

# INITIAL STUDY

RANCHERO ROAD AQUEDUCT CROSSING PROJECT

CITY OF HESPERIA

SAN BERNARDINO COUNTY, CALIFORNIA



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# **INITIAL STUDY**

## **RANCHERO ROAD AQUEDUCT CROSSING PROJECT**

### **CITY OF HESPERIA**

### **SAN BERNARDINO COUNTY, CALIFORNIA**

Prepared for:

City of Hesperia  
Development Services Department  
9700 7<sup>th</sup> Avenue  
Hesperia, California 92345

Prepared by:

LSA Associates, Inc.  
1500 Iowa Avenue, Suite 200  
Riverside, California 92507  
(951) 781-9310

LSA Project No. ATH1502

September 12, 2019

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- C: Drainage Report: Ranchoero Road Aqueduct Crossing. Cordoba Corporation. July 2019.
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**ACRONYMS AND ABBREVIATIONS**

AB 52	Assembly Bill 52
ACM	Asbestos-Containing Material
ADA	Americans with Disabilities Act
ADL	Aerially Deposited Lead
amsl	above mean sea level
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
BLM	Bureau of Land Management
BMP	Best Management Practice
BOMMP	Burrowing Owl Mitigation and Monitoring Plan
C&D	Construction and Demolition
Cal-OSHA	State Occupational Safety and Health Administration
CAP	Climate Action Plan
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of Hesperia
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CWA	Federal Clean Water Act
CWMP	Construction Waste Management Plan
dBA	A-weighted decibel
DWR	Department of Water Resources
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse Gas
HCOC	Hydrologic Condition of Concern
HDPE	High-Density Polyethylene
I-15	Interstate 15
IS	Initial Study

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LBP	Lead-Based Paint
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MDAQMD	Mojave Desert Air Quality Management District
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Plan
MND	Mitigated Negative Declaration
mph	Miles per Hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
NAHC	Native American Heritage Commission
ND	Negative Declaration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
OHWM	Ordinary High Water Mark
OSHA	Federal Occupational Safety and Health Administration
PM <sub>2.5</sub>	Fine Particulate Matter
PM <sub>10</sub>	Coarse Particulate Matter
PPV	Peak Particle Velocity
PRC	Public Resources Code
ROW	Right-of-Way
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SBTAM	San Bernardino Transportation Analysis Model
SCAG	Southern California Association of Governments
SCH#	State Clearinghouse Number
SCS	Sustainable Communities Strategy
SRA	Source Receptor Area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCP	Traffic Control Plan
TMP	Transportation Management Plan
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service



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V/C	Volume to Capacity
VPD	vehicles per day
WDR	Waste Discharge Requirement
WMP	Western Mojave Plan
WQMP	Water Quality Management Plan

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### 1.0 INTRODUCTION AND PURPOSE

#### 1.1 INTRODUCTION

Section 1.0 of this Initial Study (IS) describes the purpose, environmental authorization, the intended uses of the IS, documents incorporated by reference, and the processes and procedures governing the preparation of the environmental document. Pursuant to Section 15367 of the State of California *Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines)*, the City of Hesperia (City) is the Lead Agency under the California Environmental Quality Act (CEQA). The City has primary responsibility for compliance with CEQA and consideration of the Rancho Road Bridge Replacement over the California Aqueduct Project (project or proposed project).

The Initial Study is organized as follows:

- Section 1.0 Introduction and Purpose* provides a discussion of the Initial Study’s purpose, focus, legal requirements.
- Section 2.0 Project Description* provides a detailed description of the proposed project.
- Section 3.0 Environmental Checklist* includes a checklist and accompanying analyses of the project’s effect on the environment. For each environmental issue, the analysis identifies the level of project’s environmental impact.
- Section 4.0 References* details the references cited throughout the document.
- Appendices* Includes the technical material prepared to support the analyses contained in the IS.

#### 1.2 PURPOSE

CEQA requires that the proposed project be reviewed to determine the environmental effects that would result if the project is approved and implemented. The City is the Lead Agency and has the responsibility for preparing and adopting the associated environmental document prior to consideration of the approval of the proposed project. The City has the authority to make decisions regarding discretionary actions relating to implementation of the proposed project.

This IS has been prepared in accordance with the relevant provisions of CEQA (California Public Resources Code Section 21000 et seq.); the *CEQA Guidelines*,<sup>1</sup> and the rules, regulations, and procedures for implementing CEQA as adopted by the City. The objective of the Initial Study is to inform City decision-makers, representatives of other affected/responsible agencies, the public and interested parties of the potential environmental consequences of the project.

As established in *CEQA Guidelines* Section 15063(c), the purposes of an IS are to:

- Provide the Lead Agency (City of Hesperia) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND);
- Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for an ND or MND;
- Assist in the preparation of an EIR, if one is required;

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<sup>1</sup> California Code of Regulations, Title 14, Chapter 3, Sections 15000 through 15387.

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- Facilitate environmental assessment early in the design of a project;
- Provide a factual basis for finding in an ND or MND that a project will not have a significant effect on the environment;
- Eliminate unnecessary EIRs; and
- Determine whether a previously prepared EIR could be used with the project.

#### **1.3 INTENDED USE OF THIS INITIAL STUDY**

The City formally initiated the environmental process for the proposed project with the preparation of this Initial Study. The IS screens out those impacts that would be less than significant and do not warrant mitigation, while identifying those issues that require further mitigation to reduce impacts to a less than significant level. As identified in the following analyses, project impacts related to various environmental issues either do not occur, are less than significant (when measured against established significance thresholds), or have been rendered less than significant through implementation of mitigation measures. Based on these analytical conclusions, this IS supports adoption of an MND for the proposed project.

CEQA<sup>2</sup> permits the incorporation by reference of all or portions of other documents that are generally available to the public. The IS has been prepared utilizing information from City planning and environmental documents, technical studies specifically prepared for the project, and other publicly available data. The documents utilized in the IS are identified in Section 4.0 and are hereby incorporated by reference. These documents are available for review at the City of Hesperia, Development Services Department.

#### **1.4 PUBLIC REVIEW OF THE INITIAL STUDY**

The IS and a Notice of Intent (NOI) to adopt an MND will be distributed to responsible and trustee agencies, other affected agencies, and other parties for a 30-day public review period. Written comments regarding this IS should be addressed to:

Tina Souza, Senior Management Analyst  
City of Hesperia  
Development Services Department  
9700 7<sup>th</sup> Avenue  
Hesperia, California 92345  
(760) 947-1474  
[tsouza@cityofhesperia.us](mailto:tsouza@cityofhesperia.us)

After the 30-day public review period, consideration of comments raised during the public review period will be taken into account and addressed prior to adoption of the MND by the City.

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<sup>2</sup> CEQA Guidelines Section 15150.

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### 2.0 PROJECT SUMMARY

The City of Hesperia (City) proposes to replace the existing Ranchoero Road Bridge over the California Aqueduct. The City's objective is to enhance service to its residents and businesses by accommodating existing and future vehicular, pedestrian, and bicycle traffic capacity on Ranchoero Road, which is a Special Major Arterial<sup>3</sup> in the City. The replacement bridge would be constructed for future accommodation of six lanes in support of the City's "ultimate" build out of Ranchoero Road as a six-lane *Special Major Arterial* roadway; however it would be striped as a four-lane bridge to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project<sup>4</sup>, and include a shared pedestrian/bike path in conformance with the City, federal, and Caltrans programs and procedures. The proposed improvements would also include realignment of 11<sup>th</sup> Avenue, which is a 2-lane corridor with a reverse "S" curve with a 300-foot radius. Additionally, a new cul-de-sac street will be constructed on the north side of Ranchoero Road providing access to APNs 0412-182-25 and 37.

### 2.1 PROJECT LOCATION

The project site is located approximately 5 miles east of the Interstate 15 (I-15)/Ranchoero Road Interchange within the City of Hesperia, San Bernardino County. The project will be constructed within portions of the Ranchoero Road right-of-way (ROW) crossing the California Aqueduct, as well as within portions of Assessor's Parcel Numbers (APNs) 0397-201-12 through 0397-201-17, 0405-841-, 07, 08, 09, and 14, 0409-222-34, 52, 58, and 61, and 0412-182-00, 23, 24, 25, 26, 36, and 37. The project limits along Ranchoero Road are between Kern Avenue and approximately 350 feet east of Via Antiqua Street. Refer to Figures 1 through 3 at the end of this chapter. Figure 1 details the regional and project location. Figure 2 details the project site and site features. Figure 3 identifies the surrounding land use zoning and the project's proposed temporary and permanent easements.

### 2.2 PROJECT BACKGROUND

On December 18, 2012, the City prepared the *Draft Environmental Impact Report for the Ranchoero Road Widening Project*, State Clearinghouse Number 2012061058, and on June 20, 2013, the City certified the *Ranchoero Road Widening Project Final Environmental Impact Report*, State Clearinghouse Number 2012061058. The EIR for the Ranchoero Road Widening Project analyzed impacts to the environment from the widening of a 5-mile segment of Ranchoero Road from two lanes to four lanes between Coriander Drive and 7<sup>th</sup> Avenue in the City of Hesperia and County of San Bernardino. Although the proposed Ranchoero Road Bridge Replacement over the California Aqueduct project site is located within this segment of Ranchoero Road analyzed under the EIR, the replacement bridge, approach roadways, and ancillary components associated with the proposed bridge replacement were not included in the analysis of environmental impacts of the approved Ranchoero Road Widening Project.

The environmental impacts resulting from development of the approved Ranchoero Road Widening Project were evaluated in the Ranchoero Road Widening Project Final EIR and were determined to have no effect, a less than significant impact, or be less than significant with mitigation incorporated, with the

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<sup>3</sup> "Special" designation to the Major Arterial roadway indicates streets with Special Sections compared to standard Major Arterial and arterial designations. Refer to Figure 3.15-1, Circulation Map, of the Hesperia 2010 General Plan Update Draft Environmental Impact Report.

<sup>4</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page S-6. City of Hesperia and County of San Bernardino. June 2013.

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exception of noise effects during operation of the roadway.<sup>5</sup> The EIR evaluated and concluded that project implementation is anticipated to result, either individually or cumulatively with other planned projects, in an increase in operational traffic noise that would exceed the City's and/or County's established exterior noise standards. Even with mitigation, significant unavoidable noise impacts are anticipated to occur to adjacent homes along the Ranchoero Road corridor.

### 2.3 PROJECT INFORMATION

This project is consistent with the Ranchoero Road Corridor Project Improvements, which consist of various improvements on Ranchoero Road and have been segmented into three phases. Phase I, the Ranchoero Road Underpass, and Phase II, the new Ranchoero Road Interchange at I-15, have been completed and are currently open to traffic. Additional lanes are needed to accommodate increased daily traffic from the undercrossing and interchange. Phase III comprises widening an approximately 5-mile stretch of Ranchoero Road in between the undercrossing and interchange. Design for the widening of the roadway (with the exception of the aqueduct crossing) is near completion. The widening of the bridge is included in the 2015 Federal Transportation Improvement Program (FTIP) Project ID SBD55030. The project is included in the Southern California Associated Governments (SCAG) 2012–2035 Regional Transportation Plan (RTP) [Project ID SBD55030].

#### Baseline Conditions

The existing Ranchoero Road Bridge, built in 1971, is an east-west undivided two-lane arterial corridor without sidewalks or bicycle lanes within the project limits. Ranchoero Road is intersected by 11th Avenue immediately east of the aqueduct bridge. Eleventh Avenue is a two-lane roadway with a reverse "S" curve with a 300-foot radius. The existing bridge pier wall and abutments are parallel to the centerline of the channel, skewed at approximately 45 degrees with respect to Ranchoero Road. The existing bridge is a two-span simply supported, precast concrete girder structure with a transverse expansion joint at the pier centerline. The existing bridge length is approximately 159 feet long and approximately 33 feet wide. The superstructure sits on closed-end-backfilled strutted-type abutments that are supported on spread-footings. The bridge pier wall is also supported on spread-footings. The bridge deck was recently retrofitted and opened to traffic on February 13, 2015.

Table A identifies the existing and surrounding land uses and General Plan and Zoning designations. Surrounding land uses include single-family residential uses of various densities, the Just-4-Kids Preschool and Just-4-Toddlers Preschool, and the California Aqueduct.

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<sup>5</sup> *Ibid.* Table S-1, Summary of Impacts.

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**Table A: Surrounding Land Uses and Setting**

Direction	Existing Land Use	General Plan Designation	Zoning Designation
<b>Project Site</b>	City Right-of-Way (ROW) for Rancho Road, Department of Water Resources ROW for the California Aqueduct, Single-Family Residential; Institutional (School)	Aqueduct (AQ); Agricultural (A1); Rural Residential (RR-20000; Residential (R1-18000)	Aqueduct (AQ); Agricultural (A1); Rural Residential (RR-20000; Residential (R1-18000)
<b>North</b>	Department of Water Resources ROW for the California Aqueduct; Single-Family Residential; Preschool	Aqueduct (AQ); Agricultural (A1); Rural Residential (RR-20000	Aqueduct (AQ); Agricultural (A1); Rural Residential (RR-20000
<b>East</b>	City ROW for Rancho Road; Single-Family Residential	Agricultural (A1); Residential (R1-18000)	Agricultural (A1); Residential (R1-18000)
<b>South</b>	Department of Water Resources ROW for the California Aqueduct; Single-Family Residential; Electric Transmission Tower ROW	Aqueduct (AQ); Residential (R1-18000); Utility Corridor (UC)	Aqueduct (AQ); Residential (R1-18000); Utility Corridor (UC)
<b>West</b>	City ROW for Rancho Road; Single-Family Residential	Rural Residential (RR-20000; Residential (R1-18000)	Rural Residential (RR-20000); Residential (R1-18000)

### 2.4 PROJECT DESCRIPTION

The project proposes to replace the existing two-lane, two-span structure over the California Aqueduct with a new six-lane, single-span structure (refer to Figure 2 at the end of this chapter). The replacement bridge would be constructed for future accommodation of six lanes in support of the City’s “ultimate” build out of Rancho Road as a six-lane *Special Major Arterial* roadway, but it would be striped as a four-lane roadway and include a median and shared pedestrian sidewalk/bike pathways to correspond with the anticipated roadway capacity of Rancho Road pursuant to the Rancho Road Widening Project, which is four lanes.<sup>6</sup> The project would also construct bridge approach roadway improvements, including drainage and utilities, to accommodate the raised profile for the proposed bridge.

The proposed bridge structure would be constructed in one stage. The existing crossing would need to be temporarily shut down to accommodate bridge removal and one-stage new bridge construction. Construction-related traffic detours will be planned and executed through consultation with the City Engineer to ensure alternate routes are posted and motorists are advised to use specified detour routes.

The proposed improvements include a slight realignment of 11<sup>th</sup> Avenue, which is a 2-lane corridor with a reverse “S” curve with a 300-foot radius. 11<sup>th</sup> Avenue is proposed to be realigned slightly to the east and elevated to intersect Rancho Road at the bridge. Additionally, a new cul-de-sac street will be constructed on City-owned APN 412-182-26, which would reestablish driveway access to the single-family residence at APN 0412-182-37 and the Just-4-Kids Preschool (APN 0412-182-25) at the northeast quadrant of Rancho Road and 11<sup>th</sup> Avenue. One residential property (APN 0397-201-12) at the southwest corner of Rancho Road and Via Antiqua would be acquired and converted to permanent City ROW as part of the proposed project.

The proposed Rancho Road alignment starts curving southerly immediately east of the Kern Avenue intersection. It then curves northerly and crosses the California Aqueduct at an approximately 45-degree skew and ties back into the existing centerline at the Via Antiqua intersection. The proposed alignment provides optimized geometrics and maximizes the constructability of a single-span precast girder bridge

<sup>6</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058. Page S-6. City of Hesperia and County of San Bernardino. June 2013.*

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to comply with Department of Water Resources (DWR) Encroachment Permit Guidelines. The design speed is 55 miles per hour (mph).

The proposed Rancho Road profile starts ascending from the west side at 2.3 percent grade over the aqueduct and descends at 5 percent with an 830-foot crest vertical curve and touchdown west of the Via Antiqua intersection. The proposed profile grades are 5 percent or less to comply with Americans with Disabilities Act (ADA) sidewalk requirements. The raised profile is necessary in order to meet the latest requirements imposed by the State of California and DWR, which include:

- New bridge crossings shall be single-span design.
- The minimum vertical clearance between the bottom of the girders and the top of the canal lining shall be 3 feet.
- The minimum horizontal clearance from the face of the abutment to the top of the canal lining shall be 5 feet.

A 240-foot-long Type 1 retaining wall is proposed along the northern property line of properties between APNs 405-841-07 (15362 Kern Avenue) and 405-841-08 (15350 Kern Avenue). The wall is constructed of concrete supported by footing extending a minimum of 2 feet below finished grade. In addition, a 6-foot property wall on Type 736S (modified) concrete barrier is provided on top of the proposed retaining wall to create privacy for the residences. The exposed wall face varies in height between 10.8 feet and 14.6 feet from the top of finished grade. The project would also construct four utility driveways, two on the south side of Rancho Road, one on the north side of Rancho Road, and one off of the realigned 11<sup>th</sup> Avenue roadway, to facilitate DWR access to both sides of the California Aqueduct.

The existing 14-inch water line in the bridge will be removed prior to demolition. An 8-inch temporary water line will be required during construction to serve the City's needs. The proposed temporary water line would cross the aqueduct at an angle of 90 degrees, just north of the existing bridge. To allow for the continuation of utilities during bridge demolition and construction, the project includes the installation of a temporary 102-foot by 5.5-foot galvanized truss structure that will support the temporary water line. A temporary easement from DWR will accommodate the water line crossing.

## 2.5 METHODOLOGY

The analysis in this IS/MND provides an environmental review of the project pursuant to CEQA. The details of this proposed bridge replacement project and associated actions have been characterized in this section and are also addressed in detail throughout Section 3.0 of this IS/MND.

## 2.6 REQUIRED PERMITS AND APPROVALS

The City is expected to use this IS/MND in consideration of the proposed bridge replacement and associated actions. These actions may include, but are not limited to, the following approvals from responsible or trustee agencies may also be required:

- DWR: Responsible Agency for activities occurring within DWR property and easements.
- U.S. Army Corps of Engineers (USACE): Federal Clean Water Act (CWA) Section 404 permit and/or an Approved Jurisdictional Determination.
- CDFW: Streambed Alteration Agreement (SAA) Section 1602 of the California Fish and Game Code.



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- State Water Resources Control Board (SWRCB): Notice of Intent to comply with the General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit.

#### **2.7 INITIAL STUDY APPENDICES/REFERENCE DOCUMENTS**

The Initial Study is based on the following technical studies.

Appendix A: Impacts Assessment: Rancho Bridge Replacement over the California Aqueduct Project. City of Hesperia, San Bernardino County, California. LSA. June 2018.

Appendix B: Foundation Report for Rancho Road Bridge (Replace) over California Aqueduct, Hesperia, California, Earth Mechanics, Inc., January 29, 2018.

Appendix C: Drainage Report: Rancho Road Aqueduct Crossing. Cordoba Corporation. July 2019.

Appendix D: Rancho Road Improvement Project, Noise Technical Report. Parsons. October 2011.

Appendix E: Aqueduct Crossing Traffic Study. Cordoba Corporation. Revised January 2016.

The Initial Study further relies on the following documents, which are incorporated by reference:

- Draft Environmental Impact Report for the Rancho Road Widening Project (State Clearinghouse Number [SCH#] 2012061058). City of Hesperia, San Bernardino County. December 2012.
- Final Environmental Impact Report for the Rancho Road Widening Project (SCH# 2012061058). City of Hesperia, San Bernardino County. June 2013.

Both documents are available for viewing at the City of Hesperia, Development Services Department located at 9700 7<sup>th</sup> Avenue, Hesperia, California 92345, phone (760) 947-1474. City office hours are Monday – Thursday (7:30 am - 5:30 pm) and Friday (7:30 am - 4:30 pm).

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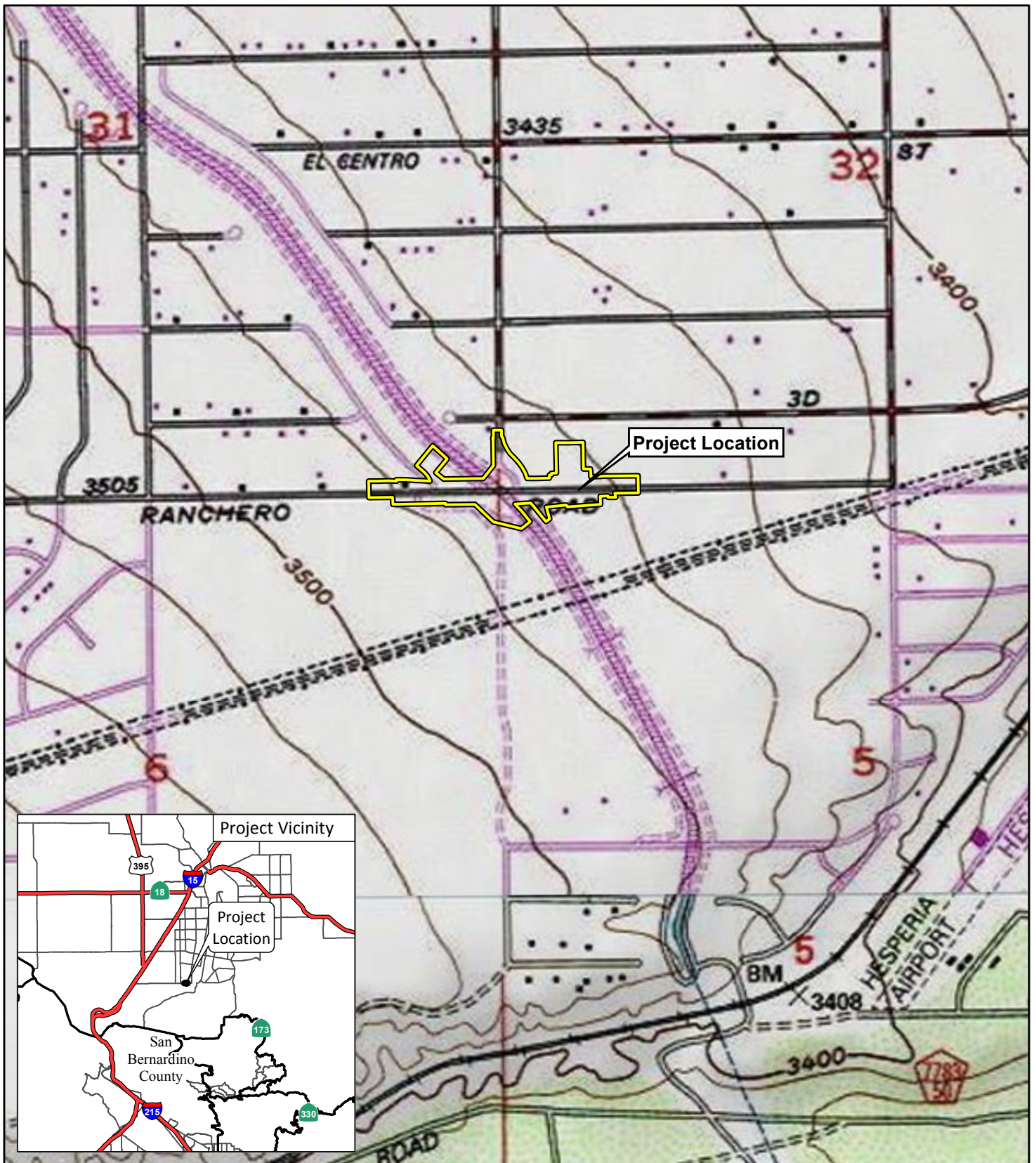


FIGURE 1

LSA

LEGEND

 Project Location



0 500 1000  
FEET

SOURCE: USGS 7.5' Quad - Hesperia (1980)

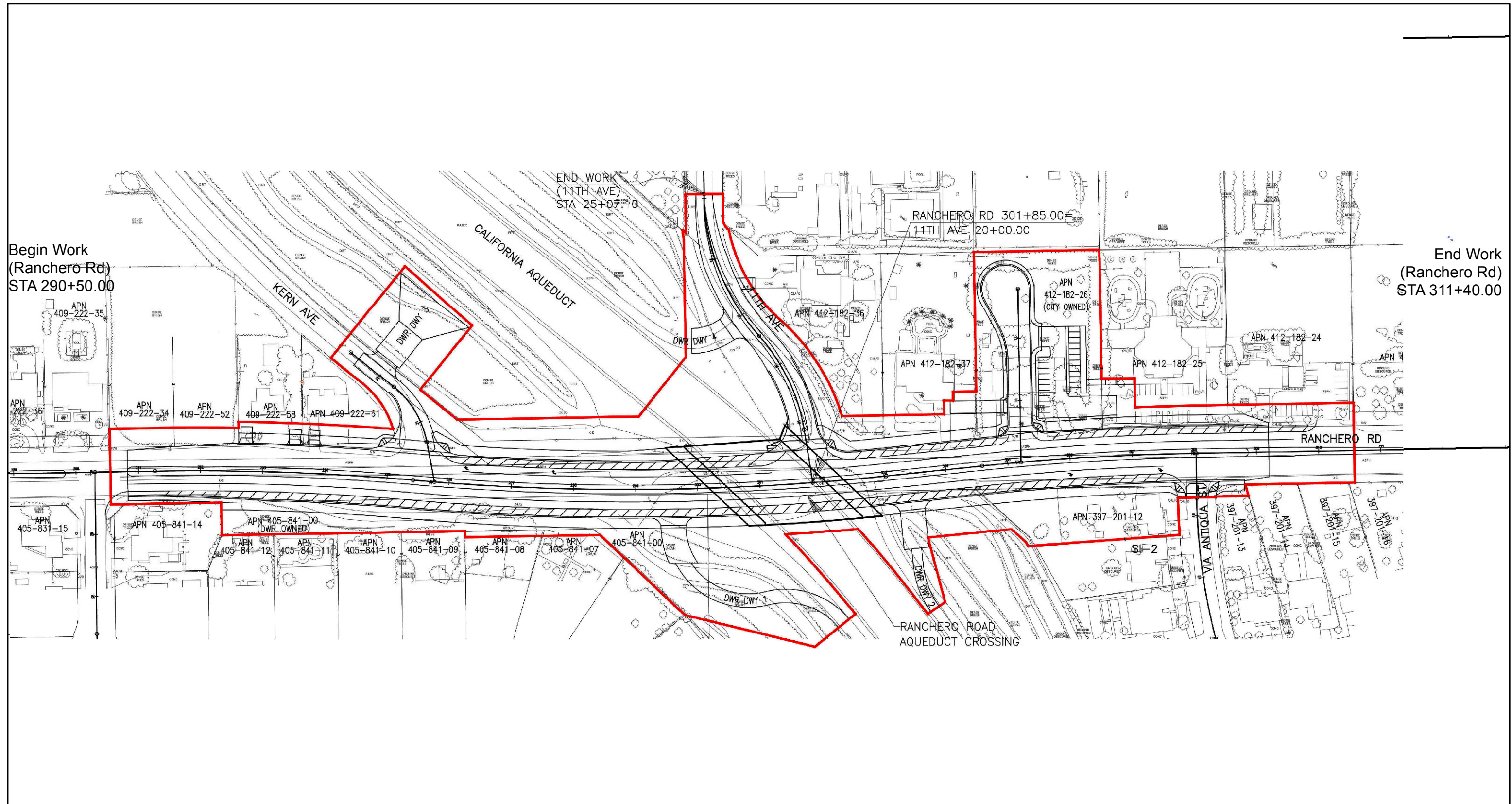
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Ranchero Road Bridge Replacement  
Over the California Aqueduct  
Project Location

