State Route 60 / World Logistics Center Parkway Interchange Project

RIVERSIDE COUNTY, CALIFORNIA
DISTRICT 8– RIV – 60 (PM 20.0/22.0)
0M590/0813000109

Draft Environmental Impact Report / Environmental Assessment



Prepared by the
State of California, Department of Transportation
and the City of Moreno Valley

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

February 2020

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General Information About This Document

The California Department of Transportation (Caltrans) as assigned by the Federal Highway Administration (FHWA), has prepared this Environmental Impact Report/ Environmental Assessment (EIR/EA), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Moreno Valley, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives have been considered, how the existing environment would be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

- Please read this document. Electronic copies of the Draft EIR/EA are available to download and/or receive by email/mail from the following sources (maps and other information are also available): Download a copy by going to the City of Moreno Valley's website: http://www.moval.org/pubreview; download a copy by going to the City of Moreno Valley Library Services' webpage: http://www.moval.org/mv-library; request a CD by emailing 0M590.Comments@dot.ca.gov or by calling Antonia Toledo at (909) 806-2541.

  Copies of the Draft EIR/EA for in-person viewing and copying are currently suspended pursuant to Governor Executive Orders N-29-20 (electronic public meetings) and N-33-20 (stay home). Copies will be made available should the Governor's orders be released within the public review period.

- A virtual public hearing will be held on the following date to give you an opportunity to provide comments or questions: May 13, 2020, 5:00 p.m. to 7:00 p.m. via Zoom – the hearing link and information will be available on the City of Moreno Valley's website (http://www.moval.org/pubreview) prior to the hearing date. To attend without internet access, use the following call-in numbers:

  English - (253) 215-8782 and enter the Meeting ID: 748 427 3045

  Spanish - (872) 240-3212 and enter the Access Code: 456 294 141

  If you need technical assistance, call (786) 535-3211 (Access Code: 152-271-621) the hour prior to the virtual hearing.

- We'd like to hear what you think. If you have any comments about the proposed project, please attend the virtual public hearing and/or send your written comments to the Department by the deadline.

- Send comments via postal mail to:

  Antonia Toledo, Senior Environmental Planner
  Caltrans District 8, Division of Environmental Analysis – MS 820
  464 West 4th Street, San Bernardino, CA 92401

- Send comments via email to: 0M590.Comments@dot.ca.gov

- Be sure to send comments by the deadline: June 8, 2020

After comments are received from the public and reviewing agencies, Caltrans, as assigned by the FHWA, may: (1) give environmental approval to the proposed project (2) do additional environmental studies, or (3) abandon the proposed project. If the proposed project is given environmental approval and funding is obtained, Caltrans could design and construct all or part of the project.

Alternative Formats

For individuals with sensory disabilities, this document may be made available in Braille, large print, audiocassette, or a computer disk. To obtain a copy in one of these formats, please contact Antonia Toledo, 0M590.Comments@dot.ca.gov. TDD users may contact the California Relay Service TDD line at 1-800-735-2929 or Voice Line at 1-800-735-2922.

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8–RIV–60 PM 20.0/22.0
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SCH# **[SCH No. TBD]**

The project proposes to reconstruct and improve the State Route 60/World Logistics Center Parkway interchange in the City of Moreno Valley and unincorporated Riverside County within the City's Sphere of Influence between Post Mile (PM) 20.0 and PM 22.0.

DRAFT ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL ASSESSMENT

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

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agency: City of Moreno Valley

2/21/2020
Date

David Bricker
Deputy District Director
California Department of Transportation
District 8
CEQA & NEPA Lead Agency

The following person may be contacted for more information about this document:

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Summary

NEPA Assignment

California participated in the “Surface Transportation Project Delivery Pilot Program” (Pilot Program) pursuant to 23, USC 327, for more than 5 years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the Department entered into a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with the FHWA. The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016 for a term of 5 years. In summary, the Department continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and the Department assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to the Department under the 23 USC 326 Categorical Exclusion Assignment MOU, projects excluded by definition, and specific project exclusions.

Introduction

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Environmental Impact Report/Environmental Assessment (EIR/EA), which examines the potential environmental impacts of the alternatives being considered for the State Route 60 (SR-60)/World Logistics Center Parkway (WLC Pkwy) Interchange (project) in the City of Moreno Valley in Riverside County, California. Theodore Street has been renamed to World Logistics Center Parkway between Hemlock Avenue and its southern terminus at Alessandro Boulevard/Davis Road. Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

Purpose and Need

Project Purpose

The City of Moreno Valley (City), in cooperation with Caltrans District 8, proposes to reconstruct and improve the SR-60/WLC Pkwy interchange (project).

The purpose of the proposed project is to:

- Improve existing interchange geometric deficiencies;
- Provide increased interchange capacity, reduce congestion, and improve traffic operations to support the forecast travel demand for the 2045 design year;

- Improve existing interchange geometric deficiencies; and

- Accommodate a facility that is consistent with the City of Moreno Valley General Plan.

Project Need

The proposed project addresses the following needs, transportation deficiencies and problems:

- The existing overpass bridge was constructed in 1964 and does not meet current geometric standards related to vertical clearance. Current Caltrans standards require 16 feet (ft) 6 inches of minimum vertical clearance in the ultimate condition. The existing vertical bridge clearance is 15 ft 2 inches. The overpass bridge was hit by an excavator hauled on a flatbed trailer in January 2015 and a costly emergency repair project was required that involved closure of the overpass bridge. Additionally, the overpass bridge was hit by an unknown vehicle in June 2019, and repairs were subsequently performed. Both incidences occurred in the westbound direction. Additional geometric deficiencies include non-standard ramp geometry and a lack of pedestrian facilities that are in compliance with the Americans with Disabilities Act (ADA).

- According to the Demographics and Growth Forecast prepared for the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), between 2012 and 2040, Riverside County's population is expected to increase by 42 percent, households are anticipated to increase by 52 percent, and employment is anticipated to increase by 90 percent. For Moreno Valley specifically, between 2012 and 2040, population is anticipated to increase by 30 percent, households are anticipated to increase by 41 percent, and employment is anticipated to increase by 165 percent. Without the proposed improvements, the interchange intersections and SR-60 mainline are anticipated to operate at unacceptable levels of service (LOS) by Design Year 2045 (acceptable LOS is LOS D or better).

- Planned transportation improvement projects, including the SR-60/WLC Pkwy interchange project, need to be consistent with the transportation goals as identified in the City of Moreno Valley General Plan. Project improvements need to accommodate the movement of people using multiple modes of transportation with community-based design and taking into consideration the natural environment, social environment, and transportation behavior. Regarding equestrian, bicycle, and pedestrian users, the project needs to be consistent with the City's Master Plan of Trails to implement a multi-use trail along WLC Pkwy from Eucalyptus Avenue to the northern project limit.

Proposed Action

The proposed project would construct modifications to the existing SR-60/WLC Pkwy interchange from Post Mile (PM) 20.0 to PM 22.0 on SR-60, approximately 2 miles (mi). Major improvements to the interchange will include:

- Reconstruction of the westbound and eastbound SR-60 on- and off-ramps;
- Replacement of the existing WLC Pkwy Overcrossing to provide a minimum 16.5 ft vertical clearance and additional through and turn lanes;
- Addition of auxiliary lanes in each direction from SR-60/WLC Pkwy to the Redlands Boulevard (west) and Gilman Springs Road (east) interchange on- and off-ramps; and
- Improvements to Theodore Street/WLC Pkwy north to Ironwood Avenue and south to Eucalyptus Avenue and Dracaea Avenue.

The project alternatives developed for consideration in this Draft EIR/EA are Alternative 1 (No Build Alternative) and Alternatives 2 and 6 (Build Alternatives). Alternative 2 proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration. Alternative 6 (LPA) proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration with roundabout intersections on WLC Pkwy within the project limits. Two design variations (Design Variations 2a and 6a) are also under consideration. The No Build Alternative, the two Build Alternatives, and differences with inclusion of optional Design Variations 2a and 6a are described in further detail in Table S.1 (all tables provided at the end of the Summary text).

After comparing and weighing the benefits and impacts of all feasible alternatives, the project proponent (the City of Moreno Valley) has identified Build Alternative 6 as the Locally Preferred Alternative (LPA). Build Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a were evaluated at the same level of detail in this Draft EIR/EA, allowing for a determination of the impacts and/or effects on the environment to be made. The designation of an LPA in the Draft EIR/EA is intended to convey the City's preference for a specific alternative based on the information available prior to public review of the Draft EIR/EA, including potential impacts and reasonable mitigation measures.

Joint NEPA/CEQA Documentation

The proposed project is a joint project by Caltrans and the FHWA, and is subject to State and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. Caltrans is the lead agency under NEPA. Caltrans is the lead agency under CEQA. In addition, FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the MOU dated December 23, 2016 and executed by FHWA and Caltrans.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, often a "lower level" document is prepared for NEPA. One of the most common joint document types is an EIR/EA. Another reason for the difference in the level of document under CEQA compared to NEPA is the standard of legal review under each law. Under CEQA, an EIR must be prepared

whenever substantial evidence in the record supports a fair argument that the project will have a significant effect on the environment. Under NEPA, the decision not to prepare an EIS will withstand legal challenge as long as the agency's determination approving the project was not arbitrary and capricious. This makes the decision not to prepare an EIS under NEPA much easier to defend than the decision not to prepare an EIR under CEQA.

After receiving comments from the public and reviewing agencies, a Final EIR/EA will be prepared. Caltrans may prepare additional environmental and/or engineering studies to address comments. The Final EIR/EA will include responses to comments received on the Draft EIR/EA and will identify the preferred alternative. If the decision is made to approve the project, a Notice of Determination will be published for compliance with CEQA, and Caltrans will decide whether to issue a Finding of No Significant Impact (FONSI) or require an Environmental Impact Statement for compliance with NEPA. A Notice of Availability of the FONSI will be sent to the affected units of federal, State, and local government, and to the State Clearinghouse in compliance with Executive Order 12372.

Project Impacts

Table S.1 summarizes the criteria used to evaluate the project alternatives and design variations, including design features, operational improvements, and environmental impacts. The optional design variations under consideration have the same design features, operational improvements and environmental impacts as their associated Build Alternative, with some exceptions. Where differences exist, Table S.1 summarizes those differences.

Table S.1 also lists applicable impact avoidance, minimization, and mitigation measures for each environmental topic. The avoidance and minimization measures are Project Features (PF) which will be implemented during design and construction of the project. These project features are summarized in Table S.1 and described in detail in Chapter 2 of this EIR/EA. Mitigation measures were identified to reduce significant impacts under CEQA. Significant impacts were identified for the following environmental topics:

- **Paleontological Resources:** Because of the grading and excavation required to construct the project, there is a potential for the project to impact significant paleontological resources (fossils). Mitigation Measure PAL-1 requires the preparation of a Paleontological Mitigation Plan that requires monitoring for and recovery of significant paleontological resources during project construction. With implementation of PAL-1, impacts to paleontological resources would be less than significant under CEQA.

- **Greenhouse Gas (GHG) Emissions:** GHG emissions would be a significant unavoidable impact under CEQA because future GHG emissions with the Build Alternatives would be greater than existing GHG emissions. While some measures such as the use of energy-efficient lighting can reduce GHG emissions, most of the GHG emissions are due to increased vehicle miles traveled in the project area that will occur with or without the project.

- **Noise:** The Build Alternatives and Design Variations 2a and 6a would result in substantial increases in permanent noise levels at two noise receptors in the project area. Implementation of Mitigation Measure N-1, which requires construction of noise barriers on private property to reduce noise levels at the two receptors, would reduce traffic noise levels to acceptable noise levels, and permanent noise levels would be a less than significant impact under CEQA. However, if the property owners do not desire or accept the mitigation for installation of noise barriers, the permanent noise levels would be significant and unavoidable under CEQA for Alternative 2 and 6 (LPA) and Design Variation 2a. Therefore, noise levels are considered potentially significant and unavoidable in this Draft EIR/EA.

Coordination with Public and Other Agencies

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, as well as identify potential impacts and avoidance, minimization, and/or mitigation measures, and related environmental requirements. Agency and tribal consultation and public participation for the project have been accomplished through a variety of formal and informal methods, including Project Development Team meetings, interagency coordination meetings, and consultation with interested parties. Chapter 4, Comments and Coordination, summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

The City held a business briefing meeting on July 23, 2018. The purpose of the business briefing was to provide local businesses and community members an overview of the project and the opportunity to ask questions related to the project. The business briefing meeting was open to the public. Questions were raised about the project schedule, funding, and the proposed alternatives. Questions were addressed at the business briefing meeting by members of the Project Development Team (PDT) in attendance. Additionally, comment responses were provided from the City to those who provided a written comment at the business briefing meeting or subsequent to the meeting.

The community was informed of the project status during the Notice of Preparation (NOP) period for the EIR/EA. The NOP review period began on November 25, 2019 and concluded on January 3, 2020, for a total of 39 days. A public scoping meeting was held on December 16, 2019. A summary of comments, issues, and concerns raised during the scoping process is included in Table 4.1 in Chapter 4, Comments and Coordination.

The formulation of project alternatives and measures to avoid, minimize, and/or mitigate potential impacts has been carried out through a cooperative dialogue among representatives of the following agencies or organizations:

- Native American Heritage Commission (NAHC)
- Native American Tribal Representatives
- Agencies and Interested Parties Regarding Historical Resources

- City of Moreno Valley
- State Historic Preservation Officer (SHPO)
- Southern California Association of Governments (SCAG) Transportation Conformity Working Group (TCWG)
- United States Fish and Wildlife Service (USFWS)
- National Oceanic and Atmospheric Administration (NOAA)
- Western Riverside County Regional Conservation Authority (RCA)

Table S.2 summarizes the permits, licenses, agreements, and certifications that would be required for project construction.

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
Project Features and Design Standards						
Vertical clearances consistent with the Caltrans *Highway Design Manual*?	No	Yes		Yes		
Roadway Improvements	None	● New WB and EB direct on- and off-ramps in modified partial cloverleaf configurations ● New or expanded four-lane WLC Pkwy Overcrossing	● Repositioning of the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south from its current location	● New WB and EB direct on- and off-ramps in modified partial cloverleaf configurations ● New or expanded four-lane WLC Pkwy Overcrossing ● Roundabouts at the proposed EB and WB ramp intersections and at Eucalyptus Avenue/WLC Pkwy	● Repositioning of the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south from its current location	
Nonvehicular and Pedestrian Access Improvements	None	● Signalization of proposed EB ramp, WB ramp, and Eucalyptus Avenue/WLC Pkwy intersections ● Class II bike lanes provided on both sides of WLC Pkwy on Eucalyptus Avenue throughout the project limits ● An 8 ft sidewalk on the east side of WLC Pkwy and a potentially 6 ft sidewalk on both sides of Eucalyptus Avenue from WLC Pkwy to Redlands Boulevard, if not previously constructed with nearby development ● An 11 ft wide multi-use trail along the northbound side of WLC Pkwy		● Class II bike lanes provided on both sides of WLC Pkwy on Eucalyptus Avenue throughout the project limits ● An 8 ft sidewalk on the east side of WLC Pkwy and potentially a 6 ft sidewalk on both sides of Eucalyptus Avenue from WLC Pkwy to Redlands Boulevard, if not previously constructed with nearby development ● An 11 ft wide multi-use trail along the northbound side of WLC Pkwy ● Alternative 6 (LPA) would give bicyclists the option to merge with vehicular traffic to navigate the roundabout or exit the travel lane prior to each roundabout and cross the roundabout with pedestrian traffic		
Number of Parcels Impacted	None	Full Parcels: 6 Partial Parcels: 55	Partial Parcels: 61	Full Parcels: 6 Partial Parcels: 55	Full Parcels: 7 Partial Parcels: 60	
Total Project Cost	**None**	**$95,133,000**	**$103,056,000**	**$87,718,000**	**$95,341,000**	
Construction Duration	None	19 months, north-south access on WLC Pkwy between the EB and WB ramps would be closed for approximately 4 months while the overcrossing is being demolished and reconstructed.		19 months, north-south access on WLC Pkwy between the EB and WB ramps would be closed for approximately 4 months while the overcrossing is being demolished and reconstructed.		
Potential Environmental Impacts						
Land Use	No impacts	Alternative 2 is consistent with local, regional, and State plans.		Alternative 6 (LPA) is consistent with local, regional, and State plans.	Design Variation 6a would result in a minor land use inconsistency due to the conversion of one parcel designated as a residential land use to a transportation use.	**PF-LU-1:** Restoration of Land Used Temporarily During Construction
Parks and Recreational Facilities	No Impact	There are no existing parks or recreational facilities within 0.5 mi of the project area; however, Morrison Park is 0.5 mi north/northwest of the proposed City Stockpile borrow site and is a protected Section 4(f) resource.		There are no existing parks or recreational facilities within 0.5 mi of the project area; however, Morrison Park is 0.5 mi north/northwest of the proposed City Stockpile borrow site and is a protected Section 4(f) resource.		
Farmlands and Timberlands	No Impact	**Temporary Impacts:** Alternative 2 would temporarily impact 1.2 ac of Prime Farmland, 2.9 ac of Farmland of Statewide Importance, and 26 ac of Farmland of Local Importance as a result of TCEs. None of the land in the project area is zoned for agricultural use, and there are no Williamson Act Contract lands within or adjacent to the project area.	**Temporary Impacts:** Design Variation 2a would temporarily impact 1.1 ac of Prime Farmland and 21.3 ac of Farmland of Local Importance as a result of TCEs.	**Temporary Impacts:** Alternative 6 (LPA) would temporarily impact 0.7 ac of Prime Farmland, 2.9 ac of Farmland of Statewide Importance, and 26 ac of Farmland of Local Importance as a result of TCEs. None of the land in the project area is zoned for agricultural use, and there are no Williamson Act Contract lands within or adjacent to the project area.	**Temporary Impacts:** Design Variation 6a would temporarily impact 21.2 ac of Farmland of Local Importance as a result of TCEs.	

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
Potential Environmental Impacts (Continued)						
Farmlands and Timberlands (continued)	No Impact	**Permanent Impacts:** Alternative 2 would permanently impact 0.1 ac of Prime Farmland, 0.3 ac of Farmland of Statewide Importance, and 43.7 ac of Farmland of Local Importance as a result of the permanent conversion of that land into transportation facilities. None of the land in the project area is zoned for agricultural use, and there are no Williamson Act Contract lands within or adjacent to the project area. Alternative 2 would convert 0.02% of the farmland in Riverside County and 0% of the farmland in California. Alternative 2 received a final score of 98 on the Farmland Conversion Impact Rating (Form NRCS-CPA-106) and would therefore not have a substantial adverse effect on farmlands. There are no timberlands in the project area; therefore, there are no temporary or permanent impacts to timberlands.	**Permanent Impacts:** Design Variation 2a would permanently impact 75.4 ac of Farmland of Local Importance as a result of the permanent conversion of that land into transportation facilities. None of the land in the project area is zoned for agricultural use, and there are no Williamson Act Contract lands within or adjacent to the project area. Design Variation 2a received a final score of 115 on the Farmland Conversion Impact Rating (Form NRCS-CPA-106) and therefore would not have a substantial adverse effect on farmlands.	**Permanent Impacts:** Alternative 6 (LPA) would permanently impact 0.5 ac of Prime Farmland, 0.3 ac of Farmland of Statewide Importance, and 43.7 ac of Farmland of Local Importance as a result of the permanent conversion of that land into transportation facilities. None of the land in the project area is zoned for agricultural use, and there are no Williamson Act Contract lands within or adjacent to the project area. Alternative 6 (LPA) would convert 0.02% of the farmland in Riverside County and 0% of the farmland in California. Alternative 6 (LPA) received a final score of 98 on the Farmland Conversion Impact Rating (Form NRCS-CPA-106) and therefore would not have a substantial adverse effect on farmlands. There are no timberlands in the project area; therefore, there are no temporary or permanent impacts to timberlands.	**Permanent Impacts:** Design Variation 6a would permanently impact 76.1 ac of Farmland of Local Importance as a result of the permanent conversion of that land into transportation facilities. Design Variation 6a received a final score of 115 on the Farmland Conversion Impact Rating (Form NRCS-CPA-106) and therefore would not have a substantial adverse effect on farmlands.	
Growth	No Impact	Alternative 2 would not influence the type or amount of growth and would not result in unplanned growth. Alternative 2 could potentially accelerate the rate of growth by improving accessibility to the project area.		Alternative 6 (LPA) would not influence the type or amount of growth and would not result in unplanned growth. Alternative 6 (LPA) could potentially accelerate the rate of growth by improving accessibility to the project area.		
Community Impacts	**Community Character and Cohesion:** No Impact.	**Community Character and Cohesion:** No alterations to community character and cohesion, and no substantial adverse effects to communities would occur.		**Community Character and Cohesion:** No alterations to community character and cohesion, and no substantial adverse effects to communities would occur.		
	Acquisitions: No Impact.	**Acquisitions:** Alternative 2 would require the full acquisition of 6 properties and the partial acquisition of 55 properties. Eight of the partial acquisitions have associated TCEs. Under Alternative 2, 44 ac of land are needed for acquisitions and 21 ac of land are needed for slope easements.	**Acquisitions:** Design Variation 2a would require the partial acquisition of 61 properties. Nine of the partial acquisitions have associated TCEs. Under Design Variation 2a, approximately 50 ac of land are needed for acquisitions and 45 ac of land are needed for slope easements.	**Acquisitions:** Alternative 6 (LPA) would require the full acquisition of 6 properties and the partial acquisition of 55 properties. Nine of the partial acquisitions have TCEs. Under Alternative 6 (LPA), approximately 45 ac of land are needed for acquisitions and 21 ac are needed for slope easements.	**Acquisitions:** Design Variation 6a would require the full acquisition of 7 properties (including one residential displacement) and 60 partial acquisitions. Seven of the partial acquisitions have associated TCEs. Under Design Variation 6a, approximately 54 ac of land are needed for acquisitions and 45 ac of land are needed for slope easements.	**PF-REL-1**: Compliance with the Uniform Relocation Act (Public Law 91-646, 84 Statutes 1894) for all property acquisitions.
	Environmental Justice: No Impact	**Environmental Justice:** Low-income and minority populations would not be adversely affected.		**Environmental Justice:** Low-income and minority populations would not be adversely affected.	**Environmental Justice:** Design Variation 6a would result in one residential displacement from Census Tract 426.24 in Moreno Valley. Although Census Tract 426.24 contains substantial racial minority populations, the low number of residential displacements from Design Variation 6a would not substantially impact low-income and minority populations.	

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
Utilities and Emergency Services	No Impact.	Alternative 2 will impact various underground and overhead utilities, storm drains, and a water tank that would potentially require relocation or protection in-place. Any relocation or other effects to utility facilities as a result of the Alternative 2 would occur during the construction phase such that all utility services would be maintained. During construction, required emergency response times will be maintained. During operation, improvements in traffic flow are likely to improve emergency response times within the project area.		Alternative 6 (LPA) will impact various underground and overhead utilities, storm drains, and a water tank that would potentially require relocation or protection in-place. Any relocation or other effects to utility facilities as a result of Alternative 6 (LPA) would occur during the construction phase such that all utility services would be permanently maintained. During construction, required emergency response times will be maintained. During operation, improvements in traffic flow are likely to improve emergency response times within the project area.		**PF-UES-1**: Preparation of utility relocation plans in consultation with the affected utility providers/owners for those utilities that will need to be relocated, removed, or protected in-place. **PF-UES-2**: Coordination of all temporary mainline, ramp, and arterial roadway closures and detour plans with law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times.
Potential Environmental Impacts (Continued)						
Traffic and Transportation/ Pedestrian and Bicycle Facilities	The No Build Alternative (Alternative 1) would not provide any improvements at the existing SR-60/WLC Pkwy interchange. Therefore, traffic operations at this interchange would continue as they currently exist and would worsen over time. The No Build Alternative would not provide adequate LOS and operational conditions at the SR-60/WLC Pkwy interchange in the Opening Year (2025) or in the horizon year (2045).	**Geometrics:** Alternative 2 would reconstruct and improve the existing interchange in a modified Type L-7/L-8 configuration. Improvements would include construction of new WB entrance and loop exit ramps in the northwest quadrant of the interchange and an EB entrance ramp in the southeast quadrant, in a partial Type L-8 configuration. New EB exit and loop entrance ramps would be constructed in the southwest quadrant, in a partial Type L-7 configuration. The existing WLC Pkwy overcrossing would be removed and replaced by a new bridge. An auxiliary lane would be added in both directions between the Redlands Boulevard and WLC Pkwy interchanges, as well as in the EB direction between the WLC Pkwy and Gilman Springs Road interchanges. The divergence point of the proposed WB loop exit ramp would be located west of the existing exit ramp divergence point, thereby increasing the weave length between the WB Gilman Springs Road entrance ramp and the WLC Pkwy exit ramp. Alternative 2 would impact areas in the northwest, southwest, and southeast quadrants of the interchange. Additional right-of-way will be required to accommodate proposed ramps in these locations. **LOS:** All Opening Year 2025 intersections and mainline segments are projected to operate at acceptable LOS during the a.m. and p.m. peak periods. All Horizon Year 2045 intersections and most mainline segments are projected to operate at an acceptable LOS during the a.m. and p.m. peak periods. In the westbound direction,	**Geometrics:** Design Variation 2a would have the same features as Alternative 2, except for the location of the Eucalyptus Avenue/WLC Pkwy intersection. Design Variation 2a would move the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south of its current location. The shift would cause a partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect with the west side of WLC Pkwy. **LOS:** Design Variation 2a would result in the same LOS in Opening Year 2025 and Horizon Year 2045 for intersections, ramps, and the freeway mainline as Alternative 2.	**Geometrics:** Alternative 6 (LPA) proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration. Improvements under Alternative 6 (LPA) would include the construction of a new WB direct on-ramp and a new EB loop off-ramp in the northwest quadrant, in a partial cloverleaf configuration. New EB direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial cloverleaf configuration. Similar to Alternative 2, Alternative 6 (LPA) would also remove the existing two-lane (one lane in each direction) WLC Pkwy Overcrossing and replace it with a new four-lane (two through lanes in each direction) overcrossing. Additional improvements included as part of Alternative 6 (LPA) include the installation of roundabouts at both the proposed EB and WB ramp intersections, as well as at Eucalyptus Avenue/WLC Pkwy. On WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue, bike lanes are provided on both sides within the width of the proposed shoulders. Bicyclists would have the option to merge with vehicular traffic to navigate through the roundabout intersection or exit the travel lane prior to each roundabout and cross the roundabout intersection with pedestrian traffic. **LOS:** All Opening Year 2025 intersections and mainline segments are projected to operate at an acceptable LOS during the a.m. and p.m. peak periods.	**Geometrics:** Design Variation 6a would have the same features as Alternative 6 (LPA), except for the location of the Eucalyptus Avenue/WLC Pkwy intersection. Design Variation 6a would consist of moving the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south from its current location. The shift would cause a partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect to the west side of WLC Pkwy. **LOS:** Design Variation 6a would result in the same LOS in Opening Year 2025 and Horizon Year 2045 for intersections, ramps, and the freeway mainline as Alternative 6 (LPA).	**PF-TR-1:** Preparation of a detailed Transportation Management Plan (TMP) to minimize the potential impacts that construction activities may have on the traveling public and emergency services providers. **PF-TR-2**: Implement traffic signal overlap phasing for the eastbound right-turn green during northbound-left phase and southbound right-turn green during eastbound-left phase at the westbound ramps intersection of World Logistics Center Parkway (WLC Pkwy) and SR-60 under Alternative 2 and/or Design Variation 2a to achieve an acceptable level of service (LOS). **PF-TR-3**: Construction of the roundabout lanes and associated approach roadway segments under Alternative 6 (LPA) and/or Design Variation 6a to sufficient widths to achieve acceptable LOS and be clear of obstructions pursuant to current Caltrans standards.

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
		between WLC Pkwy and Redlands Boulevard, the mainline segment is projected to operate at LOS F in the a.m. peak period.		All Horizon Year 2045 intersections and most mainline segments are projected to operate at an acceptable LOS during the a.m. and p.m. peak periods. In the westbound direction, between WLC Pkwy and Redlands Boulevard, the mainline segment is projected to operate at LOS F in the a.m. peak period. In the eastbound direction, between the EB loop on-ramp and EB direct on-ramp, the mainline merge area segment is projected to operate near capacity at LOS E in the p.m. peak period.		
Visual/Aesthetics	No impact.	The City designated the SR-60/WLC Pkwy interchange as a gateway interchange. The gateway aesthetics would be in accordance with the Route 60 Corridor Master Plan for Aesthetics and Landscaping, and any updates. Both Alternatives 2 and 6 (LPA) may be adapted to incorporate different bridge aesthetics or alternative bridge types in the future. During construction, there would be temporary impacts with regard to visual resources/aesthetics.		The City designated the SR-60/WLC Pkwy interchange as a gateway interchange. The gateway aesthetics would be in accordance with the Route 60 Corridor Master Plan for Aesthetics and Landscaping, and any updates. Both Alternatives 2 and 6 (LPA) may be adapted to incorporate different bridge aesthetics or alternative bridge types in the future. During construction, there would be temporary impacts with regard to visual resources/aesthetics.		**PF-VIS-1**: Development of Architectural Treatments during the Plans, Specifications, and Estimates (PS&E) phase in consultation with the City and Caltrans District Landscape Architect. **PF-VIS-2**: Design of freeway landscaping to retain the character of the existing desert scrub. **PF-VIS-3**: Design of construction lighting types, plans, and placement to minimize light and glare impacts on surrounding sensitive uses.
Potential Environmental Impacts (Continued)						
Visual/Aesthetics (continued)	No impact.	Alternative 2 would alter the visible form and scale of the SR-60/WLC Pkwy interchange because of the increased height of the overcrossing. The proposed design would appear similar to the existing conditions with regard to colors, texture, diversity, and continuity, with the exception of an increase of grey colors associated with the new overcrossing and additional hardscaping.		Alternative 6 (LPA) would alter the visible form and scale of the SR-60/WLC Pkwy interchange because of the increased height of the overcrossing. The proposed design would appear similar to the existing conditions with regard to colors, texture, diversity, and continuity, with the exception of an increase of grey colors associated with the new overcrossing and additional hardscaping. Compared to Alternative 2, the visual impacts would be slightly less significant due to the slightly smaller bridge structure and visual continuity with existing conditions.		**PF-VIS-4**: Compliance with Caltrans Standard Design Practices, including the use of directional lighting, and Moreno Valley Municipal Code Section 9.10.110 to reduce new sources of light and glare impacts.
Cultural Resources	No impact.	Alternative 2 would not impact any Section 106 Historical Properties or CEQA Historical Resources. There are no NRHP-listed or eligible resources in the project area.		Alternative 6 (LPA) would not impact any Section 106 Historical Properties or CEQA Historical Resources. There are no NRHP-listed or eligible resources in the project area.		**PF-CR-1**: Stoppage of all construction work activities within 60 feet of a cultural resource discovery until a qualified archaeologist can assess the nature and significance of the find. **PF-CR-2 :** Compliance with State Health and Safety Code Section 7050.5 and California Public Resources Code (PRC) Section 5097.98 if human remains are discovered during construction and thought to be Native American.

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
Hydrology and Floodplains	No impact.	Construction of Alternative 2 would involve the grading of approximately 3.1 ac within the Awareness Floodplains regulated by the RCFCWCD, which would require a grading permit from the County of Riverside. Construction activities would not reduce or otherwise affect the flood storage capacity and would not modify flood flows in the floodplain. All of the proposed drainage improvements would connect to the existing drainage system, and implementation of Alternative 2 would improve the distribution of storm water flow to the storm drain system.		Construction of Alternative 6 (LPA) would involve the grading of approximately 3.4 ac within the Awareness Floodplains regulated by the RCFCWCD, which would require a grading permit from the County of Riverside. Construction activities would not reduce or otherwise affect the flood storage capacity and would not modify flood flows in the floodplain. All of the proposed drainage improvements would connect to the existing drainage system, and implementation of Alternative 6 (LPA) would improve the distribution of storm water flow to the storm drain system.		**PF-HYD-1:** Processing a grading permit with the County of Riverside for the proposed engineered slopes within the limits of the Awareness Floodplain within unincorporated Riverside County.
Water Quality and Storm Water Runoff	No impact.	There is a potential for construction-related pollutants to be spilled, leaked, or transported via storm runoff into drainages adjacent to the project area and thereby into downstream receiving waters. Alternative 2 would implement Caltrans-approved Treatment and Design Pollution Prevention BMPs. Alternative 2 would result in a 16.5 ac increase in impervious surface area that would raise the total amount of pollutants in the storm water runoff and non-storm water runoff, which would increase the amount of pollutants traveling to on-site drainages and downstream receiving waters.	Design Variation 2a would result in a 22.1 ac increase in impervious surface area that would raise the total amount of pollutants in the storm water runoff and non-storm water runoff, which would increase the amount of pollutants traveling to on-site drainages and downstream receiving waters.	There is a potential for construction-related pollutants to be spilled, leaked, or transported via storm runoff into drainages adjacent to the project area and thereby into downstream receiving waters. Alternative 6 (LPA) would implement Caltrans- approved Treatment and Design Pollution Prevention BMPs. Alternative 6 (LPA) would result in a 20.6 ac increase in impervious surface area that would raise the total amount of pollutants in the storm water runoff and non-storm water runoff, which would increase the amount of pollutants traveling to on-site drainages and downstream receiving waters.	Design Variation 6a would result in a 26.2 ac increase in impervious surface area that would raise the total amount of pollutants in the storm water runoff and non-storm water runoff, which would increase the amount of pollutants traveling to on-site drainages and downstream receiving waters.	**PF-WQ-1**: Compliance with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and Order 2012-0006-DWQ; NPDES No. CAS000002), or any other subsequent permit. **PF-WQ-2**: Compliance with the provisions of the NPDES Permit, Statewide Storm Water Permit, Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation Order No. 2012-0011-DWQ, NPDES No. CAS000003 (Caltrans MS4 Permit) or any subsequent permit. This permit is applicable to the portions of the project area within and outside of Caltrans right-of-way.
Geology/Soils/Seismic/ Topography	No impact.	Alternative 2 would disturb soil and alter existing landforms, and could result in temporary impacts such as soil compaction and an increased possibility of soil erosion. Alternative 2 would not result in substantial long-term impacts to geology, soils, seismic, and topography impacts.		Alternative 6 (LPA) would disturb soil and alter existing landforms, and could result in temporary impacts such as soil compaction and an increased possibility of soil erosion. Alternative 6 (LPA) would not result in substantial long-term impacts to geology, soils, seismic, and topography impacts.		**PF-GEO-1**: Preparation of a detailed geotechnical investigation to assess the geotechnical conditions in the project area. **PF-GEO-2**: Preparation of a detailed Foundation Report will be prepared for bridges, retaining walls, sound walls, storm water conduits, and overhead signs. **PF-GEO-3**: Conduct further geotechnical evaluation to determine the potential for fault rupture within the bridge footprint as a result of the unnamed “splay” located outside the mapped Alquist-Priolo Fault Hazard Zone that projects toward the existing World Logistics Center Parkway (WLC Pkwy) Overcrossing. **PF-GEO-4**: Evaluation of seismically induced settlement based on new

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
						embankment fill thickness and geometry. **PF-GEO-5**: Testing of representative soil samples for pH, sulfate content, chloride, content, and minimum electrical resistivity as part of the final Foundation Report investigation for the project area pursuant to Caltrans Corrosion Guidelines.
Paleontology	No impact.	With Mitigation Measure PAL-1, Alternative 2 would not result in adverse impacts related to paleontological resources.		With Mitigation Measure PAL-1, Alternative 6 (LPA) would not result in adverse impacts related to paleontological resources.		**PF-PAL-1:** Cessation of construction activities within 60 feet of a find if unanticipated paleontological resources are discovered. **Mitigation Measure PAL-1**: Monitoring for and recovery of significant paleontological resources during project construction.
Hazardous Waste/Materials	No impact.	Alternative 2 would not result in adverse impacts related to hazardous waste/materials.		Alternative 6 (LPA) would not result in adverse impacts related to hazardous waste/materials.		**PF-HAZ-1**: Preparation of a Lead Compliance Plan to address the presence of aerially deposited lead (ADL) in the soils within the project area and the health and safety of construction workers. **PF-HAZ-2**: Sampling and testing of paint on the paved roads for lead chromate. **PF-HAZ-3**: Assessment of structures that are proposed for demolition and/or modification for the possible presence of asbestos-containing materials (ACMs) and lead-based paints (LBPs). **PF-HAZ-4**: Disposal of hazardous transformers or poles that are disturbed/removed in accordance with the California Health and Safety Code. **PF-HAZ-5**: Adherence to the requirements of SCAQMD Rule 1403 during renovation and demolition activities. **PF-HAZ-6**: Evaluation of hazardous materials contamination or sources suspected or identified during project construction activities to determine the course of action required. **PF-HAZ-7**: During final design, a detailed review of available well information of the existing inactive groundwater wells within the project right-of-way will be conducted. The abandonment procedure for the well will be conducted in accordance with California Department of Water Resources Standards (Bulletin 74-90), and the abandonment approvals by the agency with jurisdiction for the well will be documented.

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
Air Quality	No impact.	Alternative 2 would not result in any adverse permanent effects with regard to air quality, and would meet the requirements of CAA and 40 CFR, Section 93.116.		Alternative 6 (LPA) would not result in any adverse permanent effects with regard to air quality, and would meet the requirements of CAA and 40 CFR, Section 93.116.		**PF-AQ-1**: Control of fugitive dust emissions during clearing, grading, earthmoving, or excavation operations, by regular watering or other dust preventive measures as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. **PF-AQ-2**: Maintain equipment engines in good condition and in proper tune per manufacturers' specifications to reduce construction emissions. **PF-AQ-3**: Compliance with State Vehicle Code Section 23114 for hauling materials to prevent such material spilling onto public streets and roads. **PF-AQ-4**: Adherence to Caltrans Standard Specifications for Construction, Sections 14.9-02 and 14-9.03. **PF-AQ-5**: Removal of asbestos-containing materials prior to construction. **PF-AQ-6**: Prohibition of idling in excess of 5 minutes for all construction vehicles.
Noise	No impact.	Potential long-term noise impacts are associated with operations from traffic noise. Two of the 38 modeled receptors (Receptors R-10 and R-25) would approach or exceed the NAC under Alternative 2. Two receptors (Receptors R-25 and R-28) would experience a substantial noise increase over its corresponding modeled existing level under Alternative 2.		Potential long-term noise impacts are associated with operations from traffic noise. Two of the 38 modeled receptors (Receptors R-10 and R-25) would approach or exceed the NAC under Alternative 6 (LPA). Two receptors (Receptors R-25 and R-28) would experience a substantial noise increase over its corresponding modeled existing level under Alternative 6 (LPA).	One receptor (Receptor R-25) will be fully acquired and thus would no longer experience noise impacts.	**PF-N-1**: Control of construction noise by compliance with the City's Municipal Code (7:00 a.m. to 8:00 p.m. on weekdays and weekends) and the control of noise from construction activities per Caltrans Standard Specifications, Section 14-8.02, "Noise Control." **Mitigation Measure N-1**: Construction of noise barriers to reduce noise levels at two sensitive noise receptors.
Energy	No impact.	The Alternative 2 configuration would reduce energy consumption in both the opening and horizon years compared to the corresponding No-Build Alternative. For the region, the energy consumption would not be substantially impacted by Alternative 2.		Alternative 6 (LPA) would further reduce energy consumption compared to Alternative 2 due to the roundabouts. For the region, the energy consumption would not be substantially impacted by Alternative 6 (LPA).		
Natural Communities	No impact.	Alternative 2 would not result in substantial permanent direct impacts to vegetation communities. There is a potential of permanent indirect impacts that include degradation of adjacent riparian habitat from storm water runoff, traffic, and litter. Because the project area drainages do not function as wildlife movement corridors, Alternative 2 would not result in permanent impacts to wildlife movement.		Alternative 6 (LPA) would not result in substantial permanent direct impacts to vegetation communities. There is a potential of permanent indirect impacts that include degradation of adjacent riparian habitat from storm water runoff, traffic, and litter. Because the project area drainages do not function as wildlife movement corridors, Alternative 6 (LPA) would not result in permanent impacts to wildlife movement.		**PF-NC-1:** At the 60-inch culvert, 3-foot walls with an 18-inch lip will be constructed, which will direct wildlife toward culverts. **PF-NC-2:** Culvert access areas will be hydro-seeded with natural vegetation during the winter after construction activity adjacent to the culvert is complete. Natural objects, such as stumps, rocks, and other natural debris within the crossing facility will be utilized to create cover for wildlife and to encourage the use of the culvert by wildlife.

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
Wetlands and Other Waters	No impact.	Alternative 2 would result in temporary direct and indirect impacts to wetlands and other waters. Alternative 2 would permanently impact 0.355 ac of non-jurisdictional waters, 0.027 ac of jurisdictional waters, 0.549 ac of CDFW streambed areas, and 0.163 ac of CDFW riparian areas.	Design Variation 2a would result in temporary direct and indirect impacts to wetlands and other waters. Design Variation 2a would permanently impact 0.370 ac of non-jurisdictional waters, 0.564 ac of CDFW streambed areas.	Alternative 6 (LPA) would result in temporary direct and indirect impacts to wetlands and other waters. Alternative 6 (LPA) would permanently impact 0.355 ac of non-jurisdictional waters, 0.027 ac of jurisdictional waters, 0.570 ac of CDFW streambed areas, and 0.163 ac of CDFW riparian areas.	Design Variation 6a would result in temporary direct and indirect impacts to wetlands and other waters. Design Variation 6a would permanently impact 0.370 ac of non-jurisdictional waters 0.574 ac of CDFW streambed areas.	**PF-WET-1**: Obtain a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW). **PF-WET-2**: Obtain a Section 401 water quality certification from the Santa Ana Regional Water Quality Control Board (RWQCB), Region 8. **PF-WET-3**: Compliance with the Nationwide Permit Program pursuant to Section 404 of the federal Clean Water Act. **PF-WET-4**: Provide compensatory mitigation to offset the loss of jurisdictional waters by the United States Army Corps of Engineers (USACE), CDFW, and RWQCB at a minimum 1:1 mitigation ratio.
Plant Species	No impact.	No substantial temporary or permanent impacts to special-status plant species are expected as a result of Alternative 2.		No substantial temporary or permanent impacts to special-status plant species are expected as a result of Alternative 6 (LPA).		
Animal Species	No impact.	Potential temporary impacts during construction to nesting raptors, special-status birds, other migratory bird species, the northwestern San Diego pocket mouse, and roosting bats.		Potential temporary impacts during construction to nesting raptors, special status-birds, other migratory bird species, the northwestern San Diego pocket mouse, and roosting bats.		**PF-AS-1**: Conduct a preconstruction survey by a qualified biologist within 30 days prior to project-related ground-disturbing activities to ensure that burrowing owls are not occupying the project construction area. If owls are determined to be present, mitigation measures will be developed and authorized through consultation with the WRCMSHCP Regional Conservation Authority (RCA), CDFW, and United States Fish and Wildlife Service (USFWS). **PF-AS-2**: Completion of vegetation clearing and preliminary ground-disturbing work outside the bird breeding season (typically set as February 15 through August 31). Conduct preconstruction nesting bird surveys if such work does need to occur during the bird breeding season. Install highly visible barriers around the coastal sage scrub plant community adjacent to the project footprint to designate Environmentally Sensitive Areas (ESAs) to be avoided. Install exclusionary devices and nest prevention methods if construction of the World Logistics Center Parkway bridge structure cannot take place outside the nesting season. **PF-AS-3**: Conduct roosting bat surveys in the summer one year prior to construction and if bats are present, implement humane eviction/exclusion methods prior to construction.

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
Threatened and Endangered Species	No impact.	Alternative 2 requires the removal of 0.26 ac of habitat potentially suitable for the coastal California gnatcatcher and Stephens' kangaroo rat.		Alternative 6 (LPA) requires the removal of 0.26 ac of habitat potentially suitable for the coastal California gnatcatcher and Stephens' kangaroo rat.		
Invasive Species	No impact.	Alternative 2 would not result in adverse impacts related to invasive species.		Alternative 6 (LPA) would not result in adverse impacts related to invasive species.		**PF-INV-1**: Compliance with Executive Order on Invasive Species, EO 13112, and guidance from the Federal Highway Administration (FHWA) to ensure that landscaping and erosion control included will not use species listed as invasive. Implement inspection and cleaning of construction equipment and eradication strategies should invasive species be present in construction areas.
Cumulative Impacts	No impact.	The proposed project would contribute to cumulative noise effects, and no additional avoidance, minimization, and/or abatement measures other than the specified Noise Project Features are feasible (PF-N-1). The proposed project would also not reduce GHG emissions from the existing condition and thus would not contribute to achieving statewide GHG emissions reduction goals, so the cumulative impact for GHGs would be potentially significant.		The proposed project would contribute to cumulative noise effects, and no additional avoidance, minimization, and/or abatement measures other than the specified Project Features are feasible (PF-N-1). The proposed project would also not reduce GHG emissions from the existing condition and thus would not contribute to achieving statewide GHG emissions reduction goals, so the cumulative impact for GHGs would be potentially significant.		
Climate Change	GHG emissions will increase in future years compared to existing conditions with or without the project due to anticipated regional growth. Because the No Build Alternative would not reduce GHG emissions from the existing condition, it would not contribute to achieving statewide GHG emissions reduction goals.	Alternative 2 would reduce GHG emissions in both the opening and design years. However, because the project would not reduce GHG emissions from the existing condition, it would not contribute to achieving statewide GHG emissions reductions goals. Therefore, the impact would be significant and unavoidable.		Alternative 6 (LPA) would further reduce emissions compared to Alternative 2. However, because the project would not reduce GHG emissions from the existing condition, it would not contribute to achieving statewide GHG emissions reductions goals. Therefore, the impact would be significant and unavoidable.		The following GHG-specific Project Features will be implemented as part of the project construction: **PF-GHG-1:** Right size equipment for the job. **PF-GHG-2:** Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. **PF-GHG-3:** Maximize use of recycled materials (e.g., tire rubber) and use the minimum feasible amount of GHG-emitting construction materials. **PF-GHG-4:** Reduce need for electric lighting by using ultra-reflective sign materials that are illuminated by headlights. **PF-GHG-5:** Develop a traffic plan to minimize traffic flow interference from construction activities. The following operational GHG-specific Project Features will be implemented as part of the project:

Table S.1 Summary of Alternatives and Impacts

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a (Alternative 2 with Design Variation)	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a (Alternative 6 [LPA] with Design Variation)	Summary of Project Features and Avoidance, Minimization, and Mitigation Measures
						PF-GHG-6: Include landscaping components such as mulch and compost application to improve carbon sequestration rates in soils and reduce organic waste. **PF-GHG-7:** Design and install long-life pavement structures to minimize life-cycle costs. **PF-GHG-8:** Design medians to comply with City landscape standards to increase water efficiency with efficient irrigation, grading that retains water run-off, and a drought tolerant plant palette. **PF-GHG-9:** Use rubberized asphalt concrete to the maximum extent practical within currently accepted practice. **PF-GHG-10:** Use lighting systems that are energy efficient, such as LED technology. **PF-GHG-11:** Incorporate bicycle and pedestrian facilities into project design.

Source: Compiled by LSA Associates, Inc. (2019)

ac = acre(s)
BMP = best management practice
CAA = Clean Air Act
Caltrans = California Department of Transportation
CDFW = California Department of Fish and Wildlife
CEQA = California Environmental Quality Act
City = City of Moreno Valley
CFR = Code of Federal Regulations
EB = eastbound
EO = Executive Order
ft = foot/feet
GHG = greenhouse gas(es)
LED = light-emitting diode
LOS = level(s) of service
MS4 = Municipal Separate Storm Sewer Systems
mi = mile/miles
NAC = Noise Abatement Criteria
NRHP = National Register of Historic Places
RCFCWCD = Riverside County Flood Control and Water Conservation District
SCAQMD = South Coast Air Quality Management District
SR-60 = State Route 60
TCE = temporary construction easement
WB = westbound
WLC Pkwy = World Logistics Center Parkway
WRCMSHCP = Western Riverside County Multiple Species Habitat Conservation Plan

Table S.2 Permits and/or Approvals Needed

Agency	PLAC	Status
United States Army Corps of Engineers (USACE)	Section 404 Nationwide Permit No. 14	Application will be submitted after environmental document approval.
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement	Application will be submitted after environmental document approval.
Santa Ana Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Application will be submitted after environmental document approval.
	NPDES Notice of Construction	Application will be submitted after environmental document approval, prior to any soil-disturbing work.
	Section 402 Clean Water Act NPDES	The project will comply with the requirements of the Caltrans MS4 Permit, Order No. 2012-0011-DWQ, NPDES No. CAS000003, issued by the State Water Resources Control Board, State of California. Documentation, as required, will be prepared and provided as required.
	SWPPP	The SWPPP will be developed in accordance with the Construction General Permit, Order No. 2009-0009-DWQ, NPDES No. CAS000002, issued by the State Water Resources Control Board, State of California. A Notice of Intent (NOI) will be submitted prior to any soil-disturbing work.
Federal Highway Administration (FHWA)	Air Quality Conformity Determination	Request for determination to be submitted following selection of a Preferred Alternative.
California Transportation Commission (CTC)	CTC vote to approve funds	Following the approval of the Final EIR/EA, the CTC may be requested to vote to approve funding for the project.
City of Moreno Valley	Encroachment Permit	Will be obtained prior to construction.
Riverside County	Encroachment Permit	May be required prior to construction.[1]
Caltrans	Encroachment Permit	Will be obtained prior to construction

Source 1: *Natural Environment Study* (2019)
Source 2: *Water Quality Assessment Report* (2019)
Source 3: *Draft Project Report* (2020).

[1] An encroachment permit from Riverside County may be necessary for construction in the northeast quadrant of the interchange if the project affects land outside of the City of Moreno Valley's jurisdiction.

EIR/EA = Environmental Impact Report/Environmental Assessment
FED = Final Environmental Document
NPDES = National Pollutant Discharge Elimination System
PLAC = permits, licenses, agreements, and certifications
SWPPP = Storm Water Pollution Prevention Plan

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Chapter 1 – Proposed Project

1.1 Introduction

The City of Moreno Valley (City), in cooperation with the California Department of Transportation (Caltrans) District 8, proposes to reconstruct and improve the State Route 60/World Logistics Center Parkway (SR-60/WLC Pkwy) interchange. Theodore Street has been renamed to World Logistics Center Parkway between Hemlock Avenue and its southern terminus at Alessandro Boulevard/Davis Road. The State Route 60/Theodore Street Interchange Project is now referred to as the State Route 60/World Logistics Center Parkway Interchange Project (project). The majority of the project site is located in Moreno Valley. The northeast quadrant of the site is located within unincorporated Riverside County and within the City's Sphere of Influence. The purpose of the project is to provide standard vertical clearance for the WLC Pkwy Overcrossing, to alleviate existing and future traffic congestion at the SR-60/WLC Pkwy interchange ramps during peak hours, and to improve traffic flow along the freeway and through the interchange. The total length of the project on SR-60 is 2 miles (mi). Figure 1-1 shows the project location and project vicinity.

The project is currently funded with a variety of funding sources including federal and local funds through Project Approval and Environmental Documentation (PA/ED) and, as such, will be required to comply with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans will be the Lead Agency for CEQA and the City is a Responsible Agency under CEQA. Caltrans, as assigned by the Federal Highway Administration (FHWA), is the federal Lead Agency for NEPA. The environmental review, consultation, and any other action required in accordance with the applicable federal laws for this project will be carried out by Caltrans under its assumption of responsibility pursuant to 23 United States Code (USC) 327.

The PA/ED phase is funded with a mix of federal and local sources, including a Congestion Mitigation and Air Quality (CMAQ) federal grant, Measure A local match, and Development Impact Fees (DIF). Potential fund sources for future phases include federal, State, and local grants as well as development fees and sources. Eligible City funds may be used at the discretion of the City Council. SR-60 is on the Primary Highway Freight System of the National Highway Freight Network. SR-60 is also on the National Highway System (NHS). As a result, SR-60 is eligible for several categories of federal and State funds. WLC Pkwy/Theodore Street is on the Transportation Uniform Mitigation Fee (TUMF) arterial network and is eligible for funds from the Western Riverside Council of Governments (WRCOG). As the project progresses, the City may apply for funds appropriate to the project stage completed and the components to be funded.

This project is included in the 2019 Approved Federal Transportation Improvement Program (FTIP) (RIV 080904) Amendment 19-03, as proposed for funding from the local and federal funds as:

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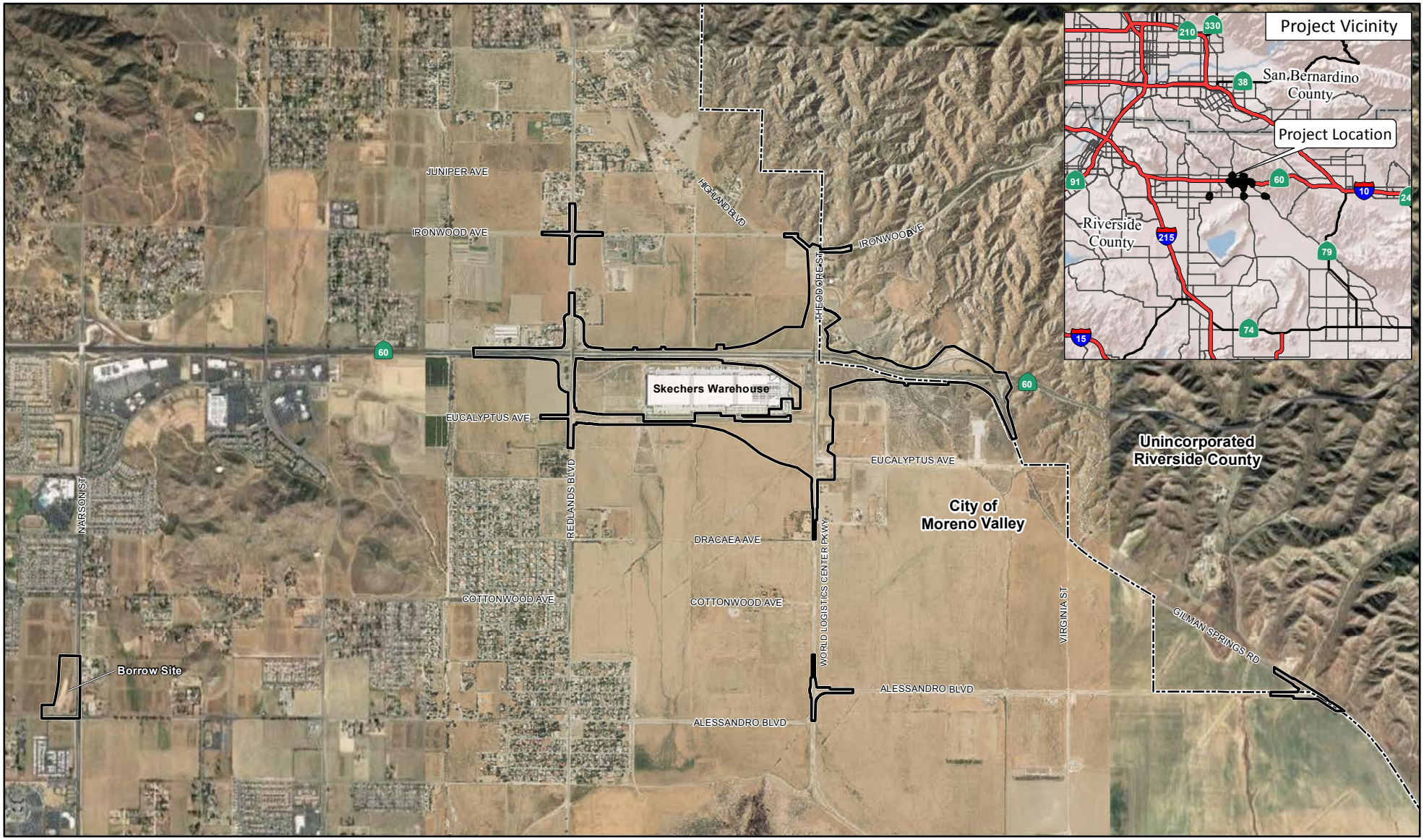

LEGEND

Project Area

City Boundary

FIGURE 1-1

SR-60/World Logistics Center Parkway Interchange Project

Project Location and Vicinity

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

0 1500 3000
FEET

SOURCE: Google (2014, 2016); MBI (6/2018); ESRI (07/2012)

I:\RBF1301\GIS_Mod\MXD\Chapter1\ProjectLocation_Aerial_8x11.mxd (2/14/2019)

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> AT SR-60/WORLD LOGISTICS CENTER PARKWAY IC: WIDEN OC FROM 2 TO 4/6 THRU LNS; WIDEN WB EXIT/ENTRY RAMPS FROM 1-2 LNS AT EXIT/ENTRY, 3 LNS AT ART. W/ HOV AT ENTRY; WIDEN EB EXIT RAMP FROM 1-2 LNS AT EXIT AND 3 LNS AT ART.; WIDEN EB ENTRY RAMP FROM 1-2 LNS W/HOV; ADD EB LOOP ENTRY WITH 2 LNS AT ART AND 1 LN AT ENTRY; ADD AUX LNS 1400' EB DIR E/O IC, 2,500' EB DIR W/O IC, 2,300' WB DIR W/O IC & 1,700' WB DIR E/O IC (EA0M590)

The project is also included in the Southern California Association of Governments (SCAG) Final Amendment #3 of the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Financially-Constrained RTP Projects (3M0801-RIV080904) as:

> AT SR-60/THEODORE ST IC: WIDEN OC FROM 2 TO 4/6 THRU LANES; WIDEN WB EXIT/ENTRY RAMPS FROM 1-2 LNS AT EXIT/ENTRY, 3 LNS AT ART. W/ HOV AT ENTRY; WIDEN EB EXIT RAMP FROM 1-2 LNS AT EXIT AND 3 LNS AT ART.; WIDEN EB ENTRY RAMP FROM 1-2 LNS W/HOV; ADD EB LOOP ENTRY WITH 2 LNS AT ART. AND 1 LN AT ENTRY; ADD AUX LNS 1400’ EB DIR E/O IC, 2,500’ EB DIR W/O IC, 2,300 WB DIR W/O IC & 1,700 WB DIR E/O IC

SCAG prepares an updated RTP/SCS every 4 years. The name of the roadway will be updated from Theodore Street to World Logistics Center Parkway in the 2020 RTP/SCS.

Project construction is anticipated to begin in early 2022 and be completed in winter 2023, contingent upon full funding of all phases (i.e., final design, right-of-way acquisition, and construction).

1.1.1 Existing Facility

SR-60 is an east-west freeway that travels through Los Angeles, San Bernardino, and Riverside Counties. The facility begins at its junction within Interstate 10 (I-10) in the City of Los Angeles (Los Angeles County) and ends at its junction with I-10 in the City of Beaumont (Riverside County). The total length of SR-60 is 70.9 mi. Within the project limits, SR-60 is two mixed-flow lanes in each direction.

SR-60 serves intraregional, interregional, and interstate travel, and is listed in Section 253.1 of the California Streets and Highway Code as a State Freeway and Expressway System. As part of the NHS, SR-60 is classified as an “Other NHS Route” for its entire length. “Other NHS routes” are highways in rural and urban areas. The entire route is included in the National Network for the Federal Surface Transportation Assistance Act for Oversized Trucks and is a Priority Global Gateway Trade Corridor for the movement of international trade. SR-60 is classified as a Transportation Gateway of Major Statewide Significance in the Caltrans June 1998 Interregional Transportation Strategic Plan (ITSP). ITSP gateways are principal centers of transportation facilities that provide access to major State, national, or international trade and commerce, goods movement, and intermodal transfer. The 2015 ITSP categorizes SR-60 as a Tier 1 Freight Facility. Tier 1 represents highways that have the highest truck volumes and provide essential connectivity to and between key freight gateways and regions. SR-60 is functionally classified as an Urban Principal Arterial. SR-60 is a major truck route, and according to the California 2016 Annual Average Daily Truck Traffic and the Caltrans *Transportation Concept*

Report (TCR) for SR-60/Theodore Street,[1] compiled by Caltrans, 16 percent of the annual average daily traffic (AADT) on SR-60 in the project vicinity was truck traffic. SR-60 within the project limits is two mixed-flow lanes in each direction.

WLC Pkwy is a north-south arterial that begins at Hemlock Avenue (north of SR-60) and terminates at Alessandro Boulevard/Davis Road (south of SR-60). WLC Pkwy transitions to Theodore Street from Hemlock Avenue north up to Ironwood Avenue. WLC Pkwy is in the eastern half of the City, between Redlands Boulevard (west) and Gilman Springs Road (east) and provides north-south access in addition to Perris Boulevard, Redlands Boulevard, Gilman Springs Road, Moreno Beach Drive, and Pigeon Pass Road/Frederick Street. The City's Circulation Plan[2] designates WLC Pkwy as a Minor Arterial (two lanes in each direction) north of Eucalyptus Avenue and as a Major Arterial south of Eucalyptus Avenue (three lanes in each direction). The existing WLC Pkwy through the project limits is one travel lane in each direction, including the SR-60 Overcrossing.

1.2 Purpose and Need

1.2.1 Project Purpose

The purpose of the proposed project is to:

- Improve existing interchange geometric deficiencies;
- Provide increased interchange capacity, reduce congestion, and improve traffic operations to support the forecast travel demand for the 2045 design year; and
- Accommodate a facility that is consistent with the City of Moreno Valley General Plan.

1.2.2 Project Need

The proposed project is needed for the following reasons:

- The existing overpass bridge was constructed in 1964 and does not meet current geometric standards related to vertical clearance. Current Caltrans standards require 16 ft 6 inches of minimum vertical clearance in the ultimate condition. The existing vertical bridge clearance is 15 ft 2 inches. The overpass bridge was hit by an excavator hauled on a flatbed trailer in January 2015 and a costly emergency repair project was required involving closure of the overpass bridge. Additionally, the overpass bridge was hit by an unknown vehicle in June 2019, and repairs were performed. Both incidences occurred in the westbound direction. Additional geometric deficiencies include non-standard ramp geometry and a lack of pedestrian facilities that are in compliance with the Americans with Disabilities Act (ADA).

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1 California Department of Transportation, District 8. September 2012. *Transportation Concept Report, State Route 60*.

2 City of Moreno Valley. 2015. Circulation Plan.

- According to the Demographics and Growth Forecast prepared for the 2016 SCAG RTP/SCS, between 2012 and 2040, Riverside County's population is expected to increase by 42 percent, households are anticipated to increase by 52 percent, and employment is anticipated to increase by 90 percent. For Moreno Valley specifically, between 2012 and 2040, population is anticipated to increase by 30 percent, households are anticipated to increase by 41 percent, and employment is anticipated to increase by 165 percent. Without the proposed improvements, the interchange intersections and SR-60 mainline are anticipated to operate at unacceptable levels of service (LOS) by Design Year 2045 (acceptable LOS is LOS D or better).

- Planned transportation improvement projects, including the SR-60/WLC Pkwy interchange project, need to be consistent with the transportation goals as identified in the City of Moreno Valley General Plan. Project improvements need to accommodate the movement of people using multiple modes of transportation with community-based design taking into consideration the natural environment, social environment, and transportation behavior. Regarding equestrian, bicycle, and pedestrian users, the project needs to be consistent with the City's Master Plan of Trails to implement a multi-use trail along WLC Pkwy from Eucalyptus Ave to the northern project limit.

1.2.2.1 Capacity, Transportation Demand, and Safety

To determine existing traffic demand versus capacity in a study area, traffic counts are recorded for passenger vehicles, two-axle trucks, three-axle trucks, and trucks with four or more axles. Trucks are factored into passenger car equivalents (PCEs) that convert traffic volumes to an equivalent number of passenger cars based on the type of truck. Based on traffic forecasts, the daily and peak-hour number of vehicles at the study area freeway segments, ramps, and intersections are projected to increase over time, which will increase traffic congestion in the project area under the existing lane and ramp configurations. Both freeway and local intersection traffic flow can be defined in terms of LOS. For both freeways and intersections, there are six LOS, ranging from LOS A to LOS F. On freeways, LOS A represents free traffic flow with low volumes and high speeds, resulting in low densities, while LOS F represents traffic volumes that exceed capacity and result in forced-flow operations at low speeds, resulting in high traffic densities. LOS at signalized intersections is calculated using the time (delay) that vehicles wait to pass through an intersection. The delay is measured in seconds for each movement at an intersection (e.g., through, right-turn and left-turn movements). These individual delays are averaged to provide the LOS for the intersection as a whole.

The ramp terminus intersections on SR-60 are under the jurisdiction of Caltrans. All other study intersections are under the jurisdiction of the City of Moreno Valley. The City's standard for peak-hour intersection LOS and roadway segment LOS is either LOS C or LOS D, depending on the LOS defined for that roadway in the General Plan Circulation Element. The standard of LOS D applies to all City intersections and roadway segments included in this analysis. According to the Caltrans

Transportation Concept Report (TCR) for SR-60,[1] Caltrans has established LOS D as the acceptable LOS threshold for the sections of SR-60 included in this analysis.

The demand for interchange access is represented in traffic volumes. The year 2045 was selected for analysis of future traffic conditions due to the minimum 20-year planning horizon required by California Transportation Plan 2040.[2] Traffic conditions in 2045 are intended to represent build out of the land uses in the project area, and therefore represent a cumulative condition scenario. Traffic projections for 2045, the identified horizon year for the proposed project, indicate that freeway mainline volumes will increase as shown in Table 1.1. As shown in Table 1.2, the LOS on the SR-60 mainline will deteriorate to LOS C or worse by 2045. The 2018 (existing conditions) interchange ramp volumes are forecast to increase substantially by 2045 as shown in Table 1.3. As shown in Table 1.4, freeway ramp LOS is expected to remain the same or worsen by 2045.

As shown in Table 1.5, the study area intersections operate at satisfactory LOS during the a.m. and p.m. peak hours in the existing condition (2018). Without improvements, WLC Pkwy and Eucalyptus Avenue and the WLC Pkwy and SR-60 eastbound and westbound ramps would operate at LOS F in the Opening Year (2025) and Design Year (2045).

As shown in Table 1.2, all freeway mainline segments operate at acceptable LOS in the existing condition (2018) and are expected to operate at acceptable LOS in the project's Opening Year (2025). However, by Design Year (2045), the SR-60 westbound segments from Gilman Springs Road to WLC Pkwy and WLC Pkwy to Redlands Boulevard will deteriorate to LOS F during the a.m. peak hours and to LOS D during the p.m. peak hours. SR-60 westbound from Redlands Boulevard to Moreno Beach Drive would also deteriorate to LOS E during the a.m. peak hour and LOS D during the p.m. peak hour. The eastbound segments of SR-60 will operate at LOS C during a.m. peak hours. SR-60 eastbound from Moreno Beach Drive to Redlands Boulevard would operate at LOS D during p.m. peak hours. SR-60 eastbound from Redlands Boulevard to WLC Pkwy would operate at unacceptable LOS E during p.m. peak hours. SR-60 eastbound from WLC Pkwy to Gilman Springs Road would operate at an unacceptable LOS E during p.m. peak hours.

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1 California Department of Transportation, District 8. September 2012. *Transportation Concept Report, State Route 60*.

2 California Department of Transportation. June 2016. California Transportation Plan 2040, Integrating California's Transportation Future. Website: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/finalctp2040-report-webready.pdf , accessed February 2019.

Table 1.1 Existing (2018), Opening Year (2025), and Design Year (2045) – Freeway Mainline Volumes on SR-60 During AM/PM Peak Hours

Freeway Section	Existing Volumes (2018)		Opening Year (2025)		Design Year (2045)	
	2018 AM Peak Hour	2018 PM Peak Hour	2025 AM Peak Hour	2025 PM Peak Hour	2045 AM Peak Hour	2045 PM Peak Hour
Westbound						
SR-60 East of Gilman Springs Road On-Ramp	1,118	1,702	1,920	2,410	3,980	2,900
SR-60 Between Gilman Springs Road and WLC Pkwy	1,878	2,159	2,680	2,890	5,740	4,450
SR-60 Between WLC Pkwy Off-Ramp and WLC Pkwy On-Ramp	1,812	2,128	2,480	2,710	5,270	4,060
SR-60 Between WLC Pkwy and Redlands Boulevard	1,836	2,177	3,070	3,120	6,320	4,900
SR-60 Between Redlands Boulevard Off-Ramp and NB Redlands Boulevard On-Ramp	1,763	2,115	2,730	2,980	5,300	4,060
SR-60 SB Redlands Boulevard On-Ramp and NB Redlands Boulevard On-Ramp	2,158	2,539	2,920	3,180	5,410	4,240
SR-60 Between Redlands Boulevard and Moreno Beach Road	2,158	2,539	3,380	3,540	5,600	4,540
Eastbound						
SR-60 Between Moreno Beach Road and Redlands Boulevard	2,057	2,839	2,930	4,080	3,780	5,450
SR-60 Between Redlands Boulevard Off-Ramp and SB Redlands Boulevard On-Ramp	1,799	2,338	2,560	3,270	3,410	4,830
SR-60 Between SB Redlands Boulevard Off-Ramp and NB Redlands Boulevard On-Ramp	1,885	2,438	2,630	3,540	3,570	5,330
SR-60 Between Redlands Boulevard and WLC Pkwy	1,885	2,438	2,690	3,600	3,780	6,370
SR-60 Between WLC Pkwy Off-Ramp and WLC Pkwy On-Ramp	1,809	2,393	2,160	3,060	3,120	5,520
SR-60 Between WLC Pkwy and Gilman Springs Road	1,850	2,437	2,350	3,310	3,460	5,930
SR-60 East of Gilman Springs Road Off-Ramp	1,434	1,533	1,930	2,320	2,230	3,850

Source: *Traffic Study Report* (2019).
NB = northbound SB = southbound SR-60 = State Route 60 WLC Pkwy = World Logistics Center Parkway

Table 1.2 Existing (2018), Opening Year (2025), and Design Year (2045) – Mainline Levels of Service (No Build Alternative)

Freeway Segment Between	Existing LOS (2018)		Opening Year LOS (2025)		Design Year LOS (2045)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Westbound						
Gilman Springs Road to WLC Pkwy	B	B	B	B	**F**	D
WLC Pkwy to Redlands Boulevard	B	B	B	B	**F**	D
Redlands Boulevard to Moreno Beach Drive	B	C	C	C	**E**	D
Eastbound						
Moreno Beach Drive to Redlands Boulevard	A	B	B	C	C	D
Redlands Boulevard to WLC Pkwy	B	C	B	C	C	**F**
WLC Pkwy to Gilman Springs Road	B	C	B	B	C	**E**

Source: *Traffic Study Report* (2019).
Note: LOS D or higher is considered acceptable while LOS E and lower is considered unacceptable (shaded/bolded type in cells).
LOS = level(s) of service WLC Pkwy = World Logistics Center Parkway

Table 1.3 Existing (2018), Opening Year (2025), and Design Year (2045) – Interchange Ramp Volumes (in vehicles) for SR-60 During AM/PM Peak Hours

Ramp	Existing Volumes (2018)		Opening Year Volumes Without Project (2025)		Design Year Volumes Without Project (2045)	
	2018 AM Peak Hour	2018 PM Peak Hour	2025 AM Peak Hour	2025 PM Peak Hour	2045 AM Peak Hour	2045 PM Peak Hour
Westbound						
Off-Ramp to WLC Pkwy	111	36	290	230	560	460
Loop On-Ramp from WLC Pkwy	52	53	1020	750	1,630	1,350
Loop Off-Ramp to WLC Pkwy	*Does not exist under these scenarios.*					
Direct On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*					
Off-Ramp to Redlands Boulevard	76	65	380	150	1,070	870
Loop On-Ramp from Redlands Boulevard	416	453	210	260	130	220
Direct On-Ramp from Redlands Boulevard	*Does not exist under this scenario.*		460	360	190	300
Eastbound						
Off-Ramp to Redlands Boulevard	284	568	420	860	410	640
Loop On-Ramp from Redlands Boulevard	92	106	90	290	170	550
Off-Ramp to WLC Pkwy	119	72	890	880	1,140	1,320
Loop On-Ramp from WLC Pkwy (Alt 2)	69	49	270	310	460	500
Direct On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*					
Direct On-Ramp from Redlands Boulevard	*Does not exist under this scenario.*		60	70	220	1,040

Source: *Traffic Study Report* (2019).
SR-60 = State Route 60
WLC Pkwy = World Logistics Center Parkway

Table 1.4 Existing (2018), Opening Year (2025), and Design Year (2045) – Merge/Diverge LOS (No Build Alternative)

Merge/Diverge	Existing LOS (2018)		Opening Year LOS (2025)		Design Year LOS (2045)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Westbound						
On-Ramp from Gilman Springs Road	B	C	B	B	**F**	C
Off-Ramp to WLC Pkwy	C	C	C	C	**F**	D
Loop On-Ramp from WLC Pkwy	B	B	C	C	**F**	**E**
Direct On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*					
Loop Off-Ramp to WLC Pkwy	*Does not exist under these scenarios.*					
Off-Ramp to Redlands Boulevard	C	C	A	A	**F**	C
Loop On-Ramp from Redlands Boulevard	B	C	C	C	D	D
Direct On-Ramp from Redlands Boulevard	*Does not exist under this scenario.*		B	C	D	D
Eastbound						
Off-Ramp to Redlands Boulevard	A	B	A	B	B	**F**
Loop On-Ramp from Redlands Boulevard	B	C	B	C	C	**F**
Off-Ramp to WLC Pkwy	C	C	C	C	D	**F**
Loop On-Ramp from WLC Pkwy	C	C	B	C	C	D
Direct On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*					
Off-Ramp to Gilman Springs Road	C	C	B	B	B	D
Direct On-Ramp from Redlands Boulevard	*Does not exist under this scenario.*		B	B	B	**F**

Source: *Traffic Study Report* (2019).
Note: LOS D or higher is considered acceptable while LOS E and lower is considered unacceptable (shaded type in cells).
LOS = level(s) of service
WLC Pkwy = World Logistics Center Parkway

Table 1.5 Existing (2018), Opening Year (2025), and Design Year (2045) – Intersection Levels of Service (No Build Alternative)

Intersection	Existing LOS (2018)		Opening Year LOS (2025)		Design Year LOS (2045)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
WLC Pkwy/Eucalyptus Avenue	A	A	F	F	F	F
WLC Pkwy/SR-60 EB Ramps	B	A	F	F	F	F
WLC Pkwy/SR-60 WB Ramps	B	A	F	F	F	F
Theodore Street/Ironwood Avenue	A	A	A	A	A	A
Redlands Boulevard/Eucalyptus Avenue	A	B	B	B	B	C
Redlands Boulevard/SR-60 EB Ramps	B	C	A	A	A	B
Redlands Boulevard/SR-60 WB Ramps	C	C	A	A	A	A
Redlands Boulevard/Ironwood Avenue	B	B	B	B	B	C

Source: *Traffic Study Report* (2019).
Note: LOS D or higher is considered acceptable while LOS E and lower is considered unacceptable (shaded cells).
EB = eastbound WB = westbound
LOS = level of service WLC Pkwy = World Logistics Center Parkway
SR-60 = State Route 60

As shown in Table 1.4, in the year 2045, four ramps would operate at LOS E or worse in the a.m. peak hours and five ramps would operate at LOS E or worse in the p.m. peak hours.

1.2.2.2 Safety

The project is anticipated to improve collision rates by providing standard ramp geometry, adding auxiliary lanes, and improving the WLC Pkwy Overcrossing to meet vertical clearance standards (i.e., 16 ft 6 inches). In January 2015, the overpass bridge at the interchange was hit by a truck and a costly emergency repair project was required. The overpass bridge was more recently struck in June 2019, and inspections and repairs have since been completed.

Traffic accident and safety records available through the Caltrans Traffic Accident Surveillance and Analysis System (TASAS) for SR-60 (PM 20.0/22.0) were reviewed for a 3-year period from January 2015 through December 2017 and are summarized in Table 1.6 below.

Table 1.6 Selective Collision Rate Calculations[1]

Segment	Actual Rates[2]			Statewide Average[2]		
	F[3]	F+I[4]	Totals	F[3]	F+I[4]	Total[5]
SR-60 EB Mainline PM 20.0/22.0	**0.014**	**0.27**	**0.91**	0.007	0.26	0.75
SR-60 WB Mainline PM 20.0/22.0	0.000	**0.29**	**0.84**	0.007	0.26	0.75
WB Off-Ramp to WLC Pkwy PM 21.46	0.000	**2.60**	**2.60**	0.010	0.33	0.98
WB On-Ramp from WLC Pkwy PM 21.37	0.000	0.00	**1.83**	0.001	0.23	0.67
EB Off-Ramp to WLC Pkwy PM 21.27	0.000	**6.63**	**6.63**	0.004	0.32	0.92
EB On-Ramp from WLC Pkwy PM 21.37	0.000	**2.28**	**2.28**	0.002	0.15	0.44

Source: Caltrans Traffic Accident Surveillance and Analysis System (TASAS) (January 2018).
Note: Shaded cells indicate rates that exceed the statewide average.
1 Selective Accident Rate Calculation (January 2015 – December 2017) (most recent data available).
2 Per million vehicle miles for mainline, per million vehicles for ramp.
3 Fatal
4 Fatal + Injury
5 All reported accidents
EB = eastbound SR-60 = State Route 60 WLC Pkwy = World Logistics Center Parkway
PM = Post Mile WB = westbound

As shown in Table 1.6, the SR-60 eastbound mainline Fatal accident rate is higher than the statewide average rate with all other segments less than the statewide average rate for similar facilities. The Fatal + Injury accident rate is higher than the statewide average rate for all segments except for the westbound on-ramp from the WLC Pkwy segment. The total mainline and ramp accident rates are higher than the statewide average rates for all segments. Table 1.7 summarizes accident types by mainline and ramp segments.

As shown in Table 1.7, the predominant mainline accident types were vehicle-to-vehicle Sideswipe (Eastbound: 20.3 percent, Westbound: 27.1 percent), Rear End (Eastbound: 25.0 percent, Westbound: 28.8 percent), and Hit Object (Eastbound: 42.2 percent, Westbound: 33.9 percent) accidents, with Hit Object having the highest percentage of collisions in both the westbound and eastbound mainline directions. The primary accident type for the Westbound On- and Off-Ramps was Hit Object (100 percent). The primary accident types for the Eastbound Off-Ramp to WLC Pkwy

Table 1.7 Accident Types

Segment/Accident Type[1]	Head-On (%)	Sideswipe (%)	Rear End (%)	Broadside (%)	Hit Object (%)	Overturn (%)	Not Stated (%)
SR-60 EB Mainline PM 20.0/22.0	-	20.3	25.0	3.1	**42.2**[2]	9.4	-
SR-60 WB Mainline PM 20.0/22.0	-	27.1	28.8	5.1	**33.9**	5.1	-
WB Off-Ramp to WLC Pkwy PM 21.46	-	-	-	-	**100**	-	-
WB On-Ramp from WLC Pkwy PM 21.37	-	-	-	-	**100**	-	-
EB Off-Ramp to WLC Pkwy PM 21.27	-	-	-	25.0	**50.0**	25.0	-
EB On-Ramp from WLC Pkwy PM 21.37	-	-	-	**100**	-	-	-

Source: Caltrans District 8 TASAS Selective Accident Retrieval (TSAR) (January 2015 – December 2017)
[1] Expressed as a percentage of accidents per segment.
[2] Bold indicates the highest accident type per segment.
EB = eastbound WB = westbound
PM = Post Mile WLC Pkwy = World Logistics Center Parkway
SR-60 = State Route 60

were Hit Object (50.0 percent), Broadside (25.0 percent), and Overturn (25.0 percent). The primary accident type for the Eastbound On-Ramp from WLC Pkwy was Broadside (100 percent).

Proposed eastbound and westbound mainline auxiliary lanes between Redlands Boulevard and Gilman Springs Road will allow merging vehicles to slow down or accelerate on a dedicated lane. Vehicle-to-vehicle Rear End and Sideswipe accident rates are expected to decrease with the addition of the mainline auxiliary lanes. Within the project limits of improvements, existing pavement striping will be re-striped to current Caltrans standards, which is expected to decrease the accident rates for Sideswipes occurring on the mainline by improving mainline lane visibility. The project will address the non-standard WLC Pkwy overcrossing vertical clearance by demolishing, reconstructing, and making the bridge clearance over SR-60 standard, which is expected to reduce future Hit Object accidents to the Bottom of Structure. During reconstruction of the bridge, the median guardrail will be removed and then replaced with a median barrier designed to current Caltrans standards, which would likely reduce the severity of Median Barrier accidents on the mainline.

The proposed project will re-align and upgrade the existing WLC Pkwy interchange ramps from the current elongated non-standard ramp geometry to a more standard ramp configuration. This would improve driver visibility, increase acceleration/ deceleration lengths, and increase ramp radii. These improvements are not expected to increase accident frequency and severity and are expected to reduce the amount of Overturned and vehicle-to-vehicle Hit Object accidents on the ramps. Additionally, all guardrails and dikes/curbs will be upgraded to current Caltrans standards, which would likely reduce the severity of Guardrail and Dike or Curb Hit Object accidents currently experienced on the ramps. Roadside objects will be moved to outside the clear recovery area, made breakable, or shielded with a standard guardrail, thereby it is expected that the accident frequency and severity of Hit Object accidents on the ramps will be reduced. Based on the available accident history and proposed project improvements, it is expected that the number and severity of accidents will decrease after the project is constructed.

1.2.2.3 Roadway Deficiencies

In addition, the WLC Pkwy Overcrossing is operationally deficient (the existing overcrossing is two lanes, but four lanes are needed) and needs additional capacity to accommodate projected future travel volumes. Without the proposed project, the operation and efficiency of the SR-60/WLC Pkwy interchange will deteriorate over time, resulting in congestion, delays, and decreased LOS at the interchange and adjacent intersections due to an increase in forecasted traffic. In the year 2045, the existing, no build, interchange ramps, intersections, and SR-60 mainline are anticipated to operate at unacceptable LOS. The eastbound and westbound off-ramps are anticipated to operate at LOS F. The westbound on-ramp is anticipated to operate at LOS F. The SR-60/WLC Pkwy ramp intersections and WLC Pkwy/ Eucalyptus Avenue intersection are anticipated to operate at LOS F. The westbound SR-60 segment from Gilman Springs Road to Redlands Boulevard is anticipated to operate at LOS F. The eastbound SR-60 segments from Redlands Boulevard to WLC Pkwy, and WLC Pkwy to Gilman Springs Road are anticipated to operate at LOS F and LOS E, respectively.

The WLC Pkwy Overcrossing was built in 1964. The overcrossing (currently 15 ft 5 inches of vertical clearance in the eastbound direction and 15 ft 2 inches in the westbound direction) does not meet current vertical clearance standards (16 ft 6 inches). The overpass bridge at the interchange was hit by a truck in January 2015 and an emergency repair project was required; therefore, there is a need to bring the vertical clearance up to current standards.

A primary operational deficiency associated with the existing interchange results from the non-standard spacing (0.7 mi) with the Gilman Springs Road interchange. This spacing reduces the weaving length between the existing Gilman Springs Road on-ramp and the WLC Pkwy off-ramp to approximately 1,200 feet (ft). Minimum spacing is 2,000 ft in urban areas and 5,000 ft in rural areas.

1.2.2.4 Social Demand and Economic Development

Similar to other areas in the Inland Empire, population growth continues to occur in Moreno Valley. Major developments in the area, consisting of a mixture of residential, commercial, industrial, and office uses, have been completed, are under construction, or are in the planning process. Build out of the area in accordance with the City's General Plan (2006) will generate substantial traffic on the freeway and local streets leading to the interchange. The City of Moreno Valley and Riverside County are anticipated to continue to grow as logistics hubs for the region and will require infrastructure to accommodate goods movement as a result of this economic growth.

In addition to the transportation uses on SR-60 and WLC Pkwy, existing land uses in the immediate vicinity of the interchange include:

- **Northeast Quadrant:** A single-family residence and a farm
- **Northwest Quadrant:** Vacant land
- **Southwest Quadrant:** A large warehouse/distribution center (Skechers) and vacant land

- **Southeast Quadrant:** A single-family residence and vacant land

Other existing land uses in the study area include agriculture; commercial and services; facilities; industrial; residential; mobile homes and trailer parks; open space and recreation; transportation, communications, and utilities; and vacant land, as shown on Figure 2.1-1, Existing Land Uses.

In addition to the transportation uses on SR-60 and WLC Pkwy, as shown on Figure 2.1-2, General Plan Land Uses, land use designations in the City of Moreno Valley General Plan Land Use Element in the immediate vicinity of the interchange are as follows:

- **Northeast Quadrant:** The northeast quadrant of the interchange is located in unincorporated Riverside County but within the Sphere of Influence of the City. Open Space (OS), Residential 1 (R1), Rural Residential (RR), and Public Facilities (PF). The OS designation allows for low-density development to preserve areas that are substantially unimproved for uses such as outdoor recreation, preservation of natural resources, grazing animals, and crop production. The R1 designation provides for rural low-density residential development at a maximum density of 1 dwelling unit per acre (DU/ac). The RR designation provides for low-density and large-lot residential development at a maximum density of 2.5 DU/ac, with agricultural uses also permitted.

- **Northwest Quadrant:** This quadrant is located in Moreno Valley and is designated primarily as R1 and Residential 2 (R2) with some Office (O) and OS land uses. The R1 designation allows for rural low-density residential development at a maximum density of 1 DU/ac, and the R2 designation allows for rural suburban residential development at a maximum density of 2 DU/ac. The O designation allows for the development of office uses at a maximum floor-to-area ratio (FAR) of 2, to provide for office uses such as administrative, professional, legal, medical, and financial offices. As described above, the OS designation allows for low-intensity development.

- **Southwest Quadrant:** This quadrant is also located in Moreno Valley and is designated as Business Park/Light Industrial (BP), Commercial (C), R2, Residential 3 (R3), and Residential 5 (R5). The BP designation allows for the development of manufacturing, research and development, warehousing and distribution, office-based firms, and limited supporting commercial uses at a maximum FAR of 1. The C designation provides for the development of a variety of businesses at a maximum FAR of 1, including retail stores, restaurants, banks, hotels, professional services, personal services, and repair services. The R2, R3, and R5 designations allow for single-family residential development at a maximum of 2 DU/ac, 3 DU/ac, and 5 DU/ac, respectively.

- **Southeast Quadrant:** This quadrant in Moreno Valley is designated primarily as BP and OS land uses, which are described above. Additional General Plan land uses in this quadrant include R2, R3, C, and PF, which are also described above.

The City's real estate market appears to have recovered from the Great Recession of 2008, and Moreno Valley is currently in another high-growth era. As of May 2018,

there were approximately 4,658 single-family residential units, 2,543 multifamily residential units, 18 commercial centers (1,327,645 square feet [sf]), 12 office/ medical facilities (1,097,557 sf), 1 expansion to an existing industrial development (464,900 sf), 1 industrial project, and 12 hotel (1,096 rooms) development projects proposed, approved, or under construction in Moreno Valley. Much of the eastern third of the Moreno Valley remains undeveloped, and significant infill development opportunities exist throughout the developed parts of Moreno Valley. Please refer to Section 2.23 (Cumulative Impacts) for a more detailed discussion of planned projects in Moreno Valley and the SR-60 Corridor. Planned projects in this area are listed in Table 2.23.1 and shown on Figure 2.23-1.

In addition to these proposed development projects in Moreno Valley, the World Logistics Center Project amended the City's General Plan to designate land uses that are generally consistent with other existing and approved uses in the vicinity of the SR-60/WLC Pkwy interchange (e.g., the Industrial Park and the Skechers warehouse/distribution facility).

The City does not currently have a growth management/control ordinance in place.

1.2.2.5 Modal Interrelationships and System Linkages

The SR-60/WLC Pkwy interchange, in combination with the other SR-60 interchanges in Moreno Valley, provides regional access to the city. I-10, a major interstate freeway, connects to SR-60 approximately 8.5 mi east of WLC Pkwy in Beaumont. SR-60 provides a regional connection between Los Angeles, Riverside, and San Bernardino Counties through its interchanges with Interstate 215 (I-215), I-10, State Route 71 (SR-71), State Route 79 (SR-79), State Route 57 (SR-57), Interstate 605 (I-605), Interstate 710 (I-710), and Interstate 5 (I-5).

The project area and its vicinity are served by the Riverside Transit Agency (RTA). The RTA provides extensive fixed-route bus systems that include bus routes in the interchange area. RTA Routes 11, 16, 18, 19, 20, 35, 41, 208, and 210; Sunline 220; and the Amtrak Thruway and Neighborhood operate within Moreno Valley.

ONT is a full-service airport with commercial jet service to major United States cities and through service to many international destinations. Located in Ontario, the airport is less than 0.5 mi south of I-10, approximately 2.5 mi west of I-15, and 1.5 mi north of SR-60. ONT, which is approximately 20 mi northwest of Moreno Valley, is the center of a developing freight movement system that includes the airport, two railroads, four major freeways, and an expanding network of freight forwarders. In 2017, 4.5 million passengers used ONT and 654,376 tons of air freight were shipped.[1]

March Air Reserve Base is an operational Air Force Reserve base located in Riverside County that is headquarters to active duty units from the Army Reserve, Navy Reserve, Marine Corps Reserve, and Air National Guard. The base provides regional commercial transportation and facilitates the movement of goods through

[1] California Department of Transportation, Division of Aeronautics. March 2018. 2017:2016 Air Passenger and Air Cargo Traffic Activity Year to Previous Year Comparison Report.

limited commercial cargo flights. The March Air Reserve Base is approximately 2 mi south of SR-60. I-215 crosses through the western portion of the base.

According to the 2012-2016 American Community Survey conducted by the United States Census, approximately 74 percent of the employed labor force in Moreno Valley works outside of their respective place of residence, and approximately 52.5 percent have a commute longer than 30 minutes.

1.2.2.6 Air Quality Improvements

Bike lanes are provided on both sides of WLC Pkwy and Eucalyptus Avenue throughout the project limits. However, the projected future growth within the project area that would generate more trips is anticipated to lead to greater congestion in the project area. This project would alleviate future congestion at the SR-60/WLC Pkwy interchange ramps and nearby intersections to improve traffic flow through the interchange. Ramp metering would also be included as part of the proposed project.

No Park and Ride facilities are existing or planned as part of this project because there are no high-occupancy vehicle (HOV) facilities planned on SR-60 with the proposed project. Per the *Transportation Concept Report* for SR-60, there are no transit facilities or routes planned through the SR-60 corridor. Additionally, HOV lanes end west of the project limits at Redlands Boulevard, and no HOV lanes are planned east of Redlands Boulevard. Per the *Transportation Concept Report* for SR-60, bicycle and pedestrian access is prohibited on SR-60 within the project limits. In accordance with the *Caltrans District 8 Ramp Meter Design Manual*, all interchange on-ramps would be two-lane and/or three-lane metered ramps, with sufficient right-of-way to accommodate vehicle storage and ramp meter equipment.

Alternative 6 is the Locally Preferred Alternative (LPA), and includes roundabout intersection designs, which would reduce congestion and intersection wait times compared to standard intersection designs.

1.2.2.7 Independent Utility and Logical Termini

FHWA regulations (23 Code of Federal Regulations [CFR] 771.111[f]) require that a proposed project:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope. Logical termini are defined as rational end points for transportation improvement and rational end points for a review of the environmental impacts. The project limits include the portion of SR-60 where the reconstructed ramps and auxiliary lanes meet the mainline and the local streets associated with maintaining an acceptable LOS D on the adjacent local transportation network in the 2045 design year. This area is large enough to appropriately address the potential environmental impacts of the proposed project.

- Have independent utility or independent significance (be usable and require a reasonable expenditure even if no additional transportation improvements in the area are made). The proposed project meets the identified need for congestion relief and ramp improvements as an independent project and is not dependent

on any other projects to meet the identified purpose for the interchange improvements.

- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. The preliminary design of the proposed project avoids potential conflicts with the other foreseeable transportation improvements in the area. Therefore, the project can be constructed independently of the other transportation improvements in the area, and conversely, the other transportation projects are not dependent on the project improvements for implementation.

1.3 Project Description

This section describes the proposed action and the project alternatives including the design variations that were developed to meet the identified purpose and need of the project while avoiding or minimizing environmental impacts.

The proposed project would construct modifications to the existing SR-60/WLC Pkwy interchange from PM 20.0 to PM 22.0 on SR-60, approximately 2 mi. Major improvements to the interchange would include:

- Reconstruction of the westbound and eastbound SR-60 on- and off-ramps;
- Replacement of the existing WLC Pkwy Overcrossing to provide a minimum 16.5 ft vertical clearance and additional through and turn lanes;
- Addition of auxiliary lanes in each direction from SR-60/WLC Pkwy to the Redlands Boulevard (west) and Gilman Springs Road (east) interchange on- and off-ramps; and
- Improvements to Theodore Street/WLC Pkwy north to Ironwood Avenue and south to Eucalyptus Avenue and Dracaea Avenue.

The proposed improvements to the on- and off-ramps would extend west and east of the proposed overcrossing on SR-60 for proposed auxiliary lanes in each direction. The proposed improvements to Theodore Street/WLC Pkwy would extend north of SR-60 to Ironwood Avenue and south of SR 60 to south of Eucalyptus Avenue. Project construction is anticipated to begin in early 2022 and be completed in winter 2023 (approximately 19 months) contingent upon full funding of all phases (i.e., final design, right-of-way acquisition, and construction).

Three alternatives and two design variations are evaluated in this Draft Environmental Impact Report/Environmental Assessment (EIR/EA):

- **Alternative 1:** No Build Alternative (No Project)
- **Alternative 2:** Modified Partial Cloverleaf with Signalized Intersections
- **Alternative 6 (LPA):** Modified Partial Cloverleaf with Roundabout Intersections
- **Design Variations 2a and 6a:** Design Variations of Alternatives 2 and 6 (LPA) to Realign Eucalyptus Avenue

During the construction phase of the proposed project, removal of the existing overcrossing and construction of the new overcrossing and ramps will affect access to SR-60 at WLC Pkwy. To address this, Eucalyptus Avenue will be extended between WLC Pkwy and Redlands Boulevard to provide a detour route to SR-60 during construction of the project. The improvements to Eucalyptus Avenue will be constructed early in the construction schedule, prior to the closure of the WLC Pkwy Overcrossing. North of the freeway, access to SR-60 during construction would be provided via Ironwood Avenue and Redlands Boulevard. South of the freeway, access to SR-60 would be provided via Alessandro Boulevard and Gilman Springs Road and via Eucalyptus Avenue and Redlands Boulevard. Additional intersection improvements are proposed along the detour routes to facilitate vehicle movement. As a result, widening is proposed at the Redlands Boulevard/Ironwood Avenue, WLC Pkwy/Alessandro Boulevard, and Alessandro Boulevard/Gilman Springs Road intersections. Consequently, a signal modification is proposed at the Redlands Boulevard/Ironwood Avenue and Redlands Boulevard/Eucalyptus Avenue intersections. A new signal would be installed at the Gilman Springs Road/ Alessandro Boulevard intersection due to the high through movements on Gilman Springs Road conflicting with left turns to and from Alessandro Boulevard. The improvements required for the detour routes also include utility adjustments and/or relocations at Redlands Boulevard/Ironwood Avenue, WLC Pkwy /Alessandro Boulevard, and Alessandro Boulevard/Gilman Springs Road.

1.3.1 Alternatives

In addition to the No Build Alternative (Alternative 1), two Build Alternatives (Alternatives 2 and 6 [LPA]) and two design variations (Design Variations 2a and 6a) are under consideration. Alternatives 1, 2, 6 (LPA), and Design Variations 2a and 6a are described in further detail below.

1.3.2 Common Design Features for Both Build Alternatives

Approximately 50,000 cubic yards (cy) of import material will be imported to the project from the City Stockpile borrow site. The City Stockpile borrow site is located at the northwest corner of the intersection of Alessandro Boulevard/Nason Street, approximately 2.3 mi southwest of the western boundary of the project site. This project would exhaust the material available at the City Stockpile and grade the area after removal. The City Stockpile will be environmentally cleared with this project. Additional fill material beyond the 50,000 cy will be necessary for the project and will come from other site(s) to be determined during future phases of the project. All local and imported borrow placed within State right-of-way must conform to the latest Caltrans standards and Section 19-7 of the Standard Specifications.

Both of the Build Alternatives may be adapted to incorporate different bridge aesthetics or alternative bridge types in the future. Additional Project Development Team (PDT) coordination during final design would be needed to determine whether impacts for alternative bridge types or modified bridge aesthetics would require any additional environmental evaluation.

1.3.2.1 Interchange On- and Off-Ramp Improvements

The proposed interchange is located approximately 1 mi east of the SR-60/Redlands Boulevard interchange and 0.7 mi west of the SR-60/Gilman Springs Road

interchange. The new on- and off- ramps and the new bridge overcrossing would provide a direct and continuous alignment for WLC Pkwy traffic entering, exiting or crossing SR-60. In accordance with the Caltrans District 8 Ramp Meter Design Manual, all interchange on-ramps would be two-lane and/or three-lane metered ramps with sufficient right-of-way to accommodate vehicle storage, ramp meter equipment, and California Highway Patrol enforcement areas. Additionally, not all on-ramps would preclude future high-occupancy vehicle (HOV) preferential lanes.

An existing Caltrans paved material transfer area located in the southwest quadrant of the existing SR-60/WLC Pkwy interchange, within the existing eastbound loop on-ramp, is currently used as a temporary site for the transfer of street sweeping materials. The existing paved material transfer area will be relocated to within the new ramp infill area as part of the proposed project.

1.3.2.2 Roadway Improvements

Roadway improvements common to both alternatives include the following:

- Widening WLC Pkwy through the proposed project limits from one lane in each direction to two 12 ft lanes in each direction with a raised median south of Eucalyptus Avenue

- A 0–16 ft parkway on both sides of WLC Pkwy, a 6 ft sidewalk on both sides of WLC Pkwy south of Eucalyptus Avenue, an 8 ft sidewalk along the northbound side of WLC Pkwy north of Eucalyptus Avenue, and an 11 ft wide multi-use trail along the northbound side of WLC Pkwy north of Eucalyptus Avenue

- Improvements to Eucalyptus Avenue to provide a detour route between Redlands Boulevard and WLC Pkwy. Improvements anticipated for detour traffic include widening by a minimum of 12 ft to accommodate two directions of travel on Eucalyptus Avenue (if not completed by a separate developer project prior to the SR-60/WLC Pkwy Interchange project)

- Addition of one 12 ft auxiliary lane on SR-60 and in each direction between the Redlands Boulevard and Gilman Springs Road interchanges

No additional future widening is planned on WLC Pkwy within the interchange limits for either Build Alternative. The overcrossing horizontal alignment is unchanged from the existing condition and has a bearing of North 0° 27' 9" East. The vertical alignment through the interchange has a design speed of 45 miles per hour (mph). The vertical alignment or profile grade has been raised through the overcrossing to provide greater overcrossing clearance. The minimum vertical clearance differs between alternatives and is further discussed in the alternative-specific discussion below.

Existing drainage structures will be maintained and extended within the project limits. The existing drainage structures are perpendicular to SR-60 and located under the travel lanes. There are four existing storm drain culvert structures located between Redlands Boulevard and WLC Pkwy.

1.3.2.3 Nonvehicular and Pedestrian Access Improvements

The proposed project includes construction of several nonvehicular and pedestrian access improvements. These include an 8 ft wide sidewalk on the east side of WLC Pkwy along the limits of the WLC Pkwy improvements, a 6 ft wide sidewalk on the west side of WLC Pkwy between the southern project limits and Eucalyptus Avenue and potentially a 6 ft wide sidewalk on both sides of Eucalyptus Avenue from WLC Pkwy to Redlands Boulevard. The proposed sidewalk on Eucalyptus Avenue is a condition of nearby development, which may construct the pedestrian facility prior to the SR-60/WLC Pkwy Interchange project. Additionally, an 11 ft wide multi-use trail would be constructed on the east side of WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue. The multi-use trail will be used by equestrian, pedestrian, and bike users. Bike lanes are provided on WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue within the width of the proposed shoulders. For Alternative 6 (LPA), bicyclists would have the option to merge with vehicular traffic to navigate through the roundabout or exit the travel lane prior to each roundabout and cross the roundabout with pedestrian traffic.

The proposed project would not preclude a future 11 ft wide multi-use trail on the north side of Eucalyptus Avenue between Redlands Boulevard and WLC Pkwy. A grade-separated trail and pedestrian crossing over the eastbound SR-60 direct on-ramp may be provided in the future based on available funding.

1.3.2.4 Utility and Right-of-Way Requirements

The proposed project would require relocation or in-place protection of several utility facilities. To prevent impacts to utility facilities and services during construction, the following utilities have been contacted regarding the proposed project: Eastern Municipal Water District (EMWD), Metropolitan Water District of Southern California (MWD), Western Municipal Water District (WMWD), Riverside County Flood Control and Water Conservation District (RCFCWCD), Riverside County Waste Management, Moreno Valley Electric Utility, Time Warner Cable, Charter Communications, Southern California Edison (SCE), Southern California Gas Company (SoCalGas), Questar Southern Trails Pipeline Company, Sunesys, Verizon, and AT&T.

The existing SCE overhead 115-kilovolt (kV) transmission line and 12 kV distribution line that are currently adjacent to the west side of WLC Pkwy would be relocated to the east side of WLC Pkwy, between the westbound ramps intersection and the southern limits of the proposed project. North of the westbound ramps intersection, the SCE utility lines will remain on the west side but will be relocated to the proposed parkway. The existing SCE utility lines do not currently cross WLC Pkwy but will cross WLC Pkwy in the proposed condition near the westbound ramps intersection. In order to accommodate future utilities, the proposed overcrossing would incorporate conduits for Moreno Valley Electric Utility, SCE, and other utility companies as requested.

Build Alternatives 2 and 6 (LPA) and Design Variation 2a would each require a total of six full acquisitions: one full acquisition in the northwest quadrant and five full acquisitions in the southwest quadrant. Design Variation 6a would require the same amount of acquisitions with an additional full acquisition in the southeast quadrant of the interchange. There would be partial right-of-way acquisitions within all four

quadrants of the interchange. The full acquisition for Design Variation 6a in the southeast quadrant of the interchange would require one residential displacement.

1.3.2.5 Additional Considerations

Geotechnical investigations will be performed during the final design phase and the findings documented in a final Geotechnical Design Report and Foundations Report(s). Geotechnical borings and tests are anticipated for the following:

- **Bridges:** A boring at each bridge abutment and bent (or two borings at each for bridges wider than 100 ft).
- **Retaining Walls:** A boring every 250 ft of retaining wall, sometimes two rows of borings for walls.
- **Sound Walls:** A boring every 500 ft of sound wall.
- **Stormwater Conduits:** Borings are typically performed at 250 ft along the conduit (for larger conduits).
- **Overhead Signs:** A boring is typically performed at each overhead sign.
- **Stormwater Infiltration Basins:** Borings and infiltration tests will be performed at new stormwater basins.

Infiltration basins are proposed in the undeveloped areas between the on-/off-ramps and SR-60. A system of bioswales and infiltration basins will be installed to compensate for the low infiltration rates.

Although the existing bridge is not within a currently designated Alquist-Priolo (AP) Earthquake Fault Zone, an unnamed “fault splay” outside the mapped AP Fault Zone projects toward the bridge. A fault trench investigation should be performed as part of the bridge foundation report during the final design phase to confirm the existence or absence of this fault splay.

Proposed landscaping palettes and the Highway Planting Design will be implemented in consultation with and approved by the City and the Caltrans District Landscape Architect in the final design phase. Trees removed within Caltrans right-of-way will be replaced. Plant palettes will conform with the guidance and plant list, listed in the *Route 60 Corridor Master Plan for Aesthetics and Landscaping*, dated August 2010, and any updates.

1.3.2.6 Project Features

This project contains a number of standardized project measures that are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

1.3.3 Unique Features of Build Alternatives

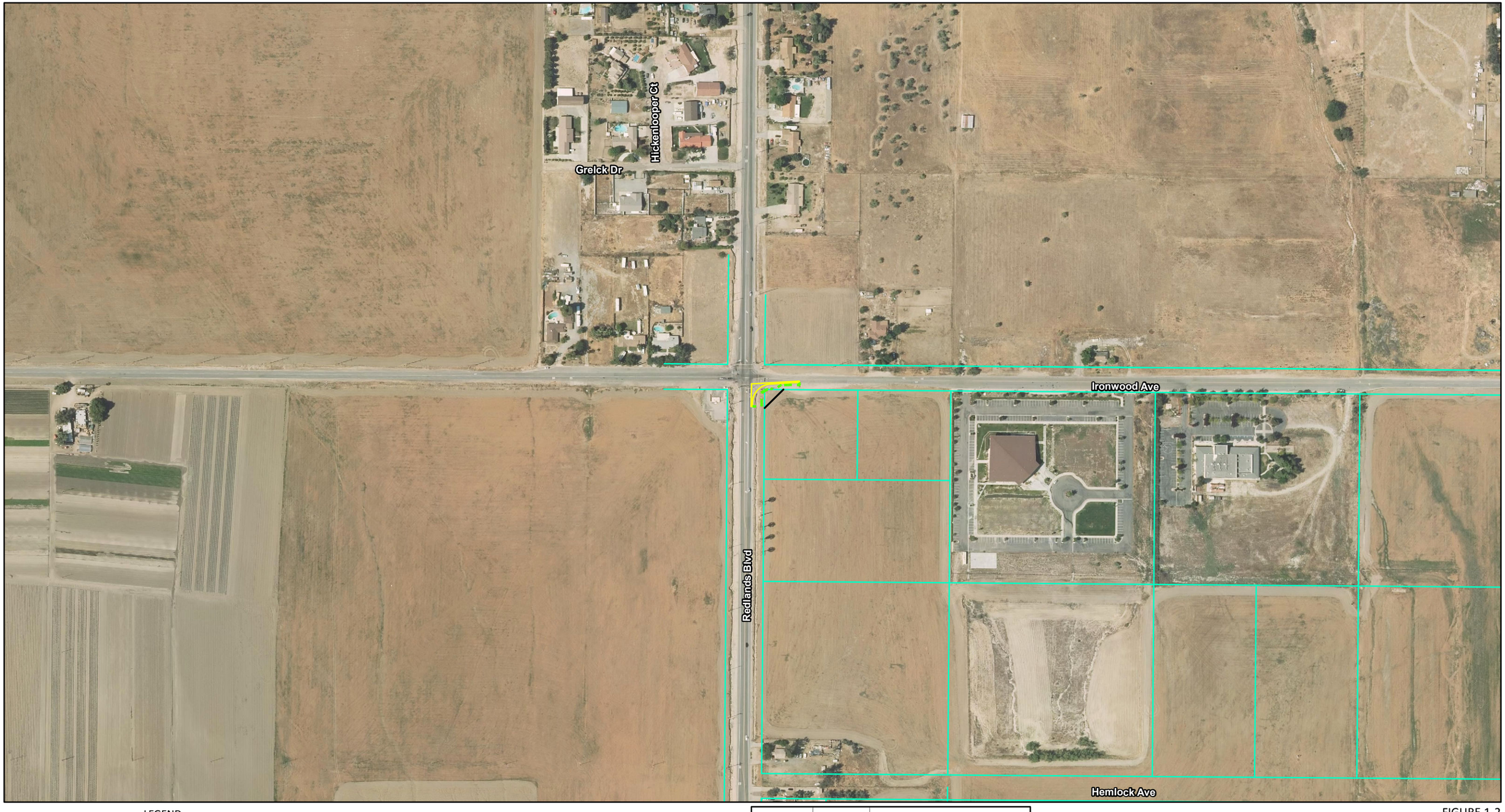
1.3.3.1 Alternative 2 (Modified Partial Cloverleaf)

Alternative 2 proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration. Improvements under Alternative 2 include the construction of a new westbound direct on-ramp and a new westbound loop off-ramp in the northwest quadrant of the interchange in a cloverleaf configuration. A new eastbound direct off-ramp, a new eastbound loop on-ramp, and a new eastbound direct on-ramp would be constructed in the southwest and southeast quadrants in a partial cloverleaf configuration. The westbound on-ramp is widened from one to three 12 ft lanes, and all other proposed ramps are widened from one to two 12 ft lanes. Alternative 2 removes and replaces the existing two through-lane (one lane in each direction) WLC Pkwy Overcrossing with a new four through-lane (two through lanes in each direction) overcrossing that is approximately 137 ft wide and 298 ft long. Included within the proposed overcrossing width are two 12 ft left-turn lanes in the northbound direction and one 17 ft right-turn lane in the southbound direction. The proposed minimum bridge vertical clearance over SR-60 is 18 ft 10 inches.

Additional improvements, as part of Alternative 2, include the installation of signals at both the proposed eastbound and westbound ramp intersections, as well as at the Eucalyptus Avenue/WLC Pkwy intersection. Bike lanes are provided on both sides of WLC Pkwy throughout the project limits. Through the interchange, bike lanes are 8 ft wide with a 4 ft buffer along WLC Pkwy and taper to 5 ft curb-adjacent lanes outside the interchange limits. At the eastbound and westbound ramp intersections, bike lanes are 4 ft wide. The improvements included in Alternative 2 are shown on Figure 1-2.

Design Variation 2a (Alternative 2 with Design Variation)

Design Variation 2a has the same features as Alternative 2 with the exception of the location of the Eucalyptus Avenue/WLC Pkwy intersection. Design Variation 2a consists of moving the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south of its current location. The shift would cause a partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect with the west side of WLC Pkwy. The design variation will be moved forward with the Build Alternatives to final design (as applicable) and studied until it is selected for construction or removed from further consideration. The improvements included in Design Variation 2a are shown on Figure 1-3.



LEGEND

- Alternative 2 Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

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FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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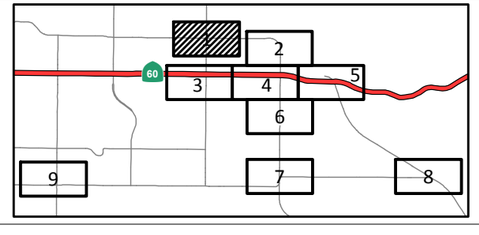

FIGURE 1-2
Sheet 1 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 2
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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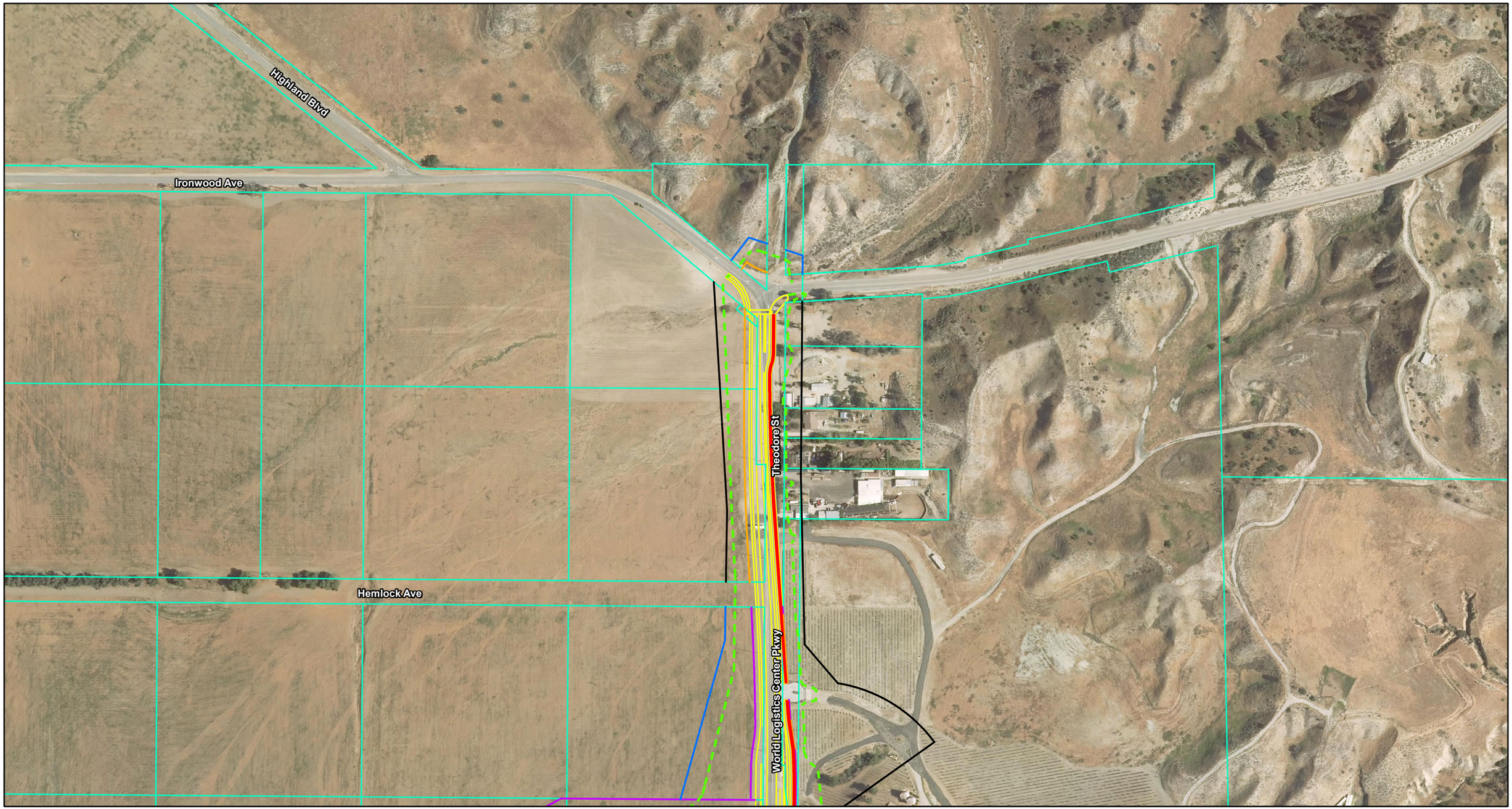

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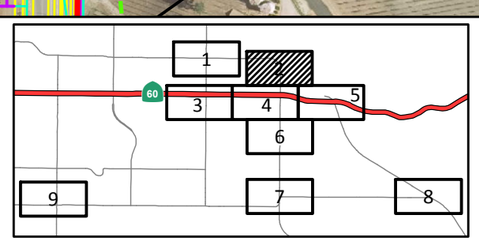

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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FIGURE 1-2
Sheet 2 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 2
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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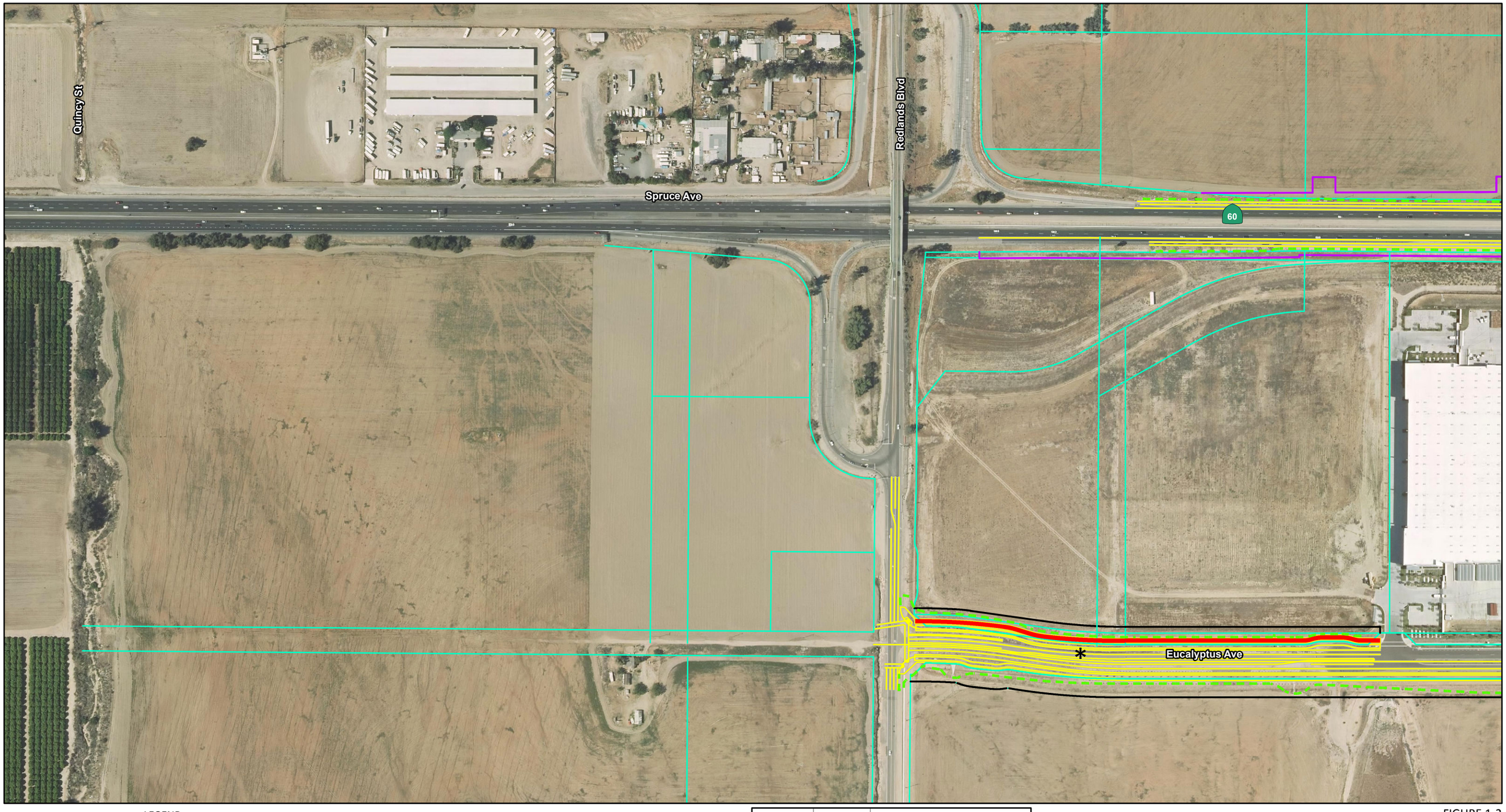

LEGEND

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SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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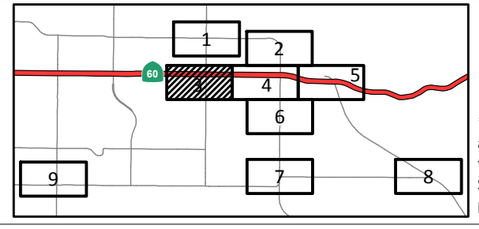

*Note: Ultimate improvements shown. Only one additional lane is predicted and planned as part of the detour route required during construction of the SR-60/WLC Pkwy Interchange Improvement project.

FIGURE 1-2
Sheet 3 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 2
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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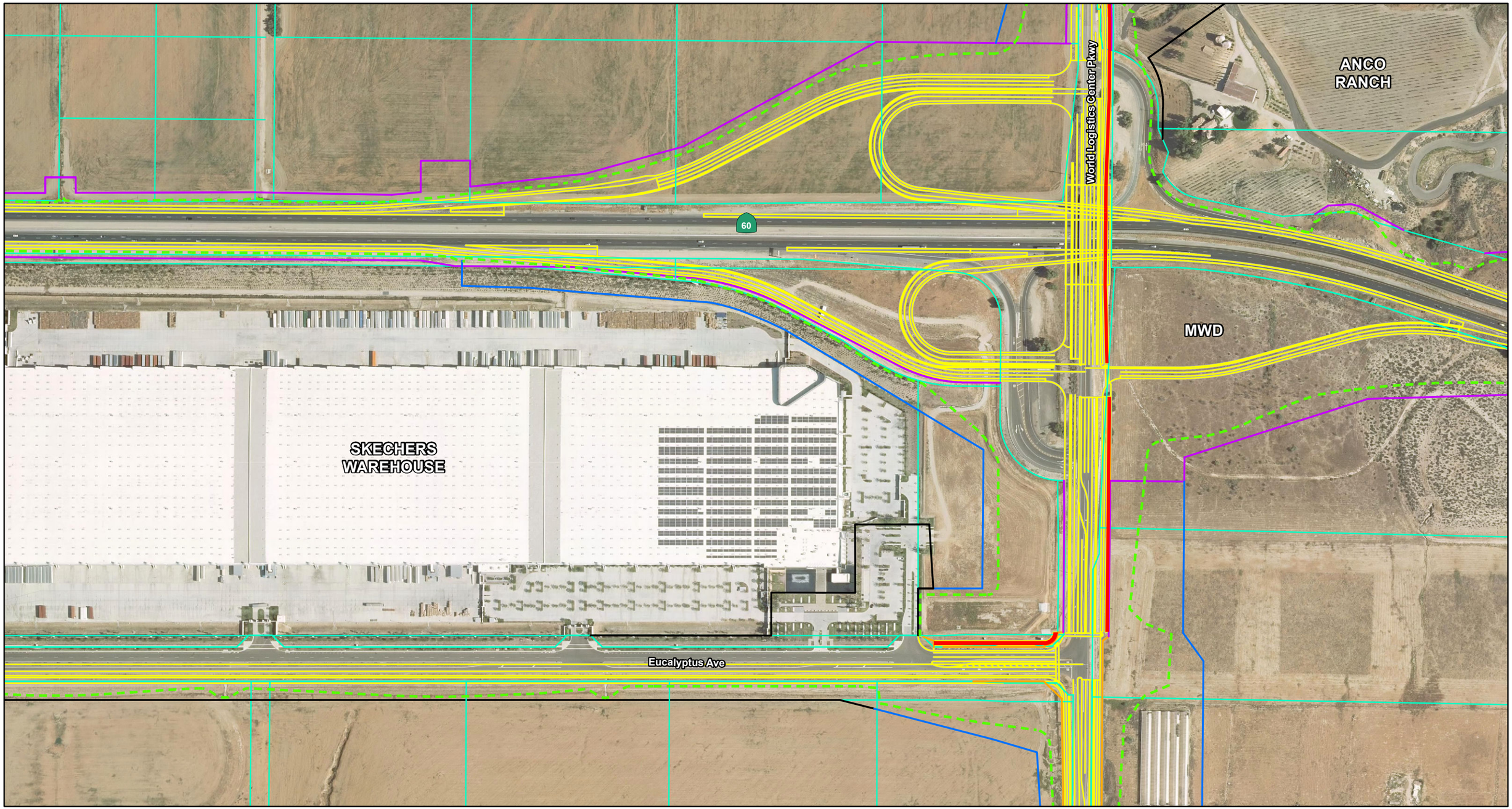

LEGEND

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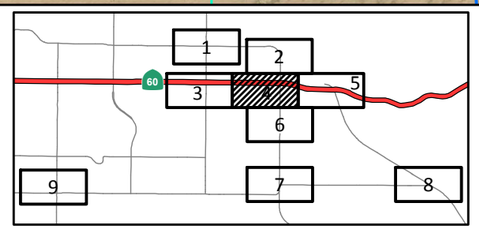

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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FIGURE 1-2
Sheet 4 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 2
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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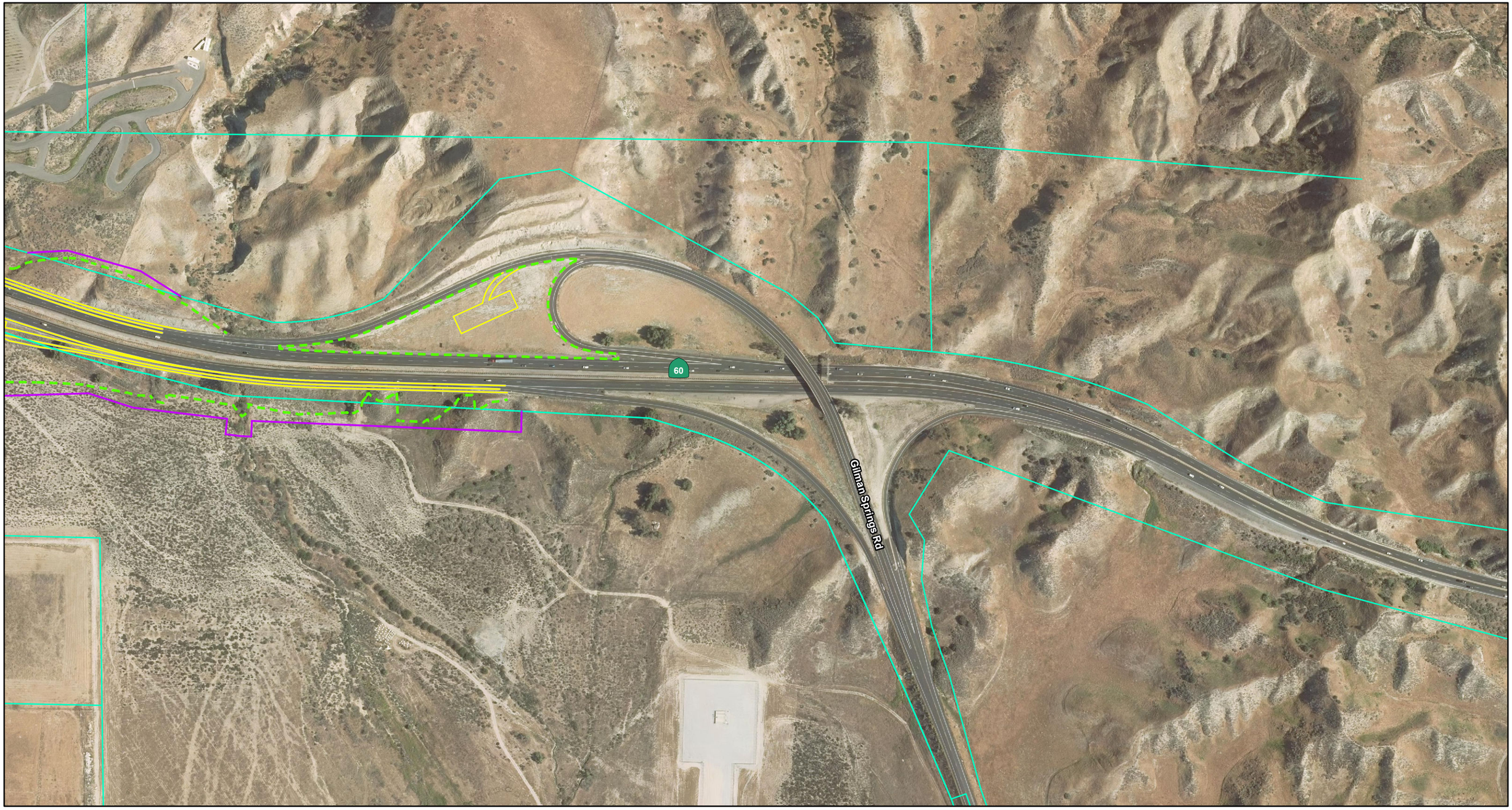

LEGEND

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SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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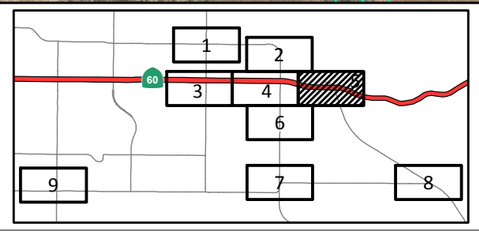

FIGURE 1-2
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SR-60/World Logistics Center Parkway Interchange Project
Alternative 2
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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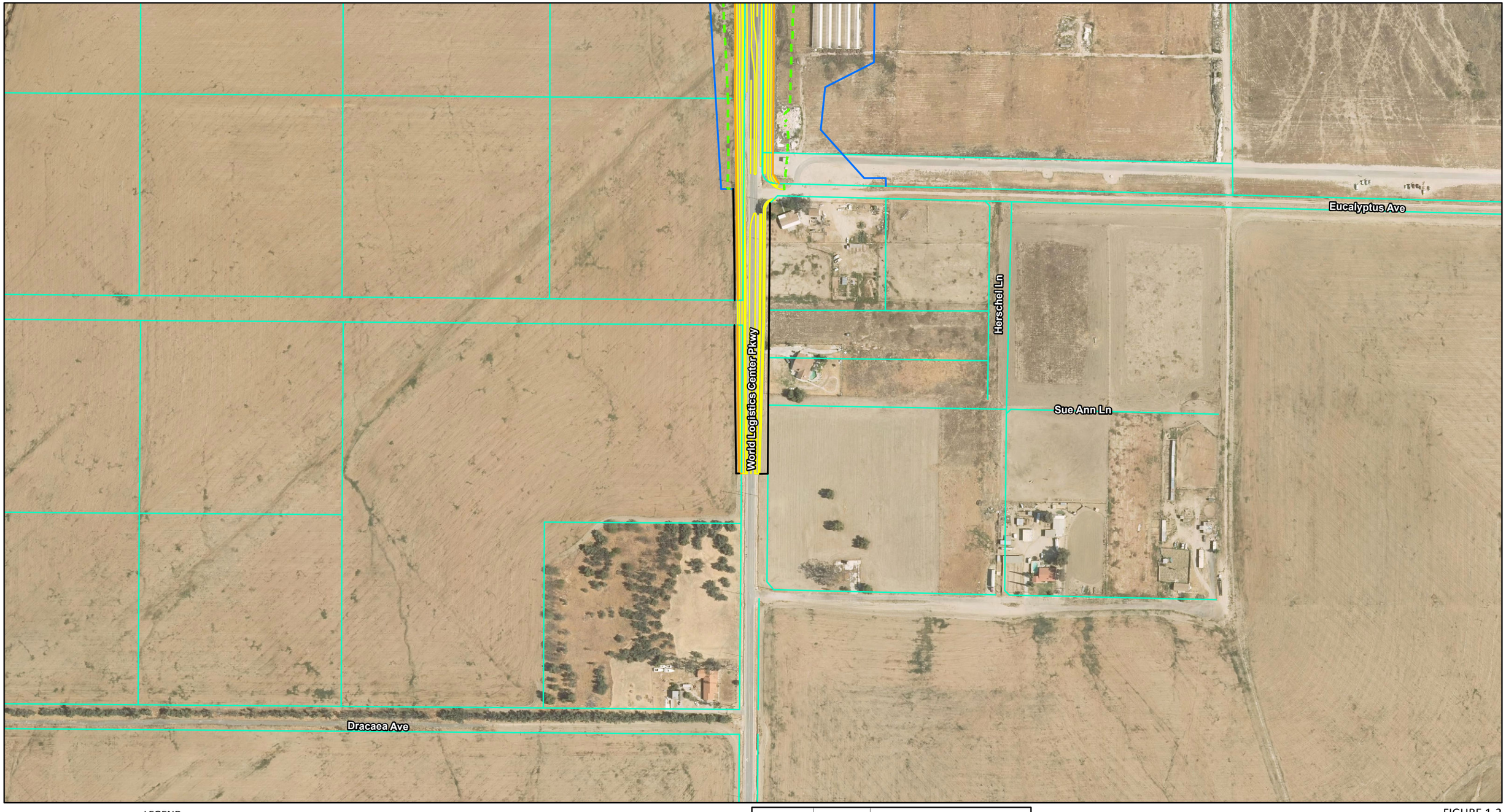

LEGEND

- Alternative 2 Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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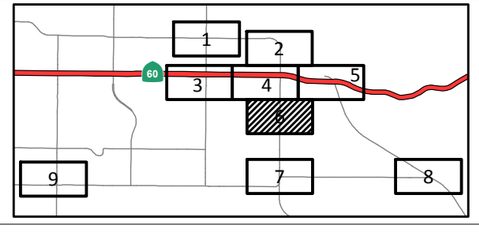

FIGURE 1-2
Sheet 6 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 2
Geometrics
08-RIV-60 PM 20.0/22.0
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Project No. 0813000109

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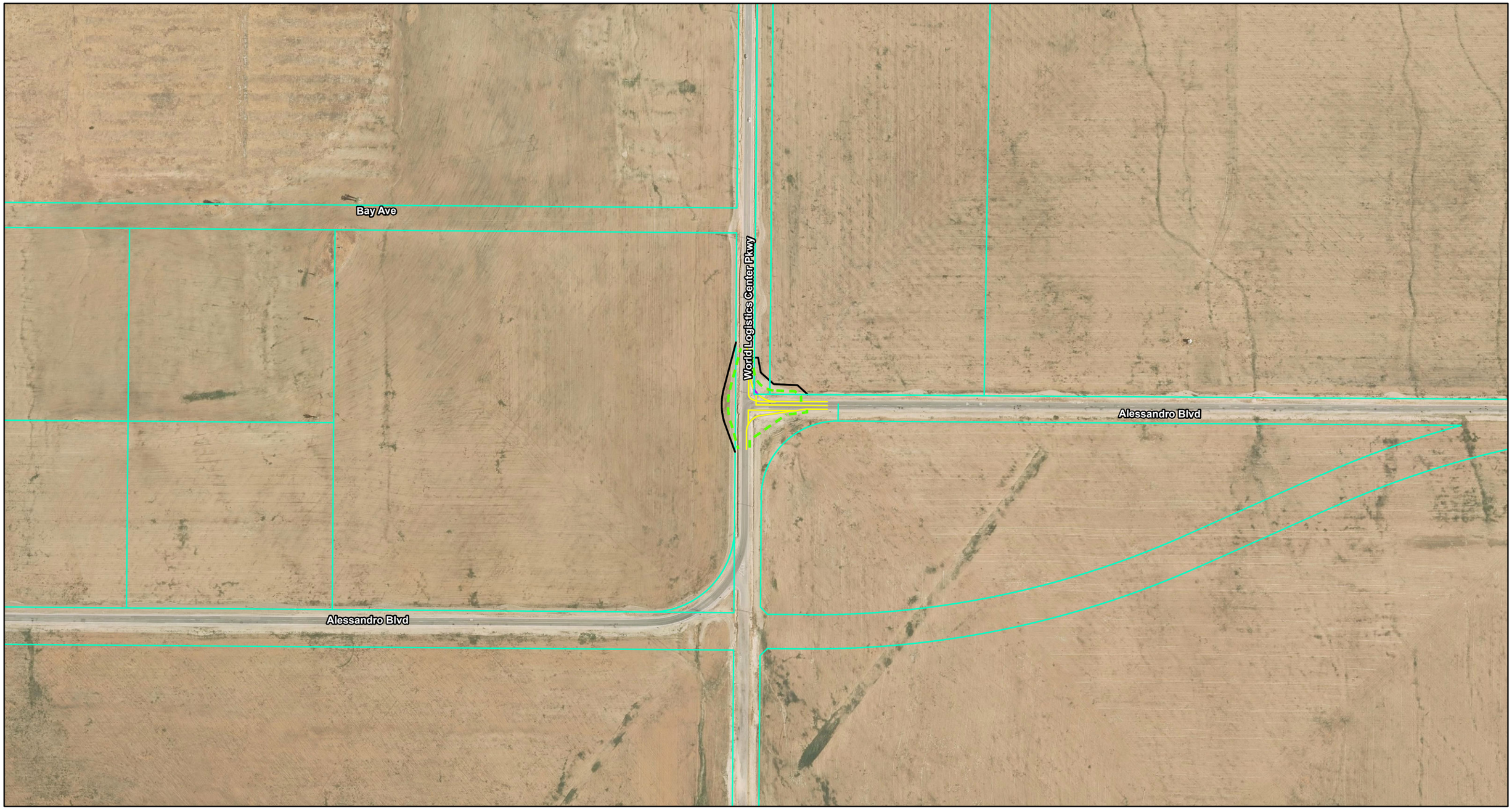

LEGEND

- Alternative 2 Proposed Improvements
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FEET

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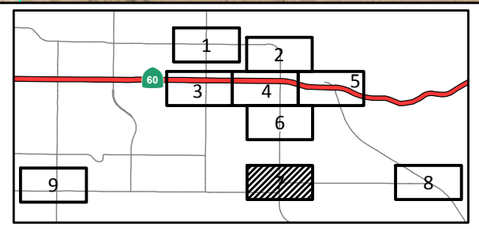

FIGURE 1-2
Sheet 7 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 2
Geometrics
08-RIV-60 PM 20.0/22.0
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Project No. 0813000109

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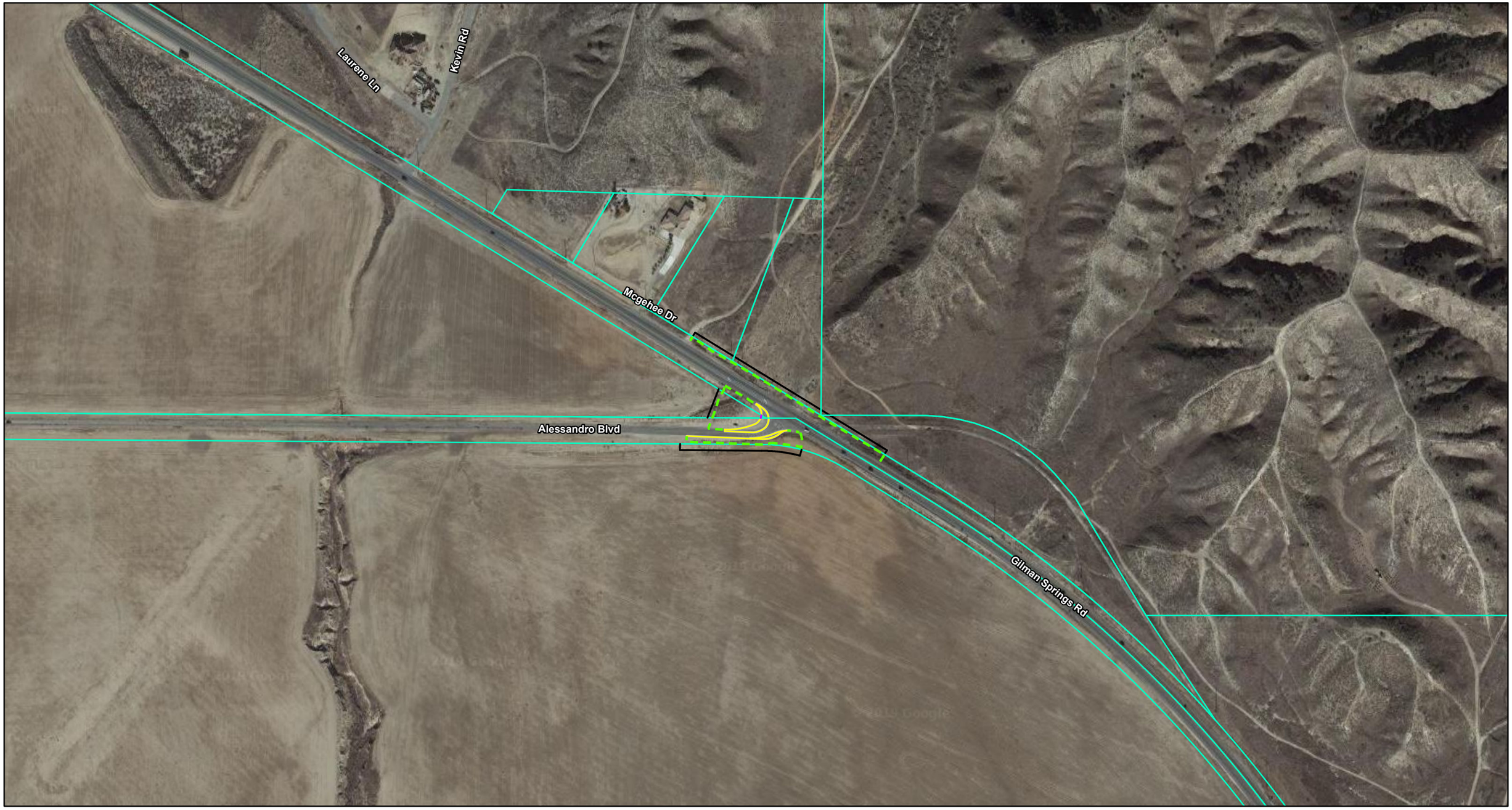

LEGEND

- Alternative 2 Proposed Improvements
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FEET

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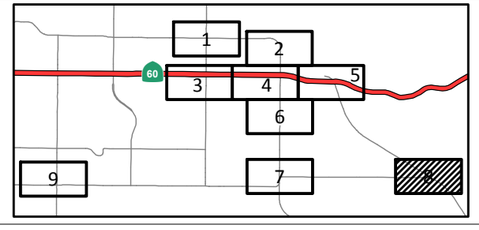

FIGURE 1-2
Sheet 8 of 9
SR-60/World Logistics Center Parkway Interchange Project
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Geometrics
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LEGEND

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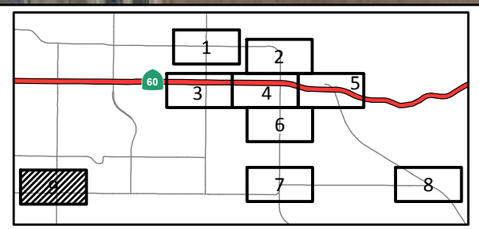

FIGURE 1-2
Sheet 9 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 2
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
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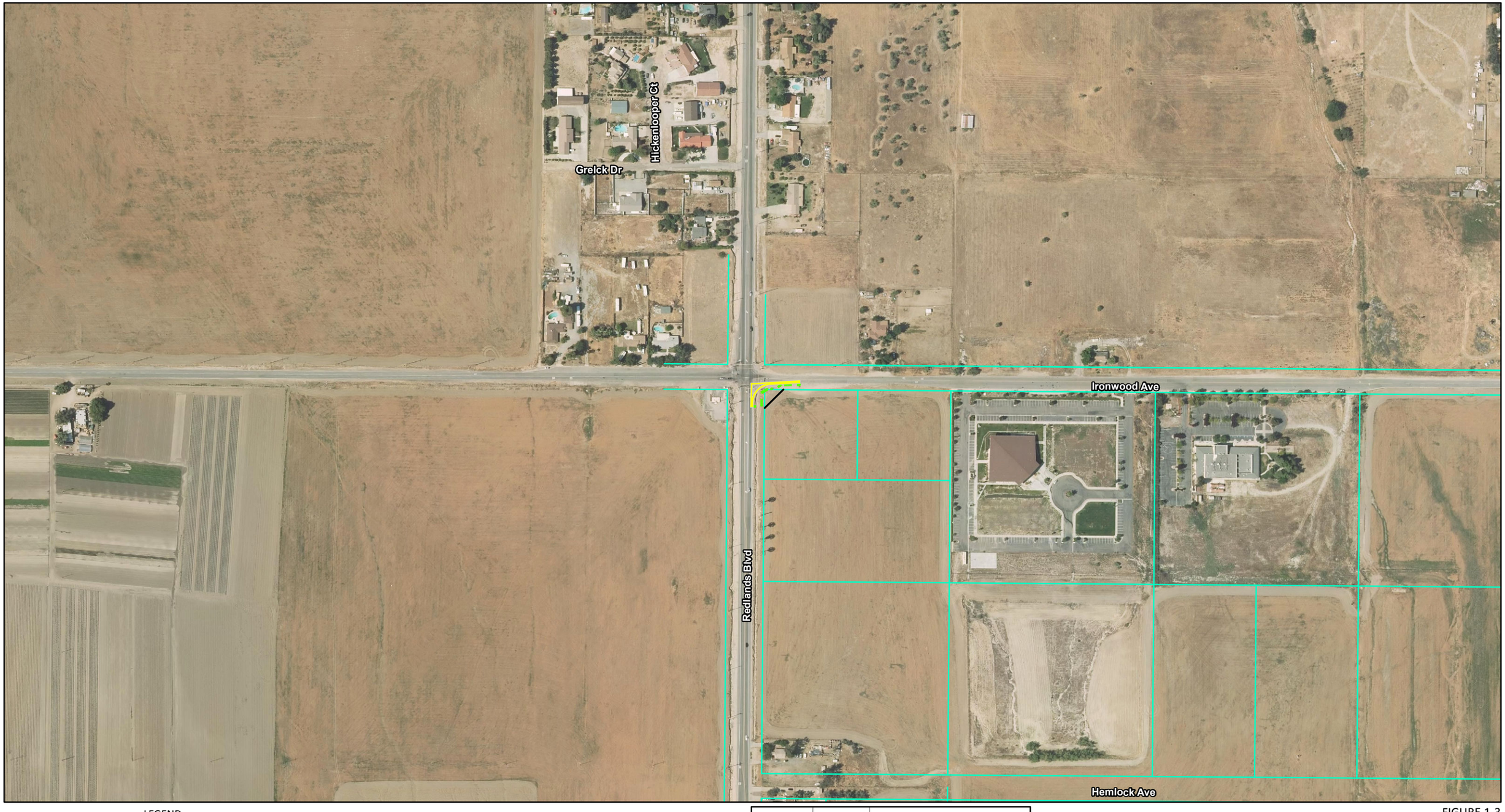

LEGEND

- Design Variation 2a Proposed Improvements
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- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

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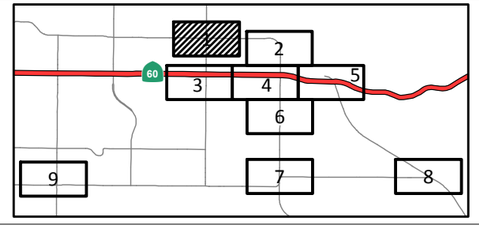

FIGURE 1-3
Sheet 1 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 2a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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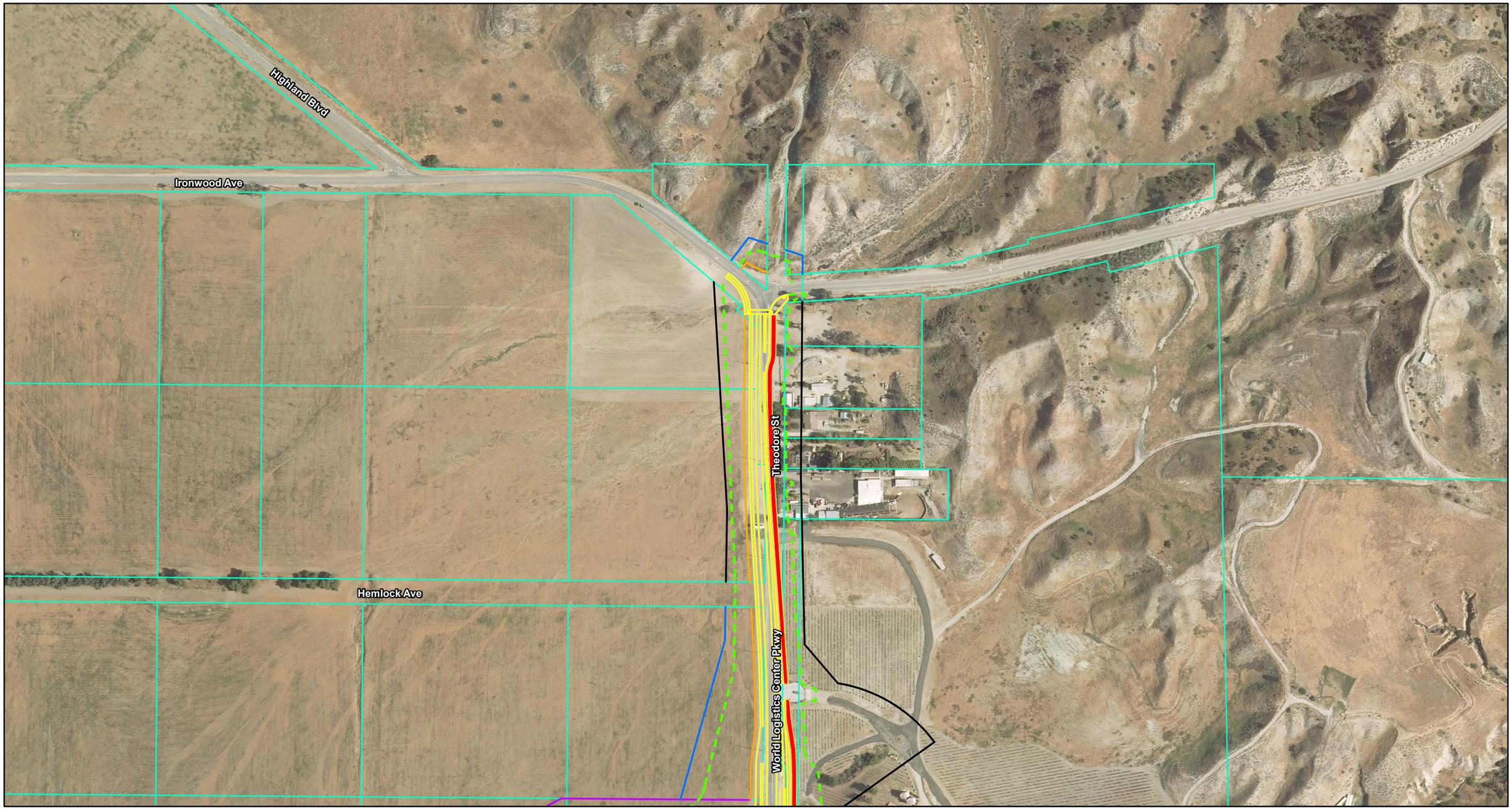

LEGEND

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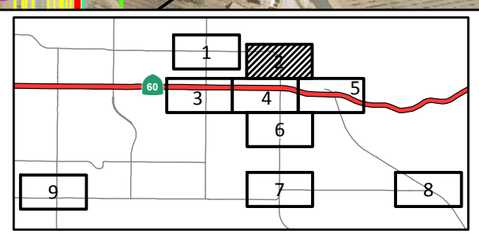

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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FIGURE 1-3
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SR-60/World Logistics Center Parkway Interchange Project
Design Variation 2a
Geometrics
08-RIV-60 PM 20.0/22.0
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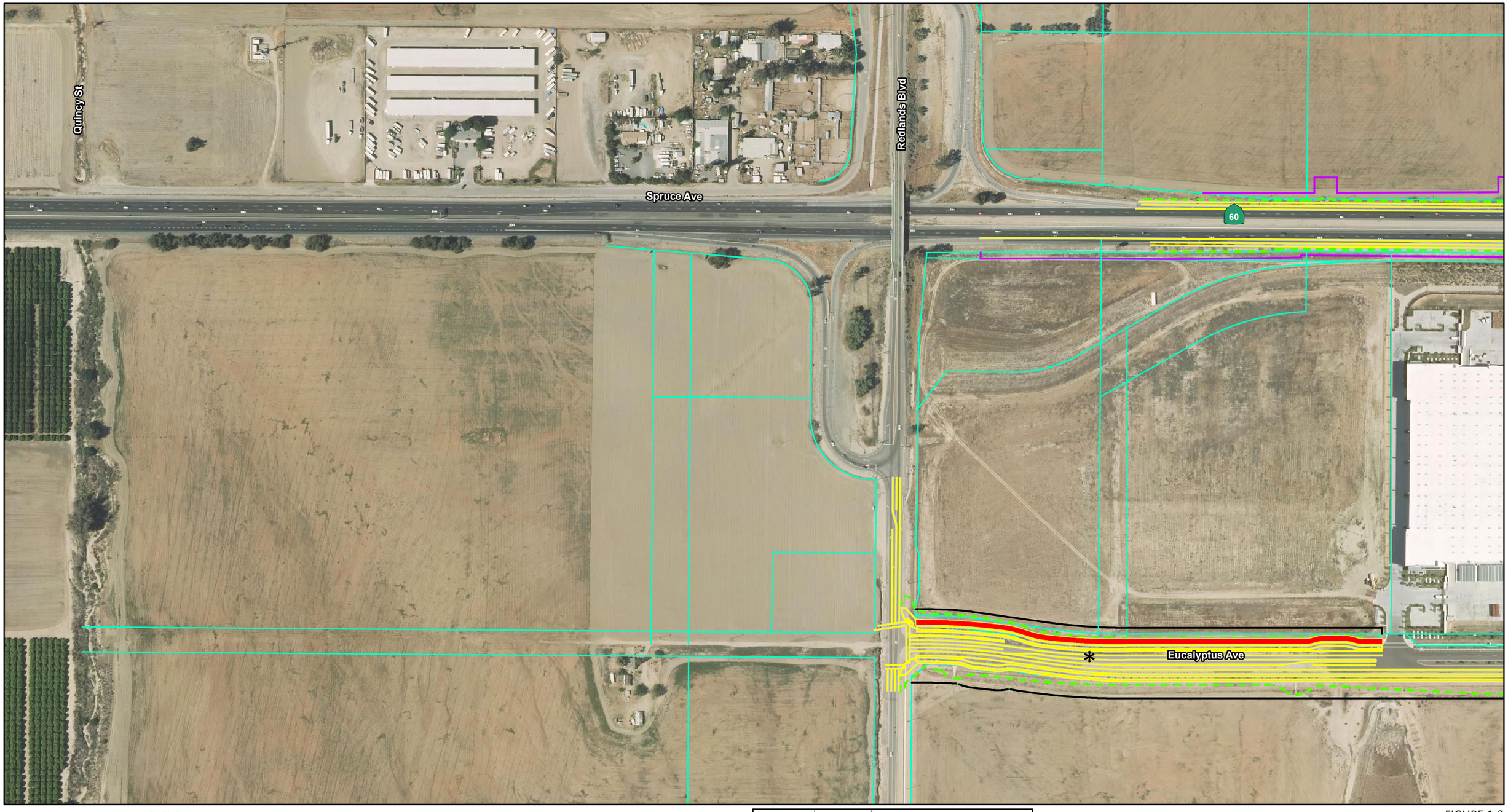

LEGEND

- Design Variation 2a Proposed Improvements
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0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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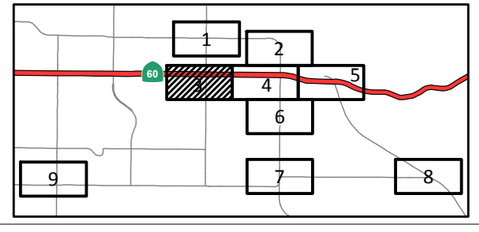

*Note: Ultimate improvements shown. Only one additional lane is predicted and planned as part of the detour route required during construction of the SR-60/WLC Pkwy Interchange Improvement project.

FIGURE 1-3
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SR-60/World Logistics Center Parkway Interchange Project
Design Variation 2a
Geometrics
08-RIV-60 PM 20.0/22.0
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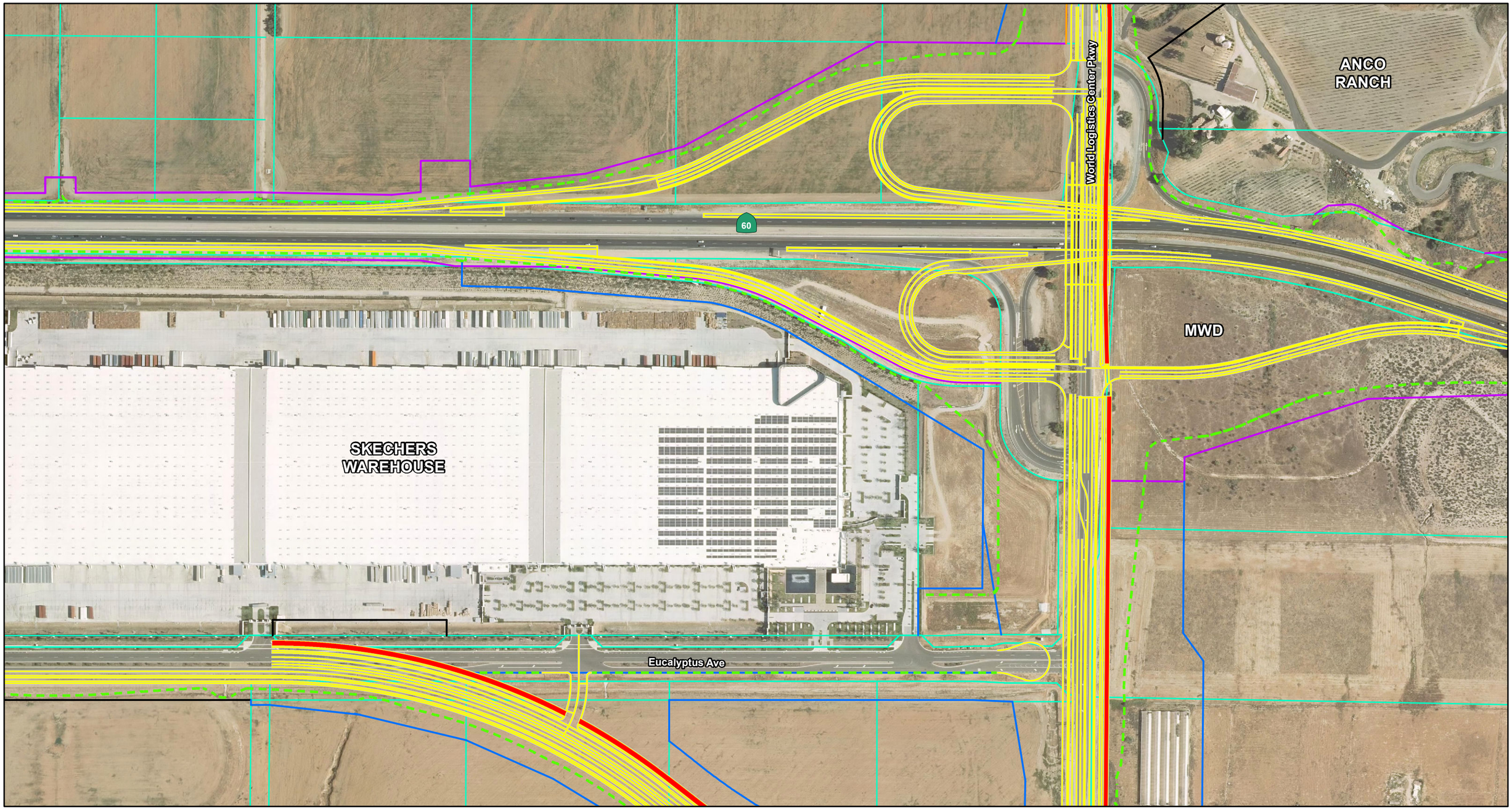

LEGEND

- Design Variation 2a Proposed Improvements
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- Temporary Construction Easement

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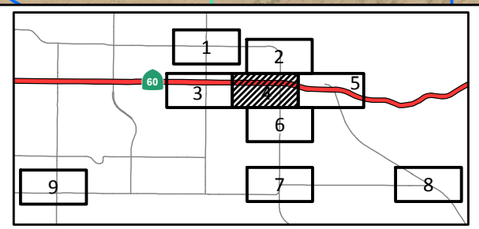

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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FIGURE 1-3
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SR-60/World Logistics Center Parkway Interchange Project
Design Variation 2a
Geometrics
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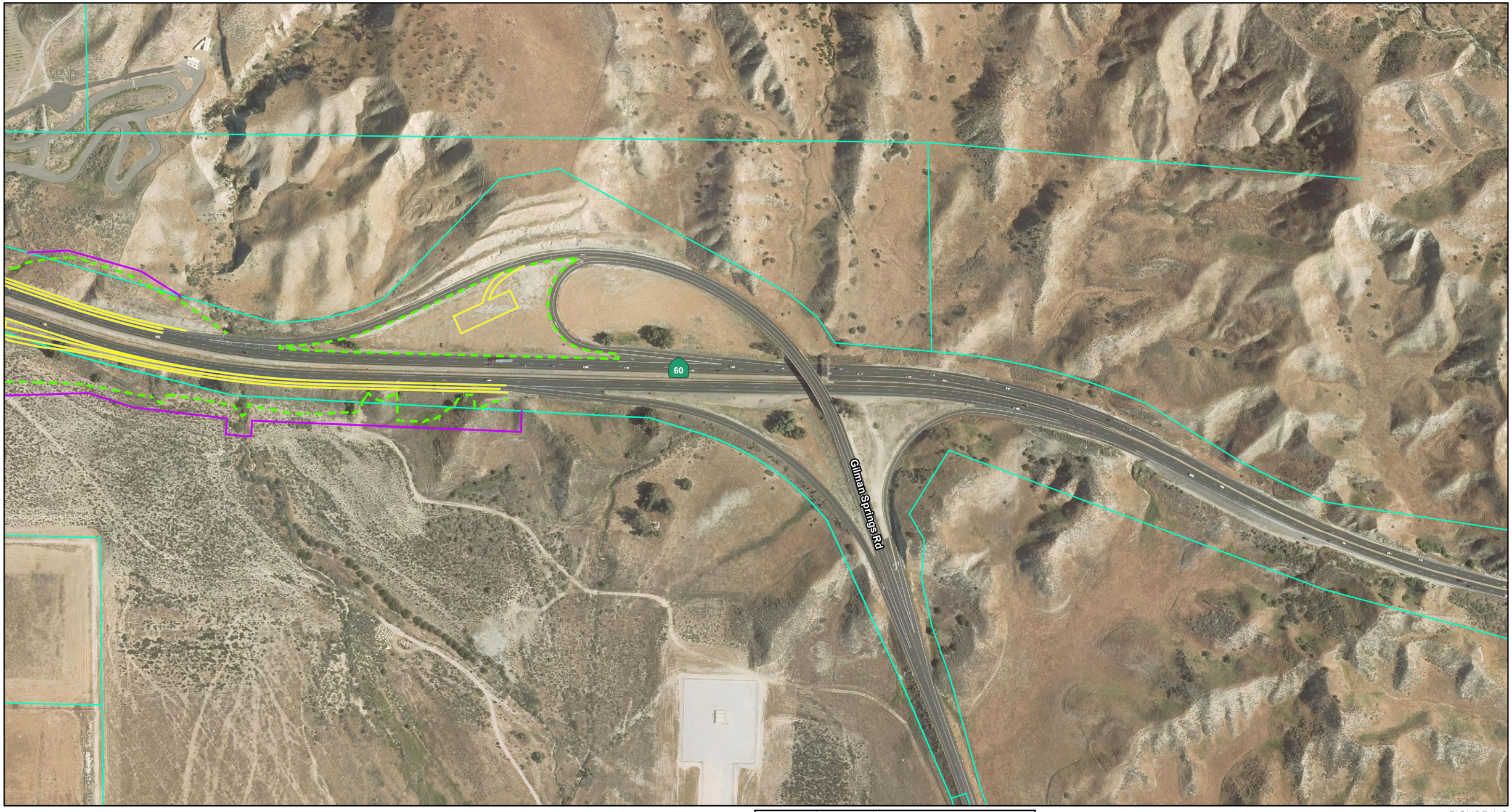

LEGEND

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0 150 300
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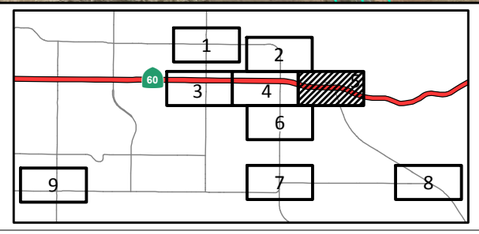

FIGURE 1-3
Sheet 5 of 9
SR-60/World Logistics Center Parkway
Interchange Project
Design Variation 2a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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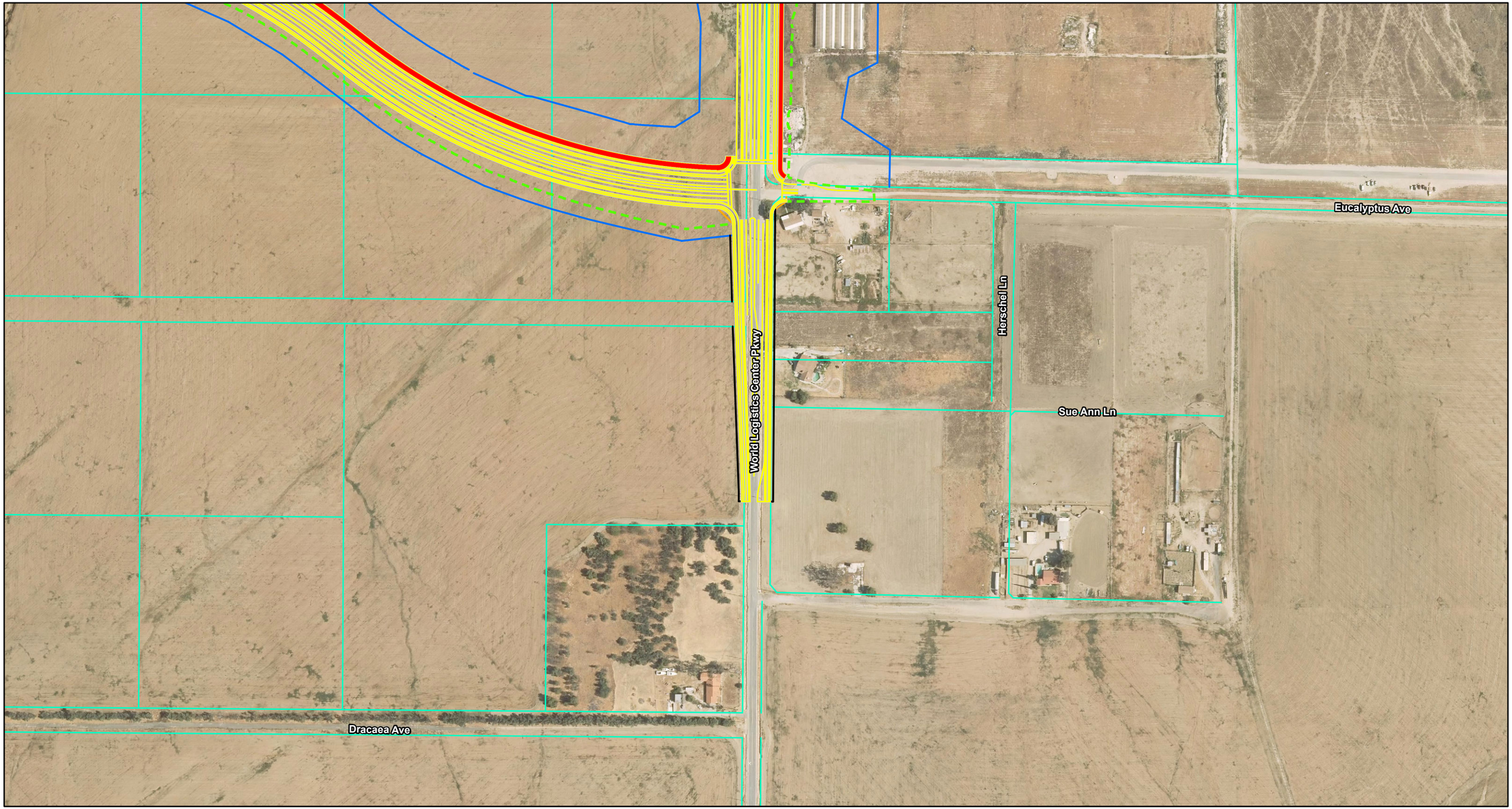

LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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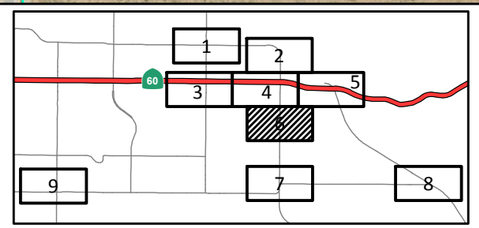

FIGURE 1-3
Sheet 6 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 2a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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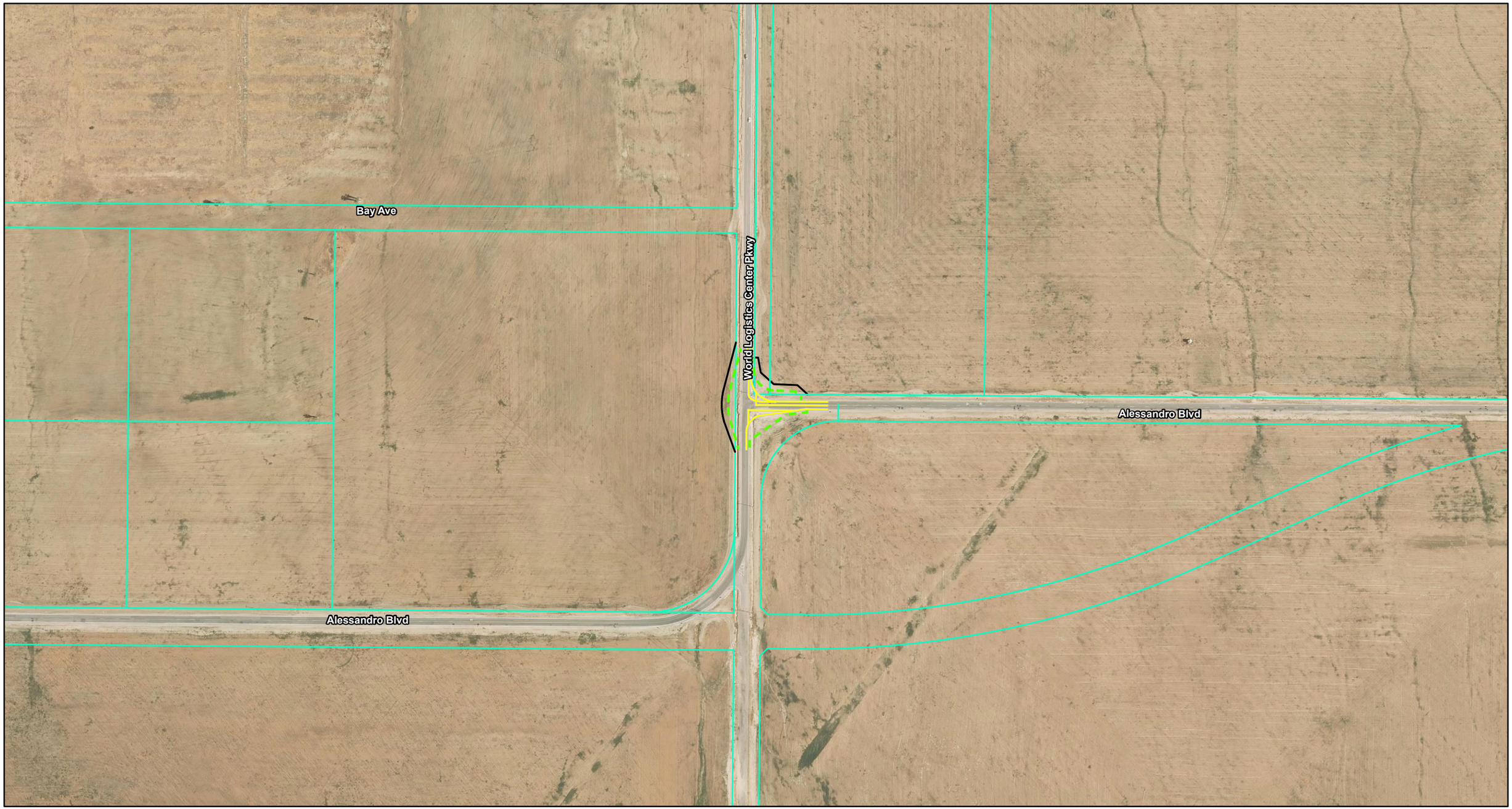

LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
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- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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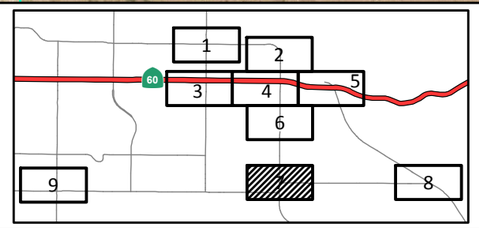

FIGURE 1-3
Sheet 7 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 2a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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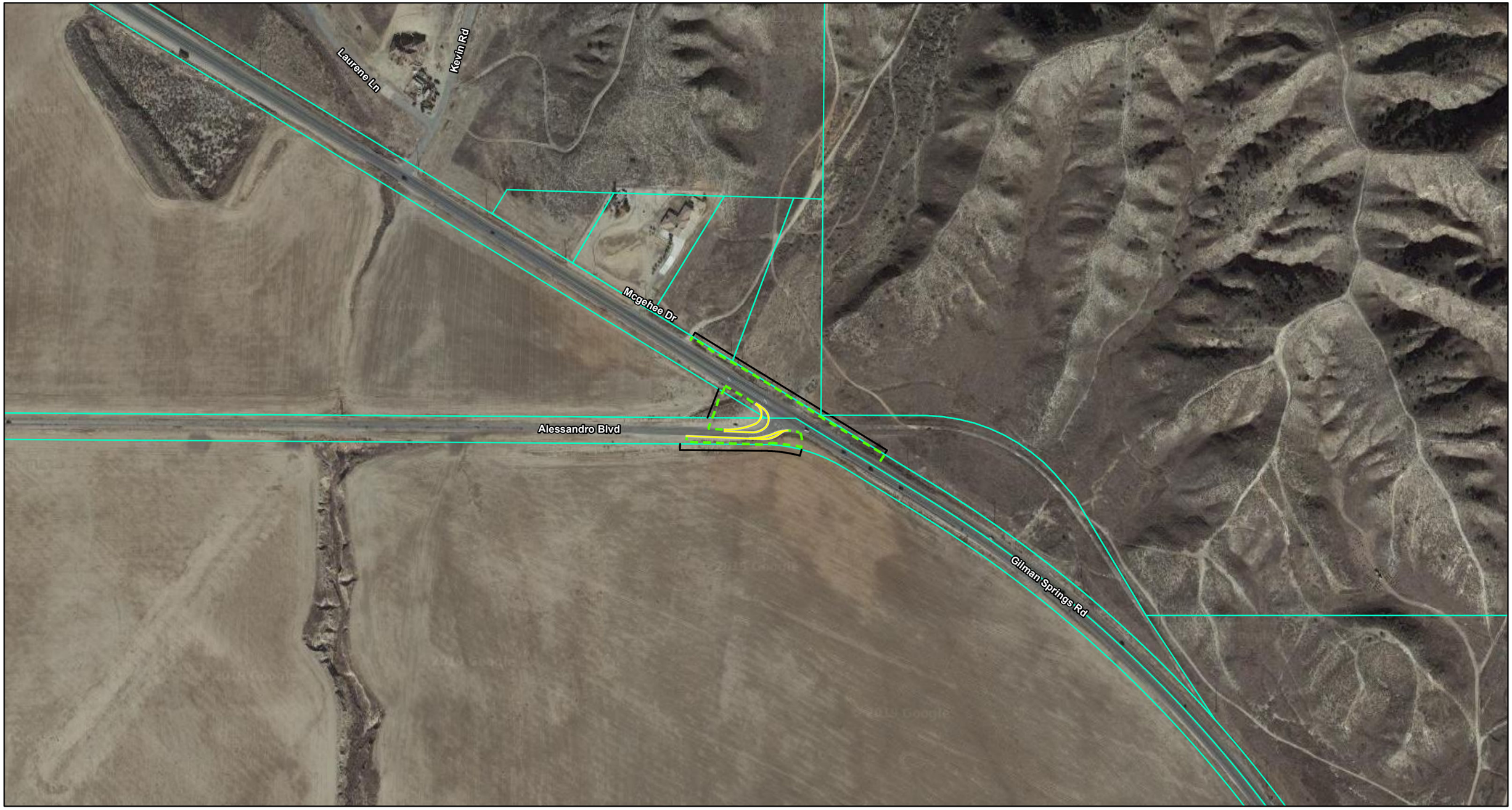

LEGEND

- Design Variation 2a Proposed Improvements
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- Proposed City Right of Way
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- Temporary Construction Easement

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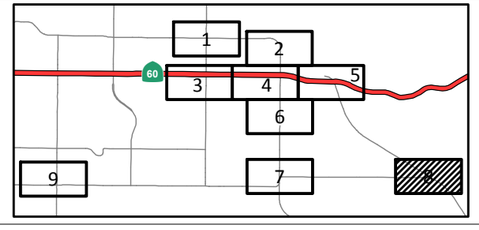

FIGURE 1-3
Sheet 8 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 2a
Geometrics
08-RIV-60 PM 20.0/22.0
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Project No. 0813000109

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LEGEND

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- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

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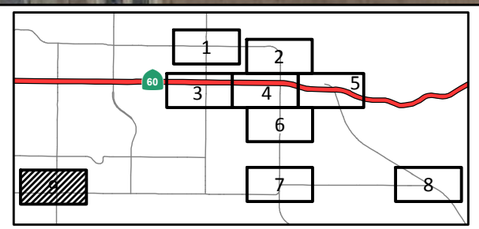

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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FIGURE 1-3
Sheet 9 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 2a
Geometrics
08-RIV-60 PM 20.0/22.0
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1.3.3.2 Alternative 6 (LPA) (Modified Partial Cloverleaf with Roundabout Intersections)

Alternative 6 (LPA) proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration with roundabout intersections on WLC Pkwy within the project limits. Improvements under Alternative 6 (LPA) would include the construction of a new westbound direct on-ramp and a new westbound loop off-ramp in the northwest quadrant in a partial cloverleaf configuration. New eastbound direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial cloverleaf configuration. The westbound on-ramp would be widened from one to three 12 ft lanes, and all other proposed ramps would be widened from one to two 12 ft lanes.

Alternative 6 (LPA) removes and replaces the existing two through-lane (one lane in each direction) WLC Pkwy Overcrossing with a new four through-lane (two through lanes in each direction) overcrossing that is approximately 90 ft wide and 245 ft long. The proposed minimum bridge vertical clearance over SR-60 is 20 ft 3½ inches. Roundabouts are proposed at the eastbound and westbound ramp intersections, as well as at the Eucalyptus Avenue/WLC Pkwy intersections. On WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue, Class II bike lanes[1] are provided on both sides within the width of the proposed shoulders. Through the roundabouts, bicyclists have the option to either merge with vehicular traffic or cross the roundabout with pedestrian traffic. Lighting and signage will be determined in final design to provide pedestrian and trail user safety for the proposed 11 ft wide multi-use trail. The improvements included in Alternative 6 (LPA) are shown on Figure 1-4.

Design Variation 6a (Alternative 6 [LPA] with Design Variation)

Design Variation 6a has the same features as Alternative 6 (LPA) with the exception of the alignment of Eucalyptus Avenue on the west side of WLC Pkwy and the location of the Eucalyptus Avenue/WLC Pkwy intersection. Design Variation 6a consists of moving the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south from its current location in order to align the roadway with the existing Eucalyptus Avenue on the east side of WLC Pkwy. The shift would result in partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect to the west side of WLC Pkwy. Construction of the roundabout at WLC Pkwy and Eucalyptus Avenue east would result in one residential displacement in the southeast quadrant of WLC Pkwy and Eucalyptus Avenue east. Design Variation 6a will be moved forward with the Build Alternatives to final design (as applicable) and studied until it is selected for construction or removed from further consideration. The improvements included in Design Variation 6a are shown on Figure 1-5.

[1] Class I (separate bike path), Class II (striped bike lane), and Class III (signed as bike route, no striping).

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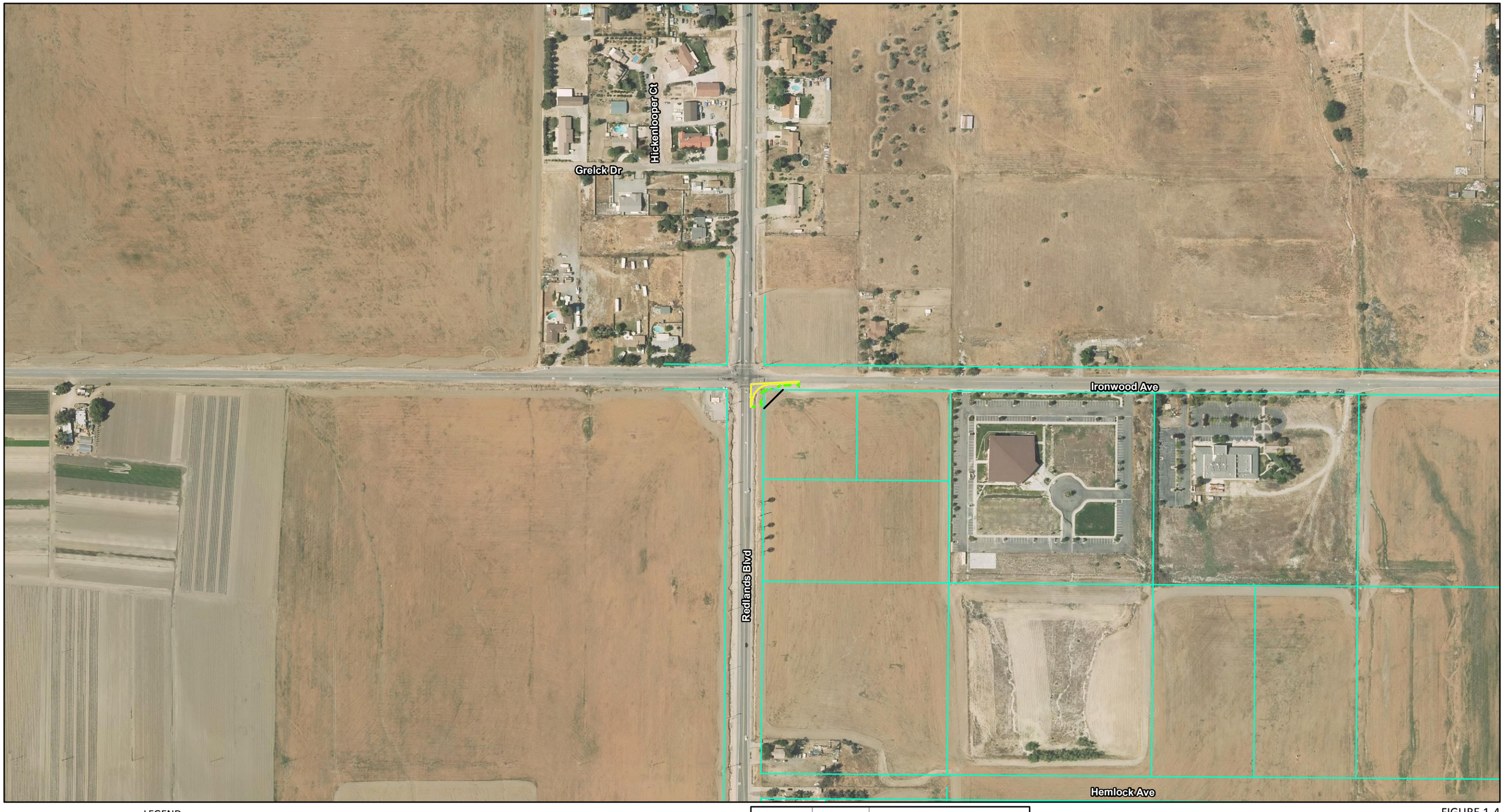

LEGEND

- Alternative 6 Proposed Improvements
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- Trails (Proposed and/or Future)
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- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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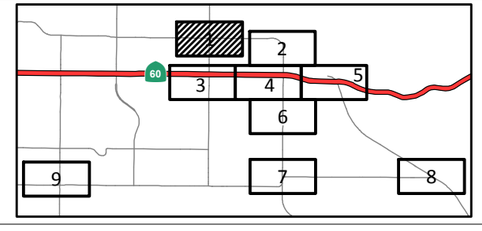

FIGURE 1-4
Sheet 1 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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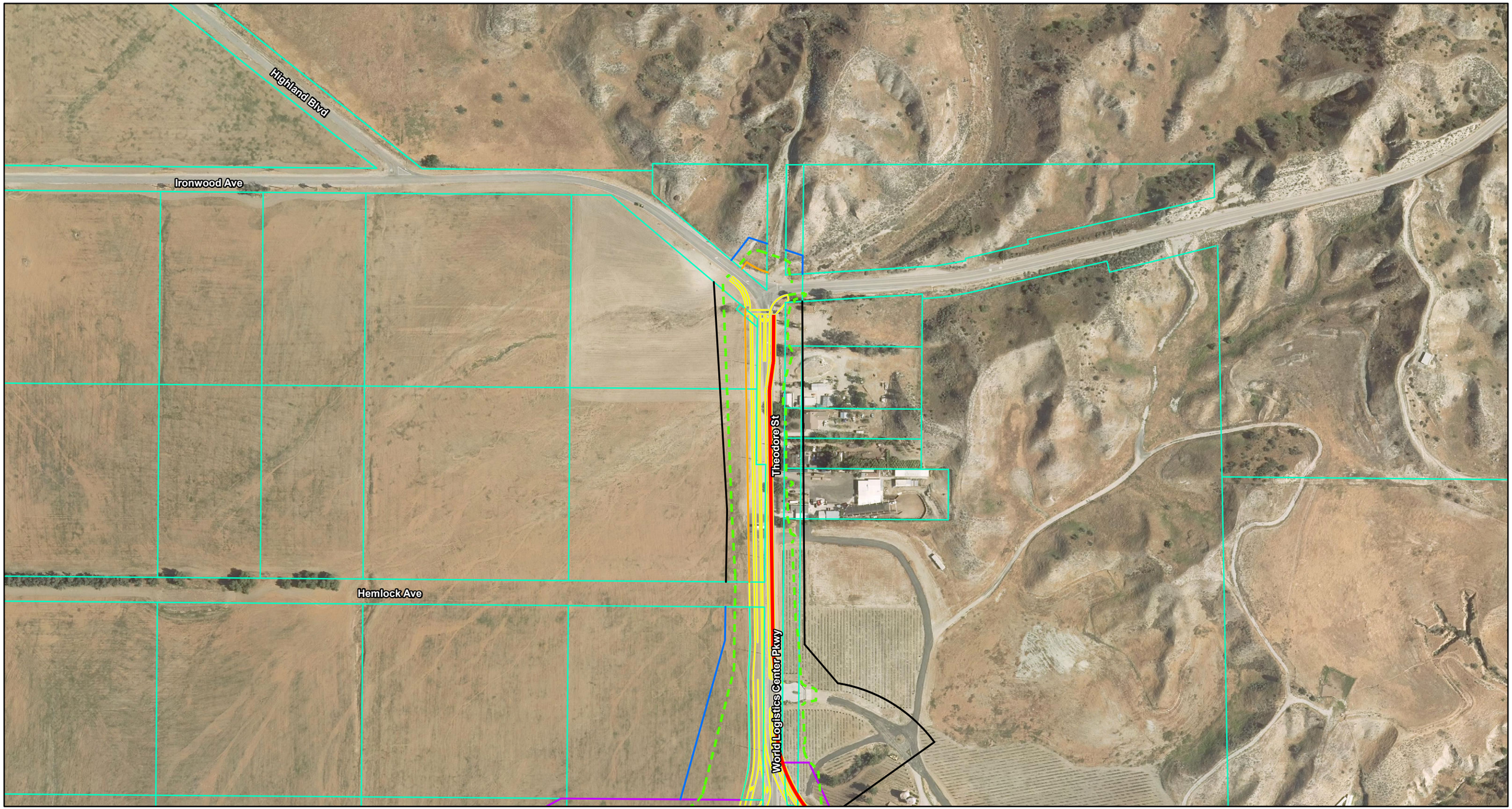

LEGEND

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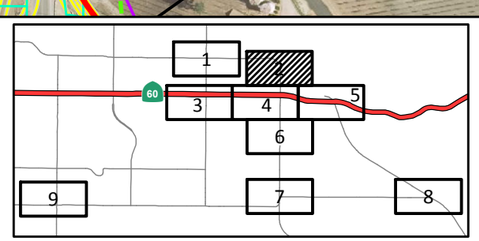

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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FIGURE 1-4
Sheet 2 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
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Project No. 0813000109

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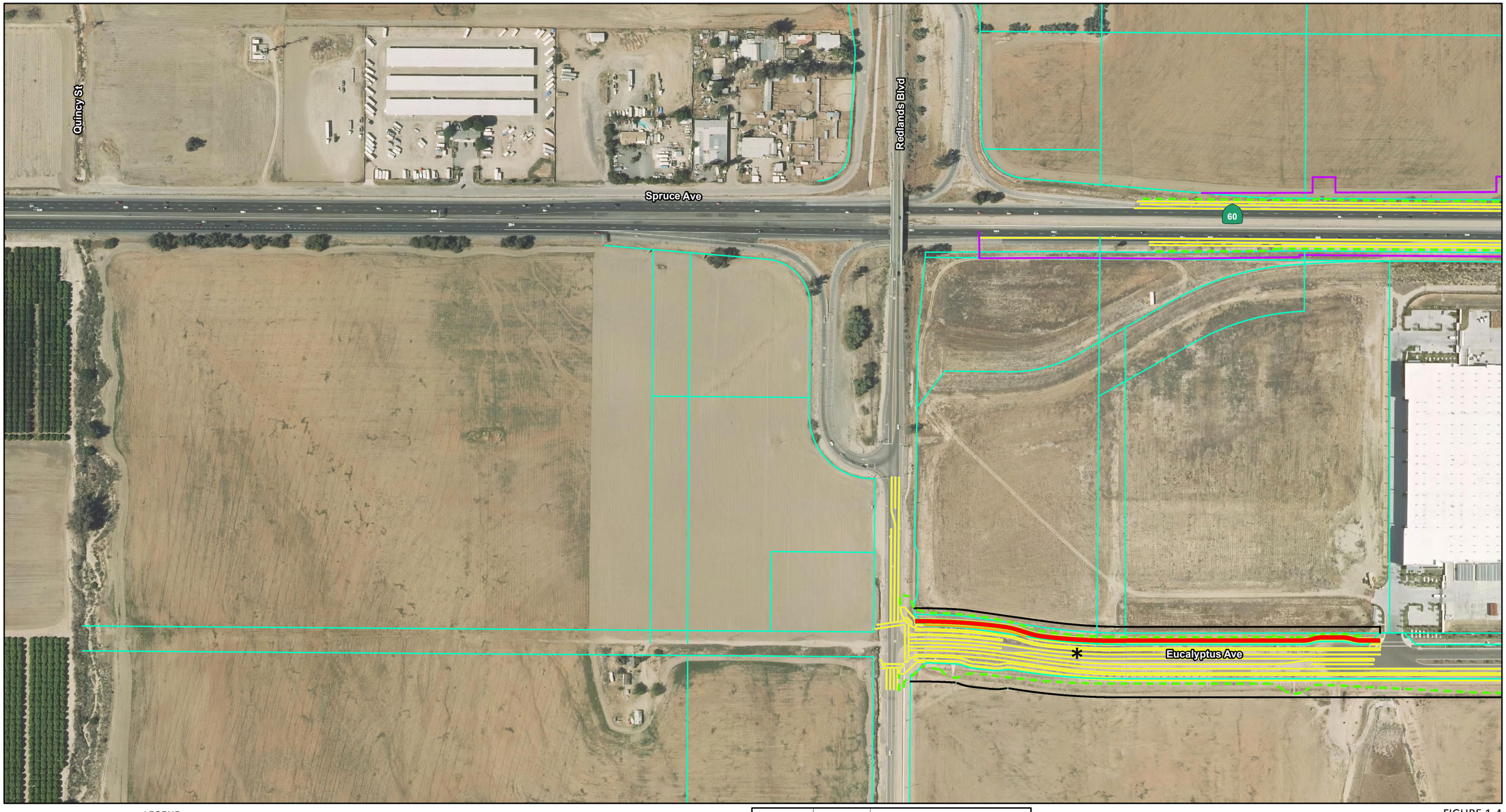

LEGEND

- Alternative 6 Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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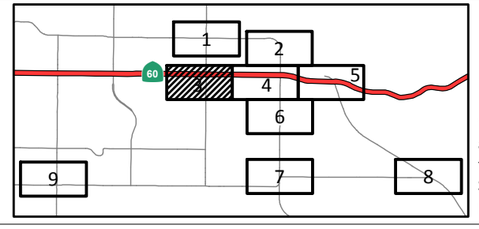

*Note: Ultimate improvements shown. Only one additional lane is predicted and planned as part of the detour route required during construction of the SR-60/WLC Pkwy Interchange Improvement project.

FIGURE 1-4
Sheet 3 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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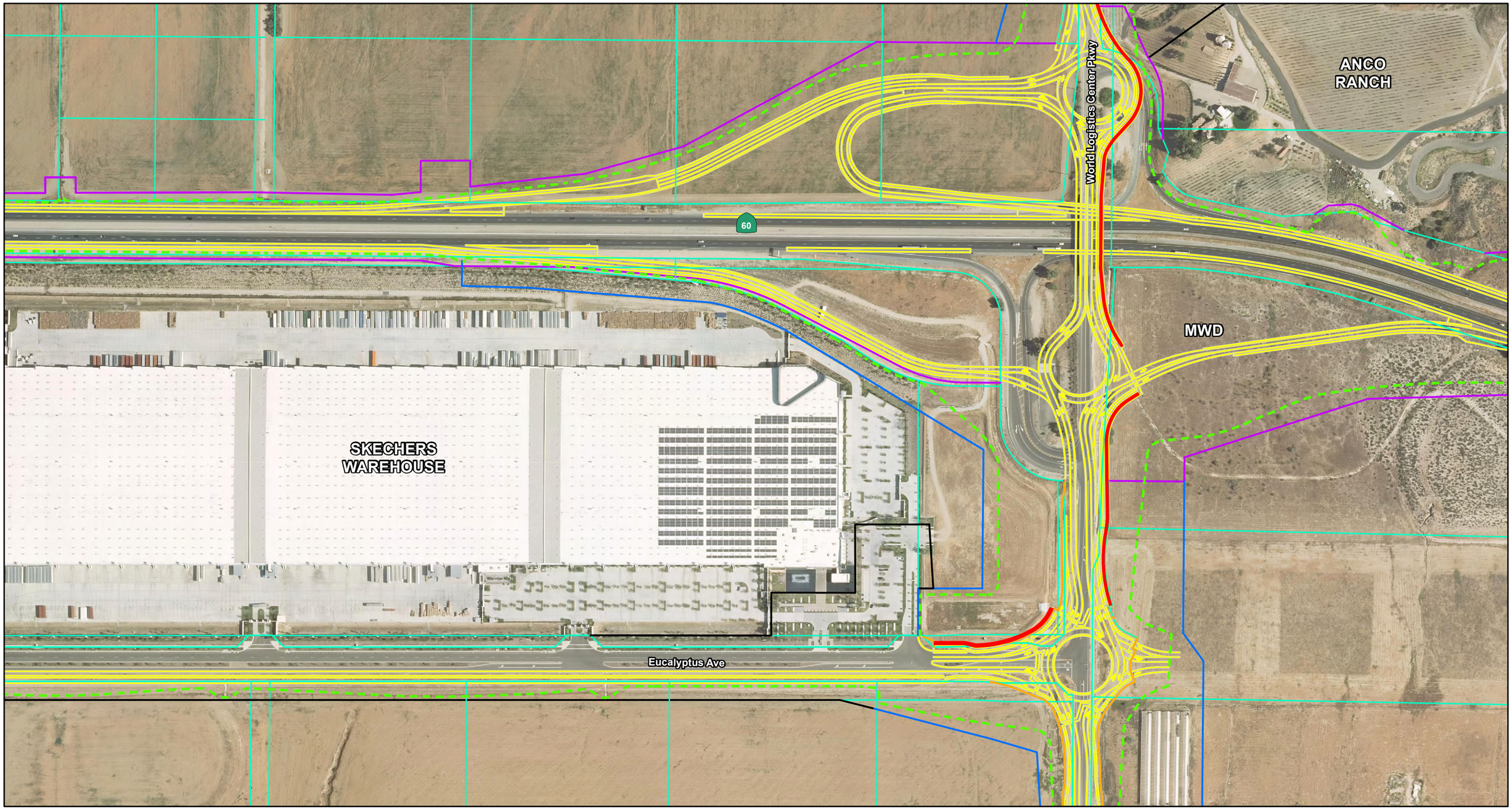

LEGEND

- Alternative 6 Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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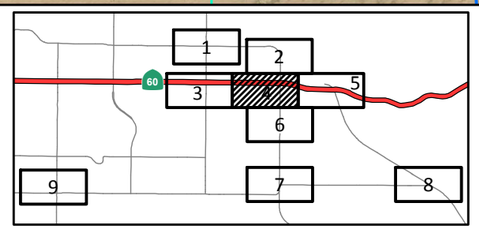

FIGURE 1-4
Sheet 4 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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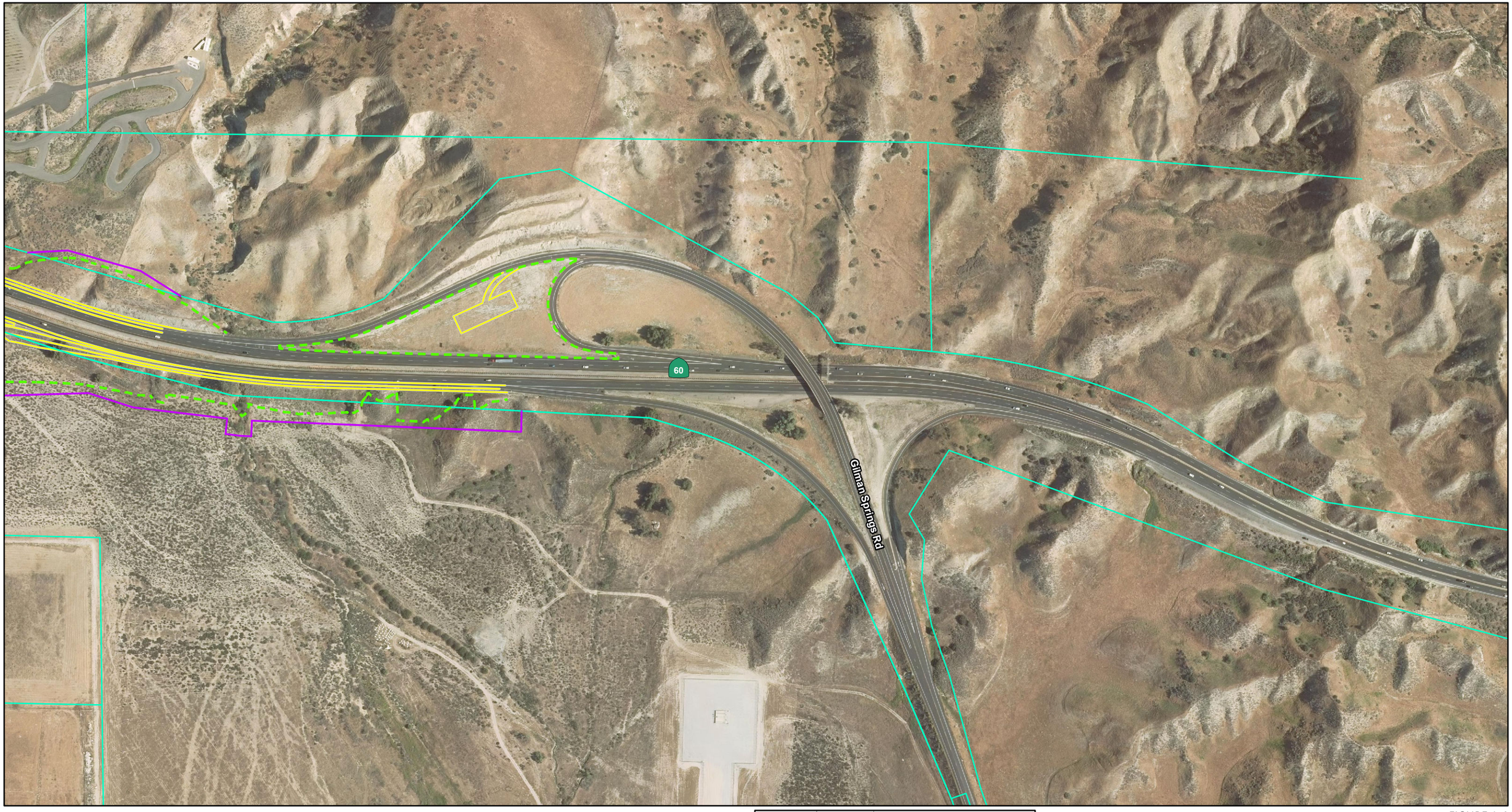

LEGEND

- Alternative 6 Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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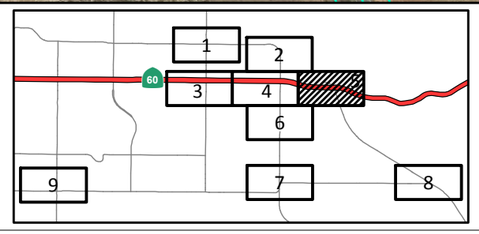

FIGURE 1-4
Sheet 5 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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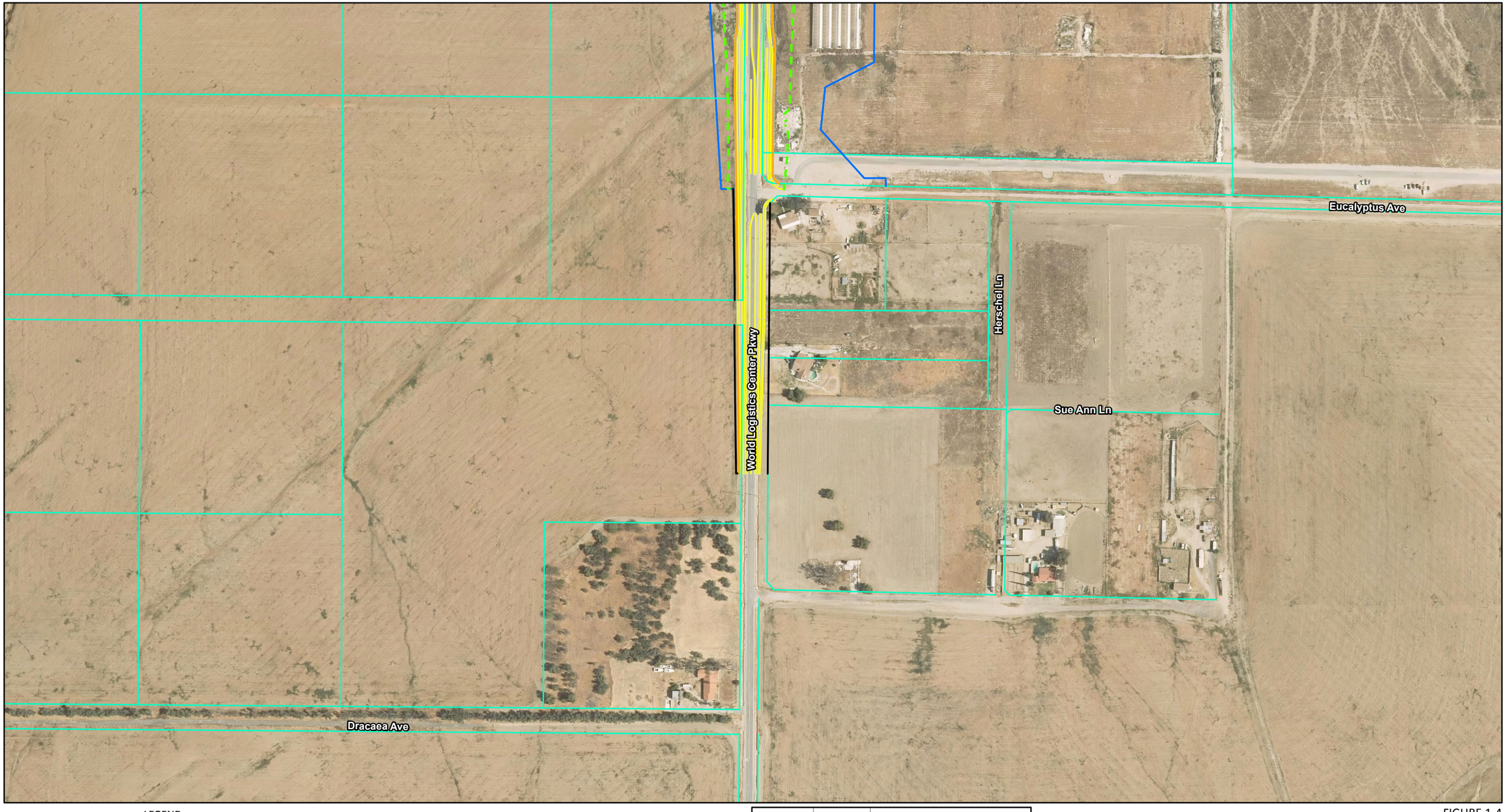

LEGEND

- Alternative 6 Proposed Improvements
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- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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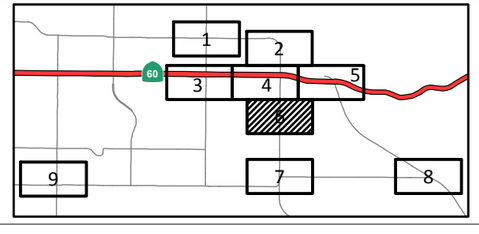

FIGURE 1-4
Sheet 6 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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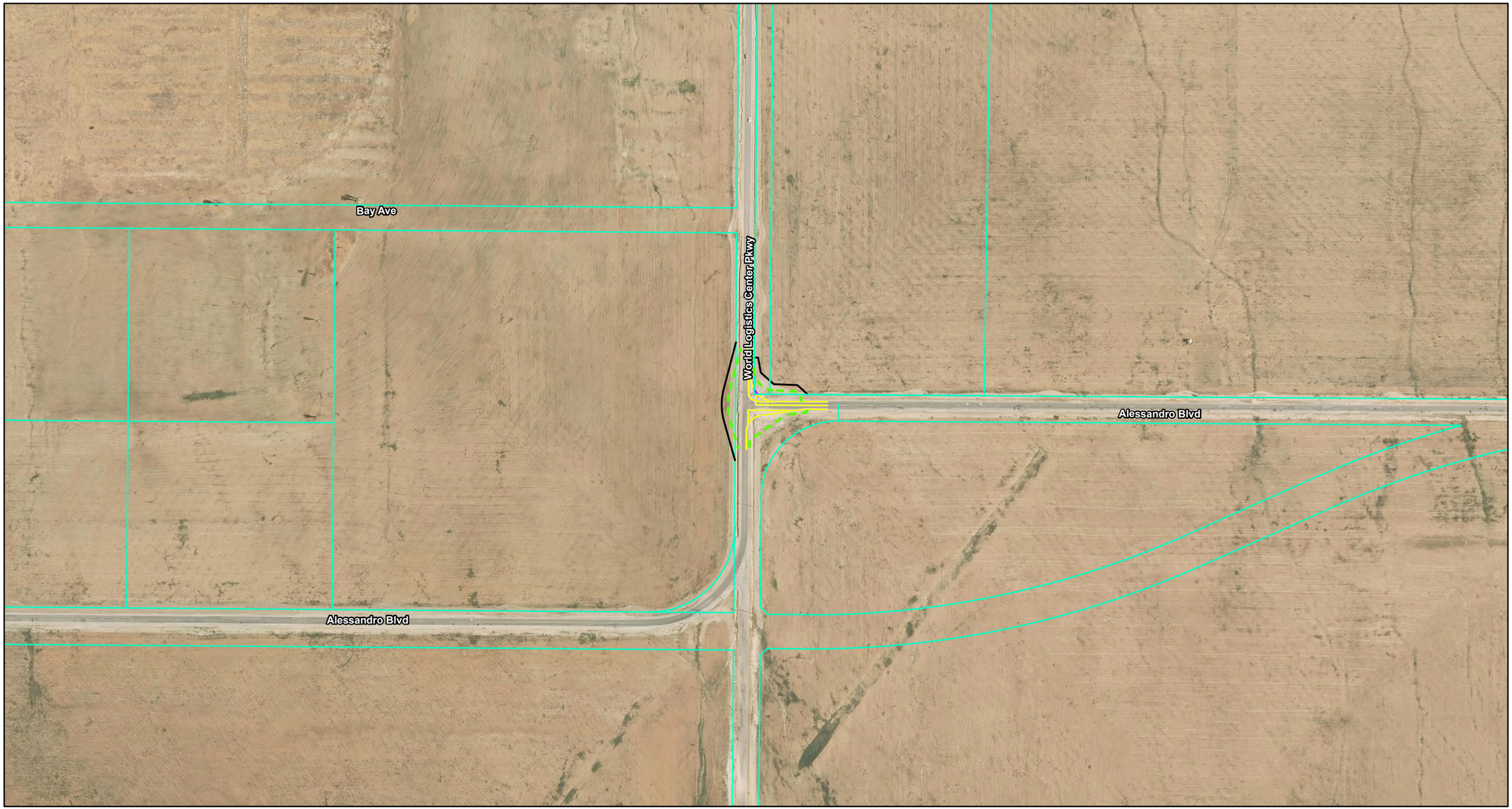

LEGEND

- Alternative 6 Proposed Improvements
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N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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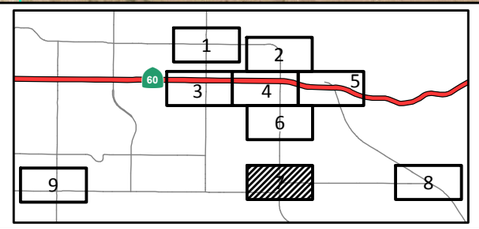

FIGURE 1-4
Sheet 7 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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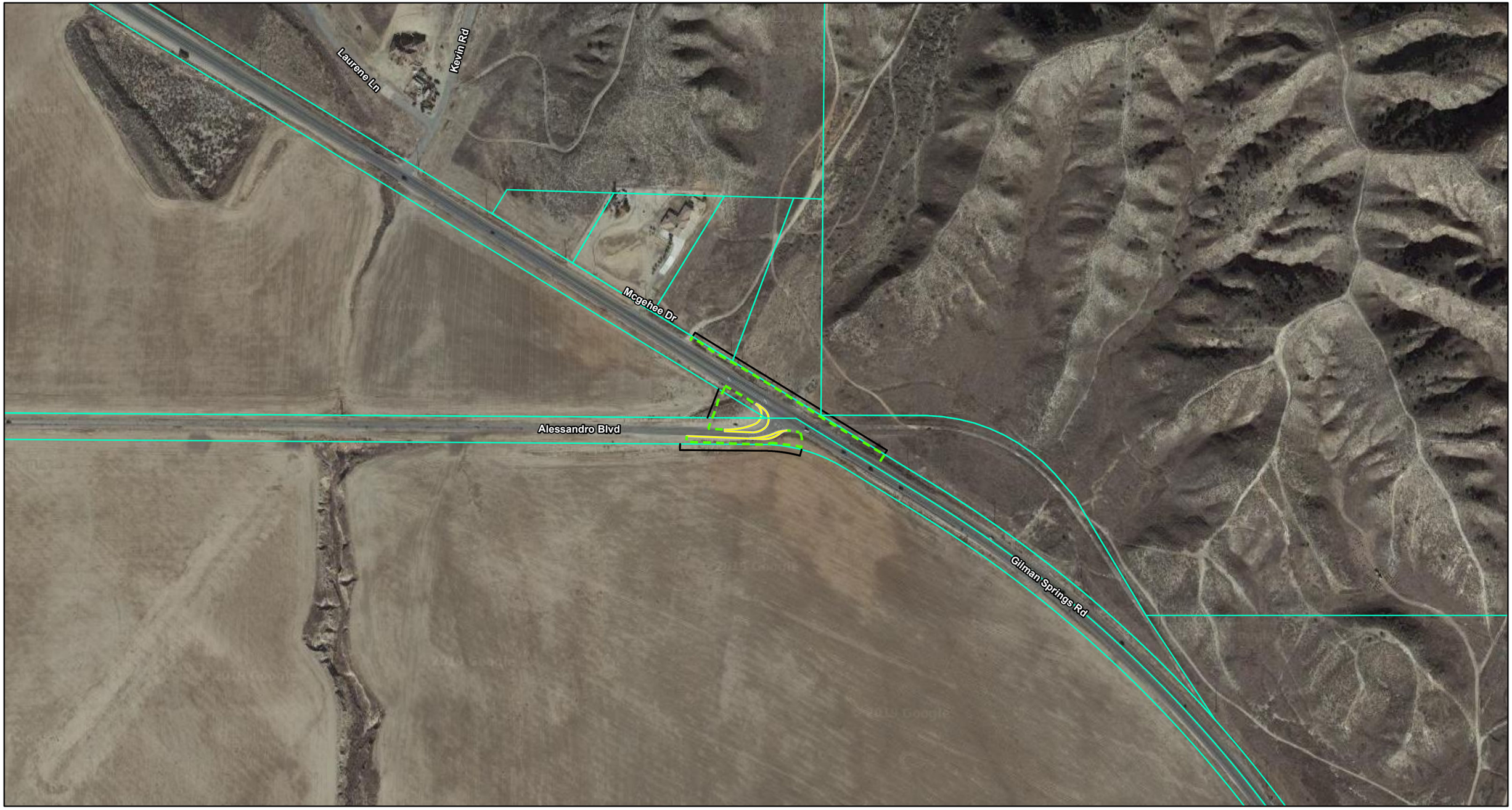

LEGEND

- Alternative 6 Proposed Improvements
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- Proposed City Right of Way
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- Temporary Construction Easement

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

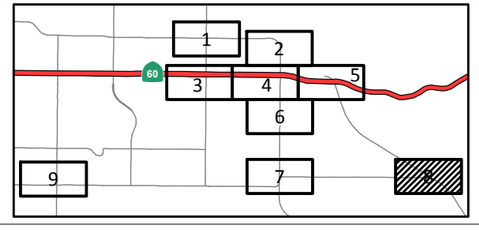

FIGURE 1-4
Sheet 8 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

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- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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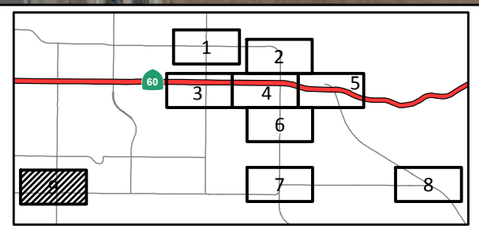

FIGURE 1-4
Sheet 9 of 9
SR-60/World Logistics Center Parkway Interchange Project
Alternative 6
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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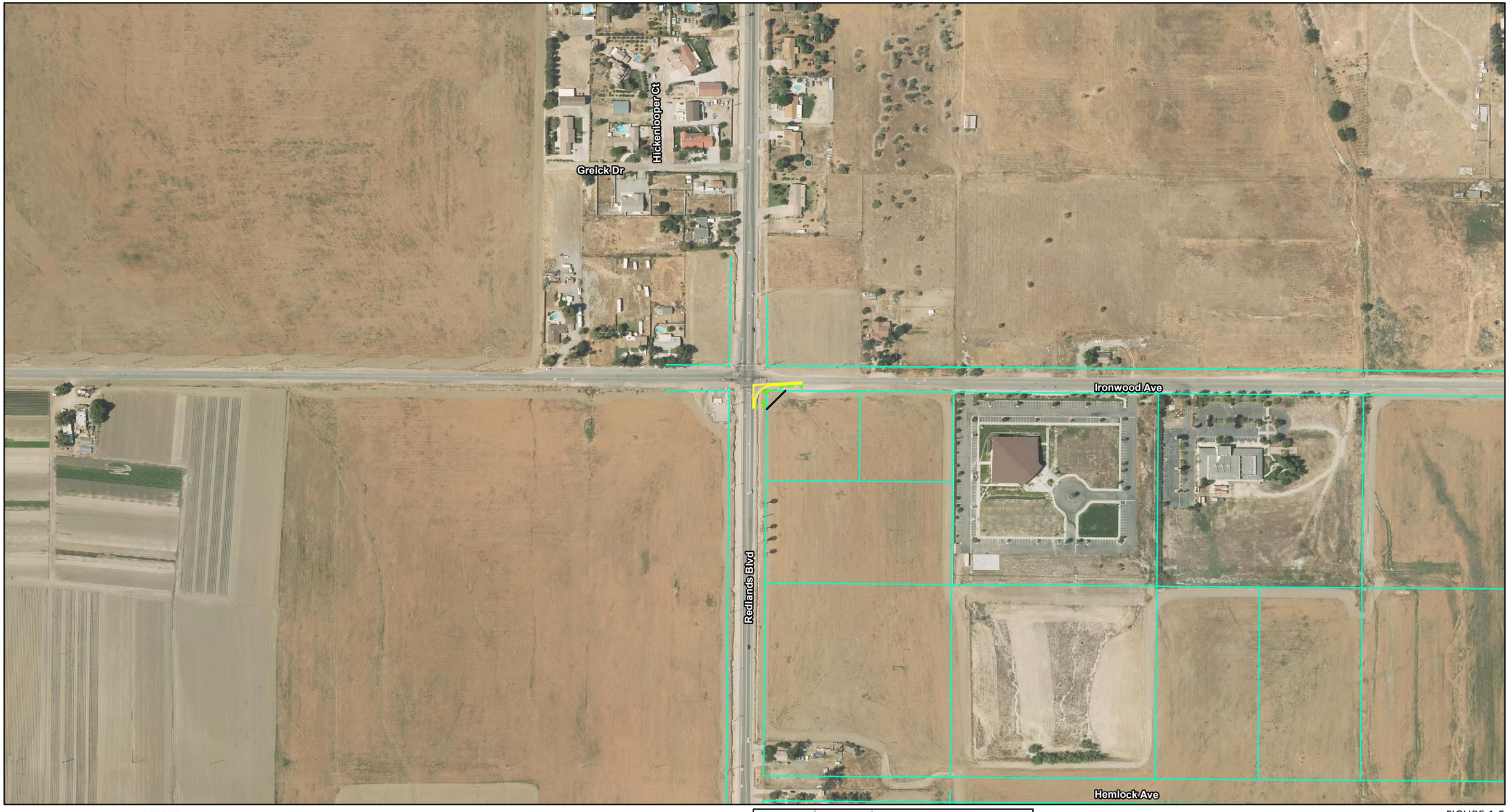

LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
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- Proposed City Right of Way
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- Temporary Construction Easement

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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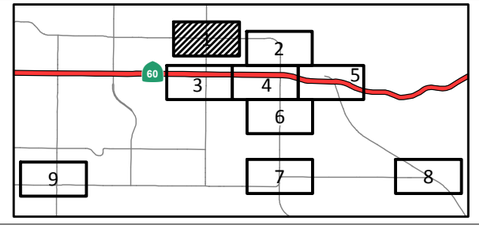

FIGURE 1-5
Sheet 1 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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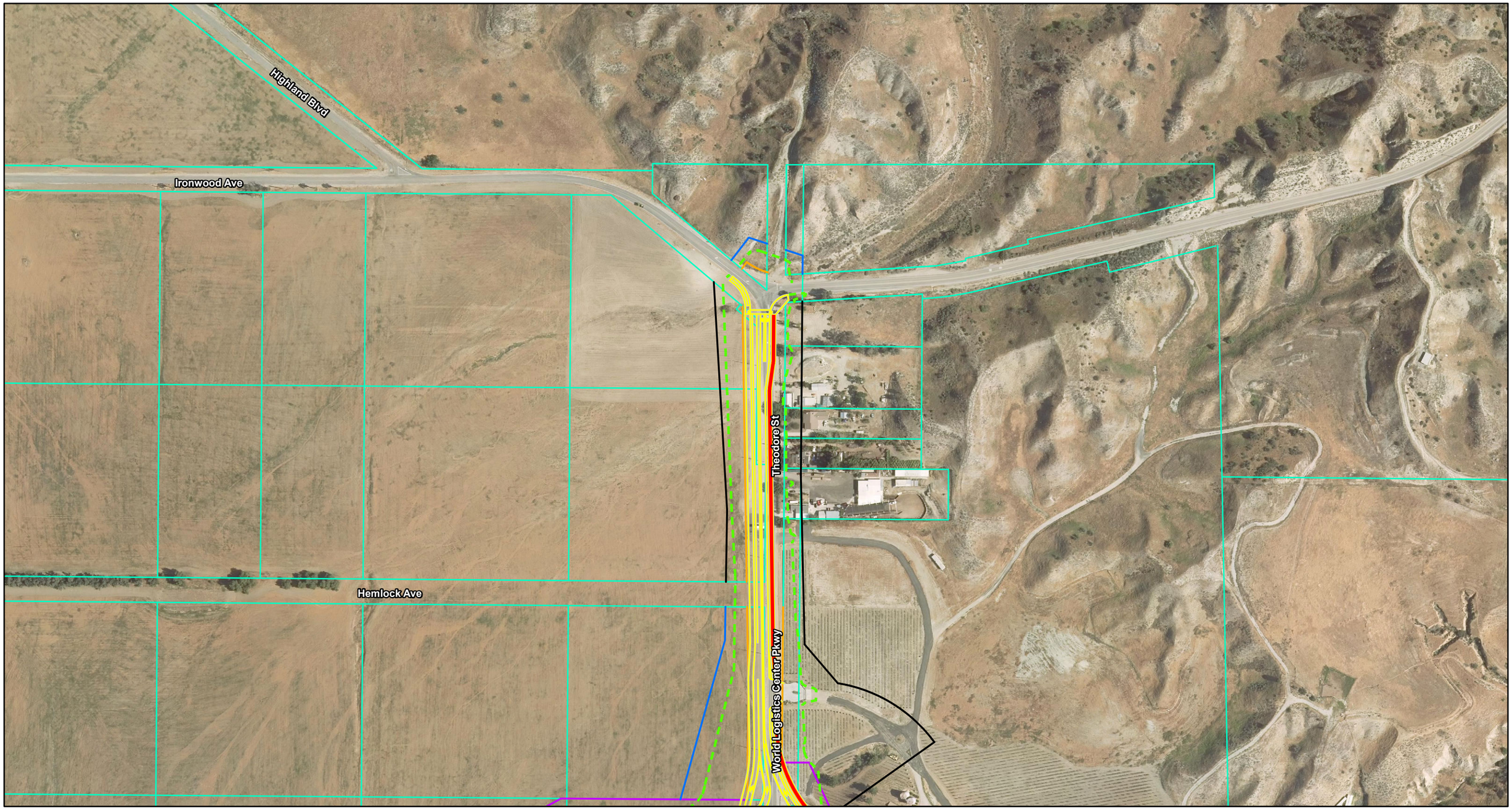

LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
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- Proposed Caltrans Right of Way
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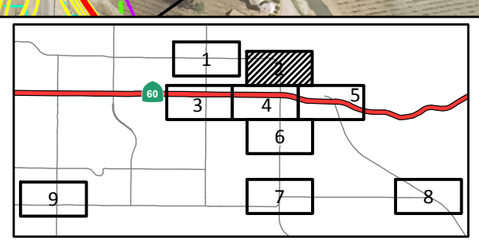
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET



SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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FIGURE 1-5
Sheet 2 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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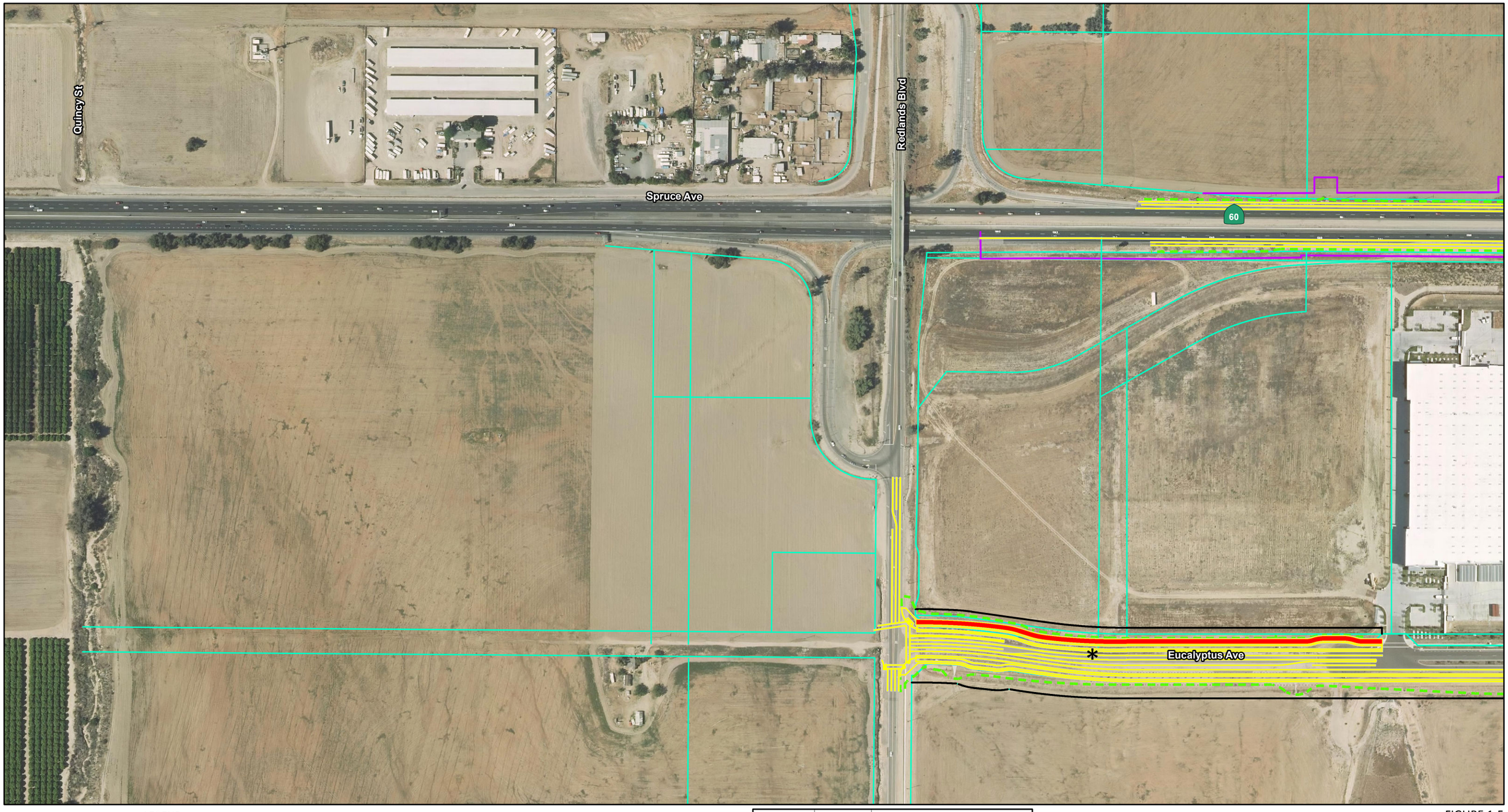

LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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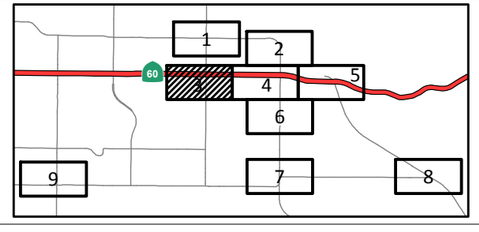

*Note: Ultimate improvements shown. Only one additional lane is predicted and planned as part of the detour route required during construction of the SR-60/WLC Pkwy Interchange Improvement project.

