STATE ROUTE 14 (STATE ROUTE 138)/AVENUE G INTERCHANGE IMPROVEMENTS AND AVENUE G WIDENING PROJECT

CITY OF LANCASTER, LOS ANGELES COUNTY, CALIFORNIA

District 7-LA-14 (LA-138) PM R70.99
EA 309500 – Project No. 0714000283

Initial Study
Proposed Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

City of Lancaster

January 2019
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SR-14 (SR-138)/Avenue G Interchange Improvements and Avenue G Widening Project

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

Submitted Pursuant to: (State) Division 13, California Resources Code

THE STATE OF CALIFORNIA
Department of Transportation
CEQA Lead Agency

Responsible Agencies: City of Lancaster, California Transportation Commission

Dec 28, 2018
Date of Approval

Ronald Kosinski
Deputy District Director
District 7, Division of Environmental Planning
California Department of Transportation

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PROPOSED MITIGATED NEGATIVE DECLARATION
Pursuant to Division 13, State of California Public Resources Code

Project Description:
The California Department of Transportation (Caltrans) and the City of Lancaster propose local interchange and arterial improvements to the State Route-14 (SR-14) (State Route 138/SR-138)/Avenue G interchange, in the City of Lancaster, Los Angeles County. The project would enhance traffic operations and improve safety through the interchange by reconfiguring the ramp intersection controls, widening Avenue G through the interchange, and constructing Avenue G arterial improvements. Interchange improvements would include the widening or replacement of the Avenue G bridge overcrossing, improvements of all on- and off-ramps, roundabout intersection control, elimination of loop on-ramps, and Avenue G arterial improvements, including bike lanes and pedestrian facilities. As the widening of the bridge and Avenue G would only allow for additional sidewalk and/or bicycle facilities, no arterial capacity enhancement is proposed. The proposed project would improve bicycle and pedestrian access in the project area and would provide for active transportation facilities along Avenue G. Caltrans is the California Environmental Quality Act (CEQA) lead agency for the project.

Determination:
This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans’ intent to adopt an MND for this project. This does not mean that Caltrans’ decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study (IS) for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project will have no impact on agricultural and forestry resources, public services, and recreation.

The proposed project will have less than significant impacts on aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise and vibration, population and housing, transportation/traffic, or tribal cultural resources, or utilities and service systems.

The proposed project will have less than significant impacts on biological resources with incorporation of mitigation measures.

Mitigation measures that would reduce potentially significant impacts resulting from the proposed project to less than significant are summarized in the Mitigation Monitoring Program for the proposed project (Chapter 5 of the IS).

Ronald Kosinski
Deputy District Director
District 7, Division of Environmental Planning
California Department of Transportation

Date of Approval
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LIST OF ACRONYMS

ºC     Celsius
ºF     Fahrenheit
AB     Assembly Bill
ACMs   asbestos-containing materials
ADA    Americans with Disabilities Act
ADL    aerially deposited lead
ADT    average daily vehicle trips
AHERA  Asbestos Hazard Emergency Response Act
AM     ante meridiem
APN    Assessor’s Parcel Number
AQMP   Air Quality Management Plan
ASR    Archaeological Survey Report
AV     Antelope Valley
AVAQMD Antelope Valley Air Quality Management District
AVCERT Antelope Valley Community Emergency Response Team
BMPs   Best Management Practices
BSA    Biological Study Area
CA     California
CAAAQS California Ambient Air Quality Standards
Cal/OSHA California Occupational Health and Safety Administration
CalEPA California Environmental Protection Agency
CalFire California Department of Forestry and Fire Protection
CalRecycle California Department of Resources Recycling and Recovery
Caltrans California Department of Transportation
CARB   California Air Resources Board
CCAA   California Clean Air Act
CCP    Construction Contingency Plan
CCR    California Code of Regulations
CDFW   California Department of Fish and Wildlife
CEQA   California Environmental Quality Act
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
CERT   Community Emergency Response Team
CFR    Code of Federal Regulations
CGP    Construction General Permit
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<th>Description</th>
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<td>CGS</td>
<td>California Geological Survey</td>
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<tr>
<td>CH₄</td>
<td>Methane</td>
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<tr>
<td>CHMIRS</td>
<td>California Hazardous Material Incident Report System</td>
</tr>
<tr>
<td>CHP</td>
<td>California Highway Patrol</td>
</tr>
<tr>
<td>CNDDB</td>
<td>California Natural Diversity Database</td>
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<tr>
<td>CNEL</td>
<td>Community Noise Equivalent Level</td>
</tr>
<tr>
<td>CO</td>
<td>Carbon Monoxide</td>
</tr>
<tr>
<td>CO₂</td>
<td>carbon dioxide</td>
</tr>
<tr>
<td>CO₂eq</td>
<td>carbon dioxide equivalent</td>
</tr>
<tr>
<td>Corps</td>
<td>United States Army Corps of Engineers</td>
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<td>COZEEP</td>
<td>Construction zone enforcement enhancement program</td>
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<td>CRIT</td>
<td>Colorado River Indian Tribes</td>
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<td>Construction Traffic Control Plan</td>
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<td>CTHR</td>
<td>Candidate California Threatened</td>
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<td>Certified Unified Program Agencies</td>
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<td>Clean Water Act</td>
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<td>Water Quality Technical Memorandum</td>
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Chapter 1.0 INTRODUCTION

The California Department of Transportation (Caltrans) and City of Lancaster propose to widen or replace of the Avenue G bridge overcrossing, improvements of all on- and off-ramps, roundabout intersection control, eliminate loop on-ramps, Avenue G arterial improvements, and construction of bicycle lanes and pedestrian facilities along State Route 14 (State Route 138)/Avenue G Interchange at post mile (PM) R70.99 and along the Avenue G arterial roadway, in the City of Lancaster, California. Caltrans is the CEQA Lead Agency.

The project would consist of widening or replacement of the Avenue G bridge overcrossing, improvements of all on- and off-ramps, roundabout intersection control, elimination of loop on-ramps, Avenue G arterial improvements, bicycle lanes, and pedestrian facilities. No arterial capacity enhancement is proposed. The proposed project would improve bicycle and pedestrian access in the project area and would provide for active transportation facilities along Avenue G over State Route 14 (SR-14) (State Route 138 [SR-138]).

1.1 Project Location

The project site is located within the City of Lancaster, California (Sections 32 and 33 of Township 8 North, Range 12 West, and Sections 4 and 5 of Township 7 North, Range 12 West, San Bernardino Base and Meridian); refer to Figure 2-1, Regional Vicinity. Specifically, the project site is located at the interchange of SR-14 (SR-138) and along Avenue G for a length of approximately 1.67 miles. The site extends along Avenue G west of SR-14 (SR-138) for approximately 0.35 miles, and east of SR-14 (SR-138) for approximately 1.32 miles. The project site extends north from the SR-14 (SR-138) and Avenue G interchange along SR-14 (SR-138) approximately 0.45 miles and south approximately 0.45 miles; refer to Figure 2-2, Site Vicinity. The project site is located within roadway ROW, and vacant land (associated with proposed acquisition).

The project site is located primarily within the northern portion of the City. Within the project area, Avenue G serves as the boundary between the City (to the south) and unincorporated Los Angeles County (to the north). As such, a small portion of the project site along the northerly portion of Avenue G exists within unincorporated Los Angeles County.

1.2 Purpose and Need

1.2.1 Project Purpose

The project purpose is to improve traffic operations and enhance safety, accommodate improved access for active transportation modes, and provide complete street features.

1.2.2 Project Need

1.2.2.1 INTERCHANGE MODIFICATION

Constructed in 1968 in conjunction with the Antelope Valley Freeway, the interchange is a partial cloverleaf configuration that reflects the high priority that was given to automobiles at that time, with minimal consideration to pedestrians and bicyclists.

In addition, the current stop-controlled ramp intersections make it difficult to make left-turns while peak hour cross-traffic on Avenue G is not required to stop. According to the Federal Highway Administration (FHWA), 1/3 of all intersection crashes, and more than 40 percent of fatal crashes,
occur at stop sign controlled intersections. The intersections at the interchange ramps with Avenue G are being reconfigured to include roundabouts as the method of intersection control, which reduce vehicle speeds and improve safety and operations.

The high-speed free-right turns on the loop entrance ramps are proposed to be eliminated which is more user-friendly for active transportation modes as it decreases vehicle speeds making a right-turn as they enter the freeway.

1.2.2.2 AVENUE G IMPROVEMENTS

Existing conditions on Avenue G east of the interchange include a single yellow dashed centerline, one lane in each direction, and graded shoulders. This makes it difficult for motorists exiting the freeway to make a left-turn across on-coming traffic and requires the left-turning vehicle to block the through lane in the process. Active transportation modes must currently traverse along the graded shoulders while cyclists must either ride on the graded shoulder or take the lane, which is not signed or marked as a bike route. In addition, the proposed buffered bike lane will enhance safety by more positively separating motorized and non-motorized traffic.

1.2.3 Project Funding

The City of Lancaster (City) has secured Measure R funding through construction for improvements at five interchanges within the SR-14 (SR-138) corridor. The corridor projects include interchange and arterial improvements at Avenue G, Avenue J, Avenue K, Avenue L, and Avenue M. These five projects will cost approximately $65 million and are funded through construction by the Los Angeles County Metropolitan Transportation Authority (Metro) Measure R Highway Equity fund program.

The project is being conducted in cooperation with the City, Metro, and County of Los Angeles. The project is identified in the Approved 2017 Federal Transportation Improvement Program (FTIP) as No. LA0G927. Costs for the project are anticipated to be up to approximately $15,850,000 for Build Alternative 2 and up to approximately $18,400,000 for Build Alternative 3. The project has been determined to be eligible for highway operational improvements and funding by action on the program by the Metro Board. No federal funds will be used, nor federal approvals required, eliminating any requirement to comply with the National Environmental Policy Act (NEPA).

1.3 Public Participation Schedule

The Initial Study/Mitigated Negative Declaration (IS/MND) will be circulated for 30 days for public comment. The City will prepare the Notice of Intent (NOI) and Caltrans will review, approve, and publish the NOI for the 30-day public review period. The City will receive any public comments and transmit them to Caltrans with the finalized copy of the IS/MND. The City will also prepare, and Caltrans will review and submit, a Notice of Completion (NOC) to the California State Clearinghouse at this time. Barring substantial new information requiring additional environmental review, the MND will be prepared, Caltrans will approve the MND, and a Notice of Determination (NOD) will be filed.
1.4 Permits and Approvals Needed

Table 1-1, Project Permits and Approvals Needed, shows the permits, reviews, and approvals required for project construction:

Table 1-1: Project Permits and Approvals Needed

<table>
<thead>
<tr>
<th>Agency</th>
<th>Permit/Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Department of Transportation District 7</td>
<td>Project approval (design and environmental review)</td>
</tr>
<tr>
<td>California Department of Transportation District 7</td>
<td>Encroachment Permit</td>
</tr>
<tr>
<td>City of Lancaster</td>
<td>Public Works: Engineering Approval</td>
</tr>
<tr>
<td>City of Lancaster</td>
<td>Public Works: Precise Design Plan</td>
</tr>
<tr>
<td>City of Lancaster</td>
<td>Public Works: Grading Permit</td>
</tr>
<tr>
<td>County of Los Angeles</td>
<td>Public Works: Grading Permit</td>
</tr>
<tr>
<td>Lahontan Regional Water Quality Control Board</td>
<td>Construction General Permit</td>
</tr>
</tbody>
</table>
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Chapter 2.0 PROJECT DESCRIPTION

2.1 Project Components

The California Department of Transportation (Caltrans) District 7 and the City of Lancaster (City) propose local interchange and arterial improvements to the State Route (SR) 14 (SR-138)/Avenue G Interchange; refer to Figure 2-1, Regional Vicinity, and Figure 2-2, Site Vicinity.