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LSA

LEGEND

— Project Features



0 75 150  
FEET

SOURCE: Bing (2015)

I:\ATH1502\GIS\MXD\SiteMap.mxd (7/8/2019)

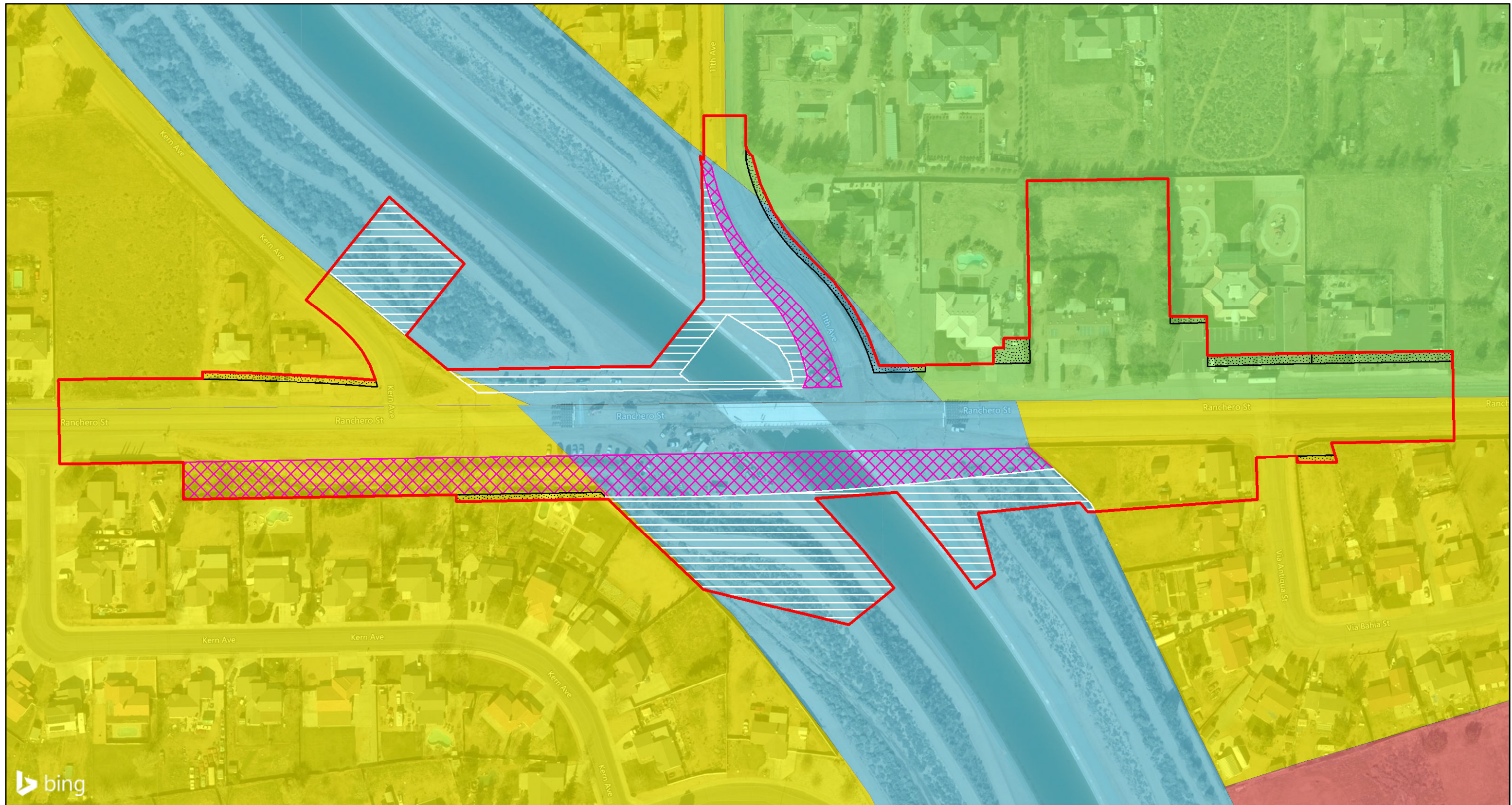
FIGURE 2

Ranchero Road Bridge Replacement  
Over the California Aqueduct  
Site Map

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Easements

Permanent Easement (DWR)

Temporary Construction Easement (DWR)

Temporary Construction Easements and Footing Easements

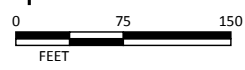
General Plan Land Use

Residential

Agriculture

Aquatic

Utility Corridor



SOURCE: Bing (2018)

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FIGURE 3

Rancho Road Bridge Replacement  
Over the California Aqueduct  
Land Uses and Easements

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**3.0 INITIAL STUDY CHECKLIST**

**1. Project Title:**

Ranchero Road Aqueduct Crossing Project

**2. Lead Agency Name and Address:**

City of Hesperia  
Development Services Department  
9700 7<sup>th</sup> Avenue  
Hesperia, California 92345  
(760) 947-1474

**3. Contact Person and Phone Number:**

Tina Souza, Senior Management Analyst  
(760) 947-1474  
[tsouza@cityofhesperia.us](mailto:tsouza@cityofhesperia.us)

**4. Project Location:**

The project site is located approximately 5 miles east of the I-15/Ranchero Road Interchange within the City of Hesperia, San Bernardino County. The project site consists of APNs 0397-201-12 through 0397-201-17, 0405-831-15, 0405-841-, 07, 08, 09, and 14, 0409-222-34, 52, 58, and 61, and 0412-182-00, 23, 24, 25, 26, 36, and 37. The project limits are between Kern Avenue and approximately 350 feet east of Via Antiqua Street. The proposed improvements would also include realignment of 11<sup>th</sup> Avenue, which is a 2-lane street with a reverse “S” curve with a 300-foot radius. Additionally, a new cul-de-sac street will be constructed on the north side of Ranchero Road providing access to APNs 0412-182-25 and 37.

**5. Project Sponsor’s Name and Address:**

City of Hesperia  
9700 7th Avenue  
Hesperia, CA 92345

**6. General Plan Designation:**

Aqueduct (AQ)  
Agricultural (A1)  
Rural Residential (RR-2000)  
Residential (R1-18000)

**7. Zoning:**

Aqueduct (AQ)  
Agricultural (A1)  
Rural Residential (RR-2000)  
Residential (R1-18000)

**8. Description of Property:**

The existing Ranchero Road Bridge segment is an east-west undivided two-lane arterial corridor without sidewalks or bicycle lanes within the project limits. Ranchero Road is intersected by 11<sup>th</sup> Avenue immediately east of the aqueduct bridge. Eleventh Avenue is a Rural Collector two-lane

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corridor. The existing Rancho Road Bridge, built in 1971, accommodates a single through lane in each direction. The existing pier wall and abutments are parallel to the centerline of the channel, skewed at approximately 45 degrees from the centerline of Rancho Road. The existing bridge is a two-span simply supported, precast concrete girder structure with a transverse expansion joint at the pier centerline. The existing bridge is approximately 159 feet long and approximately 33 feet wide. The superstructure sits on closed-end-backfilled strutted-type abutments that are supported on spread footings. The bridge pier wall is also supported on spread footings. The bridge deck was recently retrofitted for seismic safety and opened to traffic on February 13, 2015.

**9. Surrounding Land Uses and Setting:**

Surrounding land uses include single-family residential uses of various densities, the Just-4-Kids Preschool and Just-4-Toddlers Preschool, and the California Aqueduct.

**10. Required Actions:**

The City is expected to use this IS/MND in consideration of the proposed bridge replacement and associated actions. The City Council is responsible for certifying the environmental document. The following approvals from responsible or trustee agencies may also be required:

- DWR: Responsible Agency for activities occurring within DWR property and easements.
- USACE: CWA Section 404 permit and/or an Approved Jurisdictional Determination.
- CDFW: SAA Section 1602 of the California Fish and Game Code.
- SWRCB: NOI to comply with the General Construction Activity NPDES Permit.

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, has consultation begun?** Please refer to Checklist Section 3.18 (Tribal Cultural Resources).

*Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code Section 21082.3(c) contains provisions specific to confidentiality.*

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**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a potentially significant impact as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                | <input type="checkbox"/> Agricultural Resources   | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources      | <input type="checkbox"/> Cultural Resources       | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology/Soils             | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials      |
| <input type="checkbox"/> Hydrology/Water Quality   | <input type="checkbox"/> Land Use/Planning        | <input type="checkbox"/> Mineral Resources                  |
| <input type="checkbox"/> Noise                     | <input type="checkbox"/> Population/Housing       | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Recreation                | <input type="checkbox"/> Transportation           | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire                 | <input type="checkbox"/> Mandatory Findings of Significance |

**DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)**

On the basis of the initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature: \_\_\_\_\_

Michael Blay, Director of Development Services

Date: \_\_\_\_\_

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#### EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. “Negative Declaration: Less Than Significant with Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

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**3.1 AESTHETICS**

Would the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**a. Would the project have a substantial adverse effect on a scenic vista?**

*Less than Significant Impact*

Discussion of Effects: The proposed project would be developed predominantly within publicly-owned ROW, which is paved as a two- to four-lane roadway. According to the City’s General Plan, unique visual features within the City include topographic features, local flora, and historic buildings. Distant views of the San Bernardino and San Gabriel Mountains, as well as views of the Mojave Desert landscape, can be seen from the project site.

The project site is surrounded by suburban/rural development such as residential, institutional (Just-4-Kids and Just-4-Toddlers Schools), and infrastructural (California Aqueduct) uses. Small areas of vacant or undeveloped land with native and non-native flora occur along the California Aqueduct ROW and at APNs 0409-222-34 and 52 at the northeast corner of Rancho Road and Kern Avenue. In general, surrounding development obstructs views of the San Bernardino and San Gabriel Mountains and Mojave Desert landscape. Additionally, existing distribution and transmission power lines disrupt the desert viewshed along Rancho Road at the project site, which diminishes the aesthetic quality of views along Rancho Road.

The project includes a replacement bridge and approach roadways along an existing roadway; therefore, viewer groups are already exposed to views of Rancho Road and the bridge crossing the California Aqueduct, and the proposed project would contribute only incremental changes to viewsheds proximal

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to or from the project site. Existing street views provide a variety of disconnected elements, such as power lines, signs, and differing architectural treatments on existing residences and the existing bridge crossing the California Aqueduct. Therefore, the integrity of the visual order is already diminished, as the encroachment of these existing elements affects the view of the natural landscape.

The proposed project includes a replacement bridge with a raised profile and a retaining wall along the property line between APNs 0405-841-07 and 08 to support the earthwork required to construct the approach roadways. The new bridge crossings shall be single-span design. The minimum vertical clearance between the bottom of the girders and the top of the canal lining shall be 3 feet, while the minimum horizontal clearance from the face of the abutment to the top of the canal lining shall be 5 feet. The retaining wall is constructed of concrete supported by footing extending a minimum of 2 feet below finished grade. In addition, a 6-foot property wall on Type 736S (modified) concrete barrier is provided on top of the retaining wall to create privacy for the residences. The exposed wall face varies in height between 10.8 feet and 14.6 feet from the top of finished grade. Additional engineered slopes will be constructed along the property line frontage of APNs 0412-182-36 and 37 to support the earthwork required to construct the approach roadways. Due to prominence of the distant San Bernardino and San Gabriel Mountains, the proposed bridge is not expected to substantially obstruct viewsheds toward these scenic vistas; however, the retaining wall and engineered slopes have the potential to obstruct views of the immediately surrounding Mojave Desert landscape.

According to the City General Plan, “protecting the City’s scenic vistas is necessary to preserve the identity and visual character of the City.”<sup>7</sup> In order for the proposed project to protect scenic vistas, it shall be designed, constructed, and operated in accordance with General Plan Policy LU-8.5 of the Land Use Element, which requires all development within the City to “Adopt design standards which will assure land use compatibility and enhance the visual environment, by providing attractive, aesthetically pleasing development which is sensitive to the unique local characteristics of the Hesperia community.”<sup>8</sup> In accordance with City policy, the City shall provide replacement landscaping or vegetation to disturbed areas consistent with the natural surroundings, and in accordance with City Municipal Code Section 16.24.150 (Subject Desert Native Plants) and County Codes 88.01.050 (Tree or Plant Removal Permits) and 88.01.060 (Desert Native Plant Protection). Pursuant to these codes, landscaping shall be selected and incorporated to be drought-tolerant and shall complement existing natural and manmade features, including the dominant landscaping of surrounding areas.

Through compliance with the City General Plan and Municipal Code, the proposed project would minimize the contrast between project features and the surrounding Mojave Desert landscape and ensure adverse effects on scenic vistas remain **less than significant**. No mitigation is required.

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<sup>7</sup> *Open Space Element, City of Hesperia General Plan*. Page OS-13. City of Hesperia. 2010.

<sup>8</sup> *Draft Environmental Impact Report for the City of Hesperia General Plan Update, SCH# 2010011011*. Page 3.9-10. City of Hesperia. May 26, 2010.

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- b. Would the project substantially damage scenic resources, including, but not limited to trees, rock outcroppings and historic buildings within a State scenic highway?**

*No Impact*

Discussion of Effects: The proposed project is not located along a State scenic highway and there are no State scenic highways located within the project vicinity.<sup>9</sup> Therefore, the project will not affect any scenic resources within a State scenic highway. **No impact** would occur and no mitigation is required.

- c. Would the project, 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 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?**

*Less than Significant Impact*

Discussion of Effects: The City's population per square mile is estimated at approximately 1,233.6 persons.<sup>10</sup> The project is located in an area with at least 1,000 persons per square mile and therefore meets the definition of *Urbanized Area* under Section 15387 of the *CEQA Guidelines*. The construction phase of the project could potentially result in temporary visual impacts. During construction, the presence of construction vehicles and equipment could temporarily degrade the visual quality of the project site; however, the presence of construction vehicles would be temporary and would cease once construction is complete. The visual character and quality of the project corridor would be temporarily affected by removal of vegetation, heavy equipment use, and storage, excavation, and the presence of other visible general construction activity. Due to the temporary nature of construction activities, impacts to visual character of the site and its surroundings would be less than significant during construction.

As stated in response to Checklist Question 3.1a, surrounding development obstructs views of the San Bernardino and San Gabriel Mountains and Mojave Desert landscape, and existing distribution and transmission power lines disrupt the desert view shed along Rancho Road at the project site, which diminishes the visual character of the project site and its surroundings.

The project includes a replacement bridge and approach roadways along an existing roadway; therefore, viewer groups would already be exposed to views of Rancho Road and the bridge crossing the California Aqueduct, and the proposed project would contribute only incremental changes to the visual character of the project site. The raised profile of the proposed bridge is necessary in order to meet the latest requirements imposed by the State of California and DWR, which include:

- New bridge crossings shall be single-span design.
- The minimum vertical clearance between the bottom of the girders and the top of the canal lining shall be 3 feet.
- The minimum horizontal clearance from the face of the abutment to the top of the canal lining shall be 5 feet.

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<sup>9</sup> *Rancho Road Widening Project Final Environmental Impact Report (SCH# 2012061058)*. Pages 2-4. City of Hesperia and County of San Bernardino. June 2013.

<sup>10</sup> *QuickFacts, Hesperia City, California*. United States Census Bureau. <https://www.census.gov/quickfacts/fact/table/hesperiacitycalifornia,US/PST045218> (accessed April 23, 2019).

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Existing street views provide a variety of disconnected elements, such as power lines, signs, and differing architectural treatments on existing residences and the existing bridge crossing the California Aqueduct. Therefore, the integrity of the visual order is already diminished, as the encroachment of these existing elements impacts the view of the natural landscape. According to the City General Plan, “protecting the City’s scenic vistas is necessary to preserve the identity and visual character of the City.”<sup>11</sup> In order for the proposed project to protect scenic vistas, it shall be designed, constructed, and operated in accordance with General Plan Policy LU-8.5 of the Land Use Element, which requires all development within the City to “Adopt design standards which will assure land use compatibility and enhance the visual environment, by providing attractive, aesthetically pleasing development which is sensitive to the unique local characteristics of the Hesperia community.”<sup>12</sup> In accordance with City policy, the City shall provide replacement landscaping or vegetation to disturbed areas consistent with the natural surroundings, and in accordance with City Municipal Code Section 16.24.150 (Subject Desert Native Plants) and County Codes 88.01.050 (Tree or Plant Removal Permits) and 88.01.060 (Desert Native Plant Protection). Pursuant to these codes, landscaping shall be selected and incorporated to be drought-tolerant and shall complement existing natural and manmade features, including the dominant landscaping of surrounding areas. Accordingly, the proposed project would minimize the contrast between project features and the surrounding Mojave Desert landscape and reduce adverse effects on scenic quality to **less than significant**. No mitigation is required.

**d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?**

*Less than Significant Impact*

**Discussion of Effects:** Development of the proposed project will necessitate the installation of lighting necessary for the maintenance of public safety and security as well as to accommodate bridge use after dark. All lighting shall comply with applicable City standards related to the installation and operation of lighting features. The nearest sensitive receptors (residential) are approximately 25 feet on either side of the project corridor. As applicable, any bridge lighting would adhere to standards similar to what have been approved for use along Ranchero Road and throughout the City are required for the project. Therefore, proposed lighting within the project limits would have a **less than significant** impact on daytime or nighttime views of the area. No mitigation is required.

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<sup>11</sup> *Open Space Element, City of Hesperia General Plan*. Page OS-13. City of Hesperia. 2010.

<sup>12</sup> *Draft Environmental Impact Report for the City of Hesperia General Plan Update, SCH# 2010011011*. Page 3.9-10. City of Hesperia. May 26, 2010.



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**3.2 AGRICULTURE 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 Department 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 Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>a. Would the project 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>				

*No Impact*

Discussion of Effects: The California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP) compiles Important Farmland maps pursuant to the provisions of Section 65570 of the California Government Code. These maps utilize data from the United States Department of Agriculture

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(USDA), Natural Resource Conservation Service (NRCS) soil survey and current land use information using eight mapping categories, and they represent an inventory of agricultural resources within San Bernardino County.

No agricultural operations are located on, adjacent to, or near the proposed project. The proposed project limits are designated as “Urban and Built-Up Land” (land occupied by structures with a building density of at least one unit to each 1.5 acres).<sup>13</sup> As no prime or unique farmlands are located within or adjacent to the proposed project site, no conversion of or impact to prime or unique farmlands will occur. No impact related to this issue would occur and no mitigation is required.

**b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

*Less Than Significant Impact*

Discussion of Effects: The City designates the northeastern portion of the project site as “Limited Agriculture.” The intent of the Limited Agricultural land use classification is intended to continue the current rural lifestyle within the City. The Limited Agricultural land use designation mandates a minimum 1-acre lot size and a gross density range of 0.41 to 1.0 dwelling units per acre. The portion of the project site designated as “Limited Agriculture” is currently developed with single-family residences and has not been used for agricultural purposes since prior to 1938. Furthermore, development of the proposed project does not preclude adjacent properties from utilizing land for agricultural purposes. Therefore, the proposed project would not conflict with existing zoning for agricultural use. Impacts would be less than significant and no mitigation is required.

Williamson Act contracts restrict land development of contract lands.<sup>14</sup> These contracts typically limit land use to agriculture, recreation, and open space, unless otherwise stated in the contract. The project site is not subject to a Williamson Act Conservation Contract.<sup>15</sup> Therefore, the proposed project would not conflict with a Williamson Act contract. Impacts would be less than significant and no mitigation is required.

**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))?**

*No Impact*

Discussion of Effects: Neither the project site nor surrounding properties are zoned for forest land or timberland.<sup>16</sup> Therefore, the proposed project would have no impact on forest land or timberland. No mitigation is required.

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<sup>13</sup> State of California Department of Conservation, California Important Farmland Finder, 2016. <http://www.conservation.ca.gov/dlrp/fmmp> (accessed January 15, 2018).

<sup>14</sup> The Williamson Act is a procedure authorized under State law to preserve agricultural lands as well as open space. Property owners entering into a Williamson Act contract receive a reduction in property taxes in return for agreeing to protect the land’s open space or agricultural values.

<sup>15</sup> Department of Conservation, San Bernardino County Williamson Act FY 2015/2016, sheet 2 of 2.

<sup>16</sup> City of Hesperia General Plan Land Use Map, August 15, 2017.

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**d. Result in the loss of forest land or conversion of forest land to non-forest use?**

*No Impact*

Discussion of Effects: As discussed in response to Checklist Question 3.2c, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact would occur and no mitigation is required.

**e. Would the project 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?**

*Less Than Significant Impact*

Discussion of Effects: As discussed in response to Checklist Questions 3.2a and 3.2b, the portion of the project site designated as “Limited Agriculture” is currently developed with single-family residences and has not been used for agricultural purposes since prior to 1938. The Limited Agricultural land use designation mandates a minimum 1-acre lot size and a gross density range of 0.41 to 1.0 dwelling units per acre, and approximately 1.9 acres of land designated for “Limited Agriculture” would be converted to ROW as part of the approach roadway for the proposed bridge replacement. However, existing land uses within these 1.9 acres designated for “Limited Agriculture” consist of a single-family residential structure and associated rear yard and driveways, and parking lots for the Just-4-Kids and Just-4-Toddlers Preschools. No agricultural activities occur within the 1.9 acres to be converted and development of the proposed project does not preclude adjacent properties from utilizing land for agricultural purposes in the future. Therefore, impacts would be less than significant and no mitigation is required.

**3.3 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:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>a.</b> Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>c.</b> Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>d.</b> Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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**a. Would the project conflict with or obstruct implementation of the applicable air quality plan?**

*No Impact*

Discussion of Effects: The City's objective is to enhance service to its residents and businesses by accommodating existing and future vehicular, pedestrian, and bicycle traffic capacity on Rancho Road. The replacement bridge would be constructed for future accommodation of six lanes in support of the City's General Plan "ultimate" build out of Rancho Road as a six-lane *Special Major Arterial* roadway. It would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Rancho Road pursuant to the Rancho Road Widening Project<sup>17</sup> and include a shared pedestrian/bike path in conformance with the City, federal, and Caltrans programs and procedures.

Basin-wide air pollution levels are administered by the Mojave Desert Air Quality Management District (MDAQMD's) through the Air Quality Management Plan (AQMP). Adopted in March 2017, the 2016 AQMP represents a thorough analysis of existing and potential regulatory control options, includes available, proven, and cost-effective strategies, and seeks to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. Because the proposed project is a transportation project, consistency of the project with the AQMP is determined by the Regional Transportation Improvement Program (RTIP). This is determined by comparing the emissions from the transportation projects with the emissions budget in the AQMP. If the AQMP growth assumptions are likely to be exceeded as a result of the RTIP improvements, then the RTIP cannot be found consistent with the AQMP.

The approved Rancho Road Widening Project is included in the adopted 2012 Regional Transportation Plan (RTP) and the 2010–2011 RTIP *Annual Listing of Obligated Projects*. The Rancho Road Widening Project's influence on mobile source air pollutant emissions was already incorporated into the air quality modeling used in the MDAQMD's conformity determinations for the 2012 RTP and 2008 RTIP and its *2012–2035 RTP Transportation Conformity Report*. The Rancho Road Widening Project's inclusion in a conforming RTP/RTIP is one indicator that it would not produce a substantial regional impact related to air pollutant emissions.

The proposed replacement bridge would be striped as a four-lane roadway to correspond with the roadway capacity of Rancho Road pursuant to the approved Rancho Road Widening Project, for which no significant impacts to air quality occur with implementation of mitigation<sup>18</sup> (refer to response to Checklist Question 3.3b). No vehicle trips would originate because of the bridge lanes increasing from two to four because the number of vehicle trips on the bridge would be determined by the capacity of the connecting Rancho Road on either side of the bridge. The proposed project does not propose additional lanes to the four-lane road already analyzed under the approved Rancho Road Widening Project. Therefore, the proposed project would not add vehicle trips in addition to the vehicle trips anticipated under the approved Rancho Road Widening Project. Accordingly, the proposed project would not induce growth within the City. Therefore, the proposed project is consistent with the AQMP. **No impact** related to this issue will occur, and no mitigation is required.

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<sup>17</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page S-6. City of Hesperia and County of San Bernardino. June 2013.

<sup>18</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Pages 2-33 and 2-34. City of Hesperia and County of San Bernardino. June 2013.

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- b. Would the project 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?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects:

In evaluating the cumulative effects of the project, Section 21100(e) of CEQA states that “previously approved land use documents including, but not limited to, general plans, specific plans, and local coastal plans, may be used in cumulative impact analysis.” In addressing cumulative effects for air quality, the AQMP utilizes approved general plans and specific plans and, therefore, the General Plan is the most appropriate document to use to evaluate cumulative impacts of the project. This is because the AQMP evaluated air quality for the entire Mojave Desert Air Basin using a future development scenario based on population projections and set forth a comprehensive program that would lead the region, including the project, into compliance with all federal and State air quality standards.

As described in Response to Checklist Question 3.3a, the proposed project is consistent with the General Plan “ultimate” build out of Ranchoero Road as a six-lane *Special Major Arterial* roadway; however, it would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project. It also includes a shared pedestrian/bike path in conformance with the City, federal, and Caltrans programs and procedures. The cumulative air quality impacts resulting from development of the approved Ranchoero Road Widening Project were evaluated in the Ranchoero Road Widening Project Final EIR and were determined to be **less than significant with mitigation incorporated**;<sup>19</sup> additionally, the proposed project is consistent with the approved Ranchoero Road Widening Project and would not substantially alter the land use assumptions utilized in the development of the AQMP.