FIGURE 1-5
Sheet 3 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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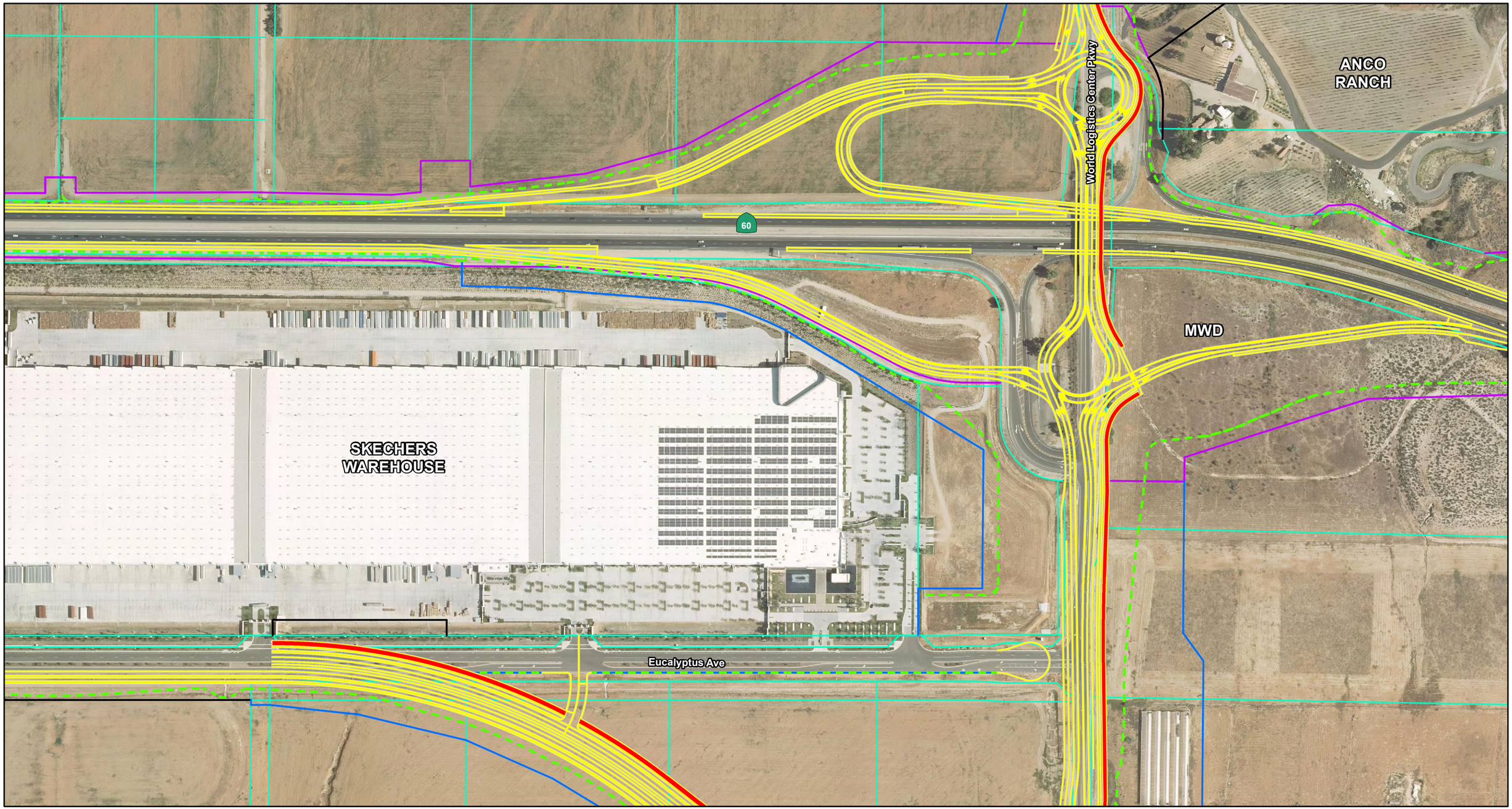
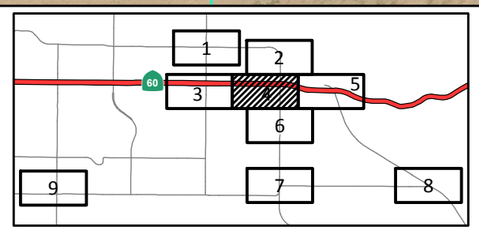


LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET



SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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FIGURE 1-5
Sheet 4 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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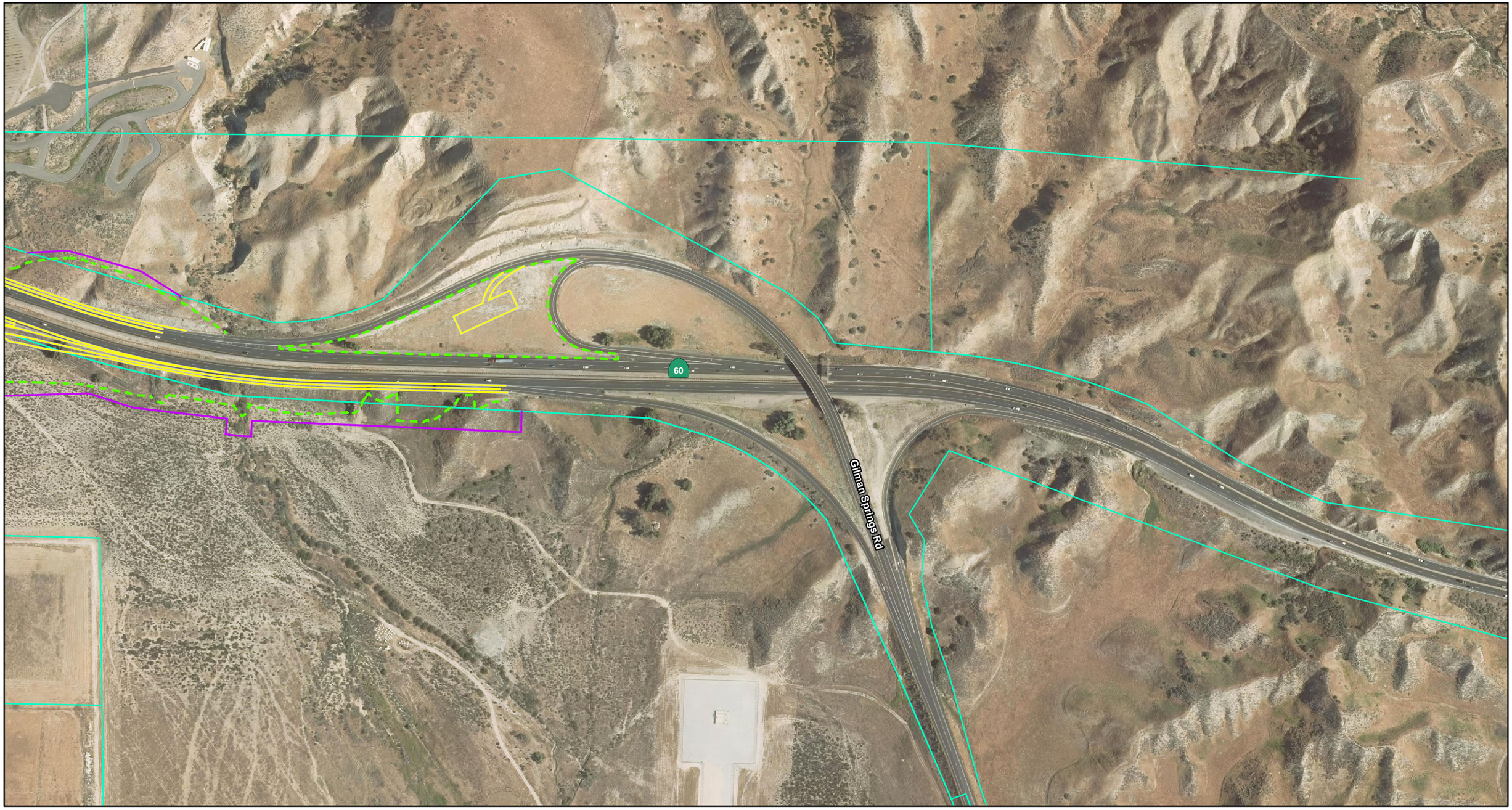

LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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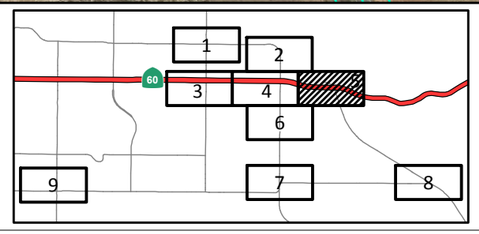

FIGURE 1-5
Sheet 5 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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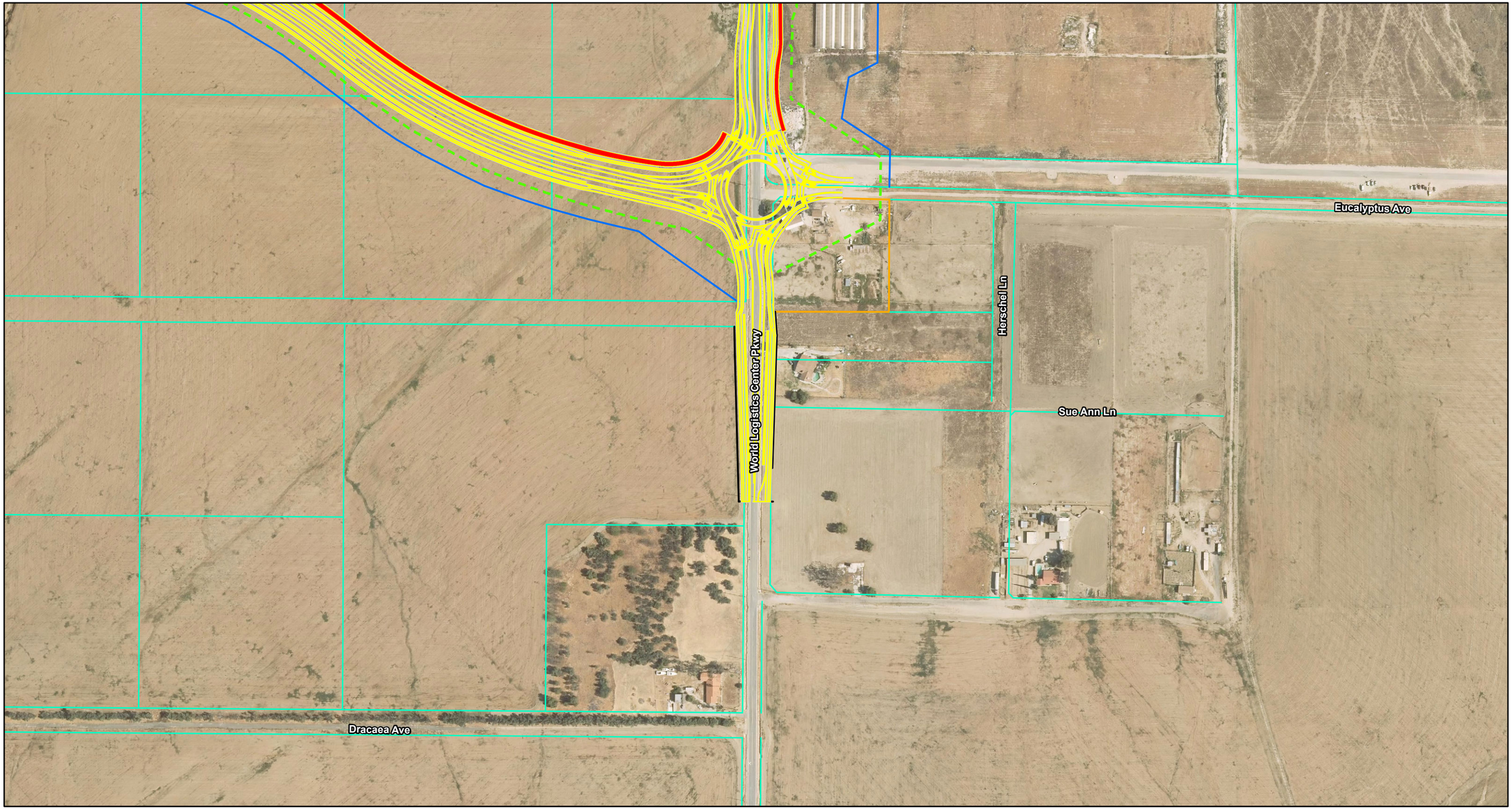

LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
- Existing Right of Way and Parcels
- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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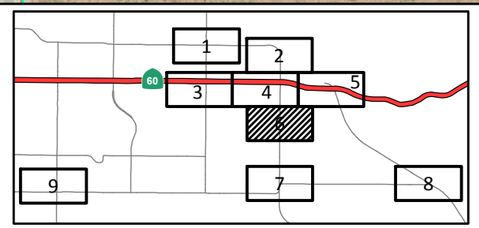

FIGURE 1-5
Sheet 6 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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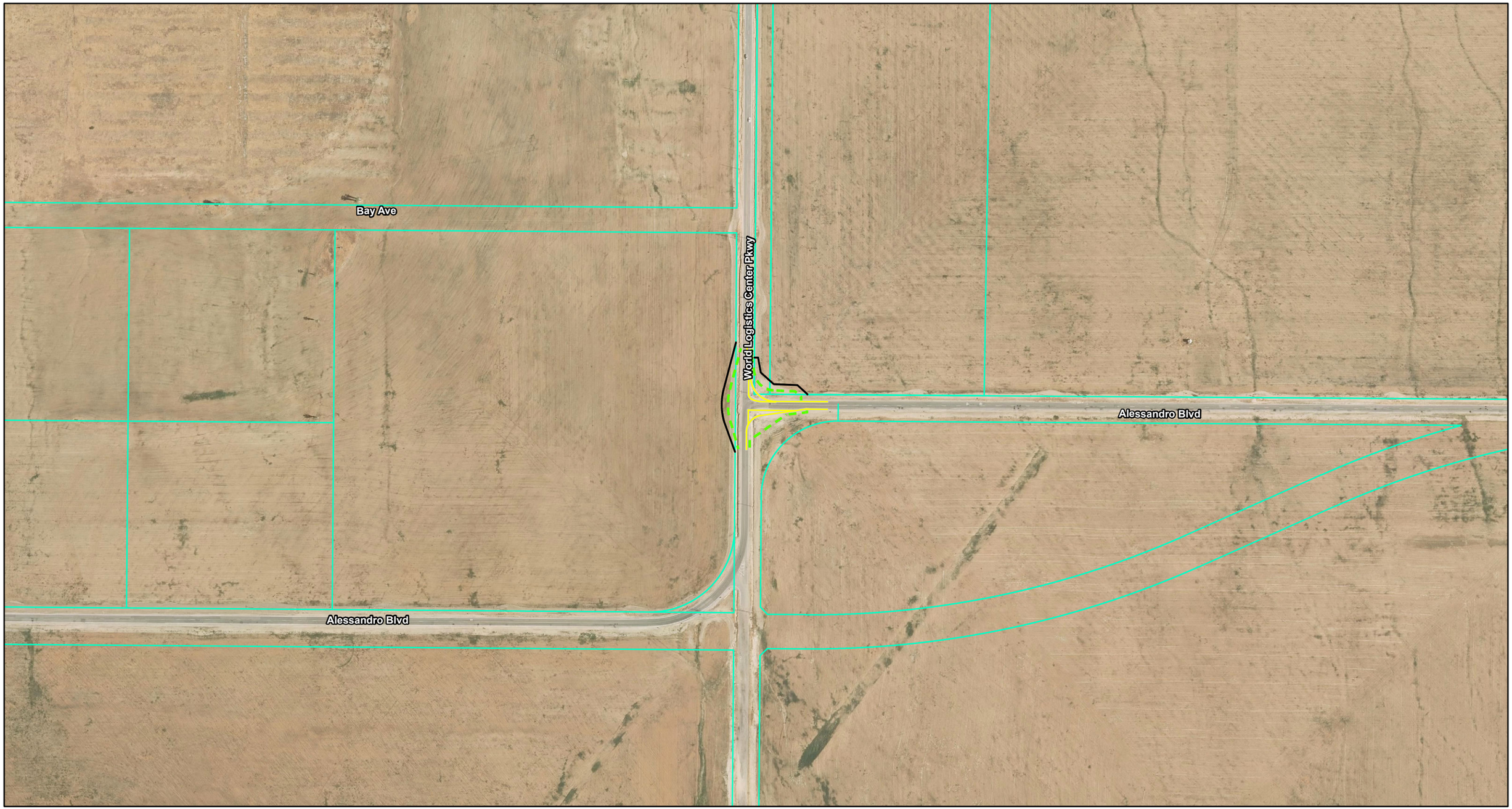

LEGEND

- Design Variation 2a Proposed Improvements
- Cut/Fill Grading Limits
- Trails (Proposed and/or Future)
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- Proposed Caltrans Right of Way
- Proposed City Right of Way
- Slope Easement
- Temporary Construction Easement

N

0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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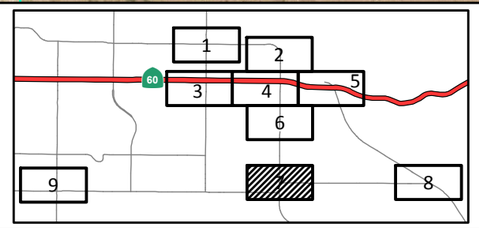

FIGURE 1-5
Sheet 7 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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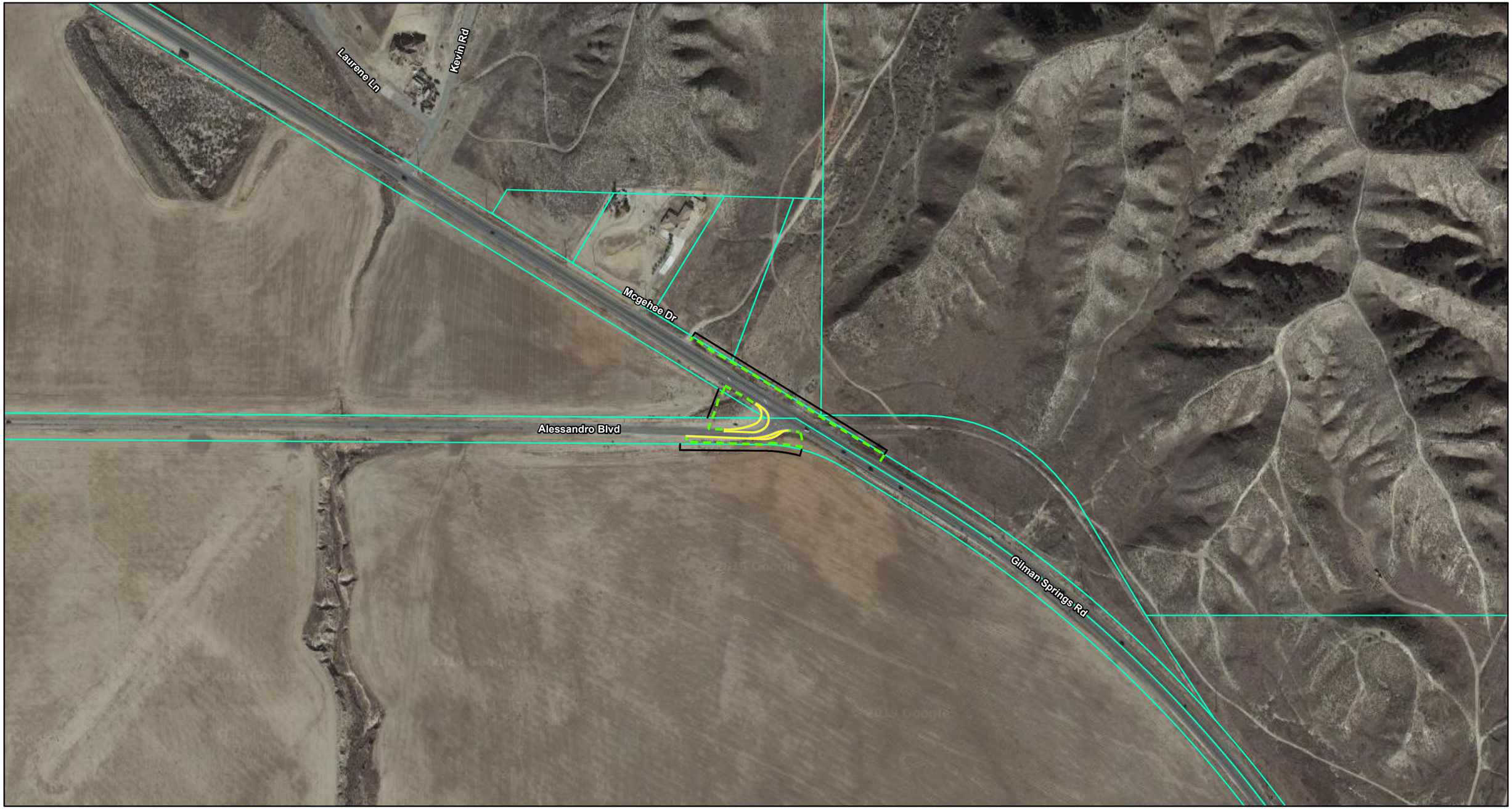

LEGEND

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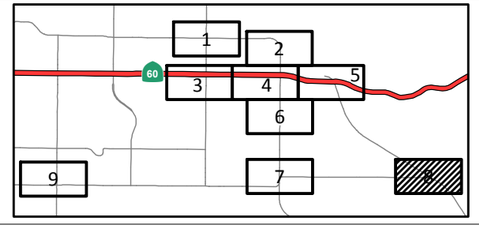

FIGURE 1-5
Sheet 8 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

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0 150 300
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); MBI (2018)

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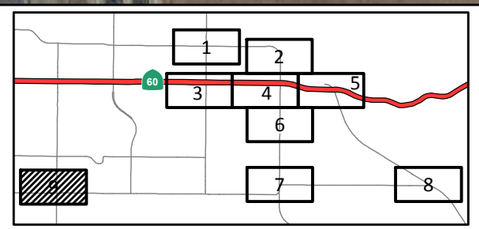

FIGURE 1-5
Sheet 9 of 9
SR-60/World Logistics Center Parkway Interchange Project
Design Variation 6a
Geometrics
08-RIV-60 PM 20.0/22.0
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1.3.4 Boldfaced and Underlined Design Exception Features

The Caltrans *Highway Design Manual* establishes Boldfaced and Underlined design standards. Exceptions to these standards are sometimes necessary, particularly when reconstructing an existing interchange. Such exceptions are called nonstandard design features.

Table 1.8 below lists all known nonstandard design features and their probability of approval for Alternatives 2 and 6 (LPA), including design variations. A design standards risk assessment focus meeting was held on January 13, 2016, to determine the level of risk associated with each nonstandard feature and their "probability of approval" rating.

Table 1.8 Design Standards Probability of Approval

Alternative and Design Variation	Design Standard from Highway Design Manual Tables 82.1A and 82.1B	Probability of Design Exception Approval (None, Low, Medium, or High)	Justification for Probability Rating
Alt 2, Alt 6 (LPA), DV 2a, DV 6a	202.5 (1)-Superelevation Transitions	High	Superelevations will be designed to meet or exceed the minimum requirements for safety.
Alt 2, Alt 6 (LPA), DV 2a, DV 6a	202.5 (2)-Superelevation Runoff	High	Superelevations will be designed to meet or exceed the minimum requirements for safety.
Alt 2, Alt 6 (LPA), DV 2a, DV 6a	309.1 (2)(a) – Clear Recovery Zone (Necessary Highway Features)	High	Objects within the vehicle recovery area will be shielded, moved or protected in place with a barrier.
Alt 2, Alt 6 (LPA), DV 2a, DV 6a	501.3 – Minimum Interchange Spacing	High	This is an existing condition and is not changing with the proposed design.
Alt 2, Alt 6 (LPA), DV 2a, DV 6a	504.7 – Minimum Weave Length	Medium	This is an existing condition that cannot be remedied without a complete reconstruction of multiple interchanges.

Source: *Draft Project Report* (2020).
Alt = Alternative
DV = Design Variation
LPA = Locally Preferred Alternative

1.3.5 Transportation System Management/Transportation Demand Management (TSM/TDM)

Alternative travel modes were considered during the early planning studies. Transportation Systems Management (TSM) strives to maximize efficiency of the existing system through operational modifications by providing options such as ridesharing, reversible lanes, ramp metering, and traffic signal optimization. TSM strategy options consist of actions to improve traffic flow and increase the number of vehicle trips without altering the number of through lanes, while Transportation Demand Management (TDM) focuses on the demand side of travel behavior, with regional strategies for reducing the number of vehicle trips and vehicle miles traveled, and increasing vehicle occupancy. It facilitates higher vehicle occupancy and reduces traffic congestion by expanding travelers' transportation choices through initiatives such as telecommuting and changing work schedules to produce a more even pattern of transportation network use, thereby muting the effect of morning and evening rush hours. In addition, multimodal alternatives integrate multiple modes of transportation (e.g., pedestrian, bicycle, automobile, rail, and transit).

The purpose of the SR-60/WLC Pkwy Interchange Project is to increase the capacity, reduce the future congestion, improve traffic operations at the SR-60/WLC Pkwy interchange, and improve project geometric deficiencies. A separate TDM alternative, such as a Mass Transit Alternative, was not developed because there are transit services (i.e., RTA local and regional bus services) provided in the project vicinity and because the proposed interchange improvements are needed to increase capacity, reduce congestion, and improve traffic operations. The Build Alternatives include the construction of Class II bike lanes on WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue. Therefore, no TSM/TDM alternative is evaluated in this EIR/EA.

Although TSM/TDM measures alone could not satisfy the purpose and need of the project, TSM/TDM measures such as ramp metering for the on-ramps have been incorporated into the Build Alternatives (including Design Variations 2a and 6a) for this project. In addition, the proposed Build Alternatives do not preclude future transit operations within the project limits by providing right-of-way for future bus bays on Eucalyptus Avenue.

1.3.6 Reversible Lanes

Assembly Bill 2542 amended California Streets and Highways code to require, effective January 1, 2017, that Caltrans or a regional transportation planning agency demonstrate that reversible lanes were considered when submitting a capacity-increasing project or a major street or highway lane realignment project to the California Transportation Commission for approval (California Streets and Highways Code, Section 100.015). However, reversible lanes were not considered for the SR-60/WLC Pkwy interchange improvement project because it was programmed prior to January 1, 2017.

1.3.7 No Build (No Action) Alternative

The No Build (No Action) Alternative (also referred to as Alternative 1 in this EIR/EA) assumes that no improvements will be made to the freeway mainline or to the existing SR-60/WLC Pkwy interchange. Without the planned improvements proposed as part of the project, the LOS at the on- and off-ramps and traffic operations at the interchange would continue to worsen over time. Alternative 1 was determined to not meet or satisfy the project purpose and need. In addition, vertical clearance of the existing overpass would not be upgraded to current Caltrans standards (16 ft 6 inches). Therefore, collision rates would not improve. Existing conditions for the project area are shown on Figure 1-6.

1.3.8 Comparison of Alternatives

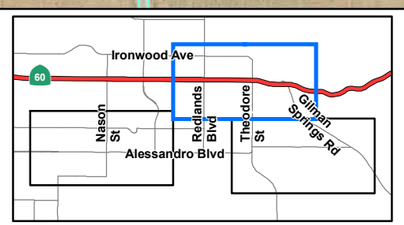
Table 1.9 provides a comparison of the No Build Alternative (Alternative 1), Alternatives 2 and 6 (LPA), and Design Variations 2a and 6a. Because the interchange is within a developed area of Moreno Valley, it is preferred that the Build Alternatives minimize right-of-way acquisition and displacements, and maintain local circulation while meeting the purpose and need for the project.

Juniper Ave
Grelck Dr
Ironwood Ave
Quincy St
Redlands Blvd
Hemlock Ave
Prairie Wind Trl
Spruce Ave
60
Highland Blvd
City of Moreno Valley
County of Riverside
Theodore St
SKECHERS WAREHOUSE
Eucalyptus Ave
Gilman Springs Rd
Eucalyptus Ave
Eucalyptus St
Herschel Ln
Sue Ann Ln
Virginia St
Jerry St
Strauss Ln
Shubert St
Mozart Way
Gershwin Way
Dracaea Ave

LEGEND

- Existing Right of Way and Parcels
- Project Area
- City/County Boundary

0 500 1000
FEET



SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2018)

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FIGURE 1-6
Sheet 1 of 3

SR-60/World Logistics Center Parkway
Interchange Project
Alternative 1 No Build Exisiting Conditions
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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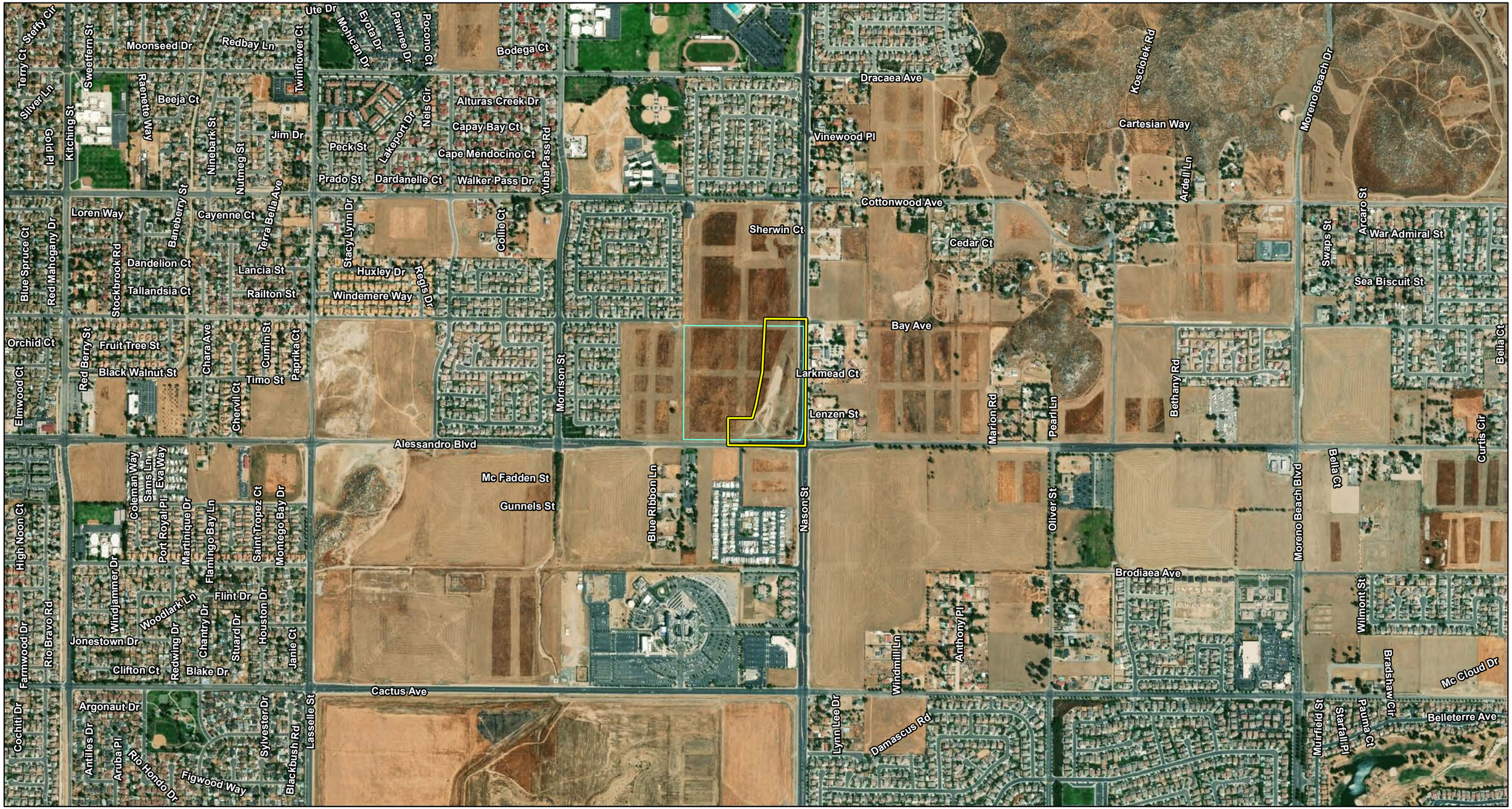

LEGEND

- Existing Right of Way and Parcels
- Project Area
- City/County Boundary

0 500 1000
FEET



FIGURE 1-6
Sheet 2 of 3

SR-60/World Logistics Center Parkway
Interchange Project
Alternative 1 No Build Exisiting Conditions
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2018)

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Dracaea Ave
World Logistics Center Pkwy
Cottonwood Ave
Bay Ave
Alessandro Blvd
Brodiaea Ave
Theodore St
Cactus Ave
Davis Rd
Virginia St
Jerry St
Alberta Ln
Laurene Ln
Kevin Rd
City of Moreno Valley
County of Riverside
Mcgehee Dr
Gilman Springs Rd
Gato Del Sol Ave

LEGEND

- Existing Right of Way and Parcels
- Project Area
- City/County Boundary

N

0 500 1000
FEET

SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2018)

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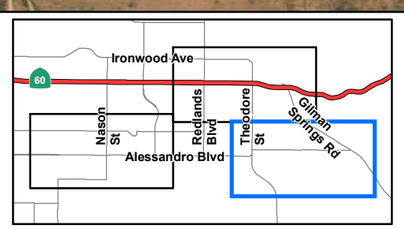

FIGURE 1-6
Sheet 3 of 3

SR-60/World Logistics Center Parkway
Interchange Project
Alternative 1 No Build Exisiting Conditions
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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Table 1.9 Comparison of Alternatives

Issue	Alternative 1 (No Build Alternative)	Alternative 2	Identification of Differences with Inclusion of Design Variation 2a	Alternative 6 (LPA)	Identification of Differences with Inclusion of Design Variation 6a
Right-of-Way Acquisition and Relocations	No displacements	6 full acquisitions 55 partial acquisitions 0 residential displacements 0 business displacements 0 employee displacements	61 partial acquisitions	6 full acquisitions 55 partial acquisitions 0 residential displacements 0 business displacements 0 employee displacements	7 full acquisitions 60 partial acquisitions 1 residential displacement
Traffic and Transportation/ Pedestrian and Bicycle Facilities	The No Build Alternative (Alternative 1) would not provide any improvements at the existing SR-60/ WLC Pkwy interchange. Therefore, traffic operations at this interchange would continue as they currently exist and would worsen over time. The No Build Alternative (Alternative 1) would not provide adequate LOS and operational conditions at the SR-60/WLC Pkwy interchange in the Opening Year (2025) or in the Design Year (2045).	**Geometrics:** This alternative avoids an existing residential development in the southeast quadrant of the interchange. It would reconstruct and improve the existing interchange in a modified Type L-7/L-8 configuration. Improvements would include construction of a new westbound entrance and loop exit ramps in the northwest quadrant of the interchange and an eastbound entrance ramp in the southeast quadrant in a partial Type L-8 configuration. New eastbound exit and loop entrance ramps would be constructed in the southwest quadrant in a partial Type L-7 configuration. The existing WLC Pkwy Overcrossing would be removed and replaced by a new, approximately 142 ft wide and 300 ft long bridge. An auxiliary lane would be added in both directions between the Redlands Boulevard and WLC Pkwy interchanges, as well as in the eastbound direction between the WLC Pkwy and Gilman Springs Road interchanges. The divergence point of the proposed westbound loop exit ramp would be located west of the existing exit ramp divergence point, thereby increasing the weave length between the westbound Gilman Springs Road entrance ramp and the WLC Pkwy exit ramp. Alternative 2 would impact areas in the northwest, southwest, and southeast quadrants of the interchange. Additional right-of-way will be required to accommodate proposed ramps in these locations. **LOS:** All Opening Year 2025 **i**ntersections and mainline segments are projected to operate at acceptable LOS during the a.m. and p.m. peak periods. All Horizon Year 2045 intersections and most mainline segments are projected to operate at an acceptable LOS during the a.m. and p.m. peak periods. In the westbound direction, between WLC Pkwy and Redlands Boulevard, the mainline segment is projected to operate at LOS F in the a.m. peak period.	**Geometrics:** Design Variation 2a would have the same features as Alternative 2, except for the location of the Eucalyptus Avenue/WLC Pkwy intersection. This design variation would also avoid the residential development. Design Variation 2a would move the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south of its current location. The shift would cause a partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect with the west side of WLC Pkwy.	**Geometrics:** Alternative 6 (LPA) proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration. Improvements under Alternative 6 (LPA) would include the construction of a new westbound direct on-ramp and a new eastbound loop off-ramp in the northwest quadrant in a partial cloverleaf configuration. New eastbound direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial cloverleaf configuration. Similar to Alternative 2, Alternative 6 (LPA) would also remove the existing two-lane (one lane in each direction) WLC Pkwy Overcrossing and replace it with a new four-lane (two through lanes in each direction) overcrossing that would be approximately 90 ft wide and 245 ft long. Additional improvements included as part of Alternative 6 (LPA) include the installation of roundabouts at both the proposed eastbound and westbound ramp intersections, as well as at Eucalyptus Avenue/WLC Pkwy. On WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue, bike lanes are provided on both sides within the width of the proposed shoulders. Bicyclists would have the option to merge with vehicular traffic to navigate through the roundabout intersection or exit the travel lane prior to each roundabout and cross the roundabout intersection with pedestrian traffic. **LOS:** All Opening Year 2025 intersections and mainline segments are projected to operate at an acceptable LOS during the a.m. and p.m. peak periods. All Horizon Year 2045 intersections and most mainline segments are projected to operate at an acceptable LOS during the a.m. and p.m. peak periods. In the westbound direction, between WLC Pkwy and Redlands Boulevard, the mainline segment is projected to operate at LOS F in the a.m. peak period. In the eastbound direction, between the EB loop on-ramp and EB direct on-ramp, the mainline merge area segment is projected to operate near capacity at LOS E in the p.m. peak period.	**Geometrics:** Design Variation 6a would have the same features as Alternative 6 (LPA), except for the location of the Eucalyptus Avenue/WLC Pkwy intersection. Design Variation 6a would consist of moving the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south of its current location. The shift would cause a partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect to the west side of WLC Pkwy. This design variation would not avoid the residential development in the southeast quadrant of the interchange.
Estimated Cost	**None**	**$95,133,000**	**$103,056,000**	**$87,718,000**	**$95,341,000**

Source: Compiled by LSA Associates, Inc. (2019).
ft = foot/feet
LOS = level(s) of service
SR-60 = State Route 60
WLC Pkwy = World Logistics Center Parkway

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As seen in Table 1.9, Alternatives 2 and 6 (LPA) and Design Variation 2a would each require a total of six full acquisitions: one full acquisition in the northwest quadrant and five full acquisitions in the southwest quadrant. Design Variation 6a will require the same amount of acquisitions with an additional full acquisition in the southeast quadrant of the interchange. There would be partial right-of-way acquisitions within all four quadrants of the interchange. The full acquisition for Design Variation 6a in the southeast quadrant of the interchange would require one residential displacement. As shown in Table 1.9, Design Variation 2a has the highest total cost, Alternative 2 has the second highest cost, Design Variation 6a has the third highest cost, and Alternative 6 (LPA) has the lowest total cost. The total cost includes all construction and right-of-way costs.

1.3.9 Operational Comparison

The Community Development Element of the City's General Plan previously designated the area south of SR-60 for future development as a mix of residential, commercial, business park, and open space. The Build Alternatives would reduce congestion and improve operations at the interchange when compared to the No Build Alternative. Specific data illustrating these improvements are shown in Tables 1.10 through 1.13. Design Variations 2a and 6a do not impact the traffic analysis and operations for each Alternative. The operations presented for Alternative 2 and Alternative 6 (LPA) also apply to Design Variations 2a and 6a.

Table 1.10 Opening Year (2025) – Intersection LOS

Intersection	No Build Alternative 2025 LOS		Build Alternatives 2025 LOS			
			Alternative 2		Alternative 6 (LPA)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
WLC Pkwy/Eucalyptus Avenue	F	F	C	A	A	A
WLC Pkwy/SR-60 EB Ramps	F	F	B	B	A	A
WLC Pkwy/SR-60 WB Ramps	F	F	A	C	A	A
Theodore Street/Ironwood Avenue	A	A	A	A	A	A
Redlands Boulevard/Eucalyptus Avenue	B	B	B	B	B	B
Redlands Boulevard/SR-60 EB Ramps	A	A	A	A	A	A
Redlands Boulevard/SR-60 WB Ramps	A	A	A	A	A	A
Redlands Boulevard/Ironwood Avenue	B	B	B	B	B	B

Source: *Traffic Study Report* (WSP USA Inc. 2019).
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 1.11 Design Year (2045) – Intersection LOS

Intersection	No Build Alternative 2045 LOS		Build Alternatives 2045 LOS			
			Alternative 2		Alternative 6 (LPA)	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
WLC Pkwy/Eucalyptus Avenue	F	F	D	D	B	C
WLC Pkwy/SR-60 EB Ramps	F	F	A	B	B	B
WLC Pkwy/SR-60 WB Ramps	F	F	C	C	B	B
Theodore Street/Ironwood Avenue	A	A	A	A	A	A
Redlands Boulevard/Eucalyptus Avenue	B	C	B	C	B	C
Redlands Boulevard/SR-60 EB Ramps	A	B	A	B	A	B
Redlands Boulevard/SR-60 WB Ramps	A	A	A	A	A	A
Redlands Boulevard/Ironwood Avenue	B	C	B	C	B	C

Source: *Traffic Study Report* (WSP USA Inc. 2019).
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 1.12 Future (2025 and 2045) – Freeway Mainline Levels of Service

Freeway Segment	Opening Year (2025) LOS		Design Year (2045) LOS	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Alternative 1 (No Build)				
Westbound				
Gilman Springs Road to WLC Pkwy	B	B	F	D
WLC Pkwy to Redlands Boulevard	B	B	F	E
Redlands Boulevard to Moreno Beach Drive	C	C	E	D
Eastbound				
Moreno Beach Drive to Redlands Boulevard	B	C	C	F
Redlands Boulevard to WLC Pkwy	B	C	D	F
WLC Pkwy to Gilman Springs Road	B	B	C	E
Alternative 2				
Westbound				
Gilman Springs Road to WLC Pkwy	B	B	D	C
WLC Pkwy to Redlands Boulevard	B	B	F	D
Redlands Boulevard to Moreno Beach Drive	C	C	E	D
Eastbound				
Moreno Beach Drive to Redlands Boulevard	B	C	C	D
Redlands Boulevard to WLC Pkwy	B	B	B	D
WLC Pkwy to Gilman Springs Road	B	B	B	E
Alternative 6 (LPA)				
Westbound				
Gilman Springs Road to WLC Pkwy	B	B	D	C
WLC Pkwy to Redlands Boulevard	B	B	F	D
Redlands Boulevard to Moreno Beach Drive	C	C	E	D
Eastbound				
Moreno Beach Drive to Redlands Boulevard	B	C	C	D
Redlands Boulevard to WLC Pkwy	B	B	B	D
WLC Pkwy to Gilman Springs Road	B	B	B	D

Source: *Traffic Study Report* (WSP USA Inc. 2019).
LOS = level of service
LPA = Locally Preferred Alternative
WLC Pkwy = World Logistics Center Parkway

Table 1.13 Future (2025 and 2045) – Merge/Diverge LOS

Merge/Diverge	Opening Year (2025) LOS		Design Year 2045 LOS	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Alternative 1 (No Build)				
Westbound				
On-Ramp from Gilman Springs Road	B	B	F	C
Off-Ramp to WLC Pkwy	C	C	F	D
Loop On-Ramp from WLC Pkwy	C	C	F	E
Loop Off-Ramp to WLC Pkwy	*Does not exist under these scenarios.*			
Direct On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*			
Off-Ramp to Redlands Boulevard	A	A	F	C
Loop On-Ramp from Redlands Boulevard	C	C	D	D
Direct On-Ramp from Redlands Boulevard	B	C	D	D
Eastbound				
Off-Ramp to Redlands Boulevard	A	B	B	F
Loop On-Ramp from Redlands Boulevard	B	C	C	F
Direct On-Ramp from Redlands Boulevard	B	B	B	F
Off-Ramp to WLC Pkwy	C	C	D	F
Loop On-Ramp from WLC Pkwy	B	C	C	D
Direct On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*			
Off-Ramp to Gilman Springs Road	B	B	B	D
Alternative 2				
Westbound				
On-Ramp from Gilman Springs Road	B	B	D	C
Off-Ramp to WLC Pkwy	*Does not exist under these scenarios.*			
Loop On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*			
Direct On-Ramp from WLC Pkwy	B	B	F	D
Loop Off-Ramp to WLC Pkwy	B	B	D	C
Off-Ramp to Redlands Boulevard	B	B	F	D
Loop On-Ramp from Redlands Boulevard	C	C	D	D
Direct On-Ramp from Redlands Boulevard	B	C	D	D
Eastbound				
Off-Ramp to Redlands Boulevard	A	B	B	C
Loop On-Ramp from Redlands Boulevard	B	B	B	D
Direct On-Ramp from Redlands Boulevard	B	B	B	D
Off-Ramp to WLC Pkwy	B	B	B	D
Loop On-Ramp from WLC Pkwy	A	B	B	E
Direct On-Ramp from WLC Pkwy	A	B	B	C
Off-Ramp to Gilman Springs Road	A	B	B	C
Alternative 6 (LPA)				
Westbound				
On-Ramp from Gilman Springs Road	B	B	D	C
Off-Ramp to WLC Pkwy	*Does not exist under these scenarios.*			
Loop On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*			
Loop Off-Ramp to WLC Pkwy	B	B	D	C
Direct On-Ramp from WLC Pkwy	B	B	F	D
Off-Ramp to Redlands Boulevard	B	B	F	D
Loop On-Ramp from Redlands Boulevard	C	C	D	D
Direct On-Ramp from Redlands Boulevard	B	C	D	D
Eastbound				
Off-Ramp to Redlands Boulevard	A	B	B	C
Loop On-Ramp from Redlands Boulevard	B	B	B	D
Direct On-Ramp from Redlands Boulevard	B	B	B	D
Off-Ramp to WLC Pkwy	B	B	B	D
Loop On-Ramp from WLC Pkwy	*Does not exist under these scenarios.*			
Direct On-Ramp from WLC Pkwy	A	B	B	D
Off-Ramp to Gilman Springs Road	A	B	B	D

Source: *SR-60/WLC Traffic Study Report* (WSP USA Inc. 2019).
LOS = level of service
LPA = Locally Preferred Alternative
WLC Pkwy = World Logistics Center Parkway

Table 1.10 shows that all of the proposed Build Alternatives (including Design Variations 2a and 6a) would improve LOS at most intersections in the study area, and all intersections would operate at a satisfactory LOS for the Opening Year (2025). For the Design Year (2045), Table 1.11 shows that under both Build Alternatives (including Design Variations 2a and 6a) LOS would improve or remain the same as the No Build conditions and all of the intersections would operate at a satisfactory LOS.

As shown in Table 1.12, in comparison to the No Build Alternative, the Build Alternatives result in improvements in LOS in the Design Year (2045) for the Gilman Springs Road to WLC Pkwy freeway segment in the westbound direction during the a.m. and p.m. peak hours. LOS would improve for the WLC Pkwy to Redlands Boulevard freeway segment in the westbound direction during the a.m. peak hours and in the eastbound direction during the p.m. peak hours. For the Design Year (2045), WLC Pkwy to Redlands Boulevard would improve from LOS F to LOS E and Redlands Boulevard to Moreno Beach Drive would continue to operate at LOS E in the a.m. peak hours. WLC Pkwy to Gilman Springs Road in the eastbound direction would also continue to operate at LOS E in p.m. peak hours in 2045.

As shown in Table 1.13, freeway ramps throughout the study area are projected to operate at satisfactory LOS for the project's Opening Year (2025). However, for the Design Year (2045), LOS deteriorates to a less than acceptable level for the WLC Pkwy off-ramp in the eastbound direction, for the direct on-ramp from WLC Pkwy in the westbound direction during the a.m. peak hour, and for the WLC Pkwy loop on-ramp in the eastbound direction during the p.m. peak hour. The section of westbound SR-60 between WLC Pkwy and Redlands Boulevard is a weaving section that would be over capacity for one 15-minute interval in the a.m. peak hour, but not to the extent that it would cause queuing on SR-60 east of the WLC Pkwy on-ramp. The merge area for the eastbound loop on-ramp would operate near capacity at LOS E for one 15-minute interval in the p.m. peak hour. The overall improvements of operation balance out the isolated 15-minute intervals of deficient LOS. If the entire peak-hour operation is averaged, the peak hour experiences acceptable LOS.

1.3.10 Locally Preferred Alternative

After comparing and weighing the benefits and impacts of all feasible alternatives, the project proponent (the City of Moreno Valley) has identified Build Alternative 6 as the Locally Preferred Alternative. Build Alternatives 2 and 6 (LPA) were evaluated at the same level of detail in this Draft EIR/EA, allowing for a determination of the impacts and/or effects on the environment to be made. The designation of a Locally Preferred Alternative in the Draft EIR/EA is intended to convey the City's preference for a specific alternative based on the information available, including potential impacts and reasonable mitigation measures, prior to public review of the Draft EIR/EA.

After the public circulation period, all comments will be considered, and the PDT will select a preferred alternative and make the final determination of the project's effect on the environment. Under CEQA, Caltrans will certify that the project complies with CEQA, prepare findings for all significant impacts identified, prepare a Statement of Overriding Considerations for impacts that will not be mitigated below a level of significance, and certify that the findings and Statement of Overriding Considerations

have been considered prior to project approval. Caltrans will then file a Notice of Determination with the State Clearinghouse that will identify whether the project will have significant impacts, if mitigation measures were included as conditions of project approval, that findings were made, and that a Statement of Overriding Considerations was adopted. Similarly, if Caltrans, as assigned by the FHWA, determines the NEPA action does not significantly impact the environment, Caltrans will issue a Finding of No Significant Impact (FONSI). If it is determined that the project is likely to have a significant effect on the environment, an Environmental Impact Statement (EIS) will be prepared.

1.4 Alternatives Considered but Eliminated from Further Discussion

Alternatives 3, 4, 5, and 7 were considered but eliminated from further discussion before preparation of the environmental document began.

1.4.1 Alternative 3 (Spread Diamond)

Alternative 3 would reconstruct and improve the existing interchange in a spread diamond configuration. Improvements would include construction of new entrance and exit ramps in all four quadrants of the interchange. An auxiliary lane would be added in both directions between the Redlands Boulevard and Gilman Springs Road interchanges. The existing WLC Pkwy Overcrossing would be removed and replaced by a new bridge.

Alternative 3 would impact areas in all four interchange quadrants, including displacement of an existing residence located in the northeast quadrant of the interchange. Additional right-of-way would be required to accommodate the proposed improvements. Sufficient weaving length on westbound SR-60 between Gilman Springs Road and WLC Pkwy was not achieved with the Alternative 3 ramp configuration. Additionally, Alternative 3 does not accommodate the large volume of vehicles (1,840 vehicles [PCE] per hour) turning from northbound WLC Pkwy to the westbound on-ramp for the 2045 design year. Ultimately, Alternative 3 was eliminated from further consideration due to insufficient westbound weaving length between WLC Pkwy and Gilman Springs Road, and the northbound-to-westbound turning movement.

1.4.2 Alternative 4 (Modified Spread Diamond)

Alternative 4 proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified spread diamond configuration. Improvements under Alternative 4 would include the construction of a new westbound direct on-ramp in the northwest quadrant of the interchange, as well as a new westbound direct off-ramp and a new loop on-ramp in the northeast quadrant, in a partial cloverleaf configuration. New eastbound direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial spread diamond configuration. An auxiliary lane would be added in both directions between the Redlands Boulevard and Gilman Springs Road interchanges. The existing WLC Pkwy Overcrossing would be removed and replaced by a new bridge.

Alternative 4 would impact areas in all four interchange quadrants, including an existing residence in the northeast quadrant of the interchange. Additional right-of-way would be required to accommodate the proposed improvements. Sufficient weaving length on westbound SR-60 between Gilman Springs Road and WLC Pkwy was not achieved with the Alternative 4 ramp configuration. Ultimately, Alternative 4 was eliminated from further consideration due to insufficient westbound weaving length between WLC Pkwy and Gilman Springs Road.

1.4.3 Alternative 5 (Modified Spread Diamond with Collector/ Distributor Road)

Alternative 5 would reconstruct and improve the existing interchange in a modified spread diamond with a collector/distributor road configuration. Improvements would include construction of new entrance and exit ramps in all four quadrants of the interchange. Improvements under Alternative 5 would construct a new westbound direct on-ramp in the northwest quadrant of the interchange, as well as a new westbound direct off-ramp and a new loop on-ramp in the northeast quadrant, in a partial cloverleaf configuration. New eastbound direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial spread diamond configuration. The Gilman Springs Road on- and off-ramps would require partial reconstruction. An eastbound collector/distributor road along the south side of SR-60 would feed into a southbound road connecting to Gilman Springs Road. The eastbound collector/distributor road would merge with eastbound SR-60 west of the Gilman Springs Road off-ramp. A westbound collector/distributor road along the north side of SR-60 would feed from the southbound Gilman Springs Road off-ramp and collect vehicles from the westbound Gilman Springs Road on-ramp. The westbound collector/distributor road would distribute traffic to the proposed westbound WLC Pkwy off-ramp and merge with westbound SR-60 west of the westbound WLC Pkwy loop on-ramp. An auxiliary lane would be added in both directions between the Redlands Boulevard and WLC Pkwy interchanges. The existing WLC Pkwy Overcrossing would be removed and replaced with a new overcrossing structure.

Alternative 5 would impact areas in all four interchange quadrants, including an existing residence in the northeast quadrant of the interchange. Additional right-of-way would be required to accommodate the proposed improvements. Sufficient weaving length on westbound SR-60 between Gilman Springs Road and WLC Pkwy was not achieved with the Alternative 5 ramp configuration. Additionally, the merge/diverge LOS did not meet Caltrans performance criteria. Ultimately, this alternative was eliminated from further consideration due to insufficient westbound weaving length between WLC Pkwy and Gilman Springs Road and a merge/diverge LOS E.

1.4.4 Alternative 7 (Single-Point Urban Interchange)

Alternative 7 would reconstruct and improve the existing interchange in a single-point urban interchange configuration. Improvements would include construction of new entrance and exit ramps in all four quadrants of the interchange. All through traffic accessing these on- and off-ramps would be directed to a single intersection located at the midpoint of the interchange. An auxiliary lane would be added in both directions between the Redlands Boulevard and Gilman Springs Road interchanges.

The existing WLC Pkwy Overcrossing would be removed and replaced by a new bridge.

Alternative 7 would impact areas in all four interchange quadrants, including an existing residential development located in the northeast quadrant of the interchange. Additional right-of-way would be required to accommodate the proposed improvements. Sufficient weaving length on westbound SR-60 between Gilman Springs Road and WLC Pkwy was not achieved with the Alternative 7 ramp configuration. Additionally, intersection LOS did not meet Caltrans performance criteria. Ultimately, Alternative 7 was eliminated from further consideration due to an insufficient westbound weaving length between WLC Pkwy and Gilman Springs Road and an intersection LOS E.

1.5 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications (PLACs) would be required for Project construction, as shown in Table 1.14.

Table 1.14 Permits and/or Approvals Needed

Agency	PLAC	Status
United States Army Corps of Engineers (USACE)	Section 404 Nationwide Permit No. 14	Application will be submitted after environmental document approval.
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement	Application will be submitted after environmental document approval.
Santa Ana Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Application will be submitted after environmental document approval.
	NPDES Notice of Construction	Application will be submitted after environmental document approval, prior to any soil-disturbing work.
	Section 402 Clean Water Act NPDES	The project will comply with the requirements of the Caltrans MS4 Permit, Order No. 2012-0011-DWQ, NPDES No. CAS000003, issued by the State Water Resources Control Board, State of California. Documentation, as required, will be prepared and provided as required.
	SWPPP	The SWPPP will be developed in accordance with the Construction General Permit, Order No. 2009-0009-DWQ, NPDES No. CAS000002, issued by the State Water Resources Control Board, State of California. A Notice of Intent (NOI) will be submitted prior to any soil-disturbing work.
Federal Highway Administration (FHWA)	Air Quality Conformity Determination	Request for determination to be submitted following public review of the Draft EIR/EA and identification of a Preferred Alternative.
California Transportation Commission (CTC)	CTC vote to approve funds	Following the approval of the FED, the CTC may be requested to vote to approve funding for the project.
City of Moreno Valley	Encroachment Permit	Will be obtained prior to construction.
Riverside County	Encroachment Permit	May be required prior to construction.[1]
Caltrans	Encroachment Permit	Will be obtained prior to construction.

Source 1: *Natural Environment Study* (2019).
Source 2: *Water Quality Assessment Report* (2019).
Source 3: *Draft Project Report* (2020).
[1] An encroachment permit from Riverside County may be necessary for construction in the northeast quadrant of the interchange if the project affects land outside of the City of Moreno Valley's jurisdiction.
FED = Final Environmental Document
NPDES = National Pollutant Discharge Elimination System
PLAC = permits, licenses, agreements, and certifications
SWPPP = Storm Water Pollution Prevention Plan

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

Topics Considered But Determined Not to Be Relevant

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

- **Coastal Zone:** There is no potential for adverse impacts to the Coastal Zone because the project site is approximately 50 miles inland from the coast.

- **Wild and Scenic Rivers:** There is no potential for adverse impacts to wild and scenic rivers due to the absence of designated Wild and Scenic Rivers in the vicinity of the project site. The nearest Wild and Scenic River is the San Jacinto River, North Fork, approximately 20 miles southeast of the project site.

- **Timberlands:** There is no potential for adverse impacts to timberlands due to the absence of designated timberlands in the vicinity of the project site. The nearest timberlands are approximately 15 miles northeast of the project site.

- **National Marine Fisheries Service Species:** This project is outside of National Marine Fisheries Service (NMFS) jurisdiction; therefore, an NMFS species list is not required and no effects to NMFS species are anticipated.

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HUMAN ENVIRONMENT

2.1 Land Use

This section is based on information from the *Community Impact Assessment* (March 2019). The Land Use Study Area is the community within and surrounding the project site in which direct and indirect impacts of the project may occur. For this project, the Land Use Study Area includes the project area (the physical area that will be affected by the project) and the adjacent neighborhoods within Moreno Valley and unincorporated Riverside County (Census Tracts 424.01 and 426.22 within Moreno Valley and the part of Census Tract 426.24 that lies within the incorporated limits of Moreno Valley[1]).

2.1.1 Existing and Future Land Use

2.1.1.1 Existing Land Use

Existing land uses in the Land Use Study Area are shown on Figure 2.1-1. Within the Land Use Study Area, existing land use was mapped based on field surveys. Existing land use outside of the Land Use Study Area is based on aerial photographs and geographic information systems (GIS) data collected from local jurisdictions and consolidated by the Southern California Association of Governments (SCAG) in 2012, with minor revisions to reflect current land uses. The data was compiled into generalized land use classifications.

The quadrants of the project interchange refer to the four areas at the intersection of World Logistics Center Parkway (WLC Pkwy) with State Route 60 (SR-60). Existing uses in the northeast quadrant of the interchange include a farm improved with a single-family residence. Existing uses in the southwest quadrant include a large warehouse/distribution center (Skechers) and vacant land. The other two quadrants of the intersection, the northwest and southeast quadrants, are vacant. Land uses leading to the City Stockpile borrow site, west of Moreno Beach Drive and between Cottonwood Avenue and Alessandro Boulevard, include residential, mobile homes and trailer parks, institutional uses (i.e., churches), and vacant land.

The acreages and percentages of existing land uses in the Land Use Study Area are shown in Table 2.1.1, which is based on data collected from local jurisdictions and consolidated by SCAG.

Projects that are planned, approved, and under construction in Moreno Valley, in the Land Use Study Area, and in the vicinity of the Land Use Study Area were identified in October and December of 2019 and are listed in Table 2.1.2.

[1] The unincorporated part of Census Tract 426.24 is undeveloped and is more than 2 miles from the SR-60/World Logistics Center Parkway interchange; therefore, the unincorporated part of Census Tract 426.24 has been excluded from the Land Use Study Area.

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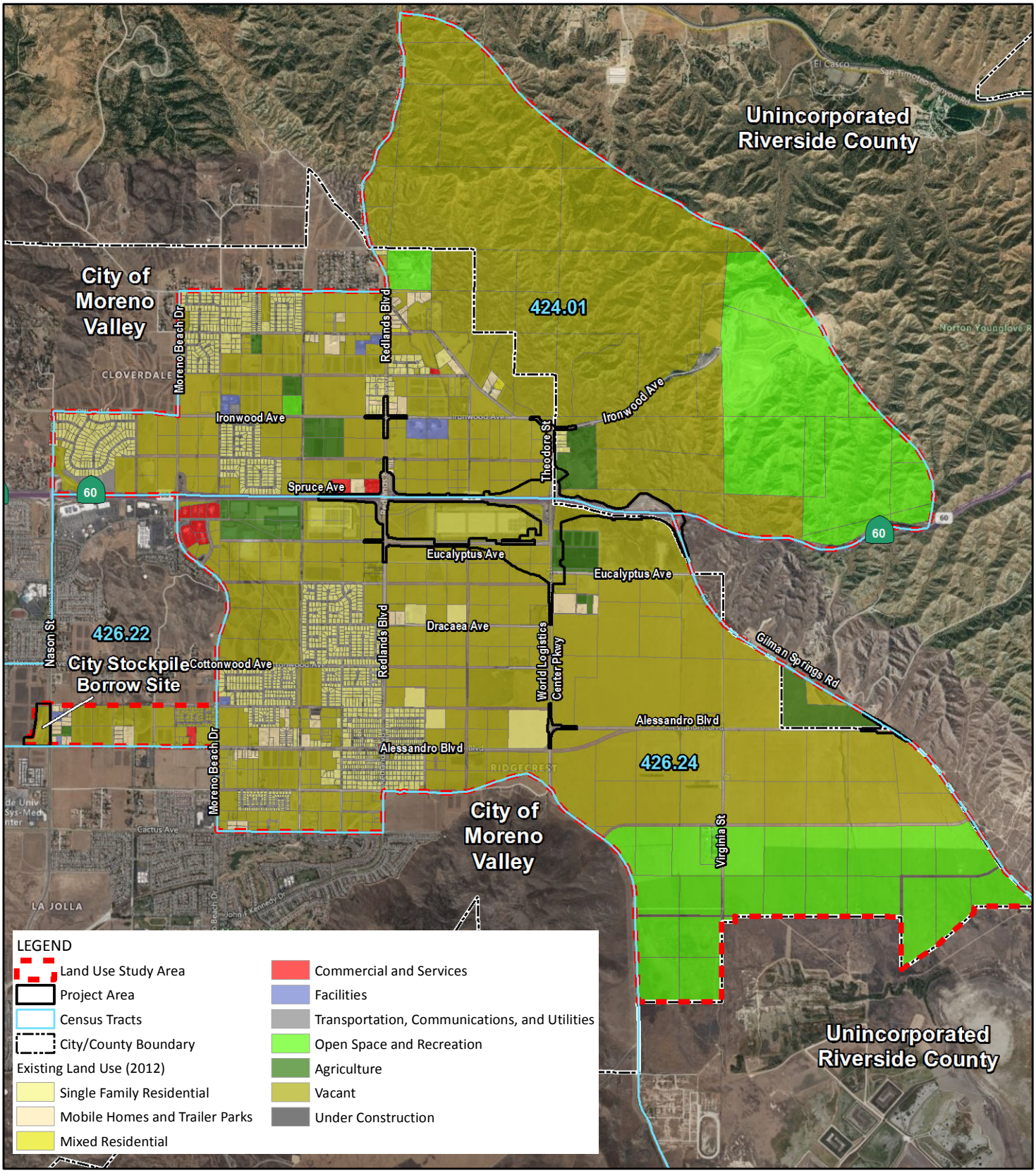

FIGURE 2.1-1

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SOURCES: Bing Maps (2012); MBI (11/2018); SCAG (2012)

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SR-60/World Logistics Center Pkwy Interchange Project

Existing Land Uses

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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Table 2.1.1 Existing Land Uses in the Land Use Study Area

Land Use	Acres	Percent[1]
Agriculture	293.1	3.0
Commercial and Services	44.9	0.5
Facilities	38.5	0.4
Mixed Residential	4.4	0.04
Mobile Homes and Trailer Parks	127.9	1.3
Open Space and Recreation	1,866.2	18.8
Single-Family Residential	777.7	7.9
Transportation, Communications, and Utilities	22.7	0.2
Under Construction	2.0	0.02
Vacant	6,723.8	68.0
Total	**9,901.2**	**100.0**

Source: 2012–2035 RTP/SCS (SCAG 2012).

[1] Any number that is greater than 0 but less than 0.05 is shown to the hundredth decimal place. Totals may not sum correctly due to rounding.

RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy

SCAG = Southern California Association of Governments

Table 2.1.2 Planned Projects in the Land Use Study Area and the SR-60 Corridor

Project Name/Type	Jurisdiction/Location	Proposed Use/Description	Status
Industrial Projects in Moreno Valley			
World Logistics Center	In Moreno Valley, at SR-60 and WLC Pkwy and Gilman Springs Road	Includes General Plan Amendments, Specific Plan, Zone Change and Tentative Parcel Map to construct 40,600,000 sf of logistics facilities and associated infrastructure providing for modern high-cube logistics warehouse distribution facilities on 2,610 ac	Approved, but under appeal
Highland Fairview Corporate Park Plan – Phase II	In Moreno Valley, south of SR-60, between Redlands Boulevard and WLC Pkwy	Includes a General Plan Amendment and Zone Change to construct a 768,000 sf industrial logistics facility on 36.8 ac	Approved
SR-60 Business Park Area	In Moreno Valley, south of SR-60, east of Moreno Beach Drive, north of Eucalyptus Avenue and Fir Avenue, and west of WLC Pkwy	Industrial warehouse business park with 3,651,264 sf of occupied/leased space and 1,249,121 sf of available space	Approved
Residential Projects in Moreno Valley			
TM 32460 – Sussex Capital Group	In Moreno Valley, north of Ironwood Avenue, west of Redlands Boulevard, south of Kalmia Avenue, east of Pettit Street	58 single-family residential units	Approved
TM 33962 – Pacific Scene Homes	In Moreno Valley, north of Ironwood Avenue, west of Redlands Boulevard, south of Kalmia Avenue, east of Pettit Street	31 single-family residential units	Approved
TM 32459 – Sussex Capital Group	In Moreno Valley north of Ironwood Avenue, west of Redlands Boulevard, south of Kalmia Avenue, east of Pettit Street	11 single-family residential units	Approved
TM 30998 – Pacific Communities	In Moreno Valley, north of Ironwood Avenue, west of Redlands Boulevard, south of Kalmia Avenue, east of Pettit Street	47 single-family residential units	Approved
PA06-0054 – Winchester Associates	In Moreno Valley, north of Alessandro Boulevard, west of Oliver Street, south of Cottonwood Avenue, east of Nason Street	52 single-family residential uses	Approved
PA04-0106 – Winchester Associates	In Moreno Valley, north of Alessandro Boulevard, west of Olive Street, south of Cottonwood Avenue, east of Nason Street	54 single-family residential units	Approved
PA05-0031 – Dev West Engineering	In Moreno Valley, north of Alessandro Boulevard, west of Moreno Beach Drive, south of Cottonwood Avenue, east of Oliver Street	80 single-family residential uses	Approved
PA03-0106 – Frontier Homes	In Moreno Valley, north of Alessandro Boulevard, west of Moreno Beach Drive, south of Bay Avenue, east of Oliver Street	56 single-family residential uses	Under Construction
TM 35823 – Lansing Companies	In Moreno Valley, northeast corner of Moreno Beach Drive and Cottonwood Avenue	562 single-family residential units	In entitlement process

Table 2.1.2 Planned Projects in the Land Use Study Area and the SR-60 Corridor

Project Name/Type	Jurisdiction/Location	Proposed Use/Description	Status
PEN18-0080 – Hakan Buvan	In Moreno Valley, north of Cactus Avenue, west of Arborglenn Drive, south of Brodiaea Avenue, east of Moreno Beach Drive	8 single-family residential units	In entitlement process
PEN18-0154 – Michael De La Torre	In Moreno Valley, north of Cactus Avenue, west of Arborglenn Drive, south of Brodiaea Avenue, east of Moreno Beach Drive	6 single family residential units	In entitlement process
45 – TM 37424 – Sid Chan	In Moreno Valley, north side of Alessandro Boulevard, between Moreno Beach Drive and Wilmot Street	7 single-family residential units	In entitlement process
TM 33222 – 26th Corp	In Moreno Valley, southeast corner of Merwin Street and Alessandro Boulevard	235 single-family residential units	In entitlement process
PEN18-0053 – Cantebury	In Moreno Valley, north side of Brodiaea Avenue, between Moreno Beach Drive and Wilmot Street	45 single-family residential units	In entitlement process
TM 36719 – Kuo Ming Lee	In Moreno Valley, southeast corner of Theodore Street (now WLC Pkwy) and Eucalyptus Avenue	34 single-family residential units	In entitlement process
TM 35377 – Michael Dillard	In Moreno Valley, southeast corner of Theodore Street (now WLC Pkwy) and Eucalyptus Avenue	9 single-family residential units	Approved
TM 36436 – KB Homes	In Moreno Valley, between Brodiaea Avenue, Wilmot Street, Cactus Avenue, and Quincy Street	159 single-family residential units	Under Construction
TM 30411 – Pacific Communities	In Moreno Valley, northwest Corner of Redlands Boulevard and Juniper Avenue	24 single-family residential units	Approved
Street Improvement and Widening Projects in Moreno Valley			
Alessandro Boulevard Widening and Realignment	In Moreno Valley, between Nason Street and Gilman Springs Road	Widening of Alessandro Boulevard from two to four lanes, realignment of Alessandro Boulevard between Theodore Street (now WLC Pkwy) and Gilman Springs Road, and associated street improvements	In 2019, SCAG FTIP and programming documents focused on long-range air quality purposes but not yet funded.
Cactus Avenue Widening	In Moreno Valley, between Nason Street and Redlands Boulevard	Widening of Cactus Avenue from two to six lanes	Planned for completion by 2020
Gilman Springs Road Widening	In Moreno Valley, between SR-60 and Alessandro Boulevard	Widening of Gilman Springs Road from two to six lanes with street improvements	In programming documents but not yet funded.
Gilman Springs Road Widening	In Moreno Valley, between Alessandro Boulevard and Bridge Street	Widening of Gilman Springs Road from two to six lanes and associated street improvements	In programming documents but not yet funded.
Ironwood Avenue Widening	In Moreno Valley, between Nason Street and Redlands Boulevard	Widening of Ironwood Avenue from two to four lanes	Planned for completion by 2022
Moreno Beach Drive Widening	In Moreno Valley, between Auto Mall Drive and Cactus Avenue	Widening of Moreno Beach Drive from two to six lanes from Auto Mall Drive to Cactus Avenue, including signals at Cottonwood Avenue, Alessandro Boulevard, and Cactus Avenue	In programming documents but not yet funded.

Table 2.1.2 Planned Projects in the Land Use Study Area and the SR-60 Corridor

Project Name/Type	Jurisdiction/Location	Proposed Use/Description	Status
Moreno Beach Drive Widening	Between Reche Canyon Road and SR-60	Widening of Moreno Beach Drive from two to four lanes.	Planned for completion by 2022
Nason Street Widening	Between Elder Avenue and Ironwood Avenue	Widening of Nason Street from two to four lanes	Planned for completion by 2022
Redlands Boulevard Widening	Between Spruce Avenue and Ironwood Avenue	Widening of Redlands Boulevard from two to four lanes including street improvements	Planned for completion by 2022
Redlands Boulevard Widening	Between Ironwood Avenue and Kalmia Avenue	Widening of Redlands Boulevard from two to four lanes	Planned for completion by 2022
Redlands Boulevard Widening	Between Kalmia Avenue and Locust Avenue	Widening of Redlands Boulevard from two to four lanes	Planned for completion by 2022
Redlands Boulevard Widening	Between SR-60 and Cactus Avenue	Widening of Redlands Boulevard from two to four lanes and other street improvements	In programming documents but not yet funded.
Eucalyptus Avenue Extension	In Moreno Valley, between Redlands Boulevard and Theodore Street (now WLC Pkwy)	Construction of three through lanes (two lanes WB and one lane EB) including the installation of medians, left-turn pockets, dedicated right-turn lanes, drainage improvements, landscaping sidewalks, and a Class I bike path	In programming documents but not yet funded.
Citywide Safe Routes to Schools Pedestrian Facility Improvements	In Moreno Valley, on Dracaea Avenue, Eucalyptus Avenue, Ironwood Avenue, Kitching Street, Sandy Glade Avenue, and Elsworth Street.	Install 2,840 ft of sidewalk gap closures, curbs, gutters, street lights, ADA ramps, and street widening.	In programming documents but not yet funded.
SR-60 Improvements			
SR-60 at Redlands Boulevard Overcrossing and Ramp Widening	In Moreno Valley at SR-60/Redlands Boulevard	Widening of the overcrossing from two to six through lanes; widening of the WB exit and entrance ramps from one lane to three lanes at the exit/entrance and three lanes at the arterial with an HOV lane at the entrance; widening of the EB exit and entrance ramps from one lane to two lanes at the exit/entrance with an HOV lane at the entrance; addition of auxiliary lanes 1,000 ft in each direction west of the intersection and 1,700 ft in each direction east of the intersection	Approved, PSR/PDS in 2016; planned for completion by 2025
SR-60/Gilman Springs Road Interchange Improvements	In Moreno Valley at the SR-60/Gilman Springs Road interchange	Realignment of Gilman Springs Road, removal of existing EB/WB ramps, widening of interchange from two lanes to six lanes, widening of WB exits from one to two/three lanes, and addition of auxiliary lanes to west of interchange 1,200 ft EB and 2,200 ft WB	In programming documents but not yet funded.
SR-60/Moreno Beach Drive Interchange (Phase 2)	In Moreno Valley at SR-60/Moreno Beach Drive	Replacement and widening of the overcrossing from two to six through lanes. Reconfiguration of the north side of SR-60/ Moreno Beach Drive interchange and associated WB auxiliary lane. Construction of a cloverleaf in the northeast quadrant, and a dedicated SB Moreno Beach Drive to WB SR-60 on-ramp. Raising of the EB ramp terminals to meet the new grade of the bridge. Completion of a portion of line K-1 in Ironwood Avenue.	Planned for completion by 2022

Table 2.1.2 Planned Projects in the Land Use Study Area and the SR-60 Corridor

Project Name/Type	Jurisdiction/Location	Proposed Use/Description	Status
SR-60 Widening	In Moreno Valley along SR-60 between Redlands Boulevard and Gilman Springs Road.	Widening of SR-60 from two to three lanes in each direction in the existing median	Planned for completion by 2022
Truck Lanes and Shoulder Improvements on SR-60 near Beaumont	On SR-60 near Beaumont	Construction of new EB and WB truck lanes from Gilman Springs Road to 1.47 mi west of Jack Rabbit Trail and upgrading the existing inside and outside shoulder to standard widths	Planned for completion by 2021
Bikeway Projects			
Alessandro Boulevard Class 2 Bike Lane	In Moreno Valley, from Nason Street to Redlands Boulevard	Buffering of the bike lane	Recommended opportunity identified
Moreno Beach Drive Class 2 Bike Lane	In Moreno Valley, from Eucalyptus Avenue to Auto Mall Drive; from Cottonwood Avenue to Bay Avenue; and from Brodiaea Avenue to Via del Lago	Buffering of the bike lane	Recommended opportunity identified
Redlands Boulevard Class 2 Bike Lane	In Moreno Valley, from Dracaea Avenue to Bay Avenue; from Alessandro Boulevard to just south of Campbell Avenue; and from just south of Campbell Avenue to Cactus Avenue	Buffering of the bike lane	Recommended opportunity identified
Nason Street Class 2 Bike Lane	In Moreno Valley, from Ironwood Avenue to Fir Avenue	Buffering of the bike lane	Recommended opportunity identified

Source 1: City of Moreno Valley. May 2018. New Development Map. Website: http://www.moval.org/edd/pdfs/NewDevelopmentMap.pdf, accessed November 26, 2019;
Source 2: City of Moreno Valley Department of Public Works – Capital Projects Division. Capital and Developer Projects Maps as of October 2019. Website: http://www.moval.org/city_hall/departments/pub-works/pdf/curproj-map.pdf, accessed November 26, 2019;
Source 3: City of Moreno Valley Department of Public Works – Capital Projects Division. Project List as of October 2019. Website: http://www.moreno-valley.ca.us/city_hall/departments/pub-works/pdf/curproj-list.pdf, accessed November 26, 2019;
Source 4: Southern California Association of Governments, 2016–2040 RTP/SCS Project List. Website: http://scagrtpscs.net/Pages/2016RTPSCS.aspx, accessed December 3, 2019.
Source 5: Southern California Association of Governments, 2019 Approved FTIP. Website: http://ftip.scag.ca.gov/Pages/2019/approved.aspx, accessed December 2, 2019.
Source 6: City of Moreno Valley Bicycle Master Plan. November 2014. Website: http://www.moval.org/city_hall/departments/pub-works/transportation/pdfs/BicycleMasterPlan.pdf, accessed December 3, 2019.

ac = acre/acres
ADA = Americans with Disabilities Act
EB = eastbound
ft = foot/feet
FTIP =Federal Transportation Improvement Program
HOV = high-occupancy vehicle
mi = mile/miles
PSR/PDS = Project Study Report/Project Development Support
RTP = Regional Transportation Plan
SB = southbound
SCAG = Southern California Association of Governments
SCS = Sustainable Communities Strategy
sf = square foot/feet
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

2.1.1.2 Future Land Use

The City of Moreno Valley's (City's) General Plan Land Use Element (2006) and the County of Riverside's (County's) General Plan Land Use Element (2017) contain land use designations intended to guide future development in the City and County, respectively. Figure 2.1-2 shows the General Plan land use designations within the Land Use Study Area. General Plan land use data are based on GIS data (which were last updated in May 2018) from the City's 2006 General Plan, and GIS data provided by SCAG as part of its 2012 Regional Transportation Plan (RTP). The data were compiled into generalized land use designations.

The City's General Plan designated land uses in the interchange quadrants are described below.

Northeast Quadrant

The northeast quadrant of the SR-60/WLC Pkwy interchange is located in unincorporated Riverside County but within the Sphere of Influence of the City. This quadrant is designated as Open Space (OS), Residential 1 (R1), Rural Residential (RR), and Public Facilities (PF). The OS designation allows for low-density development to preserve areas that are substantially unimproved for uses such as outdoor recreation, preservation of natural resources, grazing animals, and crop production. The RR designation provides for low-density and large-lot residential development at a maximum density of 2.5 dwelling units per acre (DU/ac), with agricultural uses also permitted.

Northwest Quadrant

This quadrant is located in Moreno Valley and is designated primarily as R1 and Residential 2 (R2) with some Office (O) and OS land uses. The R1 designation allows for rural low-density residential development at a maximum density of 1 DU/ac, and the R2 designation allows for rural suburban residential development at a maximum density of 2 DU/ac. The O designation allows for the development of office uses at a maximum floor-to-area ratio (FAR) of 2 to provide for office uses such as administrative, professional, legal, medical, and financial. As described above, the OS designation allows for low-intensity development.

Southwest Quadrant

This quadrant is also located in Moreno Valley and is designated as Business Park/ Light Industrial (BP), Commercial (C), R2, Residential 3 (R3), and Residential 5 (R5). The BP designation allows for the development of manufacturing, research and development, warehousing and distribution, office-based firms, and limited supporting commercial uses at a maximum FAR of 1. The C designation provides for the development of a variety of businesses at a maximum FAR of 1, including retail stores, restaurants, banks, hotels, professional services, personal services, and repair services. The R2, R3, and R5 designations allow for single-family residential development at a maximum of 2 DU/ac, 3 DU/ac, and 5 DU/ac, respectively.

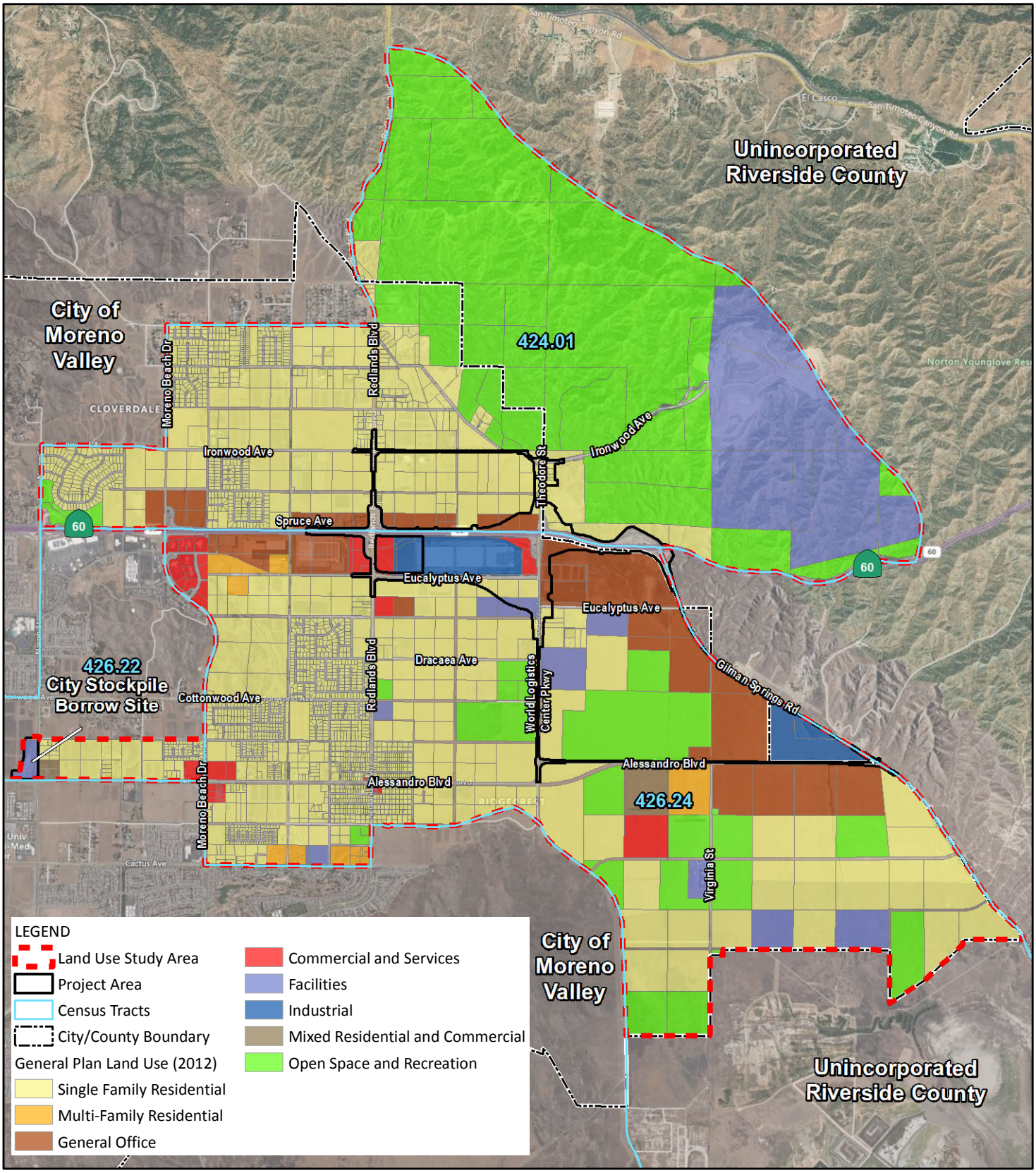

FIGURE 2.1-2

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SOURCES: Bing Maps (2012); RBF (9/2018); City of Moreno Valley (2006, amendment May, 2018); SCAG (2012)

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SR-60/World Logistics Center Pkwy Interchange Project

General Plan Land Uses

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EA No. 0M590
Project No. 0813000109

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Southeast Quadrant

This quadrant in Moreno Valley is designated primarily as BP and OS land uses, which are described above. Additional General Plan land uses in this quadrant include R2, R3, C, and PF, which are described above.

City Stockpile Borrow Site

The land west of Moreno Beach Drive, between Alessandro Boulevard and Cottonwood Avenue, leading to the City Stockpile borrow site is designated primarily R3 and includes an area of Hillside Residential, Residential Office, and C.

2.1.1.3 Development Trends

Historically, growth in the Moreno Valley area was greatly influenced by the presence of March Air Force Base (now known as March Air Reserve Base). Following World War II, the unincorporated communities of Sunnymead, Moreno, and Edgemont, which together composed the area known as Moreno Valley, began to slowly grow as affordable home prices attracted families to the area. Moreno Valley experienced explosive population growth during the 1980s as housing construction substantially escalated. This growth led to the incorporation of Sunnymead, Moreno, and Edgemont as the City of Moreno Valley in 1984. During much of the 1980s, Moreno Valley was the fastest-growing city in the United States.[1]

In the 1990s, area growth slowed due to a statewide economic downturn and the realignment[2] of March Air Force Base, which resulted in heavy job losses in this part of Riverside County. By 2000, strong housing growth returned to the area due to the soaring cost of housing in Los Angeles and Orange Counties. According to the United States Census Bureau, the City's population grew from 142,379 in 2000 to 193,365 in 2010. The city's real estate market appears to have recovered from the Great Recession of 2008, and Moreno Valley is currently in another high-growth era. As of May 2018, there were 4,658 single-family residential units, 2,543 multifamily residential units, 18 commercial centers (1,327,645 square feet [sf]), 12 office/ medical facilities (1,097,557 sf), one expansion to an existing industrial development (464,900 sf), and 12 hotel (1,096 rooms) development projects proposed, approved, or under construction in Moreno Valley. Much of the eastern third of the city remains undeveloped and significant infill development opportunities exist throughout the developed parts of Moreno Valley.

Projects that are planned, approved, and under construction in Moreno Valley, in the Land Use Study Area, and in the vicinity of the Land Use Study Area are shown in Table 2.1.2.

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1 *City of Moreno Valley General Plan*, City of Moreno Valley, July 11, 2006.

2 In March 1993, March Air Force Base was chosen for realignment under the federal governments Base Realignment and Closure (BRAC) program with an effective date of March 31, 1996. Under the BRAC program, March Air Force Base was realigned from an active military duty base to a Reserve Base and opened up the opportunity for joint use of the airfield.

2.1.1.4 Environmental Consequences

Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include modifications to the SR-60/WLC Pkwy interchange other than routine maintenance. Therefore, the No Build Alternative would not result in temporary impacts to existing and planned land uses.

Alternatives 2 and 6 (LPA) (Build Alternatives)

The Build Alternatives would require temporary construction easements (TCEs) within the Land Use Study Area. No parking spaces would be affected by the Build Alternatives. Land uses west of Moreno Beach Drive, leading to the City Stockpile borrow site, would not be affected and would only experience construction traffic during the construction period.

Most of these TCEs generally consist of land that is currently being used for agricultural uses, industrial uses, transportation and utilities uses, or is vacant. The TCEs would occur primarily at the edges of parcels. As specified in Project Feature PF-LU-1, all land temporarily used for construction would be returned to a condition equal to the pre-construction staging condition. Therefore, implementation of Project Feature PF-LU-1 would minimize any land use conflicts from construction of the Build Alternatives.

PF-LU-1 **Restoration of Land Used Temporarily During Construction.** Prior to construction, the Contractor shall generate time-stamped photodocumentation of the pre-construction conditions of all temporary staging areas. All construction access, mobilization, material laydown, and staging areas shall be returned to the property owner in a condition equal to the pre-construction staging condition.

Design Variations 2a and 6a

Similar to the Build Alternatives, Design Variations 2a (Alternative 2 with Design Variation) and 6a (Alterative 6, the Locally Preferred Alternative [LPA], with Design Variation) would also require TCEs within the Land Use Study Area. No parking spaces would be affected by Design Variations 2a and 6a. Most of the TCEs required for the design variations generally consist of land that is currently being used for agricultural uses, residential uses, industrial uses, transportation and utilities uses, or are vacant. Implementation of PF-LU-1 would also minimize any land use conflicts from construction of Design Variations 2a and 6a.

Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include modifications to the SR-60/WLC Pkwy interchange other than routine maintenance and would not result in any changes to existing or planned land uses. Therefore, the No Build Alternative would not result in permanent impacts to existing and planned land uses.

Alternatives 2 and 6 (LPA) (Build Alternatives)

The parcel acquisitions required for the Build Alternatives are on land designated for business park/light industrial, open space, public facilities, and commercial uses in the City of Moreno Valley General Plan (2006).

The 2015 County of Riverside General Plan and 2006 City of Moreno Valley General Plan identify specific goals and policies for the areas in the Land Use Study Area that are under their respective jurisdiction. The Build Alternatives would not result in any substantial land use changes within the Land Use Study Area and would minimize effects to adjacent existing land uses to the greatest extent possible. Any land use changes resulting from the Build Alternatives would be incorporated into the next regularly scheduled update of the County's and City's General Plan Land Use Element.

Design Variations 2a and 6a

The parcel acquisitions required for Design Variations 2a and 6a are on land designated for residential, business park/light industrial, and commercial uses in the City of Moreno Valley General Plan (2006). As discussed under the Build Alternatives above, Design Variations 2a and 6a also would not result in any substantial land use changes within the Land Use Study Area, would minimize effects to adjacent existing land uses to the greatest extent possible, and would be generally consistent with the County's General Plan, the City's General Plan, and policies established for the County and City within the Land Use Study Area. Any land use changes resulting from Design Variations 2a and 6a would be incorporated into the next regularly scheduled update of the County's and City's General Plan Land Use Element. Similar to the Build Alternatives, Design Variations 2a and 6a would support future development in the vicinity of the SR-60/WLC Pkwy interchange that has already been approved.

2.1.1.5 Avoidance, Minimization, and/or Mitigation Measures

Because potential temporary adverse impacts to future and existing land use would be addressed by Project Feature PF-LU-1, and permanent adverse impacts to land use are not anticipated, no avoidance, minimization, and/or mitigation measures are necessary.

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

2.1.2.1 Regional Transportation Plan/Sustainable Communities Strategy

The proposed project is listed in the 2016 financially constrained RTP/SCS Amendment No. 3, which was found to conform by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) on September 6, 2018. The SCAG 2016 RTP/SCS establishes a transportation vision for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. Major themes in the 2016–2040 RTP/SCS include integrating strategies for land use and transportation, striving for sustainability, protecting and preserving existing transportation infrastructure, and providing more transportation choices. SCAG updates the RTP every four years. The design concept and scope of the proposed

project are consistent with the 2016 RTP/SCS and are intended to meet the traffic needs in the area based on local land use plans.

2.1.2.2 Federal Transportation Improvement Program

The proposed project is programmed in the 2019 FTIP. The 2019 FTIP was found to conform by FHWA and FTA on December 17, 2018. The SCAG 2019 FTIP was prepared to implement projects and programs listed in the RTP. Amendments to the adopted FTIP are prepared and approved on a continual basis. The FTIP provides a listing of all capital transportation projects proposed over a 6-year period for the SCAG region. These funded projects include highway improvements; transit, rail, and bus facilities; carpool lanes; signal synchronization; intersection improvements; freeway ramps; and other related improvements. A new FTIP is prepared and approved every 2 years.

2.1.2.3 Riverside County Congestion Management Program

The Riverside County CMP (2011) identifies the goals of the program, defines legal requirements, and provides background information and descriptions of each element, component, and requirement of the program. The CMP has been incorporated into the County's Long Range Transportation Plan (LRTP), which was completed in December 2019. The CMP defines the network of State highways and arterials, describes level of service (LOS) standards for major road facilities, and provides technical justification for the approach to congestion management. The decisions in the CMP are continuously reviewed through meetings of the Riverside County Transportation Commission (RCTC), the RCTC Technical Advisory Committee and its subcommittees, and the RCTC Plans and Programs Policy Committee.

2.1.2.4 Riverside Transit Agency Ten-Year Transit Network Plan

The primary goal of the Ten-Year Transit Network Plan is to develop a plan that will enhance the efficiency and effectiveness of the RTA's existing transit services while responding to the changing demands for transit throughout the service area. As part of the Plan, a Comprehensive Operational Analysis (COA) study was conducted for the transit network that reviewed the broader network structure and route-specific performance to provide the RTA with a comprehensive understanding of market conditions and service performance. The findings of the COA led to the development of a phased set of recommendations designed to build upon the network's market opportunities and performance strengths, to maximize ridership, and to improve the overall passenger experience and the system's financial sustainability. The Ten-Year Transit Network Plan maximizes the performance of existing services while responding to additional community mobility needs. The focus of the recommendations is to enhance service on strong routes to increase system ridership and generate fare revenue while also maintaining appropriate transit service in lower potential ridership areas. Lastly, the recommendations respond to key issues identified by passengers and the community to create a system that is more attractive to riders. The design concept and scope of the proposed project are consistent with this Plan and would contribute to enhancement of transit services.

2.1.2.5 Riverside Transit Agency First & Last Mile Mobility Plan

The First & Last Mile Mobility Plan is a collaboration among the RTA, SCAG, and California Department of Transportation (Caltrans) with a goal of increasing transit ridership through developing strategies that address first and last mile barriers to transit use. This plan summarizes the RTA's existing ridership characteristics, highlights the future needs of the RTA customers, develops a set of Station Typologies[1] to characterize over 2,500 stations (i.e., transit stops), identifies various strategies to improve first and last mile access, identifies pilot projects for each Station Typology, develops recommendations and templates for each Station Typology, and provides an implementation plan. A primary objective of the Plan is to provide improved transit access to both retain existing users and add potential new transit users by removing the real and perceived barriers at the first and last mile. The design concept and scope of the proposed project are consistent with this Plan and would contribute to enhancement of transit services.

2.1.2.6 Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits (Corridor Master Plan)

The Corridor Master Plan is a design guideline for all highway projects on SR-60 within the Moreno Valley city limits, creating a unified and cohesive corridor. The Corridor Master Plan provides aesthetic guidelines for new retrofit highway projects, which would be accomplished by the following major actions:

- Create a sense of place relating to Moreno Valley's history and natural surroundings.
- Preserve and enhance community character.
- Include aesthetics on structures.
- Employ decorative rock and inert material.
- Use materials that reflect the character of the area.
- Coordinate the color of materials.
- Ensure a safe and durable design.
- Recommend appropriate plants for a lasting roadside environment that meets the following applicable landscape design objectives:
  - Low-growing groundcovers that allow views of the patterns.
  - Ground cover for color, preserving the line of sight.
  - Drought-tolerant plant palette material to be low water use.
  - Landscape areas within the interchange shall have bands of gravel mulch.
  - The gravel mulch will consist of three colors in shades of red and brown.
  - A specimen oak tree or suitable replacement may be planted in all interchanges considered gateways.
  - Plant palette to substantially conform with the Master Plan.
  - Plant palette to incorporate majority of plants listed in existing "Highway 60 Corridor Design Manual Landscape Guidelines".

[1] Station typologies are categories that correspond to six common environments for walking and bicycling to and from stations and bus stops. Categories are based primarily on the existing land use and transportation characteristics of the areas surrounding stations.

- Implement water conservation techniques.
- Coordinate with water quality best management practices.
- Identify potential gateway interchanges and recommend enhancements.

2.1.2.7 Riverside County General Plan Circulation Element (2015)

The Riverside County General Plan Circulation Element reflects the desires of citizens and decision-makers to provide transportation mobility and quality access to existing and future residential, recreation, and employment uses as defined in the County's Land Use Element. The circulation/transportation-related policies in the County's General Plan that are relevant to the Build Alternatives and Design Variations 2a and 6a are described below.

> **C 1.1** Design the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the Circulation Plan, Figure C-1.
>
> **C 1.2** Support development of a variety of transportation options for major employment and activity centers including direct access to transit routes, primary arterial highways, bikeways, park-n-ride facilities, and pedestrian facilities.
>
> **C 1.4** Utilize existing infrastructure and utilities to the maximum extent practicable and provide for the logical, timely, and economically efficient extension of infrastructure and services.
>
> **C 1.6** Cooperate with local, regional, state, and federal agencies to establish an efficient circulation system.
>
> **C 3.4** Allow roundabouts or other innovative design solutions when a thorough traffic impact assessment has been conducted demonstrating that such an intersection design alternative would manage traffic flow, and improve safety, if it is physically and economically feasible.
>
> **C 3.7** Design interior collector street systems for commercial and industrial subdivisions to accommodate the movement of heavy trucks.
>
> **C 3.8** Restrict heavy duty truck through-traffic in residential and community center areas and plan land uses so that trucks do not need to traverse these areas.
>
> **C 3.13** Design street intersections, where appropriate, to assure the safe, efficient passage of through-traffic and the negotiation of turning movements.
>
> **C 3.14** Design curves and grades to permit safe movement of vehicular traffic at the roads design speed. Design speed should be consistent with and complement the character of the adjacent area.

C 3.15 Provide adequate sight distances for safe vehicular movement at a road's design speed and at all intersections.

C 3.18 Align right-of-way dedications with existing dedications along adjacent parcels and maintain widths consistent with the ultimate design standard of the road, including required turning lanes.

C 3.19 Coordinate with Caltrans to identify and protect ultimate freeway rights-of-way, including those for exclusive use by transit and those necessary for interchange expansion. Ultimate right-of-way needs shall be based upon build out traffic forecasts, with facilities sized to provide the appropriate level of service per state highway planning criteria. The County, in consultation with Caltrans, will undertake a program to acquire such areas where additional right-of-way is required.

C 7.1 Work with incorporated cities to mitigate the cumulative impacts of incorporated and unincorporated development on the countywide transportation system.

C 7.3 Incorporate the Regional Transportation Plan, the Riverside County Congestion Management Program, and the Riverside County Short- and Long-Range Transit Plans into the Circulation Element, and encourage the active participation of Caltrans in the design of state highway capital improvement projects.

C 7.4 Coordinate with transportation planning, programming and implementation agencies such as Caltrans, Riverside County Transportation Commission, Western Riverside Council of Governments, Coachella Valley Association of Governments, and the cities of Riverside County on various studies relating to freeway, high occupancy vehicle/high occupancy toll lanes, and transportation corridor planning, construction, and improvement in order to facilitate the planning and implementation of an integrated circulation system.

C 7.8 Collaborate with all incorporated cities and all adjacent counties to implement and integrate right-of-way requirements and improvement standards for General Plan roads that cross jurisdictional boundaries. Detailed procedures have been developed and include the following:

- For development under the County jurisdiction but within the sphere of influence (SOI) of a city having roadway standards different from the County, city and County staff will cooperate and agree on a reasonable choice of design standards for the particular circumstances involved, and negotiate logical transitions from city to County standards.
- In general, for such development under County jurisdiction but within the SOI of an incorporated jurisdiction, city standards should apply if the staffs concur that annexation to the City will

logically occur in the short to intermediate range future. Where annexation seems doubtful into the long-term future, County standards should apply.

- Transition areas at meeting points of roadways designed to differing city and County standards or differing functional classifications should be individually designed to facilitate satisfactory operational and safety performance. Further, the County should update the road standards to reflect the intent of this policy and standards agreed upon by the County and other local agencies.

2.1.2.8 City of Moreno Valley General Plan Circulation Element (2006)

Circulation/transportation-related goals and policies in the City's General Plan, relevant to the proposed project, are described below. In the Circulation Element, Theodore Street (now WLC Pkwy) is defined as a Divided Major Arterial (88-foot [ft] wide right-of-way with a 64 ft wide improved section). A Class II bikeway (on-road striped) is also planned for the segment of Theodore Street/WLC Pkwy between Alessandro Boulevard and Ironwood Avenue. Circulation/transportation-related goals and policies in the City of Moreno Valley General Plan that are relevant to the Build Alternatives and Design Variations 2a and 6a are described below.

Goal 5.1 Develop a safe, efficient, environmentally and financially sound, integrated vehicular circulation system consistent with the City General Plan Circulation Element Map, Figure 9-1 [in the City's General Plan], which provides access to development and supports mobility requirements of the system's users.

Objective 5.1 Create a safe, efficient and neighborhood- friendly street system.

Policy 5.1.2 Plan the circulation system to reduce conflicts between vehicular, pedestrian and bicycle traffic.

Objective 5.3 Maintain Level of Service (LOS) "C" on roadway links, wherever possible, and LOS "D" in the vicinity of SR 60 and high employment centers. Figure 9-2 [in the City's General Plan] depicts the LOS standards that are applicable to all segments of the General Plan Circulation Element Map.

Policy 5.3.1 Obtain right-of-way and construct roadways in accordance with the designations shown on the General Plan Circulation Element Map and the City street improvement standards.

Policy 5.3.2 Wherever feasible, promote the development of roadways in accordance with the City standard roadway cross-

sections, as shown in Figure 9-3 [in the City's General Plan]. Cross-sections range from two-lane undivided roadways to 8-lane divided facilities.

Objective 5.4 Maximize efficiency of the regional circulation system through close coordination with state and regional agencies and implementation of regional transportation policies.

Policy 5.4.1 Coordinate with Caltrans and the Riverside County Transportation Commission (RCTC) to identify and protect ultimate rights-of-way, including those for freeways, regional arterial projects, transit, bikeways and interchange expansion.

Policy 5.4.6 Cooperatively participate with SCAG, RCTC, and Western Riverside Council of Governments (WRCOG) in the planning for a transportation system that anticipates regional needs for the safe and efficient movement of goods and people.

Policy 5.4.7 Utilizing a combination of regional, state and federal funds, development impact fees, and other locally generated funds, provide needed improvements along SR-60 and the associated interchanges, including interchange and grade separation improvements.

Policy 5.4.8 Reserve rights-of-way to accomplish future improvements as specified in the Caltrans District 8 Route Concept Fact Sheet for SR-60. Specifically, SR-60 shall be built to six general purpose lanes and two High Occupancy Vehicle (HOV) lanes through Moreno Valley. Additional auxiliary lanes may be required between interchanges. The need for auxiliary lanes will be determined from future studies.

Objective 5.9 Support and encourage development of safe, efficient and aesthetic pedestrian facilities.

Policy 5.9.2 Walkways shall be designed to minimize conflicts between vehicles and pedestrians.

Objective 5.10 Encourage bicycling as an alternative to single occupant vehicle travel for the purpose of reducing fuel consumption, traffic congestion, and air pollution. The Moreno Bikeway Plan is shown in Figure 9-4 [in the City's General Plan].

Policy 5.10.2 Integrate bikeways, consistent with the Bikeway Plan, with the circulation system and maintain Class II and III bikeways as part of the City's street system.

2.1.2.9 Environmental Consequences

The Build Alternatives and Design Variations 2a and 6a were analyzed based on consistency with the City of Moreno Valley General Plan, the 2016–2040 RTP/SCS, the 2019 FTIP, and the Riverside County CMP.

Alternative 1 (No Build Alternative)

The existing condition of the SR-60/WLC Pkwy interchange is not consistent with the regional mobility goals and objectives of RCTC and SCAG, and does not meet the standards and goals of the City's General Plan to improve the interchange and local circulation in the area. The No Build Alternative would not improve the SR-60/WLC Pkwy interchange and therefore would not be consistent with the goals of local and regional agencies.

Alternatives 2 and 6 (LPA) (Build Alternatives)

Under the Build Alternatives, local roadways would be designed consistent with the description identified in the City of Moreno Valley General Plan. Refer to Table 2.1.3 for an analysis of the consistency of the proposed project with the City of Moreno Valley General Plan.

Because Alternatives 2 and 6 (LPA) would improve LOS at the intersections, they are consistent with the Riverside County CMP. In addition, the proposed project is identified in the 2016 RTP/SCS and is programmed in the 2019 FTIP to reduce traffic congestion and improve operations.

Alternatives 2 and 6 (LPA) are consistent with the regional mobility goals of the City, RCTC, and SCAG. Therefore, the land use changes associated with the Build Alternatives are consistent with the approved land use and transportation plans.

Design Variations 2a and 6a

Design Variations 2a and 6a provide an option for the intersection of Eucalyptus Avenue and WLC Pkwy to be shifted south of its existing location. If selected, the construction of Design Variations 2a and 6a would achieve the same objectives as the Build Alternatives. Refer to Table 2.1.3 for an analysis of the consistency of the proposed project with the City of Moreno Valley General Plan.

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy	Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
Regional Transportation Plan (RTP)		
The 2016 RTP/SCS adopted by SCAG in April 2016 contains a set of existing socioeconomic projections used as the basis for the SCAG transportation planning efforts. They include projections of population, housing, and employment at the regional, county, sub-regional, jurisdictional, census tract, and transportation analysis zone levels. The RTP/SCS includes policies and regulations set forth to ensure that development within the SCAG regional area is within planned and forecasted socioeconomic projections. Goals established within the RTP/ SCS include the following: ● Align the plan investments and policies with improving regional economic development and competitiveness. ● Maximize mobility and accessibility for all people and goods in the region. ● Ensure travel safety and reliability for all people and goods in the region. ● Preserve and ensure a sustainable regional transportation system. ● Maximize the productivity of our transportation system. ● Protect the environment and health of our residents by improving air quality and encouraging active transportation (i.e., non-motorized transportation) such as bicycling and walking. ● Actively encourage and create incentives for energy efficiency, where possible. ● Encourage land use and growth patterns that facilitate transit and non-motorized transportation. ● Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would result in the construction of improvements identified in the 2016 RTP/SCS. Construction of these programmed improvements would be consistent with SCAG's RTP Major Initiative pertaining to improving Highway and Arterial Capacity, specifically focusing on achieving maximum productivity by adding capacity primarily by closing gaps in the system and improving access.	**Not Consistent.** Under the No Build Alternative, no changes to the existing roadways or freeway infrastructure would occur in the project area. This alternative would not maximize mobility and accessibility of the regional transportation system because existing freeway deficiencies would remain in current and future year conditions.
Federal Transportation Improvement Program (FTIP)		
The FTIP is a capital listing of all transportation projects proposed over a 6-year period for the SCAG region. The projects include highway improvements, transit, rail and bus facilities, high-occupancy-vehicle lanes, signal synchronization, intersection improvements, and freeway ramps, etc.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would result in the construction of improvements identified in the FTIP. Construction of these programmed improvements would minimize congestion in the area (which would meet the RTP's overarching transportation goals) and would fulfill improvements	**Not Consistent.** Under the No Build Alternative, no changes to the existing roadways or freeway infrastructure would occur in the project area. This alternative

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy	Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
The FTIP is prepared to implement projects and programs listed in the RTP and is developed in compliance with state and federal requirements.	identified in the FTIP.	would not construct improvements programmed in the FTIP that would minimize congestion in the area.
Riverside County Congestion Management Program (CMP)		
The Riverside County CMP is updated every 2 years in accordance with Proposition 111. The CMP was established to more directly address land use, transportation, and air quality issues and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related impacts, and improve air quality.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would result in the construction of improvements identified in the RTP and FTIP. Construction of these improvements would minimize congestion in the area (which would meet the RTP's overarching transportation goals) and improve air quality.	**Not Consistent.** Under the No Build Alternative, no changes to the existing roadways or freeway infrastructure would occur in the project area. This alternative would not result in the construction of improvements that would minimize congestion in the area.
RTA Ten-Year Transit Network Plan and First & Last Mile Mobility Plan		
RTA's Ten-Year Transit Network Plan and First & Last Mile Mobility Plan	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would result in the construction of improvements that would provide opportunities for enhanced transit services and improved access to transit facilities. The project would accommodate vehicle, bus, bike, and pedestrian forms of multi-modal transportation, and would serve as a regional connection and linkage between surrounding cities and counties. RTA provides extensive fixed-route bus systems that include bus routes in the interchange area. In addition, the SR-60/WLC Pkwy interchange, in combination with the other SR-60 interchanges in Moreno Valley, provides regional access to the city and neighboring City of Beaumont, as well as regional access to Los Angeles, Riverside, and San Bernardino Counties. The project also serves as a linkage to Ontario International Airport (ONT) and the March Air Reserve Base.	**Not Consistent.** Under the No Build Alternative, no changes to the existing roadways or freeway infrastructure would occur in the project area. This alternative would not provide new opportunities for enhanced transit services and would not provide improved access to transit facilities.
Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits		
The primary goal of the Corridor Master Plan is to create a unified and cohesive corridor by providing aesthetic guidance for new retrofit highway projects. The Corridor Master Plan lists the following guidelines to achieve this goal: ● Create a sense of place relating to Moreno Valley's history and natural surroundings. ● Preserve and enhance community character.	**Consistent.** As stated in PF-VIS-1, all architectural treatments proposed under the Build Alternatives and Design Variations 2a and 6a would be developed in consultation with the City, Caltrans, and the District Landscape Architect, and shall be consistent with the guidelines present in the Corridor Master Plan.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this goal.

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy	Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)

● Include aesthetics on structures.
● Employ decorative rock and inert material.
● Use materials that reflect the character of the area.
● Coordinate the color of materials.
● Ensure a safe and durable design.
● Recommend appropriate plants for a lasting roadside environment that meets the following applicable landscape design objectives:
  o Low-growing groundcovers that allow views of the patterns.
  o Ground cover for color, preserving the line of sight.
  o Drought-tolerant plant palette material to be low water use.
  o Landscape areas within the interchange shall have bands of gravel mulch.
  o The gravel mulch will consist of three colors in shades of red and brown.
  o A specimen oak tree or suitable replacement may be planted in all interchanges considered gateways.
  o Plant palette to substantially conform with the Master Plan.
  o Plant palette to incorporate majority of plants listed in existing "Highway 60 Corridor Design Manual Landscape Guidelines".
● Implement water conservation techniques.
● Coordinate with water quality best management practices.
● Identify potential gateway interchanges and recommend enhancements.		

City of Moreno Valley General Plan		
Goal 5.1*:* Develop a safe, efficient, environmentally and financially sound, integrated vehicular circulation system consistent with the City General Plan Circulation Element Map	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would reduce congestion and improve operation of the SR-60/ WLC Pkwy interchange. The design for the Build Alternatives and Design Variations 2a and 6a provides travel lanes, turn lanes, right-of-way, and sidewalks consistent with the General Plan designation of Theodore Street, a portion of which has been renamed to WLC Pkwy, as a Minor Arterial north of the SR-60/WLC Pkwy interchange and a Major Arterial south of the interchange.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this goal.
Objective 5.1: Create a safe, efficient and neighborhood-friendly street system.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would reduce congestion and improve operation of the SR-60/ WLC Pkwy interchange and would provide sidewalks along Theodore Street/WLC Pkwy and Eucalyptus Avenue, as well as a	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy	Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
	multi-use trail on the east side of Theodore Street and WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue.	condition of the SR-60/WLC Pkwy interchange is not consistent with this objective.
Policy 5.1.2: Plan the circulation system to reduce conflicts between vehicular, pedestrian and bicycle traffic.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would reduce congestion and improve operation of the SR-60/ WLC Pkwy interchange and would provide sidewalks along Theodore Street/WLC Pkwy and Eucalyptus Avenue, as well as a multi-use trail on the east side of Theodore Street and WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
Objective 5.3: Maintain Level of Service (LOS) "C" on roadway links, wherever possible, and LOS "D" in the vicinity of SR-60 and high employment centers.	**Consistent.** The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes, turn lanes, right-of-way, and sidewalks consistent with the General Plan designation of Theodore Street, a portion of which has been renamed to WLC Pkwy, as a Minor Arterial north of the SR-60/WLC Pkwy interchange and a Major Arterial south of the interchange. Alternative 6 is the Locally Preferred Alternative (LPA), and includes roundabout intersection designs that would reduce congestion and intersection wait times compared to standard intersection designs.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this objective.
Policy 5.3.1: Obtain right-of-way and construct roadways in accordance with the designations shown on the General Plan Circulation Element Map and the City street improvement standards.	**Consistent.** The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes, turn lanes, right-of-way, and sidewalks consistent with the General Plan designation of Theodore Street, a portion of which has been renamed to WLC Pkwy, as a Minor Arterial north of the SR-60/WLC Pkwy interchange and a Major Arterial south of the interchange	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
Policy 5.3.2: Wherever feasible, promote the development of roadways in accordance with the City standard roadway cross-sections.	**Consistent.** The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes, turn lanes, right-of-way, and sidewalks consistent with the General Plan designation of Theodore Street, a portion of which has been renamed to WLC Pkwy, as a Minor Arterial north of the SR-60/WLC Pkwy interchange and a Major Arterial south of the interchange	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy	Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
Objective 5.4: Maximize efficiency of the regional circulation system through close coordination with state and regional agencies and implementation of regional transportation policies.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with RCTC, SCAG, WRCOG, and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this objective.
Policy 5.4.1: Coordinate with Caltrans and the Riverside County Transportation Commission (RCTC) to identify and protect ultimate rights-of-way, including those for freeways, regional arterial projects, transit, bikeways and interchange expansion.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with RCTC, SCAG, WRCOG, and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
Policy 5.4.6: Cooperatively participate with SCAG, RCTC, and Western Riverside Council of Governments (WRCOG) in the planning for a transportation system that anticipates regional needs for the safe and efficient movement of goods and people.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with RCTC, SCAG, WRCOG, and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
Policy 5.4.7: Utilizing a combination of regional, state and federal funds, development impact fees, and other locally generated funds, provide needed improvements along SR-60 and the associated interchanges, including interchange and grade separation improvements.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with RCTC, SCAG, WRCOG, and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
Policy 5.4.8: Reserve rights-of-way to accomplish future improvements as specified in the Caltrans District 8 Route Concept Fact Sheet for SR-60. Specifically, SR-60 shall be built to six general purpose lanes and two High Occupancy Vehicle (HOV) lanes through Moreno Valley. Additional auxiliary lanes may be required between interchanges. The need for auxiliary lanes will be determined from future studies.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with RCTC, SCAG, WRCOG, and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
Objective 5.9: Support and encourage development of safe, efficient and aesthetic pedestrian facilities.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would provide sidewalks along Theodore Street/WLC Pkwy and Eucalyptus Avenue, as well as a multi-use trail on the east side of	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy	Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
	Theodore Street and WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue.	Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this objective.
Policy 5.9.2: Walkways shall be designed to minimize conflicts between vehicles and pedestrians.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would provide sidewalks along Theodore Street/WLC Pkwy and Eucalyptus Avenue, as well as a multi-use trail on the east side of Theodore Street and WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
Objective 5.10: Encourage bicycling as an alternative to single occupant vehicle travel for the purpose of reducing fuel consumption, traffic congestion, and air pollution.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would provide sidewalks along Theodore Street/WLC Pkwy and Eucalyptus Avenue, as well as a multi-use trail on the east side of Theodore Street and WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue. Bike lanes are provided on WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue within the width of the proposed shoulders. For Alternative 6 (LPA), bicyclists would have the option to merge with vehicular traffic to navigate through the roundabout or exit the travel lane prior to each roundabout and cross the roundabout with pedestrian traffic.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this objective.
Policy 5.10.2: Integrate bikeways, consistent with the Bikeway Plan, with the circulation system and maintain Class II and III bikeways as part of the City's street system.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would provide sidewalks along Theodore Street/WLC Pkwy and Eucalyptus Avenue, as well as a multi-use trail on the east side of Theodore Street and WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue. Bike lanes are provided on WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue within the width of the proposed shoulders. For Alternative 6 (LPA), bicyclists would have the option to merge with vehicular traffic to navigate through the roundabout or exit the travel lane prior to each roundabout and cross the roundabout with pedestrian traffic.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy		Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
Riverside County General Plan Circulation Element			
C 1.1	Design the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the Circulation Plan, Figure C-1.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would provide increased interchange capacity, reduce congestion, and improve traffic operations for the forecast travel demand in 2045.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
C 1.2	Support development of a variety of transportation options for major employment and activity centers including direct access to transit routes, primary arterial highways, bikeways, park-n-ride facilities, and pedestrian facilities.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a would reduce congestion and improve operation of the SR-60/ WLC Pkwy interchange and would provide sidewalks along Theodore Street/WLC Pkwy and Eucalyptus Avenue, as well as a multi-use trail on the east side of Theodore Street/WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue. Bike lanes are provided on WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue within the width of the proposed shoulders. For Alternative 6 (LPA), bicyclists would have the option to merge with vehicular traffic to navigate through the roundabout or exit the travel lane prior to each roundabout and cross the roundabout with pedestrian traffic.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
C 1.6	Cooperate with local, regional, state, and federal agencies to establish an efficient circulation system.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with RCTC, SCAG, WRCOG, the City of Moreno Valley, and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
C 3.4	Allow roundabouts or other innovative design solutions when a thorough traffic impact assessment has been conducted demonstrating that such an intersection design alternative would manage traffic flow, and improve safety, if it is physically and economically feasible.	**Consistent.** Design Variation 6a proposes roundabout intersections at both the EB and WB ramps, the intersection of WLC Pkwy/Eucalyptus Avenue, and at the other WLC Pkwy/ Eucalyptus Avenue intersection. This design variation includes innovative design solutions to manage traffic flow and improve safety. Alternatives 2 and 6 (LPA) and Design Variation 2a would not provide roundabouts.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy		Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
C 3.7	Design interior collector street systems for commercial and industrial subdivisions to accommodate the movement of heavy trucks.	**Consistent.** The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes that would be able to accommodate heavy trucks and would be consistent with the roadway design standards of the applicable jurisdiction.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange would not be able to accommodate anticipated travel demand by heavy trucks.
C 3.13	Design street intersections, where appropriate, to assure the safe, efficient passage of through-traffic and the negotiation of turning movements.	**Consistent.** The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes that would be able to accommodate heavy trucks and would be consistent with the roadway design standards of the applicable jurisdiction.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange would not be able to accommodate anticipated travel demand by heavy trucks.
C 3.14	Design curves and grades to permit safe movement of vehicular traffic at the roads design speed. Design speed should be consistent with and complement the character of the adjacent area.	**Consistent.** The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes that would be able to accommodate heavy trucks and would be consistent with the roadway design standards of the applicable jurisdiction.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange would not be able to accommodate anticipated travel demand by heavy trucks.
C 3.15	Provide adequate sight distances for safe vehicular movement at a road's design speed and at all intersections.	**Consistent.** The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes that would be able to accommodate heavy trucks and would be consistent with the roadway design standards of the applicable jurisdiction.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange would not be able to accommodate anticipated travel demand by heavy trucks.
C 3.18	Align right-of-way dedications with existing dedications along adjacent parcels and maintain widths consistent with the ultimate design standard of the road, including required turning lanes.	**Consistent.** The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes that would be able to accommodate heavy trucks and would be consistent with the roadway design standards of the applicable jurisdiction.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange would not be able to

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy		Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
			accommodate anticipated travel demand by heavy trucks.
C 3.19	Coordinate with Caltrans to identify and protect ultimate freeway rights-of-way, including those for exclusive use by transit and those necessary for interchange expansion. Ultimate right-of-way needs shall be based upon buildout traffic forecasts, with facilities sized to provide the appropriate level of service per state highway planning criteria. The County, in consultation with Caltrans, will undertake a program to acquire such areas where additional right-of-way is required.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with the County and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
C 7.1	Work with incorporated cities to mitigate the cumulative impacts of incorporated and unincorporated development on the countywide transportation system.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with the County, City and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
C 7.3	Incorporate the Regional Transportation Plan, the Riverside County Congestion Management Program, and the Riverside County Short- and Long-Range Transit Plans into the Circulation Element, and encourage the active participation of Caltrans in the design of state highway capital improvement projects.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with the County, City and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.
C 7.4	Coordinate with transportation planning, programming and implementation agencies such as Caltrans, Riverside County Transportation Commission, Western Riverside Council of Governments, Coachella Valley Association of Governments, and the cities of Riverside County on various studies relating to freeway, high occupancy vehicle/high occupancy toll lanes, and transportation corridor planning, construction, and improvement in order to facilitate the planning and implementation of an integrated circulation system.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with RCTC, SCAG, WRCOG, the City of Moreno Valley, and Caltrans on this transportation project.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.

Table 2.1.3 Consistency with State, Regional, and Local Plans and Programs

Plan/Policy		Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a[1, 2]	Alternative 1 (No Build)
C 7.8	Collaborate with all incorporated cities and all adjacent counties to implement and integrate right-of-way requirements and improvement standards for General Plan roads that cross jurisdictional boundaries. Detailed procedures have been developed and include the following: • For development under the County jurisdiction but within the sphere of influence (SOI) of a city having roadway standards different from the County, city and County staff will cooperate and agree on a reasonable choice of design standards for the particular circumstances involved, and negotiate logical transitions from city to County standards. • In general, for such development under County jurisdiction but within the SOI of an incorporated jurisdiction, city standards should apply if the staffs concur that annexation to the City will logically occur in the short to intermediate range future. Where annexation seems doubtful into the long-term future, County standards should apply. • Transition areas at meeting points of roadways designed to differing city and County standards or differing functional classifications should be individually designed to facilitate satisfactory operational and safety performance. Further, the County should update the road standards to reflect the intent of this policy and standards agreed upon by the County and other local agencies.	**Consistent.** The Build Alternatives and Design Variations 2a and 6a include appropriate coordination with the County, City and Caltrans on this transportation project. The design of the Build Alternatives and Design Variations 2a and 6a provides travel lanes that would be able to accommodate heavy trucks and would be consistent with the roadway design standards of the applicable jurisdiction.	**Not Consistent.** Under Alternative 1, no improvements are proposed on the SR-60/WLC Pkwy interchange. The existing condition of the SR-60/WLC Pkwy interchange is not consistent with this policy.

[1] The Build Alternatives include a multi-use trail on the east side of WLC Pkwy/Theodore Street between Ironwood Avenue and Eucalyptus Avenue. A multi-use trail is not precluded on the north side of Eucalyptus Avenue between WLC Pkwy and Redlands Boulevard.

[2] The Build Alternatives include a sidewalk on one or both sides of WLC Pkwy/Theodore Street primarily between the project limits. However, sidewalks will not be precluded along the remaining portion of WLC Pkwy/Theodore Street and on Eucalyptus Avenue.

Caltrans = California Department of Transportation
EB = eastbound
LPA = Locally Preferred Alternative
RTA = Riverside Transit Agency
RTP = Regional Transportation Plan
SCAG = Southern California Association of Governments
SCS = Sustainable Communities Strategy
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

2.1.2.10 Avoidance, Minimization, and/or Mitigation Measures

Land Use

Alternative 1, the No Build Alternative, is not supportive of the applicable local plans and is inconsistent with the applicable regional plans. If the No Build Alternative was identified as the Preferred Alternative for the proposed project, SCAG's RTP/SCS and FTIP would have to be updated in conjunction with an amendment that would include a modeling update.

Because the proposed project is consistent with applicable State, regional, and local plans and programs, no avoidance, minimization, or mitigation measures are proposed.

2.1.3 Parks and Recreational Facilities

2.1.3.1 Regulatory Setting

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409) prohibits local and state agencies from acquiring any property that is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

2.1.3.2 Affected Environment

Figure 2.1-3 shows community facilities, including parks and recreational facilities, within approximately 0.5 mile (mi) of the project area. As shown on Figure 2.1-3, one existing Class 2 bicycle lane exists along Eucalyptus Avenue, west of Redlands Boulevard; one existing Class 3 bicycle lane exists along Ironwood Avenue; and one existing trail exists along Cottonwood Avenue, west of Redlands Boulevard, and along the west side of Redlands Avenue. There are no existing parks or recreational facilities within 0.5 mi of any parts of the project area except the proposed City Stockpile borrow site at the intersection of Alessandro Boulevard and Nason Street. Morrison Park is approximately 0.5 mi north/northwest of the borrow site. Morrison Park is protected by the Park Preservation Act and is a protected Section 4(f) resource.

2.1.3.3 Environmental Consequences

Temporary Impacts

Alternative 1 (No Build Alternative)

Alternative 1 (No Build Alternative) does not include modifications to the SR-60/WLC Pkwy interchange other than routine maintenance. Therefore, the No Build Alternative would not result in temporary impacts to parks and recreation resources.

Alternatives 2 and 6 (LPA) (Build Alternatives)

As shown on Figure 2.1-3, the Build Alternatives would not result in any temporary use of land from any parks. Based on the distance from Morrison Park to the City Stockpile borrow site and the presence of intervening residential land uses that provide a buffer between the park and the borrow site, the activities at the borrow site under the Build Alternatives would not result in temporary impacts to Morrison Park. As a result, the Build Alternatives would not result in direct or indirect

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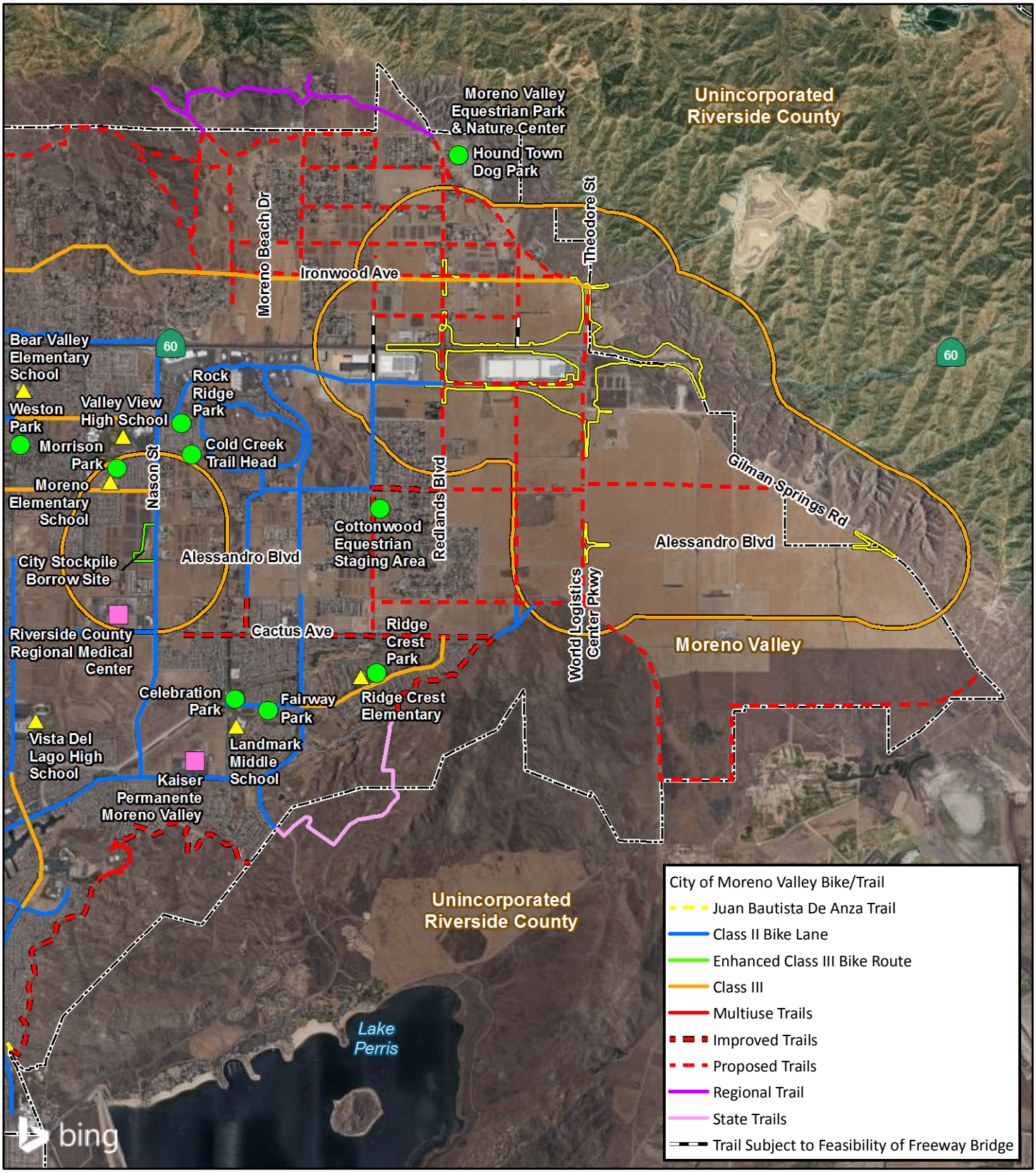

LEGEND

- Project Area
- City Stockpile Borrow Site
- Half Mile Buffer of Project Area
- City/County Boundary

Community Facilities

- Hospital
- Park
- School

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SOURCE: Bing Maps (2018); SCAG (2010); MBI (11/2018); City of Moreno Valley (5/2019)

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FIGURE 2.1-3

SR-60/World Logistics Center Pkwy Interchange Project

Community Facilities

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Project No. 0813000109

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temporary impacts to Morrison Park. Existing bike paths within the Land Use Study Area include a Class 2 bike path along Eucalyptus Avenue, west of Redlands Boulevard, and a Class 3 bike lane along Ironwood Avenue. Build Alternative improvements would not occur west of Redlands Avenue; therefore, there would be no temporary impacts to the existing Class 2 bike path along Eucalyptus Avenue.

Widening and utility and signal modifications is proposed at the Redlands Boulevard/Ironwood Avenue intersection. There would be temporary impacts to the existing Class 3 bike path along Ironwood Avenue during construction, but the bike path would be restored when construction is completed and no change in land use would occur. There would be no temporary impacts to the existing trail along Cottonwood Avenue and the west side of Redlands Boulevard because no construction-related activities are proposed within the trail locations, and no change in land use would occur.

Design Variations 2a and 6a

Similar to the Build Alternatives, Design Variations 2a and 6a would not result in any temporary use of land from any parks. Based on the distance from Morrison Park to the City Stockpile borrow site and the presence of intervening residential land uses that provide a buffer between the park and the borrow site, the activities at the borrow site under Design Variations 2a and 6a would not result in indirect impacts to Morrison Park. As a result, Design Variations 2a and 6a would not result in direct or indirect temporary impacts to Morrison Park. The analysis of temporary impacts described above for the Build Alternatives would be the same for Design Variations 2a and 6a. There would be no temporary land use impacts to existing parks and recreation facilities.

Permanent Impacts

Alternative 1 (No Build Alternative)

Alternative 1 (No Build Alternative) does not include modifications to the SR-60/WLC Pkwy interchange other than routine maintenance. Therefore, the No Build Alternative would not result in permanent impacts to parks and recreation resources.

Alternatives 2 and 6 (LPA) (Build Alternatives)

The Build Alternatives would not result in any permanent use of land from any parks. Based on the distance from Morrison Park to the City Stockpile borrow site and the presence of intervening uses, the activities at the borrow site under the Build Alternatives would not result in indirect permanent impacts to Morrison Park. As a result, the Build Alternatives would not result in direct or indirect permanent impacts on this park; therefore, no Section 4(f) analysis is required for the Build Alternatives.

Similar to the discussion of temporary impacts described above, because Build Alternative improvements would not occur west of Redlands Avenue, there would be no permanent impacts to the existing Class 2 bike path along Eucalyptus Avenue. Widening and utility and signal modifications is proposed at the Redlands Boulevard/Ironwood Avenue intersection; however no change in land use would occur, and the existing Class 3 bike path would not be permanently affected. There would be no permanent impacts to the existing trail along Cottonwood Avenue and along the west side of Redlands Boulevard because no project features are proposed within the trail locations and no change in land use would occur.

Design Variations 2a and 6a

Similar to the Build Alternatives, Design Variations 2a and 6a would not result in any permanent use of land from any parks. Design Variations 2a and 6a would not result in direct or indirect permanent impacts to Morrison Park; therefore, no Section 4(f) analysis is required for Design Variations 2a and 6a. The analysis of permanent impacts described above for the Build Alternatives would be the same for the Design Variations 2a and 6a. There would be no permanent land use impacts to existing parks and recreation facilities.

2.1.3.4 Avoidance, Minimization, and/or Mitigation Measures

The proposed project has no impacts to existing or planned parks and recreation facilities. Therefore, no avoidance, minimization, or mitigation measures are proposed.

2.2 Farmlands

2.2.1 Regulatory Setting

The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (FPPA; 7 United States Code [USC] 4201-4209; and its regulations, 7 Code of Federal Regulations [CFR] Part 658) require federal agencies, such as the Federal Highway Administration (FHWA), to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act (CEQA) requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

2.2.2 Affected Environment

This section is based on the *Community Impact Assessment* (March 2019) and Form NRCS-CPA-106 that were completed for the proposed project.

Important farmlands include Prime Farmland, Unique Farmland, and Farmland of Statewide or Local importance. Prime Farmland is defined as land that has the best combination of physical and chemical characteristics for food production. Unique Farmland is land other than Prime Farmland that is used for the production of specific high-value food and fiber crops. Farmlands of statewide or local importance are determined by the appropriate state or local agency, and are generally of importance for the production of food, feed, fiber, forage, and oil seed crops.

According to the 2017-2018 California Agricultural Statistics Review, Riverside County is ranked 14th among the State of California's counties in terms of total value of agricultural production. The leading agricultural commodities of Riverside County include milk, ornamental nursery plants, grapes, and hay. From 2010 to 2012, Riverside County lost approximately 2,761 acres (ac) of important farmland and 457 ac of grazing land. In addition to the permanent loss of important farmland, 7,799 ac of land were converted to a different land use category. For example, between 2010 and 2012, 1,871 ac of Farmland of Local Importance were converted to Prime Farmland. Conversions of farmland of lesser categories to Prime Farmland were the result of adding irrigated row crops, field crops, and orchards (primarily palms). Conversions to Farmland of Local Importance were primarily the result of land left idle for three or more update cycles. Conversions between Prime Farmland and Unique Farmland were the result of conversions between in-ground, irrigated agriculture and potted plant nurseries.

As identified in the Conservation Element of the City of Moreno Valley General Plan, the main types of agriculture in Moreno Valley include grazing, fruit orchards, potatoes, dry-grain farming, fruit crop farming, and poultry production. Over time, the land devoted to agricultural production within Moreno Valley has diminished as urban

development has encroached on agricultural lands. Nearly all of the remaining agricultural uses occur in the eastern portion of Moreno Valley. Agricultural land within the city is generally leased to farm operators, few of which are owner-operated. Economic factors such as the high cost of land, water, and energy, as well as fragmented ownership patterns and market conditions, have limited the continued farming in Moreno Valley. In addition to the economic factors limiting the continued agricultural viability within the city, there is community concern regarding the dust, spray drift, and odors associated with agricultural production.

A project that has federal involvement and may irreversibly convert farmland (directly or indirectly) to a nonagricultural use must comply with the federal FPPA. The FPPA calls for completing Form AD-1006, Farmland Conversion Impact Rating. For corridor-type projects, Form NRCS-CPA-106 is used in lieu of Form AD-1006. The purpose of completing the Farmland Conversion Impact Rating form is to provide a quantitative and qualitative method of assessing farmland impacts in order to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses and to ensure that federal programs are administered in a manner that, to the extent possible, will be compatible with State, local, and private programs and policies to protect farmlands.

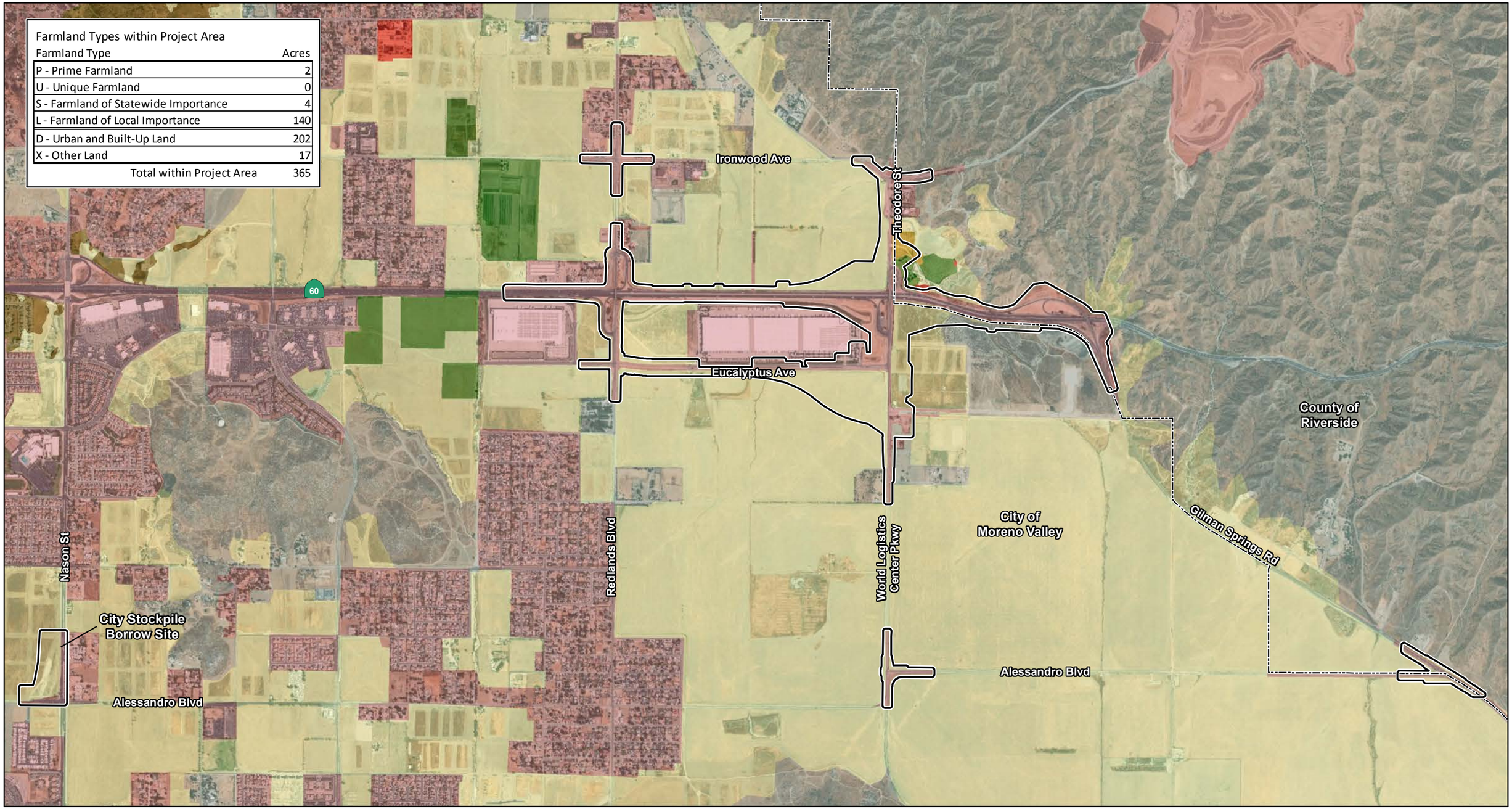
Form NRCS-CPA-106 uses a point-based approach to assess the relative value of agricultural land resources. Completing the Farmland Conversion Impact Rating is an iterative process requiring both the NRCS (formerly the Soil Conservation Service, or SCS) and the federal agency (in this instance, the California Department of Transportation [Caltrans], acting for the FHWA) to complete specified portions of the form. For the first set of factors, the Land Evaluation Criteria, the NRCS determines whether the project location includes farmland that is subject to the FPPA. If the project has farmland that is subject to the FPPA, the NRCS measures the relative value of the farmland in the project location on a numerical scale. Measuring and assigning point values to the second set of factors, the Corridor Assessment Criteria, is the responsibility of the federal agency. A single score is generated for a given project after the relative value of the farmland and the Corridor Assessment Criteria are scored and weighted. Final project scoring is based on a scale of 260 points, with a maximum score of 100 points for the relative value of the farmland and a maximum score of 160 points for the Corridor Assessment Criteria. The total number of points is used to determine the level of significance a project has on farmland.

Form NRCS-CPA-106 was submitted to the NRCS because, based on review of the 2016 Riverside County Important Farmland map (California Department of Conservation Farmland Mapping and Monitoring Program), it was evident there may be farmland or agricultural land within the project footprint.

The Build Alternatives and design variations are located in a semi-rural area. In addition to the farmlands currently under cultivation within the Farmlands Study Area, there is a greenhouse located along the eastern side of World Logistics Center Parkway (WLC Pkwy), just south of the northernmost Eucalyptus Avenue and WLC Pkwy intersection. Based on aerial imagery (April 2018) and field observations on May 7, 2015 and October 4, 2018, the greenhouse is abandoned. The abandoned greenhouse property is located on Farmland of Local Importance. Table 2.2.1 and Figure 2.2-1 show the acreages of farmland and non-farmland in the project area,

Farmland Types within Project Area

Farmland Type	Acres
P - Prime Farmland	2
U - Unique Farmland	0
S - Farmland of Statewide Importance	4
L - Farmland of Local Importance	140
D - Urban and Built-Up Land	202
X - Other Land	17
Total within Project Area	365



LEGEND

- Project Area
- City/County Boundary
- S - Farmland of Statewide Importance
- U - Unique Farmland
- D - Urban and Built-Up Land
- G - Grazing Land
- X - Other Land
- L - Farmland of Local Importance
- P - Prime Farmland

N

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SOURCE: RBF (9/2018); ESRI (07/2012); SCAG (2010); Riverside County (2016)

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FIGURE 2.2-1

SR-60/World Logistics Center Pkwy Interchange Project

Types of Farmlands in the Project Area

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Project No. 0813000109

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Table 2.2.1 Farmland Acres by Category Within the Farmland Study Area

Land Mapping Category	Acres Within the Farmland Study Area
Prime Farmland	2.2
Unique Farmland	0.3
Farmland of Statewide Importance	4.1
Farmland of Local Importance	139.3
Grazing Land	0.0
Urban and Built-Up Land	202
Other Land	17
Total	364.9

Source: Riverside County Farmland Map (DOC FMMP 2016).
DOC = California Department of Conservation
FMMP = Farmland Mapping and Monitoring Program

as reported in the *Community Impact Assessment* (March 2019). None of the land in the project area is designated in the City of Moreno Valley (City) or County of Riverside (County) General Plans for agricultural use (although some of the land is designated for rural residential uses that would allow agricultural uses). According to the *Community Impact Assessment* (March 2019), there are no Williamson Act Contract lands within or adjacent to the project area. The closest Williamson Act Contract lands are approximately 2.7 miles (mi) southeast of the project area.

2.2.3 Environmental Consequences

2.2.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the State Route 60 (SR-60)/WLC Pkwy interchange other than routine maintenance. Therefore, it would not result in any temporary impacts to farmland.

Alternative 2 (Modified Partial Cloverleaf Interchange)

Alternative 2 would result in temporary impacts to approximately 1.2 ac of Prime Farmland, 2.9 ac of Farmland of Statewide Importance, and 26 ac of Farmland of Local Importance as a result of temporary construction easements (TCEs) needed on those farmlands. None of the land in the project area is designated in the City or County General Plans or zoned for agricultural use (although some of the land is designated for rural residential uses that would allow agricultural uses). Therefore, no conflicts with existing zoning for agricultural use would occur. There are no Williamson Act Contract lands within or adjacent to the project area. Therefore, no conflicts with Williamson Act Contract lands would occur.

Alternative 6 (LPA) – Modified Partial Cloverleaf with Roundabout Intersections

Alternative 6, the Locally Preferred Alternative (LPA), would result in temporary impacts to approximately 0.7 ac of Prime Farmland, 2.9 ac of Farmland of Statewide Importance, and 26 ac of Farmland of Local Importance as a result of TCEs needed

on those farmlands. None of the land in the project area is designated in the City or County General Plans or zoned for agricultural use (although some of the land is designated for rural residential uses that would allow agricultural uses). Therefore, no conflicts with existing zoning for agricultural use would occur. There are no Williamson Act Contract lands within or adjacent to the project area. Therefore, no conflicts with Williamson Act Contract lands would occur.

Design Variation 2a (Alternative 2 with Design Variation)

Design Variation 2a would result in temporary impacts to approximately 1.1 ac of Prime Farmland, 2.9 ac of Farmland of Statewide Importance, and 21.3 ac of Farmland of Local Importance as a result of TCEs needed on those farmlands. None of the land in the project area is designated in the City or County General Plans or zoned for agricultural use (although some land is designated for rural residential uses that would allow agricultural uses). Therefore, no conflicts with existing zoning for agricultural use would occur. There are no Williamson Act Contract lands within or adjacent to the project area. Therefore, no conflicts with Williamson Act Contract lands would occur.

Design Variation 6a (Alternative 6 [LPA] with Design Variation)

Design Variation 6a would result in temporary impacts to approximately 0.7 ac of Prime Farmland, 2.9 ac of Farmland of Statewide Importance, and 21.2 ac of Farmland of Local Importance as a result of TCEs needed on those farmlands. None of the land in the project area is designated in the City or County General Plans or is zoned for agricultural use (although some land is designated for rural residential uses that would allow agricultural uses). Therefore, no conflicts with existing zoning for agricultural use would occur. There are no Williamson Act Contract lands within or adjacent to the project area. Therefore, no conflicts with Williamson Act Contract lands would occur.

2.2.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the SR-60/WLC Pkwy interchange other than routine maintenance. Therefore, it would not result in any permanent impacts to farmland.

Alternative 2 (Modified Partial Cloverleaf Interchange)

Alternative 2 would result in permanent impacts to approximately 0.1 ac of Prime Farmland, 0.3 ac of Farmland of Statewide Importance, and 43.7 ac of Farmland of Local Importance as a result of the permanent conversion of that land into transportation facilities. Because Alternative 2 involves the widening of an existing road, these impacts would primarily be limited to the edge of the existing roadway, primarily on the east side of WLC Pkwy and Theodore Street, both north and south of SR-60.

None of the land in the project area is designated in the City or County General Plans or zoned for agricultural use (although some of the land is designated for rural residential uses that would allow agricultural uses). Therefore, no conflicts with existing zoning for agricultural use would occur. There are no Williamson Act

Contract lands within or adjacent to the project area. Therefore, no conflicts with Williamson Act Contract lands would occur.

The project received a final score on Form NRCS-CPA-106 of 98, which is below the 160 point threshold that would require alternative actions as appropriate to reduce adverse impacts to farmlands. Therefore, based on Form NRCS-CPA-106, Alternative 2 would not have a substantial adverse effect on farmlands, and no further analysis is necessary to ensure that farmlands are protected per the requirements of the FPPA.

As shown in Table 2.2.2, the Project would result in conversion of approximately 0.02 percent of farmland in Riverside County and 0.00 percent of farmland in the State.

Table 2.2.2 Farmland Conversion by Alternative/Design Variation

Alternatives	Total Farmland Converted (ac)	Prime and Unique Farmland (ac)	Percent of Farmland in County	Percent of Farmland in State[1]	Farmland Conversion Impact Rating
Alternative 2	44.1	0.1	0.02	0.00	98
Alternative 6 (LPA)	44.5	0.5	0.02	0.00	98
Design Variation 2a	75.8	0.1	0.02	0.00	115
Design Variation 6a	76.9	0.5	0.02	0.00	115

Source: Compilation from Michael Baker International (2018), California Department of Conservation (2016), LSA Associates, Inc. (2018), and Natural Resources Conservation Service (2018).

Note: Table reflects engineering information provided in CAD format by Michael Baker International, GIS conversion of the CAD data by LSA and subsequent analysis of GIS shape files compared to FMMP data for Riverside County from the California Department of Conservation, and data from the Farmland Conversion Impact Rating Form completed by LSA in cooperation with the Natural Resources Conservation Service.

[1] These figures are greater than 0 but less than 0.00001.

ac = acre/acres
CAD = Computer-Aided Drafting
County = Riverside County
FMMP = Farmland Mapping and Monitoring Program
GIS = geographic information system
LPA = Locally Preferred Alternative
State = California

Alternative 6 (LPA) – Modified Partial Cloverleaf with Roundabout Intersections

Alternative 6 (LPA) would result in permanent impacts to approximately 0.5 ac of Prime Farmland, 0.3 ac of Farmland of Statewide Importance, and 43.7 ac of Farmland of Local Importance as a result of the permanent conversion of that land into transportation facilities. Similar to Alternative 2, Alternative 6 (LPA) would result in the loss of farmland along existing roads within the project area, primarily on the east side of WLC Pkwy and Theodore Street, both north and south of SR-60.

None of the land in the project area is designated in the City or County General Plans or zoned for agricultural use (although some of the land is designated for rural residential uses that would allow agricultural uses). Therefore, no conflicts with existing zoning for agricultural use would occur. There are no Williamson Act Contract lands within or adjacent to the project area. Therefore, no conflicts with Williamson Act Contract lands would occur.

The project received a final score on Form NRCS-CPA-106 of 98, which is below the 160-point threshold that would require alternative actions as appropriate to reduce adverse impacts to farmlands. Therefore, based on Form NRCS-CPA-106, Alternative 6 (LPA) would not have a substantial adverse effect on farmlands, and no further analysis is necessary to ensure that farmlands are protected per the requirements of the FPPA.

As shown in Table 2.2.2, the project would result in conversion of approximately 0.02 percent of farmland in Riverside County and <0.00 percent of farmland in the State.

Design Variation 2a (Alternative 2 with Design Variation)

Design Variation 2a would result in permanent impacts to approximately 0.1 ac of Prime Farmland, 0.3 ac of Farmland of Statewide Importance, and 75.4 ac of Farmland of Local Importance as a result of the permanent conversion of that land into transportation facilities. Design Variation 2a would result in the loss of farmland along existing roads within the project area, primarily on the east side of WLC Pkwy and Theodore Street, both north and south of SR-60, and within the corridor connecting WLC Pkwy and Eucalyptus Avenue.

None of the land in the project area is designated in the City or County General Plans or zoned for agricultural use (although some of the land is designated for rural residential uses that would allow agricultural uses). Therefore, no conflicts with existing zoning for agricultural use would occur. There are no Williamson Act Contract lands within or adjacent to the project area. Therefore, no conflicts with Williamson Act Contract lands would occur.

The project received a final score on Form NRCS-CPA-106 of 115, which is below the 160-point threshold that would require alternative actions as appropriate to reduce adverse impacts to farmlands. Therefore, based on Form NRCS-CPA-106, Design Variation 2a would not have a substantial adverse effect on farmlands, and no further analysis is necessary to ensure that farmlands are protected per the requirements of the FPPA.

Design Variation 6a (Alternative 6 [LPA] with Design Variation)

Design Variation 6a would result in permanent impacts to approximately 0.5 ac of Prime Farmland, 0.3 ac of Farmland of Statewide Importance, and 76.1 ac of Farmland of Local Importance as a result of the permanent conversion of that land into transportation facilities. Design Variation 6a would result in the loss of farmland along existing roads within the project area, primarily on the east side of WLC Pkwy and Theodore Street, both north and south of SR-60, and within the corridor connecting WLC Pkwy and Eucalyptus Avenue.

None of the land in the project area is designated in the City or County General Plans or zoned for agricultural use (although some of the land is designated for rural residential uses that would allow agricultural uses). Therefore, no conflicts with existing zoning for agricultural use would occur. There are no Williamson Act Contract lands within or adjacent to the project area. Therefore, no conflicts with Williamson Act Contract lands would occur.

The project received a final score on Form NRCS-CPA-106 of 115, which is below the 160-point threshold that would require alternative actions as appropriate to reduce adverse impacts to farmlands. Therefore, based on Form NRCS-CPA-106, Design Variation 6a would not have a substantial adverse effect on farmlands, and no further analysis is necessary to ensure that farmlands are protected per the requirements of the FPPA.

2.2.4 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures would be required. All of the farmland that would be impacted by the Build Alternatives and design variations is either within Moreno Valley or its Sphere of Influence. According to the *City of Moreno Valley General Plan Final Program Environmental Impact Report* (EIR) (July 2006), Section 5.8, Agricultural Resources, mitigation related to agricultural land is economically infeasible due to the increased cost of land, agricultural production, and labor, as well as increased distances to support facilities. In addition, the General Plan Final Program EIR concludes that agricultural mitigation is not consistent with the objectives of the General Plan.

Given the fact that the farmland being impacted is primarily along the edge of existing roads and will not impact agricultural operations, and the fact that agricultural mitigation was previously identified in the City's General Plan as being inconsistent with the goals and objectives of the General Plan, no adverse effects associated with conversion of Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance to nonagricultural uses would occur.

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2.3 Growth

2.3.1 Regulatory Setting

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

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

2.3.2 Growth Analysis

This section is based on information from the following documents prepared for the project:

- *Community Impact Assessment* (March 2019)

Demographic information from the 2016-2040 RTP/SCS Growth Forecasts was also utilized. The Growth Study Area is the community within and surrounding the project site in which direct and indirect impacts of the project may occur. For this project, the Growth Study Area is identical to the Land Use Study Area shown in previous Figure 2.1-1 and includes the project area (the physical area that will be affected by the project) and the adjacent neighborhoods within Moreno Valley and unincorporated Riverside County (Census Tract 424.01 within Moreno Valley and the part of Census Tract 426.24 that lies within the incorporated limits of Moreno Valley[1]). The City of Moreno Valley General Plan (2006)[2] discusses existing and planned land uses and project growth rates, which are discussed in Section 2.1, Land Use, and in Chapter 1, Proposed Project. On October 1, 2019, the Moreno Valley City Council approved the preparation of a comprehensive General Plan update that will update all eight State-mandated elements and will include the preparation of an Economic Development Element. The update process will include stakeholder and public outreach, visioning, and identification of community issues

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1 The unincorporated part of Census Tract 426.24 is undeveloped and is more than 2 miles from the SR-60/World Logistics Center Parkway interchange; therefore, the unincorporated part of Census Tract 426.24 has been excluded from the Land Use Study Area.

2 City of Moreno Valley. 2006. General Plan. Website: http://www.moreno-valley.ca.us/city_hall/general_plan.shtml, accessed February 5, 2019.

and goals. The City also appointed members to a General Plan Advisory Committee to oversee the update process.

2.3.3 First-Cut Screening

The California Department of Transportation (Caltrans) *Guidance for Preparers of Growth-Related, Indirect Impact Analyses* (May 2006) provides methods for evaluating a proposed highway transportation project in terms of whether the proposed project may result in growth-related impacts. The *Guidance for Preparers of Growth-Related, Indirect Impact Analyses* provides methods for determining the growth-related effects of transportation improvement projects. This guidance document provides a first-cut screening approach to growth impact analysis that identifies the need for and the extent of growth-related impact analysis based on the responses to various questions related to a project's change in accessibility, its potential to influence growth, and the potential for growth-related impacts to resources of concern. The potential growth-related impacts of the proposed project were considered in the context of the first-cut screening analysis approach to assess the likely growth potential effect of the proposed project and whether further analysis is necessary based on consideration of the following:

- **How, if at all, does the proposed project potentially change accessibility?**

  At the State Route 60/World Logistics Center Parkway (SR-60/WLC Pkwy) interchange, the project would replace the existing WLC Pkwy overcrossing to achieve a minimum 16.5-foot (ft) vertical clearance and add through and turn lanes; reconstruct the eastbound and westbound on- and off-ramps; and improve Theodore Street/WLC Pkwy north to Ironwood Avenue and south to Eucalyptus Avenue and Dracaea Avenue. The reconstruction of the SR-60/WLC Pkwy interchange would improve operation of the existing interchange and local circulation, enhance safety, alleviate future traffic congestion at the SR-60/WLC Pkwy interchange ramps during peak hours, and improve traffic flow along the freeway and through the interchange. The project is within a semi-urban area. The project would occur in the eastern portion of Moreno Valley, an area planned for extensive industrial/business park, some commercial, and some low-density residential expansion growth through the City's General Plan Build Out Year. The proposed improvements to the existing interchange and local roadways would improve accessibility to and from the surrounding area for existing, approved, and future planned development in all directions from the project area (see Table 2.1.2, Planned Projects in Section 2.1, Land Use). Therefore, this project would result in an improvement in accessibility that has been planned for and anticipated by future developments, and has already been identified in the Southern California Association of Governments (SCAG) 2016–2040 RTP and 2019 FTIP. Any future development within the vicinity of the project is anticipated to occur regardless of whether or not the project is implemented because the proposed freeway interchange improvement is not a condition of approval for any development projects within the Growth Study Area.

  Although the project would improve accessibility between homes and jobs and accommodate the planned rate of growth in the area, the project is not expected to substantially influence the overall amount or type of local or regional growth that has been identified by the City because the proposed freeway interchange

improvement is not a condition of approval for any development projects within the Growth Study Area.

- **How, if at all, do the project type, project location, and growth pressure potentially influence growth?**

  Current and projected development patterns depend on the supply of jobs in Riverside, San Bernardino, Los Angeles, and Orange County, and the abundance of affordable housing in Riverside County and San Bernardino County. This pattern of development is likely to continue with or without the project because the project does not provide excess capacity to substantially improve commuting times through the project area. According to the 2012–2016 American Community Survey conducted by the United States Census, approximately 74 percent of the employed labor force in Moreno Valley works outside of their respective place of residence, and approximately 52.5 percent have a commute longer than 30 minutes. Examples of projects likely to have excess capacity include extensions or expansions of public infrastructure systems beyond what is needed to serve project-specific demand. This project would not exceed project-specific demand, and the purpose of this project is to increase the minimum vertical clearance for the overcrossing, increase capacity at the interchange, reduce traffic congestion and to improve traffic operations at the existing freeway interchange.

  According to the City of Moreno Valley's General Plan, WLC Pkwy (Theodore Street) is planned to be a divided major arterial that would support approximately 6,000 vehicles per day. Traffic studies conducted in 2019 reveal that level of service (LOS) (measurements of density, delay, and travel time) at on- and off-ramp segments of WLC Pkwy are expected to increasingly deteriorate between the years 2020 and 2025 without any proposed improvements (see Section 2.6, Traffic and Transportation/Pedestrian and Bicycle Facilities). This divided major arterial currently provides access to users of industrial warehouse centers located along Eucalyptus Avenue and would eventually provide the primary freeway access to the World Logistics Center development. These industrial areas are key locations for economic stimulus; therefore, this arterial is an important access pathway to industrial warehouse locations. The improvements identified under the two Build Alternatives and their respective design variations for the SR-60/WLC Pkwy interchange are unlikely to attract additional industrial development and new population into the Moreno Valley planning area despite the area being currently largely vacant, because build out of the areas surrounding the interchange is already anticipated and projected to occur by the City and region.

  Improvements to the existing SR-60/WLC Pkwy interchange would reduce congestion along this divided major arterial to these industrial areas while accommodating future growth and planned development that would be present whether the project is constructed or not. The interchange improvements component of the project is unlikely to encourage the development of additional employment generating land uses in the area because the local and regional growth patterns and projections shown in Table 2.3.1 below would be realized with or without either of the Build Alternatives and their respective design variations. This is because the proposed World Logistics Center Specific Plan, as

planned, envisions the full build out of the majority of the area south of SR-60 with industrial/business park uses, and these proposed land uses are what were used in the area growth trends developed by SCAG.[1] This conclusion is based upon the broad social/economic goals, objectives, and policies of both the City of Moreno Valley and Riverside County General Plans and growth trends that are anticipated to continue throughout this part of Riverside County.

The City of Moreno Valley's General Plan identifies goals, objectives, and policies that are intended achieve a functional balance of land uses that "meet the needs of a diverse population, promote the optimum degree of health, safety, well-being, and beauty for all areas of the community, while maintaining a sound economic base", as well as the promotion of "a mix of industrial uses which provide a sound and diversified economic base and ample employment opportunities for the citizens of Moreno Valley with the establishment of industrial activities that have good access to the regional transportation system, accommodate the personal needs of workers and business visitors, and which meets the service needs of local businesses."

The County of Riverside's General Plan identifies several policies relating to economic development that stimulate a diverse economic mix, provide economic opportunities, and ensure access capabilities to operate effectively at those economic scales.

Table 2.3.1 provides the 2012 population and projected 2020, 2035, and 2040 populations for Riverside County, the City of Moreno Valley, and the project area census tracts.

By 2040, the population in Moreno Valley is anticipated to total 256,600 residents. The number of households within the City is also anticipated to increase at a higher rate. By 2040, the City is projected to have 73,000 total households. Currently, jobs within the City of Moreno Valley have grown at a much faster rate than population or households. As identified in Table 2.3.1, by 2040, there are anticipated to be 83,200 jobs in Moreno Valley.

The potential for growth-inducing effects would be the highest on undeveloped and unplanned land because these areas generally have limited existing transportation infrastructure. The majority of the land adjacent to the SR-60/WLC Pkwy interchange is currently undeveloped. Based on the City's General Plan, these lands are designated for business park and light industrial uses as well as some commercial and residential uses. Except for Design Variation 6a (Alternative 6, the Locally Preferred Alternative [LPA], with Design Variation), the improvements to the SR-60/WLC Pkwy interchange are not anticipated to result in the rezoning or reclassification of lands surrounding the interchange area in the community general plan from these existing land use designations to a more

[1] Southern California Association of Governments (SCAG). 2016. 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction and Adopted 2008 SCAG RTP Growth Forecast by Census Tract. Website: http://gisdata.scag.ca.gov/Pages/SocioEconomicLibrary.aspx?keyword=Forecasting, accessed December 13, 2019.

Table 2.3.1 Population, Household, and Employment Estimates

Census Tract/ City/County	2012[1]	2020	2035	2040[2]	Percentage Increase from 2012 – 2040
Population					
Census Tract 424.01	4,087	5,353	7,356	7,841	91.9
Census Tract 426.22	26	26	28	29	11.5
Census Tract 426.24	13,621	20,575	33,424	37,331	174.1
City of Moreno Valley	197,600	210,600	250,200	256,600	29.9
Riverside County	359,000	385,600	471,200	499,200	39.1
Households					
Census Tract 424.01	1,061	1,426	2,073	2,254	112.4
Census Tract 426.22	8	8	9	10	25
Census Tract 426.24	3,861	6,055	10,211	11,145	188.7
City of Moreno Valley	51,800	58,600	71,200	73,000	40.9
Riverside County	112,300	121,800	153,200	162,900	45.1
Employment					
Census Tract 424.01	730	1,062	1,598	1,796	146.0
Census Tract 426.22	76	111	167	188	147.4
Census Tract 426.24	2,226	3,956	6,762	7,780	249.5
City of Moreno Valley	31,400	55,900	80,200	83,200	165.0
Riverside County	70,500	96,700	139,700	156,600	122.1

Source: Southern California Association of Governments (SCAG). 2016. 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction and Adopted 2008 SCAG RTP Growth Forecast by Census Tract. Website: http://gisdata.scag.ca.gov/Pages/SocioEconomicLibrary.aspx?keyword=Forecasting (accessed December 13, 2019).

[1] Data at the census tract level was not available for year 2012; therefore, population. household, and employment estimates for year 2012 were interpolated from available data from years 2010 and 2015.

[2] Data at the census tract level was not available for year 2040; therefore, population. household, and employment estimates for year 2040 were extrapolated from available data from years 2030 and 2035.

intensive land use. Design Variation 6a would require rezoning of some land currently designated for business park and light industrial land uses in the World Logistics Center Specific Plan.

The project is consistent with the growth-related policies of the Moreno Valley General Plan. The overarching goal identified in the City's General Plan Community Development Element calls for a pattern of land uses that organizes future growth, minimizes conflicts between land uses, and promotes the rational utilization of presently underdeveloped and undeveloped parcels. The Build Alternatives and Design Variations 2a and 6a do not propose a land use that is inconsistent with this goal or other related policies. The project is unlikely to lead to the intensification of development densities. Table 2.1.2 in Section 2.1, Land Use, provides a status of developments within the proximity of the project. These developments would be implemented under their current schedules with or without the project.

Based on the analysis provided above, the two Build Alternatives and Design Variations 2a and 6a would conform with the City's General Plan and do not conflict with City policies related to the orderly pattern of land uses. In addition, the Build Alternatives and Design Variations 2a and 6a are unlikely to alter the projected growth within Moreno Valley and Riverside County and would not encourage growth on undeveloped land not currently planned for development.

- **Is project-related growth "reasonably foreseeable" as defined by NEPA?**

  As previously stated, there is an existing need to improve operations, enhance safety, and alleviate future traffic congestion at the existing SR-60/WLC Pkwy interchange. These improvements would accommodate existing, approved, and planned growth in the area. In addition, the project does not substantially increase the capacity of the transportation system as the project does not provide new transportation facilities in areas without those facilities. The project would provide additional freeway auxiliary lanes for approximately 2 miles.

  Due to the lack of existing development within the area surrounding the planned interchange site, it is "reasonably foreseeable" that growth would occur, but this growth is not project-related because the proposed freeway interchange improvement is not a condition of approval for any of the future development projects in the area. The project would potentially accelerate the rate of growth in the area by making it more accessible, but would not result in new unplanned growth since the surrounding area is already designated for future land uses in accordance with the City of Moreno Valley General Plan, as discussed in Section 2.1, Land Use.

- **If there is project-related growth, how, if at all, will it impact resources of concern?**

  For resources of concern, project-specific effects have been identified in this environmental document. Although there is a possibility that planned growth-related effects (specifically the rate of growth, not new growth) associated with the SR-60/WLC Pkwy interchange could occur, an accelerated rate of growth would not result in additional impacts to resources of concern, only the timing of when those impacts would occur.

  Resources of concern include cultural, visual, and biological resources. For cultural resources, future projects may result in the potential disturbance of both known and as yet unidentified historic properties, archaeological sites, and paleontological resources. For biological resources, future projects may result in habitat fragmentation and division of larger tracts of habitat into smaller noncontiguous areas as a result of artificial structures such as roads, buildings, and other infrastructure. For visual resources, future projects may result in the conversion of portions of a semi-rural area into a more urban landscape and changes to the viewer exposure to the area. Each resource of concern is discussed in detail in this environmental document with identification of the laws and regulations that would pertain to the development of this project. In addition, a comprehensive discussion of cumulative effects to these resources of concern has been provided in Section 2.23. Discussion in Section 2.23 takes into account the nature of cumulative projects in relation to this project. Based on the analysis provided above and within each of the chapters of this environmental document, the project would not result in growth-related effects to resources of concern. Therefore, no further growth analysis beyond this first-cut screening analysis is required.

2.3.4 Avoidance, Minimization, and/or Mitigation Measures

The Build Alternatives, including the design variations, would not result in any temporary or permanent growth-related impacts to resources of concern. Therefore, no avoidance, minimization, or mitigation measures are required.

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2.4 Community Impacts

2.4.1 Community Character and Cohesion

2.4.1.1 Regulatory Setting

The National Environmental Policy Act of 1969 (NEPA), as amended, established that the federal government use all practicable means to ensure that all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration in its implementation of NEPA (23 United States Code [USC] 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

2.4.1.2 Affected Environment

This section is based on the *Community Impact Assessment* (March 2019) and the *Draft Relocation Impact Memorandum* (December 2018) prepared for the proposed project. The study area for the community impacts analysis (Community Impacts Study Area) is the community within and surrounding the proposed project site in which direct and indirect impacts of the project may occur. For this project, the Community Impacts Study Area includes the project area (the physical area that will be affected by the project) and the adjacent neighborhoods within Moreno Valley and unincorporated Riverside County (Census Tract 424.01 and the part of Census Tract 426.24 that lies within the incorporated limits of the City of Moreno Valley[1]). The Community Impacts Study Area is shown on Figure 2.4-1 (all figures have been placed at the end of this section to enhance the readability of the text). Community profile data are collected and organized by census tract; these boundaries are utilized in evaluating impacts to the affected environment within the Community Impacts Study Area.

Data presented in this section are based on the census tracts from the 2010 Census and the 2012–2016 American Community Survey (ACS).[2] The main differences between the 2010 Census and the 2012–2016 ACS surveys are in the sample sizes and periods of time in which the samples were taken. The 2010 Census consisted of

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1 The unincorporated part of Census Tract 426.24 is undeveloped and is more than 2 miles from the SR-60/WLC Pkwy interchange; therefore, the unincorporated part of Census Tract 426.24 has been excluded from the Community Impacts Study Area.

2 The ACS is an ongoing survey conducted by the United States Census Bureau that provides data every year, giving communities the current information they need to plan investments and services (https://www.census.gov/programs-surveys/acs/about.html).

a full count of all residents and households and provides general demographic characteristics for every city, county, Census-designated place, census tract, block group, and block in the United States, whereas the ACS collects sample-derived data each year that provide more detailed information than the decennial census (2010 Census).[1] The ACS data is compiled into multiyear estimates. Three-year estimates of demographic, social, economic and housing characteristics are available for geographic areas with a population of 20,000 or more.[2] Five-year estimates of the same data are available for areas with a population less than 20,000, including all census tracts. Certain demographic, social, economic, and housing characteristics are also available at the block and block group level. Census tracts were used in the demographic because they are the most complete data set for the level of detail required for this analysis. Data boundaries with a finer level of detail, such as census blocks, were not used due to incomplete data in some of the required demographic categories necessary for analysis. Detailed information concerning the affected environment is provided for these census tracts where appropriate. For context and comparison, information is also provided at city and county levels for certain topics.

The Community Impacts Study Area is characterized by a mix of residential, commercial, agricultural, and vacant land uses, with minimal development surrounding the interchange.

Community cohesion is the degree to which residents have a sense of belonging to their neighborhood, a level of commitment to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. The following demographic indicators tend to correlate with a higher degree of community cohesion and are used to determine the degree of community cohesion in Moreno Valley and the Community Impacts Study Area:

- **Ethnicity:** In general, homogeneity of the population contributes to higher levels of community cohesion. Communities that are ethnically homogeneous often speak the same language, hold similar beliefs, and share a common culture, and are therefore more likely to engage in social interaction on a routine basis.

- **Household Size:** In general, communities with a high percentage of families with children are more cohesive than communities comprised of largely single people. This appears to be because children tend to establish friendships with other children in their community. The social networks of children often lead to the establishment of friendships and affiliations among parents in the community. Although the United States Census Bureau does not provide specific data regarding the number of children present in each household, the number of persons per household can serve as a proxy for households with children.

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1 Census tracts, block groups, and blocks are small geographic subdivisions delineated for the purpose of providing a stable set of geographic units for the presentation of statistical data. They are organized in the following hierarchy from smallest to largest area: blocks, block groups, and census tracts.

2 U.S. Census Bureau, American Community Survey. Website: https://www.census.gov/history/www/programs/demographic/american_community_survey.htm, accessed January 28, 2019.

- **Housing Occupancy:** Communities with a high percentage of owner-occupied residences are typically more cohesive because their population tends to be less mobile. Because they have a financial stake in their community, homeowners often take a greater interest in what is happening in their community than renters do. This means they often have a stronger sense of belonging to their community.

- **Transit-Dependent Population:** Communities with a high percentage of residents that are dependent on public transportation typically tend to be more cohesive than communities that are dependent on automobiles for transportation. This is because residents who tend to walk or use public transportation for travel tend to engage in social interaction with each other more frequently than residents who travel by automobile. Although the United States Census Bureau does not provide specific data regarding the percentage of the population that is dependent on public transportation for travel, a series of demographic data can be used to serve as a proxy for the transit-dependent population.

- **Housing Tenure:** Communities with a high percentage of long-term residents are typically more cohesive because a greater proportion of the population has had time to establish social networks and develop an identity with the community. For the purpose of this analysis, those households that moved into their current residence in 2009 or earlier are considered long-term residents since they have lived in their current residence for more than 7 years.

- **Elderly Populations:** Communities with a high percentage of elderly residents tend to correlate with a higher degree of community cohesion. In general, communities with a high percentage of elderly residents (65 years or older) tend to demonstrate a greater social commitment to their community. This is because the elderly population, which includes retirees, often tends to be more active in the community since they have more time available for volunteering and participating in social organizations.

These indicators of community cohesion in Moreno Valley and the census tracts in the Community Impacts Study Area are described in more detail below.

Ethnicity

Table 2.4.1 shows the racial and ethnic composition of Moreno Valley, Riverside County, and the two Community Impacts Study Area census tracts (Census Tracts 424.01 and 426.24) based on the 2012–2016 ACS.

As shown in Table 2.4.1, the racial composition of the study area census tracts, City of Moreno Valley (City), and Riverside County (County) varies. The White population percentage in Census Tract 424.01 (72.0 percent) is higher than that of the County (63.3 percent), while the White population percentage in Census Tract 426.24 (39.5 percent) is lower than that of the County. The City has a higher Black population percentage (18.0 percent) than both the study area census tract and the County. The County and the City have similar Asian population percentages (6.2 percent and

Table 2.4.1 Racial and Ethnic Demographics

Jurisdiction/ Area	White	Black	American Indian/ Native Alaskan	Asian	Hawaiian/ Pacific Islander	Some Other and Two or More Races[1]	Hispanic
Riverside County	1,470,294 (63.3%)	145,025 (6.2%)	20,205 (0.9%)	143,067 (6.2%)	6.915 (0.3%)	538.386 (23.2%)	1,102,968 (47.5%)
Moreno Valley	87,231 (43.2%)	36,421 (18.0%)	1,175 (0.6%)	11,847 (5.9%)	1,445 (0.7%)	63,942 (31.6%)	114,120 (56.5%)
Census Tract 424.01 (Unincorporated Riverside County/ Moreno Valley)	1,455 (72.0%)	39 (1.9%)	6 (0.3%)	50 (2.5%)	0 (0.0%)	472 (23.3%)	978 (48.4%)
Census Tract 426.24 (Unincorporated Riverside County/ Moreno Valley)	1,706 (39.5%)	457 (10.6%)	27 (0.6%)	332 (7.7%)	71 (1.6%)	1,725 (40.0%)	2,296 (53.2%)

Source: 2012–2016 American Community Survey, Table B02001, Table B03002.
Note: Percentages do not add up to 100 percent because Hispanics (as an ethnicity), as counted by the Census Bureau, may be of any race.
[1] Includes individuals who identify themselves as Some Other Race, or two or more races.

5.9 percent, respectively). The County and the City contain substantial Hispanic populations (47.5 percent and 56.5 percent, respectively). The Hispanic population percentages in the study area census tracts are lower than that of the City but higher than that of the County.

Household Size

Table 2.4.2 provides information on average household size and composition for Riverside County, City of Moreno Valley, and the Community Impacts Study Area census tracts (based on 2012–2016 ACS data). The average household size in the City is 4.2 persons, which is higher than Riverside County (3.8 persons). Table 2.4.2 also shows that family households comprise a higher proportion of the households in Moreno Valley (83.7 percent) than Riverside County (75.3 percent). The proportion of single-parent households headed by females represent approximately 20.7 percent of the City's households, which is higher than the County (13.4 percent). Census Tract 424.01 has a higher percentage of family households (86.4 percent) than the County (75.3 percent), but a lower percentage of single-parent households headed by females (10.7 percent) than the County (13.4 percent). In comparison, Census Tract 426.24 has a lower percentage of family households (59.3 percent) than the County (75.3 percent), but a higher percentage of single-parent households headed by females (15.2 percent) than the County (13.4 percent).

Housing Tenure

Table 2.4.3 shows the percentage of the population that moved into their current residences in 2009 or earlier in Riverside County, City of Moreno Valley, and the Community Impacts Study Area census tracts. As shown in Table 2.4.3, the percentage of owner-occupied residences in both census tracts is higher than the County and the City.

Table 2.4.2 Household Size and Composition

Area	Average Persons Per Household	Total Households (%)				
		Family Households	Married Couple Family	Female Householder (No Husband Present)	Male Householder (No Wife Present)	Non-Family Households
Riverside County	3.8	75.3	53.9	13.4	6.2	26.5
Moreno Valley	4.2	83.7	53.6	20.7	9.3	16.3
Census Tract 424.01 (Unincorporated Riverside County/Moreno Valley)	4.4	86.4	65.0	10.7	10.7	13.6
Census Tract 426.24 (Unincorporated Riverside County/Moreno Valley)	4.2	59.3	25.5	15.2	17.0	7.7

Source: United States Census Bureau, 2012–2016 American Community Survey, B11001 and S1101, Website: https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t, accessed October 2018.

Table 2.4.3 Community Cohesion Indicators

Area	Hispanic/ Latino Residents[1]	Average Household Size (persons)[2]	Owner-Occupied Residences[3]	Elderly Residents (>64 years old)[4]	Transit-Dependent Population[5]	Long-Term Residents (Moved in 2009 or Earlier)[3]
Riverside County	47.5	3.8	64.5	13.2	20.3	57.1
Moreno Valley	***56.5***	4.2	59.6	7.7	17.5	***57.5***
Community Impacts Study Area Census Tracts						
Census Tract 424.01 (Unincorporated Riverside County/Moreno Valley)	***48.4***	3.8	***84.9***	11.8	0	***79.9***
Census Tract 426.24 (Unincorporated Riverside County/Moreno Valley)	***53.2***	***4.4***	***75.4***	10.0	***27.5***	***63.9***

Note: ***Italicized numbers in bold*** indicate the values are higher than the County average.

1 U.S. Census Bureau, 2012–2016 American Community Survey, Table DP05; Website: https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t, accessed August 2018.

2 U.S. Census Bureau, 2012–2016 American Community Survey, Tables B11001 and S1101; Website: https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t, accessed October 2018.

3 U.S. Census Bureau, 2012–2016 American Community Survey, Table DP04; Website: https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t, accessed August 2016.

4 U.S. Census Bureau, 2012–2016 American Community Survey, Table DP05 Website: https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t, accessed August 2018.

5 U.S. Census Bureau, 2012–2016 American Community Survey, Tables B01001, B26001, and B25046; Website: https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t, accessed August 2018. The transit-dependent population was calculated by taking the number of residents aged 15 and over (as reported in Table B01001 of the 2012-2016 ACS), subtracting the number of persons living in group quarters (as reported in Table B26001 of 2012-2016 ACS), subtracting the number of vehicles available (as reported in Table B25046 of the 2012-2016 ACS), and then dividing the difference by the population aged 15 and over.

Housing Occupancy

Table 2.4.3 provides the percentage of owner-occupied residences in Riverside County, Moreno Valley, and the Community Impacts Study Area census tracts based on 2012–2016 ACS data. As shown in Table 2.4.3, the percentage of owner-occupied residences in both Community Impacts Study Area census tracts is higher than in the County and City.

Transit-Dependent Populations

Table 2.4.3 shows the percentage of the population that is transit-dependent in Riverside County, Moreno Valley, and the Community Impacts Study Area census tracts. As shown in Table 2.4.3, the transit-dependent population comprises a larger share of the general population in Census Tract 426.24 (27.5 percent) than the County (20.3 percent) or the City (17.5 percent). Census Tract 424.01 does not have a transit-dependent population.

Age Distribution

The median age and age distribution patterns of the population in Moreno Valley, Riverside County, and the Community Impacts Study Area census tracts are shown in Table 2.4.4. As shown in Table 2.4.4, the City and County reported similar percentages of population between ages 18 and 64, and the percentages of the population over age 64 range between 7.7 percent for the City and 13.2 percent for the County. The percentages of the population under age 18 in the City and the County are also similar. Census Tract 424.01 and Census Tract 426.24 reported the percentage of the population over the age of 64 were 11.8 percent and 10.0 percent, respectively. These percentages are both larger than that of the City (7.7 percent), but smaller than that of the County (13.2 percent).

Table 2.4.4 Age Distribution

Jurisdiction/Area	Median Age	Percent		
		Population <18	Population 18–64	Population >64
Riverside County	34.8	26.4	60.4	13.2
Moreno Valley	30.1	29.4	62.9	7.7
Census Tract 424.01 (Unincorporated Riverside County/Moreno Valley)	36.3	22.6	65.6	11.8
Census Tract 426.24 (Unincorporated Riverside County/Moreno Valley)	33.0	27.0	62.9	10.0

Source: 2012–2016 American Community Survey, Table DP05.

Community Cohesion Summary

As shown in Table 2.4.3 and described above, Moreno Valley has higher percentages of Hispanic/Latino residents and long-term residents compared to Riverside County. Accordingly, Moreno Valley appears to exhibit a moderate degree of community cohesion in comparison to the overall Riverside County population.

In comparison, as shown in Table 2.4.3, Census Tract 426.24 exhibits five community cohesion indicators, and Census Tract 424.01 exhibits three community cohesion indicators. Therefore, Census Tract 426.24 appears to exhibit a high degree of community cohesion in comparison to the overall Riverside County population, while Census Tract 424.01 appears to exhibit a more moderate degree of community cohesion.

Other Demographics

Employment

Table 2.4.5 shows the existing and projected employment in Moreno Valley and Riverside County. As shown, employment in the County is projected to increase by

Table 2.4.5 Existing and Projected Employment

Jurisdiction	Employed Population			Percent Increase
	2012[1]	2020[1]	2040[1]	2012 to 2040
Riverside County	616,600	848,700	1,174,300	90.5
Moreno Valley	31,400	55,900	83,200	165.0

[1] 2016–2040 RTP/SCS Growth Forecast, http://www.scag.ca.gov/Documents/2016DraftGrowthForecastByJurisdiction.pdf, accessed August 24, 2018.

RTP/SCS = Regional Transportation Plan/Sustainable Communities Strategy

approximately 90.5 percent between 2012 and 2040. Employment in the City is projected to increase by approximately 165.0 percent during the same period. The 2012–2016 ACS data indicate there were 946,798 persons in the County's civilian labor force. According to the California Employment Development Department (EDD), the unemployment rate in June 2018 in Riverside County was 4.7 percent. In June 2018, Moreno Valley had a slightly higher percentage (5.0 percent) of unemployed civilians than the County.[1]

Income and Poverty Status

To determine the income and poverty characteristics for the Community Impacts Study Area, data was obtained from the 2012–2016 ACS for Riverside County, Moreno Valley, and the Community Impacts Study Area census tracts (Census Tracts 424.01 and 426.24).

Table 2.4.6 provides income and poverty level characteristics for the Community Impacts Study Area census tracts, the City of Moreno Valley, and Riverside County, as reported in the 2012-2016 ACS. The poverty level is defined annually by the Department of Health and Human Services (DHHS) and was $24,300 for a family of four in 2016 (the year of the Census Bureau data used for this analysis). Moreno Valley has a higher percentage of residents living below the poverty level (18.6 percent) than Riverside County (16.5 percent).

Commuter Travel

Table 2.4.7 summarizes commuter travel patterns in the Community Impacts Study Area census tracts, City of Moreno Valley, and Riverside County based on the 2012–2016 ACS. The majority of residents in Moreno Valley, the County, and the Community Impacts Study Area census tracts work in Riverside County. However, most Community Impacts Study Area residents work in a different city than their city of residence. The percentage of residents who have a less than 30-minute commute is similar for the Community Impacts Study Area census tracts, the City, and the County.

[1] California Employment Development Department. *Labor Force and Unemployment Rate for Cities and Census Designated Places* (June 2018). Website: https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html.

Table 2.4.6 Income and Poverty Level

Jurisdiction/Area	Total Population for Whom Poverty is Determined	Median Household Income	Persons Living in Poverty (%)[1]
Riverside County	2,289,086	$57,972	16.5
Moreno Valley	201,093	$56,456	18.6
Census Tract 424.01 (Unincorporated Riverside County/Moreno Valley)	1,980	$74,934	4.9
Census Tract 426.24 (Unincorporated Riverside County/Moreno Valley)	4,285	$85,286	13.9

Source: 2012–2016 American Community Survey, Tables S1701 and S1903.

[1] Persons living in poverty percentage is based on United States Census Bureau thresholds rather than United States Department of Health and Human Services guidelines. For 2016, the poverty threshold for a family of four was $24,339.

Table 2.4.7 Commuter Travel

	Riverside County	Moreno Valley	Census Tract 424.01	Census Tract 426.24
Work in County of Residence	641,573 (69.4%)	55,123 (67.7%)	726 (73.8%)	1,404 (66.0%)
Work Outside County of Residence	282,272 (30.6%)	26,292 (32.3%)	258 (26.2%)	723 (34%)
Work in Place of Residence[1]	241,767 (27%)	21,139 (26.0%)	321 (32.6%)	614 (28.9%)
Work Outside Place of Residence[1]	653,633 (73.0%)	60,276 (74.0%)	663 (67.4%)	1,513 (71.1%)
Travel Time to Work				
<30 minutes	476,065 (53.3%)	37,546 (47.5%)	399 (42.2%)	928 (46.9%)
30–44 minutes	171.099 (19.5%)	20,780 (26.3%)	208 (22.0%)	569 (28.8%)
45–59 minutes	78,580 (9.0%)	6,912 (8.7%)	129 (13.6%)	277 (14.0%)
>60 minutes	159,350 (18.02%)	13,808 (17.5%)	210 (22.2%)	203 (10.3%)

Sources: United States Census Bureau, and 2012–2016 American Community Survey, Tables B08007, B08008, and B08303.

[1] Addresses the percentage of the population that works within and outside their County of Residence that is identified as "living in a place" in American Community Survey Table B08008.

Census Tract 424.01 has the lowest percentage of residents with a commute less than 30 minutes (42.2 percent) and the highest percentage of residents with a commute greater than 60 minutes (22.2 percent).

2.4.1.3 Environmental Consequences

Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include modifications to the State Route 60 (SR-60)/World Logistics Center Parkway (WLC Pkwy) interchange other than routine maintenance; therefore, it would not result in temporary impacts to businesses and community character and cohesion.

Alternatives 2 and 6 (LPA) (Build Alternatives)

Construction activities for the Build Alternatives would result in temporary impacts to residences and businesses in the Community Impacts Study Area adjacent to the SR-60/WLC Pkwy interchange, including construction equipment noise and emissions, access restrictions, and detours.

During construction of both of the Build Alternatives, the SR-60/WLC Pkwy interchange would be subject to a complete closure for 4 months while the overcrossing is demolished and reconstructed. The eastbound SR-60/WLC Pkwy on- and off-ramps and the westbound SR-60/WLC Pkwy on-ramp would be closed for approximately 4 months, while the westbound SR-60/WLC Pkwy off-ramp would be closed for approximately 6 months. Complete closure of the interchange is expected to reduce the overall construction timeframe and impacts on affected residents and businesses.

Access would be maintained for residents and businesses affected by the Build Alternatives, and potential detour routes have already been identified as discussed in Section 1.3, Project Description, of this document. Because the Build Alternatives would extend Eucalyptus Avenue between WLC Pkwy and Redlands Boulevard prior to closure of the SR-60/WLC Pkwy interchange, access to SR-60 from the Skechers facility would be maintained via the Redlands Boulevard interchange while the SR-60/WLC Pkwy interchange is reconstructed.

According to the *SR-60/World Logistics Center Parkway Interchange Project Ramp Closure Study* (December 2018), access to SR-60 from areas north of the freeway would be provided via Ironwood Avenue and Redlands Boulevard while the SR-60/WLC Pkwy interchange is closed for reconstruction. South of the freeway, access to SR-60 would be provided via Alessandro Boulevard and the SR-60/Gilman Springs Road interchange.

The *Ramp Closure Study* (December 2018) reviewed the potential changes in travel times and distances for motorists who would be affected by the proposed detours and determined that most of the motorists who use the SR-60/WLC Pkwy interchange to travel to or from places west of Redlands Boulevard would experience little if any delay as a result of the interchange closure. In fact, the extension of Eucalyptus Avenue will decrease the distance and travel time for the largest group of interchange users (i.e., the Skechers distribution facility). Road detours would result in minor travel delays for some local residents, businesses, and commuters; however, such delays would be limited to 5 minutes or less. In addition, during final design, a Transportation Management Plan (TMP) will be prepared to address detours. Appropriate detour signage will be developed for the Build Alternatives. Therefore, no substantial disruptions to the local neighborhoods in the Community Impacts Study Area are anticipated under either of the Build Alternatives.

Demolition of the existing WLC Pkwy Overcrossing and erection/removal of falsework for the new WLC Pkwy Overcrossing would require full closure of both the eastbound and westbound SR-60 mainline lanes on three separate occasions. Mainline closures would occur during either nighttime or weekend hours to avoid disruption of peak-hour traffic flows to the greatest extent possible. During mainline closures, regional traffic is anticipated to divert to Interstate 10 (I-10). Final detour routes will be determined during the final design of the Build Alternatives. Prior to the

closure of SR-60, signage would notify motorists eastbound and westbound of the closure and its associated detour routes.

Construction impacts would be minimized through compliance with the California Department of Transportation (Caltrans) standards for noise, emissions, and temporary construction easements (TCEs), and City of Moreno Valley standards for construction noise (for work within local jurisdictional boundaries) as well as implementation of a public outreach program. As described in Project Feature PF-TR-1 in Section 2.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, of this IS/EA, the TMP would address short-term access and circulation effects during construction. Therefore, compliance with the Caltrans and City of Moreno Valley standards for construction noise and implementation of Project Feature PF-TR-1 would minimize effects to circulation and access from project construction.

Nevertheless, construction-related closures could impede movements in the Community Impacts Study Area, which would result in temporary effects to community character and cohesion. Although community members could still utilize community services and facilities during the construction period, there would be some degree of inconvenience due to construction-related delays, temporary closures, and construction equipment operation.

Design Variations 2a and 6a

Design Variations 2a and 6a would have the same features as Alternatives 2 and 6 (the Locally Preferred Alternative [LPA]), respectively, with the exception of the location of the Eucalyptus Avenue/WLC Pkwy intersection. Design Variations 2a and 6a would consist of moving the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 feet (ft) south of its current location. The shift would cause a partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect with the west side of WLC Pkwy. Under Design Variation 6a, construction of the roundabout at WLC Pkwy and Eucalyptus Avenue east would result in one residential displacement in the southeast quadrant of WLC Pkwy and Eucalyptus Avenue east.

Design Variations 2a and 6a would have similar construction-related noise, air quality, and short-term access and circulation effects as the Build Alternatives. Please refer to the discussion of temporary construction impacts to community character and cohesion for the Build Alternatives above.

Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include modifications to the SR-60/WLC Pkwy interchange other than routine maintenance. Long-range operational deficiencies are anticipated for the SR-60/WLC Pkwy interchange given the forecasted growth in the Community Impacts Study Area. Under the No Build Alternative, future operational deficiencies would occur and would result in increased congestion in the project area and Community Impacts Study Area. Future increases in traffic congestion under the No Build Alternative would negatively affect community character in the project area and Community Impacts Study Area and result in permanent impacts to community character and cohesion.

Alternative 2 (Modified Partial Cloverleaf)

Figure 2.4-2, shows the full and partial property acquisitions that would be required under Alternative 2. Table 2.4.8, provided later, lists those full and partial property acquisitions as well as the permanent easements that would be required under Alternative 2 by their Assessor's Parcel Number (APN). As shown on Figure 2.4-2, Sheet 6 of 9), Alternative 2 would not displace any residents. Therefore, Alternative 2 would not divide an existing neighborhood or fragment a cohesive community.

As shown on Figure 2.4-2, Alternative 2 would not displace any businesses. Therefore, there would be no impacts to community character and cohesion as a result of business displacements.

Alternative 6 (LPA) (Modified Cloverleaf Interchange with Roundabout Intersections)

Figure 2.4-3 shows the parcel acquisitions that would be required under Alternative 6 (LPA). Table 2.4.10, provided later, lists those full and partial property acquisitions as well as the permanent easements that would be required under Alternative 6 (LPA) by their APN. Similar to Alternative 2, Alternative 6 (LPA) would not displace any residents (refer to Sheet 6 of 9 of Figure 2.4-3). No business displacements would occur under Alternative 6 (LPA). Therefore, Alternative 6 (LPA) would not result in impacts to community character and cohesion due to residential and business displacements.

Design Variation 2a (Alternative 2 with Design Variation)

Figure 2.4-4 shows the parcel acquisitions and easements that would be required under Design Variation 2a. Table 2.4.12, provided later, lists those full and partial property acquisitions as well as permanent easements by their APN. Similar to Alternative 2, Design Variation 2a would not displace any residents (refer to Sheet 6 of 9 of Figure 2.4-4). Therefore, Design Variation 2a would not result in substantial community character and cohesion impacts.

Design Variation 6a (Alternative 6 [LPA] with Design Variation)

Figure 2.4-5 shows the parcel acquisitions and easements that would be required under Design Variation 6a. Table 2.4.14, provided later, lists those full and partial property acquisitions as well as permanent easements by their APN. Design Variation 6a would potentially displace one residence (refer to Sheet 6 of 9 of Figure 2.4-5). This residence is in a relatively isolated area that does not demonstrate a high degree of community cohesion. The residents living on this property (which would be acquired) would be provided with relocation assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) to assist them in relocating to other residential areas. (A summary of the relocation benefits pursuant to the Uniform Act is provided in Appendix B.) According to the 2018 *Draft Relocation Impact Memorandum* (December 2018) prepared for the project, adequate replacement housing exists in Moreno Valley for the existing residents to relocate within this community. Due to the fragmented and rural nature of the affected residential community, and the limited number of residential relocations (only one would be required) and cohesion indicated by the existing demographic profile, the single residential relocation under Design Variation 6a would not divide an existing neighborhood or fragment a

cohesive community. Therefore, the residential relocation under Design Variation 6a would not result in substantial community character and cohesion impacts.

2.4.1.4 Avoidance, Minimization, and/or Mitigation Measures

Because potential temporary adverse impacts to community character and cohesion would be addressed by Project Feature PF-TR-1 and no potential permanent impacts to community character and cohesion are anticipated, no avoidance, minimization, and/or mitigation measures are necessary.

2.4.2 Relocations and Real Property Acquisition

2.4.2.1 Regulatory Setting

The Department's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix C for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, persons with disabilities, religion, age, or sex. Please see Appendix A for a copy of the Caltrans Title VI Policy Statement.

2.4.2.2 Affected Environment

This section is based on information regarding relocations and displacement impacts from the *Community Impact Assessment* (March 2019) and the *Draft Relocation Impact Memorandum* (December 2018) prepared for the proposed project.

Refer to Section 2.4.1.2, Affected Environment, for a brief description of the Community Impacts Study Area. Any property acquisitions and easements required for the Build Alternatives and Design Variations 2a and 6a would be included within the Community Impacts Study Area. None of the households or public facilities in the Community Impacts Study Area are known to have special composition (e.g., ethnicity, minority status, age, disability, or other factors) that would require special relocation considerations.

2.4.2.3 Environmental Consequences

Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area and therefore would not require TCEs.

Alternatives 2 and 6 (LPA) (Build Alternatives)

As shown on Figures 2.4-2 and 2.4-3, respectively, Alternatives 2 and 6 (LPA) would require TCEs. The TCEs needed for Alternatives 2 and 6 (LPA) are summarized later

in Table 2.4.8 and Table 2.4.10, respectively. Those easements would not change existing or approved land uses in the project area or Community Impacts Study Area.

As specified in Project Feature PF-LU-1 in Section 2.1, Land Use, all land temporarily used for construction would be returned to a condition equal to the pre-construction staging condition. After construction, all of the TCEs would be restored to their original pre-project conditions. TCEs would not require businesses, employees, or residents to relocate. Owners of the parcels affected by TCEs would be compensated for temporary use of their properties during construction. For these reasons, temporary right-of-way acquisition impacts are not anticipated to be substantial.

Design Variations 2a and 6a

As shown on Figures 2.4-4 and 2.4-5, respectively, Design Variations 2a and 6a would also require TCEs. The TCEs needed for Design Variations 2a and 6a are summarized later in Table 2.4.12 and Table 2.4.14, respectively. Those easements would not change existing or approved land uses in the project area or Community Impacts Study Area. As discussed above, Project Feature PF-LU-1 would require all land temporarily used for construction to be returned to a condition equal to the pre-construction staging condition. For these reasons, temporary right-of-way acquisition impacts are not anticipated to be adverse.

Permanent Impacts

Alternative 1 (No Build Alternative)

Under the No Build Alternative, the proposed improvements to the SR-60/WLC Pkwy interchange would not occur. However, the planned projects described in Table 2.1.2 in Section 2.1, Land Use, would still occur and are likely to result in some property acquisitions and changes to the City's property and sales tax base. These acquisitions are likely to be fewer than the number of acquisitions under the Build Alternatives and Design Variations 2a and 6a, and the planned projects would result in land use changes that would increase the City's property and sales tax base.

Alternative 2 (Modified Partial Cloverleaf)

As shown on Figure 2.4-2, Alternative 2 would require the full acquisition of 6 properties and partial acquisition of 27 properties, totaling 1,897,514square feet (sf) (or 44 acres [ac]) of land. The land acquired for Alternative 2 would be permanently incorporated into the State-owned right-of-way for SR-60 or City-owned right-of-way along the City streets improved under Alternative 2, as appropriate.

Potential full acquisitions under Alternative 2 would not acquire residential land but would acquire 13.6 ac of vacant land. Residents and businesses in the vicinity of the interchange would benefit from improved interchange operations and reduced traffic congestion in the area after project construction.

Alternative 2 would also require 21 ac of land for permanent slope easements. The permanent easements needed for Alternative 2 are summarized in Table 2.4.8.

None of the partial or full acquisitions associated with Alternative 2 would cause sales-tax-generating businesses to be relocated; therefore, no potential loss of sales tax revenue would occur.

Table 2.4.8 Alternative 2 Parcel Acquisitions

APN	Property Type	TCE (square feet)	Full/Partial Acquisition	Permanent Acquisition (square feet)	Slope Easement (square feet)
488260028	Vacant		Partial	3,167	8,111
488260029	Vacant	26,521	Partial	9,724	
488260030	Vacant	42,072	Partial	31,953	
488260036	Vacant		Partial	21,101	92,745
488260037	Vacant		Full	311,929	
488260035	Vacant		Partial	229,853	
488260033	Vacant		Partial	66,457	
488260031	Vacant		Partial	32,824	
488260022	Vacant		Partial	9,116	
488260018	Vacant		Partial	10,939	
488260014	Vacant		Partial	20,179	
488260012	Vacant		Partial	4,027	
422020009	Vacant				3,814
422020003	Vacant	7,671			
422020004	Residential	10,789			
422020005	Residential	5,181			
422020006	Residential	5,164			
422020007	Residential	8,917			
422020010	Residential	176,524			
422040008	Residential	252	Partial	20,941	
488260001	Vacant	1,811			
Public ROW	Public ROW		Partial	1,587	
422040009	Vacant		Partial	687,567	36,250
422040010	Vacant		Partial	22,908	144,148
422040014	Commercial		Partial	22.986	182,307
422040015	Vacant		Partial	3,271	27,895
478220001	Residential	4,791	Partial	5,859	
488350010	Vacant	3,594	Partial	14,833	16,230
488350019	Residential		Partial	18,254	120,827
488350021	Vacant	41,791			
488350023	Vacant	39,126			
488350025	Vacant	37,865			
488350015	Vacant	152,154			
488350030	Vacant	19,853	Partial	1,376	
488350027	Vacant	11,859			
488350040	Vacant	3,386			
488350036	Vacant	1,826			
488350037	Vacant	28,432			
488350035	Vacant	16,429			
488350044	Public	35,751			
488350041	Commercial	108,861			98,242
488350047	Vacant	8,738			205,944
488350048	Vacant		Full	14,375	
488350049	Vacant		Full	9,904	
488350051	Vacant		Full	226,512	
488350050	Vacant		Full	18,240	
488350046	Vacant		Full	9,583	
488350045	Vacant		Partial	43,576	
488350038	Vacant		Partial	3,530	
488350033	Vacant		Partial	13,082	
488350028	Vacant		Partial	7,709	
487470030	Vacant	636,791			
478230008	Vacant	9,051			
422080001	Vacant	3,774	Partial	80	
422080002	Vacant	3,328			
422130002	Vacant	8,518	Partial	71	
423260005	Vacant	7,769			
422150007	Vacant	2,232			
422150008	Vacant	4,950			

Table 2.4.8 Alternative 2 Parcel Acquisitions

APN	Property Type	TCE (square feet)	Full/Partial Acquisition	Permanent Acquisition (square feet)	Slope Easement (square feet)
422160008	Vacant	252			
422160010	Vacant	3,414			
Total	8 Residential 2 Commercial	1,479,436	6 Full 27 Partial	1,897,514	936,513

Source: *Community Impact Assessment* (March 2019).
APN = Assessor's Parcel Number
TCE = temporary construction easement

Property Tax Loss

Alternative 2 would fully acquire 6 parcels and partially acquire 27 parcels. Of the 27 partially acquired parcels or partial acquisitions under Alternative 2, 3 parcels are publicly owned and therefore do not generate property tax revenue. As shown in Table 2.4.9, the parcel acquisitions required for Alternative 2 would result in the loss of an estimated $577 in annual property tax revenue for the City of Moreno Valley, which would represent approximately 0.0032 percent of the City's total annual property tax revenue. Alternative 2 would also result in the loss of an estimated $1,516 in annual property tax revenue for the County of Riverside, which would represent approximately 0.00041 percent of the County's total annual property tax revenue.

Table 2.4.9 Estimated Annual Property Tax Loss Under Alternative 2

Jurisdiction	Property Tax Revenue (Fiscal Year 2016-17)[1,2]	Estimated Property Tax Loss[3]	Percent of Total Annual Property Tax Revenue Loss
City of Moreno Valley	$18,234,000	$577	0.0032
County of Riverside	$367,937,000	$1,516	0.00041

Source: *Community Impact Assessment* (March 2019).
[1] City of Moreno Valley, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017, http://www.moval.org/city_hall/departments/fin-man-serv/fin-pdf/mv2017cafr-v2.pdf, accessed October 28, 2018.
[2] Riverside County, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017, https://www.auditorcontroller.org/Portals/0/Documents/publications/FinancialPub/cafr/CAFR_2017/CAFR_FINAL_FY17.pdf?ver=2018-01-29-133526-440, accessed October 28, 2018.
[3] Tax revenue losses were calculated based on the Fiscal Year 2017-18 property tax roll.

Alternative 6 (LPA) (Modified Partial Cloverleaf with Roundabout Intersections)

As shown on Figure 2.4-3 and in Table 2.4.10, Alternative 6 (LPA) would require the full acquisition of 6 properties and partial acquisition of 29 properties, totaling 1,953,105 sf (or 45 ac) of land, slightly more than for Alternative 2. Approximately 45 ac of land would be required for acquisitions and 21 ac of land would be required for slope easements; therefore, Alternative 6 (LPA) would have slightly greater land use impacts than under Alternative 2. The permanent easements needed for Alternative 6 (LPA) are summarized in Table 2.4.10.

Table 2.4.10 Alternative 6 (LPA) Parcel Acquisitions

APN	Property Type	TCE (square feet)	Full/Partial Acquisition	Permanent Acquisition (square feet)	Slope Easement (square feet)
488260028	Vacant		Partial	3,167	8,111
488260029	Vacant	27,339	Partial	8,906	
488260030	Vacant	46,003	Partial	28,022	
488260036	Vacant		Partial	30,452	83,397
488260037	Vacant		Full	311,929	
488260035	Vacant		Partial	229,853	
488260033	Vacant		Partial	66,457	
488260031	Vacant		Partial	32,824	
488260022	Vacant		Partial	9,116	
488260018	Vacant		Partial	10,939	
488260014	Vacant		Partial	20,179	
488260012	Vacant		Partial	4,027	
422020009	Vacant				3,814
422020003	Vacant	7,830			
422020004	Residential	11,547			
422020005	Residential	5,769			
422020006	Residential	5,898			
422020007	Residential	10,190			
422020010	Residential	168,985	Partial	23,171	
422040008	Residential		Partial	21,193	
488260001	Vacant	1,811			
Public ROW	Public ROW		Partial	1,587	
422040009	Vacant		Partial	686,937	36,874
422040010	Vacant		Partial	40,961	126,200
422040014	Commercial		Partial	22,702	182,576
422040015	Vacant		Partial	3,141	28,022
478220001	Residential	4,791	Partial	5,859	
488350010	Vacant	3,594	Partial	14,833	16,230
488350019	Residential		Partial	25,348	113,734
488350021	Vacant	41,791			
488350023	Vacant	39,126			
488350025	Vacant	37,865			
488350015	Vacant	152,154			
488350030	Vacant	19,853	Partial	1376	
488350027	Vacant	11,859			
488350040	Vacant	3,386			
488350036	Vacant	1,826			
488350037	Vacant	28,432			
488350035	Vacant	16,429			
488350044	Public	35,751			
488350041	Commercial	108,861			98,242
488350047	Vacant	8,738	Partial	3,507	202,394
488350048	Vacant		Full	14,344	
488350049	Vacant		Full	9,891	
488350051	Vacant		Full	226,512	
488350050	Vacant		Full	18,240	
488350046	Vacant		Full	9,583	
488350045	Vacant		Partial	43,576	
488350038	Vacant		Partial	3,530	
488350033	Vacant		Partial	13,082	
488350028	Vacant		Partial	7,709	
487470030	Vacant	636,791			
478230008	Vacant	9,051			
422080001	Vacant	3,774	Partial	80	
422080002	Vacant	3,328			
422130002	Vacant	8,518	Partial	71	
423260005	Vacant	7,769			
422150007	Vacant	2,232			
422150008	Vacant	4,950			

Table 2.4.10 Alternative 6 (LPA) Parcel Acquisitions

APN	Property Type	TCE (square feet)	Full/Partial Acquisition	Permanent Acquisition (square feet)	Slope Easement (square feet)
422160008	Vacant	252			
422160010	Vacant	3,414			
Total	8 Residential 2 Commercial	1,479,905	6 Full 29 Partial	1,953,105	899,594

Source: *Community Impact Assessment* (March 2019).
APN = Assessor's Parcel Number
TCE = temporary construction easement

Similar to Alternative 2, none of the partial or full acquisitions associated with Build Alternative 6 (LPA) would cause sales-tax-generating businesses to be relocated; therefore, no potential loss of sales tax revenue would occur.

Property Tax Loss

Alternative 6 (LPA) would fully acquire 6 parcels and would partially acquire 29 parcels, including the same publicly owned parcels that would be partially acquired under Alternative 2. As shown in Table 2.4.11, the parcel acquisitions required for Alternative 6 (LPA) would result in a loss of $606 in property taxes to the City of Moreno Valley and $1,600 in annual property tax revenue to the County of Riverside. In comparison to the overall property tax revenue collected by the City and County, these losses would represent similar losses to Alternative 2.

Table 2.4.11 Estimated Annual Property Tax Loss Under Alternative 6 (LPA)

Jurisdiction	Property Tax Revenue (Fiscal Year 2016-17)[1,2]	Estimated Property Tax Loss[3]	Percent of Total Annual Property Tax Revenue Loss
City of Moreno Valley	$18,234,000	$606	0.0033
County of Riverside	$367,937,000	$1,600	0.00043

Source: *Community Impact Assessment* (March 2019).
1 City of Moreno Valley, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017, http://www.moval.org/city_hall/departments/fin-man-serv/fin-pdf/mv2017cafr-v2.pdf, accessed October 28, 2018.
2 Riverside County, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017, https://www.auditorcontroller.org/Portals/0/Documents/publications/FinancialPub/cafr/CAFR_2017/CAFR_FINAL_FY17.pdf?ver=2018-01-29-133526-440, accessed October 28, 2018.
3 Tax revenue losses were calculated based on the Fiscal Year 2017-18 property tax roll.

Design Variation 2a (Alternative 2 with Design Variation)

As shown on Figure 2.4-4 and in Table 2.4.12, Design Variation 2a would require the full acquisition of 6 properties and partial acquisition of 32 properties, totaling 2,191,813 sf (or 50 ac) of land, more than for either Alternative 2 or Alternative 6 (LPA). The land acquired for Design Variation 2a would be permanently incorporated into the State-owned right-of-way for SR-60 or City-owned right-of-way along the City streets improved under Design Variation 2a, as appropriate. Approximately 50 ac of land would be required for acquisitions; therefore, under Design Variation 2a, there would be greater real property acquisition impacts than under either Alternative 2 or

Table 2.4.12 Design Variation 2a Parcel Acquisitions

APN	Property Type	TCE (square feet)	Full/Partial Acquisition	Permanent Acquisition (square feet)	Slope Easement (square feet)
488260028	Vacant		Partial	3,167	8,111
488260029	Vacant	26,521	Partial	9,724	
488260030	Vacant	42,072	Partial	31,953	
488260036	Vacant		Partial	21,101	92,745
488260037	Vacant		Full	311,929	
488260035	Vacant		Partial	229,853	
488260033	Vacant		Partial	66,457	
488260031	Vacant		Partial	32,824	
488260022	Vacant		Partial	9,116	
488260018	Vacant		Partial	10,939	
488260014	Vacant		Partial	20,179	
488260012	Vacant		Partial	4,027	
422020009	Vacant				3,814
422020003	Vacant	7,671			
422020004	Residential	10,789			
422020005	Residential	5,181			
422020006	Residential	5,164			
422020007	Residential	8,917			
422020010	Residential	176,524			
422040008	Residential	252	Partial	20,941	
488260001	Vacant	1,811			
Public ROW	Public ROW		Partial	1,587	
422040009	Vacant		Partial	687,546	36,265
422040010	Vacant		Partial	26,485	140,666
422040014	Commercial		Partial	36,002	190,322
422040015	Vacant		Partial	5,085	33,888
422070029	Residential	2,461	Partial	1,001	
422070031	Vacant	1,162			
422070032	Residential	1,155			
422070033	Vacant	2,302			
478220001	Vacant	5,618	Partial	10,434	
488350009	Vacant		Partial	54,914	89,115
488350010	Vacant	2,126	Partial	92,466	179,482
488350019	Vacant		Partial	17,478	331,183
488350021	Vacant		Partial	28,851	339,706
488350023	Vacant		Partial	88,700	142,614
488350025	Vacant		Partial	21,014	55,928
488350015	Vacant	152,154			
488350030	Vacant	19,853	Partial	1,376	
488350027	Vacant	11,859			
488350040	Vacant	3,386			
488350036	Vacant	1,826			
488350037	Vacant	28,432			
488350035	Vacant	16,429			
488350044	Public ROW	35,751			
488350041	Commercial	27,954			98,242
488350043	Vacant	20,000			
488350047	Vacant				206,000
488350048	Vacant		Full	14,375	
488350049	Vacant		Full	9,904	
488350051	Vacant		Full	226,512	
488350050	Vacant		Full	18,240	
488350046	Vacant		Full	9,583	

Table 2.4.12 Design Variation 2a Parcel Acquisitions

APN	Property Type	TCE (square feet)	Full/Partial Acquisition	Permanent Acquisition (square feet)	Slope Easement (square feet)
488350045	Vacant		Partial	43,576	
488350038	Vacant		Partial	3,530	
488350033	Vacant		Partial	13,082	
488350028	Vacant		Partial	7,709	
487470030	Vacant	636,791			
478230008	Vacant	9,051			
422080001	Vacant	3,774	Partial	80	
422080002	Vacant	3,328			
422130002	Vacant	8,518	Partial	71	
423260005	Vacant	7,769			
422150007	Vacant	2,232			
422150008	Vacant	4,950			
422160008	Vacant	252			
422160010	Vacant	3,414			
Total	8 Residential 2 Commercial	1,297,449	6 Full 32 Partial	2,191,813	1,948,080

Source: *Community Impact Assessment* (March 2019).
APN = Assessor's Parcel Number
TCE = temporary construction easement

Alternative 6 (LPA). Design Variation 2a would also require 45 ac of land for permanent slope easements. The permanent easements needed for Design Variation 2a are summarized in Table 2.4.12.

Property Tax Loss

Design Variation 2a would fully acquire 6 parcels and would partially acquire 32 parcels, including the same publicly owned parcels that would be partially acquired under Alternative 2. As shown in Table 2.4.13, the parcel acquisitions required for Design Variation 2a would result in a loss of $877 in property taxes to the City of Moreno Valley and $2,304 in annual property tax revenue to the County of Riverside. In comparison to the overall property tax revenue collected by the City and County, these losses would represent similar losses to Alternative 2.

Table 2.4.13 Estimated Annual Property Tax Loss Under Alternative 2a

Jurisdiction	Property Tax Revenue (Fiscal Year 2016-17)[1,2]	Estimated Property Tax Loss[3]	Percent of Total Annual Property Tax Revenue Loss
City of Moreno Valley	$18,234,000	$877	0.0048
County of Riverside	$367,937,000	$2,304	0.00063

Source: *Community Impact Assessment* (March 2019)

1 City of Moreno Valley, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017, http://www.moval.org/city_hall/departments/fin-man-serv/fin-pdf/mv2017cafr-v2.pdf, accessed October 28, 2018.

2 Riverside County, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017, https://www.auditorcontroller.org/Portals/0/Documents/publications/FinancialPub/cafr/CAFR_2017/CAFR_FINAL_FY17.pdf?ver=2018-01-29-133526-440, accessed October 28, 2018.

3 Tax revenue losses were calculated based on the Fiscal Year 2017-18 property tax roll.

Design Variation 6a (Alternative 6 [LPA] with Design Variation)

As shown on Figure 2.4-5 and in Table 2.4.14, Design Variation 6a would require the full acquisition of 7 properties and partial acquisition of 34 properties, totaling 2,362,284 sf (or 54 ac) of land, slightly more than for Design Variation 2a. The land acquired for Design Variation 6a would be permanently incorporated into the State-owned right-of-way for SR 60 or City-owned right-of-way along the City streets improved under Design Variation 6a, as appropriate. Approximately 54 ac of land would be required for acquisitions; therefore, there would be greater real property acquisition impacts than under either of the Build Alternatives or Design Variation 2a. Design Variation 6a would require 45 ac of land for permanent slope easements.

Design Variation 6a would result in one full acquisition of a residential parcel resulting in a residential relocation that would not be required under the either of the Build Alternatives or Design Variation 2a.

As set forth in the *Draft Relocation Impact Memorandum* (December 2018), all activities will be conducted in accordance with the Uniform Act. Project Feature PF-REL-1 will be implemented to minimize relocations and displacement impacts:

PF-REL-1 Caltrans and the City will comply with the Uniform Act (Public Law 91-646, 84 Statutes 1894) as applicable and provide all affected property owners with a copy of the act. The Uniform Act mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced by its project. The Uniform Act also provides for uniform and equitable treatment by federal or federally assisted programs of persons displaced from their homes, businesses, or farms, and establishes uniform and equitable land acquisition policies.

Where acquisition and relocation are unavoidable, the provisions of the Uniform Act would be followed. An independent appraisal of the affected property will be obtained, and an offer for the full appraisal would be made.

The Uniform Act requires that comparable, decent, safe, and sanitary replacement housing that is within a person's financial means be made available before that person may be displaced. In the event that such replacement housing is not available for persons displaced by the project within the statutory limits for replacement housing payments, last resort housing may be provided in a number of prescribed ways. A summary of the relocation benefits pursuant to the Uniform Act is provided in Appendix B.