The project site is located primarily within the northern portion of the City. Within the project area, Avenue G serves as the boundary between the City (to the south) and unincorporated Los Angeles County (to the north). As such, a small portion of the project site along the northerly portion of Avenue G exists within unincorporated Los Angeles County.

The project would consist of widening or replacement of the Avenue G bridge overcrossing, improvements of all on- and off-ramps, roundabout intersection control, elimination of loop on-ramps, and Avenue G arterial improvements, including bicycle lanes and pedestrian facilities. As the widening of the bridge and Avenue G would only allow for additional sidewalk and/or bicycle facilities, no arterial capacity enhancement is proposed. The proposed project would improve bicycle and pedestrian access in the project area and would provide for active transportation facilities along Avenue G over SR-14 (SR-138).

The proposed project would include a Type L-2 spread diamond interchange with roundabout intersection control. All of the on- and off-ramps would be realigned in order to accommodate the roundabout intersections. The northbound and southbound loop on-ramps would be eliminated with the proposed project.

Outside and to the east of the interchange area, Avenue G would be improved. Improvements would extend east of the interchange to 10th Street West and west of the interchange to just west of 25th Street West. Avenue G improvements would include one travel lane in each direction, a striped median, and bicycle lanes.

The existing Avenue G overcrossing of SR-14 (SR-138) would either be replaced or widened by approximately 21 feet on the northerly side of the bridge to accommodate one travel lane in each direction, bicycle lanes, and sidewalks. Construction is expected to begin in September 2019 with a duration of approximately 18 months.

2.2 Project Alternatives

Two build alternatives (Alternatives 2 and 3) and a No Build Alternative are being considered as part of this project and are described as follows.
2.2.1 No Build Alternative

The No Build Alternative would maintain the existing facility as-is with no improvements. Therefore, this alternative would not improve traffic operations, provide active transportation improvements, or enhance safety in the project area.

2.2.2 Alternative 2

Alternative 2 includes a Type L-2 spread diamond interchange with roundabout intersection control; refer to Figures 2-3a through 2-3g, Preliminary Site Plan – Alternative 2. The Avenue G Overcrossing (Bridge # 53 1860) through the interchange would be widened by approximately 21 feet on the north side to accommodate one lane in both directions, 8.5-foot-wide bicycle lanes, and 8-foot-wide sidewalks. The direct on- and off-ramps would be realigned in order to accommodate the roundabout intersections. The loop on-ramps would be eliminated. Oversized truck traffic would be able to continue to use the on- and off-ramps of the interchange as a detour to avoid driving under the existing nonstandard vertical clearance of the bridge. Signage would be added to inform motorists of the detour for oversized vehicles.

Under Alternative 2, the construction activity on the bridge will be accomplished in two phases. The first phase will use the existing bridge to provide bi-directional traffic and pedestrian access while the northern width is constructed. The second phase will utilize the existing bridge section and the new northern bridge section to facilitate bi-directional traffic and possibly pedestrian access. Further, construction of the roundabouts and associated ramp realignments would conflict with existing ramps and ramp intersections. Under this Alternative, the interchange would need to be closed to SR-14 (SR-138) access and to through traffic on Avenue G once work on the on-ramps and off-ramps begin. Advanced notice of interchange closure would need to be posted in advance of the Avenue H and Avenue F interchanges in accordance with Caltrans standards. Avenue G traffic would need to be detoured to Avenue H at 30th Street West to the west of the interchange and 10th Street West to the east of the interchange.

The interchanges at Avenue H and F have relatively low traffic volumes and are anticipated to handle the diversion of the small volume of diverted traffic as a result of the Avenue G interchange construction.

2.2.3 Alternative 3

Alternative 3 includes similar project features as Alternative 2; however, this alternative includes realigning existing Avenue G through the interchange limits to accommodate a bridge replacement rather than widening the existing bridge, which includes a non-standard vertical clearance; refer to Figures 2-4a through 2-4g, Preliminary Site Plan – Alternative 3. The replaced bridge would be constructed to meet the standard vertical clearance. To facilitate construction and traffic operations during construction, the new bridge will be on an alignment north of the existing bridge. Minor revisions to Avenue G and the ramps intersections beyond those required for Alternative 2 are needed to account for the realignment.

Under Alternative 3, the new bridge could be constructed separate from the existing bridge, allowing through traffic on Avenue G to remain. However, construction of the new bridge abutments may conflict with existing on-ramps, resulting in the same Avenue G to SR-14 (SR-138) detours as Alternative 2. As with Alternative 2, construction of the roundabouts and associated ramp realignments would conflict with existing ramps and ramp intersections, requiring closure of the interchange and notice of detours in advance of Avenues H and F on SR-14 (SR-138) and at Avenue G in advance of 30th Street West and 10th Street West.
The interchanges at Avenue H and F have relatively low traffic volumes and are anticipated to handle the diversion of the small volume of diverted traffic as a result of the Avenue G interchange construction.
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Figure 2-3a

SR-14/AVENUE G INTERCHANGE IMPROVEMENTS AND AVENUE G WIDENING PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Preliminary Site Plan – Alternative 2

LEGEND
- EXISTING PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED LANDSCAPING
- PROPOSED BRIDGE CONSTRUCTION
- PROPOSED ROUNDABOUT APRON
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Figure 2-3f
SR-14/AVENUE G INTERCHANGE IMPROVEMENTS AND AVENUE G WIDENING PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
Preliminary Site Plan – Alternative 2

LEGEND
- EXISTING PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED LANDSCAPING
- PROPOSED BRIDGE CONSTRUCTION
- PROPOSED ROUNDABOUT APRON
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Figure 2-3g

SR-14/AVENUE G INTERCHANGE IMPROVEMENTS AND AVENUE G WIDENING PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Preliminary Site Plan – Alternative 2

KEY MAP

LEGEND
- EXISTING PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED LANDSCAPING
- PROPOSED ROUNDABOUT APRON
- PROPOSED BRIDGE CONSTRUCTION
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Figure 2-4a

SR-14 (SR-138)/AVENUE G INTERCHANGE IMPROVEMENTS AND AVENUE G WIDENING PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
Preliminary Site Plan – Alternative 3

LEGEND
- EXISTING PAVEMENT
- PROPOSED LANDSCAPING
- PROPOSED BRIDGE CONSTRUCTION
- PROPOSED SIDEWALK
- PROPOSED ROUNDABOUT APRON
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Figure 2-4f
SR-14 (SR-138)/AVENUE G INTERCHANGE IMPROVEMENTS AND AVENUE G WIDENING PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
Preliminary Site Plan – Alternative 3

LEGEND
EXISTING PAVEMENT
PROPOSED LANDSCAPING
PROPOSED BRIDGE CONSTRUCTION
PROPOSED SIDEWALK
PROPOSED ROUNDABOUT APRON
Chapter 3.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) CHECKLIST

The environmental factors checked below would be potentially affected by this project. Please see the checklist below for additional information regarding affected factors, involving at least one impact that is "Less Than Significant with Mitigation Incorporated."

| ☐ Aesthetics | ☐ Agriculture and Forestry | ☐ Air Quality |
| ☒ Biological Resources | ☐ Cultural Resources | ☐ Geology/Soils |
| ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials | ☐ Hydrology/Water Quality |
| ☐ Land Use/Planning | ☐ Mineral Resources | ☐ Noise |
| ☐ Population/Housing | ☐ Public Services | ☐ Recreation |
| ☐ Transportation/Traffic | ☐ Tribal Cultural Resources | ☐ Utilities/Service Systems |
| ☒ Mandatory Findings of Significance |

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included following the applicable section of the checklist. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.
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3.1 Aesthetics

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>AESTHETICS. Would the project:</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a. Have a substantial adverse effect on a scenic vista?</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b. Substantially damage scenic resources, including, but not limited to,</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>trees, rock outcroppings, and historic buildings within a state scenic</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>highway?</td>
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<td>☑</td>
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</tr>
<tr>
<td>c. Substantially degrade the existing visual character or quality of the</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>site and its surroundings?</td>
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<tr>
<td>d. Create a new source of substantial light or glare, which would</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>adversely affect day or nighttime views in the area?</td>
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</tbody>
</table>

A Scenic Resources Evaluation and Visual Impact Assessment was completed for the project in July 2018 (Michael Baker International). The study supports the discussion included below.

REGULATORY SETTING

Historic Sites Act of 1935

The federal Historic Sites Act of 1935 established a national registry of natural landmarks and protects “outstanding examples of major geological features.”

AFFECTED ENVIRONMENT

Scenic Vista

A scenic vista is defined as an area that provides expansive views of a highly valued landscape for the benefit of the general public. The City of Lancaster General Plan 2030, major visual resources within the City include local views of surrounding buttes, Quartz Hill, and long-distance panoramas of the San Gabriel Mountains and desert expanses. Other than public views along SR-138 and Avenue G, no other public views are afforded of the project site and visual resources.

State Scenic Highways

There are no designated State Scenic Highways in the vicinity of the project site. The nearest eligible State Scenic Highway is SR-58, located approximately 21.2 miles north of the project site. The proposed project would not be visible from SR-58 at this distance. However, SR-138 (SR-14) is designated as a Scenic Route in the City of Lancaster General Plan 2030 Master Environmental Assessment (MEA).

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Character and Quality

The existing visual character of the project site consists of transportation uses (SR-14 [SR-138] and Avenue G), and the surrounding area is comprised of vacant desert land. Currently, no curb/gutter, bike lanes, or sidewalk facilities are present in the project site.

Light and Glare

The proposed project is located within a rural area. Currently, nighttime lighting emanates from existing vehicle headlights along SR-14 (SR-138), and from the existing industrial uses and Antelope Valley Fairgrounds to the south/southwest of the project site (i.e., security lighting, parking lot lighting). Light and glare caused by vehicle headlights along SR-14 (SR-138) and Avenue G also occurs.