The MDAQMD recommends that a project’s potential contribution to cumulative impacts should be assessed using the same significance criteria as those for project-specific impacts. The project would generate short-term and long-term emissions of air pollutants during construction and operation (respectively) of the proposed replacement bridge, approach roadways, and ancillary components described in detail in Section 2.0 of this Initial Study. The impacts associated with these emissions are projected from the air quality analysis conducted as part of the approved Ranchoero Road Widening Project,<sup>20</sup> which entails widening a 5-mile segment of Ranchoero Road from two lanes to four lanes between Coriander Drive and 7<sup>th</sup> Avenue. The proposed project site is located within this segment of Ranchoero Road, but the replacement bridge, approach roadways, and ancillary components were not included in the analysis of air quality impacts of the approved Ranchoero Road Widening Project. The approved Ranchoero Road Widening Project stretches 5 miles between Coriander Drive and 7<sup>th</sup> Avenue. The proposed project site encompasses only approximately 0.40 mile of this segment of Ranchoero Road. Consequently, it is reasonable to conclude that any impacts to air quality from construction and operation of the proposed project would be no more severe than those analyzed under the approved Ranchoero Road Widening Project, which are summarized as follows.<sup>21</sup>

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<sup>19</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Pages 2-33 and 2-34. City of Hesperia and County of San Bernardino. June 2013.

<sup>20</sup> *Ibid.* Pages 2-1 through 2-34.

<sup>21</sup> *Ibid.*

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**Short-term Emissions:** Short-term emissions would result from construction-related activities, such as excavation and grading, machinery and equipment emissions, vehicle emissions from construction employees, etc. Construction emissions from project-related construction activities would be generated over a shorter period when compared to construction of the 5-mile segment of Rancho Road to be widened. By complying with all relevant federal, California Air Resources Board (CARB), and MDAQMD rules, regulations, ordinances, and statutes, and by incorporating Caltrans' specifications for addressing construction-related air pollution control, no adverse construction air quality impacts are anticipated.

Through compliance with regulations and implementation of mitigation measures, construction of the proposed project is not anticipated to exceed MDAQMD criteria air pollutant thresholds. To ensure that potential construction-related air quality impacts are **less than significant, Mitigation Measures AQ-01 through AQ-07** proposed for the approved Rancho Road Widening Project would apply to the proposed project:

#### **Mitigation Measures**

- AQ-01** During demolition and construction, periodic watering for short-term stabilization of disturbed surface areas shall occur to minimize visible fugitive dust emissions (for purposes of this measure, use of a water truck to maintain most disturbed surfaces and actively spread water during visible dusting episodes shall be considered sufficient to maintain compliance). This measure shall be implemented to the satisfaction of the City Development Services Department.
- AQ-02** During demolition and construction, the project contractor shall take actions sufficient to prevent project-related track-out onto paved surfaces. This measure shall be implemented to the satisfaction of the City Development Services Department.
- AQ-03** During demolition and construction, the project contractor shall cover loaded haul vehicles while operating on publicly maintained paved surfaces. This measure shall be implemented to the satisfaction of the City Development Services Department.
- AQ-04** During demolition and construction, the project contractor shall stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than 30 days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate visible fugitive dust emissions. This measure shall be implemented to the satisfaction of the City Development Services Department.
- AQ-05** During demolition and construction, the project contractor shall reduce nonessential earthmoving activity under high wind conditions (for purposes of this measure, a reduction in earthmoving activity when visible dusting occurs from moist and dry surfaces due to wind erosion shall be considered sufficient to maintain compliance). This measure shall be implemented to the satisfaction of the City Development Services Department.
- AQ-06** During demolition and construction, the project contractor shall water exposed surfaces at least twice per day; activities shall be scheduled to allow for early paving of road surfaces; reduced travel speeds (15 mph) on unpaved surfaces shall be enforced; simultaneous disturbance areas shall be limited to the smallest area as practical; and all stockpiles shall be covered with tarps. This measure shall be implemented to the satisfaction of the City Development Services Department.

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**AQ-07** Measures contained in the MDAQMD Rule 403 shall be followed, as applicable, during project construction. The City of Hesperia shall be responsible for selecting appropriate applicable Rule 403 measures to be followed during project construction and for overseeing compliance with the measures by the construction contractors. The construction contractors shall be required to obtain encroachment permits from the City, and the contract documents and specifications for the project shall state the required Rule 403 measures that must be followed by the contractors. This measure shall be implemented to the satisfaction of the City Development Services Department.

As detailed in Table B, the daily regional air pollutant emissions resulting from demolition of existing roadway, the bridge, grading, and construction vehicular activity would not exceed threshold levels established by the MDAQMD with implementation of **Mitigation Measures AQ-01 through AQ-07**. Construction-related air quality impacts would be reduced to **less than significant with mitigation incorporated**.

**Table B: Short-Term Regional Construction Emissions**

	Total Regional Pollutant Emissions, lbs./day							
	Worst Case Day (lb)				Annual (tons)			
	VOC	NOx	CO	PM <sub>10</sub>	VOC	NOx	CO	PM <sub>10</sub>
CEQA Significance Criteria	137	137	548	82	25	25	100	15
Predicted Emissions	16	109	76	14	2.6	19	12	2
<b>Exceeds Significance Criteria?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Table 2.3-8. *Ranchero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-31. City of Hesperia and County of San Bernardino. June 2013.

CO = carbon monoxide  
lb/day = pounds per day  
NOx = nitrogen oxides

VOC = volatile organic compounds  
PM<sub>10</sub> = particulate matter less than 10 microns in size

**Long-term Emissions:** The primary source of air pollutant emissions associated with operation of the proposed project would be motor vehicle traffic. An indicator that the proposed project would not have a substantial regional emissions impact is the net influence of the project on motor vehicle traffic emissions in the project vicinity, relative to the baseline emissions under no-action conditions. Under the approved Ranchero Road Widening Project, a.m. and p.m. period average travel speeds for automobiles and trucks within the corridor are expected to increase after construction, thereby decreasing the estimated emissions.

According to the Final EIR prepared for the approved Ranchero Road Widening Project, existing daily traffic volume along Ranchero Road averages 7,781 vehicles per day (VPD) and opening year VPD upon completion of the Ranchero Road Widening Project (but without replacement of the Ranchero Road Bridge crossing the California Aqueduct, i.e., the proposed project)) would increase to an average of 12,674, corresponding to a volume to capacity (V/C)<sup>22</sup> ratio of 0.41 (Level of Service [LOS] A) along the majority of the Ranchero Road alignment, excluding along the bridge.<sup>23</sup> The reduction of the number of through lanes from four lanes to two lanes at either end of the bridge would act as a choke point for

<sup>22</sup> V/C ratio 0.00–0.60 = LOS A; V/C ratio 0.61–0.70 = LOS B; V/C ratio 0.71–0.80 = LOS C; V/C ratio 0.81–0.90 = LOS D; V/C ratio 0.91–1.00 = LOS E; V/C ratio >1.00 = LOS F.

<sup>23</sup> *Ranchero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-204. City of Hesperia and County of San Bernardino. June 2013.

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vehicles traveling along Rancho Road. Due to this condition, congestion is anticipated to be heavier (V/C of 0.87) within the general area of the California Aqueduct Bridge compared to the approved four-lane segments of the widened Rancho Road on either side of the bridge. Therefore, it is reasonable to conclude that construction of the proposed project would alleviate the choke point at the California Aqueduct crossing, thereby increasing average travel speeds and reducing emissions.

Table C presents the proposed project’s predicted operational change in emissions pertaining to MDAQMD criteria air pollutants, compared with CEQA significance criteria for those pollutants.

**Table C: Long-Term Regional Emissions**

	Emissions within MDAB (lbs/day)				Emissions within MDAB (tons/year)			
	VOC	NOx	CO	PM <sub>10</sub>	VOC	NOx	CO	PM <sub>10</sub>
No Build	132.3	216.71	2,281.42	495.46	24.39	43.38	389.18	90.42
Future with Project	149.09	249.2	2,506.94	557.29	27.47	49.88	429.51	101.70
<b>Project Increment</b>	<b>16.79</b>	<b>32.49</b>	<b>225.52</b>	<b>61.83</b>	<b>3.08</b>	<b>6.50</b>	<b>40.33</b>	<b>11.28</b>
CEQA Significance Criteria	137	137	548	82	25	25	100	15
<b>Exceeds Significance Criteria?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Table 2.4-9. *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-33. City of Hesperia and County of San Bernardino. June 2013.

CO = carbon monoxide  
 lbs/day = pounds per day  
 NOx = nitrogen oxides

VOC = volatile organic compounds  
 PM<sub>10</sub> = particulate matter less than 10 microns in size  
 MDAB = Mojave Desert Air Basin

As indicated in Table C, the proposed project would result in an incremental increase in the generation of regional air pollution emissions during operation; however, none of the CEQA significance criteria for MDAQMD criteria pollutants would be reached or exceeded. The MDAQMD uses the project-level significance thresholds to determine whether a project’s emissions are cumulatively considerable. Because implementation of **Mitigation Measures AQ-01 through AQ-07** would ensure the project’s emissions would not exceed the MDAQMD’s regional significance thresholds, as detailed in Tables B and C, the MDAQMD does not consider the project to contribute significantly to a cumulative air quality impact. Impacts would be **less than significant with mitigation incorporated**.

**c. Expose sensitive receptors to substantial pollutant concentrations?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: The analysis for sensitive receptors is provided for carbon monoxide (CO), coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), and toxic air contaminants (TACs). The analysis years consist of the project opening year and the design or horizon year referenced in the approved plan, rather than present and future years. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality. Single-family residential units are located within 25 feet of the project construction boundary and the closest outdoor space of the residential unit is adjacent to the project construction boundary. Additionally, the Just-4-Kids Preschool and Just-4-Toddlers Preschool is located at 15420 and 15400 Rancho Road respectively, approximately 25 feet from the project construction boundary.

**Construction Emissions:** According to the Final EIR for the approved Rancho Road Widening Project, implementation of **Mitigation Measures AQ-01 through AQ-07** would reduce construction-related



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emissions impacts to sensitive receptors, such as residential dwellings occur along the Rancho Road corridor, to less than significant. Since the proposed project site encompasses only 0.55 mile of the 5-mile segment of the approved Rancho Road Widening Project, it is reasonable to conclude that construction of the proposed project would occur over a much shorter duration and under a smaller scale and, therefore, emissions from construction activities of the proposed project would not exceed or be more severe than those anticipated from the approved Rancho Road Widening Project. Since implementation of **Mitigation Measures AQ-01** through **AQ-07** would reduce construction-related emissions impacts to sensitive receptors under the approved Rancho Road Widening Project to less than significant, accordingly, **Mitigation Measures AQ-01** through **AQ-07** would likewise reduce construction-related emissions impacts to sensitive receptors under the proposed project to **less than significant with mitigation incorporated**.

**Operational Emissions:** The primary source of air pollutant emissions associated with operation of the proposed project would be motor vehicle traffic. A major contributor to the potential for localized hot spots of air pollutants emitted by vehicle exhaust is traffic congestion. LOS is evaluated on a scale from A to F, with A representing negligible congestion and F representing severe congestion. As a point of reference, the City has established a minimum acceptable LOS of D as a design/planning goal.

According to the Final EIR prepared for the approved Rancho Road Widening Project, existing daily traffic volume along Rancho Road averages 7,781 VPD and opening year VPD upon completion of the Rancho Road Widening Project (but without the proposed project) would increase to an average of 12,674, corresponding to a V/C<sup>24</sup> ratio of 0.41 (LOS A) along the majority of the Rancho Road alignment, excluding at the bridge.<sup>25</sup> The reduction of the number of through lanes from four lanes to two lanes at either end of the bridge would act as a choke point for vehicles traveling along Rancho Road. Due to this condition, congestion is anticipated to be heavier (V/C of 0.87) within the general area of the California Aqueduct Bridge compared to the approved four-lane segments of the widened Rancho Road on either side of the bridge.<sup>26</sup> It is reasonable to conclude that construction of the proposed project would alleviate the choke point at the California Aqueduct crossing, thereby increasing average travel speeds and reducing emissions in the immediate vicinity of the project site.

Since the Final EIR prepared for the approved Rancho Road Widening Project concluded the widening of Rancho Road from two lanes to four lanes between Coriander Drive and 7<sup>th</sup> Avenue would not result in significant emissions during operation,<sup>27</sup> likewise, the proposed project would result in substantially similar operational emissions, as replacement of the Rancho Road Bridge crossing the California Aqueduct would correspond with the anticipated capacity of Rancho Road pursuant to the approved Rancho Road Widening Project. Therefore, operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Impacts are **less than significant** and no mitigation is required.

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<sup>24</sup> V/C ratio 0.00–0.60 = LOS A; V/C ratio 0.61–0.70 = LOS B; V/C ratio 0.71–0.80 = LOS C; V/C ratio 0.81–0.90 = LOS D; V/C ratio 0.91–1.00 = LOS E; V/C ratio >1.00 = LOS F.

<sup>25</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-204. City of Hesperia and County of San Bernardino. June 2013.

<sup>26</sup> *Ibid.* Page 2-215.

<sup>27</sup> *Ibid.* Pages 2-32 and 2-33.

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**d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

*Less than Significant Impact*

Discussion of Effects: During construction, the various diesel-powered vehicles and equipment in use on the site may create other emissions, including objectionable odors, from exhaust emissions. Additionally, the placement of asphalt may generate odors. These odors are temporary and not likely to be noticeable beyond the project boundaries. MDAQMD standards regarding asphalt paving are sufficient to reduce temporary odor impacts to a **less than significant** level. The proposed project is constructing a new six-lane bridge striped to operate as a four-lane roadway, which is not anticipated to generate long-term objectionable odors. Therefore, impacts related to generation of other emissions such as objectionable odors affecting substantial numbers of people would be **less than significant**. No mitigation is required.

**3.4 BIOLOGICAL RESOURCES**

Would the project:

	Potentially Significant 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 or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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- 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?

**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 or U.S. Fish and Wildlife Service?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: The project site comprises paved roadway, a concrete aqueduct, graded and engineered earthen berms, maintenance roadways, and residential properties, and is surrounded by residential development. Approximately 3.15 acres of Mojave Desert scrub, 1.94 acres of disturbed Mojave Desert scrub, 2.16 acres of saltbush scrub, and 0.002 acre of southern willow scrub habitat occur on site. However, these habitat types are considered marginal due to the substantial disturbances on site and surrounding development. The project site was surveyed for biological resources in support of the Ranchoero Road Widening Project.<sup>28</sup> Seven special-status plant species and nine special-status wildlife species have the potential to occur on the project site, as described below:

- **Mojave milkweed (*Asclepias nyctaginifolia*)** occurs in Mojave Desert scrub and pinyon-juniper woodland habitats. This species was not observed during focused rare plant surveys conducted in support of the Ranchoero Road Widening Project. The nearest occurrence of this species is recorded approximately six miles southwest of the project site. Existing development and substantial disturbances within the proposed project site have rendered on-site habitat marginal for this species, so its potential to occur is low. No project impacts are anticipated.
- **Booth's evening primrose (*Camissonia boothii* ssp. *boothii*)** occurs in Joshua Tree woodland and pinyon-juniper woodland habitats. This species was not observed during focused rare plant surveys conducted in support of the Ranchoero Road Widening Project. The nearest occurrence of this species is recorded approximately three miles northeast of the project site. The project site does not support Joshua Tree woodland and pinyon-juniper woodland habitats, so its potential to occur is low. No project impacts are anticipated.
- **Pygmy poppy (*Canbya candida*)** occurs in gravelly or sandy sites within creosote brush scrub and pinyon-juniper woodland habitats. This species was not observed during focused rare plant surveys conducted in support of the Ranchoero Road Widening Project. The nearest occurrence of this species is recorded approximately one-mile south of the project site. Although this species was considered likely to occur within the footprint of the overall Ranchoero Road Widening Project, existing development and substantial disturbances within the proposed project site have rendered on-site habitat marginal for this species, so its potential to occur is low. No project impacts are anticipated.

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<sup>28</sup> *Ranchoero Road Widening Project Draft Environmental Impact Report (SCH# 2012061058)*. Pages 2-35 to 2-67. City of Hesperia and County of San Bernardino. December 2012.

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- **White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*)** occurs in gravelly or sandy sites within Mojave Desert scrub and pinyon-juniper woodland habitats. This species was not observed during focused rare plant surveys conducted in support of the Ranchoero Road Widening Project. Although habitat for this species exists within the project site, the nearest occurrence of this species is recorded over ten miles to the southwest. Existing development and substantial disturbances within the proposed project site have rendered on-site habitat marginal for this species, so its potential to occur is low. No project impacts are anticipated.
- **Sage brush loeflingia (*Loeflingia squarrosa* var. *aremisiarum*)** occurs in sandy flats within Great Basin scrub, Sonoran Desert scrub, and desert dune habitats. This species was observed in three localities between 2.2 and 4.3 miles west of the project site during focused rare plant surveys conducted in support of the Ranchoero Road Widening Project. All three observed localities occurred in relatively undisturbed habitat. Although habitat for this species exists within the project site, existing development and substantial disturbances within the proposed project site have rendered on-site habitat marginal for this species, so its potential to occur is low. No project impacts are anticipated.
- **Short-joint beavertail cactus (*Opuntia basilaris* var. *brachyclada*)** occurs in a variety of habitats, including chaparral, Joshua tree woodland, Mojave Desert scrub, pinyon-juniper woodland, and riparian woodland habitats. This species was not observed during focused rare plant surveys conducted in support of the Ranchoero Road Widening Project. Although habitat for this species exists within the project site, the nearest occurrence of this species is recorded over 1 mile to the southeast. Existing development and substantial disturbances within the proposed project site have rendered on-site habitat marginal for this species, so its potential to occur is low. No project impacts are anticipated.
- **Golden violet (*Viola aurea*)** occurs only in sandy regions within Great Basin scrub and pinyon-juniper habitats. This species was not observed during focused rare plant surveys conducted in support of the Ranchoero Road Widening Project. Only limited suitable habitat for this species exists within the project site and the nearest occurrence of this species is recorded over 6 miles to the southwest. Existing development and substantial disturbances within the proposed project site have rendered on-site habitat marginal for this species, so its potential to occur is low. No project impacts are anticipated.
- **Desert tortoise (*Gopherus agassizii*)** habitat in the project site is very small and isolated. Existing development and substantial disturbances within the proposed project site have rendered on-site habitat marginal for this species. Additionally, the project site is surrounded on all sides by residential development, which would make it highly unlikely for this species to enter the project site from any nearby high-quality habitat. Neither the species nor any sign of its presence was observed during intensive pedestrian surveys conducted in support of the Ranchoero Road Widening Project. No records of desert tortoise occurrences within the City exist, and the nearest occurrence of this species is recorded over 13 miles to the northwest. Therefore, this species is presumed extirpated from the project site and vicinity. No project impacts are anticipated.
- **San Diego coast horned lizard (*Phrynosoma coronatum blainvillei*)** habitat comprises open stages of dry scrub with ample ant prey. Habitat in the project site is highly disturbed due to the paved [Ranchoero] roadway, the California Aqueduct, graded and engineered earthen berms, maintenance roadways, and residential properties. This species was not observed during intensive pedestrian surveys conducted in support of the Ranchoero Road Widening Project and the nearest occurrence is

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recorded over four miles to the southwest. Therefore, impacts to this species are considered less than significant.

- **Coastal western whiptail (*Aspidoscelis tigris stejnegeri*)** is associated with deserts and semiarid areas with sparse vegetation and open areas and also found in woodland and riparian areas. Habitat in the project site is considered suitable, albeit highly disturbed due to the paved [Ranchero] roadway, the California Aqueduct, graded and engineered earthen berms, maintenance roadways, and residential properties. This species was not observed during intensive pedestrian surveys conducted in support of the Ranchero Road Widening Project and the nearest occurrence is recorded over nine miles to the southwest. Therefore, impacts to this species are considered less than significant.
- **Cooper's hawk (*Accipiter cooperii*)** is associated with oak woodland and riparian areas. Habitat in the project site is not suitable to support nesting of the Cooper's hawk, but this species may hunt for prey within the project site. This species was not observed during intensive pedestrian surveys conducted in support of the Ranchero Road Widening Project and the nearest occurrence is recorded over two miles to the north. Therefore, impacts to this species are considered less than significant.
- **Le Conte's thrasher (*Toxostoma lecontei*)** is associated with desert areas containing dense shrubs for nesting. Habitat in the project site is suitable to support nesting of the Le Conte's thrasher. This species was not observed during intensive pedestrian surveys conducted in support of the Ranchero Road Widening Project and the nearest occurrence is recorded over three miles to the northeast. However, impacts to this species could occur due to its potential to nest within the project site, so mitigation is required.
- **Gray vireo (*Vireo vicinior*)** is associated with desert, chaparral, and woodland habitats. Habitat in the project site is suitable to support nesting of the gray vireo. This species was not observed during intensive pedestrian surveys conducted in support of the Ranchero Road Widening Project and the nearest occurrence of this species is recorded 1.25 miles to the east. However, impacts to this species could occur due to its potential to nest within the project site; therefore, mitigation is required.

#### Mitigation Measure

**BIO-01** If project activities are planned during the bird nesting season (March 1 to August 31), a nesting bird survey shall be conducted within 30 days prior to any demolition or ground-disturbing activities, including, but not limited to demolition, clearing, grubbing, and/or rough grading, to ensure birds protected under the Migratory Bird Treaty Act (MBTA) are not disturbed by on-site activities. Any such survey(s) shall be conducted by a qualified biologist. If no active nests are found, no additional actions related to this measure are required. If active nests are found, the nest locations shall be mapped by the biologist. Nesting bird species shall be documented and, to the degree feasible, the nesting stage (e.g., incubation of eggs, feeding of young, near fledging) determined. Based on the species present and surrounding habitat, a no-disturbance buffer shall be established around each active nest. The buffer shall be identified by a qualified biologist and confirmed by the City; non-raptor bird species nests shall be buffered up to 250 feet, while raptor nests shall be buffered up to 820 feet. No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the City and construction supervisor that activities may resume.

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This measure shall be implemented to the satisfaction of the City Development Services Department.

With implementation of **Mitigation Measure BIO-01**, the proposed project would have a **less than significant impact** on nesting birds **with implementation of mitigation**.

- **Burrowing owl (*Athene cunicularia*)** occupies a variety of habitats in California, including open scrub, grassland, agricultural areas, and other habitats with low-lying vegetation. Burrowing owls often modify the burrows of the common California ground squirrel for their own use and also are known to use various types of debris piles, cliffs, culverts, and other man-made structures as burrows. Habitat in the project site is suitable to support nesting burrowing owls. This species was not observed during intensive pedestrian surveys conducted in support of the Ranchero Road Widening Project and the nearest occurrence of this species is recorded within 5 miles of the project site. Impacts to this species could occur due to its potential to nest within the project site, so mitigation is required.

Burrowing owls are a *California Species of Concern*, typically requiring special mitigation measures due to their rarity and declining status across California. Therefore, **Mitigation Measures BIO-02** and **BIO-03** are proposed.

#### **Mitigation Measures**

**BIO-02** Prior to commencement of construction activities, a pre-construction burrowing owl/Initial Take and Avoidance Survey must be conducted by a qualified biologist within 30 days prior to the beginning of project construction to determine if the project site contains suitable burrowing owl habitat and to avoid any potential impacts to the species. The survey shall include 100 percent coverage of the project site. If the survey reveals no suitable habitat for burrowing owl is present, no additional actions related to this measure are required.

If occupied burrows are found within the development footprint during the pre-construction clearance surveys, site-specific buffer zones shall be established by the qualified biologist in accordance with the California Department of Fish and Wildlife (CDFW). The buffer zones may vary depending on burrow location and burrowing owl sensitivity to human activity and no construction activity shall occur within a buffer zone until a Burrowing Owl Mitigation and Monitoring Plan (BOMMP) is submitted to the CDFW for approval and implemented pursuant to CDFW consultation and **Mitigation Measure BIO-3**. This measure shall be implemented to the satisfaction of the City Development Services Department and the CDFW.

**BIO-03** A BOMMP shall be submitted to the CDFW for review and approval prior to commencement of construction activities in site-specific burrowing owl buffer zones. Occupied burrowing owl burrows directly impacted (i.e., temporarily or permanently) by the project shall be relocated. The BOMMP shall describe proposed relocation and monitoring plans. The plan shall include the number and location of occupied burrow sites and details on adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, then details regarding the creation of artificial burrows (i.e., numbers, location, and type of burrows) shall also be included in the plan. The BOMMP shall include, but not be limited to, the following measures:

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- Occupied burrows shall not be disturbed during the nesting season of February 1 through August 31 unless a qualified biologist can verify through noninvasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
  - Owls must be relocated by a qualified biologist from any occupied burrows that will be impacted by project activities. Suitable habitat must be available adjacent to or near the disturbance site, or artificial burrows will need to be provided nearby. Once the biologist has confirmed that the owls have left the burrow, burrows shall be excavated using hand tools and refilled to prevent reoccupation.
  - All relocation shall be approved by the CDFW. The qualified biologist shall monitor the relocated owls a minimum of three days per week for a minimum of three weeks. A report summarizing the results of the relocation and monitoring shall be submitted to the CDFW within 30 days following completion of the relocation and monitoring of the owls.
  - This measure shall be implemented to the satisfaction of the City Development Services Department and the CDFW.
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- **Mojave ground squirrel (*Spermophilus mohavensis*)** is found in desert scrub, alkali scrub, and Joshua tree woodland habitats. Winterfat (*Kraschennikovia lanata*) and spiny hopsage (*Grayia spinosa*) are the known food plants for the species, but neither of these plant species was observed in the project site during intensive pedestrian surveys conducted in support of the Ranchoero Road Widening Project. Therefore, habitat able to support this species is marginal within the project site. Additionally, existing development and substantial disturbances within the project site have limited connectivity to other fragmented habitat within urban portions of the City and region. The project site is surrounded on all sides by residential development, which would make it highly unlikely for this species to enter the project site from any nearby high-quality habitat. Nearly all of the historic sightings of Mojave ground squirrel date back more than 30 years to a time when there was more habitat and less development in the region. The location of the most recent sighting, occurring in 2005, is separated from the project site by large tracts of developed residential properties and I-15. Neither the species nor any sign of its presence was observed during intensive pedestrian surveys conducted in support of the Ranchoero Road Widening Project. Although the project site does support natural desert habitat, its isolation, lack of constituent habitat elements for this species, and lack of recent sightings nearby suggests the species' potential to occur within the project site is low. Therefore, no project impacts are anticipated.
  - **American badger (*Taxidea taxus*)** is found in open stages of dry scrub, forest, and herbaceous habitats. The badger requires large areas of open uncultivated ground for foraging and friable soils for digging. Existing development and substantial disturbances within the project site has limited connectivity to other fragmented habitat within urban portions of the City and region. The project site is surrounded on all sides by residential development, which would limit the potential for the habitat on the project site to support this species. Therefore, habitat for this species within the project site is marginal. No observations of this species have been documented in the project vicinity, and neither the species nor any sign of its presence was observed during intensive pedestrian surveys conducted in support of the Ranchoero Road Widening Project. Although the project site does contain habitat, its isolation, fragmentation, and lack of sightings nearby suggests the species' potential to occur within the project site is low. Therefore, no project impacts are anticipated.