Property Tax Loss

Design Variation 6a would fully acquire 7 parcels and would partially acquire 34 parcels, including the same publicly owned parcels that would be partially acquired under Design Variation 2a. As shown in Table 2.4.15, the parcel acquisitions required for Design Variation 6a would result in a loss of $911 in property taxes to the City of Moreno Valley and $2,399 in annual property tax

Table 2.4.14 Design Variation 6a Parcel Acquisitions

APN	Property Type	TCE (square feet)	Full/Partial Acquisition	Permanent Acquisition (square feet)	Slope Easement (square feet)
488260028	Vacant		Partial	3,167	8,111
488260029	Vacant	25,274	Partial	8,906	
488260030	Vacant	46,003	Partial	28,022	
488260036	Vacant		Partial	30,452	83,397
488260037	Vacant		Full	311,929	
488260035	Vacant		Partial	229,853	
488260033	Vacant		Partial	66,457	
488260031	Vacant		Partial	32,824	
488260022	Vacant		Partial	9,116	
488260018	Vacant		Partial	10,939	
488260014	Vacant		Partial	20,179	
488260012	Vacant		Partial	4,027	
422020009	Vacant				3,814
422020003	Vacant	7,830			
422020004	Residential	11,547			
422020005	Residential	5,769			
422020006	Residential	5,898			
422020007	Residential	10,190			
422020010	Residential	168,985	Partial	23,171	
422040008	Residential		Partial	21,193	
488260001	Vacant	1,811			
Public ROW	Public ROW		Partial	1,587	
422040009	Vacant		Partial	686,680	37,131
422040010	Vacant		Partial	20,854	146,297
422040014	Commercial		Partial	33,399	192,925
422040015	Vacant		Partial	12,430	26,544
422070029	Residential		Full	114,998	
422070031	Vacant	798	Partial	1,322	
422070032	Residential	763	Partial	1,028	
422070033	Vacant	979	Partial	474	
478220001	Vacant	5,901	Partial	9,417	
488350009	Vacant		Partial	54,914	89,115
488350010	Vacant		Partial	121,228	178,443
488350019	Vacant		Partial	17,114	331,547
488350021	Vacant		Partial	28,851	339,706
488350023	Vacant		Partial	88,700	142,614
488350025	Vacant		Partial	21,014	55,928
488350015	Vacant	152,154			
488350030	Vacant	19,853	Partial	1,376	
488350027	Vacant	11,859			
488350040	Vacant	3,386			
488350036	Vacant	1,826			
488350037	Vacant	28,432			
488350035	Vacant	16,429			
488350044	Public ROW	35,751			
488350041	Commercial	27,954			98,242
488350043	Vacant	20,000			
488350047	Vacant				206,000
488350048	Vacant		Full	14,375	
488350049	Vacant		Full	9,904	
488350051	Vacant		Full	226,512	
488350050	Vacant		Full	18,240	
488350046	Vacant		Full	9,583	
488350045	Vacant		Partial	43,576	
488350038	Vacant		Partial	3,530	
488350033	Vacant		Partial	13,082	
488350028	Vacant		Partial	7,709	
487470030	Vacant	636,791			
478230008	Vacant	9,051			

Table 2.4.14 Design Variation 6a Parcel Acquisitions

APN	Property Type	TCE (square feet)	Full/Partial Acquisition	Permanent Acquisition (square feet)	Slope Easement (square feet)
422080001	Vacant	3,774	Partial	80	
422080002	Vacant	3,328			
422130002	Vacant	8,518	Partial	71	
423260005	Vacant	7,769			
422150007	Vacant	2,232			
422150008	Vacant	4,950			
422160008	Vacant	252			
422160010	Vacant	3,414			
Total	8 Residential 2 Commercial	1,291,534	7 Full 34 Partial	2,362,284	1,939,813

Source: Community Impact Assessment (March 2019).
APN = Assessor's Parcel Number
TCE = temporary construction easement

Table 2.4.15 Estimated Annual Property Tax Loss Under Alternative 6a

Jurisdiction	Property Tax Revenue (Fiscal Year 2016-17)[1,2]	Estimated Property Tax Loss[3]	Percent of Total Annual Property Tax Revenue Loss
City of Moreno Valley	$18,234,000	$911	0.0050
County of Riverside	$367,937,000	$2,399	0.00065

Source: *Community Impact Assessment* (March 2019).
[1] City of Moreno Valley, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017, http://www.moval.org/city_hall/departments/fin-man-serv/fin-pdf/mv2017cafr-v2.pdf, accessed October 28, 2018.
[2] Riverside County, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2017, https://www.auditorcontroller.org/Portals/0/Documents/publications/FinancialPub/cafr/CAFR_2017/CAFR_FINAL_FY17.pdf?ver=2018-01-29-133526-440, accessed October 28, 2018.
[3] Tax revenue losses were calculated based on the Fiscal Year 2017-18 property tax roll.

revenue to the County of Riverside. In comparison to the overall property tax revenue collected by the City and County, these losses would represent similar losses to Alternative 6 (LPA).

2.4.2.4 Avoidance, Minimization, and/or Mitigation Measures

Because potential temporary and permanent adverse impacts related to relocations and real property acquisitions would be addressed through implementation of project features (PF-LU-1 and PF-REL-1), no avoidance, minimization, and/or mitigation measures are necessary.

Availability of Replacement Housing

All relocation impacts would occur in Moreno Valley. In 2016, Moreno Valley had an estimated vacancy rate of 5.9 percent (approximately 3,224 units). According to the *Draft Relocation Impact Memorandum* (December 2018) prepared for the proposed project, an estimated 32.9 percent of the vacant housing units were available for rent (approximately 1,061 units), and an estimated 13.9 percent were for sale (approximately 449 units). Based on the estimated vacant housing units available for

rent and for sale in 2016,[1] there would be sufficient vacant residential replacement properties available that are equal to or better than the displaced residential property under Design Variation 6a.

2.4.3 Environmental Justice

2.4.3.1 Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines; for 2016, this was $24,300 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this project. The Department's commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix A of this document.

2.4.3.2 Affected Environment

This section is based on information from the *Community Impact Assessment* (March 2019). The Council on Environmental Quality (CEQ), which is an advisory body that has oversight of the federal government's compliance with EO 12898 and NEPA, has developed guidance for implementing environmental justice under NEPA.[2] The CEQ guidance recommends identifying minority populations where either (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. The CEQ guidance also recommends identifying low-income populations in an affected area by applying the annual statistical poverty thresholds from the United States Census Bureau Current Population Reports, Series P-60 on Income and Poverty.

In January 2003, Caltrans published the *Desk Guide – Environmental Justice in Transportation Planning and Investments* (Desk Guide), which provides information and examples of ways to promote environmental justice to those involved in making decisions about California's transportation system.[3] The Desk Guide notes that

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1 American Community Survey 2012–2016 5-Year Estimates. Website: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml, accessed July 23, 2018.

2 Council on Environmental Quality, "Environmental Justice under the National Environmental Policy Act," December 10, 1997. Website: https://ceq.doe.gov/docs/ceq-regulations-and-guidance/regs/ej/justice.pdf, accessed October 8, 2017.

3 California Department of Transportation, *Desk Guide – Environmental Justice in Transportation Planning and Investments*, January 2003. Website: http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/EnvironmentalJusticeDeskGuideJan2003.pdf, accessed October 8, 2017.

transportation agencies, particularly those in a state as diverse as California, may need to adapt the regulatory definitions of low-income and minority populations to conduct a meaningful analysis. In regions with high minority and low-income populations, for example, use of the standard definitions to define such populations could result in selection of most of the region. Because Riverside County contains substantial Hispanic/Latino and low-income populations (47.5 percent Hispanic/ Latino and 16.5 percent living below the poverty threshold established by the United States Census Bureau) and somewhat elevated racial minority populations (36.7 percent racial minorities), a different standard is required to identify those census tracts in the Community Impacts Study Area where minority and low-income populations are present in meaningfully greater percentages than the general population in the County.

The Desk Guide also notes that the low-income or minority threshold may also be adapted in order to make use of available data. For example, the United States Census Bureau determines the number of persons living below poverty based on its poverty thresholds, which differ slightly from the poverty guidelines defined by the DHHS. For 2016, the United States Census Bureau's preliminary weighted average poverty threshold for a family of four was $24,563.[1] For 2016, DHHS established a poverty guideline of $24,300 for a family of four.[2] Therefore, because the available census data related to persons living below the poverty level is based on the United States Census Bureau's poverty thresholds, as recommended in the CEQ guidance, this analysis identifies low-income populations that are meaningfully greater than the general population by applying the United States Census Bureau's poverty thresholds rather than the DHHS poverty guidelines.

This environmental justice analysis applies the following methodology to identify minority and low-income populations in Riverside County:

- Census tracts are considered to have substantial racial minority populations if the percentage of racial minority residents within them is more than 10 percentage points higher than Riverside County as a whole (i.e., 46.7 percent or higher).
- Census tracts are considered to have substantial Hispanic/Latino populations if the percentage of Hispanic/Latino residents within them is more than 10 percentage points higher than Riverside County as a whole (i.e., 57.5 percent or higher).
- Census tracts are considered to have substantial low-income populations if the percentage of residents within them who are living below the United States Census Bureau's defined poverty threshold is more than 5 percentage points higher than Riverside County as a whole (i.e., 21.5 percent or higher).

The environmental justice analysis was conducted using demographic information from the 2012–2016 ACS. The following populations were considered in assessing

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1 U.S. Census Bureau, Preliminary Estimate of Weighted Average Poverty Thresholds for 2016, August 11, 2017. Website: https://www2.census.gov/programs-surveys/cps/tables/time-series/historical-poverty-thresholds/thresh16.xls, accessed October 12, 2018.

2 United States Department of Health and Human Services, 2017 Poverty Guidelines. Website: https://aspe.hhs.gov/2017-poverty-guidelines, accessed January 3, 2019.

whether the Build Alternatives and Design Variations 2a and 6a would result in disproportionate impacts to environmental justice populations and whether those alternatives and design variations would result in benefits for those populations:

- **Racial Minority Population:** Defined as individuals who identify themselves as Black/African-American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, Some Other Race, or Two or More Races. As described in the methodology set forth above, Community Impacts Study Area census tracts are considered to have substantial racial minority populations if the aggregated percentage of racial minority residents within them is 46.7 percent or higher.

- **Hispanic/Latino Population:** Defined as individuals who identify themselves as being of Hispanic/Latino origin (a descriptor of ethnic origin who may be of any race). As described in the methodology set forth above, Community Impacts Study Area census tracts are considered to have substantial Hispanic/Latino populations if the percentage of Hispanic/Latino residents within them is 57.5 percent or higher.

- **Low-Income Population:** Pursuant to the methodology outlined above, low-income populations are those persons living below the poverty level as defined as the United States Census Bureau's poverty threshold. As described above, the United States Census Bureau's preliminary weighted average poverty threshold for a family of four was $24,563 for 2016. As described in the methodology set forth above, Community Impacts Study Area census tracts are considered to have substantial low-income populations if the percentage of persons living below the poverty level within them is 21.5 percent or higher.

The percentages of the racial minority, Hispanic, and low-income populations for each Community Impacts Study Area census tract, City of Moreno Valley, and the County are shown in Table 2.4.16. As identified in Table 2.4.16, the City of Moreno Valley has higher percentages of racial minorities (56.8 percent) and Hispanics (56.5 percent) than the County (36.7 and 47.5 percent, respectively). Census Tract 426.24 has higher percentages of racial minorities (60.5 percent) and Hispanics (53.2 percent) than the County. Census Tract 424.01 also has higher percentages of Hispanics (48.4 percent) than the County.

As shown in Table 2.4.16, the percentage of persons living below the poverty level in the City of Moreno Valley, Riverside County, and the Community Impacts Study Area census tracts varies. The City of Moreno Valley has a higher percentage of persons living below the poverty level (18.6 percent) than the County (16.5 percent). The percentages of persons living below the poverty level in Census Tracts 424.01 (4.9 percent) and 426.24 (13.9 percent) are lower than the County percentage. Both Census Tracts 424.01 ($74,934) and 426.24 ($85,286) have a higher median household income than the City of Moreno Valley and the County.

In summary, Census Tract 424.01 does not contain any substantial racial minority, Hispanic, or low-income populations. Census Tract 426.24 contains substantial racial minority populations.

Table 2.4.16 Minority and Low-Income Demographics

Jurisdiction/Area	Percent			Median Household Income[2]
	Racial Minorities[1]	Hispanics[1]	Below Poverty Level[2]	
Riverside County	36.7	47.5	16.5	$57,972
City of Moreno Valley	***56.8***	56.5	18.6	$56,456
Census Tract 424.01 (Unincorporated Riverside County/City of Moreno Valley)	28.0	48.4	4.9	$74,934
Census Tract 426.24 (Unincorporated Riverside County/City of Moreno Valley	***60.5***	53.2	13.9	$85,286

Note: ***Bold Italicized numbers*** indicate that values are substantially greater than those for the County. For racial minority populations, "substantially greater" means 10 percentage points higher than the percentage for the County (i.e., 46.7%). For Hispanic/Latino populations, "substantially greater" means 10 percentage points higher than the percentage for the County (i.e., 57.5%). For low-income populations, "substantially greater" means the poverty level is 5 percentage points higher than the percentage for the County (i.e., 21.5%).

[1] 2012-2016 American Community Survey, Table DP02. Racial minorities include individuals who identify themselves as Black/African-American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, Some Other Race, or two or more races on the American Community Survey. The Hispanic population is not considered a race but rather an ethnicity; therefore, Hispanics can be of any race.

[2] 2012–2016 American Community Survey, Table DP03.

2.4.3.3 Environmental Consequences

This project has been developed in accordance with Title VI of the Civil Rights Act of 1964, as amended, and EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. Title VI states that "No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." EO 12898 requires each federal agency (or its designee) to take the appropriate and necessary steps to identify and address "disproportionately high and adverse" effects of federal or federally funded projects on minority and low-income populations.

Consistent with this guidance, the environmental justice analysis for the Build Alternatives and Design Variations 2a and 6a describes: (1) the existing population in the Community Impacts Study Area and the presence of minority and low-income population groups in the Community Impacts Study Area; (2) potential adverse effects and measures to avoid or minimize those effects for all population groups, including minority and low-income population groups in the Community Impacts Study Area; (3) potential disproportionately high and adverse effects on minority and low-income population groups; and (4) community outreach and public involvement efforts (see Chapter 4).

Adverse Effects on Overall Population

Noise, air quality, traffic, water quality, hazardous waste, cultural resources, natural environment, and relocation impact technical studies have been conducted to determine the potential for the Build Alternatives and Design Variations to result in adverse effects on all segments of the general population, including minority and low-income population groups. These studies determined that impacts would not be adverse with compliance with Caltrans standards; local, State, and federal

regulations; avoidance, minimization, and mitigation measures, and Project Features.

Temporary Impacts

Construction activities associated with the Build Alternatives and Design Variations 2a and 6a would temporarily affect residents and businesses throughout the entire Community Impacts Study Area, including low-income and minority populations. Such impacts could include temporary disruption of local traffic patterns and access to residences and businesses during roadway closures as well as increased traffic congestion, noise levels, vibration, and dust. As specified in Project Feature PF-LU-1 in Section 2.1, Land Use, all land temporarily used for construction would be returned to a condition equal to the pre-construction staging condition. Impacts from dust and air pollution resulting from construction activities would be substantially minimized through implementation of project features to control excessive fugitive dust emissions, control emissions from construction vehicles, and adhere to Caltrans standard specifications for reducing air pollution during construction. In addition, noise resulting from construction activities would be substantially minimized through compliance with federal, State, and local regulations specified in the *Noise Study Report* (April 2019). As described in Project Feature PF-TR-1 in Section 2.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, a TMP would be developed and implemented to address short-term access and circulation effects during project construction. Nevertheless, construction-related closures could impede movement in the Community Impacts Study Area, which would result in temporary effects to community character and cohesion. However, these temporary construction effects would occur throughout the Community Impacts Study Area and would not disproportionately impact low-income and/or minority residents in the Community Impacts Study Area.

Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include modifications to the SR-60/WLC Pkwy interchange. There are no planned road modification/maintenance projects on local roadways within the interchange area or the Community Impacts Study Area.

Alternative 2 (Modified Partial Cloverleaf)

Alternative 2 would not result in any residential displacements; therefore, Alternative 2 would not substantially impact low-income and minority populations.

When compared to Alternative 6 (LPA), Alternative 2 requires the acquisition of fewer properties and has a slightly smaller footprint. Noise, air quality, and utilities impacts would be similar for both Build Alternatives because the project would add capacity at the interchange, and the footprint of each Build Alternative would involve relocation of the same utilities. All residents and workers in the vicinity of the project would experience changes to community character and visual quality following completion of the project. Because Alternative 2 would improve interchange operations in the long term, it would benefit all local populations.

Alternative 6 (LPA) (Modified Partial Cloverleaf with Roundabout Intersections)

Similar to Alternative 2, Alternative 6 (LPA) would not result in any residential displacements. Therefore, as with Alternative 2, Alternative 6 (LPA) would not substantially impact low-income and minority populations.

Compared to Alternative 2, Alternative 6 (LPA) requires the acquisition of a greater number of properties and has a slightly larger footprint. Noise, air quality, and utilities impacts would be similar for both Build Alternatives because the project would add capacity at the interchange, and the footprint of each Build Alternative would involve relocation of the same utilities. Similar to Alternative 2, all residents and workers in the vicinity of the project would experience changes to community character and visual quality following completion of Alternative 6 (LPA). Because Alternative 6 (LPA) would also improve interchange operations in the long term, it would also benefit all local populations.

Design Variation 2a (Alternative 2 with Design Variation)

Design Variation 2a would not result in any residential displacements. Therefore, as with the Build Alternatives, Design Variation 2a would not substantially impact low-income and minority populations.

Compared to the Build Alternatives, Design Variation 2a requires the acquisition of more properties and has a slightly larger footprint. Noise, air quality, and utilities impacts would be similar for both Build Alternatives and Design Variations 6a because the project would add capacity at the interchange, and the footprint of each Build Alternative and design variation would involve relocation of the same utilities. Similar to the Build Alternatives, all residents and workers in the vicinity of the project would experience changes to community character and visual quality following completion of Design Variation 2a. Because Design Variation 2a would also improve interchange operations in the long term, it would also benefit all local populations.

Design Variation 6a (Alternative 6 [LPA] with Design Variation)

Design Variation 6a would result in one residential displacement from Census Tract 426.24 in the City of Moreno Valley. Although Census Tract 426.24 contains substantial racial minority populations, given the low number of residential displacements, residential displacements from Design Variation 6a would not substantially impact low-income and minority populations.

Compared to Alternative 2, Alternative 6 (LPA), and Design Variation 2a, Design Variation 6a requires the acquisition of more properties and has a slightly larger footprint. Noise, air quality, and utilities impacts would be similar for both Build Alternatives and Design Variations 2a because the project would add capacity at the interchange, and the footprint of each Build Alternative and design variation would involve relocation of the same utilities. Design Variation 6a would result in similar changes to community character and visual quality following completion as the Build Alternatives and Design Variation 2a and would also improve interchange operations in the long term, benefitting all local populations.

2.4.3.4 Avoidance, Minimization, and/or Mitigation Measures

Potential temporary adverse impacts related to environmental justice would be addressed by Project Features (PF-TR-1 and PF-LU-1) and no potential permanent adverse impacts are anticipated. Therefore, no avoidance, minimization, and/or mitigation measures are necessary. Based on the above discussion and analysis, the Build Alternatives and Design Variations 2a and 6a would not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898. Therefore, no further environmental justice analysis is required.

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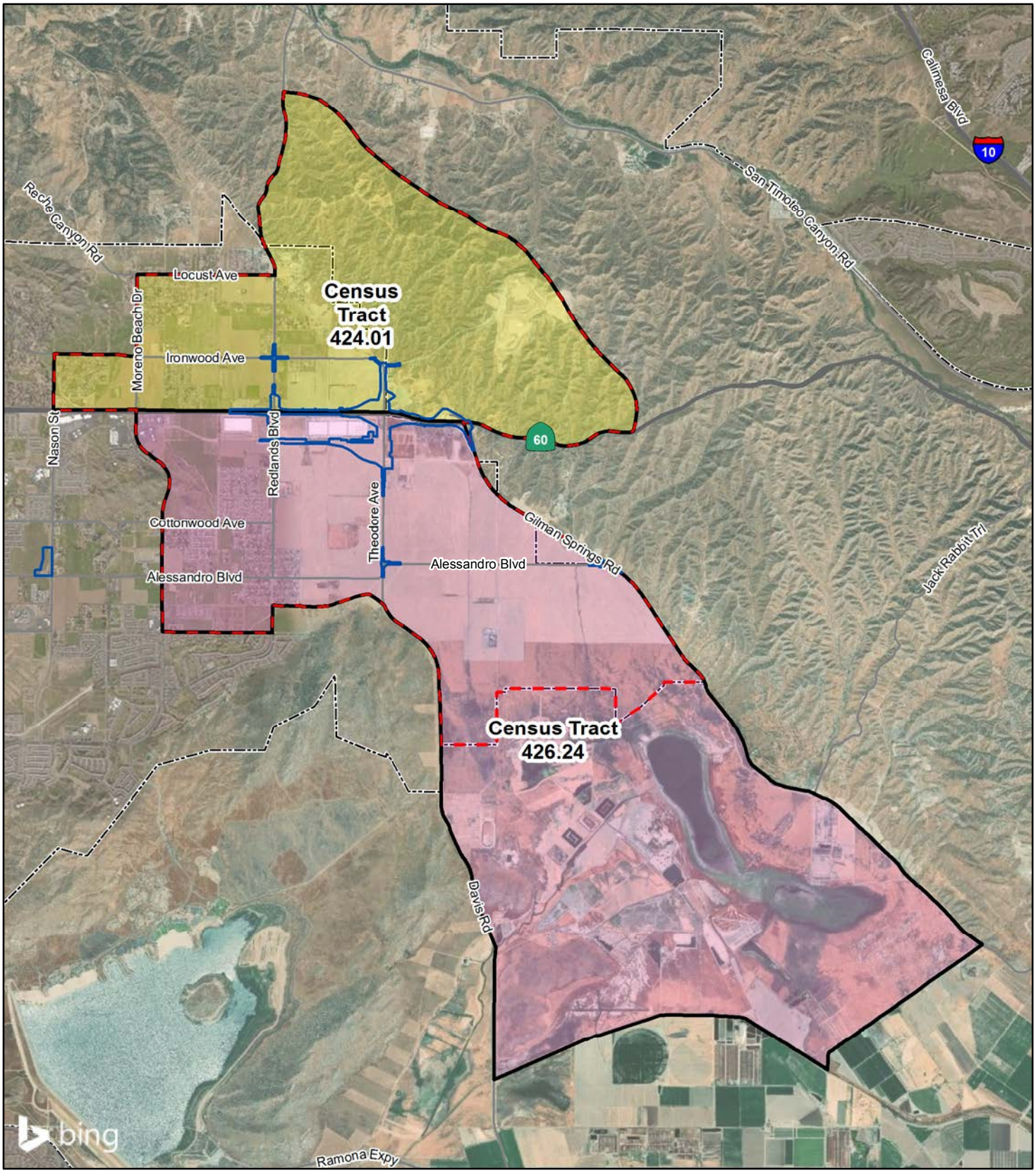

LEGEND

- Community Impacts Study Area
- Project Area
- City/County Boundary
- Census Tract 424.01
- Census Tract 426.24

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SOURCE: Bing Aerial (12/2003) U.S. Census (2010)

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FIGURE 2.4-1

SR-60/World Logistics Center Pkwy Interchange Project

Census Tracts

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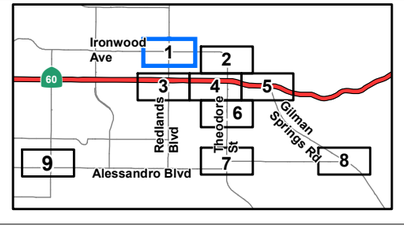
LEGEND

- Alternative 2 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement



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SOURCE: Aerial - RBF (11/2014); ESRI (2013); LSA (11/2018); MBI (11/2018)

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FIGURE 2.4-2
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SR-60/World Logistics Center Pkwy Interchange Project
Alternative 2 Property Acquisitions and Temporary Construction Easements
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EA No. 0M590
Project No. 0813000109

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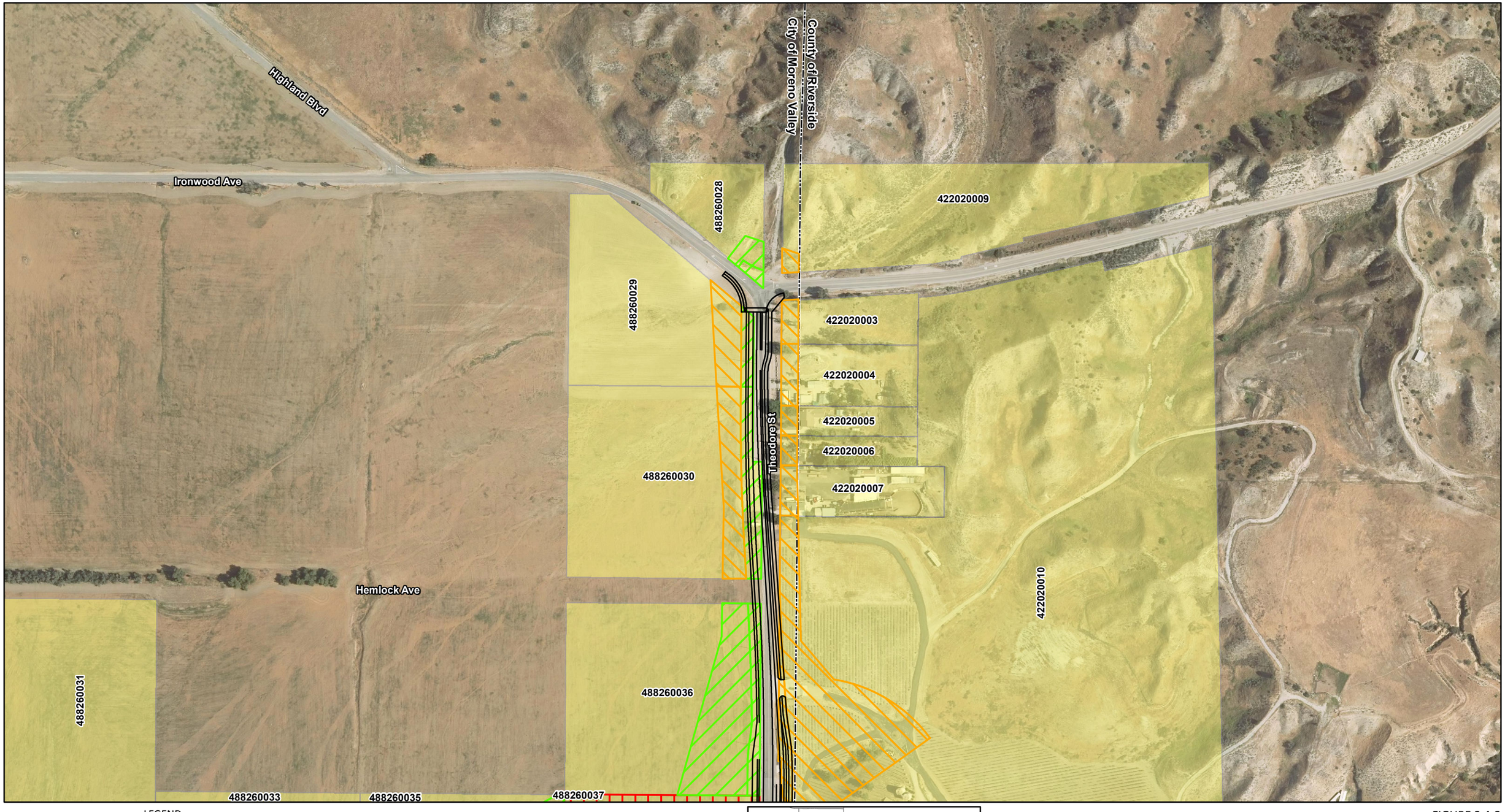

LEGEND

- Alternative 2 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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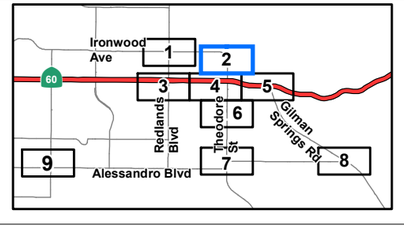

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FIGURE 2.4-2
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SR-60/World Logistics Center Pkwy Interchange Project

Alternative 2 Property Acquisitions and Temporary Construction Easements

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LEGEND

- Alternative 2 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

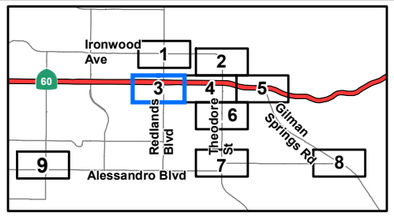

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FIGURE 2.4-2
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SR-60/World Logistics Center Pkwy Interchange Project

Alternative 2 Property Acquisitions and Temporary Construction Easements

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488350050
488350051
County of Riverside
City of Moreno Valley
MWD
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SKECHERS WAREHOUSE
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488350047
488350049
World Logistics Center Pkwy
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488350048
Eucalyptus Ave
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488350025
488350023
488350021
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LEGEND

- Alternative 2 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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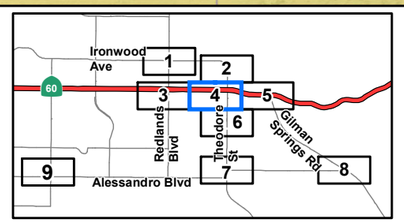

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FIGURE 2.4-2
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Alternative 2 Property Acquisitions and Temporary Construction Easements
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EA No. 0M590
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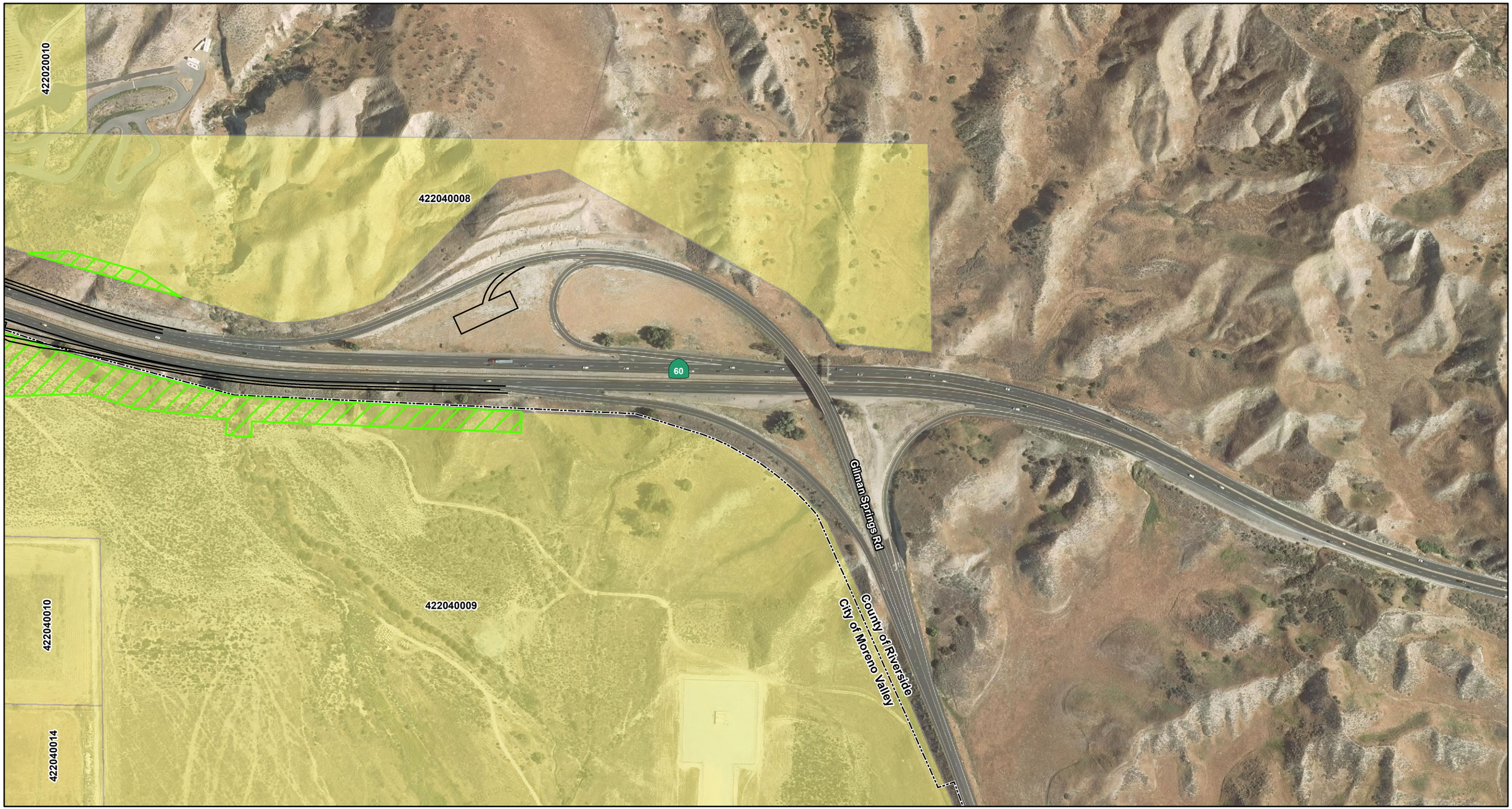

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- Alternative 2 Proposed Improvements
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- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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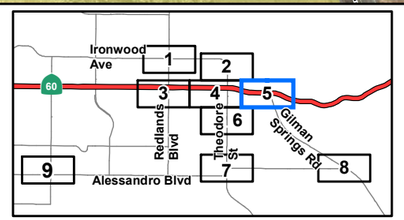

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FIGURE 2.4-2
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SR-60/World Logistics Center Pkwy Interchange Project
Alternative 2 Property Acquisitions and Temporary Construction Easements
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488350021
488350019
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422040015
488350010
Eucalyptus Ave
World Logistics Center Pkwy
Herschel Ln
Sue Ann Ln
478220001
Dracaea Ave

LEGEND

- Alternative 2 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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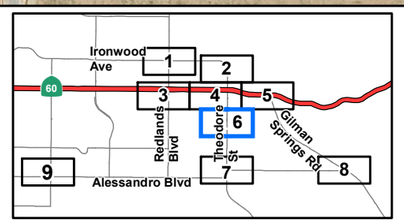

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FIGURE 2.4-2
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SR-60/World Logistics Center Pkwy Interchange Project
Alternative 2 Property Acquisitions and Temporary Construction Easements
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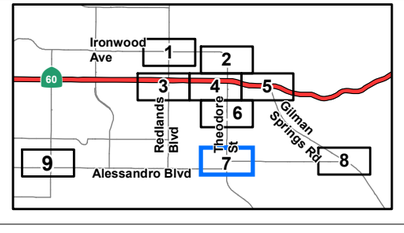

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FIGURE 2.4-2
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SR-60/World Logistics Center Pkwy Interchange Project
Alternative 2 Property Acquisitions and Temporary Construction Easements
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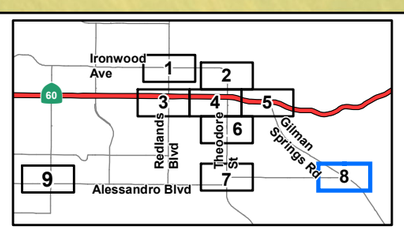

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FIGURE 2.4-2
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Alternative 2 Property Acquisitions and Temporary Construction Easements
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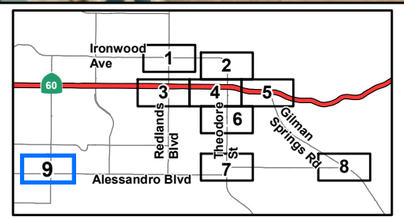

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FIGURE 2.4-2
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Alternative 2 Property Acquisitions and Temporary Construction Easements
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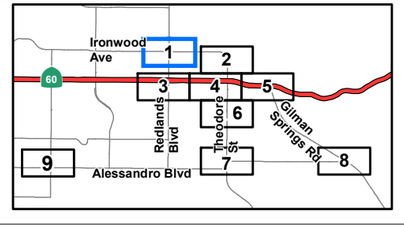
- Partial Acquisition
- Temporary Construction Easement



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SOURCE: Aerial - RBF (11/2014); ESRI (2013); LSA (11/2018); MBI (11/2018)

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FIGURE 2.4-3
Sheet 1 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Alternative 6 Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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Highland Blvd
Ironwood Ave
City of Moreno Valley
County of Riverside
488260028
422020009
48260029
422020003
422020004
422020005
422020006
422020007
Theodore St
488260030
422020010
Hemlock Ave
488260031
488260036
488260033
488260035
488260037

LEGEND

- Alternative 6 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

N

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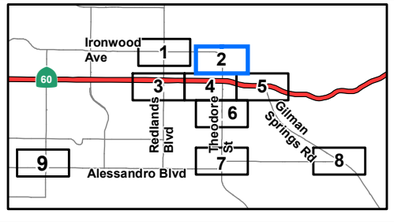

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FIGURE 2.4-3
Sheet 2 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Alternative 6 Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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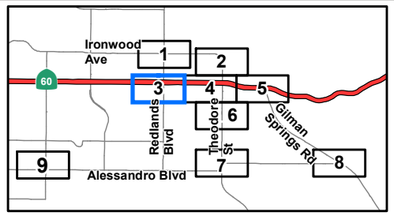
LEGEND

- Alternative 6 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement



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SOURCE: Aerial - RBF (11/2014); ESRI (2013); LSA (11/2018); MBI (11/2018)

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FIGURE 2.4-3
Sheet 3 of 9

SR-60/World Logistics Center Pkwy Interchange Project

Alternative 6 Property Acquisitions and Temporary Construction Easements

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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488260036
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422020010
ANCO RANCH
488260014
488260031
488260033
488260035
488260037
488260018
488260022
422040008
60
488350045
488350046
488350050
488350051
County of Riverside
City of Moreno Valley
MWD
422040009
SKECHERS WAREHOUSE
488350041
488350047
488350049
World Logistics Center Pkwy
422040010
488350044
488350048
Eucalyptus Ave
488350015
488350025
488350023
488350021
488350019
422040014

LEGEND

- Alternative 6 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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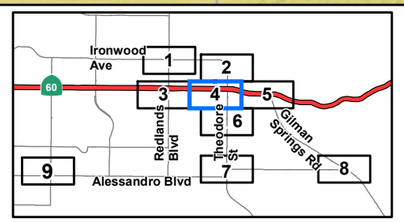

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FIGURE 2.4-3
Sheet 4 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Alternative 6 Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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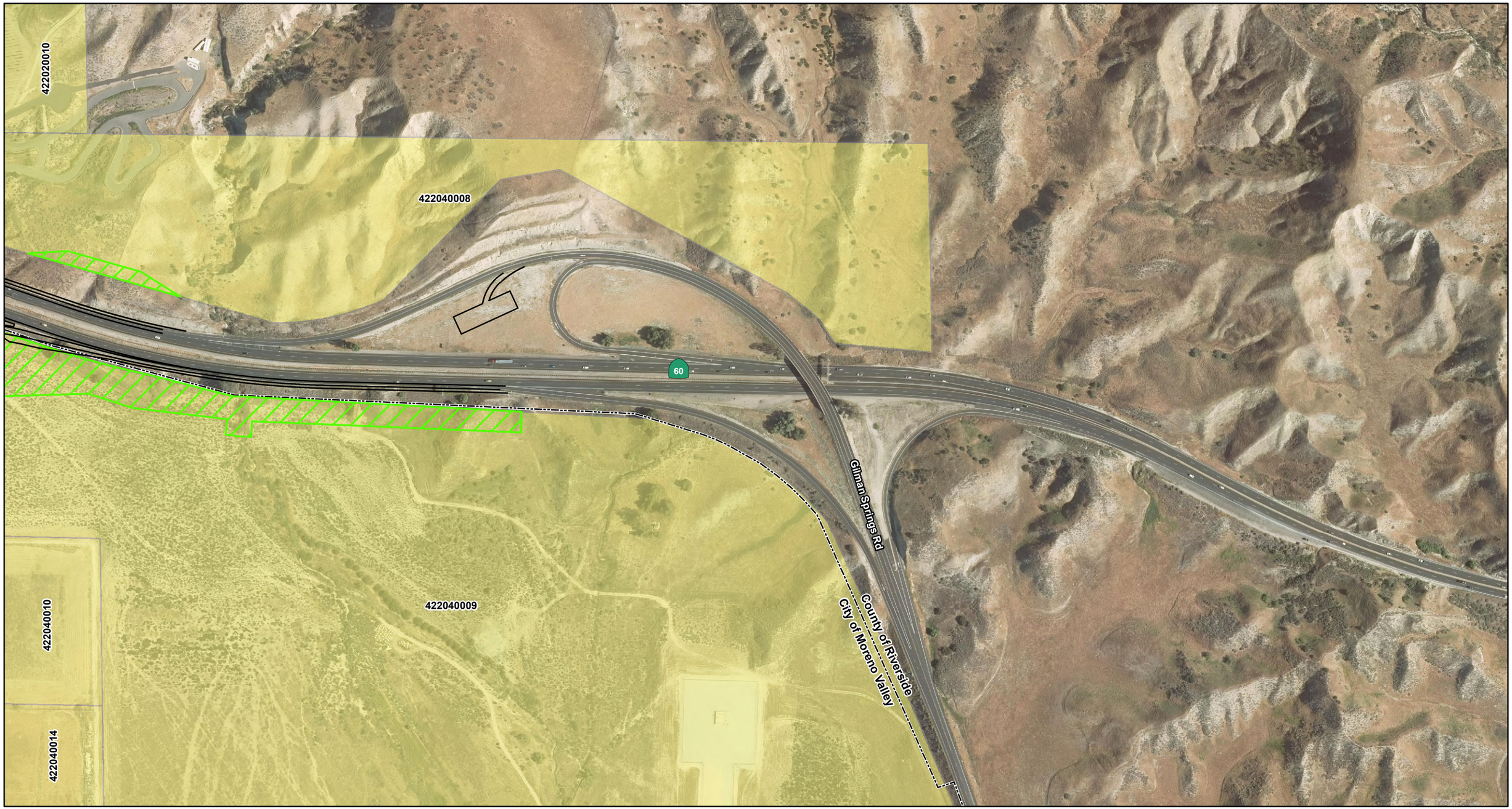

LEGEND

- Alternative 6 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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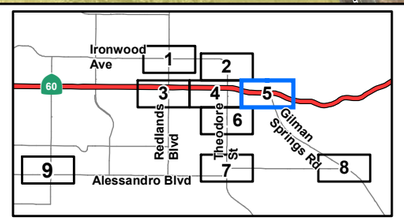

SOURCE: Aerial - RBF (11/2014); ESRI (2013); LSA (11/2018); MBI (11/2018)

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FIGURE 2.4-3
Sheet 5 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Alternative 6 Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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488350025
488350023
488350021
488350019
422040014
422040009
422040015
488350010
Eucalyptus Ave
World Logistics Center Pkwy
Herschel Ln
Sue Ann Ln
478220001
Dracaea Ave

LEGEND

- Alternative 6 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

N

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FEET

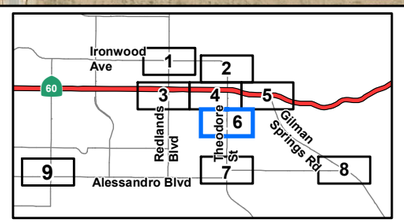

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FIGURE 2.4-3
Sheet 6 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Alternative 6 Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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Bay Ave

478230008

422080001

422080002

World Logistics Center Pkwy

Alessandro Blvd

Alessandro Blvd

LEGEND

Alternative 6 Proposed Improvements

City/County Boundary

Parcels Where Acquisitions/Easements Would be Required

Full Acquisition

Partial Acquisition

Temporary Construction Easement

0 150 300

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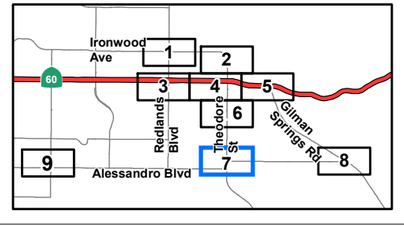

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FIGURE 2.4-3
Sheet 7 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Alternative 6 Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Alternative 6 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
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- Partial Acquisition
- Temporary Construction Easement

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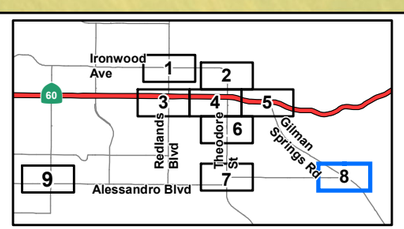

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FIGURE 2.4-3
Sheet 8 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Alternative 6 Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Alternative 6 Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

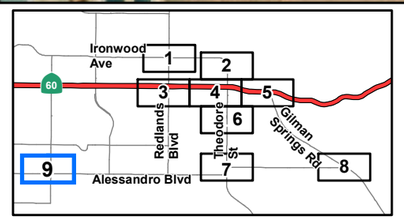

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FIGURE 2.4-3
Sheet 9 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Alternative 6 Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

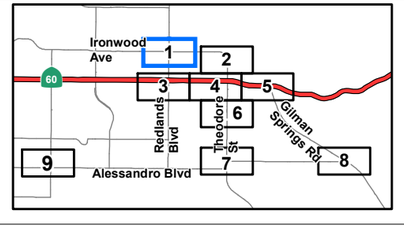

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FIGURE 2.4-4
Sheet 1 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 2a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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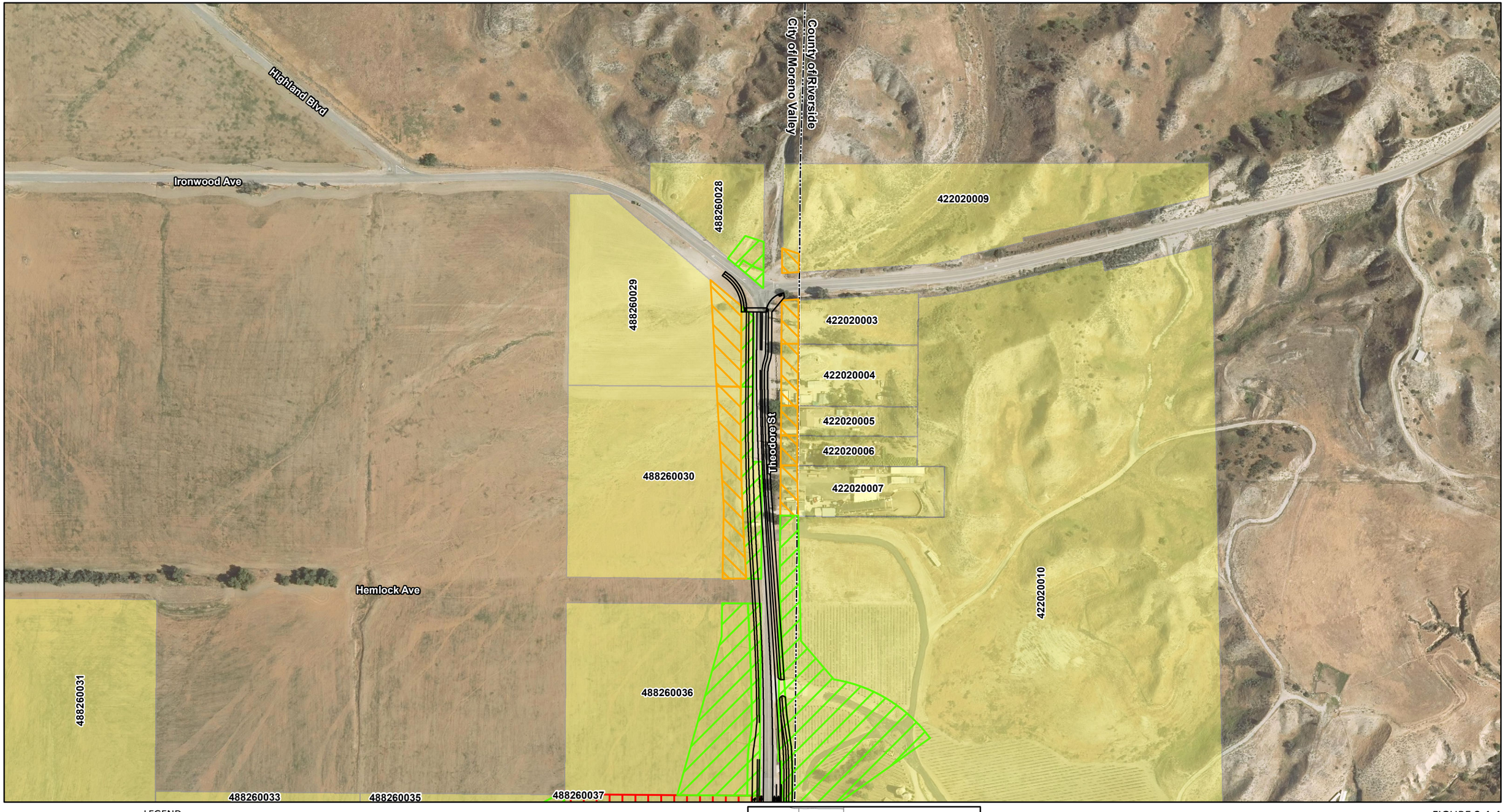

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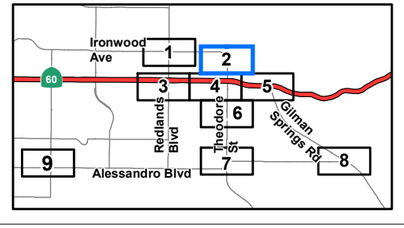
- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement



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SOURCE: Aerial - RBF (11/2014); ESRI (2013); LSA (11/2018); MBI (11/2018)

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FIGURE 2.4-4
Sheet 2 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 2a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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Quincy St
60
Spruce Ave
Redlands Blvd
488260012
488260014
488350028
488350033
488350038
488350045
488350041
SKECHERS WAREHOUSE
488350027
488350036
488350035
488350030
488350040
488350037
Eucalyptus Ave
488350015

LEGEND

- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

N

0 150 300
FEET

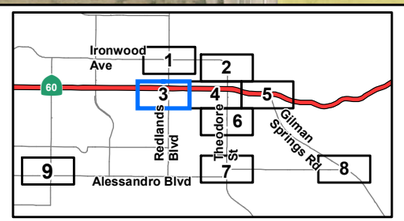

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FIGURE 2.4-4
Sheet 3 of 9

SR-60/World Logistics Center Pkwy Interchange Project

Design Variation 2a Property Acquisitions and Temporary Construction Easements

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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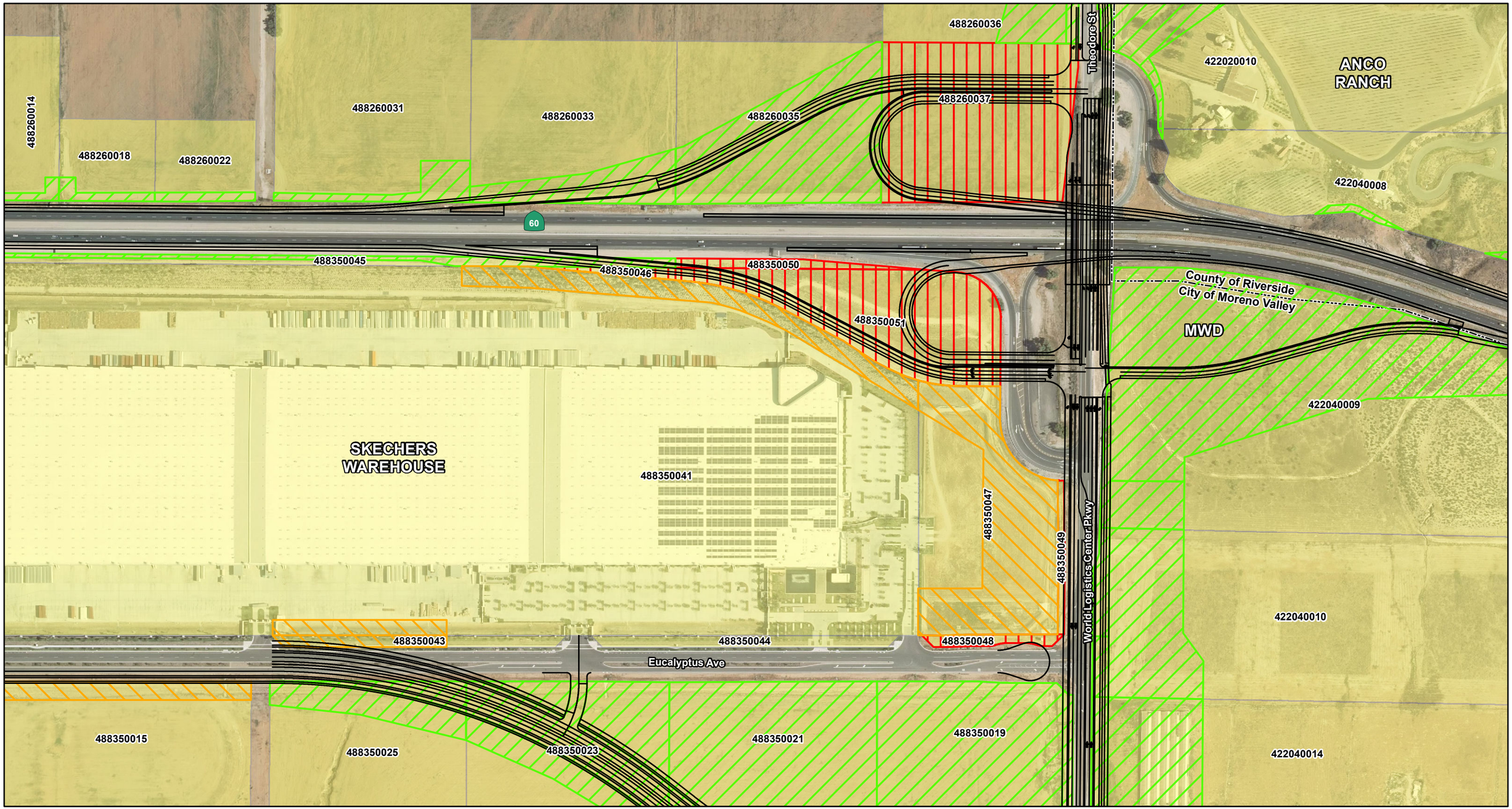

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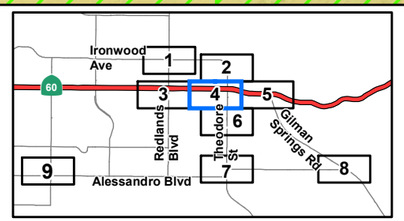
- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement



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SOURCE: Aerial - RBF (11/2014); ESRI (2013); LSA (11/2018); MBI (11/2018)

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FIGURE 2.4-4
Sheet 4 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 2a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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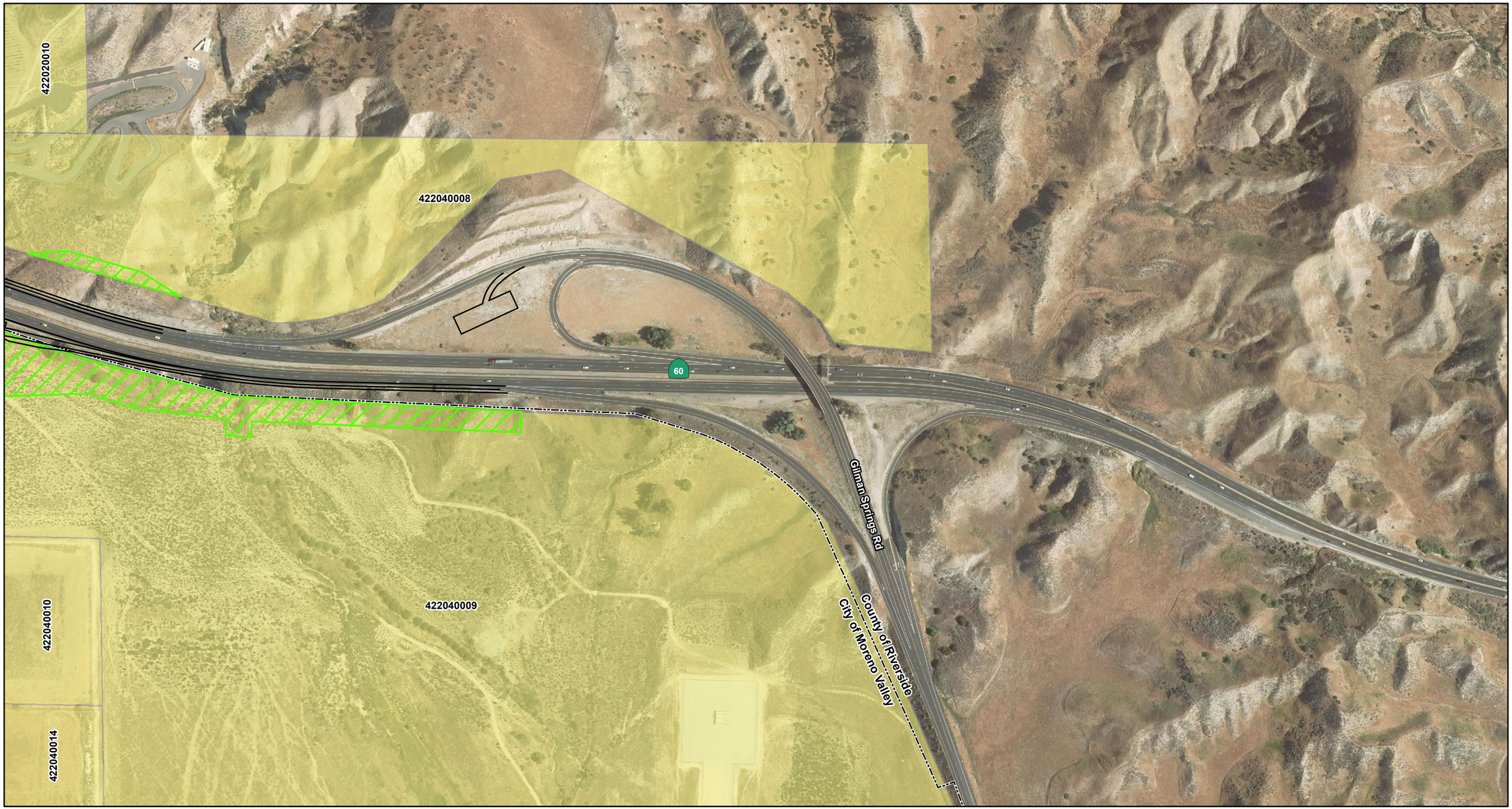

LEGEND

- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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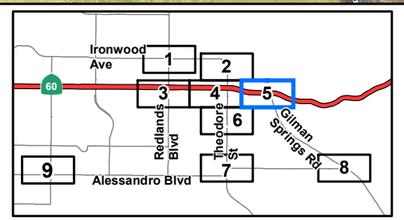

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FIGURE 2.4-4
Sheet 5 of 9
SR-60/World Logistics Center Pkwy
Interchange Project
Design Variation 2a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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488350025
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422040014
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488350009
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422040015
Eucalyptus Ave
422070029
Herschel Ln
422070031
422070032
Sue Ann Ln
World Logistics Center Pkwy
478220001
422070033
Dracaea Ave

LEGEND

- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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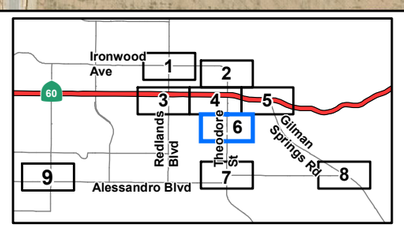

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FIGURE 2.4-4
Sheet 6 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 2a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

0 150 300
FEET

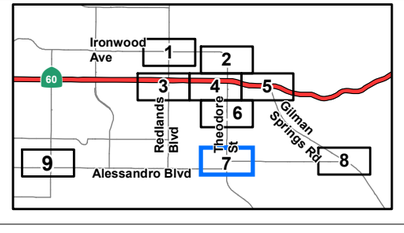

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FIGURE 2.4-4
Sheet 7 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 2a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

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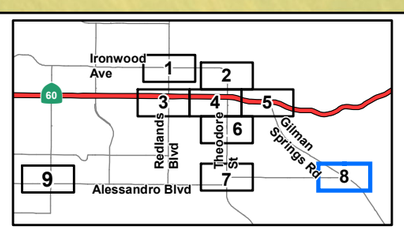

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FIGURE 2.4-4
Sheet 8 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 2a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Design Variation 2a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

N

0 150 300
FEET

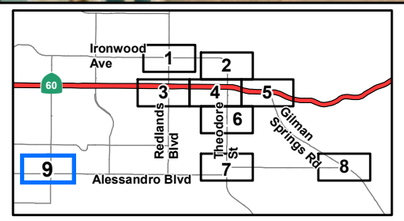

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FIGURE 2.4-4
Sheet 9 of 9
SR-60/World Logistics Center Pkwy
Interchange Project
Design Variation 2a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Design Variation 6a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

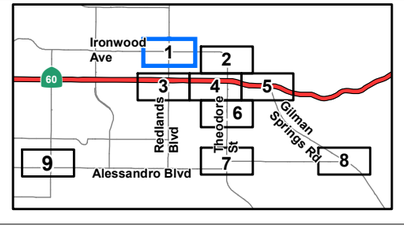

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FIGURE 2.4-5
Sheet 1 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 6a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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Highland Blvd
Ironwood Ave
City of Moreno Valley
County of Riverside
488260028
422020009
48260029
422020003
422020004
422020005
422020006
422020007
Theodore St
488260030
422020010
Hemlock Ave
488260031
488260036
488260033
488260035
488260037

LEGEND

- Design Variation 6a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

N

0 150 300
FEET

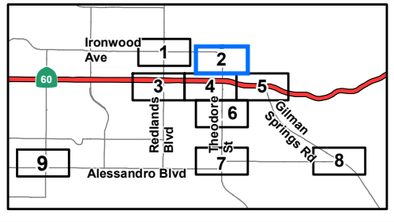

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FIGURE 2.4-5
Sheet 2 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 6a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Design Variation 6a Proposed Improvements
- City/County Boundary
- Parcels Where Acquisitions/Easements Would be Required
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement

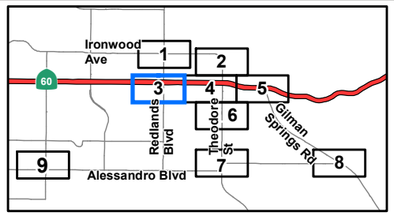

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FIGURE 2.4-5
Sheet 3 of 9

SR-60/World Logistics Center Pkwy Interchange Project

Design Variation 6a Property Acquisitions and Temporary Construction Easements

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488260036
Theodore St
422020010
ANCO RANCH
488260014
488260031
488260033
488260035
488260037
488260018
488260022
422040008
60
488350045
488350046
488350050
488350051
County of Riverside
City of Moreno Valley
MWD
422040009
SKECHERS WAREHOUSE
488350041
488350047
488350049
World Logistics Center Pkwy
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488350044
488350048
Eucalyptus Ave
488350015
488350025
488350023
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488350019
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LEGEND

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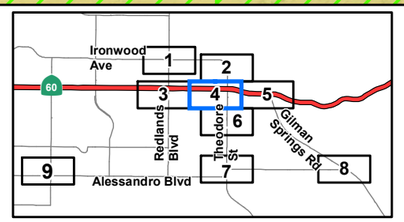

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FIGURE 2.4-5
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SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 6a Property Acquisitions and Temporary Construction Easements
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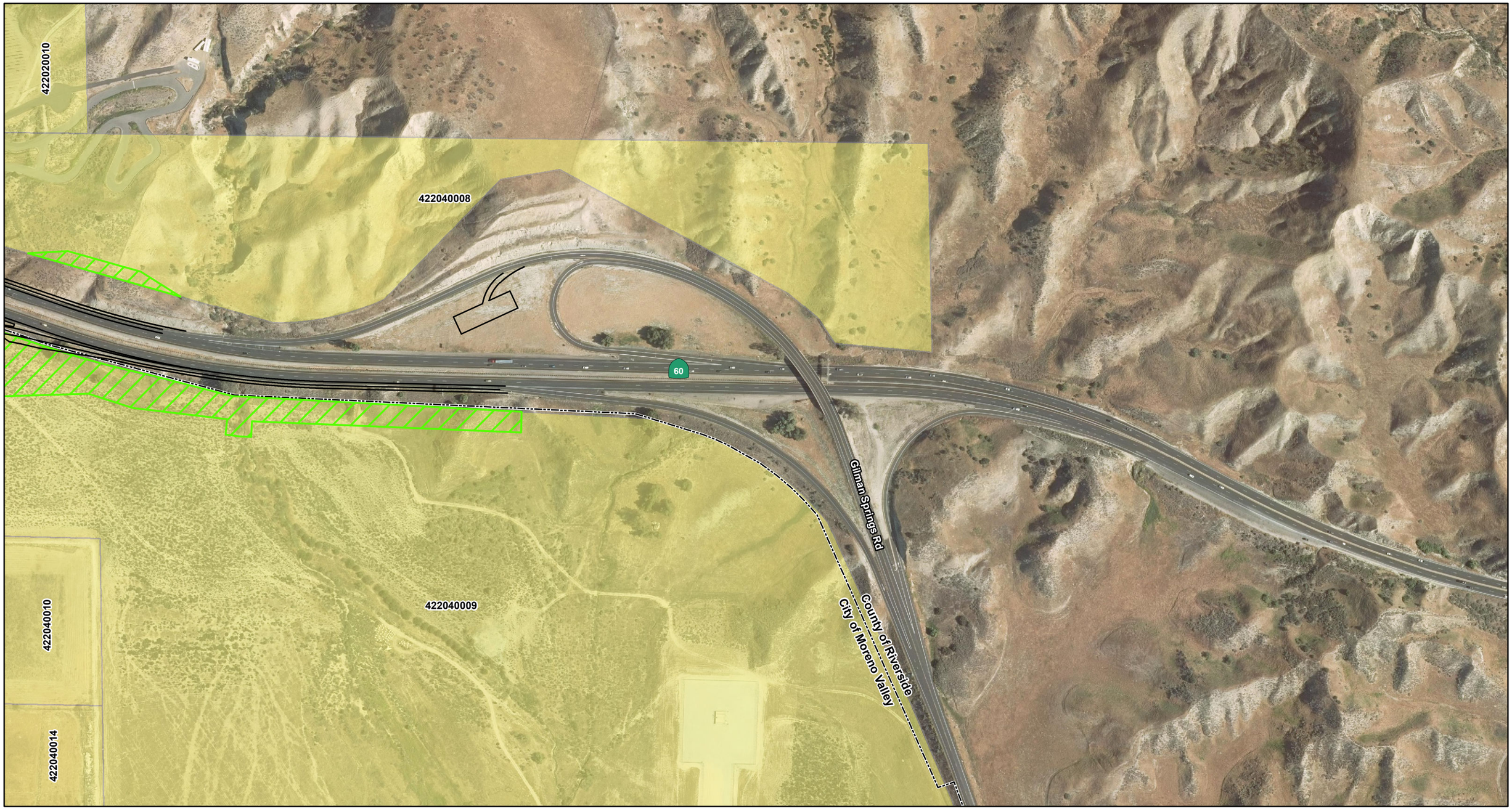

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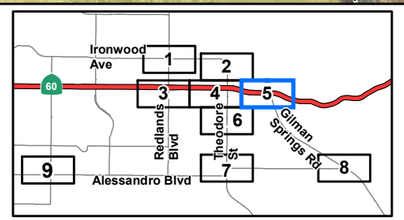

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FIGURE 2.4-5
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SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 6a Property Acquisitions and Temporary Construction Easements
08-RIV-60 PM 20.0/22.0
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488350023
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488350019
422040014
422040009
422040015
488350010
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488350009
Eucalyptus Ave
422070029
Herschel Ln
422070031
World Logistics Center Pkwy
422070032
Sue Ann Ln
478220001
422070033
Dracaea Ave

LEGEND

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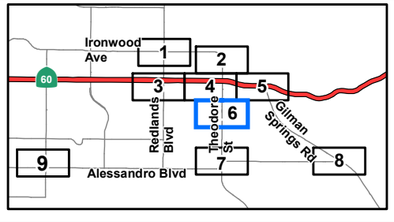

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FIGURE 2.4-5
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SR-60/World Logistics Center Pkwy Interchange Project
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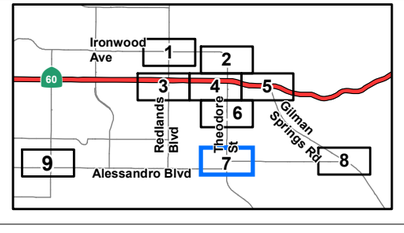

FIGURE 2.4-5
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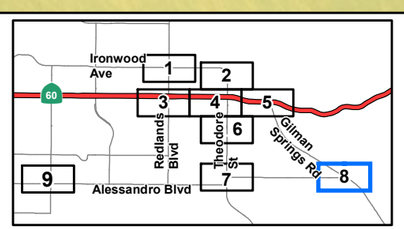

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FIGURE 2.4-5
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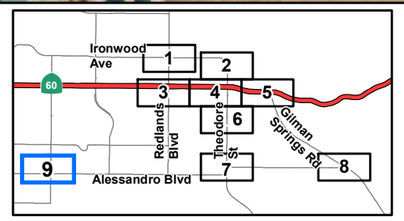

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FIGURE 2.4-5
Sheet 9 of 9
SR-60/World Logistics Center Pkwy Interchange Project
Design Variation 6a Property Acquisitions and Temporary Construction Easements
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2.5 Utilities and Emergency Services

2.5.1 Affected Environment

This section is based on information from the *Community Impact Assessment* (CIA) (March 2019) and the *Draft Project Report* (February 2020). The study area for utilities and emergency services extends 0.5 mile (mi) from the limits of the project footprint.

2.5.1.1 Utilities

Utility providers in Moreno Valley are summarized in Table 2.5.1.

Table 2.5.1 Utility Providers

Utility	Owner
Water and Sewer	Eastern Municipal Water District (EMW), Metropolitan Water District of Southern California (MWD)
Storm Drain	Riverside County Flood Control and Water Conservation District
Gas	Southern California Gas Company, Questar Southern Trails Pipeline Company
Electricity	Southern California Edison and Moreno Valley Electric Utility
Telecom	AT&T and Verizon
Cable	Time Warner Cable, Charter Communications
Trash Service	Waste Management of Inland Empire and Riverside County Waste Management Engineering Badlands

Source: *Draft Project Report* (February 2020).

2.5.1.2 Fire Protection and Emergency Services

The City of Moreno Valley (City) contracts with the Riverside County Fire Department (RCFD) for fire and rescue services. RCFD staffs seven fire stations throughout Moreno Valley. The RCFD fire station nearest the study area is Fire Station 58 at 28040 Eucalyptus Avenue. Fire Station 58 currently houses one paramedic engine company and a Type 3 fire engine, and is staffed by a captain, an engineer, and a firefighter/paramedic. The station is approximately 2 mi west of the State Route 60/World Logistics Center Parkway (SR-60/WLC Pkwy) interchange.

The Riverside County Regional Medical Center is a 439-bed medical center in Moreno Valley that is operated by the Riverside University Health System. The medical center is located at the intersection of Cactus Avenue and Nason Street, approximately 4 mi southwest of the SR-60/WLC Pkwy interchange.

2.5.1.3 Law Enforcement

The City contracts with the Riverside County Sheriff's Department (RSD) for full-service law enforcement, traffic services, investigations, and a wide variety of safety services. The RSD station responsible for servicing the City is the Moreno Valley Station, located at 22850 Calle San Juan De Los Lagos in Moreno Valley. The Moreno Valley Station is approximately 7.3 mi southwest of the SR-60/WLC Pkwy interchange.

The California Highway Patrol (CHP) has jurisdiction on freeways in the State of California, including SR-60. Although the nearest CHP office is the San Gorgonio Pass Office, located at 195 Highland Springs Avenue in Beaumont (approximately 11 mi east of the SR-60/WLC Pkwy interchange), the study area is in the service area of the Riverside office, located at 8118 Lincoln Avenue in Riverside (approximately 15.6 mi west of the SR-60/WLC Pkwy interchange). There are no CHP offices in the study area.

2.5.2 Environmental Consequences

2.5.2.1 Temporary Impacts

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the SR-60/WLC Pkwy interchange other than routine maintenance. Therefore, this alternative would not result in temporary adverse effects on utilities and emergency services.

Alternatives 2 and 6 (LPA) (Build Alternatives)

Utilities (e.g., water lines, sewer laterals, electrical connections/lines/poles, natural gas service lines, streetlights, fire hydrants, and cable television lines and utility boxes) in the project right-of-way can be abandoned, removed, relocated or replaced due to the construction of either Build Alternative 2 or Build Alternative 6 (the Locally Preferred Alternative [LPA]).

The utility facilities that could potentially be affected during construction of either Build Alternative 2 or Build Alternative 6 (LPA) are listed in Table 2.5.2. Build Alternatives 2 and 6 are anticipated to result in the same potential utility relocations. An updated utility search would be conducted during final design to determine all utilities that would require protection in place, removal or relocation. Completion of the utility work required for the affected utilities listed in Table 2.5.2 may result in temporary service disruptions to some utility users in the vicinity of the study area.

The following Project Feature has been incorporated into the Build Alternatives to minimize the potential temporary adverse effects of the project construction on utilities.

PF-UES-1 During final design, utility relocation plans will be prepared in consultation with the affected utility providers/owners for those utilities that will need to be relocated, removed, or protected in-place. If relocation is necessary, the final design will focus on relocating utilities within existing public rights-of-way and/or easements. If relocation outside of existing rights-of-way or additional public rights-of-way and/or easements required for the proposed project are necessary, the final design will focus on relocating those facilities to minimize environmental impacts as a result of project construction and ongoing maintenance and repair activities. Utility relocations are anticipated to be completed by the various utility owners prior to or during construction.

Table 2.5.2 Potential Utility Relocations Under Build Alternatives and Design Variations

Owner	Utility	Location
Moreno Valley Electric Utility	Electricity	Eucalyptus Avenue and WLC Pkwy/Theodore Street (conduit and light poles)
Time Warner Cable	Cable	Redlands Boulevard (overhead)
Southern California Edison	Electricity	WLC Pkwy/Theodore Street, Redlands Boulevard, Gilman Springs Road, Ironwood Avenue, and Alessandro Boulevard (overhead and conduit)
Southern California Gas Company	Gas	Redlands Boulevard (underground)
Verizon	Telecom	Redlands Boulevard, WLC Pkwy/Theodore Street, Alessandro Boulevard, and Eucalyptus Avenue (overhead and underground)
Eastern Municipal Water District	Water	Redlands Boulevard, Theodore Street, Gilman Springs Road, and Eucalyptus Avenue (underground pipes)
Metropolitan Water District	Water	Alessandro Boulevard and Theodore Street (inland feeder pipeline)
Riverside County Flood Control and Water Conservation District	Storm Drain	Eucalyptus Avenue and WLC Pkwy/Theodore Street (underground)
Riverside County Waste Management Engineering Badlands	Water Tank	Theodore Street

Source: *Draft Project Report* (February 2020).

Prior to utility relocation activities, the Construction Contractor will coordinate with affected utility providers regarding potential utility relocations and inform affected utility users in advance about the date and timing of potential service disruptions.

An updated utility search will be conducted during final design to verify the locations of all utility facilities that require protection in-place or relocation. As indicated in Table 2.5.2, the existing Southern California Edison (SCE) overhead 115-kilovolt (kV) transmission line and 12 kV distribution line that are currently adjacent to the west side of Theodore Street/WLC Pkwy would be relocated to the east side of WLC Pkwy, south of the westbound ramps intersection. North of the westbound ramps intersection, the SCE utility lines will remain on the west side, but will be relocated to the proposed parkway. The existing SCE utility lines do not currently cross WLC Pkwy. They will cross WLC Pkwy in the proposed condition to near the westbound ramps intersection. In order to accommodate future utilities, the proposed overcrossing would incorporate conduits for Moreno Valley Electric Utility, SCE, and other utility companies as requested.

During construction of Build Alternative 2 or Build Alternative 6 (LPA), some impairment to the delivery of emergency services, including fire and police response times, may occur due to limited lane closures on the mainline, ramps, and arterials. Detour routes would be provided to direct traffic around any mainline or ramp closures using the local arterial street network. Emergency service providers (including the local fire and police departments and the CHP) may experience these travel delays when traveling to/from emergency scenes during these mainline freeway closures.

The following Project Feature has been incorporated into the Build Alternatives to minimize the potential temporary adverse effects of the project construction on emergency services:

PF-UES-2 Prior to and during construction, the Construction Contractor will coordinate all temporary mainline, ramp, and arterial roadway closures and detour plans with law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times, including the identification of alternative routes for emergency vehicles and routes across the construction areas that are developed in coordination with the affected agencies.

In addition, temporary construction impacts to emergency services would be minimized by implementation of Project Feature PF-T-1 in Section 2.6, Traffic and Transportation/Pedestrian and Bicycle Facilities. Project Feature PF-T-1 requires development and implementation of a Transportation Management Plan (TMP) during construction of Build Alternative 2 or Build Alternative 6 (LPA) to address traffic delays; manage detours and temporary road, lane, and ramp closures; provide ongoing information to the public regarding construction activities, closures, and detours; and maintain a safe environment for construction workers and travelers.

Design Variations 2a and 6a (Design Variations)

Design Variations 2a and 6a are anticipated to result in the same potential utility relocations as Build Alternatives 2 and 6 (LPA).

As required by the California Department of Transportation (Caltrans) and City standards, emergency access would be maintained during construction. In the long term, the design variations will improve traffic operations in the study area, which will benefit emergency service providers as they travel in and through the study area.

2.5.2.2 Permanent Impacts

Alternative 1 (No Build Alternative)

No modifications to the SR-60/WLC Pkwy interchange are proposed under the No Build Alternative other than routine maintenance. Therefore, the No Build Alternative would not result in permanent direct adverse effects related to emergency services, utility services, and their facilities. However, because the No Build Alternative would not improve operations at the interchange, continued degradation of the interchange's operations under this alternative could adversely affect emergency service providers' response times in the study area.

Alternatives 2 and 6 (LPA) (Build Alternatives)

Any relocation or other effects to utility facilities as a result of the Build Alternatives would occur during the construction phase such that all utility services would be permanently maintained.

Alternatives 2 and 6 would not increase the need for domestic water services, wastewater facilities, or solid waste disposal. Therefore, the Build Alternatives would not result in permanent adverse effects on utility providers or their facilities.

The Build Alternatives will improve traffic operations in the study area compared to the No Build Alternative. These improvements in traffic flow are likely to improve emergency response times within the study area. Therefore, the Build Alternative would not result in adverse effects to emergency services and providers.

Design Variations 2a and 6a (Design Variations)

Design Variations 2a and 6a are anticipated to result in the same potential utility relocations as Build Alternatives 2 and 6.

2.5.2.3 Avoidance, Minimization, and/or Mitigation Measures

The project will incorporate project features PF-UES-1, PF-UES-2, and PF-T-1 as described above; therefore no adverse impacts to utilities and emergency services would occur, and no avoidance, minimization, and/or mitigation measures are required.

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2.6 Traffic and Transportation/Pedestrian and Bicycle Facilities

2.6.1 Regulatory Setting

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

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

2.6.2 Affected Environment

This section is primarily based on the *Traffic Study Report* (January 2019), the *Draft Project Report* (February 2020), and the *Ramp Closure Study* (WSP USA, Inc., December 2018). The *Traffic Study Report* considered three circulation scenarios: Existing Conditions (2018), traffic projections for Opening Year (2025), and Design Year (2045).

The following eight study area intersections were analyzed:

- Theodore Street/Ironwood Avenue
- World Logistics Center Parkway (WLC Pkwy)/westbound State Route 60 (SR-60) ramps
- WLC Pkwy/eastbound SR-60 ramps
- WLC Pkwy/Eucalyptus Avenue
- Redlands Boulevard/Ironwood Avenue
- Redlands Boulevard/westbound SR-60 ramps
- Redlands Boulevard/eastbound SR-60 ramps
- Redlands Boulevard/Eucalyptus Avenue

In addition to the eight intersections identified above, this analysis evaluates the forecasted impact of the proposed project at the following State Highway study segments:

- Westbound SR-60 from Gilman Springs Road to WLC Pkwy
- Westbound SR-60 from WLC Pkwy to Redlands Boulevard
- Westbound SR-60 from Redlands Boulevard to Moreno Beach Drive
- Eastbound SR-60 from Moreno Beach Drive to Redlands Boulevard
- Eastbound SR-60 from Redlands Boulevard to WLC Pkwy
- Eastbound SR-60 from WLC Pkwy to Gilman Spring Road

The freeway analysis covered traffic flows along SR-60 in both directions from the eastbound off-ramp of the SR-60/Gilman Springs Road interchange to the westbound off-ramp of the SR-60/Moreno Beach Drive interchange.

The study area for the traffic analysis was concurred by Caltrans with the *Methodology and Traffic Volumes Report* (August 2018) and per Caltrans guidance (*Guide for the Preparation of Traffic Impact Studies*, dated December 2002), the study area includes an analysis of adjacent local facilities, upstream and downstream on the State Highway. The interchange project itself does not generate traffic; therefore, it would have no effect on freeway system traffic volumes away from the immediate area.

During the construction phase of the proposed project, removal of the existing overcrossing and construction of the new overcrossing and ramps would interfere with access to SR-60 at WLC Pkwy. The WLC Pkwy Overcrossing is being evaluated for closure during construction of the proposed project. The study area for the ramp closure study is bounded by Ironwood Avenue to the north, Alessandro Boulevard to the south, Gilman Springs Road to the east, and Redlands Boulevard to the west. If not done prior to this project, Eucalyptus Avenue would be extended and improved between WLC Pkwy and Redlands Boulevard to provide a detour route to SR-60.

The level of service (LOS) for study signalized and stop-controlled intersections was determined using Synchro 10 applying the *Highway Capacity Manual* (HCM), 6th Edition methodology. The HCM analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on corresponding stopped delay per vehicle ranges for signalized and unsignalized intersections, as detailed in Table 2.6.1.

The LOS analysis for freeways was performed using HCM 6th Edition Approach C. Each direction of travel was analyzed using the freeway facility function in Highway Capacity Software (HCS) 7 using eight 15-minute time periods representing the two-hour peak periods (7:00-9:00 AM and 4:00-6:00 PM). Freeway analysis used the recommended heavy truck passenger car equivalent (PCE) factor of 2.0 from the HCM 6th Edition for level terrain. The Caltrans LOS thresholds for freeway facilities are presented in Table 2.6.2.

The ramp terminus intersections on SR-60 are under the jurisdiction of Caltrans. All other study intersections are under the jurisdiction of the City of Moreno Valley (City). The City's standard for peak-hour intersection LOS and roadway segment LOS is either LOS C or LOS D, depending on the LOS defined for that roadway in the General Plan Circulation Element. The standard of LOS D applies to all City intersections included in this analysis. The Caltrans target for peak hour operations is transition from LOS C to LOS D. According to the *Transportation Concept Report*

Table 2.6.1 Level of Service Thresholds for Signalized and Unsignalized Intersections

LOS	Description	Average Control Delay (sec/veh)	
		Signalized	Unsignalized & Roundabouts
A	Volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.	≤ 10	≤ 10
B	Volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.	> 10 to 20	> 10 to 15
C	Progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	> 20 to 35	> 15 to 25
D	Volume-to-capacity ratio is high and either progression is ineffective or cycle length is long. Many vehicles stop and individual cycle failures are noticeable.	> 35 to 55	> 25 to 35
E	Volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.	> 55 to 80	> 35 to 50
F	Volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	> 80	> 50

Source: Exhibit 7*, Traffic Study Report* (January 2019).
Note: The description is from the *Highway Capacity Manual*, 6th Edition chapter on signalized intersections. For signalized intersections and roundabouts, the LOS is based on the average for all vehicles entering the intersection. For unsignalized intersections, the LOS is based on the delay for the worst-performing approach.
LOS = level of service
sec/veh = seconds per vehicle

Table 2.6.2 Level of Service Thresholds for Freeway Facilities

LOS	Basic Freeway Segment Density (pc/mi/ln)	Freeway Weaving Segment Density (pc/mi/ln)	Freeway Ramp Density (pc/mi/ln)
A	0-11.0	≤ 10.0	≤ 10.0
B	11.0 – 18.0	> 10.0 and ≤ 20.0	> 10.0 and ≤ 20.0
C	18.0 – 26.0	> 20.0 and ≤ 28.0	> 20.0 and ≤ 28.0
D	26.0 – 35.0	> 28.0 and ≤ 35.0	> 28.0 and ≤ 35.0
E	35.0 – 45.0	>35.0 and ≤ 43.0	> 35.0
F	> 45.0, or demand exceeds capacity	> 43.0, or demand exceeds capacity	Demand exceeds capacity

Source: Exhibit 8, *Traffic Study Report* (January 2019).
LOS = level of service
pc/mi/ln = passenger cars per mile per lane

(TCR) for SR-60/WLC Pkwy (Caltrans 2012, with reference to Theodore Street), Caltrans has established LOS D as the acceptable concept LOS threshold for sections of SR-60 included in this analysis.

Theodore Street/WLC Pkwy is a two-lane undivided arterial running on a north-south alignment between Alessandro Boulevard at 1.5 miles (mi) south of SR-60 and Ironwood Avenue at 0.5 mi north of SR-60. SR-60 runs in a generally east-west alignment between Interstate 110 (I-110) in Los Angeles and Interstate 10 in Beaumont. In the vicinity of WLC Pkwy, SR-60 has two travel lanes in each direction.

Currently, the SR-60/WLC Pkwy interchange has a two-quadrant cloverleaf configuration. The ramp intersections are side-street stop-controlled. The nearest

interchanges to the WLC Pkwy interchange are at Redlands Boulevard, 4,560 ft to the west, and at Gilman Springs Road, 1,650 ft to the east along SR-60.

2.6.2.1 Existing and Future Traffic Forecast Conditions

Table 2.6.3 provides the traffic data specific to SR-60 at the proposed SR-60/WLC Pkwy interchange under Existing (2018), Opening Year (2025), and Design Year (2045) conditions.

Table 2.6.3 Existing (2018), 2025, and 2045 Traffic Forecast Conditions – SR-60/WLC Parkway Traffic Data

SR-60 Mainline		Existing 2018	Opening 2025	Design 2045
Annual Average Daily Traffic (AADT)	WB	33,272	46,100	83,000
	EB	35,387	48,900	85,400
Peak Hour (Vehicles)	AM	3,728	5,760	10,100
	PM	4,615	6,720	11,270
Peak Directional Split (WB/EB)	AM	50/50	53/47	63/37
	PM	47/53	46/54	43/57
Truck Percentage	AM	12%	17%	14%
	PM	10%	14%	11%

Source: Table 2, *Draft Project Report* (February 2020).
EB = eastbound
WB = westbound

Existing (2018) Conditions

Table 2.6.4 shows the existing traffic volumes during the a.m. and p.m. peak hours in the project area.

Table 2.6.4 Existing (2018) Conditions – Peak-Hour Traffic Volumes

Freeway	Roadway	Ramp	Existing (2018), in vehicles	
			AM	PM
SR-60	WLC Pkwy	WB Off-Ramp	111	36
		WB Loop On-Ramp	52	53
		EB Off-Ramp	119	72
		EB Loop On-Ramp	69	49
	Redlands Boulevard	WB Off-Ramp	76	65
		WB Loop On-Ramp	416	453
		EB Off-Ramp	284	568
		EB Loop On-Ramp	92	106

Source: Table 3, *Draft Project Report* (February 2020).
EB = eastbound WB = westbound
SR-60 = State Route 60 WLC Pkwy = World Logistics Center Parkway

For signalized and stop-controlled intersection analysis, the City of Moreno Valley (City) Traffic Impact Analysis (TIA) guidelines mandate the use of passenger car equivalent (PCE) factors taken from the San Bernardino County Congestion Management Program (CMP), 2003 Update. These are more precise and on average higher than default rates in the HCM 6th Edition. The trucks were factored into PCEs that convert traffic volumes to an equivalent number of passenger car volumes based on the types of trucks. Where HCM recommends two PCEs per

heavy truck, the San Bernardino County CMP PCE rates use 1.5 for two-axle trucks, 2.0 for three-axle trucks, and 3.0 for trucks with four or more axles. Intersection volumes were input to Synchro directly as PCEs (with the heavy vehicle percentage set to zero to avoid double-counting the trucks).

As shown in Table 2.6.5, the study intersections in the vicinity of the SR-60/WLC Pkwy interchange currently operate at satisfactory LOS during the a.m. and p.m. peak hours.

Table 2.6.5 Existing (2018) Conditions – Peak-Hour Intersection Level of Service

Roadway	Study Intersection	Delay (sec/veh)		LOS	
		AM	PM	AM	PM
WLC Pkwy	Eucalyptus Avenue	10	9.2	A	A
	SR-60 EB Ramps	10.1	9	B	A
	SR-60 WB Ramps	10.3	9.4	B	A
	Ironwood Avenue	8.8	8.8	A	A
Redlands Boulevard	Eucalyptus Avenue	7.8	13.1	A	B
	SR-60 EB Ramps	19.1	27.9	B	C
	SR-60 WB Ramps	30.6	26.5	C	C
	Ironwood Avenue	12.8	13.2	B	B

Source: Exhibit 9, *Traffic Study Report* (January 2019).
EB = eastbound
LOS = level of service
sec/veh = seconds per vehicle
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Existing conditions on SR-60 consist of two general-purpose lanes in both directions in the vicinity of the SR-60/WLC Pkwy interchange. Table 2.6.6 summarizes existing highest peak-hour LOS of the freeway ramps while Table 2.6.7 summarizes existing peak-hour LOS of the freeway segments in the study area.

As shown in Table 2.6.6 and Table 2.6.7, all freeway ramps and freeway segments in the study area are currently operating at an acceptable LOS according to Caltrans performance criteria.

Table 2.6.6 Existing (2018) Conditions – Merge/Diverge

Freeway	Roadway	Ramp	Existing (2018)			
			AM		PM	
			Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
SR-60	Gilman Springs Road	WB On-Ramp	16.8	B	19.5	C
		EB Off-Ramp	17.7	C	23.6	C
	WLC Pkwy	WB Off-Ramp	18.2	C	20.8	C
		WB Loop On-Ramp	16.9	B	19.7	B
		EB Off-Ramp	17.9	C	22.4	C
		EB Loop On-Ramp	16.5	C	21.6	C
	Redlands Boulevard	WB Off-Ramp	18.1	C	21.1	C
		WB Loop On-Ramp	19	B	22.8	C
		EB Off-Ramp	10.7	A	14.2	B
		EB Loop On-Ramp	16.6	B	21.2	C

Source: Exhibit 11, *Traffic Study Report* (January 2019).
EB = eastbound
LOS = level of service
pc/mi/ln = passenger car per mile per lane
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.6.7 Existing (2018) Conditions – Freeway Mainline Level of Service

SR-60 Mainline		Existing (2018)			
		AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Westbound	Gilman Springs Road to WLC Pkwy	14.9	B	17.2	B
	WLC Pkwy to Redlands Boulevard	15.2	B	17.8	B
	Redlands Boulevard to Moreno Beach Drive	17.2	B	20.8	C
Eastbound	Moreno Beach Drive to Redlands Boulevard	10.7	A	14.2	B
	Redlands Boulevard to WLC Pkwy	15.0	B	19.1	C
	WLC Pkwy to Gilman Springs Road	17.7	B	23.6	C

Source: Exhibit 11, *Traffic Study Report* (January 2019).
LOS = level of service SR-60 = State Route 60
pc/mi/ln = passenger car per mile per lane WLC Pkwy = World Logistics Center Parkway

Opening Year (2025) Assumptions

According to the demographics and growth forecast prepared for the 2016 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), between 2012 and 2040, Riverside County's population is expected to increase by 41 percent, job growth is anticipated to increase by 90 percent, and households are anticipated to increase by 51 percent. For Moreno Valley specifically, between 2012 and 2040, population is anticipated to increase by 30 percent, household jobs are anticipated to increase by 165 percent, and households are anticipated to increase by 41 percent.

A 2025 model year was created for analysis by interpolating the land use growth assumptions found in SCAG's 2016 RTP/SCS. This model reflects all known development projects in the greater Moreno Valley area that will foreseeably be completed by 2025, including the first 23,000,000 square feet (sf) of the World Logistics Center (WLC). Forecast year 2025 conditions on SR-60 assume that a separate planned SR-60 project will add an additional mainline lane (three lanes in each direction) in the study area, and additional roadway projects from the State Transportation Improvement Program (STIP), RTP, and City of Moreno Valley General Plan will be completed by 2025. The analysis performed for the current study anticipates the need for the additional mainline lanes on SR-60 between the Redlands Blvd and Gilman Springs Rd interchanges. The need for these lanes would take place between Opening Year (2025) and Design Year (2045) and would depend upon the timing of the General Plan buildout.

Design Year (2045) Assumptions

A 2040 model year was created using SCAG's 2016 RTP/SCS, which models 2040. This model also includes all foreseeable development projects in the greater Moreno Valley area, including build out (41,000,000 sf) of the WLC Specific Plan. The network is consistent with the SCAG 2040 RTP/SCS model network in the greater Moreno Valley area.

Forecasts for the 2045 study year were developed by extrapolating the ambient (i.e., non-WLC) growth for the 2025–2040 period for an additional 5 years and then adding in the traffic from full build out of the WLC. No roadway projects were added because no adopted plans are available beyond 2040, so any additions would have

been speculative. Full build out of the City of Moreno Valley General Plan was assumed, including the WLC Specific Plan land uses and network.

The 2040 network assumptions followed those in SCAG's 2040 financially constrained RTP project set. The 2040 network is consistent with roadway improvements in the City of Moreno Valley General Plan, including the WLC Specific Plan.

Without proposed improvements, in the Design Year 2045, the interchange ramps, intersections, and SR-60 mainline are anticipated to operate at unacceptable LOS. The eastbound and westbound off-ramps are anticipated to operate at LOS F. The westbound on-ramp is anticipated to operate at LOS F. The westbound SR-60 segment from Gilman Springs Road to Redlands Boulevard is anticipated to operate at LOS F. The eastbound SR-60 segments from Redlands Boulevard to WLC Pkwy and WLC Pkwy to Gilman Springs Road are anticipated to operate at LOS F and LOS E, respectively.

Pedestrian Access, Bicycle Facilities, Transit, and Compliance with the Americans with Disabilities Act

The SR-60/WLC Pkwy interchange has paved shoulders and a sidewalk on the west side of the existing bridge. However, sidewalks are not provided along the WLC Pkwy approach roadways to the interchange. Within 0.5 mi of the project limits, sidewalks are provided for a 0.6 mi stretch along the north side of Eucalyptus Avenue between WLC Pkwy to the east and Redlands Boulevard to the west, and for a 0.25 mi stretch along the south side of Ironwood Avenue between Sinclair Street to the east and Redlands Boulevard to the west. Additionally, sidewalks occur on both sides of Nason Street, Morrison Street, and portions of Cottonwood Avenue within 0.5 mi of the City Stockpile borrow site.

The SR-60/WLC Pkwy interchange does not have bicycle lanes along the bridge or the approach roadways. Within 0.5 mi of the project limits, a Class II[1] bicycle lane occurs for a 0.7 mi stretch along both sides of Eucalyptus Avenue between WLC Pkwy to the east and Redlands Boulevard to the west and on both sides of Nason Street within 0.5 mi of the City Stockpile borrow site. The City of Moreno Valley General Plan shows a planned Class II bicycle lane on Theodore Street (now WLC Pkwy) between Alessandro Boulevard and Ironwood Avenue. The City of Moreno Valley General Plan also shows planned Class I bicycle lanes along Eucalyptus Avenue, between Redlands Boulevard and Gilman Springs Road, and on the east side of Redlands Boulevard, between Alessandro Boulevard and the northern City limits.

Due to the limited pedestrian facilities currently existing within the project limits, ADA-compliant pedestrian access through the interchange along both sides of WLC Pkwy and Eucalyptus Avenue are very limited. The Redlands Boulevard interchange, similar to the WLC Pkwy interchange, lacks dedicated bicycle and pedestrian accommodations but does include a sidewalk on the west side of the existing bridge.

[1] Class I (separate bike path), Class II (striped bike lane), and Class III (signed as bike route, no striping).

Moreno Valley is served by several bus routes operated by the Riverside Transit Agency (RTA). Although RTA Route 35, which connects Beaumont to the Moreno Valley Mall Transit Center, travels on SR-60 through the project area, it does not stop at the SR-60/WLC Pkwy interchange and therefore does not provide transit service to the project area. No other existing RTA bus routes serve the project area.

2.6.3 Environmental Consequences

2.6.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the Project area. Therefore, the No Build Alternative would not result in temporary impacts related to traffic, transportation, or bicycle and pedestrian facilities.

Alternatives 2 and 6 (LPA) (Build Alternatives)

Traffic delays are expected during construction of the new ramps and the WLC Pkwy Overcrossing and modifications to local intersections. Construction of the proposed project would potentially result in temporary delays on Ironwood Avenue, Eucalyptus Avenue, Gilman Springs Road, and Alessandro Boulevard due to the proposed detour routes for the WLC Pkwy closure between Eucalyptus Avenue and Ironwood Avenue for removal and reconstruction of the existing SR-60/WLC Pkwy interchange overcrossing. Complete closure of the interchange during construction is proposed for 4 months. The eastbound SR-60/WLC Pkwy on-/off-ramps and westbound SR-60/WLC Pkwy on-ramp would be closed for approximately 4 months, while the westbound SR-60/WLC Pkwy off-ramp would be closed for 6 months.

If not done prior to this project, Eucalyptus Avenue would be extended and improved between WLC Pkwy and Redlands Boulevard to provide a detour route to SR-60. The improvements to Eucalyptus Avenue would be constructed early in the construction schedule, prior to the closure of the WLC Pkwy Overcrossing. During construction, access to SR-60 north of the freeway would be provided via Ironwood Avenue and Redlands Boulevard. Access to SR-60 south of the freeway would be provided via Alessandro Boulevard and Gilman Springs Road and via Eucalyptus Avenue and Redlands Boulevard. Additional intersection improvements are proposed along the detour routes to facilitate vehicle movement. As a result, widening is proposed at the Redlands Boulevard/Ironwood Avenue, WLC Pkwy/Alessandro Boulevard, and Alessandro Boulevard/Gilman Springs Road intersections. Consequently, a signal modification is proposed at the Redlands Boulevard/Ironwood Avenue and Redlands Boulevard/Eucalyptus Avenue intersections. A new signal would be installed at the Gilman Springs Road/ Alessandro Boulevard intersection due to the high through movements on Gilman Springs Road conflicting with left turns to and from Alessandro Boulevard. The improvements required for the detour routes also include utility adjustments and/or relocations at Redlands Boulevard/Ironwood Avenue, WLC Pkwy/Alessandro Boulevard, and Alessandro Boulevard/Gilman Springs Road. Final detour routes would be confirmed during the final design of the proposed project. Prior to the closure of SR-60, signage would notify motorists eastbound and westbound of the closure and associated detour routes.

A Transportation Management Plan (TMP) with traffic control plans and related specifications for the project is necessary to avoid and/or minimize circulation and delay impacts. Proposed measures in the TMP Data Sheet include off-peak lane closures and nighttime detours, a public awareness campaign to inform the public about construction activities, the use of portable changeable message signs (CMS), a Construction Zone Enhanced Enforcement Program (COZEEP), traffic control officers, and reduced speed zones. Short-term closures will be publicized through the local media. As described in the following Project Feature (PF-TR-1), a TMP will be implemented during project construction to address changes in vehicular, pedestrian, and bicycle circulation and to provide measures to minimize the adverse effects of construction activities on traffic flows and pedestrian and bicycle travel within the project area.

PF-TR-1 **Transportation Management Plan.** A detailed Transportation Management Plan (TMP) will be prepared during the final design phase of the proposed project. The objective of the TMP is to minimize the potential impacts that construction activities may have on the traveling public and emergency services providers. Preparation of the TMP will be coordinated with the emergency services providers in the project vicinity to minimize response delays resulting from traffic delays, temporary ramp and freeway mainline lane closures, and detours during project construction.

The TMP for the proposed project would include the following elements and strategies:

a. During construction, the contractor will be required to coordinate all temporary ramp closures and detour plans with applicable fire, emergency, medical, and law enforcement providers in order to minimize temporary delays in provider response times.

b. The TMP will include construction staging, detours, and road closures, as applicable.

c. The proposed project will provide access to the parking area and gate for the Skechers Warehouse at all times.

d. Traffic control plans and related specifications, to be completed during final design of the proposed project, will be developed in accordance with the Work Area Traffic Control Handbook (also referred to as the WATCH Manual), Section 5 of the California Department of Transportation (Caltrans) Traffic Manual, Caltrans Standard Plans, and applicable City of Moreno Valley requirements. These plans and specifications will include elements such as: advance roadside signs and portable changeable message signs (CMSs); traffic surveillance; lane/shoulder closures; and temporary signing/striping on local streets, the State Route 60 (SR 60) ramps, and the SR-60 mainline. Temporary closures of SR-60 are anticipated during construction. Closures along the mainline, which will be limited to

nighttime and off-peak hours, are anticipated to re-route traffic to Eucalyptus Avenue.

e. The improvements to Eucalyptus Avenue will be constructed early in the construction schedule, prior to the closure of the WLC Pkwy Overcrossing. During construction, access to SR-60 north of the freeway will be provided via Ironwood Avenue and Redlands Boulevard. Access to SR-60 south of the freeway will be provided via Alessandro Boulevard and Gilman Springs Road and via Eucalyptus Avenue and Redlands Boulevard. Additional intersection improvements required along the detour routes to facilitate vehicle movement shall be implemented prior to the closure of the WLC Pkwy overcrossing.

f. The proposed project will implement a Construction Zone Enhanced Enforcement Program (COZEEP) and use California Highway Patrol (CHP) officers to enforce lane closures and provide a visual deterrent to errant/speeding vehicles.

g. The proposed project will implement a Public Awareness Campaign (PAC). Although any lane closures will occur at night, there will still be a potential temporary impact to vehicles traveling through the construction zone. The purpose of this PAC is to keep the surrounding community abreast of the proposed project's progress and construction activities that could affect the public's travel plans, as well as minimize delays or confusion to the motoring public during construction activities. Mailers/flyers and local newspaper advertising will be used to disseminate this information.

h. The proposed project will implement the following construction strategies to minimize construction-related impacts:

    i. Perform major construction activities at off-peak hours, such as at night or during the weekends, when feasible and reasonable.

    ii. Finalize ramp closure charts during the final design phase. During final design, the proposed lane and ramp closures will be presented to the Caltrans Lane Closures Review Committee (LCRC) for approval.

    iii. Coordinate construction with adjacent projects. Coordination is important to address possible temporary increases in traffic due to detours from adjacent projects. Construction of the adjacent projects is anticipated to be completed prior to construction of the proposed project.

    iv. All ramp reconstruction and local street widening will be constructed in stages to minimize disruption.

i. The proposed project will include provisions for maintaining pedestrian and bicycle access at all times during construction through implementation of various detour routes throughout the study area along Ironwood Avenue, Eucalyptus Avenue, Gilman Springs Road, and Alessandro Boulevard. The proposed project will include contingency plans that specify the actions that will be taken in the event that something unexpected occurs with respect to construction activities or traffic operations. The contractor will review these plans and incorporate them into the contractor's contingency plan.

Design Variations 2a and 6a

Similar to the Build Alternatives, Design Variations 2a and 6a would also require temporary delays on Ironwood Avenue, Eucalyptus Avenue, Gilman Springs Road, and Alessandro Boulevard due to the proposed detour routes for the WLC Pkwy closure between Eucalyptus Avenue and Ironwood Avenue for removal and reconstruction of the existing SR-60/WLC Pkwy interchange overcrossing, as well as full closure of both the eastbound and westbound SR-60 mainline lanes and Eucalyptus Avenue between Redlands Boulevard and WLC Pkwy.

Eucalyptus Avenue would be extended and improved between WLC Pkwy and Redlands Boulevard to provide a detour route to SR-60 while incorporating a realignment of the Eucalyptus Avenue roadway to join WLC Pkwy approximately 900 ft south of the existing Eucalyptus Avenue/WLC Pkwy intersection. At the realigned Eucalyptus Avenue/WLC Pkwy junction, a new intersection would be installed under Design Variation 2a, whereas a roundabout would be installed Under Design Variation 6a. The improvements to Eucalyptus Avenue would be constructed early in the construction schedule, prior to the closure of the WLC Pkwy overcrossing.

During construction, access to SR-60 north of the freeway would be provided via Ironwood Avenue and Redlands Boulevard. Access to SR-60 south of the freeway would be provided via Alessandro Boulevard and Gilman Springs Road and via the [realigned] Eucalyptus Avenue and Redlands Boulevard. Additional intersection improvements are proposed along the detour routes to facilitate vehicle movement. As a result, widening is proposed at the Redlands Boulevard/Ironwood Avenue, WLC Pkwy/Alessandro Boulevard, and Alessandro Boulevard/Gilman Springs Road intersections. Consequently, a signal modification is proposed at the Redlands Boulevard/Ironwood Avenue and Redlands Boulevard/Eucalyptus Avenue intersections. A new signal would be installed at the Gilman Springs Road/ Alessandro Boulevard intersection due to the high through movements on Gilman Springs Road conflicting with left turns to and from Alessandro Boulevard. The improvements required for the detour routes also include utility adjustments and/or relocations at Redlands Boulevard/Ironwood Avenue, WLC Pkwy/Alessandro Boulevard, and Alessandro Boulevard/Gilman Springs Road. Final detour routes will be confirmed during the final design of the proposed project. Prior to the closure of SR-60, signage would notify motorists eastbound and westbound of the closure and associated detour routes.

A TMP with traffic control plans and related specifications for the project would be implemented for Design Variations 2a and 6a as described above in Project Feature PF-TR-1.

2.6.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

Analysis for 2025

The No Build Alternative does not include any improvements to the interchange or local roads in the project area.

Table 2.6.8 provides a summary of forecast (2025) traffic volumes for the SR-60/ WLC Pkwy interchange without the project (i.e., No Build Alternative).

Table 2.6.8 Forecast Conditions 2025 – Peak-Hour Traffic Volumes Without Project

Freeway	Roadway	Ramp		Without Project (vehicles)	
				AM	PM
SR-60	WLC Pkwy	WB Off-Ramp		290	230
		WB Loop On-Ramp		1,020	750
		WB Loop Off-Ramp		--	--
		WB Direct On-Ramp		--	--
		EB Off-Ramp		890	880
		EB Loop On-Ramp	Alt 2	270	310
		EB Direct On-Ramp	Alt 2	--	--
			Alt 6 (LPA)		
	Redlands Boulevard	WB Off-Ramp		380	150
		WB Loop On-Ramp		210	260
		WB Direct On-Ramp		460	360
		EB Off-Ramp		420	860
		EB Loop On-Ramp		90	290
		EB Direct On-Ramp		60	70

Source: Table 4, *Draft Project Report* (February 2020).
Alt = Alternative
EB = eastbound
LPA = Locally Preferred Alternative
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.6.9 summarizes forecast year 2025 condition a.m. and p.m. peak-hour average stopped delay per vehicle and corresponding LOS of the study intersections for without project conditions. As indicated in Table 2.6.9, the 2025 WLC Pkwy/ Eucalyptus Avenue, SR-60/WLC Pkwy eastbound ramps, and SR-60/WLC Pkwy westbound ramps are projected to operate at a deficient LOS without the project (i.e., the No Build Alternative).

Table 2.6.10 summarizes forecast year 2025 highest peak-hour LOS on the freeway ramps and indicates that all study conditions would have an acceptable LOS under the No Build Alternative.

Table 2.6.9 Forecast Conditions 2025 – Peak-Hour Intersection Level of Service Without Project

Roadway	Study Intersection		Without Project			
			Delay (sec/veh)		LOS	
			AM	PM	AM	PM
WLC Pkwy	Eucalyptus Avenue	Alt 2 / Alt 6 (LPA)	>180	>180	F	F
	SR-60 EB Ramps	Alt 2 / Alt 6 (LPA)	>180	>180	F	F
	SR-60 WB Ramps	Alt 2 / Alt 6 (LPA)	126.2	109.2	F	F
	Ironwood Avenue		9.4	9.7	A	A
Redlands Boulevard	Eucalyptus Avenue		13.3	15.7	B	B
	SR-60 EB Ramps		6.4	7.8	A	A
	SR-60 WB Ramps		6.3	6.7	A	A
	Ironwood Avenue		13.4	15	B	B

Source: Exhibit 13, *Traffic Study Report* (January 2019).
Alt = Alternative
EB = Eastbound
LPA = Locally Preferred Alternative
sec/veh = seconds per vehicle
SR-60 = State Route 60
WB = Westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.6.10 Forecast Conditions 2025 – Merge/Diverge Without Project

Freeway	Roadway	Ramp		Without Project			
				AM		PM	
				Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
SR-60	Gilman Springs Road	WB On-Ramp		14.9	B	16.4	B
		EB Off-Ramp	Alt 2 / Alt 6 (LPA)	11.8	B	16.7	B
	WLC Pkwy	WB Off-Ramp		15.8	C	17.4	C
		WB Loop On-Ramp		19.9	C	20.2	C
		WB Loop Off-Ramp		-	-	-	-
		WB Direct On-Ramp		-	-	-	-
		EB Off-Ramp		16.5	C	21.3	C
		EB Loop On-Ramp	Alt 2	13.3	B	18.8	C
		EB Direct On-Ramp	Alt 2	-	-	-	-
			Alt 6 (LPA)	-	-	-	-
	Redlands Boulevard	WB Off-Ramp		18.2	A	19.0	A
		WB Loop On-Ramp		17.7	C	19.5	C
		WB Direct On-Ramp		19.8	B	21.2	C
		EB Off-Ramp		17.6	A	23.4	B
		EB Loop On-Ramp		15.3	B	20.1	C
		EB Direct On-Ramp		15.2	B	20.1	B

Source: Exhibit 17, *Traffic Study Report* (January 2019).
Alt = Alternative
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
pc/mi/ln = passenger cars per mile per lane
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Furthermore, Table 2.6.11 summarizes forecast year 2025 highest peak-hour LOS for the State Highway study segments. As indicated in Table 2.6.11, all State Highway study segments are forecast to operate at an acceptable LOS for forecast year 2025 conditions under the No Build Alternative.

Analysis for 2045

Table 2.6.12 provides a summary of Design Year (2045) traffic volumes for the SR-60/WLC Pkwy interchange without the project (i.e., No Build Alternative).

Table 2.6.11 Forecast Conditions 2025 – Freeway Mainline Level of Service Without Project

SR-60 Mainline		Without Project			
		AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Westbound	Gilman Springs Road to WLC Pkwy	15.8	B	17.4	B
	WLC Pkwy to Redlands Boulevard	17.0	B	17.9	B
	Redlands Boulevard to Moreno Beach Drive	18.9	C	20.3	C
Eastbound	Moreno Beach Drive to Redlands Boulevard	15.7	B	21.4	C
	Redlands Boulevard to WLC Pkwy	16.5	B	21.3	C
	WLC Pkwy to Gilman Springs Road	12.3	B	17.3	B

Source: Exhibit 17, *Traffic Study Report* (January 2019).
LOS = level of service WLC Pkwy = World Logistics Center Parkway
pc/mi/ln = passenger cars per mile per lane

Table 2.6.12 Forecast Conditions 2045 – Peak-Hour Traffic Volumes Without Project

Freeway	Roadway	Ramp		Without Project (vehicles)	
				AM	PM
SR-60	WLC Pkwy	WB Off-Ramp		560	460
		WB Loop On-Ramp		1,630	1,350
		WB Loop Off-Ramp		--	--
		WB Direct On-Ramp		--	--
		EB Off-Ramp		1,140	1,320
		EB Loop On-Ramp	Alt 2	460	500
		EB Direct On-Ramp	Alt 2	--	--
			Alt 6 (LPA)		
	Redlands Boulevard	WB Off-Ramp		1,070	870
		WB Loop On-Ramp		130	220
		WB Direct On-Ramp		190	300
		EB Off-Ramp		410	640
		EB Loop On-Ramp		170	550
		EB Direct On-Ramp		220	1,040

Source: Table 5, *Draft Project Report* (February 2020).
Alt = Alternative SR-60 = State Route 60
EB = eastbound WB = westbound
LPA = Locally Preferred Alternative WLC Pkwy = World Logistics Center Parkway

Table 2.6.13 summarizes forecast year 2045 condition a.m. and p.m. peak-hour average stopped delay per vehicle and corresponding LOS of the study intersections for without project conditions. As indicated in Table 2.6.13, the 2045 WLC Pkwy/ Eucalyptus Avenue, SR-60/WLC Pkwy eastbound ramps, and SR-60/WLC Pkwy westbound ramps are projected to operate at a deficient LOS without the project (i.e., the No Build Alternative).

Table 2.6.14 summarizes forecast year 2045 highest peak-hour LOS of the freeway on-/off-ramps and indicates the following freeway ramps would operate at a deficient LOS without the project (i.e., the No Build Alternative):

Table 2.6.13 Forecast Conditions 2045 – Peak-Hour Intersection Level of Service Without Project

Roadway	Study Intersection		Without Project			
			Delay (sec/veh)		LOS	
			AM	PM	AM	PM
WLC Pkwy	Eucalyptus Avenue	Alt 2 / Alt 6 (LPA)	>180	>180	F	F
	SR-60 EB Ramps	Alt 2 / Alt 6 (LPA)	>180	>180	F	F
	SR-60 WB Ramps	Alt 2 / Alt 6 (LPA)	>180	>180	F	F
	Ironwood Avenue		1.5	1.1	A	A
Redlands Boulevard	Eucalyptus Avenue		17.5	22.8	B	C
	SR-60 EB Ramps		6.7	15.0	A	B
	SR-60 WB Ramps		9.9	9.1	A	A
	Ironwood Avenue		17.4	22.5	B	C

Source: Exhibit 14, *Traffic Study Report* (January 2019).
Alt = Alternative
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
sec/veh = seconds per vehicle
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.6.14 Forecast Conditions 2045 – Merge/Diverge Without Project

Freeway	Roadway	Ramp		Without Project			
				AM		PM	
				Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
SR-60	Gilman Springs Road	WB On-Ramp		68.6	F	26.0	C
		EB Off-Ramp	Alt 2 / Alt 6 (LPA)	17.5	B	35.0	D
	WLC Pkwy	WB Off-Ramp		72.1	F	26.3	D
		WB Loop On-Ramp		>Cap.	F	38.2	E
		WB Loop Off-Ramp		--	--	--	--
		WB Direct On-Ramp		--	--	--	--
		EB Off-Ramp		22.7	D	>Cap.	F
		EB Loop On-Ramp	Alt 2	19.9	C	34.5	D
		EB Direct On-Ramp	Alt 2 / Alt 6 (LPA)	--	--	--	--
	Redlands Boulevard	WB Off-Ramp		>Cap.	F	31.6	C
		WB Loop On-Ramp		35.8	D	31.0	D
		WB Direct On-Ramp		36.7	D	32.9	D
		EB Off-Ramp		22.7	B	73.7	F
		EB Loop On-Ramp		20.5	C	77.6	F
		EB Direct On-Ramp		21.2	B	>Cap.	F

Source: Exhibit 18, *Traffic Study Report* (January 2019).
>Cap. = Segment over capacity (V/C >1)
Alt = Alternative
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
pc/mi/ln = passenger cars per mile per lane
SR-60 = State Route 60
V/C = volume-to-capacity ratio
WB = westbound
WLC Pkwy = World Logistics Center Parkway

- Gilman Springs Road/SR-60 westbound on-ramp during the a.m. peak hour
- SR-60/WLC Pkwy westbound off-ramp during the a.m. peak hour
- SR-60/WLC Pkwy westbound loop on-ramp during the a.m. and p.m. peak hours
- SR-60/WLC Pkwy eastbound off-ramp during the p.m. peak hour

- Redlands Boulevard/SR-60 westbound off-ramp during the a.m. peak hour
- Redlands Boulevard/SR-60 eastbound off-ramp during the p.m. peak hour
- Redlands Boulevard/SR-60 eastbound loop on-ramp during the p.m. peak hour
- Redlands Boulevard/SR-60 eastbound direct on-ramp during the p.m. peak hour

Furthermore, Table 2.6.15 summarizes the forecast year 2045 highest peak-hour LOS for the State Highway study segments. As indicated in Table 2.6.15, the following State Highway study segments would operate at a deficient LOS without the project (i.e., the No Build Alternative):

- Westbound Gilman Springs Road to WLC Pkwy a.m. peak hour
- Westbound WLC Pkwy to Redlands Boulevard a.m. peak hour
- Westbound Redlands Boulevard to Moreno Beach Drive during a.m. peak hour
- Eastbound Redlands Boulevard to WLC Pkwy p.m. peak hour
- Eastbound WLC Pkwy to Gilman Springs Road p.m. peak hour

Table 2.6.15 Forecast Conditions 2045 – Freeway Mainline Level of Service Without Project

SR-60 Mainline		Without Project			
		AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Westbound	Gilman Springs Road to WLC Pkwy	72.1	F	26.3	D
	WLC Pkwy to Redlands Boulevard	>Cap.	F	33.6	D
	Redlands Boulevard to Moreno Beach Drive	39.2	E	34.1	D
Eastbound	Moreno Beach Drive to Redlands Boulevard	20.8	C	33.4	D
	Redlands Boulevard to WLC Pkwy	22.7	C	>Cap.	F
	WLC Pkwy to Gilman Springs Road	18.1	C	35.3	E

Source: Exhibit 18, *Traffic Study Report* (January 2019).
>Cap.= Segment over capacity (V/C >1) SR-60 = State Route 60
LOS = level of service V/C = volume-to-capacity ratio
pc/mi/ln = passenger cars per mile per lane WLC Pkwy = World Logistics Center Parkway

The SR-60/WLC Pkwy interchange is currently a two-quadrant cloverleaf with side-street stop-controlled ramp intersections. At present, the interchange's catchment area is sparsely developed with the exception of the 1,800,000 sf Skechers high-cube warehouse, and the current configuration is sufficient to handle the current low traffic demand as indicated in Tables 2.6.4, 2.6.5, 2.6.6, and 2.6.7. However, as build out of the region occurs, traffic volumes are expected to increase through the year 2025, as indicated in Table 2.6.8, which would result in insufficient LOS at select study area intersections detailed in Table 2.6.9. Furthermore, long-range build out of the region through the year 2045 is expected to further increase traffic volumes, as indicated in Table 2.6.12, which would result in insufficient intersection, merge/diverge, and freeway mainline LOS at select study intersections, ramps, and segments as indicated in Tables 2.6.13, 2.6.14, and 2.6.15. Therefore, the roadway capacity of the No Build Alternative configuration is not sufficient to accommodate the future traffic volumes forecast for 2025 and 2045.

Alternatives 2 and 6 (LPA) (Build Alternatives)

Alternative 2 would construct a new modified partial cloverleaf interchange with direct on-ramps, an eastbound loop on-ramp, a direct eastbound off-ramp and westbound loop off-ramp, and a four-lane overcrossing with additional turning lanes. Alternative 6 (LPA) would construct a new modified partial cloverleaf interchange with direct on-ramps, a direct eastbound off-ramp and westbound loop off-ramp, a four-lane overcrossing with additional turning lanes, and addition of roundabout intersection control at the ramps. All directional movements will be accommodated by both of the proposed alternatives. Therefore, the following intersection delay, merge/diverge densities, and freeway mainline densities for Alternatives 2 and 6 (LPA) are identical for all corresponding study intersections, ramps, and freeway segments, unless noted otherwise.

Analysis for 2025

Table 2.6.16 provides a summary of forecast (2025) traffic volumes for the SR-60/ WLC Pkwy interchange with the project (i.e., Alternatives 2 and 6 [LPA]).

Table 2.6.16 Forecast Conditions 2025 – Peak Hour Traffic Volumes With Project

Freeway	Roadway	Ramp		With Project – Alt 2 & 6 (LPA) (vehicles)	
				AM	PM
SR-60	WLC Pkwy	WB Off-Ramp		-	-
		WB Loop On-Ramp		-	-
		WB Loop Off-Ramp		290	230
		WB Direct On-Ramp		1,020	750
		EB Off-Ramp		890	880
		EB Loop On-Ramp	Alt 2	10	40
		EB Direct On-Ramp	Alt 2	260	270
			Alt 6 (LPA)	270	310
	Redlands Boulevard	WB Off-Ramp		380	150
		WB Loop On-Ramp		210	260
		WB Direct On-Ramp		460	360
		EB Off-Ramp		420	860
		EB Loop On-Ramp		90	290
		EB Direct On-Ramp		60	70

Source: Table 4, *Draft Project Report* (February 2020).
Alt = Alternative
EB = eastbound
LPA = Locally Preferred Alternative
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.6.17 summarizes forecast year 2025 condition a.m. and p.m. peak-hour average stopped delay per vehicle and corresponding LOS of the study intersections for with project conditions. Intersection delay for Alternatives 2 and 6 (LPA) are identical for all study intersections, unless noted otherwise. As shown in Table 2.6.17, all of the study intersections have acceptable intersection LOS with the proposed SR-60/WLC Pkwy interchange under both Build Alternatives.

Table 2.6.17 Forecast Conditions 2025 – Peak-Hour Intersection Level of Service With Project

Roadway	Study Intersection		With Project (Alt 2 & 6 [LPA])			
			Delay (sec/veh)		LOS	
			AM	PM	AM	PM
WLC Pkwy	Eucalyptus Avenue	Alt 2	13.9	5.1	B	A
		Alt 6 (LPA)	10.7	10.6	B	B
	SR-60 EB Ramps	Alt 2	17.8	9.4	B	A
		Alt 6 (LPA)	4.6	3.6	A	A
	SR-60 WB Ramps	Alt 2	8.0	17.4	A	B
		Alt 6 (LPA)	7.2	7.4	A	A
	Ironwood Avenue		9.4	9.7	A	A
Redlands Boulevard	Eucalyptus Avenue		13.3	15.7	B	B
	SR-60 EB Ramps		6.4	7.8	A	A
	SR-60 WB Ramps		6.3	6.7	A	A
	Ironwood Avenue		13.4	15	B	B

Source: Exhibits 21 and 31, *Traffic Study Report* (January 2019).
Alt = Alternative
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
sec/veh = seconds per vehicle
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.6.18 summarizes forecast year 2025 highest peak-hour LOS of the freeway ramps for with project conditions. Merge/diverge densities for Alternatives 2 and 6 (LPA) are identical for all study ramps, unless noted otherwise. Table 2.6.18 indicates all study conditions would have an acceptable LOS under both Build Alternatives.

Table 2.6.18 Forecast Conditions 2025 – Merge/Diverge With Project

Freeway	Roadway	Ramp		With Project (Alt 2 & 6 [LPA])			
				AM		PM	
				Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
SR-60	Gilman Springs Road	WB On-Ramp		11.8	B	12.7	B
		EB Off-Ramp	Alt 2	9.7	A	14.3	B
			Alt 6 (LPA)	9.8	A	14	B
	WLC Pkwy	WB Off-Ramp		-	-	-	-
		WB Loop On-Ramp		-	-	-	-
		WB Loop Off-Ramp		11.8	B	12.7	B
		WB Direct On-Ramp		17.0	B	16	B
		EB Off-Ramp		11.7	B	15.5	B
		EB Loop On-Ramp	Alt 2	10.9	A	15.8	B
		EB Direct On-Ramp	Alt 2	9.7	A	14.3	B
		EB Direct On-Ramp	Alt 6 (LPA)	9.8	A	14	B
	Redlands Boulevard	WB Off-Ramp		17.0	B	16	B
		WB Loop On-Ramp		17.7	C	19.5	C
		WB Direct On-Ramp		19.8	B	21.2	C
		EB Off-Ramp		17.7	A	23.4	B
		EB Loop On-Ramp		13.5	B	16.7	B
		EB Direct On-Ramp		11.7	B	15.5	B

Source: Table 11, *Draft Project Report* (February 2020).
Alt = Alternative
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
pc/mi/ln = passenger cars per mile per lane
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Furthermore, Table 2.6.19 summarizes forecast year 2025 highest peak hour LOS with project conditions for the State Highway study segments. Mainline densities for Alternatives 2 and 6 (LPA) are identical for all study segments, unless noted otherwise. As indicated in Table 2.6.19, all State Highway study segments are forecast to operate at an acceptable LOS for forecast year 2025 conditions under both Build Alternatives.

Table 2.6.19 Forecast Conditions 2025 – Freeway Mainline Level of Service With Project

SR-60 Mainline		With Project (Alt 2 & 6 [LPA])			
		AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Westbound	Gilman Springs Road to WLC Pkwy	13.3	B	14.3	B
	WLC Pkwy to Redlands Boulevard	15.4	B	17.2	B
	Redlands Boulevard to Moreno Beach Drive	18.9	C	20.3	C
Eastbound	Moreno Beach Drive to Redlands Boulevard	15.8	B	21.4	C
	Redlands Boulevard to WLC Pkwy	14.2	B	17.6	B
	WLC Pkwy to Gilman Springs Road	11.4	B	16.4	B

Source: Table 14, *Draft Project Report* (February 2020).
Alt = Alternative
LOS = level of service
LPA = Locally Preferred Alternative
pc/mi/ln = passenger cars per mile per lane
WLC Pkwy = World Logistics Center Parkway

Analysis for 2045

Table 2.6.20 provides a summary of Design Year (2045) traffic volumes for the SR-60/WLC Pkwy interchange with the project (i.e., Alternative 2 and Alternative 6 [LPA]).

Table 2.6.20 Forecast Conditions 2045 – Peak-Hour Traffic Volumes With Project

Freeway	Roadway	Ramp		With Project (Alt 2 & 6 [LPA]) (vehicles)	
				AM	PM
SR-60	WLC Pkwy	WB Off-Ramp		--	--
		WB Loop On-Ramp		--	--
		WB Loop Off-Ramp		560	460
		WB Direct On-Ramp		1,630	1,350
		EB Off-Ramp		1,140	1,320
		EB Loop On-Ramp	Alt 2	120	250
		EB Direct On-Ramp	Alt 2	340	250
			Alt 6 (LPA)	460	500
	Redlands Boulevard	WB Off-Ramp		1,070	870
		WB Loop On-Ramp		130	220
		WB Direct On-Ramp		190	300
		EB Off-Ramp		410	640
		EB Loop On-Ramp		170	550
		EB Direct On-Ramp		220	1,040

Source: Table 5, *Draft Project Report* (February 2020).
Alt = Alternative
EB = eastbound
LPA = Locally Preferred Alternative
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.6.21 summarizes forecast year 2045 condition a.m. and p.m. peak-hour average stopped delay per vehicle and corresponding LOS of the study intersections for with project conditions. Intersection delay for Alternatives 2 and 6 are identical for all study intersections, unless noted otherwise. As shown in Table 2.6.21, all of the study intersections have acceptable intersection LOS with the proposed SR-60/WLC Pkwy interchange under both Build Alternatives. Whereas Table 2.6.13 indicated the 2045 design year WLC Pkwy/Eucalyptus Avenue, SR-60/WLC Pkwy eastbound ramps, and SR-60/WLC Pkwy westbound ramps are projected to operate at a deficient LOS without the project (i.e., the No Build Alternative), intersection LOS improves with the proposed project for the SR-60/WLC Pkwy intersections under both Build Alternatives.

Table 2.6.21 Forecast Conditions 2045 – Peak-Hour Intersection Level of Service With Project

Roadway	Study Intersection		With Project (Alt 2 & 6 [LPA])			
			Delay (sec/veh)		LOS	
			AM	PM	AM	PM
WLC Pkwy	Eucalyptus Avenue	Alt 2	39.3	49.8	D	D
		Alt 6 (LPA)	18.5	23.7	C	C
	SR-60 EB Ramps	Alt 2	16.8	25.8	B	C
		Alt 6 (LPA)	10.2	12.3	B	B
	SR-60 WB Ramps	Alt 2	29.2	17.4	C	B
		Alt 6 (LPA)	9.3	28.8	A	D
	Ironwood Avenue		1.5	1.1	A	A
Redlands Boulevard	Eucalyptus Avenue		17.5	22.8	B	C
	SR-60 EB Ramps		6.7	15	A	B
	SR-60 WB Ramps		9.9	9.1	A	A
	Ironwood Avenue		17.4	22.5	B	C

Source: Exhibits 22 and 32, *Traffic Study Report* (January 2019).
Alt = Alternative
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
sec/veh = seconds per vehicle
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.6.22 summarizes forecast year 2045 highest peak-hour LOS of the freeway on-/off-ramps for with project conditions. Merge/diverge densities for Alternatives 2 and 6 (LPA) are identical for all study ramps, unless noted otherwise. When compared to the No Build Alternative, Table 2.6.22 under Alternatives 2 and 6 (LPA) indicates:

- The following study freeway ramps will maintain acceptable LOS operations with the proposed SR-60/WLC Pkwy interchange:
    - SR-60/Gilman Springs Road eastbound off-ramp (Alternative 6 [LPA])
    - SR-60/Redlands Boulevard westbound loop on-ramp
    - SR-60/Redlands Boulevard westbound direct on-ramp
- The following study freeway ramps will experience acceptable LOS with the proposed SR-60/WLC Pkwy interchange:
    - SR-60/WLC Pkwy westbound loop off-ramp
    - SR-60/WLC Pkwy eastbound direct on-ramp

Table 2.6.22 Forecast Conditions 2045 – Merge/Diverge With Project

Freeway	Roadway	Ramp		Without Project (No Build Alternative				With Project (Alt 2 & 6 [LPA])			
				AM		PM		AM		PM	
				Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
SR-60	Gilman Springs Road	WB On-Ramp		68.6	F	26.0	C	29.3	D	21.5	C
		EB Off-Ramp	Alt 2	17.5	B	35.0	D	15.4	B	28.0	C
			Alt 6 (LPA)					15.1	B	28.8	D
	WLC Pkwy	WB Off-Ramp		72.1	F	26.3	D	--	--	--	--
		WB Loop On-Ramp		>Cap.	F	38.2	E	--	--	--	--
		WB Loop Off-Ramp		-	--	--	--	29.3	D	21.5	C
		WB Direct On-Ramp		-	--	--	--	>Cap.	F	29.5	D
		EB Off-Ramp		22.7	D	>Cap.	F	16.7	B	34.7	D
		EB Loop On-Ramp	Alt 2	19.9	C	34.5	D	15.4	B	38.4	E
		EB Direct On-Ramp	Alt 2	--	--	--	--	15.4	B	28.0	C
		EB Direct On-Ramp	Alt 6 (LPA)					15.1	B	28.8	D
	Redlands Boulevard	WB Off-Ramp		>Cap.	F	31.6	C	>Cap.	F	29.5	D
		WB Loop On-Ramp		35.8	D	31.0	D	34.8	D	31.0	D
		WB Direct On-Ramp		36.7	D	32.9	D	35.9	D	32.9	D
		EB Off-Ramp		22.7	B	73.7	F	22.8	B	31.7	C
		EB Loop On-Ramp		20.5	C	77.6	F	17.9	B	27.2	D
		EB Direct On-Ramp		21.2	B	>Cap.	F	16.7	B	34.7	D

Source: Table 12, *Draft Project Report* (February 2020).
>Cap. = Segment over capacity (V/C >1)
Alt = Alternative
EB = eastbound
LPA = Locally Preferred Alternative
pc/mi/ln = passenger cars per mile per lane
SR-60 = State Route 60
V/C = volume-to-capacity ratio
WB = westbound
WLC Pkwy = World Logistics Center Parkway

- The following study freeway ramps will experience improvements in LOS with the proposed SR-60/WLC Pkwy interchange:

    - SR-60/Gilman Springs Road westbound on-ramp
    - SR-60/Gilman Springs Road eastbound off-ramp (Alternative 2)
    - SR-60/WLC Pkwy eastbound off-ramp
    - SR-60/Redlands Boulevard eastbound off-ramp
    - SR-60/Redlands Boulevard eastbound loop on-ramp
    - SR-60/ Redlands Boulevard eastbound direct on-ramp

- The following study freeway ramps will experience a LOS lower than D with the proposed SR-60/WLC Pkwy interchange:

    - SR-60/WLC Pkwy westbound on-ramp (a.m.)
    - SR-60/WLC Pkwy eastbound loop on-ramp (Alternative 2 – p.m.)
    - SR-60/Redlands Boulevard westbound off-ramp (a.m.)

The section of westbound SR-60 between WLC Pkwy and Redlands Boulevard is a weaving section that would be over capacity for one 15-minute interval during the a.m. peak hours, but not to the extent that it would cause queuing on SR-60 east of the WLC Pkwy on-ramp. (Note that even though density on this segment is less than 43 passenger cars per mile per lane (pc/mi/ln), its weaving volume exceeds weaving capacity and is therefore over capacity per the 6th Edition of the HCM.) The merge area for the eastbound loop on-ramp would operate near capacity at LOS E for one 15-minute interval during the p.m. peak hours. The overall improvements of operation balance out the isolated 15-minute intervals of different LOS. If the entire peak-hour operation is averaged, the peak hour experiences acceptable LOS.

Furthermore, Table 2.6.23 summarizes forecast year 2045 highest peak hour LOS for the State Highway study segments. Mainline densities for Alternative 2 and Alternative 6 (LPA) are identical for all study segments, unless noted otherwise. When compared to the No Build Alternative, Table 2.6.23 under Build Alternative 2 and Build Alternative 6 (LPA) indicates the following freeway segments will maintain LOS operations with the proposed SR-60/WLC Pkwy interchange:

- Westbound SR-60 from Redlands Boulevard to Moreno Beach Drive
- Eastbound SR-60 from Moreno Beach Drive to Redlands Boulevard

The following freeway segments experience improvements in LOS operations with the proposed SR-60/WLC Pkwy interchange:

- Westbound SR-60 from Gilman Springs Road to WLC Pkwy
- Westbound SR-60 from WLC Pkwy to Redlands Boulevard
- Eastbound SR-60 from Redlands Boulevard to WLC Pkwy
- Eastbound SR-60 from WLC Pkwy to Gilman Springs Road

Table 2.6.23 Forecast Conditions 2045 – Freeway Mainline Level of Service Without and With Project

SR-60 Mainline		Without Project				With Project (Alt 2 & 6 [LPA])			
		AM		PM		AM		PM	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
Westbound	Gilman Springs Road to WLC Pkwy	72.1	F	26.3	D	32.3	D	21.4	C
	WLC Pkwy to Redlands Boulevard	>Cap.	F	33.6	D	35.5	E	29.8	D
	Redlands Boulevard to Moreno Beach Drive	39.2	E	34.1	D	38.4	E	34.1	D
Eastbound	Moreno Beach Drive to Redlands Boulevard	20.8	C	33.4	D	20.9	C	33.4	D
	Redlands Boulevard to WLC Pkwy	22.7	C	>Cap.	F	18.8	C	28.1	D
	WLC Pkwy to Gilman Springs Road	18.1	C	35.3	E	16.0	B	37.9	E

Source: Table 15, *Draft Project Report* (February 2020).
>Cap. = Segment over capacity (V/C >1) pc/mi/ln = passenger cars per mile per lane
Alt = Alternative V/C = volume-to-capacity ratio
LOS = level of service WLC Pkwy = World Logistics Center Parkway
LPA = Locally Preferred Alternative

Design Variations 2a and 6a

Under both design variations, Eucalyptus Avenue would be extended and improved between WLC Pkwy and Redlands Boulevard to provide a detour route to SR-60 while incorporating a realignment of the Eucalyptus Avenue roadway to join WLC Pkwy approximately 900 ft south of the existing Eucalyptus Avenue/WLC Pkwy intersection. At the realigned Eucalyptus Avenue/WLC Pkwy junction, a new intersection would be installed under Design Variation 2a, whereas a roundabout would be installed Under Design Variation 6a. All directional movements will be accommodated by both of the proposed design variations, and neither design variation is expected to result in substantial changes in capacity. Therefore, intersection delay, merge/diverge densities, and [freeway] mainline densities under Design Variation 2a and Design Variation 6a are expected to be the same as those for Alternative 2 and Alternative 6 (LPA) detailed above, respectively.

Summary of Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative features side-street stop control at the two WLC Pkwy ramp intersections. The capacity of this configuration is too low to accommodate the large traffic volumes associated with the projected future development.

Alternative 2 and Design Variation 2a

Alternative 2 (modified partial cloverleaf) and/or Design Variation 2a would provide an acceptable LOS. However, the design would have to accommodate a large northbound-to-westbound left-turn movement at the SR-60/WLC Pkwy interchange during both a.m. and p.m. peak hours. Overlap phasing (eastbound right-turn green during northbound-left phase, and southbound right-turn green during eastbound-left phase) at the westbound ramps intersection is needed to achieve acceptable LOS, as specified in Project Feature PF-TR-2.

PF-TR-2 **Overlap Phasing.** Eastbound right-turn green during northbound-left phase and southbound right-turn green during eastbound-left phase at the westbound ramps intersection of World Logistics Center Parkway (WLC Pkwy) and SR-60 under Alternative 2 and/or Design Variation 2a shall be implemented to achieve an acceptable level of service (LOS).

Alternative 6 (LPA) and Design Variation 6a

Project Feature PF-TR-3 would ensure Alternative 6 (LPA) (modified partial cloverleaf with roundabouts) and/or Design Variation 6a provide an acceptable LOS and, because trucks would not need to come to a complete stop, may have less air quality and noise impacts than the other Alternatives.

PF-TR-3 **Roundabout Capacity.** The roundabout lanes and associated approach roadway segments under Alternative 6 (LPA) and/or Design Variation 6a must be constructed to sufficient widths so as to achieve acceptable LOS and be clear of obstructions pursuant to current Caltrans standards.

As shown in Table 2.6.24, with implementation of Project Features PF-TR-2 and PF-TR-3, Alternative 6 (LPA) and/or Design Variation 6a would result in lower average delays than Alternative 2 and/or Design Variation 2a at two of the three critical intersections on SR-60/WLC Pkwy for both a.m. and p.m. peak hours. At the third intersection, Alternative 6 (LPA) performs better in the a.m. peak hour, but Alternative 2 would operate better in the p.m. peak hour.

Pedestrian Access, Bicycle Facilities, Transit, and Compliance with the Americans with Disabilities Act

The proposed project includes construction of a number of nonvehicular and pedestrian access improvements, including sidewalks, bicycle lanes, and ADA-compliant features. These include an 8 ft wide sidewalk on the east side of WLC Pkwy along the limits of the WLC Pkwy improvements, a 6 ft wide sidewalk on the west side of WLC Pkwy between the southern project limits and Eucalyptus Avenue. Additionally, an 11 ft wide multi-use trail would be constructed on the east side of WLC Pkwy between Eucalyptus Avenue and Ironwood Avenue. The multi-use trail would be used by equestrian users, pedestrians, and bicyclists. Bike lanes are provided on WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue within the width of the proposed shoulders. For Alternative 6 (LPA), bicyclists would have the option to either merge with vehicular traffic to navigate through the roundabout or exit the travel lane prior to each roundabout and cross the roundabout with pedestrian traffic.

The proposed project would also accommodate future nonvehicular and pedestrian access improvements, including an 11 ft wide multi-use trail on the north side of Eucalyptus Avenue between Redlands Boulevard and WLC Pkwy. A grade-separated trail and pedestrian crossing over the eastbound SR-60 direct on-ramp would be potentially provided with the proposed project based on available funding.

Table 2.6.24 Comparison of Intersection LOS Under 2045 Conditions

Description	Traffic Control	WLC Pkwy and Eucalyptus Avenue				WLC Pkwy and SR-60 EB Ramps				WLC Pkwy and SR-60 WB Ramps			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS	Delay[1]	LOS
Alt 1 – No Build Alternative	SSSC[2]	>180	F	>180	F	>180	F	>180	F	>180	F	>180	F
Alt 2 & DV 2a – Modified Partial Cloverleaf	Signal[3]	39.3	D	49.8	D	16.8	B	25.8	C	29.2	C	17.4	B
Alt 6 (LPA) & DV 6a – Modified Partial Cloverleaf with Roundabout Intersections	RABT[4]	18.5	C	23.7	C	10.2	B	12.3	B	9.3	A	28.8	D

Source: Exhibit 39, *Traffic Study Report* (January 2019).

[1] Delay is reported in sec/veh.

[2] "SSSC" means "side-street stop-controlled." For SSSC intersections, delay and LOS for the worst performing approach are reported.

[3] For signalized intersections, average intersection delay and LOS are reported.

[4] "RABT" means "Roundabout." For roundabout intersections, average intersection delay and LOS are reported.

Alt = Alternative
DV = Design Variation
EB = eastbound
LOS = level of service
LPA = Locally Preferred Alternative
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

This project includes ADA-compliant pedestrian access through the interchange along both sides of WLC Pkwy and Eucalyptus Avenue, within the project limits. Crosswalks will be provided along WLC Pkwy for all crossing maneuvers except for access across WLC Pkwy at the eastbound ramps, westbound ramps, and Eucalyptus Avenue. Non-motorized vehicle access for bikes would be provided in the form of on-street bike lanes for both directions of travel. Access for alternate forms of transportation (e.g., equestrian riders) would be provided in the multi-use trail on the east side of WLC Pkwy. The features mentioned above will provide for a continuation of existing access to shopping, schools, and hospitals within the vicinity of the project. The City does not have future plans for additional transit activity in the area and, as such, the locations and accessibility of public transit stops are not affected by the project.

These features would improve pedestrian and bicycle access in the project area and be compliant with the ADA; therefore, no impacts would occur.

2.6.4 Avoidance, Minimization, and/or Mitigation Measures

Implementation of Project Feature PF-TR-1 would minimize potential traffic impacts to motorists, bicyclists, and pedestrians traveling through the project area during project construction. Implementation of Project Feature PF-TR-2 would reduce permanent LOS impacts under Alternative 2 and/or Design Variation 2a, while implementation of Project Feature PF-TR-3 would reduce permanent LOS impacts under Alternative 6 (LPA) and/or Design Variation 6a. With implementation of Project Features PF-TR-1 through PF-TR-3, no adverse impacts to vehicular, bicycle, and pedestrian circulation would occur; therefore, no additional avoidance, minimization, or mitigation measures are required.

2.7 Visual/Aesthetics

2.7.1 Regulatory Setting

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

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

California Streets and Highways Code Section 92.3 directs the Department to use drought resistant landscaping and recycled water when feasible, and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

2.7.2 Affected Environment

This section is based on the *Visual Impact Assessment* (VIA) (June 2019). The VIA generally follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the FHWA in January 1988. The study area for visual resources includes the project setting, which is also referred to as the corridor or project corridor. The project setting is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way and is determined by the topography, vegetation, and viewing distance.

2.7.2.1 Visual Setting

The proposed project would be located on State Route 60 (SR-60) between Post Mile (PM) 20.0 and PM 22.0 in the eastern part of Moreno Valley and a small portion of unincorporated Riverside County (within the City of Moreno Valley's Sphere of Influence). Moreno Valley is located in northwestern Riverside County, approximately 66 miles (mi) east of Los Angeles, 42 mi west of Palm Springs, and 100 mi north of San Diego. The land use within the corridor is primarily rural vacant land/open space, but also includes areas of suburban residential, industrial, and institutional uses. The community is situated in a crescent of land bounded by the Box Springs Mountains to the north, the steep hills of the Badlands to the east, and the mountains of the Lake Perris Recreation Area to the south. The surrounding jurisdictions include the City of Riverside, the City of Perris, and the County of Riverside.

The proposed project is located approximately 1 mi east of the SR-60/Redlands Boulevard interchange and 0.7 mi west of the SR-60/Gilman Springs Road interchange. Moreno Valley is located in proximity to regional transportation routes

SR-60, which traverses the city, and Interstate 215 (I-215), which is located near the western boundary of the study area.

The project is located in the South Coast bioregion of northwestern Riverside County, California. The landscape is characterized by a relatively flat valley floor surrounded by rugged hills and mountains. The topography of Moreno Valley is defined by the Box Springs Mountains and Reche Canyon area to the north, the Badlands to the east, and the Mount Russell area to the south. The State of California owns and operates two regional recreation and open space areas south of the City of Moreno Valley (City) limits: the San Jacinto Wildlife Area and the Lake Perris State Recreation Area.

A joint civilian and military airport under the jurisdiction of March Air Reserve Base and the March Joint Powers Authority is located at the southwestern boundary of Moreno Valley.

The most visually prominent developed use adjacent to the project site includes a 1.8 million-square-foot Skechers Distribution Center and Factory Outlet (Skechers) facility that adjoins the project site to the southwest.

The City of Moreno Valley General Plan has designated a number of view corridors throughout the city, including views to the north, east, south, and west of the project site. City-designated visual resources within the corridor include the Reche Canyon area to the north, the Badlands to the north/east, the Mount Russell area and Moreno Peak to the south, and the Box Springs Mountains to the west of the project site. The project site does not include any officially designated or eligible State Scenic Highways. However, SR-60 is designated as a local Scenic Route in the City's General Plan Conservation Element.

2.7.2.2 Visual Assessment Unit

The project corridor is considered an "outdoor room" or "visual assessment unit" (VAU), and is typically defined by the limits of a particular viewshed. A viewshed is a subset of a landscape unit and comprises 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 proposed project. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by project elements.

The following VAU and its associated key views have been identified for the project.

Visual Assessment Unit 1 (VAU1)

VAU1 is located in the eastern portion of Moreno Valley and is generally situated within the northwestern portion of Riverside County. This VAU is defined by geographic features such as ridgelines associated with the Reche Canyon area to the north, the Badlands to the north and east, the Mount Russell area and Moreno Peak to the south, and the Box Springs Mountains to the west. These ridgelines and sloping hills visually contrast with the relatively flat form of Moreno Valley, allowing for more distant views. VAU1 contains varying topography, with elevations ranging from 2,150 feet (ft) above mean sea level (amsl) in the Badlands to the east, to 1,678 ft amsl in the southernmost portion along World Logistics Center Parkway (WLC Pkwy). The project site is located to the south and west of the Badlands,

ranging from approximately 1,675 to 1,865 ft amsl within the easternmost portion of Moreno Valley.

Vegetative communities within VAU1 consist of Disturbed Alluvial, Nonnative Grassland, Oak Woodland, Field Croplands, and Dairy and Livestock Feedyards. There are no ponds, lakes, or any other water features within VAU1.

Development within VAU1 consists of residential, industrial, agricultural, and institutional uses. Other visible features within the landscape unit include open space, hillsides, and transportation uses.

One VAU was determined to be sufficient for the visual analysis of the proposed project due to the homogenous character of the project area. Although there are multiple land uses within VAU1, all are in similar proximity to the project site and have similar views from the SR-60/WLC Pkwy interchange. Thus, one VAU was selected for the analysis of the proposed project in order to avoid repetitive analyses.

2.7.2.3 Key Views

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key viewpoints (see Figure 2.7-1) that would most clearly display the visual effects of the project. Key views also represent the primary viewer groups that would potentially be affected by the project.

Four key view locations within VAU1 were selected to depict visual changes to the project corridor from the proposed project.

- **Key View 1** is located in the northern portion of VAU1, along WLC Pkwy and adjacent to a single-family residential use. Key View 1 represents a typical view from southbound WLC Pkwy and shows the changes that would occur as a result of the proposed improvements to the SR-60/WLC Pkwy interchange. Key View 1 depicts the proposed westbound loop off-ramp (Alternatives 2 and 6, the Locally Preferred Alternative [LPA]), direct westbound on-ramp (Alternatives 2 and 6 [LPA]), westbound roundabout intersection (Alternative 6 [LPA]), traffic signals (Alternative 2), multi-use trail (Alternatives 2 and 6 [LPA]), new overcrossing (Alternatives 2 and 6 [LPA]), and landscape improvements.
- **Key View 2a** is located in the southern portion of VAU1, along WLC Pkwy and adjacent to a single-family residential use. Key View 2a represents a typical view from northbound WLC Pkwy and shows the changes that would occur as a result of the proposed improvements to the SR-60/WLC Pkwy interchange. Key View 2a provides views of the widened WLC Pkwy and landscaped medians (Alternatives 2 and 6 [LPA]), traffic signals (Alternative 2), multi-use trail (Alternatives 2 and 6 [LPA]), and landscaped sidewalks (Alternatives 2 and 6 [LPA]). Although not visible in the foreground of this key view, it is noted that the 1.8 million-square-foot Skechers facility is located to the south of the project site and is highly visible from motorists traveling along WLC Pkwy.

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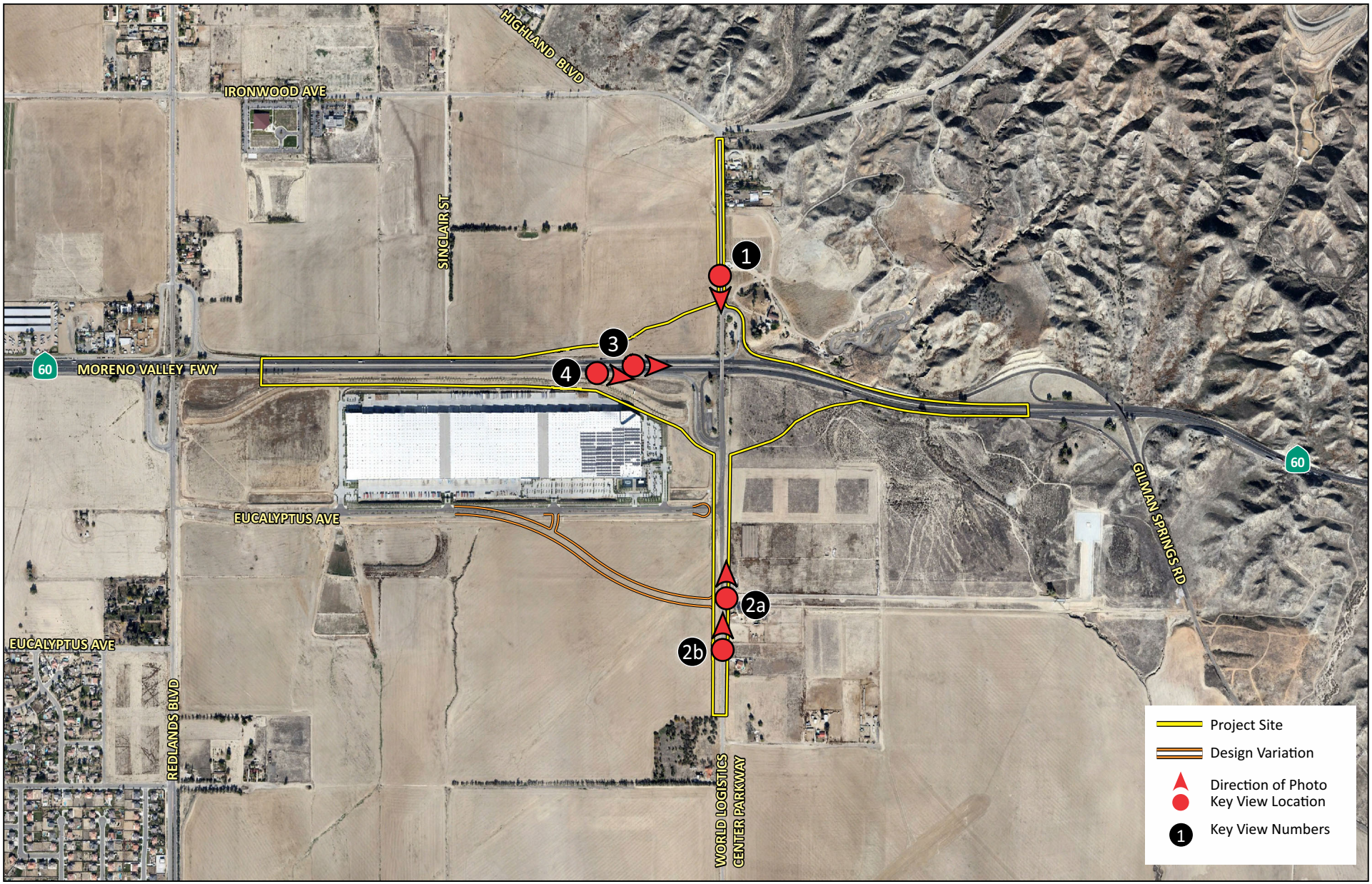

FIGURE 2.7.1

SR-60/WLC Parkway Interchange Improvement Project

Key View Index Map

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

SOURCE: Google Earth

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- **Key View 2b** is located in the southern portion of VAU1, approximately 400 ft south of Key View 2a along WLC Pkwy. Key View 2b represents a typical view from northbound WLC Pkwy and shows the changes that would occur to the Eucalyptus Avenue/WLC Pkwy intersection as a result of the proposed design variations (Design Variations 2a and 6a). Key View 2b depicts realignment of the Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south of its existing location, as well as the partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect to the west side of WLC Pkwy.
- **Key View 3** is located in the western portion of VAU1, along the eastbound travel lanes of SR-60 and to the west of the SR-60/WLC Pkwy interchange. Key View 3 represents a typical view from the perspective of eastbound SR-60 travelers and shows the changes that would occur as a result of the new WLC Pkwy overcrossing and new on- and off-ramps. Although not visible in this key view, the Skechers facility is located to the south of the project site and is highly visible from motorists traveling along SR-60.
- **Key View 4** is located in the western portion of VAU1, along the shoulder of the eastbound travel lanes of SR-60, to the west of the SR-60/WLC Pkwy. Key View 4 represents a typical view from eastbound SR-60 travelers and the new modified changes that would occur as a result of the new WLC Pkwy overcrossing and eastbound direct off-ramp. Although not visible in this key view, the Skechers facility is located to the south of the project site and is highly visible from motorists traveling along SR-60.

2.7.2.4 Sensitive Viewer Groups

The primary sensitive viewer groups in the study area include freeway travelers on SR-60, residents, and other viewers likely to be affected by visual changes brought about by project elements, including WLC Pkwy travelers, Eucalyptus Avenue travelers, and industrial employees and customers within the project limits.

2.7.2.5 Visual Resources

The visual resources of the project setting are defined and identified by assessing visual character and visual quality in the project corridor.

Visual Character

Visual character definitions establish an existing condition that can be discussed in general terms and then compared to the post-project development visual character categories, with any differences identified. For this project, the following attributes of visual character were considered:

- **Form:** Visual mass or shape
- **Line:** Edges or linear definition
- **Color:** Reflective brightness (light, dark) and hue (red, green)
- **Texture:** Surface coarseness
- **Dominance:** Position, size, or contrast
- **Scale:** Apparent size as it relates to the surroundings

- **Diversity:** A variety of visual patterns
- **Continuity:** Uninterrupted flow of form, line, color, or textural pattern

The project area is mainly characterized by rural development and open space, although large-scale industrial development is increasing in the vicinity of the project site (e.g., the existing Skechers facility south of the project site). On-site uses consist of freeway (SR-60) and roadway uses (WLC Pkwy), as well as vacant land and open space. Surrounding uses include single-family residential, industrial (including a Skechers Distribution Center and Factory Outlet), institutional (Crosswinds Church and Trinity Baptist Church), vacant land, and open space uses. Existing visual resources visible within the project viewshed include the Reche Canyon area to the north, the Badlands to the north and east, the Mount Russell area and Moreno Peak to the south, and the Box Springs Mountains to the west of the project site.

The peaks, ridgelines, and hillsides associated with the aforementioned topographic features are the most prominent visual resources in the project area. These ridgelines are generally uniform in color and texture.

Overall, the distant views toward these hills, mountains, and ridgelines provide visual diversity in form, line, and color compared to the relatively flat Moreno Valley floor. Vegetation within the area mainly consists of nonnative grassland, croplands, vacant land, and disturbed land associated with highway and roadway right-of-way. Water flow within VAU1 generally flows in a southerly direction toward the City's drainage channels, which drain to the San Jacinto River, Canyon Lake, and ultimately Lake Elsinore (located southwest of the project site). Man-made features within the project area consist of rural residential and industrial development, as well as transportation uses. Existing freeway structures located on site consist of the WLC Pkwy overcrossing.

The visible form of the SR-60 corridor in VAU1 is fairly consistent, with a continuous width and following a generally straight line with edges defined by shoulders, guardrails, etc. The colors throughout VAU1 are predominantly shades of grey associated with the freeway; however, the surrounding open space, vacant land, and mountains consist of tans, browns, and greens. The freeway texture appears to be granular throughout VAU1, while the textures of surrounding open space, vacant land, and mountains are coarse, rigid, and smooth. The scale of the features visible along the SR-60 corridor within VAU1 is generally consistent due to vast open space and rural development, although the Skechers facility increases visible hardscape along the SR-60 corridor. The lowest elevations in VAU1 are located to the south of SR-60 (approximately 1,678 ft amsl). The highest elevations within VAU1 are at the Badlands (approximately 2,150 ft) to the north and east of the project site. VAU1 is generally continuous, with repeating form, line, color, and textural pattern.

Alternative 2 and Design Variation 2a

Alternative 2 and its Design Variation 2a are characterized by both man-made features (e.g., a new WLC Pkwy overcrossing, traffic signals, ornamental landscaping and newly paved/widened roadways, sidewalks, and a multi-use trail, etc.), and natural features (e.g., desert shrubs, hillsides, etc.). The improved roadway (WLC Pkwy), new overcrossing, sidewalks, and multi-use trail are generally similar in line, color, and texture, and provide fairly consistent visible form. The overcrossing

structure and widened roadway exert visual dominance of the surrounding area. The ornamental landscaping, mature trees, and other vegetation features are relatively uniform in form, color, and texture, although their visual dominance is moderate.

Alternative 6 (LPA) and Design Variation 6a

The visual character of Alternative 6 (LPA) and its Design Variation 6a are similar to that of Alternative 2 and its Design Variation 2a. However, Alternative 6 (LPA) and its Design Variation 6a include landscaped roundabouts at three intersections along WLC Pkwy. With installation of the landscaped roundabouts and the Design Variation 6a's proposed realignment of the Eucalyptus Avenue/WLC Pkwy intersection, the visual dominance and scale of the new overcrossing structure and widened roadway is lessened, and the variety of form, color, and texture in the project corridor is increased. The landscaped roundabout intersections provide diverse line patterns, and as well as great continuity within the project corridor and VAU1 compared to Alternative 2 and its Design Variation 2a.

Visual Quality

The visual quality of an area is evaluated by identifying the vividness, intactness, and unity present in the study area viewsheds. These identifying characteristics can be defined as follows:

- **Vividness** is the visual power or memorability of landscape components as they combine in distinctive visual patterns.
- **Intactness** is the visual integrity of the natural and man-built landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.
- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual components in the landscape.

Generally, existing pattern characteristics are vivid and consist of varying landscape ranging from the sloping topography of the surrounding hillsides to Moreno Valley (flat in appearance) in the central portion of VAU1, as well as the ridgelines associated with the Reche Canyon area to the north, the Badlands to the north and east, the Mount Russell area and Moreno Peak to the south, distant views of the San Jacinto Mountains to the southeast, and the Box Springs Mountains to the west. Expansive views of the aforementioned topographic features in the surrounding area increase the vividness and intactness in the project corridor. However, rural development, fencing, overhead power lines, streetlights, and other visually obstructive elements encroach onto these views and decrease the intactness in the area. The visibility and vividness of views to developed features within Moreno Valley and the surrounding ridgelines provide relatively unified viewsheds.

Alternative 2 and Design Variation 2a

The vividness of Alternative 2 and its Design Variation 2a is reduced due to substantial hardscape (associated with the new overcrossing structure and widened WLC Pkwy), generally unvaried color palette (e.g., greys, whites, tans/browns, etc.), and lack of diverse project elements (e.g., minimal landscaping, etc.). Partially obstructed views of surrounding topographic features, vegetation removal, and

increased hardscape decrease the intactness in the area. Unity within the viewshed is fair due to visually obtrusive project elements, and increased hardscape.

Alternative 6 (LPA) and Design Variation 6a

Diverse ornamental landscaping, mature trees, and other vegetation along WLC Pkwy and within the three roundabout intersections provide increased vividness compared to Alternative 2 and its Design Variation 2a. The proposed landscaped areas, and lack of visually intrusive man-made elements (e.g., traffic signals) allow for relatively cohesive views of the project site and surrounding project corridor, although minor visual obstruction of the Badlands and Mount Russell area would occur. In comparison to Alternative 2, unity within the project area is enhanced due to the proposed diversity of texture and colors (associated with the landscape design features along WLC Pkwy and at the SR-60/WLC Pkwy interchange), and decreased hardscape.

2.7.2.6 Resource Change

Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project. Resource change is one of the two major variables in the equation that determine visual impacts. The other is viewer response, which is discussed below.

2.7.2.7 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 project. There are two major types of viewer groups for highway projects: highway neighbors (views to the road from residential and industrial uses adjacent to the project site) and highway users (views from the road, including SR-60 freeway travelers, WLC Pkwy travelers, and Eucalyptus Avenue travelers). Each viewer group has its own particular level of viewer exposure and viewer sensitivity, resulting in distinct and predictable visual concerns for each group, which help to predict viewers' responses to visual changes.

High viewer sensitivity helps predict that viewers would have a high concern for any visual change. Viewer sensitivity is a measure of the viewer's recognition of a particular object. It has three attributes: activity, awareness, and local values.

State Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits (Corridor Master Plan)

The project site is located within the Corridor Master Plan area. The Corridor Master Plan[1] is a design guideline for all highway projects on SR-60 within the Moreno Valley city limits, creating a unified and cohesive corridor. The Corridor Master Plan provides aesthetic guidelines for new retrofit highway projects, which would be accomplished by the following major actions:

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[1] California Department of Transportation, District 8. August 2010. Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits. Website: http://www.moreno-valley.ca.us/city_hall/departments/pub-works/pdf/sr60corridor-mp1010.pdf, accessed January 2019.

- Create a sense of place relating to Moreno Valley's history and natural surroundings.
- Preserve and enhance community character.
- Include aesthetics on structures.
- Employ decorative rock and inert material.
- Use materials that reflect the character of the area.
- Coordinate the color of materials.
- Ensure a safe and durable design.
- Recommend appropriate plants for a lasting roadside environment that meets the following applicable landscape design objectives:
    - Low-growing groundcovers that allow views of the patterns.
    - Ground cover for color, preserving the line of sight.
    - Drought-tolerant plant palette material to be low water use.
    - Landscape areas within the interchange shall have bands of gravel mulch.
    - The gravel mulch will consist of three colors in shades of red and brown.
    - A specimen oak tree or suitable replacement may be planted in all interchanges considered gateways.
    - Plant palette to substantially conform with the Master Plan.
    - Plant palette to incorporate majority of plants listed in existing "Highway 60 Corridor Design Manual Landscape Guidelines".
- Implement water conservation techniques.
- Coordinate with water quality best management practices.
- Identify potential gateway interchanges and recommend enhancements.

The City of Moreno Valley has developed policies and objectives pertaining to visual resources within the General Plan. Policies from the City's General Plan with regard to visual resources that are applicable to the proposed project are provided below.

> **Policy 2.10.7:** On-site lighting should not cause nuisance levels of light or glare on adjacent properties.
>
> **Policy 5.11.1:** Landscaping adjacent to City streets, sidewalks and bikeways shall be designed, installed and maintained so as not to physically or visually impede public use of these facilities.
>
> (a) The removal or relocation of mature trees, street trees and landscaping may be necessary to construct safe pedestrian, bicycle and street facilities.

(b) New landscaping, especially street trees shall be planted in such a manner to avoid overhang into streets, obstruction of traffic control devices or sight distances, or creation of other safety hazards.

Objective 7.7: Where practical, preserve significant visual features significant views and vistas.

Policy 7.7.4: Gilman Springs Road, Moreno Beach Drive, and State Route 60 shall be designated as local scenic roads.

Visual resources, which the residents within the project area have deemed important, include views of the surrounding mountains (the Reche Canyon area to the north, the Badlands to the east, the Mount Russell area and Moreno Peak to the south, and the Box Springs Mountains to the west) and southerly views of the valley. The General Plan also values the man-made environment (e.g., buildings, landscaping, and signage), as well as agricultural uses (e.g., citrus groves) as aesthetic resources within Moreno Valley. The General Plan designates SR-60 as a Scenic Route and states that "Special attention to the location and design of buildings, landscaping, and other features should be made to protect and enhance views from scenic roadways."

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration.

Group Viewer Response

The descriptions of viewer exposure and viewer sensitivity for each viewer group below indicate the overall visual response for each viewer group.

- **Freeway Travelers:** Overall viewer exposure and viewer sensitivity for freeway travelers along the project site are considered to be moderate and moderate–high, respectively. Because SR-60 is designated as a Scenic Route in the City's General Plan, the overall viewer response for this viewer group is moderate–high.
- **WLC Pkwy Travelers:** Overall viewer exposure and viewer sensitivity for WLC Pkwy travelers in the project vicinity are considered to be moderate–low and moderate, respectively. Because the City does not specifically identify travelers along WLC Pkwy as sensitive viewers and because their awareness depends on traffic conditions, the overall viewer response for this viewer group is moderate.
- **Eucalyptus Avenue Travelers:** Overall viewer exposure and viewer sensitivity for Eucalyptus Avenue travelers in the project vicinity are considered to be moderate–low. Because the City does not specifically identify travelers along Eucalyptus Avenue as sensitive viewers and their viewer duration is short to moderate, the overall viewer response for this viewer group is moderate–low.
- **Residential Uses:** Overall viewer exposure for residential uses along the project site is considered to be moderate, while overall viewer sensitivity is considered to be moderate–high. Because the residences with views of the project site (in particular, the residence adjoining the project site to the northeast) would be aware of the visual change, the overall viewer response for this viewer group is moderate–high.

- **Industrial-Use Employees and Customers (Skechers Distribution Center and Factory Outlet):** Overall viewer exposure and viewer sensitivity for industrial employees and customers within the project area (i.e., at the Skechers Distribution Center and Factory Outlet) are considered to be moderate–low. Because the City does not specifically identify these users as sensitive viewers, and the majority of the employees and customers at the Skechers Distribution Center and Factory Outlet are not generally engaged in the surrounding outdoor visual environment, the overall viewer response for this viewer group is moderate–low.

This analysis acknowledges that although the existing character of the surrounding landscape is mostly rural in character, large-scale industrial development is increasing in the vicinity of the project site (e.g., the existing Skechers facility to the south). It is anticipated that industrial use employees and customers will become a much larger population of viewers in the future for the project area.

2.7.2.8 Scenic Resources

The City's General Plan designates SR-60 as a local Scenic Corridor. Key Views 3 and 4 depict typical views from eastbound SR-60 travelers. Views to the north, east, south, and west of the project site provide expansive views of the Reche Canyon area/Badlands, Badlands/San Jacinto Mountains, Moreno Valley floor and Mount Russell area, and Box Springs Mountains, respectively, for travelers along SR-60 and WLC Pkwy.

According to the California Department of Transportation (Caltrans), a State Route must first be included on the list of highways eligible for Scenic Highway designation in Streets and Highways Code Section 263. It can then be nominated for official designation by the local governing body. The project site does not include any officially designated or eligible State Scenic Highways.

2.7.3 Environmental Consequences

2.7.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area. Therefore, the No Build Alternative would not result in temporary visual impacts.

Alternatives 2 and 6 (LPA) (Including Design Variations 2a and 6a)

Implementation of the proposed project would expose sensitive uses to views of the project site. Construction-related vehicle access and staging of construction materials would occur within Caltrans and City right-of-way, and disturbed or developed areas along the length of the project site. The project's construction would expose surfaces, construction debris, equipment, and truck traffic to nearby sensitive viewers. Construction vehicle access and staging of construction materials would be visible to motorists traveling along the project site as well as to residents located in the project vicinity. These impacts are short term and would cease upon project completion. Adherence to Caltrans Standard Specifications for Construction would

minimize visual impacts through the use of opaque, temporary construction fencing that would be situated around construction staging areas.

Demolition of the existing WLC Pkwy overcrossing and erection/removal of falsework for the new WLC Pkwy overcrossing would require full closure of both the eastbound and westbound SR-60 mainline lanes on three separate occasions. Mainline closures would occur during either nighttime or weekend hours to avoid disruption of traffic flows to the greatest extent possible. Nighttime construction would be limited to the hours of 10:00 p.m. to 6:00 a.m. in accordance with Caltrans regulations. Necessary lighting for safety and construction purposes would be directed away from land uses outside the project area and contained and directed toward the specific area of construction.

2.7.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area. As a result, the visual quality of the project area would remain the same.

As discussed below, permanent impacts to each of the four key views identified within the project VAU are discussed by Build Alternative.

Key View 1

Alternative 2

As shown on Figure 2.7-2, under Alternative 2, the visible form and scale of the SR-60/WLC Pkwy interchange would be altered due to the introduction of a new overcrossing (increased height, width, and length compared to the existing overcrossing structure) and westbound loop off-ramp, and widening of WLC Pkwy. The proposed condition would appear similar to the existing condition with regard to colors, although an increase in grey colors (associated with the new overcrossing, widened WLC Pkwy, sidewalks, and traffic signals), a slight decrease in green colors (from vegetation removal/new landscaping), and a decrease in tan/brown colors (as a result of increased hardscape) would result. The texture and continuity associated with the proposed condition would be similar to existing conditions, although to a lesser extent. Mature trees and vegetation in the foreground and middle ground would be removed, and new mature ornamental vegetation would be planted along WLC Pkwy. Increased hardscape, partial view blockage of the Mount Russell area, and vegetation removal activities would result in the decrease of vividness, intactness, and unity as seen from this key view. Overall, the resource change in Key View 1 as a result of Alternative 2 is considered to be moderate due to the increase in hardscape and scale of the new overcrossing and the widening of WLC Pkwy.

Alternative 6 (LPA)

Under the proposed condition, the visible form of the SR-60/WLC Pkwy interchange would be altered due to the introduction of a new overcrossing (increased height, width, and length compared to the existing overcrossing structure), westbound loop off-ramp, and westbound roundabout intersection, and the widening of WLC Pkwy.







For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

FIGURE 2.7.2

SR-60/WLC Parkway Interchange Improvement Project

Key View 1

Existing and Proposed Conditions (Alternatives 2 and 6)

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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The proposed overcrossing would result in a larger bridge structure, although to a lesser extent than under Alternative 2 (i.e., the Alternative 6 [LPA] overcrossing would be approximately 47 ft narrower in width and 53 ft shorter in length than the Alternative 2 structure). Although hardscape would increase, the colors, texture, diversity, and continuity under Alternative 6 (LPA) would appear more similar to existing conditions compared to Alternative 2. The use of considerable ornamental landscaping (e.g., a variety of mature trees, shrubs, and rocks) and architectural treatments at the westbound roundabout intersection for Alternative 6 (LPA) would lessen the appearance of hardscape in the project corridor, resulting in relatively cohesive unity, vividness, and intactness in this key view. Overall, the resource change in Key View 1 as a result of Alternative 6 (LPA) is considered to be moderate–low due to the increase in landscaping and architectural treatments, and the reduced dimensions of the new overcrossing (which would slightly obstruct views of the Mount Russell area).

Key View 2a

Alternatives 2 and 6 (LPA)

Completion of the proposed project would result in visible changes to the existing condition of the SR-60/WLC Pkwy interchange, as seen from this key view. Under Alternatives 2 and 6 (LPA), visible project elements would include the widened WLC Pkwy, traffic signals (under Alternative 2 only), multi-use trail and sidewalks, ornamental landscaping along WLC Pkwy, and landscaped medians (refer to Figure 2.7-3). Given the scope of Design Variations 2a and 6a, there are no visual differences between the Build Alternatives from Key View 2a.

Under the proposed condition, the visible form of WLC Pkwy would be altered due to the introduction of a new overcrossing (increased height, width, and length compared to the existing overcrossing structure) and improvements to WLC Pkwy (widened right-of-way and increased vertical alignment). The increased hardscape and vertical alignment of WLC Pkwy would result in an increased scale of the roadway at this view. The grey colors and texture associated with WLC Pkwy dominate northbound views of the Badlands, decreasing the vividness and intactness at this key view. Partial views of the Badlands to the north remain. Although vegetation removal is visible, the new ornamental landscaping within landscaped medians and along the sidewalks/multi-use trail provides some unity and continuity. Overall, the resource change in Key View 2a for both Alternatives 2 and 6 (LPA) is considered to be moderate–high due to the increased hardscape and vertical alignment of WLC Pkwy. To ensure consistency with the design intent of the Corridor Master Plan, as well as to ensure that landscape treatments reduce the appearance of hardscape features from the overcrossing and widened WLC Pkwy, Caltrans' Gateway Monument policies will be adhered to.

Key View 2b

Design Variations 2a and 6a

Key View 2b is the only key view that depicts the differences between Design Variations 2a and 6a. Completion of the proposed project would result in visible changes to the existing condition of the SR-60/WLC Pkwy interchange as well as the Eucalyptus Avenue/WLC Pkwy intersection as seen from this key view. Under Design Variation 2a and Design Variation 6a, visible project elements would include

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For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

FIGURE 2.7.3

SR-60/WLC Parkway Interchange Improvement Project

Key View 2a

Existing and Proposed Conditions (Alternatives 2 and 6)

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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the proposed relocation of the Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south of its current location and the resultant partial realignment of Eucalyptus Avenue, the widened WLC Pkwy, traffic signals (under Alternative 2 only), multi-use trail and sidewalks, ornamental landscaping along WLC Pkwy, and landscaped medians (refer to Figure 2.7-4). Under the proposed condition, the visible form of WLC Pkwy would be altered due to the introduction of a new overcrossing (increased height, width, and length compared to the existing overcrossing structure) and improvements to WLC Pkwy (widened right-of-way and increased vertical alignment). The increased hardscape and vertical alignment of WLC Pkwy would result in an increased scale of the roadway at this view and would add to the existing hardscape of existing uses (e.g., the Skechers facility). Fencing has also been introduced along northbound and southbound WLC Pkwy, along with rows of ornamental trees, that soften the increased hardscape experienced at this key view.

Although vegetation removal is visible, the new ornamental landscaping within landscaped medians and along the sidewalks/multi-use trail provide some unity and continuity.

Distant views to the Badlands would remain largely intact. Overall, the resource change in Key View 2b for both the design variations is considered to be moderate–high due to the increased hardscape, permanent acquisition of an existing residential use and mature trees along WLC Pkwy, and the vertical alignment of WLC Pkwy. To ensure consistency with the design intent of the Corridor Master Plan, as well as to ensure that landscape treatments reduce the appearance of hardscape features from the overcrossing and widened WLC Pkwy, Caltrans' Gateway Monument policies will be adhered to.

Key View 3

Alternatives 2 and 6 (LPA)

Completion of the proposed project would result in visible changes to the existing condition of the SR-60/WLC Pkwy interchange as seen from this key view. Visible project elements from this key view under Alternatives 2 and 6 (LPA) include the new WLC Pkwy overcrossing, direct eastbound off-ramp, ornamental landscaping, and new eastbound loop on-ramp (Alternative 2) (refer to Figure 2.7-5). The project changes under Alternatives 2 and 6 (LPA) are generally consistent with the existing condition of the area. The proposed condition in Key View 3 would appear generally similar to the existing condition with regard to colors, texture, scale, diversity, and continuity. However, the visible form would be altered due to the scale of the new WLC Pkwy overcrossing structure and the new eastbound direct on-ramp associated with Alternative 2. Vividness would nominally decrease due to vegetation removal within the highway right-of-way, although the installation of ornamental landscaping along WLC Pkwy and SR-60 would increase the unity in this view. Hardscape features in this key view would increase as a result of the vegetation removal, and the new overcrossing structure would slightly decrease the intactness of this view. A minimal increase in view blockage of the Badlands to the east would occur, which would minimize the effect of the additional hardscape in the foreground and middle-ground views. Overall, the resource change in Key View 3 for both Alternatives 2 and 6 (LPA) is considered to be moderate–low because the proposed condition appears generally similar to the existing condition with implementation of hardscape treatment and new ornamental landscaping.

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For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

FIGURE 2.7.4

SR-60/WLC Parkway Interchange Improvement Project

Key View 2b

Existing and Proposed Conditions (Alternatives 2 and 6)

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

FIGURE 2.7.5

SR-60/WLC Parkway Interchange Improvement Project

Key View 3

Existing and Proposed Conditions (Alternatives 2 and 6)

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EA No. 0M590
Project No. 0813000109

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Key View 4

Alternatives 2 and 6 (LPA)

Completion of the proposed project would result in visible changes to the existing condition of the SR-60/WLC Pkwy interchange as seen from this key view. Visible project elements from this key view under Alternatives 2 and 6 (LPA) include the new WLC Pkwy overcrossing, direct eastbound off-ramp, and ornamental landscaping (refer to Figure 2.7-6). The proposed condition in Key View 4 would appear generally similar to the existing condition with regard to colors, texture, scale, diversity, and continuity. However, the visible form would be slightly altered due to the scale of the new WLC Pkwy overcrossing structure and the new eastbound direct off-ramp. Vividness would nominally decrease due to vegetation removal within the highway right-of-way, although the installation of ornamental landscaping along WLC Pkwy and SR-60 would increase the unity in this view. Hardscape features in this key view would minimally increase as a result of the vegetation removal and the new overcrossing structure, resulting in a slight decrease in intactness within this view. In addition, the project will increase hardscape compared to existing conditions (e.g., the Skechers facility). Nominal view blockage of the Badlands (to the east) and San Jacinto Mountains (to the southeast) would occur, which minimizes the effect of the additional hardscape in the middle-ground views. Overall, the resource change in Key View 4 for both Alternatives 2 and 6 (LPA) is considered to be moderate–low because the proposed condition appears generally similar to the existing condition.

Scenic Highways

According to the Caltrans California Scenic Highway Mapping System, there are no Scenic Highways within the project area. Therefore, impacts to scenic resources within a Scenic Highway would not occur as a result of the proposed project.

Visual Impact Summary

Please refer to Table 2.7.1. The proposed SR-60/WLC Pkwy interchange improvements would be introduced to the project area. Visual elements included with the interchange improvements would consist of an overcrossing, paved on- and off-ramps (including loop on- and off-ramps), traffic signals, and new mature ornamental landscaping throughout the project limits. Alternative 2 would result in a greater amount of hardscape than Alternative 6 (LPA) because Alternative 2 would include an eastbound loop on-ramp (Alternative 6 [LPA] does not), and Alternative 6 (LPA) would include three roundabout intersections with ornamental landscaping and increased architectural treatments. Viewer groups affected by the proposed project include eastbound and westbound SR-60 travelers, WLC Pkwy travelers, residential uses, and industrial uses (Skechers Distribution Center and Factory Outlet). Visual impacts associated with a project are determined by a measurement of the resource change and viewer response. The overall visual impact of both Alternatives 2 and 6 (LPA) and their respective design variations is considered to be moderate.

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For comparative purposes, site photographs are utilized to demonstrate the general character at different points of the project area. These simulations are subject to change and are intended to provide the reader with information on the form, size, and scale of the proposed improvements within the project area.

FIGURE 2.7.6

SR-60/WLC Parkway Interchange Improvement Project

Key View 4

Existing and Proposed Conditions (Alternatives 2 and 6)

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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Table 2.7.1 Summary of Key View Narrative Ratings

Visual Assessment Unit	Key View	Alternative 2			Alternative 6 (LPA)		
		Resource Change	Viewer Response	Visual Impact	Resource Change	Viewer Response	Visual Impact
1	1	M	M	M	ML	M	M
	2a	MH	M	MH	MH	M	MH
	2b	MH	ML	M	MH	ML	M
	3	ML	MH	M	ML	MH	M
	4	ML	MH	M	ML	MH	M

Source: *Visual Impact Assessment* (June 2019).
LPA = Locally Preferred Alternative
M = medium
MH = medium-high
ML = medium-low

Scenic Vistas

The City's General Plan designates SR-60 as a local Scenic Corridor. Key Views 3 and 4 depict typical views from eastbound SR-60 travelers. Views to the north, east, south, and west of the project site provide expansive views of the Reche Canyon area/Badlands, Badlands/San Jacinto Mountains, Moreno Valley floor and Mount Russell area, and Box Springs Mountains, respectively, for travelers along SR-60 and WLC Pkwy. However, as shown in the visual simulations provided on Figures 2.7-2 through 2.7-6, the proposed project structure would not result in a substantial view blockage of these visual resources, and the overall visual resource change from both Key Views 3 and 4 for both Alternatives 2 and 6 (LPA) would be moderate–low. However, because the overall potential viewer response is considered moderate–high as a result of the large number of viewers along SR-60 as well as the local Scenic Corridor designation, the overall visual impact would be moderate. Project Features PF-VIS-1 through PF-VIS-4 are included to avoid or minimize potential visual impacts and would ensure that the character and quality of the project area is maintained and not substantially degraded.

The following project features are required to minimize the visual impacts of Alternatives 2 and 6 (LPA).

PF-VIS-1 **Architectural Treatments and Review.** All Architectural Treatments proposed shall be developed during the Plans, Specifications, and Estimates (PS&E) phase in consultation with the City of Moreno Valley and the California Department of Transportation (Caltrans) District Landscape Architect and shall be consistent with the guidelines present in the *State Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits* (Corridor Master Plan), prepared by Caltrans District 8, dated August 2010, as well as the Gateway Monument policy identified in Chapter 29 of the *Project Development Procedures Manual*, prepared by Caltrans, dated May 2016. All proposed architectural treatments shall be reviewed and approved by Caltrans prior to final design and implementation.

PF-VIS-2 **Landscaping.** Freeway landscaping shall retain the character of the existing desert scrub. An informal mixture of low-growing native desert plants shall be protected in-place and/or filled in where needed. A few tall specimens shall be incorporated at the overcrossing structure to provide scale without impacting the broader vista. Landscape palettes and concept plans will be implemented in consultation with the City of Moreno Valley and the Caltrans District Landscape Architect. All proposed landscaping would follow the guidance in Section 92.3 of the Streets and Highways code, and shall include the following measures:

- All proposed landscaping species shall be well suited for the local climate, humidity, soil types, and local wind.
- All selected species shall share similar water requirements.
- Appropriate plant spacing shall be allowed to avoid overcrowding.
- Landscape concepts shall include zoning areas of medium and low water use to meet the needs for usage and achieve efficiency. It is Caltrans policy to conserve water and use drought-tolerant and low to moderate water-using plants. High water-using plants are discouraged.
- The construction of unnaturally steep slopes shall be avoided.
- Mulches, gravels, or other inert materials, and drip or other non-spray irrigation shall be implemented.

PF-VIS-3 **Construction Lighting.** Construction lighting types, plans, and placement shall be reviewed at the discretion of the Caltrans District Landscape Architect and in accordance with Moreno Valley Municipal Code Section 9.10.110 in order to minimize light and glare impacts on surrounding sensitive uses. Specifically, Section 9.10.110 of the Moreno Valley Municipal Code states:

> "No operation, activity, sign or lighting fixture shall create illumination which exceeds 0.5 footcandles minimum maintained on any adjacent property, whether the illumination is direct or indirect light from the source. All lighting shall be designed to project downward and shall not create glare on adjacent properties."

PF-VIS-4 **Operational Lighting.** Compliance with Caltrans Standard Design Practices, including the use of directional lighting, and Moreno Valley Municipal Code Section 9.10.110 will be used to reduce new sources of light and glare impacts.

Visual Character

Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator. The project corridor is characterized with visual resources such as views to surrounding hillsides, views of the vast Moreno Valley, and desert scrub vegetation.

After project implementation, the visual character of the area may be affected by the removal of vegetation and grading activities to accommodate the interchange improvements. Alternatives 2 and 6 (LPA) would result in similar visual character impacts due to the interchange, new overcrossing, new loop on- and off-ramps, traffic signals, pedestrian safety lighting, sidewalks, multi-use trail, and some vegetation removal. Design Variations 2a and 6a would involve similar project elements as those described for Alternatives 2 and 6 (LPA) and thus would result in similar visual impacts. Adherence to project features PF-VIS-1 through PF-VIS-4 would ensure that the character and quality of the project area are maintained and not substantially degraded.

Scenic Resources Along Scenic Highways

According to Caltrans, a State Route must first be included on the list of highways eligible for Scenic Highway designation in Streets and Highways Code Section 263. It can then be nominated for official designation by the local governing body. The project site does not include any officially designated or eligible State Scenic Highways.[1]

Light and Glare

Implementation of Alternatives 2 and 6 (LPA) would introduce additional sources of light and glare to the project area from the proposed bridge overcrossing structure, traffic signals, and pedestrian safety lighting along WLC Pkwy. Motorists along SR-60 and WLC Pkwy would be nominally impacted by lighting from the proposed traffic signals and pedestrian safety lighting due to high travel speeds and short duration of exposure. The residential uses in the general vicinity would be sensitive to increased lighting from the proposed project. However, lighting features already exist in the project area, particularly at the eastbound and westbound SR-60/WLC Pkwy ramps, at the intersection of the westbound ramps and WLC Pkwy, along WLC Pkwy near Eucalyptus Avenue, along Eucalyptus Avenue, and the Redlands Boulevard/ Ironwood Avenue intersection. The proposed project would also increase ornamental trees along WLC Pkwy, further screening new lighting features from the residential uses in the area.

2.7.4 Avoidance, Minimization, and/or Mitigation Measures

Potential temporary and permanent adverse impacts to visual resources would be addressed by Project Features PF-VIS-1 through PF-VIS-4. Therefore, no avoidance, minimization, and/or mitigation measures are necessary.

[1] California Department of Transportation, California Scenic Highway Mapping System. Website: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm/, accessed on September 4, 2018.

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2.8 Cultural Resources

2.8.1 Regulatory Setting

The term "cultural resources," as used in this document, refers to the "built environment" (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including "historic properties," "historic sites," "historical resources," and "tribal cultural resources." Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way.

2.8.2 Affected Environment

This section is based on the *Historic Property Survey Report* (June 2019), the *Archaeological Survey Report* (June 2019), and the *Historical Resources Evaluation Report* (June 2019).

2.8.2.1 Methods

Area of Potential Effects

The Area of Potential Effects (APE) was established as all areas where the project has the potential to directly or indirectly affect historic properties, if any such properties exist. The mapped project APE was established in consultation with California Department of Transportation (Caltrans) District 8 Cultural Studies staff and is the combination of the areas of potential direct and indirect effects. The areas of direct effects include the areas where physical impacts may occur. These are generally limited to the proposed and existing right-of-way and include the horizontal and vertical areas associated with ground-disturbing activities. The areas of indirect effects extend beyond those of the direct effects and incorporate areas that may be indirectly affected by visual, noise, or other effects. The areas of indirect effects generally include all properties that are adjacent to the proposed right-of-way unless they are undeveloped or the buildings are 100 feet (ft) or more from proposed new construction. Consistent with general cultural resources practices and in order to account for lead time between preparation of Section 106 compliance and actual project construction, buildings that are 45 years of age or older (rather than 50 years of age and older) are being considered for this project. Cultural resources that may be affected have been included within the APE for the project.

The undertaking is located in Township 2 South, Range 3 West, Sections 35 and 36; Township 3 South, Range 3 West, Sections 1, 2, 12, and 13; and Township 3 South, Range 2 West, Sections 6, 7, 8, and 9, San Bernardino Baseline and Meridian as depicted on the United States Geological Survey (USGS) 7.5′ quadrangles for *El Casco, California* and *Sunnymead, California* (1979/1980). The APE is generally characterized by small residential properties, a few nonresidential properties, a large factory outlet, local roadways, and vacant land as well as a portion of State Route 60 (SR-60).

Records Search

On August 16, 2013, a records search and literature review were conducted at the Eastern Information Center (EIC) located at the University of California, Riverside. Due to revisions to the APE in 2015, an update of the records search was conducted on April 2 and 7, 2015. The records search included a review of the EIC electronic databases for previously identified historical/archaeological resources in or near the APE and existing cultural resources reports pertaining to the project vicinity. The following inventories were examined:

- National Register of Historical Resources
- California Register of Historical Resources
- California Historical Landmarks
- California Points of Historical Interest
- Caltrans Historic Highway Bridge Inventory

Background research was conducted for the project APE using a variety of primary and secondary sources, including published literature regarding the history and development of Moreno Valley and the surrounding area; historic aerial photographs and maps; building permits; and various online sources. The primary historic themes in the project APE were developed on the basis of this research. The repositories and resources that were contacted to access historical information pertinent to the parcels within the project APE and project vicinity are discussed in further detail in Chapter 4, Comments and Coordination.

The following were contacted and/or utilized to access historical information pertinent to the project APE and vicinity:

- **Moreno Valley Historical Society President Richard Dozier:** Contacted via email on March 19, 2015. A follow-up telephone call was made on December 5, 2018. Mr. Dozier has passed away. A follow-up email was sent to the historical society. No response received.
- **Moreno Valley Family History Center:** Letter and map were mailed on March 20, 2015. On December 5, 2018, a follow-up telephone call was made and a voice message was left. No response received.
- **Keith Herron, Historic Preservation Officer, Regional Park and Open-Space District, County of Riverside:** On December 5, 2018, a follow-up telephone call was made. Erin Gettis, Mr. Herron's replacement, requested that the letter and map be emailed to her. The email was sent to Ms. Gettis on December 5, 2018. No response has been received from Ms. Gettis to date.
- **Viola F. Hamner, Author of Moreno Valley, California: In the Beginning:** Letter and map were mailed on March 20, 2015. On December 5, 2018, a follow-up telephone call was made to Ms. Hamner who said she had no comments.
- **Steve Lech, Local Historian:** Contacted via email on March 19, 2015. On December 5, 2018, a follow-up email was sent to Mr. Lech. No response has been received from Mr. Lech to date.
- **Ken Holtzclaw, Author of Images of America: Moreno Valley:** Letter and map were mailed on March 20, 2015. No response received. No follow-up attempt was made because no email address or telephone number was found.
- Historic aerial photographs accessed online at https://www.historicaerials.com/ in 2015.
- USGS topographic maps.
- Caltrans Structure, Maintenance & Investigations, Historical Significance – State Agency Bridges, dated May 2015.

Field Survey

An intensive pedestrian field survey of the APE was conducted on February 4, March 19 and 20, and May 7, 2015. A survey of the additional portions of the APE added for the Eucalyptus Avenue realignment was conducted in November 15, 2018. The APE was surveyed by walking transects spaced 32 to 50 feet when possible, with particular attention given to exposed ground surfaces. Visibility varied from excellent to poor, averaging 50 percent, with substantial obstruction of the surface by

roadway, vegetation, and development. The majority of the project APE was severely disturbed by road construction, commercial and residential development, and agricultural activities. Modern roadside refuse was noted throughout the APE.

On September 24, 2014, an intensive-level field survey was conducted of the Anco Ranch property, which is partially within the project APE. On April 7, 2015, the remainder of the project APE was intensively surveyed. During these surveys, properties with buildings that appeared to be 45 years of age or older were photographed, and detailed notations were made of each building's structural and architectural characteristics and current condition as well as its setting and associated features.

Based on the intensive-level survey and basic property-specific research, the majority of the built environment in the APE was determined to meet the criteria for classification under Property Types 2–4 and 6, as defined in Attachment 4 (Properties Exempt from Evaluation) in the Caltrans Section 106 PA and, therefore, was not further documented. Most of the buildings that were found to be exempt are modern or significantly altered.

Native American Consultation

On September 9, 2013, a request for a list of potentially interested Native Americans and a search of the Sacred Lands File (SLF) was emailed to the Native American Heritage Commission (NAHC). On September 30, 2013, the NAHC responded with a list of 10 individuals representing eight Native American groups who were designated by the NAHC for consultation, and indicated there were no Native American cultural resources documented in the SLF in or adjacent to the project. All designated individuals/groups were contacted via certified mail, email, and follow-up telephone calls in October and November 2013. Respondents included:

- **Joseph Ontiveros (Soboba Band of Luiseño Indians):** Mr. Ontiveros requested government-to-government consultation, that the Soboba continue to be a lead consulting tribal entity for this project, and that Soboba Native Americans monitor any ground-disturbing activities, including cultural resources survey and testing;
- **Anna Hoover (Pechanga Band of Luiseño Mission Indians):** Ms. Hoover requested government-to-government consultation, that copies be provided of all applicable cultural and environmental documents, that there be Pechanga monitoring of all survey and subsurface excavation activities, as well as an opportunity for further comment upon review of cultural and environmental documents;
- **William Madrigal, Jr. (Morongo Band of Mission Indians):** Mr. Madrigal expressed concern regarding sensitivity of the area east of the APE for prehistoric cultural resources, requested results of the records search within 0.5 mile (mi) of the APE (which were provided by the project consultant), and Native American monitoring of the survey by a Morongo monitor;
- **Goldie Walker (Serrano Nation of Mission Indians):** Inquired about the presence of prehistoric resources within the APE and requested further consultation in the event any previously undocumented prehistoric resources within the APE were encountered.

The balance of the contacts had no information or specific concerns, did not respond, or could not be reached for comment. All designated individuals/groups were notified via email of revision of the APE in April 2015. There were no respondents.

Assembly Bill 52 Consultation

Letters pursuant to AB 52 were sent to potentially interested tribes on July 30, 2015. The Rincon Band replied on August 12, deferring to the Pechanga and the Soboba Bands. The Morongo and Soboba Bands replied on August 24, asking for continued consultation under AB 52 and Section 106. Both groups identified the project area as culturally sensitive but did not provide specifics. Both groups have requested tribal monitoring during any ground-disturbing activity and copies of reports and records search results. The Soboba Band also requested direct government-to-government consultations. Consultation pursuant to AB 52 continued in 2018 and is currently ongoing.

2.8.2.2 Results

Archaeological Results

The records search revealed that 65 cultural resources studies have previously been conducted within a 1 mi radius of the project, 8 of which included portions of the APE. Resources documented within 1 mi of the APE included 64 prehistoric resources (51 bedrock milling sites, 4 bedrock milling sites and associated features, 3 bedrock milling sites with associated artifacts, 2 lithic scatters, 1 subsurface hearth feature, 1 rock art site, and 2 isolated artifacts) and 15 historic-period resources (1 building foundation with associated refuse, 1 water conveyance system with associated refuse, 8 water conveyance features, 2 historic refuse scatters, 1 borrow pit, 1 historic-period residence [33-015436], and the balance of the Kerr Stock Farm District buildings and structures). The nearest prehistoric resource is approximately 800 ft west of the APE boundary to the west of Gilman Springs Road.

The records search identified nine previously recorded cultural resources within the APE, including three isolated prehistoric artifacts and a historic-period water conveyance feature and refuse. The remaining five resources are considered built environment resources. All archaeological resources within the APE are exempt from evaluation as Property Types 1 and 3 under the Caltrans Section 106 PA Attachment 4 (Properties Exempt from Evaluation).

Built Environment Results

The records search identified nine previously recorded cultural resources within the APE, five of which are considered built environment resources. These five resources include a portion of a historic district (Kerr Stock Farm District), two historic-period residences, and two segments of roads and associated features (former Jackrabbit Trail Route and Gilman Springs Road/former State Route 79 [SR-79]).

Two previously evaluated resources (33-021095 and 33-021096) in the APE, consisting of former Jackrabbit Trail Route and overlapping segments of Gilman Springs Road, were determined ineligible for listing in the NRHP in 2012 as part of a Caltrans project and received SHPO concurrence.

Three other previously evaluated resources were re-evaluated as part of this project. Of these, the Kerr Stock Farm District (33-016655) is no longer extant. The residence at 12130 Theodore Street (33-007275) is altered. The property known as the Armstrong Home at 12400 Theodore Street (33-007291) has been extensively altered. Additionally, 12150 Theodore Street was evaluated as a result of this project and was determined not eligible for inclusion in the NRHP. Under Section 106 PA Stipulation VIII.C.6, Caltrans has requested the SHPO's concurrence for this determination. In a response dated August 28, 2019, the SHPO concurred with the finding of No Historic Properties Affected for the above three properties listed. Therefore, the undertaking will have a finding of No Historic Properties Affected.

There are no historical resources as defined by CEQA within the APE. The segment of the former Jackrabbit Trail Route (33-021095), the segment of Gilman Springs Road/former SR-79 (33-021096), and 12150 Theodore Street (a 1933 residence) were considered to be not significant resources under CEQA.

Further, three State agency bridges are within the APE: 560487 (Redlands Boulevard Overcrossing [OC]), 560488 (Theodore Street OC), and 560489 (Gilman Springs Road OC). All three bridges are listed as Category 5 (previously determined not eligible for the NRHP) in the Caltrans Highway Bridge Inventory. Therefore, none of the bridges are subject to evaluation.

Of the resources in the APE that were previously determined not to meet the NRHP or CRHR criteria, as outlined in CEQA Guidelines 15064.5(a), the prior determination remains valid, and these resources are not historical resources for the purposes of CEQA. There are also resources in the APE that were evaluated as a result of this project and do not meet NRHP or CRHR criteria, as outlined in CEQA Guidelines 15064.5(a). These resources are not historical resources for the purposes of CEQA.

The remaining built environment resources that were identified within the APE meet the criteria for Caltrans Section 106 PA Attachment 4 (Properties Exempt from Evaluation) and were therefore exempt from evaluation.

2.8.3 Environmental Consequences

2.8.3.1 Temporary Impacts

Alternatives 1, 2, and 6 (LPA), and Design Variations 2a and 6a

Any impacts to cultural resources as a result of the No Build Alternative or the proposed project would be considered permanent; therefore, an analysis of temporary impacts is not applicable.

2.8.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area. The No Build Alternative would not result in ground disturbance or excavation; therefore, no impacts to cultural resources would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

Based on the findings reported in the *Historic Property Survey Report* (June 2019), there are no Section 106 Historic Properties Affected or CEQA Historical Resources within the APE. The cultural resources that required evaluation were determined to be ineligible for the NRHP, and a request has been submitted to the SHPO for concurrence. Therefore, Caltrans determined that, pursuant to Stipulation IX.A of the Section 106 PA, a finding of No Historic Properties Affected is appropriate for this project (undertaking) as a whole. Furthermore, SHPO concurrence was provided in a response to Caltrans dated August 28, 2019. Therefore, the undertaking will have a finding of No Historic Properties Affected.

There are no NRHP-listed or eligible resources in the project area that would trigger the requirements for protection under Section 4(f).

Previously Undocumented Cultural Materials

There is always a potential for previously undocumented cultural materials or human remains to be unearthed during site preparation, grading, or excavation for the Build Alternatives. Those potential effects would be avoided or minimized through the following Project Features:

PF-CR-1 **Cultural Materials.** If cultural materials are discovered during construction, it is Caltrans policy that all construction work activities within 60 feet of the discovery shall stop until a qualified archaeologist can assess the nature and significance of the find.

PF-CR-2 **Human Remains.** If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County of Riverside Coroner shall be contacted. Pursuant to California Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendant (MLD). At this time, the person who discovered the remains will contact the California Department of Transportation (Caltrans) District 8 Environmental Branch Chief so that he or she may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.8.4 Avoidance, Minimization, and/or Mitigation Measures

The project will incorporate project features PF-CR-1 and PF-CR-2 as described above. The Build Alternatives and Design Variations would not result in any temporary or permanent cultural resource-related impacts; therefore, no avoidance, minimization, or mitigation measures are required.

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PHYSICAL ENVIRONMENT

2.9 Hydrology and Floodplains

2.9.1 Regulatory Setting

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

To comply, the following must be analyzed:

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

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

2.9.2 Affected Environment

This section is based on the *Drainage Assessment* (July 2018) and the *Location Hydraulics Report and Summary Floodplain Encroachment Report* (October 2018) prepared for the project.

2.9.2.1 Regional Hydrology

The project area is under the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB), which includes Orange, Riverside, and San Bernardino Counties. The Santa Ana Region is approximately 2,800 square miles (sq mi) in Southern California and consists mostly of the Santa Ana River Watershed and its tributaries, including the San Jacinto River Watershed, which is where the project is located.

For regulatory purposes, the Santa Ana RWQCB designates watershed areas into Hydrologic Units (HUs), which are further divided into Hydrologic Areas (HAs) and Hydrologic Subareas (HSAs). As designated by the Santa Ana RWQCB, the western portion of the project area is located in the San Jacinto Valley HU, the Perris HA, and the Perris Valley HSA. The eastern portion of the project area is located in the San Jacinto Valley HU, the San Jacinto HA, and the Gilman Hot Springs HSA.

All storm water runoff from the project site is conveyed south into Mystic Lake and a series of nearby reclamation ponds within the San Jacinto Wildlife Area, which is located approximately 4 miles (mi) to the south of the project site. Overflow from the Mystic Lake area flows into the San Jacinto River, Reach 4 (Nuevo Road to North-South Mid-Section Line). Reach 4 of the San Jacinto River is located approximately

5 mi downstream of the project area. The San Jacinto River is approximately 42 mi long, is formed at the base of the San Jacinto Mountains, and drains into Lake Elsinore. In rare cases, Lake Elsinore overflows into Temescal Creek. Temescal Creek flows into the Santa Ana River, which then flows into the Pacific Ocean.

2.9.2.2 100-Year Floodplains

The project area is not located within a Federal Emergency Management Agency (FEMA) designated 100-year flood hazard area. According to the FEMA Flood Insurance Rate Map (FIRM) Nos. 06065C760G and 06065C0770G (August 28, 2008), the majority of the project area is located within FEMA Shaded Zone X, Other Flood Areas. Shaded Zone X is defined as areas within the 500-year flood; areas within the 100-year flood with average depths of less than 1 foot (ft) or with drainage areas of less than 1 sq mi, and areas protected by levees from the 100-year flood (refer to Figure 2.9-1). In summary, Shaded Zone X is commonly described as the area subject to flooding between the 100-year and 500-year floods. Furthermore, the project is not located within a FEMA-designated 100-year base floodplain.

The California Department of Water Resources (DWR) has developed Awareness Floodplain Maps to identify all flood hazard areas that are not mapped under FEMA's National Flood Insurance Program (NFIP) and to provide communities and residents with additional information on potential flood hazards that are not currently mapped as a FEMA-regulated floodplain. According to the Sunnymead Quadrangle Awareness Floodplain Map, an Awareness Floodplain is located within the project area. The Awareness Floodplain is bounded by the base of the Badlands area to the northeast of the project site and the base of Mount Russell in the San Jacinto Mountains to the south of the project site (refer to Figure 2.9-1). Awareness Floodplains are designated as a 100-year flood hazard area.

The majority of the Awareness Floodplain in the project area is within Moreno Valley and a small portion, the northeast quadrant of the State Route 60/World Logistics Center Parkway (SR-60/WLC Pkwy) interchange, is within unincorporated Riverside County. The City of Moreno Valley (City) regulates floodplains within City limits, and the local flood control agency (i.e., Riverside County Flood Control and Water Conservation District [RCFCWCD]) regulates floodplains within unincorporated Riverside County limits. The City has not adopted and does not regulate the Awareness Floodplains; therefore, the larger portion of the Awareness Floodplain in the project area that is in the City is not regulated. RCFCWCD has adopted and regulates the Awareness Floodplain in the same manner as a FEMA flood hazard area. Therefore, development within the smaller portion of the Awareness Floodplain in the northwest quadrant of the project area that is in unincorporated Riverside County (shown on Figure 2.9-1) is regulated in the same manner as a FEMA Zone A Special Flood Hazard Area. FEMA Zone A floodplains are areas subject to inundation by the 100-year flood.

Awareness Floodplains are flood-prone areas without specific flood depths or other flood hazard data. The Awareness Floodplain mapping does not represent the flooding patterns of a single stream or a boundary based on a geographic or hydraulic condition. Rather the mapping shows an area of unknown flood hazards resulting from the numerous streams and alluvial fans in the area. Many of the streams and alluvial fans within the Awareness Floodplain boundary are not tributary

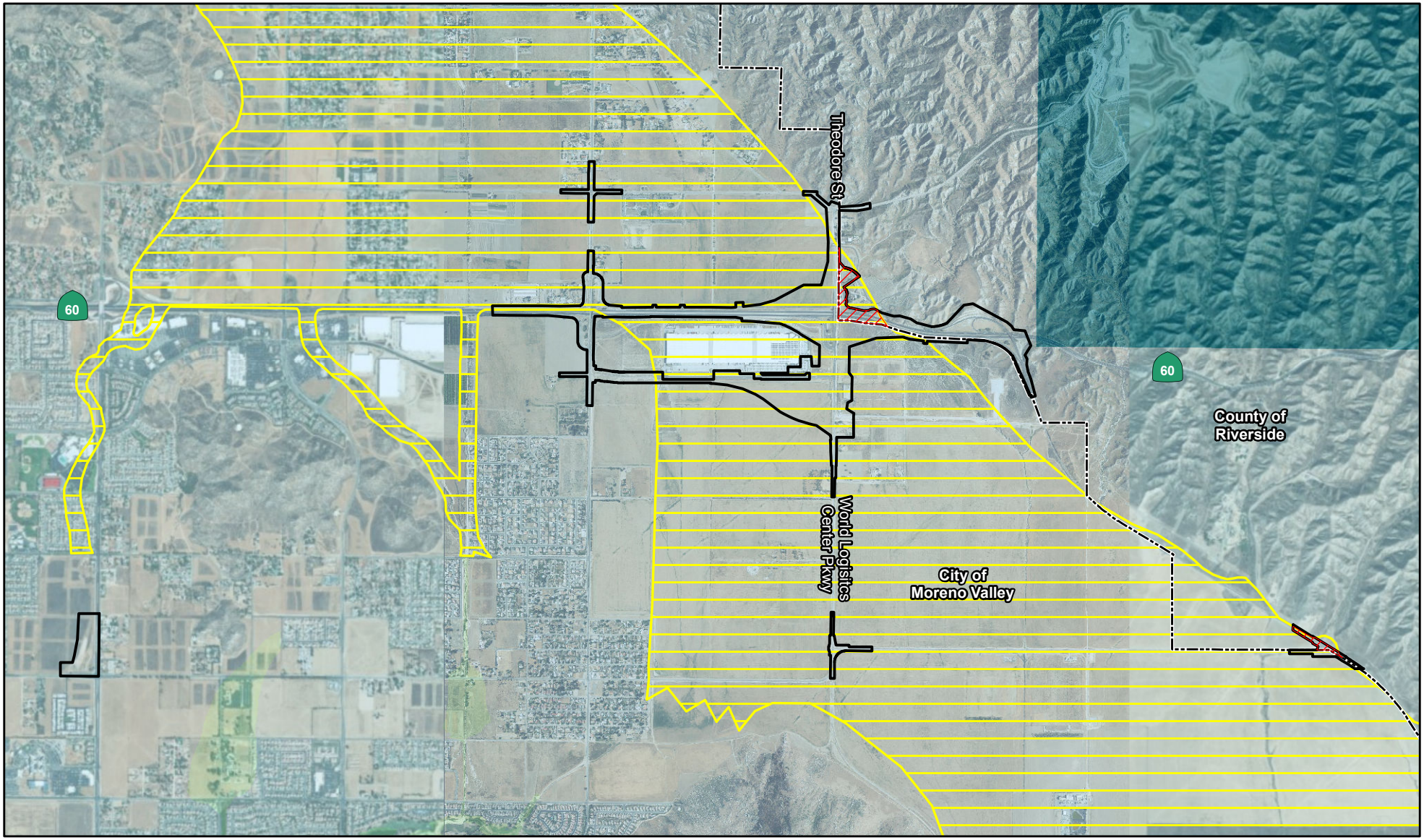

FIGURE 2.9-1

LEGEND

- Project Location
- Jurisdictional Boundary
- Awareness Floodplain
- Awareness Floodplain Regulated by Riverside County Flood Control and Water Conservation District

FEMA FIRM and Flood Hazard Area

- X (= areas outside 1% annual chance or 1% chance with depths less than 1 ft, drainages less than 1 sq mi, or levee protected areas)
- A (= 1 % annual chance)
- D (= unstudied areas, hazards undetermined but possible)

0 1500 3000
FEET

SOURCE: Aerial - RBF (9/30/2014; 2015); ESRI (2012); NFHL (2012)

I:\RBF1301\GIS_Mod\MXD\WaterQuality\AwarenessFloodplains_EIR_EA.mxd (12/12/2019)

SR-60/World Logistics Center Parkway Interchange Project

Awareness Floodplain

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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to the SR-60/WLC Pkwy interchange, and they actually flow away from the project area (i.e., Reche Canyon is principally tributary to Moreno Beach Drive and the culverts to the west).

2.9.2.3 Natural and Beneficial Floodplain Values

Floodplains and wetlands in their natural or relatively undisturbed state serve water resource values (e.g., natural moderation of floods, water quality maintenance, groundwater recharge), living resource values (e.g., fish, wildlife, plant species), and cultural resource values (e.g., open space, archaeological, historical natural beauty, scientific study, outdoor education, recreation). As described below, the drainages within the project area have limited natural and beneficial uses.

The Santa Ana RWQCB designates beneficial uses of surface waters in their jurisdiction. Beneficial uses are defined in the Santa Ana RWQCB's Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) as the various ways that water can be used for benefit of humans and/or wildlife. There are no designated beneficial uses for the drainages within the project area.

A functions and values analysis was conducted for the drainages within the project area as part of the Jurisdictional Delineation prepared for the project. As detailed further in Section 2.18, Wetlands and Other Waters, essentially all of the drainages within the project area have low water resource and natural resource values, including sediment retention, nutrient retention, toxicant trapping, wildlife habitat, and aquatic habitat. However, because all of the drainages within the project area are at least partially earthen, some soil saturation occurs. Therefore, all drainages have a low to moderate hydrologic regime value.

The drainages within the Awareness Floodplain may provide some cultural resource value for recreational use, such as walking and birding. However, because the majority of these drainage features are channelized and near major roads and freeways, all of the drainages are considered to have a low social significance value.

2.9.3 Environmental Consequences

2.9.3.1 Temporary Impacts

No Build Alternative

The No Build Alternative does not include the construction of any improvements to the SR-60/WLC Pkwy interchange. Therefore, the No Build Alternative would not result in temporary impacts to hydrology and floodplains in the project area.

Build Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a

Construction of the Build Alternatives and Design Variations 2a and 6a would occur within FEMA Zone X and within the Awareness Floodplain. Construction within FEMA Zone X and the Awareness Floodplain within City limits is not regulated. Only minor grading would occur within the portion of the Awareness Floodplain that is regulated by the RCFCWCD, which is located in the northeast quadrant of the SR-60/WLC Pkwy interchange. Construction of Build Alternative 2 and Design Variation 2a would involve grading of approximately 3.1 acres (ac) within the Awareness Floodplains regulated by the RCFCWCD. Construction of Build Alternative 6 (the Locally Preferred Alternative [LPA]) and Design Variation 6a would

involve grading of approximately 3.4 ac within the Awareness Floodplains regulated by the RCFCWCD. As specified in Project Feature PF-HYD-1, a grading permit from the County of Riverside (County) would be required for the portion of the project constructed within the Awareness Floodplain regulated by the County.

PF-HYD-1 **Awareness Floodplain Boundary.** During final design, the City of Moreno Valley shall process a grading permit with the County of Riverside (County) for the proposed engineered slopes within the limits of the Awareness Floodplain within unincorporated Riverside County. The chosen Build Alternative or design variation shall not be constructed until the grading permit is approved by the County.

Although minor grading within the regulated Awareness Floodplain would be required, construction activities would not reduce or otherwise affect the flood storage capacity and would not modify the flood flows in the Awareness Floodplain. Furthermore, construction-related activities within the storm drains and channels would be staged and scheduled to avoid work directly within the regional drainages during the rainy season. As a result, construction activities under the Build Alternatives and Design Variations 2a and 6a would not result in temporary adverse impacts related to hydrology and floodplains.

2.9.3.2 Permanent Impacts

No Build Alternative

The No Build Alternative does not include any improvements to the SR-60/WLC Pkwy interchange. Routine maintenance would continue, similar to that already occurring in the existing condition. Therefore, no permanent impacts to hydrology and floodplains would occur in the project area.

Build Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a

Hydraulic Analysis

The Build Alternatives and Design Variations 2a and 6a would increase the total amount of impervious surface area, which can result in an increase in flow discharges. However, as specified in Project Feature PF-WQ-2 in Section 2.10, Water Quality and Storm Water Runoff, Treatment Best Management Practices (BMPs), including infiltration basins and biofiltration swales, would be incorporated into the design of the Build Alternatives in accordance with the requirements of the California Department of Transportation (Caltrans) Municipal Separate Storm Sewer Systems (MS4) Permit. The infiltration basins and biofiltration swales would promote infiltration to offset any increased flows associated with the increase in impervious surface from the project area and would provide flow duration, volume, and rate control functions.

Hydraulic modeling was conducted for Alternative 2 as part of the *Location Hydraulics Report and Summary Floodplain Encroachment Report* (October 2018). Based on the footprint and vertical profile of the Build Alternatives and Design Variations 2a and 6a, the analysis of the potential effects of the project related to floodplains and hydrology was based on Alternative 2 in order to provide the most conservative estimate of the project effects related to hydrology and floodplains. The

effects of Alternative 6 (LPA) and Design Variations 2a and 6a would be the same as or less than the effects under Alternative 2.

It was determined from the hydraulic modeling that the boundaries of the Awareness Floodplain do not accurately represent the actual boundaries of the base flood. The flow patterns within the area north of SR-60 do not flood the entire area as the Awareness Floodplain boundary implies. The portion of the project area within an Awareness Floodplain regulated by RCFCWCD does not contain any large canyon outfalls and appears to be largely free of flooding during a 100-year flood event.

Flooding across SR-60 near the Redlands Boulevard interchange occurs in the existing condition; however, implementation of the Build Alternatives and Design Variations 2a and 6a would not change the existing flooding at that location. Furthermore, no flooding occurs around the SR-60/WLC Pkwy interchange under the existing or proposed conditions, including the area within RCFCWCD jurisdiction.

In the existing condition, four culverts cross under SR-60 from north to south, which would be extended on the upstream ends as part of the Build Alternatives and Design Variations 2a and 6a. The modeling conducted for the project demonstrates that depths of flow at the upstream end of the four cross culverts would remain the same as existing conditions or would be slightly reduced by the improved distribution of the streams along the toe of the proposed westbound on-ramp. Therefore, the extension of the four culverts would not adversely affect the existing flood depths.

100-Year Floodplain Encroachment

Longitudinal Encroachment

A longitudinal encroachment is an encroachment that is parallel to the direction of flow. Longitudinal encroachment refers to the placement of fill in the floodplain (e.g., for building a road parallel to the edge of a river). This type of encroachment reduces the storage capacity of the floodplain (constricting the area through which water can flow), causes higher peak flows, and potentially creates flooding downstream.

A majority of the improvements proposed as part of the Build Alternatives and Design Variations 2a and 6a, including the reconstruction of the on- and off-ramps, intersection improvements, and addition of the auxiliary lane, would occur within the City's jurisdiction. A channel would be constructed in the Awareness Floodplain along the edge of the roadway embankment that would confine the base flood in the northwestern quadrant of the SR-60/WLC Pkwy interchange. Construction of the channel would result in a longitudinal encroachment into the Awareness Floodplain; however, this encroachment is within Moreno Valley and therefore is not within a regulated floodplain. Therefore, the project would not result in a longitudinal encroachment into a regulated floodplain.

Potential Risk to Life and Property

As discussed above, the Build Alternatives and Design Variations 2a and 6a would not change flood patterns or increase flood depths. All of the proposed drainage improvements would connect to the existing drainage system. Furthermore, the implementation of the Build Alternatives and Design Variations 2a and 6a would not substantially alter the overall drainage pattern in the project

area but would improve the existing drainage patterns by improving the distribution of storm water flow to the storm drain system.

As described above, the longitudinal encroachment as part of the Build Alternatives and Design Variations 2a and 6a would occur within an unregulated Awareness Floodplain. The longitudinal encroachment would not increase the risk of overtopping of the SR-60 mainline because the channel would not change the base flood elevation. As mentioned above, implementation of the Build Alternatives and Design Variations 2a and 6a would not change the flood patterns across SR-60 near Redlands Boulevard compared to the existing condition. Because the project would not increase or change the risk of flooding, there would be no change to emergency vehicle access or to school bus or postal service routes, and there would be no risk to life or property from implementation of the Build Alternatives.

Effects to Natural and Beneficial Floodplain Values

The drainages within the project area have limited natural beneficial floodplain values. As mentioned above, the Build Alternatives and Design Variations 2a and 6a would only result in minor grading within the Awareness Floodplain regulated by the RCFCWCD. Additionally, the Build Alternatives and Design Variations 2a and 6a would not affect the flood depths or flow patterns within the floodplains. Because of the limited natural beneficial floodplain values and the small extent of improvements that would not affect flooding, there would be no change to the beneficial floodplain values compared to the existing condition.

Support of Incompatible Floodplain Development

The Build Alternatives include improvements to an existing transportation facility in order to increase capacity and improve the traffic operations at the SR 60/WLC Pkwy interchange. Future planned development designated in the City's General Plan consists primarily of residential land uses (one dwelling/acre) and a small portion of office building on the north side of SR-60. The future planned development is within the City's jurisdiction and is also outside of the regulated Awareness Floodplain. Because there is no planned development within the regulated Awareness Floodplain in unincorporated Riverside County, the Build Alternatives would not promote future non-project-related development within the regulated Awareness Floodplain. Therefore, the Build Alternatives and Design Variations 2a and 6a would not support incompatible floodplain development.

Significant Floodplain Encroachment

A "significant encroachment," as defined in 23 CFR 650.105(q), is a highway encroachment that would result in (1) a significant potential for interruption or termination of a transportation facility that is needed for emergency vehicles or provides a community's only evacuation route; (2) a significant risk; or (3) a significant adverse impact to natural and beneficial floodplain values. No FEMA 100-year flood hazard areas are located within the project area; therefore, no impacts would occur to FEMA 100-year floodplains. The majority of the improvements would be within the Awareness Floodplain, within the City limits, which is not regulated. Only minor grading improvements would occur within the regulated Awareness Floodplain. As described above, the Build Alternatives and Design Variations 2a and 6a would not increase flooding or change flood

patterns, and therefore would not result in any changes in risk related to traffic disruption, loss of life and property, or natural or beneficial floodplain values. According to the *Location Hydraulics Report and Summary Floodplain Encroachment Report* (October 2018), the combined assessed level of risk associated with minor grading within the Awareness Floodplain, risks to life and property, risks to natural and beneficial floodplain values, and risk of probable incompatible floodplain development is considered Low Risk. The encroachment that would occur under the Build Alternatives and Design Variations 2a and 6a would be classified as Minimal as defined in 23 CFR 650.105(q). As such, the Build Alternatives and Design Variations 2a and 6a do not constitute a significant floodplain encroachment.

2.9.4 Avoidance, Minimization, and/or Mitigation Measures

The project will incorporate PF-HYD-1 and PF-WQ-2 as described above. Therefore, no temporary or permanent adverse impacts to hydrology and floodplains would occur, and no avoidance, minimization, and/or mitigation measures are necessary.

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2.10 Water Quality and Storm Water Runoff

2.10.1 Regulatory Setting

2.10.1.1 Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source[1] unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and Municipal Separate Storm Sewer Systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

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

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

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE’s Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether the permit approval is

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

in the public's interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent[1] standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

2.10.1.2 State Requirements: Porter-Cologne Water Quality Control Act

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

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

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

2.10.1.3 State Water Resources Control Board and Regional Water Quality Control Boards

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

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

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water." The SWRCB has identified the Department as an owner/operator of an MS4 under federal regulations. The Department's MS4 permit covers all Department rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Department's MS4 Permit (Order No. 2012-0011-DWQ) (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

1. The Department must comply with the requirements of the Construction General Permit (see below);

2. The Department must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and

3. The Department storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within the Department for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices the

Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Additionally, a 2014 amendment to the Caltrans MS4 Permit issued by the SWRCB identified Caltrans as a stakeholder for a nutrient TMDL in the San Jacinto Watershed. In 2015, the SWRCB amended the Caltrans MS4 Permit requiring the full capture of trash on roadways designated "significant trash generating areas". Portions of the mainline and ramps at the State Route 60/World Logistics Center Parkway (SR-60/WLC Pkwy) interchange have been designated significant trash generating areas.

Construction General Permit

Construction General Permit, Order No. 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of 1 acre (ac) or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least 1 ac must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than 1 ac is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with the Department's SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than 1 ac.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the U.S., must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

2.10.1.4 Regional and Local Requirements

Riverside County Municipal NPDES Permit

The County of Riverside and the City of Moreno Valley are co-permittees under the NPDES Permit for WDRs for the RCFCWCD, the County of Riverside, and the Incorporated Cities of Riverside County with the Santa Ana Region (Order No. R8-2010-0033, NPDES No. CAS618033) (Riverside County MS4 Permit). The MS4 Permit prohibits non-storm water discharges, sets limits on pollutants being discharged into receiving waters, and requires implementation of technology-based standards. The Riverside County MS4 Permit requires all new development and significant redevelopment projects to incorporate Low Impact Development (LID) BMPs and hydromodification management tools to the Maximum Extent Practicable (MEP) to reduce the discharge of pollutants to receiving waters.

Under the Riverside County MS4 Permit, the co-permittees are responsible for the management of storm drain systems within their jurisdiction. The co-permittees are required to implement the Monitoring and Reporting Program (MRP), which includes a Watershed Action Plan to support coordinated watershed management, including urban TMDLs; to implement all BMPs outlined in the Drainage Area Management Plan (DAMP); and to take any other actions that may be necessary to protect water quality to the MEP. The co-permittees are required to develop their own Local Implementation Plan (LIP), which includes the specific actions the co-permittees would need to take to implement the DAMP and the requirements of the Riverside County MS4 permit.

The Riverside County MS4 Permit requires co-permittees to develop and implement a standard design and post-development BMP guidance to guide application of LID BMPs to the MEP on public street, road, and highway improvement projects. The Low Impact Development: Guidance and Standards for Transportation Projects for Santa Ana Region Riverside County Co-Permittees (October 2012) was developed to provide direction on how to address the County MS4 Permit requirements on public works transportation projects.