Viewers

There are two major types of viewer groups for highway projects: highway neighbors and highway users. Highway neighbors are people who have views “to” the road. Highway users are people who have views “from” the road. Highway neighbors include owners, employees, and patrons that may be using the commercial businesses within the City. Highway users include commuters or residents traveling along SR-14 (SR-138) or along Avenue G, and visitors traveling through or staying in the area.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.1(a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The project consists of widening or replacing the Avenue G overcrossing, realignment of all on- and off-ramps, roundabouts at northbound and southbound ramp terminus intersections, elimination of loop on-ramps, and Avenue G arterial improvements, including bicycle lanes and/or pedestrian facilities. There are no scenic vistas on or near the project site. However, SR-14 (SR-138) is designated as a Scenic Route in the City of Lancaster General Plan 2030 MEA. Upon completion of the project, the SR-14 (SR-138)/Avenue G interchange would be improved with new roundabout features, separated bicycle lanes, and new landscaping, improving the visual quality of the landscape. According to the City of Lancaster 2030 General Plan, major visual resources within the City include local views of surrounding buttes, Quartz Hill, and long-distance panoramas of the San Gabriel Mountains, and desert expanses. The proposed-project would not impede public views toward General Plan-designated visual resources and would not obstruct views from travelers along SR-14 (SR-138). As such, the project would not have a substantial adverse effect on a scenic view or vista. A less than significant impact would occur in this regard.

3.1(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. SR-14 (SR-138) is not designated as a State Scenic Highway. The nearest Officially Designated State Scenic Highway is State Route 58 (SR-58), located approximately 21.2 miles north of the project site. In addition, there are no scenic resources within the project area.

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resources, significant rock outcroppings, geologic features, trees, or historic resources located along SR-14 (SR-138) or Avenue G. Therefore, no impacts would occur.

3.1(c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact.

Short-Term Construction

Construction activities are expected to begin in early 2019 with a duration of approximately 18 months. During this time, construction activities would be visible from motorists and bicyclists traveling along SR-14 (SR-138) and Avenue G. Impacts in this regard would be temporary in nature and would cease upon completion. Therefore, it is concluded that short-term project construction would not substantially degrade the existing visual character or quality of the site and its surroundings.

Long-Term Operations

The existing visual character of the project site consists of transportation uses (SR-14 [SR-138] and Avenue G), and the surrounding area is comprised of vacant desert land. Developed industrial uses and the Antelope Valley Fairgrounds are located to the south/southwest of the project site along SR-14 (SR-138). Currently, no curb/gutter, bicycle lanes, or sidewalk facilities are present on the project site. While the proposed project would slightly alter the existing visual character of the site by constructing/improving the SR-14 (SR-138)/Avenue G interchange and widening or replacing the Avenue G overcrossing structure, it would not substantially degrade the visual character of the site or its surroundings. Rather, the proposed roundabouts, raised medians, and buffered bicycle lanes would provide for a cohesive landscape at a pedestrian-friendly scale. In addition, the proposed bicycle lanes and pedestrian facilities would introduce new views of General Plan-designated visual resources for non-motorized viewers along Avenue G, as these facilities are currently not present. The SR-14 (SR-138)/Avenue G interchange would be improved in compliance with the City of Lancaster’s and Caltrans’ design guidelines. As such, a less than significant impact would occur in this regard.

3.1(d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. There are two primary sources of light: light emanating from building interiors that pass through windows, and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Depending upon the location of the light source and its proximity to adjacent light sensitive uses, light introduction can be a nuisance, affecting adjacent areas and diminishing the view of the clear night sky.

The proposed project is located within a rural area of the City. Currently, nighttime lighting emanates from existing vehicle headlights along SR-14 (SR-138), and from the existing industrial uses and Antelope Valley Fairgrounds to the south/southwest of the project site (i.e., security lighting, parking lot lighting). Light and glare caused by vehicle headlights along SR-14 (SR-138) and Avenue G also occurs. Upon completion of the project, lighting would be similar to existing conditions. The project would not introduce any new sources of light or glare that would affect motorists, bicyclist, or other sensitive viewers in the project area. Any new roadway lighting associated with
the project would be consistent with Caltrans standards for “cut-off” type fixtures and light spillover reduction. A less than significant impact would occur in this regard.
3.2 Agriculture and Forestry Resources

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRICULTURE AND FORESTRY 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 the 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:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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))?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>d. Result in the loss of forest land or conversion of forest land to non-forest use?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
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</tr>
<tr>
<td>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?</td>
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<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

REGULATORY SETTING

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

AFFECTED ENVIRONMENT

The project site consists of transportation facilities (SR-14 [SR-138] and Avenue G), and the surrounding area is comprised of vacant land. The nearest active agricultural use is over four miles to the northwest.
ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.2(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?

No Impact. The project site is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). The proposed project will not convert farmland, prime or otherwise, to non-agricultural uses, as there is no farmland on the project site. No impacts to State-designated farmland would result.

3.2(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The proposed project would not conflict with agricultural zoning, as zoning in the immediate vicinity of the project is for Heavy Industrial, Open Space, and Specific Plan within the City of Lancaster, and Light Manufacturing (M-1) within the County of Los Angeles. These zones are not intended for agricultural uses. Further, there is no conflict with any Williamson Act contracts, since there are no contracts in the project area. Thus, implementation of the proposed project would not conflict with an agricultural zone or Williamson Act contract and no impact would result in this regard.

3.2(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. There is no land within the project area zoned or used for forest land or timberland. No impact would result in this regard.

3.2(d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. See response to Response 3.2(c).

3.2(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?

No Impact. The project area does not contain any farmland, agricultural land, or forest land. No impact would result in this regard.

---

3.3 Air Quality

<table>
<thead>
<tr>
<th>AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Conflict with or obstruct implementation of the applicable air quality plan?</td>
</tr>
<tr>
<td>b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</td>
</tr>
<tr>
<td>c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?</td>
</tr>
<tr>
<td>d. Expose sensitive receptors to substantial pollutant concentrations?</td>
</tr>
<tr>
<td>e. Create objectionable odors affecting a substantial number of people?</td>
</tr>
</tbody>
</table>

An Air Quality Assessment was completed for the project in September 2018 (Michael Baker International). The results of this study are included in the discussion below.

REGULATORY SETTING

California Clean Air Act

The California Air Resources Board (CARB) administers air quality policy in California. The CAAQS were established in 1969 pursuant to the Mulford-Carrell Act. These standards are generally more stringent and apply to more pollutants than the NAAQS (i.e., visibility reducing particulates, hydrogen sulfide, and sulfates). The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an air quality management plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for preparation of the SIP for the State of California.

CARB also administers the state’s mobile source emissions control program and oversees air quality programs established by state statute, such as Assembly Bill (AB) 2588, the Air Toxics “Hot Spots” Information and Assessment Act of 1987.

Antelope Valley Air Quality Management District

Air districts have the primary responsibility to control air pollution from all sources other than those directly emitted from motor vehicles, which are the responsibility of the CARB and the EPA. Air districts adopt and enforce rules and regulations to achieve State and Federal ambient air quality standards and enforce applicable State and Federal law.

The Antelope Valley Air Quality Management District (AVAQMD) adopted its own 2008 Federal 8-Hour Ozone Attainment Plan on May 20, 2008. The document sets forth a comprehensive program that would lead the area into compliance with federal and state air quality standards. The
2008 Federal 8-Hour Ozone Attainment Plan includes the latest planning assumptions regarding population, vehicle, and industrial activity and addresses all existing and forecasted ozone precursor-producing activities within the Antelope Valley through the year 2020.

**AFFECTED ENVIRONMENT**

The Antelope Valley is in the westernmost portion of the Mojave Desert Air Basin (MDAB), which encompasses the desert portion of Kern County, and the northeastern desert portion of Riverside County. The MDAB contains an assemblage of mountain ranges and isolated 305 to 1,219-meter peaks interspersed with long broad valleys that often contain dry lake beds. The San Bernardino, San Gabriel, Tehachapi and Sierra Nevada mountain ranges largely separate the MDAB from the southern California coastal and central California valley regions. Prevailing winds in the MDAB are from the west and southwest, flowing from coastal and central regions through mountain passes and canyons. The mountains trap incoming moisture, creating a “rain shadow” effect in the basin and contributing to the region’s desert climate.

The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, with at least three months exhibiting maximum average temperatures over 38 degrees Celsius (100.4 degrees Fahrenheit). The region receives on average between 3.77 and 22.61 inches of precipitation per year. During the summer the MDAB is generally influenced by the offshore Pacific Subtropical High [pressure] cell that inhibits cloud formation and contributes to daytime solar heating. Winter cold air masses from Canada and Alaska rarely influence the basin, because they are weak and diffuse by the time they reach the desert. Most desert moisture arrives as infrequent summer monsoon-season thundershowers arising from warm, moist, and unstable air masses from the south.

Air quality in the MDAB is affected by locally-generated air pollution but is also highly influenced by out-of-basin pollutant sources, primarily ozone-generating precursors. The Antelope Valley is downwind of the Los Angeles basin, and to a lesser extent, downwind of the San Joaquin Valley. Prevailing winds transport ozone and ozone precursors from both regions into and through the Antelope Valley during the summer ozone season. Local Antelope Valley emissions contribute to exceedances of both the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for ozone, but the Antelope Valley would be in attainment of both standards without the influence of this transported air pollution from upwind regions.

The MDAB is also not in CAAQS attainment for suspended particulate matter (PM$_{10}$); it is unclassified for fine suspended particulate matter (PM$_{2.5}$). Notably, the MDAB is in attainment for several criteria air pollutants: carbon monoxide (CO), nitrogen dioxide (NO$_2$), sulfur dioxide (SO$_2$), and lead (Pb).

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2. Ibid.
5. Air Quality Planning Branch, AQPSD, *Area Designations for State Ambient Air Quality Standards PM$_{2.5}$*, December 2015.
ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.3(a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The project would include interchange and arterial improvements, as well as realignment of freeway ramps, and therefore would not increase freeway capacity or truck capacity. The project would not involve a substantial number of trucks or other diesel vehicles. The proposed improvements would not directly generate new heavy truck trips in the project area and is in compliance with the Regional Transportation Plan. Additionally, the project would improve traffic operations and enhance safety, accommodate improved access for active transportation modes, and provide complete street features. Therefore, the project meets the Clean Air Act requirements and no impact would occur.

3.3(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The project would be constructed over 18 months, beginning in 2019. As a result, project construction would not last more than five years and is considered temporary. Project construction would result in temporary emissions of CO, NOx, ROG, PM2.5, and PM10. Stationary or mobile powered on-site construction equipment typically include trucks, tractors, signal boards, excavators, backhoes, concrete saws, crushing and/or processing equipment, graders, scrapers, trenchers, pavers, and other paving equipment. Short-term construction emissions for the project are depicted in Table 5 of the Air Quality Assessment. In order to minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with state-mandated emission control devices pursuant to state emission regulations and standard construction practices (refer to Minimization Measure AQ-2). Short-term construction particulate matter emissions would be further reduced through the implementation of dust suppression measures outlined within AQAQM Rule 403 (refer to Minimization Measure AQ-1), and Caltrans Standard Specifications for Construction (Section 10-5 [Dust Control], refer to Minimization Measure AQ-4). Therefore, the project’s short-term construction emissions are expected to be less than significant.