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Although no special-status species were observed in the project site during intensive pedestrian surveys conducted in support of the Ranchoero Road Widening Project, the proposed project is expected to result in permanent loss of habitat for seven special-status plant species and nine special-status wildlife species as described above. However, the suitability of the habitat found on the project site for these species is considered marginal due to several disturbances, such as urban development, foot traffic, trash dumping, and vehicle traffic; therefore, the potential for these species to occur on the project site is low, with the exception of the Le Conte's thrasher, gray vireo, and burrowing owl.

Thorough implementation of **Mitigation Measures BIO-01** through **BIO-03**, impacts to species identified as a candidate, sensitive, or special-status would be reduced to **less than significant levels with mitigation incorporated**.

**b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: Certain habitats/natural communities are considered to be of special concern based on, 1) federal, State, or local laws regulating their development; 2) limited distributions; and/or 3) whether they support the habitat requirements of special-status plants or animals.

The project site was surveyed for biological resources in support of the Ranchoero Road Widening Project.<sup>29</sup> The project site comprises paved roadway, a concrete aqueduct, graded and engineered earthen berms, maintenance roadways, and residential properties, and is surrounded by residential development. Approximately 3.15 acres of Mojave Desert scrub, 1.94 acres of disturbed Mojave Desert scrub, 2.16 acres of Atriplex (saltbush) scrub, and 0.002 acre of southern willow scrub habitat occur on site. These habitat types are considered marginal due to the substantial disturbances on site and surrounding residential development, as detailed in response to Checklist Question 3.4a.

The Mojave Desert scrub community consists of widely spaced desert shrubs such as white bursage (*Ambrosia dumosa*), cheesebush (*Hymenoclea salsola*), and Nevada tea (*Ephedra nevadensis*). Associated species include occasional Joshua trees (*Yucca brevifolia*), Davidson's buckwheat (*Eriogonum davidsonii*), and small wirelettuce (*Stephanomeria* sp.). This is the most common plant community found within the project site, with varying levels of disturbance as it appears between developed areas.

The Atriplex scrub plant community within the project site consists of the dominant species fourwing saltbush (*Atriplex canescens*) and associated species, including telegraph weed (*Heterotheca grandiflora*) and California buckwheat (*Eriogonum fasciculatum*). The only occurrence of this plant community within the project site is along the western embankment of the California Aqueduct.

Southern willow scrub community within the project site consists primarily of arroyo willow (*Salix lasiolepis*) with a few individuals of Fremont's cottonwood (*Populus fremontii*) and mule fat (*Baccharis salicifolia*) also present. This community is found adjacent to streams, along lakeshores, and within urbanized areas where runoff is sufficient.

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<sup>29</sup> Ranchoero Road Widening Project Draft Environmental Impact Report (SCH# 2012061058). Pages 2-35 to 2-67. City of Hesperia and County of San Bernardino. December 2012.



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Construction activities, including demolition, grading, drilling, vehicle access, equipment staging areas, development of access roads, and other construction-related activities have the potential to result in temporary impacts to natural communities within the project site. Neither Mojave Desert scrub nor Atriplex scrub has special status with United States Fish and Wildlife Service (USFWS) or CDFW. However, the City is required to revegetate and restore the project site to pre-project conditions in order to comply with City Municipal Code Chapter 16.24 - Protected Plants. Compliance with City Municipal Code Chapter 16.24 - Protected Plants would ensure the City would provide replacement landscaping or vegetation to disturbed areas consistent with the natural surroundings.

The project proposes construction of a cul-de-sac and driveway on APN 0412-182-26 (15380 Rancho Road) along the north side of Rancho Road to provide access to APNs 0412-182-25 (15420 Rancho Road) and 0412-182-37 (15350 Rancho Road). APN 0412-182-26 (15380 Rancho Road) contains a residence constructed in 1973 and includes dense landscaping consisting of mature trees, desert vegetation, and various ornamental plants. According to the County's Property Information Management System, APN 0412-182-26 (15380 Rancho Road) was acquired by the City on September 28, 2017.<sup>30</sup> Pursuant to Section 16.24.030(B)(2) - Scope of Provisions of the City Municipal Code, properties owned by local governmental entities are exempt from Chapter 16.24 - Protected Plants except for the provisions of Article II therein. Pursuant to Article II of Chapter 16.24 - Protected Plants, specifically Section 16.24.160 - Subject Area, Article II is applicable only within the City in which the protected plants grow in natural habitat. Since all the vegetation on APN 0412-182-26 has been planted there as landscaping since the early 1970s, that property is exempt from the provisions of Chapter 16.24 - Protected Plants.

Southern willow scrub is a riparian vegetation community with special value as both wildlife habitat and as a jurisdictional habitat when associated with a streambed. In support of the Rancho Road Widening Project, it was determined that the Southern willow scrub habitat is associated with a 0.138-acre manmade ditch that conveys storm water flows eastbound along the south side of Rancho Road<sup>31</sup>. Additionally, 0.018 acre of disturbed wetland (a category that indicates the presence of hydrophytic vegetation) is located where storm water conveyed along the south side of Rancho Road leaves the road gutter and gathers in an earthen channel. A 2019 field verification of this feature indicated the continued presence of this feature and its ultimate connection to the Mojave River. Based on the Jurisdictional Delineation prepared for the Rancho Road Widening Project and the field verification, small areas within the project footprint may be considered jurisdiction by the CDFW and/or US Army Corps of Engineers (Corps).

**Mitigation Measure BIO-04**, has been identified to address impacts to potential jurisdiction features to a **less than significant level**.

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<sup>30</sup> APN 0412-182-26, *Property Information Management System Internet Site*. County of San Bernardino. [http://www.sbcounty.gov/assessor/pims/\(S\(i5y3jiud40lffhg0cqzuxwz\)\)/PIMSINTERFACE.ASPX](http://www.sbcounty.gov/assessor/pims/(S(i5y3jiud40lffhg0cqzuxwz))/PIMSINTERFACE.ASPX). Accessed January 18, 2018.

<sup>31</sup> *Jurisdictional Delineation for the Rancho Road Widening Project, City of Hesperia, California*. Table 4. ECORP Consulting, Inc. October 2011.

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### Mitigation Measure

**BIO-04** Prior to commencement of construction activities, the City shall confirm with the CDFW, Corps and/or Regional Water Quality Control Board any appropriate permit requirement(s) related to any identified jurisdictional feature within the project footprint. If no jurisdiction is asserted, no further action is required.

In the event the CDFW, Corps and/or Regional Water Quality Control Board assert jurisdiction over feature(s) within the project footprint, the City shall satisfy the applicable and appropriate permit requirement(s) identified by the agency (agencies) prior to the commencement of construction activities.

Neither Mojave Desert scrub nor Atriplex scrub has special status with the USFWS or CDFW. However, southern willow scrub is a riparian vegetation community with special value as both wildlife habitat and as a jurisdictional habitat when associated with a streambed. Through adherence to City Municipal Code Chapter 16.24 - Protected Plants and with implementation of **Mitigation Measure BIO-04**, impacts to riparian habitat or other sensitive natural communities within the project site would be reduced to **less than significant** levels.

**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?**

*No Impact*

#### Discussion of Effects:

As detailed in response to Checklist Question 3.4b, areas to be disturbed within the project footprint include southern willow scrub habitat, disturbed wetland and streambed which may be subject to CDFW jurisdiction. Furthermore, the Jurisdictional Delineation identified approximately 0.10 acre of ephemeral streams exhibiting an OHWM along the south side of Rancho Road (west side of the California Aqueduct.) Based on field verification (June 2019), waters from larger storm events ultimately discharge into the Mojave River<sup>32</sup> and are therefore considered potential jurisdictional Waters of the U.S.<sup>33</sup> **Mitigation Measure BIO-04**, would reduce impacts to potential jurisdictional areas, wetlands and/or riparian areas to **less than significant** level.

**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?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: Habitat fragmentation occurs when a single, contiguous habitat area is divided into two or more areas, or where an action isolates two or more new areas from each other. Isolation of

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<sup>32</sup> *Drainage Report: Rancho Road Aqueduct Crossing*. Existing Drainage Facility Exhibit, Sheet 1 of 1. Cordoba Corporation. February 2018.

<sup>33</sup> *Jurisdictional Delineation for the Rancho Road Widening Project, City of Hesperia, California*. Page 18. ECORP Consulting, Inc. October 2011.

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habitat occurs when wildlife cannot move freely from one portion of the habitat to another or to/from one habitat type to another. Habitat fragmentation may occur when a portion of one or more habitats is converted into another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning. Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Examples of migration corridors may include areas of unobstructed movement for deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds.

The project site comprises paved roadway, a concrete aqueduct, graded and engineered earthen berms, maintenance roadways, and residential properties, and is surrounded by residential development. Development within and surrounding the project site has limited connectivity to other fragmented habitat within urban portions of the City and region.

It is possible that wildlife would utilize the linear nature of the California Aqueduct as a corridor between undeveloped areas. The project is proposed along an existing roadway and proposes to replace an existing bridge crossing the California Aqueduct. As part of a Habitat Assessment<sup>34</sup> in support of the Rancho Road Widening Project, it was determined wildlife likely cross Rancho Road at many different locations along its length, with no preference being clear. Since the project proposes to replace the existing bridge crossing the California Aqueduct and widen the existing approach roadways on either side of the proposed bridge, the project would not preclude wildlife from continuing to cross Rancho Road at the California Aqueduct. Additionally, with implementation of previously-referenced **Mitigation Measures BIO-01** through **BIO-03** protecting migratory birds, impacts to wildlife movement/corridors, and migratory/nesting species would be reduced to **less than significant** levels **with mitigation incorporated**. No additional mitigation is required.

**e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

*Less Than Significant with Mitigation Incorporated*

Discussion of Effects: The City of Hesperia has a Protected Plant Ordinance as a means of managing the preservation of trees and native desert flora, where necessary. Construction activities, including demolition, grading, drilling, vehicle access, equipment staging areas, development of access roads, and other construction-related activities have the potential to result in temporary impacts to desert flora within the project site. Therefore, the City is required to revegetate and restore the project site to pre-project conditions in order to comply with City Municipal Code Chapter 16.24 - Protected Plants. Compliance with City Municipal Code Chapter 16.24 - Protected Plants would ensure the City would provide replacement landscaping or vegetation to disturbed areas consistent with the natural surroundings.

As stated in response to Checklist Question 3.4b, properties owned by local governmental entities are exempt from Chapter 16.24 - Protected Plants except for the provisions of Article II therein. Pursuant to Article II of Chapter 16.24 - Protected Plants, specifically Section 16.24.160 - Subject Area, Article II is applicable only within the City in which the protected plants grow in natural habitat. Since all the vegetation on APN 0412-182-26 has been planted there as landscaping since the early 1970s, that property is exempt from the provisions of Chapter 16.24 - Protected Plants.

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<sup>34</sup> *Biological Report for the Rancho Road Widening Project, City of Hesperia, California.* Page 21. ECORP Consulting, Inc. October 2011.

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In accordance with Article III (Riparian Plant Conservation) of Chapter 16.24 - Protected Plants, the City would implement **Mitigation Measure BIO-04**, to reduce impacts to riparian habitat and jurisdictional areas to **less than significant levels with mitigation incorporated**. Through implementation of **Mitigation Measure BIO-04**, the proposed project would comply with City Municipal Code Chapter 16.24 - Protected Plants, and **no impact** would occur related to conflict with any local policies or ordinances protecting biological resources.

**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?**

*No Impact*

Discussion of Effects: The City is not within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the proposed project would not conflict with any such plan applicable to the project. No impact would occur, and no mitigation is required.

**3.5 CULTURAL RESOURCES**

Would the project:

	Potentially Significant 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 §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?**

*No Impact*

Discussion of Effects: According to the Final EIR prepared for the approved Rancho Road Widening Project, the California Aqueduct, which was constructed beginning in 1960 and ending in 1974, was recently identified as potentially eligible for listing as a historical resource by Caltrans.<sup>35</sup> The California Aqueduct was evaluated in 2011 as eligible for listing in the National Register of Historic Places and California Register of Historical Resources (California Register) under Criteria A/1 and C/3 at the State level of significance “for its representation as a comprehensively planned and publicly sanctioned water conveyance public works project to facilitate development throughout the state and its complex design necessary to redistribute water throughout the state of California on such a massive

<sup>35</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058. Page 2-94. City of Hesperia and County of San Bernardino. June 2013.*

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level.”<sup>36</sup> The Rancho Road Bridge that crosses the aqueduct was built in 1971, and is a contributing feature to the California Aqueduct, which is a historical resource as defined by CEQA.<sup>37</sup>

A project-specific Impacts Assessment for the replacement of the Rancho Road Bridge crossing the California Aqueduct was prepared to determine if replacement of the bridge would adversely impact the resource (California Aqueduct) (Appendix A). The Impacts Assessment concluded that replacing the Rancho Road Bridge crossing the California Aqueduct would not adversely alter the Aqueduct’s historical values, including water conveyance and complex design/engineering, which render it significant pursuant to CEQA. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5. **No impact** would occur, and no mitigation is required.

**b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?**

*No Impact*

Discussion of Effects: The project area has been extensively disturbed by previous construction activities, including excavation for the California Aqueduct, Rancho Road, residential uses on both sides of Rancho Road, and the existing bridge crossing the Aqueduct. Additionally, the Cultural Resources Study for the Proposed Rancho Road Improvements Project included an intensive pedestrian survey of the subject project site and did not identify any archaeological resources therein.<sup>38</sup> Therefore, sensitivity for archaeological resources within the project site is extremely low. The project would have no impacts on archaeological resources and no mitigation is required.

**c. Disturb any human remains, including those interred outside of dedicated cemeteries?**

*Less than Significant Impact*

Discussion of Effects: No known human remains are present on the project site and there is no evidence that Native Americans are buried on the project site. In the unlikely event that human remains are encountered during project construction, the proper authorities (i.e., San Bernardino County Coroner) shall be notified and standard procedures for the respectful handling of human remains during the earthmoving activities will be followed. Construction contractors are required to adhere to California Code of Regulations (CCR) Section 15064.5(e), Public Resources Code (PRC) Section 5097, and Section 7050.5 of the State’s Health and Safety Code. In the event of an unanticipated discovery of a human burial, human bone or suspected human bone, or funerary objects associated with a human burial, the law requires all excavation or grading in the vicinity of the find halt immediately, the area of the find be protected, and the contractor immediately notify the County Coroner of the find. The construction contractor, developer, and the County Coroner are required to comply with the provisions of CCR Section 15064.5(e), PRC Section 5097.98, and Section 7050.5 of the State’s Health and Safety Code. Compliance with these provisions would ensure that any potential impacts to unknown buried human remains would be **less than significant** by ensuring appropriate examination, treatment, and protection of human remains as required by State law. No mitigation is required.

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<sup>36</sup> *Department of Parks and Recreation forms for the California Aqueduct.* Provided by the California Department of Water Resources. Ambacher, Patricia. 2011.

<sup>37</sup> *Impacts Assessment: Rancho Bridge Replacement over the California Aqueduct Project.* Page 8. City of Hesperia, San Bernardino County, California. LSA. June 2018.

<sup>38</sup> *Cultural Resources Study for the Proposed Rancho Road Improvements Project.* City of Hesperia, San Bernardino County, California. ECORP Consulting, Inc. October 2011.

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**3.6 ENERGY**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

*Less than Significant Impact*

Discussion of Effects: The vast majority of energy consumption of a typical roadway project occurs during construction since the project would not include continuous on-site occupation that would generate demand for energy during its operation.

**Construction.** Construction would require energy for the demolition, haul away/disposal, manufacture and transportation of building materials, preparation of the site for construction, utility installation/relocation, paving, and bridge construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. However, energy usage on the project site during construction would be temporary in nature.

The proposed project is subject to MDAQMD Best Available Control Measures for equipment emissions. Adherence to appropriate Best Available Control Measures is a standard requirement for any construction or ground disturbance activity occurring within the Basin. Best Available Control Measures include, but are not limited to the following:

- Requires the contractor utilize only low-sulfur fuel having a sulfur content of 800 parts per million by weight or less;
- Requires the contractor ensure off-road vehicles (i.e., self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on road) limit vehicle idling to five minutes or less; register and label vehicles in accordance with the CARB Diesel Off-Road Online Reporting System; and
- Restricts the inclusion of older vehicles into fleets; and retire, replace, or repower older engines or install Verified Diesel Emission Control Strategies (i.e., exhaust retrofits).

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Through compliance with applicable MDAQMD Rules, construction of the project would demand only the energy required, and impacts from wasteful, inefficient, or unnecessary energy consumption would be **less than significant** and no mitigation is required.

**Operation.** The proposed project does not propose additional lanes to the four-lane road already analyzed under the approved Ranchoero Road Widening Project. Therefore, the proposed project would not add vehicle trips in addition to the vehicle trips anticipated under the approved Ranchoero Road Widening Project because the number of vehicle trips on the bridge would be determined by the capacity of the connecting Ranchoero Road on either side of the bridge. Accordingly, the proposed project is not traffic capacity-increasing, and it would not affect traffic volume, traffic mix, and/or diesel truck percentage along the project corridor or generate a corresponding increase in the demand for fossil fuels.

Implementation of the proposed project would improve overall circulation along Ranchoero Road by eliminating the choke point from deceleration and acceleration in the project vicinity that would otherwise occur if the approved Ranchoero Road Widening Project were to be constructed without the proposed project. Accordingly, operation of the proposed project would stabilize travel speeds and reduce fuel consumption and overall emissions through the life of the project.

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 mpg in 1980 to 22.0 mpg in 2016.<sup>39</sup> Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007, which originally mandated a national fuel economy standard of 35 mpg by the year 2020, and would be applicable to cars and light trucks of Model Years 2011 through 2020.<sup>40</sup> New automobiles purchased by motorists driving to and from the project site would be subject to fuel economy and efficiency standards applied throughout the State. As such, the fuel efficiency of vehicles associated with the project site would increase throughout the life of the project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

According to the Final EIR for the approved Ranchoero Road Widening Project, the savings in operational energy requirements over the life of the project would more than offset construction energy requirements, and thus, in the long term, would result in a net savings in energy usage.<sup>41</sup> Since the proposed project site encompasses only approximately 0.40 mile of the 5-mile segment of the approved Ranchoero Road Widening Project, it is reasonable to conclude that energy demand from construction of the replacement bridge would be generated over a shorter period when compared to construction of the 5-mile segment of Ranchoero Road to be widened. Therefore, energy demand from construction activities of the proposed project are expected to be less than those anticipated from the approved Ranchoero Road Widening Project, and the savings in operational energy over the life of the proposed project would more than offset construction energy demand, which would likewise result in a net savings in energy usage.

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<sup>39</sup> Table 4-23. *Average Fuel Efficiency of U.S. Light Duty Vehicles*. United States Department of Transportation, Bureau of Transportation Statistics. <https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles> (accessed April 5, 2019).

<sup>40</sup> *Energy Independence & Security Act of 2007*. U.S. Department of Energy. <https://www.afdc.energy.gov/laws/eisa> (accessed April 5, 2019).

<sup>41</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-234. City of Hesperia and County of San Bernardino. June 2013.

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Construction and operation of the proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Impacts would be **less than significant**, and no mitigation is required.

**b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?**

*No Impact*

Discussion of Effects: Construction and operation of the proposed project accommodating six lanes in support of the City’s “ultimate” build out of Ranchoero Road as a six-lane *Special Major Arterial* roadway, but striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project, would improve traffic conditions at the project site and serve to alleviate the choke point for vehicles traveling along Ranchoero Road by providing an additional lane in each direction along the bridge. The additional lane would provide a passing lane for slow-moving vehicles such as heavy trucks and vehicles turning to abutting driveways. This would enhance the flow of traffic along Ranchoero Road. By alleviating the choke point from deceleration and acceleration in the project vicinity that would otherwise occur if the approved Ranchoero Road Widening Project were to be constructed without the proposed project, operation of the proposed project would stabilize travel speeds and reduce fuel consumption and overall emissions. Therefore, the proposed project would be consistent with applicable plans related to renewable energy and energy efficiency. **No impact** would occur, and no mitigation is required.

**3.7 GEOLOGY AND SOILS**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>a.</b> 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>b.</b> Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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- 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-site 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?
- f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**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?**

*No Impact or Less than Significant Impact*

- i. Discussion of Effects: The Alquist-Priolo Earthquake Fault Zoning Act (Act) mitigates fault rupture hazards by prohibiting the development of structures for human occupancy across the trace of an active fault. The Act requires the State Geologist to delineate “Earthquake Fault Zones” along faults that are “sufficiently active” and “well defined.” The boundary of an “Earthquake Fault Zone” is generally 500 feet from major active faults and between 200 and 300 feet from well-defined minor faults. The project site is not identified as being within an Alquist-Priolo Earthquake Fault Zone.<sup>42</sup> The closest known Alquist-Priolo Earthquake Fault is the North Frontal Fault located approximately 6.5 miles east of the project site. **No impact** related to fault rupture would result from the implementation of the project. No mitigation is required.
- ii. Discussion of Effects: Like all of southern California, the project site has and will continue to be subject to ground shaking generated from activity on local and regional faults. Particular aspects of the project site may reduce the hazards associated with ground shaking relative to a typical urban location. The proposed project is the construction of a bridge and

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<sup>42</sup> *Fault Map.* City of Hesperia General Plan. Exhibit 3.6-2. Hogle Ireland, Inc. May 2010.

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approach roadway and no habitable structures are proposed. The design of the proposed project would include seismic design parameters in accordance with State law that would reduce the potential for seismic shaking-related impacts to a **less than significant** level. No mitigation is required.

- iii. Discussion of Effects: Liquefaction occurs when loose, unconsolidated, water-laden soils are subject to shaking, causing the soils to lose cohesion. The project site is not identified as being within an area susceptible to liquefaction.<sup>43</sup> Because the project site would not be highly susceptible to liquefaction, a **less than significant impact** related to this issue would occur. No mitigation is required.
- iv. Discussion of Effects: The project site is within an area developed with urban uses and is not adjacent to or near any geographical feature identified by the City that would be susceptible to landslides.<sup>44</sup> The project site is generally flat and the likelihood of a landslide near or on the project site is low. Therefore, impacts associated with landslides are **less than significant**. No mitigation is required.

#### **b. Result in substantial soil erosion or the loss of topsoil?**

##### *Less than Significant Impact*

Discussion of Effects: Soils are classified by the NRCS into four hydrologic soils groups based on the soil's runoff potential. "Hydrologic soil group" is a term that represents a group of soils having similar runoff potential under similar storm and cover conditions. Soil properties that influence runoff potential are those that influence the minimum rate of infiltration for bare soil after prolonged wetting. The project site contains Hesperia loamy fine sand, 2 to 9 percent slopes and is considered well drained.<sup>45</sup> Runoff of Hesperia loamy fine sand is considered slow.<sup>46</sup> Therefore, Hesperia loamy fine sand is considered to have a low runoff or erosion potential.

Although the project site soils have a low runoff or erosion potential, the proposed project would require the excavation and movement of on-site soils, which could provide for runoff or erosion issues. State and federal regulations require the project to include a National Pollutant Discharge Elimination System (NPDES) permit and to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) establishing erosion and sediment controls for construction activities. The SWPPP identifies Best Management Practices (BMPs) to limit soil erosion during project construction. Compliance with State and federal requirements will ensure that the proposed project will have a **less than significant impact** related to soil erosion or loss of topsoil. No mitigation is required.

#### **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-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?**

##### *Less than Significant Impact*

Discussion of Effects: Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal motion. Subsidence is caused by a variety of activities, which include

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<sup>43</sup> *Seismic Hazard Areas*. City of Hesperia General Plan. Exhibit 3.6-3. Hogle-Ireland, Inc. May 2010.

<sup>44</sup> *Ibid.*

<sup>45</sup> *Web Soil Survey*. United States Department of Agriculture, 2017. <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed January 16, 2018.

<sup>46</sup> *Soil Survey of San Bernardino County California*. Page 44. United States Department of Agriculture. February 1986.

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(but are not limited to) withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydro-compaction. The project does not include the on-site removal of groundwater or pumping of oil and/or gas.

As identified above, the project site is not located within landslide or liquefaction zones.<sup>47</sup> A field investigation consisting of five soil borings was performed by Earth Mechanics, Inc. on June 9 and 10, 2016, for the bridge and roadway along Rancho Road. Because the subsurface soils are granular, ground settlements due to new fills are expected to be small and to occur during embankment construction. Based on the data available, maximum calculated ground subsidence due to new fills is estimated to be about one-half inch and no settlement period is required for pile construction.<sup>48</sup> Surficial stability is not a design concern for embankment slopes with a gradient of 2H:1V or flatter. To promote surficial stability, proper surface drainage devices and erosion control shall be implemented.

General Plan Goal SF-1 is implemented to minimize injury, loss of life, and property damage as a result of seismic hazards and other geologic hazards such as slope instability, compressible and collapsible soils, and subsidence through the following implementation policies:

- Preparation of a project-specific geotechnical investigation and implementation of all applicable recommendations therein (Policy SF-1.2).
- Routine inspections of grading operations by City staff (Policy SF-1.3).
- City staff review and approve project-specific geotechnical investigation and implementation of all applicable recommendations therein (Policy SF-1.4).

Pursuant to General Plan Goal SF-1, the project will be designed and constructed to withstand seismic activity in accordance with the latest Caltrans Seismic Design Criteria (SDC) and Seismic Loading Criteria (SLC) of the California Department of Water Resources (DWR) State Water Project.<sup>49</sup> Accordingly, a project-specific Foundation Report (Appendix C) was prepared for the bridge and roadway along Rancho Road. Proper engineering design and construction in conformance with Caltrans SDC and DWR SLC standards and project-specific geotechnical recommendations (**Standard Condition GEO-01**) would ensure that the project is not developed on unstable geologic units or soils.