City of Moreno Valley Municipal Code

Chapter 8.10, Stormwater/Urban Runoff Management and Discharge Controls, of the City of Moreno Valley (City) Municipal Code sets forth standards to protect and enhance the water quality of watercourses, water bodies, groundwater, and wetlands in a manner pursuant to and consistent with the CWA, the Porter-Cologne Act, and the conditions of the MS4 Permit issued to the County of Riverside (County). Chapter 8.10 is also intended to ensure the health, safety, and welfare of the City's residents by prescribing regulations to effectively reduce pollutants in storm water discharges to the MEP and to regulate illicit connections, discharges, and non-storm water discharges to the storm drain system.

Summary of Applicable NPDES Permits

Part of the project area is California Department of Transportation (Caltrans) right-of-way and part of the project area is outside of Caltrans right-of-way. According to the Water Quality Management Plan (WQMP) for the Santa Ana Region, transportation projects subject to other MS4 Permit requirements, such as Caltrans oversight projects, are not subject to the Riverside County MS4 Permit. Therefore, all areas of work within and outside State right-of-way will be covered by the Caltrans MS4 Permit and Caltrans SWMP within the project area. The Caltrans MS4 Permit addresses operational impacts of projects within Caltrans jurisdiction, such as on the State Highway system. The Construction General Permit addresses construction impacts of the project and is applicable to all construction projects that disturb greater than 1 ac of soil. Therefore, the entire project area is subject to the requirements of both the Caltrans MS4 Permit and the Construction General Permit.

2.10.2 Affected Environment

This section is based on the *Water Quality Assessment Report* (January 2019) prepared for the proposed project.

2.10.2.1 Watersheds

The project area is located within the Santa Ana RWQCB's jurisdiction, which includes Orange, Riverside, and San Bernardino Counties. The Santa Ana Region is approximately 2,800 square miles (sq mi) in Southern California and consists mostly of the Santa Ana River Watershed and its tributaries, including the San Jacinto River Watershed, which is where the project is located. The Santa Ana Region is too large and complex to be managed as a single watershed. Therefore, for the purpose of watershed planning, the Santa Ana Region has been divided into 10 Watershed Management Areas (WMAs). The project area is within the Lake Elsinore/San Jacinto River WMA.

For regulatory purposes, the Santa Ana RWQCB designates watershed areas into Hydrologic Units (HUs), which are further divided into Hydrologic Areas (HAs) and Hydrologic Subareas (HSAs). As designated by the Santa Ana RWQCB, the western portion of the project area is located in the San Jacinto Valley HU, the Perris HA, and the Perris Valley HSA. The eastern portion of the project area is located in the San Jacinto Valley HU, the San Jacinto HA, and the Gilman Hot Springs HSA. As discussed previously, an SWRCB 2014 amendment to the Caltrans MS4 Permit identified Caltrans as a Stakeholder for nutrient TMDL in the San Jacinto Watershed, which requires Caltrans to implement treatment BMPs to mitigate this nutrient pollutant.

2.10.2.2 Surface Waters

Several drainage features are present within the project area. The drainage features primarily consist of channelized storm water drainages that eventually convey flows into the San Jacinto River. In addition, an unnamed blue line stream crosses underneath SR-60 east of the WLC Pkwy interchange at approximately Post Mile (PM) 21.75. This drainage feature does not drain to the San Jacinto River; however, all storm water runoff from the project site is conveyed south into Mystic Lake and a series of nearby reclamation ponds within the San Jacinto Wildlife Area, which is located approximately 4 miles (mi) to the south of the project site. Overflow from the

Mystic Lake area flows into the San Jacinto River, Reach 4 (Nuevo Road to North-South Mid-Section Line). Reach 4 of the San Jacinto River is located approximately 5 mi downstream of the project area. The San Jacinto River is approximately 42 mi long, is formed at the base of the San Jacinto Mountains, and drains into Lake Elsinore. In rare cases, Lake Elsinore overflows into Temescal Creek. Temescal Creek flows into the Santa Ana River, which then flows into the Pacific Ocean.

Beneficial Uses of Surface Waters

The following intermittent beneficial uses are identified in the Santa Ana RWQCB's Basin Plan[1] for Reach 4 of the San Jacinto River:

- **AGR:** Agricultural Supply
- **GWR:** Groundwater Recharge
- **REC-1:** Body-Contact Recreation (swimming/wading)
- **REC-2:** Non-Body-Contact Recreation (boating/fishing)
- **WARM:** Warm Freshwater Habitat (for fish amenable to reproduction in warm water)
- **WILD:** Wildlife Habitat (for wild plants and animals)

Surface Water Quality

Primary water quality concerns in the Lake Elsinore/San Jacinto River WMA include lake water level management, summer lake algal blooms and fish kills affecting the bacterial quality of the lakes, high nitrogen and total dissolved solids (TDS) in groundwater, and water quality problems associated with confined animal feeding operations.

The SWRCB approved the 2014/2016 Integrated Report (CWA Section 303(d) List) on October 3, 2017. On April 6, 2018, the EPA approved the California 303(d) List of Water Quality Limited Segments. Reach 4 of the San Jacinto River is not listed for any impairments on the 2014/2016 California 303(d) List of Water Quality Limited Segments. There are currently no proposed or adopted TMDLs for Reach 4 of the San Jacinto River.

2.10.2.3 Groundwater

The project area is located within the South Coast Hydrologic Region as defined by the California Department of Water Resources (DWR) and the Santa Ana RWQCB. The majority of the project area is located in the San Jacinto Groundwater Basin. A small portion of the eastern side of the project area is located in the San Timoteo Subbasin of the Upper Santa Ana Valley Groundwater Basin.

The San Jacinto Groundwater Basin is bounded by the San Jacinto Mountains on the east, the San Timoteo Badlands on the northeast, the Box Mountains on the north, the Santa Rosa Hills and Bell Mountain on the south, and unnamed hills on the west. The valleys are drained by the San Jacinto River and its tributaries. The San Timoteo Subbasin is bounded on the north and northeast by the Banning fault and impermeable rocks of the San Bernardino Mountains, Crafton Hills, and Yucaipa

[1] Santa Ana Regional Water Quality Control Board. 2016. *Water Quality Control Plan for the Santa Ana River Basin*.

Hills; on the south by the San Jacinto fault; on the west by the San Jacinto Mountains; and on the east by a topographic drainage divide with the Colorado River Hydrologic Region. Depth of groundwater near the project area is reported by DWR to be in excess of 110 feet (ft) below existing ground surface.

For regulatory purposes, the Santa Ana RWQCB designated Groundwater Management Zones for the Santa Ana Region. As designated by the Santa Ana RWQCB, the project area is within the Perris North Groundwater Management Zone and the San Jacinto Lower Pressure Groundwater Management Zone. Groundwater basins were predesignated as Groundwater Management Zones by the Santa Ana RWQCB in the February 2016 update of the Basin Plan.

Beneficial Uses of Groundwater

The present or potential beneficial uses identified in the Basin Plan for the Perris North Groundwater Management Zone include:

- **MUN:** Municipal and Domestic Supply
- **AGR:** Agricultural Supply
- **IND:** Industrial Supply
- **PROC:** Industrial Process Supply

The present or potential beneficial uses identified in the Basin Plan for the San Jacinto Lower Pressure Groundwater Management Zone include:

- **MUN:** Municipal and Domestic Supply
- **AGR:** Agricultural Supply
- **IND:** Industrial Supply

Groundwater Quality

According to DWR, in 2002 the San Jacinto Groundwater Basin's average groundwater character was primarily sodium chloride, sodium-calcium chloride, calcium-sodium chloride, or calcium-sodium chloride-bicarbonate. TDS content ranges from 160 to 1,390 milligrams per liter (mg/L) and averages about 463 mg/L. According to the Basin Plan, the current ambient TDS level in the San Jacinto Lower Pressure Groundwater Management Zone is 730 mg/L, which is higher than the water quality objective. The current ambient nitrate level is 1.9 mg/L, which is higher than the water quality objective.

According to DWR, the character of groundwater for the San Timoteo Subbasin beneath San Timoteo Canyon is sodium bicarbonate, calcium bicarbonate in the alluvium of Little San Gorgonio Creek, and both calcium bicarbonate and sodium bicarbonate near Beaumont. TDS content ranges from 170 to 340 mg/L and averages approximately 253 mg/L. According to the Basin Plan, the current ambient TDS level in the Perris North Groundwater Management Zone is 750 mg/L, which is higher than the water quality objective. The current ambient nitrate level is 4.7 mg/L, which is lower than the water quality objective.

2.10.3 Environmental Consequences

2.10.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the SR-60/WLC Pkwy interchange. No construction activities, such as grading or excavation, would occur. Therefore, no soil would be disturbed, and there would be no increase in the potential for soil erosion or sedimentation compared to existing conditions. Additionally, there would be no increased risk of spills from construction equipment or materials use.

Alternatives 2 and 6 (LPA) (Build Alternatives) Including Design Variations 2a and 6a

Pollutants of concern during construction of the Build Alternatives include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed and there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion can occur at an accelerated rate. During construction, the total disturbed surface area for the Build Alternatives would be approximately 115 ac for Alternatives 2 and 6 (the Locally Preferred Alternative [LPA]), and approximately 148 ac for Design Variations 2a and 6a.

During construction, there is also a potential for construction-related pollutants to be spilled, leaked, or transported via storm runoff into drainages adjacent to the project area and thereby into downstream receiving waters. The following construction-related pollutants have the potential to impact water quality: chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste. These pollutants may be spilled or leaked and have the potential to be transported via storm runoff into receiving waters.

As specified in the following Project Feature PF-WQ-1, the construction activities associated with the Build Alternatives would comply with the requirements of the Construction General Permit.

PF-WQ-1 **Construction General Permit.** Construction of the proposed project shall comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and Order 2012-0006-DWQ; NPDES No. CAS000002), or any other subsequent permit. The project shall comply with the Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level. The SWPPP shall identify the sources of pollutants that may affect the quality of storm water and include Best Management Practices (BMPs) to control the pollutants (e.g., Sediment Control, Catch Basin Inlet Protection, Construction Materials Management, and Non-Storm Water BMPs). All work shall

conform to the construction site BMP requirements specified in the latest edition of the California Department of Transportation (Caltrans) *Storm Water Quality Handbooks: Construction Site Best Management Practices Manual* to control and minimize the impacts of construction and construction-related activities, materials, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, concrete waste management, street sweeping and vacuuming, wind erosion control, and other non-storm water BMPs.

In compliance with the Construction General Permit, a SWPPP would be prepared and Construction BMPs implemented during construction activities to minimize erosion and to prevent spills. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs (which are designed to minimize erosion and retain sediment on site) and Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. The SWPPP would be developed and Construction BMPs selected and implemented to target pollutants of concern during construction. Because the Construction BMPs would be designed to retain sediment and other pollutants on the project site so they would not reach receiving waters, storm water discharges and authorized non-storm water discharges are not anticipated to cause or contribute to any violations of applicable water quality standards or objectives, or to adversely impact human health or the environment. In addition, because Construction BMPs would be designed to retain sediment and other pollutants on the project site so they would not reach receiving waters, runoff during construction would not contain pollutants in quantities that would create a condition of nuisance or adversely affect beneficial uses of waters of the State.

In addition, as specified in Project Features PF-WET-2 and PF-WET-3 in Section 2.18, Wetlands and Other Waters, a Section 401 Water Quality Certification and a Section 404 Nationwide Permit would be obtained for the project for impacts to jurisdictional waters. The USACE and RWQCB may specify additional measures in these permits to reduce water quality impacts. When Construction BMPs are properly designed, implemented, and maintained to address pollutants of concern, as required in Project Feature PF-WQ-1, and measures specified in the Section 401 and 404 permits are implemented, as required by project features PF-WET-2 and PF-WET-3, pollutants of concern would be retained on the project site so they would not reach receiving waters; therefore, no adverse water quality impacts are anticipated during construction of the Build Alternatives and Design Variations 2a and 6a.

Groundwater dewatering is not anticipated to be required during construction or operation of the Build Alternatives and Design Variations 2a and 6a. However, dewatering during storm events may be necessary.

As previously discussed, Reach 4 of the San Jacinto River is not listed for any impairments on the 2014/2016 California 303(d) List of Water Quality Limited Segments. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. However, as discussed above, Construction BMPs would be implemented to target these pollutants of concern. Because there are no existing water quality impairments,

there is no potential for construction of the Build Alternatives to contribute to any existing water quality impairments. Furthermore, with the implementation of Construction BMPs, the Build Alternatives and Design Variations 2a and 6a would not result in any water quality impairments during construction.

In summary, with implementation of Project Features PF-WQ-1, PF-WET-2, and PF-WET-3, including compliance with the requirements of the Construction General Permit, 401 Permit, and 404 Permit and implementation of Construction BMPs, the Build Alternatives and Design Variations 2a and 6a would not result in any adverse impacts to water quality or storm water runoff during operation.

2.10.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the SR-60/WLC Pkwy interchange. Routine maintenance activities would be similar to those occurring in the existing condition. Under the No Build Alternative, there would be no increase in impervious area at the SR-60/WLC Pkwy interchange or at the additional intersections included as part of the project. Furthermore, treatment BMPs would not be implemented and storm water would remain untreated. The No Build Alternative would not result in an increase in storm water runoff or long-term pollutant loading compared to existing conditions; therefore, no permanent impacts to water quality or storm water runoff would occur.

Alternative 2 and 6 (LPA) (Build Alternatives) Including Design Variations 2a and 6a

Pollutants of concern during operation of the Build Alternatives include suspended solids/sediments, nutrients, pesticides, heavy metals, oil and grease, toxic organic compounds, and trash and debris. Alternatives 2 and 6 (LPA) would result in a permanent net increase in impervious surface area of 16.5 ac and 20.6 ac, respectively. Design Variations 2a and 6a would result in a permanent increase in impervious surface area of approximately 22.1 ac and 26.2 ac, respectively. An increase in impervious surface area would increase the volume of runoff during a storm, thereby increasing the potential for more effective transport of pollutants to receiving waters. In addition, an increase in impervious surface area would also raise the total amount of pollutants in the storm water runoff and non-storm water runoff, which would increase the amount of pollutants traveling to on-site drainages and downstream receiving waters.

Improvements for the Build Alternatives and Design Variations 2a and 6a are proposed both within and outside of Caltrans right-of-way, as specified in the Project Feature listed below.

PF-WQ-2 **Caltrans MS4 Permit.** Design and operation of the proposed project shall comply with the provisions of the NPDES Permit, Statewide Storm Water Permit, Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation Order No. 2012-0011-DWQ, NPDES No. CAS000003 (Caltrans MS4 Permit) or any subsequent permit. This permit is applicable to the portions of the project area within and outside of Caltrans right-of-way. Caltrans-approved Treatment and Design Pollution Prevention BMPs shall be

implemented within and outside of Caltrans right-of-way to the maximum extent practicable. As per the Statewide Trash Implementation Plan, trash capture devices will be implemented along the SR-60/WLC Pkwy mainline and ramps designated as "significant trash generating areas". Treatment BMPs shall be sized and designed to retain and infiltrate the water quality volume and would not result in an increase in velocity or volume of downstream flow. Treatment BMPs include infiltration basins and biofiltration swales. Design Pollution Prevention BMPs include preservation of existing vegetation, slope/surface protection systems (permanent soil stabilization and replanting of vegetation) concentrated flow conveyance systems, and low-impact design (LID) efforts.

As specified in Project Feature PF-WQ-2, the project would comply with the Caltrans MS4 Permit for the portions of the project area within and outside Caltrans right-of-way. Caltrans-approved Treatment BMPs and Design Pollution Prevention BMPs would be implemented to reduce the discharge of pollutants of concern to the MEP for improvements proposed within the project limits.

Treatment BMPs within the project limits would include a system of biofiltration swales and infiltration basins, which are described further below. Treatment BMPs use treatment mechanisms to remove pollutants that have entered storm water runoff. These Treatment BMPs would treat runoff from the project site and would target pollutants of concern. In addition, the infiltration basins and biofiltration swales would promote infiltration to offset any increased flows associated with the increase in impervious surface from the project area and would provide flow duration, volume, and rate control functions.

An infiltration basin is a shallow artificial pond designed to infiltrate storm water though permeable soils into the groundwater aquifer and remove pollutants as the storm water percolates through the soil. Biofiltration swales are vegetated channels that convey storm water and remove pollutants by filtration through grass, sedimentation, adsorption to soil particles, and infiltration through soil. Biofiltration swales are effective at removing debris and solid particles, and some dissolved constituents. Therefore, these treatment BMPs would promote infiltration to offset any increased flows associated with the increase in impervious surface from the project area and target pollutants of concern from transportation facilities, including total suspended solids, nutrients, metals, turbidity, and oil and grease.

In addition to Treatment BMPs, Caltrans-approved Design Pollution Prevention BMPs would include LID efforts, slope/surface protection systems, concentrate flow conveyance systems, and preservation of existing vegetation.

Reach 4 of the San Jacinto River is not listed for any water quality impairments on the 2014/2016 California 303(d) List. Therefore, operation of the Build Alternatives and Design Variations 2a and 6a would not contribute to any existing water quality impairments. The proposed Treatment BMPs include a system of biofiltration swales and infiltration basins and would be implemented both within and outside Caltrans right-of-way to target pollutants of concern. The Treatment BMPs would be sized and designed to retain and infiltrate the water quality volume and would not result in an increase in velocity or volume of downstream flow. In addition, the Treatment BMPs

would treat 100 percent of the runoff from the project site, thereby reducing the amount of pollutants that would drain to downstream receiving waters. In summary, with implementation of Project Feature PF-WQ-2 and implementation of Treatment and Design Pollution Prevention BMPs, the Build Alternatives would not result in any adverse impacts to water quality or storm water runoff during operation.

Comparison of the Build Alternatives Including Design Variations 2a and 6a

The disturbed soil area, impervious surface area, and Treatment BMPs for the Build Alternatives and Design Variations 2a and 6a are compared in Table 2.10.1.

Table 2.10.1 Water Quality Impacts Comparison for Build Alternatives

Build Alternative	Disturbed Soil Area (acres)	Increase in Impervious Surface Area (acres)	Proposed Treatment BMPs Within and Outside Caltrans Right-of-Way
Alternative 2 (Modified Partial Cloverleaf Interchange)	115	16.5	Infiltration basins and biofiltration swales
Design Variation 2a (Alternative 2 with Design Variation)	148	22.1	
Alternative 6 (LPA) (Modified Partial Cloverleaf with Roundabout Intersections)	115	20.6	
Design Variation 6a (Alternative 6 [LPA] with Design Variation)	148	26.2	

Source: *Water Quality Assessment Report* (January 2019)
BMPs = Best Management Practices
Caltrans = California Department of Transportation
LPA = Locally Preferred Alternative

The Build Alternatives without the design variations would result in the same amount of disturbed soil area during construction (approximately 115 ac). Design Variations 2a and 6a would both disturb an additional 33 ac of soil compared to the Build Alternatives without the design variation. Therefore, construction of Design Variations 2a and 6a would result in a greater potential for soil erosion and downstream sedimentation and contamination to occur. However, the duration of construction would be the same length for both Build Alternatives and the Design Variations; therefore, the potential for construction-related pollutants to spill, leak, and/or affect on-site drainages and downstream receiving waters would be the same.

Implementation of Design Variation 6a would result in the greatest increase in impervious surface area (26.2 ac). Therefore, implementation of Design Variation 6a would be expected to result in the greatest increase in storm water runoff and the highest concentrations of suspended solids/sediments, nutrients, pesticides, heavy metals, oil and grease, toxic organic compounds, and trash and debris in storm water runoff. Alternative 2 would be expected to result in the smallest increase in impervious surface area (16.2 ac) and therefore the smallest increase in storm water runoff and lowest concentration of pollutants in the storm water runoff.

2.10.4 Avoidance, Minimization, and/or Mitigation Measures

The project will incorporate project features PF-WQ-1, PF-WQ-2, PF-WET-2, and PF-WET-3 as described above. Therefore, no avoidance, minimization, and/or mitigation measures are required.

2.11 Geology/Soils/Seismic/Topography

2.11.1 Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using the Department's Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge's category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see the Department's Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

2.11.2 Affected Environment

This section discusses the existing geologic and soils conditions within the project area and provides an analysis of the potential impacts of the proposed project that are related to geology and soils. This section is based on the *Preliminary Geotechnical Design Report* (November 2018).

2.11.2.1 Topography

The overall project area topography slopes gently in a southerly direction, except in the northeast quadrant of the interchange, where relatively steep slopes exist.

2.11.2.2 Surface and Groundwater

According to the 2015 County of Riverside General Plan Safety Element, groundwater within the project area is anticipated to be in excess of 110 feet (ft) below ground surface (bgs). Surface water, with the exception of manmade drainage facilities, is not known to exist on the project area.

2.11.2.3 Geology

The project area is within California's Peninsular Ranges Geomorphic Province. This Province is characterized by northwest-trending elongated mountain ranges and valleys. The Province is divided into three major fault-bounded tectonic blocks within the San Andreas Fault System (from west to east): the Santa Ana, Perris, and San Jacinto Blocks. The project area is situated near the northeastern boundary of the relatively stable Perris Block.

The project area is located within the northern portion of the San Jacinto Valley, a fault-bonded tectonic basin that has evolved from movement along the San Jacinto fault system, resulting in a down-dropped northwest-trending trough. The elongated transverse basin is believed to have formed as a result of a right step of the fault zone between the Casa Loma and Claremont strands of the fault zone.

Regional geologic maps for the area indicate that the project area is underlain by very young to young alluvial fan deposits as well as Pleistocene-aged formational materials. The existing State Route 60 (SR-60) freeway is underlain by fill materials. Each of these units is explained in greater detail below.

Fill

Fills that underlay the project area are expected to consist of silty fine to coarse sand and sandy silt with low expansion.

Alluvial Deposits

The alluvial soils in the project area were deposited as part of a complex depositional environment and generally include interbedded fine to coarse sands and silts with varying amounts of clay. The recent alluvial soils (younger alluvium) are found in drainages and are believed to constitute the upper surficial materials (upper 3 to 10 ft). The deeper materials (older alluvium and older fan deposits) consist of silty fine sand to sandy silt with interbedded lenses of silty clay.

San Timoteo Formation

The Pleistocene-aged San Timoteo Formation was encountered in one geotechnical boring along the north side of SR-60 and is exposed in the northeast quadrant cut slopes. This Formation locally consists of poorly consolidated sands, silts, sandy gravel, and gravel conglomerate.

2.11.2.4 Soils

Per the United States Department of Agriculture Natural Resources Conservation Services (USDA NRCS), the majority of the project area is mapped as San Emigdio fine sandy loam (SeC2). This surficial soil has a soil erodibility factor between 0.2 and 0.4, a Hydrologic Soil Group classification of A, and an infiltration rate of 0.1 to 0.5 inch per hour. This soil is therefore well drained with moderately rapid permeability. On-site surficial soils are subject to erosion, particularly if exposed to rainfall and irrigation.

2.11.2.5 Geologic Hazards

Geologic hazards relevant to the proposed project include seismic ground shaking, fault rupture, liquefaction, and seismic settlement. The following geologic hazards were reviewed and determined not to be relevant to the proposed project; therefore, they are not discussed further in this document.

- **Economical Resources/Minerals:** According to California's Division of Oil, Gas, and Geothermal Resources, there are no oil or gas wells in Moreno Valley. The State Geologist is responsible for classifying and/or designating mineral deposits based on adopted criteria that address the resource development potential of a particular commodity. Areas are categorized into four Mineral Resource Zones (MRZs) based on geologic factors. MRZ-2 identifies significant mineral deposits of a particular commodity and is therefore the most important category. There are no deposits in the project area or in Moreno Valley that have been classified as MRZ-2 by the State Geologist. According to the City of Moreno Valley General Plan (2006), the mineral resources known to be located within the project area are common materials: sand, gravel, and rock. Sand and gravel are used to

make concrete and for road base. The project area is not located within a locally important mineral resource recovery site delineated in the City of Moreno Valley General Plan (2006).

- **Volcanic Hazards:** There are no active, potentially active, or inactive volcanoes in Moreno Valley; therefore, volcanic hazards would not affect the project area.

- **Soil Subsidence:** Subsidence is a phenomenon where the soils and other earth materials settle or compress, resulting in a lower ground surface elevation. When fill and native materials on a site are saturated with water, there is a net decrease in the pore pressure, and contained water would allow the soil grains to pack closer together. This closer grain packing results in less volume and lowering of the ground surface. According to the 2006 Moreno Valley General Plan Final Program EIR,[1] the only area that has experienced subsidence in the past is located outside of the project area; therefore, subsidence is not expected to affect the project area.

- **Faulting and Seismicity:** The project area, similar to other areas of Southern California, is located within a seismically active region near the active margin between the North American and Pacific tectonic plates. The principal source of seismic activity is movement along the northwest-trending regional fault systems such as the San Andreas, San Jacinto, and Elsinore Fault Zones. Currently, these fault systems accommodate up to approximately 55 millimeters per year (mm/yr) of slip between the plates. The San Jacinto Fault Zone, located within the project area, is estimated to accommodate slip of approximately 12 mm/yr. A list of major local faults and their seismic characteristics is presented in Table 2.11.1.

Table 2.11.1 Local Fault Data

Fault Name	Fault Type	Maximum Earthquake Magnitude	Estimated Distance from Site (km)
San Jacinto (San Jacinto Valley)	Strike-Slip	7.7	0.31
San Jacinto (San Bernardino Valley)	Strike-Slip	7.7	4.62
San Jacinto (Anza)	Strike-Slip	7.7	6.31

Source: *Preliminary Geotechnical Design Report* (November 2018).
km = kilometers

Historically, the San Jacinto Fault Zone has produced earthquakes in the magnitude range of 6.2 Moment Magnitude (Mw) to 7.2 Mw. Of all the fault systems in California, the San Jacinto Fault and San Andreas Fault are among the most active.

A portion of the project area is located within the Claremont Segment of the San Jacinto Fault Zone. Based on a probabilistic spectrum obtained from the United States Geological Survey (USGS) National Hazard Map (2008) for 5 percent

[1] City of Moreno Valley. July 2006. Environmental Impact Report, City of Moreno Valley General Plan. Volume 1. Website: http://www.moval.org/city_hall/general-plan/06gpfinal/ieir/eir-tot.pdf.

probability of exceedance in 50 years, the peak ground acceleration expected at the project area is 0.86g.

Liquefaction

Liquefaction is a phenomenon in which saturated, cohesionless soils lose their strength due to the buildup of excess water pressure during cyclic loading such as that induced by earthquakes. The primary factors affecting the liquefaction potential of a soil deposit are: (1) intensity and duration of earthquake shaking; (2) soil type and relative density; (3) overburden pressures; and (4) depth to groundwater. Soils most susceptible to liquefaction are clean, loose, uniformly graded, fine-grained sands and non-plastic silts that are saturated. Silty sands, under certain site conditions, may also be susceptible to liquefaction. Due to deep groundwater, relatively dense alluvial soils, and interbedded clay layers underlying the project area, the potential for liquefaction at the project area is very low.

Seismic Settlement

Ground accelerations generated from a seismic event can produce settlements in dry to moist sands with relatively low density. Near-surface loose soil deposits susceptible to such seismically induced settlement will be generally removed and compacted during grading.

Fault Rupture Potential

Some of the proposed improvements (i.e., on- and off-ramps) are located within the Claremont Segment of the San Jacinto Fault Zone. Although the existing bridge (PM 21.37, Bridge No. 56-0488) is not located within a currently designated Alquist-Priolo (AP) Earthquake Fault Zone, an unnamed fault splay is projected to transect the existing/proposed bridge. As such, a ground rupture can occur along any of these active faults when seismic activity occurs.

Seismically-Induced Landslides

According to the City of Moreno Valley General Plan (2006), there is some potential for landslides in the Badlands because the slopes are steep and the underlying geologic material is poorly consolidated. Evidence of landslide potential is not observed elsewhere.

Rock Falls

The potential for rock fall due to either erosion or seismic ground shaking is considered very low or nonexistent in the project area because of the relatively flat topography.

Tsunamis and Seiches

A tsunami, or seismically generated sea wave, is generally created by a large, distant earthquake occurring near a deep ocean trough. A seiche is an earthquake-induced wave in a confined body of water such as a lake or reservoir. Due to the distance of large bodies of water (inland seas, large rivers, and oceans) from the project area, the possibility of tsunamis is considered nonexistent. The ephemeral Mystic Lake (which is approximately 4 miles [mi] southeast of the project) and the Perris Reservoir (which is approximately 4.5 mi south of the project area) are lower

in elevation. As such, the potential for seiches from these two enclosed bodies of water to affect the project area is considered unlikely.

2.11.3 Environmental Consequences

2.11.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area. The No Build Alternative does not result in soil disturbance in the project area and therefore would not result in temporary impacts related to geology and soils.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

Construction activities for the project (e.g., grading and cut-and-fill slopes) would disturb soil and alter existing landforms. Temporary impacts would include soil compaction and an increased possibility of soil erosion. On-site soils (silt and sands or fine sandy loam) would be particularly prone to erosion during construction of the project, especially during heavy rains. Unpaved sloping grades within the project limits include the approach embankments and potential cut slopes in the northeast quadrants, which would be especially susceptible to erosion. Provisions for site drainage, slope planting, and other measures in accordance with California Department of Transportation (Caltrans) requirements will be fulfilled to provide adequate protection against erosion. As described in Project Feature PF-WQ-1, during all construction activities for the Build Alternative, the contractor will be required to adhere to the requirements of the General Construction Permit and to implement erosion and sediment control Best Management Practices (BMPs) that are specifically identified in the project Storm Water Pollution Prevention Plan (SWPPP) to keep sediment from moving off site into receiving waters and impacting water quality. Worker safety hazards resulting from erosion during construction of the Build Alternatives would be minimized based on implementation of the requirements in the General Construction Permit and Erosion and Sediment Control BMPs in the SWPPP. Refer to Section 2.10, Water Quality and Storm Water Runoff, for additional discussion regarding erosion impacts related to water quality and project features, including BMPs.

The existing 2:1 (horizontal:vertical) cut slopes on the project area are considered stable. Any temporary excavations (including temporary shoring) necessary to construct any retaining walls/footings or culverts will be designed for surficial and deep-seated stability once the means of construction are determined; therefore, no adverse impacts are anticipated. Construction of the Build Alternatives and Design Variations 2a and 6a would have the same temporary impacts.

As described in the following project features (PF-GEO-1, PF-GEO-2), during the Plans, Specifications, and Estimates (PS&E) phase, a detailed geotechnical investigation and preparation of a Foundation Report would be conducted. The findings from these geotechnical investigations would be incorporated into the final project design.

PF-GEO-1 **Geotechnical Design Report.** During the Plans, Specifications, and Estimates (PS&E) phase, a detailed geotechnical investigation will be conducted by qualified geotechnical personnel to assess the geotechnical conditions in the project area. The geotechnical investigation will include exploration, testing, and evaluation based on proposed grading and alignment schemes. This investigation shall also include slope stability evaluations, particularly for any proposed cuts and fills. Borings and double-ring infiltration tests will also be required at new storm water infiltration basins. Those soil samples will be tested to evaluate liquefaction potential, collapsibility potential, stability, and corrosion potential. The project-specific findings and recommendations of the geotechnical investigation will be submitted to the California Department of Transportation (Caltrans) for review and approval. Those findings and recommendations will be incorporated into the final design of the selected Build Alternative or Design Variation.

PF-GEO-2 **Foundation Reports.** During the PS&E phase, a detailed Foundation Report specific to the project will be prepared. Geotechnical investigations for bridges, retaining walls, sound walls, storm water conduits, and overhead signs will be required. The project-specific findings and recommendations of these geotechnical investigations will be submitted to Caltrans for review and approval. Those findings and recommendations will be incorporated into the final design of the selected Build Alternative or Design Variation.

2.11.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area. The No Build Alternative would not change the topography in the project area; therefore, no permanent impacts related to geology and soils would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

Alternatives 2 and 6 (the Locally Preferred Alternative [LPA]) and Design Variations 2a and 6a (Alternative 6 [LPA] with Design Variation) would have the same permanent impacts. The Build Alternatives, including Design Variations 2a and 6a, would not result in permanent substantial changes to the topography or to geologic features in the project area because the proposed project improvements would generally be constructed at or close to the same grade as the existing facilities.

Ground Rupture

As discussed above, some of the proposed project improvements are located within the Claremont Segment of the San Jacinto Fault Zone. In addition, an unnamed fault splay is anticipated to transect the existing bridge (PM 21.37, Bridge No. 56-0488). As such, a ground rupture can occur along any of these active faults when seismic activity occurs. As specified in Project Feature PF-GEO 3 below, a fault trench investigation will be performed for the bridge structure to confirm the existence or

absence of any fault. With implementation of Project Feature PF-GEO 3, no adverse impacts as a result of fault-induced ground rupture are anticipated.

PF-GEO-3 Ground Surface Rupture and Deformation Potential Testing. During the PS&E phase, further geotechnical evaluation will be conducted. This evaluation will determine the potential for fault rupture within the bridge footprint as a result of the unnamed "splay" located outside the mapped Alquist-Priolo Fault Hazard Zone that projects toward the existing World Logistics Center Parkway (WLC Pkwy) Overcrossing.

Seismic Ground Shaking

The project area is located in the highly seismic Southern California region, within the influence areas of several fault systems. These fault systems are considered active and well defined and are capable of producing potentially damaging seismic ground shaking. It is recognized that the project area could periodically experience ground acceleration as the result of moderate to large seismic events.

The structures (e.g., bridges, culverts) constructed for the project could be potentially subject to substantial impacts related to seismic ground shaking. The proposed project would be designed in accordance with the requirements of Caltrans SDC and the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications and California Amendments in order to minimize ground-shaking impacts. Therefore, impacts as a result of seismic ground shaking would be less than substantial.

Secondary Effects of Seismic Shaking

Secondary effects of seismic shaking are nontectonic processes that are directly related to strong seismic shaking. Ground deformation, including fissures, settlement, displacement, and loss of bearing strength, are common expressions of these processes and are among the leading causes of damage to structures during moderate to large earthquakes. Secondary effects leading to ground deformation include liquefaction, settlement, and landsliding. Other hazards indirectly related to seismic shaking are inundations, tsunamis, and seiches. These potential secondary effects of seismic shaking on the project are discussed below.

Liquefaction

The potential impacts of liquefaction to the project area may include: (1) settlement of the ground surface; (2) lateral spreading of the ground; (3) additional down-drag forces on foundation piles as a result of soil settlement above the liquefied layers; and (4) reduction of the shear strength of the liquefied soil, resulting in reduced load-carrying capacity.

As described above, due to the depth to groundwater (which is anticipated to be greater than 110 ft bgs), the relatively dense alluvial soils present in the project area, and the interbedded clay layers underlying the project area, the potential for liquefaction on the project area is very low and does not present a design issue. Therefore, no adverse liquefaction impacts would occur.

Seismic Densification

Ground accelerations generated from a seismic event can produce settlements in dry or moist sands (granular earth materials) with relative low density. The near-surface loose soil deposits susceptible to such seismically induced settlement will be generally removed and recompacted during grading. As such, the potential seismic densification is anticipated to be minimal or less than 2 inches for surface structures. However, as described in Project Feature PF-GEO-4, additional evaluation of seismic densification, based on actual field data for the proposed structure, would be performed in future phases of project development. Therefore, no adverse impacts related to seismic densification are anticipated.

PF-GEO-4 **Seismically Induced Settlements.** During PS&E, seismically induced settlement will be evaluated based on new embankment fill thickness and geometry. If there is potential for seismically induced settlement, these findings will be incorporated into the final design of the selected Build Alternative or design variation.

Collapsible Soils

A collapsible soil is generally defined as a soil that will undergo a sudden decrease in volume when its internal structural support is lost. Soils found to be most susceptible to collapse include loose (fine-grained, wind-deposited soil) deposits, valley alluvium deposited within a semi-arid to arid climate, and residual soil deposits. The project area is located in a geological area that includes potentially collapsible soils in shallow alluvium. This collapse potential will be further evaluated during future investigations to determine the required depth of overexcavation, as described in Project Feature PF-GEO-1. Therefore, no adverse impacts related to collapsible soils are anticipated.

Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) as a result of variations in moisture content even without an increase in external loads. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures or concrete slabs supported on grade. Potentially expansive soils exist on the project area. The more expansive soils are expected to be localized and associated with interbedded silt and clay layers that are likely to be located on the south side of the existing and proposed WLC Pkwy Overcrossing. These materials shall not be used in embankment fills or the upper 4 ft of pavement subgrade. Therefore, no adverse impacts related to expansive soils are anticipated.

Seismically Induced Landslides

Marginally stable slopes may be subject to landsliding caused by seismic shaking. In most cases, this is limited to relatively shallow soil failures on steeper natural slopes, although deep-seated failures of over-steepened, engineered slopes are also possible. The potential for rockfall due to either erosion or seismic ground shaking is considered very low or nonexistent for the project area due to the relatively flat topography.

Seismically Induced Inundation

Strong seismic ground motion can cause dams and levees to fail, resulting in damage to structures and properties located downstream of those water retention facilities. There are no dams or substantial bodies of water on, in the immediate vicinity of, or immediately upstream of the project area. The project area is not within an inundation area of a dam.[1] Therefore, the project would not be substantially impacted by seismically induced inundation.

Tsunamis and Seiches

As described above, due to its distance from large bodies of water (inland seas, large rivers, and oceans), the project area is not at risk of tsunami. The ephemeral Mystic Lake, which is approximately 4 mi southeast of the project, is at a lower elevation than the project area. As such, the potential for seiches on Mystic Lake to affect the project area is considered low. Perris Reservoir is located approximately 4.5 mi south of the project area and is also located at a lower elevation. As such, the potential for seiches on the Perris Reservoir to affect the project area is considered low.

Corrosive Soils

Corrosive soils contain constituents or physical characteristics that react with concrete (water-soluble sulfates) or ferrous metals (e.g., chlorides, low percentage of hydrogen levels, and low electrical resistivity). Fine-grained soils (predominantly clays) are the typical soil types responsible for corrosive site conditions. No subsurface investigation or laboratory testing has been conducted during the preliminary engineering phase of this project to date. However, based on previous soil testing performed in the immediate vicinity of the project area, it is anticipated that project area soils are noncorrosive. As detailed in Project Feature PF-GEO 5, the potential for soil corrosion effects on the project structures will be investigated during final design. If recommended by the geotechnical investigation to be prepared during PS&E, final design will include design features related to corrosive soils.

PF-GEO-5 **Corrosive Soil Testing.** During PS&E, representative soil samples will be tested for pH, sulfate content, chloride, content, and minimum electrical resistivity as part of the final Foundation Report investigation for the project area pursuant to Caltrans Corrosion Guidelines. If corrosive soils are found, appropriate material recommendations will be incorporated into the final design of the selected Build Alternative or design variation.

2.11.4 Avoidance, Minimization, and/or Mitigation Measures

The project will incorporate project features PF-WQ-1 and PF-GEO-1 through PF-GEO-5, as described above. Potential temporary and permanent adverse impacts to geology and soils would be addressed by geotechnical investigations conducted in the PS&E phase, included as Project Features; therefore, no avoidance, minimization, and/or mitigation measures are necessary.

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[1] City of Moreno Valley. July 2006. Environmental Impact Report, City of Moreno Valley General Plan. Volume 1. Website: http://www.moval.org/city_hall/general-plan/06gpfinal/ieir/eir-tot.pdf.

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2.12 Paleontology

2.12.1 Regulatory Setting

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils. A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects. 23 United States Code (USC) 1.9(a) requires that the use of federal-aid funds must be in conformity with federal and state law. 23 United States Code (USC) 305 authorizes the appropriation and use of federal highway funds for paleontological salvage as necessary by the highway department of any state, in compliance with 16 USC 431-433 above and state law.

Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

The National Environmental Policy Act of 1969 (NEPA) (42 United States Code [USC] 4321-4375) established a national policy for the protection, promotion, enhancement, and understanding of the environment and created the Council on Environmental Quality. As part of this act, Section 101(b)(4) (42 USC 4331) seeks to "…preserve important historic, cultural, and natural aspects of our natural heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice." NEPA requires that the environmental effects of a proposed federal project or action be evaluated, and regulations for implementing this evaluation are found in 40 Code of Federal Regulations (CFR) 1500-1508. Because a federal agency, the FHWA, has oversight on this project, compliance with NEPA regulations is required for the project as a whole. The applicability of NEPA to paleontological resources depends on whether Section 101(b)(4) is interpreted to include fossils. However, compliance with CEQA regulations and California Department of Transportation (Caltrans) guidelines regarding paleontological resources will meet the requirements of NEPA regardless of whether paleontological resources are deemed to be covered under this act.

2.12.2 Affected Environment

This section is based on the *Paleontological Identification and Evaluation Report* (January 2019).

Geologic maps of the area were examined and relevant geological and paleontological literature were reviewed to determine which geologic units are present in the project area and whether fossils have been recovered from those or similar geologic units elsewhere in the region. As geologic formations and units may extend over large geographic areas and contain similar lithologies and fossils, the literature review includes areas well beyond the project area. A fossil locality search for any known localities within and surrounding the project area was completed through the San Bernardino County Museum (SBCM). Pedestrian surveys of the project area were conducted by Riordan Goodwin and Veronica Sorce on February 4, March 19, March 20, May 7, 2015, and November 15, 2018. These surveys were conducted by opportunistically walking most areas of the project area or visually inspecting the project area from a distance. Because much of the project

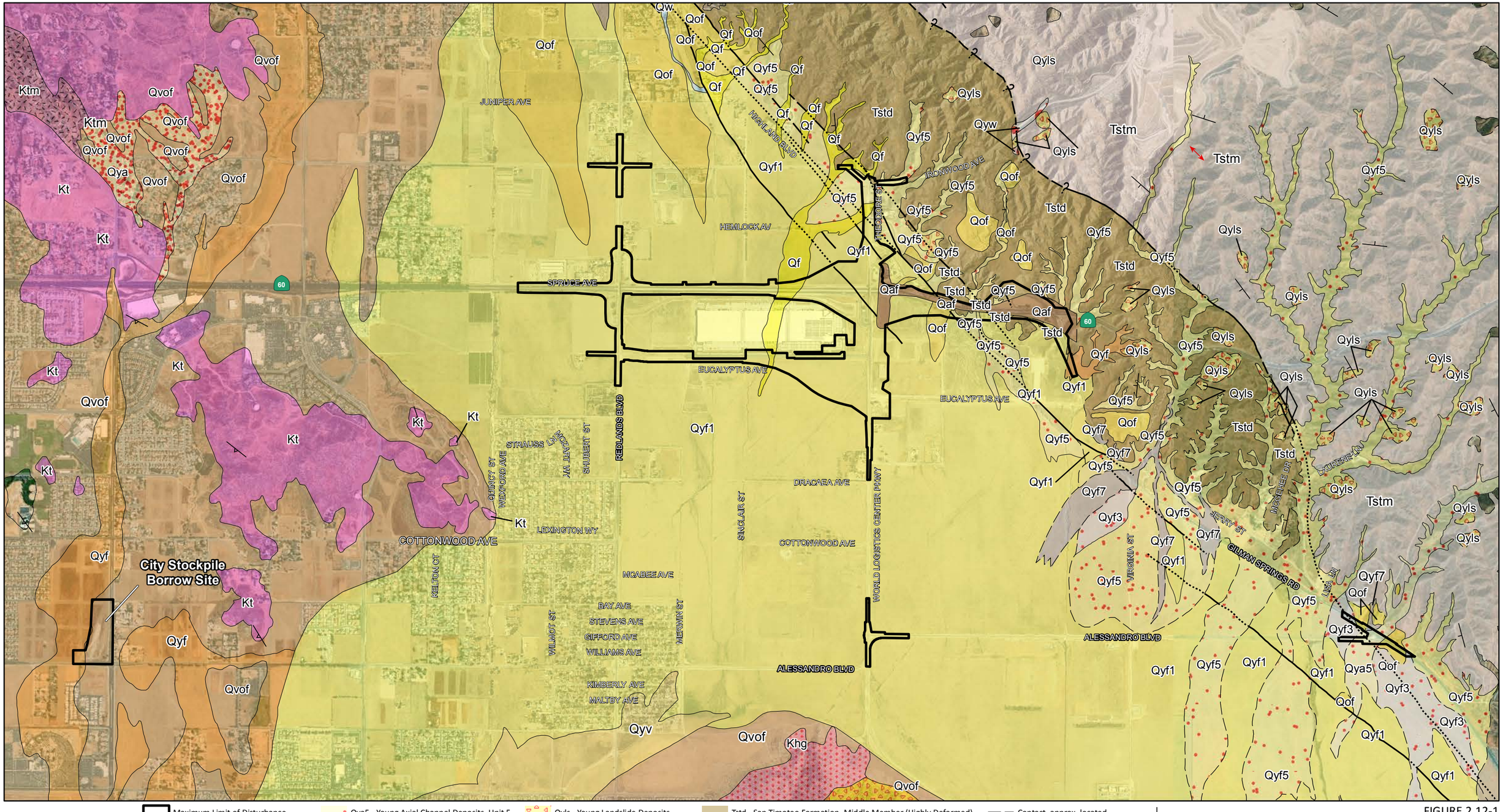
area is within active freeway and street rights-of-way, access was not safely available in all areas. The purpose of a field survey is to note the sediments and to identify any unrecorded paleontological resources exposed on the surface of a project area.

The project area is in the Peninsular Ranges Geomorphic Province, a 900-mile (mi) long northwest-southeast trending structural block that extends from the Transverse Ranges in the north to the tip of Baja California in the south and includes the Los Angeles Basin. The total width of this province is 225 mi, extending from the Colorado Desert in the east, across the continental shelf, to the southern Channel Islands (Santa Barbara, San Nicolas, Santa Catalina, and San Clemente) in the west. This province is characterized by a series of mountain ranges and valleys that trend in a northwest-southeast direction roughly parallel to the San Andreas Fault. It contains extensive pre-Cenozoic (more than 66 million years ago [Ma] igneous and metamorphic rock covered by limited exposures of Cenozoic (less than 66 Ma) sedimentary deposits.

Geologic mapping indicates that the project area contains Artificial Fill, late Holocene (less than 4,200 years ago) Very Young Alluvial Fan Deposits, Holocene to late Pleistocene (less than 126,000 years ago) Young Axial Channel Deposits and Young Alluvial Fan Deposits, late to middle Pleistocene 11,700 to 781,000 years ago) Old Alluvial Fan Deposits, middle to early Pleistocene (126,000 years ago to 2.588 Ma) Very Old Alluvial Fan Deposits, and the Pliocene (3.6 to 5.333 Ma) Middle Member of the San Timoteo Formation (Figure 2.12-1).

Because of its disturbed context, Artificial Fill does not have the potential to contain scientifically significant paleontological resources. The Very Young Alluvial Fan Deposits and the upper 10 feet (ft) of the Young Axial Channel Deposits and the Young Alluvial Fan Deposits are unlikely to contain scientifically significant paleontological resources because of their young age (likely less than 4,200 years). However, the older sediments of the Young Axial Channel Deposits and the Young Alluvial Fan Deposits below a depth of 10 ft may be old enough to contain scientifically significant paleontological resources. The Old Alluvial Fan Deposits, the Very Old Alluvial Fan Deposits, and the unnamed subunit of the middle member of the San Timoteo Formation may contain scientifically significant paleontological resources and are considered to have high paleontological sensitivity. The paleontological sensitivity of the geologic units within the project area is shown on Figure 2.12-2.

The results of the fossil locality search through the SBCM identified one fossil locality within the boundaries of the project area from the San Timoteo Formation. This locality (SBCM 5.3.9, which refers to University of California Museum of Paleontology [UCMP] Locality 3258) yielded remains of the extinct horse *Equus (Plesippus) francescana* near the existing intersection of State Route 60 (SR-60)/ Gilman Springs Road. Because much of this area is mapped as Artificial Fill, the locality may have been removed or covered. In addition, the SBCM identified 14 localities in the San Timoteo Formation within 1 mi of the project area. These localities have produced specimens of gastropods, bivalves, and terrestrial vertebrates, including the pocket gopher (*Thomomys*) and kangaroo rat (*Dipodomys*). The SBCM also indicates that to the north and northeast of the Area of Project Disturbance (APD), numerous localities are known from the San Timoteo Formation.



Maximum Limit of Disturbance

Geology

- Qaf - Artificial Fill
- Qf - Very Young Alluvial Fan Deposits
- Qw - Very Young Wash Deposits
- Qya - Young Axial Channel Deposit
- Qya5 - Young Axial Channel Deposits, Unit 5
- Qyf - Young Alluvial Fan Deposits
- Qyf1 - Young Alluvial Fan Deposits, Unit 1
- Qyf3 - Young Alluvial Fan Deposits, Unit 3
- Qyf5 - Young Alluvial Fan Deposits, Unit 5
- Qyf7 - Young Alluvial Fan Deposits, Unit 7
- Qyls - Young Landslide Deposits
- Qyv - Young Alluvial Valley Deposits
- Qyw - Young Alluvial Wash Deposits
- Qof - Old Alluvial Fan Deposits
- Qols - Old Landslide
- Qvof - Very Old Alluvial Fan Deposits
- Tstd - San Timoteo Formation, Middle Member (Highly Deformed)
- Tstm - San Timoteo Formation, Middle Member
- Khg - Heterogeneous Granitic Rocks
- Kt - Tonalite
- Ktm - Tonalite and Mafic Rocks, Undifferentiated

- Contact, approx. located
- Contact, certain
- Fault, approx. located
- Fault, approx. located, queried
- Fault, certain
- Fault, concealed
- Bedding
- Igneous Foliation
- Anticline

0 900 1800
FEET

SOURCE: MBI (11/2018); ESRI (07/2012); Morton and Miller (2006); Morton and Matti (2001)

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FIGURE 2.12-1

SR-60/World Logistics Center Parkway Interchange Project

Geology Map

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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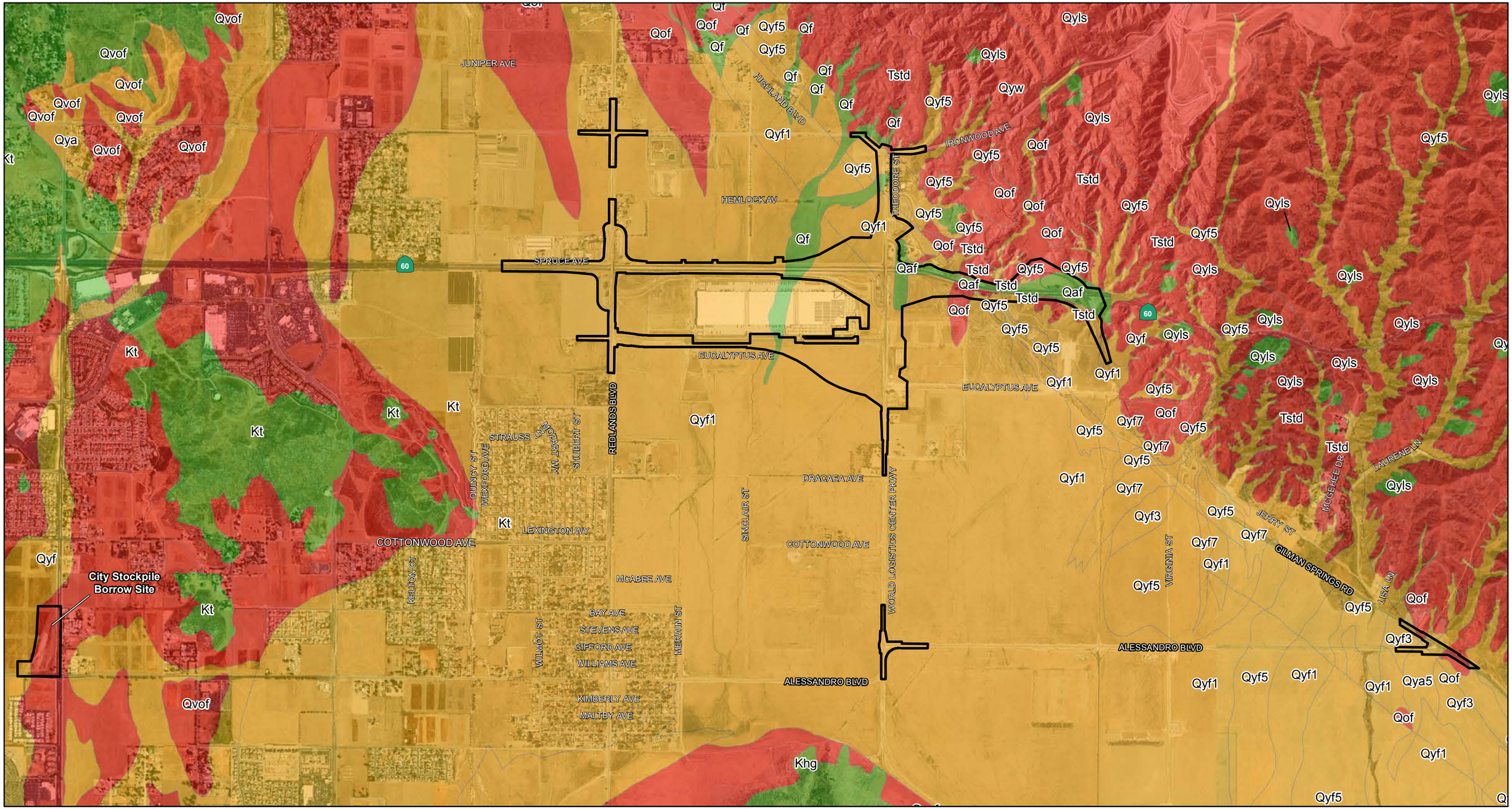

Maximum Limit of Disturbance

Paleontological Sensitivity

- No
- Low 0-10, High below 10
- High

0 900 1800
FEET

SOURCE: MBI (11/2018); ESRI (07/2012); Morton and Miller (2006); Morton and Matti (2001)

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FIGURE 2.12-2

SR-60/World Logistics Center Parkway Interchange Project

Paleontological Sensitivity Map

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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The field surveys noted that the majority of the project area was severely disturbed by road construction and commercial and residential development, as well as agricultural activities. Modern roadside refuse was noted throughout the project area. Special attention was given to the area near the existing intersection of SR-60 and Gilman Springs Road, as this is the location of the previously recorded fossil locality, SBCM 5.3.9 (UCMP 3258). No evidence of the fossil locality was observed. As noted above, much of this area is mapped as Artificial Fill; therefore, it is likely that the locality has been removed or covered. No paleontological resources were observed during the field surveys.

2.12.3 Environmental Consequences

2.12.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

Under the No Build Alternative, none of the proposed improvements to the interchange or local roads in the project area would be implemented. The No Build Alternative would not result in temporary impacts related to paleontological resources as a result of construction activities.

Alternatives 2 and 6 (LPA) (including Design Variations 2a and 6a)

The construction of Alternatives 2 and 6 (the Locally Preferred Alternative [LPA]), as well as Design Variations 2a and 6a (Alternative 6 [LPA] with Design Variation), would not result in temporary impacts to paleontological resources because the impacts to those types of resources during construction would be considered permanent as described below in Section 2.12.3.2 for the Build Alternatives and Design Variations 2a and 6a.

2.12.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area. The No Build Alternative would not result in ground disturbance or excavation; therefore, no impacts to paleontological resources would occur.

Alternatives 2 and 6 (LPA) (including Design Variations 2a and 6a)

Although the configuration of the SR-60/World Logistics Center Parkway (WLC Pkwy) interchange differs between Alternatives 2 and 6 (LPA), construction of both Build Alternatives would include ground-disturbing activities. The design variations for Build Alternatives 2 and 6 (LPA) are similar and would realign Eucalyptus Avenue to join WLC Pkwy approximately 900 ft south of the existing Eucalyptus Avenue/WLC Pkwy intersection. Therefore, construction of Alternatives 2 and 6 (LPA), as well as Design Variations 2a and 6a, would have the same potential impacts during ground-disturbing activities. During these ground-disturbing activities, there is a potential for significant, nonrenewable paleontological resources to be encountered in the Young Alluvial Fan Deposits, Young Axial Channel Deposits, Old Alluvial Fan Deposits, Very Old Alluvial Fan Deposits, and the unnamed subunit of the middle member of the San Timoteo Formation. As such, construction of Build Alternatives 2 and 6 (LPA), and their respective Design Variations 2a and 6a, have the potential to impact scientifically significant, nonrenewable paleontological resources.

Unanticipated Paleontological Resources

There is a potential for unanticipated paleontological resources to be unearthed during site preparation, grading, or excavation for all the Build Alternatives. Those potential effects would be avoided or minimized through Project Feature PF-PAL-1.

PF-PAL-1 **Discovery of Unanticipated Paleontological Resources.** If unanticipated paleontological resources are discovered, all work within 60 feet of the discovery must cease and the construction Resident Engineer must be notified. Work cannot continue near the discovery until authorized.

2.12.4 Avoidance, Minimization, and/or Mitigation Measures

To avoid impacts to any paleontological resources that may be present within the project area, and in addition to Project Feature PF-PAL-1 noted above, a Paleontological Mitigation Plan (PMP), as specified below in Mitigation Measure PAL-1, would be implemented during construction.

PAL-1 **Paleontological Mitigation Plan (PMP).** The PMP shall be developed concurrently with the final design plans and shall follow the California Department of Transportation (Caltrans) guidelines in the Standard Environmental Reference (SER) Environmental Handbook, Volume 1, Chapter 8 (Caltrans, 2017), as well as guidelines from the Society of Vertebrate Paleontology. Following these guidelines, the PMP shall be prepared by a qualified paleontologist and shall include the following elements:

- Required 1-hour preconstruction paleontological sensitivity training for earthmoving personnel
- A signed repository agreement
- Field and laboratory methods proposed (must be consistent with repository requirements)
- A required Paleontological Mitigation Report upon completion of project earthmoving

2.13 Hazardous Waste/Materials

2.13.1 Regulatory Setting

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

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

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

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

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and clean up contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

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

2.13.2 Affected Environment

This section is based on the *Initial Site Assessment* (February 2019). The following were conducted as part of the *Initial Site Assessment*:

- **Environmental Database Review:** A records search of selected government databases for the study area of potential concern within 1 mile (mi) of the study area was conducted in March 2015.

- **Agency Records Review:** The Department of Toxic Substances Control (DTSC); the California Regional Water Quality Control Board (RWQCB), Santa Ana Region; and the Riverside County Department of Environmental Health (RCDOEH) were contacted with regard to obtaining and reviewing documents for facilities located within and adjacent to the study area. Data contained on the Department of Oil, Gas, and Geothermal Resources (DOGGR) website, the National Pipeline Mapping System, the California RWQCB Geotracker online database, and the DTSC online Envirostor database were also reviewed for any relevant information.

- **Historical Research:** Aerial photographs and historical topographic maps were reviewed.

- **Site Reconnaissance:** On March 27, 2015, and October 8, 2015, a site visit of the study area was conducted to assess its current land uses and to visually search for indications of contamination.

- **Aerially Deposited Lead (ADL) Borings:** On March 2 and 3, 2016, 31 total borings and three duplicate borings were advanced at approximately 400-foot (ft) intervals on the shoulders and ramps of the study area of State Route 60 (SR-60) to investigate the presence of ADL, and 134 soil samples were collected (including duplicate samples) in accordance with the California Department of Transportation's (Caltrans) approved workplan.

The following hazardous materials are potentially of concern for the study area:

- **Pesticides:** Based on the historical agricultural use of areas adjacent to the study area, residual organochlorine pesticides (OCPs) and arsenical herbicides may remain in the subsurface soil in these areas.

  Current agricultural uses were observed in Area 1 east and west of World Logistics Center Parkway (WLC Pkwy) in Assessor's Parcel Numbers [APNs] 488-260-029, 488-260-030, 488-260-036, 488-260-037, 422-020-010, 422-040-010, 488-350-019, 488-350-010, and 478-220-001. Current agricultural uses were observed in APNs associated with Area 2 and with APN 423-250-005 located within Area 3. The fields appeared to be growing wheat.

- **Polychlorinated Biphenyls and Mercury:** Polychlorinated biphenyls (PCBs) and mercury are known hazardous materials found in coolants or lubricating oils used in some electrical transformers, light ballasts, electrical panels, and other similar equipment prior to 1976. Multiple pad-mounted transformers and pole-mounted transformers were observed within the study area adjacent to WLC

Pkwy and within the fully acquired parcel (APN 488-350-048) and the temporary construction easement (TCE) parcel (APN 488-350-044) along the northern side of Eucalyptus Avenue. The transformers appeared to be in good condition, with no visible leaks and no soil staining. However, there is the potential for the transformers to contain PCBs.

- **Aerially Deposited Lead:** According to the *Aerially Deposited Lead Survey Report* (December 2018) tested soils within the project area/study area do not represent significant environmental or health hazards and do not meet the definition of ADL-contaminated soil and can be reused on site as an unregulated soil. All soil disturbing activities will be in accordance with the DTSC draft soil management agreement.

- **Asbestos-Containing Materials:** The use of asbestos in many building products was banned by the United States Environmental Protection Agency (EPA) by the late 1970s; however, many asbestos-containing material (ACM) categories not previously banned may still be in use today. ACMs represent a concern when they are subject to damage that results in the release of fibers. Asbestos may be found in building materials such as rails, bearing pads, support piers, and expansion joint material in bridges, asphalt, and concrete within the expected disturbance limits of the Build Alternatives. Based on the construction date of the WLC Pkwy Overcrossing and structures within the study area, ACMs may be present. In addition, portions of the study area were historically used for agricultural purposes. Therefore, the potential exists for buried asbestos-containing cementitious pipe or “transit” pipe to be present within the study area.

  An *Asbestos* survey and memorandum (approved on January 30, 2019) found no asbestos containing materials on the WLC Pkwy overcrossing in excess of compliance levels and should not be an issue if the structure is demolished or renovated. If suspect materials are encountered during construction, the new material(s) must be properly sampled for the content of asbestos or assumed to be asbestos containing prior to proceeding with any activity which may disturb the subject material.

- **Lead-Based Paint:** A *Lead Based Paint* survey and memorandum (approved on January 30, 2019) found no surface coatings which had lead concentrations defining them as LBPs, in accordance with 17 CCR 35001 et. seq., and 8 CCR 1532.1. No building components and respective surface coatings had lead concentrations, in excess of the level for compliance, as defined in 8 CCR 1532.1.

  Yellow safety paint utilized for the center stripe on the bridge was found to contain chromium and disturbed yellow centerline paint should be removed and disposed of in accordance with the California Code of Regulations (CCR), and the project special provisions. All traffic striping disturbance waste should be disposed of at an appropriate, permitted disposal facility by a properly trained and equipped employee.

- **On-Site Wells:** An abandoned water well was observed on the proposed full-acquisition parcel (APN 488-260-037). The parcel is located west of WLC Pkwy and north of SR-60 near the westbound off-ramp. This abandoned well is not considered a Recognized Environmental Condition (REC); however, if the water well is no longer being used, the well shall be properly abandoned in accordance with regulatory guidelines prior to construction activities.

- **Petroleum Hydrocarbons and Metals:** A portion of the study area located southeast of the intersection of SR-60/WLC Pkwy was used as a staging area during construction of the Inland Feeder Riverside Badlands Tunnel from October 1998 through July 2001. A considerable and unverified stockpile of various soils and gravel/rock fragments was observed southeast of the SR-60/ WLC Pkwy intersection, and the location of this soil stockpile is considered to be one of the right-of-way acquisitions. The locations of the stockpiles are shown on Figure 2.13-1. (All figures have been placed at the end of this section to enhance the readability of the text.) These materials are assumed to be spoils from the Inland Feeder Riverside Badlands Tunnel and pipeline alignment construction. There is a potential for the soil stockpile to contain total petroleum hydrocarbons (TPH), residual OCPs, and metals. However, according to the Preliminary Site Investigation (February 2019), total petroleum hydrocarbons were not reported above the laboratory reporting limits in the soil samples analyzed.

- **Soil and/or Groundwater Contamination Within and Adjacent to the Study Area:** Soils and/or groundwater contamination have been identified at facilities that are proposed to be TCEs as part of the Build Alternatives, or on properties adjacent to the project that may affect soil and/or groundwater within the study area. These facilities are identified in Table 2.13.1 and shown on Figures 2.13-1, 2.13-2, 2.13-3, and 2.13-4 for Alternative 2 (Modified Partial Cloverleaf), Alternative 6 (the Locally Preferred Alternative [LPA]) (Modified Partial Cloverleaf with Roundabout Intersections), Design Variation 2a (Alternative 2 with Design Variation), and Design Variation 6a (Alternative 6 [LPA] with Design Variation), respectively. Based on the status and types of the listing, the facilities listed in Table 2.13.1 are not considered RECs for the proposed project.

2.13.3 Environmental Consequences

2.13.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the study area. The No Build Alternative would not involve ground and structure disturbance or construction activities in the study area; therefore, no temporary impacts related to hazardous waste/materials would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) Including Design Variations 2a and 6a

Temporary impacts related to hazardous waste/materials during project construction could occur within the maximum disturbance limits for the Build Alternatives and design variations on individual properties identified for acquisition.

Table 2.13.1 Potential Right-of-Way Acquisition Facilities with Hazardous Waste Concerns

Figure ID[1]	Address	Facility Name	Type of Operation	Assessor's Parcel Number	Acquisition Type	Type of Concern
1	12170 Theodore Street	Delbert Waddell	Residential (with animal corrals)	422-020-007	TCE – Alternative 2 and Alternative 6 (LPA) (and design variations)	The facility is listed on the HAZNET database. In 2005, tons of waste categorized as tank bottom waste were hauled from this facility. Records for this address were not found on the California RWQCB Geotracker online database or the DTSC online Envirostor database. Based on the type of listing, and because this facility is a TCE, it was determined that this facility has not resulted in a REC at the study area.
2	29800 Eucalyptus Avenue	Skechers Outlet	Commercial	488-350-041	TCE – Alternative 2 and Alternative 6 (LPA) (and design variations)	The facility is listed on the HAZNET database. In 2007, 10 tons of asbestos-containing waste was removed from the facility and disposed of at a landfill. Additional records for this address were not found on the California RWQCB Geotracker online database or the DTSC online Envirostor database. There is a low potential risk from this facility to the project during construction.
3	29170 Ironwood Avenue	Sunnymead Poultry Ranch	Ranch	N/A	N/A	The facility is located approximately 0.37 mile northwest of the proposed project. The facility was identified on the HIST CORTESE and LUST databases. According to EDR, a release of gasoline to the soil was reported in 1994. Based on the information on the California RWQCB Geotracker online database, three gasoline and diesel USTs were removed from the facility in 1994. Due to the low concentrations of contaminants identified in the soil, the facility was issued closure on August 19, 1994. Due to the distance of the facility from the proposed project and the case closure status, there is low potential risk from this facility to the proposed project during construction.

Sources: *Initial Site Assessment* (February 2019).

[1] The locations of these facilities are shown on Figures 2.13-1 and 2.13-2 for Alternatives 2 and 6 (LPA), respectively.

DTSC = Department of Toxic Substances Control
EDR = Environmental Data Resources, Inc.
HAZNET = Hazardous Waste Information System
HIST CORTESE = Hazardous Waste and Substance Site List
LPA = Locally Preferred Alternative
LUST = Leaking Underground Storage Tank
N/A = Not Applicable
REC = Recognized Environmental Condition
RWQCB = Regional Water Quality Control Board
TCE = temporary construction easement
UST = Underground Storage Tank

Persistent pesticides may remain in undeveloped areas of historical pesticide use, if the surface soils have not been previously disturbed. Based on the historical use of some potential right-of-way properties for agricultural purposes, residual OCPs and arsenical herbicides may exist in the subsurface soil. A site investigation was performed for undeveloped areas that might contain elevated contaminations of pesticide to identify whether any residual contamination from the past agricultural uses is still present, and to determine if any potential hazards may occur during construction activities associated with residual contamination. Soil samples were collected at depths of 0.5 ft and 2.5 ft bgs at 28 primary boring locations and 4 duplicate boring locations (P001 through P028) during October and November of 2018. The soil samples were collected within the proposed right-of-way, temporary construction, and slope easement parcels. The soil samples reported arsenic concentrations ranging from 1.68 to 5.72 mg/kg. The reported arsenic concentrations were below the DTSC established Southern California ambient background arsenic concentration of 12 mg/kg. The tested soil does not represent significant environmental or health hazards and, according to the DTSC draft soil management agreement, the soil located along SR-60 does not meet the definition of ADL-contaminated soil and can be reused on site.

Due to the historical use of lead in gasoline lead may exist in soils near heavily traveled roads. This specific type of lead is referred to as ADL. The presence of ADL in soils may pose a potential concern to the environment and on-site workers during construction activities and may result in disposal consideration if removed off site.

ADL from the historical use of leaded gasoline, exists along roadways throughout California. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed under the July 1, 2016 ADL Agreement between Caltrans and the DTSC. This ADL Agreement allows such soils to be safely reused within the project limits as long as all requirements of the ADL Agreement are met. Findings of the *Aerially Deposited Lead Survey Report* (December 2018) determined that the tested soil does not represent significant environmental or health hazards and, according to the draft DTSC soil management agreement issued to Caltrans, does not meet the definition of an ADL-contaminated soil and therefore can be reused on site as an unregulated soil. All soil disturbing activities will be in accordance with the DTSC draft soil management agreement. While the *Aerially Deposited Lead Survey Report* results reflected that soil in the project area is below the DTSC threshold for ADL-contaminated soil, a Lead Compliance Plan will be developed in accordance with Caltrans and California Occupational Safety and Health Administration (Cal/OSHA) codes and standards, as outlined in PF-HAZ-1, to address the presence of ADL in the soils within the project area and the health and safety of construction workers.

PF-HAZ-1 **Lead Compliance Plan.** Prior to construction, construction contractors excavating, transporting, or stockpiling soil will prepare a Lead Compliance Plan in accordance with the California Department of Transportation (Caltrans) Code of Safety Practices, the California Code of Regulations, and California Occupational Safety and Health Administration (Cal/OSHA) standards. The Lead Compliance Plan will address the presence of aerially deposited lead (ADL) in the soils within the project area and the health and safety of construction workers.

The Build Alternatives and Design Variations 2a and 6a would involve disturbance of soils and demolition of existing buildings and structures; therefore, hazardous structural materials (PCBs, lead chromate, LBP, and ACM) may be encountered during project construction. In addition, yellow traffic striping and pavement-marking materials (paint, thermoplastic, permanent tape, and temporary tape) that would be removed as part of the Build Alternatives and Design Variations 2a and 6a may contain elevated concentration of metals such as lead. Removal of these materials during project construction could affect construction workers and the surrounding environment. An asbestos survey was performed in March 2016 as part of the Asbestos and Lead-Based Paint Survey for the SR-60/WLC Pkwy Overcrossing investigation. Asbestos-containing building materials were not identified in the WLC Pkwy Overcrossing and structures associated with that project. A comprehensive asbestos survey should be completed prior to any demolition of structures so that they can be removed and disposed of in accordance with applicable State and federal regulations as provided in Project Features PF-HAZ-2, PF-HAZ-3, and PF-HAZ-4.

PF-HAZ-2 **Striping and Pavement Markings.** Striping paint on the paved roads associated with the proposed project will be sampled and tested for lead chromate in accordance with the Caltrans' *Construction Manual* (2017) Chapter 7, Section 7-107, Hazardous Waste and Contamination, by trained and/or licensed professionals. The field and analytical data obtained during this study will be used to provide a review of the sampling locations and descriptions, a summary of the analytical results, and recommendations for striping paint removal, containment, and off-site transportation and disposal, as appropriate.

PF-HAZ-3 **Asbestos-Containing Materials and Lead-Based Paint.** After property acquisition and prior to demolition, the World Logistics Center Parkway (WLC Pkwy) and structures that are proposed for demolition and/or modification within the study area will be assessed for the possible presence of asbestos-containing materials (ACMs) and lead-based paints (LBPs). These studies will be conducted by trained and/or licensed professionals and will comply with the EPA, the National Emission Standards for Hazardous Air Pollutants (NESHAPs), the Code of Federal Regulations (CFR) Title 40, South Coast Air Quality Management District (SCAQMD) Rule 1403, and the United States Department of Housing and Urban Development (HUD) and California Department of Public Health (CDPH) guidelines. The results of these studies will provide a description of the ACM and LBP locations, estimated quantity, and recommendations for removal, containment, and off-site transportation and disposal.

PF-HAZ-4 **Transformers.** If transformer removal is required, Southern California Edison will be contacted prior to handling or removal of electrical transformers. If utility poles require removal, additional sampling and analysis will be conducted to determine the presence of creosote (often associated with the preservation of wooden electric poles) and appropriate disposal methods. Any hazardous transformers or poles that are disturbed/removed will be disposed of in accordance with the California Health and Safety Code.

A considerable and unverified stockpile of various soils and gravel/rock fragments is located southeast of the SR-60/WLC Pkwy, and the location of this soil stockpile is considered to be one of the right-of-way acquisitions. These materials are assumed to be spoils from the Inland Feeder Riverside Badlands Tunnel and pipeline alignment construction. Based on the findings of the *Initial Site Assessment* (February 2019), soil sampling was performed in the proposed right-of-way and slope easement parcel in the area of the debris stockpile to evaluate the presence of TPH, residual OCPs, and metals. During grading or excavation within the area, hazardous concentrations of the contaminants listed above could be released into the environment and affect construction workers. On November 10, 2018, a total of six borings (four primary borings and two duplicate borings) were advanced in the unverified debris stockpile. Discrete soil samples were collected from each soil boring at depths of 0.5 ft, 5.0 ft, and 10.0 ft bgs using either a direct push drill rig or a hand auger, depending on boring location conditions. Residual OCPs and TPH were not reported in concentrations above the laboratory reporting limit in the soil stockpile samples analyzed during the investigation. Title 22 metals were not reported in concentrations above their respective EPA residential Regional Screening Levels (RSLs) with the exception of arsenic. Naturally occurring arsenic was detected in the soil samples at concentrations ranging from 0.242J[1] mg/kg to 2.59 mg/kg. The reported concentrations of arsenic were above the EPA's RSL of 0.68 mg/kg and the DTSC HERO Note 3 screening value of 0.11 mg/kg, for unrestricted land use. The reported arsenic concentrations were below the DTSC established Southern California ambient background arsenic concentration of 12 mg/kg (*Preliminary Site Investigation* [February 2019]). Therefore, arsenic concentrations do not present a health hazard and are below the California and federal hazardous waste criteria.

Typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be handled in accordance with standard procedures. There are standard regulations and Caltrans policies (avoidance and minimization measures) that must be followed with respect to the use, storage, handling, disposal, and transport of potentially hazardous materials during construction of the project to protect human health and the environment. These procedures are included in Project Features PF-HAZ-5 and PF-HAZ-6.

PF-HAZ-5 **SCAQMD Rule 1403.** Notification and applicable fees will be submitted to the SCAQMD at least 10 days prior to proceeding with any demolition or renovation of a structure (refer to SCAQMD Rule 1403(d)(1)(B)). The construction contractor will adhere to the requirements of SCAQMD Rule 1403 during renovation and demolition activities.

PF-HAZ-6 **Unknown Hazards.** If hazardous materials contamination or sources are suspected or identified during project construction activities, an environmental professional shall evaluate the course of action required. This course of action shall follow the Unknown Hazards Procedures described in Chapter 7 of the Caltrans *Construction Manual* (2017).

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1 "J" indicates a trace concentration between the method detection limit and practical quantification limit.

Construction of the Build Alternatives and Design Variations 2a and 6a will require that the abandoned water well, which is located west of WLC Pkwy and north of SR-60, near the westbound off-ramp, be properly abandoned in accordance with regulatory guidelines prior to construction activities. The well is currently on a proposed full-acquisition parcel (APN 488-260-037) owned by the City of Moreno Valley. While this abandoned well is not considered an REC, the well shall be properly abandoned as outlined in PF-HAZ-7 below.

PF-HAZ-7 **Groundwater Well Abandonment.** During final design, a detailed review of available well information of the existing inactive groundwater wells within the project right-of-way will be conducted. The abandonment procedure for the well will be conducted in accordance with California Department of Water Resources Standards (Bulletin 74-90), and the abandonment approvals by the agency with jurisdiction for the well will be documented.

Project Features PF-HAZ-1 through PF-HAZ-7, listed above, include performance of further testing and would require proper handling and disposal of hazardous waste and materials in accordance with local, State, and federal regulations prior to and during construction of the project as applicable. With implementation of these project features, all potential impacts related to hazardous materials are expected to be addressed.

Construction of Design Variations 2a and 6a would create ground disturbance within areas that would be affected under the Build Alternatives. In addition, the fields in the southwest quadrant of the intersection of WLC Pkwy and Eucalyptus Avenue would be affected during construction. These additional affected areas may contain persistent pesticides in undeveloped areas of historical pesticide use, if the surface soils have not been previously disturbed. Under Design Variation 6a, construction of the roundabout at WLC Pkwy and Eucalyptus Avenue east would result in one residential displacement in the southeast quadrant of WLC Pkwy and Eucalyptus Avenue east. This structure could contain hazardous materials and would require checks prior to demolition of structures so that the hazardous materials can be removed and disposed of in accordance with applicable State and federal regulations as provided in Project Features PF-HAZ-3 and PF-HAZ-4.

Project Features PF-HAZ-1 through PF-HAZ-6, listed above, would reduce hazards from these sources by requiring soil sampling for pesticides on potentially affected parcels and procedures to be followed if hazardous materials contamination or sources are suspected or identified during project construction activities.

2.13.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the study area. Similar to the Build Alternatives, routine maintenance activities would continue under the No Build Alternative, including compliance with applicable regulations regarding the handling and disposal of potentially hazardous materials.

Alternatives 2 and 6 (LPA) (Build Alternatives) Including Design Variations 2a and 6a

Routine maintenance activities during operation of the proposed project would be required to follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials. Therefore, the operation of the Build Alternatives would not result in adverse impacts related to hazardous waste/materials.

Design Variations 2a and 6a would include additional project features; however, the routine maintenance activities during operation of the proposed project would remain the same as those under the Build Alternatives. The project would follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials. Therefore, the operation of the design variations would not result in adverse impacts related to hazardous waste/materials.

2.13.4 Avoidance, Minimization, and/or Mitigation Measures

With implementation of Project Features PF-HAZ-1 through PF-HAZ-7, the Build Alternatives and Design Variations 2a and 6a would not result in any temporary or permanent impacts related to hazardous materials or the abandoned water well. Therefore, no avoidance, minimization, or mitigation measures are required.



LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Alternative 2 Proposed Improvements

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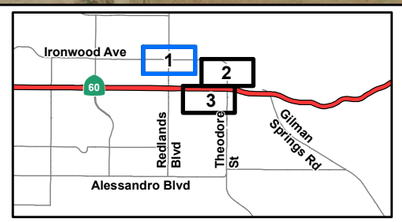
FEET



SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-1
Sheet 1 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Alternative 2 (Modified Partial Cloverleaf)

08-RIV-60
PM 20.0/22.0

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LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Alternative 2 Proposed Improvements

0 150 300
FEET

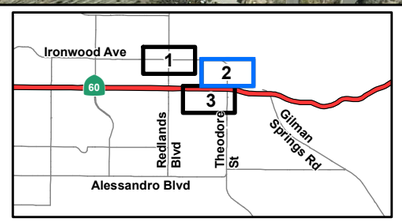

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FIGURE 2.13-1
Sheet 2 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Alternative 2 (Modified Partial Cloverleaf)

08-RIV-60
PM 20.0/22.0

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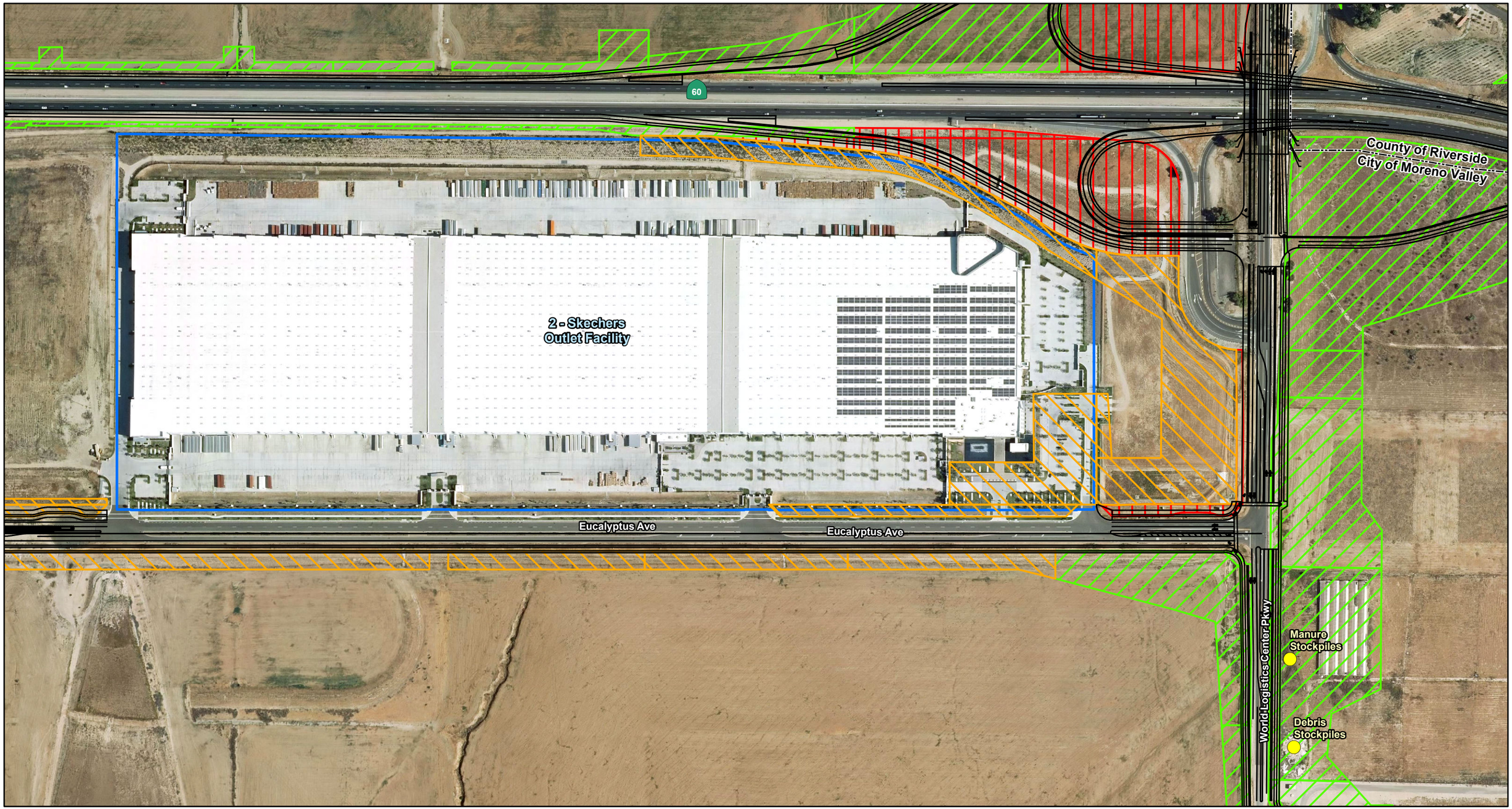

LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Alternative 2 Proposed Improvements

N

0 150 300
FEET



SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-1
Sheet 3 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Alternative 2 (Modified Partial Cloverleaf)

08-RIV-60
PM 20.0/22.0

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LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Alternative 6 Proposed Improvements

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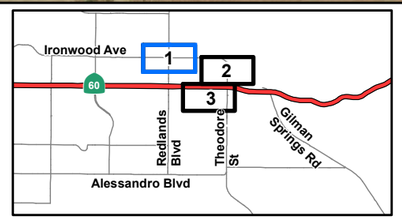

SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-2
Sheet 1 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Alternative 6
(Modified Partial Cloverleaf with Roundabout Intersection)

08-RIV-60
PM 20.0/22.0

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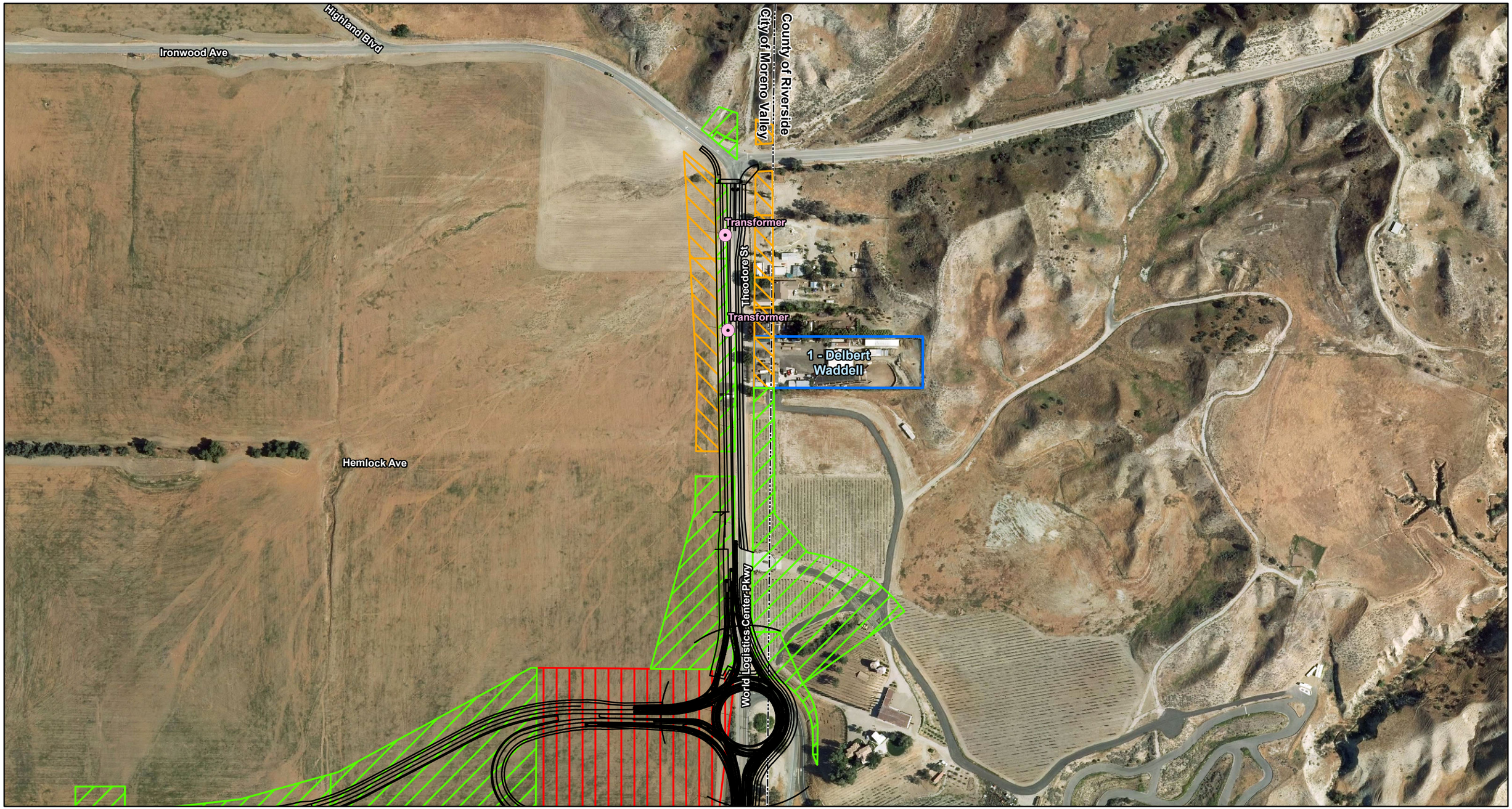
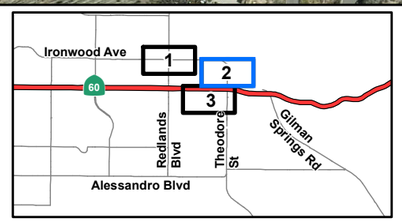


LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Alternative 6 Proposed Improvements

0 150 300
FEET



SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-2
Sheet 2 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Alternative 6
(Modified Partial Cloverleaf with Roundabout Intersection)

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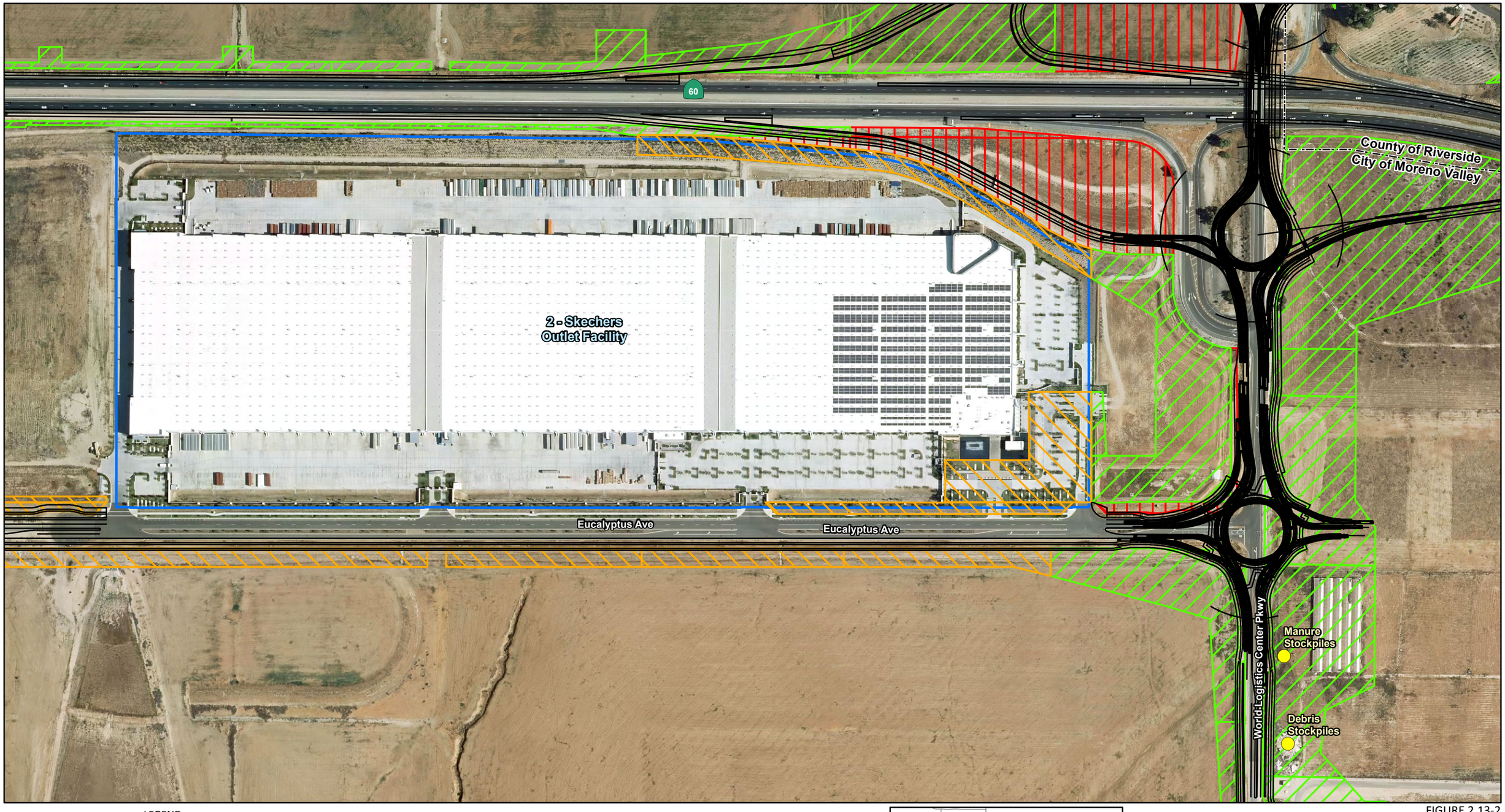

LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Alternative 6 Proposed Improvements

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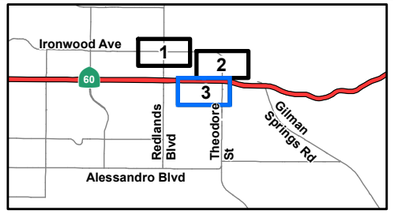

SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-2
Sheet 3 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Alternative 6
(Modified Partial Cloverleaf with Roundabout Intersection)

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LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Design Variation 2a Proposed Improvements

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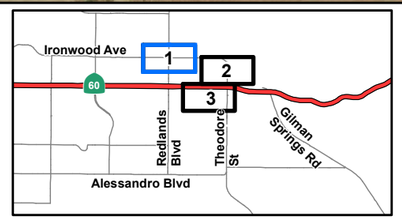

SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-3
Sheet 1 of 3

SR-60/World Logistics Center Parkway Interchange Project
Sites of Potential Concern Under Design Variation 2a (Modified Partial Cloverleaf)

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LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Design Variation 2a Proposed Improvements

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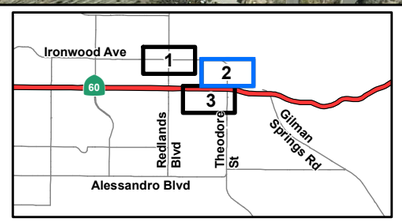

SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-3
Sheet 2 of 3

SR-60/World Logistics Center Parkway Interchange Project
Sites of Potential Concern Under Design Variation 2a (Modified Partial Cloverleaf)

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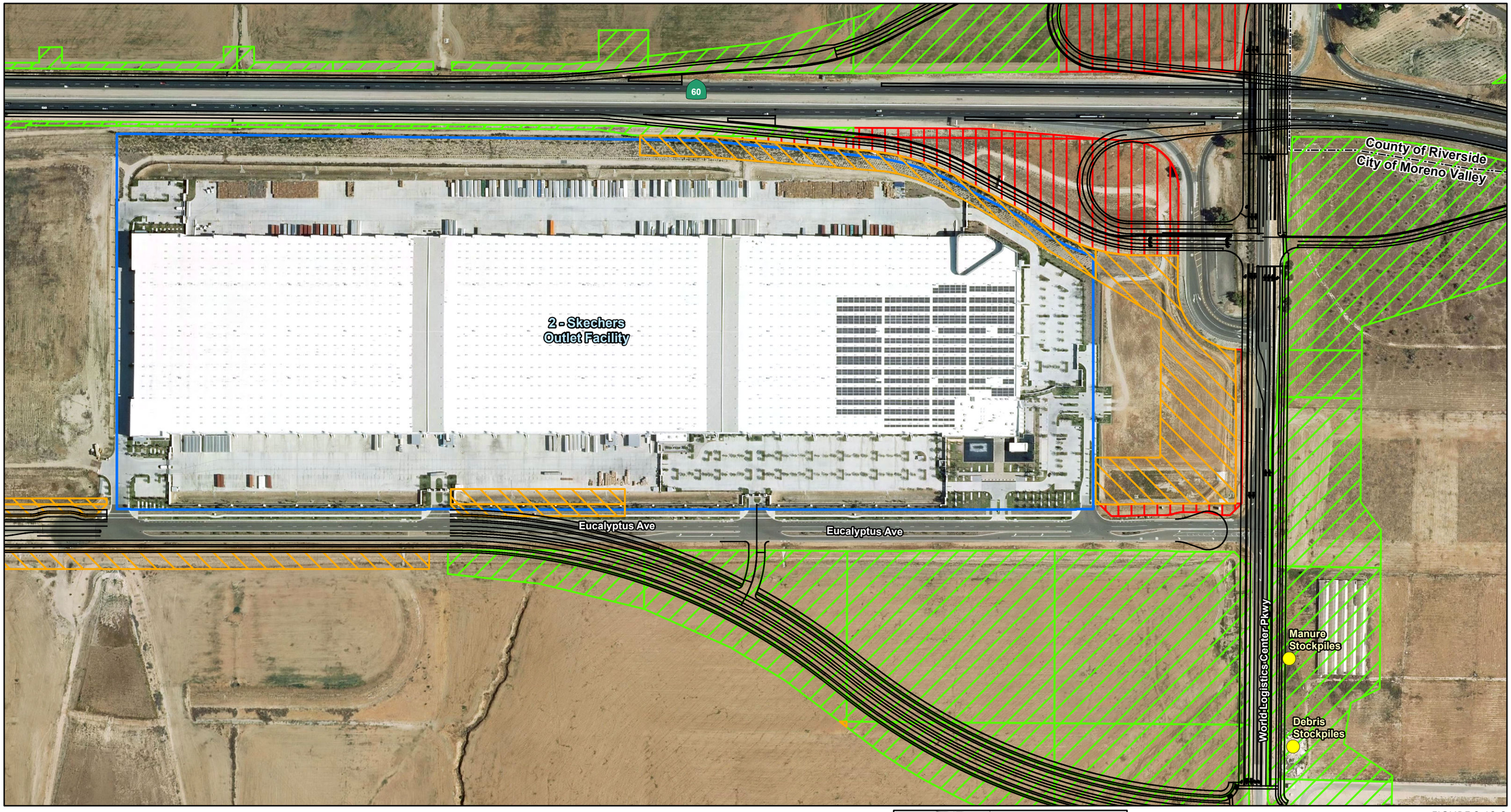

LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Design Variation 2a Proposed Improvements

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SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-3
Sheet 3 of 3

SR-60/World Logistics Center Parkway
Interchange Project
Sites of Potential Concern Under
Design Variation 2a (Modified Partial Cloverleaf)

08-RIV-60
PM 20.0/22.0

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LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Design Variation 6a Proposed Improvements

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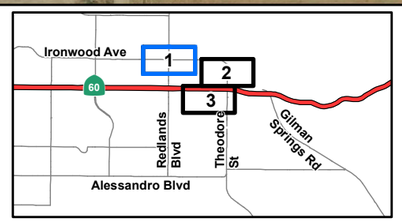

SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-4
Sheet 1 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Design Variation 6a
(Modified Partial Cloverleaf with Roundabout Intersection)

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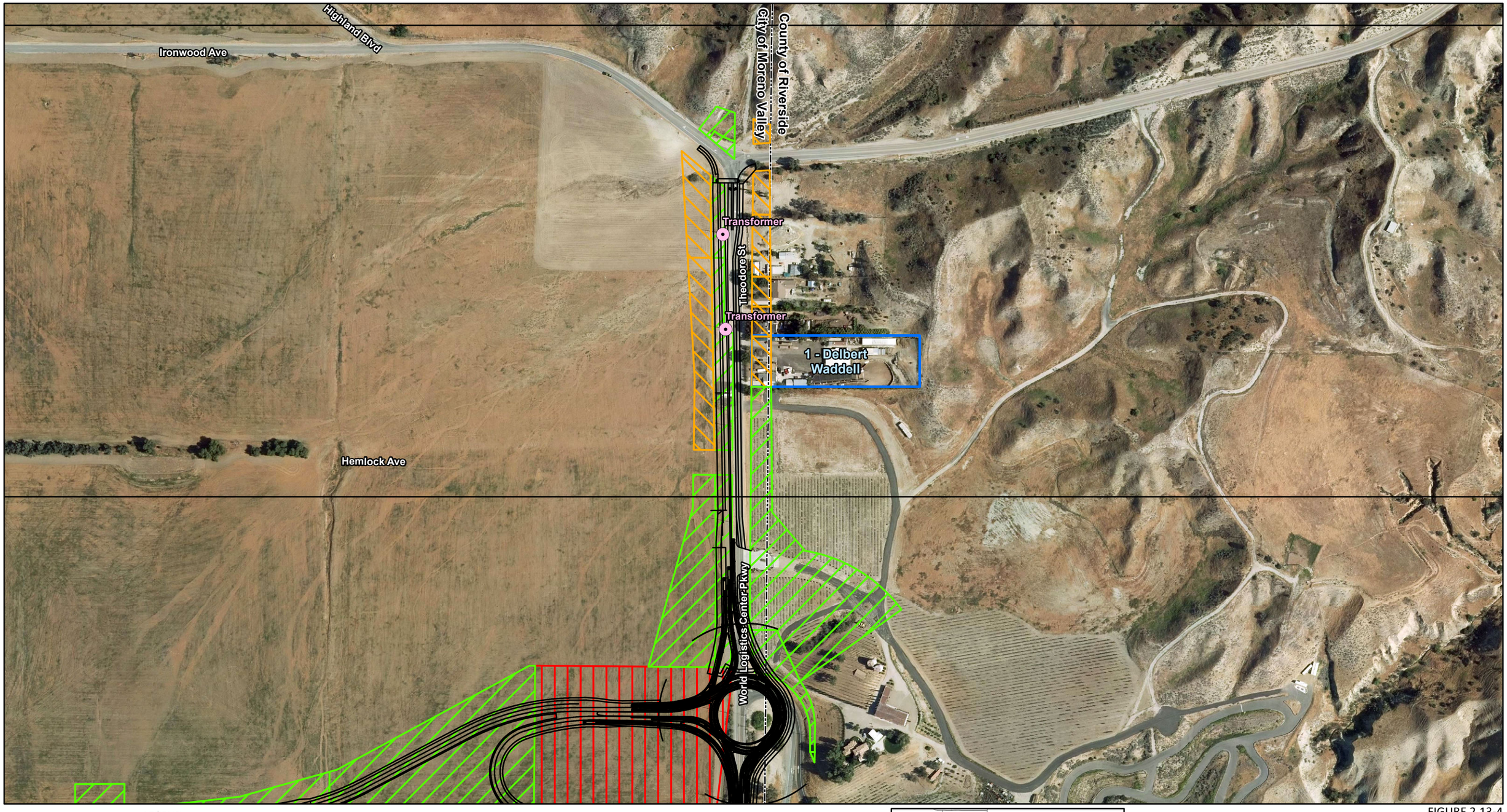

LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Design Variation 6a Proposed Improvements

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SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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FIGURE 2.13-4
Sheet 2 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Design Variation 6a
(Modified Partial Cloverleaf with Roundabout Intersection)

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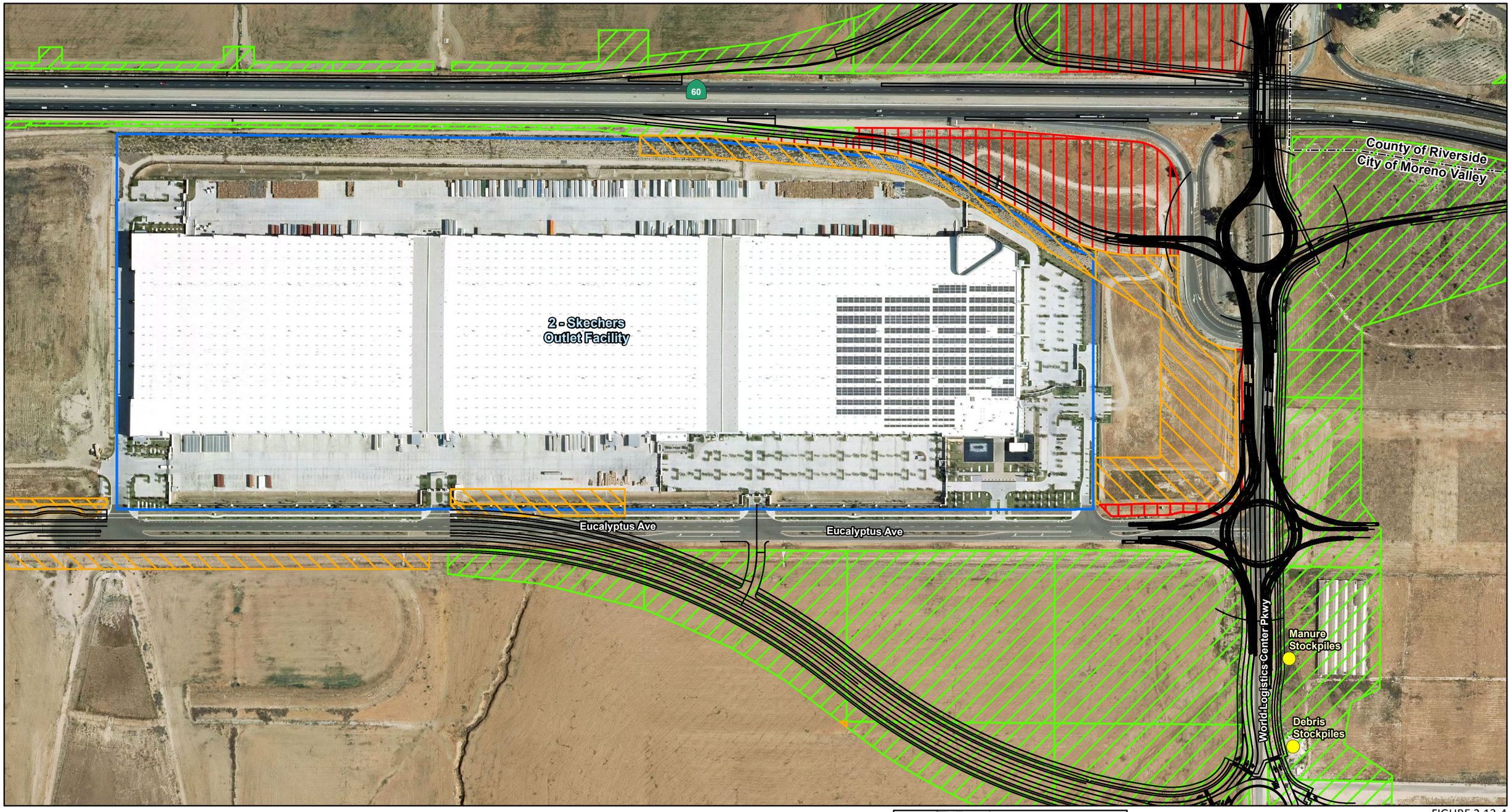

LEGEND

- Transformers
- Stockpiles
- Potential Sites of Concern (Approximate Location; Refer to Table 2.11.A)
- City/County Boundary
- Full Acquisition
- Partial Acquisition
- Temporary Construction Easement
- Design Variation 6a Proposed Improvements

N

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FIGURE 2.13-4
Sheet 3 of 3

SR-60/World Logistics Center Parkway Interchange Project

Sites of Potential Concern Under Design Variation 6a
(Modified Partial Cloverleaf with Roundabout Intersection)

08-RIV-60
PM 20.0/22.0

SOURCE: Aerial - RBF (11/2014); ESRI (2013); RBF (2015)

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2.14 Air Quality

2.14.1 Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act (CCAA) is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM)—which is broken down for regulatory purposes into particles of 10 microns or smaller (PM_{10}) and particles of 2.5 microns and smaller ($PM_{2.5}$), lead (Pb), and sulfur dioxide (SO_2). In addition, national and state standards exist for Pb, and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel “Conformity” requirement under the FCAA also applies.

2.14.1.1 Conformity

The conformity requirement is based on FCAA Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. “Transportation Conformity” applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and “maintenance” (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and in some areas (although not in California), sulfur dioxide (SO_2). California has nonattainment or maintenance areas for all of these transportation-related “criteria pollutants” except SO_2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the

FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the FCAA and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept and scope and the "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope[1] that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

2.14.2 Affected Environment

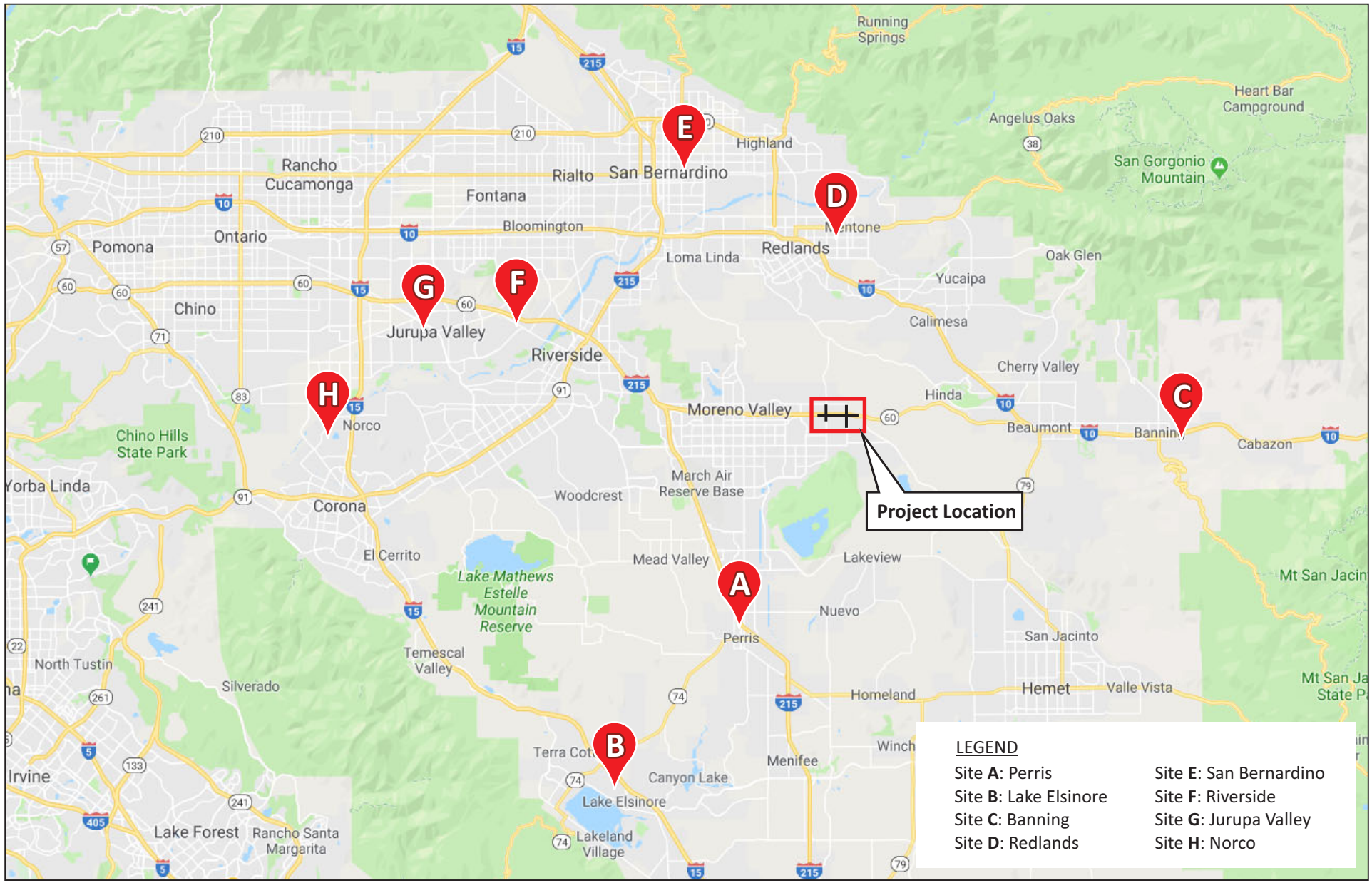
This section is based on the *Air Quality Report* (January 2020) prepared for the proposed project.

2.14.2.1 Climate

Meteorology (weather) and terrain can influence air quality. Certain weather parameters are highly correlated to air quality, including temperature, the amount of sunlight, and the type of winds at the surface and above the surface. Winds can transport ozone and ozone precursors from one region to another, contributing to air quality problems downwind of source regions. Furthermore, mountains can act as a barrier that prevents ozone from dispersing.

The South Coast Air Quality Management District (SCAQMD) operates several air quality monitoring stations in the project area. Figure 2.14-1 shows the locations of the air quality monitoring stations near the proposed project.

[1] Western Regional Climatic Center. 2019. Website: http://www.wrcc.dri.edu, accessed January 2019.



SOURCE: Google Maps, 2019

FIGURE 2.14-1

SR-60/World Logistics Center Parkway Interchange Project

Air Quality Monitoring Stations Near Project

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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The Riverside climatological station, which is maintained by SCAQMD, is located near the project site and is representative of meteorological conditions near the proposed project. Figure 2.14-2 shows a wind rose illustrating the predominant wind patterns near the proposed project. The climate of the project area is generally Mediterranean in character, with cool winters (average 43 degrees Fahrenheit [°F] in January) and warm, dry summers (average 94°F in July). Temperature inversions are common, affecting localized pollutant concentrations in the winter and enhancing ozone formation in the summer. Annual average rainfall is 10.32 inches (at the Riverside station), mainly falling during the winter months.

2.14.2.2 Existing Air Quality

Air quality monitoring stations are located throughout the nation and are maintained by local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the EPA to identify regions as "attainment", "nonattainment", or "maintenance" depending on whether the regions meet the requirements stated in the primary NAAQS.

Nonattainment areas are imposed with additional restrictions as required by the EPA. In addition, different classifications of nonattainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and comply with the NAAQS. Table 2.14.1 lists the State and federal attainment status for all regulated pollutants.

The SCAQMD Riverside-Rubidoux Air Quality Monitoring Station at 5888 Mission Boulevard in Rubidoux monitors five criteria pollutants (O_3, CO, PM_{10}, $PM_{2.5}$, and NO_2). The project region is in attainment for SO_2, and ambient levels of SO_2 have historically been so low that SO_2 is no longer monitored. Table 2.14.2 lists air quality trends identified for data collected between 2014 and 2018.

2.14.2.3 Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) located in proximity to localized sources of toxics and CO are of particular concern. Land uses that are considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive land uses located directly adjacent to the project area include rural residences.

2.14.3 Environmental Consequences

2.14.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative assumes that no improvements will be made to the freeway mainline or to the State Route 60 (SR-60)/World Logistics Center Parkway (WLC Pkwy) interchange. No temporary air quality impacts would occur under the No Build Alternative because there would be no construction activities in the project area as a result of the proposed project.

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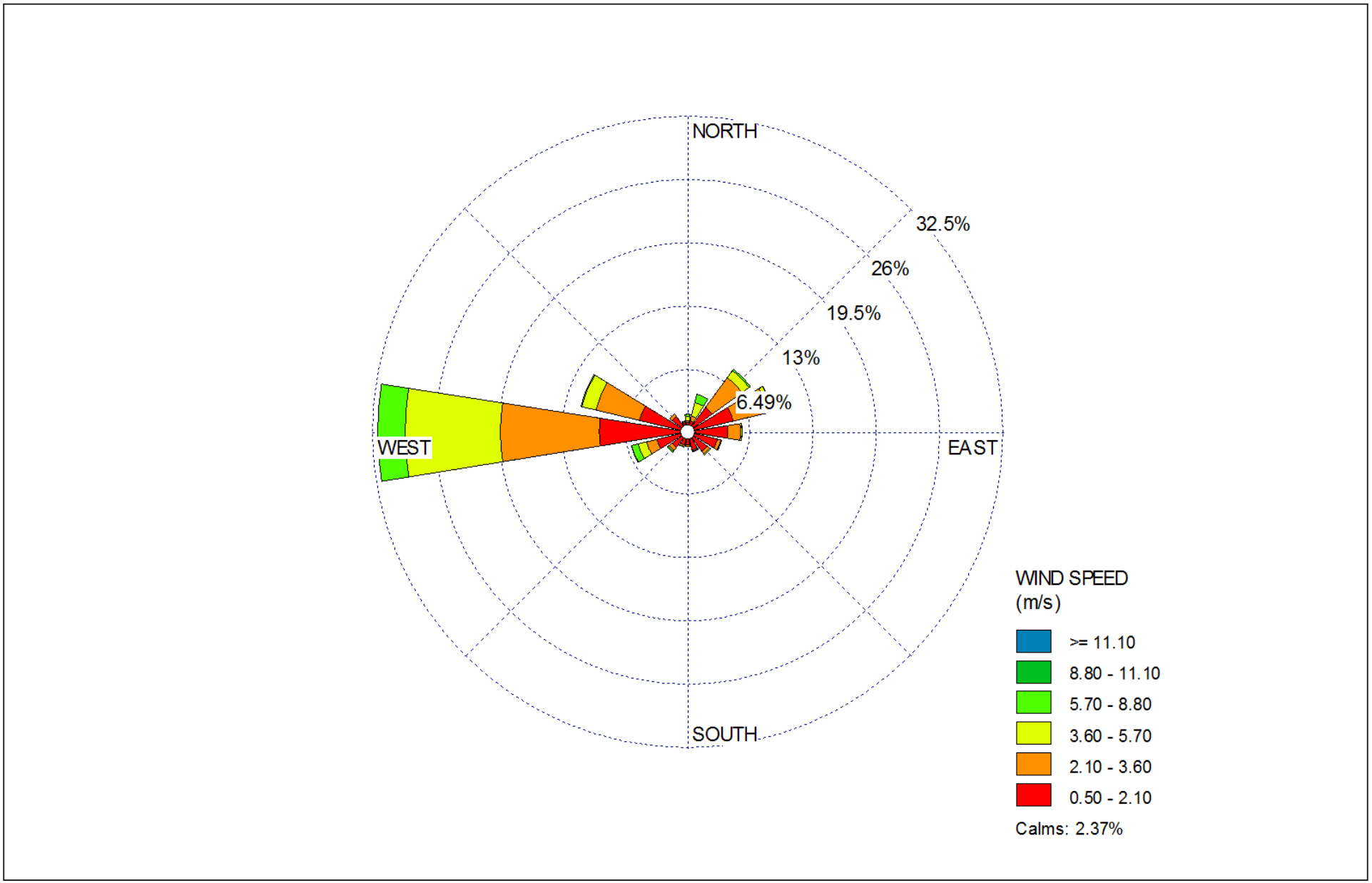

FIGURE 2.14-2

SR-60/World Logistics Center Parkway Interchange Project

Predominant Wind Patterns Near Project

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

SOURCE: SCAQMD Meteorological Data

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Table 2.14.1 State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard [1]	Federal Standard [1]	Principal Health and Atmospheric Effects	Typical Sources	Basin Attainment Status
Ozone (O_3)	1 Hour 8 Hours	0.09 ppm 0.07 ppm	--- [2] 0.075 ppm (4th highest in 3 years)	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known TACs. Biogenic VOCs may also contribute.	Low-altitude O_3 is almost entirely formed from ROG/VOC and NO_X in the presence of sunlight and heat. Major sources include motor vehicles and other mobile sources, solvent evaporation, and industrial and other combustion processes.	**Federal:** Extreme Nonattainment (8-hour) **State:** Nonattainment (1-hour and 8-hour)
Carbon Monoxide (CO)	1 Hour 8 Hours 8 Hours (Lake Tahoe)	20 ppm 9.0 ppm [3] 6 ppm	35 ppm 9 ppm ---	Interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. Is also a minor precursor for photochemical O_3.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.	**Federal:** Attainment/ Maintenance **State:** Attainment
Respirable Particulate Matter (PM_{10})[2]	24 Hours Annual	50 µg/m^3 20 µg/m^3	150 µg/m^3 --- [4] (expected number of days above standard < or equal to 1)	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some TACs. Many aerosol and solid compounds are part of PM_{10}.	Dust- and fume-producing industrial and agricultural operations; combustion smoke and vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; and natural sources.	**Federal:** Attainment/ Maintenance **State:** Nonattainment
Fine Particulate Matter ($PM_{2.5}$)[2]	24 Hours Annual 24 Hours (conformity process [5]) Secondary Standard (annual; also for conformity process [5])	--- 12 µg/m^3 --- ---	35 µg/m^3 12.0 µg/m^3 65 µg/m^3 12.0 µg/m^3 (98th percentile over 3 years)	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter—a TAC—is in the $PM_{2.5}$ size range. Many toxic and other aerosol and solid compounds are part of $PM_{2.5}$.	Combustion, including motor vehicles, other mobile sources, and industrial activities, and residential and agricultural burning. Also formed through atmospheric chemical (including photochemical) reactions involving other pollutants, including NO_X, SO_X, ammonia, and ROG.	**Federal:** Nonattainment **State:** Nonattainment
Nitrogen Dioxide (NO_2)	1 Hour Annual	0.18 ppm 0.030 ppm	0.100 ppm [6] (98th percentile over 3 years) 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain. Part of the "NO_X" group of O_3 precursors.	Motor vehicles and other mobile sources, refineries, and industrial operations.	**Federal:** Attainment/ Maintenance **State:** Nonattainment

Table 2.14.1 State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard [1]	Federal Standard [1]	Principal Health and Atmospheric Effects	Typical Sources	Basin Attainment Status
Sulfur Dioxide (SO_2)	1 hour 3 Hours 24 Hours Annual Arithmetic Mean	0.25 ppm --- 0.04 ppm ---	0.075 ppm [7] (99th percentile over 3 years) 0.5 ppm [8] 0.14 ppm 0.03 ppm	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, and steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing, and some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low-sulfur fuel not used.	**Federal:** Attainment/ Unclassified **State:** Attainment/ Unclassified
Lead [9]	Monthly Calendar Quarter Rolling 3-Month Average	1.5 µg/m^3 --- ---	--- 1.5 µg/m^3 0.15 µg/m^3 [10]	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a TAC and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint and leaded gasoline. Aerially deposited lead from gasoline may exist in soils along major roads.	**Federal:** Nonattainment (Los Angeles County only) **State:** Nonattainment (Los Angeles County only)
Sulfate	24 Hours	25 µg/m^3	---	Premature mortality and respiratory effects. Contributes to acid rain. Some TACs attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.	**Federal:** N/A **State:** Attainment/ Unclassified
Hydrogen Sulfide (H_2S)	1 Hour	0.03 ppm	---	Colorless, flammable, and poisonous. Respiratory irritant. Neurological damage and premature death. Headache and nausea.	Industrial processes such as refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.	**Federal:** N/A **State:** Attainment/ Unclassified
Visibility-Reducing Particles (VRP)	8 Hours	Visibility of 10 miles or more (Lake Tahoe: 30 miles) at relative humidity less than 70%	---	Reduces visibility. Produces haze. NOTE: Not related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other “Class I” areas.	See particulate matter above.	**Federal:** N/A **State:** Attainment/ Unclassified

Table 2.14.1 State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard [1]	Federal Standard [1]	Principal Health and Atmospheric Effects	Typical Sources	Basin Attainment Status
Vinyl Chloride[3]	24 Hours	0.01 ppm	---	Neurological effects, liver damage, and cancer. Also considered a TAC.	Industrial processes.	**Federal:** N/A **State:** Attainment/ Unclassified

Source 1: California Air Resources Board. Website: www.arb.ca.gov/research/aaqs/aaqs2.pdf, accessed January 2019.
Source 2: California Air Resources Board, Area Designations. Website: http://www.arb.ca.gov/desig/desig.htm, accessed January 2019.

[1] State standards are "not to exceed" or "not to be equaled or exceeded" unless stated otherwise. Federal standards are "not to exceed more than once a year" or as described above.

[2] Prior to June 2005, the 1-hour NAAQS was 0.12 ppm. Emission budgets for 1-hour O_3 are still in use in some areas where 8-hour O_3 emission budgets have not been developed, such as the San Francisco Bay Area.

[3] Rounding to an integer value is not allowed for the State 8-hour CO standard. Violation occurs at or above 9.05 ppm.

[4] Annual PM_{10} NAAQS revoked October 2006; was 50 µg/m^3. 24-hour $PM_{2.5}$ NAAQS tightened October 2006; was 65 µg/m^3. Annual $PM_{2.5}$ NAAQS tightened from 15 µg/m^3 to 12 µg/m^3 December 2012, and secondary standard set at 15 µg/m^3.

[5] The 65 µg/m^3 $PM_{2.5}$ (24-hour) NAAQS was not revoked when the 35 µg/m^3 NAAQS was promulgated in 2006. The 15 µg/m^3 annual $PM_{2.5}$ standard was not revoked when the 12 µg/m^3 standard was promulgated in 2012. The 0.08 ppm 1997 O_3 standard is revoked for conformity purposes only when area designations for the 2008 0.75 ppm standard become effective for conformity use (July 20, 2013). Conformity requirements apply for all NAAQS, including revoked NAAQS, until emission budgets for newer NAAQS are found adequate, SIP amendments for the newer NAAQS are approved with an emission budget, the EPA specifically revokes conformity requirements for an older standard, or the area becomes attainment/unclassified. SIP-approved emission budgets remain in force indefinitely unless explicitly replaced or eliminated by a subsequent approved SIP amendment. During the "interim" period prior to availability of emission budgets, conformity tests may include some combination of build vs. no build, build vs. baseline, or compliance with prior emission budgets for the same pollutant.

[6] Final 1-hour NO_2 NAAQS published in the Federal Register on February 9, 2010, effective March 9, 2010. The initial area designation for California (2012) was attainment/unclassifiable throughout. Project-level hot-spot analysis requirements do not currently exist. Near-road monitoring starting in 2013 may cause redesignation to nonattainment in some areas after 2016.

[7] The EPA finalized a 1-hour SO_2 standard of 75 ppb in June 2010. Nonattainment areas have not yet been designated as of September 2012.

[8] Secondary standard, set to protect public welfare rather than health. Conformity and environmental analysis addresses both primary and secondary NAAQS.

[9] The CARB has identified vinyl chloride and the particulate matter fraction of diesel exhaust as TACs. Diesel exhaust particulate matter is part of PM_{10} and, in larger proportion, $PM_{2.5}$. Both the CARB and the EPA have identified lead and various organic compounds that are precursors to O_3 and $PM_{2.5}$ as TACs. There are no exposure criteria for substantial health effects due to TACs, and control requirements may apply at ambient concentrations below any criteria levels specified above for these pollutants or the general categories of pollutants to which they belong.

[10] Lead NAAQS are not considered in transportation conformity analysis.

µg/m^3 = micrograms per cubic meter
CARB = California Air Resources Board
EPA = United States Environmental Protection Agency
N/A = Not Available
NAAQS = national ambient air quality standards
NO_X = nitrogen oxides
ppb = parts per billion
ppm = parts per million
ROG = reactive organic gases
SIP = State Implementation Plan
SO_X = sulfur oxides
TAC = toxic air contaminant
VOC = volatile organic compounds

Table 2.14.2 Air Quality Concentrations for the Past 5 Years Measured at the Riverside-Rubidoux Station

Pollutant	Standard	2014	2015	2016	2017	2018
Ozone (O_3)						
Max 1-hour concentration (ppm)		0.141	0.132	0.142	0.145	0.123
No. days exceeded: State	>0.09 ppm	29	31	33	47	22
Max 8-hour concentration (ppm)		0.104	0.105	0.104	0.118	0.101
No. days exceeded: State	>0.07 ppm	66	55	69	81	53
Federal	>0.07 ppm	66	55	69	81	53
Carbon Monoxide (CO)						
Max 1-hour concentration (ppm)		2.4	4.1	1.7	2.4	2.2
No. days exceeded: State	>20 ppm	0	0	0	0	0
Federal	>35 ppm	0	0	0	0	0
Max 8-hour concentration (ppm)		1.9	1.7	1.3	1.8	2.0
No. days exceeded: State	>9.0 ppm	0	0	0	0	0
Federal	>9.0 ppm	0	0	0	0	0
Particulate Matter Less Than 10 Microns in Size (PM_{10})						
Max 24-hour concentration ($\mu g/m^3$)		100	69	84	92	87
No. days exceeded: State	>50 $\mu g/m^3$	119	87	60	98	127
Federal	>150 $\mu g/m^3$	0	0	0	0	0
Annual avg. concentration ($\mu g/m^3$)		36.6	32.0	37.8	39.4	35.4
Exceeds Standard? State	>20 $\mu g/m^3$	Yes	Yes	Yes	Yes	Yes
Particulate Matter Less Than 2.5 Microns in Size ($PM_{2.5}$)						
Max 24-hr concentration ($\mu g/m^3$)		48.9	54.7	51.6	50.3	66.3
No. days exceeded: Federal	>35 $\mu g/m^3$	5	9	5	7	3
Annual avg. concentration ($\mu g/m^3$)		16.8	15.3	12.6	14.5	12.6
Exceeds Standard? State	>12 $\mu g/m^3$	Yes	Yes	Yes	Yes	Yes
Federal	>15 $\mu g/m^3$	Yes	Yes	No	No	No
Nitrogen Dioxide (NO_2)						
Max 1-hour concentration (ppb)		59.9	57.4	73.1	63.0	55.4
No. days exceeded: State	>180 ppb	0	0	0	0	0
Federal	>100 ppb	0	0	0	0	0
Annual avg. concentration (ppb)		15.1	14.4	14.9	15.0	14.3
Exceeds Standard? State	>30 ppb	No	No	No	No	No
Federal	>53 ppb	No	No	No	No	No

Source: United States Environmental Protection Agency, Air Quality Data. Website: https://www.epa.gov/outdoor-air-quality-data, accessed December 2019.
$\mu g/m^3$ = micrograms per cubic meter
avg. = average
max = maximum
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ppb = parts per billion
ppm = parts per million

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

Construction Equipment, Traffic Congestion, and Fugitive Dust

During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment are also anticipated and would include CO, nitrogen oxides (NO_X), VOCs, directly-emitted PM ($PM_{2.5}$ and PM_{10}), and toxic air contaminants (TACs) (e.g., diesel exhaust PM). Ozone is a regional pollutant that is derived from NO_X and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction would involve clearing, cut-and-fill activities, grading, and paving roadway surfaces. Construction-related effects on air quality from most roadway projects would be greatest during the site preparation

phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. If not properly controlled, these activities would temporarily generate CO, NO_X, VOCs, PM_{10}, and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after drying. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, the silt content of soil, wind speed, and the amount of equipment operating at the time. Larger dust particles would settle near the source, while finer particles would be dispersed over greater distances from the construction site.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, NO_X, VOCs, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site. Areas within 500 feet (ft) of CARB-defined sensitive land uses where material storage/transfer and equipment maintenance activities could occur would be labeled as no-idle areas.

SO_2 is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and CARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel, therefore, SO_2-related issues due to diesel exhaust would be minimal.

Some phases of construction, particularly asphalt paving, may result in short-term odors in the immediate area of each paving site. Such odors would quickly disperse to below detectable levels as distance from the site(s) increases.

The construction emissions were estimated for the proposed project using the Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 9.0, which is consistent with the guidance provided by the SCAQMD for evaluating construction impacts from roadway projects. The maximum amount of construction-related emissions during a peak construction day is presented in Table 2.14.3 (model data are provided in the *Air Quality Report* [January 2020]). The PM_{10} and $PM_{2.5}$ emissions assume a 50 percent control of fugitive dust as a result of watering and associated dust-control measures. The emissions presented below are based on the best information available at the time of calculations and specify that the schedule for either of the Build Alternatives or design variations is anticipated to take approximately 18 months beginning in 2022. Additionally, SCAQMD has established rules for reducing fugitive dust emissions. With the implementation of standard construction measures (providing 50 percent effectiveness) such as frequent watering (e.g., a minimum of twice per day) as well as Project Features PF-AQ-1 through PF-AQ-6, fugitive dust and exhaust emissions from construction activities would not result in any adverse air quality impacts.

Construction activities would not last more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)).

Table 2.14.3 Maximum Project Construction Emissions

Project Phases	VOC	CO	NO_X	Total PM_{10}	Total $PM_{2.5}$
Grubbing/Land Clearing (lbs/day)	1.0	9.8	10.1	10.4	2.5
Grading/Excavation (lbs/day)	5.4	45.2	56.0	12.6	4.4
Drainage/Utilities/Sub-Grade (lbs/day)	5.7	52.1	56.1	12.5	4.4
Paving (lbs/day)	0.9	12.7	8.7	0.5	0.4
Maximum (lbs/day)	5.7	52.1	56.1	12.6	4.4
Total (tons/construction project)	0.9	7.8	8.8	2.1	0.7

Source: *Air Quality Report* (January 2020).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
VOC = volatile organic compounds

The following Project Features will be implemented during construction activities to minimize fugitive dust and construction vehicle exhaust emissions:

PF-AQ-1 During clearing, grading, earthmoving, or excavation operations, excessive fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust. The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized to prevent excessive amounts of dust. These control techniques will be indicated in project specifications. Visible dust beyond the property line emanating from the project will be prevented to the maximum extent feasible.

PF-AQ-2 Project specifications will include the duration of construction. Emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. Properly operating engines also help reduce greenhouse gas (GHG) emissions.

PF-AQ-3 All trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

PF-AQ-4 The contractor will adhere to California Department of Transportation (Caltrans) Standard Specifications for Construction, Sections 14.9-02 and 14-9.03 (e.g., comply with air-pollution-control rules, regulations, ordinances, and statutes that apply to work performed under the construction contract, and do not dispose of material by burning).

PF-AQ-5 Should the project geologist determine that asbestos-containing materials (ACMs) are present at the project study area during final

inspection prior to construction, the appropriate methods will be implemented to remove ACMs.

PF-AQ-6 All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes.

2.14.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the SR-60/WLC Pkwy interchange or local roads in the project area. The No Build Alternative would not improve operations or reduce congestion at the SR-60/WLC Pkwy interchange; therefore, no permanent impacts to air quality would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a)

Regional Air Quality Conformity

The proposed project is listed in the 2016 financially constrained RTP/Sustainable Communities Strategy (SCS), as amended by Amendment No. 3, which was found to conform by the Southern California Association of Governments (SCAG) on April 7, 2016, and the FHWA and FTA made a regional conformity determination finding on December 17, 2018. The project is also included in the SCAG financially constrained 2019 FTIP (under ID #RIV080904), which was determined to conform by the FHWA and FTA on December 17, 2018 (Project ID: RIV080904; At SR-60/Theodore St Interchange [future updates to the RTP and FTIP will include the name change]: widen overcrossing from four to six through lanes; widen westbound exit/entry ramps from one lane to two lanes at exit/entry, three lanes at arterial with high occupancy vehicle (HOV) at entry; widen eastbound exit ramps from one lane to two lanes at exit and three lanes at arterial; widen eastbound entry ramp from one lane to two lanes with HOV; add eastbound loop entry; add aux lanes 1,700 feet each direction west of interchange and 1,200 feet eastbound and 2,200 feet westbound east on interchange – RTP 3M0801). The design concept and scope of the proposed project is consistent with the project description in the 2016 RTP and 2019 FTIP, and the "open to traffic" assumptions of the SCAG's regional emissions analysis. Therefore, the proposed project is in conformance with the SIP.

Project-Level Conformity

The proposed project is within an attainment/maintenance area for CO and PM_{10} and a nonattainment area for $PM_{2.5}$ federal standards. Therefore, local hot-spot analyses for CO, $PM_{2.5}$, and PM_{10} are required for conformity purposes. The proposed project does not cause or contribute to any new localized CO, $PM_{2.5}$, and/or PM_{10} violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the time frame of the transportation plan (or regional emissions analysis).The results of these hot-spot analyses are provided below.

Carbon Monoxide

The CO Protocol[1] was developed for project-level conformity (hot-spot) analysis and was approved for use by the EPA in 1997. It provides qualitative and quantitative screening procedures as well as quantitative (modeling) analysis methods to assess project-level CO impacts. The qualitative screening step is designed to avoid the use of detailed modeling for projects that clearly cannot cause a violation, or worsen an existing violation, of the CO standards. The methodology required for a CO local analysis is summarized in the Caltrans Transportation Project-Level Carbon Monoxide Protocol (CO Protocol), Section 3 (Determination of Project Requirements), and Section 4 (Local Analysis).

Section 3 of the CO Protocol provides two conformity requirement decision flowcharts designed to assist project sponsors in evaluating the requirements that apply to specific projects. Figure 1 of the CO Protocol flowchart (shown in Appendix D of the *Air Quality Report* [January 2020]) applies to new projects and was used in this local analysis conformity decision. Below is a step-by-step explanation of the flow chart. Each level cited is followed by a response, which in turn determines the next applicable level of the flowchart for the project.[2]

The flowchart begins with Section 3.1.1:

- **3.1.1. Is this project exempt from all emissions analyses?**

  NO.

  Table 1 of the Protocol is Table 2 of 40 CFR 93.126. Section 3.1.1 is inquiring whether the project is exempt. Such projects appear in Table 1 of the Protocol. The interchange reconstruction and improvement of the Build Alternatives is not one of the exempt projects listed in Table 1; therefore, it is not exempt from all emissions analyses.

- **3.1.2. Is the project exempt from regional emissions analyses?**

  NO.

  Table 2 of the Protocol is Table 3 of 40 CFR 93.127. The question is attempting to determine whether the project is listed in Table 2. Projects that are included in Table 2 of the CO Protocol are exempt from regional conformity. Because the proposed project would reconfigure an interchange for an existing highway, it is not exempt from regional emissions analysis.

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1 CO Protocol for a CO analysis, http://www.dot.ca.gov/hq/env/air/pages/coprot.htm, accessed January 2019.

2 Garza V., P. Graney, D. Sperling, D. Niemeier, D. Eisinger, T. Kear, and D. Chang. December 1997. Transportation Project-Level Carbon Monoxide Protocol revised. Prepared for California Department of Transportation Environmental Program by the Institute of Transportation Studies, University of California, Davis, UCD-ITS-RR-97-21. Website: http://www.dot.ca.gov/hq/env/air/pages/coprot.htm, accessed February 2019.

- **3.1.3. Is the project locally defined as regionally significant?**

  YES.

  As mentioned above, the proposed project would reconfigure an interchange for an existing highway; therefore, the proposed project is regionally significant.

- **3.1.4. Is the project in a federal attainment area?**

  NO.

  The project is in an attainment/maintenance area for the federal CO standard; therefore, the proposed project is subject to a regional conformity determination.

- **3.1.5. Is there a currently conforming Regional Transportation Plan [RTP] and Transportation Improvement Program [TIP]?**

  YES.

- **3.1.6. Is the project included in the regional emissions analysis supporting the currently conforming RTP and TIP?**

  YES.

  The proposed project is listed in the 2016 RTP/SCS as amended by Amendment No. 3 adopted on September 6, 2018 under RTP ID RIV080904. The proposed project is listed in the 2019 FTIP under the ID # RIV080904. The FHWA and FTA approved the FTIP on December 17, 2018. Therefore, both of the Build Alternatives meet the CAA requirements and 40 CFR, Section 93.116, without any explicit hot-spot analysis.

- **3.1.7. Has the project design concept and/or scope changed significantly from that in the regional analysis?**

  NO.

  As discussed above in Section 3.1.6, regional conformity for the proposed project has been demonstrated for the RTP and the FTIP.

- **3.1.9. Examine local impacts.**

  Section 3.1.9 of the flowchart directs the project evaluation to Section 4 (Local Analysis) of the CO Protocol. (This concludes Figure 1.)

  Section 4 of the CO Protocol contains Figure 3 (Local CO Analysis). This flowchart is used to determine the type of CO analysis required for the project. Below is a step-by-step explanation of the flowchart. Each level cited is followed by a response, which in turn determines the next applicable level of the flowchart for the Build Alternative. The flowchart begins at Level 1:

- **Level 1: Is the project in a CO nonattainment area?**

  NO.

  The project site is in an area that has demonstrated attainment with the federal CO standards.

- **Level 1 (cont.): Was the area redesignated as "attainment" after the 1990 Clean Air Act?**

  YES.

- **Level 1 (cont.). Has "continued attainment" been verified with the local Air District, if appropriate?**

  YES.

  The South Coast Air Basin (Basin) was designated as attainment/ maintenance by the EPA on June 11, 2007 (proceed to Level 7).

- **Level 7. Does the project worsen air quality?**

  NO.

  Because the proposed project would not meet any of the criteria discussed below, it would not potentially worsen air quality.

  a. *The project significantly increases the percentage of vehicles operating in cold start mode. Increasing the number of vehicles operating in cold start mode by as little as 2% should be considered potentially significant.*

     All vehicles on the freeway and in the intersections are assumed to be in a fully warmed-up mode. Therefore, this criterion is not met.

  b. *The project significantly increases traffic volumes. Increases in traffic volumes in excess of 5% should be considered potentially significant. Increasing the traffic volume by less than 5% may still be potentially significant if there is also a reduction in average speeds.*

     The proposed project would improve traffic flow without increasing the traffic volumes along the WLC Pkwy or SR-60, as shown in Tables 2.14.4 and 2.14.5. Therefore, this criterion is not met.

  c. *The project worsens traffic flow. For uninterrupted roadway segments, a reduction in average speeds (within a range of 3 to 50 mph) should be regarded as worsening traffic flow. For intersection segments, a reduction in average speed or an increase in average delay should be considered as worsening traffic flow.*

     As shown in Tables 2.14.6 through 2.14.11, the proposed project would either not change the level of service (LOS) or result in improvement. Therefore, this criterion is not met.

Table 2.14.4 2025 Traffic Volumes (No Build and Build Alternatives)

Roadway Link	2025 No Build			2025 Build (Alt 2 & 6 [LPA])		
	Total ADT	Truck ADT	Truck %	Total ADT	Truck ADT	Truck %
Theodore Street – SR-60 WB Ramp to Ironwood Avenue	2,267	655	29	2,267	655	29
WLC Pkwy – Eucalyptus Avenue to SR-60 EB Ramps	24,242	8,744	36	24,242	8,744	36
SR-60 – Redlands Boulevard to WLC Pkwy	92,116	15,490	17	92,116	15,490	17
Ironwood Avenue – Redlands Boulevard to Theodore Street	2,587	638	25	2,587	638	25
Eucalyptus Avenue – Redlands Boulevard to WLC Pkwy	1,668	861	52	1,668	861	52

Source: *Methodology and Traffic Volumes Report* (August 2018).
ADT = average daily traffic
Alt = Alternative
EB = eastbound
LPA = Locally Preferred Alternative
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.14.5 2045 Traffic Volumes (No Build and Build Alternatives)

Roadway Link	2045 No Build			2045 Build (Alt 2 & 6 [LPA])		
	Total ADT	Truck ADT	Truck %	Total ADT	Truck ADT	Truck %
Theodore Street – SR-60 WB Ramp to Ironwood Avenue	14,618	1,054	7	14,618	1,054	7
WLC Pkwy – Eucalyptus Avenue to SR-60 EB Ramps	31,816	12,512	39	31,816	12,512	39
SR-60 – Redlands Boulevard to WLC Pkwy	168,384	23,699	14	168,384	23,699	14
Ironwood Avenue – Redlands Boulevard to Theodore Street	6,941	840	12	6,941	840	12
Eucalyptus Avenue – Redlands Boulevard to WLC Pkwy	5,370	1,308	24	5,370	1,308	24

Source: *Methodology and Traffic Volumes Report* (August 2018).
ADT = average daily traffic
Alt = Alternative
EB = eastbound
LPA = Locally Preferred Alternative
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.14.6 2025 Without Project Intersection Levels of Service

Intersection	AM Peak Hour (LOS)	PM Peak Hour (LOS)
WLC Pkwy/Eucalyptus Avenue	A	A
WLC Pkwy/SR-60 EB Ramps	F	F
WLC Pkwy/SR-60 WB Ramps	F	F
Theodore Street/Ironwood Avenue	A	A

Source: *Methodology and Traffic Volumes Report* (August 2018).
EB = eastbound
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.14.7 2025 With Alternative 2 Intersection Levels of Service

Intersection	AM Peak Hour (LOS)	PM Peak Hour (LOS)
WLC Pkwy/Eucalyptus Avenue	A	A
WLC Pkwy/SR-60 EB Ramps	B	B
WLC Pkwy/SR-60 WB Ramps	B	B
Theodore Street/Ironwood Avenue	A	A

Source: *Methodology and Traffic Volumes Report* (August 2018).
EB = eastbound
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway

Table 2.14.8 2025 With Alternative 6 (LPA) Intersection Levels of Service

Intersection	AM Peak Hour (LOS)	PM Peak Hour (LOS)
WLC Pkwy/Eucalyptus Avenue	B	B
WLC Pkwy/SR-60 EB Ramps	A	A
WLC Pkwy/SR-60 WB Ramps	A	A
Theodore Street/Ironwood Avenue	A	A

Source: *Methodology and Traffic Volumes Report* (August 2018).
EB = eastbound WB = westbound
SR-60 = State Route 60 WLC Pkwy = World Logistics Center Parkway

Table 2.14.9 2045 Without Project Intersection Levels of Service

Intersection	AM Peak Hour (LOS)	PM Peak Hour (LOS)
WLC Pkwy/Eucalyptus Avenue	D	D
WLC Pkwy/SR-60 EB Ramps	F	F
WLC Pkwy/SR-60 WB Ramps	F	F
Theodore Street/Ironwood Avenue	A	A

Source: *Methodology and Traffic Volumes Report* (August 2018).
EB = eastbound WB = westbound
SR-60 = State Route 60 WLC Pkwy = World Logistics Center Parkway

Table 2.14.10 2045 With Alternative 2 Intersection Levels of Service

Intersection	AM Peak Hour (LOS)	PM Peak Hour (LOS)
WLC Pkwy/Eucalyptus Avenue	D	D
WLC Pkwy/SR-60 EB Ramps	B	C
WLC Pkwy/SR-60 WB Ramps	C	B
Theodore Street/Ironwood Avenue	A	A

Source: *Methodology and Traffic Volumes Report* (August 2018).
EB = eastbound WB = westbound
SR-60 = State Route 60 WLC Pkwy = World Logistics Center Parkway

Table 2.14.11 2045 With Alternative 6 (LPA) Intersection Levels of Service

Intersection	AM Peak Hour (LOS)	PM Peak Hour (LOS)
WLC Pkwy/Eucalyptus Avenue	C	C
WLC Pkwy/SR-60 EB Ramps	B	B
WLC Pkwy/SR-60 WB Ramps	A	D
Theodore Street/Ironwood Avenue	A	A

Source: *Methodology and Traffic Volumes Report* (August 2018).
EB = eastbound WB = westbound
SR-60 = State Route 60 WLC Pkwy = World Logistics Center Parkway

The background CO concentrations in the vicinity of the project were 2.4 parts per million (ppm) for 1 hour and 1.8 ppm for 8 hours in 2017. As shown in Tables 2.14.6 through 2.14.11, the proposed project would improve LOS by reducing vehicle delay and is therefore not expected to result in any CO concentrations exceeding the 1-hour or 8-hour CO standards of 20 ppm and 9.0 ppm, respectively. Therefore, a detailed quantitative CO hot-spot analysis is not required and the project has been determined to be satisfactory. No further analysis is needed.

Particulate Matter (PM_{10} and $PM_{2.5}$)

Based on the *Traffic Study Report* (January 2019), the proposed project would provide increased interchange capacity and improve existing interchange geometric deficiencies to improve traffic flow without increasing the traffic volumes along the WLC Pkwy or SR-60, as shown in the *Air Quality Report* (January 2020). Therefore, the project would have no long-term regional vehicle air emission impacts.

In November 2015, the EPA released an updated version of *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* (Guidance) for quantifying the local air quality impacts of transportation projects and comparing them to the PM NAAQS (75 Federal Register [FR] 79370). The EPA originally released the quantitative guidance in December 2010, and released a revised version in November 2013 to reflect the approval of Emissions Factor model, version 2011 (EMFAC2011) and the EPA 2012 PM NAAQS final rule. The November 2015 version reflects MOVES2014 and its subsequent minor revisions (e.g., MOVES2014a) to revise design value calculations to be more consistent with other EPA programs, and to reflect guidance implementation and experience in the field. Note that EMFAC, not MOVES, should be used for project hot-spot analysis in California. The Guidance requires a hot-spot analysis to be completed for a project of air quality concern (POAQC). The final rule in 40 CFR 93.123(b)(1) defines a POAQC as:

(i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;

(ii) Projects affecting intersections that are at Level-of-Service (LOS) D, E, or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;

(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;

(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and

(v) Projects in or affecting locations, areas, or categories of sites which are identified in the $PM_{2.5}$ and PM_{10} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The EPA guidance for PM hot-spot analysis and interagency consultation were used to determine whether the project is a POAQC. On October 23, 2018, the Transportation Conformity Working Group (TCWG) determined that the proposed project is not a POAQC. Per the transportation conformity rules and regulations, all nonexempt projects must go through review by the TCWG. The proposed project was approved and concurred upon by interagency consultation at the TCWG meeting as a project not having adverse impacts on air quality, and the proposed project meets the requirements of the CAA and 40 CFR §93.116. A copy of the TCWG finding is included in the *Air Quality Report* (January 2020).

Therefore, both of the Build Alternatives and Design Variations 2a and 6a meet the CAA requirements and 40 CFR §93.116 without any explicit hot-spot analysis. The proposed project is listed in the 2016 RTP/SCS as amended by Amendment No. 3 adopted on September 1, 2018, under RTP ID RIV080904. Thus, the proposed project is included in the regional emissions analysis that was used to meet regional conformity and would not delay timely attainment of the PM_{10} or $PM_{2.5}$ NAAQS for the Basin area. On August 1, 2017, the FHWA published its determination that 2016 RTP/SCS Amendment No. 2 conforms with the SIP in accordance with 40 CFR, Part 93. Construction and long-term operation of the proposed project would, therefore, be considered consistent with the purpose of the SIP, and both of the Build Alternatives and Design Variations 2a and 6a would conform to the requirements of the federal CAA. The proposed project is listed in the 2019 FTIP under the ID # RIV080904. The FHWA and FTA approved the FTIP on December 17, 2018.

Additional Environmental Analysis

Naturally Occurring Asbestos

The project is located in Riverside County, which is among the counties listed as containing serpentine and ultramafic rock in their soils. However, according to the California Geological Survey, no such rock has been identified in the project vicinity. Therefore, the potential risk for naturally occurring asbestos during Project construction would be minimal to none.

Mobile-Source Air Toxics

FHWA released updated guidance in October 2016[1] for determining when and how to address Mobile Source Air Toxics (MSAT) impacts in the NEPA process for transportation projects. FHWA identified three levels of analysis:

- No analysis for exempt projects or projects with no potential for meaningful MSAT effects
- Qualitative analysis for projects with low potential MSAT effects

[1] Federal Highway Administration. 2016. *Updated Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents*. Website: https://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/msat/, accessed February 2019.

- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects

Projects with no impacts generally include those that (a) qualify as a categorical exclusion under 23 CFR 771.117, (b) qualify as exempt under the FCAA conformity rule under 40 CFR §93.126, and (c) are not exempt, but have no meaningful impacts on traffic volumes or vehicle mix.

Projects that have low potential MSAT effects are those that serve to improve highway, transit, or freight operations or movement without adding substantial new capacity or creating a facility that is likely to substantially increase emissions. The large majority of projects fall into this category.

Projects with high potential MSAT effects include those that:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location; or

- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the annual average daily traffic (AADT) is projected to be in the range of 140,000 to 150,000, or greater, by the design year; and

- Are proposed to be located in proximity to populated areas or, in rural areas, in proximity to concentrations of vulnerable populations (i.e., schools, nursing homes, hospitals).

As shown in Table 2.14.12, the existing traffic on SR-60 near the proposed project is well below the criteria of 125,000 average daily trips or 10,000 truck trips. While future truck volumes are expected to be much higher than the existing levels because of the extensive number of planned intermodal warehouses in this area, auto and truck volumes on SR-60 or adjacent streets would not change substantially as a result of the proposed project. Consequently, the emission effects of the proposed project would be low, and it is expected that there would be no appreciable difference in overall MSAT emissions between the No Build Alternative and the Build Alternatives, including Design Variations 2a and 6a. Because the emission effects of the proposed project would be low, it is expected that there would be no appreciable difference in overall MSAT emissions between the No Build Alternative and the Build Alternatives, including Design Variations 2a and 6a.

Table 2.14.12 Summary of Existing Traffic Conditions

Scenario/Analysis Year	Location	AADT		% Truck	LOS
		Total	Truck		
Existing/Baseline Year 2018	SR-60 at WLC Pkwy	68,423	8,192	12	C
	WLC Pkwy	2,246	341	15	F

Source: *Methodology and Traffic Volumes Report* (August 2018).
AADT = annual average daily traffic SR-60 = State Route 60
LOS = level of service WLC Pkwy = World Logistics Center Parkway

NO_2 Analysis

The EPA modified the NO_2 NAAQS to include a 1-hour standard of 100 parts per billion (ppb) in 2010. The EPA announced that transportation conformity for NO_2 is no longer required for the South Coast area effective September 22, 2018.

2.14.4 Avoidance, Minimization, and/or Mitigation Measures

Potential temporary and permanent adverse impacts to air quality would be addressed by Project Features PF-AQ-1 through PF-AQ-6. Therefore, no avoidance, minimization, and/or mitigation measures are required.

2.14.5 Climate Change

Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level greenhouse gas (GHG) analysis. The FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and Executive Orders on climate change, the issue is addressed in the CEQA chapter of this document (Chapter 3). The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

2.15 Noise

2.15.1 Regulatory Setting

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

2.15.1.1 California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless such measures are not feasible. The rest of this section will focus on the NEPA Title 23 Part 772 of the Code of Federal Regulations (23 CFR 772) noise analysis; please see Chapter 3 of this document for further information on noise analysis under CEQA.

2.15.1.2 National Environmental Policy Act and 23 CFR 772

For highway transportation projects with Federal Highway Administration (FHWA) involvement (and the Department, as assigned), the federal-Aid Highway Act of 1970 and its implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include Noise Abatement Criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). Table 2.15.1 lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis.

Table 2.15.2 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

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

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

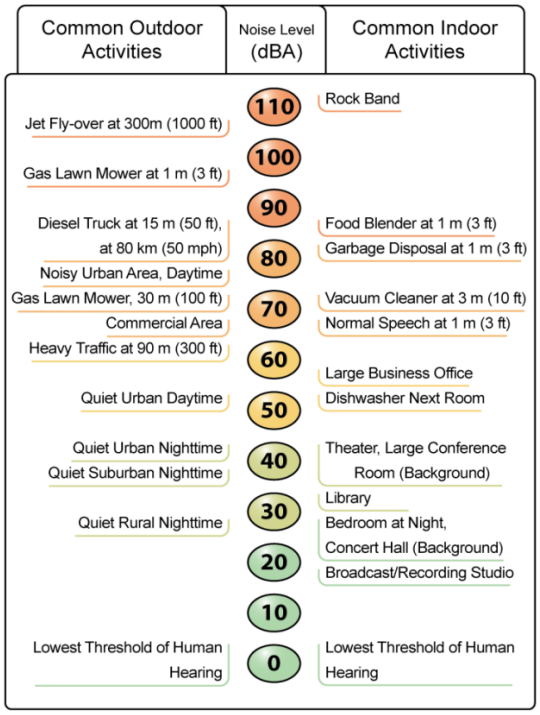
The Department's *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. Noise abatement must be predicted to reduce noise by at least 5 dB at an impacted receptor to be considered feasible from an acoustical perspective.

Table 2.15.1 Noise Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, dBA $L_{eq}(h)$[1]	Description of Activities
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B[2]	67 (Exterior)	Residential.
C[2]	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.

Source: FHWA 23 CFR 772.
[1] The $L_{eq}(h)$ noise level values are for impact determination only and are not design standards for noise abatement measures.
[2] Includes undeveloped lands permitted for this activity category.
CFR = Code of Federal Regulations
dBA = A-weighted decibels
FHWA = Federal Highway Administration
$L_{eq}(h)$ = 1-hour A-weighted equivalent continuous sound level
NAC = Noise Abatement Criteria

Table 2.15.2 Noise Levels of Common Activities



dBA = A-weighted decibel(s)
ft = foot/feet
m = meter(s)
mph = miles per hour

It must also be possible to design and construct the noise abatement measure for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, safety, barrier height, topography, drainage, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and maintenance of the abatement measure. The overall reasonableness of noise abatement is determined by the following three factors: (1) the noise reduction design goal of 7 dBA at one or more impacted receptors; (2) the cost of noise abatement; and (3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

2.15.2 Affected Environment

This section is based on the *Noise Study Report* (April 2019) and the *Noise Abatement Decision Report* (August 2019) prepared for Alternative 2, Design Variation 2a (Alternative 2 with Design Variation), Alternative 6 (Locally Preferred Alternative [LPA]), and Design Variation 6a (Alternative 6 [LPA} with Design Variation) for the State Route 60/World Logistics Center Parkway Interchange Project (project).

2.15.2.1 Surrounding Land Use and Sensitive Receptors

Existing land uses in the project area include single-family residences, vacant land, and agricultural and industrial uses. Currently, there are no permitted developments located adjacent to the proposed project. The primary source of noise in the project area is traffic on State Route 60 (SR-60) and Theodore Street/World Logistics Center Parkway (WLC Pkwy).

A total of 38 receptor locations, shown on Figure 2.15-1, were selected to represent land uses in the project vicinity. (All figures have been placed at the end of this section to enhance the readability of the text.)

2.15.2.2 Existing Noise Levels

The existing a.m. peak-hour traffic volume from the *Methodology and Traffic Volumes Report* (August 2018) and supplemental traffic data provided January 2019 was used to determine the existing worst-hour noise levels because the long-term noise level measurement shows the noise levels during the a.m. peak hour are higher than the p.m. peak hour. Also, the worst-case traffic volumes of 1,950 vehicles per lane per hour (vplph) on the highway mainline, 1,500 vplph for freeway auxiliary lanes, and 900 vplph on the highway on-ramps were used when the a.m. peak-hour traffic volumes exceeded the worst-case traffic volumes. The results of the existing traffic noise modeling are shown in Table 2.15.3. Currently, of the 38 modeled receptor locations, 1 receptor (Receptor R-10) approaches or exceeds the NAC. Figure 2.15-1 shows the locations of the modeled receptors.

2.15.3 Environmental Consequences

The proposed project is considered a Type 1 Project because the project would add through travel lanes on WLC Pkwy and one auxiliary lane in each direction on SR-60 between the Redlands Boulevard and Gilman Springs Road interchanges. In addition, the interchange ramps would be relocated. A noise analysis is required for all Type 1 Projects.

Table 2.15.3 Existing Noise Levels

Receptor No.	Location	Type of Land Use	No. of Units Represented	Noise Abatement Category	Existing Noise Level (dBA L_{eq})
R-1	SR-60	Vacant Land	1	G	67
R-2	SR-60	Vacant Land	1	G	66
R-3	SR-60	Vacant Land	1	G	65
R-4	SR-60	Vacant Land	1	G	56
R-5	SR-60	Vacant Land	1	G	63
R-6	SR-60	Industrial	1	F	58
R-7	SR-60	Industrial	1	F	57
R-8	SR-60	Industrial	1	F	56
R-9	WLC Pkwy	Vacant Land	1	G	54
R-10	WLC Pkwy	Residential	1	B(67)	**67**[1]
R-11	SR-60	Racetrack	1	F	65
R-12	WLC Pkwy	Vacant Land	1	G	55
R-13	SR-60	Vacant Land	1	G	59
R-14	SR-60	Vacant Land	1	G	60
R-15	Eucalyptus Avenue	Vacant Land	1	G	48
R-16	Eucalyptus Avenue	Vacant Land	1	G	46
R-17	Eucalyptus Avenue	Vacant Land	1	G	44
R-18	Eucalyptus Avenue	Vacant Land	1	G	41
R-19	WLC Pkwy	Vacant Land	1	G	57
R-20	Eucalyptus Avenue	Vacant Land	1	G	46
R-21	WLC Pkwy	Vacant Land	1	G	55
R-22	Eucalyptus Avenue	Vacant Land	1	G	44
R-23	WLC Pkwy	Vacant Land	1	G	56
R-24	WLC Pkwy	Vacant Land	1	G	55
R-25	WLC Pkwy	Residential	1	B(67)	55
R-26	WLC Pkwy	Vacant Land	1	G	56
R-27	WLC Pkwy	Agriculture	1	F	57
R-28	WLC Pkwy	Residential	1	B(67)	49
R-29	WLC Pkwy	Vacant Land	1	G	57
R-30	Theodore Street	Vacant Land	1	G	52
R-31	Theodore Street	Vacant Land	1	G	53
R-32	Theodore Street	Vacant Land	1	G	56
R-33	Theodore Street	Residential	1	B(67)	46
R-34	Theodore Street	Residential	1	B(67)	51
R-35	Theodore Street	Residential	1	B(67)	47
R-36	Theodore Street	Residential	1	B(67)	50
R-37	Theodore Street	Residential	1	B(67)	54
R-38	Theodore Street	Agriculture	1	F	54

Source: *Noise Study Report* (April 2019).
[1] Numbers in bold represent noise levels that approach or exceed the NAC.
dBA L_{eq} = 1-hour equivalent continuous sound level measured in A-weighted decibels
ft = foot/feet
NAC = Noise Abatement Criteria
SR-60 = State Route 60

2.15.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative assumes that no improvements will be made to the freeway mainline or to the SR-60/WLC Pkwy interchange. No temporary noise impacts would occur under the No Build Alternative because there would be no construction activities in the project area as a result of the proposed project.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

Two types of short-term noise impacts would occur during project construction. The first type would be from construction crew commutes and the transport of construction equipment and materials to the project site and would incrementally raise noise levels on access roads leading to the site. The pieces of heavy equipment for grading and construction activities will be moved on site, will remain for the duration of each construction phase, and will not add to the daily traffic volume in the project vicinity. A high single-event noise exposure potential at a maximum level of 75 A-weighted decibels (dBA) maximum instantaneous noise level (L_{max}) from trucks passing at 50 feet (ft) will exist. However, the projected construction traffic will be minimal when compared to existing traffic volumes on SR-60, Theodore Street/WLC Pkwy, and other affected streets, and its associated long-term noise level change will not be perceptible. Additionally, the project would import soil from the City Stockpile borrow site located at the northwestern corner of the intersection of Alessandro Boulevard/Nason Street, which would generate approximately 13 trucks trips per day based on construction activity assumptions. This volume of trucks, when spread over a typical 8-hour work day, would be minimal compared to the existing traffic volumes along the haul route. Therefore, short-term, construction-related worker commutes and equipment/material transport noise impacts would not be adverse.

The second type of short-term noise impact is related to noise generated during roadway construction. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated as well as the noise levels along the project alignment as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 2.15.4 lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments based on a distance of 50 feet (ft) between the equipment and a noise receptor.

Typical noise levels at 50 ft from an active construction area range up to 88 dBA L_{max} during the noisiest construction phases. The site preparation phase, which includes grading and paving, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 to 2 minutes of full-power operation followed by 3 to 4 minutes at lower power settings.

Construction of the proposed project is expected to require the use of graders, bulldozers, and water trucks/pickup trucks. Noise associated with the use of construction equipment is estimated to be between 75 dBA L_{max} and 85 dBA L_{max} at a distance of 50 ft from the active construction area for the grading phase. As seen in Table 2.15.4, the maximum noise level generated by each grader is assumed to be approximately 85 dBA L_{max} at 50 ft from the grader in operation. Each dozer would generate approximately 82 dBA L_{max} at 50 ft. The maximum noise level generated by water trucks/pickup trucks is approximately 75 dBA L_{max} at 50 ft from these vehicles. Each doubling of the sound source with equal strength increases the noise level by 3 dBA. Each piece of construction equipment operates as an individual point source. The worst-case composite noise level at the nearest residence during this phase of construction would be 87 dBA L_{max} (at a distance of 50 ft from an active construction area).

Table 2.15.4 Typical Construction Equipment Noise Levels

Equipment Description	Spec. 721.560[1] L_{max} at 50 ft	Actual Measured[2] L_{max} at 50 ft
Backhoes	80	78
Compactor (ground)	80	83
Cranes	85	81
Dozers	85	82
Dump Truck	84	76
Excavators	85	81
Flatbed Trucks	84	74
Front-End Loaders	80	79
Graders	85	N/A[3]
Jackhammer	85	89
Pickup Truck	55	75
Pneumatic Tools	85	85
Pumps	77	81
Rock Drill	85	81
Roller	85	80
Scrapers	85	84
Tractors	84	N/A
Vibratory Pile Driver	95	101

Source: Federal Highway Administration Roadway Construction Noise Model (January 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
1 Maximum noise levels were developed based on Spec. 721.560 from the CA/T program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
2 The maximum noise level was developed based on the average noise level measured for each piece of equipment during the CA/T program in Boston, Massachusetts.
3 Since the maximum noise level based on the average noise level measured for this piece of equipment was not available, the maximum noise level developed based on Spec. 721.560 was used.
CA/T = Central Artery/Tunnel
ft = foot/feet
L_{max} = maximum instantaneous noise level
N/A = not applicable

In addition to standard construction equipment, the proposed project may require the use of pile drivers for the overcrossing at Theodore Street/WLC Pkwy. As shown in Table 2.15.4, pile driving generates noise levels of approximately 95 dBA L_{max} at 50 ft.

The closest residence is located within 50 ft of the project construction areas and approximately 400 ft from where pile driving would occur. Therefore, the closest residence may be subject to short-term noise reaching 87 dBA L_{max} or higher associated with construction activities. Compliance with the construction hours specified by the City's Municipal Code and California Department of Transportation (Caltrans) Standard Specifications, Section 14-8.02, would be required to minimize construction noise impacts on sensitive land uses adjacent to the project site. The noise level from the Contractor's operations between the hours of 9:00 p.m. and 6:00 a.m. shall not exceed 86 dBA L_{max} at a distance of 50 ft. Project Feature PF-N-1 will be implemented as part of the project to minimize construction noise impacts on sensitive land uses adjacent to the project site.

PF-N-1 Construction activities within City right-of-way will comply with the allowed construction hours specified by the City's Municipal Code (7:00 a.m. to 8:00 p.m. on weekdays and weekends) and the control of noise from construction activities within California Department of Transportation (Caltrans) right-of-way will conform to Caltrans Standard Specifications, Section 14-8.02, "Noise Control." The nighttime noise level from the Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., will not exceed 86 maximum A-weighted decibels (dBA L_{max}) at a distance of 50 feet.

2.15.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative assumes that no improvements will be made to the freeway mainline or to the SR-60/WLC Pkwy interchange. Potential long-term noise effects under the No Build Alternative would be solely from traffic noise. Future No Build noise levels are shown in Table 2.15.5. Of the 38 modeled receptor locations, 2 receptors (Receptors R-10 and R-25) would continue to approach or exceed the NAC under the future No Build condition.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

Potential long-term noise impacts associated with project operations are solely from traffic noise. Traffic noise was evaluated for the worst-case traffic condition. Using coordinates obtained from the topographic maps, 38 receptor locations were evaluated in the model.

Future traffic noise levels at all 38 receptor locations were determined with existing walls using 2045 a.m. peak-hour traffic volumes obtained from the *Methodology and Traffic Volumes Report* (August 2018) and supplemental traffic data provided January 2019. The a.m. peak-hour traffic volumes were used because the long-term noise level measurement shows the noise level during the a.m. peak hour is higher than the p.m. peak hour. For roadway segments that exceed the worst-case traffic volume of 1,950 vplph for the mainline freeway, 1,500 vplph for freeway auxiliary lanes, and 900 vplph for on-ramps, the worst-case traffic volumes were used instead of the a.m. peak-hour traffic volumes.

Table 2.15.5 summarizes the traffic noise modeling results for the existing and future no build conditions. Tables 2.15.5, 2.15.6, 2.15.7, and 2.15.8 summarize the traffic noise modeling for Alternative 2, Design Variation 2a, Alternative 6 (LPA), and Design Variation 6a conditions, respectively. The modeled future noise levels with the Project were compared to the modeled existing noise levels (after calibration) from Traffic Noise Model (TNM) 2.5 to determine whether a substantial noise increase would occur. The modeled future noise levels for Alternative 2, Design Variation 2a, Alternative 6 (LPA), and Design Variation 6 were also compared to the NAC to determine whether a traffic noise impact would occur.

Traffic noise impacts occur when either of the following occurs: (1) the traffic noise level at a receptor location is predicted to “approach or exceed” its NAC, or (2) the predicted traffic noise level is 12 dBA or more over the corresponding modeled existing noise level at the receptor locations analyzed. When traffic noise impacts occur, noise abatement measures must be considered.

Of the 38 modeled receptors, 2 receptors (Receptors R-10 and R-25) under Alternative 2, Design Variation 2a, and Alternative 6 (LPA) conditions, and one receptor (Receptor R-10) under Design Variation 6a conditions would approach or exceed the NAC. Of the 38 modeled receptors, two receptor locations (Receptors R-25 and R-28) under Alternative 2, Design Variation 2a, and Alternative 6 (LPA) conditions would experience a substantial noise increase of 12 dBA or more over their corresponding modeled existing noise level. One receptor location (Receptor R-28) under Design Variation 6a conditions would experience a substantial noise increase of 12 dBA over its corresponding modeled existing level. Receptors R-25 and R-27 would be fully acquired as part of the project under Design Variation 6a conditions.

Table 2.15.5 Alternative 2 Predicted Noise Levels (2045) (dBA L_{eq})

Noise Barrier No.	Receptor No.	Location	Existing Noise Level	Future 2045 Noise Level Without Project	Future 2045 Noise Level with Project	With Project Minus No Project Conditions	With Project Minus Existing Conditions	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement						Feasible?
									6 ft Wall	8 ft Wall	10 ft Wall	12 ft Wall	14 ft Wall	16 ft Wall	
	R-1	SR-60	67	70	71	1	4	No	--[1]	--	--	--	--	--	--
	R-2	SR-60	66	69	70	1	4	No	--	--	--	--	--	--	--
	R-3	SR-60	65	69	70	1	5	No	--	--	--	--	--	--	--
	R-4	SR-60	56	60	65	5	9	No	--	--	--	--	--	--	--
	R-5	SR-60	63	66	66	0	3	No	--	--	--	--	--	--	--
	R-6	SR-60	58	61	62	1	4	No	--	--	--	--	--	--	--
	R-7	SR-60	57	61	62	1	5	No	--	--	--	--	--	--	--
	R-8	SR-60	56	60	62	2	6	No	--	--	--	--	--	--	--
	R-9	WLC Pkwy	54	63	62	-1	8	No	--	--	--	--	--	--	--
1	R-10	WLC Pkwy	**67**[2]	**71**	**70**	-1	3	Yes	**65**[3]	64	63	62	61	60	Yes
	R-11	SR-60	65	67	68	1	3	No	--	--	--	--	--	--	--
	R-12	WLC Pkwy	55	63	62	-1	7	No	--	--	--	--	--	--	--
	R-13	SR-60	59	61	60	-1	1	No	--	--	--	--	--	--	--
	R-14	SR-60	60	62	62	0	2	No	--	--	--	--	--	--	--
	R-15	Eucalyptus Avenue	48	52	56	4	8	No	--	--	--	--	--	--	--
	R-16	Eucalyptus Avenue	46	51	54	3	8	No	--	--	--	--	--	--	--
	R-17	Eucalyptus Avenue	44	48	51	3	7	No	--	--	--	--	--	--	--
	R-18	Eucalyptus Avenue	41	49	50	1	9	No	--	--	--	--	--	--	--
	R-19	WLC Pkwy	57	68	65	-3	8	No	--	--	--	--	--	--	--
	R-20	Eucalyptus Avenue	46	56	57	1	11	No	--	--	--	--	--	--	--
	R-21	WLC Pkwy	55	67	68	1	13	No	--	--	--	--	--	--	--
	R-22	Eucalyptus Avenue	44	54	55	1	11	No	--	--	--	--	--	--	--
	R-23	WLC Pkwy	56	67	67	0	11	No	--	--	--	--	--	--	--
	R-24	WLC Pkwy	55	68	68	0	13	No	--	--	--	--	--	--	--
2	R-25	WLC Pkwy	55	**68**	**69**	1	14	Yes	65	64	63	59	58	58	Yes
	R-26	WLC Pkwy	56	69	70	1	14	No	--	--	--	--	--	--	--
	R-27	WLC Pkwy	57	70	70	0	13	No	--	--	--	--	--	--	--
3	R-28	WLC Pkwy	49	62	63	1	14	Yes	61	59	58	55	55	54	Yes
	R-29	WLC Pkwy	57	70	70	0	13	No	--	--	--	--	--	--	--
	R-30	Theodore Street	52	57	58	1	6	No	--	--	--	--	--	--	--
	R-31	Theodore Street	53	58	61	3	8	No	--	--	--	--	--	--	--
	R-32	Theodore Street	56	62	63	1	7	No	--	--	--	--	--	--	--

Table 2.15.5 Alternative 2 Predicted Noise Levels (2045) (dBA L_{eq})

Noise Barrier No.	Receptor No.	Location	Existing Noise Level	Future 2045 Noise Level Without Project	Future 2045 Noise Level with Project	With Project Minus No Project Conditions	With Project Minus Existing Conditions	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement						Feasible?
									6 ft Wall	8 ft Wall	10 ft Wall	12 ft Wall	14 ft Wall	16 ft Wall	
	R-33	Theodore Street	46	51	52	1	6	No	--	--	--	--	--	--	--
	R-34	Theodore Street	51	56	55	-1	4	No	--	--	--	--	--	--	--
	R-35	Theodore Street	47	52	53	1	6	No	--	--	--	--	--	--	--
	R-36	Theodore Street	50	55	55	0	5	No	--	--	--	--	--	--	--
	R-37	Theodore Street	54	60	60	0	6	No	--	--	--	--	--	--	--
	R-38	Theodore Street	54	59	61	2	7	No	--	--	--	--	--	--	--

Source: *Noise Study Report* (April 2019).

[1] No barrier was analyzed at this location because the modeled receptor would not approach or exceed the NAC, or there are no impact criteria for its land use

[2] Numbers in bold represent noise levels that approach or exceed the NAC.

[3] Underlined noise levels have been attenuated by at least 5 dBA (i.e., feasible barrier height.)

dBA = A-weighted decibels

ft = foot/feet

L_{eq} = equivalent continuous sound level

NAC = Noise Abatement Criteria

SR-60 = State Route 60

WLC Pkwy = World Logistics Center Parkway

Table 2.15.6 Design Variation 2a Predicted Noise Levels (2045) (dBA L_{eq})

Noise Barrier No.	Receptor No.	Location	Adjusted Existing Peak Noise Level	Predicted Noise Level Without Project	Predicted Noise Level with Project	With Project Minus No Project Conditions	With Project Minus Existing Conditions	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement						Feasible?
									6 ft Wall	8 ft Wall	10 ft Wall	12 ft Wall	14 ft Wall	16 ft Wall	
	R-1	SR-60	67	70	71	1	4	No	--[1]	--	--	--	--	--	--
	R-2	SR-60	66	69	70	1	4	No	--	--	--	--	--	--	--
	R-3	SR-60	65	69	70	1	5	No	--	--	--	--	--	--	--
	R-4	SR-60	56	60	65	5	9	No	--	--	--	--	--	--	--
	R-5	SR-60	63	66	66	0	3	No	--	--	--	--	--	--	--
	R-6	SR-60	58	61	62	1	4	No	--	--	--	--	--	--	--
	R-7	SR-60	57	61	62	1	5	No	--	--	--	--	--	--	--
	R-8	SR-60	56	60	62	2	6	No	--	--	--	--	--	--	--
	R-9	WLC Pkwy	54	63	62	-1	8	No	--	--	--	--	--	--	--
1	R-10	WLC Pkwy	**67**[2]	**71**	**70**	-1	3	Yes	**65**[3]	64	63	62	61	60	Yes
	R-11	SR-60	65	67	68	1	3	No	--	--	--	--	--	--	--
	R-12	WLC Pkwy	55	63	62	-1	7	No	--	--	--	--	--	--	--
	R-13	SR-60	59	61	60	-1	1	No	--	--	--	--	--	--	--
	R-14	SR-60	60	62	62	0	2	No	--	--	--	--	--	--	--
	R-15	Eucalyptus Avenue	48	52	56	4	8	No	--	--	--	--	--	--	--
	R-16	Eucalyptus Avenue	46	51	54	3	8	No	--	--	--	--	--	--	--
	R-17	Eucalyptus Avenue	44	48	51	3	7	No	--	--	--	--	--	--	--
	R-18	Eucalyptus Avenue	41	49	50	1	9	No	--	--	--	--	--	--	--
	R-19	WLC Pkwy	57	68	65	-3	8	No	--	--	--	--	--	--	--
	R-20	Eucalyptus Avenue	46	56	58	2	12	No	--	--	--	--	--	--	--
	R-21	WLC Pkwy	55	67	67	0	12	No	--	--	--	--	--	--	--
	R-22	Eucalyptus Avenue	44	54	59	5	15	No	--	--	--	--	--	--	--
	R-23	WLC Pkwy	56	67	65	-2	9	No	--	--	--	--	--	--	--
	R-24	WLC Pkwy	55	68	68	0	13	No	--	--	--	--	--	--	--
2	R-25	WLC Pkwy	55	**68**	**70**	2	15	Yes	66	65	63	61	60	60	Yes
	R-26	WLC Pkwy	56	69	70	1	14	No	--	--	--	--	--	--	--
	R-27	WLC Pkwy	57	70	71	1	14	No	--	--	--	--	--	--	--
3	R-28	WLC Pkwy	49	62	64	2	15	Yes	62	60	58	56	55	55	Yes
	R-29	WLC Pkwy	57	70	71	1	14	No	--	--	--	--	--	--	--
	R-30	Theodore Street	52	57	59	2	7	No	--	--	--	--	--	--	--
	R-31	Theodore Street	53	58	61	3	8	No	--	--	--	--	--	--	--
	R-32	Theodore Street	56	62	63	1	7	No	--	--	--	--	--	--	--
	R-33	Theodore Street	46	51	52	1	6	No	--	--	--	--	--	--	--

Table 2.15.6 Design Variation 2a Predicted Noise Levels (2045) (dBA L_{eq})

Noise Barrier No.	Receptor No.	Location	Adjusted Existing Peak Noise Level	Predicted Noise Level Without Project	Predicted Noise Level with Project	With Project Minus No Project Conditions	With Project Minus Existing Conditions	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement						Feasible?
									6 ft Wall	8 ft Wall	10 ft Wall	12 ft Wall	14 ft Wall	16 ft Wall	
	R-34	Theodore Street	51	56	55	-1	4	No	--	--	--	--	--	--	--
	R-35	Theodore Street	47	52	53	1	6	No	--	--	--	--	--	--	--
	R-36	Theodore Street	50	55	55	0	5	No	--	--	--	--	--	--	--
	R-37	Theodore Street	54	60	60	0	6	No	--	--	--	--	--	--	--
	R-38	Theodore Street	54	59	61	2	7	No	--	--	--	--	--	--	--

Source: *Noise Study Report* (April 2019).

[1] No barrier was analyzed at this location because the modeled receptor would not approach or exceed the NAC, or there are no impact criteria for its land use.

[2] Numbers in bold represent noise levels that approach or exceed the NAC.

[3] Underlined noise levels have been attenuated by at least 5 dBA (i.e., feasible barrier height.)

dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
NAC = Noise Abatement Criteria
SR-60 = State Route 60
WLC Pkwy = World Logistics Center Parkway

Table 2.15.7 Alternative 6 (LPA) Predicted Noise Levels (2045) (dBA L_{eq})

Noise Barrier No.	Receptor No.	Location	Adjusted Existing Peak Noise Level	Predicted Noise Level Without Project	Predicted Noise Level with Project	With Project Minus No Project Conditions	With Project Minus Existing Conditions	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement						Feasible?
									6 ft Wall	8 ft Wall	10 ft Wall	12 ft Wall	14 ft Wall	16 ft Wall	
	R-1	SR-60	67	70	71	1	4	No	--[1]	--	--	--	--	--	No
	R-2	SR-60	66	69	70	1	4	No	--	--	--	--	--	--	--
	R-3	SR-60	65	69	70	1	5	No	--	--	--	--	--	--	--
	R-4	SR-60	56	60	64	4	8	No	--	--	--	--	--	--	--
	R-5	SR-60	63	66	66	0	3	No	--	--	--	--	--	--	--
	R-6	SR-60	58	61	62	1	4	No	--	--	--	--	--	--	--
	R-7	SR-60	57	61	62	1	5	No	--	--	--	--	--	--	--
	R-8	SR-60	56	60	62	2	6	No	--	--	--	--	--	--	--
	R-9	WLC Pkwy	54	63	61	-2	7	No	--	--	--	--	--	--	--
1	R-10	WLC Pkwy	**67**[2]	**71**	**69**	-2	2	Yes	**63**[3]	63	62	61	60	60	Yes
	R-11	SR-60	65	67	68	1	3	No	--	--	--	--	--	--	--
	R-12	WLC Pkwy	55	63	62	-1	7	No	--	--	--	--	--	--	--
	R-13	SR-60	59	61	60	-1	1	No	--	--	--	--	--	--	--
	R-14	SR-60	60	62	62	0	2	No	--	--	--	--	--	--	--
	R-15	Eucalyptus Avenue	48	52	56	4	8	No	--	--	--	--	--	--	--
	R-16	Eucalyptus Avenue	46	51	54	3	8	No	--	--	--	--	--	--	--
	R-17	Eucalyptus Avenue	44	48	51	3	7	No	--	--	--	--	--	--	--
	R-18	Eucalyptus Avenue	41	49	50	1	9	No	--	--	--	--	--	--	--
	R-19	WLC Pkwy	57	68	63	-5	6	No	--	--	--	--	--	--	--
	R-20	Eucalyptus Avenue	46	56	56	0	10	No	--	--	--	--	--	--	--
	R-21	WLC Pkwy	55	67	67	0	12	No	--	--	--	--	--	--	--
	R-22	Eucalyptus Avenue	44	54	54	0	10	No	--	--	--	--	--	--	--
	R-23	WLC Pkwy	56	67	66	-1	10	No	--	--	--	--	--	--	--
	R-24	WLC Pkwy	55	68	68	0	13	No	--	--	--	--	--	--	--
2	R-25	WLC Pkwy	55	**68**	**69**	1	14	Yes	65	64	63	59	58	58	Yes
	R-26	WLC Pkwy	56	69	70	1	14	No	--	--	--	--	--	--	--
	R-27	WLC Pkwy	57	70	70	0	13	No	--	--	--	--	--	--	--
3	R-28	WLC Pkwy	49	62	63	1	14	Yes	61	59	58	55	55	54	Yes
	R-29	WLC Pkwy	57	70	70	0	13	No	--	--	--	--	--	--	--
	R-30	Theodore Street	52	57	58	1	6	No	--	--	--	--	--	--	--
	R-31	Theodore Street	53	58	61	3	8	No	--	--	--	--	--	--	--
	R-32	Theodore Street	56	62	62	0	6	No	--	--	--	--	--	--	--
	R-33	Theodore Street	46	51	52	1	6	No	--	--	--	--	--	--	--

Table 2.15.7 Alternative 6 (LPA) Predicted Noise Levels (2045) (dBA L_{eq})

Noise Barrier No.	Receptor No.	Location	Adjusted Existing Peak Noise Level	Predicted Noise Level Without Project	Predicted Noise Level with Project	With Project Minus No Project Conditions	With Project Minus Existing Conditions	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement						Feasible?
									6 ft Wall	8 ft Wall	10 ft Wall	12 ft Wall	14 ft Wall	16 ft Wall	
	R-34	Theodore Street	51	56	55	-1	4	No	--	--	--	--	--	--	--
	R-35	Theodore Street	47	52	52	0	5	No	--	--	--	--	--	--	--
	R-36	Theodore Street	50	55	55	0	5	No	--	--	--	--	--	--	--
	R-37	Theodore Street	54	60	60	0	6	No	--	--	--	--	--	--	--
	R-38	Theodore Street	54	59	58	-1	4	No	--	--	--	--	--	--	--

Source: *Noise Study Report* (April 2019).
[1] No barrier was analyzed at this location because the modeled receptor would not approach or exceed the NAC, or there are no impact criteria for its land use.
[2] Numbers in bold represent noise levels that approach or exceed the NAC.
[3] Underlined noise levels have been attenuated by at least 5 dBA (i.e., feasible barrier height.)
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
LPA = Locally Preferred Alternative
NAC = Noise Abatement Criteria
SR-60 = State Route 60
WLC Pkwy = World Logistics Center Parkway

Table 2.15.8 Design Variation 6a Predicted Noise Levels (2045) (dBA L_{eq})

Noise Barrier No.	Receptor No.	Location	Adjusted Existing Peak Noise Level	Predicted Noise Level Without Project	Predicted Noise Level with Project	With Project Minus No Project Conditions	With Project Minus Existing Conditions	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement						Feasible?
									6 ft Wall	8 ft Wall	10 ft Wall	12 ft Wall	14 ft Wall	16 ft Wall	
	R-1	SR-60	67	70	71	1	4	No	--[1]	--	--	--	--	--	--
	R-2	SR-60	66	69	70	1	4	No	--	--	--	--	--	--	--
	R-3	SR-60	65	69	70	1	5	No	--	--	--	--	--	--	--
	R-4	SR-60	56	60	64	4	8	No	--	--	--	--	--	--	--
	R-5	SR-60	63	66	66	0	3	No	--	--	--	--	--	--	--
	R-6	SR-60	58	61	62	1	4	No	--	--	--	--	--	--	--
	R-7	SR-60	57	61	62	1	5	No	--	--	--	--	--	--	--
	R-8	SR-60	56	60	62	2	6	No	--	--	--	--	--	--	--
	R-9	WLC Pkwy	54	63	61	-2	7	No	--	--	--	--	--	--	--
1	R-10	WLC Pkwy	**67**[2]	**71**	**69**	-2	2	Yes	63[3]	63	62	61	60	60	Yes
	R-11	SR-60	65	67	68	1	3	No	--	--	--	--	--	--	--
	R-12	WLC Pkwy	55	63	61	-2	6	No	--	--	--	--	--	--	--
	R-13	SR-60	59	61	60	-1	1	No	--	--	--	--	--	--	--
	R-14	SR-60	60	62	62	0	2	No	--	--	--	--	--	--	--
	R-15	Eucalyptus Avenue	48	52	56	4	8	No	--	--	--	--	--	--	--
	R-16	Eucalyptus Avenue	46	51	54	3	8	No	--	--	--	--	--	--	--
	R-17	Eucalyptus Avenue	44	48	51	3	7	No	--	--	--	--	--	--	--
	R-18	Eucalyptus Avenue	41	49	49	0	8	No	--	--	--	--	--	--	--
	R-19	WLC Pkwy	57	68	64	-4	7	No	--	--	--	--	--	--	--
	R-20	Eucalyptus Avenue	46	56	57	1	11	No	--	--	--	--	--	--	--
	R-21	WLC Pkwy	55	67	66	-1	11	No	--	--	--	--	--	--	--
	R-22	Eucalyptus Avenue	44	54	57	3	13	No	--	--	--	--	--	--	--
	R-23	WLC Pkwy	56	67	64	-3	8	No	--	--	--	--	--	--	--
	R-24	WLC Pkwy	55	68	65	-3	10	No	--	--	--	--	--	--	--
	R-25	WLC Pkwy	55	**68**	--[4]	--	--	No	--	--	--	--	--	--	--
	R-26	WLC Pkwy	56	69	68	-1	12	No	--	--	--	--	--	--	--
	R-27	WLC Pkwy	57	70	--[4]	--	--	No	--	--	--	--	--	--	--
3	R-28	WLC Pkwy	49	62	63	1	14	Yes	61	59	58	56	55	54	Yes
	R-29	WLC Pkwy	57	70	70	0	13	No	--	--	--	--	--	--	--
	R-30	Theodore Street	52	57	58	1	6	No	--	--	--	--	--	--	--
	R-31	Theodore Street	53	58	61	3	8	No	--	--	--	--	--	--	--
	R-32	Theodore Street	56	62	62	0	6	No	--	--	--	--	--	--	--
	R-33	Theodore Street	46	51	52	1	6	No	--	--	--	--	--	--	--

Table 2.15.8 Design Variation 6a Predicted Noise Levels (2045) (dBA L_{eq})

Noise Barrier No.	Receptor No.	Location	Adjusted Existing Peak Noise Level	Predicted Noise Level Without Project	Predicted Noise Level with Project	With Project Minus No Project Conditions	With Project Minus Existing Conditions	Noise Impact Requiring Abatement Consideration	Predicted Noise Level with Abatement						Feasible?
									6 ft Wall	8 ft Wall	10 ft Wall	12 ft Wall	14 ft Wall	16 ft Wall	
	R-34	Theodore Street	51	56	55	-1	4	No	--	--	--	--	--	--	--
	R-35	Theodore Street	47	52	52	0	5	No	--	--	--	--	--	--	--
	R-36	Theodore Street	50	55	55	0	5	No	--	--	--	--	--	--	--
	R-37	Theodore Street	54	60	60	0	6	No	--	--	--	--	--	--	--
	R-38	Theodore Street	54	59	58	-1	4	No	--	--	--	--	--	--	--

Source: *Noise Study Report* (April 2019).
[1] No barrier was analyzed at this location because the modeled receptor would not approach or exceed the NAC, or there are no impact criteria for its land use.
[2] Numbers in bold represent noise levels that approach or exceed the NAC.
[3] Underlined noise levels have been attenuated by at least 5 dBA (i.e., feasible barrier height.)
[4] Shaded area represents receptors that would be fully acquired by the Project under Alternative 6a (Alternative 6 [LPA] with Design Variation).
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
NAC = Noise Abatement Criteria
SR-60 = State Route 60
WLC Pkwy = World Logistics Center Parkway

The following receptor locations would be or would continue to be exposed to noise levels that approach or exceed the NAC and/or a substantial noise increase under Alternative 2, Design Variation 2a, and Alternative 6 (LPA):

- **Receptor R-10:** This receptor location represents an existing residence along the east side of WLC Pkwy north of SR-60. Currently, there is no existing wall that shields this residence. One noise barrier (NB No. 1) was modeled at the top of the slope, on private property. Noise barriers were not evaluated within the State right-of-way or edge of shoulder because the receptor is approximately 30 ft higher in elevation than the area within the State right-of-way and the barrier would not be feasible at that location.

- **Receptor R-25:** This receptor location represents an existing residence along the east side of WLC Pkwy south of SR-60. Currently, there is no existing wall that shields this residence. One noise barrier (NB No. 2) was modeled along the City of Moreno Valley (City) right-of-way and private property line.

- **Receptor R-28:** This receptor location represents an existing residence along the east side of WLC Pkwy south of SR-60. Currently, there is no existing wall that shields this residence. One noise barrier (NB No. 3) was modeled along the City right-of-way and private property line.

The following receptor locations would be or would continue to be exposed to noise levels that approach or exceed the NAC and/or a substantial noise increase under Design Variation 6a:

- **Receptor R-10:** This receptor location represents an existing residence along the east side of WLC Pkwy north of SR-60. Currently, there is no existing wall that shields this residence. One noise barrier (NB No. 1) was modeled at the top of the slope, on private property. Noise barriers were not evaluated within the State right-of-way or edge of shoulder because the receptor is approximately 30 ft higher in elevation than the area within the State right-of-way and the barrier would not be feasible at that location.

- **Receptor R-28:** This receptor location represents an existing residence along the east side of WLC Pkwy south of SR-60. Currently, there is no existing wall that shields this residence. One noise barrier (NB No. 3) was modeled along the City right-of-way and private property line.

Noise Abatement Consideration

Noise abatement measures were evaluated for receptors located within the project limits that would be or would continue to be exposed to traffic noise levels approaching or exceeding the NAC and/or a substantial noise increase from the corresponding existing noise level. All properties requiring abatement consideration are within Activity Category B (67 dBA L_{eq} NAC). Noise barriers were analyzed for each of these receptor locations. Noise barrier heights from 6 to 16 ft at 2 ft increments were analyzed. The locations of the modeled noise barriers for Alternative 2, Design Variation 2a, Alternative 6 (LPA), and Design Variation 6a are shown on Figures 2.15-2 through 2.15-5, respectively.

The following noise barriers were analyzed to shield receptor locations that would be exposed to traffic noise levels approaching or exceeding the NAC and/or a substantial noise increase under Alternative 2, Design Variation 2a, Alternative 6 (LPA), and Design Variation 6a:

- **NB No. 1:** A 339 ft long barrier along the top of slope on private property on the east side of WLC Pkwy north of SR-60 was analyzed to shield Receptor R-10.

- **NB No. 2:** A 233 ft (Alternatives 2 and 6 [LPA]) and 206 ft (Design Variation 2a) long barrier along the City right-of-way and private property line on the east side of WLC Pkwy south of SR-60 was analyzed to shield Receptor R-25.

- **NB No. 3:** A 453 ft (Alternatives 2 and 6 [LPA]) and 434 ft (Design Variation 2a) long barrier along the City right-of-way and private property line on the east side of WLC Pkwy south of SR-60 was analyzed to shield Receptor R-28.

The following noise barriers were analyzed to shield receptor locations that would be exposed to traffic noise levels approaching or exceeding the NAC and/or a substantial noise increase under Design Variation 6a:

- **NB No. 1:** A 339 ft long barrier along the top of slope on private property on the east side of WLC Pkwy north of SR-60 was analyzed to shield Receptor R-10.

- **NB No. 3:** A 414 ft long barrier along the City right-of-way and private property line on the east side of WLC Pkwy south of SR-60 was analyzed to shield Receptor R-28.

Feasibility and Reasonable Allowance

Section 3 of the Caltrans Traffic Noise Analysis Protocol states that a minimum noise reduction of 5 dBA must be achieved at the impacted receptors in order for the proposed noise abatement measure to be considered feasible. Greater noise reductions are encouraged if they can be reasonably achieved. Feasibility may also be restricted by the following factors: (1) topography, (2) access requirement for driveways, (3) presence of local cross-streets, (4) underground utilities, (5) other noise sources in the area, and (6) safety considerations.

Table 2.15.9 lists the feasible noise barriers along with their heights, approximate lengths, highest noise attenuation, number of benefited units/receptors, total reasonable allowance, noise barrier locations, beginning and ending station numbers, and beginning and ending top of wall elevation for Alternative 2, Design Variation 2a, Alternative 6 (LPA), and Design Variation 6a. As shown in Table 2.15.9, NB Nos. 1, 2, and 3 were determined to be feasible under Alternative 2, Design Variation 2a, and Alternative 6 (LPA). For Design Variation 6a, NB Nos. 1 and 3 were determined to be feasible.

Table 2.15.9 Summary of Feasible Noise Barriers

Alternative	Noise Barrier No.	Height (ft)	Approximate Length (ft)	Highest Noise Attenuation (dBA)	Number of Benefited Receptors/Units[1]	Total Reasonable Allowance[2]	Noise Barrier Location	Noise Barrier Station Number		Top of Wall Elevation	
								Begin	End	Begin	End
2	1	6	339	5	1	$107,000	PL	489+10	491+15	1,817.00	1,828.00
		8	339	6	1	$107,000				1,819.00	1,830.00
		10	339	7	1	$107,000				1,821.00	1,832.00
		12	339	8	1	$107,000				1,823.00	1,834.00
		14	339	9	1	$107,000				1,825.00	1,836.00
		16	339	10	1	$107,000				1,827.00	1,838.00
	2	8	233	5	1	$107,000	ROW/PL	175+40	176+47	1,708.96	1,712.45
		10	233	6	1	$107,000				1,710.96	1,714.45
		12	233	10	1	$107,000				1,712.96	1,716.45
		14	233	11	1	$107,000				1,714.96	1,718.45
		16	233	11	1	$107,000				1,716.96	1,720.45
	3	10	453	5	1	$107,000	ROW/PL	170+52	172+17	1,697.90	1,702.00
		12	453	8	1	$107,000				1,699.90	1,704.00
		14	453	8	1	$107,000				1,701.90	1,706.00
		16	453	9	1	$107,000				1,703.90	1,708.00
2a	1	6	339	5	1	$107,000	PL	489+10	491+15	1,817.00	1,828.00
		8	339	6	1	$107,000				1,819.00	1,830.00
		10	339	7	1	$107,000				1,821.00	1,832.00
		12	339	8	1	$107,000				1,823.00	1,834.00
		14	339	9	1	$107,000				1,825.00	1,836.00
		16	339	10	1	$107,000				1,827.00	1,838.00
	2	8	206	5	1	$107,000	ROW/PL	175+40	176+32	1,708.96	1,712.36
		10	206	7	1	$107,000				1,710.96	1,714.36
		12	206	9	1	$107,000				1,712.96	1,716.36
		14	206	10	1	$107,000				1,714.96	1,718.36
		16	206	10	1	$107,000				1,716.96	1,720.36
	3	10	434	6	1	$107,000	ROW/PL	170+52	172+17	1,697.90	1,702.12
		12	434	8	1	$107,000				1,699.90	1,704.12
		14	434	9	1	$107,000				1,701.90	1,706.12
		16	434	9	1	$107,000				1,703.90	1,708.12
6 (LPA)	1	6	339	6	1	$107,000	PL	489+10	491+15	1,817.00	1,828.00
		8	339	6	1	$107,000				1,819.00	1,830.00
		10	339	7	1	$107,000				1,821.00	1,832.00
		12	339	8	1	$107,000				1,823.00	1,834.00

Table 2.15.9 Summary of Feasible Noise Barriers

Alternative	Noise Barrier No.	Height (ft)	Approximate Length (ft)	Highest Noise Attenuation (dBA)	Number of Benefited Receptors/Units[1]	Total Reasonable Allowance[2]	Noise Barrier Location	Noise Barrier Station Number		Top of Wall Elevation	
								Begin	End	Begin	End
6 (LPA)	1	14	339	9	1	$107,000	PL	489+10	491+15	1,825.00	1,836.00
		16	339	9	1	$107,000				1,827.00	1,838.00
	2	8	233	5	1	$107,000	ROW/PL	175+40	176+47	1,708.96	1,712.45
		10	233	6	1	$107,000				1,710.96	1,714.45
		12	233	10	1	$107,000				1,712.96	1,716.45
		14	233	11	1	$107,000				1,714.96	1,718.45
		16	233	11	1	$107,000				1,716.96	1,720.45
	3	10	453	5	1	$107,000	ROW/PL	170+52	172+17	1,697.90	1,702.12
		12	453	8	1	$107,000				1,699.90	1,704.12
		14	453	8	1	$107,000				1,701.90	1,706.12
		16	453	9	1	$107,000				1,703.90	1,708.12
6a	1	6	339	6	1	$107,000	PL	489+10	491+15	1,817.00	1,828.00
		8	339	6	1	$107,000				1,819.00	1,830.00
		10	339	7	1	$107,000				1,821.00	1,832.00
		12	339	8	1	$107,000				1,823.00	1,834.00
		14	339	9	1	$107,000				1,825.00	1,836.00
		16	339	9	1	$107,000				1,827.00	1,838.00
	3	10	414	5	1	$107,000	ROW/PL	170+52	172+17	1,697.90	1,702.12
		12	414	7	1	$107,000				1,699.90	1,704.12
		14	414	8	1	$107,000				1,701.90	1,706.12
		16	414	9	1	$107,000				1,703.90	1,708.12

Source: Compiled by LSA Associates, Inc. (2019).
[1] Number of receptors/units that are attenuated by 5 dBA or more by the modeled barrier.
[2] Calculated by multiplying the number of benefited receptors by $95,000 (reasonable allowance per benefited receptor/unit).
dBA = A-weighted decibels
ft = foot/feet
LPA = Locally Preferred Alternative
PL = property line
ROW = right-of-way

Noise Barrier Reasonableness

The reasonableness of a noise barrier is determined by comparing the estimated cost of constructing the noise barrier against the total reasonable allowance. The total reasonable allowance is determined based on the number of benefited receptors/residential units multiplied by the reasonable allowance per receptors/ residential units. Additionally, in accordance with the Caltrans *Traffic Noise Analysis Protocol* (2011), each noise barrier must provide at least 7 dBA of noise reduction at one or more benefited receptors/residential units to be considered reasonable. Therefore, if the estimated noise barrier construction cost exceeds the total reasonable allowance or was not predicted to provide at least 7 dBA of noise reduction at one or more benefited receptors/residential units, the noise barrier is determined to be not reasonable. However, if the estimated noise barrier construction cost is less than the total reasonable allowance and is predicted to provide at least 7 dBA of noise reduction at one or more benefited receptors/ residential units, the noise barrier is determined to be reasonable.

The estimated noise barrier construction cost was developed by the project engineer. A summary of abatement information in Table 2.15.10 lists the feasible noise barriers, along with their heights, approximate lengths, highest noise attenuation, number of benefited units/receptors, total reasonable allowance per barrier, and whether the noise barrier is reasonable with and without the right-of-way acquisition cost. As shown in Table 2.15.10, none of the feasible noise barriers under Alternative 2, Design Variation 2a, Alternative 6 (LPA), and Design Variation 6a were determined to be reasonable because the estimated noise barrier construction cost exceeded the total reasonable allowance.

Based on the studies completed to date, Caltrans does not intend to incorporate noise abatement in the form of barriers because the feasible noise barriers were determined to be not reasonable.

2.15.4 Avoidance, Minimization, and/or Abatement Measures

The project will incorporate Project Feature PF-N-1 to help avoid and/or minimize potential noise impacts during project construction. No avoidance, minimization, and/or abatement measures other than the Standard Project Features are required.

Table 2.15.10 Noise Barrier Reasonableness

Alternative	Noise Barrier No.	Noise Barrier Location	Height (ft)	Approximate Length (ft)	Noise Attenuation Level (dBA)	Number of Benefited Receptors/ Units[1]	Total Reasonable Allowance[2]	Estimated Construction Cost (Without ROW Donation)[3]	Reasonable ?	Estimated Construction Cost (With ROW Donation)[3]	Reasonable ?
2	1	PL	6	339	5	1	$107,000	--[4]	No	--[4]	No
			8	339	6	1	$107,000	--	No	--	No
			10	339	7	1	$107,000	$147,220	No	$128,820	No
			12	339	8	1	$107,000	$164,662	No	$146,262	No
			14	339	9	1	$107,000	$181,324	No	$162,924	No
			16	339	10	1	$107,000	$197,986	No	$179,586	No
	2	ROW/PL	8	233	5	1	$107,000	--	No	--	No
			10	233	6	1	$107,000	--	No	--	No
			12	233	10	1	$107,000	$140,734	No	$129,334	No
			14	233	11	1	$107,000	$152,308	No	$140,908	No
			16	233	11	1	$107,000	$163,882	No	$152,482	No
	3	ROW/PL	10	453	5	1	$107,000	--	No	--	No
			12	453	8	1	$107,000	$191,614	No	$178,114	No
			14	453	8	1	$107,000	$213,748	No	$200,248	No
			16	453	9	1	$107,000	$235,882	No	$222,382	No
2a	1	PL	6	339	5	1	$107,000	--	No	--	No
			8	339	6	1	$107,000	--	No	--	No
			10	339	7	1	$107,000	$178,114	No	$128,820	No
			12	339	8	1	$107,000	$200,248	No	$146,262	No
			14	339	9	1	$107,000	$222,382	No	$162,924	No
			16	339	10	1	$107,000	$178,114	No	$179,586	No
	2	ROW/PL	8	206	5	1	$107,000	--	No	--	No
			10	206	7	1	$107,000	$121,900	No	$110,500	No
			12	206	9	1	$107,000	$132,958	No	$121,558	No
			14	206	10	1	$107,000	$128,236	No	$116,836	No
			16	206	10	1	$107,000	$138,514	No	$127,114	No
	3	ROW/PL	10	434	6	1	$107,000	--	No	--	No
			12	434	8	1	$107,000	$187,942	No	$172,942	No
			14	434	9	1	$107,000	$209,164	No	$194,164	No
			16	434	9	1	$107,000	$230,386	No	$215,386	No
6 (LPA)	1	PL	6	339	6	1	$107,000	--	No	--	No
			8	339	6	1	$107,000	--	No	--	No
			10	339	7	1	$107,000	$147,220	No	$128,820	No
			12	339	8	1	$107,000	$164,662	No	$146,262	No
			14	339	9	1	$107,000	$181,324	No	$162,924	No
			16	339	9	1	$107,000	$197,986	No	$179,586	No

Table 2.15.10 Noise Barrier Reasonableness

Alternative	Noise Barrier No.	Noise Barrier Location	Height (ft)	Approximate Length (ft)	Noise Attenuation Level (dBA)	Number of Benefited Receptors/ Units[1]	Total Reasonable Allowance[2]	Estimated Construction Cost (Without ROW Donation)[3]	Reasonable ?	Estimated Construction Cost (With ROW Donation)[3]	Reasonable ?
6 (LPA)	2	ROW/PL	8	233	5	1	$107,000	--	No	--	No
			10	233	6	1	$107,000	--	No	--	No
			12	233	10	1	$107,000	$140,734	No	$129,334	No
			14	233	11	1	$107,000	$152,308	No	$140,908	No
			16	233	11	1	$107,000	$163,882	No	$152,482	No
	3	ROW/PL	10	453	5	1	$107,000	--	No	--	No
			12	453	8	1	$107,000	$192,766	No	$178,306	No
			14	453	8	1	$107,000	$214,900	No	$200,440	No
			16	453	9	1	$107,000	$237,034	No	$222,574	No
6a	1	PL	6	339	6	1	$107,000	--	No	--	No
			8	339	6	1	$107,000	--	No	--	No
			10	339	7	1	$107,000	$147,220	No	$128,820	No
			12	339	8	1	$107,000	$164,662	No	$146,262	No
			14	339	9	1	$107,000	$181,324	No	$162,924	No
			16	339	9	1	$107,000	$197,986	No	$179,586	No
	3	ROW/PL	10	414	5	1	$107,000	--	No	--	No
			12	414	7	1	$107,000	$186,898	No	$167,968	No
			14	414	8	1	$107,000	$207,160	No	$188,230	No
			16	414	9	1	$107,000	$227,422	No	$208,492	No

Source: Compiled by LSA Associates, Inc. (2019).

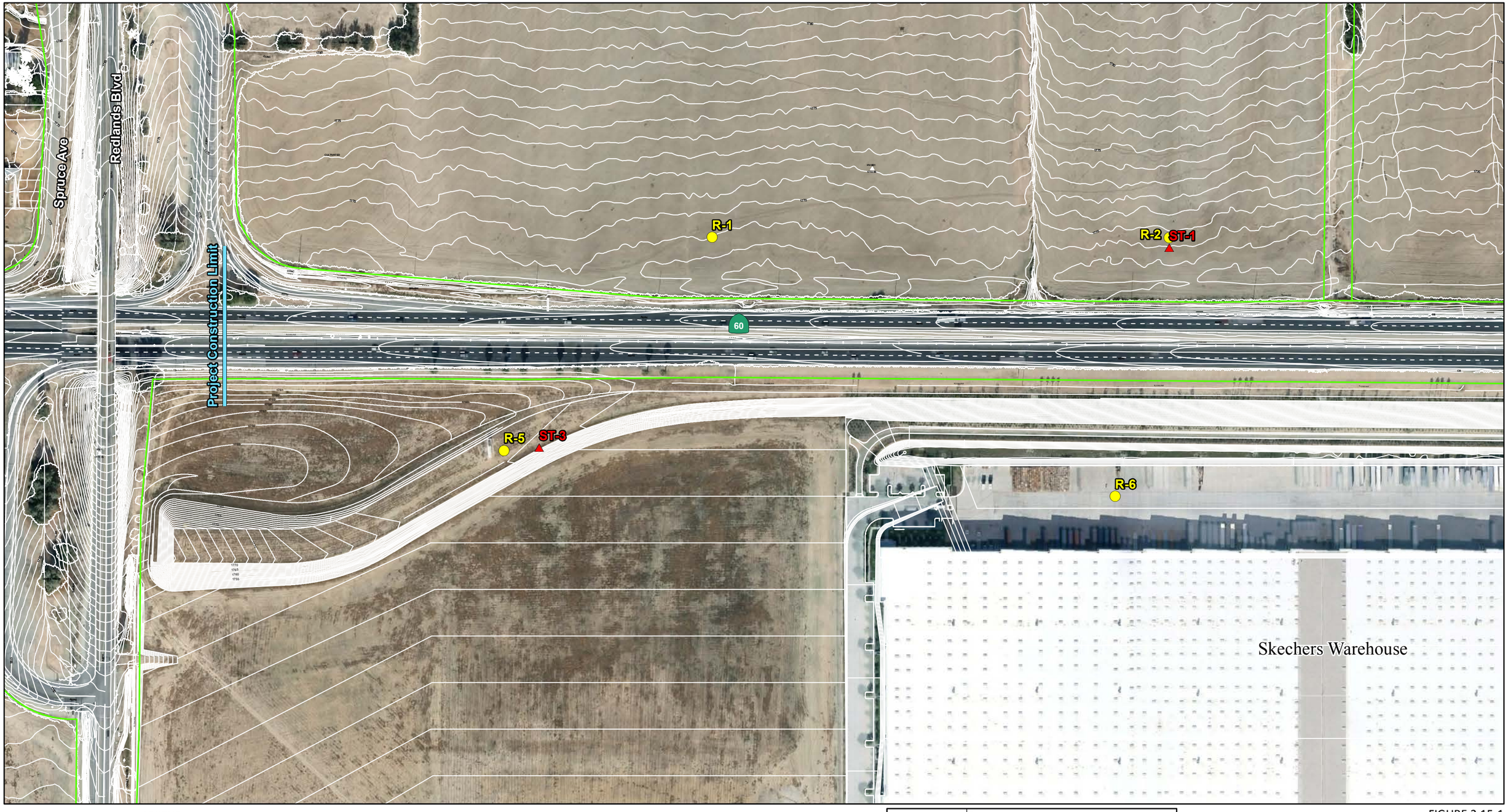
[1] Number of receptors/units that are attenuated by 5 dBA or more by the modeled barrier.

[2] Calculated by multiplying the number of benefited receptors by $107,000 (the dollar amount per benefited receptor/unit).

[3] Construction cost estimate provided by Michael Baker International (2019).