With regard to long-term operational emissions, No Build and Build traffic volumes would be the same (for both the Opening Year [2020] and Horizon Year [2040]). Improvements to the proposed project would include widening of Avenue G to provide one lane in each direction and buffered bike lanes. Because the existing condition already includes one lane in each direction, these improvements would not increase the capacity of the roadway. Therefore, no arterial capacity enhancement is proposed and improvements would not generate additional traffic. Additionally, the project would not increase the number of trucks or other diesel vehicles in the project area. Thus, the proposed improvements would not directly generate new operational emissions in the project area. As described in the Air Quality Assessment, the project is not considered a project of air quality concern (POAQC) under Title 40 of the Code of Federal Regulations (40 CFR), section 93.123(b)(1), as it would not create a new or worsen an existing particulate matter violation. Additionally, the project would not create CO hot-spots, and would not increase Diesel Particulate Matter and Mobile Source Air Toxic (MSAT) emissions from no build conditions. As such, long-term operational emissions would be less than significant.
Avoidance and Minimization Measures:

Minimization Measure AQ-1: Prior to the issuance of grading permits or approval of grading plans, a dust control plan shall be a part of the construction contract standard specifications, which shall include measures to meet the requirements of AVAQMD Rules 402 (Nuisance) and 403 (Fugitive Dust). Such measures may include, but are not limited to, the following:

- Attempt to phase and schedule activities to avoid high-ozone days and first-stage smog alerts.
- Discontinue operation during second-stage smog alerts.
- All haul trucks shall be covered prior to leaving the site to prevent dust from impacting the surrounding areas.
- Comply with AVAQMD Rule 403, particularly to minimize fugitive dust to surrounding areas. AVAQMD Rule 403, should be adhered to, ensuring the cleanup of the construction-related dirt on approach routes to the site, and the application of water and/or chemical dust retardants that solidify loose soils, should be implemented for construction vehicle access, as directed by the Resident Engineer.
- Moisten soil each day prior to commencing grading to depth of soil cut.
- Water exposed surfaces at least twice a day under calm conditions, and as often as needed on windy days or during very dry weather in order to maintain a surface crust and minimize the release of visible emissions from the construction site.
- Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation.
- Wash mud-covered tires and under carriages of trucks leaving construction sites.
- Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud that would otherwise be carried off by trucks departing project sites.
- Securely cover all loads of fill coming to the site with a tight-fitting tarp.
- Cease grading during periods when winds exceed 25 mph.
- Provide for permanent sealing of all graded areas, as applicable, at the earliest practicable time after soil disturbance.
- Maintain construction equipment in peak operating condition so as to reduce operating emissions.
- Use low-sulfur diesel fuel in all equipment.
• Use electric equipment whenever practicable/shut off engines when not in use.

**Minimization Measure AQ-2:** Project grading plans shall show the duration of construction. Ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer’s specifications, to the satisfaction of the Resident Engineer, which may include periodic inspections of construction equipment.

**Minimization Measure AQ-3:** All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

**Minimization Measure AQ-4:** The contractor shall adhere to Caltrans Standard Specifications for Construction (2015) Sections 14-9.02 (Air Pollution Control) and 10-5 (Dust Control).

**Minimization Measure AQ-5:** In order to further minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with the State-mandated emission control devices pursuant to State emission regulations and standard construction practices.

3.3(c) **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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

*Less Than Significant Impact.* As discussed previously, the proposed project would not result in short- or long-term air quality impacts with implementation of Minimization Measures AQ-1 through AQ-5. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. In addition, the proposed project would be consistent with the City’s General Plan designation (Major Arterial with 6 through lanes and a 100-foot right-of-way). Therefore, cumulative operational impacts associated with implementation of the proposed project would be less than significant.

3.3(d) **Expose sensitive receptors to substantial pollutant concentrations?**

*Less Than Significant Impact.* According to the CEQA, residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The AVAQMD requires a health risk assessment for transportation projects (i.e., with 50,000 or more vehicles per day) within 1,000 feet of a sensitive receptor. The proposed project would not expose sensitive receptors to substantial pollutant concentrations. A less than significant impact would occur in this regard.

3.3(e) **Create objectionable odors affecting a substantial number of people?**

*Less Than Significant Impact.* According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses associated with odors. In addition, the project would be...
required to comply with AVAQMD Rule 402 (Nuisance), which would reduce odorous emissions from project operations.

Construction activities associated with the proposed project may generate detectable odors from heavy-duty equipment exhaust. Construction-related odors would be short-term in nature and cease upon construction completion. Any impacts to existing adjacent land uses would be short-term and are considered less than significant.
### 3.4 Biological Resources

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td><strong>BIOLOGICAL RESOURCES. Would the project:</strong></td>
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<tr>
<td>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 Game or U.S. Fish and Wildlife Service?</td>
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<td>b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</td>
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<td>c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</td>
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<td>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?</td>
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<td>e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</td>
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<td>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?</td>
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This analysis is based on the Natural Environment Study/Jurisdictional Delineation (NES/JD), dated May 2017 (Michael Baker International). As part of the NES/JD, a habitat assessment was conducted by Michael Baker International biologists on June 21, 2016 to document baseline conditions of the habitat and to identify special status species and natural communities of special concern potentially occurring within the Biological Study Area (BSA)\(^1\) that could pose a constraint to implementation of the proposed project. The JD site investigation was conducted on June 21, 2016 (Michael Baker International) to delineate United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and the California Department of Fish and Wildlife (CDFW) jurisdictional authority within the proposed BSA.

\(^1\) The Biological Study Area is defined as the area of analysis for direct effects, indirect effects, and cumulative effects within the project boundary. In this case, it includes a 500-foot radius buffer around the entire project site.
REGULATORY SETTING

Federal Endangered Species Act of 1973

As defined within the Federal Endangered Species Act (FESA) of 1973, an endangered species is any animal or plant listed by regulation as being in danger of extinction throughout all or a significant portion of its geographical range. A threatened species is any animal or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its geographical range. Without a special permit, federal law prohibits the “take” of any individuals or habitat of federally listed species. Under Section 9 of the FESA, take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” The term “harm” has been clarified to include “any act which actually kills or injures fish or wildlife and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.” Enforcement of FESA is administered by the United States Fish and Wildlife Service (USFWS).

Critical habitat is designated for the survival and recovery of species listed as threatened or endangered under the FESA. Critical habitat includes those areas occupied by the species, in which are found physical and biological features that are essential to the conservation of an FESA listed species and which may require special management considerations or protection. Critical habitat may also include unoccupied habitat if it is determined that the unoccupied habitat is essential for the conservation of the species.

Whenever Federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the FESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing has a federal nexus and uses federal funds or requires federal authorization or permits (e.g., funding from the Federal Highway Administration or a permit from the Corps). If USFWS determines that Critical Habitat would be lost or adversely modified from a proposed action, the USFWS would develop reasonable and prudent alternatives to ensure the purpose of the proposed action can be achieved without loss of Critical Habitat. If the action is not likely to adversely modify or destroy critical habitat, USFWS would include a statement in its biological opinion concerning any incidental take that may be authorized and specify terms and conditions to ensure the agency is in compliance with the opinion.

In the event that a federally-listed species would be affected and there is no federal nexus, the USFWS would require a Habitat Conservation Plan (HCP) under Section 10 of the FESA prior to issuing an incidental take permit. HCPs are required to include an impact assessment, minimization or mitigation measures, and reasonable and prudent alternatives and the reasons for not taking them. As in Section 7 consultations, the approval of an HCP and associated Implementation Agreement (if required) would necessitate a biological opinion from the USFWS, which would include any additional measures that USFWS feels are necessary to properly protect the resource(s) being permitted for take.

California Endangered Species Act

In addition to federal laws, the State of California has its own Endangered Species Act, the CESA, which is enforced by the CDFW. The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in “take” of individuals (defined in CESA as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) are regulated by CDFW. Habitat
degradation or modification is not included in the definition of “take” under CESA. Nonetheless, CDFW has interpreted “take” to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A rare species is one that is considered present in such small numbers throughout its range that it may become endangered if its present environment worsens. State threatened and endangered species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, as an informal term that refers to species which might be in need of concentrated conservation actions.

As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species would be proposed for listing as a threatened or endangered species.

**California Fish and Game Code**

*Sections 3503, 3503.5, 3511, and 3513*

The CDFW administers the California Fish and Game Code (Fish and Game Code). There are particular sections of the Fish and Game Code that are applicable to natural resource management. For example, Section 3503 of the Fish and Game Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the Migratory Bird Treaty Act (MBTA). Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

*Section 1602 of the Fish and Game Code*

Section 1600 *et seq.* of the Fish and Game Code applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. Section 1602 of the Fish and Game Code establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources, or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided. Pursuant to Section 1602 of the Fish and Game Code, a notification must be submitted to the CDFW for any activity that diverts or obstructs the natural flow or alter the bed, channel, or bank (which may include associated biological resources) of a river or stream or use material from a streambed. This
includes activities taking place within rivers or streams that flow perennially or episodically and that are defined by the area in which surface water currently flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical and biological indicators.

Sections 1900-1913 of the Fish and Game Code

Sections 1900–1913 of the California Fish and Game Code were developed to preserve, protect, and enhance Rare and Endangered plants in the state of California (the Native Plant Protection Act). The act requires all state agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

Federal Clean Water Act Section 404

The Corps maintains regulatory authority over the discharge of dredged or fill material into the waters of the United States, pursuant to Section 404 of the Federal Clean Water Act (CWA). The Corps and United States Environmental Protection Agency (EPA) defines “fill material” as any “material placed in waters of the United States where the material has the effect of: (i) Replacing any portion of a water of the United States with dry land; or (ii) Changing the bottom elevation of any portion of the waters of the United States.” Fill material may include sand, rock, clay, construction debris, wood chips, or other similar “materials used to create any structure or infrastructure in the waters of the United States.” The term “waters of the United States” includes the following:

- All waters that have, are, or may be used in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide;
- Wetlands;
- All waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;
- All impoundments of water mentioned above;
- All tributaries of waters mentioned above;
- Territorial seas; and,
- All wetlands adjacent to the waters mentioned above.

In the absence of wetlands, the Corps’ jurisdiction in non-tidal waters extends to the ordinary high water mark (OHWM), which is defined as “…that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area (33 Code of Federal Regulations [CFR] 328.3(e)).”
Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are jointly defined by the Corps and EPA as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (33 CFR 328.3(b)).”