**Standard Condition:** No mitigation is required; however, the following Standard Condition is a regulatory requirement that would be implemented to ensure impacts related to unstable geologic units or soils remain **less than significant**.

**Standard Condition GEO-01:** Prior to the approval of grading and/or building permits, the City shall design the project in conformance with applicable provisions of the Caltrans Seismic Design Criteria, Seismic Loading Criteria of the California Department of Water Resources State Water Project, and the recommendations cited in Section 6.0 of the project-specific Foundation Report. Geotechnical recommendations include remedial earthwork and/or ground improvement to provide a sufficient layer of engineered fill or densified soil beneath the structural footings/foundations, as well as proper surface drainage devices and erosion control.

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<sup>47</sup> *Seismic Hazard Areas, City of Hesperia General Plan*. Exhibit 3.6-3. Hogle-Ireland, Inc. May 2010.

<sup>48</sup> *Foundation Report for Rancho Road Bridge (Replace) over California Aqueduct, Hesperia, California*. Page 22. Earth Mechanics, Inc., January 29, 2018.

<sup>49</sup> *State Water Project Seismic Loading Criteria Report*. California Department of Water Resources, Division of Engineering. 2012, as amended.

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Verification testing must be performed upon completion of ground improvements to confirm that the compressible soils have been sufficiently densified. This measure shall be implemented to the satisfaction of the Development Services Department.

Proper engineering design and construction in conformance with Caltrans SDC and DWR SLC standards and project-specific geotechnical recommendations (**Standard Condition GEO-01**) would ensure potential impacts from landslides or slope instabilities, subsidence and/or collapse, or lateral spreading at the project site would be **less than significant**. No mitigation is required.

**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?**

*Less than Significant Impact*

Discussion of Effects: Expansive soils generally have a substantial amount of clay particles that can give up water (shrink) or absorb water (swell). The change in the volume exerts stress on structures and other loads placed on these soils. The extent or range of the shrink/swell is influenced by the amount and kind of clay present in the soil. The occurrence of these soils is often associated with geologic units having marginal stability. Expansive soils can be widely dispersed and they can occur in hillside areas as well as low-lying alluvial basins.

Soils on site are Hesperia loamy fine sand, 2 to 9 percent slope. Based on preliminary field investigation and laboratory testing data, soil materials within the upper stratigraphy of the Ranchoero Road alignment have a very low potential for expansion.<sup>50</sup> Furthermore, Hesperia loamy fine sand covering the proposed project site is anticipated to have a low shrink-swell potential.<sup>51</sup> Development of the proposed project site will be required to adhere to City design and engineering standards. Through implementation of Caltrans SDC and DWR SLC standards and project-specific geotechnical recommendations (**Standard Condition GEO-1**), impacts associated with expansive soils would be **less than significant**. No mitigation is required.

**e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

*No Impact*

Discussion of Effects: The proposed project is a roadway improvement project that does not have a septic or alternative waste disposal system component; therefore, alternative wastewater disposal systems would not be utilized. **No impact** would occur and no mitigation is required.

**f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: The project site is underlain by young wash deposits, Unit 3 (Qyf<sub>3</sub>) of the middle Holocene epoch (i.e., younger than 12,000 years).<sup>52</sup> Holocene alluvial deposits are typically too young to

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<sup>50</sup> *Ranchoero Road Widening Project Draft Environmental Impact Report (SCH# 2012061058)*. Page 2-94. City of Hesperia and County of San Bernardino. December 2012.

<sup>51</sup> *Soil Survey of San Bernardino County California*. Page 44. United States Department of Agriculture. February 1986.

<sup>52</sup> *Preliminary Geologic Map of the San Bernardino 30' x 60' Quadrangle, California*. United States Geological Survey. Douglas M. Morton and Fred K. Miller. 2003.

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yield paleontological resources; however, these deposits may be underlain by Pleistocene sediments, which a potential to yield paleontological resources.

The Rancho Road corridor was analyzed for paleontological sensitivity in support of the Rancho Road Widening Project.<sup>53</sup> Preliminary geotechnical borings reveal between 3 and 7 feet of artificial fill along Rancho Road as a result of construction of the existing roadway and construction of the California Aqueduct likely generated additional artificial fill in the project site. However, construction of the proposed project is expected to reach depths of at least 20 feet below grade during drilling for driving piles, a depth that may encounter native Holocene or Pleistocene deposits; therefore, a potential exists that the project may encounter paleontological resources. The following measures have been identified to address this potential impact.

#### **Mitigation Measures**

**GEO-01** Prior to commencement of construction activities, the City shall ensure a qualified paleontological monitor has been retained to monitor ground disturbance activities of native deposits (below identified levels of artificial fill.) During construction, the paleontological monitor shall be present as deemed appropriate to monitor construction-related grading, excavation, trenching, and/or augering in areas with a high potential for paleontological resources to occur. Paleontological monitoring shall include inspection of exposed rock units and microscopic examination of matrix to determine if fossils are present. Upon the advice of the paleontological monitor, the Construction Manager shall have the authority to temporarily divert excavations or drilling away from exposed fossils to recover the fossil specimens and collect associated data efficiently and professionally.

**GEO-2** If paleontological resources are encountered during the course of ground disturbance, work in the immediate area of the find shall be redirected and a qualified paleontologist shall be retained to assess the find for scientific significance. If determined to be significant, the fossil shall be collected from the field. The paleontologist may also make recommendations regarding additional mitigation measures, such as paleontological monitoring. Scientifically significant resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository.

**GEO-03** In the event any paleontological resources are encountered, a Paleontological Resources Report shall be prepared and submitted to the City. The report shall include a description and inventory list of recovered fossil materials, a (confidential) map showing the location of paleontological resources found in the field, determinations of sensitivity and significance, and a statement by the paleontological resource specialist that project impacts to paleontological resources have been mitigated to less than significant levels. This measure shall be implemented to the satisfaction of the City Development Services Department.

With implementation of **Mitigation Measures GEO-01** through **GEO-03**, impacts to unique paleontological resources or sites or unique geologic features would be reduced to **less than significant levels with mitigation incorporated**.

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<sup>53</sup> *Rancho Road Widening Project Draft Environmental Impact Report (SCH# 2012061058)*. Pages 2-74 to 2-75. City of Hesperia and County of San Bernardino. December 2012.

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**3.8 GREENHOUSE GAS EMISSIONS**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

*Less than Significant Impact*

Discussion of Effects: The replacement bridge would be constructed for future accommodation of six lanes in support of the City’s General Plan “ultimate” buildout of Ranchoero Road as a six-lane *Special Major Arterial* roadway, but it would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project<sup>54</sup> and include a shared pedestrian/bike path in conformance with the City, federal, and Caltrans programs and procedures.

The project would generate short-term and long-term emissions of greenhouse gases (GHGs) during construction and operation (respectively) of the proposed replacement bridge, approach roadways, and ancillary components described in detail in Section 2.0 of this Initial Study. The impacts associated with these emissions are projected from the GHG emissions analysis conducted as part of the approved Ranchoero Road Widening Project,<sup>55</sup> which includes the widening of the roadway, but not the bridge over the Aqueduct. Although the proposed project site is located within this segment of Ranchoero Road, the replacement bridge, approach roadways, and ancillary components associated with the proposed bridge replacement were not included in the analysis of GHG emissions impacts in the approved Ranchoero Road Widening Project EIR. However, as the approved Ranchoero Road Widening Project stretches 5 miles between Coriander Drive and 7<sup>th</sup> Avenue, and the proposed project site encompasses approximately 0.40 mile of this segment of Ranchoero Road. Therefore, it is reasonable to conclude that any impacts from generation of GHG emissions during construction and operation of the proposed project would be no more severe than those analyzed under the approved Ranchoero Road Widening Project, which are summarized as follows:<sup>56</sup>

GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>,

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<sup>54</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058.* Page S-6. City of Hesperia and County of San Bernardino. June 2013.

<sup>55</sup> *Ibid.* Pages 2-108 through 2-119.

<sup>56</sup> *Ibid.*

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CH<sub>4</sub>, and N<sub>2</sub>O. 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 minimized to some degree by longer intervals between maintenance and rehabilitation events. Therefore, generation of GHG emissions during construction would be **less than significant**.

Since the proposed replacement bridge would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project, which was determined to result in less than significant generation of greenhouse gas emissions,<sup>57</sup> and the proposed project would not add vehicle trips within the project site because it does not propose additional lanes to the anticipated four-lane road already analyzed under the approved Ranchoero Road Widening Project EIR, the proposed project would not induce growth within the City. Therefore, project-specific generation of greenhouse gases during operation would correspond to that anticipated under the approved Ranchoero Road Widening Project, which was determined to be **less than significant**. No mitigation is required.

**b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

*Less than Significant Impact*

Discussion of Effects: The replacement bridge would be constructed for future accommodation of six lanes in support of the City's General Plan "ultimate" build out of Ranchoero Road but it would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project<sup>58</sup> and include a shared pedestrian/bike path. The approved Ranchoero Road Widening Project is included in the adopted 2012 Regional Transportation Plan (RTP) and the 2010–2011 RTIP *Annual Listing of Obligated Projects*. The Ranchoero Road Widening Project's influence on mobile source emissions was already incorporated into the air quality modeling used in MDAQMD's conformity determinations for the 2012 RTP and 2008 RTIP and its *2012–2035 RTP Transportation Conformity Report*. The Ranchoero Road Widening Project's inclusion in a conforming RTP/RTIP is one indicator that it would not produce a substantial regional impact from mobile emissions.

The proposed replacement bridge would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project EIR, which was determined to result in less than significant generation of greenhouse gas emissions.<sup>59</sup> The proposed project would not add vehicle trips within the project site because the project does not propose additional lanes to the four-lane road already analyzed under the approved Ranchoero Road Widening Project. Therefore, the proposed project would not induce growth within the City beyond that which was already anticipated by local and regional plans.

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<sup>57</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-119. City of Hesperia and County of San Bernardino. June 2013.

<sup>58</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page S-6. City of Hesperia and County of San Bernardino. June 2013.

<sup>59</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-119. City of Hesperia and County of San Bernardino. June 2013.

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One of the main strategies of the City’s 2010 Climate Action Plan (CAP) to reduce GHG emissions is to make Hesperia’s transportation and land use systems more efficient. Transportation (i.e., automobile) sources are by far the greatest generators of GHG emissions and therefore provide for the greatest opportunity to reduce emissions.<sup>60</sup> According to the Final EIR prepared for the approved Ranchoero Road Widening Project, existing daily traffic volume along Ranchoero Road averages 7,781 VPD and opening year VPD upon completion of the Ranchoero Road Widening Project (but without the proposed project) would increase to an average of 12,674, corresponding to a V/C<sup>61</sup> ratio of 0.41 (LOS A) along the majority of the Ranchoero Road alignment, excluding along the bridge.<sup>62</sup> The reduction of the number of through lanes from four lanes to two lanes at either end of the bridge would act as a choke point for vehicles traveling along Ranchoero Road. Due to this condition, congestion is anticipated to be heavier (V/C of 0.87) within the general area of the bridge compared to the approved four-lane segments of the widened Ranchoero Road on either side of the bridge. Therefore, it is reasonable to conclude that construction of the proposed project would alleviate the choke point at the California Aqueduct crossing, thereby increasing average travel speeds and reducing GHG emissions in accordance with the City’s CAP. Therefore, the project will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be **less than significant** and no mitigation is required.

### 3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>60</sup> *Ibid.* Page 2-117.

<sup>61</sup> V/C ratio 0.00–0.60 = LOS A; V/C ratio 0.61–0.70 = LOS B; V/C ratio 0.71–0.80 = LOS C; V/C ratio 0.81–0.90 = LOS D; V/C ratio 0.91–1.00 = LOS E; V/C ratio >1.00 = LOS F.

<sup>62</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058.* Page 2-204. City of Hesperia and County of San Bernardino. June 2013.



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|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| <p><b>d.</b> Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <p><b>e.</b> 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?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <p><b>f.</b> Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <p><b>g.</b> Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?</p>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

*Less than Significant Impact*

Discussion of Effects: Construction of the project has the potential to create a hazard to the public or environment through the routine transportation, use and disposal of construction-related hazardous materials such as fuels, oils, solvents, and other materials. These materials are typical of materials delivered to construction sites. These materials would be stored temporarily on site in small quantities and therefore would not pose a significant threat to the public. Oversight by the appropriate federal, State, and local agencies, and compliance with applicable regulations related to the transport, storage, and disposal of hazardous materials would ensure construction of the proposed project would not create a significant hazard to the public or the environment during construction.

Being a transportation improvement project, the operation of the proposed project would not include uses requiring the use, storage, disposal, or transport of toxic, flammable, explosive, or otherwise hazardous materials that could cause serious environmental damage. All activity involving hazardous substances (e.g., transport) during the operation of the project would be conducted in accordance with applicable local, State, and federal safety standards.

Ranchero Road is identified in the City’s General Plan as a major east-west roadway. The proposed replacement bridge would be constructed for future accommodation of six lanes in support of the City’s “ultimate” buildout of Ranchero Road as a six-lane *Special Major Arterial* roadway, would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchero Road pursuant to the Ranchero Road Widening Project. The proposed wider bridge and approach roadways would result in improved sight lines, wider shoulders, and an overall safer travel corridor which would reduce the risk of hazardous material disruption and exposure. Through compliance with applicable regulations related to the transport, storage, and disposal of hazardous materials, impacts would be **less than significant** and no mitigation is required.

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- 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?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: The following discussion is based on the findings of the Rancho Road Widening Project Final EIR.<sup>63</sup> During the removal of the old roadway and bridge and the construction of the new bridge, a nominal quantity of various hazardous materials and fluids, consisting of fuels, lubricants, and other materials typically associated with construction activities may be present in the project area. Soils adjacent to paved areas may contain aerially deposited lead (ADL) from past vehicle exhaust. Additionally, the bearing pads and hinge and joint seal materials within existing bridge and existing utility pipelines within the right-of-way may contain asbestos-containing materials (ACM). The existing graffiti and/or bridge coatings may contain lead-based paint (LBP) or other heavy metals. Lead and other heavy metals may be present within yellow thermoplastic paint markings on the pavement and the existing bridge coatings. Due to the potential for hazardous materials to be encountered within the project site **Mitigation Measure HAZ-01** has been identified.

Materials containing trace amount of asbestos (less than 1 percent) are not considered hazardous by the EPA. However, both the Federal Occupational Safety and Health Administration (OSHA) and the State Occupational Safety and Health Administration (Cal-OSHA) require employers to implement specific work practices to protect workers from airborne asbestos exposure as building materials containing trace amounts of asbestos can generate significant concentrations of airborne asbestos fibers when disturbed. Because implementation of the project would require the demolition of an existing bridge that may have materials containing asbestos and lead-based paint, **Mitigation Measure HAZ-02** has been identified.

Because there is a potential for soil containing ADL to be present within the project site, **Mitigation Measure HAZ-03** has been identified. There is also a small potential for other heavy metals such as chromium to be present within the yellow thermoplastic paint markings on the pavement within the project area. **Mitigation Measure HAZ-04** has been identified as reducing impacts related to this issue.

#### **Mitigation Measures**

**HAZ-01** Prior to commencement of demolition activities, the construction contractor shall prepare and implement a Worker Health and Safety Plan subject to the review and approval of the City and the California Department of Toxic Substances Control. This measure shall be completed to the satisfaction of the City Development Services Department.

**HAZ-02** Prior to any demolition activities, a Phase II site investigation shall be conducted to verify the presence of any asbestos-containing material (ACM) or lead-based paint (LBP) within any structures proposed for demolition constructed prior to 1979. If no materials containing ACM or LBP are identified, no further investigations are required. If ACM and/or LBP are identified, material containing ACM and/or LBP shall be removed pursuant to applicable State and federal regulations.

All ACM and/or LBP shall be removed from the on-site structures and hauled to a licensed receiving facility and disposed of by a certified company. Following completion of the material removal, a report documenting the abatement procedures used, the volume of ACM and/or LBP removed, where the materials were moved to, and transportation/disposal manifests or dump

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<sup>63</sup> *Rancho Road Widening Project Final Environmental Impact Report (SCH# 2012061058)*. Pages 2-120 to 2-130. City of Hesperia and County of San Bernardino. June 2013.

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tickets shall be compiled with a copy submitted to the City of Hesperia Engineering Department. This measure shall be completed to the satisfaction of the City Engineering Department.

**HAZ-03** Prior to any construction activities, the soils adjacent to the existing roadway shall be sampled and tested for aerially deposited lead (ADL) and other materials in accordance with applicable ADL testing guidelines. If ADL concentrations are detected in existing soils, such soils will be handled in accordance with State and federal regulations and Caltrans Standard Specifications. If contaminated soils are not identified within or adjacent to the project site, no further mitigation is warranted. This measure shall be completed to the satisfaction of the City Development Services Department.

**HAZ-04** Prior to any construction activities, pavement within the project site containing yellow thermoplastic markings shall be tested for lead-based paint (LBP) and other heavy metals. If markings are found to contain LBP and/or other heavy metals, then the material will be handled in accordance with Caltrans Standard Specification and corresponding Standard Special Provision. If no LBP materials are identified within the project site, no further mitigation is needed. This measure shall be completed to the satisfaction of the City Development Services Department.

Construction and operation of the proposed project would be conducted in accordance with all applicable State and federal laws. Compliance with all applicable laws and regulations and adherence to **Mitigation Measures HAZ-01 through HAZ-04** would reduce the potential impact associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment to a **less than significant level with implementation of mitigation**.

**c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: The nearest schools to the project site are Just-4-Kids Preschool located at 15420 Ranchoero Road and Just-4-Toddlers Preschool located at 15400 Ranchoero Road north east of the project site. In addition to bridge replacement and approach roadway widening, the proposed project includes construction of a cul-de-sac and driveway on APN 0412-182-26 (15380 Ranchoero Road) along the north side of Ranchoero Road to provide access to the Just-4-Kids Preschool property. Based on the findings of the Ranchoero Road Widening Project Final EIR, no known properties within a quarter mile of these schools require remediation.<sup>64</sup>

Construction and operation of the proposed project would be conducted in accordance with all applicable State and federal laws. Additionally, the proposed wider bridge and approach roadways would result in improved sight lines, wider shoulders, and an overall safer travel corridor, which would reduce the risk of hazardous material disruption and exposure to any nearby schoolchildren. Compliance with all applicable laws and regulations and adherence to **Mitigation Measures HAZ-01 through HAZ-04** would reduce the risk of hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school to a **less than significant with implementation of mitigation**.

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<sup>64</sup> *Ranchoero Road Widening Project Final Environmental Impact Report (SCH# 2012061058)*. Page 2-128. City of Hesperia and County of San Bernardino. June 2013.

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- 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?**

*No Impact*

Discussion of Effects: Based on the findings of the Ranchoero Road Widening Project Final EIR, the project site is not identified as listed in hazardous databases pursuant to Government Code Section 65962.5.<sup>65</sup> According to the General Plan EIR, the nearest site listed on the “Cortese List” (named after the Legislator who authored the legislation that enacted it) pursuant to Government Code Section 65962.5 is in the proximity of Santa Fe Avenue and Ash Street in Hesperia at an elevation of 3,300 feet above mean sea level (amsl) approximately 1.8 miles northeast of the project site.<sup>66</sup> The Cortese List did not list the specific contaminants, if any, at the listed site. Nevertheless, the project site is located at an elevation of 3,480 feet amsl, which is upgradient of the nearest site listed on the Cortese List. All other sites listed on the Cortese List are located farther away and relatively downgradient from the project site.<sup>67</sup> Therefore, **no impact** would occur from sites listed on the Cortese List pursuant to Government Code Section 65962.5. No mitigation is required.

- 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?**

*No Impact*

Discussion of Effects: The project site is located approximately 0.75 mile northwest of the Hesperia Airport, within “Referral Area C,” and the proposed project is considered an acceptable use within this airport hazard zone.<sup>68,69</sup> According to the Hesperia Airport Comprehensive Land Use Plan, aircraft noise within “Referral Area C” is anticipated to be minimal. Additionally, the proposed project consists of roadway and bridge improvements and would not result in the development of structures or facilities increasing the number of persons residing or working in the project area. **No impact** would occur from airport hazards. No mitigation is required.

- f. **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

*Less than Significant Impact*

Discussion of Effects: The project includes improvements to Ranchoero Road within the project area and does not include features that would permanently interfere with emergency access or evacuation plans. Construction activities that may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. A detailed transportation management plan is required to be prepared for any roadway closures and anticipated detours of traffic during construction.

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<sup>65</sup> *Ibid.*

<sup>66</sup> *Hazards and Hazardous Materials.* Page 3.7-25. Hesperia General Plan Update Administrative Draft Environmental Impact Report. May 26, 2010.

<sup>67</sup> *Ibid.* Exhibit 3.7-1, Hazardous Materials Site Map.

<sup>68</sup> *Comprehensive Land Use Plan, Hesperia Airport.* Page 13. San Bernardino County Airport Land Use Commission. January, 1991.

<sup>69</sup> *County Development Code.* San Bernardino County. 2010.

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As detailed in the Rancho Road Widening Project Final EIR, construction of the proposed project would be consistent with the City’s Emergency Operations Plan adopted on April 3, 2002, for the purposes of coordinating efforts during local, State, and/or federal emergency events, including response to hazardous materials incidents during any road closures.<sup>70</sup> Adherence to these measures would ensure potential impacts related to conflict with an adopted emergency response plan or emergency evacuation plan would be **less than significant**. No mitigation is required.

**g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

*No Impact*

Discussion of Effects: The project site is not located within a Fire Hazard Area or within an area susceptible to wildfires.<sup>71</sup> Areas surrounding the project site consist of developed residential and infrastructure uses. The proposed project includes replacement of the Rancho Road Bridge crossing the California Aqueduct, which does not include construction of habitable structures that would expose persons or property to increased risk from wildland fires. Construction of the wider bridge will facilitate a safer movement of evacuation traffic during a future wildfire. **No impact** related to this issue would result from the proposed project. No mitigation is required.

**3.10 HYDROLOGY AND WATER QUALITY**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>a.</b> Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>b.</b> Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management in the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>c.</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>i.</b> Result in substantial erosion or siltation on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<sup>70</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058. Pages 2-128 and 2-129. City of Hesperia and County of San Bernardino. June 2013.*

<sup>71</sup> *Ibid.*

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- |      |   |                          |                          |                                     |                                     |
|------|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| ii.  | Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iii. | Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iv.  | Impede or redirect flood flows?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d.   | Result in flood hazard, tsunami, or seiche zones, or risk release of pollutants due to project inundation?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e.   | Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

*Less than Significant Impact*

Discussion of Effects: The proposed project will be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of storm water. This permit ensures that BMPs such as vegetated swales, buffers, and/or infiltration areas are incorporated to maintain water quality. The project site is located within the jurisdiction of the Lahontan RWQCB, in Hydrologic Sub-Area 628.20, which is part of the Upper Mojave Hydrologic Area. The Lahontan RWQCB designates beneficial uses for waters in the Mojave Watershed, which are identified in the Water Quality Control Plan for the Lahontan Basin (Basin Plan).<sup>72</sup> Prior to the commencement of construction, the City will be required to prepare a project-specific Water Quality Management Plan (WQMP) that addresses impacts to water quality and quantity in the post-development phase (i.e., project operational phase). These are standard regulatory requirements that apply to all Phase II roadway projects subject to NPDES permitting.

**Short-Term Construction Impacts.** It is possible that runoff during demolition, grading, and construction activities could result in the release of sediment and other urban pollutants into local drainage facilities. Coverage under an NPDES permit includes the submittal of a Notice of Intent (NOI) application to the State Water Resources Control Board (SWRCB), the receipt of a Waste Discharge Identification Number (WDID), and the preparation of a Storm Water Pollution Prevention Plan (SWPPP) for construction discharges. To protect water quality over the short term (i.e., during construction), the project-specific SWPPP will describe the construction contractor’s activities to comply with the requirements in the NPDES permit. The SWPPP is intended to facilitate a process whereby the operator evaluates potential pollutant sources at the site and implements BMPs designed to prevent or control the discharge of pollutants in storm water runoff.

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<sup>72</sup> *Ranchero Road Widening Project Final Environmental Impact Report (SCH# 2012061058)*. Page 2-131. City of Hesperia and County of San Bernardino. June 2013.

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As part of the SWPPP, the City will identify BMPs to address water quality impacts associated with construction operations. Construction BMPs will include, but not be limited to, erosion control and sediment control BMPs 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 will be developed, and construction BMPs selected and implemented, to target pollutants of concern during construction. The construction BMPs will be designed to retain sediment and other pollutants on site so they will not reach receiving waters or degrade beneficial uses.

Table D lists BMPs for runoff control, sediment control, erosion control, and housekeeping that may be used during the demolition phase and during any future construction phase of the proposed project. The construction contractor would be required to operate and maintain these BMP controls throughout the duration of on-site demolition and construction activities to reduce the construction impacts on water quality.

**Table D: General Best Management Practices**

Runoff Control	Sediment Control	Erosion Control	Good Housekeeping
Minimize clearing Preserve natural vegetation Stabilize drainage ways	Install perimeter controls Install sediment trapping devices Inlet protection	Stabilize exposed soils Protect steep slopes Complete construction in phases	Create waste collection area Put lids on containers Clean up spills immediately

Source: National Menu of Stormwater Best Management Practices. <https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#main-content>. Accessed May 5, 2018.

The implementation of NPDES permits ensures that the State’s mandatory standards for the maintenance of clean water and the federal minimums are met. Soil erosion and sedimentation impacts would be reduced to **less than significant through implementation of the BMPs** detailed in an SWPPP and periodic inspections by RWQCB staff.

**Long-Term Operational Impacts.** The proposed project would require acquisition of additional ROW, replace the existing bridge with a wider bridge and, therefore, increase impervious surfaces on the project site. Pursuant to the requirements of the NPDES permit, the proposed project would be required to retain any additional runoff on site and discharge it to the storm drain system at rates that do not exceed pre-project conditions. Excess runoff generated by the project would be captured by BMPs.