[4] Shaded area represents barrier heights that have been determined to be not reasonable because the barrier would not reduce noise levels by 7 dBA or more.

dBA = A-weighted decibels
ft = foot/feet
LPA = Locally Preferred Alternative
ROW = right-of-way



LEGEND

- Short-Term Monitoring Locations
- Modeled Receptor Locations
- Long-Term Monitoring Location
- Existing Right-of-Way

0 100 200
FEET

SOURCE: Google Imagery (2012); RBF (7/31/2013)

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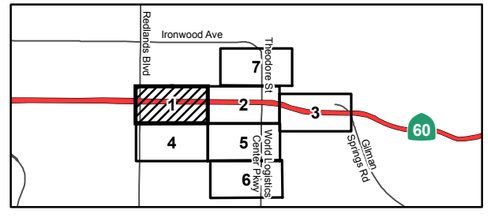

FIGURE 2.15-1

Sheet 1 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Monitoring and Modeled Receptor Locations

08-RIV-60 PM 20.0/22.0

EA No. 0M590

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LEGEND

- Short-Term Monitoring Locations
- Modeled Receptor Locations
- Long-Term Monitoring Location
- Existing Right-of-Way

0 100 200
FEET

SOURCE: Google Imagery (2012); RBF (7/31/2013)

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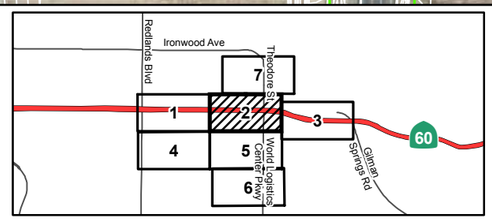

FIGURE 2.15-1
Sheet 2 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Monitoring and Modeled Receptor Locations

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Short-Term Monitoring Locations
- Modeled Receptor Locations
- Long-Term Monitoring Location
- Existing Right-of-Way

0 100 200
FEET

SOURCE: Google Imagery (2012); RBF (7/31/2013)

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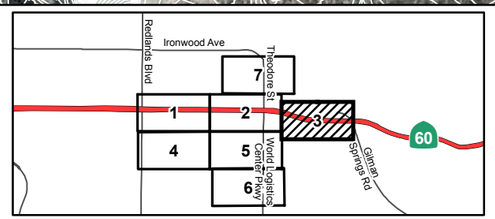

FIGURE 2.15-1

Sheet 3 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Monitoring and Modeled Receptor Locations

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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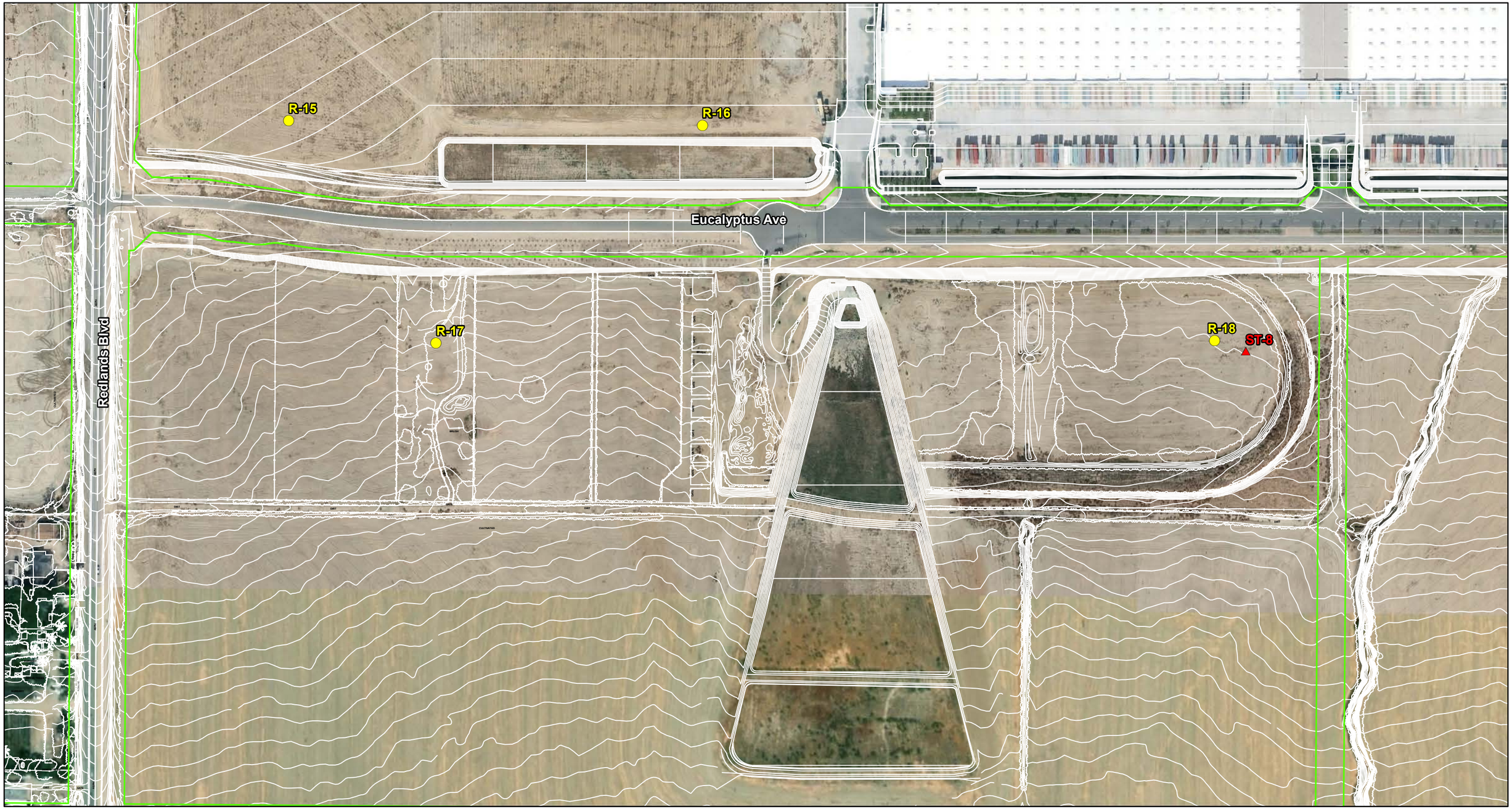

LEGEND

- Short-Term Monitoring Locations
- Modeled Receptor Locations
- Long-Term Monitoring Location
- Existing Right-of-Way

0 100 200
FEET

SOURCE: Google Imagery (2012); RBF (7/31/2013)

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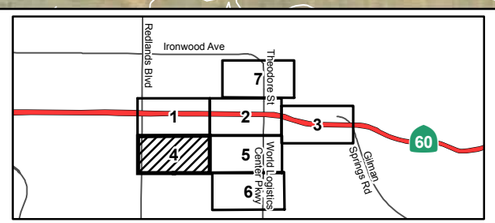

FIGURE 2.15-1

Sheet 4 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Monitoring and Modeled Receptor Locations

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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Skechers
Warehouse

Eucalyptus Ave

World Logistics Center Pkwy

Herschel Ln

R-19

ST-10

R-23

R-20

ST-9

R-21

R-24

ST-11

R-25

R-22

R-27

LEGEND

- Short-Term Monitoring Locations
- Modeled Receptor Locations
- Long-Term Monitoring Location
- Existing Right-of-Way

0 100 200
FEET

SOURCE: Google Imagery (2012); RBF (7/31/2013)

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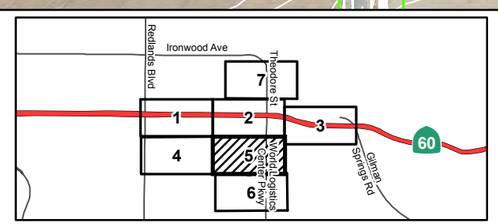

FIGURE 2.15-1

Sheet 5 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Monitoring and Modeled Receptor Locations

08-RIV-60 PM 20.0/22.0

EA No. 0M590

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R-26
R-27
R-28
R-29
Project Construction Limit
Sue Ann Ln
Herschel Ln
Dracaea Ave
World Logistics Center Pkwy
Dracaea Ave

LEGEND

- Short-Term Monitoring Locations
- Modeled Receptor Locations
- Long-Term Monitoring Location
- Existing Right-of-Way

N

0 100 200
FEET

SOURCE: Google Imagery (2012); RBF (7/31/2013)

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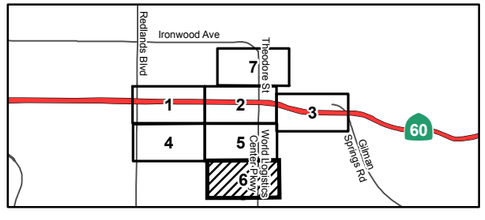

FIGURE 2.15-1
Sheet 6 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Monitoring and Modeled Receptor Locations
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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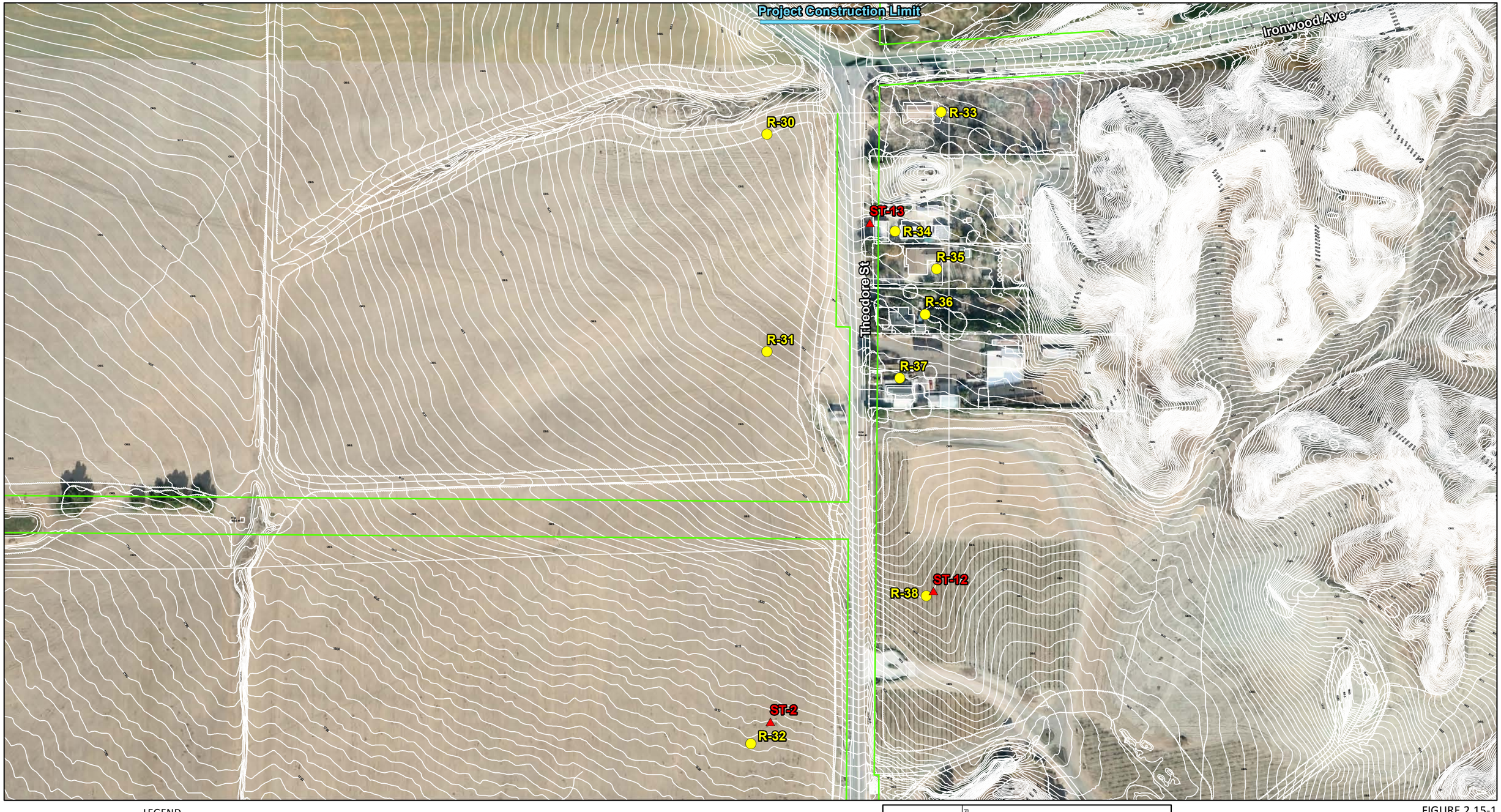

LEGEND

- Short-Term Monitoring Locations
- Modeled Receptor Locations
- Long-Term Monitoring Location
- Existing Right-of-Way

N

0 100 200
FEET

SOURCE: Google Imagery (2012); RBF (7/31/2013)

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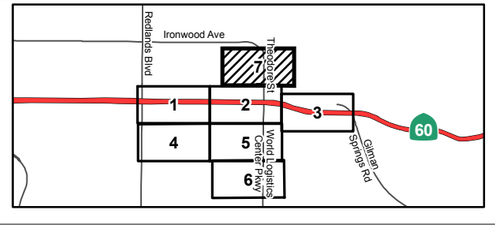

FIGURE 2.15-1

Sheet 7 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Monitoring and Modeled Receptor Locations

08-RIV-60 PM 20.0/22.0

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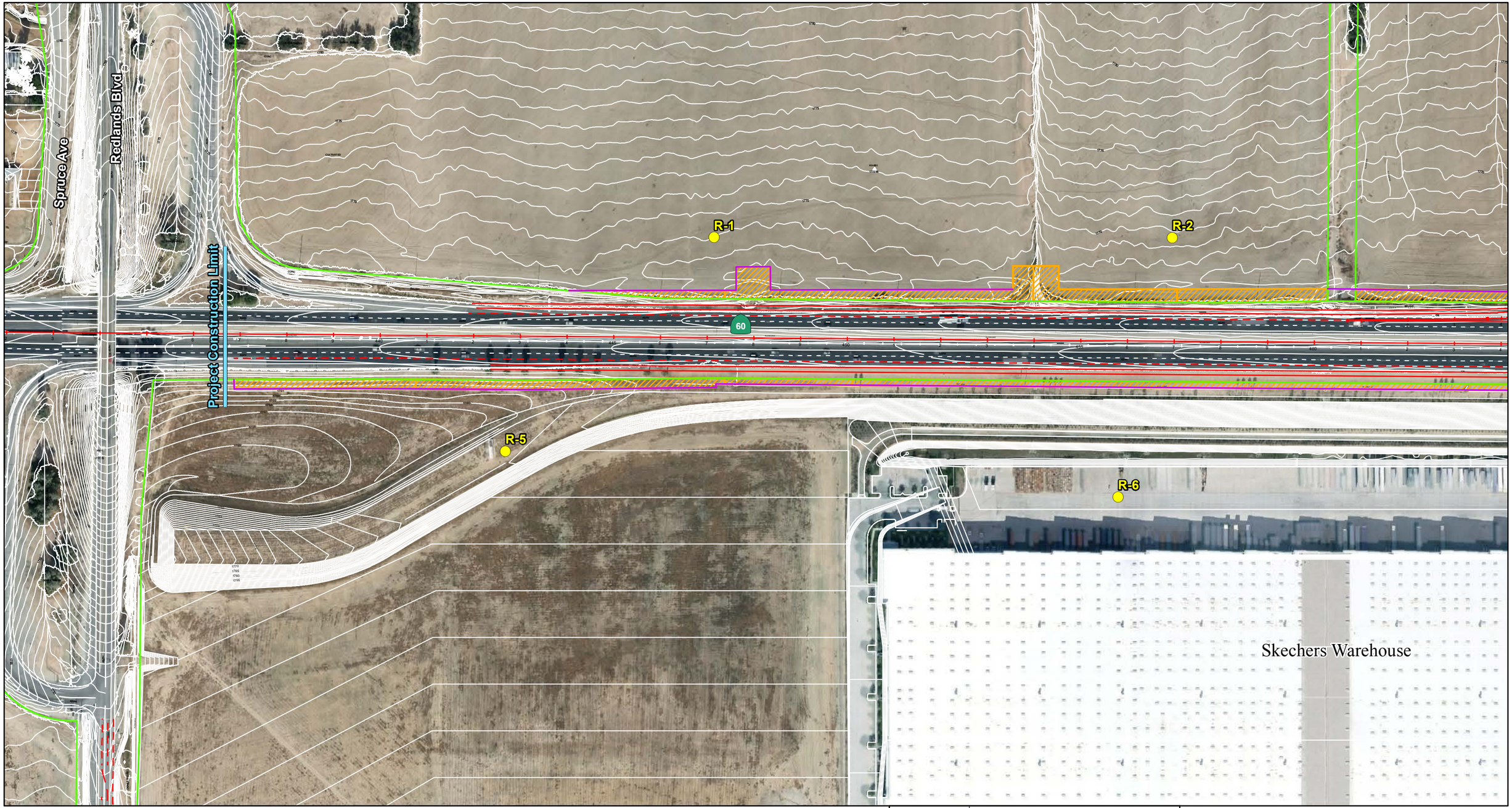


LEGEND

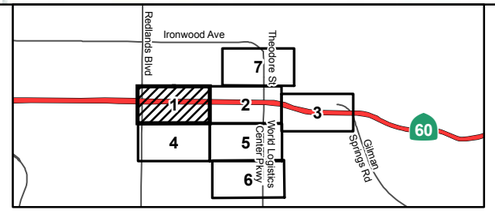
- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 2 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquistition

- Full Acquistition
- Partial Acquisition

N

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-2
Sheet 1 of 7
SR-60/World Logistics Center Pkwy Interchange Project
Modeled Noise Barrier and Receptor Locations for Alternative 2

08-RIV-60 PM 20.0/22.0
EA No. 0M590
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R-4
R-3
R-10
489+10
491+15
NB No. 1
60
R-7
R-8
Skechers Warehouse
R-9
R-12

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 2 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquistition

- Full Acquistition
- Partial Acquisition

N

0 100 200
FEET

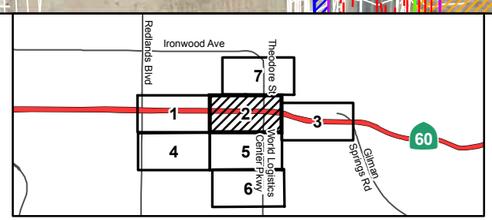

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FIGURE 2.15-2
Sheet 2 of 7
SR-60/World Logistics Center Pkwy Interchange Project
Modeled Noise Barrier and Receptor Locations for Alternative 2

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R-11

R-13

R-14

Gilman Springs Rd

60

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 2 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquistition

- Full Acquistition
- Partial Acquisition

N

0 100 200

FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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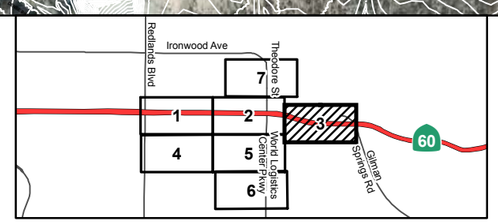

FIGURE 2.15-2

Sheet 3 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 2

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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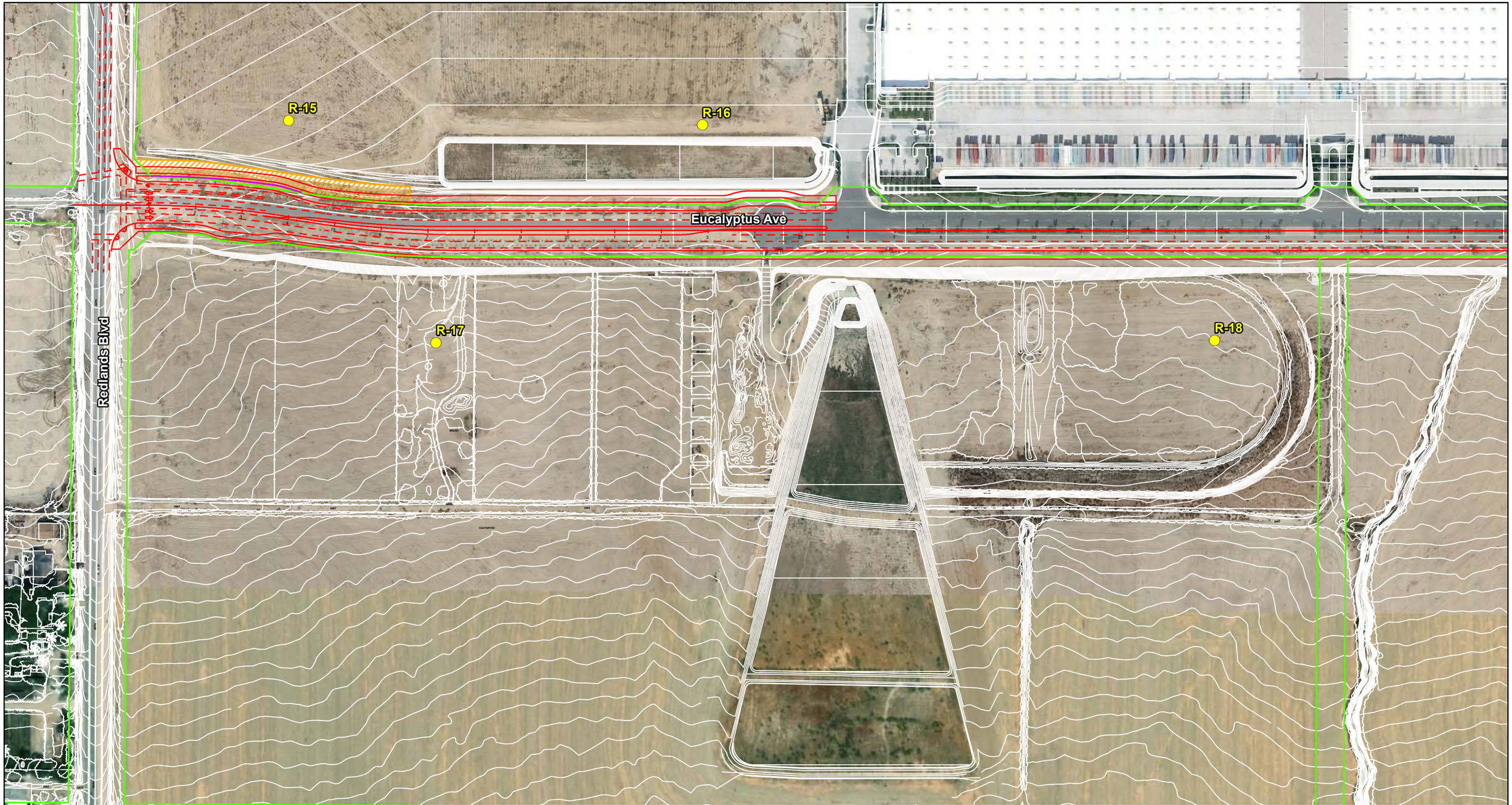


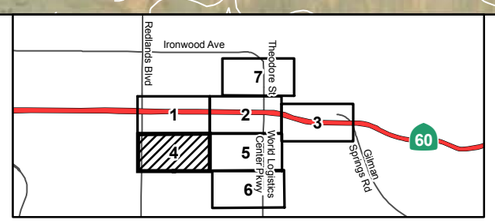
LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 2 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquistition

- Full Acquistition
- Partial Acquisition

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-2
Sheet 4 of 7
SR-60/World Logistics Center Pkwy Interchange Project
Modeled Noise Barrier and Receptor Locations for Alternative 2

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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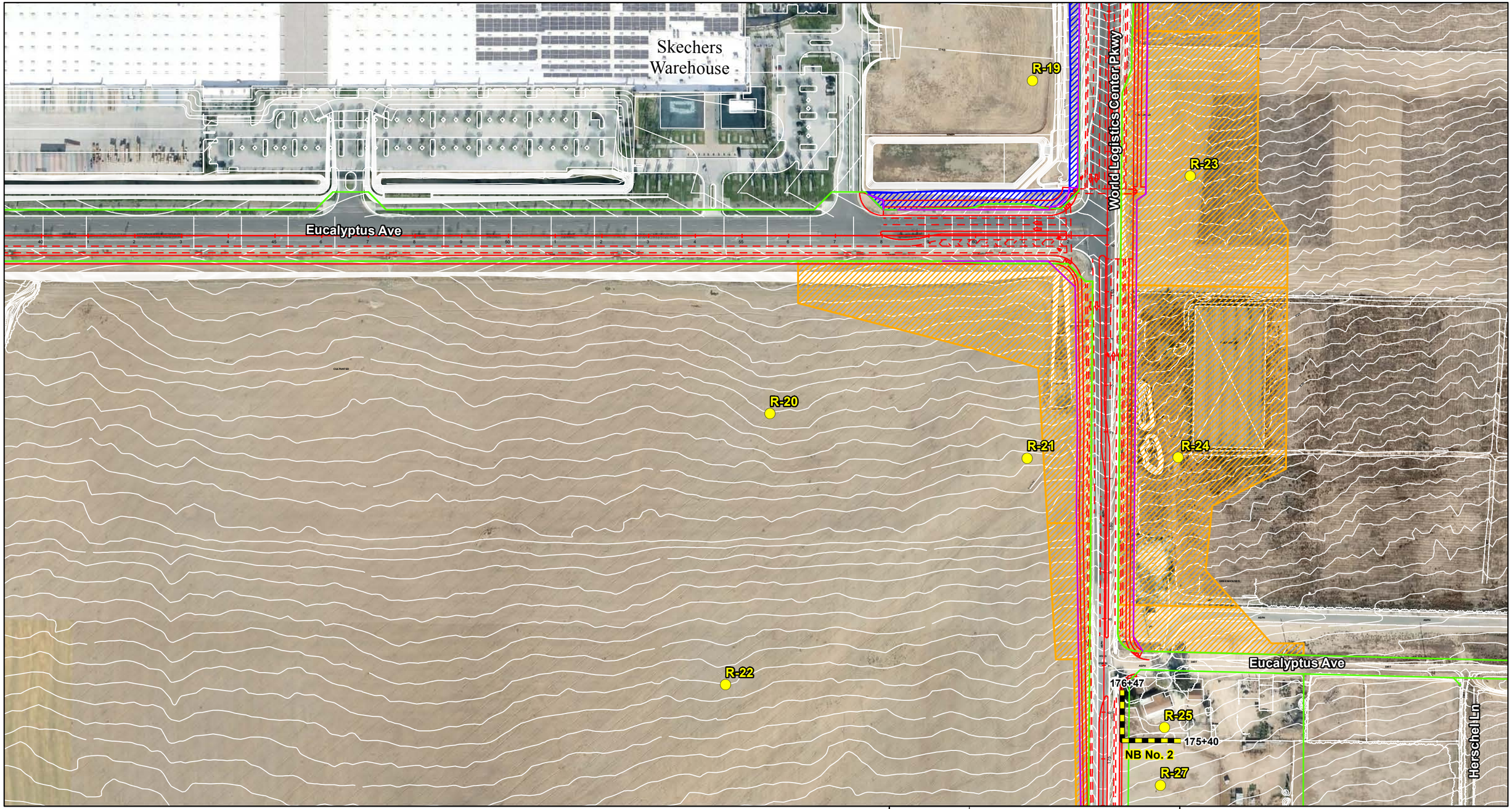


LEGEND

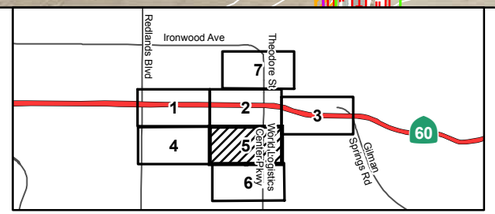
- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 2 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquistition

- Full Acquistition
- Partial Acquisition

N

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-2
Sheet 5 of 7
SR-60/World Logistics Center Pkwy Interchange Project
Modeled Noise Barrier and Receptor Locations for Alternative 2

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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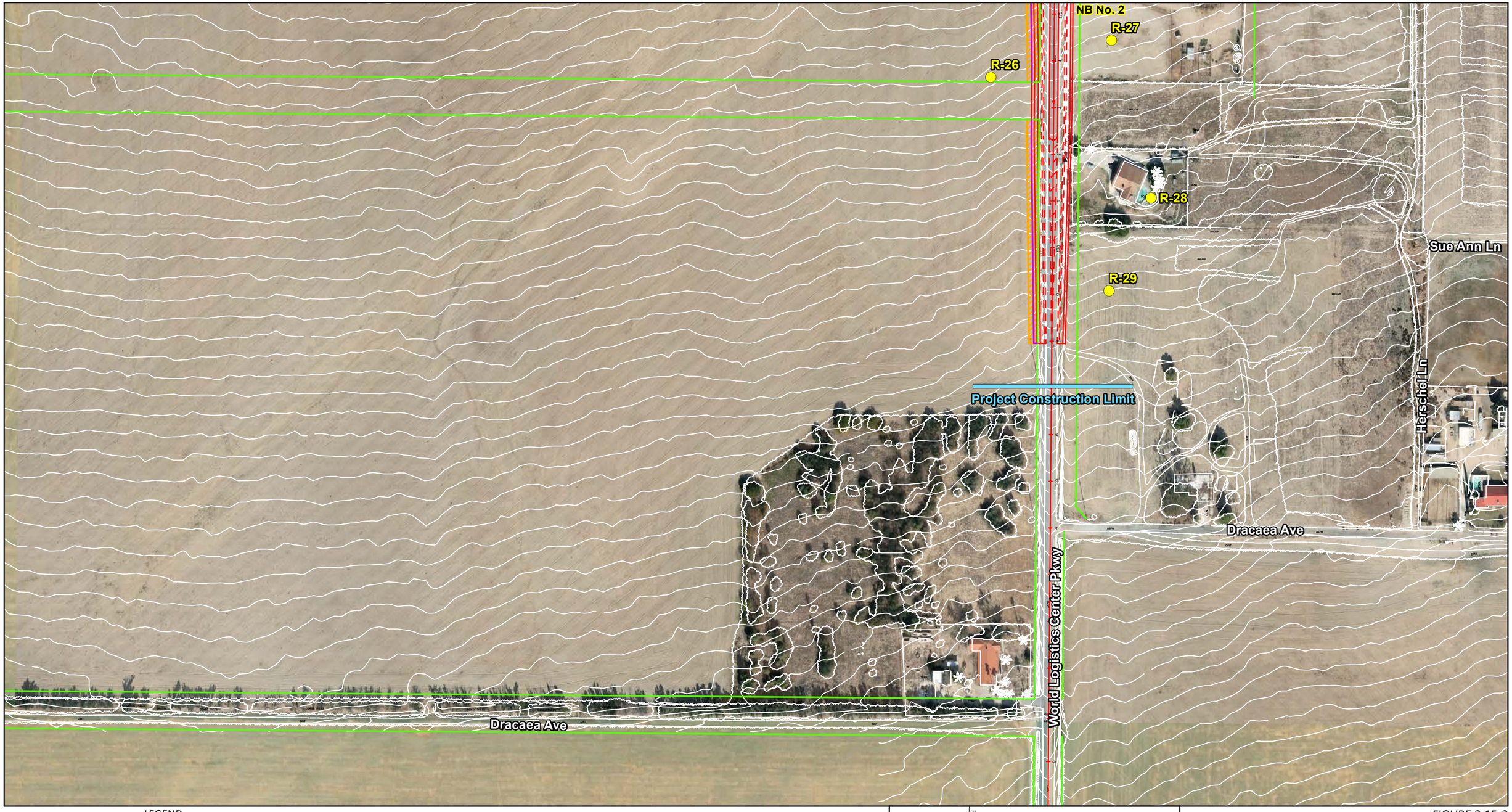


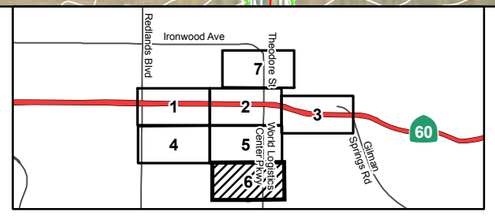
LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 2 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquistition

- Full Acquistition
- Partial Acquisition

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-2
Sheet 6 of 7
SR-60/World Logistics Center Pkwy Interchange Project
Modeled Noise Barrier and Receptor Locations for Alternative 2

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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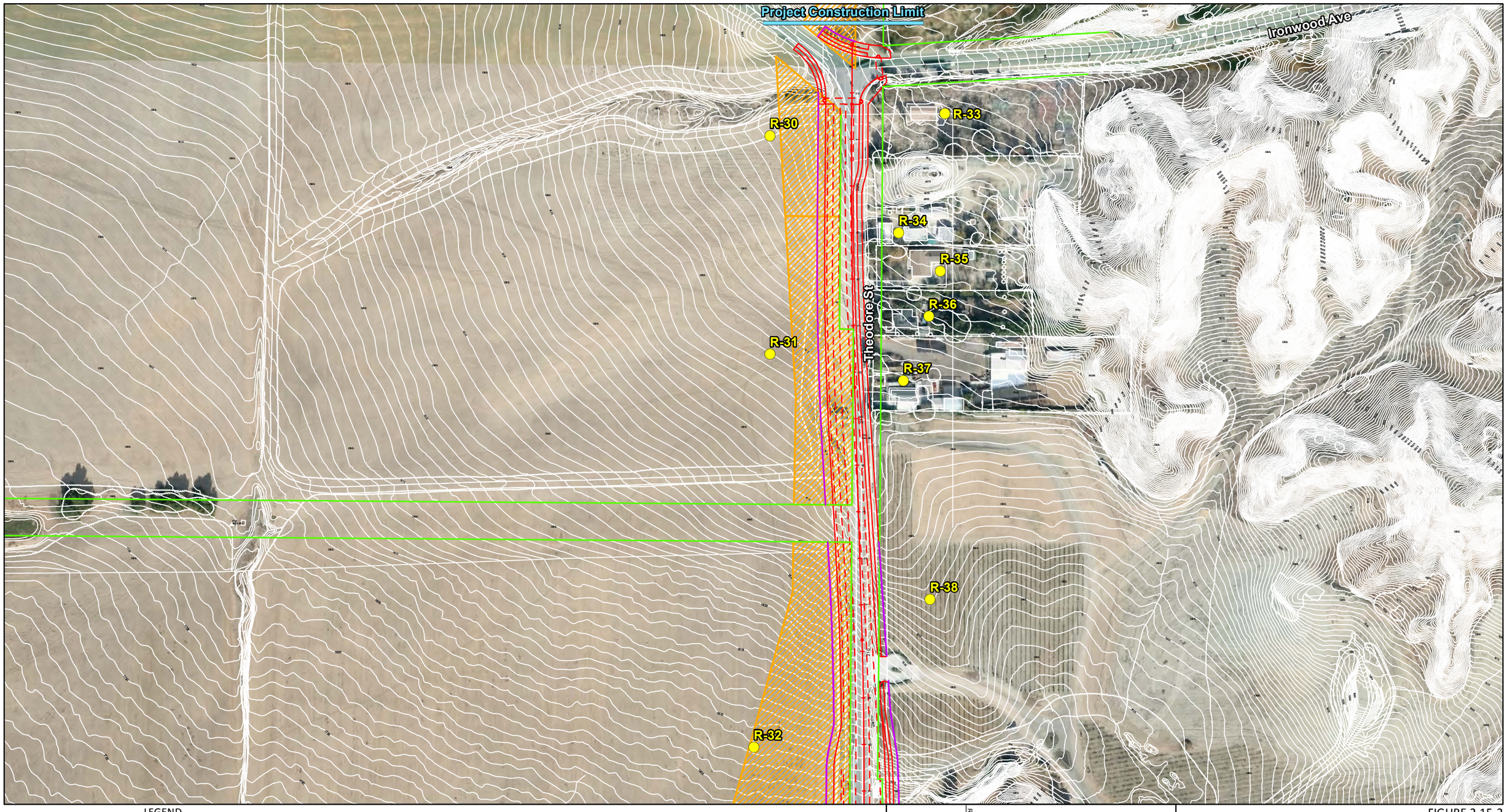


LEGEND

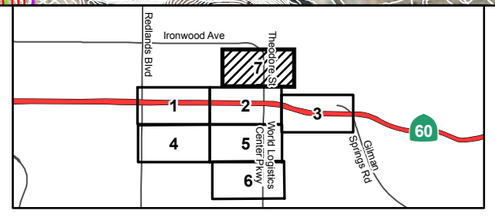
- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 2 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquistition

- Full Acquistition
- Partial Acquisition

N

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-2

Sheet 7 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 2

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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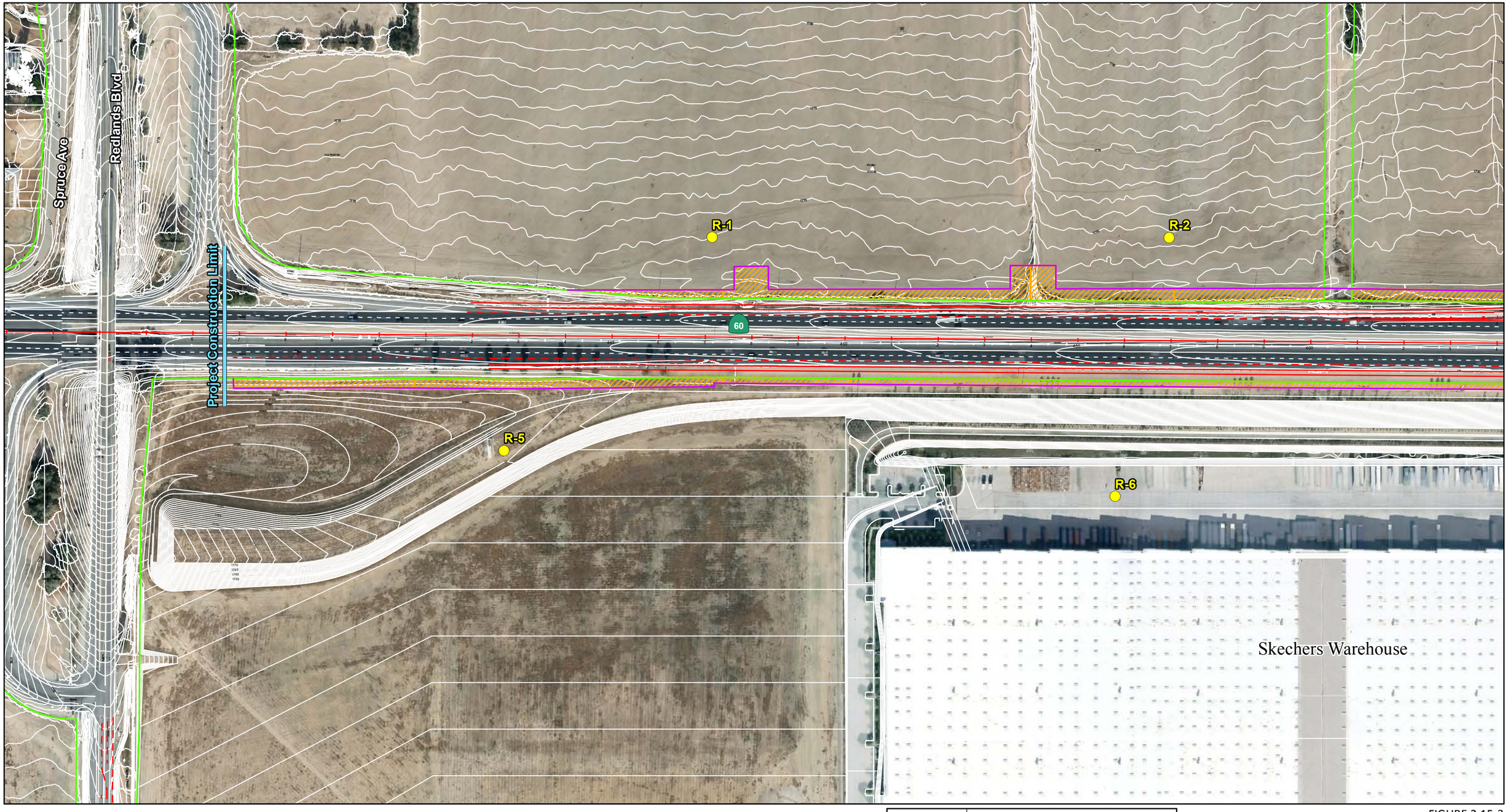

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 2a Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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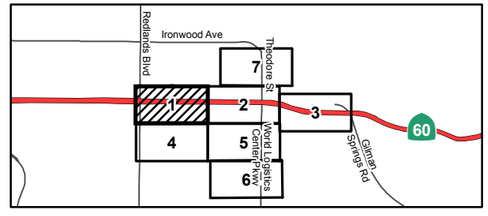

FIGURE 2.15-3

Sheet 1 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 2a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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R-4
R-3
R-10
489+10
491+15
NB No. 1
60
World Logistics Center Pkwy
R-7
R-8
Skechers Warehouse
R-9
R-12

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 2a Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

N

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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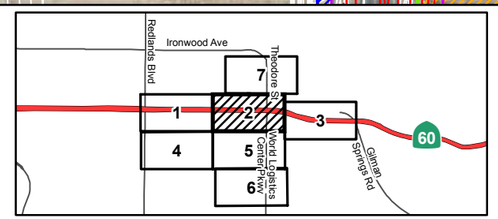

FIGURE 2.15-3

Sheet 2 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 2a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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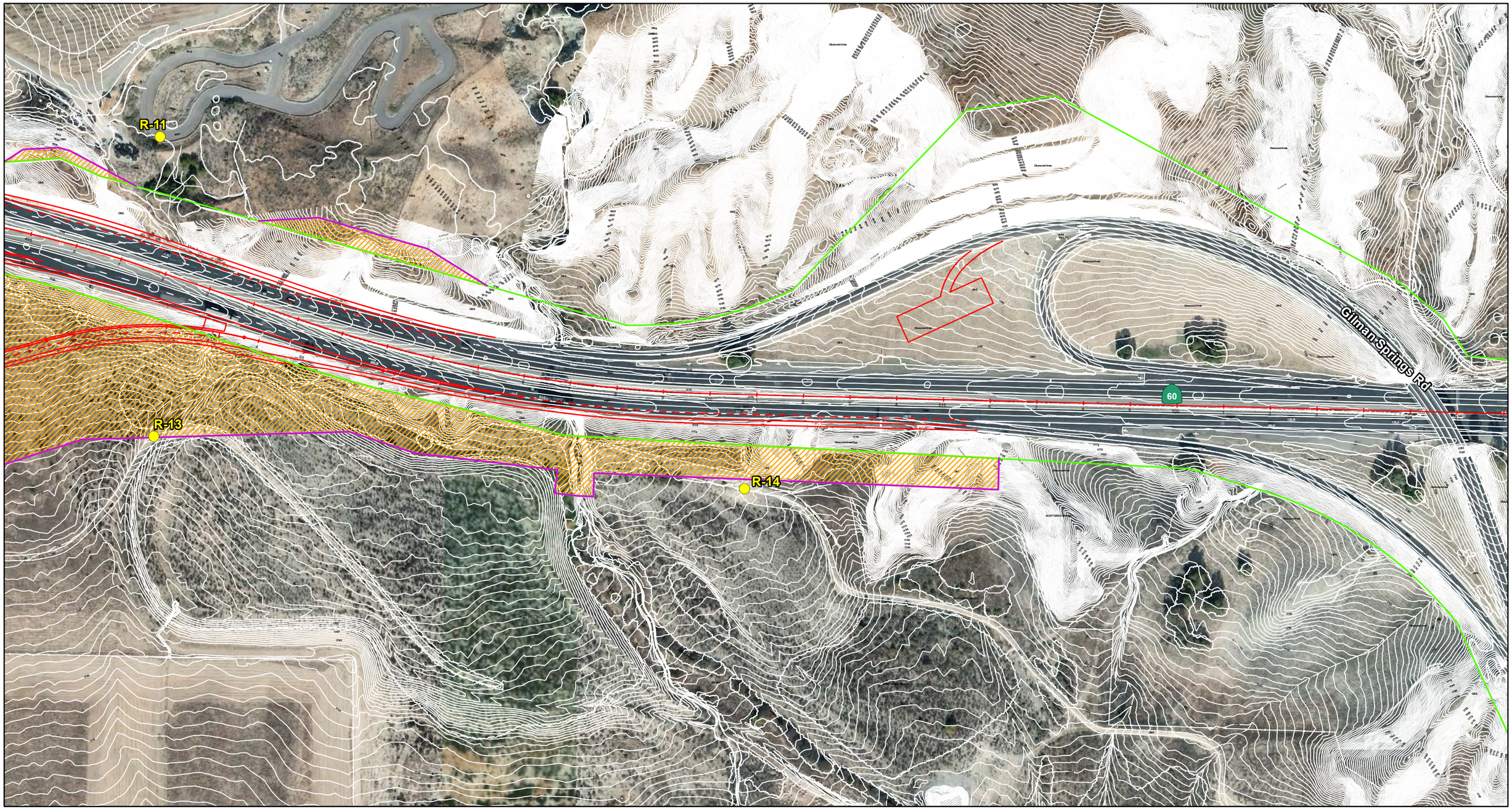

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 2a Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

0 100 200
FEET

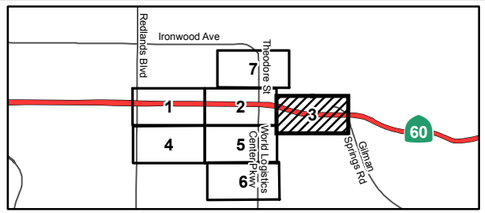

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FIGURE 2.15-3

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SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 2a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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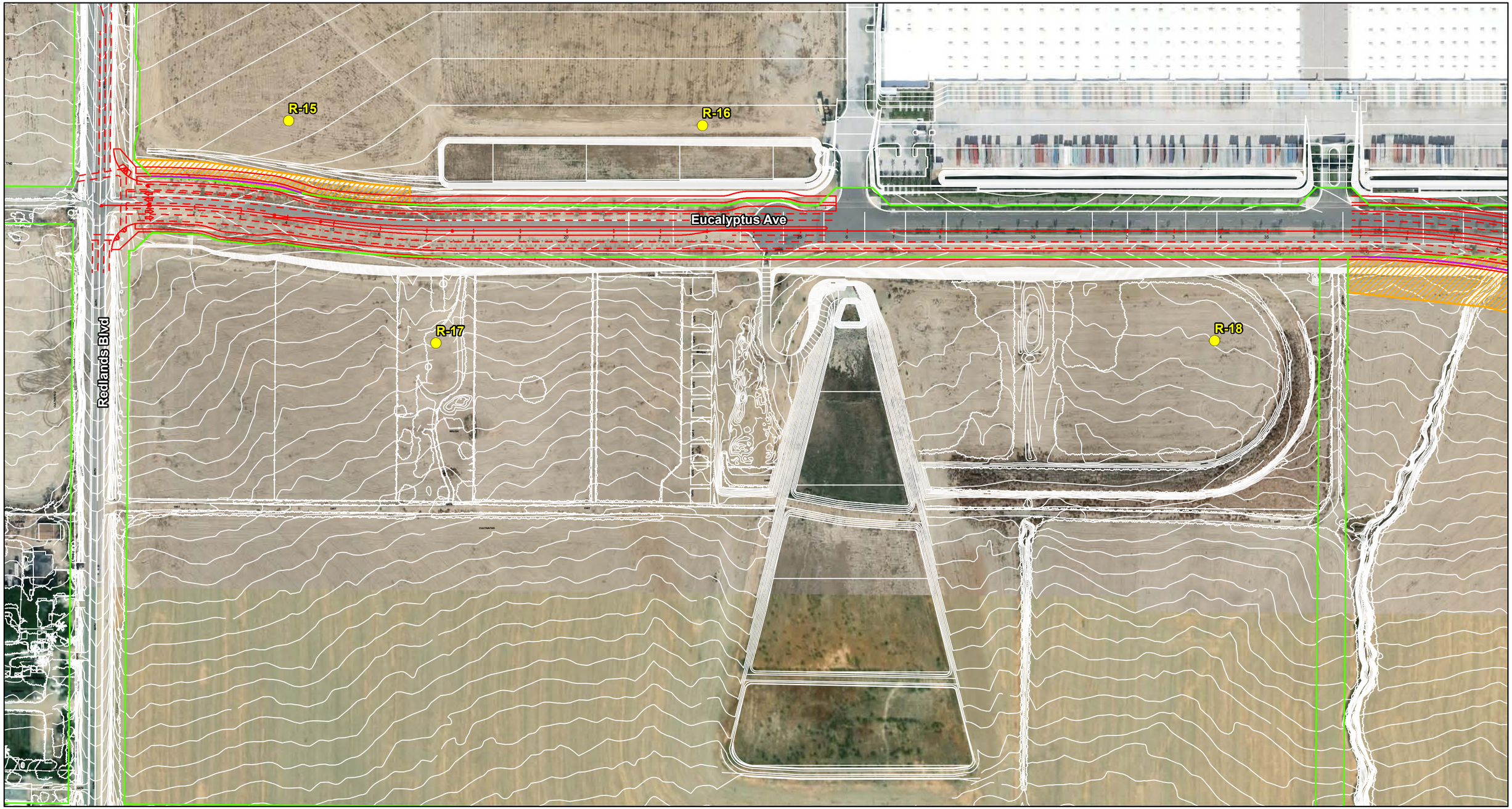

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 2a Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

N

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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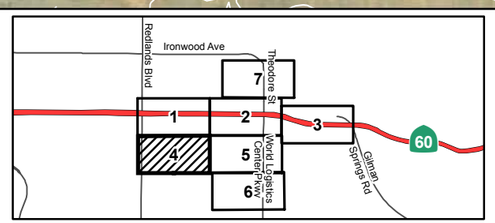

FIGURE 2.15-3

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SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 2a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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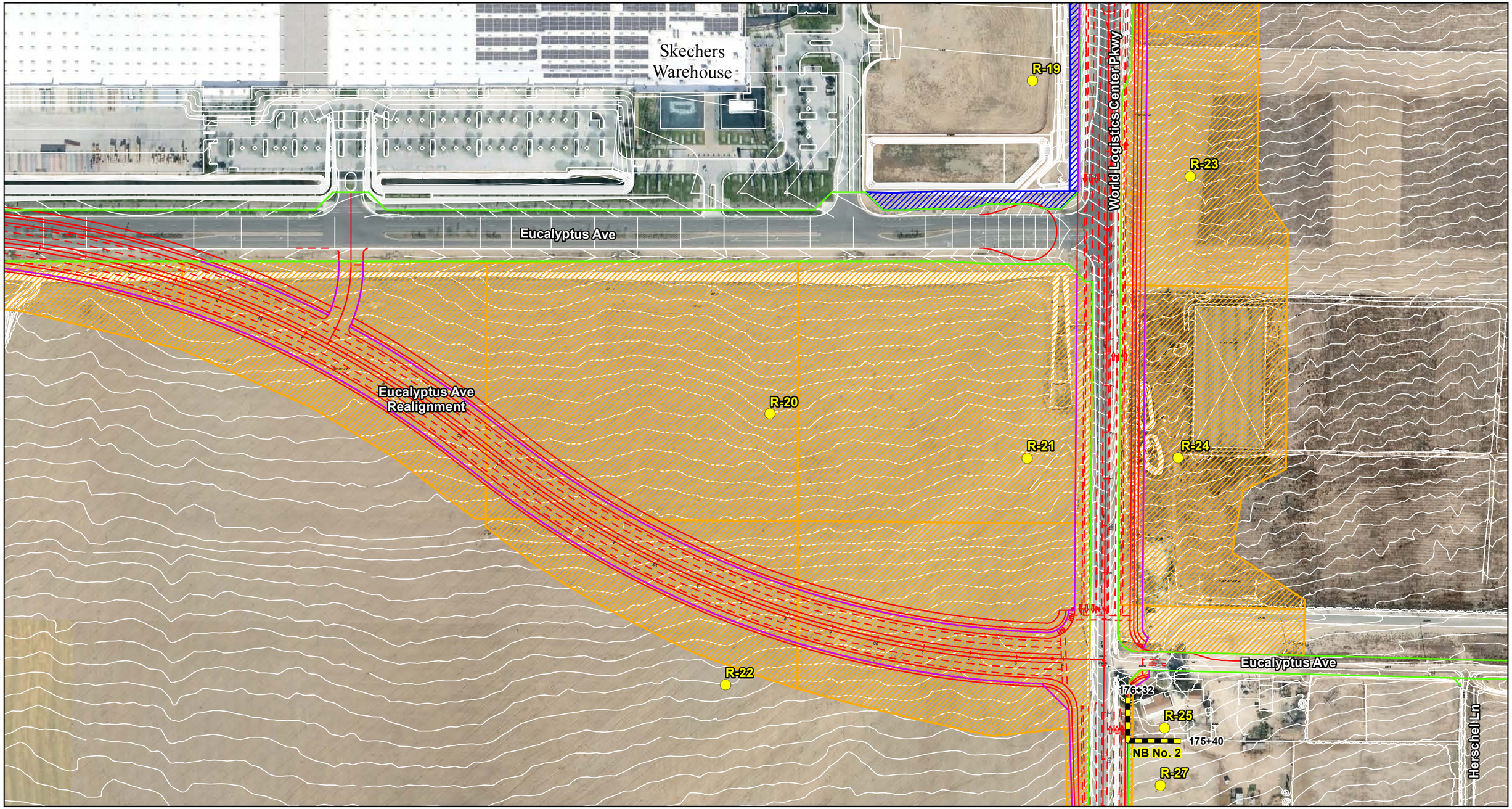
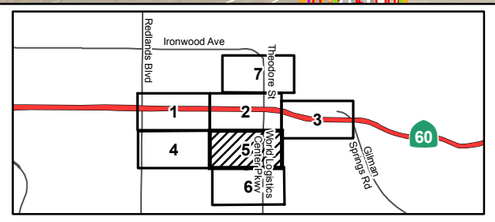


LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 2a Improvements
- Existing Right-of-Way
- Proposed Right-of-Way
- Parcel Acquisitions
  - Full Acquisition
  - Partial Acquisition

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-3

Sheet 5 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 2a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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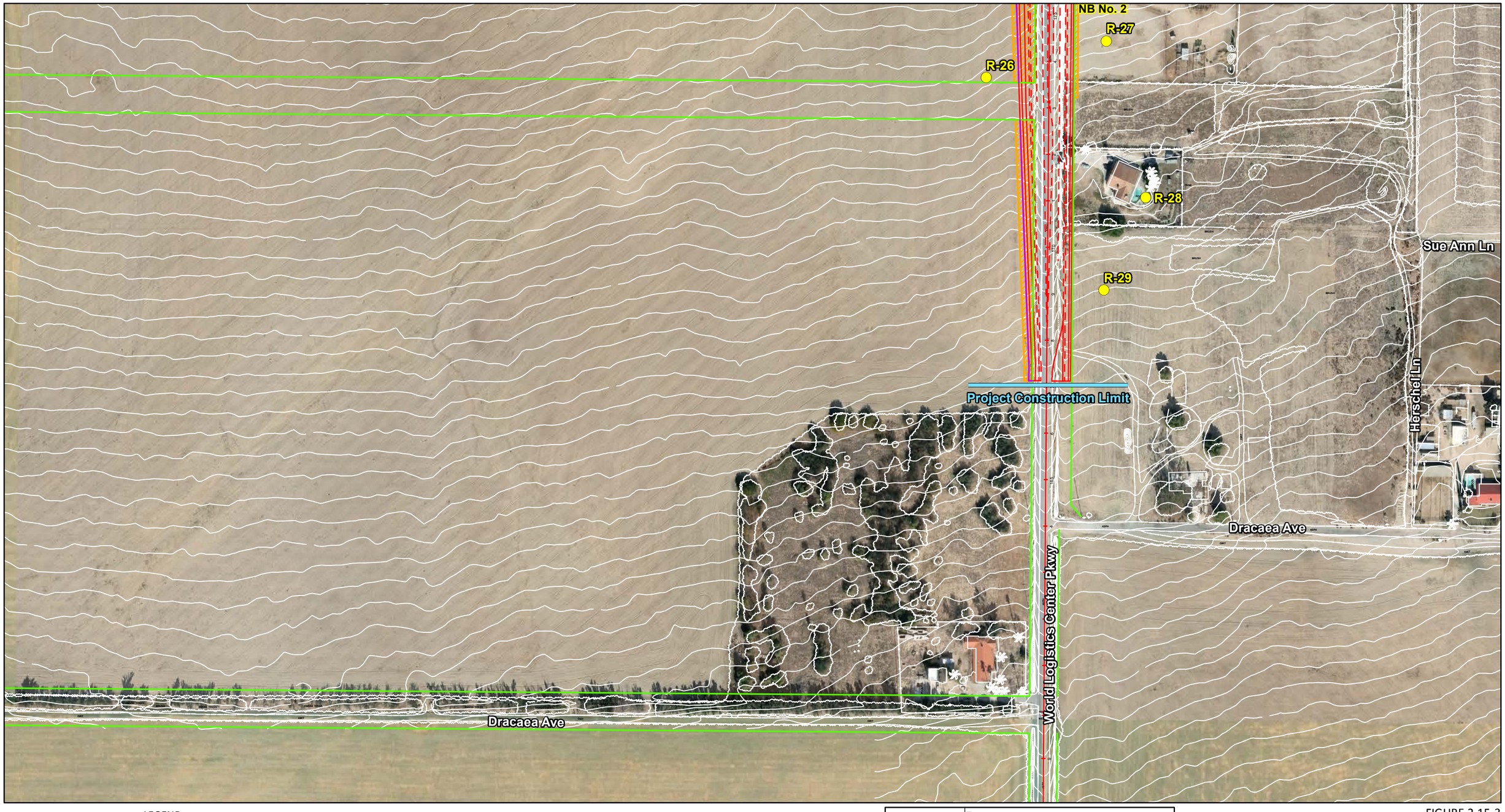

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 2a Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

N

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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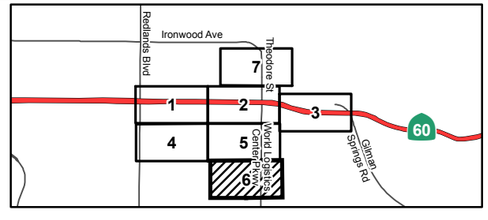

FIGURE 2.15-3

Sheet 6 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 2a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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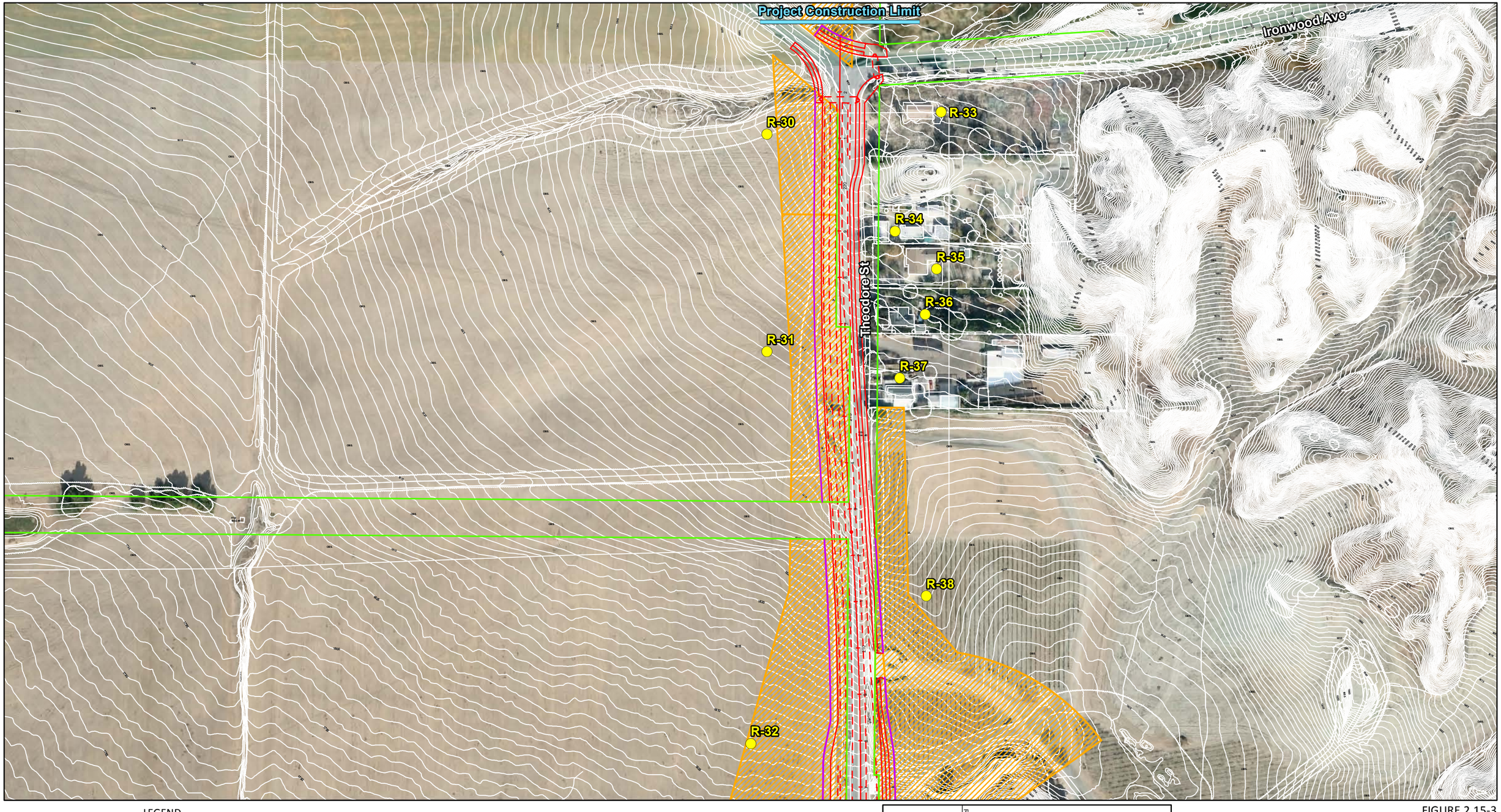

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 2a Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

N

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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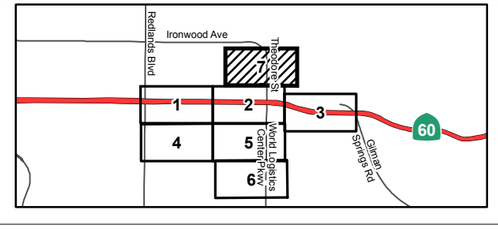

FIGURE 2.15-3

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SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 2a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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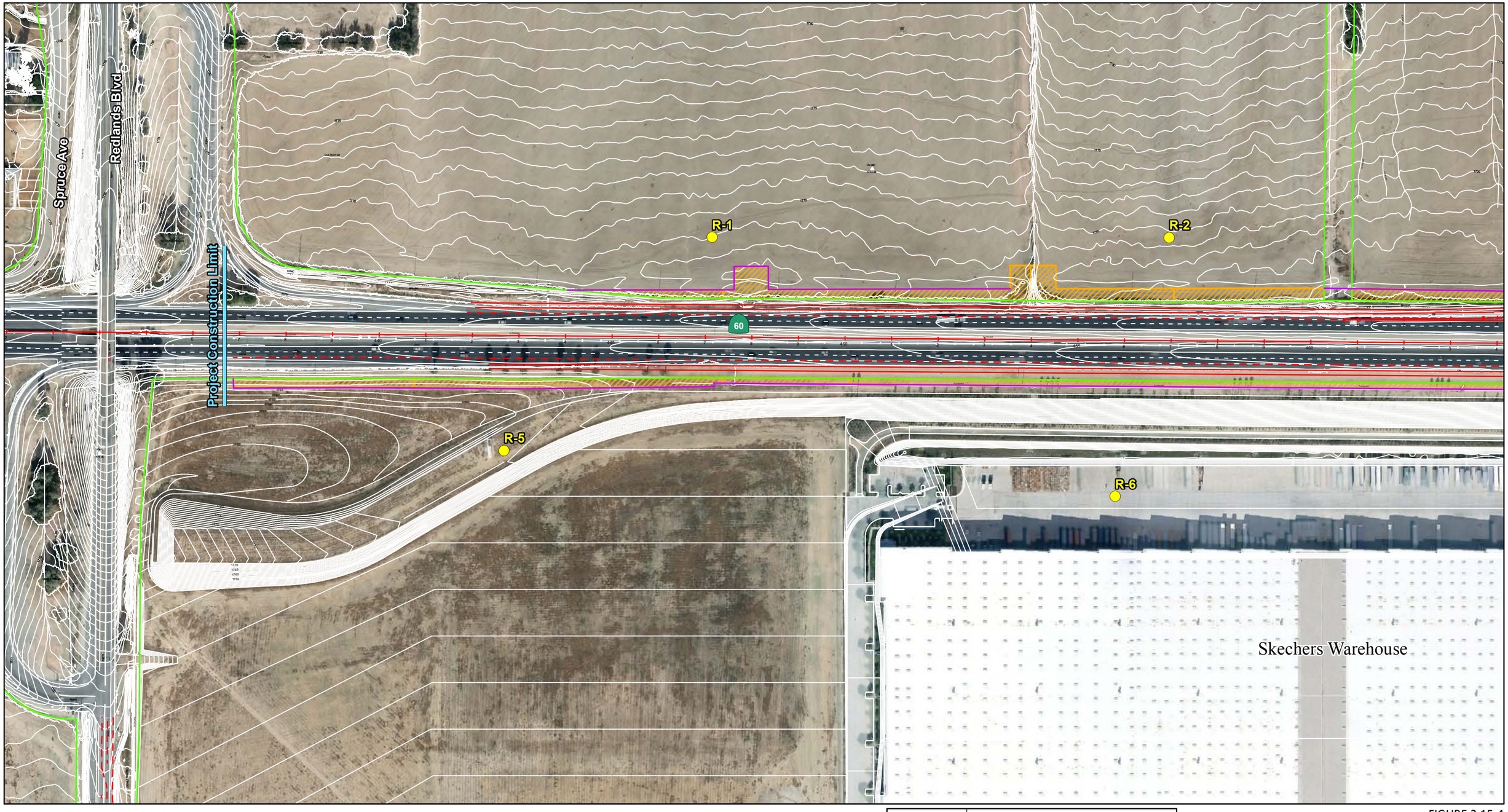

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 6 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquistition
- Partial Acquisition

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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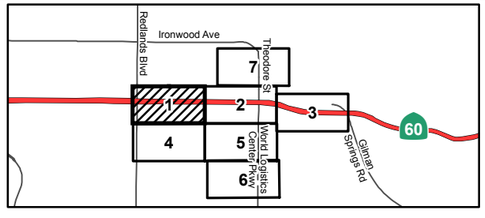

FIGURE 2.15-4

Sheet 1 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 6

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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R-4
R-3
R-10
489+10
491+15
NB No.1
60
R-7
R-8
Skechers Warehouse
R-9
R-12

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 6 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquistition
- Partial Acquisition

N

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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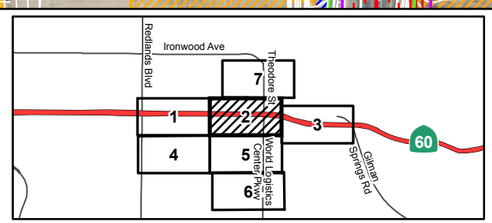

FIGURE 2.15-4

Sheet 2 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 6

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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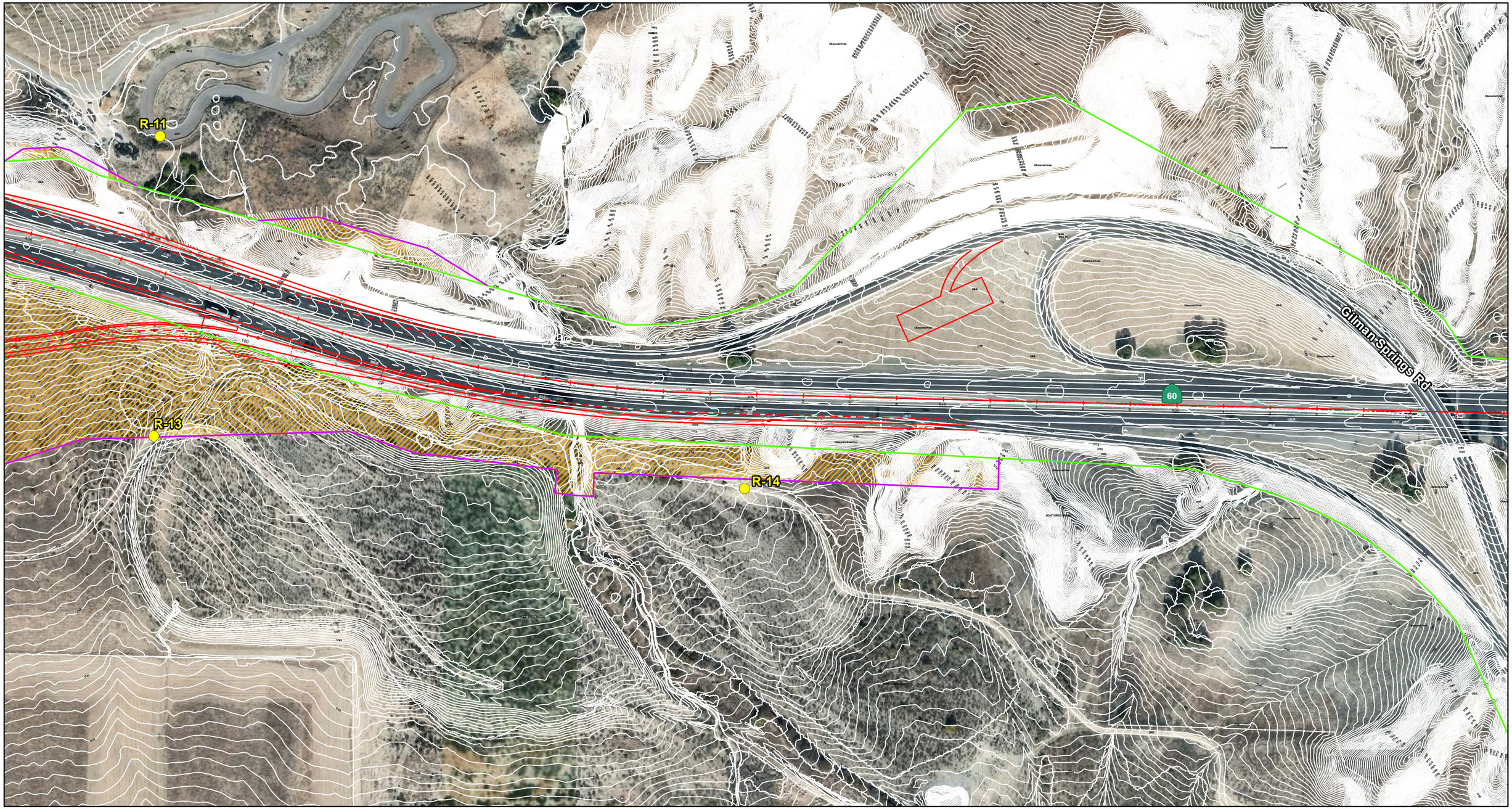
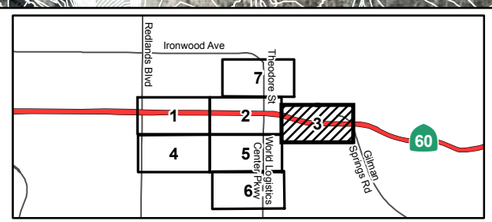


LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 6 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquistition
- Partial Acquisition



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SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-4

Sheet 3 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 6

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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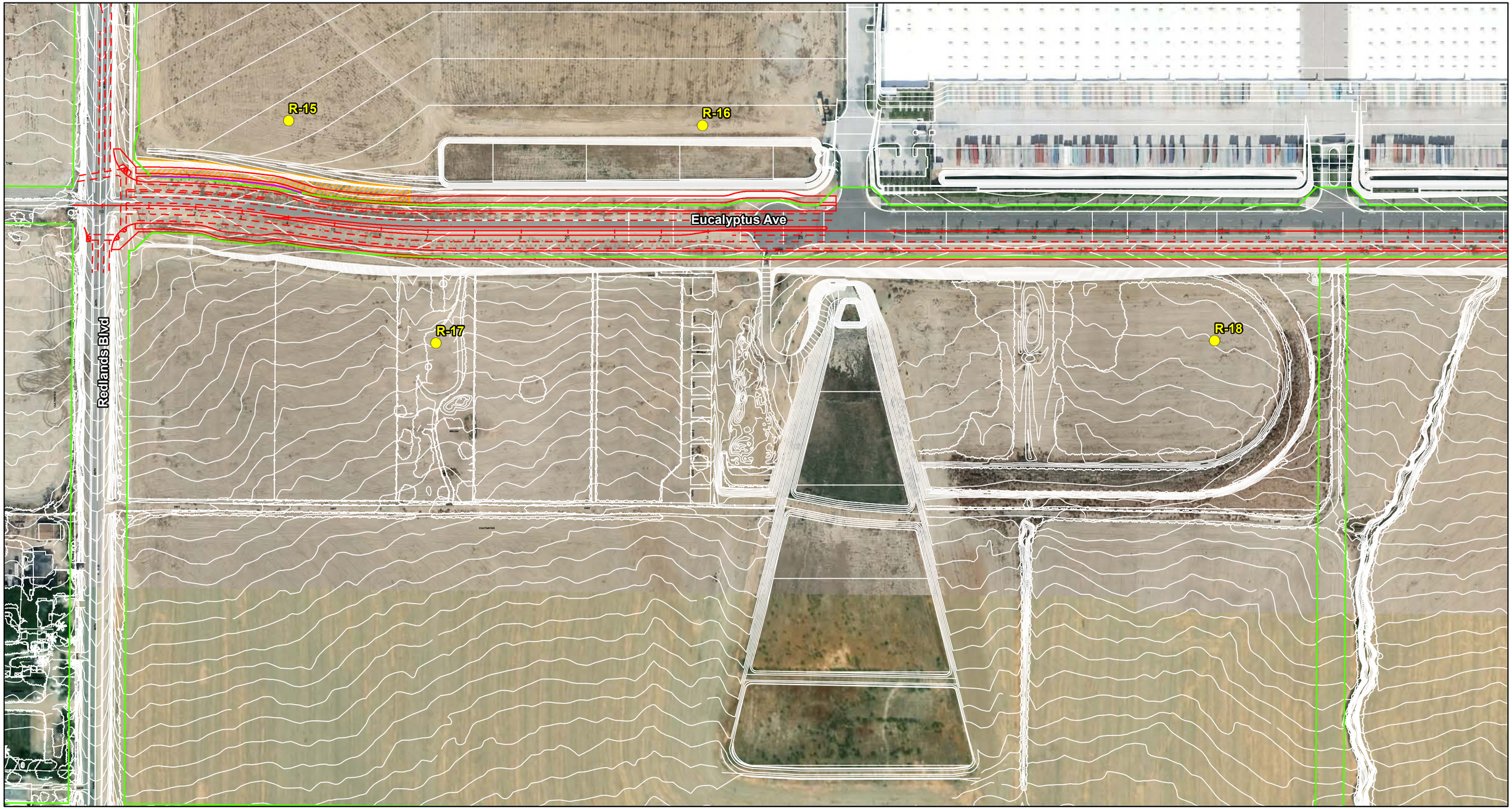


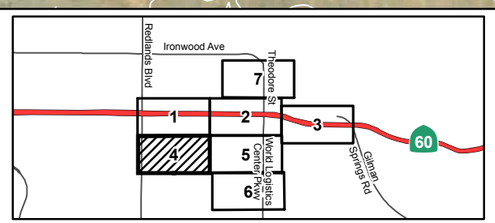
LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 6 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquistition
- Partial Acquisition

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-4

Sheet 4 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 6

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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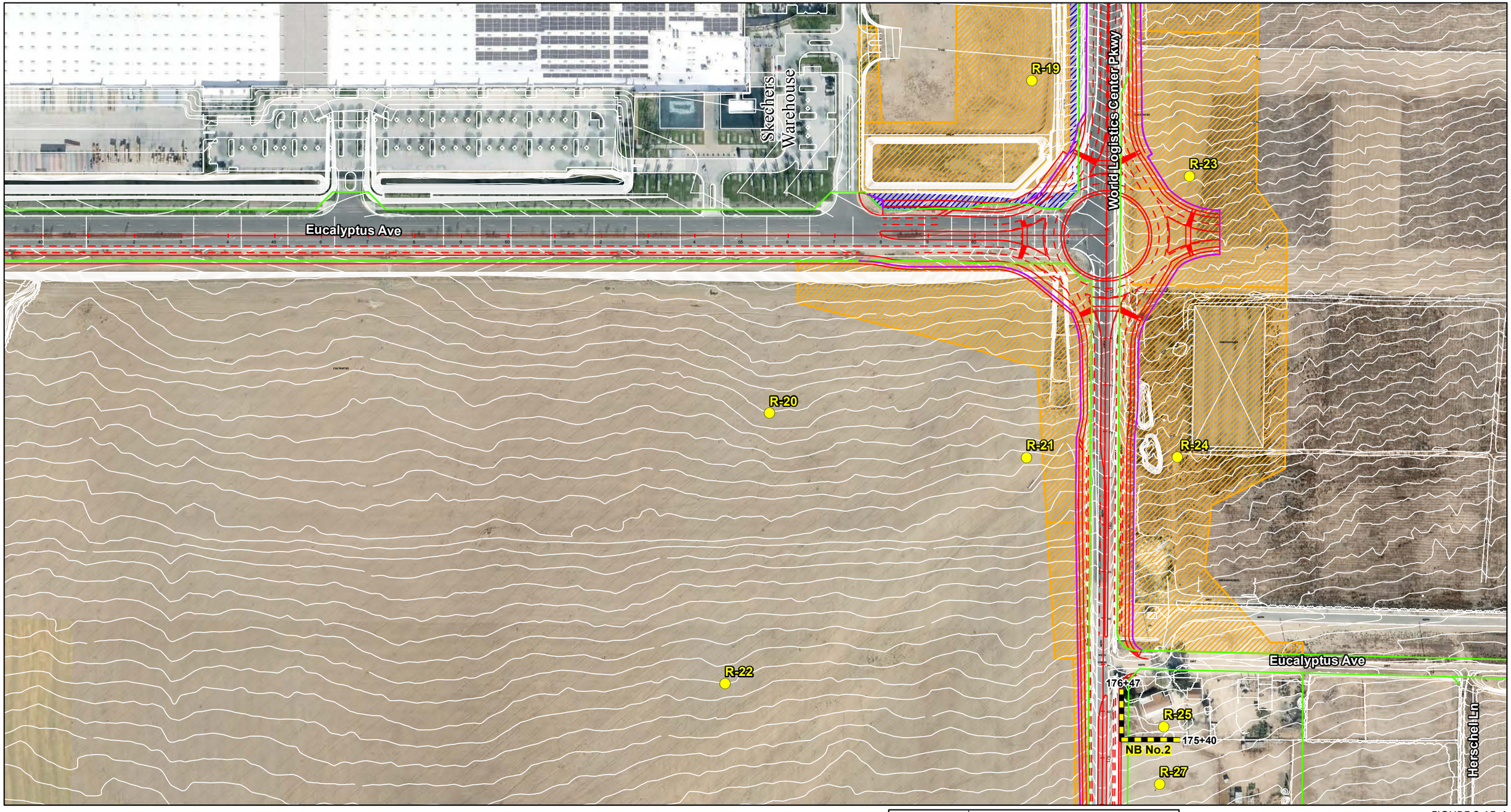
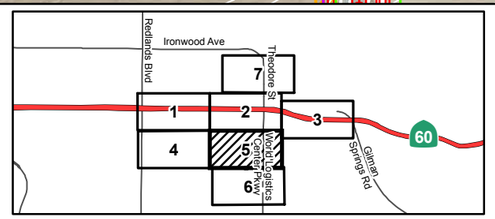


LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 6 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way
- Parcel Acquisitions
- Full Acquistition
- Partial Acquisition

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-4

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SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 6

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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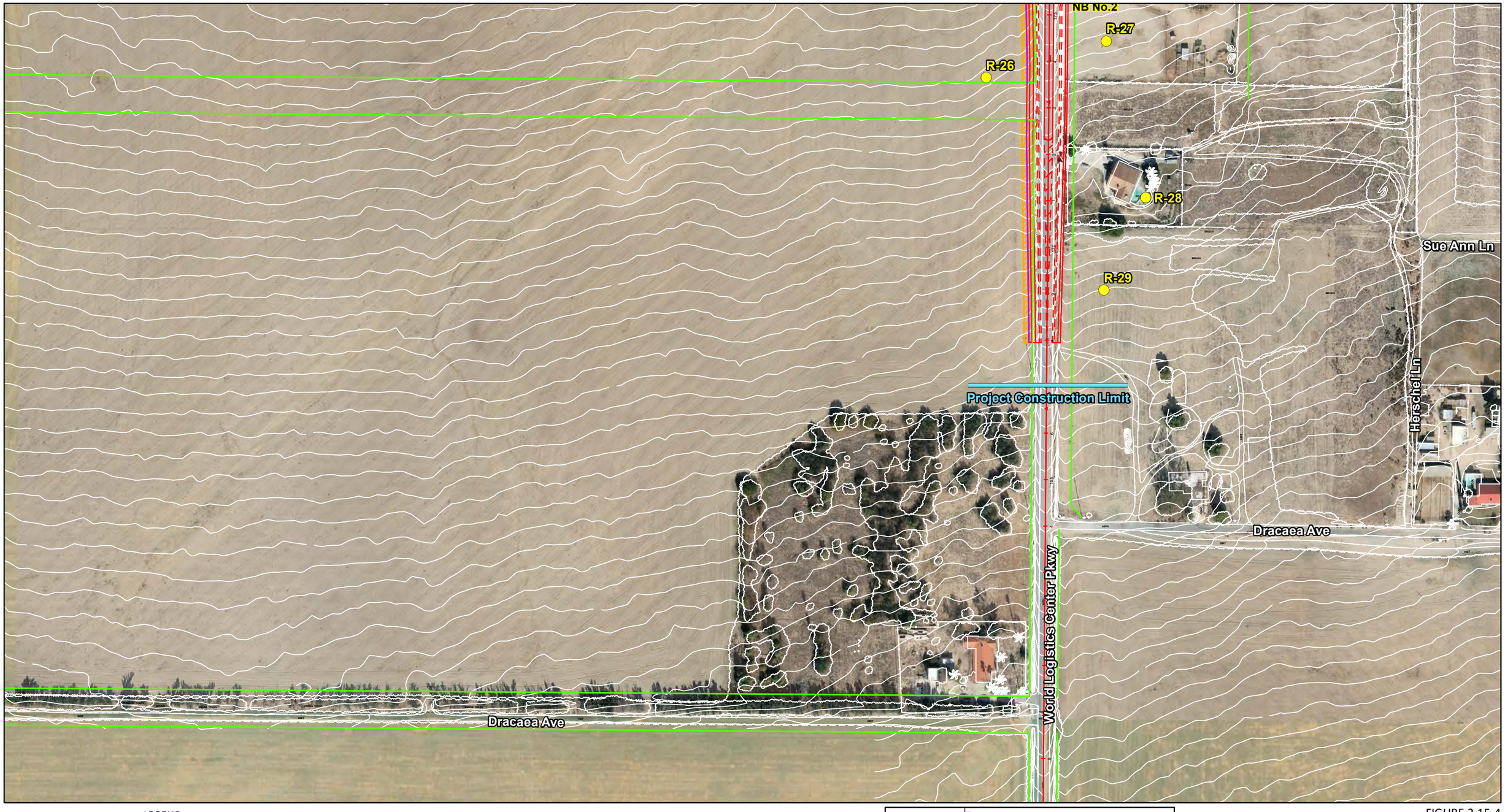

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 6 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquistition
- Partial Acquisition

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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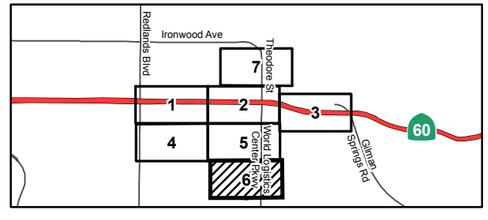

FIGURE 2.15-4

Sheet 6 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 6

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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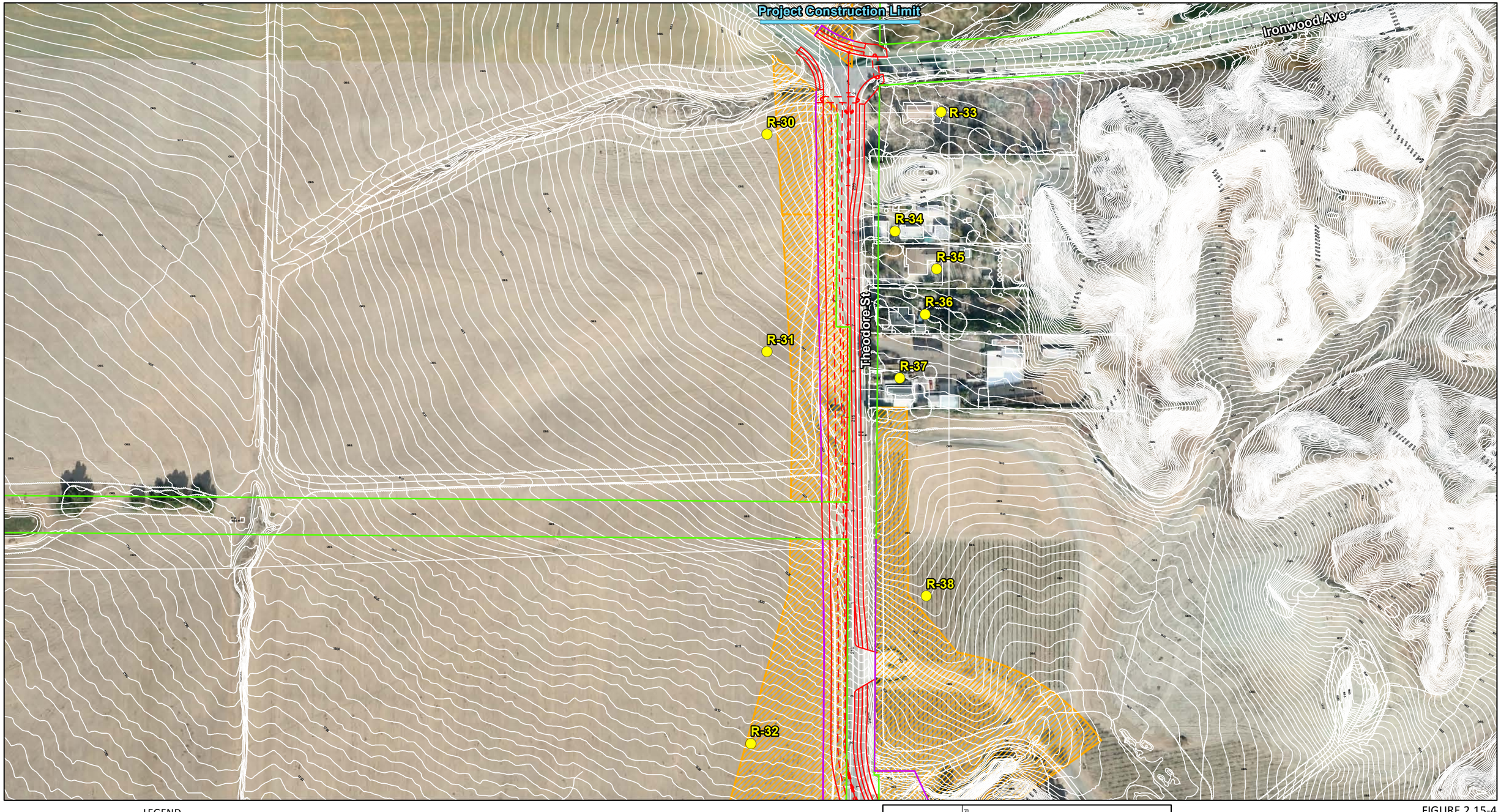


LEGEND

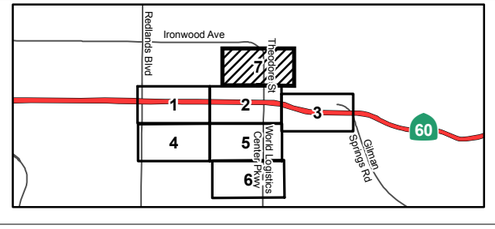
- Modeled Receptor Locations
- Modeled Noise Barrier
- Alternative 6 Improvements
- Existing Right-of-Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquistition
- Partial Acquisition

N

0 100 200
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-4

Sheet 7 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Alternative 6

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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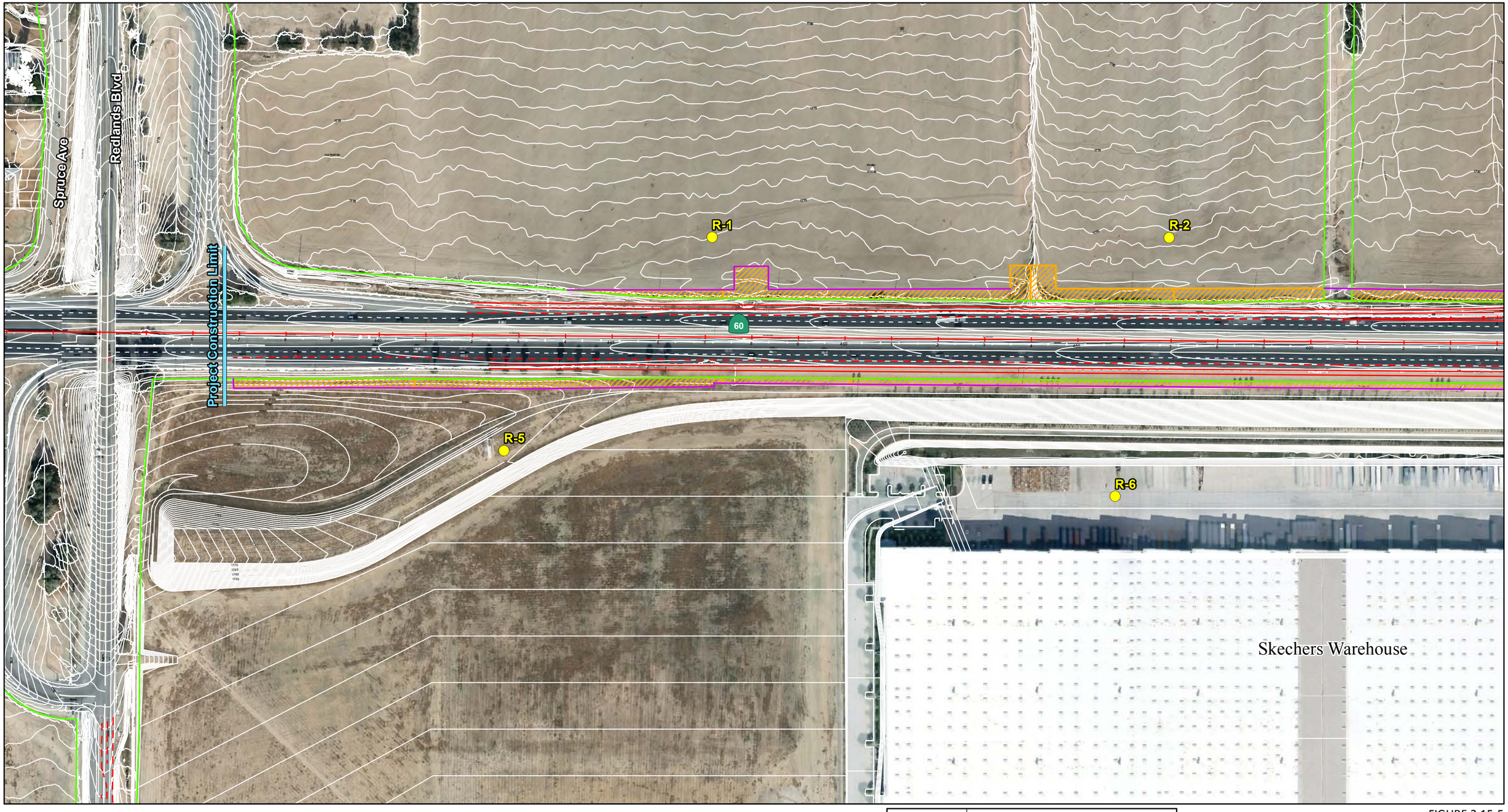

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 6a Improvements
- Existing Right-of0Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

0 100 200
FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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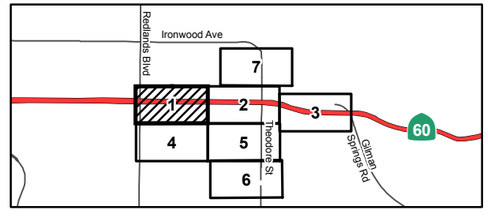

FIGURE 2.15-5

Sheet 1 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 6a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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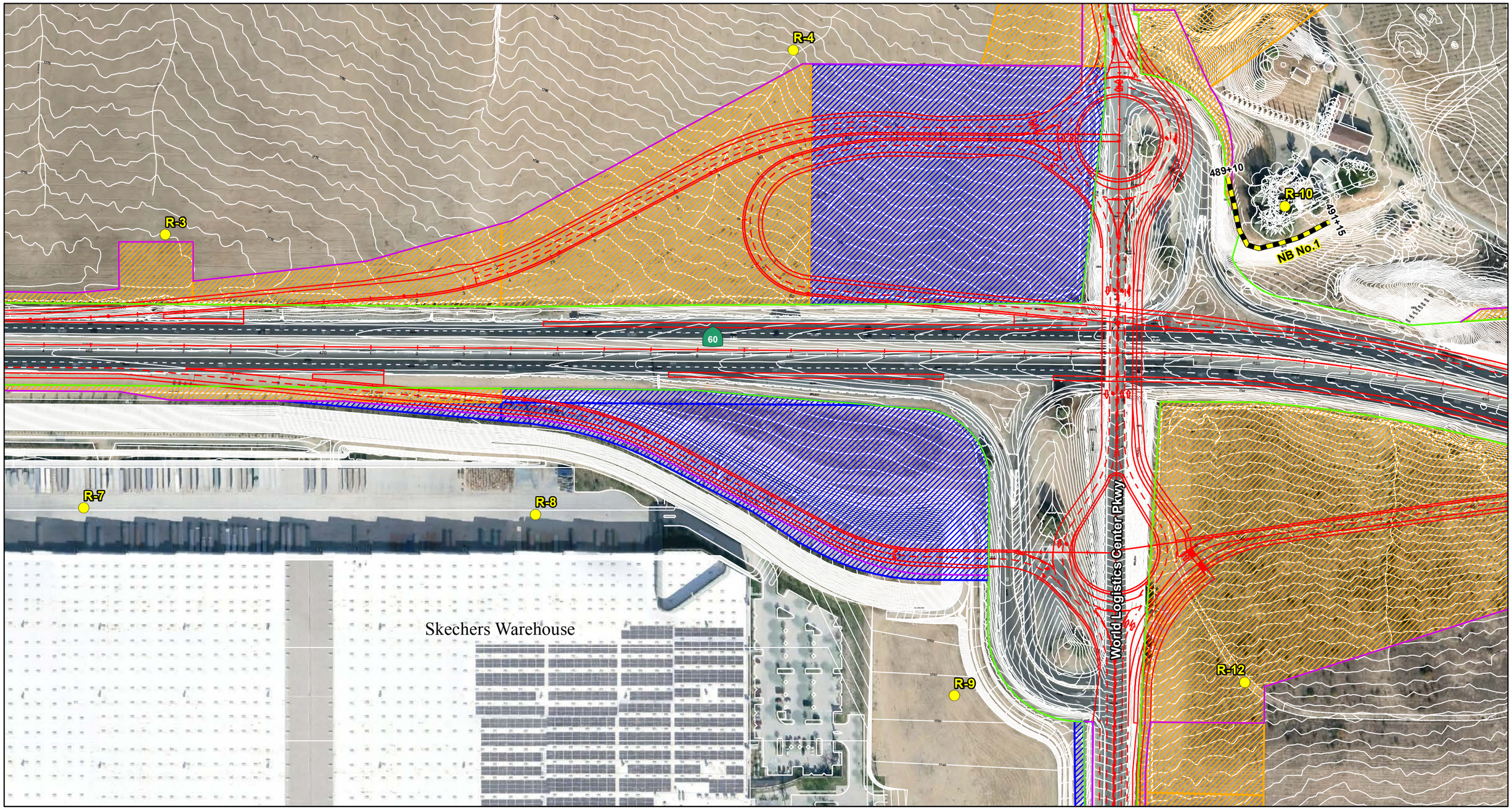

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 6a Improvements
- Existing Right-of0Way
- Proposed Right-of-Way
- Parcel Acquisitions
- Full Acquisition
- Partial Acquisition

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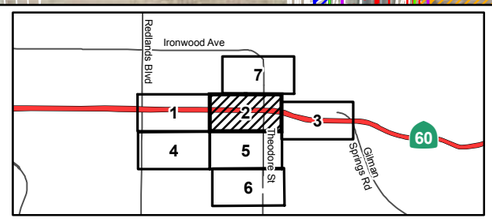
FEET



SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-5
Sheet 2 of 7
SR-60/World Logistics Center Pkwy Interchange Project
Modeled Noise Barrier and Receptor Locations for Design Variation 6a
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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R-11

R-13

R-14

Gilman Springs Rd

60

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 6a Improvements
- Existing Right-of0Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

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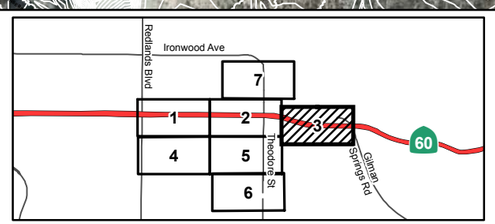

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-5

Sheet 3 of 7

SR-60/World Logistics Center Pkwy
Interchange Project

Modeled Noise Barrier and
Receptor Locations for Design Variation 6a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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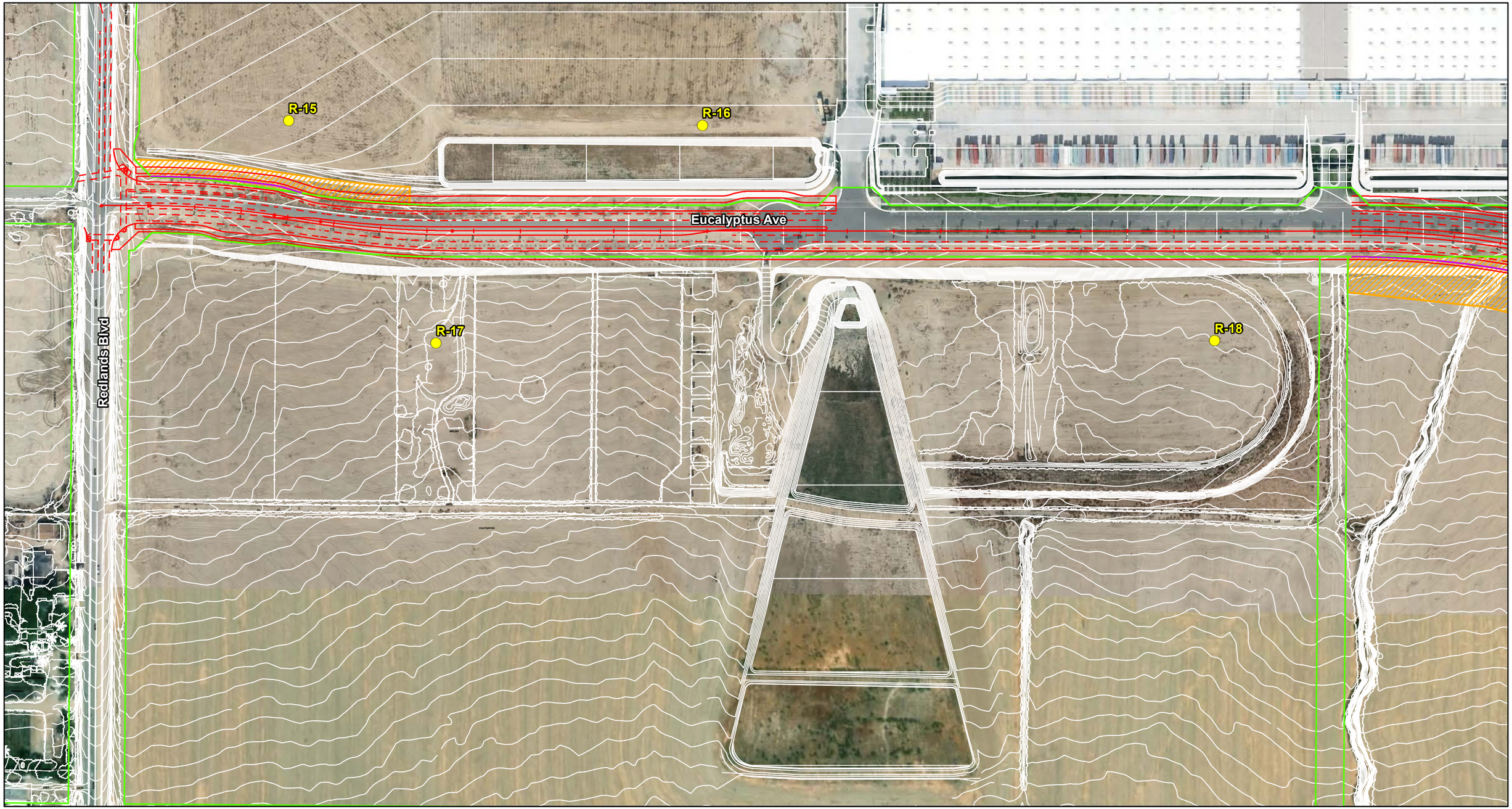

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 6a Improvements
- Existing Right-of0Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

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SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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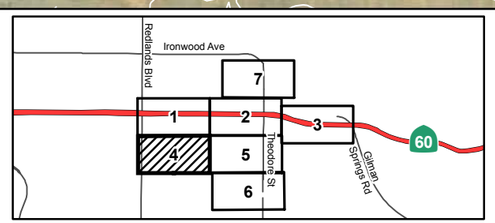

FIGURE 2.15-5

Sheet 4 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 6a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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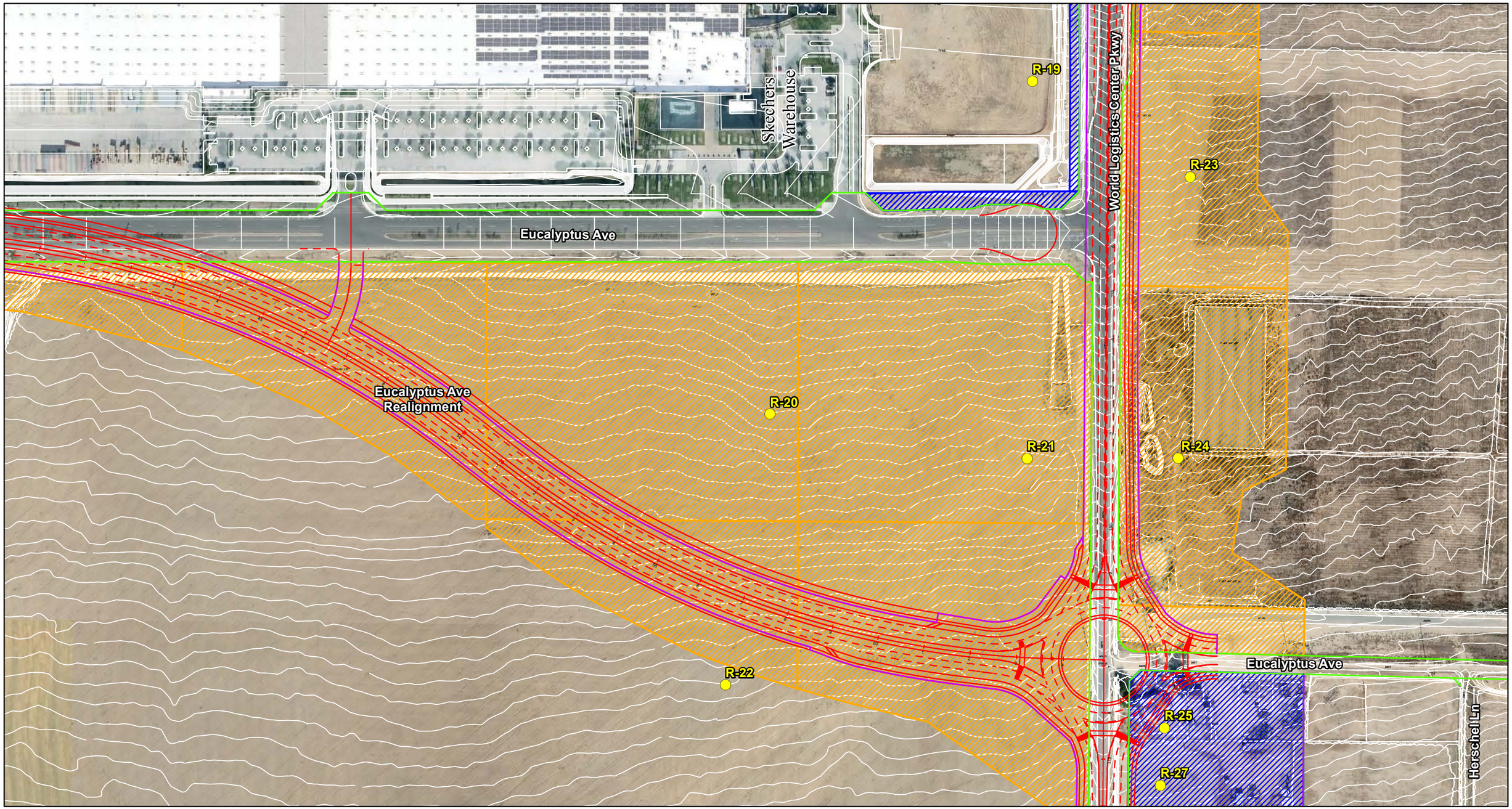

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 6a Improvements
- Existing Right-of0Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

N

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FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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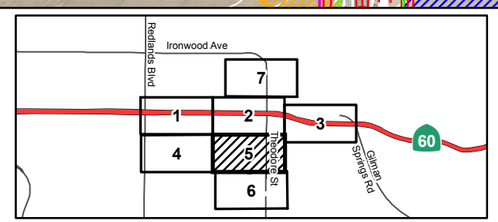

FIGURE 2.15-5

Sheet 5 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 6a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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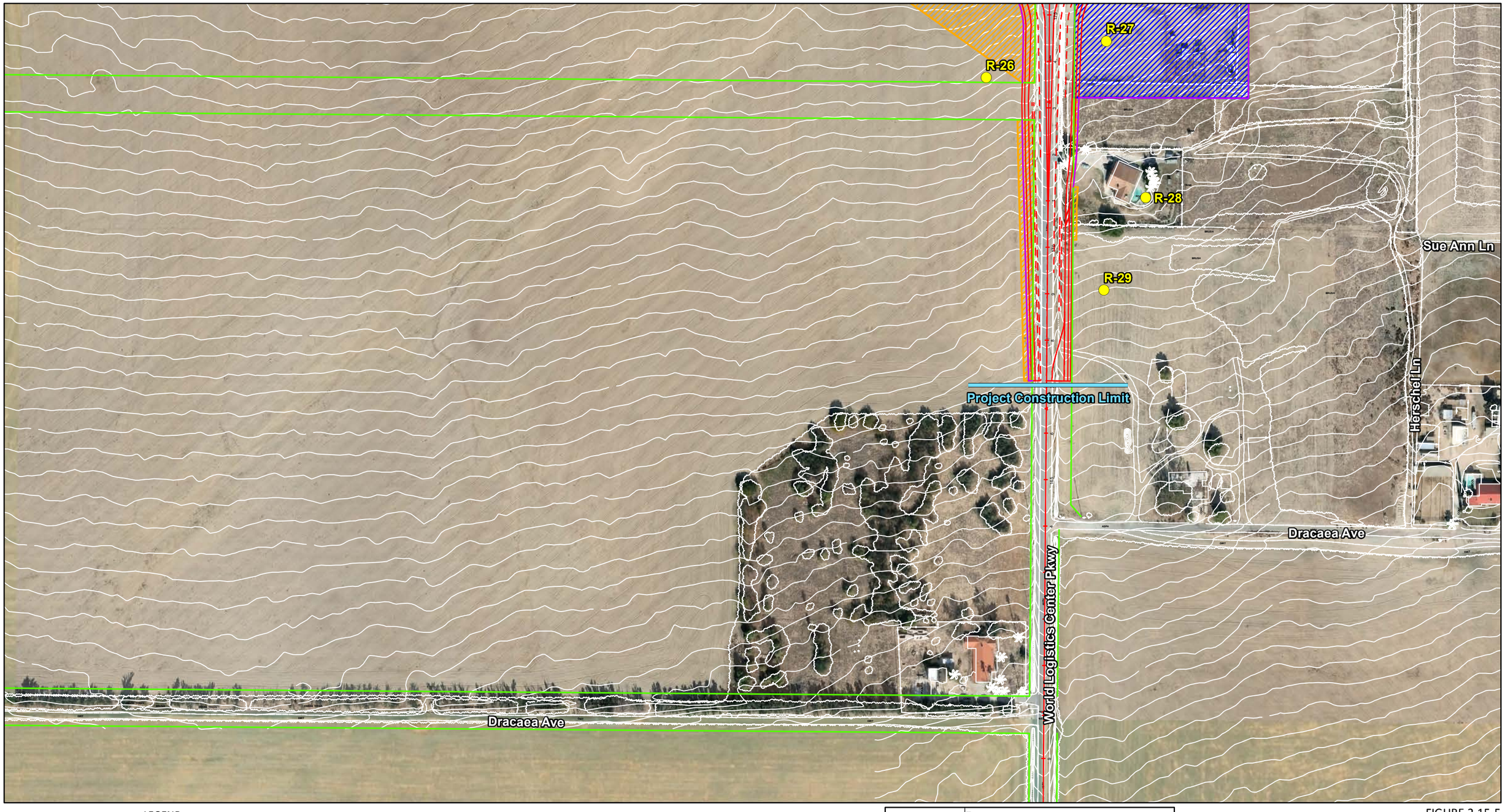

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 6a Improvements
- Existing Right-of0Way
- Proposed Right-of-Way

Parcel Acquisitions

- Full Acquisition
- Partial Acquisition

N

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FEET

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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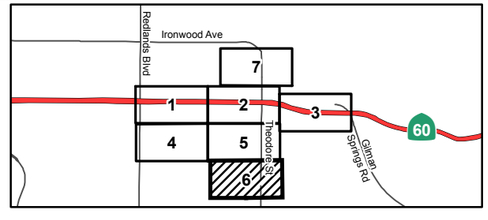

FIGURE 2.15-5

Sheet 6 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 6a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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Project Construction Limit

Ironwood Ave

Theodore St

R-30

R-31

R-32

R-33

R-34

R-35

R-36

R-37

R-38

LEGEND

- Modeled Receptor Locations
- Modeled Noise Barrier
- Design Variation 6a Improvements
- Existing Right-of0Way
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N

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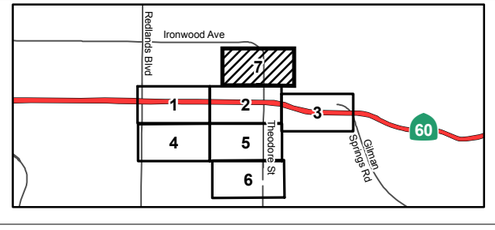

SOURCE: Google Imagery (2012); Michael Baker Intl (11/20/2018)

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FIGURE 2.15-5

Sheet 7 of 7

SR-60/World Logistics Center Pkwy Interchange Project

Modeled Noise Barrier and Receptor Locations for Design Variation 6a

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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2.16 Energy

2.16.1 Regulatory Setting

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

The California Environmental Quality Act (CEQA) Guidelines Section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

2.16.2 Affected Environment

Energy is currently consumed within the project area for the construction of public and private projects; operation of automobiles, trucks, and marine vessels; and operation of existing land uses.

2.16.2.1 Energy Consumption in California/Riverside County

The following statistics have been provided by the California Energy Commission (CEC) and are current through 2018.

Electricity

Fueled by population growth, the demand for electricity in California is increasing. At the same time, the mandate to decrease greenhouse gas (GHG) emissions will only increase in the future. California's electricity mix is generated by natural gas (46.6 percent), coal (0.2 percent), large hydroelectric (11.4 percent), nuclear (9.4 percent), and renewable (32.5 percent) sources in 2018 (CEC Energy Almanac 2019). Table 2.16.1 shows the total electricity consumed in Riverside County for 2018.

Table 2.16.1 Annual Electricity Consumption in Riverside County (2018)

Type of Consumer	Millions of Kilowatt-Hours[1]
Residential	7,706
Non-Residential	8,275
Total	**15,981**

Source: California Energy Commission. Energy Consumption Data Management System (2019).

[1] A kilowatt-hour is a unit of power equal to 1,000 watts of electricity consumed in one hour.

Natural Gas

Electricity generation is the largest user of natural gas, using approximately half of all natural gas in the State. The residential sector uses 38 percent of the available natural gas. Of that amount, 88 percent is used for space and water heating. Table 2.16.2 shows the total natural gas consumption in Riverside County for 2018.

Table 2.16.2 Annual Natural Gas Consumption in Riverside County (2018)

Land Use	Millions of Therms[1]
Residential	259
Non-Residential	139
Total	**398**

Source: California Energy Commission. Energy Consumption Data Management System (2019).
[1] A therm is a unit of heat containing 100,000 British thermal units (Btu).

Traditional Transportation Fuels (Fossil Fuels)

Fossil fuels are energy resources that come from the remains of plants and animals that are millions of years old. Three fossil fuels—petroleum oil, natural gas, and coal—are overwhelmingly responsible for providing the energy that powers our lifestyles and economy, and also fuel our transportation systems. They are the bedrock we base our energy mix on, but they are a limited resource. Once they are consumed, they will no longer be part of our energy mix.

A public concern with fossil fuels is that, in addition to their unsustainability as a non-renewable source of energy, there is a negative environmental impact in the use of fossil fuels. The burning of fossil fuels is responsible for emissions that contribute to global climate change, acid rain, ozone problems, and unhealthy air. As such, the development of alternatives to traditional transportation fuels is desirable to improve sustainability and reduce impacts of fossil fuel consumption.

Alternatives to Traditional Transportation Fuels

Alternatives to traditional transportation fuels are being developed and introduced into the consumer marketplace. Alternative fuels currently in use in the United States include:

- Compressed natural gas (CNG)
- Electric (EVC)
- Ethanol, 85 percent (E85)
- Hydrogen (HYD)
- Liquefied natural gas (LNG)
- Liquefied petroleum gas (LPG)

The following information was prepared by the Energy Information Administration (EIA), the independent statistical and analytical agency within the United States Department of Energy (DOE). Each year, the EIA collects data on the number of alternative fuel vehicles (AFVs) supplied, and for a limited set of fleet user groups, the number of AFVs in use and the amount of alternative transportation fuel consumed. The user groups surveyed are federal and State governments, alternative fuel providers, and transit companies.

Alternative Fuel Vehicles in Use

An estimated 436,921 AFVs were in use in the United States in 2017, with 45,048 in use in California. See Table 2.16.3 below.

Table 2.16.3 Alternative Fuel Vehicles In Use by Fuel Type (2017)

Fuel Type	United States	California
Compressed Natural Gas (CNG)	25,969	8,474
Electric	10,574	3,014
Ethanol, 85% (E85)	393,553	29,705
Hydrogen	59	52
Liquefied Natural Gas (LNG)	383	252
Liquefied Petroleum Gas (LPG)	6,383	963
Total	**436,921**	**45,048**

Source: Energy Information Administration. Alternative Fuels Data Center. Website: www.eia.gov/renewable/afv/users.php (accessed December 2019).

Alternative Fuel Consumption

The estimated consumption of alternative fuels (in thousand gasoline-equivalent gallons) in California during 2017 is shown in Table 2.16.4.

Table 2.16.4 Estimated Consumption of Alternative Fuels in California by Fuel Type (2017) (thousand gasoline-equivalent gallons)

CNG	Electric	E85	Hydrogen	LNG	LPG	Total
73,354	266	1,485	123	2,152	1,233	78,613

Source: Energy Information Administration. Alternative Fuels Data Center. Website: www.eia.gov/renewable/afv/users.php (accessed December 2019).
CNG = compressed natural gas
E85 = Ethanol, 85%
LNG = liquefied natural gas
LPG = liquefied petroleum gas

Although the City's General Plan Circulation Element designates World Logistics Center Parkway (WLC Pkwy) as a Minor Arterial (two lanes in each direction), existing WLC Pkwy through the project limits is one travel lane in each direction, including the overcrossing over State Route 60 (SR-60). Existing SR-60 between Redlands Boulevard and Gilman Springs Road is two mixed-flow travel lanes in each direction. Traffic study data for the year 2018 is used for the baseline year. Table 2.16.5 summarizes the existing conditions; the details of the existing traffic information are documented in the *Traffic Study Report* (January 2019).

Table 2.16.5 Summary of Existing Traffic Conditions

Scenario/Analysis Year	Location	AADT		% Truck	LOS
		Total	Truck		
Existing/Baseline Year 2018	SR-60 at WLC Pkwy	68,423	8,192	12%	C
	WLC Pkwy	2,246	341	15%	F

Source: *Traffic Study Report* (2019).
AADT = annual average daily traffic
LOS = level of service
mph = miles per hour
SR-60 = State Route 60
WLC Pkwy = World Logistics Center Parkway

At present the SR-60/WLC Pkwy interchange has a two-quadrant cloverleaf configuration. The ramp intersections are side-street stop controlled. The nearest interchanges to the WLC Pkwy interchange are at Redlands Boulevard 5,270 feet (ft) to the west and at Gilman Springs Road 3,810 ft to the east, centerline-to-centerline, along SR-60.

In September 2012, a new Transportation Concept Report for SR-60 from the Los Angeles/San Bernardino County Line to the Interstate 10 (I-10) interchange was issued, which includes this project area. The report found that although no mainline capacity improvements were planned or programmed at the time of the report, there appeared to be a need for additional lanes in some sections in the long term.

2.16.3 Environmental Consequences

The following discussion of environmental consequences describes both the direct and indirect energy impacts of the proposed project, which includes construction.

2.16.3.1 Direct Energy Impacts

In the context of transportation, direct energy involves all energy consumed by vehicle propulsion (e.g., automobiles, trains, airplanes). This energy consumption is a function of traffic characteristics such as vehicle miles traveled (VMT) (volume X distance traveled), speed, vehicle mix, and thermal value of the fuel being used. Some projects may also include features such as new or replacement roadway lighting or other features requiring electricity which is an ongoing and permanent source of direct energy consumption. The one-time energy expenditure involved in constructing a project is also considered direct energy.

Construction

The basic procedure for analyzing direct energy consumption from construction activities is to estimate fuel consumption projections in gallons. Construction of the proposed project would require the use of off-road construction equipment, as well as water trucks, and on-road vehicles for soil hauling and worker commuting.

Build Alternatives

As described in the *Air Quality Report* (January 2020), construction emissions were estimated for the proposed project using the Sacramento Metropolitan Air Quality Management District (AQMD) Road Construction Emissions Model, Version 9.0, which is consistent with the guidance provided by the South Coast Air Quality Management District (SCAQMD) for evaluating construction impacts from roadway projects. Overall project construction is planned to start in 2022 and last approximately 18 months. Both Build Alternatives considered in this EIR/EA are similar enough that this one analysis is representative of all Build Alternatives.

The amount of fuel used per year for construction was estimated from the carbon dioxide (CO_2) emissions from this model using the United States Environmental Protection Agency (EPA) conversion factors of 112.52 gallons of gasoline burned per metric ton of CO_2 emitted and 98.23 gallons of diesel fuel burned per metric ton of CO_2 emitted (EPA 2019), as shown in Table 2.16.6.

Table 2.16.6 Annual Construction Fuel Consumption

Construction Year	Overall CO_2 Emissions (tons/yr)	Diesel Fuel Consumption (gal)	Worker Commute CO_2 Emissions (tons/yr)	Gasoline Consumption (gal)
2022	1,413	125,919	86	8,821
2023	451	40,191	28	2,815
Total		**166,109**		**11,636**

Source: Conversion data from EPA Energy and the Environment - Greenhouse Gases Equivalencies Calculator - Calculations and References. Website: www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references (accessed December 2019).
112.52 gal of gasoline/metric ton of CO_2
98.23 gal of diesel/metric ton of CO_2
1.102 tons/metric ton
CO_2 = carbon dioxide
EPA = United States Environmental Protection Agency
gal = gallons
tons/yr = tons per year

Using average fuel energy factors of 111,800 British thermal units (Btu) per gallon of gasoline and 127,500 Btu per gallon of diesel fuel (CEC 2019), the energy used for construction is shown in Table 2.16.7.

Table 2.16.7 Annual Construction Energy Consumption

Construction Year	Diesel Fuel Consumption (gal)	Gasoline Consumption (gal)	Energy Consumption (MMBtu)
2022	125,919	8,821	17,041
2023	40,191	2,815	4,493
Total	**166,109**	**11,636**	**21,534**

Source: Fuel Btu rates from California Energy Commission Energy Almanac, Transportation Data. Website: ww2.energy.ca.gov/almanac/transportation_data/gge.html (accessed December 2019).
127,500 Btu/gal of diesel
111,800 Btu/gal of gasoline
Btu = British thermal units
gal = gallons
MMBtu = million British thermal units

As shown in Table 2.16.7, the total of construction-related energy consumption would be approximately 21,534 million Btu (MMBtu). Compared to energy consumption without the project construction, the project would have a substantial increase to local energy consumption in the project area. As discussed above, the total energy consumed in Riverside County in 2018 was 15,981 million kilowatt-hours (kWh) (or 54,487,384 MMBtu) of electricity and 398 million therms (or 39,800,000 MMBtu) of natural gas, for a total annual energy consumption rate of 94,287,384 MMBtu. The construction energy consumed by the project would be approximately 0.02 percent of the total Riverside County consumption. Therefore, energy consumption from construction activities would be negligible at the Riverside County regional level, and would only last for a short period of time during project construction.

No Build Alternative

Under the No Build Alternative, the indirect effects on energy consumption discussed above for the Build Alternatives during construction would not occur.

Operations

Local energy demand for transportation projects typically is dominated by vehicle fuel usage. Energy consumption is mainly based on the annual vehicle miles traveled (VMT), though it is also affected by congestion-related inefficiencies.

Build Alternatives

The primary purpose of the proposed project is to provide increased interchange capacity, reduce congestion, improve traffic operations to support the forecast travel demand for the 2045 design year, and to improve existing and projected interchange geometric deficiencies. While there would be no measurable differences in VMT for Design Variations 2a (Alternative 2 with Design Variation) and 6a (Alternative 6, the Locally Preferred Alternative [LPA], with Design Variation), traffic operating conditions in the project area would influence fuel consumption rates. Without the improvements resulting from the project, congested traffic conditions would be more prevalent throughout the project area. Those conditions would contribute to a higher energy consumption rate because vehicles use extra fuel while idling in stop-and-go traffic or moving at slow speeds on congested roads.

Using the same EPA conversion factors of fuel burned per amount of CO_2 emitted used for construction above combined with the operational carbon dioxide equivalent (CO_2e) emissions shown in Table 3.2.1 in Chapter 3, California Environmental Quality Act (CEQA) Evaluation, Table 2.16.8 shows the operational fuel and energy used by each project alternative.

Table 2.16.8 Annual Operational Energy Consumption

Alternative	Diesel Fuel Consumption (gal)	Gasoline Consumption (gal)	Energy Consumption (MMBtu)
Existing/Baseline [2018]	132,091	1,038,903	132,991
Open to Traffic [2025]			
No Build	309,428	1,750,605	235,170
Alternative 2	251,745	1,538,718	204,126
Alternative 6 (LPA)	247,811	1,524,602	202,046
Design Year [2045]			
No Build	380,797	2,544,054	332,977
Alternative 2	332,086	2,312,929	300,926
Alternative 6 (LPA)	310,436	2,205,207	286,123

Source 1: Conversion data from EPA Energy and the Environment - Greenhouse Gases Equivalencies Calculator - Calculations and References. Website: www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references.
Source 2: Fuel Btu rates from California Energy Commission Energy Almanac, Transportation Data. Website: ww2.energy.ca.gov/almanac/transportation_data/gge.html (accessed December 2019).
112.52 gal of gasoline/metric ton of CO_2
98.23 gal of diesel/metric ton of CO_2
111,800 Btu/gal of gasoline
127,500 Btu/gal of diesel fuel

Btu = British thermal units
CO_2 = carbon dioxide
EPA = United States Environmental Protection Agency
gal = gallons
LPA = Locally Preferred Alternative
MMBtu = million British thermal units

As shown in Table 2.16.8, the Alternative 2 configuration would reduce energy consumption in both the opening and design years compared to the corresponding No Build Alternative. Also shown in Table 2.16.8, the roundabouts in Alternative 6 (LPA) would further reduce energy consumption compared to Alternative 2. Therefore, the project would result in reduced energy consumption in the project

area. Additionally, the operational energy consumed would vary from 0.2 to 0.3 percent of the total county consumption. Thus, the proposed project would not result in a direct energy impact.

2.16.3.2 Indirect Energy Impacts

Indirect energy includes maintenance activities which would result in long-term indirect energy consumption by equipment required to operate and maintain the roadway.

Based on the annual urban roadway maintenance energy data in Table C:14 of the California Department of Transportation (Caltrans) Energy and Transportation Systems handbook (1.634x108 Btu per lane-mile for Portland cement concrete pavement and 1.776x108 Btu per lane-mile for asphalt concrete pavement), and assuming that the Build Alternatives would have approximately equal amounts of each over the approximately 2 miles (mi) of SR-60 and approximately 1 mi of arterial roadway for the project, the roadway maintenance energy would be 1,876 MMBtu per year. Compared to the Riverside County total annual energy consumption rate of 94,287,384 MMBtu, this ongoing annual level of energy consumption would be negligible at the regional level; therefore, no indirect energy impact would occur.

No Build Alternative

Under the No Build Alternative, the indirect effects on energy consumption discussed above for the Build Alternatives would not occur.

2.16.3.3 Total Energy Impacts

An important criterion in any energy impact analysis is if or when the energy savings a project would achieve would offset the energy cost to construct the project. If the energy savings would offset the energy costs, the project would have a payback period defined as the period of time taken to do so.

As discussed above, the direct energy costs would be negative because the proposed project would improve traffic operating conditions reducing energy consumption. Compared to Riverside County, the indirect energy costs from construction and maintenance of the proposed project would be negligible at the regional level, and would be compensated by the energy savings from the operation of the proposed project.

Thus, for the region, the energy consumption would not be substantially impacted by the Build Alternatives. Therefore, no avoidance, minimization, or mitigation measures would be required.

2.16.3.4 Consistency with Energy Conservation Plans

The CEC adopts an Integrated Energy Policy Report (IEPR) every 2 years and an update every other year. The 2019 IEPR provides the results of the CEC's assessments of a variety of energy issues facing California, which cover a broad range of topics, including decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector,

natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.

Senate Bill (SB) 375 requires regional transportation plans to adopt a sustainable communities strategy (e.g., walkable and bike-friendly neighborhoods near transit) that will reduce GHG emissions from vehicles. Sustainable community development could reduce VMT, thereby reducing transportation fuel consumption and emissions.

As discussed above, while the project would not reduce VMT, because of the congestion reduction and improved vehicle efficiencies, the energy impacts of the project would be negligible at the Riverside County regional and, by extension, statewide level. The project would not conflict with California energy conservation plans because California energy conservation planning actions are conducted at a regional level, and the total project impact to regional energy supplies would be minor.

As discussed above, the proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy.

2.16.4 Avoidance, Minimization, and/or Mitigation Measures

As described above, the project is not expected to result in any direct or indirect energy impact; therefore, no avoidance, minimization, or mitigation measures are required.

However, the City currently employs a variety of measures in municipal operations that reduce consumption of energy and water and reduce the amount of solid and green waste sent to a landfill. The City of Moreno Valley Energy Efficiency and Climate Action Strategy (2012) includes the following applicable energy reduction measures:

> **A11.** Traffic signals synchronized to improve traffic flow and reduce air pollution and gas consumption.
>
> **A12.** Traffic signal lights retrofitted in 2006 with LED light fixtures, with a reduction of 60% power usage. Newer traffic signal lights installed with LED fixtures.
>
> **A13.** City replaced all fluorescent bulbs in Internally Illuminated Street Name Signs with LED lights that enhance visibility, street safety, and last longer. Annual cost savings of about 50% realized due to less use of electricity and less maintenance due to longer life expectancy of LED.
>
> **A19.** City adopted new landscape standards which require the use of drought tolerant landscape and water efficient irrigation in new installations and most retrofit projects.
>
> **A24.** Maintenance & Operations has a program to recycle asphalt concrete. Existing pavement is ground up and used as base for repaving. Unused material is stored for future use.

A28. Rubberized asphalt concrete has been used on City street projects when cost is comparable to regular asphalt concrete. Recycled tires are used. Advantages include reduced road noise, reduced braking distance, and longer life to road surface.

A29. Cold in Place Recycling is used as appropriate for street rehabilitation projects. The process removes old pavement, combines it with emulsion, and places it back down as part of the new pavement.

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BIOLOGICAL ENVIRONMENT

2.17 Natural Communities

2.17.1 Regulatory Setting

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species Section 2.21. Wetlands and other waters are also discussed below in Section 2.18.

2.17.2 Affected Environment

This section is based on the *Natural Environment Study* (September 2019) prepared for the proposed project.

2.17.2.1 Biological Study Area

The study area that is assessed for biological resources is referred to as the Biological Study Area (BSA). The BSA represents the area of potential direct and indirect project impacts to biological resources and includes the proposed ground disturbance area associated with the proposed project, including the grading limits and staging areas. The BSA includes areas of potential direct impact but also extends beyond the maximum extent of potential direct impact where necessary to identify sensitive biological resources within and adjacent to the project area. Specifically, the BSA includes both Build Alternatives 2 and 6 (the Locally Preferred Alternative [LPA]) and Design Variations 2a and 6a, as well as adjacent habitats within 50 feet of the project footprint.

2.17.2.2 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) serves as a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act (FESA) and the Natural Communities Conservation Plan (NCCP), focusing on the conservation of species and their associated habitats in western Riverside County. The WRCMSHCP allows participating jurisdictions to authorize the take of both the plant and wildlife species identified within the WRCMSHCP area. Regulation of the "take" of threatened, endangered, and rare species is authorized by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), which allow "take authorization" for otherwise lawful actions (e.g., public and private development) in exchange for the assembly and management of a coordinated WRCMSHCP Conservation Area. The California Department of

Transportation (Caltrans) is obligated to comply with specific conditions described in Section 13.8 of the WRCMSHCP Implementing Agreement.

2.17.2.3 Natural Communities

Vegetation within the BSA has been affected by agriculture, commercial, and residential development. The BSA supports six vegetation communities: ornamental/developed, ruderal/agricultural, nonnative grassland, saltbush scrub, coastal sage scrub, and riparian scrub. The dominant vegetation type in the BSA is ruderal/agricultural.

Ornamental/Developed

Ornamental species common within this community include Peruvian pepper tree (*Schinus molle*), tamarisk (*Tamrix aphylla*), European olive (*Olea europea*) and eucalyptus (*Eucalyptus* sp.). Developed areas within the BSA include residential and commercial development and transportation corridors. These are the dominant land uses within the BSA.

Ruderal/Agricultural

Ruderal/agricultural areas are present throughout the BSA, mostly adjacent to the existing State Route 60 (SR-60) freeway and other roads. These areas have been subject to repeated disturbance by disking and agricultural use. Dominant species include stinknet (*Oncosiphon piluliferum*), common Mediterranean grass (*Schismus barbatus*), shortpod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), ripgut brome (*Bromus diandrus*), and red brome (*Bromus madritensis* spp. *rubens*).

Nonnative Grassland

Nonnative grassland is present in small patches adjacent to developed areas. Dominant species include red brome, ripgut brome, common Mediterranean grass, and redstem filaree (*Erodium cicutarium*). The area of nonnative grassland on the southeast corner of SR-60/World Logistics Center Parkway (WLC Pkwy) contains scattered mule fat (*Baccharis salicifolia*) but is not different enough from the rest of the nonnative grassland within the BSA to be mapped as a separate community.

Saltbush Scrub

Saltbush scrub occurs in two small areas, surrounded by coastal sage scrub, at the eastern end of the BSA. This community is dominated by fourwing saltbush (*Atriplex canescens*) and sprawling saltbush (*Atriplex suberecta*).

Coastal Sage Scrub

Coastal sage scrub is present primarily on cut slopes adjacent to SR-60 and Gilman Springs Road at the eastern end of the BSA. This plant community is composed predominantly of California sagebrush (*Artemesia californica*), brittlebush (*Encelia farinosa*), and California buckwheat (*Eriogonum fasiculatum*).

Riparian Scrub

Riparian scrub is mapped in three small areas within the BSA and is associated with two drainages. Dominant plants within the riparian scrub community are mule fat and fourwing saltbush.

Wildlife Corridors

The BSA is characterized predominantly by ruderal/agricultural vegetation. Wildlife species occurring within the BSA are characteristic of those found within developed and disturbed habitats. The BSA is located in an area heavily affected by freeway and roadway infrastructure where habitat connectivity is highly fragmented. The majority of the BSA is not within WRCMSHCP-designated Cores or Linkages that provide for regional habitat connectivity. The WRCMSHCP conservation area is comprised of a variety of existing and proposed Cores and Linkages. As defined in the WRCMSHCP, Cores and Linkages have specific characteristics, including size, configuration, and vegetation to support habitat for covered species. Because the majority of the BSA is not within WRCMSHCP-designated Cores or Linkages, the BSA does not function as a wildlife movement corridor.

Two small portions of the BSA are within and immediately adjacent to WRCMSHCP conservation and Core areas. The portion of the proposed project, located at the intersection of Gilman Springs Road/Alessandro Boulevard, is within a WRCMSHCP Criteria Cell, and the portion of the proposed project at the intersection of Theodore Street/Ironwood Avenue is adjacent to a Core area. Therefore, because the project is not located within a Core area, no avoidance measures, minimization measures, mitigation measures, or project features are required under the WRCMSHCP.

Several drainage features are present within the BSA. However, these drainages consist primarily of channelized storm water drainages that eventually convey flow into the San Jacinto River via Mystic Lake and therefore do not currently provide habitat connectivity.

Although the BSA does not function as a wildlife movement corridor, an existing 60-inch drainage culvert that is located northwest of the SR-60/Gilman Springs Road interchange and within the project limits may be usable as a localized wildlife crossing, and the project would include project features to improve its functionality as a wildlife crossing. This culvert is anticipated to support small- to medium-sized wildlife species. Project Features PF-NC-1 and PF-NC-2 would be incorporated into final design, as compatible with the hydraulics.

PF-NC-1 At the 60-inch culvert, 3-foot walls with an 18-inch lip will be constructed, which will direct wildlife toward the culvert.

PF-NC-2 Culvert access areas will be hydroseeded with natural vegetation during the winter after construction activity adjacent to the culvert is complete. Natural objects, such as stumps, rocks, and other natural debris within the crossing facility will be utilized to create cover for wildlife and to encourage the use of the culvert by wildlife.

2.17.3 Environmental Consequences

2.17.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the SR-60/WLC Pkwy interchange or local roads in the project area. Therefore, no temporary impacts to natural communities would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives)

As shown in Table 2.17.1, Alternative 2 would result in 113.33 acres (ac) of temporary impacts to vegetation communities within the BSA, and Alternative 6 (LPA) would result in 112.84 ac of temporary impacts to vegetation communities within the BSA. Temporary direct impacts to natural vegetation communities (saltbush scrub, coastal sage scrub, and riparian scrub) would be minimal under both Build Alternatives.

Table 2.17.1 Acreage of Impacts to Vegetation and Land Uses for Alternatives 2 and 6 (LPA)

Vegetation and Land Use Type	Total in BSA (ac)	Alternative 2 (ac)		Alternative 6 (LPA) (ac)	
		Permanent Impact	Temporary Impact	Permanent Impact	Temporary Impact
Ornamental/Developed	111.58	38.96	43.02	38.98	43.00
Ruderal/Agricultural	215.00	68.47	63.62	68.93	63.15
Nonnative Grassland	25.62	10.54	6.40	10.54	6.40
Saltbush Scrub	1.50	1.39	0.00	1.39	0.00
Coastal Sage Scrub	10.87	7.33	0.26	7.33	0.26
Riparian Scrub	0.34	0.19	0.03	0.19	0.03
Grand Total	**364.91**	**126.88**	**113.33**	**127.36**	**112.84**

Source: *Natural Environment Study* (September 2019).
ac = acre/acres
BSA = Biological Study Area
LPA = Locally Preferred Alternative

Temporary indirect impacts include potential impacts to adjacent habitats caused by storm water runoff and litter. Storm water and litter impacts would be avoided through compliance with the Construction General Permit and implementation of project-specific Best Management Practices (BMPs) as required in PF-WQ-1 (see Section 2.10, Water Quality and Storm Water Runoff). Therefore, no substantial temporary indirect impacts to natural communities would occur.

The BSA and drainages do not function as wildlife movement corridors. Therefore, construction of the Build Alternatives would not result in temporary impacts to wildlife corridors.

Design Variations 2a and 6a

As shown in Table 2.17.2, Design Variation 2a would result in 105.78 ac of temporary impacts to vegetation communities within the BSA, and Design Variation 6a would result in 105.03 ac of temporary impacts to vegetation communities within

Table 2.17.2 Acreage of Impacts to Vegetation and Land Uses for Design Variations 2a and 6a

Vegetation and Land Use Type	Total in BSA (ac)	Design Variation 2a (ac)		Design Variation 6a (ac)	
		Permanent Impact	Temporary Impact	Permanent Impact	Temporary Impact
Ornamental/Developed	111.58	42.02	40.38	43.84	40.41
Ruderal/Agricultural	215.00	100.06	58.71	102.41	58.29
Nonnative Grassland	25.62	10.54	6.40	10.54	6.40
Saltbush Scrub	1.50	1.39	0.00	1.39	0.00
Coastal Sage Scrub	10.87	7.33	0.26	7.33	0.26
Riparian Scrub	0.34	0.19	0.03	0.19	0.03
Grand Total	**364.91**	**161.53**	**105.78**	**165.70**	**105.03**

Source: *Natural Environment Study* (September 2019).
ac = acre/acres
BSA = Biological Study Area

the BSA. Temporary direct impacts to natural vegetation communities (saltbush scrub, coastal sage scrub, and riparian scrub) would be minimal under both design variations.

Temporary indirect impacts include potential impacts to adjacent habitats caused by storm water runoff and litter. Storm water and litter impacts would be avoided through compliance with the Construction General Permit and implementation of project-specific BMPs as required in PF-WQ-1 (see Section 2.10 of this document). Therefore, no substantial temporary indirect impacts to natural communities would occur.

The BSA and drainages do not function as wildlife movement corridors. Therefore, construction of Design Variations 2a and 6a would not result in temporary impacts to wildlife corridors.

2.17.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area; therefore, no permanent impacts to natural communities would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives)

As shown in Table 2.17.1, Alternative 2 would result in 126.88 ac of permanent impacts to vegetation communities within the BSA, and Alternative 6 (LPA) would result in 127.36 ac of permanent impacts to vegetation communities within the BSA. Permanent direct impacts to natural vegetation communities (saltbush scrub, coastal sage scrub, and riparian scrub) are minimal as shown in Table 2.17.1.

Potential permanent indirect impacts include degradation of adjacent riparian habitat from storm water runoff, traffic, and litter. In addition, construction has the potential to indirectly affect riparian habitat permanently through enhancing the germination and proliferation of nonnative invasive plant species. Storm water and litter indirect impacts would be avoided through compliance with the Caltrans Storm Water

Management Plan (SWMP) and Caltrans National Pollutant Discharge Elimination System (NPDES) permits, as well as implementation of project-specific BMPs as required in PF-WQ-1 (see Section 2.10 of this document). Control of invasive plant species requires revegetation with plant species native to the area, adherence to a weed abatement and control program, and compliance with pollution and litter laws and regulations as specified in PF-INV-1 (see Section 2.22, Invasive Species). Implementation of these Project Features would avoid or minimize permanent indirect impacts to riparian habitat, and no substantial impacts would occur.

As discussed in Section 2.5 (Utilities and Emergency Services), Section 2.14 (Air Quality), and Section 2.23 (Cumulative Impacts) of this document, the Build Alternatives would reduce local traffic congestion, and regional exhaust emissions would be the same as the No Build Alternative or would increase slightly. Therefore, the Build Alternatives would not cause new, indirect impacts to natural communities.

The BSA and drainages do not function as wildlife movement corridors. Therefore, construction of either of the Build Alternatives would not result in permanent impacts to wildlife corridors.

Design Variations 2a and 6a

As shown in Table 2.17.2, Design Variation 2a would result in 161.53 ac of permanent impacts to vegetation communities within the BSA, and Design Variation 6a would result in 165.70 ac of permanent impacts to vegetation communities within the BSA. Permanent direct impacts to natural vegetation communities (saltbush scrub, coastal sage scrub, and riparian scrub) are minimal as shown in Table 2.17.2. Potential permanent indirect impacts include degradation of adjacent riparian habitat from storm water runoff, traffic, and litter. In addition, construction has the potential to indirectly affect riparian habitat permanently through enhancing the germination and proliferation of nonnative invasive plant species. Storm water and litter indirect impacts would be avoided through compliance with the Caltrans SWMP and Caltrans NPDES permits, as well as implementation of project-specific BMPs as required in PF-WQ-1 (see Section 2.10 of this document). Control of invasive plant species requires revegetation with plant species native to the area, adherence to a weed abatement and control program, and compliance with pollution and litter laws and regulations as specified in PF-INV-1 (Section 2.22) of this document. Implementation of these Project Features would avoid or minimize permanent indirect impacts to riparian habitat, and no substantial impacts would occur.

As discussed in Sections 2.5, 2.14, and 2.23 of this document, Design Variations 2a and 6a would reduce local traffic congestion, and regional exhaust emissions would be the same as with the No Build Alternative or would increase slightly. Therefore, Design Variations 2a and 6a would not cause new indirect impacts to natural communities.

The BSA and drainages do not function as wildlife movement corridors. Therefore, construction of either Design Variation 2a or Design Variation 6a would not result in permanent impacts to wildlife corridors.

2.17.4 Avoidance, Minimization, and/or Mitigation Measures

The project will incorporate project features PF-NC-1, PF-NC-2, PF-WQ-1, and PF-INV-1 as described above. No substantial adverse impacts to natural communities would occur; therefore, no avoidance, minimization, and/or mitigation measures are required.

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2.18 Wetlands and Other Waters

2.18.1 Regulatory Setting

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

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the United States Environmental Protection Agency (U.S. EPA).

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

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (U.S. EPA 40 Code of Federal Regulations [CFR] Part 230), and whether permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this EO states that a federal agency, such as the FHWA and/or the Department, as assigned, cannot

undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCB) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see Section 2.10, Water Quality and Storm Water Runoff, for additional details.

2.18.2 Affected Environment

This section is based on the *Natural Environment Study* (September 2019) and the *Jurisdictional Delineation Report* (December 2018) prepared for the project.

The findings and conclusions of the *Jurisdictional Delineation Report* are considered preliminary until verified by the USACE and CDFW.

Within the project area, State Route 60 (SR-60) currently has two mixed-flow lanes in each direction and an unpaved median. The project area consists entirely of developed areas comprising a variety of land uses, including transportation, residential, office/commercial, light industrial, agricultural, and undeveloped land.

The Biological Study Area (BSA) is located on the United States Geological Survey (USGS) *Sunnymead* and *El Casco, California* 7.5-minute topographic maps. Elevations range from approximately 1,700 to 1,820 feet (ft) above mean sea level (amsl) across the entire BSA. The topography is relatively flat in the western part of the BSA and hilly in the eastern part. Earthen and concrete-lined channels, associated with tributaries of the San Jacinto River, occur throughout the BSA.

The entire BSA is located within the San Jacinto River Watershed, which has an overall size of 765 square miles (sq mi). The climate is classified as Mediterranean

(i.e., semi-arid climate with hot and dry summers and moderately mild and wet winters). The average annual precipitation is approximately 10 inches. Although most of the precipitation occurs from December to March, thunderstorms occur at all times of the year and can cause extremely high precipitation rates. Average temperatures typically range between 49 degrees Fahrenheit (°F) and 76°F.[1]

There are nine drainage features located within the study area (referred to as Drainages A through I). These drainages are shown on Figures 2.18-1 through 2.18-4 (provided at the end of the text in this section) and are described below.

- **Drainage Feature A:** Drainage Feature A (Figures 2.18-1 through 2.18-4, Sheets 1 and 2 of each) is a man-made, earthen and concrete ephemeral ditch that transports roadway runoff; therefore, it is excluded from USACE jurisdiction pursuant to the 2015 waters of the U.S. rule. Drainage Feature A conveys flows in a southerly direction on the west side of Redlands Boulevard. Outside of the BSA, Drainage Feature A continues along Redlands Boulevard (some portions with no evidence of an ordinary high water mark [OHWM] or streambed) until it conveys flows into the storm drain system at Dracaea Avenue, approximately 0.5 mile (mi) south of the BSA. The areas adjacent to this drainage are entirely covered by paved areas and fallow agricultural fields. Due to the lack of vegetation—including riparian vegetation—within the drainage and the presence of a concrete lining along a portion of it, this area was not classified as USACE wetlands or riparian habitat regulated by the CDFW. The CDFW does not typically regulate artificial channels or ditches, but based on the presence of bed and bank, the drainage feature may be subject to CDFW regulatory authority. A qualitative assessment of the functions and values was conducted in the *Natural Environment Study* (September 2019), and Drainage Feature A is considered to have overall low functions and values.

- **Drainage Feature B:** Drainage Feature B (Figures 2.18-1 through 2.18-4, Sheets 1 and 2 of each) is a man-made, earthen and concrete ephemeral ditch that transports roadway runoff; therefore, it is excluded from USACE jurisdiction pursuant to the 2015 waters of the U.S. rule. Drainage Feature B conveys flows in a southerly direction on the east side of Redlands Boulevard. Outside of the BSA, Drainage Feature B continues along Redlands Boulevard (some portions with no evidence of an OHWM or streambed) until it flows into the storm drain system at Dracaea Avenue, approximately 0.5 mi south of the BSA. The areas adjacent to this drainage are entirely covered by paved areas and fallow agricultural fields. Due to the lack of vegetation, including riparian vegetation, within the drainage and the presence of a concrete lining along a portion of it, this area was not classified as USACE wetlands or riparian habitat regulated by the CDFW. The CDFW does not typically regulate artificial channels or ditches, but based on the presence of bed and bank, this drainage feature may be subject to CDFW regulatory authority. A qualitative assessment of the functions and values was conducted in the *Natural Environment Study* (September 2019), and Drainage Feature B is considered to have overall low functions and values.

[1] http://www.moreno-valley.ca.us/community/about.shtml, accessed September 8, 2015.

- **Drainage Feature C:** Drainage Feature C (Figures 2.18-1 through 2.18-4, Sheets 4 and 5 of each) is a man-made, earthen ephemeral ditch that transports roadway runoff adjacent to the eastbound SR-60/World Logistics Center Parkway (WLC Pkwy) off-ramp, west of WLC Pkwy and south of SR-60; therefore, it is excluded from USACE jurisdiction pursuant to the 2015 waters of the U.S. rule. Drainage Feature C conveys flows in a southerly direction before entering a standpipe located at the northwest corner of WLC Pkwy and Eucalyptus Avenue. The underground pipe then transports flows beneath Eucalyptus Avenue before releasing them onto riprap and into a vacant field where it eventually seeps into the ground with no evidence of an OHWM or streambed. Drainage Feature C includes an approximately 60 ft corrugated metal gutter that conveys roadway runoff from the west side of WLC Pkwy into the drainage ditch. The areas adjacent to this drainage are entirely covered by paved areas and undeveloped ruderal areas. Due to the lack of vegetation within the drainage, including riparian vegetation, this area was not classified as USACE wetlands or riparian habitat regulated by the CDFW. The CDFW does not typically regulate artificial channels or ditches, but based on the presence of bed and bank, this drainage feature may be subject to the regulatory authority of the CDFW. A qualitative assessment of the functions and values was conducted in the Natural *Environment Study* (September 2019), and Drainage Feature C is considered to have overall low functions and values.

- **Drainage Feature D:** Drainage Feature D (Figures 2.18-1 through 2.18-4, Sheet 4 of each) is a man-made, earthen ephemeral ditch that transports roadway runoff along the west side of WLC Pkwy, north of Eucalyptus Avenue; therefore, it is excluded from USACE jurisdiction pursuant to the 2015 waters of the U.S. rule. Drainage Feature D conveys flows southerly for approximately 480 linear feet before draining into Drainage Feature C. Due to the lack of vegetation, including riparian vegetation, within the drainage, this area was not classified as USACE wetlands or riparian habitat regulated by the CDFW. The CDFW does not typically regulate artificial channels or ditches, but based on the presence of bed and bank, this drainage feature may be subject to CDFW's regulatory authority. A qualitative assessment of the functions and values was conducted in the *Natural Environment Study* (September 2019), and Drainage Feature D is considered to have overall low functions and values.

- **Drainage Feature E:** Drainage Feature E (Figures 2.18-1 through 2.18-4, Sheets 4 and 5 of each) is a man-made, earthen and concrete ephemeral ditch that transports roadway runoff along the east side of WLC Pkwy; therefore, it is excluded from USACE jurisdiction pursuant to the 2015 waters of the U.S. rule. Drainage Feature E includes two 10 ft long metal gutters along the east side of WLC Pkwy, directing roadway runoff into the drainage ditch. Drainage Feature E conveys flows southerly within the BSA and continues south outside the BSA along WLC Pkwy, which turns into Davis Road, and eventually drains into the Mystic Lake area. Due to the lack of vegetation within the drainage, including riparian vegetation, this area was not classified as USACE wetlands or riparian habitat regulated by the CDFW. The CDFW does not typically regulate artificial channels or ditches, but based on the presence of bed and bank, the drainage feature may be subject to the CDFW's regulatory authority. A qualitative assessment of the functions and values was conducted in the *Natural*

Environment Study (September 2019), and Drainage Feature E is considered to have overall low functions and values.

- **Drainage Feature F:** Drainage Feature F (Figures 2.18-1 through 2.18-4, Sheets 5 and 8 of each) is a man-made, earthen ephemeral ditch that transports roadway runoff along the west side of WLC Pkwy, south of Eucalyptus Avenue; therefore, it is excluded from USACE jurisdiction pursuant to the 2015 waters of the U.S. rule. Drainage Feature F conveys flows southerly within the BSA and continues south outside the BSA along WLC Pkwy, which turns into Davis Road, and eventually drains into the Mystic Lake area. Drainage Feature F is not hydrologically connected to Drainage Feature C. Due to the lack of vegetation, including riparian vegetation, within the drainage, this area was not classified as USACE wetlands or riparian habitat regulated by the CDFW. The CDFW does not typically regulate artificial channels or ditches, but based on the presence of bed and bank, the drainage feature may be subject to CDFW regulatory authority. A qualitative assessment of the functions and values was conducted in the *Natural Environment Study* (September 2019), and Drainage Feature F is considered to have overall low functions and values.

- **Drainage Feature G:** Drainage Feature G (Figures 2.18-1 through 2.18-4, Sheet 6 of each) is a natural earthen drainage that shows evidence of an OHWM and streambed and banks. Drainage Feature G conveys flows in a southerly direction. It begins to the north, outside of the BSA, passing beneath SR-60 via two 4.5 ft diameter concrete pipes, then continues south outside of the BSA. The drainage is predominantly surrounded by upland vegetation (i.e., Riversidean sage scrub and ruderal vegetation), but a small patch of mule fat (*Baccharis salicifolia*) occurs along a bend in this drainage. Therefore, a sample plot was taken (SP1). (The Wetland Determination Data Form for SP1 is provided in Appendix B of the *Natural Environment Study* [September 2019].) This area does not satisfy USACE wetland criteria; therefore, Drainage Feature G was not classified as wetland. However, mule fat is considered to be riparian habitat regulated by the CDFW, which will assert jurisdiction over this drainage as streambed and areas vegetated by mule fat. This drainage would be regulated by the USACE under the 2015 waters of the U.S. rule. A qualitative assessment of the functions and values was conducted in the *Natural Environment Study* (September 2019), and Drainage Feature G is considered to have overall low functions and values.

- **Drainage Feature H:** Drainage Feature H (Figures 2.18-1 through 2.18-4, Sheet 3 of each) is a natural earthen drainage west of WLC Pkwy and a concrete-lined V-ditch east of WLC Pkwy. The V-ditch carries roadway runoff from Ironwood Avenue and conveys flows under WLC Pkwy via two 48-inch-diameter corrugated metal pipes onto agricultural lands. Drainage Feature H appears to receive flows primarily from the V-channel on Ironwood Avenue, but may also receive sheet flows during large storm events from a natural drainage located outside the BSA, northeast of the intersection of WLC Pkwy and Ironwood Avenue. A review of historical aerials (NETRonline Historic Aerials 2018) and the USGS *Sunnymead, California* 7.5-minute quadrangle indicates Drainage Feature H carried flows from the drainage located outside the BSA. The earthen portion of the drainage is dominated by upland vegetation (i.e.,

ruderal vegetation) with the exception of a small patch of mule fat. This drainage would be regulated by the USACE under the 2015 waters of the U.S. rule. The CDFW will assert jurisdiction over this drainage as streambed and over the mule fat as riparian. A qualitative assessment of the functions and values was conducted in the *Natural Environment Study* (September 2019), and Drainage Feature H is considered to have overall low functions and values.

- **Drainage Feature I:** Drainage Feature I (Figures 2.18-1 through 2.18-4, Sheet 9 of each) was perceptible only as a roadside drainage ditch during the field survey. However, based on aerial photograph review (Google Earth 2018) and review of the USGS *El Casco, California* 7.5-minute quadrangle, this drainage also appears to carry flows from a natural drainage stemming from the nearby foothills of the Badlands. Drainage Feature I conveys flows southwesterly, and an OHWM was only perceptible in the immediate area on either side of the approximately 4x4 ft concrete box culvert at Gilman Springs Road. The drainage is surrounded by agricultural lands and upland vegetation (i.e., ruderal vegetation). Due to the lack of riparian vegetation within the drainage, this area was not classified as USACE wetland or riparian habitat regulated by the CDFW. This drainage would be regulated by the USACE under the 2015 waters of the U.S. rule. Due to the presence of streambed and bank, the CDFW will assert jurisdiction over this drainage as streambed. A qualitative assessment of the functions and values was conducted in the *Natural Environment Study* (September 2019), and Drainage Feature I is considered to have overall low functions and values.

2.18.2.1 Potential USACE Jurisdictional Areas

Drainage features A through F total 1.079 acres (ac) in the BSA and are considered roadside ephemeral drainage ditches that are not regulated under current USACE regulations as per the 2015 waters of the U.S. rule. Drainage features G, H, and I are natural drainage features that eventually flow into the San Jacinto River, which is regulated by USACE. The Mystic Lake area flows into the San Jacinto River; however, due to the climate in the region, flows from the Mystic Lake area are only sufficient to reach the San Jacinto River every 8–10 years.[1] Overflow from Mystic Lake continues along the San Jacinto River and into Canyon Lake (aka Railroad Canyon Reservoir). This typically only occurs in late winter and spring. The San Jacinto River continues beyond Canyon Lake until it flows into Lake Elsinore. In rare cases, Lake Elsinore overflows into Temescal Creek. Temescal Creek flows into the Santa Ana River, which then flows into the Pacific Ocean (a traditionally navigable water [TNW]), thereby establishing a nexus to navigable waters as defined by USACE guidance. As shown in Table 2.18.1, the total acreage of potential USACE jurisdictional nonwetland waters for drainage features G, H, and I within the BSA is 0.165 ac. Table 2.18.2 shows the total acreage of potential USACE nonjurisdictional nonwetland waters for drainage features A, B, C, D, E, and F within the BSA, which is 1.079 ac.

[1] Personal communication. October 7, 2013. Scott Sewell, California Department of Fish and Wildlife, re: San Jacinto Wildlife Area.

Table 2.18.1 Total Potential USACE Jurisdictional Drainage Feature Lengths and Areas Within the BSA

Drainage Feature	Length (linear feet)	Potential USACE Jurisdictional Nonwetland Area (acres) in the BSA
G	292.93	0.035
H	662.71	0.049
I	340.39	0.081
Total		**0.165**

Source: *Natural Environment Study* (September 2019).
BSA = Biological Study Area
USACE = United States Army Corps of Engineers

Table 2.18.2 Total Potential USACE Nonjurisdictional Drainage Feature Lengths and Areas Within the BSA

Drainage Feature	Length (linear feet)	Potential Nonjurisdictional USACE Nonwetland Area (acres) in the BSA
A	2,441.37	0.271
B	2,114.20	0.110
C	814.86	0.044
D	480.24	0.011
E	3,811.20	0.478
F	2,707.28	0.165
Total		**1.079**

Source: *Natural Environment Study* (September 2019).
BSA = Biological Study Area
USACE = United States Army Corps of Engineers

2.18.2.2 CDFW Jurisdictional Areas

Due to the presence of streambed and bank, all the drainage features within the BSA may be subject to CDFW jurisdiction pursuant to Section 1602 of the California Fish and Game Code. In addition, streambed banks extending beyond the limits of USACE jurisdiction (e.g., riparian habitat) are considered subject to CDFW jurisdiction. There were no areas within the BSA where riparian vegetation, potentially considered subject to CDFW jurisdiction, extended beyond the streambed banks. Only drainages G and H contain riparian habitat. As shown in Table 2.18.3, the total potential CDFW jurisdictional streambed/riparian within the BSA is 2.097 ac.

2.18.2.3 RWQCB Jurisdictional Areas

Because there is no public guidance on determining RWQCB jurisdictional areas, jurisdiction was determined based on the federal definition of waters of the U.S. (i.e., OHWM). RWQCB jurisdictional areas would be measured by USACE methods, even in ditches that are not subject to USACE jurisdiction. Therefore, RWQCB jurisdiction includes both USACE nonjurisdictional and jurisdictional waters (Tables 2.18.2 and 2.18.3).

Table 2.18.3 Total Potential CDFW Jurisdictional Drainage Feature Lengths and Areas Within the BSA

Drainage Feature	Length (linear feet)	Potential Jurisdictional CDFW Area (acres) in the BSA
A	2,441.37	0.545
B	2,114.20	0.228
C	814.86	0.044
D	480.24	0.011
E	3,811.20	0.641
F	2,707.28	0.165
G	292.93	0.293
H	662.71	0.089
I	340.39	0.081
Total		**2.097**

Source: *Natural Environment Study* (September 2019).
BSA = Biological Study Area
CDFW = California Department of Fish and Wildlife

2.18.3 Environmental Consequences

2.18.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area. Therefore, no temporary impacts to wetlands or other waters would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives)

To minimize temporary direct impacts to jurisdictional waters, drainage improvements would primarily be constructed from existing roadways. As shown in Tables 2.18.4 and 2.18.5, Alternatives 2 and 6 (Locally Preferred Alternative [LPA]) would result in temporary direct impacts to 0.675 ac and 0.111 ac for both USACE nonjurisdictional and jurisdictional waters, respectively. As shown in Tables 2.18.6 and Table 2.18.7, Alternative 2 would result in a total of 1.185 ac of temporary impacts to CDFW streambed/riparian waters. Alternative 6 (LPA) would result in a total of 1.164 ac of temporary impacts to CDFW streambed/riparian waters.

Potential temporary indirect impacts to jurisdictional areas include impacts to water quality caused by litter or pollutants in construction storm water runoff. During construction activities, Best Management Practices (BMPs) would be implemented to ensure that erosion caused by construction activities does not occur and that sediment is not deposited in the drainages.

A Storm Water Pollution Protection Plan (SWPPP) would be prepared and would specify the BMPs to be implemented as required in Project Feature PF-WQ-1 (see Section 2.10, Water Quality and Storm Water Runoff). Storm water and litter impacts would be avoided through compliance with the Construction General Permit and implementation of project-specific BMPs as required in Project Feature PF-WQ-1. Therefore, temporary direct impacts to jurisdictional areas would not be substantial.

Table 2.18.4 Effects to USACE Nonjurisdictional Waters by Alternative

Drainage ID	USACE Nonjurisdictional Waters (acres)							
	Alternative 2		Alternative 6 (LPA)		Design Variation 2a		Design Variation 6a	
	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent
A	0.257	--	0.257	--	0.257	--	0.257	--
B	0.102	0.001	0.102	0.001	0.102	0.001	0.102	0.001
C	0.005	0.040	0.005	0.040	--	0.044	--	0.044
D	--	0.011	--	0.011	--	0.011	--	0.011
E	0.204	0.259	0.204	0.259	0.189	0.267	0.196	0.267
F	0.107	0.044	0.107	0.044	0.101	0.047	0.104	0.047
G	--	--	--	--	--	--	--	--
H	--	--	--	--	--	--	--	--
I	--	--	--		--	--	--	--
Total	**0.675**	**0.355**	**0.675**	**0.355**	**0.649**	**0.370**	**0.659**	**0.370**

Source: Compiled by LSA Associates, Inc. (2019).
LPA = Locally Preferred Alternative USACE = United States Army Corps of Engineers

Table 2.18.5 Effects to Potential USACE Jurisdictional Waters by Alternative

Drainage ID	USACE Jurisdictional Waters (acres)							
	Alternative 2		Alternative 6 (LPA)		Design Variation 2a		Design Variation 6a	
	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent
A	--	--	--	--	--	--	--	--
B	--	--	--	--	--	--	--	--
C	--	--	--	--	--	--	--	--
D	--	--	--	--	--	--	--	--
E	--	--	--	--	--	--	--	--
F	--	--	--	--	--	--	--	--
G	--	0.024	--	0.024	--	0.024	--	0.024
H	0.043	0.003	0.043	0.003	0.043	0.003	0.043	0.003
I	0.068	--	0.068	--	0.068	--	0.068	--
Total	**0.111**	**0.027**	**0.111**	**0.027**	**0.111**	**0.027**	**0.111**	**0.027**

Source: Compiled by LSA Associates, Inc. (2019).
LPA = Locally Preferred Alternative USACE = United States Army Corps of Engineers

Table 2.18.6 Effects to Potential CDFW Streambed Areas by Alternative

Drainage ID	CDFW Streambed Areas (acres)							
	Alternative 2		Alternative 6 (LPA)		Design Variation 2a		Design Variation 6a	
	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent
A	0.520	--	0.520	--	0.520	--	0.520	--
B	0.209	0.006	0.209	0.006	0.209	0.006	0.209	0.006
C	0.005	0.040	0.005	0.040	--	0.044	--	0.044
D	--	0.011	--	0.011	--	0.011	--	0.011
E	0.204	0.421	0.189	0.436	0.189	0.429	0.189	0.436
F	0.107	0.044	0.101	0.050	0.101	0.047	0.101	0.050
G	--	0.019	--	0.019	--	0.019	--	0.019
H	0.046	0.008	0.046	0.008	0.046	0.008	0.046	0.008
I	0.068	--	0.068	--	0.068	--	0.068	--
Total	**1.159**	**0.549**	**1.138**	**0.570**	**1.133**	**0.564**	**1.133**	**0.574**

Source: Compiled by LSA Associates, Inc. (2019).
CDFW = California Department of Fish and Wildlife
LPA = Locally Preferred Alternative

Table 2.18.7 Effects to Potential CDFW Riparian Areas by Alternative

Drainage ID	CDFW Riparian Areas (acres)							
	Alternative 2		Alternative 6 (LPA)		Design Variation 2a		Design Variation 6a	
	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent
G	-	0.163	-	0.163	-	0.163	-	0.163
H	0.026	-	0.026	-	0.026	-	0.026	-
Total	**0.026**	**0.163**	**0.026**	**0.163**	**0.026**	**0.163**	**0.026**	**0.163**

Source: Compiled by LSA Associates, Inc. (2019).
CDFW = California Department of Fish and Wildlife
LPA = Locally Preferred Alternative

Design Variations 2a and 6a

To minimize temporary direct impacts to jurisdictional waters, drainage improvements would primarily be constructed from existing roadways. As shown in Table 2.18.4 and 2.18.5, Alternative 2a (Alternative 2 with Design Variation) would result in temporary direct impacts to 0.649 ac and 0.111 ac for USACE nonjurisdictional and jurisdictional waters, respectively. Alternative 6a (Alternative 6 [LPA] with Design Variation) would result in temporary direct impacts to 0.659 ac and 0.111 ac for USACE nonjurisdictional and jurisdictional waters, respectively. As shown in Table 2.18.6 and Table 2.18.7, Design Variations 2a and 6a would each result in a total of 0.159 ac of temporary impacts to CDFW streambed/riparian waters.

Potential temporary indirect impacts to jurisdictional areas include impacts to water quality caused by litter or pollutants in construction storm water runoff. During construction activities, BMPs would be implemented to ensure that erosion caused by construction activities does not occur and that sediment is not deposited in the drainages.

A SWPPP would be prepared and would specify the BMPs to be implemented as required in Project Feature PF-WQ-1 (see Section 2.10 of this document). Storm water and litter impacts would be avoided through compliance with the Construction General Permit and implementation of project-specific BMPs as required in Project Feature PF-WQ-1. Therefore, temporary direct impacts to jurisdictional areas would not be substantial.

2.18.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area; therefore, no permanent impacts to wetlands or other waters would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives)

As shown in Tables 2.18.4 and 2.18.5, Alternative 2 would result in permanent impacts to 0.355 ac and 0.027 ac for USACE nonjurisdictional and jurisdictional waters, respectively. Alternative 6 (LPA) would result in 0.355 ac of permanent impacts to USACE nonjurisdictional waters and 0.027 ac of USACE jurisdictional waters. As shown in Tables 2.18.6 and 2.18.7, Alternative 2 would result in a total of 0.712 ac of permanent impacts to CDFW streambed/riparian waters. Alternative 6 (LPA) would result in a total of 0.733 ac of permanent impacts to CDFW streambed/riparian waters.

Although minor, impacts to the jurisdictional areas would require authorization from the USACE, CDFW, and RWQCB prior to construction as specified in Project Features PF-WET-1 and PF-WET-2. Compensatory mitigation is anticipated to be required to offset the loss of jurisdictional waters by USACE, CDFW, and RWQCB at a minimum 1:1 mitigation ratio. Mitigation for effects to any regulated USACE nonwetland waters or “waters of the United States” will be conducted in accordance with PF-WET-4 and USACE Compensatory Mitigation for Losses of Aquatic

Resources.[1] With implementation of PF-WET-1 through WET-4, permanent direct impacts to jurisdictional areas would not be substantial.

PF-WET-1 **Streambed Alteration Agreement.** Prior to construction, a Section 1602 Streambed Alteration Agreement will be obtained from the California Department of Fish and Wildlife (CDFW).

PF-WET-2 **Water Quality Certification.** Prior to construction, a certification of water quality from the Santa Ana Regional Water Quality Control Board (RWQCB), Region 8, will be obtained pursuant to Section 401 of the federal Clean Water Act (CWA).

PF-WET-3 **Compliance with the Nationwide Permit Program.** During construction, the project will comply with the Nationwide Permit Program pursuant to Section 404 of the federal CWA.

PF-WET-4 **USACE Compensatory Mitigation.** Compensatory mitigation is anticipated to be required to offset the loss of jurisdictional waters by the United States Army Corps of Engineers (USACE), CDFW, and RWQCB at a minimum 1:1 mitigation ratio. Mitigation for effects to any regulated USACE nonwetland waters or "waters of the United States and State" will be consistent with the USACE Compensatory Mitigation for Losses of Aquatic Resources, also known as the USACE Compensatory Mitigation Rule. The final determination of what is jurisdictional, what permits will be required, and whether mitigation will be required for such impacts is ultimately subject to the discretion of the agencies (i.e., USACE, CDFW, and RWQCB) during the federal and State regulatory processes.

Potential temporary and permanent indirect impacts to jurisdictional areas would be avoided or minimized through implementation of Project Features PF-WQ-1 and PF-WQ-2.

Potential indirect impacts to jurisdictional areas include impacts to water quality caused by litter or pollutants in operational storm water runoff and the indirect effect of germination and proliferation of nonnative invasive plant species. Storm water and litter indirect impacts would be avoided through compliance with the California Department of Transportation (Caltrans) Storm Water Management Plan (SWMP), Caltrans National Pollutant Discharge Elimination System (NPDES) permits, and implementation of project-specific BMPs as required in PF-WQ-1 (see Section 2.10 of this document). Control of invasive plant species requires revegetation with plant species native to the area, adherence to a weed abatement and control program, and compliance with pollution and litter laws and regulations as specified in PF-INV-1 (see Section 2.22, Invasive Species). Implementation of these Project Features would avoid or minimize permanent indirect impacts to jurisdictional areas, and no substantial impacts would occur.

[1] United States Army Corps of Engineers. 2008. Compensatory Mitigation for Losses of Aquatic Resources. Final Rule. Federal Register 73:19595-19705. April 10, 2008.

Design Variations 2a and 6a

As shown in Tables 2.18.4 and 2.18.5, Design Variation 2a and Design Variation 6a would result in permanent impacts to 0.370 ac and 0.027 ac for USACE nonjurisdictional and jurisdictional waters, respectively. As shown in Tables 2.18.6 and 2.18.7, Design Variation 2a would result in permanent impacts to 0.727 ac of CDFW streambed/riparian waters, and Design Variation 6a would result in permanent impacts to 0.737 ac of streambed/riparian waters.

Although minor, impacts to the jurisdictional areas would require authorization from USACE, CDFW, and RWQCB prior to construction as specified in Project Feature PF-WET-1 and PF-WET-2. Compensatory mitigation is anticipated to be required to offset the loss of jurisdictional waters by USACE, CDFW, and RWQCB at a minimum 1:1 mitigation ratio. Mitigation for effects to any regulated USACE nonwetland waters or "waters of the United States" will be conducted in accordance with PF-WET-4. With implementation of Project Features PF-WET-1 through PF-WET-4, permanent direct impacts to jurisdictional areas would not be substantial.

Potential indirect impacts to jurisdictional areas include impacts to water quality caused by litter or pollutants in operational storm water runoff and the indirect effect of germination and proliferation of nonnative invasive plant species. Storm water and litter indirect impacts would be avoided through compliance with the Caltrans SWMP, Caltrans NPDES permits, and implementation of project-specific BMPs as required in PF-WQ-1 (see Section 2.10 of this document). Control of invasive plant species requires revegetation with plant species native to the area, adherence to a weed abatement and control program, and compliance with pollution and litter laws and regulations as specified in PF-INV-1 (see Section 2.22 of this document). Implementation of these measures would avoid or minimize permanent indirect impacts to jurisdictional areas, and no substantial impacts would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a Impacts to Functions and Values

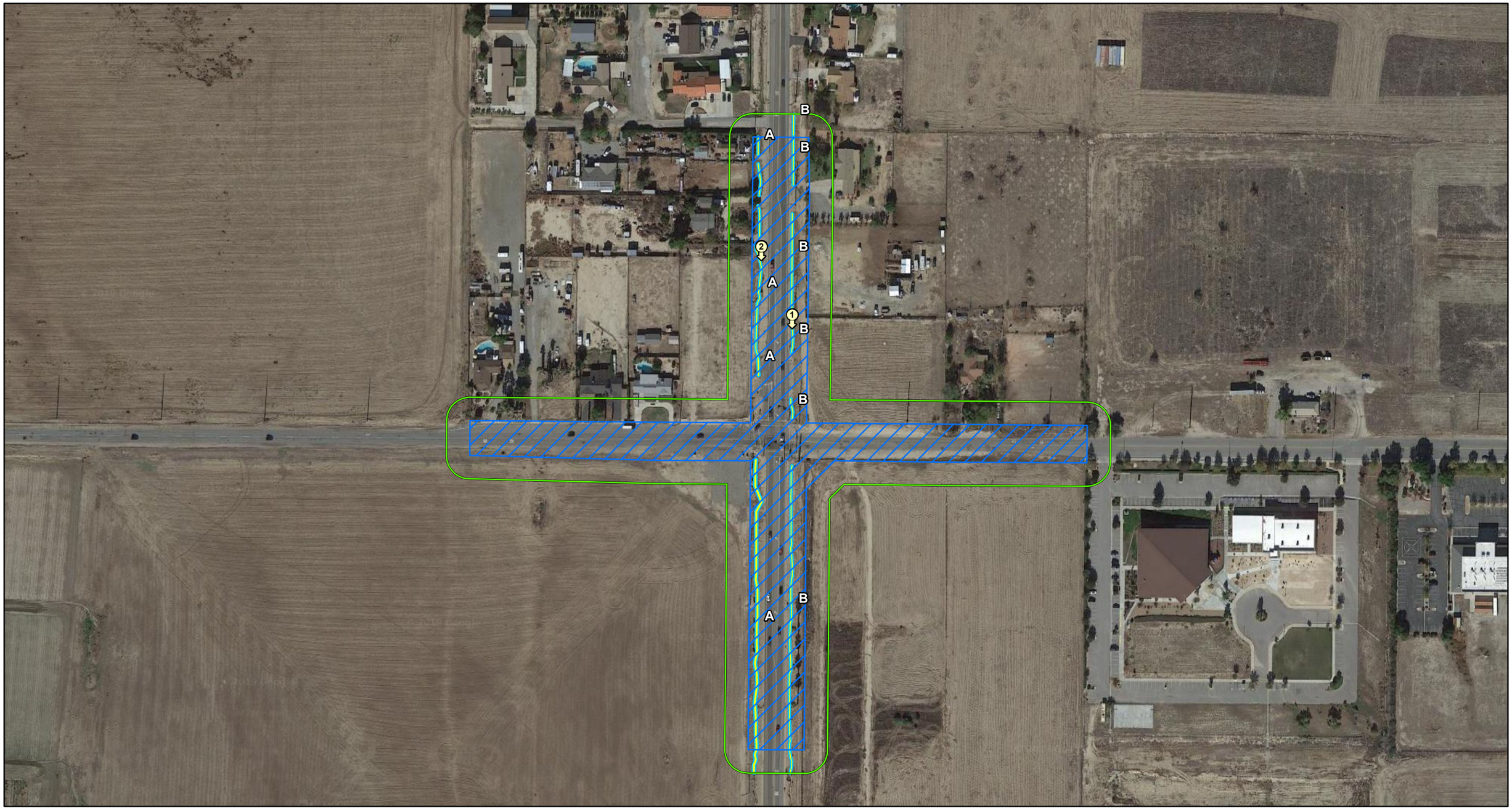
Temporary and permanent impacts to the drainages described above have the potential to impact the functions and values of these drainages. Because all of the drainages within the BSA are at least partially earthen, some soil saturation occurs. Therefore, all drainages have a low to moderate hydrologic regime value. With the exception of Drainage Features C and D, all of the drainages in the BSA have a low to moderate flood storage and flood flow modification value. Drainage Features C and D have low values because they flow into a vacant field. Because all the drainages in the BSA have little or no vegetation, they all have a low sediment retention value. The majority of the drainages in the BSA are channelized and devoid of vegetation, and the natural drainage features that are present are vegetated by upland vegetation. Therefore, retention and transformation for all drainages within the BSA is considered low. Because all of the drainages in the BSA have little or no vegetation, all drainages have a low toxicant trapping value.

The drainages in the BSA may provide some value for recreational uses such as walking and birding, but because the majority of these drainage features are channelized and near major roads and freeways, all of the drainages in the BSA are considered to have a low social significance value. Because all of the drainages in the BSA have little or no vegetation or ponding, they all have a low wildlife habitat

value. Additionally, because all of the drainages in the BSA are ephemeral, they all have a low aquatic habitat value.

2.18.4 Avoidance, Minimization, and/or Mitigation Measures

The project will incorporate project features PF-WQ-1 and PF-WQ-2, PF-INV-1, and PF-WET-1 through PF-WET-4 as described above, therefore no substantial adverse impacts to wetlands and other waters would occur, and no avoidance, minimization, and/or mitigation measures are required.



LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 2 Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.355 ac, temporary = 0.675 ac)

CDFW

Streambed (permanent = 0.549 ac, temporary = 1.159 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

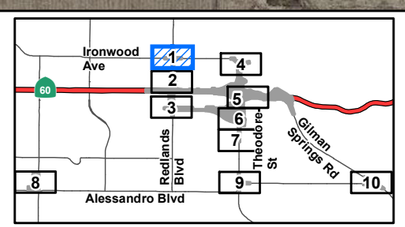


FIGURE 2.18-1
Sheet 1 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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B
B
A
B
B
A

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 2 Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.355 ac, temporary = 0.675 ac)

CDFW

Streambed (permanent = 0.549 ac, temporary = 1.159 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

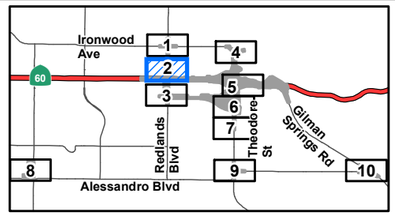

FIGURE 2.18-1
Sheet 2 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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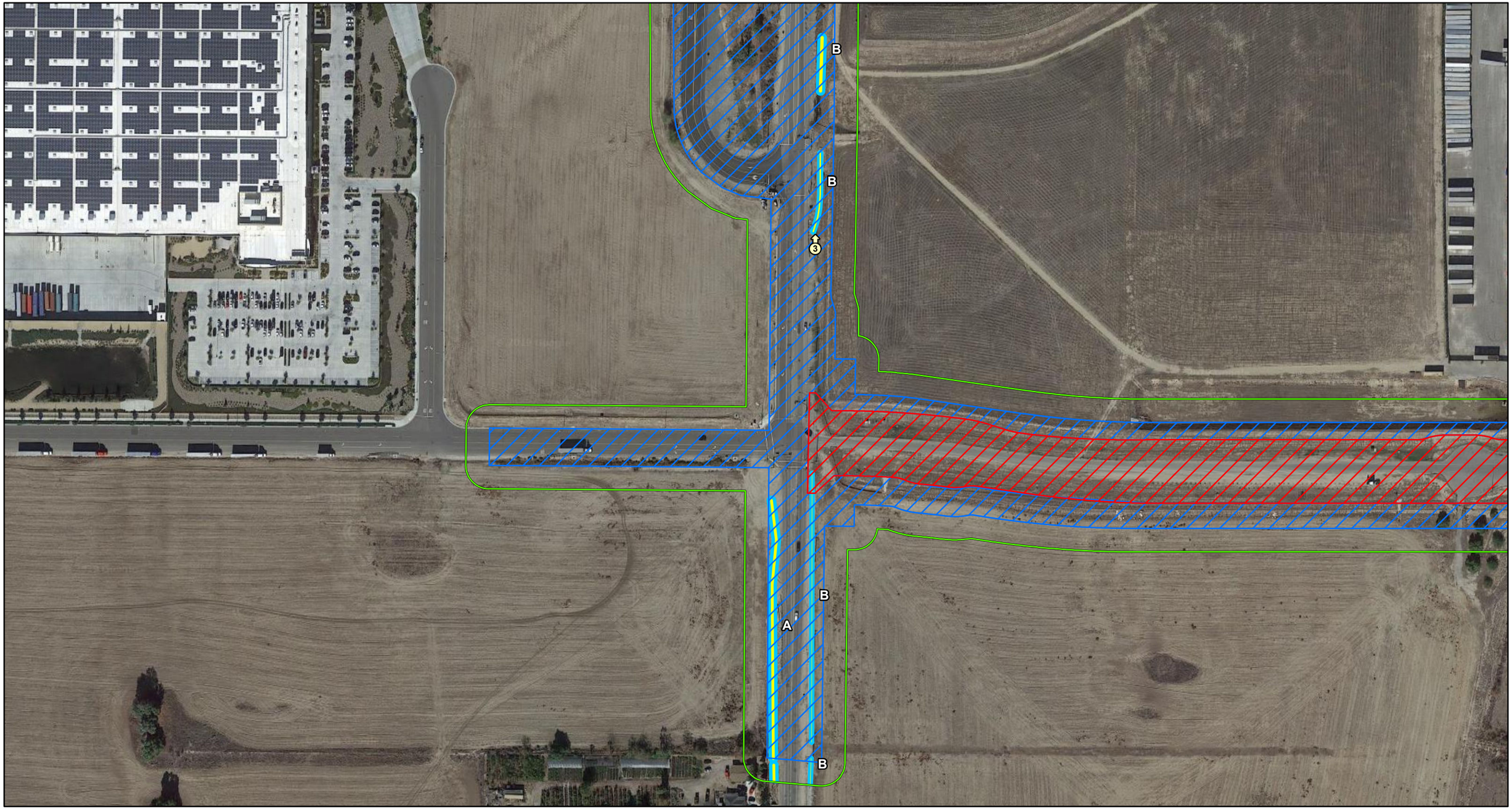

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 2 Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.355 ac, temporary = 0.675 ac)

CDFW

Streambed (permanent = 0.549 ac, temporary = 1.159 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

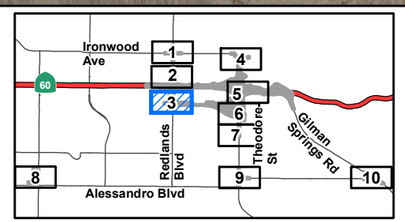

FIGURE 2.18-1
Sheet 3 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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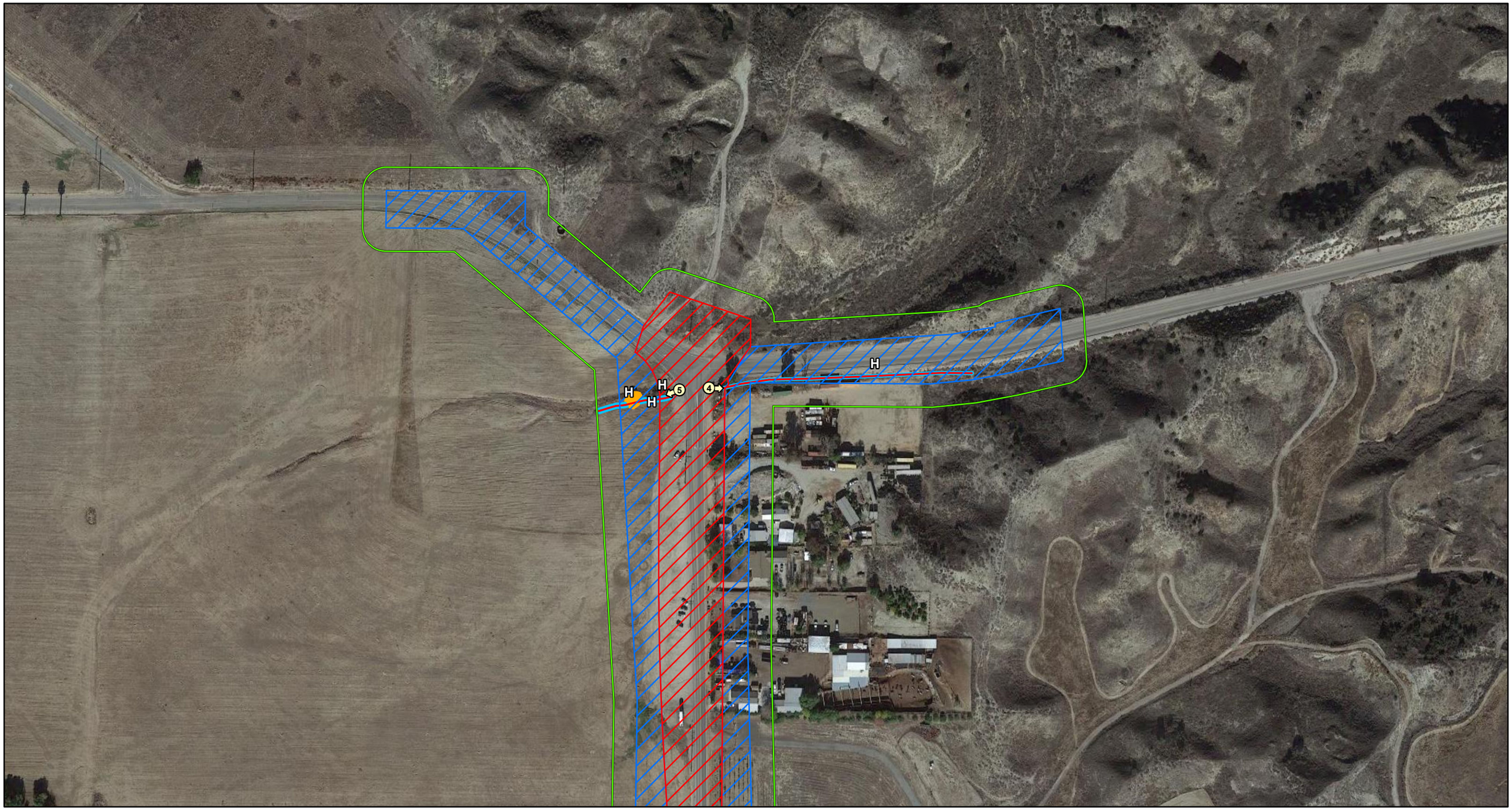

LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Alternative 2 Impacts

- Permanent
- Temporary
- Photo Locations

USACE

- Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)
- Non-Jurisdictional Waters (permanent = 0.355 ac, temporary = 0.675 ac)

CDFW

- Streambed (permanent = 0.549 ac, temporary = 1.159 ac)
- Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

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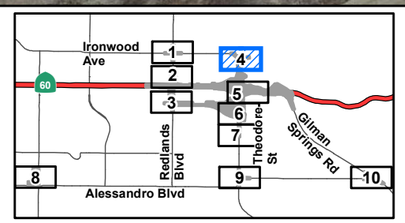

FIGURE 2.18-1
Sheet 4 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features
Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Alternative 2 Impacts

- Permanent
- Temporary
- Photo Locations

USACE

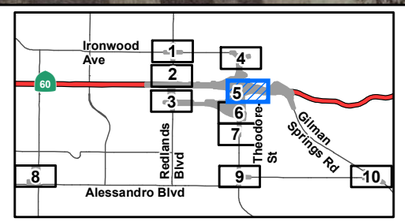
- Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)
- Non-Jurisdictional Waters (permanent = 0.355 ac, temporary = 0.675 ac)

CDFW

- Streambed (permanent = 0.549 ac, temporary = 1.159 ac)
- Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200
FEET



SOURCE: Google (2018); RBF (2018)

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FIGURE 2.18-1
Sheet 5 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features
Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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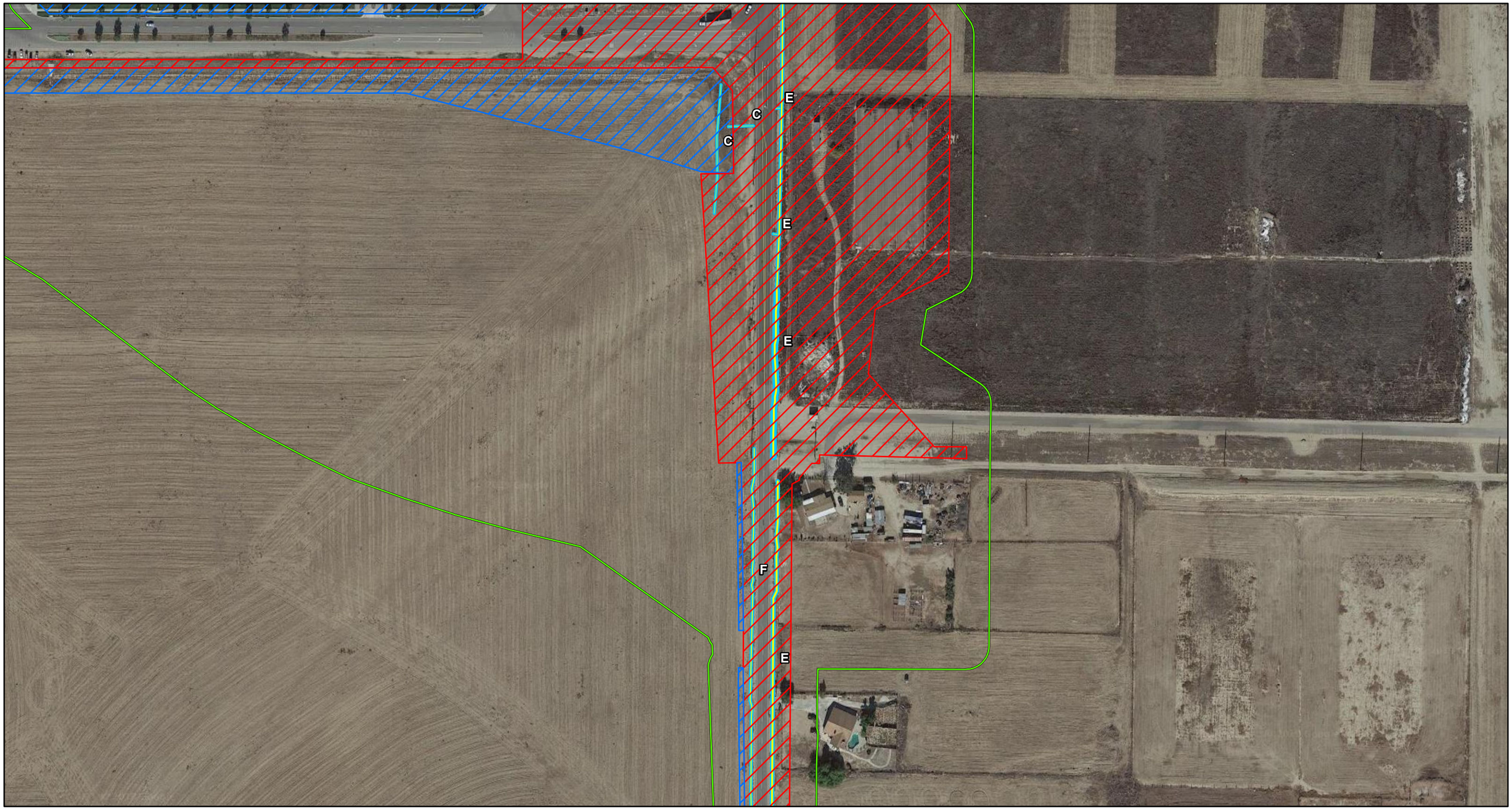

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 2 Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.355 ac, temporary = 0.675 ac)

CDFW

Streambed (permanent = 0.549 ac, temporary = 1.159 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

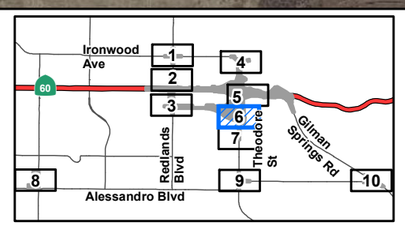

FIGURE 2.18-1
Sheet 6 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features
Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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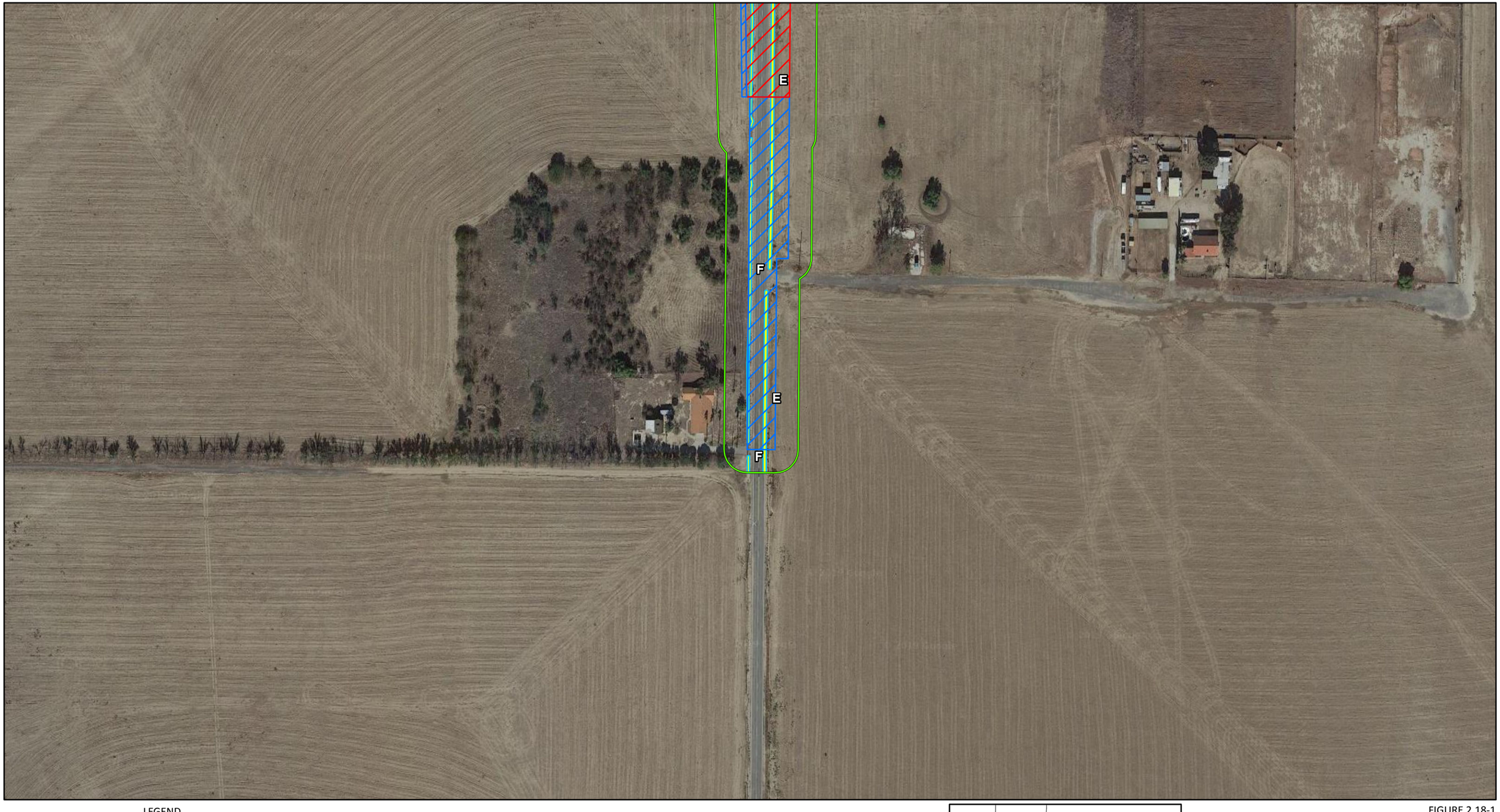

LEGEND

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Alternative 2 Impacts

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Temporary

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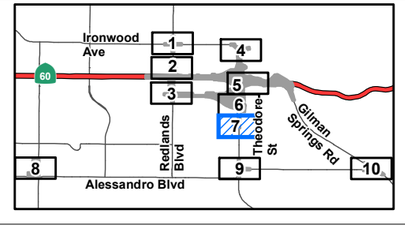

FIGURE 2.18-1
Sheet 7 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features
Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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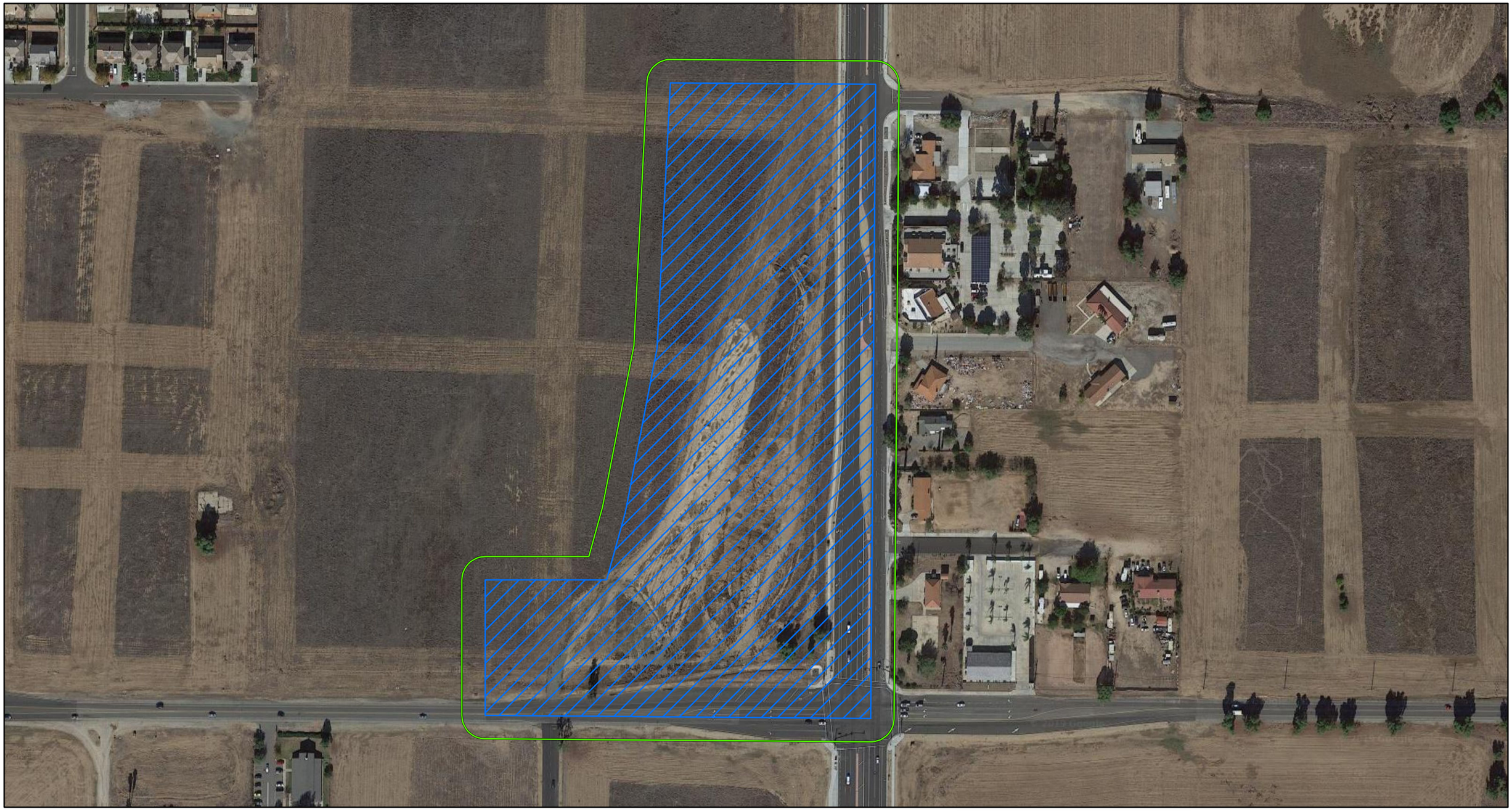

LEGEND

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FEET

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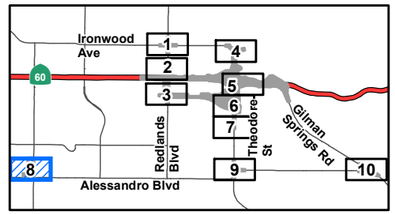

FIGURE 2.18-1
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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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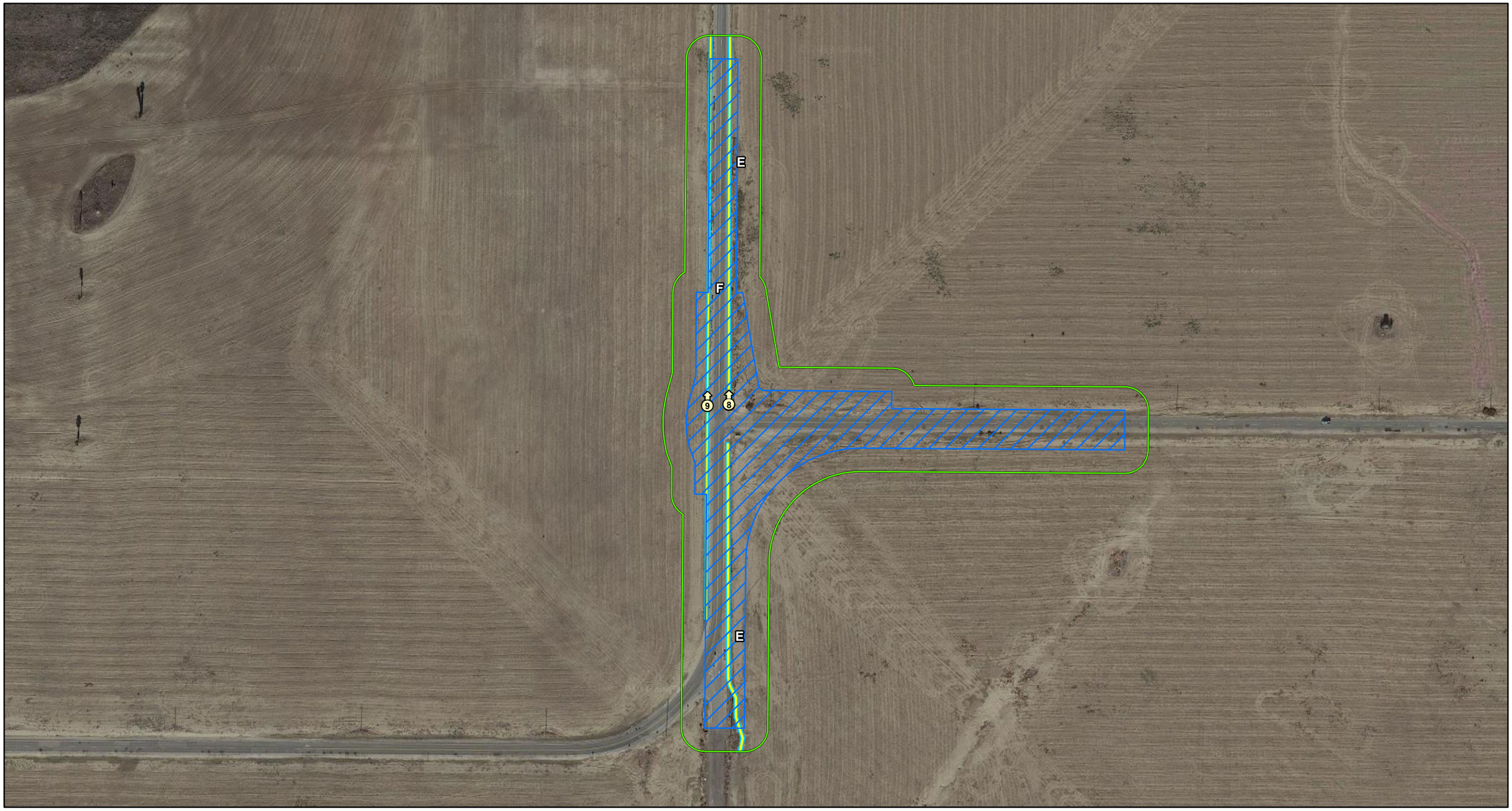

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0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

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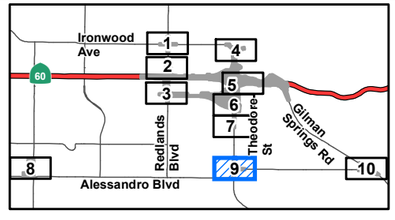

FIGURE 2.18-1
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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features
Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Alternative 2 Impacts

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N

0 100 200
FEET

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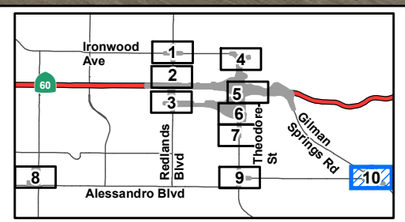

FIGURE 2.18-1
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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features
Alternative 2 Impacts

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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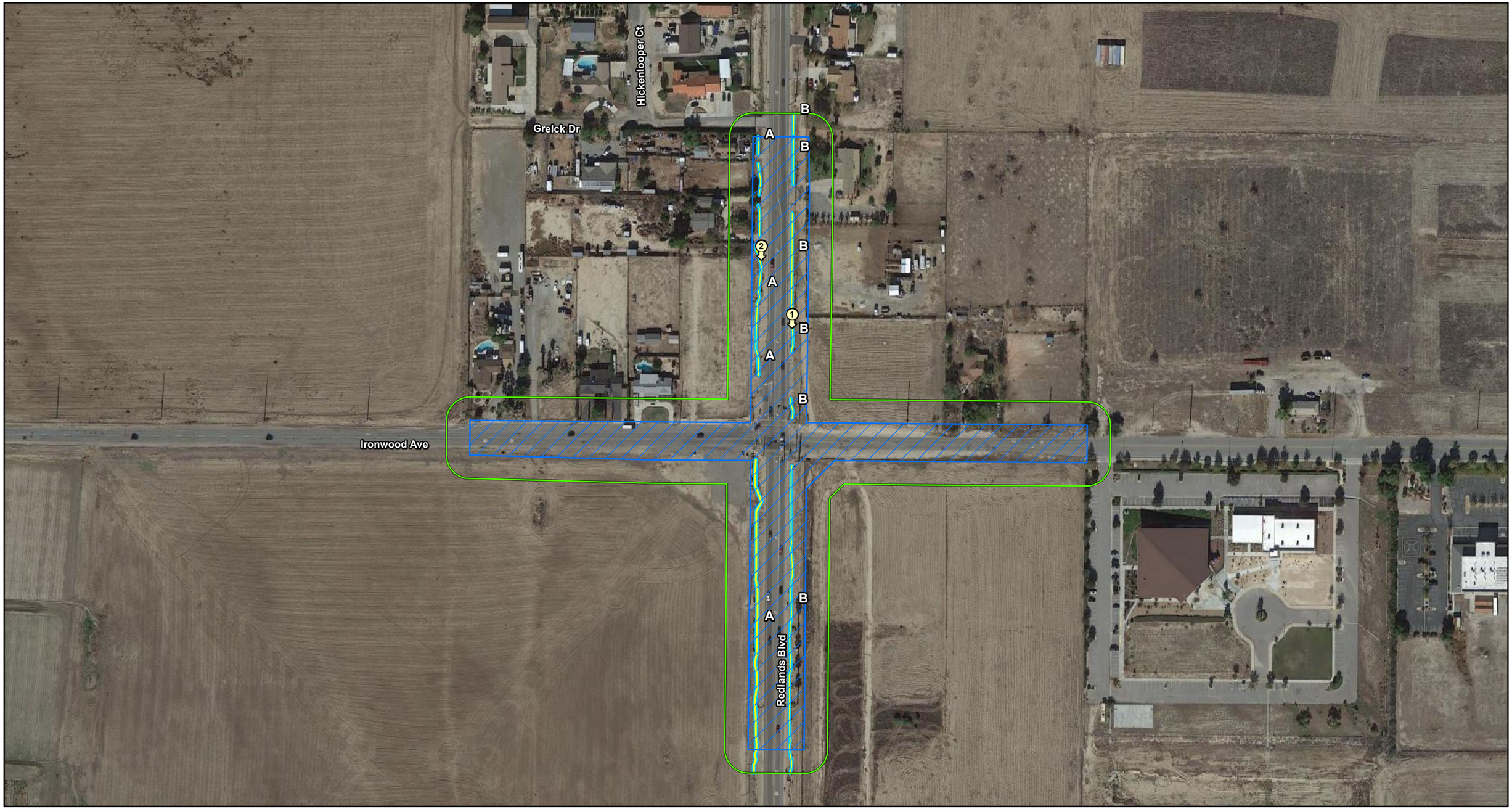

LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Alternative 6 Impacts

- Permanent
- Temporary
- Photo Locations

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N

0 100 200
FEET

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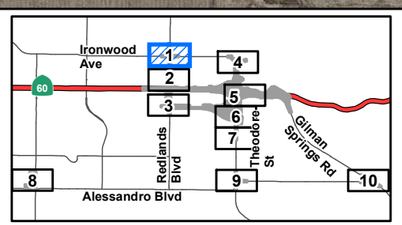

FIGURE 2.18-2
Sheet 1 of 10

SR-60/World Logistics Center Parkway Interchange Project
Potential Jurisdictional Features
-Alternative 6 Impacts
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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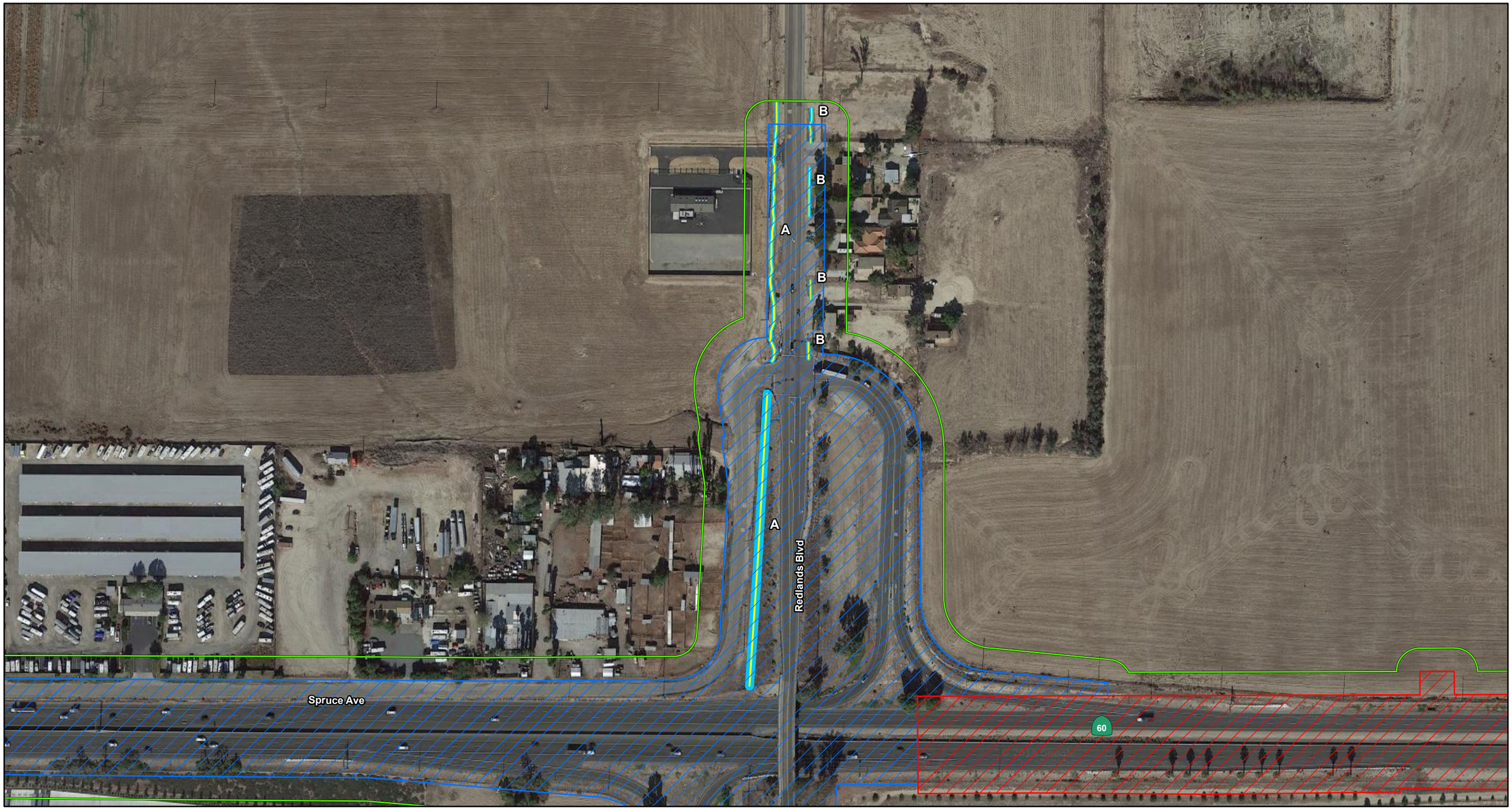

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 6 Impacts

Permanent

Temporary

Photo Locations

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N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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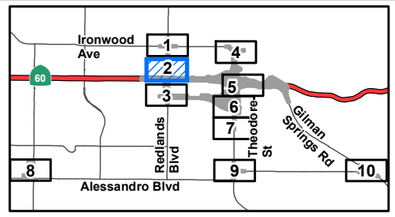

FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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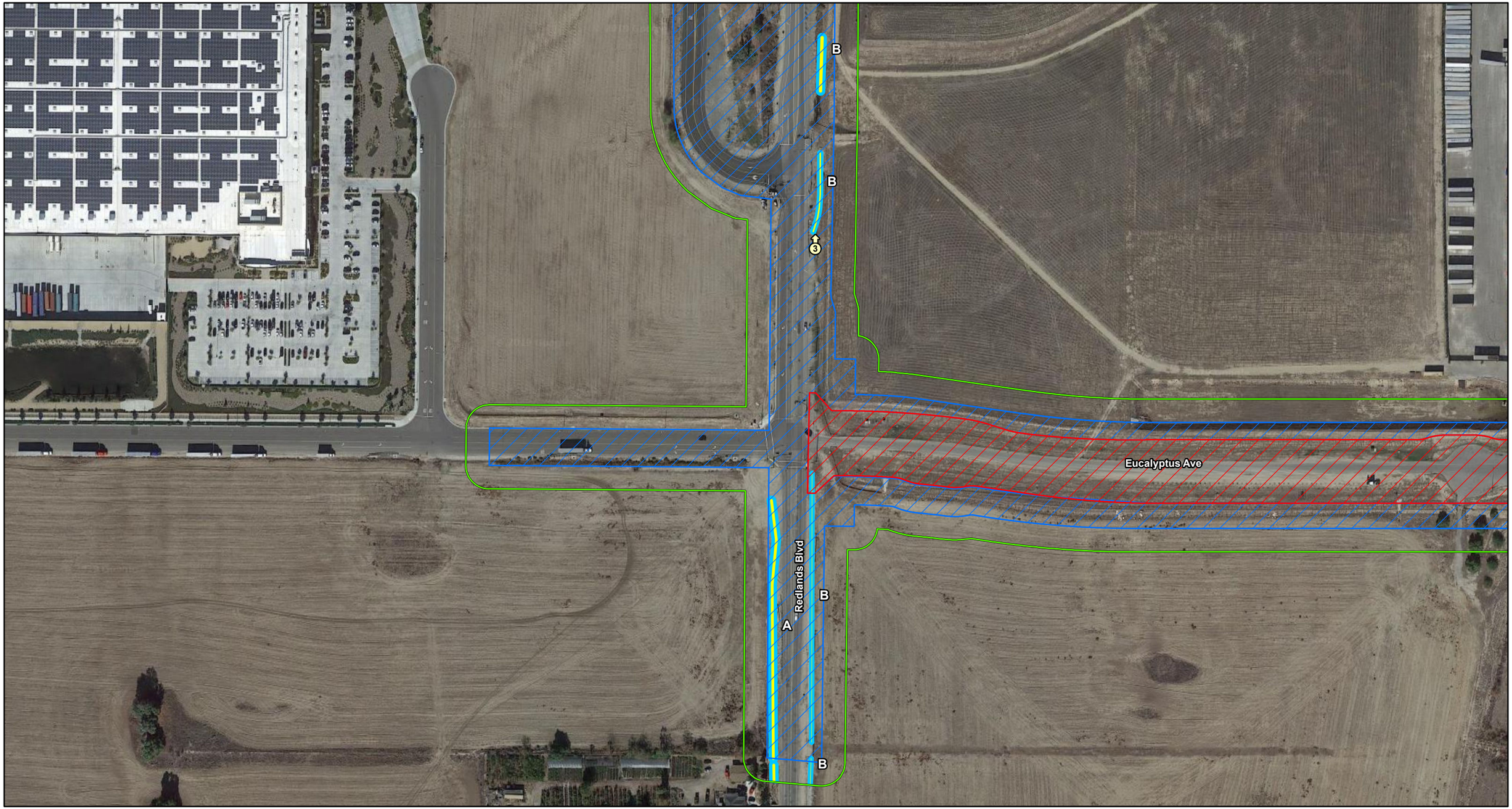

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 6 Impacts

Permanent

Temporary

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N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

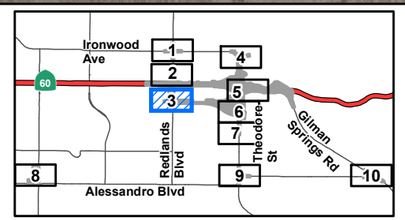

FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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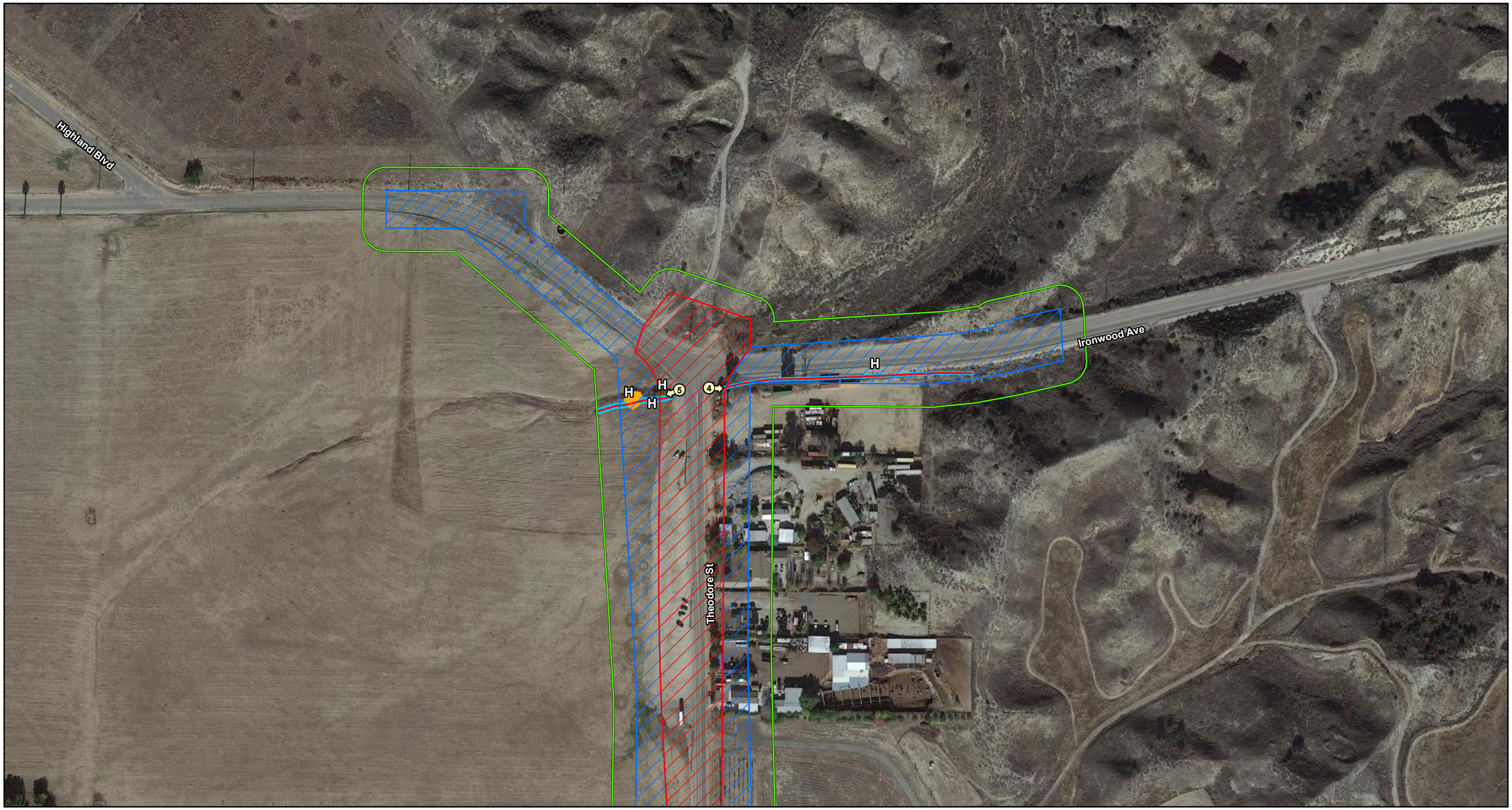

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 6 Impacts

Permanent

Temporary

Photo Locations

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0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

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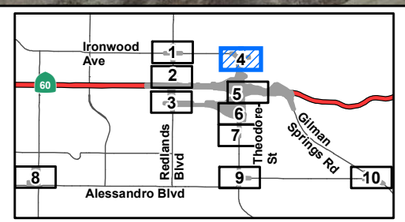

FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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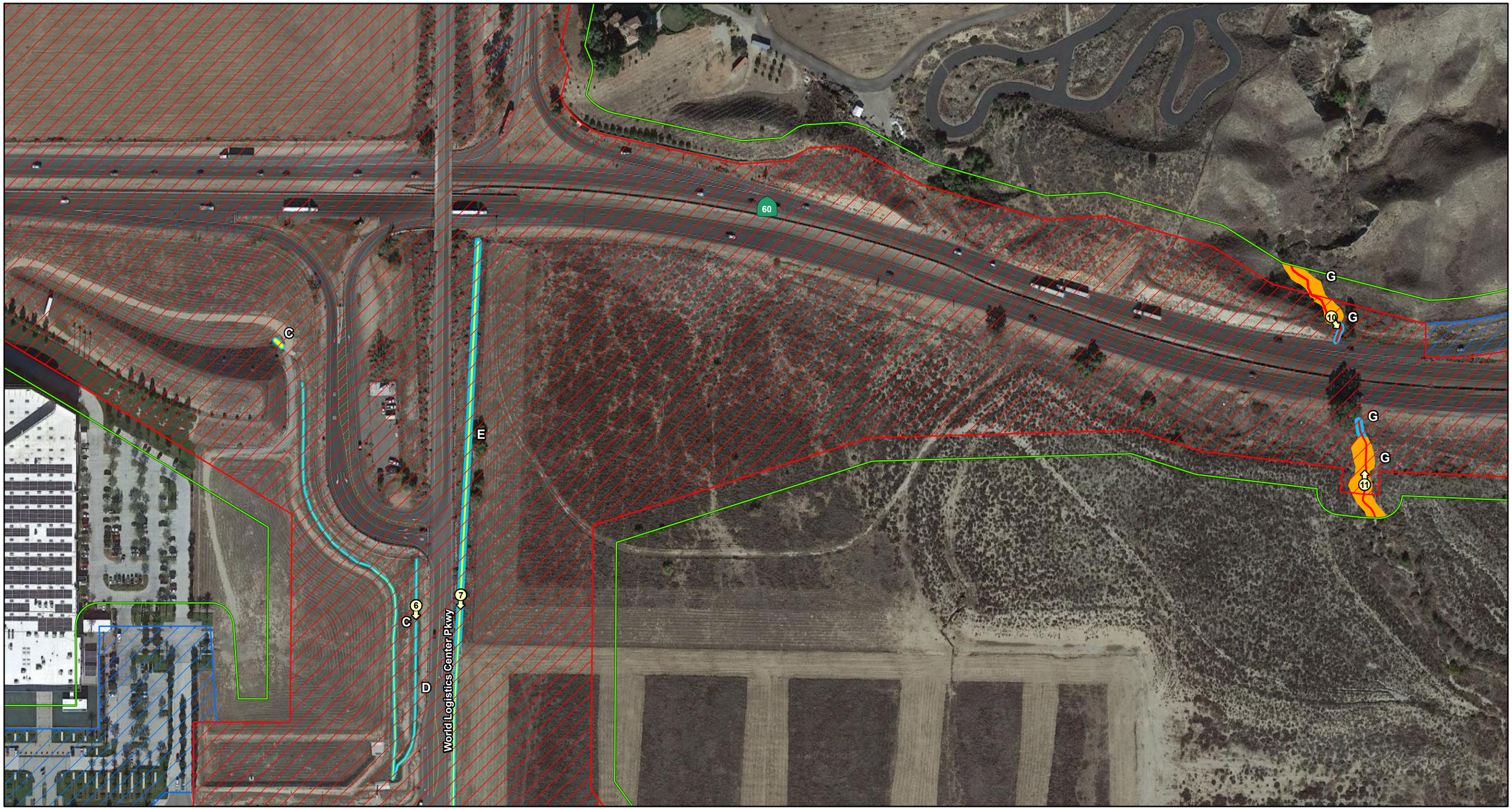

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 6 Impacts

Permanent

Temporary

Photo Locations

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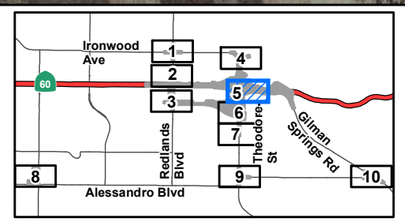
N

0 100 200

FEET



SOURCE: Google (2018); RBF (2018)

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FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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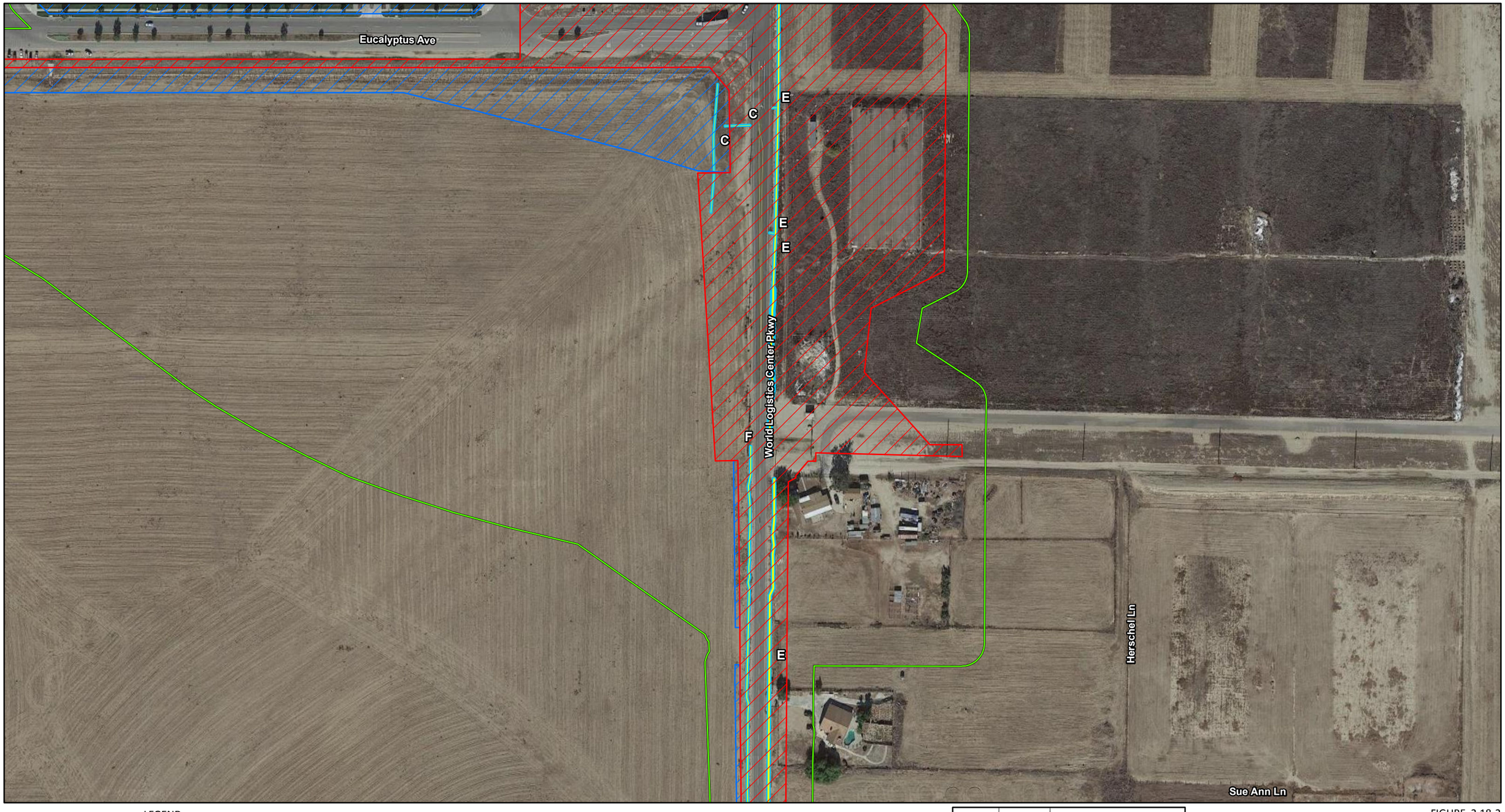

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Alternative 6 Impacts

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Temporary

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N

0 100 200

FEET

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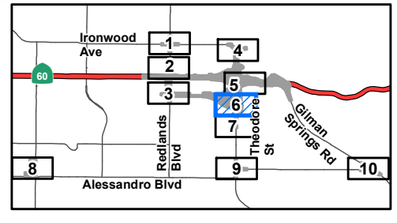

FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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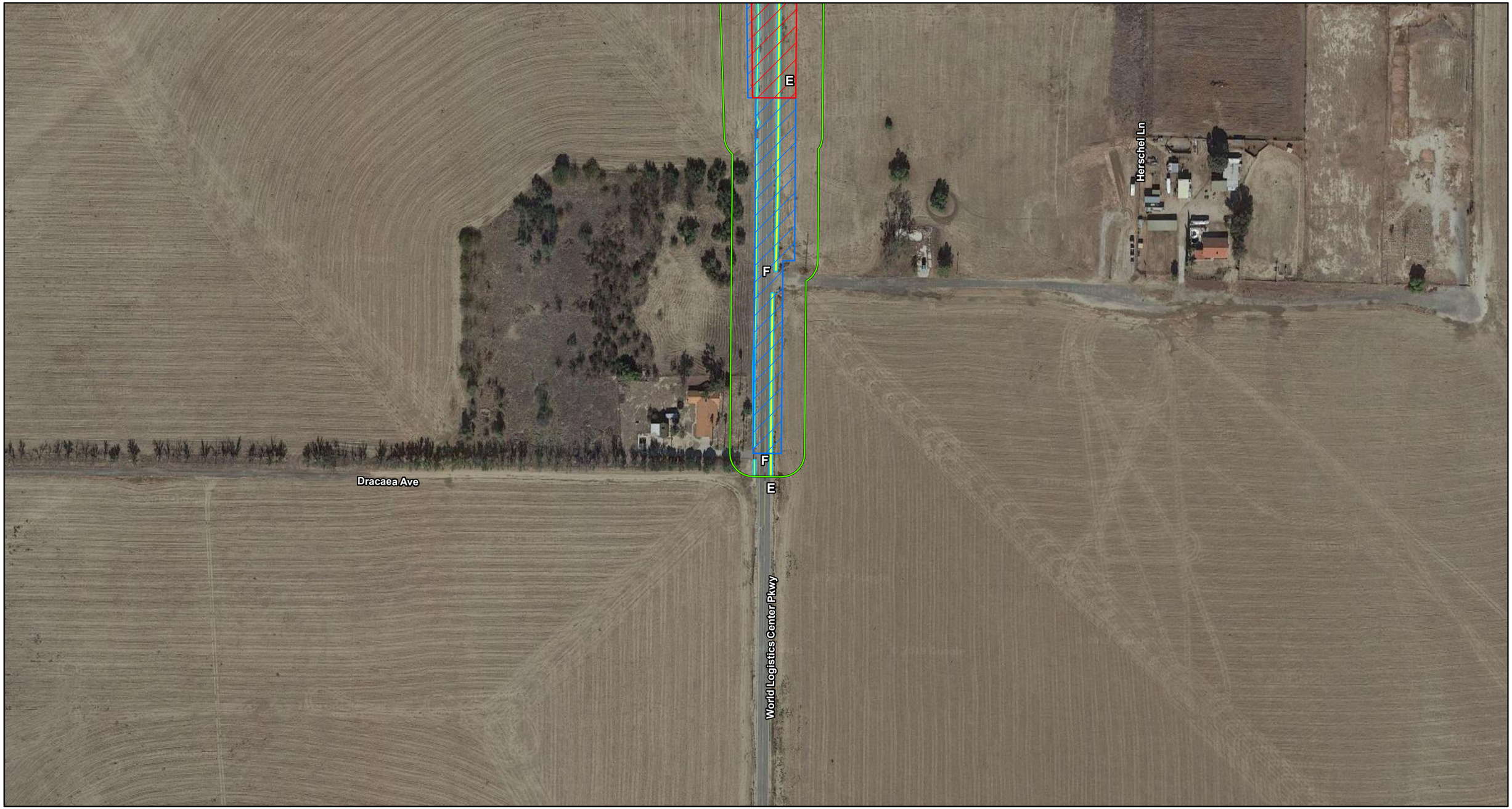