On January 9, 2001, the U.S. Supreme Court issued the decision, Solid Waste Agency of Northern Cook County v. U.S. Army Corp of Engineers. As a result of this case, the scope of the Corps' Section 404 CWA regulatory permitting program was limited, restricting Corps' jurisdictional authority over isolated, non-navigable, intrastate waters that are not tributary or adjacent to navigable waters or tributaries (i.e., wetland conditions). The Supreme Court held that Congress did not intend for isolated, non-navigable water conditions to be covered within Section 404 of the CWA, as they are not considered to be true “waters of the U.S.”

**Porter-Cologne Water Quality Act**

The Porter-Cologne Water Quality Control Act charges the State Water Resources Control Board (SWRCB) and the nine Regional Boards statewide with protecting water quality throughout California. Typically, the SWRCB and Regional Board act in concert with the Corps under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters. The Supreme Court acted to limit the regulatory jurisdiction of the Corps under Section 404 of the CWA. The action did not limit the State's regulatory jurisdiction over Waters of the state. Waters of the state are defined in Section 13050(e) of the Porter-Cologne Water Quality Control Act as “…any surface or groundwater, including saline waters, within the boundaries of the state.” Currently, an applicant would delineate the wetlands on their property utilizing methodology presented in the 1987 Corps of Engineers Wetland Delineation Manual and the delineation would be verified by the Corps. In cases where an area meets the criteria to be considered a wetland, but the Corps does not have jurisdiction, the applicant is referred to the appropriate Regional Board. In these cases, the project must receive a permit for Waste Discharge Requirements or a Waiver of Waste Discharge Requirements from the Regional Board. Projects that affect Waters of State are required by the Regional Board to incorporate mitigation. Mitigation ratios are determined on a project specific basis during the permitting process and are based on the quality of the wetlands impacted by the project.

**California Department of Fish and Wildlife Lake and Streambed Alteration Agreements**

Historically, the State of California regulated activities in rivers, streams, and lakes pursuant to California Fish and Game Code Sections 1600-1607; however, on January 1, 2004, legislation went into effect that repealed Fish and Game Code Sections 1600-1607 and instead, added Fish and Game Code Sections 1600-1616. This action eliminated the separation between private/public notifications (previously 1601/1603). Section 1602 of the Fish and Game Code requires any person, state, or local governmental agency, or public utility to notify the CDFW before commencing any activity that would result in one or more of the following:

- Substantially obstruct or divert the natural flow of a river, stream, or lake;

- Substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or,

- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.
Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes within the State of California. While the jurisdictional limits are similar to the limits defined by Corps regulations, CDFW jurisdiction includes riparian habitat supported by a river, stream, or lake with or without the presence or absence of saturated soil conditions or hydric soils. CDFW jurisdiction generally includes to the top of bank of the stream, or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Any project that occurs within or in the vicinity of a river, stream, lake, or their tributaries typically requires notification of the CDFW, including rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life, and watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.

**Migratory Bird Treaty Act of 1918**

Pursuant to the MBTA (16 U.S. Government Code [USC] 703) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds or their nests or eggs (16 USC 703; 50 CFR 10, 21). The statute states:

*Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions…*

The Act covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered a “take.” This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls).

The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

**AFFECTED ENVIRONMENT**

**Vegetation and Flora**

Three plant communities were observed within the boundaries of the Biological Study Area (BSA): desert saltbush scrub, disturbed desert saltbush scrub, and desert apricot scrub. In addition, there are four human-modified areas that would be classified as tamarisk row, basin, disturbed, and developed. These plant communities and human-modified areas are described in further detail below.

**Desert Saltbush Scrub**

The desert saltbush scrub plant community is the dominant plant community with the BSA and encompasses approximately 328.24 acres throughout the BSA. The desert saltbush scrub plant community is found in the undeveloped areas within and surrounding the project footprint. This plant community is generally dominated by spiny saltbush (*Atriplex confertifolia*), Mojave saltbush (*Atriplex spinifera*), rubber rabbitbrush (*Ericameria nauseosa*), and matchweed (*Gutierrezia*...
microcephala). Other co-dominant species include silverscale saltbush (*Atriplex argentea*), big saltbush (*Atriplex lentiformis*), and alkali heath (*Frankenia salina*). Groundcover is sparsely covered by red brome (*Bromus madritensis* ssp. *rubens*), Mediterranean grass (*Schismus barbatus*), salt grass (*Distichlis spicata*), shortpoded mustard (*Hirschfeldia incana*), and mouse barley (*Hordeum murinum*). A discrete section of the desert saltbush scrub on the southern edge of the shoulder of Avenue G supports scattered individuals of red willow (*Salix laevigata*), Goodding’s black willow (*Salix gooddingii*), and mule fat (*Baccharis salicifolia*). Most of the desert saltbush scrub plant community is relatively undisturbed, although there are dirt roads extending north-to-south primarily through the eastern portion of the BSA. Remnant homeless encampments were observed north and south of Avenue G generally in association with Amargosa Creek and where the desert saltbush scrub community intersects with the desert apricot scrub community (see below).

**Disturbed Desert Saltbush Scrub**

Approximately 6.54 acres of the desert saltbush scrub was classified as disturbed desert saltbush scrub. These areas are concentrated around the existing SR-14 (SR-138)/Avenue G interchange and consist of those areas that were formerly cleared, generally for the construction of the existing SR-14 (SR-138)/Avenue G interchange and are now revegetating with patchy vegetation characteristic of the desert saltbush scrub community.

**Desert Apricot Scrub**

The desert apricot scrub plant community is generally associated with Amargosa Creek and is present both north and south of Avenue G on the eastern side of SR-14 (SR-138). Portions of this plant community are located within the proposed project footprint adjacent to Avenue G. This plant community encompasses approximately 3.08 acres within the BSA and is present within and intermixed with the desert saltbush scrub. This plant community is dominated by desert apricot (*Prunus fremontii*), which is found singly or in small patches within this on-site community.

**Basin**

Pond Two, as identified by the National Wetlands Inventory (NWI) Mapper, is a basin located on the southern end of the BSA, east of SR-14 (SR-138) and south of Avenue G. Pond Two is located south of the SR-14 (SR-138) northbound exit ramp where a portion of it extends into the proposed project footprint. The basin bottom encompasses approximately 13.56 acres within the BSA. The basin was dry at the time of the survey; however, the basin bottom supported sparse cocklebur (*Xanthium strumarium*) and white sweetclover (*Melilotus albus*). Cottonwood (*Populus fremontii*) trees lined the bank and slopes of the basin.

**Tamarisk Row**

A tamarisk windrow is located on the northern end of the BSA, outside of the proposed project footprint, and encompasses a total of approximately 0.6 acre within the BSA on both sides of SR-14 (SR-138). Tamarisk (*Tamarix* sp.) has been planted in rows both east and west of SR-14 (SR-138).

**Disturbed**

Disturbed areas are the unpaved areas that are primarily or entirely devoid of vegetation. Disturbed areas are located throughout the BSA and encompass approximately 35.93 acres. These areas encompass the unpaved roads, especially on the BSA’s eastern side, the center median of SR-14 (SR-138), and the road shoulder of Avenue G.
Developed

Developed areas within the BSA encompass paved, impervious surfaces, and areas that have been extensively altered. Within the BSA, developed areas encompass approximately 23.51 acres and include Avenue G, SR-14 (SR-138) and its associated on- and off-ramps, and the dirt bike track.

Identified Habitats of Concern

Habitats are considered to be of special concern based on (1) federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) support the habitat requirements of special-status plants or animals. State and/or federal jurisdictional features (i.e., lakes, rivers, streams, ephemeral drainages, jurisdictional streambed and bank, and wetlands) are also considered natural communities of special concern.

Two drainage jurisdictional features (Amargosa Creek and Ancillary Feature) were observed within the eastern portion of the BSA, as well as several wetlands that would qualify as natural communities of special concern. No other habitats of concern have been identified.

Fauna

Three reptile species were observed in the BSA during the field survey: western side-blotched lizard (*Uta stansburiana elegans*), Great Basin whiptail (*Aspidoscelis tigris tigris*), and long-nosed leopard lizard (*Gambelia wislizenii*). Since the BSA is primarily undeveloped, it is expected to provide suitable habitat for a number of reptilian species, primarily lizards and snakes. Commonly-occurring reptile species that have the potential to occur in the BSA besides those already observed include Great Basin fence lizard (*Sceloporus occidentalis longipes*), southern desert horned lizard (*Phrynosoma platyrhinos calidiarum*), Mohave Desert sidewinder (*Crotalus cerastes cerastes*), and northern Mohave rattlesnake (*Crotalus scutulatus scutulatus*).

The plant communities found within the BSA, primarily located outside of the proposed project footprint, provide suitable nesting and foraging opportunities for a limited variety of resident and migrant avian species. A total of 16 avian species were detected during the June 21, 2016 habitat assessment. The avian species detected during the habitat assessment include house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*), California horned lark (*Eremophila alpestris actia*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), American crow (*Corvus brachyrhynchos*), loggerhead shrike (*Lanius ludovicianus*), northern mockingbird (*Mimus polyglottos*), ash-throated flycatcher (*Myiarchus cinerascens*), California quail (*Callipepla californica*), Bell’s sparrow (*Artemisiospiza belli*), lesser nighthawk (*Chordeiles acutipennis*), and mourning dove (*Zenaida macroura*). Of these avian species, the loggerhead shrike is a special status species of concern.

Five mammals were detected in the BSA during the field survey via direct observation or via sign: desert black-tailed jackrabbit (*Lepus californicus deserticola*), coyote (*Canis latrans*), white-tailed antelope squirrel (*Ammospermophilus leucurus*), woodrat (*Neotoma* sp.), and desert cottontail (*Sylvilagus audubonii*). The plant communities found within the BSA, primarily located outside of the proposed project footprint, provide suitable habitat for a small number of mammalian species. Most mammal species are nocturnal and are difficult to observe during a diurnal field survey. Small mammal burrows within the BSA would suggest that there are additional species of mammals present, which are likely nocturnal. Bats as well could roost under the overpass and forage throughout the flatlands of the BSA.
ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.4(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 Game or U.S. Fish and Wildlife Service?

Less Than Significant With Mitigation Incorporated. A records search was conducted as part of the NES/JD of the CDFW’s California Natural Diversity Database (CNDDB), the California Native Plant Society’s Electronic Inventory of Rare and Endangered Vascular Plants of California, and the USFWS Information for Planning and Conservation (IPaC) database. A total of nine (9) special status plant species and eighteen (18) special status animal species were identified during the records search as potentially occurring within the vicinity of the BSA; refer to Table 3.4-1, Potentially Occurring Special Status Biological Resources. No natural communities of special concern were identified within the vicinity of the BSA.

All federally listed plant or animal species are presumed absent from the proposed project footprint and would not be directly or indirectly impacted from implementation of the proposed project. The project is determined to have no effect on any federally listed species identified by the USFWS Species List, CNDDB, or CNPS. Additionally, the BSA is not located within federally designated Critical Habitat. Consultation with USFWS pursuant to the FESA is not required. However, California-listed special status species of concern were identified and are discussed as follows.