As stated previously, the proposed project site is located within the jurisdiction of the Lahontan RWQCB, in Hydrologic Sub-Area 628.20, which is part of the Upper Mojave Hydrologic Area. The Jurisdictional Delineation prepared for the Ranchoero Road Widening Project identified ephemeral streams exhibiting an ordinary high water mark (OHWM) along both the north and south sides of Ranchoero Road on the west side of the California Aqueduct east of Kern Avenue. These streams are considered regional receiving water bodies for the proposed project and they appear to enter into urbanized storm drains at various distances after leaving the project site. These drainages flow during storm events and in the days shortly afterwards. Eventually, the waters from larger storm events flow from these drainages into the Antelope Valley Wash and discharge into the Mojave River.<sup>73</sup> Because these drainages are ephemeral, water quality parameters are not known or monitored, but high levels of sediment are anticipated to be

<sup>73</sup> *Drainage Report: Ranchoero Road Aqueduct Crossing*. Existing Drainage Facility Exhibit, Sheet 1 of 1. Cordoba Corporation. February 2018.

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present.<sup>74</sup> Meanwhile, the California Aqueduct is not listed on the Environmental Protection Agency (EPA)-approved 303(D) List of Water Quality Limited Segments.<sup>75</sup>

To address potential water contaminants, the proposed project will incorporate a WQMP and include BMPs for source control, pollution prevention, site design, low impact development implementation, and structural treatment control. BMPs or project design features in the project-specific WQMP would ensure long-term water quality impacts are reduced to **less than significant levels**.

**Standard Conditions:** No mitigation is required; however, compliance with the provisions of the NPDES permit and preparation of a project-specific WQMP are regulatory requirements that apply to the proposed roadway project. These requirements are detailed below as **Standard Conditions HYD-01** through **HYD-03** to be included in the conditions of approval for this project.

**Standard Condition HYD-01:** Prior to commencement of construction, the City shall file and obtain a Notice of Intent (NOI) with the Regional Water Quality Control Board in order to be in compliance with the State National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit for discharge of surface runoff associated with construction activities. Evidence that this has been obtained (i.e., a copy of the Waste Discharger's Identification Number) shall be retained by the City for coverage under the NPDES General Construction Permit. The NOI shall address the potential for an extended and discontinuous construction period based on funding availability. This measure shall be implemented to the satisfaction of the City Development Services Department.

**Standard Condition HYD-02:** Prior to commencement of construction, the City shall have on file a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall include a surface water control plan and erosion control plan citing specific measures to control on-site and off-site erosion during the entire demolition, grading, and construction period. In addition, the SWPPP shall emphasize structural and nonstructural Best Management Practices (BMPs) to control sediment and non-visible discharges from the site. The SWPPP shall include inspection forms for routine monitoring of the site during both the demolition and construction phases to ensure National Pollutant Discharge Elimination System (NPDES) compliance and that additional BMPs and erosion control measures will be documented in the SWPPP and utilized if necessary. The SWPPP shall address the potential for an extended and discontinuous demolition and construction period based on funding availability. The SWPPP shall be kept on site for the entire duration of project demolition and construction and shall be available to the local RWQCB for inspection at any time. BMPs to be implemented may include the following:

- Sediment discharges from the site may be controlled by the following: sandbags, silt fences, straw wattles and temporary basins (if deemed necessary), and other discharge control devices. The construction and condition of the BMPs shall be periodically inspected during demolition and construction, and repairs shall be made when necessary as required by the SWPPP.
- Materials that have the potential to contribute to non-visible pollutants to storm water must not be placed in drainage ways and must be contained, elevated, and placed in temporary storage containment areas.

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<sup>74</sup> *Ranchero Road Widening Project Final Environmental Impact Report (SCH# 2012061058)*. Page 2-132. City of Hesperia and County of San Bernardino. June 2013.

<sup>75</sup> *Ibid.*



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- All loose piles of soil, silt, clay, sand, debris, and other earthen material shall be protected in a reasonable manner to eliminate any discharge from the site. Stockpiles shall be surrounded by silt fences and covered with plastic tarps.
- In addition, the construction contractor shall be responsible for performing and documenting the application of BMPs identified in the SWPPP. Weekly inspections shall be performed on sandbag barriers and other sediment control measures called for in the SWPPP. Reports and inspection logs shall be maintained by the contractor and reviewed by the City. In the event that it is not feasible to implement specific BMPs, the City of Hesperia can make a determination that other BMPs will provide equivalent or superior treatment either on or off site.

This measure shall be implemented to the satisfaction of the City Development Services Department.

**Standard Condition HYD-03:** Prior to commencement of construction, the City shall prepare and retain a Water Quality Management Plan (WQMP). The City shall implement project design features identified in the WQMP. The WQMP shall demonstrate that any proposed on-site development plan includes Best Management Practices (BMPs) for source control, pollution prevention, site design, low impact development (LID) implementation, and structural treatment control. BMPs shall be designed and implemented to retain the project site's minimum design capture volume and hydromodification volume. BMPs must be demonstrated to capture 80 percent or more volume of annual runoff, or the 85<sup>th</sup> percentile 24-hour storm runoff event, or the flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity or equal to at least 2 times the 85th percentile hourly rainfall intensity as determined from local rainfall records in order to comply with the Statewide General (National Pollutant Discharge Elimination System) Permit No. CAS000004 for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Phase II MS4s). Periodic maintenance of any required infiltration basin and landscaped areas during project occupancy and operation shall be in accordance with the schedule outlined in the WQMP. This measure shall be implemented to the satisfaction of the City Development Services Department.

Since the WQMP is required as a matter of regulatory policy for roadway projects that would create or add 5,000 square feet or greater of new impervious surface area, it is reasonable to conclude that the required measures and features detailed in the WQMP to safeguard water quality would be incorporated into the proposed project. Adherence to **Standard Conditions HYD-01** through **HYD-03** and the requirements included in the NPDES permit, SWPPP, and WQMP would reduce potential water quality impacts to **less than significant**. No mitigation is required.

**b. Substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management in the basin?**

*No Impact*

Discussion of Effects: There are no known drinking water reservoirs, recharge basins, or treatment BMPs within the proposed project site.<sup>76</sup> The Hesperia Water District pumps water directly from the Alto Subarea subbasin of the Mojave River Groundwater Basin. Because the project is a roadway

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<sup>76</sup> *Ranchero Road Widening Project Final Environmental Impact Report (SCH# 2012061058)*. Page 2-132. City of Hesperia and County of San Bernardino. June 2013.

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improvement project and does not include any habitable or commercial functions, it would not generate any demand for water or require the withdrawal of groundwater. The replacement of the bridge would require the excavation of soil for the bridge footings. However, the excavation of the soil is not anticipated to affect the groundwater basin, as groundwater in the project area was not encountered in geotechnical borings excavated to varying depths between 30 and 70 feet below grade.<sup>77</sup>

The proposed project is expected to create or add 5,000 square feet or greater of new impervious surface area and will be subject to the provisions of the Phase II MS4 permit. Through implementation of **Standard Condition HYD-03**, a project-specific WQMP will be developed to specify BMPs designed and implemented to retain the project site's minimum design capture volume and hydromodification volume. Storm water will be captured by the proposed drainage facilities described above such that post-development storm water runoff volume or time of concentration would not exceed pre-development storm water runoff. Additional project design features, such as landscaped areas and maintenance of existing surface flows across the project site into the drainage facilities, would further maintain the site's existing drainage pattern and capacity to infiltrate stormwater runoff. Periodic maintenance of any required drainage facilities and landscaped areas during project operation will be in accordance with the schedule outlined in the WQMP.

Since there would not be any direct withdrawal of water with the implementation of the proposed project, **no impact** would occur, and no mitigation is required.

- 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 off site?**
  - iii **Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**
  - iv **Impede or redirect flood flows?**

#### *Less than Significant Impact*

- i. Discussion of Effect: Limits for Ranchoero Road drainage improvements are determined by proposed changes in vertical alignment of Ranchoero Road. The proposed alignment will result in a high elevation point approximately 50 feet west of the bridge. As detailed in the project-specific Drainage Report (Appendix C), west of the bridge, runoff will discharge into one of two proposed curb opening catch basins. The proposed catch basins will be placed at a low point on both sides of Ranchoero Road, approximately 560 feet west of the bridge. The north side catch basin will discharge into a proposed 18-inch reinforced concrete pipe (RCP) lateral connecting with the south side catch basin. The stormwater runoff would then be conveyed to a proposed 24-inch RCP main storm drain line. As it crosses the bridge, this runoff is conveyed via a 24-inch high-density polyethylene pipe [HDPE]). Runoff in the 24-inch RCP will then discharge into a detention basin, located on the south side of Ranchoero Road approximately 400 feet east of the bridge. Once the detention basin reaches full capacity, overflow will discharge through two parkway drains. The runoff conveys back to the south side of Ranchoero Road via curb and gutter flowing easterly to existing catch basins located just

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<sup>77</sup> *Drainage Report: Ranchoero Road Aqueduct Crossing*. Page 2. Cordoba Corporation. February 2018.

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west of the intersection of Rancho Road/7<sup>th</sup> Avenue. Flows at these catch basins continue through existing drainage features.

Runoff east of the bridge, runoff will be conveyed via curb and gutter until it discharges outside of the project limits, matching existing flow conditions easterly to the existing catch basins at the intersection of Rancho Road/7<sup>th</sup> Avenue. Stormwater runoff on the north side of Rancho Road will be conveyed along curb and gutter and discharge via curb outlet at the end of new proposed cul-de-sac. Runoff collected through municipal storm water facilities flow to the Antelope Valley Wash until discharging into the Mojave River.

The hydrologic/drainage analysis (Appendix C) was conducted per the guidelines and procedures described in the *San Bernardino County Hydrology Manual*. Proposed catch basins are designed to efficiently capture runoff quantities that ensure safe passage of vehicles and prevent inconvenience or hazards to pedestrians.<sup>78</sup> As detailed in the project-specific Drainage Report, implementation of these proposed drainage facilities would provide sufficient drainage along the Rancho Road corridor and would minimize flooding within corridor improvements.

Proper engineering design and construction in conformance with the requirements of the City, the SWRCB Statewide General NPDES Permit No. CAS000004 for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Phase II MS4s), and project-specific recommendations outlined in a WQMP would ensure impacts related to water quality standards or waste discharge requirements remain **less than significant**.

Demolition and subsequent construction phases would disturb paved and/or vegetated surfaces and expose on-site soils to erosion and siltation potential. Pursuant to **Standard Condition HYD-02**, the City shall prepare a SWPPP prior to the issuance of a demolition permit and subsequent grading permit. The SWPPP will include a surface water control plan and erosion control plan citing specific measures to control on-site and off-site erosion during the entire demolition, grading, and construction period. In addition, the SWPPP will emphasize structural and nonstructural BMPs to control sediment and non-visible discharges from the site. The SWPPP will include inspection forms for routine monitoring of the site during both the demolition and construction phases to ensure NPDES compliance and that additional BMPs and erosion control measures will be documented in the SWPPP and utilized if necessary. The SWPPP will also address the potential for an extended and discontinuous demolition and construction period based on funding availability. Upon completion of construction, the project site would be paved and vegetated, which would prevent erosion and siltation of sediments. Through implementation of **Standard Condition HYD-02**, the project would not result in substantial erosion or siltation on or off site. Impacts would be **less than significant**, and no mitigation is required.

- ii. Discussion of Effect: As detailed in the project-specific Drainage Report, implementation of these proposed drainage facilities would provide sufficient drainage along the Rancho Road corridor and would minimize flooding within corridor improvements.

Additional project design features, such as landscaped areas and maintenance of existing surface flows across the project site into the drainage facilities, would further maintain the site's existing drainage pattern and prevent flooding on- and off-site. Periodic maintenance of any required

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<sup>78</sup> *Drainage Report: Rancho Road Aqueduct Crossing*. Pages 3 and 4. Cordoba Corporation. July 2019.

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drainage facilities and landscaped areas during project operation will be in accordance with the schedule outlined in the WQMP. With implementation of **Standard Condition HYD-03**, impacts related to substantial alteration of the existing drainage pattern of the site or area in a manner that would result in flooding on- and off-site would be **less than significant**. No mitigation is required.

- iii. Discussion of Effect: The purpose of the Phase II MS4 permit is to meet the SWRCB's requirements to mitigate for the negative impact of increases in storm water runoff caused by roadway projects that may create or add 5,000 square feet or greater of new impervious surface area. The project must incorporate BMPs that capture 80 percent or more volume of annual runoff, or the 85<sup>th</sup> percentile 24-hour storm runoff event, or the flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity or equal to at least twice the 85th percentile hourly rainfall intensity as determined from local rainfall records to be in compliance with the Phase II MS4 post-construction and site design requirements.

The project is expected to create or add 5,000 square feet or greater of new impervious surface area and is required to have coverage under the State's General Permit for Construction Activities (SWPPP). Pursuant to **Standard Condition HYD-02**, a project-specific SWPPP will be prepared and detail BMPs to be implemented during demolition and construction to reduce/eliminate adverse water quality impacts resulting from development. All impacts related to runoff during demolition, site preparation, and construction would be addressed by the SWPPP.

Pursuant to **Standard Condition HYD-03**, the City is responsible for preparing a project-specific WQMP to identify BMPs for implementation in accordance with the Phase II MS4 permit. Through implementation of **Standard Condition HYD-03**, BMPs will be designed and implemented to retain the project site's minimum design capture volume and hydromodification volume. Storm water will be captured by the proposed drainage facilities described above such that post-development storm water runoff volume or time of concentration would not exceed pre-development storm water runoff. Additional project design features, such as landscaped areas and maintenance of existing surface flows across the project site into the drainage facilities, would further maintain the site's existing drainage pattern and prevent additional sources of polluted runoff. Periodic maintenance of any required drainage facilities and landscaped areas during project occupancy and operation will be in accordance with the schedule outlined in the WQMP.

The proposed project would require acquisition of additional ROW, replace the existing bridge with a wider bridge and, therefore, increase impervious surfaces on the project site. Any sources of storm water pollution would be addressed through adherence to NPDES permit requirements. Implementation of **Standard Condition HYD-02** and **HYD-03** would ensure polluted runoff during demolition, site preparation, and construction would be addressed by the SWPPP, and post-construction storm water runoff volume or time of concentration would not exceed pre-construction conditions. Therefore, impacts related to the creation or contribution of runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff would be **less than significant**. No mitigation is required.

- iv. Discussion of Effect: According to the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer, the project site is located within Panel 06071C6490H in an "area of minimal

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flood hazard.”<sup>79</sup> The proposed project consists of a bridge replacement designed to improve existing freeboard clearances, withstand floodwaters and debris flows, and further reduce the chance of inundation from water conveyed by the California Aqueduct. The proposed project is not located within a 100-year flood hazard area. Furthermore, the project includes sufficient drainage along the Ranchoero Road corridor and would minimize flooding within corridor improvements; therefore, the project would not impede or redirect flood flows. **No impact** would occur, and no mitigation is required.

#### **d. Result in flood hazard, tsunami, or seiche zones, or risk release of pollutants due to project inundation?**

##### *No Impact*

Discussion of Effects: A tsunami is a series of waves generated in a body of water by a pulsating or abrupt disturbance that vertically displaces water. Inundation of the proposed project site by a tsunami is highly unlikely, as the project site is approximately 62 miles northeast of the Pacific Ocean.

Seiches are oscillations in enclosed bodies of water that are caused by a number of factors, most often wind or seismic activity. The California Aqueduct is an enclosed body of water that would be spanned by the proposed project. However, impacts from the risk of a seiche would be **less than significant** since the proposed project consists of a bridge replacement designed to improve existing freeboard clearances, withstand floodwaters and debris flows, and further reduce the chance of inundation from water conveyed by the California Aqueduct.

A mudflow occurs when there is fast-moving water and a great volume of sediment and debris that surges down a slope, stream, canyon, arroyo, or gulch with tremendous force. The project site is not located in an area of the City where landslide susceptibility is identified.<sup>80</sup> There are no hillsides adjacent to or within the immediate project vicinity. Additionally, the proposed bridge would be designed to withstand floodwaters and debris flows and would be built to reduce the probability of floodwaters overflowing onto the bridge. No impacts associated with mudslides would occur and no mitigation is required.

The nearest dam to the project site is the Lake Silverwood Dam, located approximately 5.1 miles south of the project site at an elevation of approximately 3,150 feet amsl. The next nearest dam to the project site is the Mojave Forks Dam located approximately 5.7 miles southeast of the project site at an elevation of approximately 2,975 feet amsl. The project site is located at an elevation of approximately 3,475 feet amsl and is therefore not within the dam inundation area of either the Lake Silverwood Dam or the Mojave Forks Dam. Furthermore, both the Lake Silverwood Dam and the Mojave Forks Dam have been engineered and constructed to withstand the projected maximum accelerations that could be produced at the site by seismic events on known faults. As such, a seismically-induced failure of the dam is unlikely. In the remote event of dam failure, it is expected flood waters to follow the general course of the Mojave River to the northeast away from the project site. Therefore, **no impacts** from inundation would occur, and no mitigation is required. Adherence to **Standard Conditions HYD-01** through **HYD-03** and the requirements included in the NPDES permit, SWPPP, and WQMP would reduce potential water

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<sup>79</sup> FEMA's *National Flood Hazard Layer (Official)*. Panel 06071C6490H. Federal Emergency Management Agency. <http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=cbe088e7c8704464aa0fc34eb99e7f30&extent=-117.36432941921195,34.362722534244256,-117.24159153469064,34.4094715356583>. Accessed January 25, 2018.

<sup>80</sup> *Ranchoero Road Widening Project Final Environmental Impact Report (SCH# 2012061058)*. Page 2-106. City of Hesperia and County of San Bernardino. June 2013.

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quality impacts to **less than significant** in the highly unlikely event the project site would become inundated from flood hazard, tsunami, seiche, or dam failure.

**e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

*No Impact*

Discussion of Effects: Please see response to Checklist Question 3.10b. The Hesperia Water District pumps water directly from the Alto Subarea subbasin of the Mojave River Groundwater Basin. Because the project is a roadway improvement project and does not include any habitable or commercial functions, it would not generate any demand for water or require the withdrawal of groundwater.

The proposed project will be subject to the provisions of the Phase II MS4 permit. Through implementation of **Standard Condition HYD-03**, a project-specific WQMP will be developed to specify BMPs designed and implemented to retain the project site’s minimum design capture volume and hydromodification volume. Storm water will be captured by the proposed drainage facilities described above such that post-development storm water runoff volume or time of concentration would not exceed pre-development storm water runoff. Additional project design features, such as landscaped areas and maintenance of existing surface flows across the project site into the drainage facilities, would further maintain the site’s existing drainage pattern and capacity to infiltrate stormwater runoff. Periodic maintenance of any required drainage facilities and landscaped areas during project operation will be in accordance with the schedule outlined in the WQMP. Through implementation of **Standard Condition HYD-03**, the proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **No impact** would occur, and no mitigation is required.

**3.11 LAND USE AND PLANNING**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>a.</b> Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a. Physically divide an established community?**

*No Impact*

Discussion of Effects: The proposed project consists of replacing and widening the Ranchoero Road Bridge from its current two lanes to a new six-lane bridge over the California Aqueduct. The proposed improvements to Ranchoero Road would not physically divide an existing community or introduce a barrier between existing or planned residential uses because the project improvements are proposed

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along an existing bridge and roadway. Therefore, **no impact** related to this issue would occur. No mitigation is required.

**b. Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?**

*No Impact*

Discussion of Effects: The project as proposed is consistent with the General Plan Circulation Element which classifies Ranchoero Road as a Special Major Arterial roadway from Topaz then easterly to Danbury Ave., with six through lanes, 92 feet width from curb to curb, and a ROW width of 140 feet. The replacement bridge would be constructed for future accommodation of six lanes in support of the City’s “build out of Ranchoero Road as a six-lane *Special Major Arterial* roadway, but it would be striped as a four-lane roadway and include a median and shared pedestrian sidewalk/bike pathways to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project.<sup>81</sup> **No impact** related to conflict with an applicable plan or ordinance would occur. No mitigation is required.

**3.12 MINERAL RESOURCES**

Would the project:

	Potentially Significant 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**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?**

*No Impact*

Discussion of Effect: The City has not identified any known mineral resources of value to the region or residents of the State within the City limits.<sup>82</sup> Therefore, **no impact** on regionally or statewide significant mineral resources would occur. No mitigation is required.

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<sup>81</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058.* Page S-6. City of Hesperia and County of San Bernardino. June 2013.

<sup>82</sup> *Draft Environmental Impact Report for the City of Hesperia General Plan Update.* Page 3.10-3. City of Hesperia. May 26, 2010.

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**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?**

*No Impact*

Discussion of Effect: The City has not identified any known mineral resources of local importance within the City limits.<sup>83</sup> Therefore, **no impact** on locally significant mineral resources would occur. No mitigation is required.

**3.13 NOISE**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<p><b>a.</b> Result in 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?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>b.</b> Result in generation of excessive groundborne vibration or groundborne noise levels?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>c.</b> 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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The analysis in this section of the Initial Study is based on the following report prepared for the approved Rancho Road Widening Project:<sup>84</sup>

- *Rancho Road Improvement Project, Noise Technical Report.* Parsons. October 2011 (Appendix E).

**a. Result in 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?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: The City has an interior noise standard of 45 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) and an exterior noise standard of 65 dBA CNEL for residential

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<sup>83</sup> *Ibid.*

<sup>84</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058.* Page S-6. City of Hesperia and County of San Bernardino. June 2013.



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and institutional (e.g., school) uses. The City considers residences, schools, rest homes, long-term care facilities, mental care facilities, and hospitals as noise-sensitive receptors. As stated previously, the nearest sensitive receptors (residential and school uses) are approximately 25 feet on either side of the project corridor. With implementation of standard construction practices and building design features, it is unlikely construction and operational activities on the project site would result in long-term noise impacts to these receptors.

**Short-Term (Construction) Noise:** Noise increases from the proposed project would be generated on a short-term basis during construction and would cease upon project completion. Noise impacts associated with construction activity are a function of the noise generated by the type of equipment used, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities.

Temporary or periodic increases in ambient noise levels will occur during the construction of the proposed project. Construction of the proposed project is expected to require the use of earthmovers, bulldozers, water trucks, and pickup trucks. Due to the project site's proximity to the California Aqueduct, the DWR does not allow pile driving to construct the project.<sup>85</sup> The maximum composite noise level ( $L_{max}$ ) would be 89 dBA at a distance of 50 feet from an active construction site. Noise levels at the nearest sensitive receptor are expected to temporarily exceed the City's exterior standard of 65 dBA during on-site construction.

Although project construction noise has the potential to be louder than the ambient noise in the project vicinity, this noise would cease once project construction is completed. The City's Municipal Code Section 16.20.125 allows temporary demolition and construction noise in excess of normally defined thresholds between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, except federal holidays. Because construction noise is exempt during specific hours, a project fully compliant with the City's construction noise standards would not generate a significant construction-related noise impact. However, if heavy construction activities were to occur outside the exempted hours, the City's noise limits likely would be exceeded at nearby residences,<sup>86</sup> and **Mitigation Measures NOI-1** through **NOI-4** would be required.

#### Mitigation Measures

**NOI-01** The contractor shall use newer equipment with improved noise muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators, intact and operational during demolition and construction activities. Newer equipment will generally be quieter in operation than older equipment. All construction equipment shall be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding). This measure shall be implemented to the satisfaction of the City Development Services Department.

**NOI-02** To the extent feasible, the Contractor shall turn off construction idling equipment. The Contractor shall strive to keep noise levels from construction equipment relatively uniform and avoid impulsive noises. This measure shall be implemented to the satisfaction of the City Development Services Department.

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<sup>85</sup> *Foundation Report for Ranchero Road Bridge (Replace) over California Aqueduct, Hesperia, California.* Page 16. Earth Mechanics, Inc., January 29, 2018.

<sup>86</sup> It is not expected that the nearby Just-4-Kids and Just-4-Toddlers Preschools would be occupied during the nighttime hours.

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**NOI-03** Between 7 p.m. and 10 p.m. on all days and between 7 a.m. and 7 p.m. on Sundays and federal holidays, any construction activities occurring within 700 feet of noise-sensitive areas must be accompanied by noise monitoring to ensure compliance with the applicable noise thresholds, and must immediately be modified to achieve compliance if necessary or ceased when/if compliance cannot be achieved. Between the hours of 10 p.m. and 7 a.m., the same provision applies when construction occurs within 1,150 feet of noise-sensitive areas. This measure shall be implemented to the satisfaction of the City Development Services Department.

**NOI-04** To ensure that the surrounding community is aware of potential noise impacts during construction, the City shall provide adequate public notification in advance of proposed construction activities. This measure shall be implemented to the satisfaction of the City Development Department.

Through compliance with the City’s Municipal Code Section 16.20.125 regarding construction noise hours and implementation of **Mitigation Measures NOI-01** through **NOI-04**, the project’s construction-related noise impacts would be reduced to **less than significant with mitigation incorporated**.

**Long-Term (Operational) Noise:** The long-term primary source of noise in the project area is traffic on Rancho Road. Traffic noise was evaluated for the worst-case traffic conditions. Twelve noise receptors were evaluated along the Rancho Road Alignment between Coriander Drive to the west and 7<sup>th</sup> Avenue to the east in the traffic noise modeling, of which three receptors monitored are located within the project site (Table E). Short-term measurements were conducted for a duration of 20 minutes each, and long-term measurements for at least 24 hours.

**Table E: Noise Measurement Results**

Site No.	Street Address of Nearest parcel, City/Community	Represented Land Use	Meter Location	Distance from Rancho Road Centerline (feet)	Measurement Date	Start Time	Duration (hours)	Measured L <sub>eq</sub> dBA
ST7	7339 11 <sup>th</sup> Street	SFR	Next to California Aqueduct	100	3/17/2010	16:20	—	57.3
LT3	7284 Locust Avenue	SFR	Back Yard	—	3/15/09–3/17/09	16:00	49	56.2
LT4	15468 Rancho Road	SFR	Front Yard	—	3/15/09–3/17/09	14:00	50	62.3

Source: Tables 5-1 and 5-2. *Rancho Road Improvement Project, Noise Technical Report*. Parsons. October 2011 (Appendix E).  
 ST = Short-Term Measurement  
 LT = Long-Term Measurement  
 SFR = Single Family Residence

Site ST7 is located north of the Rancho Road bridge across the California Aqueduct. Concrete at the base of the guard rail bounding the bridge obscured direct exposure to tire-pavement noise, reducing traffic noise levels experienced at the measurement site.