LEGEND

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N

0 100 200

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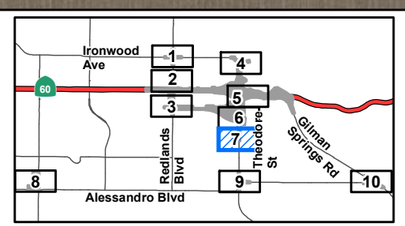

FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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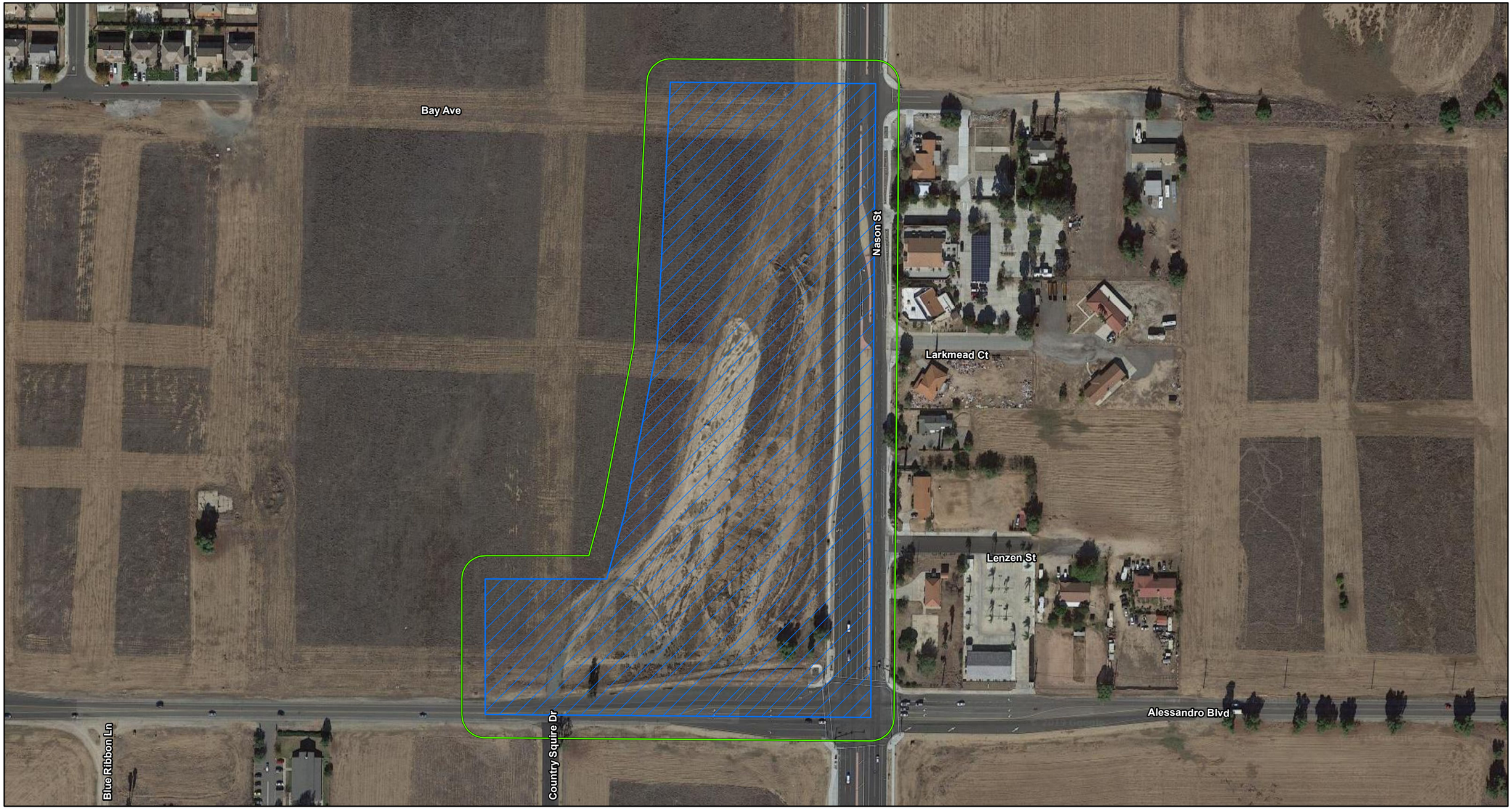

LEGEND

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- Temporary
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0 100 200
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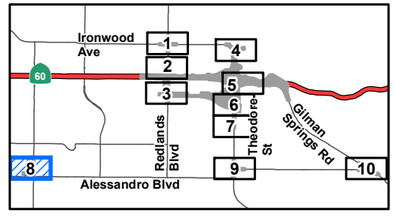

FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

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Project No. 0813000109

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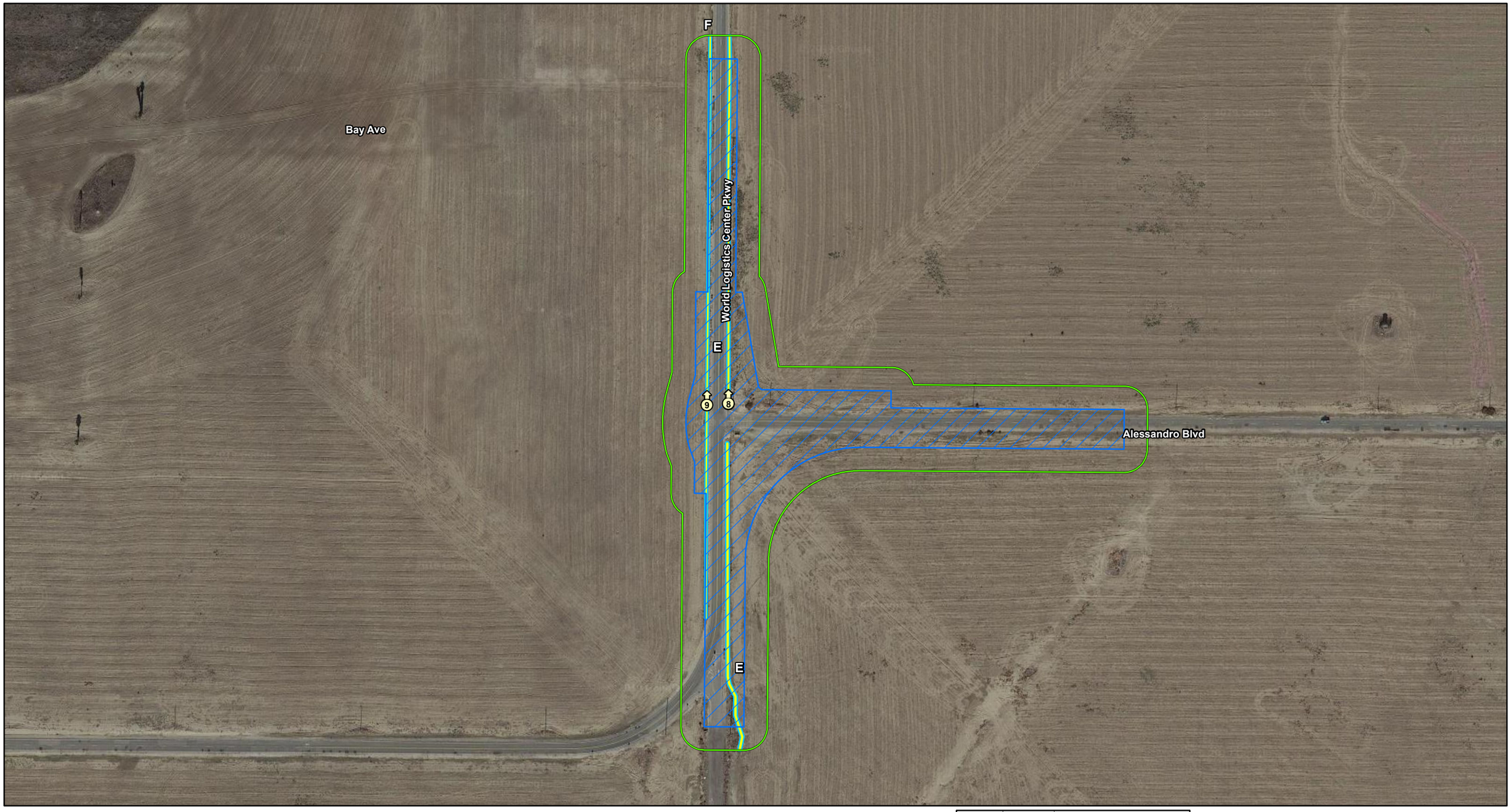

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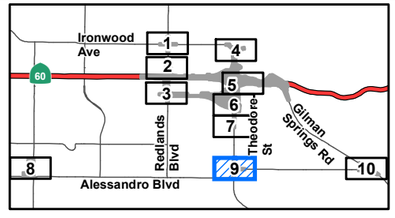

FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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LEGEND

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N

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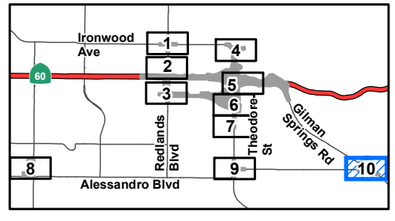

FIGURE 2.18-2

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Alternative 6 Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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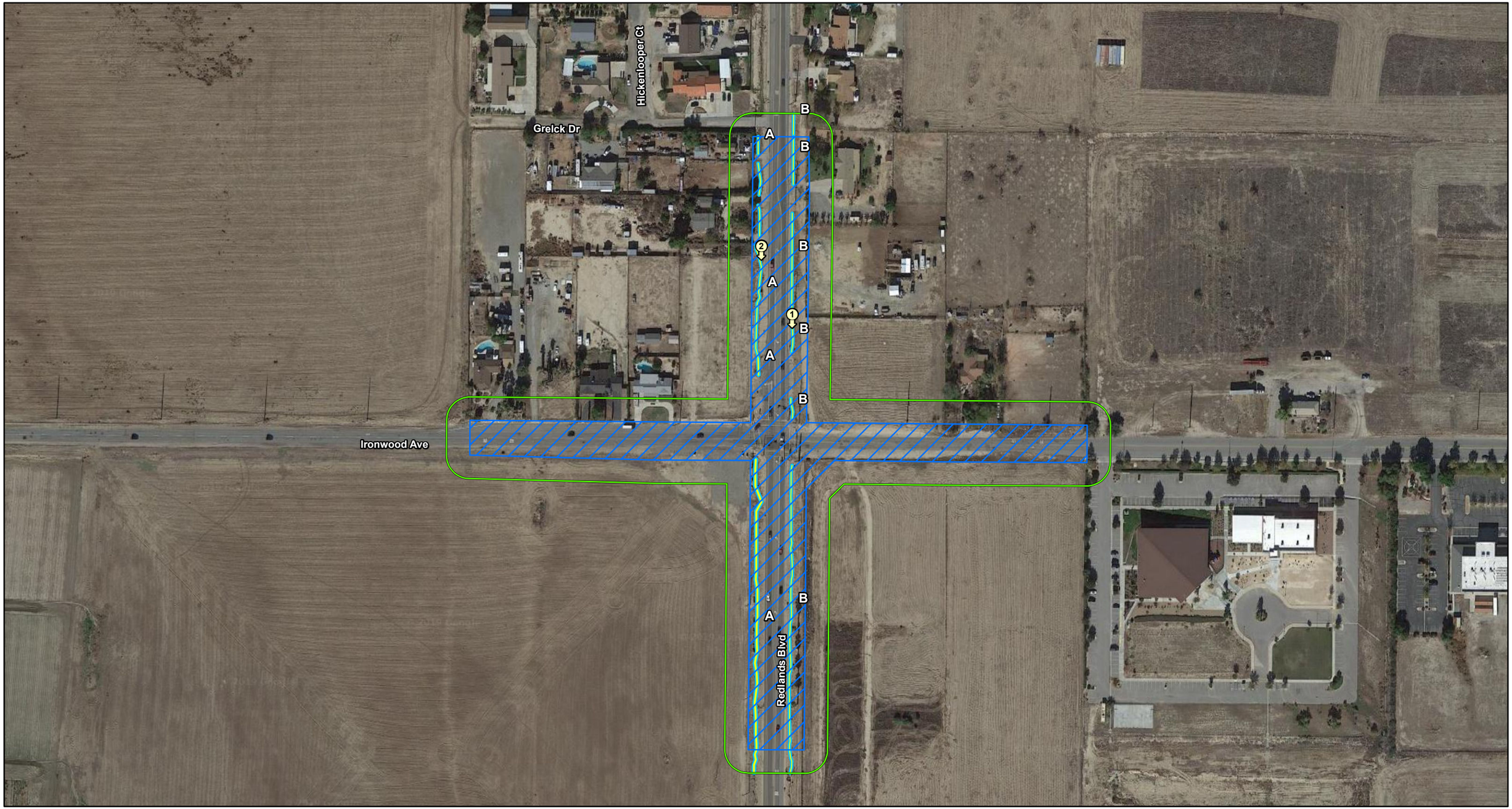

LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

- Permanent
- Temporary
- Photo Locations

USACE

- Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)
- Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.649 ac)

CDFW

- Streambed (permanent = 0.564 ac, temporary = 1.133 ac)
- Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

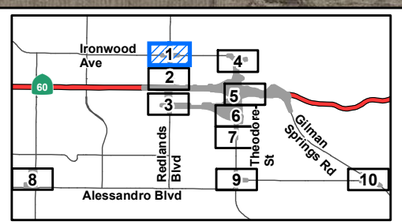

FIGURE 2.18-3
Sheet 1 of 10

SR-60/World Logistics Center Parkway Interchange Project
Potential Jurisdictional Features
-Design Variation 2a Impacts
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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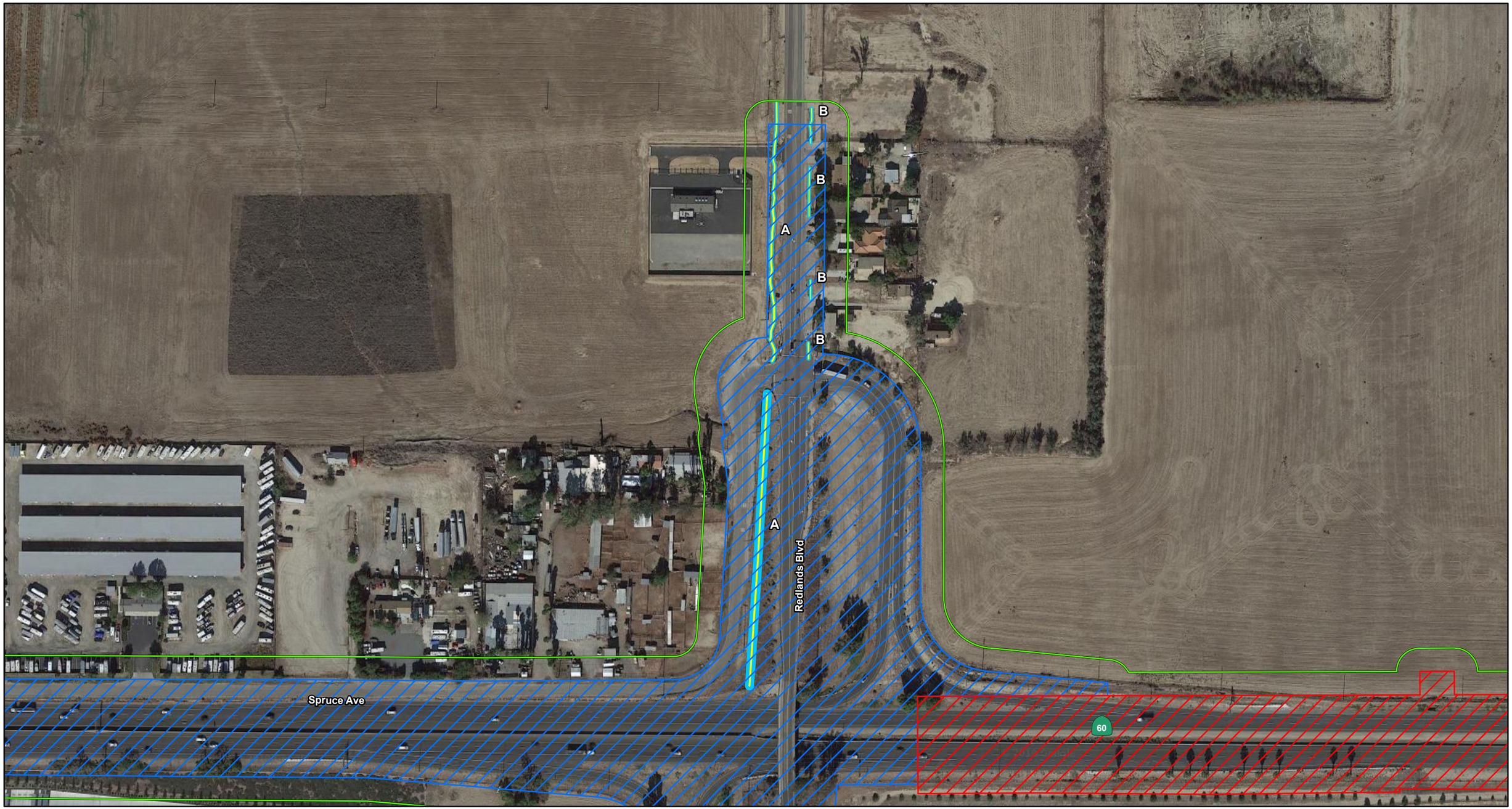

LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

- Permanent
- Temporary
- Photo Locations

USACE

- Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)
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- Streambed (permanent = 0.564 ac, temporary = 1.133 ac)
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0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

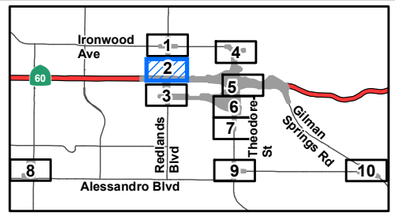

FIGURE 2.18-3
Sheet 2 of 10

SR-60/World Logistics Center Parkway Interchange Project
Potential Jurisdictional Features
-Design Variation 2a Impacts
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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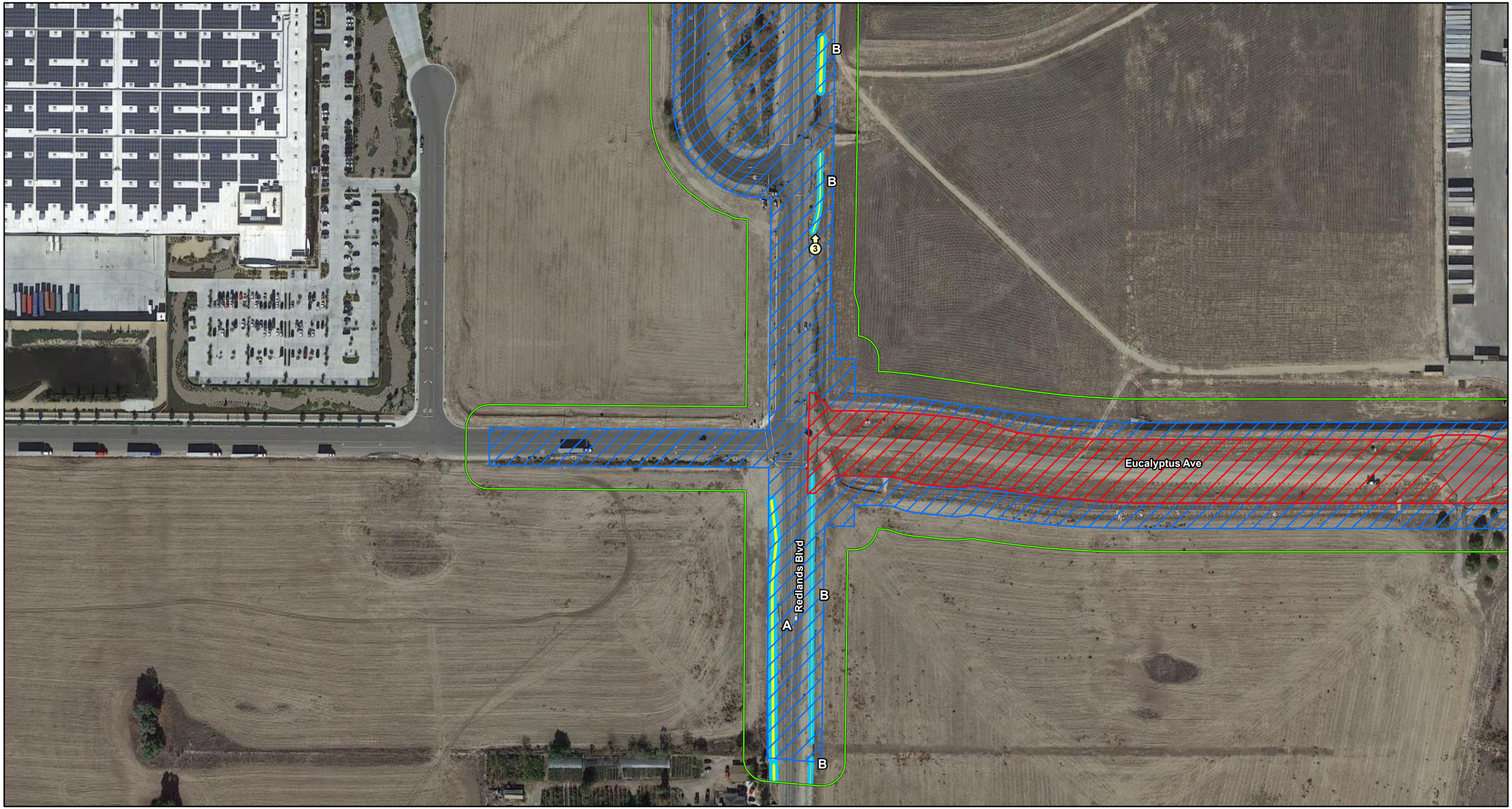

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

Permanent

Temporary

Photo Locations

USACE

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N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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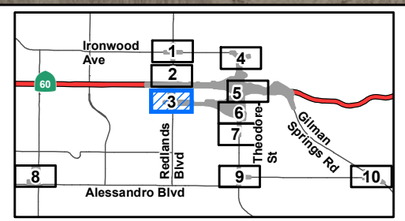

FIGURE 2.18-3

Sheet 3 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 2a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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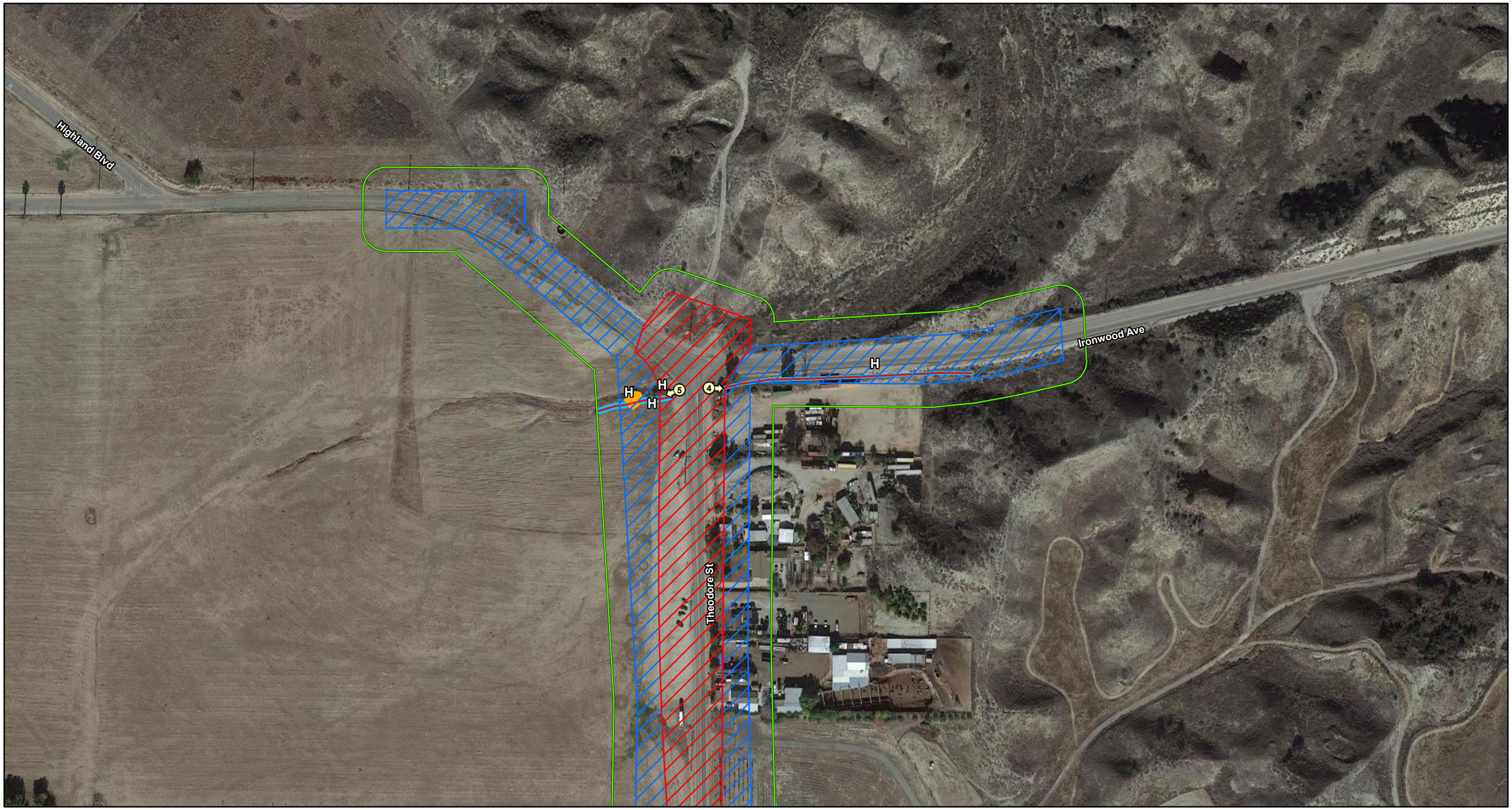

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

Permanent

Temporary

Photo Locations

USACE

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0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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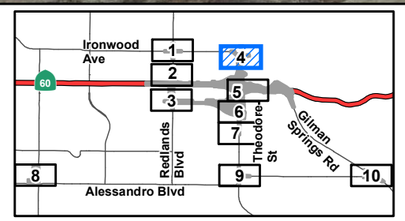

FIGURE 2.18-3

Sheet 4 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 2a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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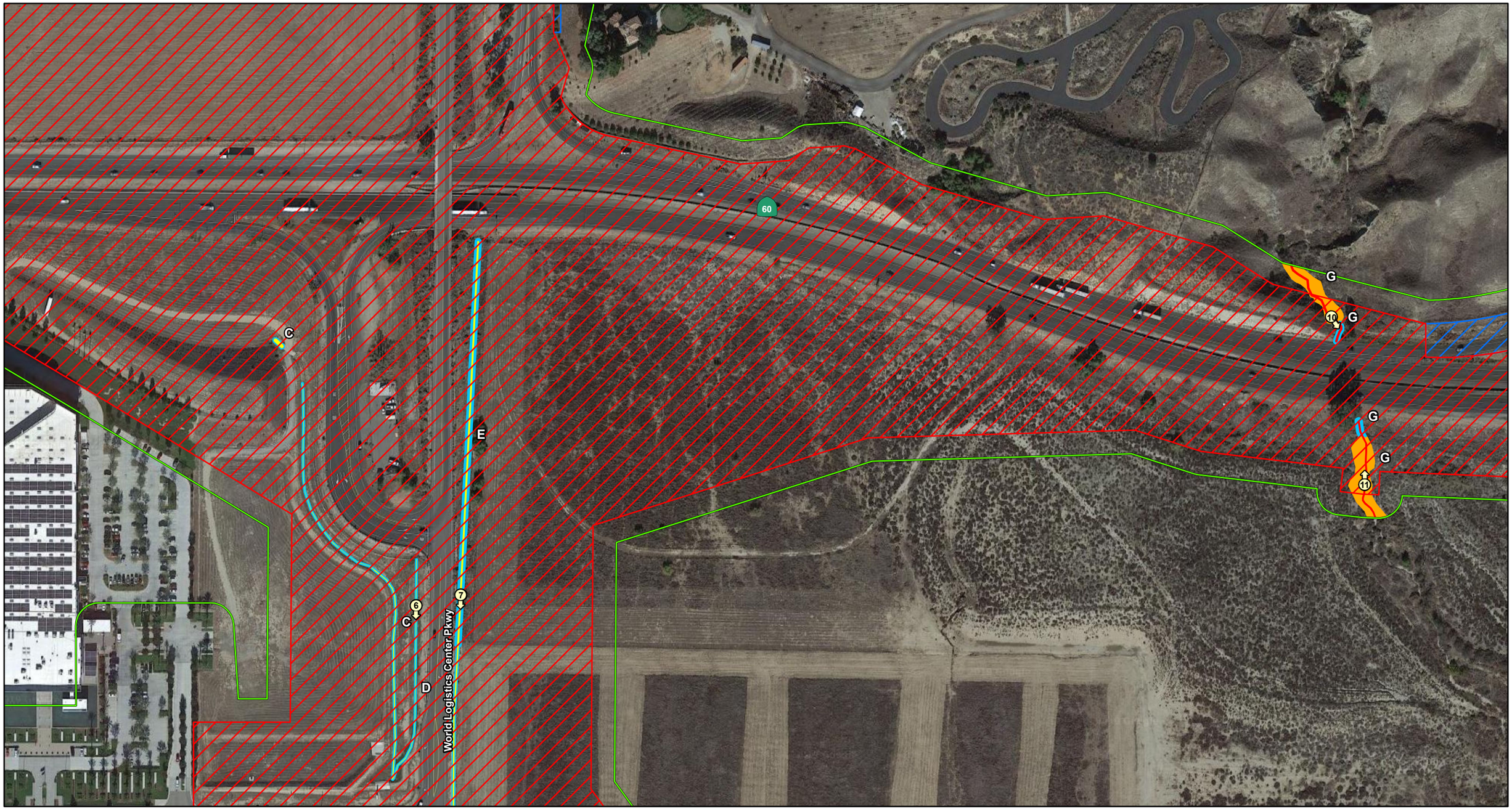

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

Permanent

Temporary

Photo Locations

USACE

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Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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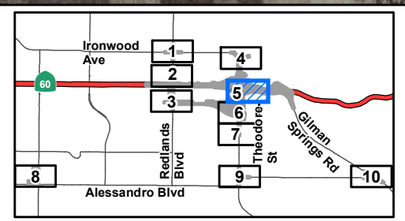

FIGURE 2.18-3

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 2a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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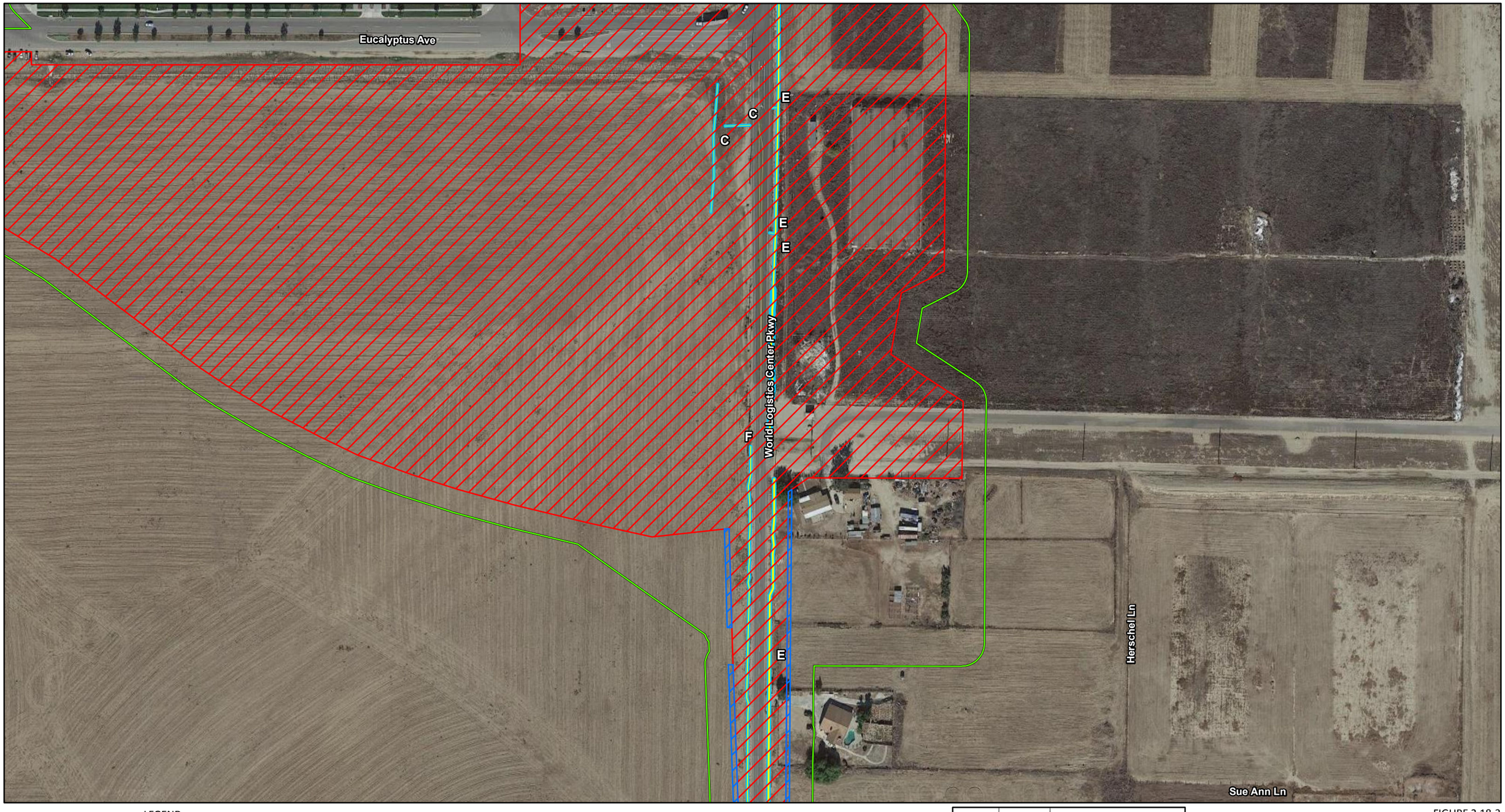

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

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0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

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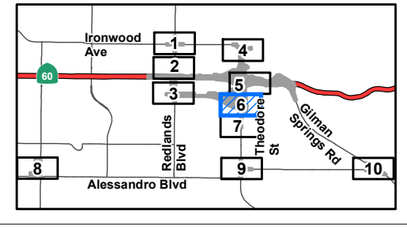

FIGURE 2.18-3

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 2a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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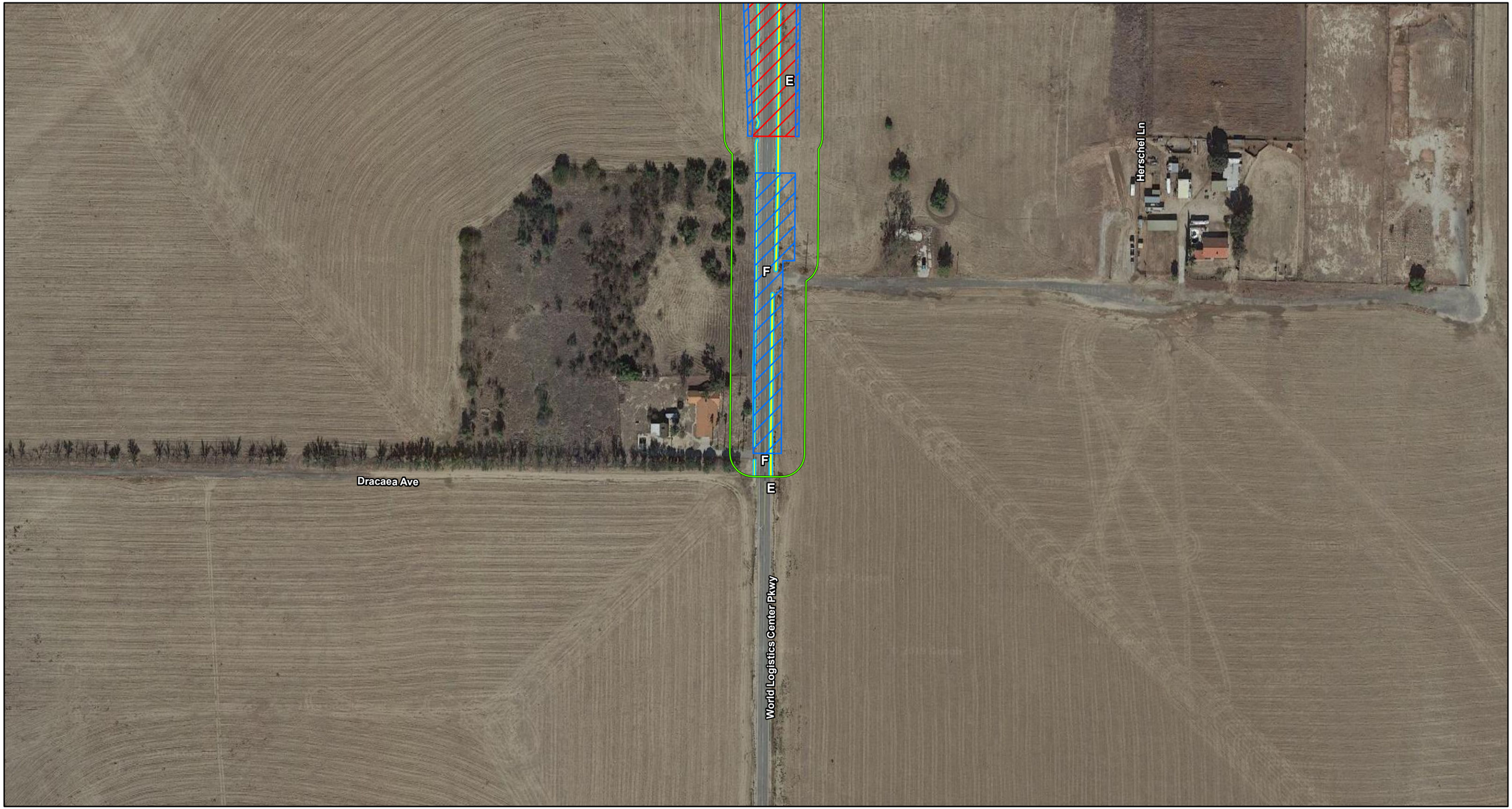

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

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Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

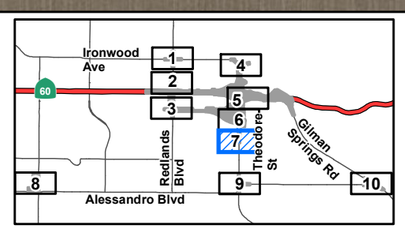

FIGURE 2.18-3

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Design Variation 2a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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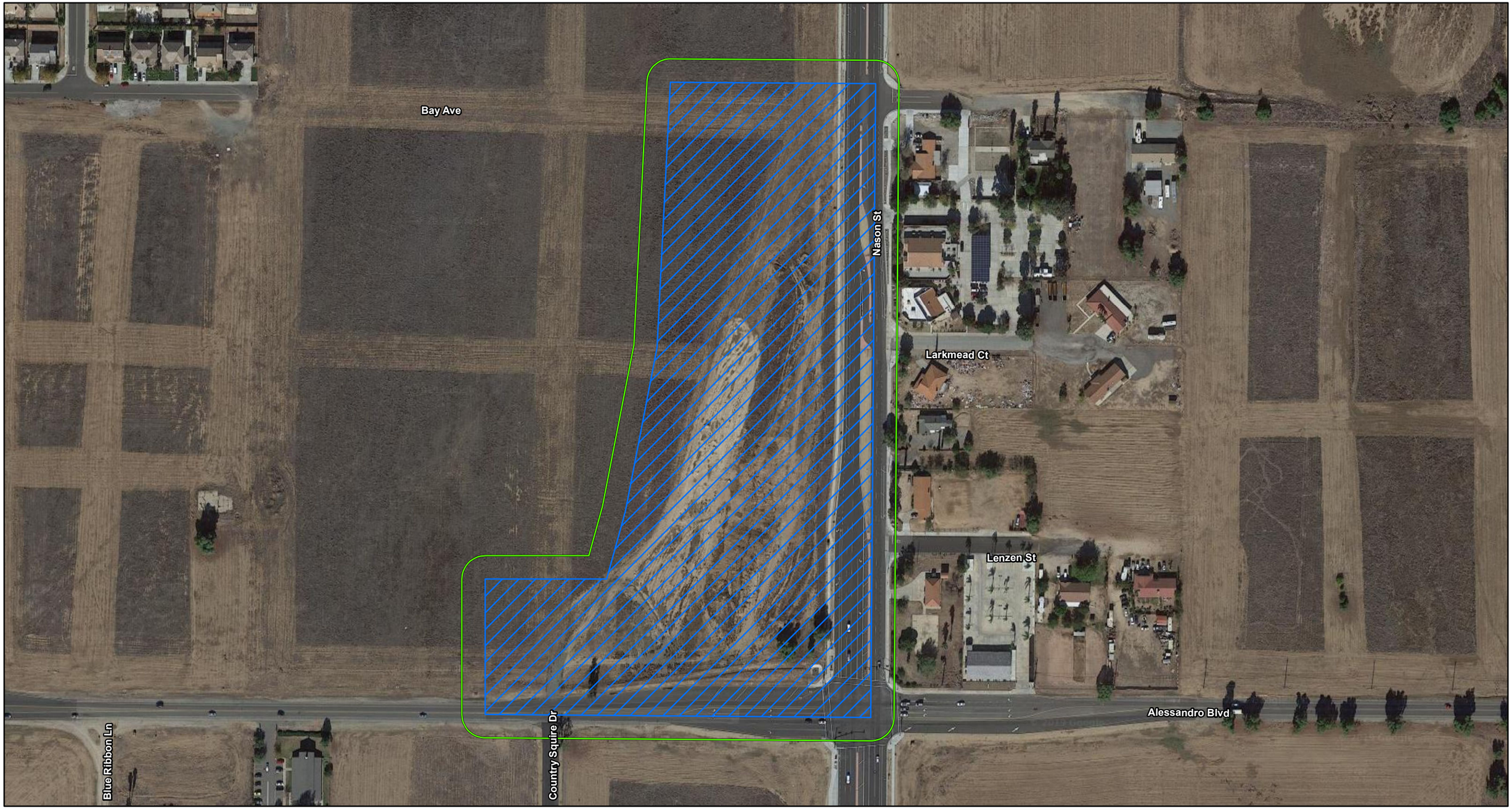

LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

- Permanent
- Temporary
- Photo Locations

USACE

- Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)
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CDFW

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- Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

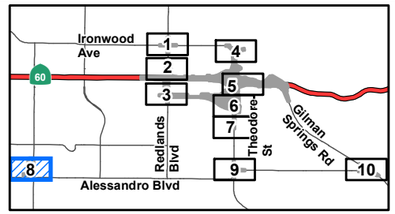

FIGURE 2.18-3
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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features
-Design Variation 2a Impacts

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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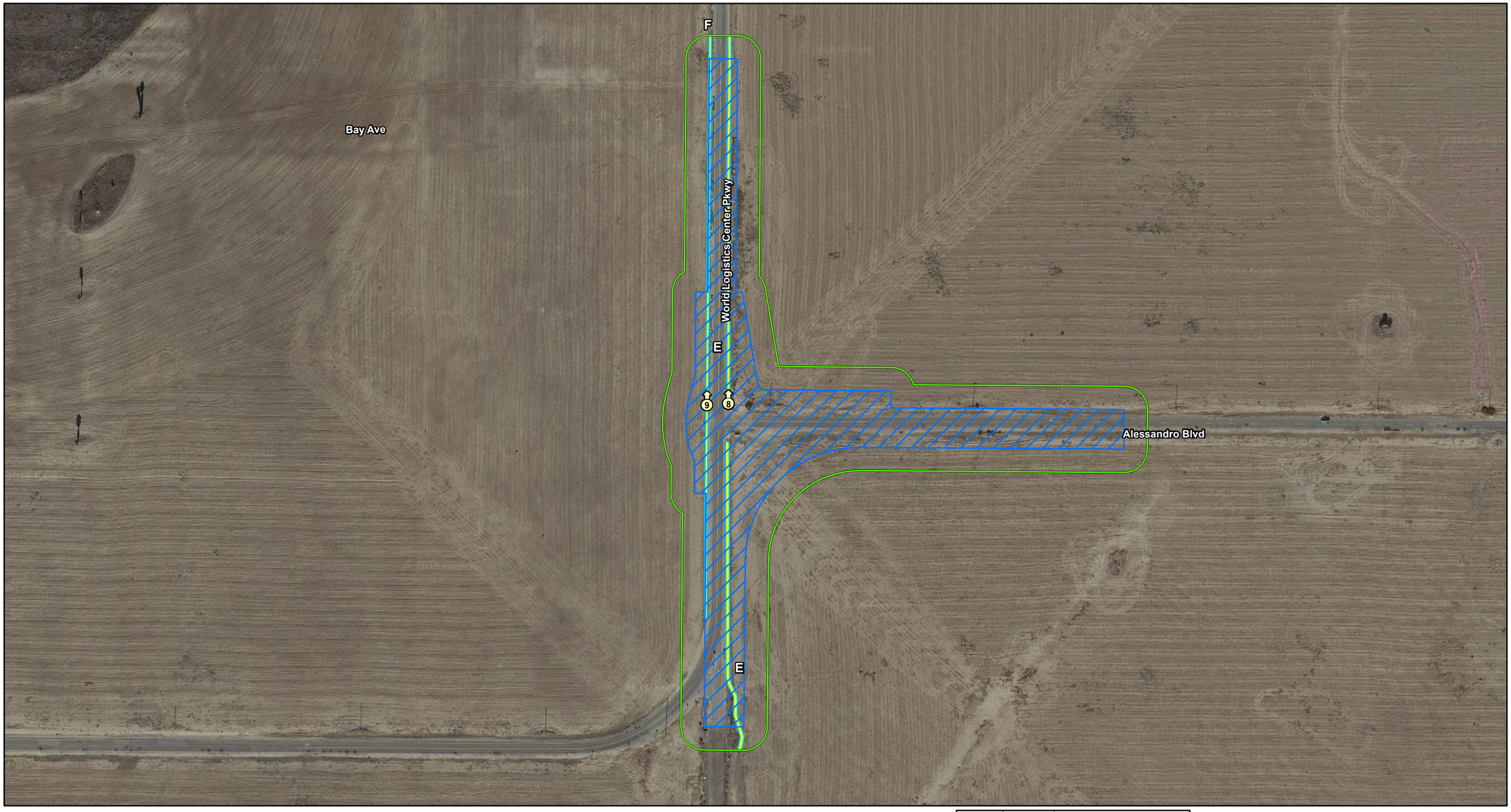

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.649 ac)

CDFW

Streambed (permanent = 0.564 ac, temporary = 1.133 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

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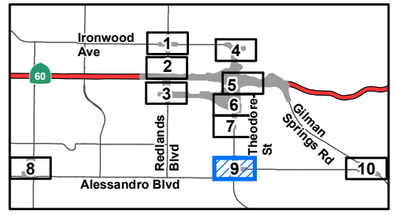

FIGURE 2.18-3

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 2a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 2a Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.649 ac)

CDFW

Streambed (permanent = 0.564 ac, temporary = 1.133 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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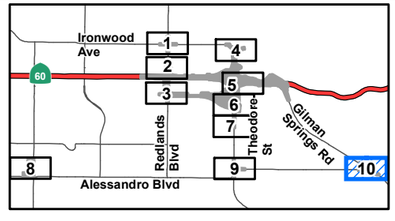

FIGURE 2.18-3

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Design Variation 2a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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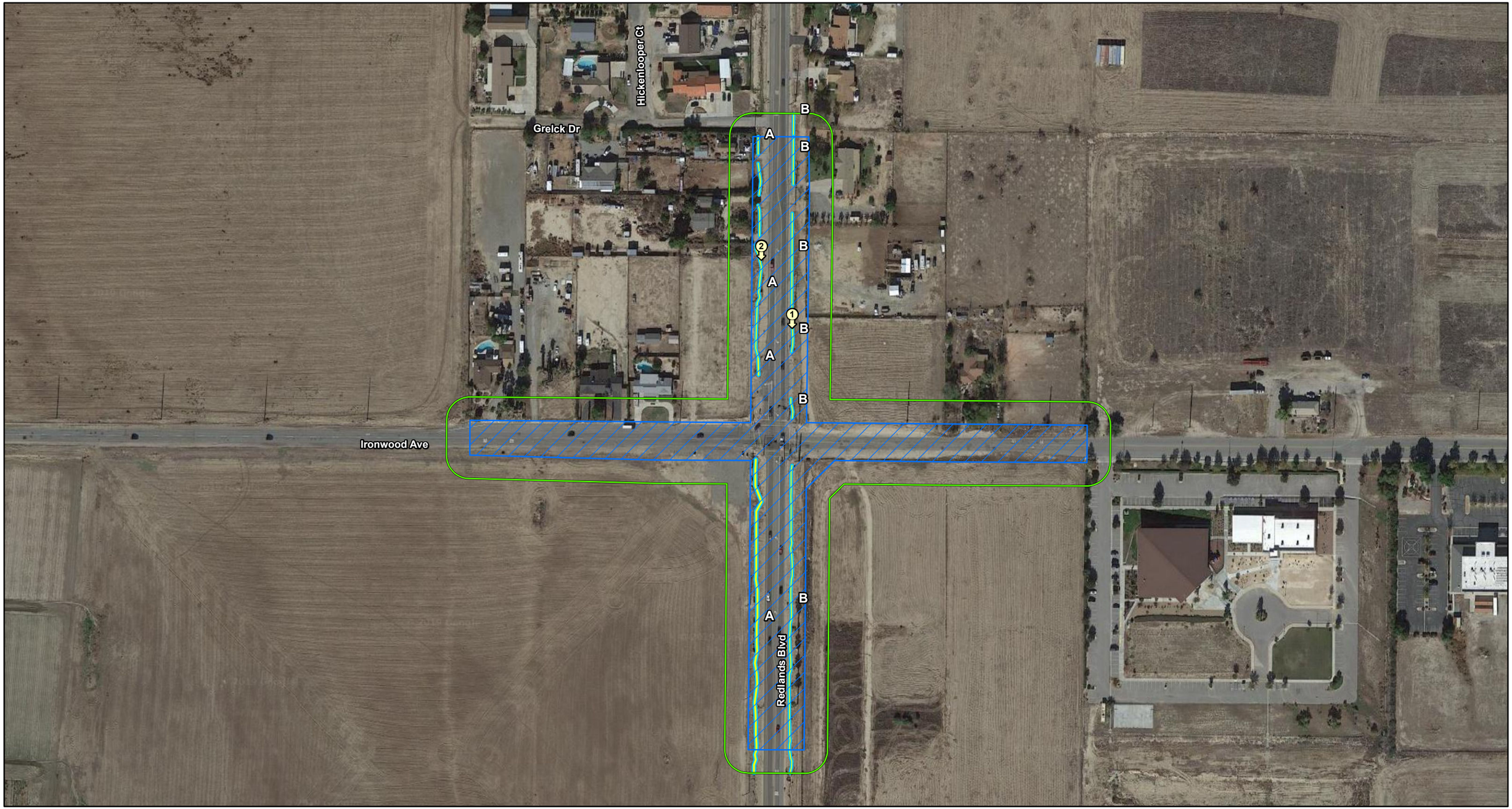

LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

- Permanent
- Temporary
- Photo Locations

USACE

- Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)
- Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.659 ac)

CDFW

- Streambed (permanent = 0.574 ac, temporary = 1.133 ac)
- Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

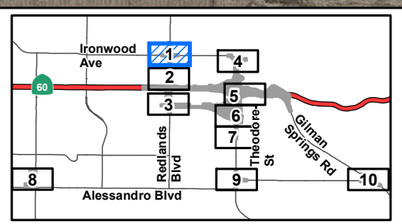

FIGURE 2.18-4
Sheet 1 of 10

SR-60/World Logistics Center Parkway Interchange Project
Potential Jurisdictional Features
-Design Variation 6a Impacts
08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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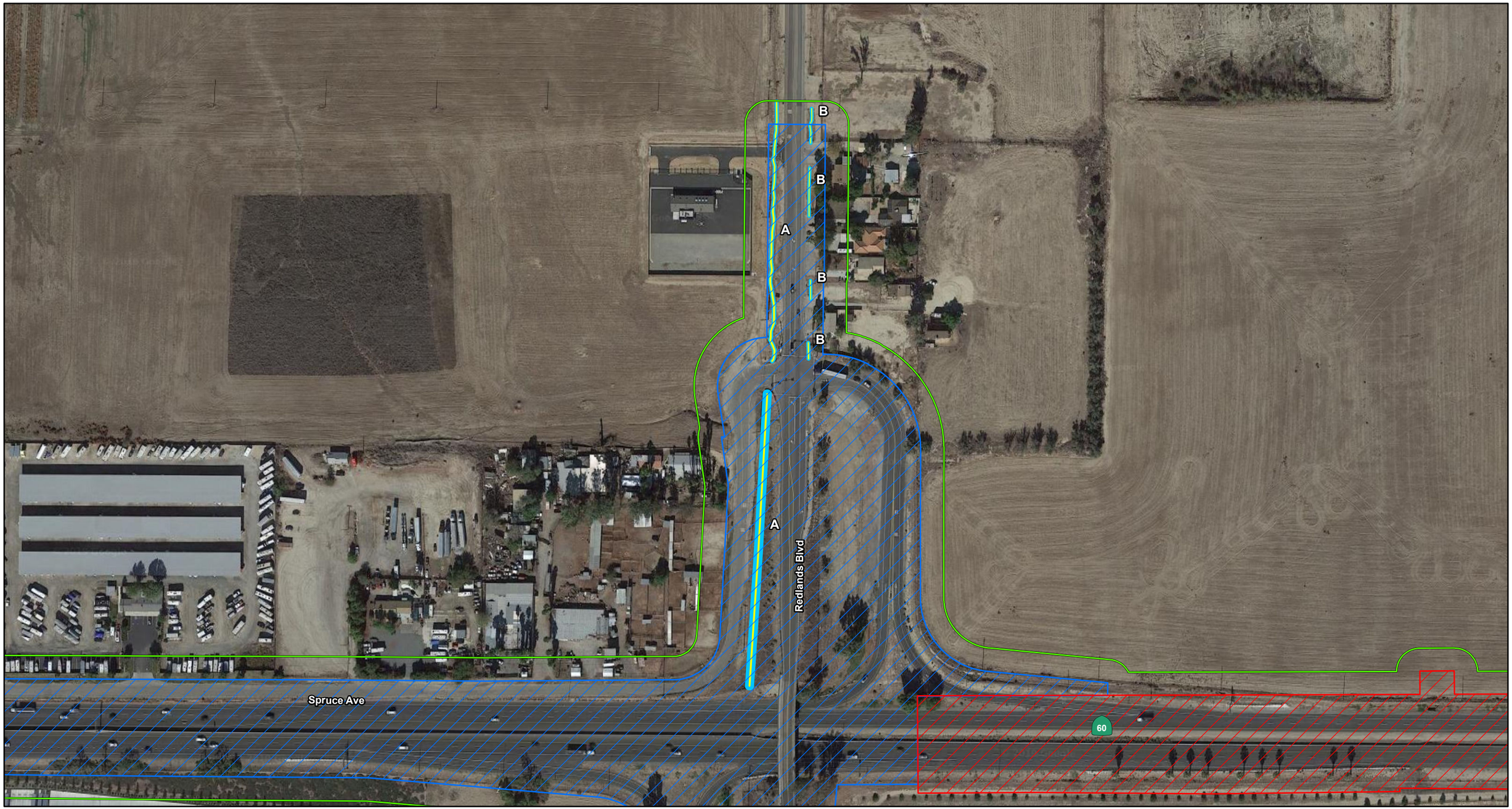

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

Permanent

Temporary

Photo Locations

USACE

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N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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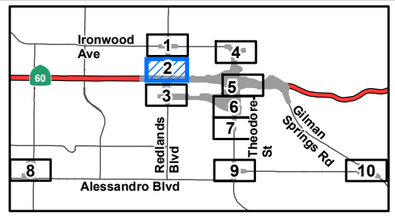

FIGURE 2.18-4

Sheet 2 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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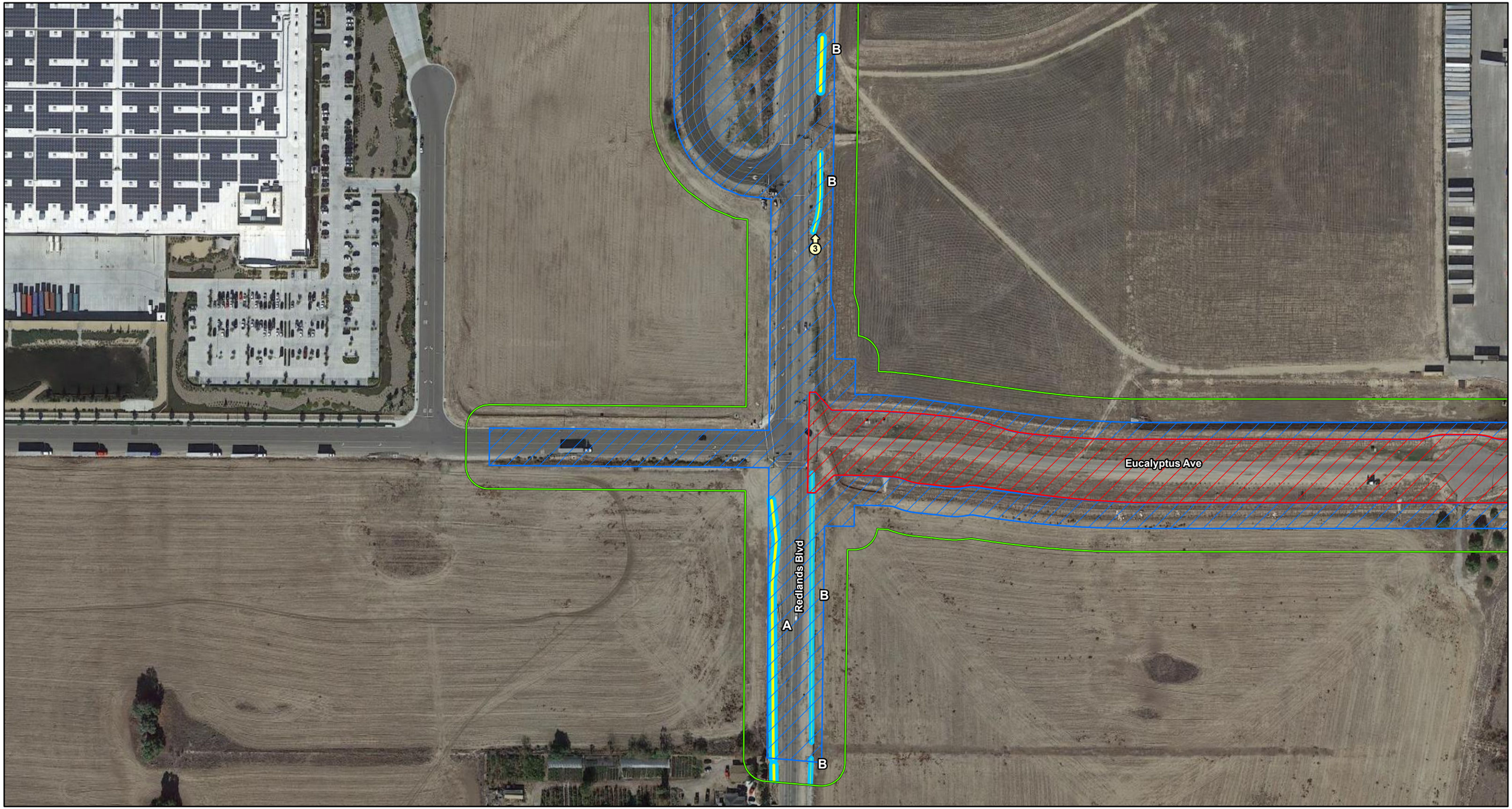

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

Permanent

Temporary

Photo Locations

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0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

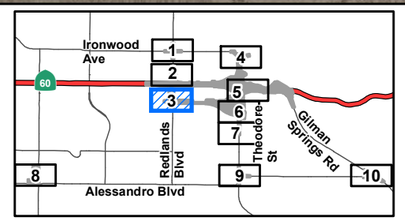

FIGURE 2.18-4

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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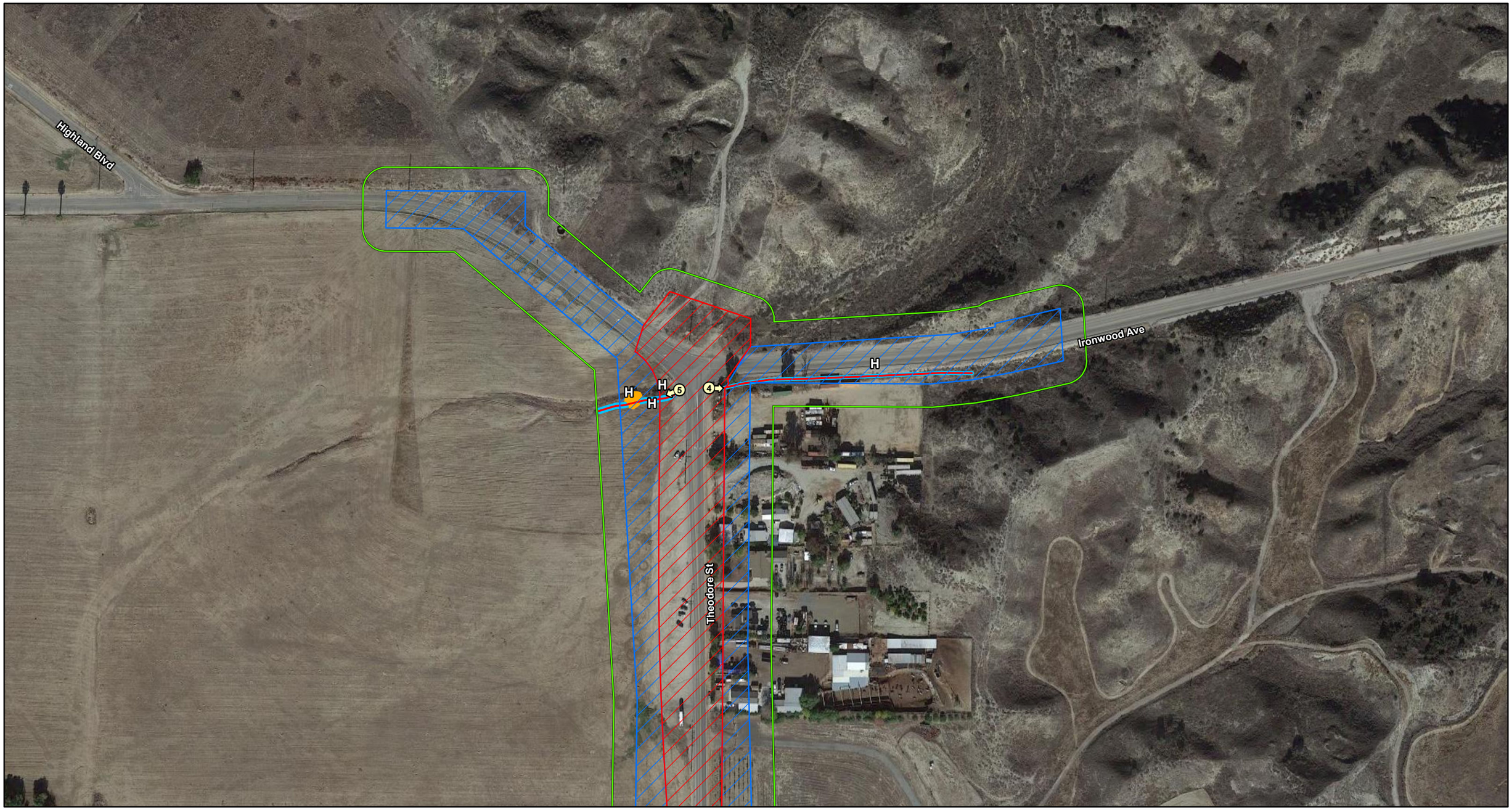

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

Permanent

Temporary

Photo Locations

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Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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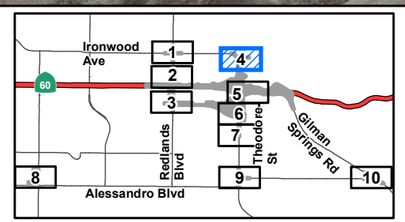

FIGURE 2.18-4

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SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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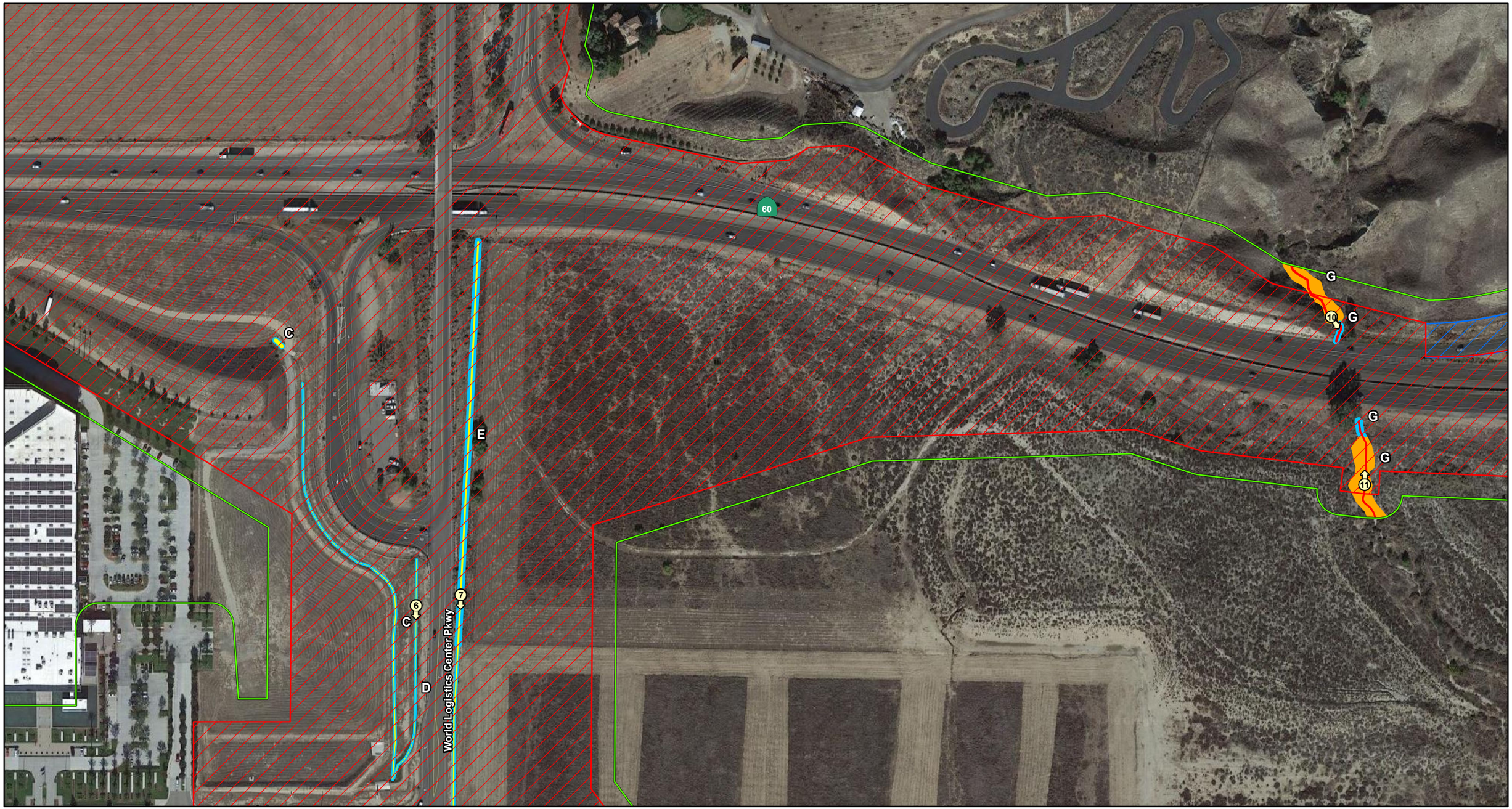

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

Permanent

Temporary

Photo Locations

USACE

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N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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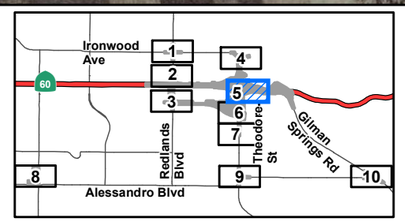

FIGURE 2.18-4

Sheet 5 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features

-Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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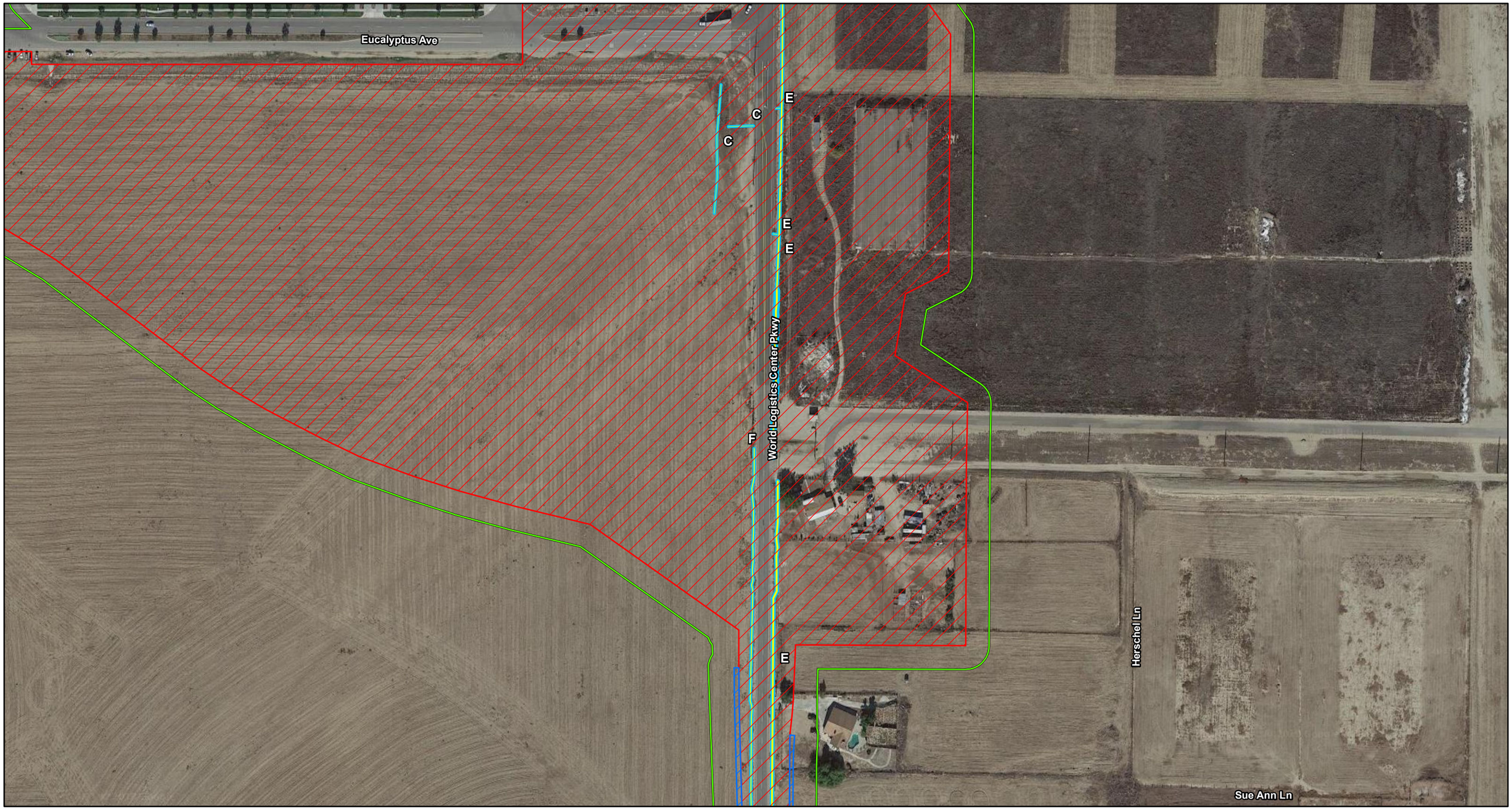

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.659 ac)

CDFW

Streambed (permanent = 0.574 ac, temporary = 1.133 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

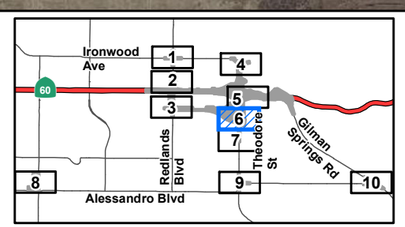

FIGURE 2.18-4

Sheet 6 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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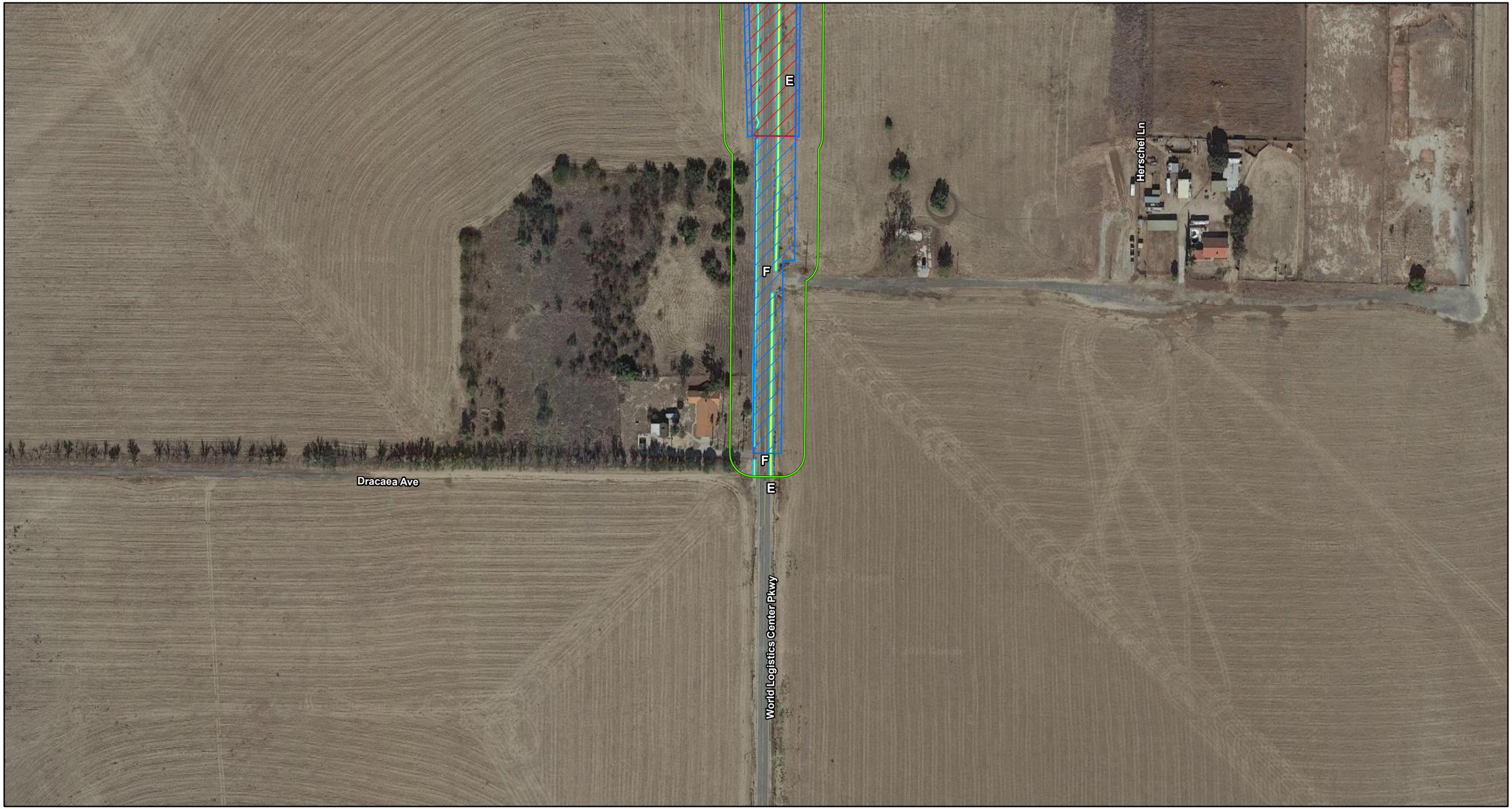

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.659 ac)

CDFW

Streambed (permanent = 0.574 ac, temporary = 1.133 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

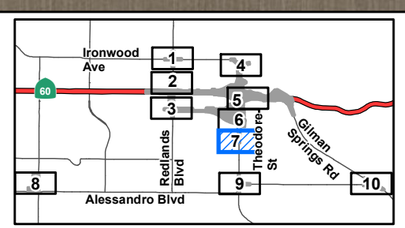

FIGURE 2.18-4

Sheet 7 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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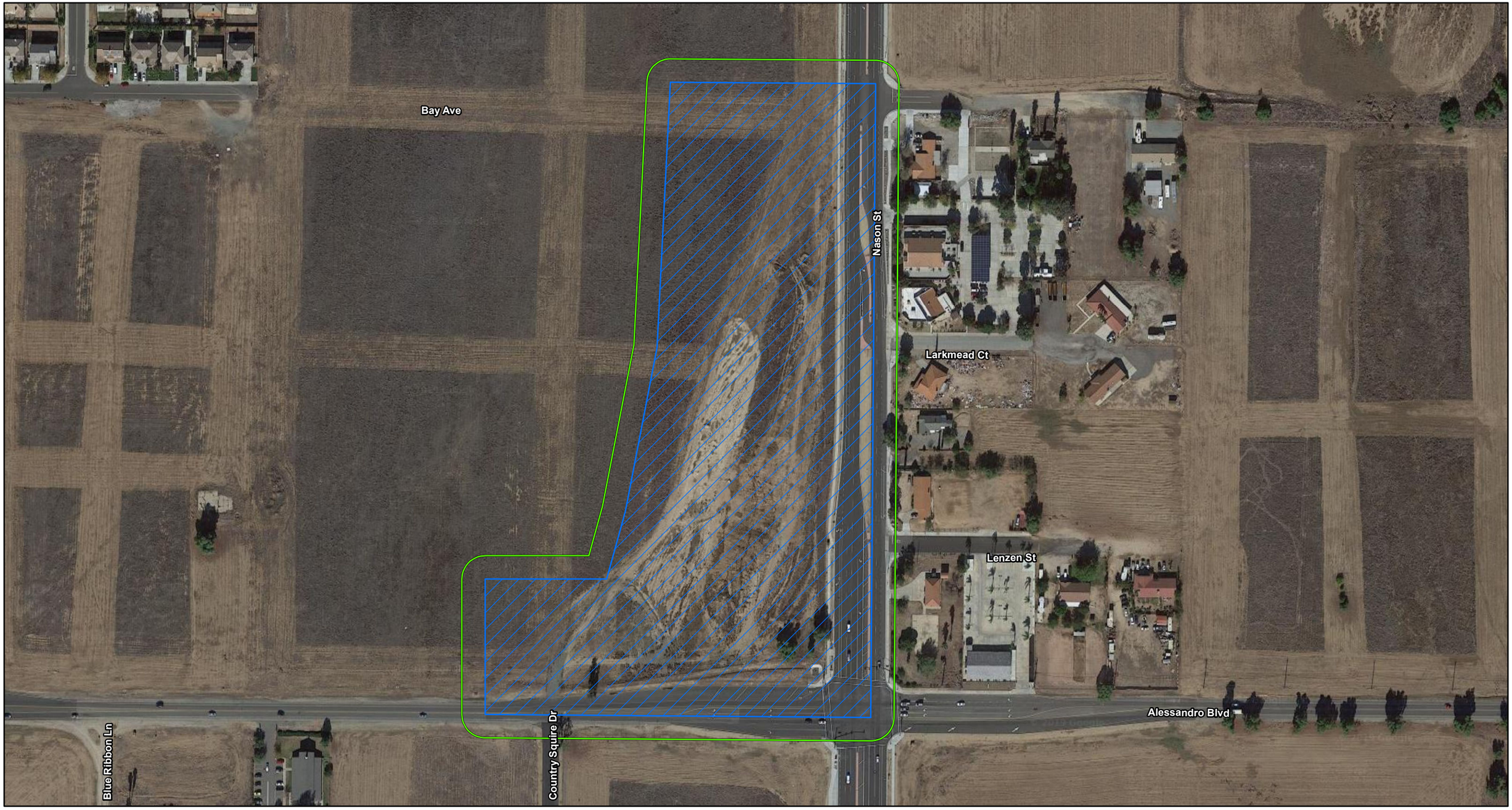

LEGEND

- Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

- Permanent
- Temporary
- Photo Locations

USACE

- Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)
- Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.659 ac)

CDFW

- Streambed (permanent = 0.574 ac, temporary = 1.133 ac)
- Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

0 100 200
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SOURCE: Google (2018); RBF (2018)

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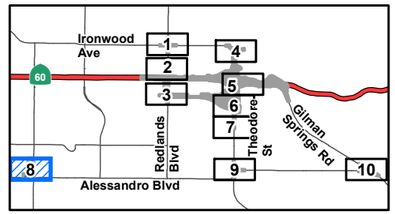

FIGURE 2.18-4
Sheet 8 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features
-Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0
EA No. 0M590
Project No. 0813000109

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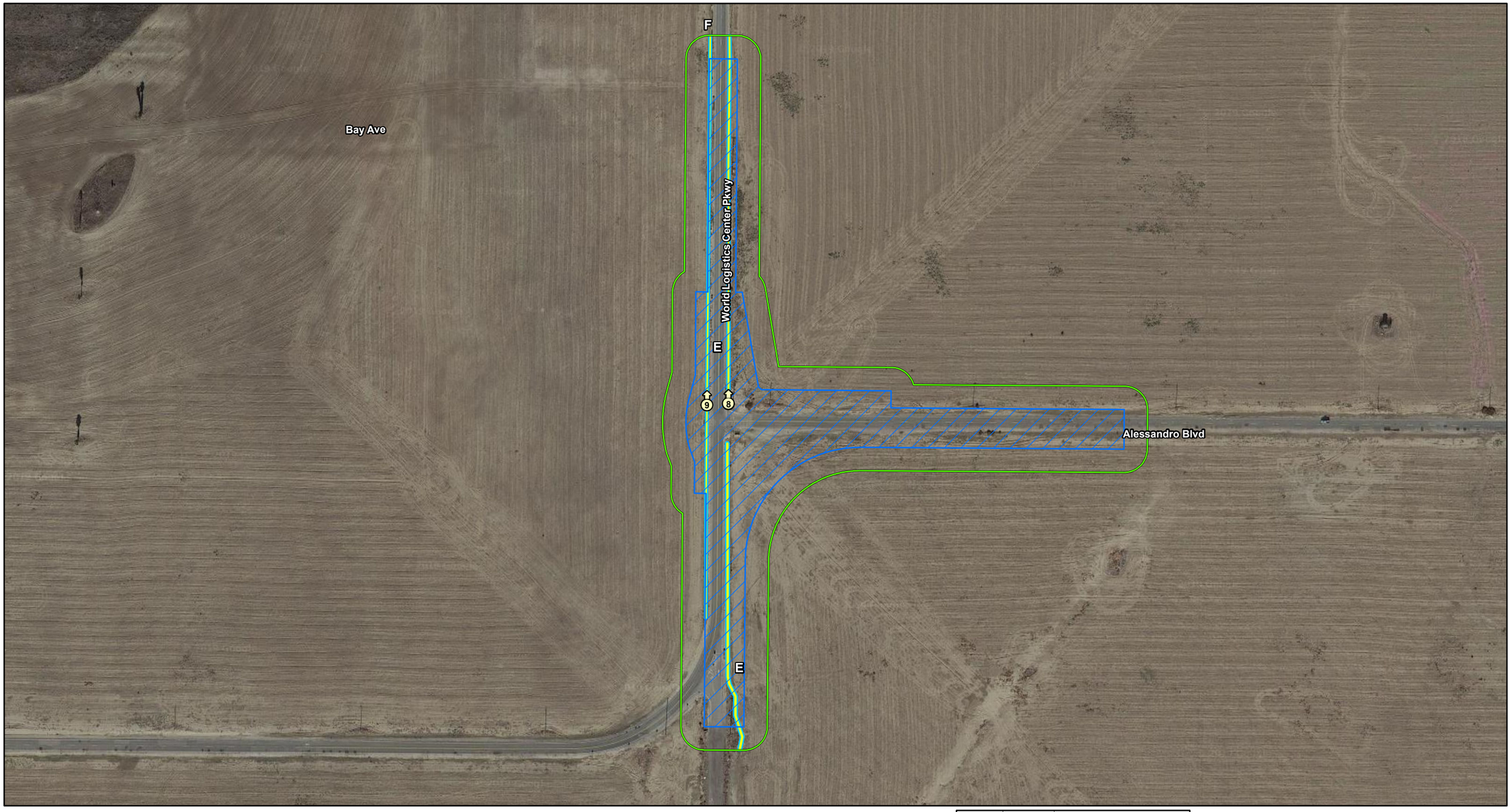

LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.659 ac)

CDFW

Streambed (permanent = 0.574 ac, temporary = 1.133 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

0 100 200
FEET

SOURCE: Google (2018); RBF (2018)

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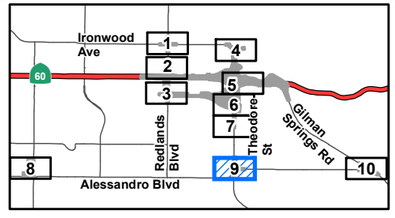

FIGURE 2.18-4

Sheet 9 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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LEGEND

Biological Study Area (worst case footprint + 50 ft)

Design Variation 6a Impacts

Permanent

Temporary

Photo Locations

USACE

Jurisdictional Waters (permanent = 0.027 ac, temporary = 0.111 ac)

Non-Jurisdictional Waters (permanent = 0.370 ac, temporary = 0.659 ac)

CDFW

Streambed (permanent = 0.574 ac, temporary = 1.133 ac)

Streambed/Riparian (permanent = 0.163 ac, temporary = 0.026 ac)

N

0 100 200

FEET

SOURCE: Google (2018); RBF (2018)

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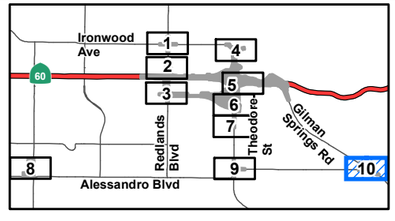

FIGURE 2.18-4

Sheet 10 of 10

SR-60/World Logistics Center Parkway Interchange Project

Potential Jurisdictional Features -Design Variation 6a Impacts

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

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2.19 Plant Species

2.19.1 Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species Section 2.21 in this document for detailed information about these species.

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

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

2.19.2 Affected Environment

This section is based on the *Natural Environment Study* (September 2019) prepared for the proposed project.

A literature review and records search were conducted to identify the existence or potential occurrence of sensitive or special-interest plant species in or within the vicinity of the Biological Study Area (BSA). The results of the literature review indicated the potential occurrence of 14 special-status plant species known from the vicinity of the BSA. A total of 7 of the 14 special-status plant species are federally and/or State-listed endangered or threatened species and are discussed later in Section 2.21, Threatened and Endangered Species. The remaining 7 special-status plant species identified as potentially occurring or known to occur in the vicinity of the BSA are:

- Davidson’s saltscale (*Atriplex serenana* var. *davidsonii*)
- Round-leaved filaree (*California macrophylla*)
- Smooth tarplant (*Centromadia pungens* ssp. *laevis*)
- Parry’s spineflower (*Chorizanthe parryi* var. *parryi*)
- Coulter’s goldfields (*Lasthenia glabrata* ssp. *coulteri*)
- San Bernardino aster (*Symphyotrichum defoliatum*)
- Wright’s trichocoronis (*Trichocoronis wrightii* var. *wrightii*)

In addition to the literature review, on-site field investigations were conducted in 2013 and 2015 to identify vegetation communities and habitats for special-status species. As a result of the on-site field investigations, no habitat for special-status plant species was identified as present in the BSA. The coastal sage scrub plant community in the BSA provides potentially suitable habitat for Wright's trichocoronis, which is a nonlisted plant species covered by the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP).

2.19.3 Environmental Consequences

2.19.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the BSA; therefore, no temporary impacts to plant species would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

There is potential for the construction of the Build Alternatives and Design Variations 2a (Alternative 2 with Design Variation) and 6a (Alternative 6, the Locally Preferred Alternative [LPA], with Design Variation) to impact Wright's trichocoronis. The 10.87 acres (ac) of coastal sage scrub plant community in the BSA provide potentially suitable habitat for this species. The Build Alternatives and Design Variations 2a and 6a would temporarily impact 0.26 ac of coastal sage scrub. Wright's trichocoronis is a covered species under the WRCMSHCP. However, the proposed project is not in a WRCMSHCP survey area for this species, and any project impacts to this species will be covered through project participation in the WRCMSHCP. Project participation in the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) involves coordinated actions between the City of Moreno Valley and the Western Riverside County Regional Conservation Authority (RCA), and is outlined in Section 12.2.2 of the MSHCP Implementing Agreement. Because no other special-status plant species were observed during the field surveys or are expected to occur in the BSA, no temporary impacts to special-status plant species are expected as a result of the Build Alternatives and Design Variations 2a and 6a.

2.19.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the BSA; therefore, no permanent impacts to plant species would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

There is potential for construction of the Build Alternatives and Design Variations 2a and 6a to affect Wright's trichocoronis. The 10.87 ac of coastal sage scrub plant community in the BSA provides potentially suitable habitat for this species. The Build Alternatives and Design Variations 2a and 6a would permanently impact 7.33 ac of coastal sage scrub. Wright's trichocoronis is a covered species under the WRCMSHCP. However, the proposed project is not in a WRCMSHCP survey area

for this species, and any project effects to this species will be covered through project participation in the WRCMSHCP. Because no other special-status plant species were observed during the field surveys or are expected to occur in the BSA, no permanent impacts to special-status plant species are expected as a result of the Build Alternatives and Design Variations 2a and 6a.

2.19.4 Avoidance, Minimization, and/or Mitigation Measures

The Build Alternatives and Design Variations 2a and 6a would not result in any adverse impacts to plant species; therefore no avoidance, minimization, and/or mitigation measures are required or proposed.

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2.20 Animal Species

2.20.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.21 below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600–1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

Local laws and regulations relevant to wildlife include the following:

- Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP)

2.20.2 Affected Environment

This section is based on the *Natural Environment Study* (September 2019) prepared for the Project and a USFWS updated list of proposed, threatened, or endangered species potentially occurring in the Project vicinity (February 6, 2020).

A literature review and records search were conducted to identify the existence or potential occurrence of sensitive or special-interest animal species in or within the vicinity of the Biological Study Area (BSA), including the updated USFWS species list. The results of the literature review indicated the potential occurrence of 23 special-status animal species known from the vicinity of the BSA. A total of 7 of the 23 special-status animal species are federally and/or State-listed endangered or threatened species and are discussed in Section 2.21, Threatened and Endangered Species. The remaining 16 special-status animal species identified as potentially occurring in the BSA are:

- Western spadefoot (*Spea hammondii*)
- Orange-throated whiptail (*Aspidoscelis hyperythra*)
- Red diamond rattlesnake (*Crotalus ruber*)
- Blainville's horned lizard (*Phrynosoma blainvillii* [*coronatum*])
- Tricolored blackbird (*Angelaius tricolor* [nesting colony])
- Southern California rufous-crowned sparrow (*Aimophila ruficeps* ssp. *canescens*)
- Golden eagle (*Aquila chrysaetos* [nesting and wintering])
- Burrowing owl (*Athene cunicularia* [burrow sites])
- Ferruginous hawk (*Buteo regalis* [wintering])
- White-faced ibis (*Plegadis chihi* [nesting colony])
- Western mastiff bat (*Eumops perotis californicus*)
- Southwestern yellow bat (*Lasiurus xanthinus*)
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)
- Southern grasshopper mouse (*Onychomys torridus*)
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) (LAPM)
- American badger (*Taxidea taxus*)

In addition to the literature review, on-site field investigations were conducted in 2013 and in 2015 to identify vegetation communities and habitats for special-status species. As a result of the on-site field investigations, no special-status animal species were observed or otherwise detected in the BSA. All special-status animal species listed above, with the exception of western spadefoot, tricolored blackbird, golden eagle, white-faced ibis, and American badger, have suitable habitat within the BSA and may be present. The western spadefoot, tricolored blackbird, golden eagle, white-faced ibis, and American badger are considered absent from the BSA because suitable habitat for these species is not located within the BSA.

No drainages contain riparian habitat that could support special-status species associated with riparian areas.

Based on the literature review and initial field investigations, focused field surveys were completed for the following animal species.

2.20.2.1 Burrowing Owl

A focused burrowing owl survey was conducted in accordance with the WRCMSHCP accepted protocol, Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.[1] The burrowing owl surveys were conducted on August 26 and 27, 2013, and on April 1, 2015. The surveys were conducted by walking throughout the project site. Transect spacing averaged 70 feet (ft), which allowed for 100 percent visual coverage of the ground surface. Potential habitat was examined for burrowing owl and owl sign (e.g., feathers, pellets, whitewash, and prey remnants). Potential habitat within 500 ft of the project site was surveyed using binoculars. No burrowing owls or burrows potentially occupied by

[1] Riverside County Environmental Programs Department. 2005. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Revised March 29, 2006.

burrowing owl were detected during the burrow surveys. Therefore, no additional site visits were required as a result of the focused survey.

2.20.2.2 Los Angeles Pocket Mouse (LAPM)

SR-60/Gilman Springs Road WRCMSHCP Survey Area

Qualified and permitted biologists conducted five nights of protocol trapping on August 4–9, 2013. The LAPM surveys were conducted according to currently accepted protocol. A total of 130 traps were set in one line and baited with bird seed and wild oats. Trap checks occurred at midnight and at dawn. All animals were identified and released unharmed at their capture sites. During the 2013 trapping session at the intersection of State Route 60 (SR-60)/Gilman Springs Road, there were 168 rodent captures involving 3 species, but no LAPM captures.

Gilman Springs Road/Alessandro Boulevard WRCMSHCP Survey Area

Qualified and permitted biologists conducted five nights of protocol trapping on July 26–31, 2015. A total of 100 traps were set in two lines. Traps were baited with bird seed and wild oats. Trap checks occurred near midnight and at dawn. All animals were identified and released unharmed at their capture sites. During the 2015 trapping session at the intersection of Gilman Springs Road/Alessandro Boulevard, there were 125 rodent captures involving 4 species, but no LAPM captures.

2.20.2.3 Bats

A daytime bat habitat assessment was conducted by qualified biologists on August 5, 2013, and on April 1, 2015. Potential roosting sites within the BSA were first identified by reviewing aerial map imagery and project design plans to locate bridges and culvert structures greater than 3 ft in height or diameter. These structures were then visited on foot and examined for suitable roosting habitat, such as crevices or cavities, as well as for the presence of bats or bat sign (e.g., guano, urine staining, or vocalizations) that may indicate use by bats. Any suitable roosting features observed were evaluated for potential use as day- and/or night-roosting habitat based on the quality of the structural feature(s) present and the proximity of the structure(s) to water or to vegetated areas that may provide foraging habitat because these factors increase the desirability of a given structure as a potential roost site. Locations containing suitable day-roosting habitat were also assessed for potential use as maternity roost sites, based on indications that the observed roost feature supports or may support a large congregation of bats, or that bats are present in the structure during the maternity season (April 1–August 31). To facilitate the assessment of maternity roosting potential, this survey was performed in the summer, when a maternity colony would be present and detectable. Of the 14 structures inspected for bat roosting habitat within the BSA, potential day-roosting habitat is present within all three bridge structures (Redlands Boulevard Overcrossing, World Logistics Center Parkway (WLC Pkwy) Overcrossing, and Gilman Springs Road Overcrossing), and a confirmed night roost is present within Culvert F. Seven structures (Culverts A, B, E, H, I, J, and K) contained marginally suitable roosting habitat, and three other structures (Culverts C, D, and G) were unsuitable for use by roosting bats. Due to the small size of the various marginally suitable culverts, the low quality of the adjacent foraging habitat, and the lack of any observed bat sign, bat use of any culverts within the BSA other than Culvert F is not expected.

2.20.3 Environmental Consequences

2.20.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the BSA; therefore, no temporary impacts to animal species would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

The burrowing owl was not detected within the BSA during the 2013 or 2015 focused surveys or during the 2018 habitat assessment. Therefore, the burrowing owl was determined absent from the BSA at the time of the surveys. However, the burrowing owl is a highly mobile species with the potential to move onto the proposed project site prior to construction. Therefore, a preconstruction focused survey, as described below in Project Feature PF-AS-1, will be required to verify the species' absence from the proposed project site prior to grading.

PF-AS-1 **Burrowing Owl Survey Protocol.** Consistent with the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area, a preconstruction survey will be conducted by a qualified biologist within 30 days prior to project-related ground-disturbing activities to ensure that burrowing owls are not occupying potentially suitable ruderal fields. If owls are determined to be present, mitigation measures will be developed and authorized through consultation with the WRCMSHCP Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and United States Fish and Wildlife Service (USFWS), as described in WRCMSHCP Table 9.2 and WRCMSHCP Appendix E, Summary of WRCMSHCP Species Survey Requirements.

Potential impacts to nesting raptors, special status-birds, and other migratory bird species may occur during the bird nesting season. The typical nesting season is February 15 through August 31. Project effects can be avoided by conducting a focused survey for nesting birds prior to removal of trees, by removing vegetation outside of the bird nesting season, and/or through the use of exclusionary buffers if nests are found.

Vegetation clearing and grading associated with the proposed project has the potential to disturb vegetation that may provide nesting habitat for migratory birds. Compliance with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, as specified below in Project Feature PF-AS-2, would be required to avoid potential impacts to migratory birds during construction.

PF-AS-2 **Vegetation and Tree Removal.** In compliance with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, vegetation clearing and preliminary ground-disturbing work will be completed outside the bird breeding season (typically set as

February 15 through August 31) or a preconstruction nesting bird survey will be conducted.

In addition, prior to clearing or construction, highly visible barriers (e.g., orange construction fencing) will be installed around the coastal sage scrub plant community adjacent to the project footprint to designate Environmentally Sensitive Areas (ESAs) to be avoided. No grading or fill activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in such a manner as to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to planned grading activities.

In the event that vegetation removal cannot be conducted outside the bird breeding season, focused surveys will be conducted by a qualified biologist prior to ground-disturbing activities. Should nesting birds be found, an exclusionary buffer will be established by a qualified biologist. The buffer may be up to 500 feet in diameter depending on the species of nesting bird found. This buffer will be clearly marked in the field by construction personnel under the guidance of a qualified biologist, and construction or clearing will not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active.

If construction of the World Logistics Center Parkway bridge structure cannot take place outside the nesting season, exclusionary devices and nest prevention methods designed to prevent birds from utilizing the bridge will be determined and implemented by a qualified biologist. Exclusionary devices must be installed prior to the initiation of nesting season (February 15) and before any bridge demolition and other bridge construction activities begin.

Nesting bird habitat within the Biological Study Area (BSA) will be resurveyed during the bird breeding season if there is a lapse in construction activities longer than 7 days.

Based on the negative results of the 2013 and 2015 surveys, the proposed project would not affect LAPM. The northwestern San Diego pocket mouse is a WRCMSHCP covered species. This species was captured during both the 2013 and 2015 trapping sessions within nonnative grasslands, coastal sage scrub, and nonnative grassland/coastal sage scrub ecotone. Both of the Build Alternatives will have temporary and permanent effects on nonnative grasslands and coastal sage scrub, which are considered potentially suitable habitat for the northwestern San Diego pocket mouse in the BSA. Both of the Build Alternatives and Design Variations 2a (Alternative 2 with Design Variation) and 6a (Alternative 6, the Locally Preferred Alternative [LPA], with Design Variation) will temporarily affect 6.40 acres (ac) of nonnative grasslands and 0.26 ac of coastal sage scrub. Establishment of

Environmentally Sensitive Areas (ESAs), as specified in PF-AS-2, would be required to avoid potential impacts to the northwestern San Diego pocket mouse prior to construction.

The project may have direct and indirect effects to bats utilizing structures and culverts within the BSA. Direct effects, such as mortality, may occur to bats roosting in bridges during construction. Construction activities in the form of noise, dust, night lighting, and human encroachment may also cause temporary indirect effects to bats. As specified in PF-AS-3, roosting bat surveys would be conducted in order to mitigate potential impacts to bats within the BSA.

PF-AS-3 **Roosting Bat Surveys.** To ensure that no bats begin roosting in the World Logistics Center Parkway bridge structure or other bridge structures to be affected by the proposed project prior to or during construction activities, a humane eviction/exclusion shall be conducted by a qualified bat biologist in the fall (September or October) preceding construction at the structure(s) to prevent potential direct impacts to bats.

During installation of the humane eviction/exclusion devices, each potentially suitable roost crevice will be closely inspected using flashlights and/or a fiber-optic scope for the presence of day-roosting bats. At crevices where the absence of bats can be confirmed, the crevices may be immediately sealed with exclusionary material. At crevices where bats are visibly roosting or where their absence cannot be confirmed, humane eviction devices (i.e., one-way doors) that will allow the bats to exit the roosting crevice but prevent them from returning will be installed. All aspects of the humane eviction/ exclusion of bats from structures shall be directly supervised and monitored by a qualified bat biologist approved by the CDFW. This qualified bat biologist will determine the specific type of humane eviction devices and exclusionary material that will be used within the crevices. These devices shall remain in place for the duration of construction work at that structure.

Prior to conducting a humane eviction/exclusion, nighttime preconstruction surveys should be conducted during the Plan, Specification, and Estimate (PS&E) stage, which would allow time to deal with any bat issues that may arise and could be dealt with prior to contract award. The surveys would include acoustic monitoring that may be conducted by a qualified bat biologist to verify the presence of bats and to determine what species, if any, inhabit the structure. These surveys shall include exit counts to ascertain the approximate number of bats utilizing the potential roost site. Nighttime surveys shall be performed between June 1 and August 15, when maternity colonies have formed but before they begin to disperse in order to confirm whether a maternity colony is roosting at any of the structures in the project area. The nighttime survey shall also be conducted no later than the summer at least 1 year prior to construction to allow adequate time for coordination and planning between biologists and engineers should a maternity colony or other grouping of bats be

discovered, and to implement any appropriate strategies necessary to minimize negative effects to roosting bats.

Palm trees suitable for use by western yellow bats, which roost in the untrimmed fronds of palm trees, occur in the BSA. If palm tree removal or palm frond trimming is necessary for project construction, this activity shall be conducted outside the bat maternity season (April 1–August 31); this time period coincides with the clearing and grubbing restrictions typically associated with bird nesting season. If palm tree removal or trimming is conducted outside the bat maternity and bird nesting season as recommended, impacts to flightless young will be avoided.

2.20.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the BSA; therefore, no permanent impacts to animal species would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

The Build Alternatives and Design Variations 2a and 6a would not result in any permanent direct impacts on sensitive animal species, including bats, LAPM, northwestern San Diego pocket mouse, burrowing owl, nesting raptors, special status-birds, and other migratory bird species because operations on SR-60, WLC Pkwy, and connecting arterial streets would be similar to existing conditions. Indirect noise impacts on nesting birds from traffic on SR-60, WLC Pkwy, and connecting arterial streets would also be similar to existing conditions.

2.20.4 Avoidance, Minimization, and/or Mitigation measures

The project will incorporate project features PF-AS-1 through PF-AS-3 as described above; therefore, no adverse impacts related to animal species would occur, and no avoidance, minimization, and/or mitigation measures are required.

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2.21 Threatened and Endangered Species

2.21.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA), are required to consult with the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence and/or documentation of a No Effect finding. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by the CDFW. For species listed under both the FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (a) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (b) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

2.21.2 Affected Environment

This section is based on the *Natural Environment Study* (September 2019) prepared for the project and a USFWS updated list of proposed, threatened, or endangered species potentially occurring in the project vicinity (February 6, 2020).

A literature review and a records search were conducted to identify the existence or potential occurrence of threatened or endangered species in or within the vicinity of the Biological Study Area (BSA). Table 2.21.1 lists the 13 State/federally listed threatened or endangered plant and animal species identified as potentially occurring in the vicinity of the BSA:

Table 2.21.1 Species Potentially Occurring in the Vicinity of the BSA

Species	Endangered	
	Federal	State
Plants		
Nevin's barberry (*Berberis nevinii*)	●	●
San Diego ambrosia (*Ambrosia pumila*)	●	
San Jacinto Valley crownscale (*Atriplex coronate* var. *notatior*)	●	
Santa Ana River woolly star (*Eriastrum densifolium* ssp. *sanctorum*)	●	●
Spreading navarretia (*Navarretia fossalis*)	●	●
Thread-leaved brodiaea (*Brodiaea filifolia*)	●	●
Animals		
Coastal California gnatcatcher (*Polioptila californica californica*)	●	
Least Bell's vireo (*Vireo bellii pusillus*)	●	●
Southwestern willow flycatcher (*Empidonax trailli extimus*)	●	●
Riverside fairy shrimp (*Streptocephalus woottoni*)	●	
Vernal pool fairy shrimp (*Branchinecta lynchi*)	●	
San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*)	●	●
Stephens' kangaroo rat (*Dipodomys stephensi*)	●	●

BSA = Biological Study Area

Initial on-site field investigations were conducted in 2013, 2015, and 2018 to identify vegetation communities, habitats for special-status species, potential jurisdictional waters, and other biological resources. Based on the literature review and initial field investigations, focused field surveys were completed for the following species:

- Fairy shrimp habitat assessment
- Burrowing owl (*Athene cunicularia*) habitat assessment and focused survey
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) (LAPM) focused survey
- Bat habitat assessment

2.21.2.1 Fairy Shrimp

A habitat assessment for fairy shrimp was conducted within the BSA by a USFWS-permitted (USFWS Permit TE-777965-10) fairy shrimp biologist on August 5, 2013. No suitable fairy shrimp habitat was found within the BSA; therefore, fairy shrimp are considered absent from the BSA.

2.21.2.2 Burrowing Owl

The focused burrowing owl survey was conducted in accordance with the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) accepted protocol, Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.[1] The burrow surveys were conducted by qualified biologists on August 26 and 27, 2013, and on April 1, 2015. A habitat assessment was conducted on September 19, 2018, for Design Variations 2a (Alternative 2 with Design Variation) and 6a (Alternative 6, the Locally Preferred Alternative [LPA], with Design Variation). The surveys were conducted by walking throughout the BSA. Transect spacing averaged 70 feet (ft), which allowed for 100 percent visual coverage of the ground surface. Potential habitat was examined for burrowing owl and owl sign (e.g., feathers, pellets, whitewash, and prey remnants). Potential habitat within 500 ft of the BSA was surveyed using binoculars.

2.21.2.3 Los Angeles Pocket Mouse (LAPM)

SR-60/Gilman Springs Road WRCMSHCP Survey Area

Qualified and permitted biologists conducted 5 nights of protocol trapping between August 4 and August 9, 2013. The LAPM surveys were conducted according to currently accepted protocol. A total of 130 traps were set in one line and baited with bird seed and wild oats. Trap checks occurred at midnight and at dawn. All animals were identified and released unharmed at their capture sites. During the 2013 trapping session at the intersection of State Route 60 (SR-60)/Gilman Springs Road, there were 168 rodent captures involving 3 species, but no LAPM captures.

Gilman Springs Road/Alessandro Boulevard WRCMSHCP Survey Area

Qualified and permitted biologists conducted 5 nights of protocol trapping between July 26 and July 31, 2015. A total of 100 traps were set in two lines. Traps were baited with bird seed and wild oats. Trap checks occurred near midnight and at dawn. All animals were identified and released unharmed at their capture sites. During the 2015 trapping session at the intersection of Gilman Springs Road/ Alessandro Boulevard, there were 125 rodent captures involving 4 species, but no LAPM captures.

2.21.2.4 Bats

Daytime bat habitat assessments were conducted by qualified biologists on August 5, 2013, and April 1, 2015. Potential roosting sites within the BSA and immediate surrounding areas were first identified by reviewing aerial map imagery and project design plans to locate bridges and culvert structures greater than 3 ft in height or diameter. These structures were then visited on foot and examined for suitable roosting habitat (e.g., crevices or cavities), as well as for the presence of bats or bat signs (e.g., guano, urine staining, or vocalizations) that may indicate use by bats. Any suitable roosting features observed were evaluated for potential use as day- and/or night-roosting habitat based on the quality of the structural feature(s) present and the proximity of the structure to water or to vegetated areas that may

[1] Riverside County Environmental Programs Department. 2005. Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Revised March 29, 2006.

provide foraging habitat (these factors increase the desirability of a given structure as a potential roost site). Locations containing suitable day-roosting habitat were also assessed for potential use as maternity roost sites, based on indications that the observed roost feature supports or may support a large congregation of bats, or that bats are present in the structure during the maternity season (April 1–August 31). To facilitate the assessment of maternity roosting potential, this survey was performed in the summer, when a maternity colony would be present and detectable. Of the 14 structures inspected for bat roosting habitat within the BSA, potential day-roosting habitat is present within all three bridge structures (Redlands Boulevard Overcrossing, World Logistics Center Parkway [WLC Pkwy] Overcrossing, and Gilman Springs Road Overcrossing), and a confirmed night roost is present within Culvert F. Seven structures (Culverts A, B, E, H, I, J, and K) contained marginally suitable roosting habitat, and three other structures (Culverts C, D, and G) were unsuitable for use by roosting bats. Due to the small size of the various marginally suitable culverts, the low quality of the adjacent foraging habitat, and the lack of any observed bat sign, bat use of any culverts within the BSA other than Culvert F is not expected.

2.21.2.5 Other Species Potentially Occurring in the Vicinity of the BSA

Of the 13 State/federally listed threatened or endangered species, potentially suitable habitat for the coastal California gnatcatcher and Stephens' kangaroo rat have the potential to occur in the BSA. The BSA does not contain, nor is it adjacent to, suitable habitat for any other threatened or endangered species identified in the literature search. Therefore, excluding the potentially suitable habitat for the coastal California gnatcatcher and Stephens' kangaroo rat, there is no habitat suitable for the species listed above in Table 2.21.1. In addition, no species listed in Table 2.21.1 were detected during the surveys.

2.21.3 Environmental Consequences

2.21.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area; therefore, no temporary impacts to threatened and endangered species would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

No threatened or endangered species are present within the BSA. However, the Build Alternatives and Design Variations 2a and 6a would temporarily affect 0.26 acre (ac) of coastal sage scrub, which is considered to be potentially suitable habitat for coastal California gnatcatcher.

Additionally, the BSA contains potentially suitable habitat for the Stephens' kangaroo rat in the form of coastal sage scrub, nonnative grasslands, and ruderal/agricultural lands. Both the Build Alternatives and Design Variations would temporarily affect 0.26 ac of coastal sage scrub and 6.4 ac of nonnative grasslands. Build Alternatives 2 and 6 (LPA) would temporarily affect 63.62 ac and 63.15 ac, respectively, of

ruderal/agricultural lands. Design Variations 2a and 6a would temporarily affect 58.71 ac and 58.29 ac, respectively, of ruderal/agricultural lands.

To avoid potential effects to the coastal California gnatcatcher, vegetation clearing and preliminary ground-disturbing work in coastal sage scrub habitat will be completed outside the bird breeding season (typically set as February 1 through September 30), or a preconstruction nesting bird survey will be conducted.

To avoid potential effects to both the coastal California gnatcatcher and Stephen's kangaroo rat, prior to clearing or construction, highly visible barriers (e.g., orange construction fencing) will be installed around the coastal sage scrub plant community adjacent to the project footprint to designate Environmentally Sensitive Areas (ESAs) to be avoided. No grading or fill activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment should be operated in a manner to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to planned grading activities.

A USFWS species list was received from the USFWS on February 6, 2020 (refer to Chapter 4, Comments and Coordination). Table 2.21.2 shows the preliminary FESA effect determinations for every listed species and critical habitat. Habitat for two federally listed as threatened species (coastal California gnatcatcher and Stephens' kangaroo rat) will be affected by the proposed project. The California Department of Transportation (Caltrans) has made a determination of "may affect, likely to adversely affect" for Stephens' kangaroo rat and the coastal California gnatcatcher. However, any project effects to suitable habitat for the Stephens' kangaroo rat and coastal California gnatcatcher would be covered by the Stephens' kangaroo rat Habitat Conservation Plan (HCP) and through the project's participation in the WRCMSHCP for each species, respectively. The proposed project is within the Stephens' kangaroo rat HCP fee area but outside of the Core Reserves and therefore qualifies for take coverage through payment of fees. However, no fee is required for the proposed project because public works projects are exempt from fee payment. Project participation in the WRCMSHCP for affected coastal California gnatcatcher habitat involves coordinated actions between the City of Moreno Valley and the Western Riverside County Regional Conservation Authority (RCA), and is outlined in Section 12.2.2 of the MSHCP Implementing Agreement.

An official National Marine Fisheries Service (NMFS) species list was obtained for the proposed project on May 30, 2019 (refer to Chapter 4, Comments and Coordination). Although the proposed project is within an NMFS jurisdictional area, no species were identified in the official NMFS species list. Therefore, the proposed project will not affect aquatic habitat and will result in No Effect to federally endangered NMFS resources.

Table 2.21.2 Preliminary FESA Effect Findings

Common Name	Scientific Name	Status	Effect Finding	Effect Finding for Critical Habitat (if applicable)
Birds				
Coastal California gnatcatcher	*Polioptila californica californica*	FT	May affect, likely to adversely affect	May affect, likely to adversely affect
Least Bell's vireo	*Vireo bellii pusillus*	FE	No effect	No effect
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE	No effect	No effect
Crustaceans				
Riverside fairy shrimp	*Streptocephalus woottoni*	FE	No effect	No effect
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	No effect	No effect
Flowering Plants				
Nevin's barberry	*Berberis nevinii*	FE	No effect	No effect
San Diego ambrosia	*Ambrosia pumila*	FE	No effect	No effect
San Jacinto Valley crownscale	*Atriplex coronata* var. *notatior*	FE	No effect	No effect
Santa Ana River woolly-star	*Eriastrum densifolium* ssp.*sanctorum*	FE	No effect	No effect
Spreading navarretia	*Navarretia fossalis*	FT	No effect	No effect
Thread-leaved brodiaea	*Brodiaea filifolia*	FT	No effect	No effect
Mammals				
San Bernardino kangaroo rat	*Dipodomys merriami parvus*	FE	No effect	No effect
Stephens' kangaroo rat	*Dipodomys stephensi*	FE	May affect, likely to adversely affect	May affect, likely to adversely affect

FE = Federal Endangered
FT = Federal Threatened

2.21.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area; therefore, no permanent impacts to threatened and endangered species would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

No threatened or endangered species are present within the BSA. However, the Build Alternatives and Design Variations 2a and 6a would permanently affect 7.33 ac of coastal sage scrub, which is considered to be potentially suitable habitat for coastal California gnatcatcher.

Additionally, the BSA contains potentially suitable habitat for the Stephens' kangaroo rat in the form of coastal sage scrub, nonnative grasslands, and ruderal/agricultural lands. Both the Build Alternatives and Design Variations 2a and 6a would permanently affect 7.33 ac of coastal sage scrub and 10.54 ac of nonnative grasslands. Build Alternatives 2 and 6 (LPA) would permanently impact 68.47 ac and 68.93 ac, respectively, of ruderal/agricultural lands. Design Variations 2a and 6a would permanently affect 100.06 ac and 102.41 ac, respectively, of ruderal/ agricultural lands.

Under FESA Section 7, Caltrans has made a preliminary determination that the project "may affect, and is likely to adversely affect" coastal California gnatcatcher

and Stephens' kangaroo rat due to removal of potentially suitable habitat. However, any project effects to suitable habitat for the Stephens' kangaroo rat and the coastal California gnatcatcher would be covered by the Stephens' kangaroo rat HCP and through the project's participation in the WRCMSHCP, as discussed in Section 2.21.3.1 above. Additionally, these permanent impacts to coastal sage scrub would include the same mitigation as discussed above in temporary impacts to the Build Alternatives and Design Variations 2a and 6a.

Federal Endangered Species Act Consultation Summary

Caltrans will submit the *Natural Environment Study* (September 2019) and the WRCMSHCP documents to USFWS for WRCMSHCP consistency review as required by the WRCMSHCP State permittee review process. Pursuant to Section 6005 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), as described in the National Environmental Policy Act (NEPA) Delegation Pilot Program between FHWA and Caltrans, Caltrans has been designated the authority to conduct Section 7 consultation of the FESA. Following WRCMSHCP consistency approval, Caltrans will initiate consultation with USFWS to obtain a streamlined FESA Biological Opinion for this project to address project impacts to the Stephens' kangaroo rat and coastal California gnatcatcher.

To receive take coverage under FESA for potential effects to coastal California gnatcatcher, a WRCMSHCP consistency review under Section 7 of FESA would be performed by the USFWS to concur that the proposed project is consistent with the requirements of the WRCMSHCP.

The proposed project site is within the plan area boundary of the Stephens' kangaroo rat HCP, but is not within an HCP Core Reserve. Although the WRCMSHCP manages Stephens' kangaroo rat HCP Core Reserves as part of the WRCMSHCP Conservation Area, other actions within the non-reserve areas of the HCP must be addressed under the HCP. Caltrans is not a Stephens' kangaroo rat HCP permittee. To rely on the analysis of the incidental take coverage provided by the HCP, the proposed action must be consistent with the HCP, its associated implementation agreement, and permit.

The Stephens' kangaroo rat HCP is implemented by the Riverside County Habitat Conservation Agency (RCHCA) on behalf of the County of Riverside and eight member cities, including Moreno Valley. The RCHCA has a Memorandum of Understanding (MOU) with the USFWS, CDFW, and Bureau of Land Management (BLM) that authorizes incidental take of Stephens' kangaroo rat in accordance with the HCP terms and conditions. To establish a regional mechanism to fund implementation of the Stephens' kangaroo rat HCP, Riverside County Ordinance No. 663.10 was adopted, which requires the payment of a fee for projects that are inside the Stephens' kangaroo rat HCP fee area but outside the Core Reserve system. The proposed project is within the Stephens' kangaroo rat HCP fee area but outside the Core Reserves, and therefore qualifies for take coverage through payment of fees. However, no fee is required for the proposed project because public works projects are exempt from fee payment.

California Endangered Species Act Consultation Summary

The CDFW authorizes the take of endangered, threatened, or other species of concern through the provisions of Sections 2081 and 2080.1 of the California Fish and Game Code. The project may have potential effects to the Stephens' kangaroo rat, which is State listed as threatened. The RCHCA has an MOU with the USFWS, the CDFW, and the BLM that authorizes incidental take of the Stephens' kangaroo rat, in accordance with the HCP's terms and conditions. To establish a regional mechanism to fund implementation of the Stephens' kangaroo rat HCP, Riverside County Ordinance No. 663.10 was adopted, which requires the payment of a fee for projects that are inside the Stephens' kangaroo rat HCP fee area but outside of the Core Reserve system. The proposed project is within the Stephens' kangaroo rat HCP fee area but outside of the Core Reserves, and therefore qualifies for take coverage through payment of fees. However, no fee is required for the proposed project because public works projects are exempt from fee payment.

2.21.4 Avoidance, Minimization, and/or Mitigation Measures

To minimize adverse effects to coastal California gnatcatcher and Stephens' kangaroo rat, the proposed project will comply with applicable measures identified in WRCMSHCP Section 6.1.4, Urban/Wildlands Interface Guidelines; WRCMSHCP Section 7.5.1, Guidelines for the Siting and Design of Planned Roads Within Criteria Areas and Public/Quasi-Public Lands; WRCMSHCP Section 7.5.2, Guidelines for Construction of Wildlife Crossings; WRCMSHCP Section 7.5.3, Construction Guidelines; and the Standard Best Management Practices in Appendix C of the WRCMSHCP. Additional conservation measures for these two species may be identified in the streamlined FESA Biological Opinion to be issued by the USFWS for the proposed project.

2.22 Invasive Species

2.22.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State's invasive species list maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

2.22.2 Affected Environment

This section is based on the *Natural Environment Study* (September 2019) prepared for the proposed project.

The California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory is based on information submitted by members, land managers, botanists, and researchers throughout the State as well as published sources. The inventory highlights nonnative plants that are serious problems in wildlands (e.g., natural areas that support native ecosystems such as national, State, and local parks, ecological reserves, wildlife areas, National Forests, and Bureau of Land Management lands). The inventory categorizes plants as High, Moderate, or Limited based on the species' negative ecological impact in California. Plants categorized as High have severe ecological impacts. Plants categorized as Moderate have substantial and apparent, but not severe, ecological impacts. Plants categorized as Limited are invasive, but their ecological impacts are minor on a statewide level.

Highway corridors provide opportunities for the movement of invasive species through the landscape. Invasive species can move on vehicles and in the loads they carry. Invasive plants can be moved from site to site during spraying and mowing operations. Weed seeds can be inadvertently introduced into the corridor on equipment during construction and through the use of mulch, imported soil or gravel, and sod. Some invasive plant species might be deliberately planted in erosion control, landscape, or wildflower projects. Highway rights-of-way provide ample opportunity for weeds in adjacent land to spread along corridors that, on a national scale, span millions of miles of highway. Invasive plant species exist throughout the Biological Study Area (BSA) as a result of agricultural activities and existing development. Invasive species vary in abundance within the BSA, depending on the level of disturbance, and are more numerous adjacent to roads and developed areas within the BSA.

A total of 17 nonnative plant species occurring on the Cal-IPC California Invasive Plant Inventory were identified in the BSA. Two invasive species with a High rating were identified in the BSA: Sahara mustard (*Brassica tournefortii*) and red brome (*Bromus madritensis* ssp. *rubens*). Eight Moderate-rated invasive species were

identified: wild turnip (*Brassica tournefortii*), London rocket (*Sisymbrium irio*), oat (*Avena* sp.), ripgut grass (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), rattail fescue (*Festuca myuros* var. *myuros*), and hare barley (*Hordeum murinum* ssp. *leporinum*).

2.22.3 Environmental Consequences

2.22.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area; therefore, no temporary impacts related to invasive species would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

Impacts related to invasive species are considered permanent impacts because the introduction of invasive species into previously undisturbed areas would result in permanent impacts to the habitat. Therefore, impacts related to invasive species as a result of project construction are described under 2.22.3.2, Permanent Impacts.

2.22.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the project area; therefore, no permanent impacts to invasive species would occur.

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

Construction of the project has the potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasive species, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species causing seed to be spread along the highway. None of the species on the Cal-IPC Invasive Species List is used by the California Department of Transportation (Caltrans) for erosion control or landscaping. All equipment and materials will be inspected for the presence of invasive species. With implementation of Project Feature PF-INV-1, there would be no potential adverse project-related permanent impacts related to invasive species.

PF-INV-1 **Prevention of the Spread of Invasive Species.** In compliance with the Executive Order on Invasive Species, EO 13112, and guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control included in the project will not use species listed as invasive. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These extra precautions include the inspection and cleaning of construction equipment and eradication strategies to be implemented should invasive species be present. At a minimum, this program will include the following:

- During construction, the Construction Contractor shall inspect and clean construction equipment at the beginning of each day and prior to transporting equipment from one project location to another.
- During construction, soil and vegetation disturbance will be minimized to the greatest extent feasible.
- During construction, the Construction Contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions to prevent excessive amounts of dust.
- During construction, the Construction Contractor shall ensure that all stockpiled materials are sufficiently watered or covered to prevent excessive amounts of dust.
- During construction, soil, gravel, and rock will be obtained from weed-free sources.
- Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control.
- After construction, affected areas adjacent to native vegetation will be revegetated with plant species that are native to the vicinity as approved by the District Biologist.
- After construction, all revegetated areas will avoid the use of species listed on the California Invasive Plant Council's California Invasive Plant Inventory that have a High or Moderate rating.
- Erosion control and revegetation sites will be monitored for 2 to 3 years after construction to detect and control the introduction/ invasion of nonnative species.
- Eradication procedures (e.g., spraying and/or hand weeding) will be outlined should an infestation occur. The use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the District Biologist.
- All woody invasive species (e.g., tamarisk, tree tobacco) will be removed from the project site.

2.22.4 Avoidance, Minimization, and/or Mitigation Measures

The project will incorporate Project Feature PF-INV-1 as described above, therefore no adverse impacts related to invasive species would occur and no avoidance, minimization, and/or mitigation measures are required.

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2.23 Cumulative Impacts

2.23.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7.

2.23.2 Methodology

The cumulative impact analysis methodology was based on the eight-step process in the California Department of Transportation (Caltrans) Standard Environmental Reference (SER) Guidance for Preparers of Cumulative Impact Analysis (2005). The eight-step process is as follows:

- Identify resources to be analyzed.
- Define the study area for each resource (i.e., resource study area [RSA]).
- Describe the current health and historical context for each resource.
- Identify both direct and indirect impacts of the proposed project.
- Identify other current and reasonably foreseeable actions that affect each resource.
- Assess potential cumulative impacts.
- Report results.
- Assess the need for avoidance, minimization, and/or mitigation measures to address cumulative impacts.

2.23.3 Resources Excluded from Cumulative Impacts Analysis

As specified in the Caltrans Guidance, if a proposed project would not result in a direct or indirect impact to a resource, it would not contribute to a cumulative impact on that resource and need not be evaluated with respect to potential cumulative impacts.

Those resources for which cumulative effects are not anticipated because the proposed project would not result in impacts to those resources are briefly discussed below:

- **Growth:** A substantial number of development projects were proposed and approved prior to the initiation of the planning studies for the proposed project (Table 2.23.1 in Section 2.23.4), which indicates that development in proximity to the project (Figure 2.23-1 in Section 2.23.4) is not dependent on the completion of the State Route 60 (SR-60)/World Logistics Center Parkway (WLC Pkwy) interchange. The project would not provide any new interchanges on SR-60 or new connections to WLC Pkwy in the vicinity of the subject interchange. Due to the lack of development currently existing within the area surrounding the planned interchange site, the project would potentially accelerate the rate of growth in the area by making it more accessible, but would not result in new unplanned growth since the surrounding area is already designated for future land uses in accordance with the City of Moreno Valley General Plan. As discussed in Section 2.3 (Growth) of this EIR/EA, the project would not result in an increase in the intensity of development that would lead to unforeseen growth beyond the projections accounted for in the City's General Plan. Furthermore, the proposed freeway interchange improvement is not a condition of approval for any of the future development projects in the project vicinity. As a result, the proposed project would not influence the type, amount, and/or location of reasonably foreseeable growth in this part of Moreno Valley and Riverside County beyond what is currently anticipated.

- **Plant Species:** The *Natural Environment Study* (September 2019) concluded that no habitat for State/federally listed plant species is present in the Biological Study Area (BSA), but habitat is present for one non-listed plant species, Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). The 10.87-acre (ac) of coastal sage scrub plant community in the BSA provides potentially suitable habitat for this species. Either of the Build Alternatives or design variations would temporarily affect 0.26 ac of coastal sage scrub and permanently affect 7.33 ac of coastal sage scrub. Therefore, there is potential for construction of the project under either Build Alternative or design variation to affect Wright's trichocoronis. However, Wright's trichocoronis is a covered species under the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) and any temporary or permanent project effects to this species will be covered through requisite project participation in the WRCMSHCP. Therefore, any potential temporary or permanent effects to this species would not be considered adverse. Because no other special-status plant species were observed during the field surveys or are expected to occur in the project area under either Build Alternative or design variation, no substantial temporary or permanent effects to special-status plant species are expected.

- **Farmlands and Timberlands:** The proposed project under either Build Alternative or design variation would temporarily and permanently impact land currently under cultivation, including temporary and permanent impacts to Prime Farmland, Unique Farmland, and Farmland of Statewide Importance (refer to Section 2.2, Farmlands and Timberlands, for acreages). However, none of the land in the RSA is designated in the City of Moreno Valley (City) or County of Riverside (County) General Plans for agricultural use (although some of the land is designated for rural residential uses that would allow agricultural uses), and agricultural mitigation was previously identified in the City's General Plan as being inconsistent with the goals and objectives of the General Plan. There are no Williamson Act Contract lands within or adjacent to the project area. Furthermore, under Alternatives 2 and 6 (the Locally Preferred Alternative [LPA]), the

project received a final score on Form NRCS-CPA-106 of 98, which is below the 160-point threshold that would require alternative actions as appropriate to reduce adverse impacts to farmlands. Under Design Variations 2a and 6a, the project received a final score on Form NRCS-CPA-106 of 115, which is below the 160-point threshold that would require alternative actions as appropriate to reduce adverse impacts to farmlands. Therefore, based on the City's General Plan and Form NRCS-CPA-106, the project would not have a substantial adverse effect on farmlands.

- **Community Impacts:** Complete closure of the interchange during construction could temporarily impede circulation in the community, but a full closure is expected to reduce the overall construction timeframe and impacts on the community. Additionally, a Transportation Management Plan (TMP) would be developed and implemented to address short-term access and circulation effects during project construction. Any temporary construction effects would occur throughout the community and would not disproportionately impact low-income and/or minority residents. Conversely, construction activities would provide jobs that may benefit the local economy, including low-income and minority populations. Because the proposed project would improve the existing roadway infrastructure, communities would benefit largely due to a decrease in traffic congestion from improvements to the SR-60/WLC Pkwy interchange. Additionally, relocation of a single residence under Design Variation 6a would occur in accordance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act (Uniform Act) (Public Law 91-646, 84 Statutes 1894), and sufficient replacement residential properties have been identified in the City according to the *Relocation Impact Memorandum* (December 2018) prepared for the project. Furthermore, the proposed project would not displace any sales-tax-generating properties. All residents and workers in the vicinity of the project would experience changes to community character and visual quality following completion of the project, regardless of income and status. Because the proposed project would improve interchange operations in the long term, either Build Alternative or design variation would benefit all local populations, and the project would not result in an adverse effect to the community.

- **Traffic and Transportation/Pedestrian and Bicycle Facilities:** The WLC Pkwy/SR-60 interchange is an access point for a number of future logistics facilities. The interchange is expected to experience an increase in truck volumes due to increased shipping traffic through the area. The existing hook ramps terminate at WLC Pkwy and are stop controlled. The existing SR-60/WLC Pkwy interchange does not have adequate capacity to support the growth in traffic volumes anticipated by the cumulative year (2040) due to future development.[1]

  Construction-related closures could impede movement in the area. However, complete closure of the interchange is expected to reduce the overall construction timeframe, and a TMP would be developed and implemented to address short-term access and

[1] A 2040 model year was created for the World Logistics Center (WLC) traffic analysis using Southern California Association of Governments' (SCAG's) 2016 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS), which models 2040. This model also includes all foreseeable development projects in the greater Moreno Valley area including buildout (41,000,000 square feet) of the WLC. The network is consistent with the SCAG 2040 RTP/SCS model network in the greater Moreno Valley area.

circulation effects during project construction. The proposed project would improve levels of service (LOS) at study intersections under Opening Year (2025) and future (2045)[1] conditions with implementation of either Build Alternative or design variation, and the State Highway study segments would either maintain or improve LOS under Opening Year (2025) and future (2045) conditions with implementation of either Build Alternative or design variation. Furthermore, the proposed project includes construction of a number of non-vehicular and pedestrian access improvements, including sidewalks and multi-use trails. These features would improve pedestrian access and safety by reducing pedestrian-vehicle conflicts. Either Build Alternative or design variation would have beneficial effects on traffic and circulation by improving regional and local mobility. Therefore, the proposed project would not result in adverse effects on traffic and transportation/pedestrian and bicycle facilities.

- **Cultural Resources:** No Section 106 Historic Properties are known to occur within the area of potential effects under either Build Alternative or design variation. Therefore, Caltrans determined that, pursuant to Stipulation IX.A of the Section 106 Programmatic Agreement (PA), a finding of No Historic Properties Affected is appropriate for this project (undertaking) as a whole. Furthermore, there are no National Register of Historic Places (NRHP) listed or eligible resources in the project area that would trigger the requirements for protection under Section 4(f). The project is conditioned to halt construction activities for evaluation of any unanticipated cultural resources during construction, and compliance with California State Health and Safety Code Section 7050.5 would ensure human remains or suspected human remains encountered during construction are treated with appropriate dignity. Therefore, the project would not result in an adverse effect to cultural resources.

- **Geology/Soils:** Implementation of the National Pollutant Discharge Elimination System (NPDES) Permit and erosion and sediment control Best Management Practices (BMPs) specifically identified in the project Storm Water Pollution Prevention Plan (SWPPP) will prevent soil erosion. A detailed geotechnical investigation (i.e., Foundation Report) and fault trench investigation for the bridge structure will be prepared, and the findings from these investigations will be incorporated into the final project design to guard against geologic hazards, including seismic activity, unstable geological units, and corrosive soils. Additional evaluation of seismic densification based on actual field data for the proposed structure would be performed in future phases of project development for either Build Alternative or design variation. The project will be designed and constructed to withstand seismic activity in accordance with Caltrans Seismic Design Criteria (SDC) and the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications and California Amendments. Furthermore, neither Build Alternative nor design variation would result in permanent substantial changes to the topography or to geologic features in the project area because the proposed project improvements would generally be constructed at or close to the same grade as the existing facilities. Through implementation of proper design and engineering based on available seismic and other geotechnical data, development of the proposed project will not have an adverse effect on geology and soil

[1] Forecasts for the 2045 study year were developed by extrapolating the ambient (i.e., non-WLC) growth for the 2025–2040 period for an additional 5 years and then adding in the traffic from full build out of the WLC. No roadway projects were added because no adopted plans are available beyond 2040, so any additions would have been speculative.

resources, nor will regional geotechnical constraints have an adverse effect on the proposed project or the public.

- **Natural Communities:** There would be no substantial temporary or permanent direct effects to natural communities under either Build Alternative or design variation because none of the biological communities within the project limits are considered communities of concern in the WRCMSHCP. Therefore, the proposed project would not result in adverse effects to natural communities.

2.23.4 Resources Evaluated for Cumulative Impacts

The following discussion of potential cumulative impacts is presented by environmental resource area. The reasonably foreseeable projects considered in this analysis are listed in Table 2.23.1 and shown on Figure 2.23-1.

The reasonably foreseeable actions discussed in this section include the proposed developments in proximity to the RSA that could contribute to a cumulative effect. Information on proposed developments was obtained from the City of Moreno Valley. Information on future transportation projects was obtained from Caltrans and the Southern California Association of Governments (SCAG).

The following resources are evaluated in this section for cumulative impacts: land use, utilities and emergency services, visual/aesthetics, hydrology and floodplains, water quality and storm water runoff, paleontology, hazardous waste and materials, air quality, greenhouse gases, noise, wetlands and other waters, animal species, threatened and endangered species, and invasive species. Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a would have similar potential contributions to cumulative impacts for these resources and are therefore discussed as one, unless otherwise noted under each resource area.

2.23.4.1 Land Use

The RSA for the cumulative land use impacts analysis is the project area (the physical area that will be affected by the project) and the adjacent neighborhoods within Moreno Valley and unincorporated Riverside County (Census Tracts 424.01 and 426.22 and the part of Census Tract 426.24 that lies within the incorporated limits of the City[1]). The information below describes the current health and historical context of land use within the RSA.

The Moreno Valley area began to develop in the late 1880s with the establishment of the Alessandro and Moreno settlements. The community of Moreno was built around the intersection of Redlands Boulevard and Alessandro Boulevard. Grain and fruit farms were established and an aqueduct was built to deliver water from a new reservoir located in the San Bernardino Mountains. Water reached the community of Moreno in 1891. Due to drought conditions and water rights disputes, crops began to fail shortly after and many farmers and settlers moved away until the activation of March Air Force Base in 1918. The presence of March Air Force Base and an increase in water well drilling spurred new development until March Air Force Base closed in 1922. The reactivation and expansion of

[1] The unincorporated part of Census Tract 426.24 is undeveloped and is more than 2 miles from the SR-60/WLC Pkwy interchange; therefore, the unincorporated part of Census Tract 426.24 has been excluded from the RSA.

March Air Force Base during the 1940s generated additional growth, and new development began to appear in what is now the Edgemont and Sunnymead communities as well as in the community of Moreno. Once Moreno Valley was included in the Eastern Municipal Water District's (EMWD) service area in the 1950s, the community began to grow rapidly due to the reliability of water.[1]

The City of Moreno Valley was incorporated on December 3, 1984, and its first General Plan was adopted in 1988. Prior to 1988, Moreno Valley operated under the General Plan and zoning ordinance of the County of Riverside. The 1988 General Plan functioned much like a zoning code because the Riverside County zoning ordinance did not adequately address community concerns. A new zoning code for the City of Moreno Valley was adopted in 1992 followed by a comprehensive update of the General Plan in 1996.[2]

As identified in Section 2.1, Land Use, area growth slowed due to a statewide economic downturn and the realignment[3] of March Air Force Base in the 1990s, which resulted in heavy job losses in this part of Riverside County. By 2000, strong housing growth returned to the area due to the soaring cost of housing in Los Angeles and Orange Counties. The city's real estate market appears to have recovered from the Great Recession of 2008, and Moreno Valley is currently in another high-growth era. Much of the eastern third of the city remains undeveloped, and significant infill development opportunities exist throughout the developed parts of Moreno Valley.

The Build Alternatives and Design Variations 2a and 6a would require TCEs within the project area. Project Feature PF-LU-1, requiring photodocumentation of pre-construction conditions for restoration purposes, would minimize any land use conflicts from construction of the project.

As detailed in Section 2.1, Land Use, the Build Alternatives and Design Variations 2a and 6a would not result in any substantial land use changes within the RSA and would minimize effects to adjacent existing land uses to the greatest extent possible. The project would be generally consistent with the County of Riverside General Plan, the City of Moreno Valley General Plan, and policies established for the County and City within the RSA, and would support future development in proximity to the SR-60/WLC Pkwy interchange that has already been approved. Any land use changes resulting from the Build Alternatives would be incorporated into the next regularly scheduled update of the County's and City's General Plan Land Use Element.

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1 *City of Moreno Valley General Plan*, City of Moreno Valley, July 11, 2006.

2 Ibid.

3 In March 1993, March Air Force Base was chosen for realignment under the federal government's Base Realignment and Closure (BRAC) program with an effective date of March 31, 1996. Under the BRAC program, March Air Force Base was realigned from an active military duty base to a Reserve Base and opened up the opportunity for joint use of the airfield.

Table 2.23.1 Planned Projects in the Land Use Study Area and the SR-60 Corridor

Project Name/Type[1]	Jurisdiction/Location	Proposed Use/Description	Status
Industrial Projects in Moreno Valley			
World Logistics Center	In Moreno Valley, at SR-60 and WLC Pkwy and Gilman Springs Road	Includes General Plan Amendments, Specific Plan, Zone Change and Tentative Parcel Map to construct 40,600,000 sf of logistics facilities and associated infrastructure providing for modern high-cube logistics warehouse distribution facilities on 2,610 ac	Approved
Highland Fairview Corporate Park Plan – Phase II	In Moreno Valley, south of SR-60, between Redlands Boulevard and World Logistics Center Pkwy	Includes a General Plan Amendment and Zone Change to construct a 768,000 sf industrial logistics facility on 36.8 ac	Approved
SR-60 Business Park Area	In Moreno Valley, south of SR-60, east of Moreno Beach Drive, north of Eucalyptus Avenue and Fir Avenue, and west of World Logistics Center Pkwy	Industrial warehouse business park with 3,651,264 sf of occupied/leased space and 1,249,121 sf of available space.	Approved
Residential Projects in Moreno Valley			
TM 32460 – Sussex Capital Group	In Moreno Valley, north of Ironwood Avenue, west of Redlands Boulevard, south of Kalmia Avenue, east of Pettit Street	58 single-family residential units	Approved
TM 33962 – Pacific Scene Homes	In Moreno Valley, north of Ironwood Avenue, west of Redlands Boulevard, south of Kalmia Avenue, east of Pettit Street	31 single-family residential units	Approved
TM 32459 – Sussex Capital Group	In Moreno Valley north of Ironwood Avenue, west of Redlands Boulevard, south of Kalmia Avenue, east of Pettit Street	11 single-family residential units	Approved
TM 30998 – Pacific Communities	In Moreno Valley, north of Ironwood Avenue, west of Redlands Boulevard, south of Kalmia Avenue, east of Pettit Street	47 single-family residential units	Approved
PA06-0054 – Winchester Associates	In Moreno Valley, north of Alessandro Boulevard, west of Oliver Street, south of Cottonwood Avenue, east of Nason Street	52 single-family residential uses	Approved
PA04-0106 – Winchester Associates	In Moreno Valley, north of Alessandro Boulevard, west of Olive Street, south of Cottonwood Avenue, east of Nason Street	54 single-family residential units	Approved
PA05-0031 – Dev West Engineering	In Moreno Valley, north of Alessandro Boulevard, west of Moreno Beach Drive, south of Cottonwood Avenue, east of Oliver Street	80 single-family residential uses	Approved
PA03-0106 – Frontier Homes	In Moreno Valley, north of Alessandro Boulevard, west of Moreno Beach Drive, south of Bay Avenue, east of Oliver Street	56 single-family residential uses	Under Construction
TM 35823 – Lansing Companies	In Moreno Valley, northeast corner of Moreno Beach Drive and Cottonwood Avenue	562 single-family residential units	In entitlement process

Table 2.23.1 Planned Projects in the Land Use Study Area and the SR-60 Corridor

Project Name/Type[1]	Jurisdiction/Location	Proposed Use/Description	Status
PEN18-0080 – Hakan Buvan	In Moreno Valley, north of Cactus Avenue, west of Arborglenn Drive, south of Brodiaea Avenue, east of Moreno Beach Drive	8 single-family residential units	In entitlement process
PEN18-0154 – Michael De La Torre	In Moreno Valley, north of Cactus Avenue, west of Arborglenn Drive, south of Brodiaea Avenue, east of Moreno Beach Drive	6 single-family residential units	In entitlement process
45 – TM 37424 – Sid Chan	In Moreno Valley, north side of Alessandro Boulevard, between Moreno Beach Drive and Wilmot Street	7 single-family residential units	In entitlement process
TM 33222 – 26th Corp	In Moreno Valley, southeast corner of Merwin Street and Alessandro Boulevard	235 single-family residential units	In entitlement process
PEN18-0053 – Cantebury	In Moreno Valley, north side of Brodiaea Avenue, between Moreno Beach Drive and Wilmot Street	45 single-family residential units	In entitlement process
TM 36719 – Kuo Ming Lee	In Moreno Valley, southeast corner of Theodore Street (now WLC Pkwy) and Eucalyptus Avenue	34 single-family residential units	In entitlement process
TM 35377 – Michael Dillard	In Moreno Valley, southeast corner of Theodore Street (now WLC Pkwy) and Eucalyptus Avenue	9 single-family residential units	Approved
TM 36436 – KB Homes	In Moreno Valley, between Brodiaea Avenue, Wilmot Street, Cactus Avenue, and Quincy Street	159 single-family residential units	Under Construction
TM 30411 – Pacific Communities	In Moreno Valley, northwest Corner of Redlands Boulevard and Juniper Avenue	24 single-family residential units	Approved
Street Improvement and Widening Projects in Moreno Valley[2]			
Alessandro Boulevard Widening and Realignment	In Moreno Valley, between Nason Street and Gilman Springs Road	Widening of Alessandro Boulevard from two to four lanes, realignment of Alessandro Boulevard between Theodore Street (now WLC Pkwy) and Gilman Springs Road, and associated street improvements	In 2019, SCAG FTIP and programming documents focused on long-range air quality purposes but not yet funded.
Cactus Avenue Widening	In Moreno Valley, between Nason Street and Redlands Boulevard	Widening of Cactus Avenue from two to six lanes	Planned for completion by 2020
Gilman Springs Road Widening	In Moreno Valley, between SR-60 and Alessandro Boulevard	Widening of Gilman Springs Road from two to six lanes with street improvements	In programming documents but not yet funded.
Gilman Springs Road Widening	In Moreno Valley, between Alessandro Boulevard and Bridge Street	Widening of Gilman Springs Road from two to six lanes and associated street improvements	In programming documents but not yet funded.
Ironwood Avenue Widening	In Moreno Valley, between Nason Street and Redlands Boulevard	Widening of Ironwood Avenue from two to four lanes	Planned for completion by 2022
Moreno Beach Drive Widening	In Moreno Valley, between Auto Mall Drive and Cactus Avenue	Widening of Moreno Beach Drive from two to six lanes from Auto Mall Drive to Cactus Avenue, including signals at Cottonwood Avenue, Alessandro Boulevard, and Cactus Avenue	In programming documents but not yet funded.
Moreno Beach Drive Widening	Between Reche Canyon Road and SR-60	Widening of Moreno Beach Drive from two to four lanes.	Planned for completion by 2022

Table 2.23.1 Planned Projects in the Land Use Study Area and the SR-60 Corridor

Project Name/Type[1]	Jurisdiction/Location	Proposed Use/Description	Status
Nason Street Widening	Between Elder Avenue and Ironwood Avenue	Widening of Nason Street from two to four lanes	Planned for completion by 2022
Redlands Boulevard Widening	Between Spruce Avenue and Ironwood Avenue	Widening of Redlands Boulevard from two to four lanes including street improvements	Planned for completion by 2022
Redlands Boulevard Widening	Between Ironwood Avenue and Kalmia Avenue	Widening of Redlands Boulevard from two to four lanes	Planned for completion by 2022
Redlands Boulevard Widening	Between Kalmia Avenue and Locust Avenue	Widening of Redlands Boulevard from two to four lanes	Planned for completion by 2022
Redlands Boulevard Widening	Between SR-60 and Cactus Avenue	Widening of Redlands Boulevard from two to four lanes and other street improvements	In programming documents but not yet funded.
Eucalyptus Avenue Extension	In Moreno Valley, between Redlands Boulevard and Theodore (now WLC Pkwy)	Construction of three through lanes (two lanes WB and one lane EB) including the installation of medians, left-turn pockets, dedicated right turn lanes, drainage improvements, landscaping, sidewalks, and a Class I bike path	In programming documents but not yet funded.
Citywide Safe Routes to Schools Pedestrian Facility Improvements	In Moreno Valley, on Dracaea Avenue, Eucalyptus Avenue, Ironwood Avenue, Kitching Street, Sandy Glade Avenue, and Elsworth Street.	Install 2,840 feet of sidewalk gap closures, curbs, gutters, street lights, ADA ramps, and street widening.	In programming documents but not yet funded.
SR-60 Improvements			
SR-60 at Redlands Boulevard Overcrossing and Ramp Widening	In Moreno Valley at SR-60/Redlands Boulevard	Widening of the overcrossing from two to six through lanes; widening of the WB exit and entrance ramps from one lane to three lanes at the exit/entrance and three lanes at the arterial with an HOV lane at the entrance; widening of the EB exit and entrance ramps from one lane to two lanes at the exit/entrance with an HOV lane at the entrance; addition of auxiliary lanes 1,000 ft in each direction west of the intersection and 1,700 ft in each direction east of the intersection.	Approved, PSR/PDS in 2016; planned for completion by 2025 but not yet funded.
SR-60/Gilman Springs Road Interchange Improvements	In Moreno Valley at the SR-60/Gilman Springs Road interchange	Realignment of Gilman Springs Road, removal of existing EB/WB ramps, widening of interchange from two lanes to six lanes, widening of WB exits from one to two/three lanes, and addition of auxiliary lanes to west of interchange 1,200 ft EB and 2,200 ft WB.	In programming documents but not yet funded.
SR-60/Moreno Beach Drive Interchange (Phase 2)	In Moreno Valley at SR-60/Moreno Beach Drive	Replacement and widening of the overcrossing from two to six through lanes. Reconfiguration of the north side of SR-60/ Moreno Beach Drive interchange and associated WB auxiliary lane. Construction of a cloverleaf in the northeast quadrant, and a dedicated SB Moreno Beach Drive to WB SR-60 on-ramp. Raising of the EB ramp terminals to meet the new grade of the bridge. Completion of a portion of line K-1 in Ironwood Avenue.	Planned for completion by 2022; funded.
SR-60 Widening	In Moreno Valley along SR-60 between Redlands Boulevard and Gilman Springs Road.	Widening of SR-60 from two to three lanes in each direction in the existing median	Planned for completion by 2022 but not yet funded.

Table 2.23.1 Planned Projects in the Land Use Study Area and the SR-60 Corridor

Project Name/Type[1]	Jurisdiction/Location	Proposed Use/Description	Status
Truck Lanes and Shoulder Improvements on SR-60 near Beaumont	On SR-60 near Beaumont	Construction of new EB and WB truck lanes from Gilman Springs Road to 1.47 mi west of Jack Rabbit Trail and upgrading the existing inside and outside shoulder to standard widths	Planned for completion by 2021
Bikeway Projects			
Alessandro Boulevard Class 2 Bike Lane	In Moreno Valley, from Nason Street to Redlands Boulevard	Buffering of the bike lane	Recommended opportunity identified
Moreno Beach Drive Class 2 Bike Lane	In Moreno Valley, from Eucalyptus Avenue to Auto Mall Drive; from Cottonwood Avenue to Bay Avenue; and from Brodiaea Avenue to Via del Lago	Buffering of the bike lane	Recommended opportunity identified
Redlands Boulevard Class 2 Bike Lane	In Moreno Valley, from Dracaea Avenue to Bay Avenue; from Alessandro Boulevard to just south of Campbell Avenue; and from just south of Campbell Avenue to Cactus Avenue	Buffering of the bike lane	Recommended opportunity identified

[1] The projects listed in the column correspond sequentially to the projects listed in Figure 2.23-1.
[2] The projects listed under "Street Improvement and Widening Projects in Moreno Valley" are currently unfunded.

Source 1: City of Moreno Valley. May 2018. New Development Map. Website: http://www.moval.org/edd/pdfs/NewDevelopmentMap.pdf, accessed November 26, 2019;

Source 2: City of Moreno Valley Department of Public Works – Capital Projects Division. Capital and Developer Projects Maps as of October 2019. Website: http://www.moval.org/city_hall/departments/pub-works/pdf/curproj-map.pdf, accessed November 26, 2019;

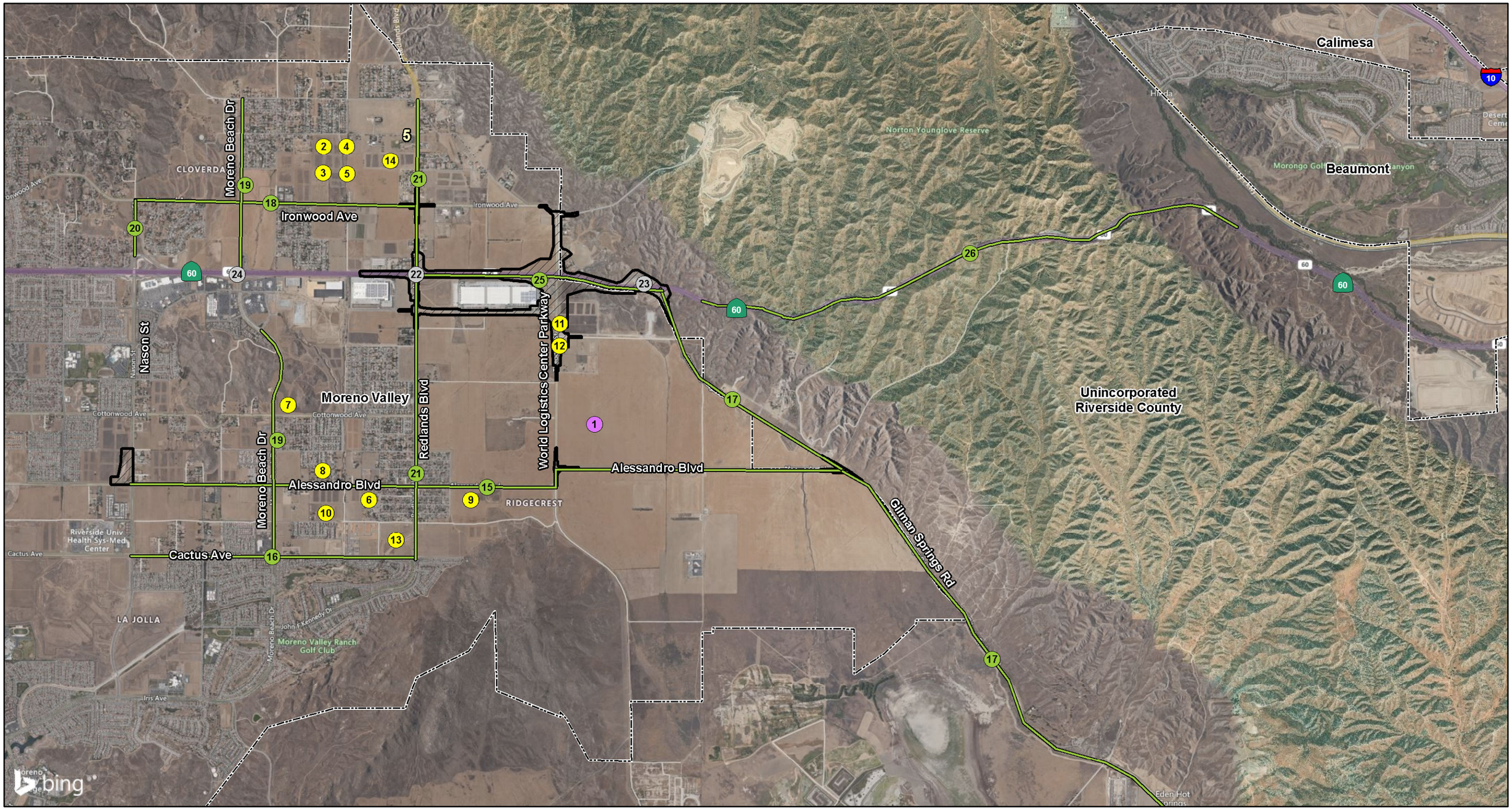
Source 3: City of Moreno Valley Department of Public Works – Capital Projects Division. Project List as of October 2019. Website: http://www.moreno-valley.ca.us/city_hall/departments/pub-works/pdf/curproj-list.pdf, accessed November 26, 2019;

Source 4: Southern California Association of Governments, 2016–2040 RTP/SCS Project List. Website: http://scagrtpscs.net/Pages/2016RTPSCS.aspx, accessed December 3, 2019.

Source 5: Southern California Association of Governments, 2019 Approved FTIP. Website: http://ftip.scag.ca.gov/Pages/2019/approved.aspx, accessed December 2, 2019.

Source 6: City of Moreno Valley Bicycle Master Plan. November, 2014. Website: http://www.moval.org/city_hall/departments/pub-works/transportation/pdfs/BicycleMasterPlan.pdf, accessed December 3, 2019.

ac = acre/acres
EB = eastbound
EIR = Environmental Impact Report
ft = foot/feet
FTIP =Federal Transportation Improvement Program
HOV = high-occupancy vehicle
mi = mile/miles
PSR/PDS = Project Study Report/Project Development Support
RTP = Regional Transportation Plan
SB = southbound
SCAG = Southern California Association of Governments
SCS = Sustainable Communities Strategy
sf = square foot/feet
SR-60 = State Route 60
WB = westbound
WLC Pkwy = World Logistics Center Parkway



LEGEND

- Project Area
- City/County Boundary

Planned Projects

- Industrial
- Overpass
- Residential
- Roadway Improvements

1: World Logistics Center
2: TM 32460 – Sussex Capital Group
3: TM 33962 – Pacific Scene Homes
4: TM 32459 – Sussex Capital Group
5: TM 30998 – Pacific Communities
6: TM 36372 – Motlagh Family Trust
7: TM 35823 – Lansing Companies
8: 45 – TM 37424 – Sid Chan
9: TM 33222 – 26th Corp
10: PEN18-0053 – Cantebury
11: TM 36719 – Kuo Ming Lee
12: TM 35377 – Michael Dillard
13: TM 36436 – KB Homes
14: TM 30411 – Pacific Communities
15: Alessandro Boulevard Widening and Realignment
16: Cactus Avenue Widening
17: Gilman Springs Road Widening
18: Ironwood Avenue Widening
19: Moreno Beach Drive Widening
20: Nason Street Widening
21: Redlands Boulevard Widening
22: SR-60 at Redlands Boulevard Overcrossing and Ramp Widening
23: SR-60/Gilman Springs Road Interchange Improvements
24: SR-60/Moreno Beach Drive Interchange
25: SR-60 Widening
26: SR 60 Truck Lanes and Shoulder Improvements

0 1750 3500
FEET

SOURCE: Bing Maps (2014); SCAG (2010); RBF (2015)

I:\RBF1301\GIS_Mod\MXD\Cumulative\PlannedProjects_2019.mxd (12/12/2019)

FIGURE 2.23-1

SR-60/World Logistics Center Pkwy Interchange Project

Planned Projects
08-RIV-60
PM 20.0/22.0

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Through the improvement of the local and regional circulation system, the design concept and scope of the proposed project are consistent with SCAG 2016/2040 Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS) and Riverside County Congestion Management Program (CMP) and are intended to meet the traffic needs in the area based on the local land use plans. Additionally, the proposed project is programmed in the 2019 Federal Transportation Improvement Program (FTIP).

As shown on Figure 2.1-3 (Section 2.1, Land Use), one existing Class 2 bicycle lane exists along Eucalyptus Avenue, west of Redlands Boulevard; one existing Class 3 bicycle lane exists along Ironwood Avenue; and one existing trail exists along Cottonwood Avenue, west of Redlands Boulevard, and along the west side of Redlands Avenue. There are no existing parks or recreational facilities within 0.5 mile (mi) of any parts of the project area except for near the proposed City Stockpile borrow site at the intersection of Alessandro Boulevard and Nason Street. Morrison Park is approximately 0.5 mi north/northwest of the borrow site. Morrison Park is protected by the Park Preservation Act and is a protected Section 4(f) resource. Minor temporary impacts to the Class 3 bicycle lane were identified during construction, but the bike lane would be restored when construction is complete. No other temporary impacts were identified. Permanent impacts to bicycle and trail facilities would not occur.

As shown in Table 2.23.1 lists all of the currently planned land development projects within the RSA for land use. Most of these projects have either been approved or are currently undergoing review through the applicable local jurisdiction's land use entitlement process. Of the projects listed in Table 2.23.1, the project that will result in the greatest change to land use within the RSA is the proposed World Logistics Center which will provide over 40 million square feet of warehouses and logistics facilities on 2,610 ac in the RSA. As with the proposed project, all of the planned projects listed in Table 2.23.1 are required to comply with applicable land use plans and policies of the jurisdiction(s) in which they are located. Accordingly, a project that is not consistent with applicable land use plans cannot be approved unless amendments, variances, or exceptions are proposed and adopted as part of the project. Other reasonably foreseeable actions would be evaluated on a project-by-project basis to determine the potential for impacts on land use and the appropriate measures required to reduce impacts. Because project impacts would not be adverse with implementation of temporary construction easements (TCEs) and execution in accordance with the County of Riverside General Plan, the City of Moreno Valley General Plan, SCAG's RTP/SCS, CMP, and the FTIP, the Build Alternatives and Design Variations 2a and 6a, in conjunction with past, present, and reasonably foreseeable projects, would not result in a cumulative effect related to land use (with regards to conflicts with existing plans, policies, or regulations, or conflicts with surrounding land uses). Therefore, no avoidance, minimization, and/or mitigation measures for cumulative land use impacts are required.

2.23.4.2 Utilities and Emergency Services

The RSA for the utility and emergency services cumulative impacts analysis is the service territories of the respective utility and emergency services providers within the City limits and the City's sphere of influence. The information below describes the

current health and historical context of utilities and emergency services within the RSA.

- **Water Supply:** The majority of water supplied to the City of Moreno Valley comes from EMWD, whose service area extends north of the city limits and includes most of the City's sphere of influence. EMWD's water supply comes from local groundwater, recycled water, and imported water from the Metropolitan Water District of Southern California. The Box Springs Mutual Water Company provides well water and/or purchased water from Western Municipal Water District (WMWD) to a portion of northwest Moreno Valley. Water service is adequately available to all areas within the city limits and sphere of influence.

- **Wastewater:** Sewer service in the City is provided by EMWD and the Edgemont Community Services District (ECSD). EMWD provides service to the majority of the City and surrounding areas while ECSD provides sewer service to a small area in the southwest portion of the city limits.[1] EMWD owns and operates the Moreno Valley Regional Water Reclamation Facility, which has a daily treatment capacity of 16 million gallons with an ultimate capacity of 41 million gallons per day. Typical daily flows at the Moreno Valley Regional Water Reclamation Facility are 10.6 million gallons per day with the ability to divert approximately 2 million gallons per day to EMWD's Perris facility.[2] ECSD sewage treatment services are provided under contract with the City of Riverside.

- **Electricity:** Southern California Edison (SCE) supplies electricity to individual customers in the region. Electricity is delivered to the Maxwell Substation (located at Ironwood Avenue and Heacock Street), the Alessandro Substation (located near John F. Kennedy Boulevard and Kitching Street), and the Bunker Substation (located northeast of the intersection of Ironwood Avenue and Pettit Street). From these substations, electricity is distributed throughout the City and sphere of influence. In 2001, the City created a municipal electrical utility to provide service to new residents and businesses within areas of the City that are being converted from fallow or agricultural lands (Greenfields) to urban uses. Service began for these Greenfield areas in 2004.[3]

- **Natural Gas:** The Southern California Gas Company (SoCalGas) provides natural gas to the City and maintains a comprehensive network of distribution and service lines. Two major 30-foot-wide transmission line rights-of-way cross through the City along Cottonwood Avenue and Brodiaea Avenue (both rights-of-way traverse east-west). Major 8-inch and 12-inch distribution supply lines are located within Indian Avenue, north of Brodiaea Avenue, within the City. In addition to natural gas pipelines, there is a jet fuel pipeline running through the western portion of the City. The jet fuel pipeline runs from the City of Colton to

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1 *City of Moreno Valley General Plan*, City of Moreno Valley, July 11, 2006.
2 *Moreno Valley Regional Water Reclamation Facility Fact Sheet*, Eastern Municipal Water District
3 *City of Moreno Valley General Plan*, City of Moreno Valley, July 11, 2006.

the northwest corner of the city limits and then south to March Air Reserve Base.[1]

- **Fire Protection:** Since incorporation, the Riverside County Fire Department has provided the City's fire protection, fire prevention, and emergency medical services through a cooperative contractual agreement. Originally, the City was protected by three fire stations. As of 2006, the number of fire stations had increased to six.[2] Currently, the Riverside County Fire Department staff has seven fire stations throughout Moreno Valley.

- **Law Enforcement:** Since 1984, the Riverside County Sheriff's Department (under the name of the Moreno Valley Police Department) has provided the City with police protection and crime prevention services. Protection and prevention services include general law enforcement, traffic enforcement, investigation, and routine support services such as communications, evidence collection, analysis and preservation, training, administration, and records. Several specialized functions (e.g., Hazardous Device Team, K9 Units) are available from the Sheriff's Department as needed. The Moreno Valley Police Department operates out of the Public Safety Building located at 22850 Calle San Juan de Los Lagos, but they also operate out of several satellite offices in strategic locations throughout the City.

- **Solid Waste:** The City provides waste management and handling services through a contract with Waste Management. Refuse is deposited in several local area landfills, including the Badland Sanitary Landfill at the eastern end of Ironwood Avenue. The Badlands Sanitary Landfill is owned and operated by the Riverside County Department of Waste Resources. The City adopted a "Source Reduction and Recycling Element" in 1992 that includes strategies to address waste diversion requirements prescribed by the California Integrated Waste Management Act of 1989 (AB 939).[3]

Utilities (e.g., water lines, sewer laterals, electrical connections/lines/poles, natural gas service lines, streetlights, fire hydrants, and cable television lines and utility boxes) in the project right-of-way could be abandoned, removed, relocated or replaced due to the construction of either Build Alternative or design variation, any of which are anticipated to result in the same potential utility relocations.

An updated utility search would be conducted during final design to determine whether all utilities would require protection in-place, removal, or relocation. Completion of the utility work required for the affected utilities listed in Table 2.5.2 (Section 2.5, Utilities and Emergency Services) may result in temporary service disruptions to some utility users in the vicinity of the study area. Accordingly, Project Feature PF-UES-1 requires the development of utility relocation plans for all affected utilities applicable to either Build Alternative or design variation.

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1 Ibid.
2 *City of Moreno Valley General Plan*, City of Moreno Valley, July 11, 2006.
3 Ibid.

During construction of either Build Alternative or design variation, some impairment to the delivery of emergency services, including fire and police response times, may occur due to limited lane closures on the mainline, ramps, and arterials. Detour routes would be provided to direct traffic around any mainline or ramp closures using the local arterial street network. Emergency service providers (including the local fire and police departments and the California Highway Patrol [CHP]) could experience these travel delays when traveling to/from emergency scenes during these mainline freeway closures. Accordingly, Project Feature PF-UES-2 requires coordination of all temporary mainline, ramp, and arterial roadway closures and detour plans with law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times, including the identification of alternative routes for emergency vehicles and routes across the construction areas that are developed in coordination with the affected agencies.

Temporary construction impacts to emergency services would be further minimized by implementation of Project Feature PF-TR-1, which requires development and implementation of a TMP during construction of either Build Alternative or design variation to address traffic delays; manage detours and temporary road, lane, and ramp closures; provide ongoing information to the public regarding construction activities, closures, and detours; and maintain a safe environment for construction workers and travelers. At the time it is prepared, the TMP will consider other planned transportation projects that may require lane closures and/or traffic detours to ensure that they would not conflict with any lane closures or traffic detours necessary to construct the Build Alternatives or Design Variations 2a or 6a. Therefore, neither the Build Alternatives nor the design variations would contribute to any temporary cumulatively considerable adverse effects to emergency services or utility providers.

Design Variations 2a and 6a are anticipated to result in the same potential utility relocations as Alternatives 2 and 6 (LPA). Any relocation or other effects to utility facilities as a result of the Build Alternatives or Design Variations 2a or 6a would occur during the construction phase such that all utility services would be permanently maintained. As required by Caltrans and City standards, emergency access would be maintained during construction.

Neither Build Alternative nor design variation would increase the need for domestic water services, wastewater facilities, or solid waste disposal. In the long term, either Build Alternative or design variation would improve traffic operations in the RSA, which will benefit emergency service providers as they travel in and through the project area. Therefore, the proposed project would not result in permanent adverse effects on utility providers or their facilities.

Other reasonably foreseeable actions within the RSA would be evaluated on a project-by-project basis to determine the potential for impacts on utilities/emergency services and the appropriate measures required to reduce adverse effects. Because project effects would not be adverse with adherence to local and State policies and implementation of utility relocation plans and a TMP, the proposed project, in conjunction with past, present, and reasonably foreseeable projects, would not result in a cumulative effect related to utilities/emergency services. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative impacts to utilities/emergency services are required.

2.23.4.3 Visual/Aesthetics

The RSA for the visual resources cumulative impacts analysis includes the project setting, which is also referred to as the corridor or project corridor. The project setting is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way and is determined by the topography, vegetation, and viewing distance. The RSA is mainly characterized by rural development and open space, although large-scale industrial development is increasing in the vicinity of the project site (e.g., the existing Skechers warehouse facility south of the project site). Finally, the RSA does not include any officially designated or eligible State Scenic Highways.[1] The information below describes the current health and historical context of visual/aesthetics within the RSA.

The peaks, ridgelines, and hillsides associated with Box Springs Mountains and Reche Canyon areas to the north, the Badlands to the east, and the Mount Russell area to the south, as well as the San Jacinto Wildlife Area and the Lake Perris State Recreation Area, are the most prominent visual resources in the RSA. These ridgelines are generally uniform in color and texture. In addition to natural features, the City considers the manmade environment (e.g., buildings, landscaping, and signs) equally important in terms of scenic values as well as agricultural areas, although less common (e.g., groves).[2] The project will substantially conform with the guidance listed in the City of Moreno Valley's Route 60 Corridor Master Plan for Aesthetics and Landscaping, dated August 2010, and any updates.

Construction vehicle access and staging of construction materials would be visible to motorists traveling along the project site as well as to residents located in the project vicinity. These impacts are short term and would cease upon project completion. Adherence to Caltrans Standard Specifications for Construction and Moreno Valley Municipal Code Section 9.10.110 in accordance with Project Feature PF-VIS-3 would minimize visual impacts.

For any nighttime construction, necessary lighting for safety and construction purposes would be directed away from land uses outside the project area and contained and directed toward the specific area of construction under both Build Alternatives and Design Variations 2a and 6a.

Both Build Alternatives and Design Variations 2a and 6a would include minor view obstruction of the surrounding natural elements because the form would be altered due to the new WLC Pkwy Overcrossing (the height, width, and length of the structure would be larger than the existing overcrossing structure), new on- and off-ramps, traffic signals, and a potential grade-separated trail/pedestrian crossing over the eastbound SR-60 direct on-ramp (based on available funding). However, views to the surrounding mountains, hillsides, and ridgelines would remain. Additionally, new ornamental landscaping would increase the color, form, and texture of the project corridor, so the visual character of the proposed project would be mostly

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1 California Department of Transportation, California Scenic Highway Mapping System. Website: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm/, accessed on September 4, 2018.

2 *City of Moreno Valley General Plan*, City of Moreno Valley, July 11, 2006.

compatible with the existing corridor under either Build Alternative or design variation.

Implementation of the Build Alternatives would introduce additional sources of light and glare to the project area from the proposed bridge overcrossing structure, traffic signals, and pedestrian safety lighting along WLC Pkwy. To ensure consistency with the design intent of the Corridor Master Plan, maintain the character and quality of the project corridor, and ensure that landscape treatments reduce the appearance of hardscape features from the overcrossing and widened WLC Pkwy, Caltrans' Gateway Monument policies will be adhered to in accordance with Project Feature PF-VIS-1, and freeway landscaping shall retain the character of the existing desert scrub in accordance with Project Feature PF-VIS-2 under either Build Alternative or design variation. Furthermore, Caltrans Standard Design Practices, including the use of directional lighting, and City of Moreno Valley Municipal Code Section 9.10.110 will be used to reduce new sources of light and glare impacts in accordance with Project Feature PF-VIS-4.

Other planned projects have the potential to affect resource change and viewer response in proximity to the RSA. Due to the relatively undeveloped condition of the RSA, the reasonably foreseeable actions have the potential to substantially change the semi-rural character of the area. However, these actions would be evaluated on a project-by-project basis to determine impacts and the appropriate measures required to reduce those impacts on visual resources/aesthetics. Since the proposed project is not anticipated to generate temporary adverse visual effects, its cumulative contribution to visual effects from planned projects within the RSA would not be adverse during construction. Furthermore, the Project Features incorporated into the Build Alternatives and Design Variations 2a and 6a will help minimize visually permanent adverse effects of the proposed project within the visual RSA. Therefore, the proposed project, in conjunction with past, present, and reasonably foreseeable projects, would not result in a cumulative effect related to visual resources/ aesthetics. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative visual/aesthetic impacts are required.

2.23.4.4 Hydrology and Floodplains

The RSA for the hydrology and floodplain resources cumulative impacts analysis is the Santa Ana River Watershed and its tributaries, including the San Jacinto River Watershed, which is where the project is located. The information below describes the current health and historical context of hydrology and floodplains within the RSA.

The Santa Ana River Watershed is the largest watershed in Southern California and spans parts of San Bernardino, Riverside, and Orange Counties, encompassing approximately 2,840 square miles of land. The Santa Ana River is divided geographically into upper and lower watersheds that are delineated by the 60-year-old Prado Dam in Corona.

The San Jacinto River Watershed encompasses approximately 765 square miles and is regulated by several lakes and reservoirs, including Lake Elsinore, Canyon Lake, Lake Perris, and Mystic Lake.

The project is within the California Department of Water Resources (DWR) Awareness Floodplain, which is designated as a 100-year flood hazard area. Accordingly, a grading permit from the County would be required for construction within the Awareness Floodplain regulated by the County, as specified in Project Feature PF-HYD-1. Although minor grading within the regulated Awareness Floodplain would be required, construction activities would not reduce or otherwise affect the flood storage capacity and would not modify the flood flows in the floodplain under either Build Alternative or design variation. Furthermore, construction-related activities within the storm drains and channels would be staged and scheduled to avoid working directly within the regional drainages during the rainy season. As a result, construction activities under the Build Alternatives and Design Variations 2a and 6a would not result in temporary adverse impacts related to hydrology and floodplains.

The Build Alternatives and Design Variations 2a and 6a would increase the total amount of impervious surface area, which can result in an increase in flow discharges. As specified in Project Features PF-WQ-2 and PF-WQ-3, Treatment BMPs including infiltration basins and biofiltration swales would be incorporated into the design of the Build Alternatives and Design Variations 2a and 6a in accordance with the requirements of the Caltrans Municipal Separate Storm Sewer Systems (MS4) Permit and the Riverside County MS4 Permit. The infiltration basins and biofiltration swales would promote infiltration to offset any increased flows associated with the increase in impervious surface from the project area and would provide flow duration, volume, and rate control functions.

The Build Alternatives and Design Variations 2a and 6a would only result in minor grading within the Awareness Floodplain regulated by the Riverside County Flood Control and Water Conservation District (RCFCWCD). Additionally, the Build Alternatives and Design Variations 2a and 6a would not affect the flood depths or flow patterns within the floodplains. Therefore, there would be no change to the beneficial floodplain values compared to the existing condition. Furthermore, the longitudinal encroachment would not increase the risk of overtopping of the SR-60 mainline because the channel would not change the base flood elevation. Therefore, there would be no change to emergency vehicle access or to school bus or postal service routes and there would be no risk to life or property from implementation of the Build Alternatives or Design Variations 2a or 6a.

Development of other reasonably foreseeable actions within the watershed will result in a cumulative increase in impervious surfaces, changes in the type and density of land use, and corresponding changes in the amount and characteristic of runoff characteristics. Increased impervious surfaces are likely to alter existing hydrology and increase potential pollutant loads. All future development in the City, County, and throughout the Santa Ana River Watershed will be required to comply with the applicable requirements of the NPDES permit program, Awareness Floodplain, Caltrans MS4 Permit, Riverside County MS4 Permit, and water quality standards defined by local, regional, State, and federal agencies. Therefore, all planned projects will be required to mitigate for effects to hydrology and the floodplain on a project-by-project basis. Construction of the proposed project would not result in temporary adverse impacts related to hydrology and floodplains. Furthermore, neither Build Alternative nor design variation would increase flooding or change flood patterns, and therefore would not result in any changes in risk related to traffic

disruption, loss of life and property, or natural or beneficial floodplain values. Accordingly, the proposed project will not result in cumulatively considerable adverse effects to hydrology and floodplains under either Build Alternative or design variation, and no avoidance, minimization, and/or mitigation measures for cumulative impacts to hydrology and floodplains are required.

2.23.4.5 Water Quality and Storm Water Runoff

The RSA for the water quality and storm water runoff resources cumulative impacts analysis is the Santa Ana River Watershed and its tributaries, including the San Jacinto River Watershed, which is where the project is located. The information below describes the current health and historical context of water quality and storm water runoff within the RSA.

Several drainage features are present within the project area and primarily consist of channelized storm water drainages that eventually convey flows into the San Jacinto River. All storm water runoff from the project site is conveyed south into Mystic Lake and a series of nearby reclamation ponds within the San Jacinto Wildlife Area, which is located approximately 4 mi to the south of the project site. Overflow from the Mystic Lake area flows into the San Jacinto River, Reach 4 (Nuevo Road to North-South Mid-Section Line). Reach 4 of the San Jacinto River is located approximately 5 mi downstream of the project area. Primary water quality concerns in the Lake Elsinore/San Jacinto River Watershed Management Area include lake water level management, summer lake algal blooms and fish kills affecting the bacterial quality of the lakes, high nitrogen and total dissolved solids (TDS) in groundwater, and water quality problems associated with confined animal feeding operations. Reach 4 of the San Jacinto River is not listed for any impairments on the 2014/2016 California 303(d) List of Water Quality Limited Segments. There are currently no proposed or adopted Total Maximum Daily Loads (TMDLs) for Reach 4 of the San Jacinto River.

The majority of the project area is located in the San Jacinto Groundwater Basin. A small portion of the eastern side of the project area is located in the San Timoteo Subbasin of the Upper Santa Ana Valley Groundwater Basin. As designated by the Santa Ana Regional Water Quality Control Board (RWQCB), the project area is within the Perris North Groundwater Management Zone and the San Jacinto Lower Pressure Groundwater Management Zone.

According to DWR, in 2002 the San Jacinto Groundwater Basin's average groundwater character was primarily sodium chloride, sodium-calcium chloride, calcium-sodium chloride, or calcium-sodium chloride-bicarbonate. TDS content ranges from 160 to 1,390 milligrams per liter (mg/L) and averages about 463 mg/L. According to the Basin Plan, the current ambient TDS level in the San Jacinto Lower Pressure Groundwater Management Zone is 730 mg/L, which is higher than the water quality objective. The current ambient nitrate level is 1.9 mg/L, which is higher than the water quality objective.

According to DWR, the character of groundwater for the San Timoteo Subbasin beneath San Timoteo Canyon is sodium bicarbonate, calcium bicarbonate in the alluvium of Little San Gorgonio Creek, and both calcium bicarbonate and sodium bicarbonate near Beaumont. TDS content ranges from 170 to 340 mg/L and averages approximately 253 mg/L. According to the Basin Plan, the current ambient

TDS level in the Perris North Groundwater Management Zone is 750 mg/L, which is higher than the water quality objective. The current ambient nitrate level is 4.7 mg/L, which is lower than the water quality objective.

Pollutants of concern during construction of the proposed project include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. Accordingly, the construction activities associated with the Build Alternatives and Design Variations 2a and 6a must comply with the requirements of the NPDES Permit as specified in Project Feature PF-WQ-1. In compliance with the NPDES Permit, the City would be required to prepare a SWPPP and implement Construction BMPs detailed in the SWPPP during construction activities to minimize erosion and to prevent spills. In addition, as specified in Project Features PF-WET-2 and PF-WET-3, a Section 401 Water Quality Certification and a Section 404 Nationwide Permit would be obtained to address any impacts to jurisdictional waters. The United States Army Corps of Engineers (USACE) and RWQCB may specify additional measures in these permits to reduce water quality impacts. With implementation of Project Features PF-WQ-1, PF-WET-2, and PF-WET-3, pollutants of concern would be retained on the project site so as not to reach receiving waters; therefore, no adverse water quality impacts are anticipated during construction of the Build Alternatives or Design Variations 2a or 6a.

The Build Alternatives and Design Variations 2a and 6a would increase the total amount of impervious surface area, which can result in an increase in flow discharges. As specified in Project Features PF-WQ-2 and PF-WQ-3, Treatment BMPs including infiltration basins and biofiltration swales would be incorporated into the design of the Build Alternatives and Design Variations 2a and 6a in accordance with the requirements of the Caltrans MS4 Permit and the Riverside County MS4 Permit. The infiltration basins and biofiltration swales would promote infiltration to offset any increased flows associated with the increase in impervious surface from the project area and would provide flow duration, volume, and rate control functions. With implementation of Project Features PF-WQ-2 and PF-WQ-3 and implementation of Treatment and Design Pollution Prevention BMPs, neither the Build Alternatives nor the design variations would result in any adverse impacts to water quality or storm water runoff during operation.

Development of planned projects within the RSA will result in a cumulative increase in impervious surfaces, changes in the type and density of land use, and corresponding changes in the amount and characteristic of runoff. Increased impervious surfaces are likely to alter existing hydrology and increase potential pollutant loads.

Development of other reasonably foreseeable actions within the watershed will result in a cumulative increase in impervious surfaces, changes in the type and density of land use, and corresponding changes in the amount and characteristic of runoff characteristics. Increased impervious surfaces are likely to alter existing hydrology and increase potential pollutant loads. All future development in the City, County, and throughout the Santa Ana River Watershed will be required to comply with the applicable requirements of the NPDES permit program, Awareness Floodplain,

Caltrans MS4 Permit, Riverside County MS4 Permit, and water quality standards defined by local, regional, State, and federal agencies. Therefore, all planned projects will be required to mitigate for effects to water quality and storm water runoff on a project-by-project basis. Through implementation of Project Features and compliance with NPDES and MS4 Permit requirements, construction and operation of the proposed project would not result in temporary or permanent adverse impacts related to water quality and storm water runoff. Accordingly, the proposed project will not result in cumulatively considerable adverse effects to water quality and storm water runoff under either Build Alternative or design variation, and no avoidance, minimization, and/or mitigation measures for cumulative impacts to water quality are required.

2.23.4.6 Paleontology

Paleontological resources occur in geological formations that traverse regional landscapes; therefore, the RSA for the paleontological resources cumulative impacts analysis includes not only the project limits of ground disturbance, but also the City and western Riverside County. The information below describes the current health and historical context of paleontology within the RSA.

Geologic mapping indicates that the project area contains Artificial Fill, late Holocene (less than 4,200 years ago) Very Young Alluvial Fan Deposits, Holocene to late Pleistocene (less than 126,000 years ago) Young Axial Channel Deposits and Young Alluvial Fan Deposits, late to middle Pleistocene 11,700 to 781,000 years ago) Old Alluvial Fan Deposits, middle to early Pleistocene (126,000 years ago to 2.588 Ma) Very Old Alluvial Fan Deposits, and the Pliocene (3.6 to 5.333 Ma) Middle Member of the San Timoteo Formation. Of these formations, only older sediments of the Young Axial Channel Deposits and the Young Alluvial Fan Deposits below a depth of 10 ft may be old enough to contain scientifically significant paleontological resources.

Any impacts to paleontological resources as a result of the proposed project under either Build Alternative or Design Variation 2a or 6a would be considered permanent; therefore, an analysis of temporary impacts is not applicable.

There is a potential for significant, nonrenewable paleontological resources to be encountered in older sediments of the Young Alluvial Fan Deposits, Young Axial Channel Deposits, Old Alluvial Fan Deposits, Very Old Alluvial Fan Deposits, and the unnamed subunit of the middle member of the San Timoteo Formation during ground-disturbing activities. As such, Project Feature PF-PAL-1 requires temporary stoppage of construction activities if paleontological resources are encountered during construction. To ensure that unanticipated paleontological resources are managed in accordance with applicable Caltrans SER and Society of Vertebrate Paleontology (SVP) standards, a Paleontological Mitigation Plan (PMP), as specified in Mitigation Measure PAL-1, would be implemented during construction.

Other reasonably foreseeable actions would similarly include ground-disturbing activities with the potential to destroy, damage, or displace surface or previously undiscovered paleontological resources within the RSA. These actions would be evaluated on a project-by-project basis to determine impacts on paleontological resources and the appropriate measures required to reduce impacts. Because project impacts would not be adverse with implementation of Mitigation Measure

PAL-1 and development of a PMP, the proposed project, in conjunction with past, present, and reasonably foreseeable projects, would not result in a cumulative effect related to paleontological resources. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative impacts to paleontological resources are required.

2.23.4.7 Hazardous Waste and Materials

The RSA for the hazardous waste and materials cumulative impacts analysis includes the maximum disturbance limits of the project site and a 1 mi radius of the project site, within which a government databases search for recognized environmental conditions was conducted in accordance with American Society for Testing and Materials (ASTM) E 1527-13: Environmental Protection Agency (EPA) and State Government Records. It is expected that any cumulative adverse effect the project in conjunction with other planned projects could have on the environment with respect to hazardous waste and materials would aggregate within a 1 mi radius of the site. The information below describes the current health and historical context of hazardous waste and materials within the RSA.

Historical agricultural use within the City is the primary source of contaminated soils within the RSA. Additionally, due to the historical use of lead in gasoline, lead may exist in soils near heavily traveled roads. Other historical hazard sources within the RSA are from leaking underground storage tanks containing petroleum products. Due to limited development in the area to date, there are relatively few hazardous waste sites within the RSA.

The following hazardous materials are potentially a concern within the RSA: organochlorine pesticides (OCP), polychlorinated biphenyls (PCB) and mercury, aerially deposited lead (ADL), lead chromate, asbestos-containing materials (ACM), lead-based paint (LBP), on-site wells, total petroleum hydrocarbons (TPH) and metals, and soil and/or groundwater contamination within and adjacent to the project area.

Project Feature PF-HAZ-1 requires a site investigation be performed for any undeveloped areas that might contain elevated contaminations of OCP to identify whether any residual contamination from the past agricultural uses is still present, and to determine if any potential hazards may occur during construction activities associated with residual contamination. Based on the historical agricultural use of areas adjacent to the study area, residual OCPs and arsenical herbicides may remain in the subsurface soil in these areas. Project Features PF-HAZ-2 and PF-HAZ-3 require soil determined to contain lead concentrations exceeding stipulated thresholds to be managed pursuant to the July 1, 2016, ADL Agreement between Caltrans and the California Department of Toxic Substances Control. This ADL Agreement allows such soils to be safely reused within the project limits, as long as all requirements of the ADL Agreement are met. Project Features PF-HAZ-4, PF-HAZ-5, and PF-HAZ-6 would require a survey and/or testing for PCBs, lead chromate, LBP, and ACM prior to disturbance of roadside soils and demolition of existing buildings and structures so that any hazardous materials can be removed and disposed of in accordance with applicable State and federal regulations.

Project Feature PF-HAZ-7 would require sampling for TPH, residual OCPs, and metals from a considerable and unverified stockpile of various soils and gravel/rock fragments believed to have been deposited during construction of the Inland Feeder Riverside Badlands Tunnel and pipeline southeast of the intersection of SR-60 and WLC Pkwy. The results of the sampling will dictate if and how any hazardous materials will be removed and disposed of in accordance with applicable State and federal regulations. Project Features PF-HAZ-8 and PF-HAZ-9 will ensure standard State and federal regulations, including Caltrans policies (avoidance and minimization measures), will be followed with respect to the use, storage, handling, disposal, and transport of potentially hazardous materials during construction of the project to protect human health and the environment.

Construction of other reasonably foreseeable actions may expose or require handling contaminated soils. These actions would be evaluated on a project-by-project basis to determine the potential for encountering hazardous materials and the appropriate measures required to reduce impacts. Similar to the project, development of other planned projects within the RSA would be required to adhere to the existing laws and regulations regarding the use, storage, transport, or disposal of hazardous materials and waste. With implementation of Project Features PF-HAZ-1 through PF-HAZ-9, the project would not result in any materials and waste hazards to human health and the environment, so the project would not combine with other projects to result in a cumulatively considerable effect with respect to these potential hazards. Therefore, the project will not make a significant contribution to any cumulatively considerable effects related to hazardous materials, hazardous waste, or the creation of any health hazards. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative impacts to hazardous waste and materials are required.

2.23.4.8 Air Quality

The proposed project is located in the South Coast Air Basin (Basin) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). Due to the defining geographic and meteorological characteristics of the Basin, the RSA for cumulative air quality effects is the Basin itself. The information below describes the current health and historical context of air quality within the RSA.

The Basin is currently attainment/maintenance for carbon monoxide (CO) and particulate matter less than 10 microns in size (PM_{10}), and nonattainment for federal particulate matter less than 2.5 microns in size ($PM_{2.5}$) standards. State standards for ozone (O_3), annual PM_{10}, annual $PM_{2.5}$, and nitrogen dioxide (NO_2) currently are in nonattainment.

During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include carbon monoxide (CO), nitrogen oxides (NO_X), volatile organic compounds (VOC), directly-emitted particulate matter less than 10 microns in size (PM_{10}) and less than 2.5 microns in size ($PM_{2.5}$), and toxic air contaminants (TACs) (e.g., diesel exhaust PM). With the implementation of standard construction measures (providing 50 percent effectiveness) such as frequent watering (e.g., a minimum of twice per day) as well as Project Features PF-AQ-1 through PF-AQ-6,

fugitive dust and exhaust emissions from construction activities would not result in any adverse air quality effects.

Because the proposed project under both Build Alternatives and Design Variations 2a and 6a is within an attainment/maintenance area for CO and PM_{10} and a nonattainment area for $PM_{2.5}$ per federal standards, local hot-spot analyses for CO, $PM_{2.5}$, and PM_{10} were prepared for conformity purposes (refer to Section 2.14, Air Quality). The proposed project does not cause or contribute to any new localized CO, $PM_{2.5}$, and/or PM_{10} violations, or delay timely attainment of any national ambient air quality standards (NAAQS) or any required interim emission reductions or other milestones during the timeframe of the transportation plan (or regional emissions analysis).

SCAQMD considers the thresholds for project-specific impacts and cumulative impacts to be the same. Project emissions within the context of SCAQMD's regional emissions thresholds provide an indicator of potential cumulative impacts within the Basin. Cumulative localized impacts for pollutants are also considered and reflect project air pollutant emissions in the context of ambient conditions in the project vicinity.

Construction of other reasonably foreseeable actions may contribute to short-term air quality impacts in the SCAG region. However, the transportation projects listed in Table 2.23.1 are included in the SCAG RTP/SCS and the 2017 FTIP, and were found to be conforming by the Federal Highway Administration (FHWA)/Federal Transit Administration (FTA) on December 17, 2018. These strategies help the region achieve federal Clean Air Act (CAA) requirements and provide beneficial impacts related to long-term air quality.[1] The reasonably foreseeable actions within the RSA would be evaluated on a project-by-project basis to determine air quality impacts and the appropriate measures required to reduce impacts. Since the project would not emit any criteria air pollutants above regional significance under either Build Alternative or design variation, and the project also has been determined to be consistent with the State Implementation Plan (SIP) for attaining NAAQS, implementation of Project Features PF-AQ-1 through PF-AQ-6 will ensure the project will not result in adverse effects to air quality. Specifically, PF-AQ-6 would prohibit construction vehicles both on and off site from idling for more than 5 minutes. Therefore, the proposed project, in conjunction with past, present, and reasonably foreseeable projects, would not result in a cumulative effect related to air quality. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative impacts to air quality are required.

2.23.4.9 Greenhouse Gases

Greenhouse gases (GHGs) are those gases that will contribute to global climate change; therefore, the RSA for cumulative GHG effects is the Earth's atmosphere. Implementation of the proposed project along with cumulative development projects will contribute GHG emissions to the atmosphere.

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[1] Southern California Association of Governments, 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy. Website: http://scagrtpscs.net/Pages/FINAL 2016RTPSCS.aspx, accessed February 22, 2019.

Neither the United States Environmental Protection Agency (EPA) nor the FHWA has issued explicit guidance or methods to conduct project-level GHG analysis. The FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and Executive Orders (EOs) on climate change, the issue of GHG is addressed in the CEQA evaluation chapter of this document (Chapter 3). The CEQA analysis may be used to inform the NEPA determination for the project.

Despite the global nature of GHG impacts, it is important to note that the scope of Caltrans' and the City's jurisdictional authority is limited to certain types of emissions generated within Caltrans' right-of-way and the City's physical boundaries. Caltrans' and the City's authority does not include the regulation of the majority of actions, including for example transportation policy, fuel consumption, and energy generation, which the State has determined are necessary to meet all of Assembly Bill (AB) 32's GHG reduction goals. Further, some of the GHG emissions associated with the project can be reduced only by measures to be implemented by other governmental agencies that are outside the jurisdiction of Caltrans and the City.

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EO S-3-05 and EO S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and Senate Bill (SB) 32 (2016), set a new interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. Accordingly, Project Features PF-AQ-2, PF-AQ-6, and PF-GHG-1 through PF-GHG-12 will be implemented as part of the project construction under both Build Alternatives and Design Variations 2a and 6a to reduce GHG emissions and potential climate change impacts from the project. Nevertheless, Construction GHG emissions will be unavoidable, and construction of the proposed project in conjunction with reasonably foreseeable actions would contribute to cumulatively considerable GHG emissions. However, the *Traffic Study Report* (January 2019) indicated the proposed project would improve traffic flow without increasing the traffic volumes along WLC Pkwy or SR-60. As discussed in Section 3.2.8 (Greenhouse Gases) of this EIR/EA, there will be long-term GHG reduction benefits due to improved operation, reduced delay, and smoother pavement surfaces from the proposed SR-60/WLC Pkwy interchange improvements. Therefore, while the project would improve traffic operations and reduce GHG emissions compared to the No Build condition, it would not reduce GHG emissions from the existing condition and thus would not contribute to achieving statewide GHG emissions reduction goals. The cumulative impact would be potentially significant.

2.23.4.10 Noise

Noise by definition is a localized phenomenon that drastically reduces in magnitude as the distance from the noise source increases. Therefore, the project area for noise effects is the immediate vicinity of the project site where there are sensitive land uses that would be affected by noise from construction and traffic noise from operation. Consequently, only planned projects in the immediate vicinity of the proposed project will likely contribute to cumulative noise effects. The information below describes the current health and historical context of noise within the RSA.

Existing land uses in the project area include single-family residences, vacant land, and agricultural and industrial uses. Currently, there are no permitted developments located adjacent to the proposed project. The primary source of noise in the project area is traffic on SR-60 and Theodore Street/WLC Pkwy.

The closest sensitive receptors (e.g., residences) are located within 50 ft of the project construction areas and approximately 400 ft from where pile driving would occur. Therefore, the closest residence may be subject to short-term noise generated by construction activities within the project area that reach 87 A-weighted decibel (dBA) maximum instantaneous noise level (L_{max}) or higher. In accordance with Project Feature PF-N-1, compliance with Caltrans Standard Specifications, Section 14-8.02 "Noise Control", will be required for the proposed project. Noise levels from the Contractor's operations between the hours of 9:00 p.m. and 6:00 a.m. shall not exceed 86 dBA L_{max} at a distance of 50 ft.

The primary source of noise in a community located adjacent to a freeway is traffic. In the existing condition, sensitive receptors (e.g., residences) near the SR-60/WLC Pkwy interchange and adjacent roads are exposed to the highest noise levels in the project area.

Of the 38 modeled receptors, two receptors (Receptors R-10 and R-25) under Alternative 2, Design Variation 2a, and Alternative 6 (LPA) conditions, and one receptor (Receptor R-10) under Design Variation 6a conditions would approach or exceed the Caltrans Noise Abatement Criteria (NAC). Of the 38 modeled receptors, 2 receptor locations (Receptors R-25 and R-28) under Alternative 2, Design Variation 2a, and Alternative 6 (LPA) conditions would experience a substantial noise increase of 12 dBA or more over their corresponding modeled existing noise level. One receptor location (Receptor R-28) under Design Variation 6a conditions would experience a substantial noise increase of 12 dBA over its corresponding modeled existing level. All properties requiring abatement consideration are within Activity Category B (67 dBA equivalent continuous sound level [L_{eq}] NAC). Noise barriers were analyzed for each of these receptor locations. The following noise barriers were analyzed at heights from 6 to 16 ft at 2 ft increments to shield receptor locations that would be exposed to traffic noise levels approaching or exceeding the NAC for Build Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a:

- **NB No. 1:** A 339 ft long barrier along the top of slope on private property on the east side of WLC Pkwy north of SR-60 was analyzed to shield Receptor R-10.

- **NB No. 2:** A 233 ft long barrier along the City right-of-way and private property line on the east side of WLC Pkwy south of SR-60 was analyzed to shield Receptor R-25. For Design Variation 2a, this noise barrier would be 206 ft long. For Design Variation 6a, NB No. 2 would not apply because Receptor R-25 would be fully acquired as part of the project right-of-way.

- **NB No. 3:** A 453 ft (Alternatives 2 and 6 [LPA]), 434 ft (Design Variation 2a), and 414 ft (Design Variation 6a) long barrier along the City right-of-way and private property line on the east side of WLC Pkwy south of SR-60 was analyzed to shield Receptor R-28.

NB No. 1 and 2 are capable of reducing noise levels by 5 dBA or more, as required to be considered feasible. The construction cost estimates for the proposed noise barriers are compared to reasonable allowances in the *Noise Abatement Decision Report* (August 2019) to identify which noise barrier configurations are reasonable from a cost perspective.

In accordance with the Caltrans Traffic Noise Analysis Protocol, each noise barrier must provide at least 7 dBA of noise reduction at one or more benefited receptors/ residential units to be considered reasonable. The total reasonable allowance is determined based on the number of benefited receptors/residential units multiplied by the reasonable allowance per receptors/residential units. Implementation of mitigation measures in the form of NB Nos. 2 and 3 are required to reduce significant impacts to Receptors R-25 and R-28. NB No. 2, with a minimum height of 6 ft, would provide a noise reduction of 4 dBA. NB No. 3, with a minimum height of 8 ft, would also provide a noise reduction of 4 dBA. Final heights and lengths would be determined during final design. With implementation of Mitigation Measure N-1, traffic noise levels would be reduced to 2045 without project traffic noise levels or below and substantial increases in permanent noise levels would be reduced.

Because the planned street and freeway projects in the project area would increase capacity and reduce congestion, they would likely increase traffic noise associated with additional vehicles traveling at faster speeds. The freeway projects would be required to evaluate the reasonability and feasibility of noise barriers to shield sensitive receptors from increased noise levels at locations where they would result in noise impacts. The planned development projects (industrial and residential) are noise-generating uses and may contribute to cumulative noise effects in the project area. As a result, Receptors R-10, R-25, and R-28 would be or would continue to be exposed to noise levels that approach or exceed the NAC and/or a substantial noise increase under Alternative 2, Design Variation 2a, Alternative 6 (LPA), and Design Alternative 6a. Accordingly, the proposed project would contribute to cumulative noise effects; however, no additional avoidance, minimization, and/or abatement measures other than the specified Project Features are required.

2.23.4.11 Wetlands and Other Waters

The RSA for the wetlands and other waters cumulative impacts analysis is the Santa Ana River Watershed and its tributaries, including the San Jacinto River Watershed, which is where the project is located. The *Natural Environment Study* (September 2019) and the *Jurisdictional Delineation Report* (December 2018) prepared for the project identified nine drainage features (referred to as Drainage Features A through I) within the BSA of the project. These drainages are shown on Figures 2.18-1 through Figure 2.18-4 and are described in Section 2.18, Wetlands and Other Waters. The information below describes the current health and historical context of wetlands and other waters within the RSA.

Drainage Features A, B, and E are man-made earthen and concrete ephemeral ditches that transport roadway runoff. Due to the lack of vegetation (including riparian vegetation) within the drainages, these areas were not classified as USACE wetlands or riparian habitat regulated by the California Department of Fish and Wildlife (CDFW). The CDFW does not typically regulate artificial channels or ditches, but based on the presence of bed and bank, the drainage features may be subject to

CDFW regulatory authority. Drainage Features A, B, and E are considered to have overall low functions and values.

Drainage Features C, D, and F are man-made earthen and concrete ephemeral ditches that transport roadway runoff. Due to the lack of vegetation within the drainages (including riparian vegetation), these areas were not classified as USACE wetlands or riparian habitat regulated by the CDFW. The CDFW does not typically regulate artificial channels or ditches, but based on the presence of bed and bank, these drainage features may be subject to the regulatory authority of the CDFW. Drainage Features C, D, and F are considered to have overall low functions and values.

Drainage Feature G is a natural earthen drainage that shows evidence of an OHWM and streambed and banks. The drainage is predominantly surrounded by upland vegetation (i.e., Riversidean sage scrub and ruderal vegetation), but a small patch of mule fat (*Baccharis salicifolia*) occurs along a bend in this drainage; however, Drainage Feature G was not classified as a wetland. Mule fat is considered to be riparian habitat regulated by the CDFW, which will assert jurisdiction over this drainage as streambed and areas vegetated by mule fat. This drainage would be regulated by the USACE under the 2015 waters of the U.S. rule. Drainage Feature G is considered to have overall low functions and values.

Drainage Feature H is a natural earthen drainage west of WLC Pkwy and a concrete-lined V-ditch east of WLC Pkwy. The earthen portion of the drainage is dominated by upland vegetation (i.e., ruderal vegetation) with the exception of a small patch of mule fat. This drainage would be regulated by the USACE under the 2015 waters of the U.S. rule. The CDFW will assert jurisdiction over this drainage as streambed and over the mule fat as riparian. Drainage Feature H is considered to have overall low functions and values.

Drainage Feature I was perceptible only as a roadside drainage ditch during the field survey. The drainage is surrounded by agricultural lands and upland vegetation (i.e., ruderal vegetation). Due to the lack of riparian vegetation within the drainage, this area was not classified as USACE wetland or riparian habitat regulated by the CDFW. Drainage Feature I is considered to have overall low functions and values.

Temporary and permanent indirect effects to jurisdictional areas include impacts to waterways caused by litter or pollutants in construction storm water runoff. Storm water and litter impacts would be avoided through compliance with the NPDES General Permit and implementation of project-specific BMPs specified in a SWPPP as required in PF-WQ-1. Permanent indirect effects could also result from germination and proliferation of nonnative invasive plant species. Control of invasive plant species requires revegetation with plant species native to the area, adherence to a weed abatement and control program, and compliance with pollution and litter laws and regulations as specified in Project Feature PF-INV-1 (Section 2.22, Invasive Species). Implementation of these Project Features would avoid or minimize temporary and permanent indirect effects to jurisdictional areas, and no adverse effects would occur under either Build Alternative or design variation.

Although minor, temporary and permanent direct effects to the jurisdictional areas would require authorization from the USACE, CDFW, and RWQCB prior to

construction, as specified in Project Features PF-WET-1 through PF-WET-3. Compensatory mitigation is anticipated to be required to offset the loss of jurisdictional waters by USACE, CDFW, and RWQCB at a minimum 1:1 mitigation ratio. Mitigation for effects to any regulated USACE nonwetland waters or "waters of the United States" will be conducted in accordance with Project Feature PF-WET-4. With implementation of Project Features PF-WET-1 through PF-WET-4, temporary and permanent direct effects to jurisdictional areas would not be adverse under either Build Alternative or design variation.

Temporary and permanent effects to Drainage Features A through I have the potential to impact the functions and values of these drainages. However, the analysis provided in Section 2.18, Wetlands and Other Waters, indicates all drainages have a low to moderate hydrologic regime value, a low to moderate flood storage and flood flow modification value, a low sediment retention value, a low retention and transformation value, and a low toxicant trapping value. The drainages in the BSA may provide some value for recreational uses such as walking and birding, but because the majority of these drainage features are channelized and near major roads and freeways, all of these drainages are considered to have a low social significance value. Because these drainages have little or no vegetation or ponding, they all have a low wildlife habitat value. Additionally, because these drainages are ephemeral, they all have a low aquatic habitat value.

Other reasonably foreseeable actions may result in temporary and permanent impacts to wetlands and other waters. These actions would be evaluated on a project-by-project basis to determine the acreage of impacts to jurisdictional drainage features and the appropriate measures required to reduce impacts. A qualitative assessment of the functions and values of Drainage Features A through I was conducted in the *Natural Environment Study* (September 2019), which concluded that every drainage feature within the BSA is considered to have overall low functions and values. Through implementation of Project Features PF-WQ-1 through PF-WQ-3 (Section 2.10, Water Quality and Storm Water Runoff), Project Features PF-WET-1 through PF-WET-4, and PF-INV-1 (Section 2.22, Invasive Species), the proposed project sufficiently reduces project-specific effects to wetlands and other waters. It is reasonable to conclude that effects to wetlands and other waters associated with development of planned projects in the RSA will be equally required to provide compensatory mitigation to offset the loss of jurisdictional waters in accordance with USACE, CDFW, and RWQCB regulations and to consider unique site-specific functions and values of drainage features within the footprint of each planned project. Because project-specific effects would not be adverse with the implementation of Project Features and BMPs, the proposed project, in conjunction with past, present, and reasonably foreseeable projects, would not result in a cumulative effect on wetlands and other waters. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative impacts to wetlands and other waters are required.

2.23.4.12 Animal Species

The RSA for cumulative animal species effects is the jurisdictional boundaries of the WRCMSHCP. The *Natural Environment Study* (September 2019) indicated 16 special-status (not federally and/or State-listed endangered or threatened) animal

species as potentially occurring in the BSA. The information below describes the current health and historical context of animal species within the RSA.

The inland valleys and hillsides of Riverside and San Bernardino Counties have remained largely rural, agricultural, and relatively undeveloped until recently. Natural vegetation communities, which provide the habitat for the animal species that live within them, have rapidly declined due to increasing development pressure over the past 25 years.

Based on the literature review and initial field investigations, focused field surveys were completed for burrowing owl (*Athene cunicularia*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), western mastiff bat (*Eumops perotis californicus*), and southwestern yellow bat (*Lasiurus xanthinus*). No special-status animal species were observed or otherwise detected in the BSA at the time of the site visits. No drainages contain riparian habitat that could support special-status species associated with riparian areas.

The burrowing owl is a highly mobile species with the potential to move onto the project site prior to construction. Therefore, a preconstruction focused survey, as outlined in Project Feature PF-AS-1, will be required to verify the species' absence from the proposed project site prior to grading under either Build Alternative or design variation. Furthermore, compliance with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, as specified in Project Feature PF-AS-2, would be required to avoid potential impacts to migratory birds during construction of either Build Alternative or design variation.

Although the Los Angeles pocket mouse was not identified on site during trapping surveys, the northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) is a WRCMSHCP covered species that was captured during 2013 and 2015 trapping sessions within nonnative grasslands, coastal sage scrub, and nonnative grassland/ coastal sage scrub ecotone. Both of the Build Alternatives and Design Variations 2a and 6a will have temporary and permanent effects on nonnative grasslands and coastal sage scrub, which are considered potentially suitable habitat for the northwestern San Diego pocket mouse in the BSA. Establishment of Environmentally Sensitive Areas (ESAs), as specified in Project Feature PF-AS-2, prior to construction of either Build Alternative or design variation would be required to avoid potential effects to the northwestern San Diego pocket mouse.

Seven structures (Culverts A, B, E, H, I, J, and K) contained marginally suitable roosting habitat, and three other structures (Culverts C, D, and G) were unsuitable for use by roosting bats. Due to the small size of the various marginally suitable culverts, the low quality of the adjacent foraging habitat, and the lack of any observed bat sign, bat use of any culverts within the BSA other than Culvert F is not expected. The project under either Build Alternative or design variation may have direct and indirect effects to bats utilizing structures and culverts within the BSA. Direct effects, such as mortality, may occur to bats roosting in bridges during construction. Construction and operation activities in the form of noise, dust, night lighting, and human encroachment may also cause temporary and/or permanent indirect effects to bats. As specified in Project Feature PF-AS-3, roosting bat surveys would be conducted in order to protect bats within the vicinity of the project area for either Build Alternative or design variation.

Other reasonably foreseeable actions may result in loss of foraging, roosting, or nesting habitat for animal species. These actions would be evaluated on a project-by-project basis to determine the presence of animal species and the appropriate measures required to reduce impacts. The WRCMSHCP is a regional mitigation plan for regional or potential cumulative impacts to animal species through establishment of focused protocol surveys, avoidance and/or relocation of animal species, and preservation and/or replacement of habitat. Implementation of project-level measures in the WRCMSHCP, including Project Features PF-AS-1 through PF-AS-3, will help ensure that potential regional (i.e., cumulative) effects from construction and operation of the proposed project under either Build Alternative or design variation are not adverse. Therefore, the project, in conjunction with past, present, and reasonably foreseeable projects, would not make a significant contribution to cumulatively adverse effects to animal species. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative impacts to animal species are required.

2.23.4.13 Threatened and Endangered Species

The RSA for cumulative threatened and endangered species effects is the jurisdictional boundaries of the WRCMSHCP. The information below describes the current health and historical context of threatened and endangered species within the RSA.

As described above in Section 2.23.4.12, Animal Species, natural vegetation communities, which provide the habitat for the threatened and endangered species that live within them, have rapidly declined due to increasing development pressure over the past 25 years.

The *Natural Environment Study* (September 2019) indicated the potential occurrence of 13 federally and/or State-listed endangered or threatened species as potentially occurring in the BSA as detailed in Section 2.21, Threatened and Endangered Species. Of the 13 State/federally listed threated and/or endangered species, potentially suitable habitat for the coastal California gnatcatcher (*Polioptila californica californica*) and Stephens' kangaroo rat (*Dipodomys stephensi*) have the potential to occur in the BSA.

Both Build Alternatives and Design Variations 2a and 6a would result in temporary and permanent impacts to similar amounts of potentially suitable habitat for coastal California gnatcatcher and Stephens' kangaroo rat. Therefore, Build Alternatives 2 and 6 (LPA) as well as Design Variations 2a and 6a would have the same potential effects to threatened and endangered species during construction and operation.

Focused surveys of the BSA did not identify threatened and/or endangered species. However, both Build Alternatives and Design Variations 2a and 6a would temporarily affect 0.26 ac and permanently affect 7.33 ac of coastal sage scrub, as well as adjacent nonnative grasslands and agricultural lands. Coastal sage scrub is considered suitable habitat for coastal California gnatcatcher, while coastal sage scrub and adjacent nonnative grasslands and agricultural lands are considered suitable habitat for Stephens' kangaroo rat. Under Federal Endangered Species Act (FESA) Section 7, the project has a "may affect, likely to adversely affect" rating due

to removal of potentially suitable habitat. However, any project effects to these species' habitat would be covered through project participation in the WRCMSHCP.

To minimize adverse effects to coastal California gnatcatcher and Stephens' kangaroo rat, the proposed project will comply with applicable measures identified in the WRCMSHCP in Section 6.1.4, Urban/Wildlands Interface Guidelines; Section 7.5.1, Guidelines for the Siting and Design of Planned Roads Within Criteria Areas and Public/Quasi-Public Lands; Section 7.5.2, Guidelines for Construction of Wildlife Crossings; Section 7.5.3, Construction Guidelines; and the Standard BMPs in Appendix C of the WRCMSHCP. Additional conservation measures for these two species may be identified in the streamlined FESA Biological Opinion to be issued by the USFWS for the proposed project. Therefore, no temporary or permanent adverse effects to threatened and/or endangered species would occur during construction or operation of the project under either Build Alternative or design variation.

Other reasonably foreseeable actions may result in loss of threatened and/or endangered species and their habitats. These actions would be evaluated on a project-by-project basis to determine the presence of threatened and/or endangered species and their associated habitats, and the appropriate measures required to reduce impacts. The WRCMSHCP is a regional mitigation plan for regional or potential cumulative impacts to threatened and/or endangered species. Compliance with the WRCMSHCP will help ensure that potential regional (i.e., cumulative) effects from construction and operation of the proposed project under either Build Alternative or design variation are not adverse. Since any temporary or permanent project effects to threatened and/or endangered species and associated habitat will be covered through project participation in the WRCMSHCP, the project, in conjunction with past, present, and reasonably foreseeable projects, would not make a significant contribution to cumulatively adverse effects to threatened and/or endangered species. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative impacts to threatened and/or endangered species are required.

2.23.4.14 Invasive Species

The RSA for cumulative invasive species effects is the jurisdictional boundaries of the WRCMSHCP. The information below describes the current health and historical context of invasive species within the RSA.

Urban development activities provide opportunities for the movement of invasive species through vehicles, maintenance equipment, construction equipment, and by deliberate planting for erosion control or ornamental landscaping. Invasive plant species exist throughout the BSA as a result of agricultural activities and existing development. Invasive species vary in abundance within the BSA, depending on the level of disturbance, and are more numerous adjacent to roads and developed areas within the BSA.

The *Natural Environment Study* (September 2019) identified a total of 17 nonnative plant species occurring on the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory in the BSA, of which two species (Sahara mustard [*Brassica tournefortii*] and red brome [*Bromus madritensis* ssp. *rubens*]) are assigned a High rating by Cal-IPC. Additionally, eight Moderate-rated invasive species were

identified: wild turnip (*Hirschfeldia incana*), London rocket (*Sisymbrium irio*), oat (*Avena* sp.), ripgut grass (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), rattail fescue (*Festuca myuros*), and hare barley (*Hordeum murinum*).

Effects related to invasive species are considered permanent because the introduction of invasive species into previously undisturbed areas would result in permanent effects to the habitat. Therefore, impacts related to invasive species as a result of project construction under either Build Alternative or design variation are considered permanent.

Construction of the project under either Build Alternative or design variation has the potential to spread invasive species by the entering and exiting of construction equipment contaminated by invasive species, the inclusion of invasive species in seed mixtures and mulch, and the improper removal and disposal of invasive species causing seed to be spread along the highway. None of the species on the Cal-IPC Invasive Species List is used by Caltrans for erosion control or landscaping. All equipment and materials will be inspected for the presence of invasive species. With implementation of Project Feature PF-INV-1, potential project-related permanent effects related to invasive species would not be substantial under either Build Alternative or design variation.

Other reasonably foreseeable actions may result in the germination and spread of invasive species. These actions would be evaluated on a project-by-project basis to determine the potential for invasive species proliferation and the appropriate measures required to reduce impacts. The WRCMSHCP is a regional mitigation plan for regional or potential cumulative effects from invasive species through establishment of guidelines for Urban/Wildlands Interface, Siting and Design of Planned Roads Within Criteria Areas and Public/Quasi-Public Lands, and Standard BMPs. Implementation of project-level measures in the WRCMSHCP will help ensure that potential regional (i.e., cumulative) effects from construction and operation of the proposed project under either Build Alternative or design variation are not adverse. Since any temporary or permanent project effects from proliferation of invasive species will be minimized through project participation in the WRCMSHCP and through implementation of Project Feature PF-INV-1, the project, in conjunction with past, present, and reasonably foreseeable projects, would not make a significant contribution to cumulatively adverse effects from invasive species. Therefore, no avoidance, minimization, and/or mitigation measures for cumulative impacts from invasive species are required.

2.23.5 Avoidance, Minimization, and/or Mitigation Measures

No measures beyond those identified in Sections 2.1 through 2.22 as well as GHG emission reduction measures discussed in Chapter 3 of this EIR/EA are required to address the effects of the Build Alternatives and Design Variations 2a and 6a, including potential cumulative effects to land use, utilities/emergency services, visual/aesthetics, hydrology and floodplains, water quality and storm water runoff, paleontology, hazardous waste and materials, air quality, greenhouse gases, noise, wetlands and other waters, animal species, threatened and endangered species, and invasive species. Those measures address both temporary and permanent effects.

Chapter 3 – California Environmental Quality Act (CEQA) Evaluation

3.1 Determining Significance Under CEQA

The proposed project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding (MOU) dated December 23, 2016, and executed by FHWA and Caltrans. Caltrans is the Lead Agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an Environmental Impact Statement (EIS), or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require Caltrans to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report (EIR) must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and its CEQA significance.

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project Features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	**Significant and Unavoidable Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.2.1.1 CEQA Significance Determinations for Aesthetics

The potential for the project to result in impacts related to aesthetics was assessed in the *Visual Impact Assessment* (June 2019), the results of which are summarized in the discussion provided in Section 2.7, Visual/Aesthetics, of this EIR/Environmental Assessment (EA). The analysis evaluates Alternatives 2 and 6, which is the Locally Preferred Alternative (LPA), and Design Variations 2a and 6a. Design Variations 2a and 6a are similar and would realign Eucalyptus Avenue to join World Logistics Center Parkway (WLC Pkwy) approximately 900 feet (ft) south of the existing Eucalyptus Avenue/WLC Pkwy intersection. The following discussion is based on that information.

For the purposes of the following analysis, two general aesthetic terms are defined: scenic vistas and viewsheds.

- **Scenic Vistas:** A scenic vista can be categorized as either containing a panoramic view or a focal view. Panoramic views are typically associated with publicly accessible vantage points that provide a sweeping geographic orientation not commonly available (e.g., skylines, valleys, mountain ranges, or large bodies of water). Focal views are typically associated with views of natural landforms, public art/signs, and visually important structures, such as historic

buildings. There are three aesthetic components of a scenic vista: scenic quality, sensitivity level, and view access.

- **Viewsheds:** A viewshed is typically defined as the natural environment that is visible from one or more viewing points. CEQA documents most often define the viewshed as what portions of the project viewers can see from surrounding areas. A viewshed can be divided into three distinct components: the foreground, the middleground, and the background.

a. Less Than Significant Impact

The major scenic resources for the project area, as documented on Figure 7-2 of the County's General Plan Conservation Element, are the Russell Mountains to the southwest, the Badlands to the east and northeast, Moreno Peak to the west, and the Reche Mountains to the far northwest. Moreno Valley's General Plan Conservation Element identifies these topographic features as providing Moreno Valley with outstanding vistas. The County of Riverside (County) General Plan Land Use and Multipurpose Open Space Elements include policies for the preservation of outstanding scenic vistas.

The proposed project would not result in significant obstruction of existing views to or from these visual features/scenic vistas beyond the obstruction that currently exists from the existing interchange and development surrounding the interchange. During construction, construction equipment and activities would be visible; however, the presence of construction equipment and activities would be temporary. There are no outstanding scenic vistas and/or visual features that would be permanently impacted by implementation of either of the Build Alternatives or Design Variations 2a and 6a. No mitigation is required.

b. No Impact

The Caltrans Scenic Highway Program does not identify any State-designated scenic highways near the project site. However, the City of Moreno Valley (City) identifies State Route (SR-) 60 and Gilman Springs Road as local scenic roads. According to the City's General Plan EIR, major scenic resources within the Moreno Valley study area are visible from SR-60 and Gilman Springs Road, both of which are City-designated local scenic roadways. It should be noted that Moreno Beach Drive, the remaining City-designated scenic route (per General Plan Policy 7.7.4), is approximately 1 mile (mi) west of the project site, and the project site is not visible from that roadway. However, truck traffic to and from the City Stockpile borrow site would cross or utilize Moreno Beach Drive to haul soil to and from the project site. Project-related truck traffic would only occur during the construction period and would not result in impacts to scenic resources as trucks would use existing roadways. There are no scenic resources (e.g., trees, rock outcroppings, or historic buildings) within the project limits. Therefore, neither Build Alternative nor Design Variation 2a or 6a would result in significant impacts to scenic resources within designated scenic highways. No mitigation is required.

c. Less Than Significant Impact

The project site is within a non-urbanized area. As described in Section 2.7, the project corridor is characterized with visual resources such as views to surrounding hillsides, views of Moreno Valley, and desert scrub vegetation. After project implementation, the visual character of the area may be affected by the removal of vegetation and grading activities to accommodate the interchange improvements. Alternatives 2 and 6 (LPA) would result in similar visual character impacts due to the interchange, new overcrossing, new loop on and off-ramps, traffic signals, pedestrian safety lighting, sidewalks, multi-use trail, and some vegetation removal. Design Variations 2a and 6a would involve similar project elements as those described for Alternatives 2 and 6 (LPA) and thus would result in similar visual impacts. Visual simulations of the Build Alternatives and their Design Variations 2a and 6a are shown on Figures 2.7-2 through 2.7-6 in Section 2.7.

As shown on Figures 2.7-2 through 2.7-6, the proposed structure would not result in substantial blockage of views to surrounding hillsides, views of Moreno Valley and desert scrub vegetation, and the overall visual resource change from both Key Views 2a, 3, and 4 for both Alternatives 2 and 6 (LPA) would be moderate-low. However, because the overall potential viewer response is considered moderate-high as a result of the large number of viewers along SR-60 as well as the local Scenic Corridor designation, Project Features PF-VIS-1 through PF-VIS-4 (Section 2.7) are included as part of the proposed project to avoid or minimize potential visual impacts. Project Features PF-VIS-1 through PF-VIS-4 would ensure that the character and quality of the project area are maintained and are not substantially degraded.

Temporary visual impacts during construction, such as from construction activity, staging sites, truck hauling, excavation activity, and detour signage, are anticipated under Alternatives 2 and 6 (LPA). These construction impacts would occur over a relatively short duration and would cease upon project completion. The project would require temporary construction easements (TCEs) from private property owners for access and staging purposes. Impacts would be minimized through compliance with the Caltrans Standard Construction Specifications (Project Features).

Implementation of Project Features PF-VIS-1 through PF-VIS-4 would ensure that the character and quality of the project area are maintained and are not substantially degraded; therefore, impacts would be less than significant and no mitigation is required.

d. Less Than Significant Impact

The project area receives light at night from traffic, street lighting, and lighted parking lots; signalization at the intersections; and commercial zone and limited residential development light sources. Existing lighting on the streets and along the ramps would be modified or relocated as a part of the proposed project. Implementation of Build Alternatives 2 and 6 (LPA), including Design Variations 2a and 6a, would introduce additional sources of light and glare to the project area from the proposed bridge overcrossing structure, traffic signals, and pedestrian safety lighting along WLC Parkway. The proposed project would also increase the number of ornamental trees along WLC Parkway, further screening new lighting features from residential uses in the area. Project Features PF-VIS-3 and PF-VIS-4 would minimize potential

impacts regarding light and glare; therefore, impacts would be less than significant and no mitigation is required.