### Table 3.4-1: Potentially Occurring Special Status Biological Resources

<table>
<thead>
<tr>
<th>Scientific Name Common Name</th>
<th>Status</th>
<th>Habitat</th>
<th>Observed On-site</th>
<th>Potential to Occur</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Special Status Wildlife Species</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><em>Agelaius tricolor</em></td>
<td>Fed: None CA: SSC</td>
<td>Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes (<em>Schoenoplectus</em> sp.)), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Locally this species is most likely to occur at Piute Ponds, Apollo Community Park, and other irrigated fields.</td>
</tr>
<tr>
<td>Scientific Name Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
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<tr>
<td><strong>Anniella pulchra</strong> silvery legless lizard</td>
<td>Fed: None CA: SSC</td>
<td>Occurs primarily in areas with sandy or loose loamy soils under sparse vegetation of beaches, chaparral, or pine-oak woodland; or near sycamores, oaks, or cottonwoods that grow on stream terraces. Often found under or in the close vicinity of logs, rocks, old boards, and the compacted debris of woodrat nests.</td>
<td>No</td>
<td>Low. While there are some drainages within the BSA, they likely do not provide enough subsurface soil moisture to support this species.</td>
</tr>
<tr>
<td><strong>Asio flammeus</strong> short-eared owl</td>
<td>Fed: None CA: SSC</td>
<td>Occurs in swamps, marshlands, meadows, and irrigated fields. Can occur in both freshwater and saltwater habitats. Nests on the ground in areas concealed by tule patches or dry vegetation.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Locally this species is most likely to occur at Piute Ponds.</td>
</tr>
<tr>
<td><strong>Athene cunicularia</strong> burrowing owl</td>
<td>Fed: None CA: SSC</td>
<td>Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.</td>
<td>No</td>
<td>Low. There marginal foraging habitat with the BSA. Burrows capable of supporting this species were not found within the BSA.</td>
</tr>
<tr>
<td><strong>Bombus crotchii</strong> Crotch bumble bee</td>
<td>Fed: None CA: None</td>
<td>Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site.</td>
</tr>
<tr>
<td><strong>Buteo regalis</strong> ferruginous hawk</td>
<td>Fed: None CA: WL</td>
<td>Occurs primarily in open grasslands and fields, but may be found in sagebrush flats, desert scrub, low foothills, or along the edges of pinyon-juniper woodland. Feeds primarily on small mammals and typically found in agricultural or open fields.</td>
<td>No</td>
<td>Moderate. May forage over the site but does not nest in this region.</td>
</tr>
<tr>
<td><strong>Buteo swainsoni</strong> Swainson’s hawk</td>
<td>Fed: None CA: THR</td>
<td>Typical habitat is open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grassland or suitable grain or alfalfa fields or livestock pastures.</td>
<td>No</td>
<td>Moderate. This species has been well documented in the immediate surrounding area. May forage over the site but there is no nesting habitat.</td>
</tr>
<tr>
<td><strong>Charadrius alexandrinus nivosus</strong> western snowy plover</td>
<td>Fed: THR CA: SSC</td>
<td>Occurs on sandy beaches, salt pond levees and along the shores of large alkali lakes. Requires sandy or gravelly substrate for nesting.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Locally this species is most likely to occur at Piute Ponds and Rosamond Dry Lake.</td>
</tr>
</tbody>
</table>
### Table 3.4-1: Potentially Occurring Special Status Biological Resources [continued]

<table>
<thead>
<tr>
<th>Scientific Name Common Name</th>
<th>Status</th>
<th>Habitat</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Charadrius montanus mountain plover</td>
<td>Fed: None CA: SSC</td>
<td>Found in short grasslands, freshly-plowed fields, newly-sprouting grain fields, and sometimes in sod farms. Prefers short vegetation or bare ground with flat topography, particularly grazed areas or areas with fossorial rodents.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat. Locally this species is most likely to be found in agricultural fields.</td>
</tr>
<tr>
<td>Corynorhinus townsendii Townsend’s big-eared bat</td>
<td>Fed: None CA: CTHR; SSC</td>
<td>This species uses a variety of habitats, almost always near caves, cliffs, rock ledges, or other roosting areas. They can be found in pine forest and arid desert scrub habitats. This species prefers large open areas for roosting and do not tuck themselves into cracks or crevices. Extremely sensitive to human disturbance.</td>
<td>No</td>
<td>Moderate. There is marginal foraging habitat, and it may forage within the biological study area. There is no roosting habitat.</td>
</tr>
<tr>
<td>Falco columbarius merlin</td>
<td>Fed: None CA: WL</td>
<td>Nest in forested openings, edges, and along rivers across northern North America. Found in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.</td>
<td>No</td>
<td>Moderate. May forage over the site but does not nest in this region.</td>
</tr>
<tr>
<td>Gopherus agassizii desert tortoise</td>
<td>Fed: THR CA: THR</td>
<td>Widely distributed in the Mojave, Sonoran, and Colorado deserts from below sea level to 7,220 feet. Most common in desert scrub, desert wash, and Joshua tree habitats, but occurs in almost every desert habitat except those on the most precipitous slopes.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Burrows capable of supporting this species were not found within the BSA.</td>
</tr>
<tr>
<td>Gymnogyps californianus California condor</td>
<td>Fed: END CA: END</td>
<td>Requires vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Nests in caves on cliff faces and forages up to 100 miles from its roost/nest.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. This species is most likely to be found in the surrounding mountains.</td>
</tr>
<tr>
<td>Lanius ludovicianus loggerhead shrike</td>
<td>Fed: None CA: SSC</td>
<td>Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats.</td>
<td>Yes</td>
<td>Present. This species was observed in several locations in the BSA during the field survey.</td>
</tr>
<tr>
<td>Scientific Name</td>
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<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
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<tr>
<td><strong>Phrynosoma blainvillii</strong></td>
<td>coast horned lizard</td>
<td>Fed: None CA: SSC</td>
<td>Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e., fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.</td>
<td>No</td>
</tr>
<tr>
<td><strong>Plegadis chihi</strong></td>
<td>white-faced ibis</td>
<td>Fed: None CA: WL</td>
<td>Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland.</td>
<td>No</td>
</tr>
<tr>
<td><strong>Vireo bellii pusillus</strong></td>
<td>least Bell’s vireo</td>
<td>Fed: END CA: END</td>
<td>Primarily occupy Riverine riparian habitat that typically feature dense cover within 1-2 meters of the ground and a dense, stratified canopy. Typically, it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.</td>
<td>No</td>
</tr>
<tr>
<td><strong>Xerospermophilus mohavensis</strong></td>
<td>Mohave ground squirrel</td>
<td>Fed: None CA: THR</td>
<td>Optimal habitats are open desert scrub, alkali desert scrub, and Joshua tree woodland. Prefers flat or moderately sloping terrain and is not typically found in steep areas or rocky areas. It is not known to inhabit desert pavement habitat.</td>
<td>No</td>
</tr>
</tbody>
</table>
### Table 3.4-1: Potentially Occurring Special Status Biological Resources [continued]

<table>
<thead>
<tr>
<th>Scientific Name Common Name</th>
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<th>Habitat</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Special Status Plant Species</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Astragalus preussii var. laxiflorus Lancaster milk-vetch</td>
<td>Fed: None CA: None CNPS: 1B.1</td>
<td>Grows in chenopod scrub and is only found in the area surrounding Lancaster and Edwards Air Force Base. Found at approximately 2297 feet in elevation. Blooming period is from March to May.</td>
<td>No</td>
<td>Moderate. There is suitable habitat throughout the biological study area.</td>
</tr>
<tr>
<td>Calochortus striatus alkali mariposa lily</td>
<td>Fed: None CA: None CNPS: 1B.2</td>
<td>Found in chaparral, chenopod scrub, Mojavean desert scrub, and meadows and seeps in alkaline and mesic soils. Found at elevations ranging from 230 to 5,233 feet. Blooming period is from April to June.</td>
<td>Yes - during the April 2015 rare plant survey conducted by GPA Consulting</td>
<td>High. This species was documented within the biological study area in 2015 by GPA Consulting but was not observed in 2016.</td>
</tr>
<tr>
<td>Canbya candida white pygmy-poppy</td>
<td>Fed: None CA: None CNPS: 4.2</td>
<td>Occurs on gravelly, sandy, granitic soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. Grows in elevation from 2,297 to 5,249 feet. Bloom period is from March to June.</td>
<td>No</td>
<td>Moderate. There is suitable habitat throughout the biological study area.</td>
</tr>
<tr>
<td>Chorizanthe parryi var. parryi Parry's spineflower</td>
<td>Fed: None CA: None CNPS: 1B.1</td>
<td>Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat.</td>
</tr>
<tr>
<td>Cymopterus deserticola desert cymopterus</td>
<td>Fed: None CA: None CNPS: 1B.2</td>
<td>Occurs in Joshua tree woodland and Mojavean desert scrub in sandy soils. Found at elevations ranging from 2,067 to 4,921 feet. Blooming period is from March to May.</td>
<td>No</td>
<td>Moderate. There is suitable habitat throughout the biological study area.</td>
</tr>
<tr>
<td>Eriastrum rosamondense Rosamond eriastrum</td>
<td>Fed: None CA: None CNPS: 1B.1</td>
<td>Found in openings in chenopod scrub and at the edges of vernal pools, usually in sandy, alkaline hummocks. Found at elevations ranging from 2,297 to 2,346 feet. Blooming period is from April to July.</td>
<td>No</td>
<td>Moderate. This species was documented immediately east of the biological study area in 1993 but was not observed in 2016.</td>
</tr>
<tr>
<td>Eriophyllum mohavense Barstow woolly sunflower</td>
<td>Fed: None CA: None CNPS: 1B.2</td>
<td>Grows in chenopod scrub, Mojavean desert scrub, and in playas. Found at elevations ranging from 1,640 to 3,150 feet. Blooming period is from March to May.</td>
<td>No</td>
<td>Moderate. There is suitable habitat throughout the biological study area.</td>
</tr>
<tr>
<td>Loeflingia squarrosa var. artemisiarum sagebrush loeflingia</td>
<td>Fed: None CA: None CNPS: 2B.2</td>
<td>Grows in sandy soils in desert dunes, Great Basin scrub, and Sonoran desert scrub. Found at elevations ranging from 2,297 to 5,299 feet. Blooming period is from April to May.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat.</td>
</tr>
<tr>
<td>Puccinellia simplex California alkali grass</td>
<td>Fed: None CA: None CNPS: 1B.2</td>
<td>Occurs in chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools in alkaline, vernally mesic soils, as well as in sinks, flats, and on lake margins. Found at elevations ranging from 7 to 3,051 feet. Blooming period is from March to May.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat.</td>
</tr>
</tbody>
</table>
Table 3.4-1: Potentially Occurring Special Status Biological Resources [continued]