The worst-case traffic condition (resulting in the highest traffic noise level) is based on the maximum number of vehicles that can typically travel in a given lane while still resulting in free-flowing traffic conditions (LOS D or better). According to the Rancho Road Widening Project Final EIR, the existing daily traffic volume along Rancho Road averages 7,781 VPD and opening year VPD upon completion of

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the Rancho Road Widening Project (but without the proposed project) would increase to an average of 12,674, corresponding to a V/C<sup>87</sup> ratio of 0.41 (LOS A) along the majority of the Rancho Road alignment, excluding along the bridge.<sup>88</sup> Nevertheless, at opening year conditions of the approved Rancho Road Widening Project, roadway capacity (V/C of 0.87) along the existing California Aqueduct Bridge would still operate at LOS D, which is considered acceptable by standards contained in the City's adopted General Plan.<sup>89</sup>

The *CEQA Guidelines*<sup>90</sup> do not define the levels at which temporary and permanent increases in ambient noise are considered "substantial." A noise level increase of 3 dBA is barely perceptible to most people, a 5 dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. Based on this information, the following generally acceptable standards would apply to the operation activities of the proposed project:

- Less than 3 dBA difference in noise levels would not be discernable; therefore, the difference would not be significant.
- Between 3 dBA and 5 dBA would be noticeable, but not significant, if noise levels were to remain below the noise level standards recommended by the State Model Community Noise Ordinance.
- A noise level difference of 5 dBA or greater would be readily noticeable and, therefore, considered significant.

In addition to the 3 dBA definition of a potentially significant change in noise levels, the applicable noise standards governing the project site have to be considered. Although a change in noise of 3 dBA or greater is considered substantial, it is not significant unless the total noise (background plus project) exceeds the City's noise standards. A significant impact regarding peak noise levels would occur if a project were to generate noise levels, measured in dBA  $L_{max}$  or dBA  $L_{eq}$ , that exceed the standards contained in the City's Municipal Code and/or General Plan.

Table NS-4 of the City's 2010 General Plan Noise Element states a significant operational noise impact would occur if predicted outdoor noise levels at noise-sensitive receivers under Future Build (e.g., opening year of the Rancho Road Widening Project) "are higher than predicted noise levels under Future No Build conditions and equal or exceed a CNEL of 65 dBA; or are at least five (5) decibels higher than predicted noise levels under Future No Build conditions and equal or exceed a CNEL of 60 dBA."<sup>91</sup> The noise study prepared for the Rancho Road Widening Project indicates that traffic noise is anticipated to increase without the widening of Rancho Road. Comparing the future, No Build Alternative traffic noise with the future traffic noise associated with the Future Build (Rancho Road Widening Project but without replacement of the Rancho Road Bridge crossing the California Aqueduct (i.e., proposed project), traffic noise is anticipated to increase up to 3.3 dBA, which is a barely discernible change in noise level perceived by the human ear.

Although traffic noise is anticipated to increase, the Future Build would not exceed the 5 dBA with [Rancho Road Widening] Project noise impact threshold criteria. Noise increase along the Rancho

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<sup>87</sup> V/C ratio 0.00–0.60 = LOS A; V/C ratio 0.61–0.70 = LOS B; V/C ratio 0.71–0.80 = LOS C; V/C ratio 0.81–0.90 = LOS D; V/C ratio 0.91–1.00 = LOS E; V/C ratio >1.00 = LOS F.

<sup>88</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-204. City of Hesperia and County of San Bernardino. June 2013.

<sup>89</sup> *Ibid.* Page 2-215.

<sup>90</sup> State of California. California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387, as amended December 1, 2004.

<sup>91</sup> *Rancho Road Improvement Project, Noise Technical Report*. Page 21. Parsons. October 2011.

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Roadway corridor is primarily attributed to projected future traffic growth within the City, which is anticipated to increase along the Rancho Roadway corridor and exceed the 60 dBA CNEL threshold even with implementation of mitigation. Although the proposed project entails a replacement bridge to be constructed for future accommodation of six lanes in support of the City's "ultimate" buildout of Rancho Road as a six-lane *Special Major Arterial* roadway, it would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Rancho Road pursuant to the approved Rancho Road Widening Project.<sup>92</sup>

No vehicle trips would originate because of the bridge lanes increasing from two to four because the number of vehicle trips on the bridge would be determined by the capacity of the connecting Rancho Road on either side of the bridge. The proposed project does not propose additional lanes to the four-lane road already analyzed under the approved Rancho Road Widening Project. Therefore, the proposed project would not add vehicle trips in addition to the vehicle trips anticipated under the approved Rancho Road Widening Project. Accordingly, the proposed project is not traffic capacity-increasing, and it would not increase traffic or corresponding noise levels beyond those that have already been anticipated for and evaluated under the approved Rancho Road Widening Project.

The proposed project would not increase traffic or corresponding noise levels beyond those which have already been anticipated for and evaluated under the approved Rancho Road Widening Project; therefore, the proposed project would not contribute to projected future traffic growth along the Rancho Roadway corridor and exceed the 60 dBA CNEL threshold. Impacts would be reduced to **less than significant with mitigation incorporated**.

#### **b. Result in generation of excessive groundborne vibration or groundborne noise levels?**

*Less than Significant with Mitigation Incorporated*

##### Discussion of Effects:

**Construction Vibration:** The primary source of groundborne vibration from the proposed project is construction equipment. The Federal Transit Administration (FTA) guidelines indicate that a vibration level up to 102 VdB (FTA 2006) is considered safe for buildings consisting of reinforced concrete, steel or timber (no plaster), and would not result in any construction vibration damage. For non-engineered timber and masonry building, the construction vibration damage criterion is 94 VdB (0.2 in/sec Peak Particle Velocity [PPV]). For typical construction activity, the equipment with the highest vibration generation potential are the vibratory roller, which would generate 101 VdB at 15 feet and 94 VdB at 25 feet, and the large bulldozer, which would generate 94 VdB at 15 feet and 87 VdB at 25 feet. Due to the project site's proximity to the California Aqueduct the DWR does not allow pile driving to construct the project.<sup>93</sup>

The City's Municipal Code Section 16.20.130 states that: "No vibration shall be allowed which can be felt without the aid of instruments at or beyond the lot line; nor will any vibration be permitted which produces a particle velocity greater than or equal to 0.2-inch per second (94 VdB) measured at or beyond the lot line." The same construction activity exemption applied to noise impacts is also applied to vibration impacts. In other words, the City allows temporary demolition and construction vibration in

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<sup>92</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058.* Page S-6. City of Hesperia and County of San Bernardino. June 2013.

<sup>93</sup> *Foundation Report for Rancho Road Bridge (Replace) over California Aqueduct, Hesperia, California.* Page 16. Earth Mechanics, Inc., January 29, 2018.

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excess of normally defined thresholds between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, except for Sundays and federal holidays. Nevertheless, as a CEQA threshold, it will be applied any time, not just outside periods when construction is exempt under the Municipal Code.

The closest residential structure is approximately 25 feet from the project construction boundary, and the California Aqueduct is approximately 15 feet from the project construction boundary. The vibratory roller would generate 101 VdB at 15 feet and 94 VdB at 25 feet, and the large bulldozer would generate 94 VdB at 15 feet and 87 VdB at 25 feet. To ensure the closest residential structure would not experience vibration levels that exceed the FTA threshold of 94 VdB (0.2 in/sec PPV), and the California Aqueduct would not experience vibration levels that exceed the FTA threshold of 102 VdB (an equivalent to 0.5 in/sec in PPV), **Mitigation Measures NOI-05** through **NOI-07** are proposed.

#### **Mitigation Measures**

- NOI-5** Where vibratory rollers are used within 30 feet of existing building structures during exempted hours, rollers shall be selected based on compaction force to ensure that the 0.2-inch per second peak particle velocity (PPV) threshold is not exceeded at the structure. Whenever vibratory rollers are used within 30 feet of such building structures, continuous vibration monitoring shall be performed, and a plan shall be in place to allow immediate modification or cessation of any vibratory roller activity that generates vibrations exceeding the applicable threshold. Outside of exempted hours, activity constraints will need to be applied for perceptibility thresholds so that the corresponding distance will be more than 200 feet. As a practical matter, this will prevent the use of vibratory rollers on the project outside of the exempted hours. When other vibration-generating construction equipment is used outside of exempted hours, it shall only be done when compliance with the perceptibility threshold can be verified through conservative vibration propagation modeling and/or continuous on-site vibration monitoring. This measure shall be implemented to the satisfaction of the City Development Services Department.
- NOI-6** When possible, the use of construction equipment that creates high vibration levels shall be limited, such as vibratory rollers and hammers operating in the proximity of residential structures or other sensitive land uses. This measure shall be implemented to the satisfaction of the City Development Services Department.
- NOI-7** The hours of vibration-intensive equipment use, such as vibratory rollers, shall be restricted to daytime hours so that impacts to residents are minimal. This measure shall be implemented to the satisfaction of the City Development Services Department.

With Implementation of **Mitigation Measures NOI-05** through **NOI-07**, construction-related vibration impacts to nearby residential structures and the California Aqueduct would be reduced to **less than significant with mitigation incorporated**.

**Operational Vibration:** Operations of the proposed project would not involve any vibration sources that would cause exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels. Passenger vehicles and trucks associated with the proposed project would generate groundborne vibration or groundborne noise if poor road conditions exist, such as potholes, bumps, expansion joints, or other discontinuities in the road surface that can generate groundborne vibration or groundborne noise from passenger vehicles and trucks. Since the project would construct the approach roadway and replacement bridge to be in good condition, free of potholes, bumps, expansion joints, or

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other discontinuities in the road surface, groundborne vibration or groundborne noise contributed by the proposed project would not be perceptible. Therefore, groundborne vibration or groundborne noise levels generated from long-term operations of the proposed project would be **less than significant** and no mitigation is required during operation.

- 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?**

*No Impact*

Discussion of Effect: The project site is approximately 0.75 mile northwest of the Hesperia Airport, within “Referral Area C,” and the proposed project is considered an acceptable use within this airport hazard zone.<sup>94,95</sup> According to the Hesperia Airport Comprehensive Land Use Plan, aircraft noise within “Referral Area C” is anticipated to be minimal. Additionally, the proposed project consists of roadway and bridge improvements and would not result in the development of structures or facilities increasing the number of persons residing or working in the project vicinity. There would be **no impact** from airport noise and No mitigation is required.

**3.14 POPULATION AND HOUSING**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>a.</b> 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>b.</b> Displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>a.</b> 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)?				

*No Impact*

Discussion of Effects: Although the proposed project would create short-term employment opportunities as part of the anticipated construction of the proposed replacement bridge and approach roadways, these positions are anticipated to be filled by workers who, for the most part, reside in the project area. Therefore, construction employment would not generate a permanent increase in population within the City.

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<sup>94</sup> Comprehensive Land Use Plan, Hesperia Airport. Page 13. San Bernardino County Airport Land Use Commission. January, 1991.  
<sup>95</sup> County Development Code. San Bernardino County. 2010.

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The proposed project would result in the replacement of an existing two-lane bridge with a new six-lane bridge over the California Aqueduct. No housing or permanent employment is proposed, so direct population growth would not occur. Although the replacement bridge would be constructed for future accommodation of six lanes in support of the City's "ultimate" build out of Rancho Road as a six-lane *Special Major Arterial* roadway, it would be striped as a four-lane roadway and include a median and shared pedestrian sidewalk/bike pathways to correspond with the anticipated roadway capacity of Rancho Road pursuant to the approved Rancho Road Widening Project.<sup>96</sup> Therefore, the proposed project would not increase the potential capacity of Rancho Road beyond that which has already been analyzed as part of the Rancho Road Widening Project, which is not anticipated to result in permanent impacts related to population or housing.<sup>97</sup>

Because the proposed project would remediate existing deficiencies in current roadway configurations, the expansion of the bridge and the widening of the roadway would not induce indirect growth. Therefore, **no impacts** associated with this issue would occur and no mitigation is required.

#### **b. Displace substantial amounts of people or housing, necessitating the construction of replacement housing elsewhere?**

##### *Less than Significant Impact*

Discussion of Effects: One residential property south of Rancho Road at 7288 Via Antigua Street (APN 0397-201-12) would be acquired and converted to permanent City ROW as part of the proposed project. According to the City, the projected year 2020 population of Hesperia will be 113,151 persons and the projected year 2020 number of households will be 33,552.<sup>98</sup> Therefore, the average number of persons per household is approximately 3.37 and the proposed project would displace one household and between 3 and 4 persons.<sup>99</sup> According to recent Census data, the City's 2017 housing stock was 28,262 units with an average annual vacancy of approximately 7 percent.<sup>100</sup> This equals 1,978 units, and the existing unit on the project site to be displaced represents 0.000505 percent of the available vacant units in the City (or 0.000035 percent of the total City housing stock). Therefore, there appears to be an adequate amount of housing in the City or within other nearby communities within which project residents could relocate. For that reason, the proposed project would not displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere. Impacts would be **less than significant**, and no mitigation is required.

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<sup>96</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058.* Page S-6. City of Hesperia and County of San Bernardino. June 2013.

<sup>97</sup> *Ibid.* Page 2-192.

<sup>98</sup> *Demographics and Population Facts.* City of Hesperia. <https://www.cityofhesperia.us/DocumentCenter/View/4039/Demographics>. Accessed May 7, 2018.

<sup>99</sup> 113,151 population ÷ 33,552 households = 3.37 persons per household.

<sup>100</sup> *Hesperia, California Housing Data.* Figures 1 and 35. TownCharts. <http://www.towncharts.com/California/Housing/Hesperia-city-CA-Housing-data.html>. Accessed May 7, 2018.

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**3.15 PUBLIC SERVICES**

Would the project 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 public services:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*No Impact*

Discussion of Effects:

**Fire Protection.** The proposed bridge replacement and approach roadway widening would not require fire protection services and therefore would not generate additional demand for such services. Construction activities that may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures so as not to interfere with emergency access or evacuation plans.

As detailed in the Ranchoero Road Widening Project Final EIR, construction of the proposed project would be consistent with the City’s Emergency Operations Plan adopted on April 3, 2002, for the purposes of coordinating efforts during local, State, and/or federal emergency events, including fire department response.<sup>101</sup> There would be no corresponding need for new or altered fire protection facilities. **No impact** would occur, and no mitigation is required.

**Police Protection.** The proposed bridge replacement and approach roadway widening would not require police protection services and therefore would not generate additional demand for such services. Construction activities that may temporarily restrict vehicular traffic would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures so as not to interfere with emergency access or evacuation plans.

As detailed in the Ranchoero Road Widening Project Final EIR, construction of the proposed project would be consistent with the City’s Emergency Operations Plan adopted on April 3, 2002, for the purposes of coordinating efforts during local, State, and/or federal emergency events, including police response.<sup>102</sup>

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<sup>101</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058.* Pages 2-128 and 2-129. City of Hesperia and County of San Bernardino. June 2013.

<sup>102</sup> *Ibid.*



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There would be no corresponding need for new or altered police protection facilities. **No impact** would occur and no mitigation is required.

**Schools.** The proposed project does not include development of residential uses; therefore, there would be no increase in student population or corresponding demand for school facilities or programs. **No impact** would occur. No mitigation is required.

**Parks/Recreational Facilities.** The proposed project does not include development of residential uses; therefore, there would be no increase in population or corresponding demand for park facilities or programs. **No impact** would occur. No mitigation is required.

**Other Public Facilities.** In the absence of any population increase, no increase in demand for other public services (e.g., library, government buildings, or hospitals) or programs would occur, so there would be no need to construct or expand additional government facilities. The proposed project would result in improved curbs, gutters, sidewalks, and bicycle lanes along the new bridge and approach roadways, which are public facilities. The project would also construct four utility driveways, two on the south side of Ranchoero road, one on the north side of Ranchoero Road, and one off of the realigned 11<sup>th</sup> Avenue roadway to facilitate DWR access to both sides of the California Aqueduct. These improvements are anticipated in the City’s General Plan.

Environmental impacts associated with the construction of the proposed bridge replacement, approach roadways, and associated improvements are analyzed and mitigated as applicable throughout this Initial Study. Therefore, there would be **no impacts** resulting from the construction of other public facilities, and no mitigation is required.

**3.16 RECREATION**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
a. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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- a. 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?**

*No Impact*

Discussion of Effects: The proposed project does not include development of residential uses; therefore, there would be no increase in population or corresponding demand for park facilities or programs. **No impact** would occur. No mitigation is required.

- b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

*Less than Significant Impact*

Discussion of Effects: Rancho Road is classified as a Special Major Arterial from Topaz Ave. to Dandbury Ave. limits, with six through lanes, 92-foot width from curb to curb, and a ROW width of 140 feet.<sup>103</sup> The existing Rancho Road Bridge crossing the California Aqueduct is an east-west undivided two-lane arterial corridor without sidewalks or bicycle lanes within the project limits. The proposed project would result in improved sidewalk and bicycle paths along the new bridge and approach roadways, which are recreational facilities. These improvements are anticipated through build out of the City’s General Plan.

As a result of the proposed sidewalks and bicycle paths along the new bridge and approach roadways, the project would facilitate and encourage the use of alternative transportation (i.e., bicycling and walking). Environmental impacts associated with the construction of the proposed bridge replacement, approach roadways, and associated improvements are analyzed and mitigated as applicable throughout this Initial Study. Therefore, impacts resulting from the construction of sidewalks and bicycle lanes along the new bridge and approach roadways would be **less than significant** and no additional mitigation is required.

**3.17 TRANSPORTATION**

Would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<b>a.</b> Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>b.</b> Would the project conflict or be inconsistent with <i>CEQA Guidelines</i> Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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<sup>103</sup> *Rancho Road Widening Project Final Environmental Impact Report (SCH# 2012061058)*. Page 2-149. City of Hesperia and County of San Bernardino. June 2013.

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- 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?

**a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: During the construction of the California Aqueduct Bridge and approach roadways under the proposed project, Ranchoero Road would be closed to through traffic from west of Kern Avenue to east of 11<sup>th</sup> Street. Construction-related traffic detours will be planned and executed through consultation with City police, fire, and emergency staff to ensure construction of the project would not increase traffic that is substantial in relation to the existing traffic load and capacity of the street system. Detour options for motorists along the I-15 corridor exiting at Ranchoero Road and traveling to destinations east of the Aqueduct Crossing could use Maple Avenue or Cottonwood Avenue to travel to Mesquite, Mission, or Ash Avenue one-mile north of Ranchoero Road or to Farmington Avenue one-half mile south of Ranchoero Road to cross the Aqueduct, returning to Ranchoero Road at 7<sup>th</sup> Avenue. Trips from east of the Aqueduct, traveling to destinations west of the Aqueduct could likewise use the same routes to bypass the construction closure on Ranchoero Road.<sup>104</sup>

The neighborhood immediately north of Ranchoero Road and east of the Aqueduct currently has connections to Ranchoero Road at 7<sup>th</sup> Avenue on the east and 11<sup>th</sup> Avenue on the west. It is possible 11<sup>th</sup> Avenue access to Ranchoero Road may be closed during construction. Therefore, traffic from the neighborhood traveling west of the Aqueduct would have the option to exit northbound on 11<sup>th</sup> Avenue to westbound Fir Street to southbound Cottonwood Avenue. Traffic with destinations to the east of the California Aqueduct could exit the neighborhood on 7<sup>th</sup> Avenue, south of Ranchoero Road.<sup>105</sup>

Table F compares level of service (LOS) conditions without project construction (Base Conditions) and conditions during project construction and reveals that three intersections would operate at an unsatisfactory level during project construction. However, two of the three intersections already operate at an unsatisfactory level without project construction (Base Conditions).

As indicated in Table F, the closure of Ranchoero Road between Kern Avenue and 11<sup>th</sup> Avenue would deteriorate to LOS E or worse at the following intersections:

- Ranchoero Road at Maple Avenue (p.m. peak hour);
- Ranchoero Road at Cottonwood Avenue (p.m. peak hour); and
- Ranchoero Road at 7<sup>th</sup> Avenue (p.m. peak hour).

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<sup>104</sup> *Aqueduct Crossing Traffic Study*. Page 37. Cordoba Corporation. Revised January 2016.

<sup>106</sup> V/C ratio 0.00–0.60 = LOS A; V/C ratio 0.61–0.70 = LOS B; V/C ratio 0.71–0.80 = LOS C; V/C ratio 0.81–0.90 = LOS D; V/C ratio 0.91–1.00 = LOS E; V/C ratio >1.00 = LOS F.

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**Table F: Near-Term Intersection LOS without and with Project Construction**

Intersection	Without Construction (Base Conditions)				During Construction			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Ranchero Road at Escondido Avenue	B	17.1	B	13.9	B	17.1	B	13.7
Ranchero Road at Maple Avenue	D	30.5	<b>F</b>	<b>51.2</b>	D	30.5	<b>F</b>	<b>53.7</b>
Ranchero Road at Cottonwood Avenue	C	18.3	<b>E</b>	<b>38.2</b>	B	14.5	<b>E</b>	<b>40.6</b>
Ranchero Road at 11 <sup>th</sup> Avenue	C	17.6	C	23.0	A	8.6	A	8.7
Ranchero Road at 7 <sup>th</sup> Avenue	B	13.1	C	15.5	C	21.7	<b>F</b>	<b>50.3</b>
Ranchero Road at Santa Fe Avenue	B	12.7	B	15.0	B	12.2	B	14.4
Ranchero Road at Danbury Avenue	B	14.5	C	17.3	C	16.4	C	24.4

Source: Table 11. Aqueduct Crossing Traffic Study. Cordoba Corporation. Revised January 2016.

Note: Intersections with unsatisfactory LOS are identified in **Bold**.

Three intersections would be temporarily affected due to the construction of the proposed project. Impacts to these three intersections are temporary and would cease once the Ranchero Road Bridge is over the California Aqueduct is built.

- Ranchero Road at Maple Avenue (p.m. peak hours);
- Ranchero Road at Cottonwood Avenue (p.m. peak hours); and
- Ranchero Road at 7<sup>th</sup> Avenue (p.m. peak hours).

The intersections of Ranchero Road at Maple Avenue and Ranchero Road at Cottonwood Avenue, which are estimated to operate at unacceptable levels of service E or F under current conditions, will be slightly worsened with the changes in traffic patterns resulting from the project (including closures/detours. The intersection of Ranchero Road at 7th Street is estimated to operate at LOS F in the PM peak hour during construction of the Ranchero Road project. This is attributable to increased turning movements at this intersection as vehicles divert to avoid the Ranchero Road closure at the Aqueduct. Upon completion of the project, current conditions will resume. The project is anticipated to have a positive overall benefit to the existing and future roadway network within the study area.

### Mitigation Measures

**TRA-01** Prior to construction, the Contractor shall develop a Transportation Management Plan (TMP) to be implemented during construction for all work performed within the public right-of-way (ROW). The TMP shall comply with City Municipal Code and incorporate measures to reduce construction-related delays to the public and provide safe and efficient movement of motorists, pedestrians, bicyclists, construction equipment, workers, and emergency and law enforcement personnel and equipment. The City and its contractor shall coordinate with local police, fire, and emergency medical service providers regarding construction scheduling and any other practical measures to maintain adequate access to properties and response times. This measure shall be implemented to the satisfaction of the City of Hesperia Development Services Department.

**TRA-02** The Contractor shall develop a Traffic Control Plan (TCP) to be implemented during construction. The TCP shall follow the latest edition of the California Manual on Uniform Traffic Control Devices and local agency guidelines. Data to be included in the TMP will vary depending upon the complexity of the work being performed, the volume of traffic affected, and the roadway

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geometrics at the specific location where the construction will be performed. The TCP shall depict the sequence of construction operations, construction to be performed, travel ways that would be utilized by movements of traffic during each phase of construction, hours of operation, and the estimated time required for construction completion. Multiple phases of construction would require a separate TCP component for each different construction phase or operation. This measure shall be implemented to the satisfaction of the City of Hesperia Development Services Department.

With implementation of **Mitigation Measures TRA-01** and **TRA-02**, the proposed project's construction-related impacts to LOS that would otherwise conflict with City policy addressing the circulation system would be reduced to **less than significant with mitigation incorporated**.

According to the Rancho Road Widening Project Final EIR, existing daily traffic volume along Rancho Road averages 7,781 VPD and VPD upon completion of the Rancho Road Widening Project (without replacement the proposed project) would increase to an average 12,674, corresponding to a V/C<sup>106</sup> ratio of 0.41 (LOS A) along the majority of the Rancho Road alignment, excluding along the bridge.<sup>107</sup> Construction of the Rancho Road Widening Project without replacing the Rancho Road Bridge crossing the California Aqueduct would result in the reduction of the number of through lanes from four lanes to two lanes at either end of the bridge. This scenario would generate a choke point at the bridge for vehicles traveling along Rancho Road. Due to this condition, congestion is anticipated to be heavier (V/C of 0.87) within the general area of the California Aqueduct Bridge compared to the approved four-lane segments of the widened Rancho Road on either side of the bridge. Nevertheless, at opening, conditions of the approved Rancho Road Widening Project, roadway capacity (V/C of 0.87) along the existing California Aqueduct Bridge would still operate at LOS D, which is acceptable by standards contained in the City's adopted General Plan.<sup>108</sup> Therefore, it is reasonable to conclude that the roadway along the existing California Aqueduct Bridge currently operates at the acceptable LOS D (or better) under the existing scenario where Rancho Road is still a two-lane, two-way roadway on either side of the bridge.

The Horizon Year (2040) analysis assumed build out of all local and regional arterials in accordance with the City of Hesperia's Circulation Plan. The 2040 traffic volume forecasts were prepared based on the San Bernardino Transportation Analysis Model (SBTAM) developed and maintained by the San Bernardino Association of Governments. The traffic volumes from the model were factored to reflect levels of growth likely to occur between 2035 and 2040. A growth factor of 2 percent per year was applied.

By the Horizon Year (2040), all study intersections are assumed to be controlled by traffic signals with the exception of the intersection of Rancho Road and 11<sup>th</sup> Avenue, which will continue to be controlled by stop sign only on 11<sup>th</sup> Avenue, which will be right-in, right-out only. Table G details the results of the intersection LOS for the Horizon Year Conditions. All of the study area intersections are estimated to operate at an acceptable LOS C or better with the exception for Main Street at Key Pointe Avenue, which is estimated to operate at an acceptable LOS D during the P.M. peak hour in 2040.

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<sup>106</sup> V/C ratio 0.00–0.60 = LOS A; V/C ratio 0.61–0.70 = LOS B; V/C ratio 0.71–0.80 = LOS C; V/C ratio 0.81–0.90 = LOS D; V/C ratio 0.91–1.00 = LOS E; V/C ratio >1.00 = LOS F.

<sup>107</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page 2-204. City of Hesperia and County of San Bernardino. June 2013.

<sup>108</sup> *Ibid.* Page 2-215.