3.2.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

3.2.2.1 CEQA Significance Determinations for Agriculture and Forest Resources

The potential for the project to result in impacts related to agriculture and forest resources was assessed in the *Community Impact Assessment* (March 2019), the results of which are summarized in the discussion provided in Section 2.2, Farmlands and Timberlands, of this EIR/EA. The following discussion is based on that information.

a. Less Than Significant Impact

Impacts to Build Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a are similar in nature and thus are analyzed as one throughout this section. Table 3.1 contains the total acreage of Important Farmland designated by the City, the County,

the California Department of Conservation (DOC), and the United States Department of Agriculture (USDA) that would be directly impacted by Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a.

Table 3.1 Impacts to Farmlands Within the Farmland Study Area

Alternative	Prime Farmland (acres)	Unique Farmland (acres)	Farmland of Statewide Importance (acres)	Total (acres)
Alternative 2				
Temporary	1.2	0.0	2.9	4.1
Permanent	0.1	0.0	0.3	0.4
Alternative 6 (LPA)				
Temporary	0.7	0.0	2.9	3.6
Permanent	0.5	0.0	0.3	0.8
Design Variation 2a				
Temporary	1.1	0.0	2.9	4
Permanent	0.1	0.0	0.3	0.4
Design Variation 6a				
Temporary	0.7	0.0	2.9	3.6
Permanent	0.5	0.0	0.3	0.8

Source: Compiled by LSA Associates, Inc. (2019).
LPA = Locally Preferred Alternative

Alternatives 2 and 6 (LPA) (Build Alternatives) and Design Variations 2a and 6a

As shown in Table 3.1, Alternative 2 would result in 1.2 ac of temporary impacts and 0.1 ac of permanent impacts to Prime Farmland; no temporary or permanent impacts to any Unique Farmlands; and 2.9 ac of temporary and 0.3 ac of permanent impacts to Farmland of Statewide Importance. Alternative 6 (LPA) would result in 0.7 ac of temporary impacts and 0.5 ac of permanent impacts to Prime Farmland; no temporary or permanent impacts to Unique Farmland; and 2.9 ac of temporary impacts and 0.3 ac of permanent impacts to Farmland of Statewide Importance.

Design Variation 2a would result in 1.1 ac of temporary impacts and 0.1 ac of permanent impacts to Prime Farmland; no temporary or permanent impacts to Unique Farmland; and 2.9 ac of temporary impacts and 0.3 ac of permanent impacts to Farmland of Statewide Importance. Design Variation 6a would result in 0.7 ac of temporary impacts and 0.5 ac of permanent impacts to Prime Farmland; no temporary or permanent impacts to Unique Farmland; and 2.9 ac of temporary impacts and 0.3 ac of permanent impacts to Farmland of Statewide Importance.

Both Build Alternatives and Design Variations 2a and 6a would permanently impact a total of 0.4 ac and 0.8 ac of Prime Farmland and Farmland of Statewide Importance, respectively. The farmland being impacted is along the edge of the existing roadway at the northeast corner of the SR-60/WLC Pkwy intersection and along the edge of the east side of WLC Pkwy south of the SR-60/WLC Pkwy intersection. A majority of this farmland is in Moreno Valley, and none of it is explicitly zoned for agricultural

uses.[1] Given the small amount of farmland being impacted by the proposed project and the fact that the land being impacted is at the edge of the existing farmland and will not impact existing agricultural operations, impacts associated with conversion of Prime Farmland or Farmland of Statewide Importance to nonagricultural uses would be less than significant. No mitigation is required.

b. Less Than Significant Impact

Alternatives 2 and 6 (LPA) (Build Alternatives)

City of Moreno Valley Zoning

The Farmlands Study Area includes the areas temporarily and permanently impacted by the Build Alternatives and Design Variations 2a and 6a, plus a 50 ft buffer. None of the lands within the Farmland Study Area are zoned for agricultural uses; however, agriculture is identified as an interim use in all the zoning districts. Because none of the lands are zoned within the City of Moreno Valley for agricultural uses, neither of the Build Alternatives nor the design variations would conflict with existing agricultural zoning in the City.

County of Riverside

Land within the Farmland Study Area is zoned Scenic Highway Commercial (C-P-S) and Controlled Development Area (W-2). Implementation of Alternative 2 would result in temporary impacts to 2.13 ac of land zoned C-P-S and 1.91 ac of land zoned W-2. Alternative 2 would result in permanent impacts to 0.02 ac of land zoned C-P-S and 0.31 ac of land zoned W-2. Implementation of Alternative 6 (LPA) would result in temporary impacts to 1.70 ac of land zoned C-P-S and 1.90 ac of land zoned W-2. Alternative 6 (LPA) would result in permanent impacts to 0.48 ac of land zoned C-P-S and 0.31 ac of land zoned W-2. Permanent impacts to both zoning categories would be along the existing roadway in the northeast quadrant of the SR-60/WLC Pkwy intersection, both on the east side of Theodore Street and the north side of SR-60. Agricultural uses are not permitted on lands zoned C-P-S. Agricultural uses are a permitted use on lands zoned W-2. Therefore, neither Alternative 2 nor Alternative 6 (LPA) would conflict with lands zoned C-P-S.

Alternative 2 and Alternative 6 (LPA) would each impact 0.31 ac of land zoned W-2. Therefore, both Alternative 2 and Alternative 6 (LPA) would conflict with the 0.31 ac of land zoned W-2. However, 0.31 ac is a nominal amount of the total permanent impact area. The conversion of 0.31 ac of land within a zoning district that allows agricultural uses would not constitute a significant impact. Any land use changes resulting from the Build Alternatives would be incorporated into the next regularly scheduled update of both the County's and the City's General Plan Land Use Element.

Williamson Act Lands

The County of Riverside is a participating county for the Williamson Act Program and divides Williamson Act contract land into four categories: Prime Agricultural Land, Non-Prime Agricultural Land, Mixed Enrollment Agricultural Land, and Non-Renewal.

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[1] Approximately 0.31 ac of farmland that would be permanently impacted by the proposed project is within the County of Riverside and is zoned as Controlled Development Area (W-2). Agricultural uses are a permitted use in lands zoned W-2.

The City of Moreno Valley is a non-participating jurisdiction under the Williamson Act Program. According to the *Community Impact Assessment* (March 2019), there are no Williamson Act contract lands within the Farmland Study Area. The closest Williamson Act contract lands are approximately 2.7 mi southeast of the Farmland Study Area. Therefore, neither of the Build Alternatives nor their respective design variations would conflict with Williamson Act contract lands, and the proposed project would not result in impacts to Williamson Act contract lands. No mitigation is required.

c. No Impact, and d. No Impact

There are no forest lands or timberlands within or immediately adjacent to the disturbance limits of the proposed project. Areas adjacent to the project area are not zoned for forest or timberland uses, including timberland production. The proposed project would not result in impacts related to the direct or indirect conversion of forest lands to non-forest uses or timberlands to non-timberland uses. Therefore, there would be no impact and no mitigation is required.

e. Less Than Significant Impact

Farming within the City and County has diminished due to market influences, including the cost of land and the availability and cost of water. The proposed project would temporarily and permanently impact land currently under cultivation. Alternative 2 would result in temporary and permanent impacts to Prime Farmland and Farmland of Statewide Importance totaling approximately 4.1 ac and 0.4 ac, respectively. Alternative 6 (LPA) would result in temporary and permanent impacts to Prime Farmland and Farmland of Statewide Importance totaling approximately 3.6 ac and 0.8 ac, respectively. Design Variation 2a would result in temporary and permanent impacts to Prime Farmland and Farmland of Statewide Importance totaling approximately 4 ac and 0.4 ac, respectively. Design Variation 6a would result in temporary and permanent impacts to Prime Farmland and Farmland of Statewide Importance totaling approximately 3.6 ac and 0.8 ac, respectively.

The farmlands affected would be limited to land necessary for the interchange, roadway, and pedestrian access improvements, including the expanded right-of-way, the acquisition of which would not significantly affect the viability of existing agricultural operations. Both the Build Alternatives and Design Variations 2a and 6a would require the acquisition of land containing a greenhouse along the eastern side of WLC Pkwy, just south of the northernmost Eucalyptus Avenue and WLC Pkwy intersection. Based on aerial imagery (April 2018)[1] and field observations on May 7, 2015, and October 4, 2018, the greenhouse is abandoned. Since the greenhouse is abandoned, its removal would not impact existing agricultural operations, which could result in conversion of this parcel to non-agricultural uses. Therefore, since the greenhouse is abandoned and acquisition of land required for project improvements would not significantly affect the viability of existing agricultural operations, impacts that involve other changes in the existing environment, which, due to their location or nature could result in conversion of farmland to non-agricultural use, would be less than significant. No mitigation is required.

[1] Google Earth. Aerial imagery, dated April 2018.

3.2.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.2.3.1 CEQA Significance Determinations for Air Quality

The potential for the Build Alternatives to adversely impact air quality was assessed in the *Air Quality Report* (January 2020) and Section 2.14, Air Quality, of this EIR/EA. The following discussion is based on those analyses.

a. Less Than Significant Impact

The proposed project is in an area of attainment/maintenance for carbon monoxide (CO) and particulate matter less than 10 microns in size (PM_{10}) and nonattainment for federal particulate matter less than 2.5 microns in size ($PM_{2.5}$) standards. State standards for O_3, annual PM_{10}, annual $PM_{2.5}$, and NO_2 currently are in nonattainment within the South Coast Air Basin (Basin). The applicable air quality plan is the current South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) that was adopted by SCAQMD in 2017, which is submitted as part of the California State Implementation Plan (SIP). Implementation of the SIP would bring the region into conformance with the applicable air quality standards. If a project "conforms" with the SIP, it would not conflict with or obstruct implementation of the applicable air quality plan. Project conformity with the SIP is demonstrated by inclusion of the project in the current Regional Transportation Plan (RTP) and detailed project-level analyses demonstrating that the project will not contribute to any new violations of the national ambient air quality standards (NAAQS), increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any required interim milestone.

As described in Section 2.14, the proposed project is listed in Amendment #3 to the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) as RTP ID 3M0801-RIV080904. The proposed project is listed in the 2019 Federal Transportation Improvement Program (FTIP) under the ID # RIV080904. The 2019 FTIP was approved by the Southern California Association of Governments (SCAG) on September 1, 2018 and by the Federal Transit Administration (FTA) and FHWA on December 17, 2018. Based on the *Traffic Study Report* (January 2019), the proposed project would improve traffic flow without increasing the traffic volumes along the WLC Pkwy or SR-60. Therefore, the proposed project would have no long-term regional vehicle air emission impacts. The project would generate a less than significant amount of pollutants during construction due to the short duration of project construction. Table 2.14.3 in Section 2.14 shows that maximum construction emissions are below SCAQMD thresholds for construction. Therefore, the proposed project would not conflict with the AQMP, violate any air quality standard, or result in a net increase of any criteria pollutant. Impacts would be less than significant. No mitigation is required.

b. Less Than Significant Impact

As described in Response 3.2.3.a above, the proposed project is in an area of nonattainment for federal $PM_{2.5}$ standards and O_3, annual PM_{10}, annual $PM_{2.5}$, and NO_2 for State standards. As identified above, maximum construction emissions would be below SCAQMD significance thresholds. Therefore, the project would not create a new, or worsen an existing criteria pollutant violation. The proposed project would improve traffic flow without increasing the traffic volumes along WLC Pkwy or SR-60. Project Features PF-AQ-1 through PF-A-6 are identified in Section 2.14 to minimize fugitive dust and exhaust emissions. Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant. Impacts would be less than significant. No mitigation is required.

c. Less Than Significant Impact

The project would result in temporary, short-term construction-related increases in pollutant concentrations specifically associated with fugitive dust and construction equipment emissions. As identified above, maximum construction emissions would be below SCAQMD significance thresholds. Compliance with SCAQMD Rules and Regulations in addition to Project Features PF-AQ-1 through PF-AQ-6 would minimize potential short-term adverse project-related impacts to sensitive receptors. Impacts would be less than significant. No mitigation is required.

d. Less Than Significant Impact

Potential odor sources associated with the project may result from equipment exhaust and asphalt paving during construction of the project. These types of odors are temporary and would cease upon completion of construction. The project is required to comply SCAQMD Rule 402 to prevent occurrences of public nuisances associated with odor; therefore, odors associated with the project would be less than significant. No mitigation is required.

3.2.4 Biological Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

3.2.4.1 CEQA Significance Determinations for Biological Resources

The potential for the project to result in impacts to biological resources was assessed in the *Natural Environment Study* (May 2019), the results of which are summarized in the discussion provided in Sections 2.16 through 2.22 of this EIR/EA. The following is based on that information.

a. Less Than Significant Impact

Impacts to Build Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a are similar in nature and thus are analyzed as one throughout this section. An on-site assessment was conducted to evaluate the biological condition of the Biological Study Area (BSA), including vegetation, wildlife, and suitability of habitat for the presence of various sensitive species. The BSA represents the area of potential direct and indirect project impacts to biological resources and is predominantly a mixture of ruderal/agriculture and ornamental/developed vegetation. Nine drainages were identified in the BSA. Six of these drainage features lack the attributes of a natural drainage feature (including riparian habitat), and the remaining three drainage features are natural ephemeral drainage features that likely contained flows historically, but only seasonally.

As discussed in Section 2.20, Animal Species, and Section 2.21, Threatened and Endangered Species, of this EIR/EA, the BSA is within a Burrowing Owl (*Athene*

cunicularia) Survey Area and a Mammal Species Survey Area for the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). Both of these species are covered under the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) and were determined to be absent from the BSA. As specified in Project Feature PF-AS-1 (Section 2.20), preconstruction surveys would be conducted within 30 days of construction commencing to ensure that burrowing owls are not occupying potentially suitable habitat within areas to be graded during construction. If burrowing owls are determined to be present, mitigation measures will be developed in accordance with policies outlined by the WRCMSHCP Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and the United States Fish and Wildlife Service (USFWS).

As discussed in Section 2.21, the BSA also contains potentially suitable habitat in the form of coastal sage scrub for two additional WRCMSHCP-covered species: coastal California gnatcatcher (*Polioptila californica californica*) and Stephens' kangaroo rat (*Dipodomys stephensi*). The project would temporarily affect 0.26 acre (ac) and permanently affect 7.33 ac of coastal sage scrub, which is considered to be potentially suitable habitat for the coastal California gnatcatcher. Additionally, the project would temporarily affect 0.26 ac and permanently affect 7.33 ac of coastal sage scrub as well as adjacent nonnative grasslands and agricultural lands, which is considered to be potentially suitable habitat for Stephens' kangaroo rat. Under the Federal Endangered Species Act (FESA) Section 7, the project has a "may affect, likely to adversely affect" rating due to removal of potentially occupied habitat. However, any project effects to these species' habitat would be covered through project participation in the WRCMSHCP.

The BSA also provides habitat for raptors and other nesting birds. Potential impacts to nesting raptors, special-status birds, and other migratory bird species may occur during the bird breeding season. As specified in Project Feature PF-AS-2 (Section 2.20), project effects can be avoided by conducting a focused survey for nesting birds prior to removal of trees, by removing vegetation outside of the nesting season, and/or through the use of exclusionary buffers if nests are found. Additionally, the project may have direct and indirect effects to bats utilizing structures and culverts within the BSA. Direct effects, such as mortality, may occur to bats roosting in bridges during construction. Construction activities in the form of noise, dust, night lighting, and human encroachment may also cause temporary indirect effects to bats. As specified in Project Feature PF-AS-3 (Section 2.20), roosting bat surveys would be conducted prior to construction in order to minimize potential impacts to bats within the vicinity of the project area.

Impacts to WRCMSHCP-covered species (burrowing owl and Los Angeles pocket mouse), as well as other threatened or endangered species or other species of special concern, would be less than significant through implementation of Project Features PF-AS-1 through PF-AS-3 (Section 2.20); therefore, no mitigation is required.

b. Less Than Significant Impact

Impacts to riparian habitats and natural communities would be approximately the same under Alternatives 2 and 6 (LPA). Alternative 2 would result in 113.33 ac of temporary impacts and 126.88 ac of permanent impacts to vegetation within the

BSA. Alternative 6 (LPA) would result in 112.84 ac of temporary impacts and 127.36 ac of permanent impacts. Design Variation 2a would result in 105.78 ac of temporary impacts and 161.53 ac of permanent impacts, and Design Variation 6a would result in 105.39 ac of temporary impacts and 165.70 ac of permanent impacts to vegetation within the BSA. However, these temporary and permanent direct impacts would not occur to sensitive natural communities identified in local or regional plans; therefore, impacts would not be considered significant.

Alternative 2 would have 1.185 ac of temporary impacts and 0.712 ac of permanent impacts to CDFW riparian streambed habitat. Alternative 6 (LPA) would have 1.164 ac of temporary impacts and 0.733 ac of permanent impacts to CDFW riparian streambed habitat. Design Variations 2a and 6a would result in a total of 0.159 ac of temporary impacts to CDFW streambed/riparian waters. Design Variation 2a would result in permanent impacts to 0.727 ac of CDFW streambed/riparian waters, and Design Variation 6a would result in permanent impacts to 0.737 ac of streambed/riparian waters. Design Variations 2a and 6a have reduced temporary impacts to CDFW riparian streambed when compared to Alternatives 2 and 6 (LPA) and slightly higher permanent impacts to CDFW riparian streambed when compared to Alternatives 2 and 6 (LPA).

The proposed project is anticipated to require a Federal Clean Water Act (CWA) Section 404 permit authorization from the United States Army Corps of Engineers (USACE), a CWA Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), and a Fish and Game Code Section 1602 Streambed Alteration Agreement from the CDFW.

The proposed project has the potential to result in indirect permanent impacts through the degradation of riparian habitat. Permanent indirect impacts include impacts to adjacent habitats caused by storm water runoff, traffic, and litter. In addition, construction has the potential to indirectly affect riparian habitat permanently through enhancing the germination and proliferation of nonnative invasive plant species.

Indirect impacts resulting from storm water and litter would be avoided through compliance with the Caltrans Storm Water Management Plan (SWMP), the Caltrans and City National Pollutant Discharge Elimination System (NPDES) Permits, and implementation of project-specific BMPs as required in Project Feature PF-WQ-4 in Section 2.10, Water Quality and Storm Water Runoff, of this EIR/EA. Control of invasive plant species requires revegetation with plant species native to the area, adherence to a weed abatement and control program, and compliance with pollution and litter laws and regulations as specified in Project Feature PF-INV-1 in Section 2.21, Invasive Species, in this EIR/EA. Implementation of Project Features PF-WQ-4 and PF-INV-1 would avoid or minimize permanent indirect impacts to riparian habitat, and no significant impacts would occur. No mitigation is required.

c. Less Than Significant Impact

As described in Section 2.18, Wetlands and Other Waters, of this EIR/EA, Alternatives 2 and 6 (LPA) would result in temporary direct impacts to 0.675 ac and 0.111 ac for both USACE non-jurisdictional and jurisdictional waters, respectively. Design Variation 2a would result in temporary impacts to 0.649 ac and 0.111 ac for

USACE non-jurisdictional and jurisdictional waters, respectively. Additionally, Alternative 6a would result in temporary direct impacts to 0.659 ac and 0.111 ac for USACE non-jurisdictional and jurisdictional waters, respectively. Alternative 2 would result in a total of 1.185 ac of temporary impacts to CDFW streambed/riparian waters and Alternative 6 (LPA) would result in 1.164 ac of temporary impacts to CDFW streambed/riparian waters. Design Variations 2a and 6a would each result in a total of 0.159 ac of temporary impacts to CDFW streambed/riparian waters.

Potential temporary indirect impacts to jurisdictional areas include impacts to water quality caused by litter or pollutants in construction storm water runoff. During construction activities, BMPs would be implemented to ensure that erosion caused by construction activities does not occur and that sediment is not deposited in the drainages.

A Storm Water Pollution Prevention Plan (SWPPP) would be prepared and would specify the BMPs to be implemented as required in Project Feature PF-WQ-1 (Section 2.10). Storm water and litter impacts would be avoided through compliance with the Construction General Permit and implementation of project-specific BMPs as required in Project Feature PF-WQ-4 (Section 2.10). Therefore, temporary direct impacts to jurisdictional areas would not be significant.

Although minor impacts to the jurisdictional areas would require authorization from CDFW and RWQCB prior to construction, as specified in Project Feature PF-WET-4 (Section 2.17), compensatory mitigation is anticipated to be required to offset the loss of jurisdictional waters by the USACE, CDFW, and RWQCB at a minimum 1:1 mitigation ratio. Mitigation for effects to any regulated USACE non-wetland waters or “waters of the United States” will be conducted in accordance with Project Feature PF-WET-4.

Section 2.18 of this EIR/EA states that Alternative 2 would result in permanent impacts to 0.355 ac and 0.027 ac for USACE non-jurisdictional and jurisdictional water, respectively. Alternative 6 (LPA) would result in 0.355 ac of permanent impacts to USACE non-jurisdictional waters and 0.027 ac of USACE jurisdictional waters. Alternatives 2 and 6 (LPA) would result in a total of 0.712 ac and 0.733 ac of permanent impacts to CDFW streambed/riparian waters, respectively. Additionally, Design Variation 2a would result in permanent impacts to 0.727 ac of CDFW streambed/riparian waters, and Design Variation 6a would result in permanent impacts to 0.737 ac of streambed/riparian waters.

Potential indirect impacts to jurisdictional areas include impacts to water quality caused by litter or pollutants in operational storm water runoff and the indirect effect of germination and proliferation of nonnative invasive plant species. Storm water and litter indirect impacts would be avoided through compliance with the Caltrans SWMP and the Caltrans and City NPDES Permits, and with implementation of project-specific BMPs as required in Project Feature PF-WQ-1 (Section 2.10). Control of invasive plant species requires revegetation with plant species native to the area, adherence to a weed abatement and control program, and compliance with pollution and litter laws and regulations as specified in Project Feature PF-INV-1 (Section 2.21). Implementation of Project Features PF-WQ-1 and PF-INV-1 would avoid or minimize permanent indirect impacts to jurisdictional areas, and no significant impacts would occur. No mitigation is required.

d. Less Than Significant Impact

The BSA is characterized predominantly by ruderal/agricultural and ornamental/ developed vegetation. Wildlife species occurring within the BSA include those found within developed and disturbed habitats. The BSA is in an area heavily affected by freeway and roadway infrastructure where habitat connectivity is highly fragmented. The majority of the BSA is not within WRCMSHCP-designated Cores or Linkages that provide for regional habitat connectivity. The portion of the proposed project located at the intersection of Gilman Springs Road/Alessandro Boulevard is within WRCMSHCP Criteria Cell 1204, and the portion of the proposed project at the intersection of Theodore Street/Ironwood Avenue is adjacent to Proposed Core 3. According to the WRCMSHCP, Proposed Core 3 connects to several proposed and existing Cores and Linkages and also functions as a Linkage, connecting the San Bernardino National Forest within San Bernardino County and other conserved areas to the north of the Proposed Core 3. Proposed Core 3 provides important "live-in" and movement habitat for the least Bell's vireo (*Vireo bellii pusillus*), loggerhead shrike (*Lanius ludovicianus*), cactus wren (*Campylorhynchus brunneicapillus*), Stephens' kangaroo rat (*Dipodomys stephensi*), Southern California rufous-crowned sparrow (*Aimophila ruficeps* ssp. *canescens*), and mountain lion (*Puma concolor*). The project will avoid and minimize impacts to wildlife corridors through implementation of Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface) of the WRCMSHCP. Although the BSA does not function as a wildlife movement corridor, an existing 60-inch drainage culvert located northwest of the SR-60/Gilman Springs Road interchange that is within project limits may be usable as a localized wildlife crossing. The project would include project features to improve its functionality as a wildlife crossing. Project Features PF-NC-1 and PF-NC-2 (Section 2.17) would be incorporated into final design, as compatible with the hydraulics. Impacts are less than significant, and no mitigation is required.

e. Less Than Significant Impact

According to the City of Moreno Valley Municipal Code (as amended), Chapter 9.17, Landscape and Water Efficiency Requirements; Section 0.30, Landscape and Irrigation Standards; Part G, Heritage Trees, any tree that defines the historical and cultural character of the City, including older palm and olive trees, and/or any tree designated as such by official action; any trees with a 15-inch diameter measured 24 inches above ground level; and trees that have reached a height of 15 ft or greater may be not be removed, destroyed, or topped within the City limits. Removal of a heritage tree is only permitted if the tree poses a dangerous or hazardous condition to people, structures, property, or another heritage tree, or if the tree is diseased, dying, or dead and reasonable undertaking to preserve the tree has occurred. Removal of a heritage tree in the public or future public right-of-way is permitted with the approval of the Community Development Director and if a reasonable undertaking to preserve the tree has occurred.

The majority of the project site is in Moreno Valley; however, the northeast quadrant of the site is within unincorporated Riverside County. Riverside County Ordinance No. 559 (as amended) regulates the removal of trees such that no person shall remove any living native tree on any parcel or property greater than 0.5 ac in size, located in an area above 5,000 ft in elevation within unincorporated County of Riverside area, without first obtaining a permit to do so unless exempted by

provisions of the ordinance. This ordinance would not apply to the project because the project is not in an area with an elevation of 5,000 ft or higher. Additionally, Chapter 12.24, Tree Removal, of the County's Code, Section 050, requires an application to remove a living tree. The project would adhere to all requirements set forth by the Riverside County Code regarding the removal of a living native tree if removal of a native living tree is required.

Although removal of heritage trees or living native trees is not anticipated to be required for the project, the project would comply with the requirements set forth by the City of Moreno Valley Municipal Code and Riverside County Code, respectively. Therefore, impacts are considered less than significant, and no mitigation is required.

f. Less Than Significant Impact

The WRCMSHCP is the Habitat Conservation Plan (HCP) applicable to the project area. The proposed project is a covered activity under the WRCMSHCP and will comply with all requirements and measures set forth by the WRCMSHCP for covered species within the project area, including the burrowing owl and Los Angeles pocket mouse, threatened and endangered species, migratory bird species, and sensitive habitats. Implementation of Project Features PF-AS-1 and PF-AS-2 (Section 2.20), PF-WQ-4 (Section 2.10), PF-INV-1 (Section 2.22), and PF-WET-1 through PF-WET-4 (Section 2.18) would ensure that impacts within the WRCMSHCP plan area would be less than significant. Therefore, no mitigation is required.

3.2.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

3.2.5.1 CEQA Significance Determinations for Cultural Resources

This section is based on the *Historic Property Survey Report* (June 2019), the *Archaeological Survey Report* (June 2019), the *Historical Resources Evaluation Report* (June 2019), and Section 2.8, Cultural Resources, of this EIR/EA. Given the scope of Design Variations 2a and 6a, potential impacts related to cultural resources would be the same for each Build Alternative and its respective design variation.

a. No Impact

It was determined that the only cultural resources within the project's Area of Potential Effects (APE) are not eligible for inclusion on the National Register of Historic Places (NRHP), do not qualify as "historical resources" pursuant to CEQA, or are exempt per the Section 106 Programmatic Agreement (PA). In addition, it has been determined that a finding of no impact is appropriate because there are no

historical resources within the project limits; therefore, no impacts to historical resources pursuant to CEQA Guidelines Section 15065.5(b)(3) would occur. No mitigation is required.

b. Less Than Significant Impact

No archaeological resources requiring evaluation were identified through archival research, consultation, or field survey, and the APE does not appear to be sensitive in terms of archaeological resources. Although considered unlikely, there is a potential to encounter unknown buried cultural materials within the APE during construction of the Build Alternatives and Design Variations 2a and 6a. In the event that previously unknown buried cultural resources are encountered during construction, compliance with Project Features PF-CR-1 and PF-CR-2 (Section 2.8), which are Caltrans Standard Measures, would avoid and/or minimize potential impacts to previously unknown cultural resources. Impacts are considered to be less than significant and no mitigation is required.

c. Less Than Significant Impact

Although considered unlikely, there is a potential to encounter unknown buried human remains within the APE during construction of the Build Alternatives and Design Variations 2a and 6a. In the event that previously unknown buried human remains are encountered during construction, compliance with Project Features PF-CR-1 and PF-CR-2 (Section 2.8), which are Caltrans Standard Measures, would avoid and/or minimize potential impacts to previously unknown human remains. Impacts would be less than significant and no mitigation is required.

3.2.6 Energy

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.2.6.1 CEQA Significance Determinations for Energy

The potential for the Build Alternatives and Design Variations 2a and 6a to adversely increase energy demand was assessed in Section 2.16, Energy, of this EIR/EA. The following discussion is based on those analyses.

a. Less Than Significant Impact

Construction energy use would result from off-road construction equipment, water trucks, and on-road vehicles for soil hauling and worker commuting. The amount of fuel used per year for construction of the project was estimated from the carbon dioxide (CO_2) emissions from this model using the United States Environmental Protection Agency (EPA) conversion factors of 112.52 gallons of gasoline burned per

metric ton of CO_2 emitted and 98.23 gallons of diesel fuel burned per metric ton of CO_2 emitted (EPA 2019),[1] as shown in Table 3.2.

Table 3.2 Annual Construction Fuel Consumption

Construction Year	Overall CO_2 Emissions (tons/yr)	Diesel Fuel Consumption (gal)	Worker Commute CO_2 Emissions (tons/yr)	Gasoline Consumption (gal)
2022	1,413	125,919	86	8,821
2023	451	40,191	28	2,815
Total		**166,109**		**11,636**

Source: Conversion data from EPA Energy and the Environment - Greenhouse Gases Equivalencies Calculator - Calculations and References. Website: www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references (accessed December 2019).
112.52 gal of gasoline/metric ton of CO_2
98.23 gal of diesel/metric ton of CO_2
1.102 tons/metric ton
CO_2 = carbon dioxide
EPA = United States Environmental Protection Agency
gal = gallons
tons/yr = tons per year

Using average fuel energy factors of 111,800 British thermal units (Btu) per gallon of gasoline and 127,500 Btu per gallon of diesel fuel (CEC 2019),[2] the energy used for construction is shown in Table 3.3.

Table 3.3 Annual Construction Energy Consumption

Construction Year	Diesel Fuel Consumption (gal)	Gasoline Consumption (gal)	Energy Consumption (MMBtu)
2022	125,919	8,821	17,041
2023	40,191	2,815	4,493
Total	**166,109**	**11,636**	**21,534**

Source: Fuel Btu rates from California Energy Commission Energy Almanac, Transportation Data. Website: ww2.energy.ca.gov/almanac/transportation_data/gge.html (accessed December 2019).
127,500 Btu/gal of diesel
111,800 Btu/gal of gasoline
Btu = British thermal units
gal = gallons
MMBtu = million British thermal units

As shown in Table 3.3, the total of construction-related energy consumption would be 21,534 million Btu (MMBtu). Compared to energy consumption without the project construction, the project would have a substantial increase to local energy consumption in the project area. As discussed above, the total energy consumed in Riverside County in 2018 was 15,981 million kilowatt-hours (or 54,487,384 MMBtu) of electricity and 398 million therms (or 39,800,000 MMBtu) of natural gas, for a total annual energy consumption rate of 94,287,384 MMBtu. The construction energy consumed by the project would be 0.02 percent of the total Riverside County consumption. Therefore, energy consumption from construction activities would be

1 United States Environmental Protection Agency. 2019. Energy and the Environment - Greenhouse Gases Equivalencies Calculator - Calculations and References. Website: www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references (accessed December 2019).

2 California Energy Commission. 2019. Energy Almanac, Transportation Data. Website: ww2.energy.ca.gov/almanac/transportation_data/gge.html (accessed December 2019).

negligible at the Riverside County regional level, and would only last for a short period of time during project construction. Furthermore, the project would result in a less than significant energy impact during project construction.

Operation energy use for transportation projects typically is dominated by vehicle fuel usage. Energy consumption is mainly based on the annual vehicle miles traveled (VMT), though it is also affected by congestion-related inefficiencies. While there would be no measurable differences in VMT for Design Variations 2a and 6a, traffic operating conditions in the project area would influence fuel consumption rates. Without the improvements resulting from the project, congested traffic conditions would be more prevalent throughout the project area. Those conditions would contribute to a higher energy consumption rate because vehicles use extra fuel while idling in stop-and-go traffic or moving at slow speeds on congested roads.

Using the same EPA conversion factors of fuel burned per amount of CO_2 emitted used for construction above combined with the operational carbon dioxide equivalent (CO_2e) emissions shown later in Table 3.7, Table 3.4 shows the operational fuel and energy used by each project alternative.

Table 3.4 Annual Operational Energy Consumption

Alternative	Diesel Fuel Consumption (gal)	Gasoline Consumption (gal)	Energy Consumption (MMBtu)
Existing/Baseline [2018]	131,834	1,037,859	132,842
Open to Traffic [2025]			
No Build	313,365	1,765,020	237,283
Alternative 2	252,109	1,540,048	204,321
Alternative 6 (LPA)	248,088	1,525,616	202,195
Design Year [2045]			
No Build	393,152	2,603,514	341,200
Alternative 2	334,750	2,325,749	302,699
Alternative 6 (LPA)	311,991	2,212,692	287,158

Source 1: Conversion data from EPA Energy and the Environment - Greenhouse Gases Equivalencies Calculator - Calculations and References. Website: www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references.
Source 2: Fuel Btu rates from California Energy Commission Energy Almanac, Transportation Data. Website: ww2.energy.ca.gov/almanac/transportation_data/gge.html (accessed December 2019).

112.52 gal of gasoline/metric ton of CO_2
98.23 gal of diesel/metric ton of CO_2
111,800 Btu/gal of gasoline
127,500 Btu/gal of diesel fuel

Btu = British thermal units
CO_2 = carbon dioxide
EPA = United States Environmental Protection Agency
gal = gallons
LPA = Locally Preferred Alternative
MMBtu = million British thermal units

As shown in Table 3.4, the Alternative 2 configuration would reduce energy consumption in both the opening and design years compared to the corresponding No Build Alternative. Also shown in Table 3.4, the roundabouts in Alternative 6 (LPA) would further reduce energy consumption compared to Alternative 2. Therefore, the project would result in reduced energy consumption in the project area. Additionally, the operational energy consumed would vary from 0.2 to 0.3 percent of the total county consumption. Thus, the proposed project would result in a less than significant energy impact during project operation, and no mitigation is required. Although no mitigation measures related to energy are proposed for the project, the City currently employs a variety of measures in municipal operations that reduce

consumption of energy and water and reduce the amount of solid and green waste sent to a landfill. The City of Moreno Valley Energy Efficiency and Climate Action Strategy (2012) includes the following applicable energy reduction measures:

> **A11.** Traffic signals synchronized to improve traffic flow and reduce air pollution and gas consumption.
>
> **A12.** Traffic signal lights retrofitted in 2006 with LED light fixtures, with a reduction of 60% power usage. Newer traffic signal lights installed with LED fixtures.
>
> **A13.** City replaced all fluorescent bulbs in Internally Illuminated Street Name Signs with LED lights that enhance visibility, street safety, and last longer. Annual cost savings of about 50% realized due to less use of electricity and less maintenance due to longer life expectancy of LED.
>
> **A19.** City adopted new landscape standards which require the use of drought tolerant landscape and water efficient irrigation in new installations and most retrofit projects.
>
> **A24.** Maintenance & Operations has a program to recycle asphalt concrete. Existing pavement is ground up and used as base for repaving. Unused material is stored for future use.
>
> **A28.** Rubberized asphalt concrete has been used on City street projects when cost is comparable to regular asphalt concrete. Recycled tires are used. Advantages include reduced road noise, reduced braking distance, and longer life to road surface.
>
> **A29.** Cold in Place Recycling is used as appropriate for street rehabilitation projects. The process removes old pavement, combines it with emulsion, and places it back down as part of the new pavement.

Therefore, the project would result in a less than significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

b. Less Than Significant Impact

State of California Integrated Energy Policy

In 2002, the Legislature passed Senate Bill 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles and their infrastructure

needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The CEC adopted the 2019 Integrated Energy Policy Report[1] on November 8, 2019. The 2019 Integrated Energy Policy Report provides the results of the CEC's assessment of a variety of issues, including: ensuring the State has sufficient, reliable, and safe energy infrastructure to meet current and future energy demands; monitoring publicly owned utilities' progress toward achieving 10-year energy efficiency targets; defining and including zero-net-energy goals in State building standards; overcoming challenges to increased use of geothermal heat pump/ground loop technologies and procurement of biomethane; using demand response to meet California's energy needs and integrate renewable technologies; removing barriers to bioenergy development; planning for California's electricity infrastructure needs given potential retirement of power plants; estimating new generation costs for utility-scale renewable and fossil-fueled generation; planning for new or upgraded transmission infrastructure; monitoring utilities' progress in implementing past recommendations related to nuclear power plants; tracking natural gas market trends; implementing the Alternative and Renewable Fuel and Vehicle Technology Program; addressing the vulnerability of California's energy supply and demand infrastructure to the effects of climate change; and planning for potential electricity system needs in 2030.

Energy is currently consumed in the project area for the construction of public and private projects; operation of automobiles, trucks, and marine vessels; and for the operation of existing land uses. Automobile and truck fueling stations are located throughout the area. Tables 3.5 and 3.6 show the annual electricity and natural gas consumed, respectively, in Riverside County in 2018. These energy consumption totals equal 54.5 and 39.8 trillion BTUs for electricity and natural gas consumption, respectively.

Table 3.5 Annual Electricity Consumption in Riverside County (2018)

Type of Consumer	Millions of kWh
Residential	7,706
Non-Residential	8,275
Total	**15,981**

Source: California Energy Commission. Energy Consumption Data Management System (2019).
kWh = kilowatt-hours

Table 3.6 Annual Natural Gas Consumption in Riverside County (2018)

Land Use	Millions of Therms
Residential	259
Non-Residential	139
Total	**398**

Source: California Energy Commission. Energy Consumption Data Management System (2019).
therm = a unit of heat that equals 100,000 British thermal units (BTU).

[1] California Energy Commission. Website: https://ww2.energy.ca.gov/2019_energypolicy/, accessed January 1, 2019.

Because California's energy conservation planning actions are conducted at a regional level, neither of the Build Alternatives would conflict with California's energy conservation plans as described in the CEC's 2019 Integrated Energy Policy Report. Thus, the project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and not result in any irreversible or irretrievable commitments of energy. Because the project would not have a significant impact on energy resources, it would not conflict with or obstruct any State or local plan for renewable energy or energy efficiency.

3.2.7 Geology and Soils

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

3.2.7.1 CEQA Significance Determinations for Geology and Soils

This section discusses the existing geologic and soils conditions within the project area and provides an analysis of the potential impacts of the proposed project that are related to geology and soils. This section is based on the *Preliminary Geotechnical Design Report* (November 2018) and Section 2.11, Geology/ Soils/Seismic/Topography, of this EIR/EA. Given the scope of Design Variations 2a and 6a, potential impacts related to geology and soils would be the same for each Build Alternative and its respective design variation.

a. Less Than Significant Impact

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. As described in Section 2.11, Geology and Soils, of this EIR/EA, some of the proposed improvements (i.e., on- and off-ramps) are located within the Claremont Segment of the San Jacinto Fault Zone. Although the existing bridge is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, an unnamed fault splay is projected to transect the existing/proposed bridge. As such, a ground rupture can occur along any of these active faults when seismic activity occurs. As specified in Project Feature PF-GEO-3 (Section 2.11), a fault trench investigation will be performed for the bridge structure to confirm the existence or absence of any fault. With implementation of Project Feature PF-GEO-3, impacts as a result of fault-induced ground rupture would be less than significant. No mitigation is required.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The project site is in the highly seismic Southern California region, within the influence areas of several fault systems. It is recognized that the project site could periodically experience ground acceleration as the result of moderate to large seismic events.

The structures (e.g., bridges, culverts) constructed for the proposed project could be potentially subject to substantial impacts related to seismic ground shaking. The proposed project would be designed in accordance with the requirements of Caltrans Seismic Design Criteria (SDC) and the American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications and California Amendments in order to minimize ground-shaking impacts. Therefore, impacts as a result of seismic ground shaking would be less than significant. No mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. The potential impacts of liquefaction to the project site may include: (1) settlement of the ground surface; (2) lateral spreading of the ground; (3) additional down-drag forces on foundation piles as a result of soil settlement above the liquefied layers; and (4) reduction of the shear strength of the liquefied soil, resulting in reduced load-carrying capacity.

As described in Section 2.11 of this EIR/EA, due to the depth to groundwater (which is anticipated to be greater than 110 ft below ground surface [bgs]), relatively dense alluvial soils present in the project area, and interbedded clay layers underlying the project site, the potential for liquefaction on the project

site is very low and does not present a design issue. Therefore, no significant liquefaction impacts would occur. No mitigation is required.

iv. Landslides?

Less Than Significant Impact. Marginally stable slopes may be subject to landsliding caused by seismic shaking. In most cases, this is limited to relatively shallow soil failures on steeper natural slopes, although deep-seated failures of over-steepened, engineered slopes are also possible. The potential for rockfall due to either erosion or seismic ground shaking is considered very low or nonexistent for the project site. Therefore, impacts related to landslides are less than significant, and no mitigation is required.

b. Less Than Significant Impact

As described in Section 2.11 of this EIR/EA, construction activities for the proposed project (e.g., grading and cut-and-fill slopes) would disturb soil and alter existing landforms. Construction of Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a would have the same temporary impacts. Temporary impacts would include soil compaction and an increased possibility of soil erosion. On-site soils (silt and sands or fine sandy loam) would be particularly prone to erosion during construction of the project, especially during heavy rains. Unpaved sloping grades within the project limits include the approach embankments and potentially cut slopes in the northeast quadrants, which would be especially susceptible to erosion. Provisions for site drainage, slope planting, and other measures in accordance with Caltrans standard requirements will be fulfilled to provide adequate protection against erosion. As described in Project Feature PF-WQ-1 (Section 2.10), during all construction activities for the Build Alternative, the contractor will be required to adhere to the requirements of the General Construction Permit and to implement erosion and sediment control BMPs specifically identified in the project SWPPP to keep sediment from moving off site into receiving waters and impacting water quality. Worker safety hazards resulting from erosion during construction of the Build Alternatives or their respective design variations would be minimized based on implementation of the requirements in the General Construction Permit and Erosion and Sediment Control BMPs in the SWPPP. Impacts would be less than significant, and no mitigation is required.

c. Less Than Significant Impact

Collapsible Soils

The project site is in a geological area that includes potentially collapsible soils in shallow alluvium. This collapse potential will be further evaluated during future investigations to determine the required depth of over-excavation, as described in Project Feature PF-GEO-1 (Section 2.11). Therefore, impacts related to collapsible soils would not be significant. No mitigation is required.

Corrosive Soils

No subsurface investigation or laboratory testing has been conducted during the preliminary engineering phase of this project to date; however, based on previous soil testing performed in the immediate vicinity of this project, it is anticipated that the site soils are noncorrosive. As described in Project Feature PF-GEO-5 (Section

2.11), the potential for soil corrosion effects on the project structures will be investigated during final design. If recommended by the geotechnical investigation to be prepared during Plans, Specifications, and Estimates (PS&E), final design will include design features related to corrosive soils. Impacts would be less than significant, and no mitigation is required.

Seismic Densification

Ground accelerations generated from a seismic event can produce settlements in dry or moist sands (granular earth materials) with relatively low density. The near-surface loose soil deposits susceptible to such seismically induced settlement would be generally removed and recompacted during grading. As such, the potential seismic densification is anticipated to be minimal or less than 2 inches for surface structures. However, as described in Project Feature PF-GEO-4 (Section 2.11), additional evaluation of seismic densification based on actual field data for the proposed structure would be performed in future phases of project development. Therefore, impacts related to seismic densification are not considered significant. No mitigation is required.

d. Less Than Significant Impact

Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) as a result of variations in moisture content even without an increase in external loads. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures or concrete slabs supported on grade. Potentially expansive soils exist on the project site. The more expansive soils are expected to be localized and associated with interbedded silt and clay layers likely to be located on the south side of the existing and proposed WLC Pkwy overcrossing. Because these materials will not be used in embankment fills or the upper 4 ft of pavement subgrade, impacts related to expansive soils are not considered significant. No mitigation is required.

e. No Impact

The project is an infrastructure improvement project and does not require a septic tank or sewer system. Therefore, no impacts related to this issue will occur. No mitigation is required.

f. Less Than Significant with Mitigation Incorporated

As described in Section 2.12, Paleontology, in this EIR/EA, construction of Alternatives 2 and 6 (LPA) as well as Design Variations 2a and 6a would have the same potential impacts during ground-disturbing activities. During these ground-disturbing activities, there is a potential for significant, nonrenewable paleontological resources to be encountered in the Young Alluvial Fan Deposits, Young Axial Channel Deposits, Old Alluvial Fan Deposits, Very Old Alluvial Fan Deposits, and the unnamed subunit of the middle member of the San Timoteo Formation. As such, construction of Build Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a have the potential to impact scientifically significant, nonrenewable paleontological resources. There is a potential for unanticipated paleontological resources to be unearthed during site preparation, grading, or excavation for all the Build

Alternatives. Those potential effects would be avoided or minimized through Project Feature PF-PAL-1 (Section 2.12). To avoid impacts to any paleontological resources that may be present within the project area, in addition to Project Feature PF-PAL-1, a Paleontological Mitigation Plan (PMP), as specified in Mitigation Measure PAL-1 (Section 2.12), would be implemented during construction. With adherence to Project Feature PF-PAL-1 and Mitigation Measure PAL-1, impacts are considered less than significant with mitigation.

3.2.8 Greenhouse Gas Emissions

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

3.2.8.1 CEQA Significance Determinations for Greenhouse Gas Emissions Impacts

The potential for the Build Alternatives to adversely impact greenhouse gas (GHG) emissions was assessed in the *Air Quality Report* (January 2020) for this EIR/EA. The following discussion is based on that analysis.

a. Significant and Unavoidable Impact

GHG emissions from transportation projects can be divided into those produced during operation of the project and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs). CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The *State CEQA Guidelines* generally address GHG emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, §21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself” (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512). In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (*State CEQA Guidelines* Sections 15064(h)(1) and 15130)).

Operational GHG Emissions. The largest sources of transportation-related GHG emissions are passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans. The highest levels of GHG emissions from mobile sources such as automobiles occur at stop-and-go speeds (0–25 miles per hour

[mph]) and speeds over 55 mph, with the most severe emissions occurring from 0–25 mph. To the extent that a project relieves congestion by enhancing operations and improving travel times in high-congestion travel corridors, GHG emissions, particularly CO_2, may be reduced.

The purpose of the proposed project is to improve existing and projected interchange geometric deficiencies, provide increased interchange capacity, reduce congestion, and improve traffic operations. Based on the *Traffic Study Report* (January 2019), the proposed project would improve traffic flow without increasing the traffic volumes along the WLC Pkwy or SR-60.

Traffic data, including VMT, intersection queuing and delay times, and average roadway speeds for the existing/baseline condition, opening year, and 2045 were combined with GHG emissions factors from the EMFAC2017 model to produce the GHG emissions rates shown in Table 3.7. The horizon year of 2045 was used in the *Traffic Study Report* (January 2019) to be consistent with the SCAG 2016 RTP/SCS, which includes all foreseeable development projects in the greater Moreno Valley area.

Table 3.7 Modeled Annual GHG Emissions and Vehicle Miles Traveled, by Alternative

Alternative	GHG Emissions (Metric Tons/Year)[1]	Annual Vehicle Miles Traveled[2]
Existing/Baseline 2018	10,566	24,575,948
Open to Traffic 2025		
No Build	18,876	37,010,238
Build Alternative 2	16,253	
Build Alternative 6 (LPA)	16,084	
20-Year Horizon/Design Year 2045		
No Build	27,140	67,306,279
Build Alternative 2	24,077	
Build Alternative 6 (LPA)	22,840	

Sources: *Traffic Study Report* (January 2019), Average Speed Data for Air Quality Analysis Technical Memorandum (January 2020), and EMFAC2017.

[1] GHG emissions expressed as CO_2e.

[2] Annual vehicle miles traveled (VMT) values derived from Daily VMT values multiplied by 347, per CARB methodology (CARB 2008).

CO_2e = carbon dioxide equivalent (CO_2, CH_4, and N_2O)

GHG = greenhouse gas

LPA = Locally Preferred Alternative

Based on the *Traffic Study Report* (January 2019), the proposed project would provide increased interchange capacity and improve existing interchange geometric deficiencies to improve traffic flow without increasing the traffic volumes along WLC Pkwy or SR-60, thus the No Build and both Build Alternative VMT amounts are the same within each scenario analyzed. The VMT increases from 2018 to 2025 due to the increased regional vehicle traffic from all known development projects in the greater Moreno Valley area that will foreseeably be completed by 2025. The VMT increases 2018 to 2045 due to the increased regional vehicle traffic from all known development projects in the greater Moreno Valley area that will foreseeably be completed by 2045. As shown in Table 3.7, the Alternative 2 configuration would reduce GHG emissions in both the opening and horizon years compared to the

corresponding No Build Alternative. As also shown in Table 3.7, the roundabouts in Alternative 6 (LPA) would further reduce emissions compared to Alternative 2.

While both Build Alternatives would reduce GHG emissions compared to those of the No Build Alternative, GHG emissions would increase in future years compared to existing conditions, with or without the project, due to circumstances outside the project's control, such as anticipated regional population and employment growth and other reasonably foreseeable projects in the project area. Table 2.23.1, Planned Projects in the Land Use Study Area and the SR-60 Corridor, in Section 2.23, Cumulative Impacts, identifies the reasonably foreseeable projects in the project area. Because the project would not reduce GHG emissions below the existing 2018 condition, the impact would be significant and unavoidable. There is no feasible mitigation measure available to reduce the GHG emissions from the privately owned vehicles operating on the project roadways. Project operational features such as bicycle and pedestrian improvements, higher efficiency street lighting, and low-water-use landscaping would reduce this impact, but not to a less-than-significant level. Thus, this impact would be significant and unavoidable.

Construction GHG Emissions. Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase.

The Sacramento Metropolitan Air Quality Management District Road Construction Emissions Model, Version 9.0, was used to quantify the expected construction-related GHG emissions related to the proposed project. Construction of the project would emit a daily maximum of up to 13,009 pounds per day (lbs/day) of CO_2e and a total quantity of 1,718 metric tons of CO_2e, as shown in Table 3.8. Construction is expected to last 18 months, resulting in maximum yearly emissions of 1,305 metric tons per year of CO_2e.

Table 3.8 Project Construction GHG Emissions

Project Phases	CO_2	CH_4	N_2O	CO_2e
Grubbing/Land Clearing (lbs/day)	2,109	1	<1	2,137
Grading/Excavation (lbs/day)	12,755	3	1	13,009
Drainage/Utilities/Sub-Grade (lbs/day)	10,473	3	<1	10,578
Paving (lbs/day)	2,134	1	<1	2,162
Maximum (lbs/day)	12,755	3	1	13,009
Project Total (tons/construction project)	**1,864**	**<1**	**<1**	**1,718[1]**
2022 Annual Total (tons/yr)	**1,413**	**<1**	**<1**	**1,305[1]**
2023 Annual Total (tons/yr)	**451**	**<1**	**<1**	**413[1]**

Source: Roadway Construction Model GHG output from *Air Quality Report* construction modeling (January 2020).
[1] The annual and project total CO_2e emissions are reported as metric tons.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
lbs/day = pounds per day
N_2O = nitrous oxide
tons/yr = tons per year

The Project Features listed in Section 3.4.7, Greenhouse Gas Reduction Strategies, will also be implemented as part of the project to reduce GHG emissions and potential climate change impacts from the project.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction (which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all CARB emission reduction regulations) and Section 14-9.02, Air Pollution Control (which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes). Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

b. Significant and Unavoidable Impact

GHG emissions increase in future years compared to existing conditions, with or without the project, due to anticipated regional growth. As shown in Table 3.7, the Alternative 2 configuration would reduce GHG emissions in both the opening and horizon years compared to the corresponding No Build Alternative. Additionally, the roundabouts in Alternative 6 (LPA) would further reduce emissions compared to Alternative 2. Thus, the project would improve traffic operations and reduce GHG emissions compared to the No Build condition, but because it would not reduce GHG emissions from the existing condition, it would not contribute to achieving statewide GHG emissions reduction goals. The impact would be significant and unavoidable.

3.2.9 Hazards and Hazardous Materials

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

3.2.9.1 CEQA Significance Determinations for Hazards and Hazardous Materials

This section is based on the *Initial Site Assessment* (February 2019) and Section 2.13, Hazardous Waste/Materials, of this EIR/EA. Given the scope of Design Variations 2a and 6a, potential impacts related to geology and soils would be the same for each Build Alternative and its respective design variation.

a. Less Than Significant Impact

Typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be handled in accordance with standard procedures. The amount of such materials utilized at the project site during construction is anticipated to be used in small quantities on an as-needed basis. The project would be required to adhere to any applicable local, State, and federal safety standards associated with the handling of these materials as well as Caltrans policies.

Routine maintenance activities during operation of the project would be required to follow applicable regulations with respect to the use, storage, handling, transport, and disposal of potentially hazardous materials. Therefore, implementation of the project would not result in adverse impacts related to hazardous waste or materials. Therefore, potential impacts associated with the use, transport, storage, and disposal of hazardous materials would be less than significant. In addition, Project Features PF-HAZ-8 and PF-HAZ-9 (Section 2.13) would be implemented to ensure impacts related to this issue remain less than significant. No mitigation is required.

b. Less Than Significant Impact

Please refer to Response 3.2.9.1.a above.

c. No Impact

There are no existing or proposed schools within 0.25 mi of the project site. Therefore, no impacts associated with this issue would occur, and no mitigation is required.

d. Less Than Significant Impact

Although the project is proposing TCEs on two parcels that are listed on the Hazardous Waste Information System (HAZNET) database maintained by the California Department of Toxic Substances Control (DTSC) as containing hazardous waste, it is not anticipated that establishing TCEs on these parcels would result in the creation of a significant hazard to the public or environment. This is because the sites are: (1) not considered to be Recognized Environmental Conditions (REC) posing a risk to the site and surroundings; and (2) groundwater would not be encountered during project construction because groundwater levels are below the maximum depth of excavation.

The project would involve disturbance of existing soils and structures; therefore, hazardous soil contaminants (pesticides, lead-based paint [LBP], and aerially-deposited lead [ADL]), and structural materials (polychlorinated biphenyls [PCBs], LBP, and asbestos-containing materials [ACM]) may be encountered during project

construction. As previously described, typical hazardous materials used during construction (e.g., solvents, paints, and fuels) would be handled in accordance with standard procedures. There are Caltrans policies (avoidance and minimization measures) as well as local, State, and federal regulations that must be followed with respect to investigation, use, storage, handling, disposal, and transport of potentially hazardous materials during implementation of the project to protect human health and the environment. Findings of the *Aerially Deposited Lead Survey* (December 2018) determined that the tested soil does not represent significant environmental or health hazards and, according to the DTSC draft soil management agreement issued to Caltrans, does not meet the definition of ADL-contaminated soil, and can be reused on site. Per the draft soil management agreement, the DTSC must be notified of the project, and a Lead Compliance Plan is required for worker safety as stated in PF-HAZ-2 described in Section 2.13 of this EIR/EA. Adherence to Project Features PF-HAZ-1 through PF-HAZ-8 would ensure that impacts associated with this issue remain less than significant. No mitigation is required.

e. No Impact

The project site is not located within an airport land use plan or within 2 mi of a public airport or public use airport. Therefore, implementation of the project would not result in a safety hazard for people residing or working in the area. No mitigation is required.

f. Less Than Significant Impact

During construction, some impairment to the delivery of services, including fire and police response times, may occur. However, these temporary impacts would be substantially minimized through the implementation of a Transportation Management Plan (TMP).

Construction activities associated with the project would result in temporary road detours and access restrictions during construction that may result in some impairment to the delivery of services, including fire and police response. However, significant disruptions to the local access network within the study area are not anticipated with implementation of a TMP. Adherence to Project Feature PF-TR-1, a standard condition described in Section 2.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, of this EIR/EA, would ensure impacts remain less than significant related to emergency response plans and emergency evacuation plans. No mitigation is required.

g. Less Than Significant Impact

Portions of the project site are identified as being within a Local Responsibility Area (LRA) Very High Fire Hazard Severity Zone and a State Responsibility Area (SRA) Moderate Fire Hazard Severity Zone.[1] However, the project site is currently developed with a series of existing highway facilities and access roads and is currently sparsely vegetated. The project would not expose people or property to

[1] California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones Maps. Website: http://www.fire.ca.gov/fire_prevention/fhsz_maps_riversidewest, accessed February 15, 2019.

new increased wildland fire risks. Impacts are less than significant. No mitigation is required.

3.2.10 Hydrology and Water Quality

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

3.2.10.1 CEQA Significance Determinations for Hydrology and Water Quality

The potential for the project to result in impacts related to hydrology and water quality was assessed in the *Water Quality Assessment Report* (January 2019) and in the *Location Hydraulics Report and Summary Floodplain Encroachment Report* (October 2018), the results of which are summarized in the discussion provided in Section 2.9, Hydrology and Floodplains, and Section 2.10, Water Quality and Storm Water Runoff, of this EIR/EA. The following discussion is based on that information.

a. Less Than Significant Impact

During construction activities, excavated soil would be exposed and there would be an increased potential for soil erosion compared to existing conditions. The total disturbed area for Alternatives 2 and 6 (LPA) would be approximately 115 ac and approximately 148 ac for Design Variations 2a and 6a. In addition, chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction of the project, with the potential to be transported via storm runoff into receiving waters.

The project would increase impervious areas, which would increase the volume of runoff during a storm and more effectively transport pollutants to receiving waters. Alternative 2 would increase the impervious surface area by approximately 16.5 ac, which would be a 125 percent increase from the existing impervious surface area. Alternative 6 (LPA) would increase the impervious surface area by approximately 20.6 ac, which would be a 156 percent increase from the existing impervious surface area. Design Variation 2a would result in an increase of 22.1 ac (a 167 percent increase from the existing impervious surface area), and Design Variation 6a would result in an increase of 26.2 ac (a 198 percent increase from the existing impervious surface area).

The project would be required to comply with applicable NPDES permits for construction (Construction General Permit) and operation (Caltrans Municipal Separate Storm Sewer Systems [MS4] Permit) to reduce pollutants in storm water, as specified in Project Features PF-WQ-1 through PF-WQ-3, which are provided in Section 2.10 of this EIR/EA. In compliance with the NPDES permits, BMPs would be implemented during construction and operation of the project. The BMPs would target and reduce pollutants of concern in storm water runoffs. Project Features PF-WQ-1 through PF-WQ-3 are regulatory requirements that ensure the project would not violate water quality standards or waste discharge requirements or substantially degrade surface water quality. Impacts would be less than significant, and no mitigation is required.

Groundwater depths at the project site are reported to be in excess of 110 ft bgs. The primary improvements as part of the Build Alternatives consist of fill placement; therefore, excavations extending to the groundwater table are not anticipated. As a result, construction activities do not have the potential to directly affect groundwater quality. In addition, infiltration of storm water can have the potential to affect groundwater quality. However, pollutants in storm water are generally removed by soil through absorption as water infiltrates. In areas of deep groundwater, there is more absorption potential and, as a result, less potential for pollutants to reach groundwater. Due to the depth to groundwater, there is not a direct path for pollutants to reach groundwater. Therefore, it is not expected that any storm water that may infiltrate during project construction or operation would affect groundwater quality. Because it is unlikely that pollutants will reach the groundwater table, the project would not violate groundwater quality standards or waste discharge requirements or substantially degrade groundwater quality. Impacts would be less than significant, and no mitigation is required.

b. Less Than Significant Impact

The project site is not a designated groundwater recharge area. As described above, groundwater is not anticipated to be encountered during construction of either of the Build Alternatives or design variations; therefore, groundwater dewatering would not be required during construction. In addition, groundwater extraction would not be required during operation. The Build Alternatives and Design Variations 2a and 6a would increase impervious surface area, which decreases infiltration potential and decreases the amount of water that is able to recharge groundwater. However, the Build Alternatives would include Treatment BMPs such as infiltration basins, which would offset the decrease in infiltration. Therefore, the project would not substantially decrease groundwater supplies, interfere with groundwater recharge, or impede

sustainable groundwater management of the San Jacinto and San Timoteo Groundwater Basins. No significant groundwater supply impacts would occur, and no mitigation is required.

c. Less Than Significant Impact

i. Result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact. During grading, excavation, and other construction activities, soil would be disturbed and drainage patterns temporarily altered. As a result, there would be an increased potential for on-site and downstream erosion and siltation compared with existing conditions. However, as discussed in Threshold 3.2.10.1.a, the project would comply with the Construction General Permit as specified in Project Feature PF-WQ-1 (Section 2.10). The Construction General Permit requires preparation of a SWPPP and implementation of Erosion Control and Sediment Control BMPs to reduce impacts to water quality during construction, including those impacts associated with soil erosion and siltation. As a provision of the Construction General Permit, the termination of the Construction General Permit would not be granted until the soil loss after construction is less than at the beginning of construction.

The project would not alter the course of a stream or river. However, as discussed in Threshold 3.2.10.1.a, the project would increase impervious surface area on the project site and could increase peak runoff flow during a storm event. In the proposed condition, the on-site impervious surface areas would not be prone to erosion or siltation. Slopes disturbed during construction would be landscaped with appropriate vegetation for erosion and siltation control purposes. On-site erosion and siltation would be minimized in the landscaped areas, where soil would be stabilized by vegetation. Therefore, the project would not increase on-site erosion or siltation. Additionally, as required by Project Features PF-WQ-2 and PF-WQ-3 (Section 2.10), storm water runoff from the project site would be treated with Treatment BMPs, which include a system of biofiltration swales and infiltration basins. The infiltration basins and biofiltration swales would reduce the total amount of sediment in surface runoff from the project area, which would reduce the downstream transport of sediment in storm water runoff. With implementation of Project Features PF-WQ1 through PF-WQ-3, which require implementation of construction and operational BMPs, impacts related to on- or off-site erosion would be less than significant. No mitigation is required.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Less Than Significant Impact. Construction activities would alter the on-site drainage pattern, potentially compact on-site soils, and increase the potential for flooding compared to existing conditions. As discussed in Threshold 3.2.10.1.a and specified in Project Feature PF-WQ-1 (Section 2.10), construction activities would comply with the Construction General Permit, which requires preparation of a SWPPP to identify construction BMPs to be

implemented as part of the project to manage storm water during construction. Proper management of storm water during construction would reduce impacts associated with flooding.

The project would not alter the course of a stream or river. However, the project would increase impervious surface area, which would increase peak runoff flow during a storm event. However, the project would improve the existing drainage patterns by improving the distribution of storm water flow to the storm drain system. Storm water runoff from the Build Alternatives and Design Variations 2a and 6a would be collected and conveyed via the existing storm water infrastructure along with the newly constructed graded channel, headwalls, and sloped invert paving. All of the proposed drainage improvements would connect to the existing drainage system to maintain the existing drainage patterns and convey on-site storm water runoff. In addition, as required by Project Features PF-WQ-2 and PF-WQ-3 (Section 2.10), the project would include Treatment BMPs (a system of biofiltration swales and infiltration basins) to promote infiltration to potentially offset any increased flows associated with the increase in impervious surface from the project area and would potentially provide flow duration, volume, and rate control functions. By improving the existing drainage pattern and including infiltration basins and biofiltration swales, storm water flow concentrations associated with the project area would be the same as under current conditions. For these reasons, the project would result in only a negligible change in storm water flow velocities and volumes. Additionally, as detailed later in Threshold 3.2.10.1.c.iv, the new structures construction as part of the project would not increase flooding in the project area compared to existing conditions. Therefore, impacts related to increases in on-site or off-site flooding would be less than significant. No mitigation is required.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less Than Significant Impact. The project involves modification of an existing transportation facility. The project would not increase peak storm flows such that they would impact downstream drainage facilities. Compliance with the Construction General Permit, as described in Project Feature PF-WQ-1 (Section 2.10), would minimize any incremental pollutant loading associated with construction through implementation of construction BMPs to reduce pollutants of concern in storm water runoff. Compliance with the requirements of the Caltrans MS4 Permit, as described in Project Features PF-WQ-2 and PF-WQ-3 (Section 2.10), would minimize any incremental pollutant loading associated with the increased surface area of Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a through implementation of operational BMPs to reduce pollutants of concern in storm water runoff. Therefore, impacts related to the exceedance of the capacity of a storm water drainage system or provision of additional sources of polluted runoff would be less than significant. No mitigation is required.

iv. Impede or redirect flood flows?

Less Than Significant Impact. According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Nos. 06065C760G and 06065C0770G (August 28, 2008), there are no 100-year floodplains within the project area. Therefore, the project would not result in impacts related to the 100-year floodplain.

The California Department of Water Resources (DWR) has developed Awareness Floodplain Maps to identify all flood hazard areas that are not mapped under FEMA's National Flood Insurance Program (NFIP) and to provide communities and residents with an additional understanding of potential flood hazards currently not mapped as a regulated floodplain. According to the Sunnymead Quadrangle Awareness Floodplain Map, an Awareness Floodplain is within the project area. As detailed in Section 2.9, the City has not adopted and does not regulate the Awareness Floodplains; therefore, the larger portion of the Awareness Floodplain in the project area that is in Moreno Valley is not regulated. However, the smaller portion of the Awareness Floodplain in the northwest quadrant of the project area that is in unincorporated Riverside County is regulated by the local flood control agency (i.e., Riverside County Flood Control and Water Conservation District [RCFCWCD]). The RCFCWCD regulates the Awareness Floodplain in the same manner as a FEMA Zone A, Special Flood Hazard Area. FEMA Zone A floodplains are areas subject to inundation by the 100-year flood.

Based on hydraulic modeling conducted as part of the *Location Hydraulics Report and Summary Floodplain Encroachment Report* (October 2018), which is discussed in more detail in Section 2.9, it was determined that the boundaries of the Awareness Floodplain do not accurately represent the actual boundaries of the base flood. In fact, the portion of the project area within the Awareness Floodplain regulated by the RCFCWCD is largely free of flooding during a 100-year flood event. Additionally, only minor grading improvements would occur within the regulated Awareness Floodplain. The minor grading would not involve placement of structures that would impede or redirect flood flows.

The project would include improvements in areas that currently flood. However, based on the hydraulic modeling conducted for the project and summarized below, these improvements would not increase flood depths or impede or redirect flood flows. Flooding across SR-60 near the Redlands Boulevard interchange occurs in the existing condition. The project would not change the existing drainage patterns or increase the depth of flooding that occurs at this location. The project would also extend four culverts that cross under SR-60 from north to south. However, the depth of flow at the upstream end of the four cross culverts would remain the same as existing conditions or would be slightly reduced by the improved distribution of the streams along the toe of the proposed westbound on-ramp. Because the project would not change drainage patterns or increase flood depth, impacts related to impedance or redirection of flood flows would be less than significant. No mitigation is required.

d. Less Than Significant Impact

Due to the distance of the project site from the ocean (approximately 45 mi), there is no foreseeable risk of tsunami inundation. There is also no foreseeable risk from seiches (i.e., oscillations in enclosed bodies of water caused by seismic waves) in the project area due to the lack of bodies of water or hillsides in the project area. As discussed in Threshold 3.2.10.1.c.iv, a portion of the project site is subject to flooding. However, the project is an existing transportation facility and would not introduce a new use that would substantially change the pollutants that currently exist in the project area. In addition, the project would include operational BMPs to reduce pollutants from the transportation uses associated with the project. Therefore, the project would not substantially increase the risk of release of pollutants resulting from inundation. Impacts are less than significant, and no mitigation is required.

e. No Impact

The project is within the jurisdiction of the Santa Ana RWQCB. The Santa Ana RWQCB has adopted a Water Quality Control Plan (i.e., Basin Plan) (February 2016) [1] that designates beneficial uses for all surface and groundwaters within their jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. As discussed in Threshold 3.2.10.1.a, the project would comply with the applicable NPDES permits and implement construction and operational BMPs to reduce pollutants of concern in storm water runoff so that the project would not degrade water quality, cause the receiving waters to exceed the water quality objectives, or impair the beneficial use of receiving waters. Therefore, the project would not conflict with or obstruct implementation of the Basin Plan.

The Sustainable Groundwater Management Act (SGMA) was enacted in September 2014. SGMA requires governments and water agencies of high and medium priority basins[2] to halt overdraft of groundwater basins. SGMA requires the formation of local groundwater sustainability agencies (GSAs), who are required to adopt Groundwater Sustainability Plans to manage the sustainability of the groundwater basins. The Eastern Municipal Water District (EMWD) is the GSA for the San Jacinto Groundwater Basin, which is a high priority basin. EMWD will be developing a Groundwater Sustainability Plan in accordance with SGMA by January 31, 2022.[3] The San Timoteo Groundwater Sustainability Agency was formed by the City of Redlands, the San Gorgonio Pass Water Agency, the Beaumont Cherry Valley Water District, and the Yucaipa Valley Water District. The San Timoteo Groundwater Sustainability Agency manages the portion of the San Timoteo Groundwater subbasin that overlaps with the project area. The San Timoteo Groundwater subbasin is a very low priority basin; therefore, development of a Groundwater

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1 Santa Ana Regional Water Quality Control Board. 2019. Santa Ana Region Basin Plan. February.

2 California Department of Water Resources. Basin Prioritization. Website: https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization, accessed March 1, 2019.

3 Eastern Municipal Water District. 2018. West San Jacinto Groundwater Management Area 2017 Annual Report. June.

Sustainability Plan is not required.[1] Because there are currently no adopted Groundwater Sustainability Plans applicable to the groundwater basins within the project area, the project would not conflict with or obstruct the implementation of a sustainable groundwater management plan. Therefore, no impact would occur related to conflict or obstruction of water quality control plans or sustainable groundwater management plans, and no mitigation is required.

3.2.11 Land Use and Planning

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

3.2.11.1 CEQA Significance Determinations for Land Use and Planning

This section is based on information from the *Community Impact Assessment* (March 2019), and Sections 2.1 (Land Use) and 2.4 (Community Impacts) of this EIR/EA. The study area for the land use analysis (Land Use Study Area) is the community within and surrounding the proposed project site in which direct and indirect impacts of the project may occur. For this project, the Land Use Study Area includes the project area (i.e., the physical area that will be affected by the project) and the adjacent neighborhoods within Moreno Valley and unincorporated Riverside County (Census Tracts 424.01 and 426.22 within Moreno Valley and the part of Census Tract 426.24 that lies within the incorporated limits of the City of Moreno Valley[2]).

a. No Impact

The project site is currently developed with the existing SR-60 freeway facility, ramps, and access roads. Surrounding land uses in the vicinity of WLC Pkwy consist primarily of vacant land, but there is also a single-family residence and farm in the northeast quadrant of the interchange and a large warehouse/distribution center (i.e., Skechers) in the southwest quadrant of the interchange. Other existing land uses in the project vicinity include agriculture, commercial and services, facilities, industrial, residential, mobile homes and trailer parks, open space and recreation, transportation, communications, and utilities. The mix of urban uses and undeveloped land within the surrounding area does not constitute an established neighborhood. Therefore, the site would not be located within or divide an existing neighborhood. In contrast, the division of an established community usually results from the construction of a new feature such as a highway or railroad tracks or removal of access to a community. In addition, the project is an enhancement to the

1 San Timoteo Sustainable Groundwater Management Agency. Website: http://www.san timoteosgma.org/, accessed March 1, 2019.

2 The unincorporated part of Census Tract 426.24 is undeveloped and is more than 2 miles from the SR-60/WLC Pkwy interchange; therefore, the unincorporated part of Census Tract 426.24 has been excluded from the Land Use Study Area.

existing facility. The existing SR-60 freeway facility would still operate with implementation of this change of operations. Since the project would still result in the continuation of existing activities on the project site and since no division of community would occur, no impacts would occur. No mitigation measures are required.

b. No Impact

The project is consistent with the City's General Plan Circulation Element and does not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project; therefore, no impacts would occur. Any land use changes resulting from the Build Alternatives would be incorporated into the next regularly scheduled update of both the County's and the City's General Plan Land Use Element. No mitigation is required.

3.2.12 Mineral Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

3.2.12.1 CEQA Significance Determinations for Mineral Resources

The State Geologist is responsible for classifying and/or designating mineral deposits based on adopted criteria that address the resource development potential of a particular commodity. Areas are categorized into four Mineral Resources Zones (MRZs) based on geologic factors. MRZ-2 identifies significant mineral deposits of a particular commodity and is therefore the most important category.

a. No Impact

Based on the MRZs established by the California Department of Conservation, the project site is designated as an Urban Area and contains no MRZs.[1] The project site is currently developed with an existing freeway facility and local roadways. Implementation of the proposed project would result in the continual operation of the freeway facility. There are no deposits in the project area or in Moreno Valley that have been classified as MRZ-2 by the State Geologist. According to the Moreno Valley General Plan[2], the mineral resources known to be located within the study area are common materials: sand, gravel, and rock. Sand and gravel are used to

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1 California Department of Conservation, California Geologic Survey, CGS Information Warehouse: Mineral Land Classification. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc, accessed February 15, 2019.

2 City of Moreno Valley. July 2011. *City of Moreno Valley General Plan*. Website: http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/gp/gp-tot.pdf, accessed March 1, 2019.

make concrete and as road base. The project site is not located within a locally important mineral resource recovery site delineated in the Moreno Valley General Plan. The project site is not designated as an area with known significant mineral resource value. Implementation of the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. Therefore, no impacts would occur. No mitigation is required.

b. No Impact

Refer to Response 3.2.12.a above.

3.2.13 Noise

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b. Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

3.2.13.1 CEQA Significance Determinations for Noise

This section is based on Section 2.15, Noise, of this EIR/EA and the following documents prepared for the project:

- *Noise Study Report* (April 2019)
- *Noise Abatement Decision Report* (August 2019)

a. Significant and Unavoidable Impact

The projected construction traffic will be minimal when compared to existing traffic volumes on SR-60, Theodore Street/WLC Pkwy, and other affected streets, and its associated long-term noise level change will not be perceptible. Therefore, short-term construction-related worker commutes and equipment transport noise impacts would be less than substantial. Additionally, it is possible that the project may need to import soil from the City Stockpile borrow site at the northwestern corner of the intersection of Alessandro Boulevard/Nason Street, which would generate 13 trucks trips per day based on construction activity assumptions. When spread over a typical 8-hour workday, this volume of trucks would be minimal compared to the existing traffic volumes along the haul route. Therefore, short-term construction-related worker commutes and equipment transport noise impacts would be less than significant. No mitigation measures are required.

Noise levels during construction of the Build Alternative may impact noise-sensitive receptors. Typical construction noise levels may reach 87 dBA L_{max} (maximum instantaneous noise level measured in A-weighted decibels) at the closest residence, which is within 50 ft of the project construction areas and approximately 400 ft from where pile driving would occur. Project Feature PF-N-1 (Compliance with the construction hours specified by the City's Municipal Code and Caltrans Standard Specifications, Section 14-8.02, "Noise Control"), described in detail in Section 2.15.3.1 of this EIR/EA, would minimize construction noise impacts under the Build Alternatives and Design Variations 2a and 6a.

The Build Alternatives and Design Variations 2a and 6a would result in substantial increases in permanent noise levels at Receptors R-25 (except for Design Variation 6a) and R-28 and result in a potentially significant and unavoidable impact without mitigation. Implementation of mitigation measures in the form of NB Nos. 2 and 3, as described in Section 2.15.3.2 of this EIR/EA are required to reduce the level of impact from significant and unavoidable to less than significant with mitigation. However, if the property owners do not desire or accept the mitigation for installation of noise barriers on their property, the permanent noise levels would be significant and unavoidable under Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a. NB No. 2 at a minimum height of 6 ft would provide a noise reduction of 4 dBA, and NB No. 3 at a minimum height of 8 ft would also provide a noise reduction of 4 dBA.

With implementation of Mitigation Measure N-1,traffic noise levels would be reduced to 2045 without project traffic noise levels or below, and substantial increases in permanent noise levels would be reduced to less than significant. The location of NB No. 2 under Alternative 2, Design Variation 2a, and Alternative 6 (LPA) is shown on Figures 2.15-2 through 2.15-4, respectively, in Section 2.15. The location of NB No. 3 under Alternative 2, Design Variation 2a, Alternative 6 (LPA), and Design Variation 6a is shown on Figures 2.15-2 through 2.15-5, respectively, in Section 2.15. With implementation of Mitigation Measure N-1 below, potential noise impacts would be reduced from significant and unavoidable to a less than significant level.

N-1 Noise mitigation in the form of noise barriers will be implemented to reduce significant noise impacts at Receptors R-25 and R-28. During final design, the final height and length of the noise barrier will be determined. During construction, the construction contractor will construct the noise barrier as specified in the final design plans.

b. Less Than Significant Impact

The closest sensitive receptors are approximately 50 ft from the construction areas. The use of a large bulldozer during construction would generate the highest vibration level of 0.089 peak particle velocity (PPV) inches per second (in/sec) at a distance of 25 ft.

Sensitive receptors located approximately 50 ft from an active large bulldozer may be subject to a ground-borne vibration level of 0.031 PPV (in/sec). Although this vibration level is considered barely perceptible to humans and may result in community annoyance, this vibration level would be well below the damage threshold of 0.12 PPV (in/sec) for older residential structures and would not have the potential to damage nearby residential structures. Compliance with the construction hours

specified by the City's Municipal Code would minimize vibration impacts. Therefore, ground-borne vibration and ground-borne noise generated by project construction would be less than significant. No mitigation measures are required.

Ground-borne vibration from vehicles driving on the project facilities would not result in any measurable changes in vibration levels compared to the existing conditions. Therefore, vibration impacts are considered less than significant. No mitigation measures are required.

c. No Impact

The project site is not located within the vicinity of a private airstrip or an airport land use plan or within 2 miles of a public airport or public use airport. Therefore, implementation of the project would not expose people residing or working in the project area to excessive noise levels. No mitigation measures are required.

3.2.14 Population and Housing

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

3.2.14.1 CEQA Significance Determinations for Population and Housing

The potential for the project to result in impacts related to population and housing was assessed and is discussed in Section 2.3, Growth, and Section 2.4, Community Impacts, of this EIR/EA. The following discussion is based on that information.

a. Less Than Significant Impact

The Build Alternatives and Design Variations 2a and 6a are consistent with the General Plans of the City of Moreno Valley and the County of Riverside, as well as applicable RTPs. The proposed project would improve an existing freeway interchange in an area with existing development and substantial projected development based on General Plans and transportation plans for the area. The Build Alternatives and Design Variations 2a and 6a would accommodate approved and planned growth in the associated study area. The improvements identified under the two Build Alternatives and their respective design variations for the SR-60/WLC Pkwy interchange are unlikely to attract additional industrial development and new population into the Moreno Valley planning area despite the area being currently largely vacant, because build out of the areas surrounding the interchange is already anticipated and projected to occur by the City and region. Except for Design Variation 6a, the improvements to the SR-60/WLC Pkwy interchange are not anticipated to result in the rezoning or reclassification of lands surrounding the

interchange area in the community general plan from these existing land use designations to a more intensive land use. Design Variation 6a would require rezoning of some land currently designated for business park and light industrial land uses in the World Logistics Center Specific Plan.

Due to the lack of development currently existing within the area surrounding the planned interchange site, it is "reasonably foreseeable" that growth would occur, but this growth is not project-related because the proposed freeway interchange improvement is not a condition of approval for any of the future development projects in the area. The project would potentially accelerate the rate of growth in the area by making it more accessible, but would not result in new unplanned growth because the surrounding area is already designated for future land uses in accordance with the City of Moreno Valley General Plan, as discussed in 2.1, Land Use. The proposed project would not contribute to new, unplanned growth in the project area and would not induce substantial population growth in the area. Impacts are less than significant, and no mitigation is required.

b. Less Than Significant Impact

Design Variation 6a would result in one residential displacement. As discussed in Section 2.4 of this EIR/EA, there are sufficient residential resources available that are equal to or better than the displaced residential property displaced by the project within Moreno Valley. The project would displace one residence and would not result in the displacement of significant numbers of existing homes or people. Alternative 2 (including Design Variation 2a) and Alternative 6 (LPA) (without Design Variation 6a) would not acquire any residential land. The proposed project would not necessitate the construction of replacement housing elsewhere. Impacts are less than significant, and no mitigation is required.

3.2.15 Public Services

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

3.2.15.1 CEQA Significance Determinations for Public Services

The potential for the Build Alternatives and Design Variations 2a and 6a to result in impacts related to the provision of emergency services is discussed in Section 2.5, Utilities and Emergency Services, of this EIR/EA. The following discussion is based on that information. Given the scope of Design Variations 2a and 6a, potential impacts related to public services would be the same for each Build Alternative and its respective design variation.

a. i–v. Less Than Significant Impact

During construction, traffic would be temporarily detoured in conjunction with short-term ramp closures and/or delayed due to lane closures, which could potentially result in a temporary increase in emergency response times in the project area. Implementation of Project Feature PF-TR-1 (described in Section 2.6, Traffic and Transportation/Pedestrian and Bicycle Facilities), requiring preparation of a TMP, would minimize impacts to emergency response times in the project area. Therefore, impacts would be less than significant, and no mitigation is required.

After completion of construction, the proposed project is expected to reduce congestion at the SR-60/WLC Pkwy interchange. The project does not include the construction of structures or features or changes in operation that would increase demand on public services for the project site or area.

The project does not include the construction of housing or other uses that would necessitate the construction of additional public facilities such as schools or parks in the project area. The proposed project would not result in significant physical impacts to government facilities in the study area. Impacts are less than significant, and no mitigation is required.

3.2.16 Recreation

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.2.16.1 CEQA Significance Determinations for Recreation

The potential for Alternatives 2 and 6 (LPA) (and Design Variations 2a and 6a) to result in impacts related to recreation is discussed in Section 2.1, Land Use, of this EIR/EA. The following discussion is based on that information.

a. No Impact

No residential component or other use that would cause a direct or indirect increase in population is planned; therefore, no direct or indirect demand on neighborhood/regional parks or recreational facilities would occur. Therefore, implementation of the project would not result in a substantial physical deterioration of a recreational facility. No impacts would occur; therefore, no mitigation is required.

b. No Impact

The project consists of improvements to existing roadways and freeway interchanges. As previously stated, no residential component or other use that would cause a direct or indirect increase in population is planned. Therefore, no development or expansion of recreational facilities is required. No impact would occur, and no mitigation is required.

3.2.17 Transportation

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

3.2.17.1 CEQA Significance Determinations for Transportation

The potential for the Build Alternatives and Design Variations 2a and 6a to result in impacts related to transportation is discussed in Section 2.6, Traffic and Transportation/Pedestrian and Bicycle Facilities, of this EIR/EA. The following discussion is based on that information.

a. Less Than Significant Impact

The project consists of improvements to existing roadways and freeway interchanges. Implementation of the project would not cause an increase in traffic that would result in a deficient level of service (LOS) at intersections or along freeway segments with the implementation of Project Features. Implementation of Project Feature PF-TR-1 (Section 2.6) requires preparation of a TMP. The TMP would minimize potential traffic impacts to motorists, bicyclists, and pedestrians

traveling through the project area during project construction. Furthermore, implementation of Project Feature PF-TR-2 (Section 2.6) would reduce permanent LOS impacts under Alternative 2 and/or Design Variation 2a, while implementation of Project Feature PF-TR-3 (Section 2.6) would reduce permanent LOS impacts under Alternative 6 (LPA) and/or Design Variation 6a. Therefore, impacts would be less than significant, and no mitigation is required.

b. Less Than Significant Impact

The proposed roadway and freeway interchange improvements are not projected to result in a significant increase in VMT. Currently, there are transit services (i.e., Riverside Transit Agency [RTA] local and regional bus services) in the project area. The Build Alternatives, including their respective design variations, include the construction of bike lanes on WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue. As shown in Table 3.5 in Section 3.3, Climate Change, annual VMT for existing conditions is 24,575,948. While the projected VMT for either Build Alternative would increase over existing conditions to 37,010,238 in 2025 and 67,306,279 in 2045, the VMT increase is attributable to ambient growth in the project area and is not a result of the project (as evidenced by the identical VMT value of the No Build Alternative for both future scenarios). Therefore, impacts are considered to be less than significant, and no mitigation is required.

c. Less Than Significant Impact

The proposed roadway and freeway interchange improvements would not increase hazards due to design features because the construction of the project would be required to adhere to Caltrans design standards. However, there are existing non-standard curb ramps in the project vicinity that would require updating to meet Americans with Disabilities Act (ADA) requirements for accessibility. No additional access or roadway improvements have been proposed that would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Impacts are less than significant, and no mitigation is required.

d. Less Than Significant Impact

Construction activities associated with the project would result in temporary road detours and access restrictions during construction, which may result in some impairment to the delivery of services, including fire and police response. However, significant disruptions to the local access network within the study area are not anticipated with implementation of a TMP. Implementation of Project Feature PF-TR-1 (Section 2.6) would ensure that impacts remain less than significant in relation to emergency access. No mitigation is required.

3.2.18 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	**Significant and Unavoidable Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

3.2.18.1 CEQA Significance Determinations for Tribal Cultural Resources

This section is based on the *Historic Property Survey Report* (June 2019), the *Archaeological Survey Report* (June 2019), the *Historical Resources Evaluation Report* (June 2019), and Section 2.8, Cultural Resources, of this EIR/EA. Given the scope of Design Variations 2a and 6a, potential impacts related to tribal cultural resources would be the same for each Build Alternative and its respective design variation.

a. Less Than Significant Impact

Based on the results of the *Historic Property Survey Report* (June 2019), the *Archaeological Survey Report* (June 2019), and the *Historic Resources Evaluation Report* (June 2019), it was determined that the only cultural resources within the project limits are not eligible for inclusion in the NRHP and do not qualify as "historical resources" pursuant to CEQA, or are exempt per the Section 106 PA. One historic period can scatter (i.e., historic period refuse) and one 1940s residence were identified within the APE during the survey; however, both of these resources meet the criteria for exemption from evaluation under Attachment 4 of the Caltrans PA.

Based on comments provided by the Pechanga Band of Luiseño Mission Indians (Pechanga) and the Morongo Band of Mission Indians (Morongo), the project site and vicinity has been identified as an area of cultural sensitivity with the potential to contain tribal cultural resources based on their historic cultural affiliation to the project area. In the event that previously unknown tribal cultural resources are encountered during construction, compliance with Project Features PF-CR-1 and PF-CR-2 (Section 2.8), which are Caltrans Standard Measures, would avoid and/or minimize potential impacts to previously unknown tribal cultural resources. Consultation under CEQA and Section 106 of the National Historic Preservation Act (NHPA) for this EIR/EA was completed as of August 28, 2019. Impacts are considered to be less than significant, and no mitigation is required.

b. Less Than Significant Impact

Good faith government-to-government consultation took place pre-Assembly Bill (AB) 52 compliance and is documented in Chapter 4 of this EIR/EA. AB 52 is triggered with the publication of a Notice of Intent to adopt a Negative Declaration or a Mitigated Negative Declaration after July 1, 2015. AB 52 government-to-government consultation was initiated with Tribes that have notified Caltrans in writing to consult on any projects within the area of this project in October and November of 2013. All consulting Tribes are in receipt of an AB 52 consultation letter from Caltrans. All designated individuals/groups were notified of revisions to the APE in April 2015. There were no respondents.

Those individuals/groups who participated in the initial consultation and did not submit comments/concerns regarding the project, that did not defer to other Tribes, or that did not respond in 2015 were notified of further revisions to the APE from July through December 2018. The Cahuilla Band of Cahuilla Indians (Cahuilla), Morongo, and the Soboba Band of Luiseño Indians (Soboba) requested Tribal participation in the final survey. Morongo indicated the detour routes are areas of interest, and Soboba requested “new tribal scoping” (i.e., government-to-government consultation) from Caltrans. There were no other respondents.

During the AB 52 consultation meetings, the Soboba, Morongo, Cahuilla, and Pechanga Tribes made very similar statements and requests. During the Section 106 cultural study, no cultural resources had been identified within the project footprint. Because of the general sensitivity of the area surrounding the project footprint, all interested Tribes have requested monitoring of any ground disturbance of native soils during construction.

To ensure that the project would not result in a substantial adverse change in the significance of a tribal cultural resource, Project Features PF-CR-1 and PF-CR-2 (Section 2.8), which are Caltrans Standard Measures, would avoid and/or minimize potential impacts to previously unknown tribal cultural resources. Impacts would be less than significant, and no mitigation is required.

3.2.19 Utilities and Service Systems

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

3.2.19.1 CEQA Significance Determinations for Utilities and Service Systems

The potential for the Build Alternatives and Design Variations 2a and 6a to result in impacts specific to utilities and service systems is discussed in Section 2.5, Utilities and Emergency Services, of this EIR/EA. The following is based on that information.

a. No Impact

The proposed project would improve an existing transportation facility. Water would be used during construction to reduce fugitive dust in compliance with SCAQMD Rules 402 and 403. Based on available funding, landscaping would be provided as part of the proposed project. Landscape irrigation would result in a minimal increase in water demand within the project area compared to existing conditions. The amount of water used during construction and operation would be minimal, and water use for construction would cease when construction is completed. No wastewater would be generated as a result of construction or operation of the proposed project. Therefore, the project would not require or result in the construction or relocation of new water or wastewater treatment facilities or the expansion of existing facilities. No impact to existing water and water treatment facilities would occur as a result of the proposed project. No mitigation is required.

b. Less Than Significant Impact

The proposed project involves improvements to an existing transportation facility and is not anticipated to result in additional future development outside of routine operation and maintenance. Therefore, because the proposed project includes improvements to an existing facility, the implementation of the Build Alternatives and

Design Variations 2a and 6a is not anticipated to generate a substantial demand for water over existing conditions. The project's Landscape Concept Plan would be consistent with the aesthetic guidelines prescribed in the *State Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits* (Corridor Master Plan),[1] which identifies the following related to landscaping: employ decorative rock and inert materials, use materials reflecting the character of the area, recommend appropriate plants for a lasting roadside environment, and implement water conservation techniques. Therefore, the proposed project would have sufficient water supplies available to serve the project during normal, dry, and multiple dry years.

c. No Impact

The proposed project involves improvements to an existing transportation facility. Refer to Response 3.2.19.1.a above. It would not require or result in demand for new wastewater treatment capacity. No mitigation is required.

d. Less Than Significant Impact

The solid waste disposal requirements for the proposed project would primarily occur during the construction phase of the proposed project. The amount of waste material generated during construction would be limited and properly disposed of and/or recycled, as appropriate.

Waste collected during road maintenance associated with operation of the proposed project would be limited and similar to the amounts of waste collected during maintenance of the existing SR-60/WLC Pkwy interchange. The proposed project would not generate a significant amount of waste during construction or operation. No mitigation is required.

e. No Impact

Construction waste would be disposed of in accordance with federal, State, and local regulations related to recycling, including the California Integrated Waste Management Act (AB 939), which would minimize the amount of waste material entering local landfills. Operation of the completed project would generate very limited waste material, and this material would be disposed of consistent with City policies for waste management. Therefore, no mitigation is required.

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[1] California Department of Transportation, District 8. August 2010. *State Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits*. Website: http://www.moval.org/city_hall/departments/pub-works/pdf/sr60corridor-mp1010.pdf, accessed February 8, 2019.

3.2.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

3.2.20.1 CEQA Significance Determinations for Wildfire

The discussion on the potential for the Build Alternatives and Design Variations 2a and 6a to result in impacts related to wildfire is based on evaluation of California Fire Hazard Severity Maps, goals/policies in the City of Moreno Valley General Plan, and the following sections in this EIR/EA: Section 2.5, Utilities and Emergency Services; Section 2.6, Traffic and Transportation/Pedestrian and Bicycle Facilities; and 2.11, Geology/Soils/Seismic/Topography. Given the scope of Design Variations 2a and 6a, potential impacts related to wildfires would be the same for each Build Alternative and its respective design variation.

a. Less Than Significant Impact

The project is near a Local Very High Severity Wildfire area, a State High Severity area, and a State Moderate Severity Area.[1] However, the operation of the proposed project would improve accessibility and mobility in the area and reduce traffic congestion thereby enabling emergency response and evacuation plans to function effectively.

As discussed in Section 2.6, traffic delays are expected during construction of the new ramps, the SR-60/WLC Pkwy Overcrossing, and modifications to local intersections. Construction of the project would potentially result in temporary delays on Ironwood Avenue, Eucalyptus Avenue, Gilman Springs Road, and Alessandro Boulevard due to the proposed detour routes for the WLC Pkwy closure between Eucalyptus Avenue and Ironwood Avenue for removal and reconstruction of the existing SR-60/WLC Pkwy Overcrossing. Construction of the overcrossing requires full closure of both the eastbound and westbound SR-60 mainlines. Traffic is expected to be diverted to Interstate (I-) 10. A TMP with traffic control plans and related specifications for the project is necessary to avoid and/or minimize circulation

[1] California Department of Forestry and Fire Protection (CAL FIRE) Hazard Severity Zone Viewer. Website: http://egis.fire.ca.gov/FHSZ/, accessed February 5, 2019.

and delay impacts. With implementation of the TMP as described in Project Feature PF-TR-1 (Section 2.6), impacts would be less than significant. No mitigation is required.

The project does not include any elements (e.g., permanent road closure or long-term blocking of road access) that would impair or otherwise interfere with emergency response or evacuation in the project area. The proposed project would improve accessibility and mobility at the SR-60/WLC Pkwy interchange compared to the No Build Alternative. As discussed in Section 2.5, the improvements in traffic flow are likely to improve emergency response times within the project area. The City of Moreno Valley identifies four future fire station sites proximate to the project site (City of Moreno Valley General Plan Safety Element, Figure 6-1[1]). The Build Alternatives and Design Variations 2a and 6a would reduce traffic congestion and improve emergency response times for current and future emergency responders.

b. No Impact

The project proposes roadway improvements to an existing freeway overcrossing, freeway on- and off-ramps, and neighboring arterial streets. The project will not increase exposure to existing risks within the project area and therefore will not expose local occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

Due to the project site's proximity to the Badlands, there is some potential for exacerbated risks in the project vicinity associated with wildfire pollutants and/or exposure to the spread of a wildfire. However, the project site and adjacent areas are relatively flat and lack natural slopes. The proposed project would not result in an increase in the population within the project area and would not exacerbate wildfire risks.

Though winds may occur that exacerbate pollutant concentrations from a wildfire or contribute to the uncontrolled spread of a wildfire, the project does not increase the population or personnel in the area compared to the No Build Alternative and therefore would not increase existing risks.

c. No Impact

Though the proposed project would improve SR-60 in Moreno Valley and require the demolition and installation of an overcrossing at WLC Pkwy, the implementation of these features does not exacerbate fire risk. The project does not require the installation or maintenance of fuel breaks, emergency water sources, power lines, or other utilities.

d. No Impact

According to the City of Moreno Valley General Plan (2006), there is some potential for landslides in the region because the slopes of the Badlands are steep and the underlying geologic material is poorly consolidated. However, the project proposes

[1] Safety Element, City of Moreno Valley General Plan. Website: http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/gp/6-safety.pdf, accessed February 5, 2019.

roadway improvements to an existing freeway overcrossing, freeway on- and off-ramps, and neighboring arterial streets. Highway projects do not increase the population in the project area and therefore do not present an increased risk compared to the No Build Alternative. Structures in the project area are approximately 1 mi from the foothills of the natural hills and slopes. At this distance, there would be no increased wildfire risk because SR-60 and the interchange are existing facilities and lack combustible materials and vegetation between the project limits and the natural hills and open space. Additionally, a 2002 California Geologic Survey found that the slopes store relatively little debris and may have a decreased potential for debris flows along SR-60 in the project area.[1] Therefore, structures in the project area would not be impacted by downslope or downstream flooding or landslides. No mitigation is required.

3.2.21 Mandatory Findings of Significance

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

3.2.21.1 CEQA Significance Determinations for Mandatory Findings of Significance

a. Less Than Significant Impact

As discussed in Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures, in this EIR/EA and CEQA evaluation, the potential impacts of the Build Alternatives and Design Variations 2a and 6a that are related to biological and cultural resources are either below a level of significance or can be reduced to below a level of significance based on implementation of the Project Features incorporated in the Build Alternatives. As a result, the Build Alternatives and Design Variations 2a and 6a do not have the potential to directly or indirectly impact biological and cultural resources that would

[1] Department of Conservation, California Geological Survey. 2002. *Landslides in the Highway 60 Corridor, San Timoteo Badlands, Riverside County, California*.

degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

b. Significant and Unavoidable Impact

As documented in Section 2.22, Cumulative Impacts, in this EIR/EA, project-related cumulative impacts would not occur under the following environmental topics: growth, plant species, farmlands and timberlands, community impacts, traffic and transportation/pedestrian and bicycle facilities, cultural resources, geology/soils/ seismic/topography, or natural communities.

The project would have impacts that are individually limited but are not cumulatively considerable with implementation of Project Features and mitigation and minimization measures, with the exception of GHG emissions and climate change. No measures beyond those identified in Sections 2.1 through 2.21 are required to address the effects of the Build Alternatives and Design Variations 2a and 6a, including potential cumulative effects to land use, utilities/emergency services, visual/aesthetics, hydrology and floodplains, water quality and storm water runoff, paleontology, hazardous waste and materials, air quality, wetlands and other waters, animal species, threatened and endangered species, and invasive species. Implementation of the Project Features, Mitigation Measure PAL-1, and Mitigation Measure N-1 (described in this CEQA Evaluation) would reduce cumulative impacts to a less than significant level. However, if the property owners do not desire or accept the mitigation for installation of noise barriers on their property (Mitigation Measure N-1), the permanent noise levels would be significant and unavoidable under Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a.

The project would improve traffic operations and reduce GHG emissions compared to the No Build condition; however, because it would not reduce GHG emissions from the existing condition, it would not contribute to achieving statewide GHG emissions reduction goals. The impact would be significant and unavoidable.

Project operational features such as bicycle and pedestrian improvements and construction GHG-reduction measures would reduce the impact, but not to a less-than-significant level. Accordingly, the overall impact on GHGs would be significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in Section 3.4.7.

c. Significant and Unavoidable Impact

As discussed in Section 3.2.13, Noise, the Build Alternatives and Design Variations 2a and 6a would result in substantial increases in permanent noise levels at Receptors R-25 (except for Design Variation 6a) and R-28, and would result in a potentially significant and unavoidable impact without mitigation. Implementation of Mitigation Measure N-1 in the form of NB Nos. 2 and 3, as described in Section 2.15.3.2 of this EIR/EA, are required to reduce the level of impact from significant and unavoidable to less than significant with mitigation. However, if the property

owners do not desire or accept the mitigation for installation of noise barriers on their property, the permanent noise levels would be significant and unavoidable under Alternatives 2 and 6 (LPA) and Design Variations 2a and 6a.

As discussed in this CEQA evaluation, except for GHG emissions, the Build Alternatives would not result in significant adverse impacts after implementation of Project Features and/or Mitigation Measures. GHG emissions would still be a significant unavoidable impact under CEQA because future GHG emissions with the Build Alternatives would be greater than existing GHG emissions. As described above in Response b., project operational features such as bicycle and pedestrian improvements and construction GHG-reduction measures would reduce the impact, but not to a less-than-significant level. Accordingly, the overall impact on GHGs would be significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in Section 3.4.7.

3.3 Wildfire

3.3.1 Regulatory Setting

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to develop amendments to the "CEQA Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as very high fire hazard severity zones. The 2018 updates to the CEQA Guidelines expanded this to include projects "near" these very high fire hazard severity zones.

3.3.2 Affected Environment

This section describes the potential for the Build Alternatives and Design Variations 2a and 6a to result in impacts related to wildfire. The proposed project is near a Local Very High Severity Wildfire area, a State High Severity area, and a State Moderate Severity Area.[1] Figure 3-1 shows the location of the project in relation to the Local Very High Severity Wildlife area.

3.3.3 Environmental Consequences

The operation of the proposed project would improve accessibility and mobility in the project area and reduce traffic congestion, thereby enabling emergency response and evacuation plans to function effectively. The City of Moreno Valley maintains an Emergency Operations Plan,[2] which provides guidance for the City's response to extraordinary emergency situations associated with natural, man-made, and technological disasters.

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1 California Department of Forestry and Fire Protection (CAL FIRE) Hazard Severity Zone Viewer. Website: http://egis.fire.ca.gov/FHSZ/, accessed February 5, 2019.

2 Emergency Operations Plan, City of Moreno Valley. Website: http://www.moreno-valley.ca.us/city_hall/departments/fire/pdfs/MV-EOP-2019.pdf, accessed December 16, 2019.

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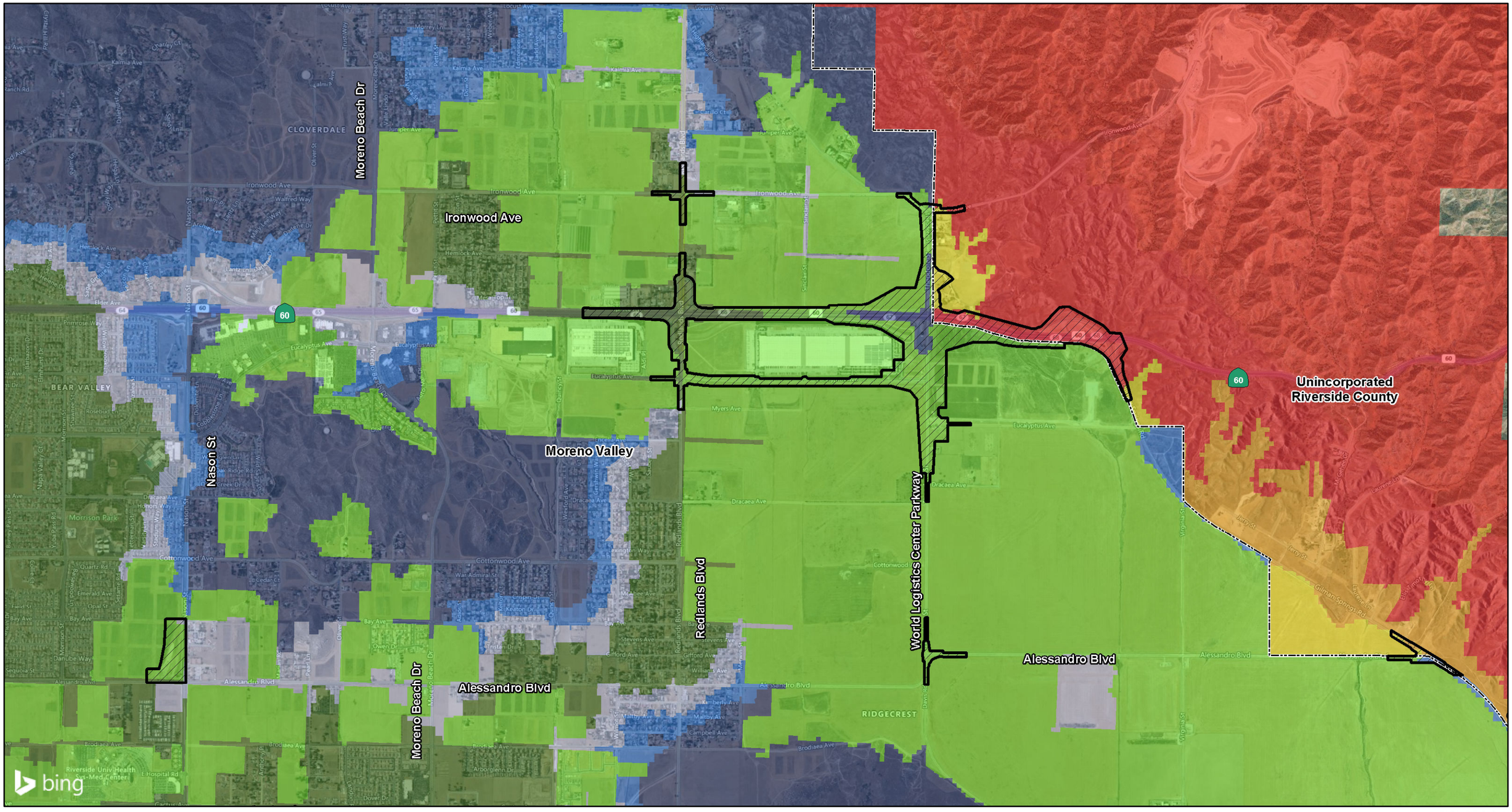

LEGEND

- Project Area
- City/County Boundary

Fire Hazard Severity Zones in State Responsibility Area (SRA)

- Moderate
- High
- Very High

Fire Hazard Severity Zones in Local Responsibility Area (LRA)

- Moderate
- High
- Very High
- Non-Wildland/Non-Urban
- Urban Unzoned

0 1000 2000
FEET

SOURCE: Bing Maps (2018); CalFire (2012); RBF (2015)

I:\RBF1301\GIS_Mod\MXD\Wilfires\Wildfires.mxd (12/19/2019)

FIGURE 3.3-1

SR-60/World Logistics Center Pkwy Interchange Project

Fire Hazard Severity Zones

08-RIV-60

PM 20.0/22.0

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The proposed project does not include any elements (e.g., permanent road closure or long-term blocking of road access) that would impair or otherwise interfere with emergency response or evacuation in the project area. Operation of the proposed project would improve accessibility and mobility at the SR-60/WLC Pkwy interchange compared to the No Build Alternative. As discussed in Section 2.5, the improvements in traffic flow are likely to improve emergency response times within the project area. The City of Moreno Valley identifies four future fire station sites proximate to the project site (City of Moreno Valley General Plan Safety Element, Figure 6-1[1]).

Traffic delays are expected during construction of the proposed project. Construction of the proposed project would potentially result in temporary delays within the project area due to the proposed detour routes for the WLC Pkwy closure between Eucalyptus Avenue and Ironwood Avenue for removal and reconstruction of the existing SR-60/WLC Pkwy Overcrossing. Construction of the overcrossing requires full closure of both the eastbound and westbound SR-60 mainlines. Traffic is expected to be diverted to I-10. A TMP with traffic control plans and related specifications for the project is necessary to avoid and/or minimize circulation and delay impacts.

The proposed project will not increase exposure to existing risks within the project area and therefore will not expose local occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Although winds may occur due to the project site's proximity to the Badlands, there is some potential for exacerbated risks in the project vicinity associated with wildfire pollutants and/or exposure to the spread of a wildfire. However, the project site and adjacent areas are relatively flat and lack natural slopes. The proposed project would not result in an increase in the population within the project area and would not exacerbate or increase existing wildfire risks. Though the proposed project would improve SR-60 in Moreno Valley and require the demolition and installation of an overcrossing at WLC Pkwy, the implementation of these features does not exacerbate fire risk. The project does not require the installation or maintenance of fuel breaks, emergency water sources, power lines, or other utilities.

According to the City of Moreno Valley General Plan (2006), there is some potential for landslides in the region because the slopes of the Badlands are steep and the underlying geologic material is poorly consolidated. However, the proposed project includes roadway improvements to an existing freeway overcrossing, freeway on- and off-ramps, and neighboring arterial streets. Highway projects do not increase the population in the project area and, therefore, do not present an increased risk compared to the No Build Alternative. Structures in the project area are approximately 1 mi from the foothills of the natural hills and slopes. At this distance, there would be no increased wildfire risk because SR-60 and the interchange are existing facilities and lack combustible materials and vegetation between the project limits, the natural hills, and open space. Therefore, structures in the project area would not be impacted by downslope or downstream flooding or landslides.

[1] Safety Element, City of Moreno Valley General Plan. Website: http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/gp/6-safety.pdf, accessed February 5, 2019.

3.3.4 Avoidance, Minimization, and/or Mitigation Measures

Based on the above discussion and analysis, the proposed project would not result in impacts related to wildfire. No avoidance, minimization, or mitigation measures are required.

3.4 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to GHG emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

3.4.1 Regulatory Setting

This section outlines federal and State efforts to comprehensively reduce GHG emissions from transportation sources.

3.4.1.1 Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and

incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019).[1] This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (FHWA n.d.).[2] Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.[3]

Energy Policy Act of 2005, 109th Congress House Resolution 6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA, in conjunction with the National Highway Traffic Safety Administration (NHTSA), is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

3.4.1.2 State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

- **EO S-3-05 (June 1, 2005):** The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

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1 Federal Highway Administration (FHWA). 2019. Sustainability. Website: https://www.fhwa.dot.gov/environment/sustainability/resilience/, accessed January 2020.

2 Federal Highway Administration (FHWA). No date. Sustainable Highways Initiative. Website: https://www.sustainablehighways.dot.gov/overview.aspx, accessed January 2020.

3 U.S. Department of Transportation (U.S. DOT). 2018. *National Highway Traffic Safety Administration Corporate Average Fuel Economy*. Website: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy, accessed January 2020.

- **AB 32, Chapter 488, 2006:** Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (CARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code Section 38551(b)). The law requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

- **EO S-01-07 (January 18, 2007):** This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals.

- **SB 375, Chapter 728, 2008, Sustainable Communities and Climate Protection:** This bill requires CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a Sustainable Communities Strategy (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

- **SB 391, Chapter 585, 2009, California Transportation Plan:** This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

- **EO B-16-12 (March 2012)** orders State entities under the direction of the Governor, including CARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

- **EO B-30-15 (April 2015)** establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$). Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every three years, and to ensure that its provisions are fully implemented.

- **SB 32, Chapter 249, 2016,** codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

- **SB 1386, Chapter 545, 2016,** declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

- **AB 134, Chapter 254, 2017,** allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

- **SB 743, Chapter 386 (September 2013):** This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicles miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

- **SB 150, Chapter 150, 2017, Regional Transportation Plans:** This bill requires CARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

- **EO B-55-18 (September 2018)** sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

- **EO N-19-19 (September 2019)** advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs CARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

3.4.2 Environmental Setting

The proposed project is at the edge of an urban setting in Moreno Valley. The northeast quadrant of the interchange is in unincorporated Riverside County and within the City of Moreno Valley's sphere of influence. Approximately 61 percent of the acreage in the project area is designated Vacant, followed by Open Space and Recreation at approximately 18 percent, and Agriculture at approximately 3 percent. Other land uses in the study area include commercial, services, facilities, industrial, residential, mobile homes and trailer parks, transportation, communications, and utilities.

Moreno Valley is bounded on three sides by mountains and hills. The SR-60/WLC Pkwy interchange and the other SR-60 interchanges in Moreno Valley provide regional access to the city. I-10, a major interstate, connects to SR-60 approximately 8.5 mi east of WLC Pkwy in Beaumont. SR-60 provides a regional connection between Los Angeles, Riverside, and San Bernardino Counties through its interchanges with I-215, I-10, SR-71, SR-57, I-605, I-710, and I-5. The project area and its vicinity are served by the Riverside Transit Agency (RTA). The RTA provides extensive fixed-route bus systems. RTA routes and the Amtrak Thruway and Neighborhood operate within Moreno Valley.

SR-60 is functionally classified as an Urban Principal Arterial serving intraregional, interregional, and interstate travel. It is a major truck route; 16 percent of the annual average daily traffic on SR-60 in the project vicinity is truck traffic. WLC Pkwy is in the eastern half of Moreno Valley, designated in the City's Circulation Plan as a Minor Arterial north of Eucalyptus Avenue and as a Major Arterial south of Eucalyptus Avenue.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. The U.S. EPA is responsible for documenting GHG emissions nationwide, and the CARB does so for the State, as required by H&SC Section 39607.4.

3.4.2.1 National GHG Inventory

The EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO_2, CH_4, N_2O, HFCs, perfluorocarbons, SF_6, and nitrogen trifluoride. It also accounts for emissions of CO_2 that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO_2 (carbon sequestration). The 1990–2016 inventory found that of 6,511 $MMTCO_2e$ GHG emissions in 2016, 81 percent consist of CO_2, 10 percent are CH_4, and 6 percent are N_2O; the balance consists of fluorinated gases (EPA 2018a).[1] In 2016, GHG emissions from the transportation sector accounted for nearly 28.5 percent of U.S. GHG emissions.

[1] U.S. Environmental Protection Agency (EPA). 2018. Inventory of U.S. Greenhouse Gas Emissions and Sinks. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks, accessed August 21, 2019.

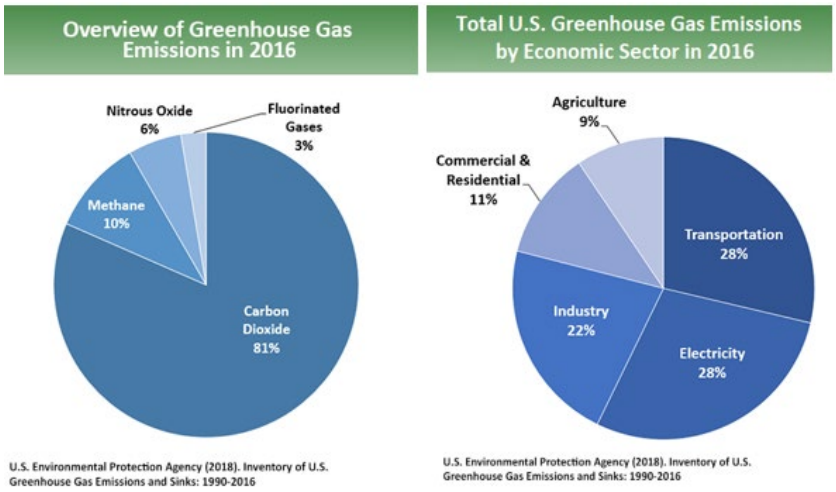


Figure 3-2 U.S. 2016 Greenhouse Gas Emissions

3.4.2.2 State GHG Inventory

CARB collects GHG emissions data for transportation, electricity, commercial/ residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 $MMTCO_2e$ for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (CARB 2019a).[1]

AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. CARB adopted the first scoping plan in 2008. The second updated plan, California's 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

3.4.2.3 Regional Plans

CARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plans/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is within the jurisdiction of the SCAG Regional Transportation Planning Agency (RTPA). The 2016 RTP/SCS identifies the following discussed GHG emissions reduction goals.

[1] California Air Resources Board (CARB). 2019a. California Greenhouse Gas Emissions Inventory–2019 Edition. Website: https://ww3.arb.ca.gov/cc/inventory/data/data.htm, accessed August 21, 2019.

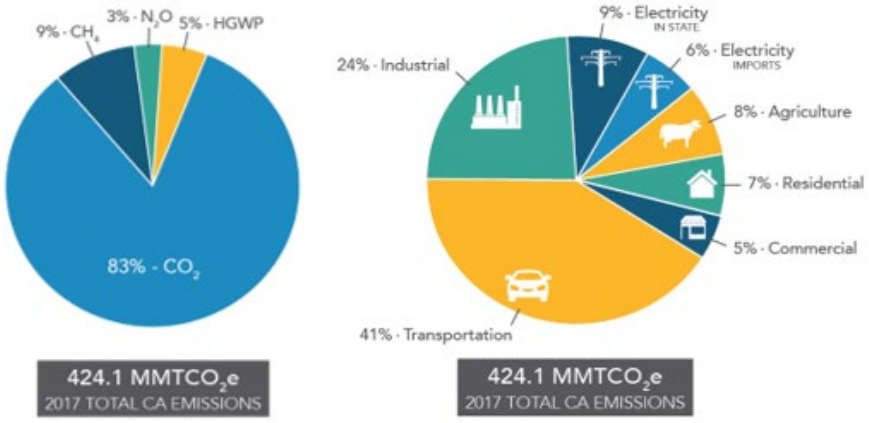


Figure 3-3 California 2017 Greenhouse Gas Emissions

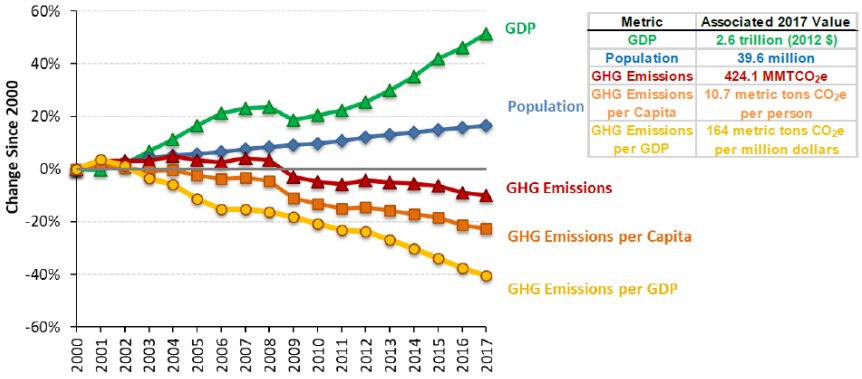


Figure 3-4 Change in California GDP, Population, and GHG Emissions Since 2000 (*Source*: CARB 2019b)[1]

The regional reduction targets for SCAG are 8 percent by 2020 and 19 percent by 2035 (ARB 2019c).[2] The proposed project is listed in the 2016 financially constrained RTP/SCS Amendment No. 3. The Riverside County Congestion Management Program (CMP) and the Circulation Element of the City of Moreno Valley's General Plan (2006) also address transportation sustainability in the project area. The *City of Moreno Valley's Greenhouse Gas Analysis* (2012) established goals and policies that incorporate environmental sustainability in management of the City's resources and infrastructure. The City established a goal of reducing its GHG emissions from all sectors by 15 percent below 2007 levels by 2020 to help meet the statewide GHG reduction goals of AB 32. The *City of Moreno Valley Energy Efficiency and Climate*

1 California Air Resources Board (CARB). 2019b. California Greenhouse Gas Emissions for 2000 to 2017. Trends of Emissions and Other Indicators. Website: https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf, accessed August 21, 2019.

2 California Air Resources Board (CARB). 2019c. SB 375 Regional Plan Climate Targets. Website: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets, accessed August 21, 2019.

Action Strategy (2012) recommends energy and GHG reduction measures similar to and consistent with those within the City of Moreno Valley Greenhouse Gas Analysis, City and County general plans, and the RTP/SCS. Examples of policies related to GHGs and sustainability are listed in Table 3.9.

Table 3.9 Regional Plans and Policies Related to Greenhouse Gases

Title	GHG Reduction Policies or Strategies
Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (adopted April 7, 2016)	● Preserve Our Existing System ● Manage Congestion ● Transportation Systems Management
Riverside County General Plan	**Land Use Element** ● **Policy LU 2.1k(f):** Site development to capitalize upon multi-modal transportation opportunities and promote compatible land use arrangements that reduce reliance on the automobile. ● **Policy LU 11.4:** Provide options to the automobile in communities, such as transit, bicycle and pedestrian trails, to help improve air quality. ● **Policy LU 13.4:** Incorporate safe and direct multi-modal linkages in the design and development of projects, as appropriate. **Circulation Element** ● **Policy C 1.2:** Support development of a variety of transportation options for major employment and activity centers including direct access to transit routes, primary arterial highways, bikeways, park-n-ride facilities and pedestrian facilities. ● **Policy C 1.7:** Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers. ● **Policy C 5.2:** Encourage the use of drought-tolerant native plants and the use of recycled water for roadway landscaping. ● **Policy C 20.14 (Previously C 20.12):** Encourage the use of alternative non-motorized transportation and the use of non-polluting vehicles.
Riverside County General Plan Amendments (Adopted July 17, 2018)	**Air Quality Element** ● **Policy AQ 20.1:** Reduce VMT by requiring expanded multi-modal facilities and services that provide transportation alternatives, such as transit, bicycle and pedestrian modes. Improve connectivity of the multi-modal facilities by providing linkages between various uses in the developments. ● **Policy AQ 20.3:** Reduce VMT and GHG emissions by improving circulation network efficiency. **Circulation Element (Amendment No. 960 – Public Review Draft, February 2015)** ● **Policy C 1.8:** Ensure that all development applications comply with the California Complete Streets Act of 2008 as set forth in California Government Code Sections 65040.2 and 65302.

Table 3.9 Regional Plans and Policies Related to Greenhouse Gases

Title	GHG Reduction Policies or Strategies
Riverside County Climate Action Plan (2018)	**Transportation Measures** ● **R2-T5:** Roadway Improvements including Signal Synchronization and Transportation Flow Management ● **R2-T6:** Provide a Comprehensive System of Facilities for Non-motorized Transportation ● **R2-T8:** Anti-Idling Enforcement **Energy Measures** ● **R2-E8:** Induction Streetlight Retrofits
Western Riverside Council of Governments Subregional Climate Action Plan (2014)	**Measure SR-11:** Goods Movement **Measure T-1:** Bicycle Infrastructure Improvements
City of Moreno General Plan (Adopted 2006)	**Parks, Recreation, and Open Space Element** ● Trails System Policies 4.3.1, 4.3.2, 4.3.4 ● Programs Policies 4-3, 4-10, 4-12, 4-13 **Circulation Element** ● Maximize Efficiency Policies 5.4.1, 5.4.6, 5.4.7 ● Pedestrian Facilities Policies 5.9.1, 5.9.2, 5.9.3, 5.9.4 ● Encourage Bicycling Policies 5.10.1, 5.10.2, 5.10.3, 5.10.4
City of Moreno Greenhouse Gas Analysis (2006)	**Measure R1-T7: Goods Movement Efficiency Measures.** System wide efficiency improvements in goods movement to achieve GHG reductions from reduced diesel combustion. **Measure R1-S2: CalGreen Construction Waste Reduction.** At least 50% of non-hazardous construction and demolition debris must be recycled or salvaged.

GHG = greenhouse gas
VMT = vehicle miles traveled

3.4.3 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

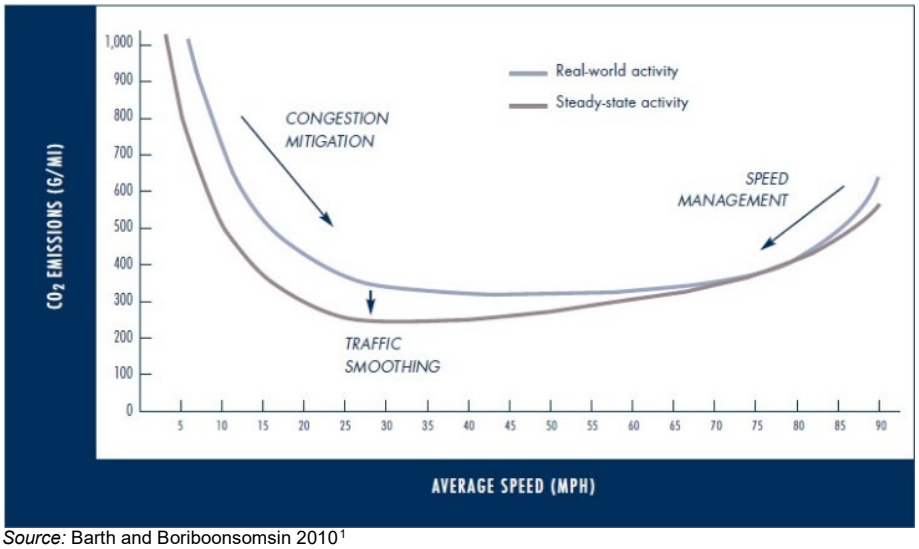
The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, §21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

3.4.4 Operational Emissions

CO_2 accounts for 95 percent of transportation GHG emissions in the U.S. The largest sources of transportation-related GHG emissions are passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans. These sources account for over half of the emissions from the sector. The remainder of GHG emissions comes from other modes of transportation, including freight trucks, commercial aircraft, ships, boats, and trains, as well as pipelines and lubricants. Because CO_2 emissions represent the greatest percentage of GHG emissions it has been selected as a proxy within the following analysis for potential climate change impacts generally expected to occur.

The highest levels of CO_2 from mobile sources such as automobiles occur at stop-and-go speeds (0–25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0–25 miles per hour (see Figure 3-5). To the extent that a project relieves congestion by enhancing operations and improving travel times in high-congestion travel corridors, GHG emissions, particularly CO_2, may be reduced.



Source: Barth and Boriboonsomsin 2010[1]

Figure 3-5 Possible Use of Traffic Operation Strategies in Reducing On-Road CO_2 Emissions

Four primary strategies can reduce GHG emissions from transportation sources: (1) improving the transportation system and operational efficiencies, (2) reducing travel activity, (3) transitioning to lower GHG-emitting fuels, and (4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued concurrently.

The proposed project is listed in the 2016 RTP/SCS as amended by Amendment No. 3 adopted on September 6, 2018 under RTP ID 3M0801-RIV080904. The proposed project is listed in the 2019 FTIP under the ID # RIV080904. The 2019

[1] Barth, Matthew and Kanok Boriboonsomsin. 2010. Real-World Carbon Dioxide Impacts of Traffic Congestion. Berkeley, CA: University of California Transportation Center. UCTC-FR-2010-11. Website: https://www.researchgate.net/publication/46438207.

FTIP was approved by SCAG on September 1, 2018 and by the FTA and the FHWA on December 17, 2018. The design concept and scope of the proposed project is consistent with the project description in the 2016 RTP/SCS and 2019 FTIP and the "open to traffic" assumptions of the SCAG's regional emissions analysis.

The purpose of the proposed project is to provide increased interchange capacity, reduce congestion, improve traffic operations, and improve existing and projected interchange geometric deficiencies. Based on the *Traffic Study Report* (January 2019), the proposed project would improve traffic flow without increasing the traffic volumes along WLC Pkwy or SR-60.

3.4.4.1 Quantitative Analysis

Traffic data (including vehicle miles traveled [VMT], intersection queuing, and delay times) and average roadway speeds for the existing/baseline condition, opening year, and 2045 were combined with GHG emissions factors from the EMFAC2017 model to produce the GHG emissions rates shown in Table 3.10. Design Year 2045 was used in the *Traffic Study Report* (January 2019) to be consistent with the SCAG 2016 RTP/SCS, which includes all foreseeable development projects in the greater Moreno Valley area.

Table 3.10 Modeled Annual GHG Emissions and Vehicle Miles Traveled, by Alternative

Alternative	GHG Emissions (Metric Tons/Year)[1]	Annual Vehicle Miles Traveled[2]
Existing/Baseline 2018	10,566	24,575,948
Open to Traffic 2025		
No Build	18,876	37,010,238
Build Alternative 2	16,253	
Build Alternative 6 (LPA)	16,084	
20-Year Horizon/Design Year 2045		
No Build	27,140	67,306,279
Build Alternative 2	24,077	
Build Alternative 6 (LPA)	22,840	

Sources: *Traffic Study Report* (January 2019), Average Speed Data for Air Quality Analysis Technical Memorandum (January 2020), and EMFAC2017.
[1] GHG emissions expressed as CO_2e.
[2] Annual vehicle miles traveled (VMT) values derived from Daily VMT values multiplied by 347, per CARB methodology (CARB 2008).[1]
CO_2e = carbon dioxide equivalent (CO_2, CH_4, and N_2O)
GHG = greenhouse gas
LPA = Locally Preferred Alternative

There would be no measurable differences in VMT for Design Variations 2a and 6a.

Based on the *Traffic Study Report* (January 2019), the proposed project would improve traffic flow without increasing the traffic volumes along WLC Pkwy or SR-60;

[1] California Air Resources Board (CARB). 2008. Climate Change Scoping Plan Appendices. Volume II: Analysis and Documentation. Appendix I, p. I-19. December. Website: https://ww3.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm, accessed October 31, 2019.

thus, the No Build and both Build Alternative VMT amounts are the same within each scenario analyzed. The VMT increases from 2018 to 2025 due to the increased regional vehicle traffic from all known development projects in the greater Moreno Valley area that will foreseeably be completed by 2025. As shown in Table 3.10, the Alternative 2 configuration would reduce GHG emissions in both the opening and design years compared to the corresponding No Build Alternative. As also shown in Table 3.10, the roundabouts in Alternative 6 (LPA) would further reduce emissions compared to Alternative 2.

While EMFAC2017 has a rigorous scientific foundation and has been vetted through multiple stakeholder reviews, its GHG emission rates are based on tailpipe emission test data.[1] Moreover, the model does not account for factors such as the rate of acceleration and vehicle aerodynamics, which influence the amount of emissions generated by a vehicle. GHG emissions quantified using EMFAC2017 are therefore estimates and may not reflect actual physical emissions. Though EMFAC2017 is currently the best available tool for calculating GHG emissions from mobile sources, it is important to note that the GHG results are only useful for a comparison among alternatives.

3.4.5 Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

The Sacramento Metropolitan Air Quality Management District Road Construction Emissions Model, Version 9.0 was used to quantify the expected construction-related GHG emissions related to the proposed project. Construction of the project would emit a daily maximum of up to 13,009 lbs/day of CO_2e and a total quantity of 1,718 metric tons of CO_2e, as shown in Table 3.11. Construction is expected to last 18 months, resulting in maximum yearly emissions of 1,305 metric tons/year of CO_2 equivalent.

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[1] This analysis does not currently account for the effects of the U.S. National Highway Traffic Safety Administration and Environmental Protection Agency SAFE (Safer Affordable Fuel-Efficient) Vehicles Rule. Part One revoking California's authority to set its own greenhouse gas emissions standards was published on September 27, 2019 and effective November 26, 2019. The SAFE Vehicles Rule Part 2 would amend existing Corporate Average Fuel Economy (CAFE) and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026. The proposal would retain the model year 2020 standards for both programs through model year 2026. Although CARB has not yet provided adjustment factors for greenhouse gas emissions to be used in light of the SAFE Rule, modeling these estimates with EMFAC2017 remains the most precise means of estimating future greenhouse gas emissions.

Table 3.11 Project Construction GHG Emissions

Project Phases	CO_2	CH_4	N_2O	CO_2e
Grubbing/Land Clearing (lbs/day)	2,109	1	<1	2,137
Grading/Excavation (lbs/day)	12,755	3	1	13,009
Drainage/Utilities/Sub-Grade (lbs/day)	10,473	3	<1	10,578
Paving (lbs/day)	2,134	1	<1	2,162
Maximum (lbs/day)	12,755	3	1	13,009
Project Total (tons/construction project)	1,864	<1	<1	1,718[1]
2022 Annual Total (tons/yr)	1,413	<1	<1	1,305[1]
2023 Annual Total (tons/yr)	451	<1	<1	413[1]

Source: Roadway Construction Model GHG output from *Air Quality Report* construction modeling (January 2020).
[1] The annual and project total CO_2e emissions are reported as metric tons.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
lbs/day = pounds per day
N_2O = nitrous oxide
tons/yr = tons per year

The following Project Features (discussed in Section 2.14, Air Quality, in this EIR/EA) will also be implemented as part of the project to reduce GHG emissions and potential climate change impacts from the project:

PF-AQ-2 Project specifications will include the duration of construction. Emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. Properly operating engines also help reduce greenhouse gas (GHG) emissions.

PF-AQ-6 All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all CARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

3.4.6 CEQA Conclusion

GHG emissions will increase in future years compared to existing conditions with or without the project due to anticipated regional growth. Even though the project would not increase VMT, the Alternative 2 configuration would reduce GHG emissions in both the opening and design years compared to the corresponding No Build Alternative, and the roundabouts in Alternative 6 (LPA) would further reduce emissions compared to Alternative 2. The project would improve traffic operations and reduce GHG emissions compared to the No Build condition, but because it would not reduce GHG emissions from the existing condition, it would not contribute to achieving statewide GHG emissions reduction goals. The impact would be significant and unavoidable.

Project operational features such as bicycle and pedestrian improvements and construction GHG-reduction measures would reduce the impact, but not to a less-than-significant level. Accordingly, the overall impact on GHGs would be significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in Section 3.4.7.

3.4.7 Greenhouse Gas Reduction Strategies

3.4.7.1 Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Jerry Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, Safeguarding California.

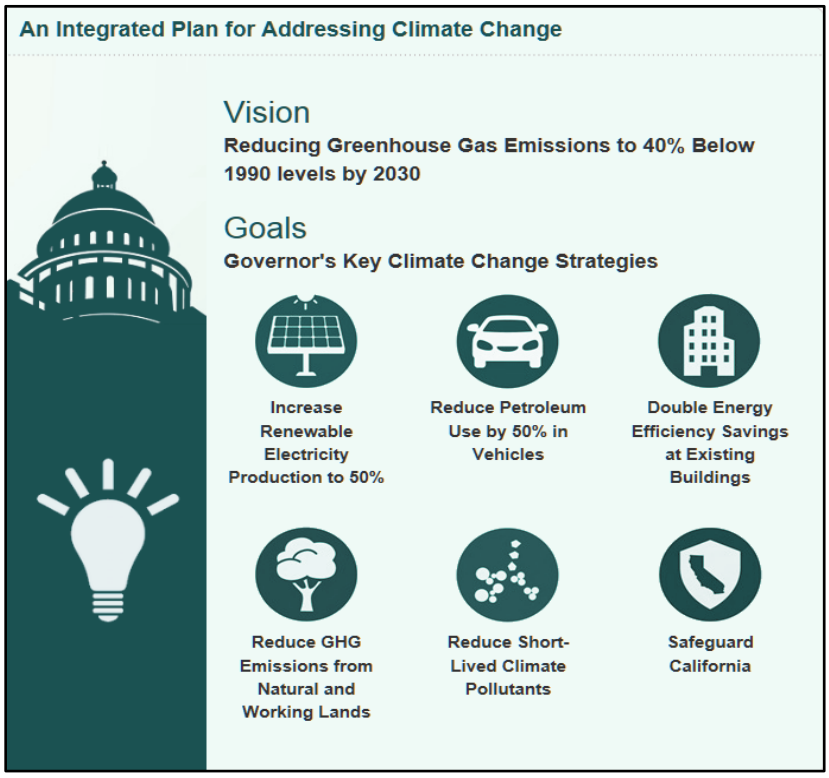

Figure 3-6 California Climate Strategy

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the State build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies,

lower-carbon fuels, and reduction of VMT. A key state goal for reducing greenhouse gas emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).[1]

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

3.4.7.2 Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

- **California Transportation Plan (CTP 2040):** The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the California Transportation Plan 2040, which establishes a new model for developing ground transportation systems, consistent with CO_2 reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will work to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

  SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

- **Caltrans Strategic Management Plan:** The *Strategic Management Plan*, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

  - Increasing percentage of non-automobile mode share
  - Reducing VMT
  - Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

[1] State of California. 2019. California Climate Strategy. Website: https://www.climatechange.ca.gov/, accessed August 21, 2019.

- **Funding and Technical Assistance Programs:** In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/ strategies; and support other climate adaptation goals (e.g., Safeguarding California).

- **Caltrans Policy Directives and Other Initiatives:** Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a department policy that will ensure coordinated efforts to incorporate climate change into departmental decisions and activities. Caltrans Activities to Address Climate Change (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

3.4.7.3 Project-Level GHG Reduction Strategies

The following Project Features will be implemented as part of the project to reduce GHG emissions and potential climate change impacts resulting from the project:

PF-AQ-2 Project specifications will include the duration of construction. Emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. Properly operating engines also help reduce greenhouse gas (GHG) emissions.

PF-AQ-6 All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes.

Additionally, the following GHG-specific Project Features will be implemented as part of the project construction:

PF-GHG-1 Use energy and fuel efficient vehicles and equipment that are the right size equipment for the job.

PF-GHG-2 Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a California Air Resources Board (CARB) approved fleet.

PF-GHG-3 Maximize use of recycled materials (e.g., tire rubber) and use the minimum feasible amount of greenhouse gas (GHG) emitting construction materials.

PF-GHG-4 Reduce need for electric lighting by using ultra-reflective sign materials that are illuminated by headlights.

PF-GHG-5 Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.

The following operational GHG-specific Project Features will be implemented as part of the project:

PF-GHG-6 Include landscaping components such as mulch and compost application to improve carbon sequestration rates in soils and reduce organic waste.

PF-GHG-7 Design and install long-life pavement structures to minimize life-cycle costs.

PF-GHG-8 Design medians to comply with City landscape standards to increase water efficiency with efficient irrigation, grading that retains water run-off, and a drought tolerant plant palette.

PF-GHG-9 Use rubberized asphalt concrete to the maximum extent practical within currently accepted practice.

PF-GHG-10 Use lighting systems that are energy efficient, such as LED technology.

PF-GHG-11 Incorporate bicycle and pedestrian facilities into project design.

Additionally, the City has committed to the following energy efficiency and climate action measures to reduce City-wide GHG emissions:

- Enforce electric vehicle infrastructure and charging stations per latest building codes.
- Promote the use of alternative fuel vehicles.
- Use smart controllers for all City projects consistent with City Landscape Standards.
- Review median landscape standards to increase water efficiency with efficient irrigation, grading that retains water run-off, and a drought tolerant plant palette.
- Establish a guideline that identifies criteria for using rubberized asphalt concrete for City projects.
- Establish LED standards (fixture and spacing) for streetlights for new installations and retrofit existing lights as funding permits.

- Implement low impact development practices that maintain existing site hydrology to manage storm water and protect the environment.

- Install water-efficient irrigation systems and devices and use water-efficient irrigation methods.

- Incorporate Complete Streets components.

- Incorporate native plants and vegetation (replacing more vegetation than was removed) to the project design to increase carbon sequestration.

- Include landscaping components such as mulch and compost application to improve carbon sequestration rates in soils and reduce organic waste.

- Incorporate green infrastructure (planted areas) instead of gray (concrete) storm water facilities.

- Design and install long-life pavement structures to minimize life-cycle costs. Consider future climate conditions in decisions. (e.g., areas that are expected to experience increased temperatures and extreme heat days may have different pavement needs than areas expecting more frequent freezing temperatures).

- Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, providing amenities incentivizing their use, also providing adequate bicycle parking and planning for and building local bicycle projects that connect with the regional network.

3.4.7.4 Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the State's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 USC ch. 56A §2921 et seq). The Fourth National Climate

Assessment, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime" (USGCRP 2018).[1]

The *U.S. DOT Policy Statement on Climate Adaptation* in June 2011, committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (U.S. DOT 2011).[2]

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*, December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. California's Fourth Climate Change Assessment (2018) is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."

- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.

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1 U.S. Global Change Research Program (USGCRP). 2018. Fourth National Climate Assessment. Website: https://nca2018.globalchange.gov/, accessed August 21, 2019.

2 U.S. Department of Transportation (U.S. DOT). 2011. Policy Statement on Climate Change Adaptation. June. Website: https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm, accessed August 21, 2019.

- *Resilience* is the "capacity of any entity–an individual, a community, an organization, or a natural system–to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.

- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.

- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.[1]

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that

[1] State of California. 2018. California's Fourth Climate Change Assessment. Website: http://www.climateassessment.ca.gov/, accessed August 21, 2019.

developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

3.4.7.5 Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans' assets exposed to damage or reduced service life from expected future conditions.

- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.

- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, State, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

3.4.7.6 Project Adaptation Analysis

The proposed project is outside the Coastal Zone and not in an area subject to sea-level rise. Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

Projects in Floodplains

The project area is not within a FEMA-designated 100-year floodplain; however, DWR Awareness mapping indicates an awareness floodplain in the project area, mostly within Moreno Valley. DWR designates awareness floodplains as 100-year flood hazard areas. Hydraulic modeling for the proposed project, however, determined that the boundaries of the awareness floodplain do not accurately

represent the actual boundaries of the base flood. The flow patterns within the area north of SR-60 do not flood the entire area, as the awareness floodplain boundary implies. The portion of the project area within an awareness floodplain regulated by the RCFCWCD does not contain any large canyon outfalls and appears to be largely free of flooding during a 100-year flood event (see Section 2.9, Hydrology and Floodplains).

The Caltrans Draft District 8 Climate Vulnerability Assessment indicates the project area would be subject to a less than 5 percent increase in storm precipitation depth through 2085 (Caltrans 2019).[1] Section 2.9 notes that many of the streams and alluvial fans within the awareness floodplain boundary are not tributary to the SR-60/WLC Pkwy interchange, and actually flow away from the project area. Hydraulics analysis found that no flooding occurs around the SR-60/WLC Pkwy interchange under the existing or proposed conditions, including the area within RCFCWCD jurisdiction.

Project construction would comply with all City and County permit grading requirements. The minor grading required within the Awareness floodplain would not modify the flood flows. A channel would be constructed in the Awareness Floodplain along the edge of the roadway embankment that would confine the base flood in the northwestern quadrant of the SR-60/WLC Pkwy interchange. Operationally, the Build Alternatives and Design Variations 2a and 6a would not change flood patterns or increase flood depths. Project implementation would not substantially alter the overall drainage pattern in the project area; rather, the project would improve the existing drainage patterns by improving the distribution of storm water flow to the storm drain system. As stated in PF-WQ-2 in Section 2.10, Water Quality and Storm Water Runoff, Treatment BMPs, including infiltration basins and biofiltration swales, would be incorporated into the design of the Build Alternatives in accordance with the requirements of the Caltrans MS4 Permit. The infiltration basins and biofiltration swales would promote infiltration to offset any increased flows associated with the increase in impervious surface from the project area and would provide flow duration, volume, and rate control functions. Given these requirements and design features and the relatively small climate-change-related increases in precipitation anticipated through 2085, it is expected that the project design adequately addresses potential future climate effects related to precipitation.

Wildfire

As discussed in Section 3.2.9, Hazards and Hazardous Materials, the project location is adjacent to an LRA Very High Fire Hazard Severity Zone, and near an SRA Moderate Fire Hazard Severity Zone.[2] The project site is about 1 mi from the foothills, and is developed with a series of existing highway facilities and access roads, with sparse vegetation. The project would not expose people or property to new increased wildland fire risks.

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1 California Department of Transportation. 2019. *Caltrans Climate Change Vulnerability Assessments. District 8 Technical Report*. June. Prepared by WSP.

2 California Department of Forestry and Fire Protection (CAL FIRE) Hazard Severity Zones Maps. Website: www.fire.ca.gov/fire_prevention/fhsz_maps_riversidewest, accessed February 15, 2019.

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Chapter 4 – Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, as well as identify potential impacts and avoidance, minimization, and/or mitigation measures, and related environmental requirements. Agency and tribal consultation and public participation for the State Route 60/World Logistics Center Parkway Interchange Project (project) have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings, interagency coordination meetings, and consultation with interested parties. This chapter summarizes the results of the California Department of Transportation's (Caltrans) efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

4.1 Scoping Process

The proposed project is supported by the City of Moreno Valley (City). The City held a business briefing meeting on July 23, 2018. The purpose of the business briefing was to provide local businesses and community members an opportunity to ask questions related to the project. Concerns were addressed during the business briefing. Commitments or issues have not developed as a result of the community interaction related to the proposed project. Comments from attendees at the business briefing are included at the end of this chapter, along with responses to those comments.

A Notice of Preparation (NOP) was published for the project on November 25, 2019 (refer to Appendix E for the NOP). The public scoping period was held for 39 days from November 25, 2019 through January 3, 2020. Caltrans District 8, in coordination with the City of Moreno Valley, held an open house public scoping meeting on December 16, 2019. Comments from attendees at the public scoping meeting will not be individually responded to A summary of comments, issues, and concerns raised during the scoping process is included in Table 4.1, NOP Comments Summary. The individuals who provided comments during the NOP review period and did not provide a mailing address were contacted by Caltrans to ensure they were appropriately added to the project distribution list.

4.2 Interagency Coordination and Consultation

The formulation of project alternatives and measures to avoid, minimize, and/or mitigate potential impacts has been carried out through a cooperative dialogue among representatives of the following agencies or organizations:

- Native American Heritage Commission (NAHC)
- Native American Tribal Representatives
- Agencies and Interested Parties Regarding Historical Resources
- City of Moreno Valley
- State Historic Preservation Officer (SHPO)

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Table 4.1 NOP Comments Summary

Comment No.	Date, Name, Organization (if applicable)	Comment Sub No.	Comment Summary	Comment Category										
				Design Features / Geometric Design	Purpose and Need	Alternative Selection Issues	Operations and Safety	Environmental Issues	Funding	Cost and Schedule	Multi-use Trail	Other / Administrative	City of Moreno Valley	WLC Development (Project by others)
1	1/3/2020, Lindsay Robinson, Individual	1	Favors Alternative 1 while the WLC Development project is still in litigation.			●								●
		2	Why SR-60/WLC Pkwy over SR-60/Moreno Beach or SR-60/Redlands?		●									
		3	Remove improvements to Eucalyptus (responsibility of developer), or provide direction that releases developer of this responsibility.	●										●
		4	Include multi-use trails.	●							●			
		5	Why cloverleaf configuration for the large projected truck/vehicle forecasts.			●	●							
		6	Additional traffic/noise/pollution for residents on Theodore and Highland, how is this addressed?					●						
		7	Ironwood will need improved to handle the additional trucks.				●		●				●	●
		8	Describe in detail funding sources, specific to the sign replacement, the interchange, and the $1M required of the developer.											
		9	Provide complete fiscal analysis of this project.						●				●	
		10	Are soundwalls proposed to mitigate noise?					●						
2	1/3/2020, Friends of the Northern San Jacinto Valley	1	Provide extension for NOP comments until 1/10/2020.									●		
3	1/3/2020, SCAG	1	Send DED to SCAG's Los Angeles office.									●		
4	1/3/2020, Laura Gaynor, Individual	1	Concerned about air and traffic impacts to neighborhood from 15,000 trucks					●						
		2	How will all the truck traffic affect SR-60/Nason					●						
		3	What mitigation will be proposed for project impacts.					●						
5	1/1/2020, Paul Claxton, Individual	1	Analyze impacts from west of SR-60/I-215				●							
		2	What are the health and safety concerns for those living, commuting, and attending religious service adjacent to the borrow site?					●						
		3	What are health impacts due to noise and traffic, and what are the best way to mitigate exposure to impacts?					●						
		4	How will commute times be impacted from the additional traffic?				●							
		5	What are the likely impacts to the City's street conditions that are a result of this project?	●									●	
		6	What are ways to mitigate exposure to cancer causing agents from the project?					●						
6	1/2/2020, Friends of the Northern San Jacinto Valley	1	Provide extension for NOP comments until 1/10/2020.									●		
7	1/2/2020, Ryan Ross, RCDWR	1	Waste delivery vehicles primarily access the landfill from SR-60/WLC Pkwy IC				●							
		2	Provide advanced notification to RCDWR for any closures, limited access of the SR-60/WLC Pkwy IC to avoid interruptions/impacts to waste delivery.				●							
		3	Consider the following measures to reduce solid waste: ● Use mulch and/or compost ● Xeriscaping and the use of drought tolerant low maintenance vegetations ● Hazardous materials are not accepted at the Riverside County landfills	●										
		4	Provide the DEIR on CD to RCDWR.									●		
8	1/3/2020, Tom Thornsley, Individual	1	Include multi-purpose trails, with suitable walking surface and protective barrier.	●							●			
		2	Include multi-purpose trail on Eucalyptus.	●							●			
		3	Re-evaluate cloverleaf geometry to accommodate trucks. Request geometry to be evaluated by trucking firms.	●		●								
		4	Suggest an Urban Interchange and/or run WB Gilman Springs traffic through Theodore to avoid on/off conflict (reference I-10 between Tennessee and Alabama).	●		●								
		5	Traffic impacts must go at least 15 miles west and east of project area to include I-215/SR-60, SR-60/SR-91/I-215, and I-10/SR-60 merge.				●							

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Comment No.	Date, Name, Organization (if applicable)	Comment Sub No.	Comment Summary	Comment Category										
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8 (cont'd)	1/3/2020, Tom Thornsley, Individual (cont'd)	6	Address growth inducing aspects of the project (interchange will enhance viability of WLC development, increase traffic, and increase need for freeway expansion).					●						●
		7	Address capacity of SR-60 through Moreno Valley beginning at SR-60/I-215 and if more lanes are needed. If traffic intended for this project would mandate extra lanes, how will Caltrans provide them?				●							
		8	Will off-ramps include long queue lanes and acceleration lanes outside the through traffic lanes on the mainline. If so, how long will they be?	●			●							
		9	Address impacts to Redlands Boulevard, north of SR-60 through San Timoteo Canyon (Recent fatal accidents and two-lane roadway without passing).				●							
		10	Address truck and passenger traffic going northbound on Theodore Street continuing up Highland Street to Redlands Boulevard.			●								
		11	Alternative 6 seems favorable for truck drivers. Verify the design works for intended user.			●								
		12	Proposed roundabouts will impact the current land uses in the WLC Specific Plan. What land use changes will be made. No access easement should be required between the north and south roundabouts.	●		●								
		13	Define Caltrans access control north and south of SR-60.	●										
		14	Traffic counts show SR-60/Redlands experiences 10x traffic compared to SR-60/WLC Pkwy. Why SR-60/WLC Pkwy instead of SR-60/Redlands Boulevard.	●			●							
		15	When will SR-60/Redlands Boulevard Interchange be improved?							●			●	
		16	When will improvements to SR-60/Redlands Boulevard be completed that were a condition of the Prologic warehouse development? Specifically improvements to SR-60 EB off-ramp at Redlands, and widening of Redlands Boulevard south to Eucalyptus.										●	
		17	Close the through access on Eucalyptus from WLC Pkwy to Redlands Boulevard. Intended for emergency access only, but is currently used by cars and semi-trucks.										●	
		18	Describe how much development can be constructed before certain traffic improvements are needed. Set mitigation measures for X amount of square feet of warehouse before the interchange needs constructed.				●						●	
		19	Address the detour plan for closures during construction	●										
		20	Justify public expenditure of money while WLC Development is still in litigation.										●	
		21	Provide fiscal impact analysis for fair share of all nearby future development.						●				●	
		22	What are funding sources for SR-60/WLC Pkwy interchange. If not enough, will City pursue bonds or long term commitment of Measure A?						●				●	
		23	Will the results of RCTC's recent Study for a Logistics Mitigation Fee be applied to the WLC Development project?										●	●
		24	Comment included example of TUMF fee calculation relative to WLC Development at buildout. Will TUMF fee cover appropriate share of interchange improvements?						●				●	●
		25	Provide air quality evaluation that addresses slower trucks movement and longer queuing that may cause unhealthy air quality.					●						
		26	How will this project prejudice land uses in the general plan update currently in progress?										●	
		27	There is no evidence the majority of Moreno Valley residents are in favor of the WLC Development or the SR-60/WLC Pkwy Interchange improvement project.		●								●	●
9	1/3/2020, George Hague, Moreno Valley Group of the Sierra Club	1	Since the WLC is still being litigated by the Sierra Club and other groups, we protest the expenditure of public money for a project which may not be built or built in its current form. Both the WLC developer and his council members who he supported with $10,000's have done what they can to make sure the WLC was never brought to a vote of the people of Moreno Valley. Therefore please do not every write that the interchange is what the residents of Moreno Valley want.		●				●				●	●
		2	The Draft EIR must fully explain the justification of spending public funds for the sole benefit of the WLC.						●				●	●

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Comment No.	Date, Name, Organization (if applicable)	Comment Sub No.	Comment Summary	Comment Category										
				Design Features / Geometric Design	Purpose and Need	Alternative Selection Issues	Operations and Safety	Environmental Issues	Funding	Cost and Schedule	Multi-use Trail	Other / Administrative	City of Moreno Valley	WLC Development (Project by others)
9 (cont'd)	1/3/2020, George Hague, Moreno Valley Group of the Sierra Club (cont'd)	3	This project will impact a long stretch of SR-60 and the Draft EIR/EA must analyze all the traffic as if the WLC would be built as well as all the background traffic from west of the I-215/SR-60 interchange to the I-10/SR-60 interface. Induced traffic must be part of the analysis as well as all foreseeable projects. Traffic impacts within 12 miles need to be analyzed.				●							●
		4	Impact to Redlands Boulevard from San Timoteo Canyon to Alessandro Boulevard must also be analyzed. What additional trucks will use this route and impact health of families who live within 500 feet of Redlands Boulevard. Highland Street must not be used in your trucks routes.				●						●	●
		5	How will this project impact animal movement? While there are a few animal linkages under SR-60 well east of the project, there needs to be one near this location because there is almost none within the Moreno Valley City limits. The Draft EIR/EA must show all such locations within the City of Moreno Valley. Will the project provide an off-site linkage under SR-60 if the project site in not appropriate? How will this project lead to further direct/indirect, cumulative and growth inducing loss of raptor foraging?					●					
		6	The City of Moreno Valley has a trail system as does Riverside County. Both systems are not far from the project site. The Draft EIR needs to show how the proposed project and interconnecting roads will impact either trail system — directly and/or indirectly.	●							●			
		7	How long will accelerations lane be to allow merging into the flow of traffic of SR-60? At what speed will they allow full semi-trucks reach before merging? Will that speed allow cars that follow trucks on the acceleration lane to safely merge onto SR-60? The Draft EIR/EA must have a chart of acceleration lane lengths in 50 ft increments which show the speed of a full semi-truck at each increment until 55 MPH is reached.	●			●							
		8	How many lanes will SR-60 need to be to accommodate future growth? When do you see this happening? How will this project be modified to accommodate the increasing lanes to SR-60?	●			●							
		9	How many semi-trucks will the cueing lines be able to hold before they interfere with the flow of traffic on SR-60? The WLC will have more than 50,000 daily vehicle trips which includes more than 12,000 daily diesel truck trips. What efforts are being made on both cueing lines and acceleration lanes to accommodate this amount of traffic as well as that of homeowners and other businesses that may use this project.	●			●							●
		10	The Sierra Club assumes that the regular flow of traffic on SR-60 and nearby roads will be interrupted during construction. The Draft EIR/EA needs to explain this impact and all others in words the average person can understand. Where and for how long will traffic be diverted? What will be the trigger for the project to begin construction. Will it begin before the WLC does any improvements? Will it begin after a certain percentage of the WLC is built? The Draft EIR/EA needs to explain the time line for construction of the project so the public knows how long their lives will be interrupted. Will it be done during certain times of the year so there is less impact on biological resources?	●			●	●		●				●
		11	There are threatened and endangered plants and animals not too far from the project site and maybe on site. How will this project impact them directly/ indirectly as well as cumulatively and growth inducing?					●						
		12	How will the construction add to our already unhealthy air? Will only Tier IV and higher rated off road equipment be used during construction? Please explain what percentage of Tier IV or higher construction equipment will be used. How will greenhouse gas impacts and particulate pollution increase as a result of not using the highest rated construction equipment. How will diverting and detouring regular traffic during all phases of construction add to our poor air quality and greenhouse gas?					●						

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Comment No.	Date, Name, Organization (if applicable)	Comment Sub No.	Comment Summary	Comment Category										
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9 (cont'd)	1/3/2020, George Hague, Moreno Valley Group of the Sierra Club (cont'd)	13	The Sierra Club expects this project to prejudice land uses and zoning during the City's current general plan update. How much of the land within a half mile of the project is outside the WLC, but owned by its developer? Will the interchange be giving a monetary windfall in the form of major up-zoning? Your agency needs to look into this to make sure you are not being used to benefit the WLC developer and those connected to the WLC.										●	
		14	Since many people in Moreno Valley and user of SR-60 speak Spanish and have trouble reading EIR/EA's in English, all documents related to this project need to be in Spanish.									●		
		15	The Sierra Club looks forward to reading the Draft EIR/EA for this project. Please use the contact information below my name and this email address to inform/send us information on future meetings as well as all documents related to this project.									●		
10	12/30/2019, Michael McCauley, Individual	1	Complete project fast							●				
		2	Include truck lanes	●										
11	12/30/2019, Keri Then, Individual	1	Concerned about projects impact on air, water, and noise pollution. Existing warehouses have increased traffic and added more commuter traffic to rural roads, leading to accidents.					●						
		2	Completing the project would add more ozone emissions and noise to the area					●						
		3	Public money should not be spent to make improvements until the developer can provide proof of lease or occupancy.						●				●	●
		4	Until the air quality improves, no new projects which would increase emissions should be approved.					●						
12	12/17/2019, SCAQMD	1	Send DEIR/EA all appendices or technical documents related to air quality, health risk, and greenhouse gas analysis and electronic versions of all air quality modeling and health risk assessment files. These include emission calculations spreadsheets and modeling input and output files (not PDF files). Any delay in the complete data request will require additional review time.					●				●		
13	12/18/2019, Mauricio Alvarez, RTA	1	What is the timeline for the project?							●				
		2	Will you move forward with the Alternative 6 proposal, if so, do you have plans you can send over?			●								
14	12/9/2019, Native American Heritage Commission	1	Follow AB 52 and SB 18					●						
15	12/5/2019, WMWD	1	WMWD does not provide services in the project area, therefore has no comments on NOP. EMWD provides service to the area.									●		
16	12/16/2019, Individual	1	Agree with Alternative 6			●								
17	12/16/2019, Individual	1	Supports project and Alternative 6			●								
18	12/16/2019, Brandon Carn, Individual	1	Agree with Alternative 6			●								
		2	Eucalyptus does not need to be constructed because Alessandro and Ironwood exist.	●										
		3	Other alternatives are preferred from earlier drafts not selected by the City Council.			●								
		4	Identify funding to do all interchanges now.						●	●				
		5	Construct Eucalyptus when available with private funding, as it's not needed now.	●					●					
19	12/16/2019, Oscar Alvarez, Individual	1	Study traffic area should include impacts on SR-60 north of City and I-15 west of City with solutions provided.				●							
		2	What solutions will you provide to limit the impact air quality? Air quality in City is already between moderate and unhealthy.					●						

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20	12/16/2019, Robert Then, Individual	1	How is the timing of the project affected by the status of the WLC Development?							●				●
		2	Greenhouse gasses resulting from 12,000-14,000 trucks generated by the WLC Development use the overpass. EIR should clearly include the environmental effects of this project.											
21	12/16/2019, Individual	1	Agree with Alternative 6			●								
22	12/16/2019, Individual	1	Supports project and Alternative 6.			●								
23	12/16/2019, Individual	1	Other projects need completed and other roads need improved before the SR-60/WLC Pkwy interchange.		●					●				
24	12/16/2019, Individual	1	Supports project (including bike lanes, trails, and turnabouts [roundabouts?]).	●										
25	1/12/2020, George Hague, Moreno Valley Group of the Sierra Club	1	Add the following newspaper article, two amicus briefs, and the public notices of a current WLC Development environmental document to the previously submitted Sierra Club comment.									●		
		2	Will the attached articles prejudice the general plan update process? Will current vacant lands on both sides of SR-60 bring in more particulate pollution/greenhouse gas?					●					●	
		3	The interchange will be growth inducing with direct/indirect impacts and also result in cumulative impacts that are very serious.					●						●
		4	The attached briefs explain why the WLC Development should not be built as currently proposed. This proposed interchange should not be conceived/studied/analyzed and definitely not built until WLC Development is approved without any further court challenges.											●
26	1/9/2020, Tom Paulek, Friends of the Northern San Jacinto Valley	1	We are both discouraged and dismayed by Caltrans, District 8's poor implementation of its obligations under CEQA and its assigned federal NEPA environmental review for the SR-60/WLC Interchange Project. We do not know whether these deficiencies are limited to Caltrans, District 8 or are representative of Caltrans statewide execution of these important and necessary state and federal environmental review laws.					●				●		
		2	The SR-60 WLC Parkway Interchange Project is intended to provide the primary access for the City of Moreno Valley project known as the World Logistics Center (WLC). The massive WLC project [40 million square feet of warehouses] remains in litigation (Appellate Court review) after the February 2018 Riverside County Superior Court Judgement found the WLC Environmental Impact Report (EIR) was deficient with respect to its treatment of Biological Resources, Energy, Noise, Agriculture and Cumulative Impacts (Case No: RIC 1510967 MF). The City of Moreno Valley prior WLC EIR deficiencies must not be replicated by Caltrans and must be viewed as significant indirect impacts of the Caltrans construction of the SR-60 WLC Parkway Interchange Project (CEQA Guidelines 15064 (d)(2)).					●					●	●
		3	We are particularly concerned regarding the indirect and cumulative impacts to Biological Resources including Endangered Species, MSHCP/NCCP Covered Species, and San Jacinto Wildlife Area, the primary MSHCP/NCCP Conservation Area located directly on the southern boundary of the proposed WLC Specific Plan site. The federal Endangered Species Act (ESA) prohibits the "take" (kill, capture or habitat destruction) of listed endangered or threatened species. In a like manner, the California Endangered Species Act (CESA) prohibits the "take" of endangered or threatened species listed by the California Fish and Game Commission. Under the 2004 Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) / Natural Communities Conservation Plan (NCCP Act) the "take" of 146 plant and animal species is permitted for 75 years throughout western Riverside County, in exchange for the assembly and management of coordinated MSHCP/NCCP Conservation Areas. The most prominent is the California Department of Fish and Wildlife (CDFW) San Jacinto Wildlife Area located on the southern boundary of the proposed World Logistics Center (WLC).					●						

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26 (cont'd)	1/9/2020, Tom Paulek, Friends of the Northern San Jacinto Valley (cont'd)	4	Both the federal and state endangered species statutes provide for exceptions to their "take" prohibitions. The federal exception requires applicants to submit a Habitat Conservation Plan (HCP). If approved by the U.S. Fish and Wildlife Service the applicant will be issued an incidental "take" permit (MSHCP). The California "take" exception is authorized pursuant to the Natural Community Conservation Planning Act (NCCP Act - Fish and Game Code §§ 2800-2835). After approval of a NCCP Act Conservation Plan, the CDFW permits the "take" of covered species whose conservation and management is provided for in the NCCP approved by CDFW. The NCCP Act section 2826 provides: " Nothing in this chapter exempts a project proposed in a natural community planning area from Division 13 (commencing with section 21000) of the Public Resources Code [CEQA - California Environmental Quality Act] or otherwise alters the applicability of that division. " The California Supreme Court has bolstered this legislative intent. ["CESA can be harmonized with CEQA"] (Mountain Lion Foundation v. Fish and Game Commission (1997) 16 Cal. 4th 105, 111)					●						
		5	In enacting the California Environmental Quality Act (CEQA) the legislature declared it is the policy of the state to "Prevent the elimination of fish and wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self- perpetuating levels, and preserve for future generation representative of all plant and animal communities." (Public Resources Code § 21001(c)) "Public agencies should not approve projects if there are feasible alternative or feasible mitigation measures available, which would substantially lessen significant environmental effects (Public Resources Code § 21002). "The purpose of an Environmental Impact Report (EIR) is to identify the Significant effects on the environment, to identify alternatives to the project, and to indicate the manner in which those Significant effects can be mitigated or avoided (Public Resources Code § 21001.1(a)).					●						
		6	The Public Notice for the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR)/ Environmental Assessment (EA) for the State Route 60/World Logistics Center Parkway Interchange Project indicates: "An Initial Study (IS) was drafted for the project; Caltrans determined through the IS process that an EIR/EA was recommended and would be prepared. " After receiving the Public Notice, we asked Caltrans, District 8 for a copy of the Initial Study (IS) to assist in the preparation of our NOP response letter [the Initial Study functions as an evidentiary document containing information which supports Caltrans District 8 conclusions the project will or will not have a significant environmental impact]. Caltrans District 8 responded to our request for the IS as follows: "An administrated draft Initial Study was in preparation for the project. It was not approved/finalized for public disclosure. "											●
		7	We believe Caltrans District 8 sought to circumvent/avoid the Mandatory Findings of Significance under CEQA Guidelines 15065. CEQA requires [the law requires] an agency contemplating an action having the potential "to...reduce the number or restrict the range of an endangered species" must find that the project "may have a significant effect on the environment. " The initial failure of Caltrans District 8 to identify the "take" of MSHCP/NCCP Covered species as a Significant Impact corrupts the entire subsequent CEQA review [examination of alternatives and mitigation measures for the "take" of MSHCP/NCCP covered species]. It ultimately allows Caltrans District 8 to avoid making the required Findings under CEQA Guideline § 15091: "No Public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects [direct, indirect and cumulative effects] of the project unless the public agency makes one or more written findings for each of the significant effects..". These CEQA procedural errors require correction.					●				●		

Table 4.1 NOP Comments Summary

Comment No.	Date, Name, Organization (if applicable)	Comment Sub No.	Comment Summary	Comment Category										
				Design Features / Geometric Design	Purpose and Need	Alternative Selection Issues	Operations and Safety	Environmental Issues	Funding	Cost and Schedule	Multi-use Trail	Other / Administrative	City of Moreno Valley	WLC Development (Project by others)
26 (cont'd)	1/9/2020, Tom Paulek, Friends of the Northern San Jacinto Valley (cont'd)	8	We also question Caltrans District 8 use of the NEPA Environmental Assessment (EA) rather than a NEPA Environmental Impact Statement (EIS) the equivalent to the proposed CEQA Environmental Impact Report (EIR). We believe Caltrans District 8 is seeking to circumvent/avoid the FHWA Section 4(f) requirements to preserve and protect the state managed San Jacinto Wildlife Area (SJWA) - MSHCP/NCCP Conservation Area immediately adjacent to the proposed World Logistics Center (WLC) site the SR-60/WLC Parkway Interchange Project is intended to service. The necessary 4(f) evaluation of "Constructive Use" of the SJWA - MSHCP/NCCP Conservation Area requires evaluation in a more thorough NEPA Environmental Impact Statement (EIS) rather than a cursory Environmental Assessment (EA) - Findings of No Significant Impact (FONSI).					●				●		
		9	We are requesting the Caltrans District 8 CEQA/NEPA procedural errors identified above be corrected prior to the release of any draft environmental document for public review. Thank you for your consideration of our NOP comments on the SR-60/World Logistics Center Parkway Interchange Project. Please ensure we receive notice of the availability of the Draft Environmental Document and all public hearings for this important project.					●				●		
27	1/13/2020, Moreno Valley Group of the Sierra Club	1	Confirming attachments are included in formal comment.									●		
28	1/13/2020, Robert Then, Individual	1	Attached article titled "Attorney General Becerra, CARB, Challenge Moreno Valley's Attempt to Sidestep its Responsibility to Regulate Emissions from Warehouse Project". Stop wasting public funds on environmentally disastrous project (WLC Development).					●	●			●		
		2	The WLC Development and interchange project are examples of environmental injustice.					●						●

AB = Assembly Bill
Caltrans = California Department of Transportation
CEQA = California Environmental Quality Act
CESA = California Endangered Species Act
DED = Draft Environmental Document
DEIR = Draft Environmental Impact Report
EB = eastbound
EIR = Environmental Impact Report
EIR/EA = Environmental Impact Report/Environmental Assessment
EMWD = Eastern Municipal Water District
HCP = Habitat Conservation Plan
I-10 = Interstate 10
I-15 = Interstate 15
I-215 = Interstate 215
IC = Interchange
MSHCP = Multiple Species Habitat Conservation Plan
NCCP = Natural Community Conservation Plan
NEPA = National Environmental Policy Act
NOP = Notice of Preparation
PDF = Portable Document Format
RCDWR = Riverside County Department of Waste Resources
RCTC = Riverside County Transportation Commission
SB = Senate Bill
SCAG = Southern California Association of Governments
SR-60 = State Route 60
SR-91 = State Route 91
TUMF = Transportation Uniform Mitigation Fee
WB = westbound
WLC = World Logistics Center
WLC Pkwy = World Logistics Center
WMWD = Western Municipal Water District

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- Southern California Association of Governments (SCAG) Transportation Conformity Working Group (TCWG)
- United States Fish and Wildlife Service (USFWS)
- National Oceanic and Atmospheric Administration (NOAA)

The following sections summarize the results of the efforts of Caltrans to fully identify, address, and resolve project-related issues through early and continuing coordination.

4.2.1 Native American Consultation

On September 9, 2013, a request for a list of potentially interested Native Americans and a search of the Sacred Lands File (SLF) was emailed to the NAHC. On September 30, 2013, the NAHC responded with a list of 10 individuals representing eight Native American groups who were designated by the NAHC for consultation, and indicated there were no Native American cultural resources documented in the SLF as being located within or adjacent to the project site.

All designated individuals/groups were contacted via certified mail, email, and follow-up telephone calls in October and November 2013. Respondents included:

- Joseph Ontiveros (Soboba Band of Luiseño Indians), who requested government-to-government consultation, that the Soboba continue to be a lead consulting tribal entity for this project, and Soboba Native American monitoring of any ground-disturbing activities, including cultural resources surveys and testing;

- Anna Hoover (Pechanga Band of Luiseño Mission Indians), who requested government-to-government consultation, copies of all applicable cultural and environmental documents, Pechanga monitoring of all survey and subsurface excavation activities, and the opportunity for further comment upon review of cultural and environmental documents;

- William Madrigal, Jr. (Morongo Band of Mission Indians), who expressed concern regarding the sensitivity of the area east of the Area of Potential Effects (APE) for prehistoric cultural resources, requested results of records searches within 0.5 mile (mi) of the APE (which were provided by LSA Associates, Inc.), and requested Native American monitoring of the survey by a Morongo monitor; and

- Goldie Walker (Serrano Nation of Mission Indians), who inquired about the presence of prehistoric resources within the APE and requested further consultation in the event any previously undocumented prehistoric resources within the APE were encountered.

The balance of the contacts had no information or specific concerns, did not respond, or could not be reached for comment. All designated individuals/groups were notified via email of the revision of the APE in April 2015 to include additional area. There were no respondents.

The individuals and groups who participated in the initial consultation and who did not respond in 2015 were notified via mail and email of further revisions to the APE from July through December 2018. Travis Armstrong (Morongo Tribal Historic

Preservation Officer [THPO]) indicated that the detour routes are areas of interest to the Tribe, and Joseph Ontiveros (Soboba Band of Luiseño Indians) requested new tribal scoping from Caltrans. Mr. Ontiveros, Bobby Ray Esparza (Cahuilla Band of Indians), and Mr. Armstrong requested Tribal participation in the final survey. There were no other respondents.

4.2.1.1 AB 52 Consultation

Letters pursuant to Assembly Bill (AB) 52 were sent to potentially interested tribes on July 30, 2015. The Rincon Band of Luiseño Indians replied on August 12, 2015, and deferred to the Pechanga and Soboba Bands. The Morongo and Soboba Bands replied on August 24, 2015, asking for continued consultation under AB 52 and Section 106. Both groups identified the project area as culturally sensitive but did not provide specifics. Both groups have requested tribal monitoring during any ground-disturbing activity and copies of reports and records search results. The Soboba Band also requested direct government-to-government consultations. Consultation pursuant to AB 52 continued in 2018. A follow-up email was sent to the Morongo and Soboba Bands on November 6, 2018, finalizing the cultural resources survey schedule. On May 14, 2019, draft final cultural documents were sent as requested to the Morongo and Soboba Bands. By letter dated June 5, 2019, the Morongo Band requested to be notified of any Native American features or artifacts should they be discovered during construction activities. Additionally, while the Morongo Band did not request construction monitoring, they requested to be included if monitoring was requested and granted by another Native American group. No monitoring requests have been received to date. On June 18, 2019, a letter was sent to the Soboba Band indicating that Caltrans was preparing to move to the next phase of the environmental process, soliciting any comments on the draft cultural documents. No response has been received to date; however, if comments are received, final copies of the cultural documents will be provided upon request.

4.2.2 Historical Consultation

Consultation with agencies and interested parties regarding historical resources is summarized below:

- **President Richard Dozier, Moreno Valley Historical Society:** Contacted via email on March 19, 2015. No response received. Mr. Dozier had passed away. A follow-up email was sent to the historical society. No response received.

- **Moreno Valley Family History Center:** Letter and map mailed on March 20, 2015. On December 5, 2018, a follow-up telephone call was made and a voice message was left. No response to date.

- **Keith Herron, Historic Preservation Officer, Regional Park and Open-Space District, County of Riverside:** Letter and map mailed on March 20, 2015. On December 5, 2018, a follow-up telephone call was made. Erin Gettis, Mr. Herron's replacement, requested that the letter and map be emailed to her. The email was sent to Ms. Gettis on December 5, 2018. No response to date.

- **Viola F. Hamner, Author of "Moreno Valley, California: In the Beginning":** Letter and map mailed on March 20, 2015. On December 5, 2018, a follow-up telephone call was made to Ms. Hamner who stated she had no comments.

- **Steve Lech, Local Historian:** Contacted via email on March 19, 2015. On December 5, 2018, a follow-up email was sent to Mr. Lech. No response to date.

- **Ken Holtzclaw, Author of "Images of America: Moreno Valley":** Letter and map mailed on March 20, 2015. No response received. No follow-up attempt was made because no email address or telephone number was found.

4.2.3 State Historic Preservation Officer

As assigned by the Federal Highway Administration (FHWA), Caltrans has determined there are properties evaluated as a result of the project that are not eligible for inclusion in the National Register of Historic Places (NRHP) within the project APE. Under the Section 106 Programmatic Agreement (PA), Stipulation VIII.C, Caltrans requested the SHPO's concurrence in this determination. SHPO concurrence was received on November 14, 2012. The SHPO correspondence letters are included at the end of this chapter.

Pursuant to Stipulation VIII.C.6 of the PA, Caltrans determined that the Moreno Valley properties located at 12130 Theodore Street, 12150 Theodore Street, and the Armstrong House located at 12400 Theodore Street are not eligible for listing in the NRHP. The SHPO concurred with this finding in a letter dated to Caltrans on August 28, 2019 (also included at the end of this chapter).

4.2.4 Southern California Association of Governments Transportation Conformity Working Group

The project-level particulate matter hot-spot analysis was presented to the SCAG TCWG for discussion and review on March 24, 2015. Per Caltrans Headquarters policy, all nonexempt projects must go through review by the TCWG. This project was approved and concurred upon by Interagency Consultation at the TCWG meeting as a project not having adverse impacts on air quality, and it meets the requirements of the Clean Air Act (CAA) and Title 40, Code of Federal Regulations (CFR) Section 93.116 (40 CFR 93.116). A copy of the TCWG determination is included at the end of this chapter.

On October 23, 2018, the project was presented for discussion and review. The SCAG TCWG determined that the project was not a project of air quality concern (POAQC). The proposed project was approved and concurred upon by Interagency Consultation at the TCWG meeting as a project not having adverse impacts on air quality, and the proposed project meets the requirements of the CAA and 40 CFR 93.116. A copy of the TCWG finding is included at the end of this chapter.

4.2.5 United States Fish and Wildlife Service

On May 15, 2015, the USFWS provided the Proposed, Threatened, or Endangered Species List for species potentially occurring in the vicinity of the proposed project. An updated list was received from the USFWS on May 30, 2019 and on February 6, 2020. These letters are included at the end of this chapter.

4.2.6 National Oceanic and Atmospheric Administration

On December 5, 2018, the National Marine Fisheries Service Branch of the NOAA provided the marine species list for species potentially occurring in the vicinity of the proposed project. An updated list was received from the National Marine Fisheries Service on May 30, 2019. This letter is included at the end of this chapter.

4.3 Community Outreach and Public Involvement

The proposed project will include a public hearing and public circulation to receive community input on the environmental document. [To be completed based on the future outreach conducted for the proposed project.]

The City Council discussed the project on the following dates:

- March 13, 2013
- July 9, 2013
- March 28, 2014
- April 8, 2014
- February 6, 2018
- May 21, 2019

4.4 Agency Coordination Documentation

A Native American Consultation Record documenting all of the Section 106 communications and outreach is provided at the end of this chapter. Copies of the correspondence for the following groups and agencies is also provided at the end of this chapter:

- SHPO
- SCAG TCWG
- USFWS
- NOAA National Marine Fisheries Service

NATIVE AMERICAN CONSULTATION RECORD

Section 106 Native American Consultation for the Proposed State Route 60 Interchange/World Logistics Center Parkway Project in the City of Moreno Valley, Riverside County, California

Date LSA Requested Sacred Lands File Search: September 9, 2013 Date Native American Heritage Commission Replied: September 30, 2013
Results of Sacred Lands File Search: failed to indicate presence of Native American cultural resources but recommended LSA contact the groups/individuals listed below.

Groups Contacted	Date LSA Faxed or Mailed Letter to Tribes	Date and Results of LSA Follow-up Telephone Calls and/or Emails
Soboba Band of Luiseño Indians Joseph Ontiveros, Cultural Resources Dept. Serrano Cahuilla	10/7/13	10/8/13: Responded with letter requesting government to government consultation, that the Soboba continue to be a lead consulting tribal entity for this project, and Soboba Native American monitoring of any ground disturbing activities, including cultural resources survey and testing. 11/22/13: Per Soboba request, Caltrans participated in the consultation. 4/30/15: A follow-up e-mail was sent notifying Mr. Ontiveros of the revised APE. 7/16/18: A follow-up e-mail was sent notifying Mr. Ontiveros of further revisions to the APE. 10/22/18: A follow-up e-mail was sent to Mr. Ontiveros notifying him of further revisions to the APE. Mr. Ontiveros responded requesting new tribal (sic) scoping from Caltrans. 11/6/18: A follow-up e-mail was sent to Mr Ontiveros finalizing the survey schedule. 5/14/19: Draft Final documents were sent as requested on May 14, 2019. 6/18/19: On June 18, 2019, a letter was sent to Soboba Band of Luiseno Indians indicating Caltrans is prepared to move to the next phase of the environmental process, soliciting any comments on the draft cultural documents. If comments are received, final copies of the cultural documents will be provided upon request. No response received to date.
Pechanga Band of Mission Indians Paul Macarro, Pechanga	10/7/13	11/5/13: A follow-up e-mail was sent. 11/26/13: A follow-up e-mail was sent. 4/30/15: A follow-up e-mail was sent notifying Mr. Macarro of the revised APE. 7/16/18: A follow-up e-mail was sent to Ebru Ozdil (Cultural Resources Coordinator) notifying her of further revisions to the APE. 10/22/18: A follow-up e-mail was sent to Ms.Ozdil notifying her of further revisions to the APE 5/14/19: Draft Final documents were sent as requested on May 14, 2019. 6/11/19: By letter dated June 11, 2019, the Pechanga Band of Luiseno Indians requested the following language be inserted into the Ethnography section of the Archaeological Survey Report: "Many anthropologists and historians who have presented boundaries of the Luiseno traditional territory have included the Moreno Valley area in their descriptions (Heizer and Whipple 1951; Kroeber 1925), and such territory descriptions correspond with what was communicated to the Pechanga people by our elders."
Cahuilla Band of Indians Luther Salgado, Chairperson Cahuilla	10/7/13	7/16/18: A follow-up e-mail was sent to Mr. Salgado notifying him of further revisions to the APE 7/17/18: Mr. BobbyRay Esparza (Cultural Coordinator) responded indicating interest in a Cahuilla Tribal participation in the final survey. 10/22/18: A follow-up e-mail was sent to Mr. Salgado notifying him of further revisions to the APE

Groups Contacted	Date LSA Faxed or Mailed Letter to Tribes	Date and Results of LSA Follow-up Telephone Calls and/or Emails
		11/6/18: A follow-up e-mail was sent to Mr Esparza finalizing the survey schedule.
Ramona Band of Cahuilla Mission Indians Joseph Hamilton. Chairman Attn: John Gomez, Cultural Resources Coordinator Cahuilla	10/7/13	11/5/13: A follow-up e-mail was sent. 11/26/13: A follow-up e-mail was sent. 4/30/15: A follow-up e-mail was sent notifying Mr. Hamilton of the revised APE. 7/16/18: A follow-up e-mail was sent notifying Mr. Hamilton of further revisions to the APE. 10/22/18: A follow-up e-mail was sent to Mr. Hamilton notifying him of further revisions to the APE
Pechanga Band of Mission Indians Anna Hoover, Cultural Analyst Pechanga	10/7/13	11/5/13: A follow-up e-mail was sent. 11/21/13: A follow-up e-mail was sent. 11/22/13: Responded with letter requesting government to government consultation, copies of all applicable cultural and environmental documents, Pechanga monitoring of all survey and subsurface excavation activities and the opportunity for further comment upon review of cultural and environmental documents. Per Pechanga request, Caltrans subsequently participated in the consultation. 4/30/15: A follow-up e-mail was sent notifying Ms. Hoover of the revised APE. Ms. Hoover is no longer with Pechanga.
San Manuel Band of Mission Indians Daniel McCarthy, M.S., Director CRM Dept. Serrano	10/7/13	10/14/13: Mr. McCarthy responded via e-mail, indicating the San Manuel are unaware of any culturally important sites within the APE, and given the nature and location of this project the Tribe has no concerns. 4/30/15: A follow-up e-mail was sent notifying Mr. McCarthy of the revised APE.
Serrano Nation of Mission Indians Goldie Walker, Chairwoman Serrano	10/7/13	11/5/13: A follow-up phone-call was made. 11/7/13: Ms. Walker was contacted via telephone and she inquired about the presence of prehistoric resources within the APE, and requested further consultation in the event any previously undocumented prehistoric resources within the APE. 4/30/15: A follow-up letter was sent notifying Ms. Walker of the revised APE. Ms. Walker passed away in April 2018.
Santa Rosa Band of Mission Indians John Marcus, Chairman	10/7/13	11/5/13: A follow-up phone call was made, and further consultation was directed to Steven Estrada, Environmental Coordinator. 11/26/2013: A fax was sent to Mr. Estrada. 4/30/15: A follow-up fax was sent notifying Mr. Estrada of the revised APE. 12/14/18: A follow-up fax was sent notifying Mr. Estrada of the revised APE.
Ernest H. Siva Morongo Band of Mission Indians Tribal Elder Serrano Cahuilla	10/7/13	11/5/13: Mr. Siva was contacted via phone call, had no comments or concerns regarding the project. 4/30/15: A follow-up e-mail was sent notifying Mr. Siva of the revised APE.
Morongo Band of Mission Indians William Madrigal Jr.	10/7/13	11/5/13: A follow-up e-mail was sent. Mr. Madrigal responded via phone call, expressed concern regarding sensitivity of area east of the APE for prehistoric cultural resources and requested results

Groups Contacted	Date LSA Faxed or Mailed Letter to Tribes	Date and Results of LSA Follow-up Telephone Calls and/or Emails
Cultural Resources Manager Morongo		of records search within ½ mile of the APE, Native American monitoring of the survey by a Morongo monitor. LSA provided requested records search results. 4/30/15: Follow-up e-mail sent notifying Mr. Madrigal of the revised APE was undeliverable. 7/16/18: A follow-up e-mail was sent to Denisa Torres (Cultural Resources Manager) notifying her of further revisions to the APE. 10/22/18: A follow-up e-mail was sent to Ms. Torres notifying her of further revisions to the APE. Mr. Travis Armstrong (THPO) responded indicating that the detour routes are areas of interest to the Tribe and expressed a desire for a Morongo Tribal monitor to participate in the final survey 11/6/18: A follow-up e-mail was sent to Mr Esparza finalizing the survey schedule. 5/14/19: Draft Final documents were sent as requested on May 14, 2019. 6/5/2019: By letter dated June 5, 2019, the Morongo Band of Mission Indians requested to be notified of any Native American features or artifacts should they be discovered during construction activities. Additionally, while the Morongo Band of Mission Indians is not requesting construction monitoring, they requested to be included if monitoring was requested and granted by another Native American group. No monitoring requests have been received to date.

LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614-5987

949.553.0666 TEL
949.553.8076 FAX

FAX TRANSMITTAL

NAME: Dave Singleton

DATE: Sept. 9, 2013

FIRM: Native American Heritage Commission

PROJECT NUMBER: RBF1301

FAX NUMBER: (916) 373-5471

PROJECT NAME: Theodore St./SR-60 Interchange

FROM: LSA Associates, Inc.

SENT BY: Riordan Goodwin

FAX #: (909) 781-4277

NUMBER OF PAGES INCLUDING COVER: 2

CC: _____

☐ URGENT

☐ AT YOUR REQUEST

☐ FOR YOUR INFORMATION

☑ FOR YOUR REVIEW

☐ FOR YOUR APPROVAL

☐ HARD COPY TO FOLLOW

☐ OTHER _____

COMMENTS:

Mr. Singleton,

LSA Associates, Inc. has a project in eastern Riverside County, in Township 3 South, Range 2 West, in Sections 1, 2, 3 and 6, of the *Sunnymead* and *El Casco* USGS topographic quadrangle maps (San Bernardino Baseline and Meridian). A map showing the project area is attached.

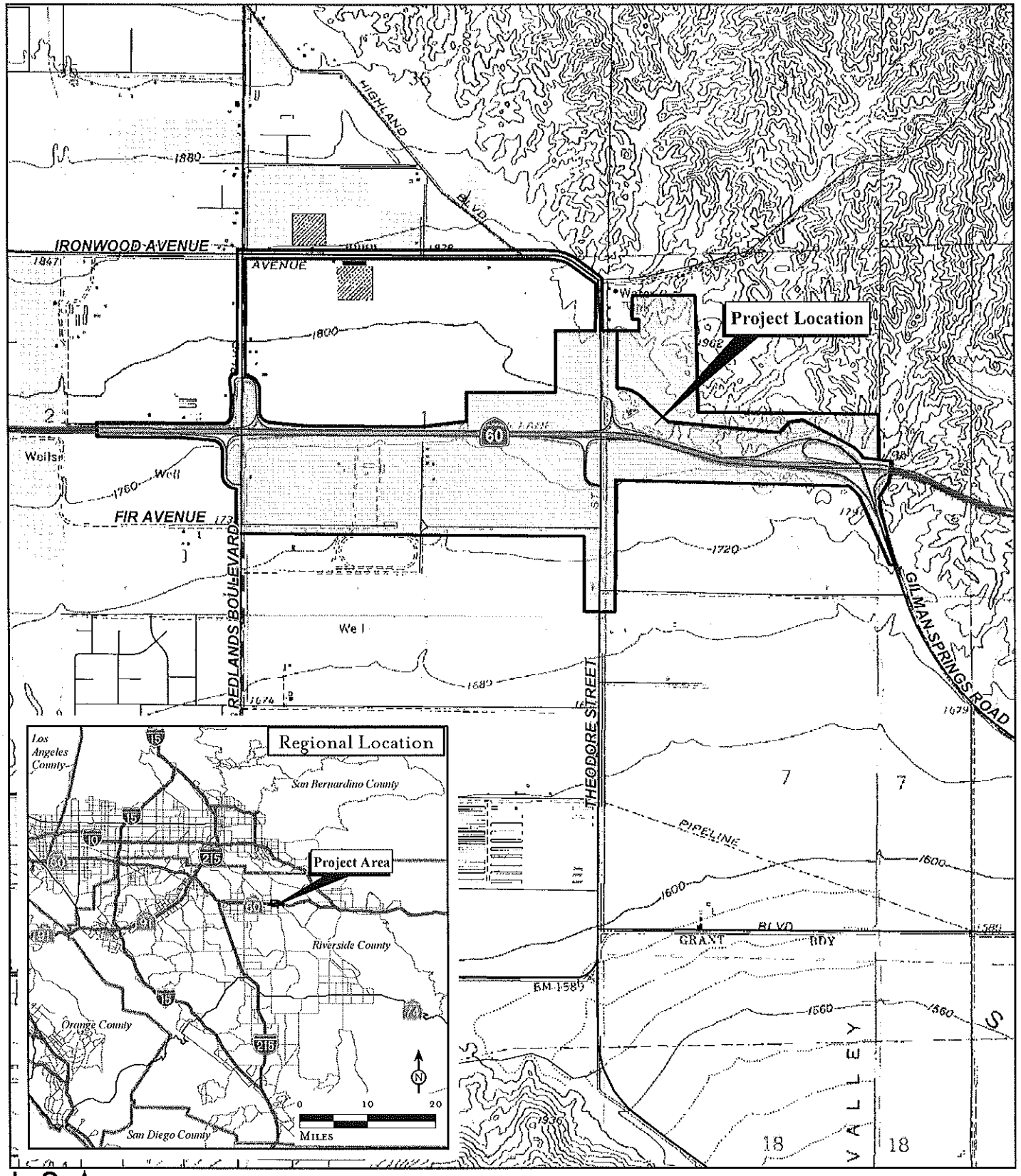
There will be ground disturbance associated with this project. Per Section 106 of the National Historic Preservation Act, LSA is requesting a Sacred Lands File search for the project area and a list of Native American groups/individuals that may have cultural ties and/or knowledge of cultural resources in the project area. Please notify LSA of any Native American cultural resources that might be impacted.

I will anticipate a response within 10 working days from your receipt of this request. Thank you very much for your assistance. If you have any questions or comments, please contact me at (951) 781-9310 or you may e-mail me at rory.goodwin@lsa-assoc.com.

Riordan Goodwin

Archaeologist/Senior Cultural Resources Manager

Attachments: USGS map



LSA

FIGURE 1

0 1,000 2,000

FEET

SR-60/Theodore Street Interchange
Cultural Resources Assessment

SOURCE: USGS 7.5' Quads: Sunnymead (1980), El Casco (1979) CA; Riverside County, 2011.

Regional and Project Location

I:\RBF1301\Reports\Cultural\fig1_reg_loc.mxd (8/15/2013)

STATE OF CALIFORNIA Edmund G. Brown, Jr. Governor
NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

September 30, 2013

Mr. Riordan Goodwin, Senior Cultural Resources Manager
LSA ASSOCIATES, INC.
20 Executive Park, Suite 200
Irvine, CA 92614-5987

Sent by FAX to: 949-553-8076
No. of Pages: 4

Re: Request for Sacred Lands File Search and Native American Contacts list for the **"RBF1301, Theodore St/SR 60 Interchange Project;"** located in the Morena Valley area; Riverside County, California.

Dear Mr. Goodwin:

A record searches of the NAHC Sacred Lands File **failed to indicate** the presence of Native American traditional cultural place(s) in the project sites submitted, based on the USGS coordinates submitted as part of the 'Areas of Potential Effect. '(APEs). Also, note that the absence of archaeological or Native American sacred places/sites does not preclude their existence. Other data sources for Native American sacred places/sites should also be contacted. A Native American tribe of individual may be the only sources of presence of traditional cultural places or sites.

In the 1985 Appellate Court decision (170 Cal App 3rd 604; *EPIC v. Johnson*), the Court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

Attached is a list of Native American tribes, individuals/organization who may have knowledge of cultural resources in or near the project area. As part of the consultation process, the NAHC recommends that local governments and project developers contact the tribal governments and individuals to determine if any cultural places might be impacted by the proposed action. If a response is not received in two weeks of notification the NAHC requests that a follow telephone call be made to ensure that the project information has been received.

If you have any questions or need additional information, please contact me at (916) 373-3715.

Sincerely,

Dave Singleton
Program Analyst

Attachments

Native American Contacts
Riverside County
September 30, 2013

Pechanga Band of Mission Indians
Paul Macarro, Cultural Resources Manager
P.O. Box 1477 Luiseno
Temecula , CA 92593
(951) 770-8100
pmacarro@pechanga-nsn.gov
(951) 506-9491 Fax

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670 Cahuilla
Anza , CA 92539
admin@ramonatribe.com
(951) 763-4105
(951) 763-4325 Fax

Santa Rosa Band of Mission Indians
John Marcus, Chairman
P.O. Box 391820 Cahuilla
Anza , CA 92539
(951) 659-2700
(951) 659-2228 Fax

Morongo Band of Mission Indians
William Madrigal, Jr.,Cultural Resources Manager
12700 Pumarra Road Cahuilla
Banning , CA 92220 Serrano
(951) 201-1866 - cell
wmadrigal@morongo-nsn.gov
(951) 572-6004 Fax

San Manuel Band of Mission Indians
Daniel McCarthy, M.S., Director-CRM Dept.
26569 Community Center. Drive Serrano
Highland , CA 92346
(909) 864-8933, Ext 3248
dmccarthy@sanmanuel-nsn.gov
(909) 862-5152 Fax

Serrano Nation of Mission Indians
Goldie Walker, Chairwoman
P.O. Box 343 Serrano
Patton , CA 92369

(909) 528-9027 or
(909) 528-9032

Cahuilla Band of Indians
Luther Salgado, Chairperson
PO Box 391760 Cahuilla
Anza , CA 92539
Chairman@cahuilla.net
760-763-5549
760-763-2631 - Tribal EPA

Pechanga Cultural Resources Department
Anna Hoover, Cultural Analyst
P.O. Box 2183 Luiseño
Temecula , CA 92593
ahoover@pechanga-nsn.gov
951-770-8104
(951) 694-0446 - FAX

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed TTheodore SR/SR 60 Interchange Project; located in the Moreno Valley area; Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.

Native American Contacts
Riverside County
September 30, 2013

Ernest H. Siva
Morongo Band of Mission Indians Tribal Elder
9570 Mias Canyon Road Serrano
Banning , CA 92220 Cahuilla
siva@dishmail.net
(951) 849-4676

SOBOBA BAND OF LUISENO INDIANS
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Luiseno
San Jacinto , CA 92581
jontiveros@soboba-nsn.gov
(951) 663-5279
(951) 654-5544, ext 4137

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed TTheodore St/SR 60 Interchange Project; located in the Moreno Valley area; Riverside County, California for which a Sacred Lands File search and Native American Contacts list were requested.

LSA

LSA ASSOCIATES, INC.
1500 IOWA AVENUE, SUITE 200
RIVERSIDE, CALIFORNIA 92507

951.781.9310 TEL
951.781.4277 FAX

OTHER OFFICES:
IRVINE
PT. RICHMOND
SAN LUIS OBISPO
PALM SPRINGS
FORT COLLINS
BERKELEY
ROCKLIN
CARLSBAD
FRESNO

October 7, 2013

Pechanga Cultural Resources Department
Anna Hoover, Cultural Analyst
Po Box 2183
Temecula, CA. 92593

Subject: Native American Consultation for the Theodore Street/SR-60 Improvements Project, City of Moreno Valley, Riverside County (LSA Project No. RBF1301)

Dear Ms. Hoover:

The City of Moreno Valley and Riverside County Transportation Department, in cooperation with the California Department of Transportation (Caltrans), District 8, proposes to improve the Theodore Street/State Route 60 (SR-60) Interchange. A map of the project location is attached.

LSA Associates, Inc. (LSA) is conducting the cultural resources studies for the project. Per Section 106 of the National Historic Preservation Act of 1966 (NHPA), LSA has notified the Native American Heritage Commission (NAHC) and requested a Sacred Lands File (SLF) search for the project Area of Potential Effects (APE). The results of the SLF search did not indicate the presence of Native American cultural resources within the APE as specified in our request. However, the NAHC has recommended contacting you as someone who may have information about cultural resources in the project area that could be affected.

If you know of any cultural resources that may be of religious and/or cultural significance to your community, or if you would like more information about the project, please do not hesitate to contact me at the above telephone number or address, or by email at rory.goodwin@lsa-assoc.com. If I do not receive a response from you, I will contact you again in the near future to discuss any comments or concerns you may have. Also, please feel free to forward this information to others in your group whom you believe may have information that would be helpful in identifying cultural resources in the project area.

Please be advised the field survey is tentatively scheduled for this month. If you wish to participate, please let us know as soon as possible.

Thank you for your involvement in this process. Your comments are important to the project, and I look forward to hearing from you.

Respectfully,

LSA ASSOCIATES, INC.

Riordan Goodwin

Riordan Goodwin

Archaeologist/Senior Cultural Resources Manager

Attachment: Project Location Map

PECHANGA CULTURAL RESOURCES
Temecula Band of Luiseño Mission Indians

Post Office. Box 2183 • Temecula, CA 92593
Telephone (951) 308-9295 • Fax (951) 506-9491

Chairperson:
Mary Bear Magee

Vice Chairperson:
Darlene Miranda

Committee Members:
Evie Gerber
Bridgett Barcello Maxwell
Richard B. Scearce, III
Germaine Arenas

Director:
Gary DuBois

Coordinator:
Paul Macarro

Cultural Analyst:
Anna Hoover

November 22, 2013

VIA E-Mail and USPS

RE: Request for Information for the Theodore Street/SR-60 Improvements Project, City of Moreno Valley, CA [LSA Associates: Project No RBF1301]

Dear Mr. Goodwin;

The Pechanga Band of Luiseño Indians ("the Tribe") appreciates your request for information regarding the above referenced Project. After reviewing the provided maps and our internal documents, we have determined that the Project area is not within reservation lands although it is within our ancestral territory. These comments are written in response to the archaeological notice we received from your office. Although your letter is being submitted as a part of the CEQA and NEPA analysis, the Tribe does not acknowledge that this is a request for Section 106 consultation as that request must come from the Lead Federal Agency, in this case Caltrans. Thus, we are submitting these comments to assist with the archaeological analysis and we will expect a formal consultation request for CEQA from the appropriate Lead Agency and for NEPA/Section 106 from Caltrans.

At this time, the Tribe is highly concerned that sensitive and significant resources may be impacted by the proposed Project. The Tribe knows that there are previously recorded sites within the APE as outlined in the maps provided to us. Human remains are also located within a very close proximity. The Tribe has worked in this area of Moreno Valley on separate projects and has identified subsurface cultural resources in areas that were previously identified as sterile by the project archaeologists. Further, the main core of a large Luiseño village is located south of the APE and portions of the village footprint may extend into the APE.

As your request is early in the process, we request to meet with you and the appropriate Lead Agency(s) to receive additional information and to provide further assistance for the archaeological study analysis. Please contact me at the information provided below to schedule a meeting.

Currently, the Tribe requests the following:

1) Participation in all archaeological surveys, excavations, geological testing and boring activities and any other field activities;
2) Copies of all applicable archaeological reports, site records, proposed grading plans and environmental documents (EA/IS/MND/EIR, etc) as they become available;

3) Government-to-government consultation with the Lead Agency(s); and

4) The Tribe believes that monitoring by a Riverside County qualified archaeologist and a professional Pechanga Tribe monitor will be required during earthmoving activities. Therefore, the Tribe reserves its right to make additional comments and recommendations once the environmental documents have been received and fully reviewed.

As a sovereign governmental entity, the Tribe is entitled to appropriate and adequate government-to-government consultation regarding the proposed Project. The Tribe does not consider initial inquiry letters from project consultants to constitute appropriate government-to-government consultation or to initiate consultation, but rather tools to obtain further information about the Project area. Therefore, the Tribe reserves its rights to participate in the formal environmental review process, including government-to-government consultation with the Lead Agency(s), and requests to be included in all correspondence regarding this Project.

Please note that we are interested in participating in surveys within Luiseño ancestral territory. Prior to conducting any surveys, please contact the Cultural Department to schedule specifics. If you have any additional questions or comments, please contact me at ahoover@pechanga-nsn.gov or 951-770-8104.

Sincerely,

Anna Hoover
Cultural Analyst

LSA

LSA ASSOCIATES, INC.
1500 IOWA AVENUE, SUITE 200
RIVERSIDE, CALIFORNIA 92507

951.781.9310 TEL
951.781.4277 FAX

OTHER OFFICES:
IRVINE
PT. RICHMOND
SAN LUIS OBISPO
PALM SPRINGS
FORT COLLINS
BERKELEY
ROCKLIN
CARLSBAD
FRESNO

October 7, 2013

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
Po Box 487
San Jacinto, CA. 92581

Subject: Native American Consultation for the Theodore Street/SR-60 Improvements Project, City of Moreno Valley, Riverside County (LSA Project No. RBF1301)

Dear Mr. Ontiveros:

The City of Moreno Valley and Riverside County Transportation Department, in cooperation with the California Department of Transportation (Caltrans), District 8, proposes to improve the Theodore Street/State Route 60 (SR-60) Interchange. A map of the project location is attached.

LSA Associates, Inc. (LSA) is conducting the cultural resources studies for the project. Per Section 106 of the National Historic Preservation Act of 1966 (NHPA), LSA has notified the Native American Heritage Commission (NAHC) and requested a Sacred Lands File (SLF) search for the project Area of Potential Effects (APE). The results of the SLF search did not indicate the presence of Native American cultural resources within the APE as specified in our request. However, the NAHC has recommended contacting you as someone who may have information about cultural resources in the project area that could be affected.

If you know of any cultural resources that may be of religious and/or cultural significance to your community, or if you would like more information about the project, please do not hesitate to contact me at the above telephone number or address, or by email at rory.goodwin@lsa-assoc.com. If I do not receive a response from you, I will contact you again in the near future to discuss any comments or concerns you may have. Also, please feel free to forward this information to others in your group whom you believe may have information that would be helpful in identifying cultural resources in the project area.

Please be advised the field survey is tentatively scheduled for this month. If you wish to participate, please let us know as soon as possible.

Thank you for your involvement in this process. Your comments are important to the project, and I look forward to hearing from you.

Respectfully,

LSA ASSOCIATES, INC.



Riordan Goodwin

Archaeologist/Senior Cultural Resources Manager

Attachment: Project Location Map

October 8, 2013

Attn: Riodan Goodwin, Archaeologist
LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, CA 92614

Re: Project number RBF1301
Theodore Street/SR-60 Improvements Project, Riverside County, California

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. This project location is in close proximity to known village sites and was used in ongoing trade between various tribes. Therefore it is regarded as highly sensitive to the people of Soboba.

Soboba Band of Luiseño Indians is requesting the following:

1. G**overnment to Government** consultation in accordance with Section 106. Including the transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this project should be done as soon as new developments occur.

2. Soboba Band of Luiseño Indians continue to be a lead consulting tribal entity for this project.

3. Working in and around traditional use areas intensifies the possibility of encountering cultural resources during the construction/excavation phase. For this reason the Soboba Band of Luiseño Indians requests that Native American Monitor(s) from the Soboba Band of Luiseño Indians Cultural Resource Department to be present during any ground disturbing proceedings. Including surveys and archaeological testing.

4. Request that proper procedures be taken and requests of the tribe be honored (Please see the attachment)

The Soboba Band is requesting that a face-to-face meeting take place between a representative from the Soboba Band and Caltrans.

Sincerely,

Joseph Ontiveros
Director of Cultural Resources
Soboba Band of Luiseño Indians P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

Cultural Items (Artifacts). Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer should agree to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. Where appropriate and agreed upon in advance, Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

The Developer should waive any and all claims to ownership of Native American ceremonial and cultural artifacts that may be found on the Project site. Upon completion of authorized and mandatory archeological analysis, the Developer should return said artifacts to the Soboba Band within a reasonable time period agreed to by the Parties and not to exceed (30) days from the initial recovery of the items.

Treatment and Disposition of Remains

A. The Soboba Band shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity.

B. The Soboba Band, as MLD, shall complete its inspection within twenty-four (24) hours of receiving notification from either the Developer or the NAHC, as required by California Public Resources Code § 5097.98 (a). The Parties agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes.

C. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The Soboba Band, as the MLD in consultation with the Developer, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains.

D. All parties are aware that the Soboba Band may wish to rebury the human remains and associated ceremonial and cultural items (artifacts) on or near, the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The Developer should accommodate on-site reburial in a location mutually agreed upon by the Parties.

E. The term "human remains" encompasses more than human bones because the Soboba Band's traditions periodically necessitated the ceremonial burning of human remains. Grave goods are those artifacts associated with any human remains. These items, and other funerary remnants and their ashes are to be treated in the same manner as human bone fragments or bones that remain intact

Coordination with County Coroner's Office. The Lead Agencies and the Developer should immediately contact both the Coroner and the Soboba Band in the event that any human remains are discovered during implementation of the Project. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c).

Non-Disclosure of Location Reburials. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer agrees to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. Where appropriate and agreed upon in advance, Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

Rory Goodwin

From: Daniel McCarthy <DMcCarthy@sanmanuel-nsn.gov>
Sent: Monday, October 14, 2013 10:49 AM
To: Rory Goodwin
Subject: Re: Theodore Street/SR-6- Improvements Project

Rory,
Thank you for the opportunity to comment. The Tribe is unaware of any culturally important sites within the project area. Given the nature and location of this project we have no concerns. Also, given the project location, other neighboring tribes used this area as well. It is recommended that other reservations be contacted and afforded the opportunity to comment.

Regards,
//daniel

Daniel McCarthy, MS, RPA
Director
Cultural Resources Management Department
San Manuel Band of Mission Indians
26569 Community Center Drive
Highland, CA 92346
Office: 909 864-8933 x 3248
Cell: 909 838-4175
dmccarthy@sanmanuel-nsn.gov

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LSA

LSA ASSOCIATES, INC.
1500 IOWA AVENUE, SUITE 200
RIVERSIDE, CALIFORNIA 92507

951.781.9310 TEL
951.781.4277 FAX

OTHER OFFICES:
IRVINE
PT. RICHMOND
SAN LUIS OBISPO
PALM SPRINGS
FORT COLLINS
BERKELEY
ROCKLIN
CARLSBAD
FRESNO

April 30, 2015

Serrano Nation of Mission Indians
Goldie Walker, Chairwoman
Po Box 343
Patton, CA. 92369

Subject: Native American Consultation for the Theodore Street/SR-60 Improvements Project, City of Moreno Valley, Riverside County (LSA Project No. RBF1301)

Dear Ms. Walker:

Please be advised that the project APE has changed/expanded to accommodate changes in the project design and engineering since our initial letter in October of 2013. No prehistoric cultural resources were identified during the surveys conducted in February and March and the final surveys are scheduled for some time during the first half of next month. Please let me know if you have any comments or questions regarding the project APE at your earliest convenience.

Thank you for your involvement in this process. Your comments are important to the project, and I look forward to hearing from you.

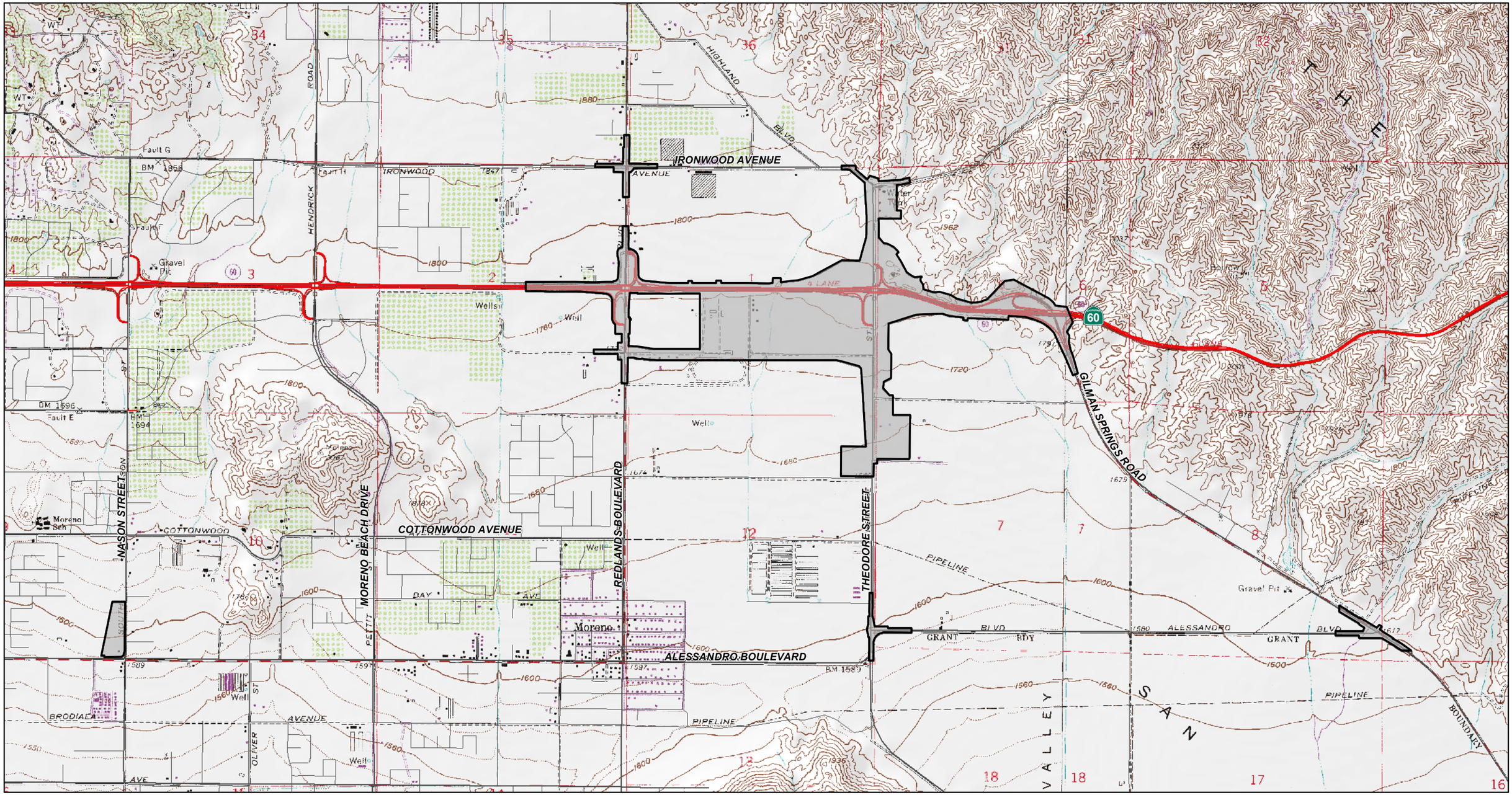
Respectfully,

LSA ASSOCIATES, INC.

Riordan Goodwin

Riordan Goodwin
Archaeologist/Senior Cultural Resources Manager

Attachment: Project Location Maps



MAP 2

Area of Potential Effects (APE)

0 1,000 2,000 FEET

0 304.8 609.6 METERS

SOURCE: USGS 7.5' Quads: El Casco, 1979 and Sunnymead, 1980; Riverside County, 2014.

I:\RBF1301\Reports\Cultural\Map2_Location.mxd (4/6/2015)

08-RIV-60 PM 20.0/22.0
EA#0M590 PN 0813000109
Theodore Street/SR-60 Interchange
Cultural Resources Report

Project Location

From: Joseph Ontiveros
To: Rory Goodwin
Subject: Re: Theodore Street/SR-60 Improvements Project 3rd APE revision
Date: Monday, October 22, 2018 1:42:31 PM
Attachments: logo1_d797a0c3-9365-497b-9c42-60e830c7158f.png

Rory,

I would also like to request a new tribal scoping. Perhaps we could arrange for a discussion in the near future to address tribal concerns regarding the redesign.

Joe

Joseph Ontiveros
Tribal Historic Preservation Officer
Soboba Band of Luiseno Indians
P.O Box 487<x-apple-data-detectors://2/0>
San Jacinto, Ca 92581<x-apple-data-detectors://2/0>
P (951) 654-2765 ext.4137<tel:(951)%20654-2765;4137>
C (951) 663-5279<tel:(951)%20663-5279>
[Soboba_?]

[cid:logo1_d797a0c3-9365-497b-9c42-60e830c7158f.png] Joseph Ontiveros
Tribal Historic Preservation Officer
(951) 654-5544 Ext. 4137
jontiveros@soboba-nsn.gov
Cultural Resource
23906 Soboba Rd. San Jacinto, CA 92583
P.O. Box 487 San Jacinto, CA 92581
www.soboba-nsn.gov<http://www.soboba-nsn.gov>

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On Oct 22, 2018, at 1:25 PM, Rory Goodwin <Rory.Goodwin@lsa.net<mailto:Rory.Goodwin@lsa.net>> wrote:

Mr. Ontiveros,

Please be advised that the project APE has changed/expanded once again to accommodate revisions in the project design and engineering since our last communication in July (specifically, detour routes have been added along Alessandro Boulevard, Gilman Springs Road and Theodore Street). An additional cultural resources survey will be scheduled some time during the next several weeks. Please let me know if you have any comments or questions or would like to coordinate Tribal participation in the survey.

Thank you,

Riordan Goodwin
Archaeologist/Senior Cultural Resources Manager
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200

Riverside, CA 92507
(951) 781-9310 Office
(951) 712-3128 Wireless

From: Rory Goodwin
Sent: Monday, July 16, 2018 12:29 PM
To: 'jontiveros@soboba-nsn.gov<mailto:jontiveros@soboba-nsn.gov>'
Subject: RE: Theodore Street/SR-60 Improvements Project 2nd APE revision
Importance: High

Mr. Ontiveros,

Please be advised that the project APE has changed/expanded once again to accommodate revisions in the project design and engineering since our last communication in April of 2015 (specifically, the realignment of Eucalyptus Avenue at Theodore Street, Alternatives 2a and 6a). Additional survey of the new area will likely be scheduled some time during the next few weeks. Please let me know if you would like LSA to coordinate Tribal participation in the survey or if you have any comments or questions at your earliest convenience.

Thank you,

Riordan Goodwin
Archaeologist/Senior Cultural Resources Manager
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, CA 92507
(951) 781-9310 Office
(951) 712-3128 Wireless

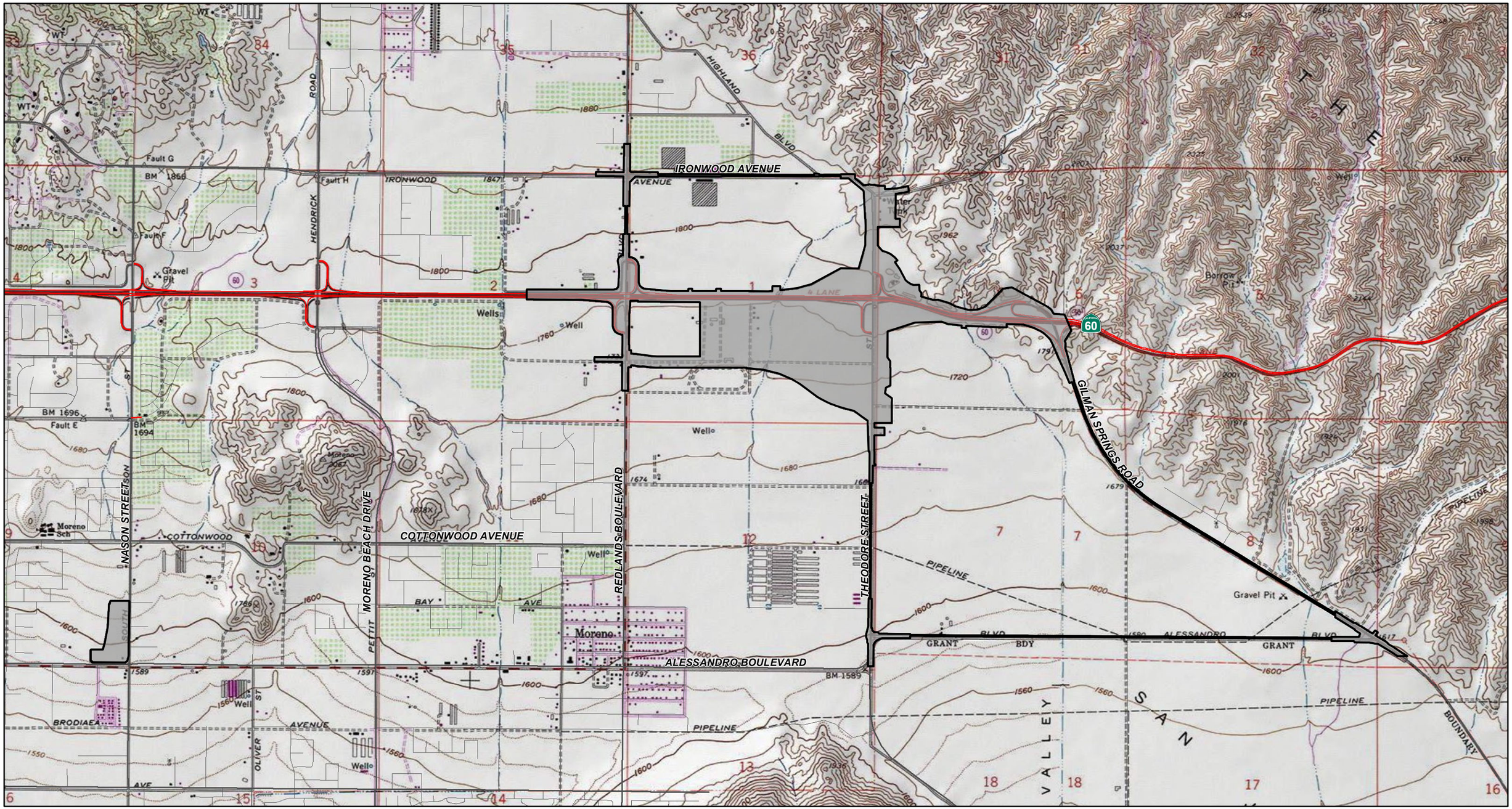
From: Rory Goodwin
Sent: Thursday, April 30, 2015 11:29 AM
To: jontiveros@soboba-nsn.gov<mailto:jontiveros@soboba-nsn.gov>
Cc: Laura Shaker (lshaker@soboba-nsn.gov<mailto:lshaker@soboba-nsn.gov>)
Subject: FW: Theodore Street/SR-60 Improvements Project APE

Mr. Ontiveros,

Please be advised that the project APE has changed/expanded to accommodate changes in the project design and engineering since our initial letter in October of 2013. No prehistoric cultural resources were identified during the surveys conducted in February and March and the final surveys are scheduled for some time during the first half of next month. Please let me know if you have any comments or questions regarding the project APE at your earliest convenience.

Thank you,

Riordan Goodwin
Archaeologist/Senior Cultural Resources Manager
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, CA 92507
(951) 781-9310 Office
(951) 781-4277 Fax
(951) 712-3128 Wireless
<Map2_Location.pdf>



LEGEND

Area of Potential Effects (APE)

MAP 2

0 1000 2000
FEET

SOURCE: USGS 7.5' Quads: El Casco, 1979 and Sunnymead, 1980; Riverside County, 2014; RBF (2018)

I:\RBF1301\Reports\Cultural\Location.mxd (12/12/2018)

SR-60/World Logistics Center Pkwy Interchange Project

Project Location

08-RIV-60 PM 20.0/22.0

EA#0M590 PN 0813000109

LSA ASSOCIATES, INC.
20 EXECUTIVE PARK, SUITE 200
IRVINE, CALIFORNIA 92614-5987
949.553.0666 TEL
949.553.8076 FAX

FAX TRANSMITTAL

NAME: Steven Estrada, Environmental Coordinator
DATE: December 14, 2018

FIRM: Santa Rosa Band of Mission Indians
PROJECT NUMBER: RBF1303A

FAX NUMBER: (951) 659-2228
PROJECT NAME: SR-60/World Logistics Center (formerly Theodore St./SR-60 Interchange)

FROM: LSA Associates, Inc.
☐ **URGENT**

SENT BY: Riordan Goodwin
☐ **AT YOUR REQUEST**

FAX #: (909) 781-4277
☐ **FOR YOUR INFORMATION**

NUMBER OF PAGES INCLUDING COVER: 2
☑ **FOR YOUR REVIEW**

CC:
☐ **FOR YOUR APPROVAL**

☐ **HARD COPY TO FOLLOW**

☐ **OTHER**

COMMENTS:

Mr. Estrada,

Please be advised that the project APE has changed/expanded to accommodate revisions in the project design and engineering (specifically, realignment of Eucalyptus Avenue and detour routes added along Alessandro Boulevard, Gilman Springs Road and Theodore Street). A map of the revised project area is attached. Please let me know at your earliest convenience if you have any concerns or recommendations. As always, your help is greatly appreciated.

Thank you,

Riordan Goodwin
Archaeologist/Senior Cultural Resources Manager
LSA Associates, Inc.
1500 Iowa Avenue, Suite 200
Riverside, CA 92507
(951) 781-9310 Office
(951) 781-4277 Fax

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OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

November 14, 2012 Reply To: FHWA_2012_1011_001

Gabrielle Duff, Office Chief
Environmental Studies/Cultural Studies
Caltrans District 8
464 W Fourth Street
San Bernardino, CA 92401-1400

Re: Determinations of Eligibility for the Proposed Gilman Springs Road Shoulder Widening Project, Riverside County, CA

Dear Ms. Duff:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA).

Caltrans has determined that the following properties are not eligible for the National Register of Historic Places:

- a segment of the former Jackrabbit Trail Route (formerly US Highway 60)
- a segment of Gilman Springs Road (formerly State Route 79)

Based on review of the submitted documentation, I concur.

Thank you for considering historic properties during project planning. If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 or email at nlindquist@parks.ca.gov.

Sincerely,

Susan K Stratton for

Carol Roland-Nawi, Ph.D.
State Historic Preservation Officer

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State of California • Natural Resources Agency Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION Lisa Ann L. Mangat, *Director*
OFFICE OF HISTORIC PRESERVATION

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

August 28, 2019

VIA EMAIL

In reply refer to: FHWA_2019_0725_001

Mr. Andrew Walters
Branch Chief – Environmental Support/Cultural Studies
Caltrans District 8, Environmental Planning (MS 825)
464 W Fourth Street, 6th floor
San Bernardino, CA 92401-1400

Subject: Determinations of Eligibility for the Proposed SR-60 World Logistic Center Parkway IC Project, Fontana, San Bernardino County, CA

Dear Mr. Walters:

Caltrans is initiating consultation regarding the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). Caltrans is also consulting in accordance with the Public Resources Code 5024 and pursuant to the *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code 5024 and Governor's Executive Order W-26-92* (5024 MOU). As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR), a Historical Resources Evaluation Report (HRER), and an Archaeological Survey Report for the proposed project.

The City of Moreno Valley, in cooperation with Caltrans District 8, proposes to reconstruct and improve the State Route 60/World Logistics Center Parkway interchange. A more detailed description of the project and area of potential effect (APE) is located on pages 1-2 of the HPSR.