<table>
<thead>
<tr>
<th>Notes:</th>
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<tbody>
<tr>
<td>U.S. Fish and Wildlife Service (USFWS) - Federal</td>
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<tr>
<td>END - Federal Endangered</td>
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<tr>
<td>THR - Federal Threatened</td>
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<tr>
<td>California Department of Fish and Wildlife (CDFW) - California</td>
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<tr>
<td>END - California Endangered</td>
</tr>
<tr>
<td>THR - California Threatened</td>
</tr>
<tr>
<td>CTHR - Candidate California Threatened</td>
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<tr>
<td>SSC - Species of Special Concern</td>
</tr>
<tr>
<td>WL - Watch List</td>
</tr>
<tr>
<td>California Native Plant Society (CNPS)</td>
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<tr>
<td>California Rare Plant Rank</td>
</tr>
<tr>
<td>1B Plants Rare, Threatened, or Endangered in California and Elsewhere</td>
</tr>
<tr>
<td>2B Plants Rare, Threatened, or Endangered in California, but More Common Elsewhere</td>
</tr>
<tr>
<td>Threat Ranks</td>
</tr>
<tr>
<td>0.1 - Seriously threatened in California</td>
</tr>
<tr>
<td>0.2 - Moderately threatened in California</td>
</tr>
</tbody>
</table>


Special Status Wildlife Species

One of the 18 special-status wildlife species was observed within the BSA during the habitat assessment: loggerhead shrike (*Lanius ludovicianus*). Based on habitat requirements for specific species, availability and quality of habitats needed by special-status animal species, and known distribution, ferruginous hawk (*Buteo regalis*), Swainson’s hawk (*Buteo swainsoni*), Townsend’s big-eared bat (*Corynorhinus townsendii*), merlin (*Falco columbarius*), and coast horned lizard (*Phrynosoma blainvillii*) were determined to have a moderate potential to occur within the BSA, silvery legless lizard (*Anniella pulchra pulchra*), burrowing owl (*Athene cunicularia*), and Mohave ground squirrel (*Xerospermophilus mohavensis*) were determined to have a low potential to occur. All other special-status wildlife species are presumed absent and are not expected to occur.

**Loggerhead Shrike**

Only loggerhead shrike was observed within the BSA during the habitat assessment. The proposed project footprint generally follows existing disturbed areas and roadway right-of-way (ROW). Implementation of the proposed project would result in the temporary and permanent loss of suitable habitat for this species. Specifically, Alternative 2 would result in temporary impacts to approximately 50.78 acres of desert saltbush scrub and 5.77 acres of disturbed desert saltbush and permanent impacts to approximately 2.17 acres of desert saltbush scrub and 0.77 acres of disturbed desert saltbush scrub. Alternative 3 would involve temporary impacts to approximately 50.50 acres of desert saltbush scrub and 5.44 acres of disturbed desert saltbush scrub and permanent impacts to 2.45 acres of desert saltbush scrub and 1.10 acres of disturbed desert saltbush scrub. Construction-related disturbance has the potential to impact this species, especially during the avian nesting season when individuals within the BSA may be attempting to incubate eggs or raise young.

Nesting birds are protected pursuant to the MBTA and Fish and Game Code (Sections 3503, 3503.3, 3511, and 3513 of the Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, pre-construction nesting bird clearance surveys need to be conducted.
prior to any vegetation removal or development that may disrupt the birds during the nesting season. Consequently, if avian nesting behaviors are disrupted, such as nest abandonment and/or loss of reproductive effort, it is considered “take” and is potentially punishable by fines and/or imprisonment.

Undisturbed parcels surrounding the BSA have the potential to provide refuge cover from predators, perching sites and favorable conditions for avian nesting that could be impacted by construction activities associated with the proposed project. Removal of nesting habitat and disturbances associated with the proposed work areas, including noise, vibration, and dust, may result in indirect impacts to these species if project activities occur during active nesting efforts. The nesting season generally extends from February 1st through September 1st but can vary slightly from year to year based upon seasonal weather conditions. If construction occurs between February 1st and September 1st, a pre-construction nesting bird clearance survey would be required to be conducted prior to construction activities to determine the presence or absence of nesting birds within the BSA (Minimization Measure BIO-1). If an active nest is found, the bird must be identified to species and the approximate distance from the closest work site to the nest must be estimated. If active nests are more than 500 feet (for raptors) or 150 feet (for non-listed passerines) from the nearest work site, no additional measures need to be implemented. Any nests occurring within these distances would be required to have a no-disturbance buffer implemented around them, under the judgement of a qualified biologist and/or the CDFW.

Per Minimization Measure BIO-1, a qualified biologist would be required to periodically monitor any confirmed nest sites (with no-disturbance buffers) during construction to determine if grading activities occurring outside the buffer zone disturb the birds and if the buffer zone should be increased to prevent nest abandonment. The nest trees would be required to be monitored until all nests have been abandoned (for non-project related reasons) or the young have fledged. If no nesting birds are found onsite during this time period, construction activities may continue as planned.

In conclusion, potential impacts to the loggerhead shrike are considered to be less than significant.

Ferruginous Hawk, Swainson’s Hawk, and Merlin

Ferruginous hawk (a State Watch List species), Swainson’s hawk (a State threatened species), and merlin (a State Watch List species) were not observed within the BSA as part of the habitat assessment. However, based on habitat requirements, availability and quality of habitats needed, and known distribution of these special-status animal species, they were determined to have a moderate potential to occur within the BSA.

The proposed project footprint generally follows existing disturbed areas and roadway ROW. However, implementation of the proposed project would result in the temporary and permanent loss of suitable foraging habitat for these species. Specifically, Alternative 2 would result in temporary impacts to approximately 50.78 acres of desert saltbush scrub and 5.77 acres of disturbed desert saltbush and permanent impacts to approximately 2.17 acres of desert saltbush scrub and 0.77 acres of disturbed desert saltbush scrub. Alternative 3 would involve temporary impacts to approximately 50.50 acres of desert saltbush scrub and 5.44 acres of disturbed desert saltbush scrub and permanent impacts to 2.45 acres of desert saltbush scrub and 1.10 acres of disturbed desert saltbush scrub. Potential temporary impacts to foraging activities may occur to
these special-status animal species during construction. Since these special-status animal species do not nest in this region and/or the BSA does not provide suitable nesting opportunities for these species, no significant impacts to these special-status animal species are anticipated. Upon completion of construction, no impacts to these species would occur during project operations, compared to the existing condition.

Coast Horned Lizard

Coast horned lizard (a California Species of Special Concern) was not observed within the BSA as part of the habitat assessment. However, the BSA generally provides suitable friable soils with isolated native ant nests that have the potential to support this species, if present.

The proposed project footprint generally follows existing disturbed areas and roadway ROW. However, implementation of the proposed project would result in the temporary and permanent loss of suitable habitat for this species. Specifically, Alternative 2 would result in temporary impacts to approximately 50.78 acres of desert saltbush scrub and 5.77 acres of disturbed desert saltbush and permanent impacts to approximately 2.17 acres of desert saltbush scrub and 0.77 acres of disturbed desert saltbush scrub. Alternative 3 would involve temporary impacts to approximately 50.50 acres of desert saltbush scrub and 5.44 acres of disturbed desert saltbush scrub and permanent impacts to 2.45 acres of desert saltbush scrub and 1.10 acres of disturbed desert saltbush scrub. Thus, construction activities have the potential to impact this species, if present within the proposed project footprint. Minimization Measure BIO-2 would require a pre-construction clearance survey to be conducted prior to start of construction for the coast horned lizard. Should lizards be found within the project footprint, all lizards would be required to be captured and released into designated relocation areas, approved by the City and a qualified biologist, within the BSA, but outside of the project footprint, no more than one hour after capture. During all initial grading activities, the qualified biologist would be required to be present in order to recover any coast horned lizard that may be excavated/unearted. If the animals are in good health, they would be required to be immediately relocated to the designated relocation area within the BSA, outside of the project footprint.

In conclusion, potential impacts to the coast horned lizard are considered to be less than significant.

Townsend’s Big-Eared Bat

Townsend’s big-eared bat (a State Candidate threatened species and California Species of Special Concern) was not observed within the BSA as part of the habitat assessment. Although the BSA does not provide suitable roosting habitat (i.e., caves, cliffs, rock ledges), the BSA has the potential to provide foraging opportunities. Implementation of the proposed project would result in the temporary and permanent loss of suitable foraging habitat for this species. Specifically, Alternative 2 would result in temporary impacts to approximately 50.78 acres of desert saltbush scrub and 5.77 acres of disturbed desert saltbush and permanent impacts to approximately 2.17 acres of desert saltbush scrub and 0.77 acres of disturbed desert saltbush scrub. Alternative 3 would involve temporary impacts to approximately 50.50 acres of desert saltbush scrub and 5.44 acres of disturbed desert saltbush scrub and permanent impacts to 2.45 acres of desert saltbush scrub and 1.10 acres of disturbed desert saltbush scrub. However, the proposed project footprint generally follows existing disturbed areas and roadway ROW and would thus result in minimal impacts on areas that potentially
provide suitable foraging habitat for the species. No impacts to Townsend’s big-eared bat are expected to occur since this species forages at night, after daily construction activities have stopped (no nighttime construction is proposed by the project). Further, the BSA does not provide preferred roosting opportunities for this species, and the BSA is not located in proximity to preferred roosting habitat (i.e., caves, cliffs, rock ledges). As a precaution, Minimization Measure BIO-3 requires a bat clearance survey within three days of site disturbance activities to confirm that bats remain absent from the BSA, or to implement avoidance measures should any bats be identified. Therefore, no impacts to Townsend’s big eared bat would result.

**Silvery Legless Lizard**

Silvery legless lizard (a California Species of Special Concern) was not observed within the BSA as part of the habitat assessment. Based on habitat requirements, availability and quality of habitats needed, and known distribution of this species, the silvery legless lizard was determined to have a low potential to occur within the BSA. The proposed project footprint generally follows existing disturbed areas and roadway ROW. However, minimal impacts to Amargosa Creek and on-site drainage features with loose loamy soils could result. Thus, construction activities have the potential to impact this species, if present within the proposed project footprint.

The project would be required to comply with Minimization Measure BIO-2, which would require a pre-construction clearance survey to be conducted by a qualified biologist for silvery legless lizard prior to initiation of construction. Should lizards be found within the project footprint, all lizards would be required to be captured and released into designated relocation areas, approved by the City and a qualified biologist, within the BSA, but outside of the project footprint, no more than one hour after capture. During all initial grading activities, the qualified biologist would be required to be present in order to recover any silvery legless lizard that may be excavated/unearthed. If the animals are in good health, they would be required to be immediately relocated to the designated relocation area within the BSA, outside of the project footprint.

In conclusion, potential impacts to the silvery legless lizard are considered to be less than significant.