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**Table G: Intersection LOS, 2040 Conditions**

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	Delay	LOS	Delay
Ranchero Road at Escondido Avenue	C	23.6	B	18.5
Ranchero Road at Maple Avenue	C	22.6	B	15.4
Ranchero Road at Cottonwood Avenue	C	20.5	B	15.2
Ranchero Road at 11 <sup>th</sup> Avenue	C	32.5	D	31.8
Ranchero Road at 7 <sup>th</sup> Avenue	C	31.4	C	32.4
Ranchero Road at Santa Fe Avenue	C	27.2	C	30.6
Ranchero Road at Danbury Avenue	C	25.7	C	34.1

Source: Table 8. Aqueduct Crossing Traffic Study, Cordoba Corporation. Revised January 2016.

Table H details the results of the roadway segment capacity analysis for Horizon Year (2040) Conditions. All roadway segments are forecast to carry traffic volumes well within the LOS D capacity of their General Plan classification.

Operation of the proposed replacement bridge accommodating six lanes in support of the City's "ultimate" build out of Ranchero Road as a six-lane *Special Major Arterial* roadway, but striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchero Road pursuant to the approved Ranchero Road Widening Project, would improve traffic conditions at the project site and serve to alleviate the choke point for vehicles traveling along Ranchero Road by providing an additional lane in each direction along the bridge. The additional lane would provide a passing lane for slow-moving vehicles such as heavy trucks and vehicles turning to abutting driveways. This would enhance the flow of traffic along Ranchero Road, which already operates at acceptable LOS D or better and will continue to do so through the year 2040. Therefore, operation of the proposed project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.

**Table H: Roadway Segment Capacity Analysis, 2040 Conditions**

Roadway Segment			Number of Lanes	LOS D Capacity	2040 Daily Traffic Volume	LOS D or Better
Roadway	From	To				
Ranchero Road	Mariposa Road	Escondido Avenue	6D	41,600	21,600	YES
	Mariposa Road	Escondido Avenue	6D	41,600	21,000	YES
	Escondido Avenue	Maple Avenue	6D	41,600	21,000	YES
	Seventh Street	Santa Fe Avenue	6D	41,600	24,500	YES
	Santa Fe Avenue	Danbury Avenue	6D	41,600	17,400	YES
	Danbury Avenue	I Avenue	4D	30,600	11,800	YES

Source: Table 9 – Aqueduct Crossing Traffic Study, Cordoba Corporation, Revised January 2016.

The existing Ranchero Road Bridge segment is an east-west undivided two-lane arterial corridor without sidewalks or bicycle lanes within the project limits. The City's objective is to enhance service to its

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residents and businesses by accommodating existing and future vehicular, pedestrian, and bicycle traffic on Rancho Road, which is classified as a Special Major Arterial in the City. The proposed Rancho Road Bridge would improve circulation of bus routes by providing an additional lane in each direction along the bridge. The additional lane would provide for travel around slow-moving vehicles, such as buses, and vehicles accessing abutting driveways, which would enhance the flow of traffic along Rancho Road. The proposed bridge would also include a shared pedestrian/bike path in conformance with the City, federal, and Caltrans programs and procedures.

As stated previously, implementation of **Mitigation Measures TRA-1** and **TRA-32** would reduce circulation-related impacts to the existing traffic load and capacity of the street system to **less than significant with mitigation incorporated**. Additionally, the proposed shared pedestrian and bicycle pathway along the new bridge and approach roadways, would facilitate and encourage the use of alternative transportation (e.g., bicycling and walking). Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities with implementation of **Mitigation Measures TRA-1** and **TRA-2**. Impacts would be **less than significant with mitigation incorporated**.

**b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

*No Impact*

Discussion of Effects: *CEQA Guidelines* Section 15064.3, subdivision (b) establishes “vehicle miles traveled” criteria in lieu of LOS for analyzing transportation impacts and was signed into law as Senate Bill (SB) 743 in 2013. Regulatory changes to the *CEQA Guidelines* that implement SB 743 were approved by the Office of Planning and Research on December 28, 2018. However, lead agencies have until July 1, 2020, which is the statewide implementation date, to opt-in the use of the new vehicle miles traveled (VMT) metric. In cases where lead agencies use LOS for analyzing transportation impacts, they may continue to do so until July 1, 2020. As the City’s General Plan identifies circulation thresholds of significance in accordance with LOS, *CEQA Guidelines* Section 15064.3, subdivision (b) does not apply to the proposed project. Therefore, **no impact** would occur, and no mitigation is required.

**c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: Construction of the proposed project would involve replacing the Rancho Road Bridge over the California Aqueduct. The proposed Rancho Road alignment starts curving southerly immediately east of the Kern Avenue intersection. It then curves northerly and routes across the California Aqueduct at an approximately 45-degree skew angle and ties back into the existing centerline at the Via Antiqua intersection. The proposed alignment provides optimized geometrics and constructability of a single span precast girder bridge to comply with DWR Encroachment Permit Guidelines. The design speed is 55 mph.

The design of the proposed project does not include any sharp curves or dangerous intersections; therefore, the project would not create a substantial increase in hazards due to a design feature. In fact, with completion of the bridge widening, Rancho Road Bridge is anticipated to improve motorist safety and the safety response times for emergency vehicles by providing an additional lane in each direction along the bridge. The additional lane would provide a passing lane for slow-moving vehicles such as

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heavy trucks and vehicles turning to abutting driveways, which would enhance the flow of traffic along Rancho Road. With implementation of **Mitigation Measures TRA-01** and **TRA-02**, construction-related traffic detours will be planned and executed through consultation with City police, fire, and emergency staff to ensure construction of the project would not substantially increase hazards due to a geometric design feature or incompatible uses. Impacts would be reduced to **less than significant with mitigation incorporated**.

**d. Result in inadequate emergency access?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: The proposed project would be designed, constructed, and maintained to provide adequate emergency access and evacuation. With implementation of **Mitigation Measures TRA-01** and **TRA-02**, the City will incorporate adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures during construction. Construction-related traffic detours will be planned and executed through consultation with City police, fire, and emergency staff to ensure construction of the project would not result in inadequate emergency access. Furthermore, replacing the two-lane Rancho Road Bridge crossing the California Aqueduct with a new 4-lane bridge would negate the potential choke point at the bridge for vehicles traveling along Rancho Road, which could result if operation of the Rancho Road Widening Project occurs without replacing the bridge as proposed. With implementation of **Mitigation Measures TRA-01** and **TRA-02**, impacts would be reduced to **less than significant with mitigation incorporated**.

**3.18 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:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
<p><b>a.</b> 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)?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>b.</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?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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- 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)?**
- 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?**

### *Less than Significant with Mitigation Incorporated*

Discussion of Effect: CEQA defines a “historical resource” as a resource that meets one or more of the following criteria: (1) is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) is listed in a local register of historical resources as defined in PRC §5020.1(k); (3) is identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); or (4) is determined to be a historical resource by a Project’s Lead Agency (PRC §21084.1 and *State CEQA Guidelines* §15064.5[a]). “Local register of historical resources” means a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

Chapter 532, Statutes of 2014 (i.e., Assembly Bill [AB] 52), requires Lead Agencies evaluate a project’s potential to impact “tribal cultural resources.” Such resources include “[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources.” AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a “tribal cultural resource.” Also per AB 52 (specifically PRC 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects.

Pursuant to AB 52, the City notified California Native American tribes that have previously requested that the City provide them with notice of the project on October 25, 2018. The City received one response, from the San Manuel Band of Mission Indians (SMBMI), dated November 19, 2018. The SMBMI stated the project is within their ancestral territory but that the project site is disturbed and therefore does not concern the SMBMI as proposed. To address unanticipated encounters of archaeological materials, the SMBMI requests the following mitigation:

### **Mitigation Measure**

**CUL-01** In the event that pre-contact cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within Mitigation Measure TCR-1, if any such find occurs and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. This measure shall be implemented to the satisfaction of the City Development Services Department.

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- CUL-02** If significant Native American historical resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly. This measure shall be implemented to the satisfaction of the City Development Services Department.
- CUL-03** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project. This measure shall be implemented to the satisfaction of the City Development Services Department.
- TCR-01** The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in Mitigation Measure CUL-1, of any pre-contact resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site. This measure shall be implemented to the satisfaction of the City Development Services Department.
- TCR-02** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project. This measure shall be implemented to the satisfaction of the City Development Services Department.

The SMBMI further stated in its response to the City that the Tribe's letter dated November 19, 2018 concludes SMBMI's input on the proposed project, as of the date of the letter, and no additional consultation pursuant to CEQA is required unless there is an unanticipated discovery of cultural resources during project implementation. Accordingly, implementation of **Mitigation Measures CUL-01** through **CUL-03** and **TCR-01** and **TCR-02** would reduce impacts on Tribal Cultural Resources to **less than significant with mitigation incorporated**.

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**3.19 UTILITIES AND SERVICE SYSTEMS**

Would the project:

	Potentially Significant 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, drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, State, and local management reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a. Require or result in the relocation or construction of new or expanded water, drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects?**

*Less than Significant Impact*

Discussion of Effects: The project would acquire some ROW and easements from the DWR, such as footing, public utility, temporary construction easements, and permanent ROW (refer to Figure 3). The City shall enter into an agreement with the DWR to address all the necessary ROW, easements, associated work, and costs.

Letters describing the project and preliminary project plans were sent on May 17, 2016 to potentially affected utility companies, including Southern California Edison Company (electricity), Southwest Gas (natural gas), Verizon Business (fiber optic communications), Charter Communications (cable television), Frontier Communications (telephone), and the City of Hesperia for water and sewer facilities. Utilities would be relocated per the City Franchise Agreements. The proposed project is replacement of a

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roadway bridge and therefore does not generate additional demand for utilities, including electricity, natural gas, telecommunications, water delivery/treatment, or wastewater conveyance/treatment. Environmental impacts associated with the construction of the proposed replacement bridge, approach roadways, and associated utility relocations are analyzed and mitigated as applicable through this Initial Study. Therefore, impacts resulting from the construction, expansion, or relocation of utilities would be **less than significant**, and no mitigation is required.

**b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?**

*No Impact*

Discussion of Effects: The proposed project does not include any structure or feature that generates demand for water; therefore, **no impact** would occur. No mitigation is required.

**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?**

*No Impact*

Discussion of Effects: The proposed project does not include any structure or feature that generates wastewater; therefore, **no impact** would occur. No mitigation is required.

**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?**

*Less than Significant Impact*

Discussion of Effects: Solid waste collection is a "demand-responsive" service, and current service levels can be expanded and funded through user fees without difficulty. The proposed project would result in the replacement of an existing two-lane bridge with a new six-lane bridge over the California Aqueduct. No housing or permanent employment is proposed; therefore, there would be no increase in population or corresponding demand for solid waste disposal during operation of the project. However, solid waste such as asphalt, concrete, soil, and landscaping would be generated during demolition of the existing bridge and approach roadways.

The City's waste recycling requirements apply only to new buildings, additions to buildings and alternations to buildings. These requirements are not applicable to projects such as the proposed bridge replacement. To the extent feasible, and as available and appropriate, the project will recycle bridge materials and/or utilize recycled materials during project construction. The project is not anticipated to generate solid waste in excess of State or local standards. Impacts to landfill capacity as a result of project demolition and construction would be **less than significant**. No mitigation is required.

**e. Comply with Federal, State, and local statutes and regulations related to solid waste?**

*Less than Significant Impact*

Discussion of Effects: As detailed in response to Checklist Question 3.19d, the project would comply with federal, State, and local statutes and regulations related to solid waste. Impacts would be **less than significant**, and no mitigation is required.

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**3.20 WILDFIRE**

If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project:

	<b>Potentially Significant Impact</b>	<b>Less than Significant with Mitigation Incorporated</b>	<b>Less than Significant Impact</b>	<b>No Impact</b>
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**a. Substantially impair an adopted emergency response plan or emergency evacuation plan?**

*No Impact*

Discussion of Effects: The California Department of Forestry and Fire Protection (CalFire) does not identify the project site to be in a Very High Fire Hazard Severity Zone.<sup>109</sup> **No impact** would occur, and no mitigation is required. For additional information on emergency evacuation plans, refer to response to Checklist Question 3.9f. No mitigation is required.

**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?**

*No Impact*

Discussion of Effects: The California Department of Forestry and Fire Protection (CalFire) does not identify the project site to be in a Very High Fire Hazard Severity Zone.<sup>110</sup> **No impact** would occur, and no mitigation is required.

<sup>109</sup> *Very High Fire Hazard Severity Zones in LRA.* California Department of Forestry and Fire Protection. November 13, 2008. [http://frap.fire.ca.gov/webdata/maps/san\\_bernardino\\_sw/fhszl\\_map.62.pdf](http://frap.fire.ca.gov/webdata/maps/san_bernardino_sw/fhszl_map.62.pdf) (accessed April 25, 2019).

<sup>110</sup> *Ibid.*

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- c. **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment?**

*No Impact*

Discussion of Effects: The California Department of Forestry and Fire Protection (CalFire) does not identify the project site to be in a Very High Fire Hazard Severity Zone.<sup>111</sup> **No impact** would occur, and no mitigation is required.

- 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?**

*No Impact*

Discussion of Effects: The California Department of Forestry and Fire Protection (CalFire) does not identify the project site to be in a Very High Fire Hazard Severity Zone.<sup>112</sup> The project is a bridge and roadway project and would not expose people to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. **No impact** would occur, and no mitigation is required.

**3.21 MANDATORY FINDINGS OF SIGNIFICANCE**

Does the project:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e. Have the potential to 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, 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. 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.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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<sup>111</sup> *Ibid.*

<sup>112</sup> *Ibid.*

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g. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

a. **Have the potential to 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, 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?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: Although potential hydrology and water quality impacts could result from the proposed project, implementation of NPDES permits ensures the State’s mandatory standards for the maintenance of clean water and the federal minimums are met. Compliance with the provisions of the NPDES permit and preparation of a project-specific WQMP are regulatory requirements that apply to all development projects. The WQMP would be reviewed and approved as a routine action during the processing of the project by the City; therefore, it is reasonable to conclude that the required measures and features detailed in the WQMP to safeguard water quality would be incorporated into the proposed project. Adherence to **Standard Conditions HYD-01** through **HYD-03** and the requirements included in the NPDES permit, SWPPP, and WQMP would reduce potential water quality impacts to **less than significant**.

The project site contains paved roadway, a concrete aqueduct, graded and engineered earthen berms, maintenance roadways, and it is surrounded by residential development. Implementation of mitigation will ensure the proposed project will not 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, or reduce the number or restrict the range of a rare or endangered plant or animal. **Mitigation Measure BIO-01** would ensure that nesting and migratory birds are not significantly affected during construction. **Mitigation Measures BIO-02** and **BIO-03** would ensure that the project would reduce impacts to burrowing owl to less than significant levels. **Mitigation Measure BIO-04**, would reduce impacts to potential jurisdictional features to less than significant levels.

A project-specific Impacts Assessment concluded that replacing the Rancho Road Bridge crossing the California Aqueduct would not adversely alter the Aqueduct’s historical values, including water conveyance and complex design/engineering, which render it significant pursuant to CEQA. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5. To address unanticipated encounters of archaeological materials, **Mitigation Measures CUL-01** through **CUL-03** and **TCR-01** and **TCR-02** are incorporated at the request of the SMBMI and would reduce impacts from unanticipated encounters to less than significant levels.

While artificial fill extends up to seven feet below existing surface grade, deeper native soils may contain sediments that have potential to yield paleontological resources. With implementation of **Mitigation Measures GEO-01** through **GEO-03**, impacts to unique paleontological resources or sites or unique geologic features would be reduced to less than significant levels.

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The proposed project has either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated with respect to environmental issues pursuant to CEQA. Due to the limited scope of physical impacts to the environment associated with the proposed project, implementation of the mitigation measures described above would reduce impacts to the quality of the environment to less than significant levels. No additional mitigation is required.

- b. 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.)**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: In evaluating the cumulative effects of the project, Section 21100(e) of CEQA states that “previously approved land use documents including, but not limited to, general plans, specific plans, and local coastal plans, may be used in cumulative impact analysis.” The replacement bridge would be constructed for future accommodation of six lanes in support of the City’s “ultimate” build out of Rancho Road as a six-lane *Special Major Arterial* roadway. The bridge would be striped as a four-lane bridge to correspond with the anticipated roadway capacity of Rancho Road under the approved Rancho Road Widening Project,<sup>113</sup> including a shared pedestrian/bicycle path in conformance with the City, federal, and Caltrans programs and procedures.

The cumulative air quality impacts resulting from development of the approved Rancho Road Widening Project were evaluated in the Rancho Road Widening Project Final EIR and were determined to be **less than significant with mitigation incorporated**.<sup>114</sup> The proposed project is consistent with the approved Rancho Road Widening Project and would not substantially alter the land use assumptions utilized in the development of the AQMP. The replacement bridge, approach roadways, and ancillary components associated with the proposed bridge replacement were not included in the analysis of air quality impacts of the approved Rancho Road Widening Project. However, as the approved Rancho Road Widening Project stretches 5 miles between Coriander Drive and 7<sup>th</sup> Avenue, and the proposed project site encompasses only approximately 0.40 mile of this segment of Rancho Road, it is reasonable to conclude that any impacts to air quality from construction and operation of the proposed project would be less severe than those analyzed under the approved Rancho Road Widening Project. As detailed in response to Checklist Question 3.3b, impacts to air quality from the approved Rancho Road Widening Project would be less than significant with mitigation. Therefore, cumulative air quality impacts of the proposed project would be **less than significant** with implementation of **Mitigation Measures AQ-01** through **AQ-07**, and no additional mitigation is required.

Construction of the proposed replacement bridge would improve traffic conditions at the project site and serve to alleviate the choke point for vehicles traveling along Rancho Road by providing an additional lane in each direction. The additional lanes would provide for passing of slow-moving vehicles such as heavy trucks, and provide vehicles access to abutting driveways. This would enhance the flow of traffic along Rancho Road, which already operates at acceptable LOS D or better and will continue to do so through the year 2040. With implementation of **Mitigation Measures TRA-01** through **TRA-03**, the

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<sup>113</sup> *Rancho Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page S-6. City of Hesperia and County of San Bernardino. June 2013.

<sup>114</sup> *Ibid.* Pages 2-33 and 2-34.



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proposed project's construction-related traffic would not exceed, the LOS standard established by the County congestion management agency for designated roads or highways.

As stated previously, the project has no impact, a less than significant impact, or a less than significant impact with implementation of mitigation with respect to environmental issues. Additionally, the project is consistent with the development anticipated in the City's General Plan and the approved Rancho Road Widening Project. Therefore, a less than significant cumulative impact would occur with development of the project, and no additional mitigation is required.

**c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?**

*Less than Significant with Mitigation Incorporated*

Discussion of Effects: Impacts to human beings that require mitigation as a result of the proposed project consist of aesthetics, air quality, hazards and hazardous materials, noise, and traffic.

Compliance with City Municipal Code Section 16.24.150 (Subject Desert Native Plants) and County Codes 88.01.050 (Tree or Plant Removal Permits) and 88.01.060 (Desert Native Plant Protection) ensure the project is designed, constructed, and operated in accordance with the General Plan. Policy LU-8.5 of the Land Use Element, requires development within the City to: "Adopt design standards which will assure land use compatibility and enhance the visual environment, by providing attractive, aesthetically pleasing development which is sensitive to the unique local characteristics of the Hesperia community."<sup>115</sup> No mitigation is required.

According to the Final EIR for the approved Rancho Road Widening Project, sensitive receptors for air quality such as residences occur along the Rancho Road corridor, for which implementation of **Mitigation Measures AQ-01 through AQ-07** would reduce construction-related emissions impacts to these receptors to **less than significant with mitigation incorporated**. Since the proposed project site encompasses only approximately 0.40 mile of the 5-mile segment of the approved Rancho Road Widening Project, it is reasonable to conclude that construction emissions from project-related construction activities would be generated over a shorter period when compared to construction of the 5-mile segment of Rancho Road to be widened. Therefore, emissions from construction activities of the proposed project would not exceed or be more severe than those anticipated from the approved Rancho Road Widening Project. Since implementation of **Mitigation Measures AQ-01 through AQ-07** would reduce construction-related emissions impacts to sensitive receptors under the approved Rancho Road Widening Project to **less than significant with mitigation incorporated**, accordingly, **Mitigation Measures AQ-01 through AQ-07** would likewise reduce construction-related emissions impacts to sensitive receptors, under the proposed project, to **less than significant with mitigation incorporated**. Additionally, **Mitigation Measures AQ-01 through AQ-07** would ensure construction of the proposed project would not exceed MDAQMD criteria air pollutant thresholds.

Pursuant to General Plan Goal SF-1, all future construction and development within the project site would be required to comply with applicable provisions of the 2016 CBC and the City's building regulations. A project-specific Foundation Report (Appendix C) was prepared for the bridge and roadway along Rancho Road. Proper engineering design and construction in conformance with the 2016 CBC

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<sup>115</sup> Draft Environmental Impact Report for the City of Hesperia General Plan Update, SCH# 2010011011. Page 3.9-10. City of Hesperia. May 26, 2010.

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standards and project-specific geotechnical recommendations (**Standard Condition GEO-1**) would ensure that the project is not developed on unstable geologic units or soils.

Lead and other heavy metals may be present within yellow thermoplastic paint markings on the pavement and the existing bridge coatings. Due to the potential for hazardous materials to be encountered within the project site **Mitigation Measure HAZ-01** has been identified. Additionally, because implementation of the project would require the demolition of an existing bridge that may have materials containing asbestos and lead-based paint, **Mitigation Measure HAZ-02** has been identified. Furthermore, there is a potential for soil containing ADL to be present within the project site, so **Mitigation Measure HAZ-03** has been identified. There is also a small potential for other heavy metals such as chromium to be present within the yellow thermoplastic paint markings on the pavement within the project area, so **Mitigation Measure HAZ-04** has been identified. Construction and operation of the proposed project would be conducted in accordance with all applicable State and federal laws. Compliance with all applicable laws and regulations and adherence to **Mitigation Measures HAZ-01** through **HAZ-04** would reduce the potential impact associated with reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment to a less than significant level.

Although project construction noise has the potential to be louder than the ambient noise in the project vicinity, this noise would cease once project construction is completed. The City's Municipal Code Section 16.20.125 allows temporary demolition and construction noise in excess of normally defined thresholds between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and Saturdays, except for federal holidays. Because construction noise is exempt during specific hours, a project fully compliant with the City's construction noise standards would not generate a significant construction-related noise impact. However, if heavy construction activities were to occur outside the exempted hours, the City's noise limits likely would be exceeded at nearby residences.<sup>116</sup> Through compliance with the City's Municipal Code Section 16.20.125 regarding construction noise hours and implementation of **Mitigation Measures NOI-01** through **NOI-04**, the project's construction-related noise impacts would be reduced to **less than significant with mitigation incorporated**.

Although the proposed project entails a replacement bridge to be constructed for future accommodation of six lanes in support of the City's "ultimate" build out of Ranchoero Road as a six-lane *Special Major Arterial* roadway, it would be striped as a four-lane roadway to correspond with the anticipated roadway capacity of Ranchoero Road pursuant to the approved Ranchoero Road Widening Project.<sup>117</sup> Therefore, the proposed project is not traffic capacity-increasing and it would not increase traffic or corresponding noise levels beyond those which have already been anticipated for and evaluated under the approved Ranchoero Road Widening Project.

As detailed in response to Checklist Question 3.13a, the Ranchoero Road Widening Project Final EIR identified mitigation for seven noise-affected dwellings along Ranchoero Road, of which one (APN 0409-222-58 located at 15190 Ranchoero Road) is located within the subject project site footprint. The mitigation entails installation of double-pane windows to affected residential homes that do not already have double-pane windows installed. However, APN 0409-222-58 located at 15190 Ranchoero Road already has double-pane windows installed,<sup>118</sup> so this mitigation is already implemented. The proposed

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<sup>116</sup> It is not expected that the nearby Just-4-Kids and Just-4-Toddlers Preschools would be occupied during the nighttime hours.

<sup>117</sup> *Ranchoero Road Widening Project Final Environmental Impact Report, SCH# 2012061058*. Page S-6. City of Hesperia and County of San Bernardino. June 2013.

<sup>118</sup> *Ibid.* Page 2-183.

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project shall adopt the mitigation proposed for the Rancho Road Widening Project as it relates to traffic impacts (refer to Section 3.16 of this Initial Study for the mitigation pertaining to traffic impacts) to ensure the proposed project does not increase traffic volumes, which are the source of the noise impact, beyond those identified in the Rancho Road Widening Project Final EIR. The proposed project would not increase traffic or corresponding noise levels beyond those which have already been anticipated for and evaluated under the approved Rancho Road Widening Project. Without an increase in traffic volumes, the proposed project would not contribute to projected future traffic growth along the Rancho Roadway corridor and exceed the 60 dBA CNEL threshold or result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Impacts would be reduced to **less than significant with mitigation incorporated**.

The closest residential structure is approximately 25 feet from the project construction boundary and the California Aqueduct is approximately 15 feet from the project construction boundary. The vibratory roller would generate 101 VdB at 15 feet and 94 VdB at 25 feet, and the large bulldozer would generate 94 VdB at 15 feet and 87 VdB at 25 feet. With Implementation of **Mitigation Measures NOI-05 through NOI-07**, the closest residential structure would not experience vibration levels that exceed the FTA threshold of 94 VdB (0.2 in/sec PPV) and the California Aqueduct would not experience vibration levels that exceed the FTA threshold of 102 VdB (an equivalent to 0.5 in/sec in PPV). Construction-related vibration impacts to nearby residential structures and the California Aqueduct would be reduced to **less than significant with mitigation incorporated**.

Construction of the proposed project has the potential to cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system as a result of required road closures during construction. With implementation of **Mitigation Measures TRA-01 and TRA-02**, the proposed project's construction-related impacts to LOS that would otherwise conflict with City policy addressing the circulation system would be reduced to **less than significant with mitigation incorporated**.

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**APPENDIX A**

**IMPACTS ASSESSMENT FOR THE RANCHERO ROAD BRIDGE CROSSING THE  
CALIFORNIA AQUEDUCT**

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**APPENDIX B**

**FOUNDATION REPORT FOR RANCHERO ROAD BRIDGE (REPLACE) OVER  
CALIFORNIA AQUEDUCT, HESPERIA, CALIFORNIA**

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**APPENDIX C**

**DRAINAGE REPORT: RANCHERO ROAD AQUEDUCT CROSSING**

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**APPENDIX D**

**RANCHERO ROAD IMPROVEMENT PROJECT, NOISE TECHNICAL REPORT**

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**APPENDIX E**

**AQUEDUCT CROSSING TRAFFIC STUDY**

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