Pursuant to Stipulation VIII.C.6 of the PA, Caltrans determined that the following properties are not eligible for listing in the National Register of Historic Places (NRHP):

- 12130 Theodore Street, Moreno Valley, CA
- 12150 Theodore Street, Moreno Valley, CA
- Armstrong House, 12400 Theodore Street, Moreno Valley, CA

Based on review of the submitted documentation, I concur with the above determinations.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov .
Sincerely,



Julianne Polanco
State Historic Preservation Officer

March 2015

PM Hot Spot Analysis Project Lists

Review of PM Hot Spot Interagency Review Forms

March, 2015	Determination
RIV080904 March 2015	Not a POAQC - Hot Spot Analysis Not Required (Caltrans Headquarters concurrence received via email after the meeting)

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PM Hot Spot Analysis Project Lists

Review of PM Hot Spot Interagency Review Forms

October, 2018	Determination
RIV080904 October 2018	Not a POAQC - Hot Spot Analysis Not Required (EPA concurrence received before the meeting)
SR-74 Widening October 2018	Not a POAQC - Hot Spot Analysis Not Required (EPA concurrence received before the meeting)
LA0G1119update October 2018 LA0G1119update October 2018 track	(Was determined to be not a POAQC on September 25, 2018)
LALS04update October 2018 LALS04update October 2018 track	(Was determined to be not a POAQC on May 22, 2018)
RIV100107 October 2018 Figures 2-4 RIV100107 October 2018 RIV100107 October 2018 Figure 1	Not a POAQC - Hot Spot Analysis Not Required (EPA concurrence received before the meeting. Project sponsor will update PM hot spot interagency review form by adding PM10.)
RIV031215 October 2018 Project Map RIV031215 October 2018 RIV031215 October 2018 Traffic Analysis	Not a POAQC - Hot Spot Analysis Not Required (Caltrans, EPA, and FHWA concurrence received after December 4, 2018 TCWG meeting)

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
PHONE: (760)431-9440 FAX: (760)431-5901
URL: www.fws.gov/carlsbad/

Consultation Code: 08ECAR00-2015-SLI-0420 May 15, 2015
Event Code: 08ECAR00-2015-E-00799
Project Name: Stater Route 60 (SR60) Theodore Street Interchange Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

Official Species List

Provided by:

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
(760) 431-9440
http://www.fws.gov/carlsbad/

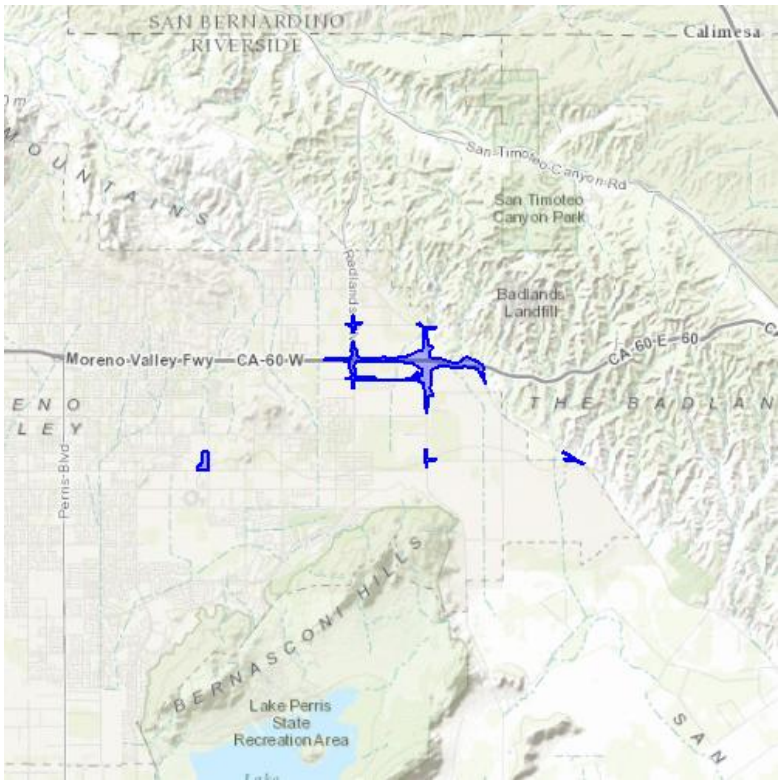
Consultation Code: 08ECAR00-2015-SLI-0420
Event Code: 08ECAR00-2015-E-00799

Project Type: TRANSPORTATION

Project Name: Stater Route 60 (SR60) Theodore Street Interchange Project
Project Description: The City of Moreno Valley, in cooperation with the California Department of Transportation (Caltrans), District 8, proposes to reconstruct and improve the State Route 60 (SR-60)/Theodore Street interchange. The majority of the project site is located in the City of Moreno Valley; however, the northeast quadrant of the site is located within unincorporated Riverside County (County) but within the Cityâs Sphere of Influence.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Riverside, CA

Endangered Species Act Species List

There are a total of 13 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	**Status**	**Has Critical Habitat**	**Condition(s)**
Coastal California gnatcatcher *(Polioptila californica californica)* Population: Entire	Threatened	Final designated	
Least Bell's vireo *(Vireo bellii pusillus)* Population: Entire	Endangered	Final designated	
Southwestern Willow flycatcher *(Empidonax traillii extimus)* Population: Entire	Endangered	Final designated	
Crustaceans			
Riverside fairy shrimp *(Streptocephalus woottoni)* Population: Entire	Endangered	Final designated	
Vernal Pool fairy shrimp *(Branchinecta lynchi)* Population: Entire	Threatened	Final designated	
Flowering Plants			
Nevin's barberry *(Berberis nevinii)*	Endangered	Final designated	

San Diego ambrosia *(Ambrosia pumila)*	Endangered	Final designated	
San Jacinto Valley crownscale *(Atriplex coronata var. notatior)*	Endangered		
Santa Ana River woolly-star *(Eriastrum densifolium ssp. sanctorum)*	Endangered		
Spreading navarretia *(Navarretia fossalis)*	Threatened	Final designated	
Thread-Leaved brodiaea *(Brodiaea filifolia)*	Threatened	Final designated	
Mammals			
San Bernardino Merriam's kangaroo rat *(Dipodomys merriami parvus)* Population: Entire	Endangered	Final designated	
Stephens' kangaroo rat *(Dipodomys stephensi)* Population: Entire	Endangered		

Critical habitats that lie within your project area

There are no critical habitats within your project area.

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To:
Consultation Code: 08ECAR00-2019-SLI-0249
Event Code: 08ECAR00-2019-E-02357
Project Name: SR60/World Logistics Parkway Project

May 30, 2019

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2019-SLI-0249

Event Code: 08ECAR00-2019-E-02357

Project Name: SR60/World Logistics Parkway Project

Project Type: TRANSPORTATION

Project Description: The City of Moreno Valley, in cooperation with the California Department of Transportation, District 8, proposes to reconstruct and improve the State Route 60 (SR-60)/ (WLC Pkwy) interchange.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.94639598192409N117.15673369296186W



Counties: Riverside, CA

Endangered Species Act Species

There is a total of 13 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat *Dipodomys merriami parvus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat *Dipodomys stephensi (incl. D. cascus)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp *Streptocephalus woottoni* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
San Diego Ambrosia *Ambrosia pumila* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered
San Jacinto Valley Crownscale *Atriplex coronata var. notatior* There is **final** critical habitat for this species. However, no *actual* acres or miles were designated due to exemptions and/or exclusions. See Federal Register publication for details. Species profile: https://ecos.fws.gov/ecp/species/4353	Endangered
Santa Ana River Woolly-star *Eriastrum densifolium ssp. sanctorum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6575	Endangered
Spreading Navarretia *Navarretia fossalis* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened
Thread-leaved Brodiaea *Brodiaea filifolia* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

From:	Denise Woodard
To:	nmfswcrca.specieslist@noaa.gov
Cc:	Denise Woodard
Subject:	Caltrans District 8 on behalf of the Federal Highway Administration; EA 0M5900 Federal Project No. PN 0813000109 - State Route 60/World Logistics Center Parkway Project, City of Moreno Valley Riverside County, CA
Date:	Thursday, May 30, 2019 1:25:30 PM

Dear NOAA~

I am requesting this list as a non-federal representative for the subject project.

Thank you,

Denise Woodard | Associate/Senior Biologist
LSA | 1500 Iowa Avenue, Suite 200
Riverside, CA 92507
_ _ _ _ _ _ _ _ _ _ _
951-781-9310 Tel
951-403-1701 Cell
Website

Quad Name **El Casco**

Quad Number **33117-H1**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans
-
MMPA Pinnipeds –

Quad Name **El Casco**
Quad Number **33117-H1**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office

562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Redlands**

Quad Number **34117-A2**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Yucaipa**

Quad Number **34117-A1**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -

From:	NMFSWCRCA Specieslist - NOAA Service Account
To:	Denise Woodard
Subject:	Re: Caltrans District 8 on behalf of the Federal Highway Administration; EA 0M5900 Federal Project No. PN 0813000109 - State Route 60/World Logistics Center Parkway Project, City of Moreno Valley Riverside County, CA
Date:	Thursday, May 30, 2019 1:25:38 PM

Receipt of this message confirms that NMFS has received your email to nmfswcrca.specieslist@noaa.gov. If you are a federal agency (or representative) and have followed the steps outlined on the California Species List Tools web page (http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html), you have generated an official Endangered Species Act species list.

Messages sent to this email address are not responded to directly. For project specific questions, please contact your local NMFS office.

Northern California/Klamath (Arcata) 707-822-7201

North-Central Coast (Santa Rosa) 707-387-0737

Southern California (Long Beach) 562-980-4000

California Central Valley (Sacramento) 916-930-3600

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To: February 06, 2020
Consultation Code: 08ECAR00-2019-SLI-0249
Event Code: 08ECAR00-2020-E-01326
Project Name: SR60/World Logistics Parkway Project

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2019-SLI-0249

Event Code: 08ECAR00-2020-E-01326

Project Name: SR60/World Logistics Parkway Project

Project Type: TRANSPORTATION

Project Description: The City of Moreno Valley, in cooperation with the California Department of Transportation, District 8, proposes to reconstruct and improve the State Route 60 (SR-60)/ (WLC Pkwy) interchange.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.94639598192409N117.15673369296186W



Counties: Riverside, CA

Endangered Species Act Species

There is a total of 13 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat *Dipodomys merriami parvus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat *Dipodomys stephensi (incl. D. cascus)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Crustaceans

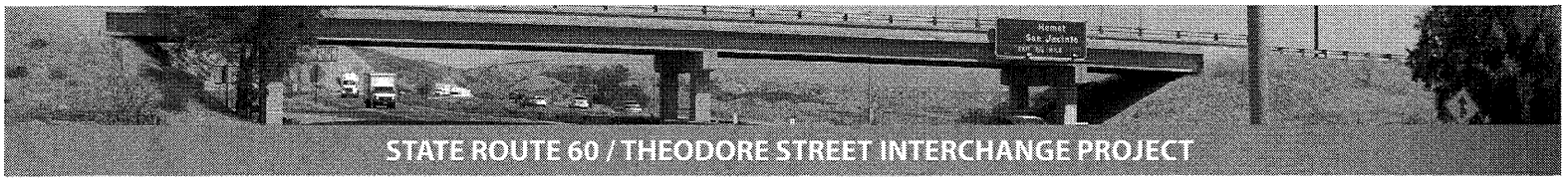
NAME	STATUS
Riverside Fairy Shrimp *Streptocephalus woottoni* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered
San Diego Ambrosia *Ambrosia pumila* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered
San Jacinto Valley Crownscale *Atriplex coronata var. notatior* There is **final** critical habitat for this species. However, no *actual* acres or miles were designated due to exemptions and/or exclusions. See Federal Register publication for details. Species profile: https://ecos.fws.gov/ecp/species/4353	Endangered
Santa Ana River Woolly-star *Eriastrum densifolium ssp. sanctorum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6575	Endangered
Spreading Navarretia *Navarretia fossalis* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened
Thread-leaved Brodiaea *Brodiaea filifolia* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



COMMENT FORM / *FORMA DE COMENTARIO* *(1)*

Name / *Nombre*	Brendan	Date / *Fecha* 7/23/18
Business / *Negocio*		
Address / *Domicilio*		
E-Mail / *Correo Electrónico*		
Telephone / *Teléfono*	□ Home □ Work □ Cell	

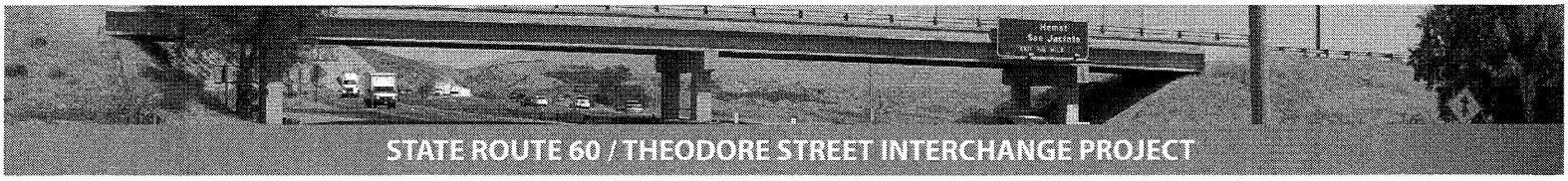
COMMENT(S):

Why is the least used interchange in the city being forwarded when others near current homes and development such as Moreno Beach Dr. and Redlands Boulevard being forwarded for construction before when funding is scarce and needs for these and is immediate and has been for several years. Few residents live on this street most uses are the Sketchers store and county landfill. The city of Moreno Valley has funded Theodore Street's renaming, signage, maintenance, and interchanges largely only to the largest landowner Highland Fairview despite only about 5% of the property developed, its current proposal is halted by court order, and all preceding ones such as Moreno Highlands, the Moreno International Trade Center, and other dating to 1986 have not been begun on any level. What the current mayor and city council seem to only want to provide infrastructure originally to be paid for by Highland Fairview for any given justification now adding Eucalyptus, and others originally to be included by the Highland Fairview Corporate Park project. Little benefit for the residents is achieve where it is greatly needed for area of minimal use or unlikely part of construction. The city as a whole is not holding the developer for the World Logistics Center to provide these infrastructure changes as promised. Even for different developments such as residential and office zoning nearby. Areas to the West already built need this type of improvement now such as Redlands Blvd interchange and Moreno Beach Dr. Any new funding source needs to be implemented to preexisting and more frequently used infrastructure now, not elsewhere for construction purposes. Planning is fine for future use, but other areas need improvement for priority first.

RESPONSE(S):

The team thanks you for your comments. This 60/Theodore project is included in the Adopted Capital Improvement Plan and approved by the City Council. Your statements and concerns have been included in the project's record.

Please return your comment card to a project team member or email your response to Rebecca M. Young, Project Manager, at ryoung@mbakerintl.com



COMMENT FORM / *FORMA DE COMENTARIO* *(2)*

Name / *Nombre*	Barbara Baxter	Date / *Fecha* 23 July
Business / *Negocio*		
Address / *Domicilio*	28010 Gerald Ln. Moreno Valley CA 92555	
E-Mail / *Correo Electrónico*	baxtertwo@yahoo.com	
Telephone / *Teléfono*	□ Home □ Work □ **Cell** 957-567-1483	

COMMENT(S):

[Q1] The time of day for this meeting (3pm) was not well planned for a city of commuters!

[Q2] Round-abouts are best left to the Europeans!

[Q3] How much will the city pay (tax payers) percentage wise and other funding sources?

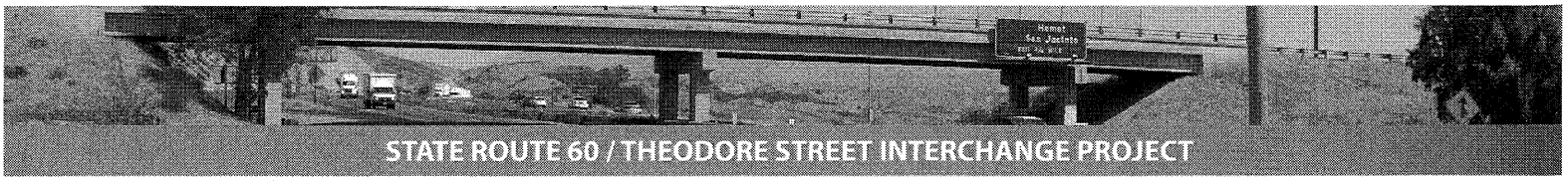
RESPONSE(S):

[Q1] – Future briefings will be provided in the evenings or weekends.

[Q2] – The team thanks you for your comments. Your statements and concerns have been included in the project's record.

[Q3] – This 60/Theodore project and its budget is included in the Adopted Capital Improvement Plan and approved by the City Council.

Please return your comment card to a project team member or email your response to Rebecca M. Young, Project Manager, at ryoung@mbakerintl.com



COMMENT FORM / *FORMA DE COMENTARIO* *(3)*

Name / *Nombre*	Marcia Narog	Date / *Fecha* 7/23/18
Business / *Negocio*	Retired Ecologist	
Address / *Domicilio*	11475 Carrie Ln. Moreno Valley 92555	
E-Mail / *Correo Electrónico*	mgnarog@gmail.com	
Telephone / *Teléfono*	□ Home □ Work □ Cell	

COMMENT(S):

Environmental Issues: [Q1] E-W sun angle issues for on + off ramps + turn abouts.

[Q2] Wildlife corridor over or under fwy include multiuse trails to connect badlands conservancy lands w/ southern species genetic flow.

Economic Issue: [Q3] North of freeway streets are in "disrepair" from Theodore to Nason. Their replacement should have priority over city $'s being spent on new Theodore project. I challenge you to find 1 street repair that does 'NOT' need repair in this area.

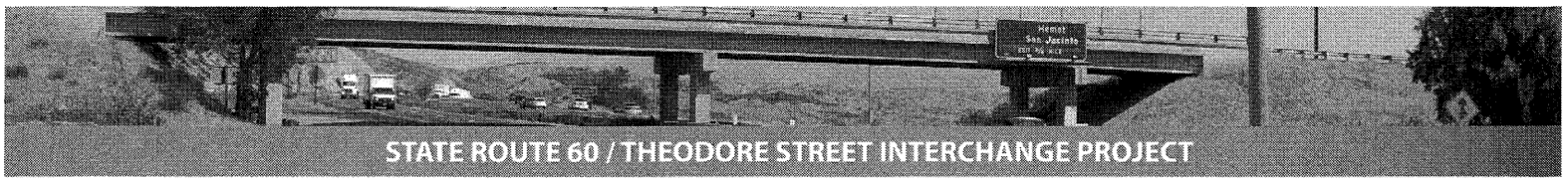
RESPONSE(S):

[Q1] – The design will meet applicable standards and will consider such measures throughout the process.

[Q2] – As part of the project's CEQA and NEPA processes, biological studies will be performed and documented.

[Q3] – The team thanks you for your comments. The City has a Pavement Management Program. Priorities are set by the City Council through the Capital Improvement Plan (CIP) budget process. This 60/Theodore project is included in the Adopted CIP. Your statements and concerns have been included in the project's record.

Please return your comment card to a project team member or email your response to Rebecca M. Young, Project Manager, at ryoung@mbakerintl.com



COMMENT FORM / *FORMA DE COMENTARIO* *(4)*

Name / *Nombre*	Lindsay Robinn	Date / *Fecha* 7/23/18
Business / *Negocio*		
Address / *Domicilio*	28399 Black Oak 92555	
E-Mail / *Correo Electrónico*	LR92555@gmail.com	
Telephone / *Teléfono*	☐ **Home** ☐ Work ☐ Cell 951-485-7776	

COMMENT(S):

[C1]Learning that this has been in works since 2013 when Benzeevi came to council for 100 million is very disturbing. Even before the project was approved the city was paying tax payer dollars to benefit Benzeevi – This needs to stop.

[C2] Eucalyptus is his responsibility. Theodore costs are his responsibilities.

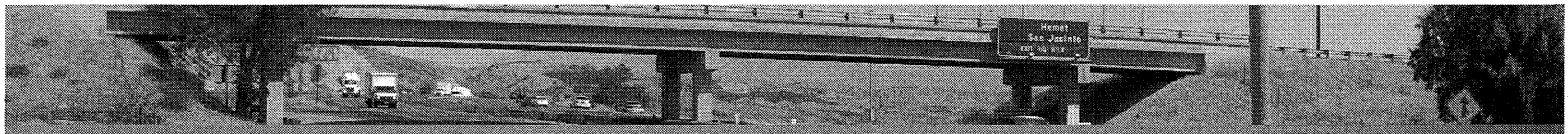
[C3] This needs to wait until all litigation is done and Moreno Beach + Redlands; redo Indian + build Graham overpass .

Option – Do Not Do this until the project is built. It is in legal limbo.

RESPONSE(S):

The team thanks you for your comments. This 60/Theodore project is included in the Adopted Capital Improvement Plan and approved by the City Council. Your statements and concerns have been included in the project's record.

Please return your comment card to a project team member or email your response to Rebecca M. Young, Project Manager, at ryoung@mbakerintl.com



STATE ROUTE 60 / THEODORE STREET INTERCHANGE PROJECT

COMMENT FORM / *FORMA DE COMENTARIO* (5)

Name / *Nombre*	Robert Then	Date / *Fecha*
Business / *Negocio*	Resident	
Address / *Domicilio*	27983 Morrey Ln Moreno Valley 92555	
E-Mail / *Correo Electrónico*	RobertThen411@gmail.com	
Telephone / *Teléfono*	□ Home □ Work □ **Cell** 951-323-1800	

COMMENT(S):

[C1]Please email me a copy of the slides used for this briefing.

[C2] Add me to your email list for distribution of additional information and future meetings.

Thank you, Robert Then

RESPONSE(S):

[C1 & C2] You have been added to the distribution list. Margery Lazarus emailed the presentation to you on 7/30/18.

Please return your comment card to a project team member or email your response to Rebecca M. Young, Project Manager, at ryoung@mbakerintl.com

COMMENT(S): *(6)*

I am against using the citizens of The City of Moreno Valley's tax dollars to pay for infrastructure improvements of the Theodore ramp or any other infrastructure for the benefit of a private person or a private company. I vote to spend the money instead for more Police for our city.

Highland Fairview, held by Iddo Benzeevi, would be the recipient of the profits made from improvements to the Theodore ramp and any other infrastructure improvements that are needed to support his projects in that area. As an experienced investor he should be willing to invest in those improvements for which he will reap the rewards.

I truly believe that Iddo Benzeevi always does what is best for Iddo Benzeevi! If he can convince The City of Moreno Valley to use their citizens tax dollars to pay for infrastructure improvements needed for HIS Business that is more MONEY IN HIS POCKETS and NONE in The City of Moreno Valley's pockets!

With the experience Iddo Benzeevi has he knew long before he ever entertained this project of his that the current infrastructure wouldn't support it. So he has been planning for years to set up a Benzeevi friendly support group … the very citizens that should be able to hold themselves to the highest standards to resist fanning the … I can do what every I want attitude of Iddo Benzeevi" our Cities representatives. It is feels as if the cities representatives only need Iddo Benzeevi and the disruptive followers he also fans with money.

Historically Iddo Benzeevi has spent more money than most citizens of Moreno Valley make in 10 years… many hundreds of thousands of dollars to insure favoritism from the City of Moreno Valleys public representatives by giving extraordinarily enormous campaign donations to more that one candidate running for public office positions that are solely meant to be filled by citizens that will represent all the citizens of The City of Moreno Valley, not a chosen few.

Google Highland Fairview and its CEO Iddo Benzeevi… you can read many things…

- How he has interjected himself (& Higland Fairview) into the **City of Moreno Valley's** political selection process starting in **2008**; the reasons for their doing so are **simply financially based on his own desires, needs and greed's.** This process continues to this very day and our upcoming general elections, in which our citizens will once again be asked to select from a robust pool of candidates vying for seats upon our city's city council to represent some of our council districts.
- So how does **Highland Fairview** and **Iddo Benzeevi** fair in their selection of candidates which they hand select, personally finance and run to fill our city's council seats in their zeal to strong arm the citizens over the control of the city *which belongs to its citizens* and NOT the outsider **Iddo Benzeevi** and his multitude of limited liability companies? Very well.

What has the City of Moreno Valley done to itself? Put a stop to it! Please!

Take a good look at those for which they have rammed down the throat of the **Moreno Valley** voters by means of *deceptive, false and grossly financed campaigning tactics*. Including but not limited to the following.

Intimidation tactics

In the city of Moreno Valley, Iddo Benzeevi has gained a reputation as an ambitious land developer. Meanwhile, his opponents have alleged that Iddo will go to any lengths necessary to get what he wants—and that he isn't afraid to throw money around.

"It's not the way most developers work. I think the disruption of the community has been particularly unsettling," said Penny Newman, a candidate for the Riverside County Board of Supervisors. **"They control everybody who would stand and oppose."**

- On one occasion, financial records published by Buzzfeed reporter Jessica Garrison show a political action committee backed by Iddo spent more than $60,000 to unseat a Moreno Valley city councilman who had conducted a survey of his district's support regarding the building of a Skechers warehouse and distribution center in 2008. A California 460 Form for political funding shows that in that same year, his company, Highland Fairview, spent more than **$260,000 in donations and loans towards Moreno Valley elections.**
- **"Iddo's been around for a long time and none of his projects have ever come to fruition," Newman said, adding that the Skechers warehouse was the first one. "Iddo has not been really effective other than creating a great deal of mistrust and animosity within the community."**
- **Newman, who founded the Center for Community Action and Environmental Justice, said that the organization is attempting to put a halt on Iddo's latest project, the World Logistics Center, a 40.6 million-square foot warehouse space. Newman, however, said their efforts have been met with harsh opposition by Iddo and Highland Fairview.**
- **In one incident in 2015, volunteers attempted to gather the needed signatures to put a referendum up to vote, when, according to a report by the Center for Community Action, they were met by eight people carrying bullhorns and shouting obscenities.** "They were vulgar, rude, disrespectful, unprofessional," said one of the signers, a Moreno Valley resident, on Facebook. "Literally called me names for signing the petition and called one of the signature gatherers the 'N' word, called me fat and stupid and said my/our vote is 'one' and doesn't even count." "It's pretty much difficult to have any civil discussion with anyone," Newman said. "It's really just impossible to have any rational conversation about it."

And Moreno Valley isn't the only victim.

Benzeevi's company, which managed TRMC, has been blamed by many in Tulare for the current state of the hospital, which went bankrupt last year. The Business Journal reached out to Iddo Benzeevi's office for comment, but did not receive a reply. The District selected HCCA to run the hospital, signing an agreement in 2014. Other potential companies considered for the management contract included Adventist Health and Alecto Healthcare Services.

"There were very good candidates… and at the eleventh hour comes a fifth person, and its Benzeevi," Martin-Soares said. "They were let in at the very eleventh hour and they ended up being the ones selected and they weren't even an entity."

A former ER doctor at TRMC, Benzeevi was selected over the competition despite, as his opponents have pointed out, having never before run a hospital. The reasons for Benzeevi's appointment have been subjected to speculation, but the Citizens for Hospital Accountability have suggested that the reason may be because the District hoped HCCA could complete the failed Tower One construction project with the help of Dr. Benzeevi's brother, Iddo.

Intimidation tactics

In the Inland Empire city of Moreno Valley, Iddo Benzeevi has gained a reputation as an ambitious land developer. Meanwhile, his opponents have alleged that Iddo will go to any lengths necessary to get what he wants—and that he isn't afraid to throw money around.

"It's not the way most developers work. I think the disruption of the community has been particularly unsettling," said Penny Newman, a candidate for the Riverside County Board of Supervisors. "They control everybody who would stand and oppose."

On one occasion, financial records published by Buzzfeed reporter Jessica Garrison show a political action committee backed by Iddo spent more than $60,000 to unseat a Moreno Valley city councilman who had conducted a survey of his district's support regarding the building of a Sketchers warehouse and distribution center in 2008. A California 460 Form for political funding shows that in that same year, his company, Highland Fairview, spent more than $260,000 in donations and loans towards Moreno Valley elections.

"Iddo's been around for a long time and none of his projects have ever come to fruition," Newman said, adding that the Skechers warehouse was the first one. "Iddo has not been really effective other than creating a great deal of mistrust and animosity within the community."

Newman, who founded the Center for Community Action and Environmental Justice, said that the organization is attempting to put a halt on Iddo's latest project, the World Logistics Center, a 40.6 million-square foot warehouse space. Newman, however, said their efforts have been met with harsh opposition by Iddo and Highland Fairview.

In one incident in 2015, volunteers attempted to gather the needed signatures to put a referendum up to vote, when, according to a report by the Center for Community Action, they were met by eight people carrying bullhorns and shouting obscenities.

"They were vulgar, rude, disrespectful, unprofessional," said one of the signers, a Moreno Valley resident, on Facebook. "Literally called me names for signing the petition and called one of the signature gatherers the 'N' word, called me fat and stupid and said my/our vote is 'one' and doesn't even count."

"It's pretty much difficult to have any civil discussion with anyone," Newman said. "It's really just impossible to have any rational conversation about it."

Iddo and Benny Benzeevi in Tulare

When HCCA was selected to run the hospital, one of the primary concerns was the completion of the construction of the Tower One expansion project at the hospital, which had come to a halt amidst financial trouble. The Citizens for Hospital Accountability argue that Iddo was at the heart of this selling point.

Minute reports from a Dec. 4, 2013 meeting of the Board of Directors read that HCCA had "a mega-scale project developer" included in their "nationally renowned team" of experts.

"This was how they sold it, really," Drilling-Phelps said. "While Benny has never done anything — this is kind of the idea — we have all these top, top guys. We're going to bring in the best CEO, we've got the best people in the business. We can bring in this guy who's built this Sketchers warehouse."

The minute report also shows Iddo being asked by a community member about any projects that he started without finishing.

"Iddo Benzeevi is not in health care, he's in construction," the report reads, "and has completed one of the largest buildings in the nation."

Iddo added there were no lawsuits and "nobody is suing us."

"He's the personable one. He's the guy that can convince you," Drilling-Phelps said. "Benny is kind of antisocial. He yells at his staff and yelled at patients. I don't think he's well liked in general. Iddo is smoother."

Upon being asked if HCCA anticipated being able to complete the tower, they responded that they did not know what the issues were yet, but that they had the expertise.

"He went from being [on] the staff, head of the doctors for the emergency room," Martin-Soares said. "In less than seven months, he's new the CEO of the hospital."

RESPONSE(S):

Response to withwdtravel@verizon.net: The team thanks you for your comments. This 60/Theodore project is included in the Adopted Capital Improvement Plan and approved by the City Council. Your statements and concerns have been included in the project's record.

COMMENT(S): *(7)*

I am against using the citizens of The City of Moreno Valley's tax dollars to pay for infrastructure improvements of the Theodore ramp or any other infrastructure for the benefit of a private person or a private company.

Highland Fairview, held by Iddo Benzeevi, would be the recipient of the profits made from improvements to the Theodore ramp and any other infrastructure improvements that are needed to support his projects in that area. He should invest his own capital to make improvements needed for his projects.

Iddo Benzeevi wants to do what is best for Iddo Benzeevi so he is trying to convince The City of Moreno Valley to use our citizens tax dollars to pay for infrastructure improvements needed for his business which will put more money in his pockets not The City of Moreno Valley's pockets!

Iddo Benzeevi is experienced and knew long before this project the current infrastructure wouldn't support it. So he has been planning for years to set up a Benzeevi friendly support group...the very citizens that have been elected and should hold themselves to the highest standards to resist Iddo Benzeevi and other developers. Iddo Benzeevi and his riffraff followers he supplies with money and favors must be held accountable the way the rest of us are.

Historically Iddo Benzeevi has spends more money that most citizens every dreamed of having in a life time.... to insure favoritism from the City of Moreno Valley's public representatives by giving extraordinarily enormous campaign donations to more than one candidate running for public office positions that are solely meant to be filled by citizens that will represent all the citizens of The City of Moreno Valley, not a chosen few.

It easy to find out about how he has interjected himself (& Higland Fairview) into the City of Moreno Valley's political selection by looking on line and in our own cities minutes. A process that started as early as 2008. The reasons for his doing so are simply financially based on his own desires, needs and greed's. This process continues to this very day and our upcoming general elections, in which our citizens will once again be asked to select from a robust pool of candidates vying for seats upon our city's city council to represent some of our council districts.

The City of Moreno Valley's elected officials must make a stand against Highland Fairview and Iddo Benzeevi. They can thank him for the donations that got them elected then proceed to the job they were hired for! We need to put a stop to huge donations to candidates by developers such as Iddo Benzeevi for many reasons which Moreno Valley is suffering because of. Stop Iddo Benzeevi from hand selecting, personally financing to run and fill our city's council seats in his zeal to strong arm the citizens over the control of the city *which belongs to its citizens* and NOT the outsider Iddo Benzeevi and his multitude of limited liability companies?

RESPONSE(S):

Response to callthatman@verizon.net: The team thanks you for your comments. This 60/Theodore project is included in the Adopted Capital Improvement Plan and approved by the City Council. Your statements and concerns have been included in the project's record.

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Chapter 5 – List of Preparers

The following persons were primarily responsible for preparation of this Draft Environmental Impact Report/Environmental Assessment (EIR/EA) and supporting technical studies.

5.1 California Department of Transportation

Reza Aurasteh, Ph.D., PE, Branch Chief – Environmental Engineering. Ph.D., Engineering. 30 years of experience performing environmental studies and document preparation. ***Contribution:*** *Supervision of Environmental Engineering Technical Studies.*

Ricardo Caraig, Jr., PE. B.S., Civil Engineering. 27 years of experience performing design, environmental studies, and document preparation. ***Contribution:*** *Oversight review of Noise technical reports.*

Laura Chatterton, Associate Environmental Planner, Archaeologist, Co-Principal Investigator—Prehistoric Archaeology (Professionally Qualified Staff [PQS]). Bachelor of Arts in Anthropology from California State University San Bernardino, 2006. 8 years of experience performing environmental studies and document preparation. ***Contribution:*** *Reviewer of Archaeological Survey Report.*

Jessica Chavez, Environmental Planner. Bachelor of Arts in Geography. 1 year of experience. ***Contribution:*** *Review of Environmental Document.*

Michael Grimes, Associate Environmental Planner of the Natural Sciences. B.A, Biology. 6 years of experience performing environmental studies and document preparation. ***Contribution:*** *Biological Resource Compliance.*

Elaheh Hadipour, Senior Transportation Engineer, Project Manager. M.S., Material Engineering. 19 years of experience performing environmental studies and document preparation. ***Contribution:*** *Project Manager.*

Bahram Karimi, Associate Environmental Planner, Paleontological Specialist. M.S., Geology. 14 years of experience performing environmental studies and document preparation. ***Contribution:*** *Paleontological Resource Compliance.*

Olufemi A. Odufalu, P.E. Branch Chief. 12 years of experience performing environmental studies and document preparation for oversight and capital projects. ***Contribution:*** *Branch Chief.*

Tami Saghafi, Associate Environmental Planner. B.S. Biology. California State University of San Bernardino, 1996. 18 years of experience in Environmental Division with Caltrans Districts 7 and 8. ***Contribution:*** *Environmental Planner.*

Mary K. Smith, Architectural Historian (PQS). M.A. Historic Preservation/Planning, Cornell University. 14 years of experience at Caltrans as an Associate Environmental Planner/Architectural Historian. ***Contribution:*** *Peer review/ comment on Section 106 docs including HPSR, HRER, DPRs for Built Environment.*

Antonia Toledo, Senior Environmental Planner; Branch Chief, Environmental Studies "D". M.S. City & Regional Planning, B.A. Urban Studies & Planning. 18 years of experience in environmental planning. ***Contribution:*** *Environmental Planner, Sr. Generalist.*

Boniface Udotor, Senior Environmental Planner; Branch Chief, Special Projects "A". B.A. Environmental Studies, MURP, Urban and Regional Planning. 30 years of experience in environmental planning. ***Contribution:*** *Environmental Planner, Generalist.*

Andrew Walters, Branch Chief—Environmental Cultural Studies. ***Contribution:*** *Cultural Resource Compliance.*

Craig Wentworth, Senior Environmental Planner, Branch Chief—Biological Studies and Permits. B.S. Biology. 18 years of experience performing environmental studies and document preparation. ***Contribution:*** *Biological Resource Studies, Surveys and Compliance.*

5.2 City of Moreno Valley

Margery Lazarus, P.E., Senior Engineer, Public Works. 37 years of experience performing environmental studies and document preparation. ***Contribution:*** Local Agency Project Manager.

5.3 LSA Associates, Inc.

Abby Annicchiarico, Assistant Environmental Planner. B.S. Environmental Policy Analysis and Planning, University of California, Davis. ***Contribution:*** *Environmental document preparation.*

David Atwater, Senior Environmental Planner. B.S. in Urban and Regional Planning with an Interdisciplinary Minor in Geographic Information Systems Applications, California State Polytechnic University, Pomona. 13 years of experience in environmental planning and analysis. ***Contribution:*** *Environmental document preparation.*

Andrea Bean, Assistant Environmental Planner. Andrea Bean, Assistant Environmental Planner. B.A. Anthropology, University of California at Santa Barbara; M.A. Archaeology, California State University Long Beach. 5 years of experience in performing environmental studies and document preparation. ***Contribution:*** *Environmental document preparation.*

Ryan Bensley, Associate/Environmental Planner. B.A. Geography, California State University Long Beach. 12 years of planning experience. ***Contribution:*** *Community Impact Assessment and Draft Relocation Impact Memorandum task lead, Community Impacts section author.*

Ron Brugger, Senior Air Quality and Health Risk Assessment Specialist. B.S. Mechanical Engineering, University of Wisconsin, Madison. 27 years of experience in environmental studies, specializing in air quality analysis. ***Contribution:*** *Preparer of the Air Quality Study.*

Meredith Canterbury, Senior GIS Specialist. B.A. in Geography with Emphasis in Environmental Analysis, California State University, Fullerton. 11 years of experience in the GIS field. ***Contribution:*** *GIS graphics preparation and generation of technical data from GIS files for the technical reports and the EIR/EA.*

Janet Danker, Senior Environmental Planner. B.A in Urban Studies, University of California, Irvine. Master in Urban and Regional Planning, University of California, Irvine. 5 years of experience in environmental planning and analysis. ***Contribution:*** *Environmental document preparation.*

Glenn DeBerg, Senior Environmental Planner. B.A. in Geography, California State University, Long Beach. 14 years of experience in environmental planning and analysis. ***Contribution:*** *Environmental document preparation.*

Dionisios Glentis, Environmental Planner. B.A. Anthropology, California State University San Bernardino. 13 years of experience in performing environmental studies and document preparation. ***Contribution:*** *Environmental document preparation.*

Riordan Goodwin, Senior Cultural Resources Manager. B.A. Anthropology, San Diego State University. 30 years of experience in performing cultural resources surveys, documentation, evaluation, assessment, and related document preparation. ***Contribution:*** *Historic Property Survey Report, Archaeological Survey Report, assisted with Historical Resources Evaluation Report document preparation.*

Christina Hirt, Senior Environmental Planner. B.A. in Environmental Studies, University of San Diego. 4 years of experience in environmental planning and analysis. ***Contribution:*** *Environmental document preparation.*

Beverly Inloes, Associate/Senior Technical Editor and Senior Word Processor. 50 years of experience editing and formatting technical documentation for a wide variety of scientific disciplines. ***Contribution:*** *Technical editing, word processing, and formatting.*

Amanda Johnson, Senior Environmental Planner, Assistant Project Manager. B.A. in Geography, California State University, Long Beach. 19 years of experience in environmental planning and analysis. ***Contribution:*** *Quality control and quality assurance review of the EIR/EA.*

Patrick Kallas, Assistant Environmental Planner. B.S. in Environmental Management and Protection, Minor in Water Science, California Polytechnic State University, San Luis Obispo. 2 years of experience in conducting research and preparing technical sections of environmental documents. ***Contribution:*** *Environmental document preparation.*

Daniel Kaufman, Noise Analyst. B.A. Environmental Studies, University of California at Santa Barbara. 2 years of experience in environmental studies, specializing in noise and air quality analysis. ***Contribution:*** *Assisted in the preparation of the Noise Study Report and the Air Quality section of the environmental document.*

Eric Lin, Assistant Environmental Planner. B.S., with Honors, Environmental Policy and Planning Analysis, University of California, Davis. 2 years of experience in environmental planning, hazardous materials, and transportation planning. ***Contribution:*** *Environmental document preparation.*

Jason Lui, Senior Noise Specialist. B.A. in Environmental Analysis and Design, University of California, Irvine; M.S. in Environmental Studies, California State University, Fullerton. 12 years of experience in environmental studies, specializing in noise and air quality analysis. ***Contribution:*** *Preparer of the Noise Study Report.*

Rob McCann, Principal in Charge. B.A. in Geography, California State University, Fullerton. 36 years of experience in environmental planning and analysis. ***Contribution:*** *Quality control and quality assurance review of the EIR/EA.*

Elise Miller, Assistant Environmental Planner. B.A. Legal Studies, University of California at Berkeley. 1 year experience in environmental planning and analysis. ***Contribution:*** *Environmental document preparation.*

Matt Phillips, Senior Graphic Designer, B.A. Anthropology, California State University Long Beach. Over 25 years of experience in the design and production of technical graphics for EIRs, planning documents, land use plans, marketing/ advertising media, and identity branding and logo design. ***Contribution:*** *Graphic design and technical illustration for environmental analysis and documentation.*

Pam Reading, Principal Environmental Planner. B.A., Environmental Science and Political Science, University of Vermont; M.S., Hydrology and Watershed Management, Yale School of Forestry and Environmental Studies. 15 years of experience in performing and managing environmental studies and document preparation. ***Contribution:*** *Farmlands reporting and analysis.*

Sarah Rieboldt, Ph.D., Associate/Senior Paleontologist. B.A. Biology, Minor Geology, University of Colorado, Boulder; Ph.D. Paleontology, University of California, Berkeley. 18 years of experience in geology and paleontology in academic, government, and private sectors. ***Contribution:*** *Environmental document preparation.*

Jodi Ross-Borrego, Principal, Biological Resources. B.S. Environmental Biology, Humboldt State University. 13 years of experience. ***Contribution:** Natural Resources Principal.*

King Thomas, Associate/Project Manager. B.A. in Social Ecology, Specialization in Environmental Health and Planning, University of California, Irvine. 29 years of experience in environmental planning and analysis. ***Contribution:** Quality control and quality assurance review of the EIR/EA.*

Casey Tibbet, Principal Architectural Historian PQS, M.A. History/Historic Preservation, University of California, Riverside. 20 years of experience in architectural history in California. ***Contribution:** Historic Property Survey Report and Historical Resources Evaluation Report preparation.*

Marlene Watanabe, Assistant Environmental Planner. B.S. Environmental Policy Analysis and Planning, B.A. Economics, University of California, Davis. 1 year of experience in NEPA and CEQA document preparation. ***Contribution:** Environmental document and technical study preparation.*

Nicole West, Associate Environmental Planner, CPSWQ, QSD/QSP. M.S. Civil and Environmental Engineering, University of California, Berkeley. B.S. with Honors, Evolution and Ecology, University of California, Davis. 18 years of experience in water quality, floodplains, fisheries, aquatic weed control, and transportation planning. ***Contribution:** Water Quality Assessment Report and environmental document preparation.*

Denise Woodard, Associate/Senior Biologist. B.S., Natural Resources Management, California Polytechnic University. 28 years of experience in conducting and managing biological studies, focused rare, threatened, and endangered species surveys, habitat evaluations, wetlands delineations, regulatory compliance and permitting, and the preparation of associated technical reports. ***Contribution:** Biological technical studies.*

5.4 Michael Baker International

Kristen Bogue, Visual Resource Analyst. B.A. Environmental Analysis and Design, University of California at Irvine. 14 years of experience performing environmental studies and document preparation. ***Contribution:** Preparer of the Visual Impact Assessment.*

Cathy Johnson, RLA, Senior Associate/Landscape Architect. B.S. Horticulture, Washington State University. 20 years of experience performing environmental studies and document preparation. ***Contribution:** Oversight of visual analysis and preparation of the Visual Impact Assessment.*

Richard Johnston, Digital Preview, Photosimulation Specialist. The Kansas City Art Institute, Kansas City, Missouri; The Harry Fredman Studios, Kansas City, Missouri. Over 25 years of experience performing photosimulation renderings. ***Contribution:** Photosimulations for the Visual Impact Assessment.*

Brad Losey, LHS/FES. B.S. Civil Engineering. University of California, Irvine. 19 years of experience performing environmental studies and document preparation. ***Contribution:*** *Responsible for preparation of the Location Hydraulics Report and Summary Floodplain Encroachment Report.*

Hector Salcedo, Civil Associate, Assistant Project Manager. B.S. Civil Engineering, California State Polytechnic University, Pomona. 5 years of experience performing environmental studies and document preparation. ***Contribution:*** *Draft Project Report, project coordination.*

Rebecca Young, PE, Project Manager. B.S. Engineering, Harvey Mudd College. 12 years of experience performing environmental studies and document preparation. ***Contribution:*** *Engineering project management.*

5.5 Leighton Consulting, Inc.

Zachary A. Freeman, PG, Project Geologist. B.S. Environmental Geology, Cal State San Bernardino. 14 years of experience performing environmental investigations. ***Contribution:*** *Initial Site Assessment, Preliminary Site Investigation, and Aerially Deposited Lead Survey.*

Simon I. Saiid, GE 2641 PM, PE, Principal Engineer. Rensselaer Polytechnic Institute, M.S. Civil Engineering. 29 years of experience. ***Contribution:*** *Preliminary Geotechnical Design Report.*

5.6 WSP USA, Inc.

Daniel Block, TE, Lead Planner. B.S., Civil Engineering, Cal Poly SLO, M.S., Transportation Technology and Policy, UC Davis. 12 years of experience performing environmental studies and document preparation. ***Contribution:*** *Traffic modeling.*

Joe De La Garza, PE, TE, Senior Traffic Engineer. B.S. Civil Engineering, Lawrence Technological University. 25 years of experience performing environmental studies and document preparation. ***Contribution:*** *Prepare Traffic Study Report and Ramp Closure Study.*

Don Hubbard, TE, AICP, Senior Planning Manager, Senior Professional Associate. B.S. Engineering Science, Northwestern University, Master of City and Regional Planning, Harvard University. 38 years of experience performing environmental studies and document preparation. ***Contribution:*** *Lead for Traffic Forecasting and Analysis.*

Vikrant Sanghai, PMP, PE, Assistant Vice President. B.S. Engineering, M.S. Engineering, MBA. 14 years of experience performing engineering studies and project report preparation. ***Contribution:*** *Reviewed engineering technical studies.*

Chapter 6 – Distribution List

6.1 Agencies

6.1.1 Federal Agencies

Veronica Li, Environmental Protection Specialist/Project Manager
U.S. Army Corps of Engineers
Los Angeles District
915 Wilshire Blvd., Ste 1101
Los Angeles, CA 90017

U.S. Department of Transportation
Federal Highway Administration
California Division
650 Capitol Mall, Ste 4-100
Sacramento, CA 95814

Karin Cleary-Rose, Chief
San Bernardino and Riverside Counties
U.S. Fish & Wildlife Service
Palm Springs Fish & Wildlife Office
777 E. Tahquitz Canyon Way, Ste 208
Palm Springs, CA 92262

U.S. Dept. of Agriculture
Natural Resource Conservation Service
c/o Bob Hewitt
950 N. Ramona Blvd., Ste #6
San Jacinto, CA 92582-2571

6.1.2 State Agencies

Heather Pert, Environmental Scientist
California Department of Fish and Wildlife Inland Desert Region
3602 Inland Empire Blvd. , Suite C-220
Ontario, CA 91764

Kimberly Gazzaniga,
Chief of Environmental Site Assessment
Department of Water Resources
3500 Industrial Blvd
West Sacramento, CA 95691

California Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

State of California Dept. of Water Resources
1416 9th Street, Ste 1311
Sacramento, CA 95814

The Governor's Office of Planning and Research
State Clearinghouse
1400 10th Street, Ste 12
Sacramento, CA 95814

California Dept. of Conservation
801 K Street, MS 24-01
Sacramento, CA 95814

California Dept. of Transportation
District 12
1750 E. 4th Street, Ste 100
Santa Ana, CA 92705

California Dept. of Transportation
District 8
464 W. 4th Street, MS 830
San Bernardino, CA 92401

California Dept. of Toxic Substances Control
9211 Oakdale Ave.
Chatsworth, CA 91311

6.1.3 Regional Agencies

Rongsheng Lou, Program Manager
Dept. of Compliance and Performance Monitoring
Division of Planning & Programs
Land Use and Environmental Planning
Southern California Association of Governments
900 Wilshire Blvd., Ste 1700
Los Angeles, CA 90017

Marc Brown
California Regional Water Quality Control Board
Santa Ana Region 8
3737 Main Street, Ste 500
Riverside, CA 92501-3348

Western Riverside Council of Governments
c/o Barbara Spoonhour
3390 University Ave., Ste 450
Riverside, CA 92501

South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

6.1.4 County Agencies

Kecia Harper-Ihem
Riverside County Clerk of the Board
4080 Lemon Street, 1st Floor
Riverside, CA 92501

Charles Landry, Director
Western Riverside County Regional Conservation Authority
Riverside Centre Building
3403 10th Street, Ste 320
Riverside, CA 92501

County of Riverside Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92502

County of Riverside Transportation and Land Management Agency
Attention: Kevin Tsang
4080 Lemon Street, 8th Floor
Riverside, CA 92502-1629

Ryan Roth, Principal Planner
Riverside County Waste Management Department
14310 Frederick Street
Moreno Valley, CA 92553

Kristin Warsinski, Director of Planning
Riverside Transit Agency
1825 3rd Street
Riverside, CA 92517-1968

Shelli Lamb, District Manager
Riverside-Corona Resource Conservation District
4500 Glenwood Drive, Bldg. A
Riverside, CA 92501

Riverside County Board of Supervisors
4080 Lemon Street
Riverside, CA 92501

Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, CA 92501

Anne Mayer, Executive Director
Riverside County Transportation Commission
4080 Lemon Street, 3rd Floor
Riverside, CA 92501

County of Riverside Transportation and Land Management Agency
Attention: Susan Vombaur
3525 14th St
Riverside, CA 92501

6.1.5 Local Agencies

City of Moreno Valley
Planning Department
14177 Frederick Street
Moreno Valley, CA 92553

City of Perris
Attn: Planning Department
101 North “D” Street
Perris, CA 92570

City of Riverside
Attn: Planning Department
3900 Main Street
Riverside, CA 92522

City of San Jacinto
Attn: Planning Division
595 S. San Jacinto Ave.
San Jacinto, CA 92853

City of Beaumont
Attn: Planning Department
550 E. Sixth Street
Beaumont, CA 92223

Moreno Valley Unified School District
25634 Alessandro Blvd.
Moreno Valley, CA 92553

6.2 Federal Legislators

Senator Kamala Harris
501 I Street, Ste 7-600
Sacramento, CA 95814

Senator Dianne Feinstein
11111 Santa Monica Blvd., Ste 915
Los Angeles, CA 90025

Mark Takano, Congress Member
U.S. House of Representatives, District 41
1507 Longworth House Office Building
Washington, D.C. 20515

6.3 State Legislators

Richard Roth
State Senator, 31st District
3737 Main Street, Ste 104
Riverside, CA 92501

Jose Mendina, State Representative
61st Assembly District
1223 University Ave., Ste 230
Riverside, CA 92507

6.4 Local Elected Officials

6.4.1 Riverside County

Kevin Jefferies, Supervisor
Riverside County Board of Supervisors, First District
4080 Lemon Street, 5th Floor
Riverside, CA 92501

Karen Spiegel, Supervisor
Riverside County Board of Supervisors, Second District
4080 Lemon Street, 5th Floor
Riverside, CA 92501

Chuck Washington, Supervisor
Riverside County Board of Supervisors, Third District
4080 Lemon Street, 5th Floor
Riverside, CA 92501

Manuel Perez, Supervisor
Riverside County Board of Supervisors, Fourth District
4080 Lemon Street, 5th Floor
Riverside, CA 92501

Jeff Hewitt, Supervisor
Riverside County Board of Supervisors, Fifth District
4080 Lemon Street, 5th Floor
Riverside, CA 92501

6.4.2 City of Moreno Valley

Dr. Yxstian Gutierrez, Mayor
14177 Frederick Street
Moreno Valley, CA 92553

Victoria Baca, Mayor Pro Tem
City Councilmember, District 1
14177 Frederick Street
Moreno Valley, CA 92553

Dr. Carla J. Thornton
City Councilmember, District 2
14177 Frederick Street
Moreno Valley, CA 92553

David Marquez
City Councilmember, District 3
14177 Frederick Street
Moreno Valley, CA 92553

Ulises Cabrera
City Councilmember, District 4
14177 Frederick Street
Moreno Valley, CA 92553

Moreno Valley Main Library
25480 Alessandro Blvd
Moreno Valley, CA 92553

6.4.3 City of Perris

Michael M. Vargas, Mayor
101 North “D” Street
Perris, CA 92570

Marisela Magana, Mayor Pro Tem
101 North “D” Street
Perris, CA 92570

Malcom Corona, Councilmember
101 North “D” Street
Perris, CA 92570

David Starr Rabb, Councilmember
101 North “D” Street
Perris, CA 92570

Rita Rogers, Councilmember
101 North “D” Street
Perris, CA 92570

6.4.4 City of Riverside

Mayor Rusty Bailey
3900 Main Street
Riverside, CA 92522

Mike Gardner, Ward 1
Councilmember
3900 Main Street
Riverside, CA 92522

Andy Melendrez, Ward 2
Councilmember
3900 Main Street
Riverside, CA 92522

Mike Soubirous, Ward 3
Councilmember
3900 Main Street
Riverside, CA 92522

Chuck Conder, Ward 4
Councilmember
3900 Main Street
Riverside, CA 92522

Chris MacArthur, Ward 5
Councilmember
3900 Main Street
Riverside, CA 92522

Jim Perry, Ward 6
Councilmember
3900 Main Street
Riverside, CA 92522

Steve Adams, Ward 7
Councilmember
3900 Main Street
Riverside, CA 92522

6.4.5 City of San Jacinto

Mayor Russell Utz
595 S. San Jacinto Ave.
San Jacinto, CA 92583

Mayor Pro Tem Andrew Kotyuk
595 S. San Jacinto Ave.
San Jacinto, CA 92583

Councilmember Alonso Ledezma
595 S. San Jacinto Ave.
San Jacinto, CA 92583

Councilmember Crystal Ruiz
595 S. San Jacinto Ave.
San Jacinto, CA 92583

Councilmember Joel Lopez
595 S. San Jacinto Ave.
San Jacinto, CA 92583

6.4.6 City of Beaumont

Mayor Julio Martinez
550 E. 6th Street
Beaumont, CA 92223

Mayor Pro Tem Rey S.J. Santos
550 E. 6th Street
Beaumont, CA 92223

Councilmember Mike Lara
550 E. 6th Street
Beaumont, CA 92223

Councilmember Lloyd White
550 E. 6th Street
Beaumont, CA 92223

Councilmember Nancy Carroll
550 E. 6th Street
Beaumont, CA 92223

6.5 Utilities and Emergency Services

Southern California Edison
Local Government Affairs/Land Use/
Environmental Coordinator
2244 Walnut Grove Ave.
Quad 4C, 474B
Rosemead, CA 91770

Eastern Municipal Water District
Attn: Customer Services
P.O. Box 8300
Perris, CA 92572-8300

Waste Management of the Inland Empire
Attn: William J. Arlington, Jr.
17700 Indian Street
Moreno Valley, CA 92551

Verizon Communications
Attn: Engineering Dept./Control Desk
9 S. Fourth Street
Redlands, CA 92373

Ida Peterson
Public Affairs Manager
Southern California Gas Company
3460 Orange Street
Riverside, CA 92501

Chief Abdul Ahmad
Fire Administration
Moreno Valley Fire Department
22850 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

Officer Darren Meyer
Border Division
California Highway Patrol
195 Highland Springs Avenue
Beaumont, CA 92223-2511

Captain Joel Ontiveros
Riverside County Sheriff's Department
Moreno Valley Station
22850 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

Officer Christina Wood, Inland Division
California Highway Patrol
8118 Lincoln Avenue
Riverside, CA 92504-4347

Bruce Barton
Director of EMS
Riverside County EMS Agency
4210 Riverwalk Pkwy., Ste 300
Riverside, CA 92505

Moreno Valley Electric Utility
14331 Frederick Street
Moreno Valley, CA 92553

Riverside County Waste Management
Engineering Badlands
14310 Frederick Street
Moreno Valley, CA 92553

AT&T
3073 Adams Street
Riverside, CA 92504

Charter Communications
7337 Central Ave.
Riverside, CA 92504

Sunesys
226 N. Lincoln Ave.
Corona, CA 92882

Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012

Questar Southern Trails Pipeline Company
5762 Bolsa Ave., Ste 201
Huntington Beach, CA 92649

Mike Pagano
Time Warner Cable
560 S. Promenade Avenue
Corona, CA 92879

6.6 Property Owners with Mailing Addresses

Adam Hall
12891 Redlands Blvd.
Moreno Valley, CA 92555

Alta Dena Dairy
c/o Henrietta Lee
4299 Macarthur Blvd., Ste 211
Newport Beach, CA 92660

Ryan Tax Compliance Services
P.O. Box 460049, Dept. 501
Houston, TX 77056

Amritpal S. Dhanjal
c/o Hardev S. Dhanjal
6663 Alfonso Drive
Chino, CA 91710

Anthem Energy
2640 Camino Del Sol
Fullerton, CA 92833

Avoian Prop
c/o Albert Avoian
4824 Garnet Street
Torrance, CA 90503

Axar
2640 Camino Del Sol
Fullerton, CA 92833

Bc Mv Land
P.O. Box 2241
Portola, CA 96122

Chandresh & Dharmistha Ravaliya
2640 Camino Del Sol
Fullerton, CA 92833

Cindy Romero
P.O. Box 9376
Moreno Valley, CA 92552

City of Moreno Valley
P.O. Box 88005
Moreno Valley, CA 92552

Eastgate Prop Partners
17780 Collins Ave.
Sunny Isles Beach, FL 33160

Dolores O'Sullivan
4280 Leisure Lane
Placerville, CA 95667

Douglas L. & Deanna R. Sadler
12150 Theodore Street
Moreno Valley, CA 92555

Eastern Municipal Water District
c/o Don Simpson
P.O. Box 8300
Perris, CA 92572

Edward W. & Penny L. Fithian
12318 Redlands Blvd.
Moreno Valley, CA 92555

Frank M. & Maryan R. Rocchi
12286 Redlands Blvd.
Moreno Valley, CA 92555

Gregory Freeman Sawyer
11935 Redlands Blvd.
Moreno Valley, CA 92555

Genaro Bautista
12130 Theodore Street
Moreno Valley, CA 92555

HF Educational Partners
17780 Collins Ave.
Sunny Isles Beach, FL 33160

HF Logistics SKX T1
17780 Collins Ave.
Sunny Isles Beach, FL 33160

HF Logistics SKX T2
17780 Collins Ave
Sunny Isles Beach, FL 33160

HF Prop
c/o Highland Fairview Prop
14225 Corporate Way
Moreno Valley, CA 92553

Hfm Prop Partners
17780 Collins Ave.
Sunny Isles Beach, FL 33160

Highland Fairview Prop
17780 Collins Ave.
Sunny Isles Beach, FL 33160

Jan Akre
c/o Conchita Marusich
P.O. Box 3005
Napa, CA 94558

Jane V. McClung
c/o Mary Loe
80733 Mountain Mesa Drive
Indio, CA 92201

Jeronimo G. Madrigal
Olivares Salvador
13200 Theodore Street
Moreno Valley, CA 92555

Jimmy Dean & Nedra Jeannine Davis
12140 Theodore Drive
Moreno Valley, CA 92555

Johnny & Sharon L. Taylor
12405 Redlands Blvd.
Moreno Valley, CA 92555

Jose Louis Bahens
c/o Dave Krattenmaker
2813 S. Monterey Ave.
Ontario, CA 91761

LCTH Investment, LP
1000 Dove Street, Ste 300
Newport Beach, CA 92660

Living Gospel
6601 Compton Ave.
Los Angeles, CA 90001

Mabon Prop Partners
17780 Collins Ave.
Sunny Isles Beach, FL 33160

Marla L. Gallegos
1755 Papaya Tree Street
Hemet, CA 92545

Melvin & Charlsee Mae Long
13100 Theodore Street
Moreno Valley, CA 92555

Mildred F. & Milton F. Sawyer
P.O. Box 1587
Helendale, CA 92342

Moreno Valley Sp
201 Wilshire Blvd., Ste 102
Santa Monica, CA 90401

Metropolitan Water District
c/o Asset Management
P.O. Box 54153
Los Angeles, CA 90054

Peter Panayotes & Vassiliki Georgitsis
8213 Seranata Drive
Whittier, CA 90603

Current Resident/Owner
17780 Collins Ave.
Sunny Isles Beach, FL 33160

Nala Prop
269 S. Beverly Drive
Beverly Hills, CA 90212

Raceway Prop
17780 Collins Ave.
Sunny Isles Beach, FL 33160

Redlands 8 Prop
c/o Chang Chung Yang
10558 E. Live Oak Ave.
Arcadia, CA 91007

Ricardo & Margarita Aguayo
12170 Theodore Street
Moreno Valley, CA 92553

Robert J. & Mary Jan Pauw
c/o Ruth Landis
2052 Bronson Way
Riverside, CA 92506

Robert J. Follman
31911 Violeta Lane
Trabuco Canyon, CA 92679

Roman Catholic Bishop of San Bernardino
1201 E. Highland Ave.
San Bernardino, CA 92404

Sunnymead Prop
17780 Collins Ave.
Sunny Isles Beach, FL 33160

Song Ramboldt
2 Rolling View Lane
Fallbrook, CA 92028

Southwest Bible College
c/o Richard W. Carlson
13890 Nason Street
Moreno Valley, CA 92555

Steven J. & Arely Duckett
12314 Redlands Blvd.
Moreno Valley, CA 9255

Steven V. & Kimberly C. Trinh
30050 Eucalyptus Ave.
Moreno Valley, CA 92555

Theodore Prop Partners
c/o Billy Lillycrop
18140 Collins Ave.
Sunny Isles Beach, FL 33160

Westcoast Prop Partners
17780 Collins Ave.
Sunny Isles Beach, FL 33160

Troy D. Mullen
28891 Grelck Drive
Moreno Valley, CA 92555

Thomas & Judy Chacon
11841 Orange Grove Court
Moreno Valley, CA 92555

W2 Land Inv
P.O. Box 2015
Del Mar, CA 92014

6.7 Property Owners with Only Site Addresses

Current Resident
12264 Redlands Blvd.
Moreno Valley, CA 92555

Current Resident
12070 Theodore Street
Moreno Valley, CA 92555

Current Resident
12212 Redlands Blvd.
Moreno Valley, CA 92555

Current Resident
12400 Theodore Street
Moreno Valley, CA 92555

Current Resident
12312 Redlands Blvd.
Moreno Valley, CA 92555

Current Resident
12328 Redlands Blvd.
Moreno Valley, CA 92555

Current Resident
13241 Theodore Street
Moreno Valley, CA 92555

Current Resident
13631 Nason Street
Moreno Valley, CA 92555

Current Resident
26960 Alessandro Blvd.
Moreno Valley, CA 92555

Current Resident
28720 Spruce Ave.
Moreno Valley, CA 92555

Current Resident
28826 Spruce Ave.
Moreno Valley, CA 92555

Current Resident
28855 Redlands Blvd.
Mira Loma, CA 92555

Current Resident
28900 Sunnymead Blvd.
Mira Loma, CA 92555

Current Resident
29800 Eucalyptus Ave.
Moreno Valley, CA 92555

Current Resident
30050 Dracaea Ave.
Moreno Valley, CA 92555

6.8 Tribal Representatives

Pechanga Band of Mission Indians
Mark Macarro, Chairperson
P.O. Box 1477
Temecula, CA 92593

Pechanga Cultural Resources Department
Anna Hoover, Cultural Analyst
P.O. Box 2183
Temecula, CA 92593

Morongo Band of Mission Indians
12700 Pumarra Road
Banning, CA 92220

San Manuel Band of Mission Indians
Daniel McCarthy, M.S., Director-CRM Dept.
28569 Community Center Drive
Highland, CA 92346

Soboba Band of Luiseno Indians
Scott Cozart, Chairperson
P.O. Box 487
San Jacinto, CA 92581

Ramona Band of Cahuilla Mission Indians
Joseph Hamilton, Chairman
P.O. Box 391670
Anza, CA 92539

Ernest H. Silva
Morongo Band of Mission Indians, Tribal Elder
9570 Mias XCanyon Road
Banning, CA 92220

Serrano Nation of Mission Indians
Goldie Walker, Chairwoman
P.O. Box 343
Patto, CA 92369

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive
Palm Springs, CA 92264

Cahuilla Band of Indians
Luther Salgado, Chairperson
P.O. Box 391760
Anza, CA 92539

Santa Rosa Band of Mission Indians
John Marcus, Chairman
P.O. Box 391820
Anza, CA 92539

6.9 Interested Parties

Moreno Valley Chamber of Commerce
12625 Frederick Street Ste. E-3
Moreno Valley, CA 92553

Barbara Baxter
28010 Gerald Ln.
Moreno Valley, CA 92555

David Zeitz
26386 Ironwood Ave.
Moreno Valley, CA 92555

Norma Gonzalez
14870 Meadow Breeze Dr.
Moreno Valley, CA 92553

Tom Paulek, Conservation Chair
Friends of the Northern San Jacinto Valley
PO Box 4036
Idyllwild, CA 92549

Tom Jerele
24253 Wild Calla Drive
Moreno Valley, CA 92557

Laura Gaynor & Helen Kiolbassa
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Moreno Valley, CA 92555

Greater Riverside Chamber of Commerce
3985 University Ave.
Riverside, CA 92501

Lindsay Robin
28399 Black Oak Ave.
Moreno Valley, CA 92555

George Hague
Sierra Club, Moreno Valley Group
26711 Ironwood Ave
Moreno Valley, CA 92555

Crystal Reza
22360 Yates St.
Moreno Valley, CA 92553

Amy Lee
12021 Calle Sombra
Moreno Valley, CA 92557

Keri A. Then
27983 Morrey Lane
Moreno Valley, CA 92555

Marcia Narog
11475 Carrie Lane
Moreno Valley, CA 92555

Robert Then
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Moreno Valley, CA 92555

Antonio Reza, Jr.
24760 Myers Ave
Moreno Valley, CA 92553

Tom Thornsby
29170 Stevens Ave
Moreno Valley, CA 92555

Crystal Serrano
22360 Yates Street
Moreno Valley, CA 92553

Michael McCauley
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Moreno Valley, CA 92555

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Appendix A – Title VI Policy Statement

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Making Conservation a California Way of Life.

April 2018

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email Title.VI@dot.ca.gov, or visit the website www.dot.ca.gov.

LAURIE BERMAN
Director

CALTRANS DIVISION OF
LOCAL ASSISTANCE

A A A
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TITLE VI: NONDISCRIMINATION PROGRAM

OVERVIEW

The California Department of Transportation (Caltrans) Division of Local Assistance (DLA) is responsible for funding local agency projects and programs that utilize federal funds. The
DLA Title VI of the Civil Rights Act of 1964 (Title VI) Program compliance and oversight function resides in the Office of Guidance and Oversight (GO). Caltrans conducts program reviews
of subrecipients of federal financial assistance to ensure compliance with Title VI requirements pursuant to 23 CFR 200.9(b)(7). Corrective action may be required, where applicable.

Title VI of the Civil Rights Act of 1964 prohibits discrimination based upon race, color, and national origin. Specifically, 42 USC 2000d states, "No person in the United States shall, on
the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving
Federal financial assistance."

In addition to Title VI of the Civil Rights Act of 1964, other nondiscrimination statutes afford legal protection under the Federal Highway Administration's (FHWA) Title VI Program. These
statutes include the following:

- Section 162(a) of the Federal-Aid Highway Act of 1973 (23 USC 324) (sex)
- Age Discrimination Act of 1975 (age)
- Section 504 of the Rehabilitation Act of 1973 (disability)
- Americans with Disabilities Act of 1990 (disability)

Two Presidential Executive Orders place further emphasis on the Title VI protections of race and national origin and are included in the scope of the FHWA's Title VI Program:

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," directs federal agencies to develop strategies to
address disproportionately high and adverse human health or environmental effects of their programs on minority and low-income populations. The order is also intended to promote
nondiscrimination in federal programs substantially affecting human health and the environment, and to provide minority and low-income communities' access to public information and
an opportunity for public participation in matters relating to human health or the environment.

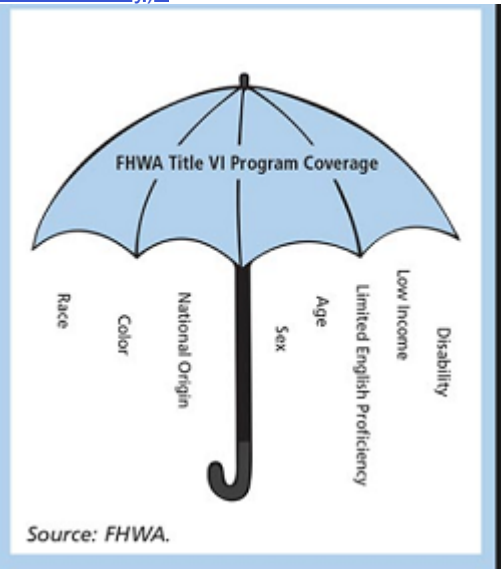
Executive Order 13166, "Improving Access To Services For Persons With Limited English Proficiency," directs federal agencies to evaluate services provided and implement a
system that ensures that Limited English Proficiency (LEP) persons are able to meaningfully access the services provided, consistent with, and without unduly burdening, the fundamental
mission of the local agency. Additionally, each federal agency shall ensure that recipients of federal financial assistance provide meaningful access to programs, services, and
information to their LEP applicants and beneficiaries free of charge.

Taken together, these requirements define an over-arching Title VI nondiscrimination program. Title VI and the additional nondiscrimination requirements are applicable to all programs and
activities administered by a recipient, in addition to programs receiving federal financial assistance, due to the Civil Rights

Restoration Act of 1987. Nondiscrimination provisions
apply to all programs and activities of federal-aid recipients, sub-recipients, and contractors, regardless of tier (49 CFR 21).

AUTHORITIES

Title VI of the Civil Rights Act of 1964 (42 USC 2000d et seq);
Section 162 (a) of the Federal-Aid Highway Act of 1973 (23 USC 324)(sex);
Age Discrimination Act of 1975;
Section 504 of the Rehabilitation Act of 1973;
Americans With Disabilities Act of 1990;
Civil Rights Restoration Act of 1987;
49 CFR Part 21;
23 CFR Part 200;
Executive Order #12898 (Environmental Justice);
Executive Order #13166 (Limited-English-Proficiency).



Please feel free to send comments regarding this web site to the DLA Webmaster.

Page last Updated: November 9, 2018

Accessibility
To report any difficulty experienced in accessing Caltrans programs, services or activities or any discriminations covered under the Americans with Disabilities Act, Section 504 of Rehabilitation Act or the Fair Employment and Housing Act, please contact us at (866)810-6346 Voice; 711 TTY; (916)653-3055 Fax.

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Appendix B – Summary of Relocation Benefits

B.1 California Department of Transportation Relocation Assistance Program

B.1.1 Declaration of Policy

> "The purpose of this title is to establish a **uniform policy for fair and equitable treatment** of persons displaced as a result of federal and federally assisted programs in order that such persons **shall not suffer disproportionate injuries** as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall…be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation." The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations (CFR) Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

B.1.2 Fair Housing

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require the Department to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Department relocation advisor.

B.1.3 Relocation Assistance Advisory Services

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Department will provide relocation advisory assistance to any person, business, farm, or nonprofit organization displaced as a

result of the acquisition of real property for public use, so long as they are legally present in the United States. The Department will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are “decent, safe, and sanitary.” Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm, and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and state assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable “decent, safe, and sanitary” replacement dwelling, available on the market, is offered to them by the Department.

B.1.4 Residential Relocation Payments

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

B.1.4.1 Moving Costs

Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until the Department obtains control of the property in order to be eligible for relocation payments.

B.1.4.2 Purchase Differential

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 90 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase

the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate.

B.1.4.3 Rent Differential

Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by the Department prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when the Department determines that the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the Down Payment section below.

To receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the Department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

B.1.4.4 Down Payment

The down payment option has been designed to aid owner-occupants of less than 90 days and tenants in legal occupancy prior to the Department's initiation of negotiations. The one-year eligibility period in which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

B.1.4.5 Last Resort Housing

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on Federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, the Department will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced.
- Specific arrangements needed to accommodate any family member(s) with special needs.

- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.

- Preferences in area of relocation.

- Location of employment or school.

B.1.5 Nonresidential Relocation Assistance

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms, and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

B.1.5.1 Moving Expenses

Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items acquired in the right-of-way contract may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.

- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.

- Expenses related to searching for a new business site, up to $2,500, for reasonable expenses actually incurred.

B.1.5.2 Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to $25,000 for reasonable expenses actually incurred.

B.1.5.3 Fixed In Lieu Payment

A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than $1,000 nor more than $40,000.

B.1.6 Additional Information

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, except for any federal law providing local "Section 8" Housing Programs.

Any person, business, farm or nonprofit organization that has been refused a relocation payment by the Department relocation advisor or believes that the payment(s) offered by the agency are inadequate may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from the Department's Division of Right of Way and Land Surveys. California's law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

For more information, refer to the Division's Right of Way's Relocation Assistance program at:

http://www.dot.ca.gov/hq/row/rap/index.htm

Attachment A: Your Rights and Benefits as a Displacee Under the Uniform Relocation Assistance Program (Residential) 2014 (English and Spanish)

Attachment B: Your Rights and Benefits as a Displaced Business, Farm, or Nonprofit Organization Under the California Department of Transportation Relocation Assistance Program 2014 (English and Spanish)

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ATTACHMENT A:

YOUR RIGHTS AND BENEFITS AS A DISPLACEE UNDER THE UNIFORM RELOCATION ASSISTANCE PROGRAM (RESIDENTIAL) 2007

(English and Spanish)

Your Rights and Benefits as a Displacee Under the Uniform Relocation Assistance Program (Residential)



California Department of Transportation

Introduction

In building a modern transportation system, the displacement of a small percentage of the population is often necessary. However, it is the policy of Caltrans that displaced persons shall not suffer unnecessarily as a result of programs designed to benefit the public as a whole.

Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments.

This brochure provides information about available relocation services and payments. If you are required to move as the result of a Caltrans transportation project, a Relocation Agent will contact you. The Relocation Agent will be able to answer your specific questions and provide additional information.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 As Amended "The Uniform Act"

The purpose of this Act is to provide for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and to establish uniform and equitable land acquisition policies for federal and federally assisted programs.

49 Code of Federal Regulations Part 24 implements the "Uniform Act" in accordance with the following relocation assistance objective:

> To ensure that persons displaced as a direct result of federal or federally-assisted projects are treated fairly, consistently and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

While every effort has been made to assure the accuracy of this booklet, it should be understood that it does not have the force and effect of law, rule, or regulation governing the payment of benefits. Should any difference or error occur, the law will take precedence.

Some Important Definitions...

Your relocation benefits can be better understood if you become familiar with the following terms:

Comparable Replacement: means a dwelling which is:

(1) Decent, safe, and sanitary. (See definition below)

(2) Functionally equivalent to the displaced dwelling.

(3) Adequate in size to accommodate the family being relocated.

(4) In an area not subject to unreasonable adverse environmental conditions.

(5) In a location generally not less desirable than the location of your displacement dwelling with respect to public utilities and commercial and public facilities, and reasonably accessible to the place of-employment.

(6) On land that is typical in size for residential development with typical improvements.

Decent, Safe and Sanitary (DS&S): Replacement housing must be decent, safe, and sanitary - which

means it meets all of the minimum requirements established by federal regulations and conforms to applicable housing and occupancy codes. The dwelling shall:

(1) Be structurally sound, weather tight, and in good repair.

(2) Contain a safe electrical wiring system adequate for lighting and other devices.



(3) Contain a heating system capable of sustaining a healthful temperature (of approximately 70 degrees) for a displaced person, except in those areas where local climatic conditions do not require such a system.

(4) Be adequate in size with respect to the number of rooms and area of living space needed to accommodate the displaced person. The Caltrans policy is that there will be no more than 2 persons per room unless

the room is of adequate size to accommodate the normal bedroom furnishings for the occupants.

(5) Have a separate, well-lighted and ventilated bathroom that provides privacy to the user and contains a sink, bathtub or shower stall, and a toilet, all in good working order and properly connected to appropriate sources of water and to a sewage drainage system.

Note: In the case of a housekeeping dwelling, there shall be a kitchen area that contains a fully usable sink, properly connected to potable hot and cold water and to a sewage drainage system, and adequate space and utility service connections for a stove and refrigerator.

(6) Contains unobstructed egress to safe, open space at ground level. If the replacement dwelling unit is on the second story or above, with access directly from or through a common corridor, the common corridor must have at least two means of egress.

(7) For a displaced person who is handicapped, be free of any barriers which would preclude reasonable ingress, egress, or use of the dwelling by *such displaced person.*

Displaced Person or Displacee: Any person who moves from real property or moves personal property from real property as a result of the acquisition of the real property, in whole or in part, or as the result of a written notice from the agency to vacate the real property needed for a transportation project. In the case of a partial acquisition, Caltrans shall determine if a person is displaced as a direct result of the acquisition.

Relocation benefits will vary, depending upon the type and length of occupancy. As a residential displacee, you will be classified as either a:

- An owner occupant of a residential property (includes mobile homes)

- A tenant occupant of a residential property (includes mobile homes and sleeping rooms)

Dwelling: The place of permanent or customary and usual residence of a person, according to local custom or law, including a single family house; a single family unit in a two-family, multi-family, or multi-purpose property; a unit of a condominium or cooperative housing project; a non-housekeeping unit; a mobile home; or any other residential unit.

Owner: A person is considered to have met the requirement to own a dwelling if the person purchases or holds any of the following interests in real property:

(1) Fee title, a life estate, a land contract, a 99-year lease, oral lease including any options for extension with at least 50 years to run from the date of acquisition; or

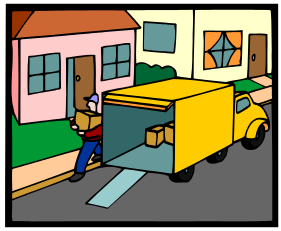
(2) An interest in a cooperative housing project which includes the right to occupy a dwelling; or

(3) A contract to purchase any interests or estates; or

(4) Any other interests, including a partial interest, which in the judgment of the agency warrants consideration as ownership.

Tenant: A person who has the temporary use and occupancy of real property owned by another.

Moving Expenses



If you qualify as a displaced person, you are entitled to reimbursement of your moving costs and certain related expenses incurred in moving. The methods of moving and the various types of moving cost payments are explained below.

Displaced individuals and families may choose to be paid on the basis of actual, reasonable moving costs and related expenses, or according to a fixed moving cost schedule. However, to ensure your eligibility and prompt payment of moving expenses, you should contact your Relocation Agent before you move.

You Can Choose Either:

Actual Reasonable Moving Costs - You may be paid for your actual reasonable moving costs and related expenses when a commercial mover performs the move. Reimbursement will be limited to a move of 50 miles or less. Related expenses may

include:

- Transportation
- Packing and unpacking personal property.
- Disconnecting and reconnecting household appliances.
- Temporary storage of personal property.
- Insurance while property is in storage or transit.

OR

Fixed Moving Cost Schedule - You may be paid on the basis of a fixed moving cost schedule. Under this option, you will not be eligible for reimbursement of related expenses listed above. The fixed schedule is designed to cover such expenses.

Examples (Year 2014 Rate):
4 Rooms - $ 1,295
7 Rooms - $ 2,090

The Fixed Move Schedule for a furnished unit (e.g. you are a tenant of an apartment that is furnished by your landlord) is based on Schedule B.

Example (Year 2014 Rate):
1 Room - $450

A dormitory style room under the 2014 Schedule B rate would receive $125.

Under the Fixed Move Schedule, you will not receive any additional payments for temporary storage, lodging, transportation or utility hook-ups.

Replacement Housing Payments

The type of Replacement Housing Payment (RHP) depends on whether you are an owner or a tenant, and the length of occupancy in the property being acquired.

If you are a qualified **owner occupant** of more than 90 days prior to the initiation of negotiations for the acquisition of your property, you may be entitled to a RHP that consists of:

Price Differential, and

Mortgage Differential, and

Incidental Expenses;

OR

Rent Differential

If you are a qualified **tenant occupant** of at least 90 days, you may be entitled to a RHP as follows:

Rent Differential

OR

Down payment Option

Length of occupancy simply means counting the number of days that you actually occupied a dwelling before the date of initiation of negotiations by Caltrans for the purchase of the property. The term "initiation of negotiations" means the date Caltrans makes the first personal contact with the owner of real property, or his/ her representative, to give him/her a written offer for the property to be acquired.

Note: If you have been in occupancy less than 90 days before the initiation of negotiations and the property is subsequently acquired, or if you move onto the property after the initiation of negotiations and you are still in occupancy on the date of acquisition, you may or may not be eligible for a Replacement Housing Payment. Check with your Relocation Agent before you make any decision to vacate your property.

For Owner Occupants of 90 Days or More

If you qualify as a 90-day owner occupant, you may be eligible - in addition to the fair market value of your property - for a Replacement Housing Payment that consists of a Price Differential, Mortgage Differential and Incidental Expenses.

The **Price Differential** payment is the amount by which the cost of a replacement dwelling exceeds the acquisition cost of the displacement dwelling. This payment will assist you in purchasing a comparable decent, safe, and sanitary (DS&S) replacement dwelling. Caltrans will compute the maximum payment you may be eligible to receive.

In order to receive the full amount of the calculated price differential, you must spend at least the amount calculated by Caltrans on a replacement property

The **Mortgage Differential** payment will reimburse you for any increased mortgage interest costs you might incur because the interest rate on your new mortgage exceeds the interest rate on the property acquired by Caltrans. The payment computation is complex as it is based on prevailing rates, your existing loan and your new loan. Also, a part of this payment may be prorated such as reimbursement for a portion of your loan origination fees and mortgage points.

To be eligible to receive this payment, the acquired property must have been encumbered by a bona fide mortgage which was a valid lien for at least 180 days prior to the initiation of negotiations.

You may also be reimbursed for any actual and necessary **Incidental Expenses** that you incur in relation to the purchase of your replacement property. These expenses may be those costs for title search, recording fees, credit report, appraisal report, and certain other closing costs associated with the purchase of property. You will not be reimbursed for any recurring costs such as prepaid real estate taxes and property insurance.

EXAMPLES OF PRICE DIFFERENTIAL PAYMENT COMPUTATION:

Assume that Caltrans purchases your property for $98,000. After a thorough study of available, decent, safe and sanitary dwellings on the open market, Caltrans determines that a comparable replacement property will cost you $100,000. If your purchase price is $100,000, you will receive $2,000 *(see Example A).*

If your actual purchase price is more than $100,000, you pay the difference (see *Example B).* If your purchase price is less than $100,000, the differential payment will be based on actual costs *(see Example C).*

How much of a differential payment you receive depends on how much you actually spend on a replacement dwelling as shown in these examples:

Caltrans' Computation

Comparable Replacement Property	$100,000
Acquisition Price of Your Property	-$ 98,000
Maximum Price Differential	$ 2,000

Example A

Purchase Price of Replacement	$100,000
Comparable Replacement Property	$100,000
Acquisition Price of Your Property	-$ 98,000
Maximum Price Differential	$ 2,000

Example B

Purchase Price of Replacement Property	$105,000
Comparable Replacement Property	$100,000
Acquisition Price of Your Property	$ 98,000
Maximum Price Differential	$ 2,000

You Must Pay the Additional $5,000

Example C

Comparable Replacement Property	$100,000
Purchase Price of Replacement	$ 99,000
Acquisition Price of Your Property	$ 98,000
Price Differential	$ 1,000

In Example C you will only receive $1,000 - not the full amount of the Caltrans "Comparable Replacement Property" because the requirements to spend were not met.

IN ORDER FOR A "90 DAY OWNER OCCUPANT" TO RECEIVE THE FULL AMOUNT OF THEIR REPLACEMENT HOUSING *PAYMENT* *(Price Differential, Mortgage Differential and Incidental Expenses)***, you must:**

A) Purchase and occupy a DS&S replacement dwelling within one year after the later of:

(1) The date you first receive a notification of an available replacement house, **OR**

(2) The date that Caltrans has paid the acquisition cost of your current dwelling (usually the closing of escrow on State's acquisition),

AND

B) Spend at least the amount of the Caltrans "Comparable Replacement Property" for a replacement property,

AND

C) File a claim for relocation payments within 18 months of the later:

(1) The date you vacate the property acquired by Caltrans, **OR**

(2) The date that Caltrans has paid the acquisition cost of your current dwelling (usually the close of escrow on State's acquisition)

You will not be eligible to receive any relocation payments until the State has actually made the first written offer to purchase the property. Also, you will also receive at least 90 days' written notice before you must move.

For Tenants of 90 Days or More

If you qualify as a 90-day occupant, you may be eligible for a Replacement Housing Payment in the form of a Rent Differential.

The **Rent Differential** payment is designed to assist you in renting a comparable decent, safe and sanitary replacement dwelling. The payment is based on the difference between the base monthly Rent for the property acquired by Caltrans (including average monthly cost for utilities) and the lesser of:

a) The monthly rent and estimated average monthly cost of utilities for a comparable replacement dwelling as determined by Caltrans, **OR**

b) The monthly rent and estimated average monthly cost of utilities for the decent, safe and sanitary dwelling that you actually rent as a replacement dwelling.

Utility costs are those expenses you incur for heat, lights, water and sewer - regardless of the source (e.g. electricity, propane, and septic system). It does not include garbage, cable, telephone, or security. The utilities at your property are the average costs over the last 12 months. The utilities at the comparable replacement property are the estimated costs for the last 12 months for the type of dwelling

and area used in the calculation.

This difference is multiplied by 42 months and may be paid to you in a lump sum payment or in periodic installments in accordance with policy and regulations.

In order to receive the full amount of the calculated Rent Differential, you must spend at least the amount calculated by Caltrans on a replacement property.

This payment may - with certain limitations - be converted to a **Down payment Option** to assist you in purchasing a replacement property.

Example of Rent Differential Payment Computation:

After a thorough study of comparable, decent, safe and sanitary dwellings that are available for rent, Caltrans determines that a comparable replacement property will rent for $325.00 per month.

Caltrans Computation (rates are per month)

Rental Rate for Comparable Replacement Property:	$ 325
PLUS average estimated utilities costs:	+ 100
TOTAL Cost to Rent Comparable Replacement Property:	= $ 425

Rental Rate for Your Current Property:	$ 300
PLUS average utilities costs:	+ 90
TOTAL Cost you pay to rent your current property:	= $ 390
Comparable Replacement Property including utilities:	$ 425
Cost you pay to rent your property including utilities:	+ 390
Difference:	=$ 35

Multiplied by 42 months = $1,470 Rent Differential

Example A:

Rental Rate for a Replacement Property, including estimated average utilities costs:	$ 525
Comparable Replacement Property including utilities:	$ 425
Cost you pay to rent your property including utilities:	$ 390

Since $425 is less than $525, the Rent Differential is based on the difference between $390 and $425.

Rent Differential ($35 x 42 months = $1,470)

In this case you spent "at least" the amount of the Comparable Replacement Property on the replacement property and will receive the full amount.

Example B:

Rental Rate for a Replacement Property, including estimated average utilities costs:	$ 400
Comparable Replacement Property including utilities:	$ 425
Cost you pay to rent your property including utilities:	$ 390

Since $400 is less than $525, the Rent Differential is based on the difference between $400 and $390.

Rent Differential ($10 x 42 months = $420)

In this case you spent "less than" the amount of the Comparable Replacement Property on the replacement property and will not receive the full amount.

You will not be eligible to receive any relocation payments until the State has actually made the first written offer to purchase the property. And, you will also receive at least 90 days' written notice before you must move.

Down Payment Option

The Rent Differential payment may - with certain limitations - be converted to a **Down Payment Option** to assist you in purchasing a replacement property. The down payment option is a direct conversion of the Rent Differential payment.

If the Caltrans calculated Rent Differential is between $0 and $7,200, your down payment option will be $7,200, which can be used towards the purchase of a replacement decent, safe and sanitary dwelling.

If the Rent Differential is over $7,200, you may be able to convert the entire amount of the Rent Differential to a down payment option.

The down payment option must be used for the acquisition of the replacement dwelling, plus any eligible incidental expenses (see “90-day Owner Occupants Incidental Expenses”) related to the purchase of the property. You must work closely with your Relocation Agent to ensure you can utilize the full amount of your down payment option towards the purchase.

If any portion of the Rent Differential was used prior to the decision to convert to a down payment option, those advance payments will be deducted from the entire benefit.

Last Resort Housing

On most projects, an adequate supply of housing will be available for sale and for rent, and the benefits provided will be sufficient to enable you to relocate to comparable housing. However, there may be projects in certain locations where the supply of available housing is insufficient to provide the necessary housing for those persons being displaced. In such cases, Caltrans will utilize a method called Last Resort Housing. Last Resort Housing allows Caltrans to construct, rehabilitate or modify housing in order to meet the needs of the people displaced from a project. Caltrans can also pay above the statutory limits of $7,200 and $31,000 in order to make available housing affordable.

Relocation Advisory Assistance



Any individual, family, business or farm displaced by Caltrans shall be offered relocation advisory assistance for the purpose of locating a replacement property. Relocation services are provided by qualified personnel employed by Caltrans. It is their goal and desire to be of service to you and assist in any way possible to help you successfully relocate.

A Relocation Agent from Caltrans will contact you personally. Relocation services and payments will be explained to you in accordance with your eligibility. During the initial interview with you, your housing needs and desires will be determined as well as your need for assistance. You cannot be required to move unless at least one comparable replacement dwelling is made available to you.

You can expect to receive the following services, advice and assistance from your Relocation Agent who will:

- Explain the relocation benefits and eligibility requirements.
- Provide the amount of the replacement housing payments in writing.
- Assure the availability of a comparable property before you move.
- Inspect possible replacement residential units for DS&S compliance.
- Provide information on counseling you can obtain to help minimize hardships in adjusting to your new location.
- Assist you in completing loan documents, rental applications or Relocation Claims Forms.

AND provide information on:

- Security deposits
- Interest rates and terms
- Typical down payments
- VA and FHA loan requirements
- Real property taxes.
- Consumer education literature on housing

If you desire, your Relocation Agent will give you current listings of other available replacement housing. Transportation will be provided to inspect available housing, especially if you are elderly or

handicapped. You may obtain the services of a real estate broker to assist in finding a replacement dwelling but, Caltrans cannot provide a referral.

Your Relocation Agent is familiar with the services provided by others in your community and will provide information on other federal, state, and local housing programs offering assistance to displaced persons. If you have special problems, your Relocation Agent will make every effort to secure the services of those agencies with trained personnel who have the expertise to help you.

If the highway project will require a considerable number of people to be relocated, Caltrans may establish a temporary Relocation Field Office on or near the project. Project relocation offices would be open during convenient hours and evening hours if necessary.

In addition to these services, Caltrans is required to coordinate its relocation activities with other agencies causing displacements to ensure that all persons displaced receive fair and consistent relocation benefits.

Remember - YOUR RELOCATION AGENT is there to offer advice and assistance. Do not hesitate to ask questions and be sure you fully understand all of your rights and available benefits.



YOUR RIGHTS AS A DISPLACEE

All eligible displacees have a freedom of choice in the selection of replacement housing, and Caltrans will not require any displaced person to accept a replacement dwelling provided by Caltrans. If you decide not to accept the replacement housing offered by Caltrans, you may secure a replacement dwelling of your choice, providing it meets DS&S housing standards. Caltrans will not pay more than your calculated benefits on any replacement property.

The most important thing to remember is that the replacement dwelling you select must meet the basic "decent, safe, and sanitary" standards. Do not execute a purchase agreement or a rental agreement until a representative from Caltrans has inspected and certified in writing that the dwelling you propose to occupy meets the basic standards. **DO NOT jeopardize** your right to receive a replacement

housing payment by moving into a substandard dwelling.

It is important to remember that your relocation benefits will not have an adverse affect on your:

- Social Security Eligibility
- Welfare Eligibility
- Income Taxes

In addition, the Title VIII of the Civil Rights Act of 1968 and later acts and amendments make discriminatory practices in the purchase and rental of most residential units illegal if based on race, color, religion, sex, or national origin.

Whenever possible, minority persons shall be given reasonable opportunities to relocate to decent, safe, and sanitary replacement dwellings, not located in an area of minority concentration, and that is within their financial means. This policy, however, does not require Caltrans to provide a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Caltrans' Non-Discrimination Policy ensures that all services and/or benefits will be administered to the general public without regard to race, color, national origin, or sex in compliance with Title VI of the 1964 Civil Rights Act (42 USC 2000d. et seq.).

And you have the Right to Appeal any decision by Caltrans regarding your relocation benefits and eligibility.

Your Right of Appeal is guaranteed in the "Uniform Act" which states that any person may file an appeal with the head of the responsible agency if that person believes that the agency has failed to properly determine the person's eligibility or the amount of a payment authorized by the Act.

If you indicate your dissatisfaction, either verbally or in writing, Caltrans will assist you in filing an appeal and explain the procedures to be followed. You will be given a prompt and full opportunity to be heard. You have the right to be represented by legal counsel or other representative in connection with the appeal (but solely at your own expense).

Caltrans will consider all pertinent justifications and materials submitted by you and other available information needed to ensure a fair review. Caltrans will provide you with a written determination resulting from the appeal with an explanation of the basis for the decision. If you are still dissatisfied with the relief granted, Caltrans will advise you that you may seek judicial review.

Americans with Disabilities Act (ADA) Notice:

This document is available in alternative formats for people with physical disabilities. Please call (916) 654-5413, or write to 'Department of Transportation - Right of Way, MS-37, 1120 N Street, Sacramento, CA 95814,' for information.

NOTES



Residential
Effective October 1, 2014 (2nd Printing)

Sus Derechos y Beneficios Como Una Persona Desplazada Bajo el Programa Uniforme De Asistencia Para Reubicación (Residencial)



California Department of Transportation

Introducción

En la construcción de un sistema moderno de transportación, el desplazamiento de un pequeño porcentaje de la población es a menudo necesario. Sin embargo, la política de Caltrans es que las personas desalojadas no tengan que sufrir innecesariamente como resultado de los programas diseñados para el beneficio del público en general.

Los individuos y familias desplazadas pueden ser elegibles para recibir servicios de asesoramiento y pagos de reubicación.

Este folleto provee información acerca de los servicios y pagos de reubicación disponibles. Si usted es requerido a mudarse como resultado de un proyecto de transportación, un Agente de Reubicación se comunicará con usted. El Agente de Reubicación le contestará preguntas específicas y le proveerá información adicional.

Ley de Procedimiento Uniforme de Asistencia para Rubicación y Adquisición de Bienes Raíces de 1970, Enmendada “La Ley Uniforme”

El propósito de esta Ley es proveer tratamiento igual y uniforme para las personas que son desplazadas de sus hogares, negocios, u operaciones agrícolas por programas federales o programas que son asistidos con fondos federales y para establecer uniformidad e igualdad en la política de adquisición de tierras por programas federales y programas asistidos con fondos federales.

La ley trata de asegurar que las personas desplazadas directamente como resultado de proyectos federales o proyectos asistidos con fondos federales sean tratados con igualdad, consistencia y equidad para que esas personas no sufran daños desproporcionados como resultado de proyectos designados para el beneficio del público en general.

Aunque se ha hecho un esfuerzo para asegurar la precisión de este folleto, debe de ser entendido que no tiene la fuerza o efectos de la ley, regla, o

regulación que gobierna el pago de los beneficios. Si hay diferencias o error, la ley tomará precedencia.

Algunas Definiciones Importantes…

Sus beneficios de reubicación pueden ser entendidos mejor si usted entiende los siguientes términos:

Vivienda de Restitución comparable: significa una propiedad que es:

(1) Decente, segura y sanitaria. (Vea la definición abajo.)
(2) Equivalente funcionalmente a la propiedad desplazada.
(3) Adecuada en tamaño para acomodar a la familia que esta siendo reubicada.
(4) En un área que no esté sujeta a condiciones irrazonablemente adversas.
(5) En una localidad generalmente no menos deseable que la localidad de su propiedad desplazada con respecto a servicios públicos, y acceso razonable al lugar de empleo.
(6) En una parcela de tamaño típico para el desarrollo de una residencia de tamaño normal.

Decente, Segura y Sanitaria (DS&S): La vivienda de restitución debe de ser decente, segura y

sanitaria … que significa que llena todos los requisítos mínimos establecidos por las regulaciones federales y conforme a los códigos de ocupación de viviendas aplicables. La propiedad será:

(1) Buena estructuralmente, cerrada a las condiciones climáticas y en buen estado de reparación.

(2) Contiene un sistema eléctrico adecuado para iluminación y otros aparatos.



(3) Contiene un sistema de calefacción capáz de mantener una temperatura saludable (de aproximadamente 70 grados) para la persona desplazada, con excepción en aquellas áreas donde las condiciones climáticas no requieren dicho sistema.

(4) Debe de ser adecuada en tamaño con respecto al número de cuartos y áreas para vivir necesarias para acomodar a las personas desplazadas. Es política de Caltrans que más

de dos personas no deben de estar en un solo cuarto, a menos que que el tamaño del cuarto sea suficientemente adecuado para acomodar los muebles de dormitorios necesarios de los ocupantes.

(5) Tener un baño separado, bien iluminado y ventilado que sea privado a los usuarios y que contenga un lavamanos, una tina o regadera, y un excusado, todos en buenas condiciones y apropiadamente conectados a los sistemas de aguas negras y aguas potables.

Nota: En el caso de una "housekeeping dwelling," debe de haber una área de cocina que contenga un lavatrastos usable, propiamente conectado a agua caliente y agua fría, y al sistema de drenaje, y con espacio adecuado para utilizar los servicios y connecciones para una estufa y un refrigerador.

(6) Contiene la salida sin obstrucciones a la caja fuerte, espacio abierto a nivel del suelo. Si la unidad de vivienda de reemplazo está en el segundo piso o por encima, con acceso directamente desde oa través de un pasillo común, el corredor común debe tener por lo menos dos medios de egreso.

(7) Si la persona desplazada es incapacitada físicamente, debe de ser libre de cualquier barrera que le impidan la entrada o salida, o uso razonable de la propiedad por dicha persona incapacitada.

Persona Desplazada: Cualquier individuo o familia que se mueva de una propiedad o mueva sus bienes personales de una propiedad como resultado de la adquisición de bienes raíces, en todo o en parte, o como resultado de una notificación escrita de una agencia pidiéndole que desocupe la propiedad que se necesita para un proyecto de transportación. En el caso de una adquisición parcial, Caltrans debe de determinar si la persona es desplazada directamente como resultado de esta adquisición.

Los beneficios de reubicación van a variar dependiendo del tipo y tiempo de ocupación. Como una persona desplazada de una unidad residencial usted puede ser clasificado como:

- Un dueño ocupante de una propiedad residencial (incluyendo casas movibles)
- Un inquilino ocupante de una propiedad residencial (incluyendo casas movibles y cuartos para dormir)

Vivienda: El lugar de permanencia o residencia regular y usual de una persona, de acuerdo a las costumbres locales o la ley, incluyendo una unidad familiar, una unidad familiar en un complejo doble o multi-familiar, o una propiedad de uso múltiple, una unidad de condominio o proyecto de vivienda en cooperativa, una unidad libre de mantenimiento doméstico, una casa movible, o cualquier otra unidad residencial.

Dueño: Una persona es considerada que llena los requisitos de dueño de una casa, si esta persona compra, tiene título o tiene algunos de los siguientes intereses en una propiedad:

(1) Una escritura de propiedad, un interés de por vida en una propiedad, un contrato de renta por 99 años, un contrato oral de renta incluyendo una opción para extensión con al menos 50 años que queden después de la fecha de adquisición; o

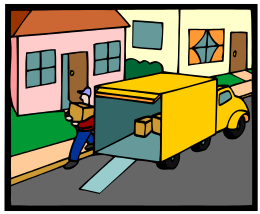
(2) El interés en un proyecto de vivienda en cooperativa que incluya el derecho de ocupar una vivienda; o

(3) Un contrato de compra de interés, o bienes raíces.

(4) Algún otro interés, incluyendo intereses parciales, qua a juicio de la agencia garanticen los pagos como dueño.

Inquilino: Una persona que tiene el uso y la ocupación temporal de una propiedad de la que otro es dueño.

Gastos de Mudanza



Si usted califica como persona desplazada, usted tiene derecho a reembolso de sus gastos de mudanza y a ciertos gastos relacionados incurridos durante el traslado. Los métodos de traslado y los distintos tipos de pagos para gastos de mudanza son explicados abajo.

Los individuos y familias desplazadas pueden escoger un pago basado en los gastos reales, razonables y los gastos relacionados, o de acuerdo a una lista de costos fijos de mudanza. Sin embargo, para asegurar su elegibilidad y el pago rápido de sus gastos de mudanza, usted debe de ponerse en contacto con su Agente de Reubicación antes de mudarse.

Usted Puede Elegir Entre:

Los Gastos Razonables de Mudanza – A usted se le puede pagar por los gastos razonables de mudanza y gastos relacionados cuando una

compañia comercial de mudanza hace la mudanza. Los reembolsos deberán ser limitados a una mudanza de 50 millas o menos. Los gastos relacionados pueden incluir:

- Transportación.
- Empaque y desempaque de propiedades personales.
- Desconexión y reconexión de aparatos eléctricos.
- Almacenaje temporal de propiedades personales.
- Seguros cuando la propiedad está almacenada o en tránsito.

Ó

Lista de Costos Fijos de Mudanza – A usted se le puede pagar basado en una lista de costos fijos de mudanza. Bajo esta opción, usted no puede ser elegible para reembolsos de gastos relacionados incluídos en la lista de arriba. Esta lista de gastos fijos está designada a cubrir todos esos gastos.

Por ejemplo (Tarifa para el año 2014)

4 Cuartos - $1,295
7 Cuartos - $2,090

Los costos fijos de mudanza para una unidad (ejemplo, usted es inquilino en un apartmento donde los muebles pertenecen al dueño de la vivienda) estan basados en la Tabla de Honorarios B.

Por ejemplo (Tarifa para el año 2014)

1 Cuartos - $450

Una habitación de estilo dormitorio debajo de la tasa de la Tabla de B - $125 (2014).

Bajo la lista de Pago Fijos de Mudanza, usted no puede recibir ningun pago adicional por almacenamiento temporario, vivienda temporaria, transportación o conexiones de servicios públicos.

Pagos Para Vivienda de Restitución

El tipo de Pago Para Vivienda de Restitución (RHP) depende de si usted es dueño o un inquilino, y en el tiempo de ocupación que tiene de la propiedad que será adquirida.

Si usted es calificado **como dueño ocupante** de más de 90 días antes de la iniciación de negociaciones para la adquisición de su propiedad, usted puede tener derecho a recibir RHP que consiste en:

Diferencia de Precio, y

Diferencia para Hipoteca, y

Gastos Incidentales

O

Diferencia Para Rentar

Si usted es un inquilino ocupante cualificada de al menos 90 días, usted puede tener derecho a un RHP de la siguiente manera:

Diferencia Para Rentar

U

Opción para Enganche

Tiempo de ocupación simplemente significa contar el número de días que usted actualmente ocupó la vivienda antes de la fecha de iniciación de negociaciones por Caltrans para la compra de la propiedad. El término “iniciación de negociaciones” significa la fecha que Caltrans hizo el primer contacto personal con el dueño de bienes raíces, o su representante, para darle a el/ella una oferta escrita para la adquisición de la propiedad.

Nota: Si usted ocupó una vivienda por menos de 90 días antes de la iniciación de negociaciones y la propiedad es posteriormente adquirida, o si usted se mudó a la propiedad después de la iniciación de negociaciones y usted todavía ocupaba la propiedad a la fecha de adquisición, usted puede ser elegible para un RHP, basado en una guía de elegibilidad establecida. Consulte con

su Agente de Reubicación antes de que haga cualquier decisión de mudarse de su propiedad.

Para Ocupantes de 90 Días o Más

Si usted califica como dueño ocupante de 90 días, puede ser elegible – además del valor equitativo en el mercado de su propiedad – para un RHP que consiste en un pago de Diferencia de Precio y/o Gastos Incidentales.

El Pago de **Diferencia de Precio** es la cantidad por la que el costo de una vivienda de restitución excede el costo de adquisición de la vivienda desplazada. Este pago le asistirá en la compra de una vivienda decente, segura, y sanitaria (DS&S). Caltrans computará el pago máximo que usted puede ser elegible para recibir.

Para recibir la cantidad total de la diferencia de precio calculadas, usted debe de gastar al menos la cantidad calculada por Caltrans en la propiedad de restitución.

El pago de **Diferencia de Hipoteca** le será reembolsado por cualquier aumento del costo de interés en la hipoteca que usted haya incurrido porque la taza de interés en su nueva hipoteca excede la taza de interés de la propiedad

adquirida por Caltrans. La computación del pago es complicada ya que está basada en las tazas típicas entre su préstamo anterior y su préstamo nuevo. También, una parte de los pagos pueden ser prorrateado como reembolso por una porción de los honorarios de su préstamo y los puntos (intereses) de la hipoteca.

Para ser elegible para recibir este pago, la propiedad adquirida debe de ser hipotecada con una hipoteca de buena fé, la cual fue un crédito válido de por lo menos 180 días antes de la iniciación de negociaciones.

Usted también puede ser reembolsado por cualquier **Gasto Incidental** actual y necesario que usted incurra en relación con la compra de su propiedad de restitución. Estos gastos pueden ser los costos por búsqueda de título, honorarios de copia en el Registro, reporte de crédito, reporte de evaluación, y ciertos otros gastos de cierre de escritura. Usted no puede ser reembolsado por ningún gasto frequente como pre-pagos de impuesto de bienes raíces y seguro de propiedad.

EJEMPLO DE COMO SE CALCULA LA DIFERENCIA DE PAGO:

Suponga que Caltrans compra su propiedad por $98,000. Después de un estudio completo de viviendas disponibles en el mercado, que sean decentes, seguras y sanitarias, Caltrans determina que la propiedad de restitución comparable en el mercado abierto le costará $100,000. Si su precio de compra es $100,000 usted recibirá $2,000 (Vea el Ejemplo A)

Si su precio de compra es de más de $100,000, usted paga la diferencia (vea el Ejemplo B). Si su precio de compra es menos de $100,000, el pago se basará en los costos actuales (vea el Ejemplo C).

La cantidad que usted recibe en un pago diferencial dependerá de cuanto usted realmente gasta en una vivienda de restitución, como se muestra en estos ejemplos.

Computación de Caltrans

Precio Comparable de la Propiedad de Restitución	$100,000
Precio de Adquisición de su Propiedad	-$ 98,000
Diferencia Máxima de Precio	$ 2,000

Ejemplo A

Precio de Compra de Restitución	$100,000
Propiedad Comparable de Restitución	$100,000
Precio de Adquisición de su Propiedad	-$ 98,000
Diferencia Máxima de Precio	$ 2,000

Ejemplo B

Precio de Compra de Restitución	$105,000
Propiedad Comparable de Restitución	$100,000
Precio de Adquisición de su Propiedad	$ 98,000
Diferencia Máxima de Precio	$ 2,000

Usted Debe de Pagar el Precio Adicional de $5,000.

Ejemplo C

Propiedad Comparable de Restitución	$100,000
Precio de Compra de Restitución	$ 99,000
Precio de Adquisición de su Propiedad	$ 98,000
Diferencia de Precio	$ 1,000

En el ejemplo C usted solo recibirá $1,000 – no la cantidad completa de "La propiedad Comparable de Restitución" por los requisítos de "Gastar para Obtener" de Caltrans.

PARA QUE UN "DUENO OCUPANTE DE 90 DÍAS" RECIBA LA CANTIDAD TOTAL DE SUS BENEFICIOS DE PAGOS PARA VIVIENDA (Diferencia de Precio, Diferencia de Hipoteca y Gastos Incidentales), usted debe:

A) Comprar y ocupar una vivienda de restitución que sea DS&S dentro de al menos un año desde la fecha más tarde de:

(1) La fecha en que recibió la primera notificación de una casa de restitución, **O**

(2) La fecha que Caltrans pagó los costos de adquisición de su vivienda actual (usualmente

los gastos de cierre de escritura en la adquisición del Estado.)

Y

B) Haber gastado al menos la cantidad que Caltrans estableció para “La Propiedad Comparable de Restitución” para la propiedad de restitución.

Y

C) Reportar un reclamo para pago para reubicación dentro de los 18 meses de la fecha más tarde de:

(1) La fecha en que se mudó de la propiedad adquirida por Caltrans, **O**

(2) La fecha en que Caltrans le pagó los costos de adquisición de su vivienda actual (usualmente al cierre de escritura en la adquisición del Estado.)

Usted no será elegible para recibir ningún pago de reubicación hasta que el Estado haya hecho la primera oferta por escrito de la compra de la propiedad. Usted también recibirá una notificación escrita por lo menos 90 días antes de tener que mudarse.

Para Inquilinos de 90 Días o Más

Si usted califica como un ocupante de 90 días, usted puede ser elegible para un Pago de Vivienda de Restitución en la forma de Diferencia para Rentar.

El pago de la **Diferencia para Rentar** es designado para asistirle en la renta de una vivienda comparable que sea decente, segura y sanitaria. El pago será basado en la diferencia entre la renta básica mensual por la propiedad adquirida por Caltrans (incluyendo el promedio del costo mensual de servicios públicos) y el menor de:

a) La renta mensual y el promedio del costo mensual estimado de los servicios públicos para una vivienda comparable de restitución determinada por Caltrans, **O**

b) La renta mensual y el promedio del costo mensual estimado de los servicios públicos para una vivienda decente, segura y sanitaria que usted rente como vivienda de restitución.

Gastos de servicios públicos son esos gastos que usted incurre por calefacción, luz, agua, y aguas negras – sin importar quien los provea (ejemplo,

electricidad, gas propano, y sistema séptico.) No incluye cable de televisión, teléfono, o seguridad. Los servicios públicos en su propiedad de restitución será el estimado del promedio de costos por los 3 últimos meses para el tipo de vivienda y área usados en los cálculos.

Esta diferencia es multiplicada por 42 meses y le puede ser pagado en una sola suma o en pagos periódicos de acuerdo con la política y regulaciones.

Para recibir la cantidad calculada total de la diferencia para rentar, usted debe gastar al menos la cantidad calculada por Caltrans en la propiedad de restitución.

Este pago puede – con ciertas limitaciones – ser convertido en una **Opción para Enganche** para asistirle en la compra de una propiedad de restitución.

EJEMPLO DE LA COMPUTACIÓN DEL PAGO DE LA DIFERENCIA PARA RENTAR:

Después de hacer un estudio completo de viviendas comparables, decentes, seguras y sanitarias que estén disponibles para rentar, Caltrans determina que una propiedad comparable de restitución podría ser rentada por $325 al mes.

Computación de Caltrans

Renta por una Propiedad Comparable de Restitución	$ 325
MÁS: estimado de costos de servicios Públicos	+100
TOTAL Costo de renta por una Propiedad Comparable de Restitución	=$425

Renta por su Propiedad Actual	$ 300
MÁS: costos de servicios públicos	+ 90
TOTAL Costo para pagar la renta de su propiedad actual	=$390

Propiedad Comparable de Restitución
incluyendo servicios públicos $ 425

Costo para pagar la renta de su
propiedad incluyendo servicios públicos + 390

Diferencia = $ 35

Multiplicado por 42 meses = $1,470 Diferencia para Rentar.

Ejemplo A:
Renta para una Propiedad de Restitución, incluyendo los costos estimados de servicios públicos $525

Propiedad Comparable de Restitución
incluyendo servicios públicos $425

Costos de pago de la renta de su
propiedad incluyendo servicios públicos $390

Ya que $425 es menos que $525, la diferencia para rentar está basada en la diferencia entre $390 y $425.

Diferencia para Rentar ($35 x 42 meses = $1,470)

En este caso usted gasta "al menos" la cantidad de la Propiedad de Restitución Comparable en la propiedad de restitución y así recibirá la cantidad total.

Ejemplo B:

Renta por una Propiedad de Restitución, incluyendo los costos estimados de servicios públicos $400

Propiedad Comparable de Restitución incluyendo servicios públicos $425

Costos de pago de la renta de su propiedad incluyendo servicios públicos $390

Ya que $400 es menos que $525, la diferencia para rentar está basada en la diferencia entre $400 y $390.

Diferencia para Rentar ($10x 42 meses = $420)

En este caso usted va a gastar “menos que” la cantidad de Propiedad de Restitución Comparable en la restitución de la vivienda y usted no recibirá la cantidad total.

Usted no será elegible para recibir ningún pago de reubicación hasta que haya hecho la primera oferta escrita para comprar la propiedad. Además, usted recibirá al menos una noticia por escrito 90 días antes de tener que mudarse.

OPCIÓN PARA ENGANCHE

El pago de Diferencia para Rentar puede – con ciertas limitaciones – ser convertido en una **Opción para Enganche** para asistirle en la compra de una propiedad de restitución. La Opción para Enganche es una conversión directa del pago de la diferencia para rentar.

Si la diferencia para rentar es calculada entre $0 y $7,200, su Opción Para Enganche será de $7,200 la cual puede ser usada para la compra de una vivienda de restitución decente, segura y sanitaria.

Si la diferencia para rentar es más de $7,200 usted podrá convertir la cantidad completa de diferencia para rentar a una Opción Para Enganche.

La Opción Para Enganche debe de ser usada para el enganche requerido, la cual usualmente es un porcentage del precio total de compra, más cualquier gasto incidental elegible (vea, “Gastos Incidentales para Dueños Ocupantes de 90 días”) relacionado con la compra de la propiedad. Usted debe trabajar junto con su Agente de Reubicación para asegurarse de que puede utilizar la cantidad total de su Opción Para Enganche en su compra.

Si alguna porción de la diferencia para rentar fue usada antes de su decisión de convertirla a una Opción Para Enganche, los pagos avanzados serán deducidos de los beneficios completos.

CASA DEL ÚLTIMO RECURSO

En la mayoría de los proyectos de Caltrans, existe una cantidad adecuada de viviendas de venta y alquiler, y los beneficios serán suficientes para que usted pueda reubicarse a una vivienda comparable. Sin embargo, en ciertas localidades pueden haber proyectos donde el número de viviendas disponibles no son suficientes para proveer viviendas a todas las personas desplazadas. En estos casos, Caltrans utiliza un método llamado Casa del Último Recurso. La Casa del Último Recurso permite a Caltrans construir, rehabilitar, o modificar viviendas para cumplir con las necesidades de las personas desplazadas por un proyecto. Caltrans puede también pagar arriba de los límites legales de $7,200 y $31,000 para hacer posible viviendas con precios razonables.

Asistencia de Consulta Para Reubicación



A cualquier individuo, familia, negocio u operación agrícola desplazada por Caltrans deberá ofrecérsele servicios de asistencia con el propósito de localizar una propiedad de restitución. Los servicios de reubicación son proveídos por empleados calificados de Caltrans. Es la meta de ellos y el deseo de estos empleados de servirle y asistirle de cualquier manera posible para ayudarle a reubicarse exitosamente.

Un Agente de Reubicación de Caltrans se pondrá en contacto con usted personalmente. Los servicios de reubicación y pagos se le explicarán de acuerdo con su elegibilidad. Durante la entrevista inicial, sus necesidades de vivienda y deseos se determinarán así como sus necesidades de asistencia. No se le puede pedir

que se mude a menos que una vivienda comparable de restitución le sea disponible.

Usted puede esperar recibir los siguientes servicios, consejos y asistencia de su Agente de Reubicación quien le:

- Explicará los beneficios de reubicación y los requisitos de elegibilidad.
- Proveerá por escrito la cantidad de pago por su vivienda de restitución.
- Asegurará la disposición de una propiedad comparable antes de que se mude.
- Inspeccionará las posibles unidades residenciales de restitución para el cumplimiento de DS&S.
- Proveerá información y aconsejará como puede obtener ayuda para minimizar las adversidades en ajustarse a su nueva localidad.
- Ayudará en completar los documentos de préstamos, aplicaciones de rentas o las Formas de Reclamo para Reubicación.

Y proveerle información de:

- Seguro de Depósitos
- Taza de intereses y términos
- Pagos típicos de enganches

- Requisitos de préstamos de la Administración de Veteranos (VA) y la Administración de Vivienda Federal (FHA)
- Impuestos sobre bienes raíces
- Literatura de educación en viviendas para el consumidor

Si usted lo desea, el Agente de Reubicación le dará una lista actual de otras viviendas de restitución disponibles.

Se proveerá transportación para inspeccionar viviendas disponibles, especialmente si usted es mayor de edad o con impedimiento físico. Aunque usted puede utilizar los servicios de un agente de bienes raíces, Caltrans no lo podrá referir.

Su Agente de Reubicación está familiarizado con los servicios proveídos por otras agencias de su comunidad y le proveerá información de otros programas de viviendas federales, estatales y locales que ofrecen programas de asistencia para personas desplazadas. Si usted tiene algun problema especial, su Agente de Reubicación hará su mejor esfuerzo para asegurarle los servicios de esas agencias con personal capacitado y con experiencia que le ayudarán.

Si el proyecto de transportación requiere un número considerable de personas que sean reubicados, Caltrans establecerá una Oficina Temporal de Reubicación en, o cerca del proyecto. Las oficinas de proyectos de reubicación deberán de abrirse durante horas convenientes y en horas tempranas de la noche, si es necesario.

Además de estos servicios, Caltrans es requirido que coordine las actividades de otras agencias que causen desplazamientos para asegurar que todas esas personas desplazadas reciban beneficios de reubicación equitativos y consistentes.

Recuerde – SU AGENTE DE REUBICACIÓN está para aconsejarle y asistirle. No vacile en hacer preguntas, y asegúrese de que entiende completamente sus derechos y beneficios de reubicación disponibles.



SUS DERECHOS COMO UNA PERSONA DESPLAZADA

Todas las personas elegibles como personas desplazadas tienen la libertad de escoger dentro de la selección de viviendas de restitución, y Caltrans no requerirá a ninguna persona que sea desplazada que acepte una vivienda de restitución proveída por Caltrans. Si usted decide no aceptar la vivienda de restitución ofrecida por Caltrans, usted puede elegir una vivienda de restitución de su propia selección, mientras que cumple con los requisítos de DS&S. Caltrans no pagará más que los beneficios calculados por una vivienda de restitución.

Lo más importante que usted debe de recordar es que la vivienda de restitución que usted seleccione debe de llenar los requisítos básicos de “decente, segura y sanitaria”. No ejecute los documentos de compra o el contrato de renta hasta que un representante de Caltrans haya inspeccionado y certificado por escrito que la vivienda que usted se propone ocupar cumple con los requisítos básicos. **NO ARRIESGUE** su derecho de recibir los pagos de vivienda de restitución por mudarse a una vivienda que no sea “decente, segura y sanitaria.”

Es importante recordar que sus beneficios de reubicación no van a tener ningún efecto adverso en su:

- Elegibilidad para Seguro Social
- Elegibilidad para Asistencia Social
- Impuestos sobre ingresos

Además, el Título VIII de los Derechos Civiles, Ley de 1968 y luego otras leyes y enmiendas hacen discriminatoria la práctica de compra y renta de unidades de vivienda si es basada ilegalmente en la raza, color, religión, sexo u origen nacional.

Cuando sea posible, a personas de minorías se les debe de dar oportunidades razonables para reubicarse a viviendas de restitución que sean decentes, seguras y sanitarias, no localizadas en áreas de concentración de minorías, y que estén dentro de sus recursos económicos. Esta política, sin embargo, no requiere que Caltrans provea a una persona pagos más grandes de lo que sean necesarios para permitir que la persona sea reubicada a una vivienda de restitución comparable.

La política No-Discriminatoria de Caltrans asegura que todos los servicios y/o los beneficios deben de ser administrados al público en general sin importar la raza, color, origen nacional, o sexo en cumplimiento con el Título VI de la Ley de Derechos Civiles de 1964 (42 USC 2000 d. et seq.)

Usted siempre tendrá el Derecho de Apelar cualquier decisión hecha por Caltrans relacionada a los beneficios de reubicación y elegibilidad.

Su Derecho de Apelar está garantizado en la "Ley Uniforme" la cual establece que una persona puede apelar al jefe de la agencia responsable, si ella cree que la agencia ha fallado en determinar correctamente su elegibilidad, o la cifra del pago autorizado por la Ley.

Si usted indica su disatisfacción, ya sea verbalmente o por escrito, Caltrans le asistirá en hacer su demanda de apelación y le explicará el procedimiento que debe de seguir. Usted tiene derecho de ser representado por un asesor legal u otro representante en conexión con su apelación (pero solamente por su propia cuenta.)

Caltrans considerará toda justificación y materia pertinente que usted entregue u otra información disponible, necesaria para asegurar una audiencia equitativa. Caltrans le proveerá una determinación por escrito del resultado de su apelación, con una explicación sobre la base de la decisión. Si usted aún no está satisfecho con la decisión otorgada, Caltrans le aconsejará que usted puede pedir una audiencia judicial.

Noticiero de la Ley para Americanos con Incapacidades Físicas (ADA):

Para personas con incapacidades físicas, este documento es disponible en formatos alternativos. Para información llame al número (916) 654-5413, o escriba a 'Department of Transportation - Right of Way, MS-37, 1120 N Street, Sacramento, CA 95814.'

NOTAS



Residential (Spanish)
Effective October 1, 2014

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ATTACHMENT B:

YOUR RIGHTS AND BENEFITS AS A DISPLACED BUSINESS, FARM, OR NONPROFIT ORGANIZATION UNDER THE CALIFORNIA DEPARTMENT OF TRANSPORTATION RELOCATION ASSISTANCE PROGRAM

(English and Spanish)

Your Rights and Benefits as a Displaced Business, Farm, or Nonprofit Organization Under the California Department of Transportation Relocation Assistance Program



California Department of Transportation

Introduction

In building a modern transportation system, the displacement of a small percentage of the population is often necessary. However, it is the policy of Caltrans that displaced persons shall not suffer unnecessarily as a result of programs designed to benefit the public as a whole.



Displaced businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments.

This brochure provides information about available relocation services and payments. If you are required to move as the result of a Caltrans transportation project, a Relocation Agent will contact you. The Relocation Agent will be able to answer your specific questions and provide additional information.

Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as Amended
"The Uniform Act"



The purpose of this Act is to provide for uniform and equitable treatment of persons displaced from their business, farm or non-profit organization, by federal and federally assisted programs and to establish uniform and equitable land acquisition policies for federal and federally assisted programs.

49 Code of Federal Regulations Part 24 implements the "Uniform Act" in accordance with the following relocation assistance objective:

> To ensure that persons displaced as a direct result of federal or federally-assisted projects are treated fairly, consistently and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

While every effort has been made to assure the accuracy of this booklet, it should be understood that it does not have the force and effect of law, rule, or regulation governing the payment of benefits. Should any difference or error occur, the law will take precedence.

Relocation Services

The California Department of Transportation has two programs to aid businesses, farms and nonprofit organizations which must relocate.

These are:

1. The Relocation Advisory Assistance Program, which is to aid you in locating a suitable replacement property, and

2. The Relocation Payments Program, which is to reimburse you for certain costs involved in relocating. These payments are classified as:

    - Moving and Related Expenses (costs to move personal property not acquired).
    - Reestablishment Expenses (expenses related to the replacement property).
    - In-Lieu Payment (a fixed payment in lieu of moving and related expenses, and reestablishment expenses).

    Note: Payment for loss of goodwill is considered an acquisition cost. California law and the federal regulations mandate that relocation payments cannot duplicate other payments such as goodwill.

You will **not** be eligible to receive any relocation payments until the State has actually made the first written offer to purchase the property. You will also receive at least 90 days' written notice before you must move.

Some Important Definitions...

Your relocation benefits can be better understood if you become familiar with the following terms:

Business: Any lawful activity, with the exception of a farm operation, conducted primarily for the purchase, sale, lease and rental of personal or real property, or for the manufacture, processing, and/or marketing of products, commodities, or any other personal property, or for the sale of services to the public, or solely for the purpose of this Act, and outdoor advertising display or displays, when the display(s) must be moved as a result of the project.

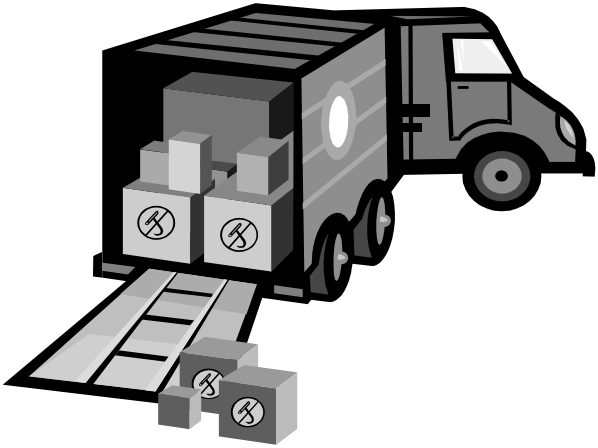
Small Business: A business having not more than 500 employees working at the site being acquired or displaced by a program or project.

Contributes Materially: A business or farm operation must have had average annual gross receipts of at least $5,000 or average annual net earnings of at least $1,000, in order to qualify as a bona-fide operation.

Farm Operation: Any activity conducted solely or primarily for the production of one or more agricultural products or commodities, including timber, for sale and home use, and customarily producing such products or commodities in sufficient quantity to be capable of contributing materially to the operator's support.

Nonprofit Organization: A public or private entity that has established its nonprofit status under applicable law.

MOVING EXPENSES



If you qualify as a displaced business, farm or nonprofit organization, you are entitled to reimbursement of your moving costs and certain related expenses incurred in moving. To qualify you must legally occupy the property as the owner or lessee/tenant when Caltrans initiates negotiations for the acquisition of the property **OR** at the time Caltrans acquires title or takes possession of the property. However, to assure your eligibility and prompt payment of moving expenses, you should contact your Relocation Agent before you move.

You Can Choose Either:

Actual Reasonable Moving Costs - You may be paid for your actual reasonable moving costs and related expenses when a commercial mover performs the move. Reimbursement will be limited to a move of 50 miles or less. Related expenses, with limitations, may include:

- Transportation.
- Packing and unpacking personal property.
- Disconnecting and reconnecting personal property related to the operation.
- Temporary storage of personal property.
- Insurance while property is in storage or transit, or the loss and damage of personal property if insurance is not reasonably available.
- Expenses in finding a replacement location ($2,500 limit).
- Professional services to plan and monitor the move of the personal property to the new location.
- Licenses, permits and fees required at the replacement location.

OR

Self-Move Agreement - You may be paid to

move your own personal property based on the lower of two acceptable bids obtained by Caltrans.

Under this option, you will still be eligible for reimbursement of related expenses listed above that were not included in the bids.

OR

In-Lieu Payment – A small business may be eligible to accept a fixed payment between $1,000 and $40,000, based on your annual earnings IN LIEU OF the moving cost and related expenses. Consult your Relocation Agent for more information about this option.

Actual Reasonable Moving Costs

You may be paid the actual reasonable and necessary costs of your move when a professional mover performs the move. All of your moving costs must be supported by paid receipts or other evidence of expenses incurred. In addition to the transportation costs of your personal property, certain other expenses may also be reimbursable, such as packing, crating, unpacking and uncrating, and the disconnecting, dismantling, removing, reassembling, and

reinstalling relocated machinery, equipment, and other personal property.

Other expenses such as professional services necessary for planning and carrying out the move, temporary storage costs, and the cost of licenses, permits and certifications may also be reimbursable. This is not intended to be an all-inclusive list of moving related expenses. Your Relocation Agent can provide you with a complete explanation of reimbursable expenses.

Self-Move Agreement

If you agree to take full responsibility for all or part of the move of your business, farm, or nonprofit organization, the Department may approve a payment not to exceed the lower of two acceptable bids obtained by the Department from qualified moving firms or a qualified Department staff employee. A low-cost or uncomplicated move may be based on a single bid or estimate at the Department's discretion. The advantage of this moving option is the fact that it relieves the displaced business, farm, or nonprofit organization operator from documenting all moving expenses. The Department may make the payment without additional documentation as long as the payment is limited to the amount of

the lowest acceptable bid or estimate. Other expenses, such as professional services for planning, storage costs, and the cost of licenses, permits, and certifications may also be reimbursable if determined to be necessary. These latter expenses must be pre approved by the Relocation Agent.

Requirements:

Before you move, you must provide Caltrans with the:

- Certified inventory of all personal property to be moved.
- Date you intend to vacate the property.
- Address of the replacement property.
- Opportunity to monitor and inspect the move from the acquired property to the replacement property.

Related Expenses

1. Searching Expenses for Replacement Property: Displaced businesses, farms, and nonprofit organizations are entitled to reimbursement for actual reasonable expenses incurred in searching for a replacement property, not to exceed $2,500. Expenses may include transportation, meals, and lodging when away from home; the reasonable value of the time spent during the search; fees paid to the real estate agents, brokers or consultants; and other expenses determined to be reasonable and necessary by the Department.



2. Direct Loss of Tangible Personal Property: Displaced businesses, farms, and nonprofit organizations may be eligible for a payment for the actual direct loss of tangible personal property which is incurred as a result of the move or discontinuance of the operation. This payment will be based upon the lesser of:

a) The fair market value of the item for continued use at the displacement site minus the proceeds from its sale.

OR

b) The estimated cost of moving and reinstalling the replaced item, based on the lowest acceptable bid or estimate obtained by the Department for eligible moving and related expenses, including dismantling and reassembly, but with no allowance for storage, cost of code requirement betterments or upgrades at the replacement site.

EXAMPLE:
You determine that the "document shredder" cannot be moved to the new location because of its condition, and you will not replace it at the new location.

Fair Market Value of the Document Shredder based on its use at the current location	$ 1,500
Proceeds: Price received from selling the Document Shredder	- $ 500
Net Value	$ 1,000

OR

Estimated cost to move	$ 1,050

Based on the "lessor of", the amount of the "Loss of Tangible Personal Property" = **$ 1,000**

Note: You are also entitled to all reasonable costs incurred in attempting to sell the document shredder (e.g. advertisement).

3. Purchase of Substitute Personal Property:
If an item of personal property, which is used as part of the business, farm, or nonprofit organization, is not moved but is promptly replaced with a substitute item that performs a

comparable function at the replacement site, the displacee is entitled to payment of the lesser of:

a) The cost of the substitute item, including installation costs at the replacement site, minus any proceeds from the sale or trade-in of the replaced item;

OR

b) The estimated cost of moving and reinstalling the replaced item, based on the lowest acceptable bid or estimate obtained by the Department for eligible moving and related expenses, including dismantling and reassembly, but with no allowance for storage, cost of code requirement betterments or upgrades at the replacement site.

EXAMPLE A:

You determine that the copying machine cannot be moved to the new location because it is now obsolete and you will replace it.

Cost of a substitute *Copying Machine* including installation costs at the replacement site.		$ 3,000
Trade-in Allowance	-	$ 2,500
Net Value		$ 500

OR

Estimated cost to move		$ 550

Based on the "lesser of", the amount of the "Substitute Personal Property" =		**$ 500**

EXAMPLE B:

You determine that the chairs will not be used at the new location because they no longer match the décor and you will replace them.

Cost of substitute chairs		$ 1,000
Proceeds: From selling the Chairs	-	$ 100
Net Value		$ 900

OR

Estimated cost to move	$ 200
Based on the "lesser of", the amount of the "Substitute Personal Property" =	**$ 200**

Note: You are also entitled to all reasonable costs incurred in attempting to sell the document shredder (e.g. advertisement).

4. Disconnecting and Reinstallation: You will be reimbursed for your actual and reasonable costs to disconnect, dismantle, remove, reassemble and reinstall any machinery, equipment or other personal property in relation to its move to the new location. This includes connection to utilities available nearby and any modifications to the personalty that is necessary to adapt it to utilities at the replacement site.

5. Physical changes at the new location: You may be reimbursed for certain physical changes to the replacement property if the changes are necessary to permit the reinstallation of machinery or equipment necessary for the continued operation of the business. ***Note:*** *The changes cannot increase the value of the building*

for general purposes, nor can they increase the mechanical capability of the buildings beyond its normal requirements.

6. The cost of installing utilities from the right of way line to the structure(s) or improvements on the replacement site.

7. Marketing studies, feasibility surveys and soil testing.

8. One-time assessments or impact fees for anticipated heavy utility usage.

Reestablishment Expenses

A small business, farm or nonprofit organization may be eligible for a payment, not to exceed $25,000, for expenses actually incurred in relocating and reestablishing the enterprise at a replacement site.

Reestablishment expenses may include, but are not limited to, the following:

1. Repairs or improvements to the replacement real property required by Federal, State or local laws, codes or ordinances.

2. Modifications to the replacement of real property to make the structure(s) suitable for the business operation.

3. Construction and installation of exterior signing to advertise the business.

4. Redecoration or replacement such as painting, wallpapering, paneling or carpeting when required by the condition of the replacement site or for aesthetic purposes.

5. Advertising the new business location.

6. The estimated increased costs of operation at the replacement site during the first two years, for items such as:

    a) Lease or rental charges
    b) Personal or real property taxes
    c) Insurance premiums, and
    d) Utility charges (excluding impact fees).

7. Other items that the Department considers essential for the reestablishment of the business or farm.

In-Lieu Payment (Fixed)

Displaced businesses, farms, and nonprofit organizations may be eligible for a fixed payment in lieu of (in place of) actual moving expenses, personal property losses, searching expense, and reestablishment expenses. The fixed payment may not be less than $1,000 or more than $40,000.

For a business to be eligible for a fixed payment, the Department must determine the following:

1. The business owns or rents personal property that must be moved due to the displacement.

2. The business cannot be relocated without a substantial loss of existing patronage.

3. The business is not part of a commercial enterprise having more than three other businesses engaged in the same or similar activity, which are under the same ownership and are not being displaced by the department.

4. The business contributed materially to the income of the displaced business operator during the two taxable years prior to displacement.

Any business operation that is engaged solely in the rental of space to others is not eligible for a fixed payment. This includes the rental of space for residential or business purposes.

Eligibility requirements for farms and nonprofit organizations are slightly different than business requirements. If you are being displaced from a farm or you represent a nonprofit organization and are interested in a fixed payment, please consult your relocation counselor for additional information.

Note: A nonprofit organization must substantiate that it cannot be relocated without a substantial loss of existing patronage (membership or clientele). The payment is based on the average of two years annual gross revenues less administrative expenses.

The Computation of Your In-Lieu Payment:

The fixed payment for a displaced business or farm is based upon the average annual net earnings of the operation for the two taxable

years immediately preceding the taxable year in which it was displaced. Caltrans can use a different two year period if it is determined that the last two taxable years do not accurately reflect the earnings of the operation.

EXAMPLE: Caltrans acquires your property and you move in 2013:

2011 Annual Net Earnings	$ 10,500
2012 Annual Net Earnings	$ 12,500
TOTAL	$ 23,000
Average over two years	**$ 11,500**

This would be the amount of your in-lieu payment. Remember - this is in-lieu of all other moving benefits. You must provide the Department with proof of net earnings to support your claim.

Proof of net earnings can be documented by income tax returns, certified financial statements, or other reasonable evidence of net earnings acceptable to the Department.

Note: The computation for nonprofit organizations differs in that the payment is computed on the basis of average annual gross revenues less administrative expenses for the two-year period specified above.

Before You Move:

A. Complete a "Request for Determination of Entitlement" form available from your Relocation Agent, and return it promptly.

B. Include a written statement of the reasons the business cannot be relocated without a substantial loss in net earnings.

C. Provide certified copies of tax returns for the two tax years immediately preceding the tax year in which you move. (If you move anytime in the year 2013, regardless of when negotiations began or the State took title to the property, the taxable years would be 2011 and 2012).

D. You will be notified of the amount you are entitled to after the application is received and approved.

E. You cannot receive the payment until after you vacate the property, AND submit a claim for the payment within 18 months of the date of your move.

Relocation Advisory Assistance



Any business, farm or non-profit organization, displaced by Caltrans shall be offered relocation advisory assistance for the purpose of locating a replacement property. Relocation services are provided by qualified personnel employed by Caltrans. It is their goal and desire to be of service to you and assist in any way possible to help you successfully relocate.

A Relocation Agent from Caltrans will contact you personally. Relocation services and payments will be explained to you in accordance with your eligibility. During the initial interview with you, your needs and desires will be determined as well as your need for assistance.

You can expect to receive the following services, advice and assistance from your Relocation Agent who will:

- Determine your needs and preferences.
- Explain the relocation benefits and eligibility.
- Provide information on replacement properties for your consideration.
- Provide information on counseling you can obtain to help minimize hardships in adjusting to your new location.
- Assist you in completing loan documents, rental applications or Relocation Claims Forms.

AND provide information on:

- Security deposits.
- Interest rates and terms.
- Typical down payments.
- Permits, fees and local planning ordinances.
- SBA loan requirements.
- Real property taxes.
- Consumer education literature.

If you desire, your Relocation Agent will give you current listings of other available replacement property. Transportation will be provided to inspect available property, especially if you are elderly or handicapped. Though you may use the services of a real estate broker, Caltrans cannot provide a referral.

Your Relocation Agent is familiar with the services provided by others in your community and will provide information on other federal, state, and local programs offering assistance to displaced persons. If you have special needs, your Relocation Agent will make every effort to secure the services of those agencies with trained personnel who have the expertise to help you.

If the highway project will require a considerable number of people to be relocated, Caltrans will establish a temporary Relocation Field Office on or near the project. Project relocation offices will be open during convenient hours and evening hours if necessary.

In addition to these services, Caltrans is required to coordinate its relocation activities with other agencies causing displacements to ensure that all persons displaced receive fair and consistent relocation benefits.

Remember - YOUR RELOCATION AGENT is there to offer advice and assistance. Do not hesitate to ask questions. And be sure you fully understand all of your rights and available benefits.

YOUR RIGHTS AS A DISPLACEE

It is important to remember that your relocation benefits will not have an adverse effect on your:

- Social Security Eligibility
- Welfare Eligibility
- Income Taxes

In addition, the Title VIII of the Civil Rights Act of 1968 and later acts and amendments make discriminatory practices in the purchase and rental of most residential units illegal if based on race, color, religion, sex, or national origin.

Caltrans' Non-Discrimination Policy ensures that all services and/or benefits will be administered to the general public without regard to race, color, national origin, or sex in compliance with Title VI of the 1964 Civil Rights Act (42 USC 2000d. et seq.).

And you always have the Right to Appeal any decision by Caltrans regarding your relocation benefits and eligibility.

Your Right of Appeal is guaranteed in the "Uniform Act" which states that any person may file an appeal with the head of the responsible

agency if that person believes that the agency has failed to properly determine the person's eligibility or the amount of a payment authorized by the Act.

If you indicate your dissatisfaction, either verbally or in writing, Caltrans will assist you in filing an appeal and explain the procedures to be followed. You will be given a prompt and full opportunity to be heard. You have the right to be represented by legal counsel or other representative in connection with the appeal (but solely at your own expense).

Caltrans will consider all pertinent justifications and materials submitted by you and other available information needed to ensure a fair review. Caltrans will provide you with a written determination resulting from the appeal with an explanation of the basis for the decision. If you are still dissatisfied with the relief granted, Caltrans will advise you that you may seek judicial review.

Americans with Disabilities Act (ADA) Notice:

This document is available in alternative formats for people with physical disabilities. Please call (916) 654-5413, or write to 'Department of Transportation - Right of Way, MS-37, 1120 N Street, Sacramento, CA 95814,' for information.

NOTES:



Non-Residential (2nd Printing)
Effective October 1, 2014

Sus Derechos y Beneficios Como Negocio, Operación Agrícola o Organización No Lucrativa Desplazada Bajo el Departamento de Transportación de California, Programa para Asistencia de Reubicación



California Department of Transportation

Introducción

Cuando se está construyendo un sistema de transporte moderno, el desplazamiento de un pequeño porcentaje de la población es a veces necesario. Sin embargo, es el procedimiento de Caltrans que las personas desplazadas no deben de sufrir innecesariamente como resultado de los programas diseñados para el beneficio del público en general.



Los negocios, operaciones agrícolas, y organizaciones no-lucrativas desplazadas pueden ser elegibles para servicios de reubicación y pagos.

Este libreto le provee información acerca de los servicios y pagos de reubicación disponibles. Si usted tiene que mudarse como resultado de un proyecto de transportación de Caltrans, un Agente de Reubicación lo contactará. El Agente

de Reubicación estará disponible para responderle preguntas específicas y darle información adicional.

Acta de Procedimiento Uniforme de Asistencia para Reubicación y Adquisición de Bienes Raíces de 1970, Emendada "El Acta Uniforme"



El propósito de esta Acta es de proveer uniformidad e igualdad de tratamiento a personas desplazadas de sus negocios, operaciones agrícolas, u organización no-lucrativa, por programas federales o programas asistidos con fondos federales, y de establecer uniformidad e igualdad en los procedimientos para adquisición de tierras para los programas federales y programas asistidos con fondos federales.

El Código de Regulaciones Federales 49, Parte 24 implementa el “Acta Uniforme” de acuerdo a los siguientes objetivos de asistencia de relocalización:

> Para asegurar que las personas desplazados como resultado directo de proyectos federales o proyectos asistidos con fondos federales sean tratados con justicia, consistencia e igualdad de tal manera que esas personas no sufran daños desproporcionados como resultado de los proyectos diseñados para el beneficio del público en general.

Mientras se ha hecho todo esfuerzo para asegurar la veracidad de este folleto, debe entenderse que no tiene la fuerza ni efecto de la ley, regla o regulaciones que gobiernan el pago de los beneficios. Si alguna diferencia o error resulta, la ley tomará precedencia.

Servicio de Reubicación

El Departamento de Transportación tiene dos programas para de ayudar a negocios, granjas y organizaciones no-lucrativas que tienen que reubicarse.

Estas son:

1. El Programa de Consejos de Asistencia de Reubicación, que es para ayudarle en localizar una propiedad de reemplazo conveniente, y

2. El Programa de Pagos para Reubicación, que le reembolsará de ciertos costos envueltos en la reubicación. Estos pagos están clasificados como:

    - Gastos Relacionados a Mudanza (costos de mover propiedad personal no adquirida).

    - Gastos de Restablecimiento (gastos relacionados a la propiedad de reemplazo).

    - Pagos Fijos (pago fijo en vez de los gastos de mudanzas y otros gastos relacionados, y gastos de restablecimiento).

Nota: *Pagos por pérdida de clientela es considerado un costo de adquisición. La ley de*

California y las regulaciones federales mandan que los pagos de reubicación no pueden duplicar otros pagos, como los pagos de pérdida de clientela.

Usted **no** puede ser elegible a recibir ningún pago de reubicación hasta que el Estado haya hecho la primera oferta escrita para comprar su propiedad. Usted también recibirá un aviso escrito por lo menos 90 días antes que se tenga que mover.

Alguna Definiciones Importantes...

Sus beneficios de relocalización pueden ser entendidos mejor si usted se familiariza con los siguientes términos:

Negocio: Cualquier actividad legal, con la excepción de operaciones agrícolas, conducida principalmente para la compra, venta, arrendamiento, y alquiler de bienes personales o bienes raíces, o para la fabricación, elaboración y/o mercadotecnia de productos, mercancías, u otros bienes personales, o solamente para el propósíto de ésta Acta, un rótulo con anuncio o anuncios, cuando el rótulo(s) tenga(n) que ser movido(s) como resultado del proyecto.

Negocio Pequeños: Un negocio que tenga no más de 500 empleados trabajando en el lugar que esta siendo adquirido o desplazado por un programa o proyecto.

Contribuye Materialmente: Un negocio u operación agrícola debe de haber tenido un ingreso bruto en recibos de al menos $5,000 o un promedio anual de ingreso netos de al menos $1,000, para poder calificar como una operación de buena fé.

Operación Agrícola: Cualquier actividad conducida sola o principalmente para la producción de uno o más productos de agricultura o mercancías, incluyendo venta de madera, para la venta y uso en casa, y producción ordinaria de tales productos o mercancía en cantidades suficientes para tener la capacidad de contribuir materialmente al soporte del operario.

Organización No-lucrativa: Una entidad pública o privada que haya establecido su estado de organización no-lucrativa bajo leyes aplicables.

GASTOS DE MUDANZA



Si usted califica como un negocio, operación agrícola, u organización no-lucrativa desplazada, usted puede recibir reembolso de los gastos de mudanza y ciertos gastos relacionados incurridos en la mudanza. Para calificar, usted tiene que ocupar la propiedad legalmente como dueño o inquilino cuando Caltrans inicie negociaciones para la adquisición de la propiedad, O al tiempo que Caltrans adquiera título, o tome posesión de la propiedad. Sin embargo, para asegurar su elegibilidad y el pronto pago de los gastos de mudanza, usted tiene que haber contactado a su Agente de Reubicación antes de que se mude.

Usted Puede Escoger Entre:

Gastos Razonables de Mudanza Actual – Usted tiene que haber pagado por sus gastos de mudanza razonables y gastos relacionados cuando una compañia comercial hace la mudanza.

El reembolso será limitado a mudanza de 50 millas o menos. Los gastos relacionados, con limitaciones, ***pueden*** incluir:

- Transportación.
- Embalaje y desembalaje propiedad personal
- Desconexión y reconexión relacionada a la operación de la propiedad personal.
- Almacenamiento temporal de la propiedad personal.
- Seguros mientras la propiedad está en almacenamiento o en tránsito, o la propiedad personal es perdida y dañada, si los seguros no son razonablemente disponible.
- Gastos en encontrar un lugar de reemplazamiento ($2500 máxima).

- Servicios profesionales para planificar y supervisar la mudanza de la propiedad personal al nuevo lugar.
- Licencias, permisos y honorarios requeridos en el lugar de reemplazamiento.
- El costo de instalación de servicios públicos desde la línea del derecho de vía a la estructura(s) o mejoramientos en el sitio de reemplazamiento.
- Estudios de mercado, estudios de factibilidad y exámen de suelo.

O

Contrato de Mudanza Propia – Usted puede ser pagado por mover su propia propiedad personal basado en la más baja de dos ofertas aceptables obtenidas por Caltrans. Bajo esta opción, usted todavía será elegible para el reembolso de los gastos relacionados arriba mencionados, que no fueron incluidos en las ofertas.

O

Pago Fijo – Usted puede aceptar un pago fijo entre $1,000 y $40,0000 basado en sus ganancias anuales EN VEZ de los costos y gastos relacionados de la mudanza.

Costos Actuales Razonables de Mudanza

Pueden pagársele los gastos actuales razonables y necesarios de su mudanza si lo transporta con una compañía comercial de muebles y mudanzas. Todos sus gastos deben de ser respaldados con recibos u otra evidencia de gastos incurridos. Además de los gastos de transportación de su propiedad personal, ciertos otros gastos también pueden ser reembolsados, tales como empaque, embalaje, desempaque y desembalaje, desconexión, desmantelación, removimiento, reensamblamiento, y reinstalción de maquinaria relocalizada, equipos y otras propiedades personales. Otros gastos necesarios tales como servicios profesionales para planificar y supervisar la mudanza, almacenaje temporal y el costo para licencias, permisos y certificados también pueden ser reembolsables. Esta no es la intención de ser una lista inclusiva de todos los gastos relacionados de mudanza. Su Agente de Reubicación puede proveerle una explicación completa de los gastos reembolsables.

Contrato de Mudanza Propia

Si usted elige tomar la responsabilidad total o parcial para la mudanza de su negocio,

operación agrícola, u organización no-lucrativa, Caltrans puede aprobar un pago sin exceder el presupuesto más bajo de dos ofertas aceptables de una compañía comercial de muebles y mudanzas o por el Agente de Reubicación. Una mudanza a costo bajo o sin complicaciones puede ser basada en una sola oferta o estimado. En realidad, la ventaja de esta opción es que releva de la obligación al operador del negocio, operación agrícola u organización no-lucrativa desplazadas de documentar todos los gastos de mudanza. Caltrans puede hacer el pago sin documentación adicional siempre y cuando el pago sea limitado a la cantidad más baja aceptable de la oferta o del estimado. Otros gastos tales como servicios profesionales para planificar, costos de almacenaje y el costo de licencias, permisos, y certificados también pueden ser reembolsables si son necesarios. Estos gastos tienen que ser aprobados de ante mano por el Agente de Reubicación.

Requisitos:

Antes de que se mueva, usted tiene que proveer a Caltrans con:

- El inventario certificado de toda la propiedad personal que va a mover.

- La fecha que usted intenta desalojar la propiedad.

- La dirección de la propiedad de reemplazamiento.

- La oportunidad de supervisar e inspeccionar la mudanza desde la propiedad adquirida a la propiedad de reemplazo.

Gastos Relacionados

1. Gastos Para la Búsqueda de una Propiedad de Reemplazo – Negocios, operaciones agrícolas, y organizaciones no-lucrativas tienen derecho a un reembolso por gastos actuales razonables, incurridos en la búsqueda de una propiedad de reemplazo, sin exceder $2,500. Los gastos pueden incluir transportación, alimento y alojamiento cuando esté lejos de su casa; el valor razonable del tiempo que ha gastado buscando una propiedad de reemplazo; los honorarios pagados a agentes de bienes raíces o asesores; y otros gastos determinados por Caltrans como razonables y necesarios.



2. Pérdidas Directas de Bienes Personales Tangibles: Los negocios, operaciones agrícolas, y organizaciones no-lucrativas desplazada pueden ser elegibles para un pago por pérdidas directas de bienes personales tangibles incurrido como resultado de la mudanza o descontinuación de la operación. Este pago deberá ser basado en el menor de:

a) El valor de mercado de un producto para uso continuo en el sitio de desplazamiento menos la ganancia por su venta.

O

b) El costo estimado de mudanza y reinstalación de los objetos reemplazados es basado en la oferta mas baja o el estimado obtenido por Caltrans para mudanza elegible y costos relacionados, incluyendo desmantelamiento y reensamblaje, pero sin pago por almacenamiento.

POR EJEMPLO:
Usted determina que el “contador de documentos” no puede ser movido a la nueva localidad por su condición, y usted no lo va a reemplazar en la nueva localidad.

El Valor de Mercado del Cortador de Documentos basado en su uso actual en La Localidad actual es de	$1,500
Ganancia: Precio recibido por la venta Del Cortador de Documentos	-$ 500
Valor Neto	$1,000
O	
El costo estimado de moverlo	$1,050
Basado en el “menor de,” la cantidad de la “Perdida de Propiedad Personal Tangible”	= **$1,000**

Nota: *Usted también tiene derecho a todos los costos razonables incurrido en su esfuerzo por vender el cortado de documentos (por ejemplo, anuncio comercial)*

3. Compra de Substitución de la Propiedad Personal: Si un objeto de propiedad personal, el cual es usado como parte del negocio, la operación agrícola, o la organización no-lucrativa, no es movido pero es prontamente reemplazado con un objeto substituto que hace una función comparable en el sitio de reemplazo, el desplazado tiene derecho al menor de:

a) El costo de un objeto sustituto, incluyendo los costos de instalación en el sitio de reemplazamiento, menos cualquier ganacia por la venta o intercambio del objeto reemplazado.

O

b) El costo estimado de mudanza y reinstalación del objeto de reemplazo, basado en la oferta mas baja aceptable o el estimado obtenido por Caltrans para una mudanza elegible y gastos relacionados, incluyendo el desmantelamiento y reensamblaje, pero sin pago por almacenamiento

EJEMPLO A:

Usted puede determinar que la máquina copiadora no puede ser movida a la nueva localidad porque es ahora obsoleta y la va a reemplazar.

Costo de substituir una Máquina Copiadora incluyendo costos de instalación en el sitio de reemplazamiento.	$3,000
Pago por el intercambio	-$2,500
Valor Neto	$ 500

O

Costo estimado de la mudanza	$ 550
Basado en el “menor de” la cantidad de “La Propiedad Personal Substituida.”	**$ 500**

EJEMPLO B:

Usted determina que las sillas no van a ser usadas en la nueva localidad, porque ya no combinan con la decoración, y usted las quiere reemplazar.

Costo de la sillas substitutas	$1,000
Ganancias: Por la venta de las Sillas	-$ 100
Valor Neto	$ 900

O

Costo estimado de la mudanza	$ 200
Basado en el “menor de,” la cantidad de “La Propiedad Personal de Substitución	**$ 200**

Nota: *Usted también tiene derecho a todos los gastos razonables incurridos en su esfuerzo por vender la copiadora (Ejemplo A) o las sillas (Ejemplo B).*

4. Desconección y Reinstalación: Usted va a ser reembolsado por los costos actuales y razonables de desconección, desmantelamiento, mudanza, reensamblaje, e reinstalación de cualquier maquinaria, equipo u otra propiedad personal en relación a la mudanza a su nuevo local. Esto incluye conección a los servicios públicos disponibles en el lugar y a cualquier modificación de los objetos personales que sean necesario para adaptar a los servicios públicos en el sitio de reemplazamiento.

5. Cambios Físicos en el nuevo local: Usted puede ser reembolsado por cierto cambios físicos de la propiedad de reemplazamiento si los cambios son necesarios para permitir la reinstalación de la maquinaria o equipo necesario para la continua operación del negocio.

> ***Nota:*** *Los cambios no pueden incrementar el valor del edificio para propósitos generales, tampoco pueden incrementar la capacidad mecánica de los edificios más alla de los requerimientos normales.*

6. El costo de instalación de los servicios públicos desde la derecha de la línea de camino a las estructuras o mejoras en el lugar de reemplazo.

7. Los estudios de marketing, encuestas de viabilidad y análisis de suelos.

8. Evaluaciones de una sola vez o tarifas de impacto para uso pesado utilidad esperada.

Gastos De Restablecimiento

Un pequeño negocio, operación agrícola, u organización no-lucrativa puede ser elegible para un pago, que no exceda $25,000, para los gastos actuales incurridos en la reubicación y el reestablecimiento en el sitio de reemplazo.

Gastos de reestablecimiento pueden incluir, pero no están limitado a, lo siguiente:

1. Reparación y mejoramiento de la propiedad de reemplazamiento requerido por las leyes, códigos, u ordenanzas federales, estatales o locales.
2. Modificaciones de la propiedad de reemplazamiento para hacer la estructura(s) apropiado para la operación del negocio.
3. Construcción e instalación de los letreros exteriores para anunciar el negocio.

4. Redecoración o reemplazamiento como pintura, tapizado de pared, paneles, o carpetas cuando sean requeridas por la condición del sitio de reemplazo o con propósitos estéticos.

5. Anunciar la localidad del nuevo negocio.

6. El aumento del costo estimado de operación en el lugar de reemplazo durante los primeros dos años, por objetos como:

    a. Cargas de rentas.

    b. Impuestos de propiedad personal o propiedad real

    c. Prima de seguros, y

    d. Carga de servicios públicos (excluyendo honorarios de impacto).

7. Otros objetos que el Departamento considere esenciales para el restablecimiento del negocio ú operación agrícola.

Pago De Una Vez (O Pago Fijo)

Negocios que han sido desplazados, operaciones agrícolas, y organizaciones no-lucrativas podrían ser elegibles para un pago fijo (en vez de) por los gastos actuales de mudanza, pérdida de propiedad personal, gastos de búsqueda, y gastos de restablecimiento. Los pagos fijos no podrán ser menos de $1,000 o más de $40,000.

Para que un negocio sea elegible por un pago fijo, Caltrans debe de determinar lo siguiente:

1. El negocio posee o renta propiedad personal que debe de ser movida debido al desplazamiento.
2. El negocia no puede ser relocalizado sin una pérdida substancial de la clientela existente.
3. El negocio no es parte de un empresa comercial que tiene más de tres otros negocios conectados en una misma o actividad similar, las cuales están bajo el mismo dueño y no estan siendo desplazadas por el Departamento.
4. El negocio contribuyó materialmente a las ganancias del operador del negocio desplazado durante los do años anteriores al desplazamiento.

Cualquier operación del negocio que está conectado solamente en la renta del espacio de otros, no es elegible para un pago fijo. Esto incluye la renta de espacio con propósitos residenciales o de negocios.

Los requerimientos de elegibilidad para las operaciones agrícolas y organizaciones no-lucrativas son un poco diferentes a los requerimientos para negocios. Si usted está siendo desplazado de una finca o usted representa una organización no-lucrativa y está interesado en un pago fijo, por favor consulte con su consejero de reubicación para información adicional.

Nota: Una organización sin fines de lucro debe corroborar que no puede ser reubicado sin una pérdida sustancial de patrocinio existente (membresía o clientela). El pago se basa en el promedio de dos años los ingresos brutos menos los gastos administrativos anuales.

La computación de Su Pago Fijo

El pago fijo para un negocio desplazado o una operación agrícola es basado en el promedio anual neto de ganancias de la operación por los dos años inmediatamente precedentes al año en el cual fue desplazado. Caltrans puede usar un período de dos años diferentes, si se determina que los dos últimos años no reflejan con certeza las ganacias de la operación.

Ejemplo: Caltrans adquiere su propiedad y usted se mueve en el 2013:

2011 Ganancias Netas Anuales	$10,500
2012 Ganancias Netas Anuales	$12,500
TOTAL	$23,000
Promedio de los años	**$11,500**

Este podría ser la cantidad de su pago fijo. Recuerde – esto es “en vez de” todos los otros beneficios de mudanza, incluyendo restablecimiento. Usted tendrá que proveer Caltrans pruebas de las ganancias netas para verificar su reclamo.

Prueba de las ganancias netas pueden ser documentas con sus declaraciones de impuestos, cartas financieras certificadas, u otra evidencia razonable de las ganancias netas aceptables por Caltrans.

Nota: La computación de las organizaciones no-lucrativas difiere en que los pagos son computados en la base del promedio anual grueso de las ganancias menos los gastos administrativos por el período de los dos años especificados arriba.

Antes de que se Mueva

A. Completar una "Solicitud de Determinación de Titularidad" forma disponible de su agente de reubicación, y volver de inmediato.

B. Somete una declaración escrita de las razones por las cuales su negocio no puede ser reubicado sin una pérdida substancial en la ganancia neta.

C. Provea una copia certificada de su declaración de impuestos de los dos años inmediatamente precedentes al año en el que se va a mover. (Si usted se mueve en cualquier momento en el año 2013, sin importar de cuando comenzaron las negociaciones o cuando el Estado tomó título de su propiedad, los años serán el de 2011 y el 2012.

D. Usted deberá ser notificado de la cantidad a la que tiene derecho después que la aplicación es recibida y aprobada.

E. Usted no puede recibir un pago hasta que se haya movido de la propiedad, Y que haya entregado un reclamo de pago dentro de los 18 meses de la fecha de mudanza.

Asistencia de Asesoría de Reubicación



A cualquier negocio, operación agrícola, u organización no-lucrativa, desplazado por Caltrans debe de ofreceria los servicios de asistencia de reubicación con el propósito de localizar una propiedad de reemplazamiento. Los servicios de reubicación deben de ser proveídos por un empleado de Caltrans. Es la meta y el deseo de nosotros de servirle y asistirle en cualquier manera posible para ayudarle a reubicarse exitosamente.

Un Agente de Reubicación de Caltrans se comunicará con usted personalmente, Los servicios de reubicación y los pagos deberán ser explicados a usted de acuerdo con su

elegibilidad. Durante la entrevista inicial con usted, sus necesidades y deseos deberán determinarse así como su necesidad de asistencia.

Usted puede esperar recibir los siguientes servicios, consejos, y asistencia de su Agente de Reubicación quien le:

- Determinará sus necesidades y preferencias.

- Explicará los beneficios de reubicación y su elegibilidad.

- Proveerá información en las propiedades de reemplazo para su consideración.

- Proveerá información en aconsejarle como puede obtener ayuda para minimizar la adversidad en ajustarse a su nuevo local.

- Asistirá en completar los documentos de préstamos, aplicaciones de rentas o Formas de Reclamos de Reubicación.

Y puede proveerle información en:

- Depósitos de seguridad.

- Taza de intereses y términos.

- Pagos típicos de enganches.
- Permisos, honorarios, y ordenanzas locales.
- Requerimientos de préstamos SBA.
- Impuestos de bienes raíces.
- Literatura de educación al consumidor.

Si usted desea, su Agente de Reubicación le dará una lista actual de otras propiedades de reemplazamiento que esten disponibles. Se la proveerá transportación para inspeccionar la propiedad disponible, especialmente si usted es anciano o deshabilitado. Aunque usted puede usar los servicios de un vendedor de bienes raíces, Caltrans no lo puede referir a un agente específico.

Su Agente de Reubicación está familiarizado con los servicios proveído por otros en su comunidad y le proveerá información de otros programas federales, estatales y locales que ofrecen asistencia a las personas desplazadas. Si usted tiene necesidades especiales, su Agente de Reubicación hará un esfuerzo para asegurar los servicios del personal entrenado de estas agencias que tienen la experiencia para ayudarle.

Si el proyecto de carreteras requiere que un número considerable de personas sean reubicadas, Caltrans establecerá Oficinas temporales de Reubicación en o cerca del proyecto. Las oficinas de projectos de reubicación serán abiertas durante las horas convenientes y hasta horas de la noche si es necesario.

Además de estos servicios, Caltrans será requerido a coordinar las actividades de reubicación con otras agencias causantes de desplazamiento para asegurar que todas las personas desplazadas reciban beneficions de reubicación iguales y consistentes.

Recuerde – Su Agente Reubicación está ahí para ofrecer consejos y asistencia. No tenga dudas en preguntar. Y esté seguro que usted entiende completamente todos los derechos y beneficios disponibles.

SUS DERECHOS COMO UNA PERSONA DESPLAZADA

Es importante que recuerde que los beneficios de reubicación no tendrán un efecto adverso en su:

- Elegibilidad para Seguro Social
- Elegibilidad para Asistencia Social
- Declaración de Impuestos

Además, el **Título VIII del Acta de Derechos Civiles de 1968**, y las actas anteriores y sus enmiendas hacen ilegal las prácticas en la venta y renta de las unidades residenciales que estén basadas en la raza, color, religión, sexo, u origen nacional.

Los Procedimientos No-Discriminatorios de Caltrans aseguran que todos los servicios y/o beneficios sean administrados al público en general sin diferencia de raza, color, origen nacional, o sexo en cumplimiento con el Título VI del Acta de Derechos Civiles de 1964. (42 USC 2000 (d.) et seq.).

Y usted siempre tiene el **Derecho de Apelar** una decisión de Caltrans en relación a sus beneficios de reubicación y elegibilidad.

Su Derecho de Apelación es garantizado en la “Ley Uniforme” que establece que una persona puede apelar con el responsable de las agencia si esta persona cree que la agencia ha fallado en determinar apropiadamente la elegibilidad de la persona o la cantidad de un pago autorizado por la Ley.

Si usted indica su disatisfacción, ya sea verbalmente o por escrito, Caltrans puede asistirle en entregar su caso y explicar los procedimientos a seguir. A usted le darán la oportunidad de ser oído pronta y totalmente. Usted tiene el derecho de ser representado por un consejero legal u otro representante en conección con la apelación (pero solamente a su propio costo).

Caltrans puede considerar todas las justificaciones pertinentes y materiales entregadas por usted y cualquier otra información disponible que sea necesaria para asegurar una revisión justa. Caltrans le proveerá con una determinación de la apelación por escrito con una explicación de la base de la decisión. Si usted todavía no está satisfecho con las asistencia prestada, Caltrans le aconsejará que usted puede buscar una revisión judicial.

Noticiero de la Ley para Americanos con Incapacidades Físicas (ADA):

Para personas con incapacidades físicas, este documento es disponible en formatos alternativos. Para información llame al número (916) 654-5413, o escriba a 'Department of Transportation - Right of Way, MS-37, 1120 N Street, Sacramento, CA 95814.'



Nonresidential (Spanish)
Effective October 1, 2014

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Appendix C – Environmental Commitments Record

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Permit Type	Agency	Date Received	Expiration	Notes
Section 404 Nationwide Permit No. 14	United States Army Corps of Engineers (USACE)			
Section 1602 Streambed Alteration Agreement	California Department of Fish and Wildlife (CDFW)			
Section 401 Water Quality Certification; National Pollutant Discharge Elimination System (NPDES) Notice of Construction; Section 402 Clean Water Act NPDES (Construction Activity)/Department NPDES Permit CAS000003 and CAS000002 (General Permit); Storm Water Pollution Prevention Plan (SWPPP)	Santa Ana Regional Water Quality Control Board (RWQCB)			
Air Quality Conformity Determination	Federal Highway Administration (FHWA)			
CTC vote to approve funds	California Transportation Commission (CTC)			
Grading Permit; Encroachment Permit	City of Moreno Valley			
Encroachment Permit	County of Riverside			
MS4 Permit	California Department of Transportation (Caltrans)			

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EA 0M590
PN 0813000109
Generalist: Boniface Udotor
ECL: **[TBD]**

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LAND USE										
PF-LU-1: Restoration of Land Used Temporarily During Construction. Prior to construction, the Contractor shall generate time-stamped photodocumentation of the pre-construction conditions of all temporary staging areas. All construction access, mobilization, material laydown, and staging areas shall be returned to the property owner in a condition equal to the pre-construction staging condition.			Construction Contractor	Prior to, during, and after construction						
COMMUNITY IMPACTS										
PF-REL-1: Caltrans and the City will comply with the Uniform Act (Public Law 91-646, 84 Statutes 1894) as applicable and provide all affected property owners with a copy of the act. The Uniform Act mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced by its project. The Uniform Act also provides for uniform and equitable treatment by federal or federally assisted programs of persons displaced from their homes, businesses, or farms, and establishes			Caltrans	Prior to relocation of properties						

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uniform and equitable land acquisition policies. Where acquisition and relocation are unavoidable, the provisions of the Uniform Act would be followed. An independent appraisal of the affected property will be obtained, and an offer for the full appraisal would be made. The Uniform Act requires that comparable, decent, safe, and sanitary replacement housing that is within a person's financial means be made available before that person may be displaced. In the event that such replacement housing is not available for persons displaced by the project within the statutory limits for replacement housing payments, last resort housing may be provided in a number of prescribed ways. A summary of the relocation benefits pursuant to the Uniform Act is provided in Appendix B.										
UTILITIES AND EMERGENCY SERVICES										
PF-UES-1: During final design, utility relocation plans will be prepared in consultation with the affected utility providers/owners for those utilities that will need to be relocated,			Project Engineer Resident Engineer	During final design						

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removed, or protected in-place. If relocation is necessary, the final design will focus on relocating utilities within existing public rights-of-way and/or easements. If relocation outside of existing rights-of-way or additional public rights-of-way and/or easements required for the proposed project are necessary, the final design will focus on relocating those facilities to minimize environmental impacts as a result of project construction and ongoing maintenance and repair activities. Utility relocations are anticipated to be completed by the various utility owners prior to or during construction.			Construction Contractor	Prior to utility relocation activities Prior to and during construction						
PF-UES-2: Prior to and during construction, the Construction Contractor will coordinate all temporary mainline, ramp, and arterial roadway closures and detour plans with law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times, including the identification of alternative routes for emergency vehicles and routes across the construction areas that are developed in coordination with the affected agencies.			Construction Contractor	Prior to and during construction						

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TRAFFIC AND TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES										
PF-TR-1: Transportation Management Plan. A detailed Transportation Management Plan (TMP) will be prepared during the final design phase of the proposed project. The objective of the TMP is to minimize the potential impacts that construction activities may have on the traveling public and emergency services providers. Preparation of the TMP will be coordinated with the emergency services providers in the project vicinity to minimize response delays resulting from traffic delays, temporary ramp and freeway mainline lane closures, and detours during project construction. The TMP for the proposed project would include the following elements and strategies: a. During construction, the contractor will be required to coordinate all temporary ramp closures and detour plans with applicable fire, emergency, medical, and law enforcement providers in order to minimize temporary delays in provider response times.			Project Engineer Resident Engineer Construction Contractor Qualified Traffic Engineer	During final design and construction						

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b. The TMP will include construction staging, detours, and road closures, as applicable. c. The proposed project will provide access to the parking area and gate for the Sketchers Warehouse at all times. d. Traffic control plans and related specifications, to be completed during final design of the proposed project, will be developed in accordance with the Work Area Traffic Control Handbook (also referred to as the WATCH Manual), Section 5 of the California Department of Transportation (Caltrans) Traffic Manual, Caltrans Standard Plans, and applicable City of Moreno Valley requirements. These plans and specifications will include elements such as: advance roadside signs and portable changeable message signs (CMSs); traffic surveillance; lane/shoulder closures; and temporary signing/striping on local streets, the State Route 60 (SR 60) ramps, and the SR-60 mainline. Temporary closures of SR-60 are anticipated during construction. Closures along the mainline, which will be limited to nighttime and off-									

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peak hours, are anticipated to re-route traffic to Eucalyptus Avenue. e. The improvements to Eucalyptus Avenue will be constructed early in the construction schedule, prior to the closure of the WLC Pkwy Overcrossing. During construction, access to SR-60 north of the freeway will be provided via Ironwood Avenue and Redlands Boulevard. Access to SR-60 south of the freeway will be provided via Alessandro Boulevard and Gilman Springs Road and via Eucalyptus Avenue and Redlands Boulevard. Additional intersection improvements required along the detour routes to facilitate vehicle movement shall be implemented prior to the closure of the WLC Pkwy overcrossing. f. The proposed project will implement a Construction Zone Enhanced Enforcement Program (COZEEP) and use California Highway Patrol (CHP) officers to enforce lane closures and provide a visual deterrent to errant/speeding vehicles. g. The proposed project will implement a Public Awareness										

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Campaign (PAC). Although any lane closures will occur at night, there will still be a potential temporary impact to vehicles traveling through the construction zone. The purpose of this PAC is to keep the surrounding community abreast of the proposed project's progress and construction activities that could affect the public's travel plans, as well as minimize delays or confusion to the motoring public during construction activities. Mailers/flyers and local newspaper advertising will be used to disseminate this information. h. The proposed project will implement the following construction strategies to minimize construction-related impacts: i. Perform major construction activities at off-peak hours, such as at night or during the weekends, when feasible and reasonable. ii. Finalize ramp closure charts during the final design phase. During final design, the proposed lane and ramp closures will be presented to the Caltrans Lane									

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Closures Review Committee (LCRC) for approval. iii. Coordinate construction with adjacent projects. Coordination is important to address possible temporary increases in traffic due to detours from adjacent projects. Construction of the adjacent projects is anticipated to be completed prior to construction of the proposed project. iv. All ramp reconstruction and local street widening will be constructed in stages to minimize disruption. i. The proposed project will include provisions for maintaining pedestrian and bicycle access at all times during construction through implementation of various detour routes throughout the study area along Ironwood Avenue, Eucalyptus Avenue, Gilman Springs Road, and Alessandro Boulevard.										
PF-TR-2: Overlap Phasing. Eastbound right-turn green during northbound-left phase and southbound right-turn green during eastbound-left phase at the westbound ramps intersection of			Project Engineer Resident Engineer	During final design and construction						

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World Logistics Center Parkway (WLC Pkwy) and SR-60 under Alternative 2 and/or Design Variation 2a shall be implemented to achieve an acceptable level of service (LOS).			Construction Contractor							
PF-TR-3: Roundabout Capacity. The roundabout lanes and associated approach roadway segments under Alternative 6 and/or Design Variation 6a must be constructed to sufficient widths so as to achieve acceptable LOS and be clear of obstructions pursuant to current Caltrans standards.			Project Engineer Resident Engineer Construction Contractor	During final design and construction						
VISUAL										
PF-VIS-1: Architectural Treatments and Review. All Architectural Treatments proposed shall be developed during the Plans, Specifications, and Estimates (PS&E) phase in consultation with the City of Moreno Valley and the California Department of Transportation (Caltrans) District Landscape Architect and shall be consistent with the guidelines present in the *State Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits* (Corridor Master Plan), prepared by Caltrans District 8, dated August 2010, as well as the			Project Engineer Resident Engineer	During PS&E						

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Gateway Monument policy identified in Chapter 29 of the *Project Development Procedures Manual*, prepared by Caltrans, dated May 2016. All proposed architectural treatments shall be reviewed and approved by Caltrans prior to final design and implementation.										
PF-VIS-2: Landscaping. Freeway landscaping shall retain the character of the existing desert scrub. An informal mixture of low-growing native desert plants shall be protected in-place and/or filled in where needed. A few tall specimens shall be incorporated at the overcrossing structure to provide scale without impacting the broader vista. Landscape palettes and concept plans will be implemented in consultation with the City of Moreno Valley and the Caltrans District Landscape Architect. All proposed landscaping would follow the guidance in Section 92.3 of the Streets and Highways code, and shall include the following measures: • All proposed landscaping species shall be well suited for the local climate, humidity, soil types, and local wind.			Project Engineer Resident Engineer Construction Contractor Licensed Landscape Architect	During final design and construction						

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• All selected species shall share similar water requirements. • Appropriate plant spacing shall be allowed to avoid overcrowding. • Landscape concepts shall include zoning areas of medium and low water use to meet the needs for usage and achieve efficiency. It is Caltrans' policy to conserve water and use drought-tolerant and low to moderate water-using plants. High water-using plants are discouraged. • The construction of unnaturally steep slopes shall be avoided. • Mulches, gravels, or other inert materials, and drip or other non-spray irrigation shall be implemented.									
PF-VIS-3: Construction Lighting. Construction lighting types, plans, and placement shall be reviewed at the discretion of the Caltrans District Landscape Architect and in accordance with Moreno Valley Municipal Code Section 9.10.110 in order to minimize light and glare			Resident Engineer Licensed Landscape Architect	During final design and construction						

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impacts on surrounding sensitive uses. Specifically, Section 9.10.110 of the Moreno Valley Municipal Code states: "No operation, activity, sign or lighting fixture shall create illumination which exceeds 0.5 footcandles minimum maintained on any adjacent property, whether the illumination is direct or indirect light from the source. All lighting shall be designed to project downward and shall not create glare on adjacent properties."										
PF-VIS-4: Operational Lighting. Compliance with Caltrans Standard Design Practices, including the use of directional lighting, and Moreno Valley Municipal Code Section 9.10.110 will be used to reduce new sources of light and glare impacts.			Project Engineer Resident Engineer Construction Contractor	During final design, construction, and operation						
CULTURAL RESOURCES										
PF-CR-1: Cultural Materials. If cultural materials are discovered during construction, it is Caltrans policy that all construction work activities within 60 feet of the discovery shall stop until a qualified archaeologist can assess the nature and significance of the find.			Construction Contractor Caltrans Archaeologist	During site preparation, grading, or excavation						

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PF-CR-2: Human Remains. If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County of Riverside Coroner shall be contacted. Pursuant to California Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendant (MLD). At this time, the person who discovered the remains will contact the California Department of Transportation (Caltrans) District 8 Environmental Branch Chief so that he or she may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.			Construction Contractor Resident Engineer Native American Heritage Commission	During site preparation, grading, or excavation						

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HYDROLOGY AND FLOODPLAINS										
PF-HYD-1: Awareness Floodplain Boundary. During final design, the City of Moreno Valley shall process a grading permit with the County of Riverside (County) for the proposed engineered slopes within the limits of the Awareness Floodplain within unincorporated Riverside County. The chosen Build Alternative or design variation shall not be constructed until the grading permit is approved by the County.			City of Moreno Valley Staff County of Riverside Staff	During final design						
WATER QUALITY AND STORM WATER RUNOFF										
PF-WQ-1: Construction General Permit. Construction of the proposed project shall comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and Order 2012-0006-DWQ; NPDES No. CAS000002), or any other subsequent permit. The project shall comply with the Construction General Permit by preparing and			Project Engineer Construction Contractor	During PS&E and during construction						

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implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have the potential to impact water quality for the appropriate risk level. The SWPPP shall identify the sources of pollutants that may affect the quality of storm water and include Best Management Practices (BMPs) to control the pollutants (e.g., Sediment Control, Catch Basin Inlet Protection, Construction Materials Management, and Non-Storm Water BMPs). All work shall conform to the construction site BMP requirements specified in the latest edition of the California Department of Transportation (Caltrans) *Storm Water Quality Handbooks: Construction Site Best Management Practices Manual* to control and minimize the impacts of construction and construction-related activities, materials, and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, concrete waste management, street sweeping and vacuuming, wind erosion control, and other non-storm water BMPs.										

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PF-WQ-2: Caltrans MS4 Permit. Design and operation of the proposed project shall comply with the provisions of the NPDES Permit, Statewide Storm Water Permit, Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation Order No. 2012-0011-DWQ, NPDES No. CAS000003 (Caltrans MS4 Permit) or any subsequent permit. This permit is applicable to the portions of the project area within and outside of Caltrans right-of-way. Caltrans-approved Treatment and Design Pollution Prevention BMPs shall be implemented within and outside of Caltrans right-of-way to the maximum extent practicable. As per the Statewide Trash Implementation Plan, trash capture devices will be implemented along the SR-60/WLC Pkwy mainline and ramps designated as "significant trash generating areas." Treatment BMPs shall be sized and designed to retain and infiltrate the water quality volume and would not result in an increase in velocity or volume of downstream flow. Treatment BMPs include infiltration basins and biofiltration swales. Design Pollution Prevention BMPs include preservation of existing			Project Engineer Construction Contractor	During PS&E, construction, and operation.							

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vegetation, slope/surface protection systems (permanent soil stabilization and replanting of vegetation) concentrated flow conveyance systems, and low-impact design (LID) efforts.										
GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY										
PF-GEO-1: Geotechnical Design Report. During the Plans, Specifications, and Estimates (PS&E) phase, a detailed geotechnical investigation will be conducted by qualified geotechnical personnel to assess the geotechnical conditions in the project area. The geotechnical investigation will include exploration, testing, and evaluation based on proposed grading and alignment schemes. This investigation shall also include slope stability evaluations, particularly for any proposed cuts and fills. Borings and double-ring infiltration tests will also be required at new storm water infiltration basins. Those soil samples will be tested to evaluate liquefaction potential, collapsibility potential, stability, and corrosion potential. The project-specific findings and recommendations of the geotechnical investigation will be submitted to the			Project Engineer Resident Engineer Qualified Geotechnical Personnel	During PS&E and final design						

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California Department of Transportation (Caltrans) for review and approval. Those findings and recommendations will be incorporated into the final design of the selected Build Alternative or Design Variation.										
PF-GEO-2: Foundation Reports. During the PS&E phase, a detailed Foundation Report specific to the project will be prepared. Geotechnical investigations for bridges, retaining walls, sound walls, storm water conduits, and overhead signs will be required. The project-specific findings and recommendations of these geotechnical investigations will be submitted to Caltrans for review and approval. Those findings and recommendations will be incorporated into the final design of the selected Build Alternative or Design Variation.			Project Engineer Resident Engineer Qualified Geotechnical Personnel	During PS&E						
PF-GEO-3: Ground Surface Rupture and Deformation Potential Testing. During the PS&E phase, further geotechnical evaluation will be conducted. This evaluation will determine the potential for fault rupture within the bridge footprint as a result of the unnamed "splay" located outside the mapped Alquist-Priolo Fault Hazard Zone that			Project Engineer Resident Engineer Qualified Geotechnical Personnel	During PS&E						

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projects toward the existing World Logistics Center Parkway (WLC Pkwy) Overcrossing.										
PF-GEO-4: Seismically Induced Settlements. During PS&E, seismically induced settlement will be evaluated based on new embankment fill thickness and geometry. If there is potential for seismically induced settlement, these findings will be incorporated into the final design of the selected Build Alternative or design variation.			Project Engineer Resident Engineer Qualified Geotechnical Personnel	During PS&E						
PF-GEO-5: Corrosive Soil Testing. During PS&E, representative soil samples will be tested for pH, sulfate content, chloride, content, and minimum electrical resistivity as part of the final Foundation Report investigation for the project area pursuant to Caltrans Corrosion Guidelines. If corrosive soils are found, appropriate material recommendations will be incorporated into the final design of the selected Build Alternative or design variation.			Project Engineer Resident Engineer Qualified Geotechnical Personnel	During PS&E						

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PALEONTOLOGY										
PF-PAL-1: Discovery of Unanticipated Paleontological Resources. If unanticipated paleontological resources are discovered, all work within 60 feet of the discovery must cease and the construction Resident Engineer must be notified. Work cannot continue near the discovery until authorized.			Resident Engineer Construction Contractor	During Construction						
PAL-1: Paleontological Mitigation Plan (PMP). The PMP shall be developed concurrently with the final design plans and shall follow the California Department of Transportation (Caltrans) guidelines in the Standard Environmental Reference (SER) Environmental Handbook, Volume 1, Chapter 8 (Caltrans, 2017), as well as guidelines from the Society of Vertebrate Paleontology. Following these guidelines, the PMP shall be prepared by a qualified paleontologist and shall include the following elements: ● Required 1-hour preconstruction paleontological sensitivity training for earthmoving personnel			Resident Engineer Qualified Paleontologist Qualified Environmental Staff	Concurrently with final design plans						

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• A signed repository agreement • Field and laboratory methods proposed (must be consistent with repository requirements) • A required Paleontological Mitigation Report upon completion of project earthmoving										
HAZARDOUS WASTE/MATERIALS										
PF-HAZ-1: Lead Compliance Plan. Prior to construction, construction contractors excavating, transporting, or stockpiling soil will prepare a Lead Compliance Plan in accordance with the California Department of Transportation (Caltrans) Code of Safety Practices, the California Code of Regulations, and California Occupational Safety and Health Administration (Cal/OSHA) standards. The Lead Compliance Plan will address the presence of aerially deposited lead (ADL) in the soils within the project area and the health and safety of construction workers.			Project Engineer Resident Engineer Construction Contractor	Prior to construction						

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PF-HAZ-2: Striping and Pavement Markings. Striping paint on the paved roads associated with the proposed project will be sampled and tested for lead chromate in accordance with the Caltrans' *Construction Manual* (2017) Chapter 7, Section 7-107, Hazardous Waste and Contamination, by trained and/or licensed professionals. The field and analytical data obtained during this study will be used to provide a review of the sampling locations and descriptions, a summary of the analytical results, and recommendations for striping paint removal, containment, and off-site transportation and disposal, as appropriate.			Project Engineer Resident Engineer Trained or licensed Contractor Construction Contractor	During PS&E and construction						
PF-HAZ-3: Asbestos-Containing Materials and Lead-Based Paint. After property acquisition and prior to demolition, the World Logistics Center Parkway (WLC Pkwy) and structures that are proposed for demolition and/or modification within the study area will be assessed for the possible presence of asbestos-containing materials (ACMs) and lead-based paints (LBPs). These studies will be conducted by trained and/or licensed professionals and will comply with the EPA, the National			Project Engineer Resident Engineer Trained or licensed Contractor	After property acquisition and prior to demolition						

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Emission Standards for Hazardous Air Pollutants (NESHAPs), the Code of Federal Regulations (CFR) Title 40, South Coast Air Quality Management District (SCAQMD) Rule 1403, and the United States Department of Housing and Urban Development (HUD) and California Department of Public Health (CDPH) guidelines. The results of these studies will provide a description of the ACM and LBP locations, estimated quantity, and recommendations for removal, containment, and off-site transportation and disposal.										
PF-HAZ-4: **Transformers.** If transformer removal is required, Southern California Edison will be contacted prior to handling or removal of electrical transformers. If utility poles require removal, additional sampling and analysis will be conducted to determine the presence of creosote (often associated with the preservation of wooden electric poles) and appropriate disposal methods. Any hazardous transformers or poles that are disturbed/removed will be disposed of in accordance with the California Health and Safety Code.			Project Engineer Resident Engineer Appropriate Southern California Edison Staff	During construction but prior to handling or removal of electrical transformers						

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PF-HAZ-5: SCAQMD Rule 1403. Notification and applicable fees will be submitted to the SCAQMD at least 10 days prior to proceeding with any demolition or renovation of a structure (refer to SCAQMD Rule 1403(d)(1)(B)). The construction contractor will adhere to the requirements of SCAQMD Rule 1403 during renovation and demolition activities.			Project Engineer Resident Engineer Construction Contractor	At least 10 days prior to proceeding with any demolition or renovation of a structure						
PF-HAZ-6: Unknown Hazards. If hazardous materials contamination or sources are suspected or identified during project construction activities, an environmental professional shall evaluate the course of action required. This course of action shall follow the Unknown Hazards Procedures described in Chapter 7 of the Caltrans *Construction Manual* (2017).			Project Engineer Resident Engineer Qualified Environmental Staff Trained or licensed Contractor	During Construction						
PF-HAZ-7: Groundwater Well Abandonment. During final design, a detailed review of available well information of the existing inactive groundwater wells within the project right of way will be conducted. The abandonment procedure for the well will be conducted in accordance with California Department of Water Resources Standards (Bulletin			Project Engineer Construction Contractor	During final design						

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74-90), and the abandonment approvals by the agency with jurisdiction for the well will be documented.										
AIR QUALITY										
PF-AQ-1: During clearing, grading, earthmoving, or excavation operations, excessive fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust. The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized to prevent excessive amounts of dust. These control techniques will be indicated in project specifications. Visible dust beyond			Project Engineer Construction Contractor	During clearing, grading, earthmoving, or excavation						

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the property line emanating from the project will be prevented to the maximum extent feasible.										
PF-AQ-2: Project specifications will include the duration of construction. Emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. Properly operating engines also help reduce greenhouse gas (GHG) emissions.			Project Engineer Construction Contractor	During final design and construction						
PF-AQ-3: All trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.			Project Engineer Construction Contractor	During construction						
PF-AQ-4: The contractor will adhere to California Department of Transportation (Caltrans) Standard Specifications for Construction, Sections 14.9-02 and 14-9.03 (e.g., comply with air-pollution-control rules, regulations, ordinances, and statutes that apply to work performed under the construction contract, and do not dispose of material by burning).			Construction Contractor	During construction						

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PF-AQ-5: Should the project geologist determine that asbestos-containing materials (ACMs) are present at the project study area during final inspection prior to construction, the appropriate methods will be implemented to remove ACMs.			Project Engineer Resident Engineer Trained or licensed Contractor Project Geologist	During final inspection and prior to construction						
PF-AQ-6: All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes.			Construction Contractor	During construction						
GREENHOUSE GAS EMISSIONS										
PF-GHG-1: Use energy and fuel efficient vehicles and equipment that are the right size equipment for the job.			Construction Contractor	Prior to construction and during construction						
PF-GHG-2: Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of			Construction Contractor	During construction						

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the applicable percent reduction for a CARB-approved fleet.										
PF-GHG-3: Maximize use of recycled materials (e.g., tire rubber) and use the minimum feasible amount of GHG-emitting construction materials that is feasible.			Construction Contractor	During construction						
PF-GHG-4: Reduce need for electric lighting by using ultra-reflective sign materials that are illuminated by headlights.			Construction Contractor	During construction						
PF-GHG-5: Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.			Construction Contractor	During construction						
PF-GHG-6: Include landscaping components such as mulch and compost application to improve carbon sequestration rates in soils and reduce organic waste.			Project Engineer Construction Contractor	During final design and construction						
PF-GHG-7: Design and install long-life pavement structures to minimize life-cycle costs.			Project Engineer Construction Contractor	During final design and construction						

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PF-GHG-8: Design medians to comply with City landscape standards to increase water efficiency with efficient irrigation, grading that retains water run-off, and a drought tolerant plant palette.			Project Engineer Construction Contractor	During final design and construction						
PF-GHG-9: Use rubberized asphalt concrete to the maximum extent practical within currently accepted practice.			Project Engineer Construction Contractor	During final design and construction						
PF-GHG-10: Use lighting systems that are energy efficient, such as LED technology.			Project Engineer Construction Contractor	During final design and construction						
PF-GHG-11: Incorporate bicycle and pedestrian facilities into project design.			Project Engineer Construction Contractor	During final design and construction						
NOISE										
PF-N-1: Construction activities within City right-of-way will comply with the allowed construction hours specified by the City's Municipal Code (7:00 a.m. to 8:00 p.m. on weekdays and weekends) and the control of noise from construction activities within California Department of Transportation (Caltrans) right-of-way will conform to Caltrans Standard Specifications, Section 14-8.02, "Noise Control." The nighttime noise			Project Engineer Resident Engineer Construction Contractor	During construction						

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level from the Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., will not exceed 86 maximum A-weighted decibels (dBA L_{max}) at a distance of 50 feet.										
N-1: Noise mitigation in the form of noise barriers will be implemented to reduce significant noise impacts at Receptors R-25 and R-28. During final design, the final height and length of the noise barrier will be determined. During construction, the construction contractor will construct the noise barrier as specified in the final design plans.			Project Engineer Resident Engineer Construction Contractor	During construction						
NATURAL COMMUNITIES										
PF-NC-1: At the 60-inch culvert, 3-foot walls with an 18-inch lip will be constructed, which will direct wildlife toward the culvert.			Project Engineer Construction Contractor	During final design and construction						
PF-NC-2: Culvert access areas will be hydro-seeded with natural vegetation during the winter after construction activity adjacent to the culvert is complete. Natural objects, such as stumps, rocks, and other natural debris within the crossing facility will be utilized to create cover for wildlife and to encourage the use of the culvert by wildlife.			Project Engineer Construction Contractor	During final design and construction						

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WETLANDS AND OTHER WATERS										
PF-WET-1: Streambed Alteration Agreement. Prior to construction, a Section 1602 Streambed Alteration Agreement will be obtained from the California Department of Fish and Wildlife (CDFW).			Project Engineer	Prior to construction						
PF-WET-2: Water Quality Certification. Prior to construction, a certification of water quality from the Santa Ana Regional Water Quality Control Board (RWQCB), Region 8, will be obtained pursuant to Section 401 of the federal Clean Water Act (CWA).			Project Engineer	Prior to construction						
PF-WET-3: Compliance with the Nationwide Permit Program. During construction, the project will comply with the Nationwide Permit Program pursuant to Section 404 of the federal CWA.			Project Engineer	Prior to construction						
PF-WET-4: USACE Compensatory Mitigation. Compensatory mitigation is anticipated to be required to offset the loss of jurisdictional waters by the United States Army Corps of Engineers (USACE), CDFW, and RWQCB at a minimum 1:1 mitigation ratio. Mitigation for effects to any regulated USACE nonwetland waters or "waters of the United States and			Project Engineer	Prior to, during, or after construction						

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State" will be consistent with the USACE Compensatory Mitigation for Losses of Aquatic Resources, also known as the USACE Compensatory Mitigation Rule. The final determination of what is jurisdictional, what permits will be required, and whether mitigation will be required for such impacts is ultimately subject to the discretion of the agencies (i.e., USACE, CDFW, and RWQCB) during the federal and State regulatory processes.										
ANIMAL SPECIES										
PF-AS-1: Burrowing Owl Survey Protocol. Consistent with the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area, a preconstruction survey will be conducted by a qualified biologist within 30 days prior to project-related ground-disturbing activities to ensure that burrowing owls are not occupying potentially suitable ruderal fields. If owls are determined to be present, mitigation measures will be developed and authorized through			Resident Engineer Qualified Burrowing Owl Biologist Qualified Environmental Staff Construction Contractor	Prior to construction Within 30 days prior to Project-related ground-disturbing activities						

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consultation with the WRCMSHCP Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and United States Fish and Wildlife Service (USFWS), as described in WRCMSHCP Table 9.2 and WRCMSHCP Appendix E, Summary of WRCMSHCP Species Survey Requirements.										
PF-AS-2: Vegetation and Tree Removal. In compliance with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, vegetation clearing and preliminary ground-disturbing work will be completed outside the bird breeding season (typically set as February 15 through August 31) or a preconstruction nesting bird survey will be conducted. In addition, prior to clearing or construction, highly visible barriers (e.g., orange construction fencing) will be installed around the coastal sage scrub plant community adjacent to the project footprint to designate Environmentally Sensitive Areas (ESAs) to be avoided. No grading or fill activity of any type will be permitted within these ESAs. In addition, heavy equipment, including			Resident Engineer Qualified Biologist Qualified Environmental Staff Construction Contractor	Prior to and during construction							

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motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in such a manner as to prevent accidental damage to nearby preserved areas. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to planned grading activities. In the event that vegetation removal cannot be conducted outside the bird breeding season, focused surveys will be conducted by a qualified biologist prior to ground-disturbing activities. Should nesting birds be found, an exclusionary buffer will be established by a qualified biologist. The buffer may be up to 500 feet in diameter depending on the species of nesting bird found. This buffer will be clearly marked in the field by construction personnel under the guidance of a qualified biologist, and construction or clearing will not be conducted within this zone until the qualified biologist determines that the										

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young have fledged or the nest is no longer active. If construction of the World Logistics Center Parkway bridge structure cannot take place outside the nesting season, exclusionary devices and nest prevention methods designed to prevent birds from utilizing the bridge will be determined and implemented by a qualified biologist. Exclusionary devices must be installed prior to the initiation of nesting season (February 15) and before any bridge demolition and other bridge construction activities begin. Nesting bird habitat within the Biological Study Area (BSA) will be resurveyed during the bird breeding season if there is a lapse in construction activities longer than 7 days.										
PF-AS-3: Roosting Bat Surveys. To ensure that no bats begin roosting in the World Logistics Center Parkway bridge structure or other bridge structures to be affected by the proposed project prior to or during construction activities, a humane eviction/exclusion shall be conducted by a qualified bat biologist in the fall (September or October) preceding			Project Engineer Resident Engineer Qualified Bat Biologist	During PS&E; prior to and during construction						

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construction at the structure(s) to prevent potential direct impacts to bats. During installation of the humane eviction/exclusion devices, each potentially suitable roost crevice will be closely inspected using flashlights and/or a fiber-optic scope for the presence of day-roosting bats. At crevices where the absence of bats can be confirmed, the crevices may be immediately sealed with exclusionary material. At crevices where bats are visibly roosting or where their absence cannot be confirmed, humane eviction devices (i.e., one-way doors) that will allow the bats to exit the roosting crevice but prevent them from returning will be installed. All aspects of the humane eviction/exclusion of bats from structures shall be directly supervised and monitored by a qualified bat biologist approved by the CDFW. This qualified bat biologist will determine the specific type of humane eviction devices and exclusionary material that will be used within the crevices. These devices shall remain in place for the duration of construction work at that structure.			Qualified Environmental Staff Construction Contractor							

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Prior to conducting a humane eviction/exclusion, nighttime preconstruction surveys should be conducted during the Plan, Specification, and Estimate (PS&E) stage, which would allow time to deal with any bat issues that may arise and could be dealt with prior to contract award. The surveys would include acoustic monitoring that may be conducted by a qualified bat biologist to verify the presence of bats and to determine what species, if any, inhabit the structure. These surveys shall include exit counts to ascertain the approximate number of bats utilizing the potential roost site. Nighttime surveys shall be performed between June 1 and August 15, when maternity colonies have formed but before they begin to disperse in order to confirm whether a maternity colony is roosting at any of the structures in the project area. The nighttime survey shall also be conducted no later than the summer at least 1 year prior to construction to allow adequate time for coordination and planning between biologists and engineers should a maternity colony or other grouping of bats be discovered, and to implement any										

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appropriate strategies necessary to minimize negative effects to roosting bats. Palm trees suitable for use by western yellow bats, which roost in the untrimmed fronds of palm trees, occur in the BSA. If palm tree removal or palm frond trimming is necessary for project construction, this activity shall be conducted outside the bat maternity season (April 1–August 31); this time period coincides with the clearing and grubbing restrictions typically associated with bird nesting season. If palm tree removal or trimming is conducted outside the bat maternity and bird nesting season as recommended, impacts to flightless young will be avoided.										
INVASIVE SPECIES										
PF- INV-1: Prevention of the Spread of Invasive Species. In compliance with the Executive Order on Invasive Species, EO 13112, and guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control included in the project will not use species listed as invasive. In areas of			Construction Contractor Qualified Environmental Staff Qualified Biologist	During and after construction						

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particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These extra precautions include the inspection and cleaning of construction equipment and eradication strategies to be implemented should invasive species be present. At a minimum, this program will include the following: ● During construction, the Construction Contractor shall inspect and clean construction equipment at the beginning of each day and prior to transporting equipment from one project location to another. ● During construction, soil and vegetation disturbance will be minimized to the greatest extent feasible. ● During construction, the Construction Contractor shall ensure that all active portions of the construction site are watered a minimum of twice daily or more often when needed due to dry or windy conditions to prevent excessive amounts of dust.									

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• During construction, the Construction Contractor shall ensure that all stockpiled materials are sufficiently watered or covered to prevent excessive amounts of dust. • During construction, soil, gravel, and rock will be obtained from weed-free sources. • Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. • After construction, affected areas adjacent to native vegetation will be revegetated with plant species that are native to the vicinity as approved by the District Biologist. • After construction, all revegetated areas will avoid the use of species listed on the California Invasive Plant Council's California Invasive Plant Inventory that have a High or Moderate rating. • Erosion control and revegetation sites will be monitored for 2 to 3 years after construction to detect and control the introduction/ invasion of nonnative species.										

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• Eradication procedures (e.g., spraying and/or hand weeding) will be outlined should an infestation occur. The use of herbicides will be prohibited within and adjacent to native vegetation, except as specifically authorized and monitored by the District Biologist. • All woody invasive species (e.g., tamarisk, tree tobacco) will be removed from the project site.										

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Appendix D – List of Acronyms and Abbreviations

°F	degrees Fahrenheit
23 USC 327	23 United States Code Section 327
AADT	annual average daily traffic
AASHTO	American Association of State Highway and Transportation Officials
AB	Assembly Bill
ac	acre/acres
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
AFV	alternative fuel vehicle
AGR	Agricultural Supply
ALD	aerially deposited lead
amsl	above mean sea level
APD	Area of Project Disturbance
APE	Area of Potential Effects
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ASTM	American Society for Testing and Materials
Basin	South Coast Air Basin
BAU	business as usual
bgs	below ground surface
BLM	Bureau of Land Management
BMPs	Best Management Practices
BP	Business Park/Light Industrial
BRAC	Base Realignment and Closure
BSA	Biological Study Area
BTU	British thermal unit
C	Commercial
C_2F_6	hexafluoroethane
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration

Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CDPH	California Department of Public Health
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act
CF_4	tetrafluoromethane
CFR	Code of Federal Regulations
CH_4	methane
CHP	California Highway Patrol
City	City of Moreno Valley
CMAQ	Congestion Mitigation and Air Quality
CMP	Congestion Management Program
CMS	changeable message sign
CNPS	California Native Plant Society
CO	carbon monoxide
CO Protocol	Caltrans Transportation Project-Level Carbon Monoxide Protocol
CO_2	carbon dioxide
COA	Comprehensive Operational Analysis
Corridor Master Plan	Route 60 Corridor Master Plan for Aesthetics and Landscaping Moreno Valley City Limits
County	County of Riverside
COZEEP	Construction Zone Enhanced Enforcement Program
CRHR	California Register of Historical Resources
CTP 2040	California Transportation Plan 2040
CWA	Clean Water Act
cy	cubic yards
DAMP	Drainage Area Management Plan
dBA	A-weighted decibels
Desk Guide	Desk Guide – Environmental Justice in Transportation Planning and Investments

DHHS	Department of Health and Human Services
DIF	Development Impact Fees
DOC	Department of Conservation
DOE	United States Department of Energy
DOGGR	Department of Oil, Gas, and Geothermal Resources
DSA	Disturbed Soil Area
DTSC	Department of Toxic Substances Control
DU/ac	dwelling unit per acre
DWR	California Department of Water Resources
E85	Ethanol, 85 percent
ECSD	Edgemont Community Services District
EDD	Employment Development Department
EIA	Energy Information Administration
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIR/EA	Environmental Impact Report/Environmental Assessment
EIS	Environmental Impact Statement
EMWD	Eastern Municipal Water District
EO	Executive Order
EPA	United States Environmental Protection Agency
ESA	Environmentally Sensitive Areas
F+I	Fatal plus Injury
FAR	floor-to-area ratio
FCAA	Federal Clean Air Act (regulatory language)
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
FR	Federal Register
ft	foot/feet
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
GIS	geographic information systems
GSAs	groundwater sustainability agencies

Guidance	Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas
GWP	Global Warming Potentials
GWR	Groundwater Recharge
H_2S	hydrogen sulfide
HA	Hydrologic Area
HAZNET	Hazardous Waste Information System
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HIST CORTESE	Hazardous Waste and Substance Site List
HOV	high-occupancy vehicle
HSA	Hydrologic Subarea
HU	Hydrologic Unit
HUD	United States Department of Housing and Urban Development
HYD	hydrogen
I-10	Interstate 10
I-110	Interstate 110
I-215	Interstate 215
I-5	Interstate 5
I-605	Interstate 605
I-710	Interstate 710
IEPR	Integrated Energy Policy Report
in/sec	inches per second
IND	Industrial Supply
IPCC	Intergovernmental Panel on Climate Change
ITSP	Interregional Transportation Strategic Plan
kWh	kilowatt-hours
kV	kilovolts
LAPM	Los Angeles pocket mouse
LBP	lead-based paint
LCFS	low carbon fuel standard
LCRC	Lane Closures Review Committee
LEDPA	least environmentally damaging practicable alternative
L_{eq}	equivalent continuous sound level
$L_{eq}(h)$	1-hour equivalent continuous sound level
LID	Low Impact Development *or* low-impact design
LIP	Local Implementation Plan

L_{max}	maximum instantaneous noise level
LNG	liquefied natural gas
LOS	level of service
LPA	Locally Preferred Alternative
LPG	liquefied petroleum gas
LRFD	Load and Resistance Factor Design
LRTP	Long Range Transportation Plan
LUST	Leaking Underground Storage Tank
Ma	million years ago
MBTA	Migratory Bird Treaty Act
MEP	Maximum Extent Practicable
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MHSP	Moreno Highlands Specific Plan
mi	mile/miles
MLD	Most Likely Descendant
MMBtu	million British thermal units
mm/yr	millimeters per year
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
Morongo	Morongo Band of Mission Indians
MOU	Memorandum of Understanding
mph	miles per hour
MPO	Metropolitan Planning Organization
MRP	Monitoring and Reporting Program
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer Systems
MS4 Permit	Municipal Separate Storm Sewer Systems Permit
MSAT	Mobile Source Air Toxics
MUN	Municipal and Domestic Supply
Mw	Moment Magnitude
MWD	Metropolitan Water District of Southern California
N_2O	nitrous oxide
NAAQS	national ambient air quality standards
NAC	Noise Abatement Criteria
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NEPA	National Environmental Policy Act

NESHAPs	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries Service	National Oceanic and Atmospheric Administration's National Marine Fisheries Service
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHC	National Register of Historic Places
NRHP	National Register of Historic Places
O	Office
O_3	ozone
OC	Overcrossing
OCPs	organochlorine pesticides
OHWM	ordinary high water mark
OPR	Governor's Office of Planning and Research
OS	Open Space
OSHA	Occupational Safety and Health Act
OSTP	Office of Science and Technology Policy
PA	Programmatic Agreement
PA&ED	Project Approval and Environmental Documentation
PAC	Public Awareness Campaign
Pb	lead
pc/mi/ln	passenger cars per mile per lane
PCBs	polychlorinated biphenyls
PCE	passenger car equivalent
PDT	Project Development Team
Pechanga	Pechanga Band of Luiseño Indians
PF	Public Facilities
Pilot Program	Surface Transportation Project Delivery Pilot Program
PL	Public Law
PM	particulate matter *or* Post Mile

PM_{10}	particulate matter less than 10 microns in size
$PM_{2.5}$	particulate matter less than 2.5 microns in size
PMP	Paleontological Mitigation Plan
POAQC	project of air quality concern
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PROC	Industrial Process Supply
project	SR-60/World Logistics Center Parkway Interchange Project
PS&E	Plans, Specifications, and Estimates
PSR/PDS	Project Study Report/Project Development Support
R1	Residential 1
R2	Residential 2
R3	Residential 3
R5	Residential 5
RAP	Relocation Assistance Program
RCA	Regional Conservation Authority
RCDOEH	Riverside County Department of Environmental Health
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCHCA	Riverside County Habitat Conservation Agency
RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
REC	Recognized Environmental Condition
REC-1	Body-Contact Recreation
REC-2	Non-Body-Contact Recreation
RR	Rural Residential
RSA	resource study area
RSD	Riverside County Sheriff's Department
RSL	Regional Screening Level
RTA	Riverside Transit Agency
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board

SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SB	Senate Bill
SBCM	San Bernardino County Museum
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDC	Seismic Design Criteria
SER	Standard Environmental Reference
sf	square foot/feet
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
Skechers	Skechers Distribution Center and Factory Outlet
SLF	Sacred Lands File
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
sq mi	square mile/miles
SR-57	State Route 57
SR-60	State Route 60
SR-71	State Route 71
SR-79	State Route 79
STIP	State Transportation Improvement Program
SVP	Society of Vertebrate Paleontology
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TASAS	Traffic Accident Surveillance and Analysis System
TCE	temporary construction easement
TCR	Transportation Concept Report
TCWG	Transportation Conformity Working Group
TDM	Transportation Demand Management
TDS	total dissolved solids
THPO	Tribal Historic Preservation Officer

TIA	Traffic Impact Analysis
TMDLs	Total Maximum Daily Loads
TMP	Transportation Management Plan
TNM	Traffic Noise Model
TNW	traditionally navigable water
TPH	total petroleum hydrocarbons
TSCA	Toxic Substances Control Act
TSM	Transportation Systems Management
TSN	Transportation System Network
TUMF	Transportation Uniform Mitigation Fee
UCMP	University of California Museum of Paleontology
Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United states Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
VAU	visual assessment unit
VMT	vehicle miles traveled
VOC	volatile organic compounds
vplph	vehicles per lane per hour
WARM	Warm Freshwater Habitat
WATCH Manual	Work Area Traffic Control Handbook
waters of the U.S.	waters of the United States
WDR	Waste Discharge Requirement
WILD	Wildlife Habitat
WLC	World Logistics Center
WLC Pkwy	World Logistics Center Parkway
WMA	Watershed Management Area
WMWD	Metropolitan Water District of Southern California
WPCP	Water Pollution Control Program
WQMP	Water Quality Management Plan
WRCMSHCP	Western Riverside County Multiple Species Habitat Conservation Plan

WRCOG	Western Riverside Council of Governments
ZE	zero emissions

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Appendix E – Notice of Preparation

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Notice of Preparation

To: Responsible and Trustee Agencies

(Address)

From: California Department of Transportation, District 8 Division of Environmental Planning
464 W 4th Street
San Bernardino, CA 92401 (Address)

Subject: Notice of Preparation of a Draft Environmental Impact Report

Caltrans District 8 will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☐ is ☒ is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 39 days after receipt of this notice.

Please send your response to Boniface Udotor, Senior Environmental Planner, MS 830 at the address shown above. We will need the name for a contact person in your agency.

Project Title: SR-60/World Logistics Center Parkway Interchange

Project Applicant, if any:

Date November 14, 2019

Signature

Title Senior Environmental Planner

Telephone (909) 888-2347

Reference: California Code of Regulations, Title 14, (CEQA Guidelines) Sections 15082(a), 15103, 15375.

PROJECT DESCRIPTION

The California Department of Transportation (Caltrans) District 8, in cooperation with the City of Moreno Valley (City), proposes to reconstruct and improve the SR-60 (SR-60)/World Logistics Center Parkway (WLC Pkwy) interchange. Theodore Street has been renamed to WLC Pkwy between Hemlock Avenue and its southern terminus at Alessandro Boulevard. Therefore, the SR-60/Theodore Street Interchange Project will now be referred to as the SR-60/WLC Pkwy Interchange Project (project). The purpose of the project is to enhance safety by upgrading the geometry at the existing interchange, to provide standard vertical clearance for the WLC Pkwy overcrossing, to alleviate future traffic congestion at the SR-60/WLC Pkwy interchange ramps during peak hours, and to improve traffic flow along the freeway and through the interchange. The City has identified Alternative 6 as the locally preferred alternative.

Caltrans will be the lead agency for the proposed project under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) as assigned by the Federal Highway Administration (FHWA).

The document for environmental analysis of this project under CEQA and NEPA was originally scoped as an Initial Study/Environmental Assessment (IS/EA) anticipated to result in a Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI). Following completion of the environmental technical studies and the Screencheck Draft IS/EA, Caltrans, as the CEQA lead agency, determined that an Environmental Impact Report (EIR) would be the most appropriate level of environmental document under CEQA to address potentially significant impacts. Therefore, a joint EIR/EA is anticipated to be prepared in accordance with CEQA and NEPA.

LOCATION OF STUDY AREA

The majority of the project site is located in the City of Moreno Valley. The northeast quadrant of the site is located within unincorporated Riverside County, and within the City's Sphere of Influence. The total length of the project on SR-60 is 2 miles between SR-60 Post Mile (PM) 20.0 and PM 22.0. The attached figure shows the project location and project vicinity.

ALTERNATIVES

In addition to the No Build Alternative (Alternative 1), two Build Alternatives (Alternatives 2 and 6) and design variations (Design Variations 2a and 6a) are under consideration. Alternatives 1, 2, 6, and Design Variations 2a and 6a are described in further detail below.

Alternative 1 (No Build)

The No Build Alternative assumes that no improvements will be made to the freeway mainline or to the existing SR-60/WLC Pkwy interchange. Without the planned improvements proposed as part of the project (e.g. upgrading to current geometric design standards and improving the existing vertical clearance over SR-60), the desired safety benefits would not be realized. In addition, the traffic Level of Service at the on- and off-ramps and traffic operations at the interchange would continue to

worsen over time resulting in increased delays. For these reasons, Alternative 1 would not meet the project purpose and need.

Build Alternative 2 (Modified Partial Cloverleaf Interchange)

Alternative 2 proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration. Improvements under Alternative 2 include the construction of a new westbound direct on-ramp and a new westbound loop off-ramp in the northwest quadrant of the interchange, in a cloverleaf configuration. A new eastbound direct off-ramp, a new eastbound loop on-ramp, and a new eastbound direct on-ramp would be constructed in the southwest and southeast quadrants, in a partial cloverleaf configuration. The westbound on-ramp is widened from one to three 12-foot lanes and all other proposed ramps are widened from one to two 12-foot lanes.

Alternative 2 removes and replaces the existing two through lane (one lane in each direction) WLC Pkwy overcrossing with a new four through lane (two through lanes in each direction) overcrossing that is approximately 137 ft wide and 298 ft long. Included within the proposed overcrossing width are two 12-foot left-turn lanes in the northbound direction and one 17-foot right-turn lane in the southbound direction. In total, the proposed bridge accommodates seven (7) lanes of traffic (through lanes and turn lanes). The proposed minimum bridge vertical clearance over SR-60 is 18'-10".

Additional improvements as part of Alternative 2 include the installation of signals at both the proposed eastbound and westbound ramp intersections, as well as at the intersection of Eucalyptus Ave/WLC Pkwy. Bike lanes are provided on both sides of WLC Pkwy throughout the project limits. On WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue, bike lanes are provided on both sides within the width of the proposed shoulders.

Design Variation 2a (Alternative 2 with Design Variation)

Design Variation 2a will have the same features as Alternative 2 with the exception of the location of the Eucalyptus Avenue/WLC Pkwy intersection. Design Variation 2a will consist of moving the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south of its current location. The shift will cause a partial realignment of Eucalyptus Avenue from approximately 2,600 ft west of WLC Pkwy to connect with the west side of WLC Pkwy and align with the continuation of Eucalyptus Avenue east of WLC Pkwy. The design variation will be moved forward with the build alternatives to PS&E (as applicable) and studied until it is removed from consideration.

Alternative 6 (Modified Partial Cloverleaf with Roundabout Intersections)

Alternative 6 proposes to reconstruct the SR-60/WLC Pkwy interchange in a modified partial cloverleaf configuration. Improvements under Alternative 6 would include the construction of a new westbound direct on-ramp and a new westbound loop off-ramp in the northwest quadrant, in a partial cloverleaf configuration. New eastbound direct off- and on-ramps would be constructed in the southwest and southeast quadrants, respectively, in a partial cloverleaf configuration. The westbound on-ramp is widened from one to three 12-foot lanes and all other proposed ramps are widened from one to two 12-foot lanes.

Alternative 6 removes and replaces the existing two through lane (one lane in each direction) WLC Pkwy overcrossing with a new four through lane (two through lanes in each direction) overcrossing that is approximately 90 ft wide and 245 ft long. The proposed minimum bridge vertical clearance over SR-60 is 20'-3½". Roundabouts are proposed at the eastbound and westbound ramp intersections, as well as at Eucalyptus Avenue/WLC Pkwy. On WLC Pkwy north of the Eucalyptus Avenue intersection and on Eucalyptus Avenue, bike lanes are provided on both sides within the width of the proposed shoulders. Through the roundabouts, bicyclists have the option to either merge with vehicular traffic or cross the roundabout with pedestrian traffic. Lighting and signage will be determined during final design to provide pedestrian and trail user safety.

Design Variation 6a (Alternative 6 with Design Variation)

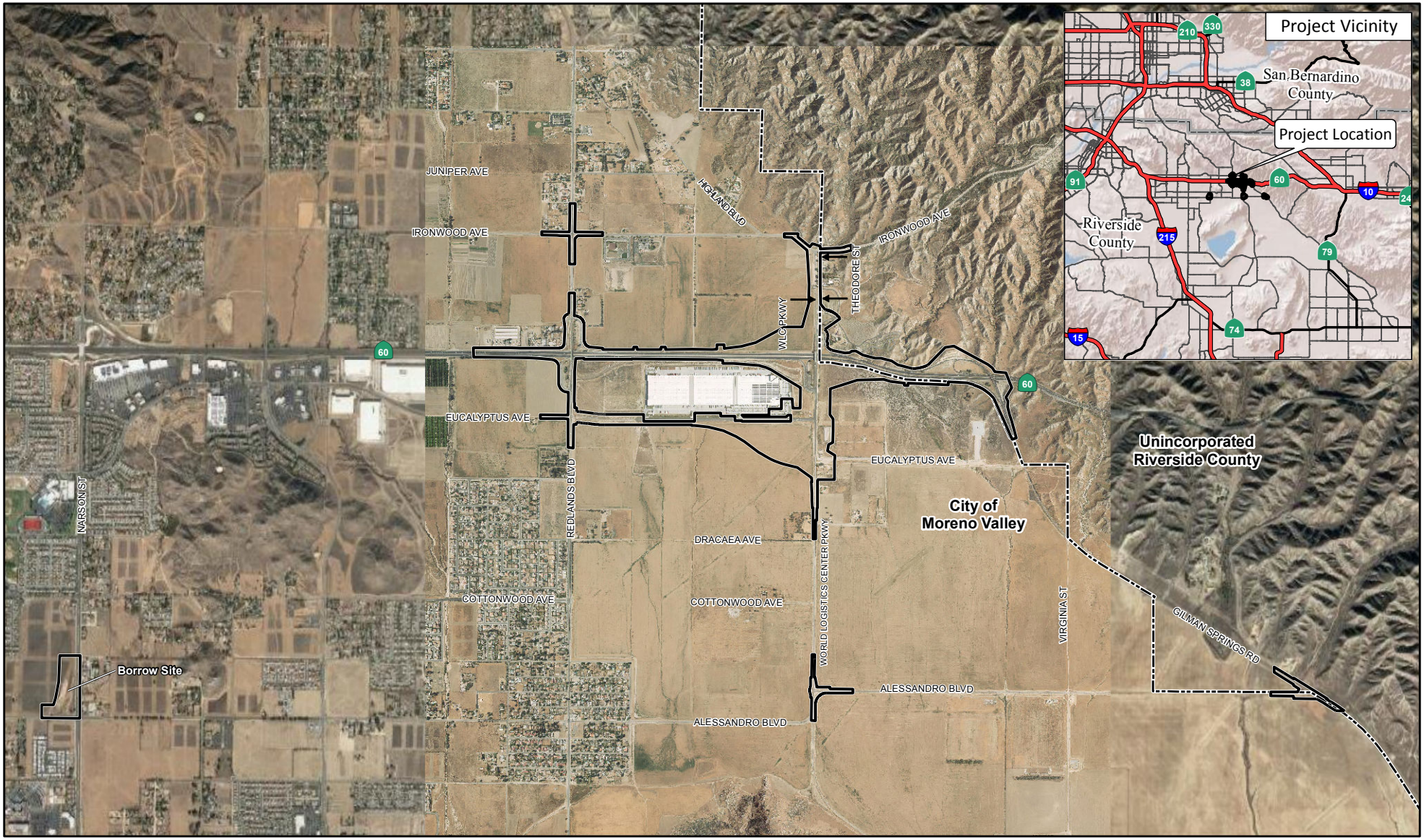
Design Variation 6a will have the same features as Alternative 6 with the exception of the alignment of Eucalyptus Avenue on the west side of WLC Pkwy and the location of the Eucalyptus Avenue/WLC Pkwy intersection. The design variation consists of moving the current Eucalyptus Avenue/WLC Pkwy intersection approximately 900 ft south from its current location, in order to align the roadway with the existing Eucalyptus Ave on the east side of WLC Pkwy. The shift would result in a partial realignment of Eucalyptus Avenue from approximately 2600 ft west of WLC Pkwy to connect to the west side of WLC Pkwy. Construction of the roundabout at WLC Pkwy and Eucalyptus Avenue east would result in one residential displacement in the southeast quadrant of WLC Pkwy and Eucalyptus Avenue east. The design variation will be moved forward with the build alternatives to final design (as applicable) and studied until it is either selected or removed from consideration.

POTENTIAL ENVIRONMENTAL EFFECTS

Various environmental and community resources are known to exist within the limits of the study area and the potential effects to these resources will be studied in the Environmental Impact Report/Environmental Assessment (EIR/EA). Environmental effects anticipated for study include, but are not limited to: Land Use, Farmlands, Growth, Community Impacts, Utilities and Emergency Services, Traffic and Transportation/Pedestrian and Bicycle Facilities, Visual/Aesthetics, Cultural Resources, Water Quality and Stormwater Runoff, Hydrology and Floodplains, Geology/Soils/Seismicity/Topography, Paleontology, Hazardous Waste/Materials, Air Quality/Greenhouse Gas Emissions/Climate Change, Noise, Mineral Resources, Wildfire, Energy, Biological Resources, and Cumulative Impacts. Of these environmental resources, further study may determine potentially significant impacts to climate change due to new State policy regarding Greenhouse Gases (GHG). It is anticipated that the project will have a less than significant impact on all other environmental resources.

PUBLIC SCOPING MEETING

Caltrans will hold a public scoping meeting to provide an overview of the project, present a summary of the environmental process and issues addressed, and receive input regarding environmental issues and the suggested scope and content of the EIR/EA. The scoping meeting will be held on Monday, December 16, 2019 from 6:00pm to 8:00pm at the Moreno Valley Conference and Recreation Center: 14075 Frederick St., Moreno Valley, CA 92553, Room A&B.



LEGEND

Project Area

City Boundary

N

0 1500 3000

FEET

SOURCE: Google (2014, 2016); MBI (6/2018); ESRI (07/2012)

SR-60/World Logistics Center Parkway Interchange Project

Project Location and Vicinity

08-RIV-60 PM 20.0/22.0

EA No. 0M590

Project No. 0813000109

Appendix F – List of Technical Studies

The technical studies listed below were used in the preparation of this Environmental Impact Report/Environmental Assessment (EIR/EA):

- *Aerially Deposited Lead Survey* (December 2018).
- *Air Quality Report* (January 2020).
- *Archaeological Survey Report* (June 2019).
- *Community Impact Assessment* (March 2019).
- *Draft Project Report* (February 2020).
- *Draft Relocation Impact Memorandum* (December 2018).
- *Drainage Assessment* (July 2018).
- *Historic Property Survey Report* (June 2019).
- *Historical Resources Evaluation Report* (June 2019).
- *Initial Site Assessment* (February 2019).
- *Interchange Closure Study* (January 2019).
- *Jurisdictional Delineation Report* (December 2018).
- *Location Hydraulics Report and Summary Floodplain Encroachment Report* (October 2018).
- *Location Hydraulic Study Form* (October 2018).
- *Methodology and Traffic Volumes Report* (August 2018).
- *Natural Environment Study* (September 2019).
- *Noise Abatement Decision Report* (August 2019).
- *Noise Study Report* (April 2019).
- *Paleontological Identification and Evaluation Report* (January 2019).
- *Preliminary Geotechnical Design Report* (November 2018).
- *Preliminary Site Investigation* (February 2019).

- *Ramp Closure Study* (December 2018).
- *Traffic Study Report* (January 2019).
- *Visual Impact Assessment* (June 2019).
- *Water Quality Assessment Report* (January 2019).

Appendix G – Required Consultation/Concurrence Documentation

To be Included in Final Document

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Appendix H – Comment Letters and Responses

To be Included in Final Document

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