**Burrowing Owl**

Burrowing owl (a California Species of Special Concern) was not observed within the BSA as part of the habitat assessment. Based on habitat requirements, availability and quality of habitats needed, and known distribution of this species, the burrowing owl was determined to have a low potential to occur within the BSA. The BSA provides marginal foraging habitat for this species. No burrowing owl, sign (pellets, feathers, castings, or white wash), or suitable burrows (greater than 4 inches in diameter) were observed within the BSA during the habitat assessment.

The proposed project footprint generally follows existing disturbed areas and roadway ROW. However, implementation of the proposed project would result in the temporary and permanent loss of suitable habitat for this species. Specifically, Alternative 2 would result in temporary impacts to approximately 50.78 acres of desert saltbush scrub and 5.77 acres of disturbed desert saltbush and permanent impacts to approximately 2.17 acres of desert saltbush scrub and 0.77 acres of disturbed desert saltbush scrub. Alternative 3 would involve temporary impacts to approximately 50.50 acres of desert scrub.
saltbush scrub and 5.44 acres of disturbed desert saltbush scrub and permanent impacts to 2.45 acres of desert saltbush scrub and 1.10 acres of disturbed desert saltbush scrub. Construction activities have the potential to impact this species, if present within the proposed project footprint.

To ensure burrowing owl remain absent from the project site and would not be impacted from implementation of the proposed project, a burrowing owl pre-construction clearance survey would be required to be conducted within three days of the start of any ground disturbing activities in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation (Minimization Measure BIO-4).

If burrowing owls are observed within the proposed project footprint during the pre-construction surveys and would be impacted from implementation of the project, a burrowing owl relocation plan would be required to be prepared and submitted to CDFW for review and approval prior to commencement of vegetation clearing/grubbing, grading, and construction activities. The burrowing owl relocation plan would outline methods to relocate any burrowing owls occurring within the project footprint and ensure compliance with the MBTA and Fish and Game Code. As such, potential impacts to the burrowing owl are considered to be less than significant.

Mohave Ground Squirrel

Mohave ground squirrel (a State threatened species) was not observed within the BSA as part of the habitat assessment. Based on habitat requirements, availability and quality of habitats needed, and known distribution of this species, the Mohave ground squirrel was determined to have a low potential to occur within the BSA.

Notwithstanding, according to the NES/JD, the BSA is located within the historic range of Mohave ground squirrel but is not located within any identified core areas and/or the Mohave Ground Squirrel Conservation Area set forth in the West Mojave Plan, prepared by the U.S. Department of the Interior Bureau of Land Management, dated March 2006. Approximately 10 protocol Mohave ground squirrel trapping grids were sampled in the vicinity of the BSA between 1998 and 2007. Mohave ground squirrel were not detected and were considered absent during those ten trapping sessions. The area in the vicinity of the BSA (along SR-14 [SR-138] and the area around Rosamond Dry Lake) have been surveyed to protocol level and regionally on several occasions yet there is no compelling evidence showing that Mohave ground squirrel occur, or have occurred recently, in the vicinity of the BSA. Further, protocol trapping has been conducted at 52 grid locations in the desert portion of Los Angeles County during the period 1998-2007, but no Mohave ground squirrels have been detected by this method. The only positive records in Los Angeles County have been four detections in a small area near Rogers Dry Lake and Edwards Air Force Base.

The BSA is located approximately 18 miles southwest of Edwards Air Force Base and Rogers Dry Lake and is not located within or immediately adjacent to any of the core areas, corridors, or other known populations identified. The closest identified core area is the Edwards Air Force Base Core Area. Based on findings made in the NES/JD, the site does not appear to be occupied by this species. Thus, no impacts would result in this regard.
Special Status Plant Species

A total of nine special-status plant species were identified during the records search as potentially occurring within the BSA. None of the nine special-status plant species were observed within the BSA as part of the habitat assessment. Based on habitat requirements for specific species, availability and quality of habitats needed by special-status plant species, and known distributions, alkali mariposa lily (*Calochortus striatus*) was determined to have a high potential to occur within the BSA. Lancaster milk-vetch (*Astragalus preussii var. laxiflorus*), white pygmy-poppy (*Canbya candida*), desert cymopterus (*Cymopterus deserticola*), Rosamond eriastrum (*Eriastrum rosamondense*), and Barstow woolly sunflower (*Eriophyllum mohavense*) were determined to have a moderate potential to occur within the BSA. All other special-status plant species are presumed absent and are not expected to occur.

Alkali mariposa lily was previously identified within the proposed project footprint during a focused sensitive plant survey conducted in 2015 by GPA Consulting. Alkali mariposa lily was not identified during the 2016 general field survey, which was conducted at the end of this species’ blooming period. Rosamond eriastrum was also previously identified immediately east, and outside of the BSA in 1993 per the CNDDB records search.

Alkali Mariposa Lily

A total of nine alkali mariposa lily individuals were observed within the proposed project footprint during the April 2015 rare plant survey conducted by GPA Consulting; however, none were observed in June 2016 as part of the habitat assessment. These individuals are located within the proposed project footprint and have the potential to be impacted by the proposed project. Since alkali mariposa lily has been previously documented within the BSA and could be impacted during construction, the project would be required to comply with Mitigation Measure BIO-5.

Mitigation Measure BIO-5 requires that a qualified biologist establish fencing that identifies the environmentally sensitive area (ESA) and surrounding areas known to support alkali mariposa lily prior to initiation of construction. The qualified biologist would also be required to conduct further rare plant surveys during the appropriate blooming period for alkali mariposa lily in order to document any additional locations of alkali mariposa lily and, if found, each location would also be included in the fenced ESA and surrounding areas. During clearing and grubbing activities, a biological monitor would be required to be present to ensure the ESA is not disturbed by construction.

If impacts cannot be avoided, bulbs of this species would be required to be collected and propagated at pre-approved nurseries and replanted on-site, whenever possible (BIO-5). For any on-site mitigation plantings, these plantings would be required to have a plant reestablishment period no less than two years. On-site mitigation plantings would be monitored by a qualified biologist seasonally to determine health and viability. If it is determined that an on-site planting is in poor health, those plantings would be required to be replaced by a healthy individual and monitored.

If on-site relocation of individuals or on-site plantings are not possible after construction is complete, off-site mitigation would be required to be conducted (BIO-5). Translocation and bulb/seed collection with propagation would be required to be located on an off-site preserved property. The property must be composed of habitat characteristics suitable to support special-status plant species, in particular alkali
mariposa lily, including but not limited to: appropriate soils, elevation, hydrology, and habitat. A management fund would be established to fund all monitoring, management, and protection of the conservation area(s). Appropriate fencing and/or natural barriers and signage would be required to be placed around the perimeter of each site. The public would not have access to the mitigation area(s), and no activities would be permitted within the site, except for the maintenance of habitat. Last, a special-status plant species, planting plan (Plan) would be required to be prepared. The Plan would require a replacement that is biologically equivalent or superior by area and would ensure a minimum 80 percent survivorship at the end of a five-year monitoring period.

With implementation of Mitigation Measure BIO-5, potential impacts to the alkali mariposa lily would be reduced to a less than significant level.

**Lancaster Milk-Vetch, White Pygmy-Poppy, Desert Cymopterus, Rosamond Eriastrum, and Barstow Woolly Sunflower**

The Lancaster Milk-Vetch, White Pygmy-Poppy, Desert Cymopterus, Rosamond Eriastrum, and Barstow Woolly Sunflower were not detected during the June 2016 field survey under the NES/JD, or the 2015 rare plant survey conducted by GPA Consulting; however, suitable habitat for these species is present within the BSA. Although the proposed project would result in the temporary and permanent loss of suitable habitat for these special-status plant species, no impacts are expected to occur since they were not observed within the proposed project footprint during the April 2015 rare plant survey and have not been previously documented within the BSA.

Out of an abundance of caution and to ensure the other aforementioned special-status plant species do not occur within the proposed project footprint and to ensure no impacts would occur, it is recommended that a pre-construction rare plant clearance survey be conducted during the appropriate blooming season (generally April and May to target all possible species) (Mitigation Measure BIO-5). If any of these special-status plant species are observed during the pre-construction clearance survey, the avoidance and minimization measures presented above (for the alkali mariposa lily) would also be followed for other special-status plant species. With compliance with the recommended Mitigation Measure BIO-5, the project's less than significant impacts during construction would be further reduced. Upon completion of construction, operation of the proposed project would not impact Lancaster Milk-Vetch, White Pygmy-Poppy, Desert Cymopterus, Rosamond Eriastrum, and Barstow Woolly Sunflower, compared to the existing condition.

**Avoidance and Minimization Measures:**

**Minimization Measure BIO-1:** If construction occurs during the avian nesting season (February 1 to September 1), the following shall be conducted:

- The biologist shall be notified at least 7 days in advance of clearing and grubbing, and construction.

- A pre-construction nesting bird clearance survey shall be conducted within 3 days of the start of any ground disturbing activities to determine the presence or absence of nesting birds within the Biological Study Area (BSA). A qualified biologist shall conduct the survey.
• If no active bird nests are observed on the project site during the clearance survey, the biologist shall document the negative results with a brief letter report indicating that no impacts to active bird nests would occur. Upon submittal of the letter to the Public Works Director, construction can proceed.

• If an active nest is found, the bird shall be identified to species and the approximate distance from the closest work site to the nest shall be estimated. No additional measures need to be implemented if active nests are more than the following distances from the nearest work site: a) 500 feet for raptors or listed species; or b) 150 feet for non-listed passerines. Any nests occurring within these distances shall have a no-disturbance buffer implemented around them (at least a 300-foot buffer), as delineated by a biological monitor. These distances may be increased according to the judgment of the qualified biologist and may be decreased only with written approval from the CDFW.

• A qualified biologist shall periodically monitor any confirmed nest sites (with no-disturbance buffers) during construction to determine if grading activities occurring outside the buffer zone disturb the birds. The qualified biologist may require increasing the buffer zone, if necessary, to prevent nest abandonment. The nest trees shall be monitored until all nests have been abandoned (for non-project related reasons) or the young have fledged. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions as determined by the biological monitor, normal construction activities can occur.

**Minimization Measure BIO-2:** The following shall be implemented by a qualified biologist prior to and during construction:

• A pre-construction clearance survey shall be conducted for coast horned lizard and silvery legless lizard within the proposed project footprint. Surveys shall utilize hand search methods within the project footprint where this species is expected to be found (i.e., under shrubs, other vegetation, or debris on sandy soils). All lizards found within the project footprint shall be captured and released into designated relocation areas within the BSA (but outside of the project footprint), as recommended by the qualified biologist and approved by the City, no more than one hour after capture. Any captured lizards shall be placed immediately into containers containing sand and kept at a constant cool temperature until release.

• The qualified biologist shall be present in the study area during the initial grading activities in order to recover any coast horned lizard or silvery legless lizard that may be excavated/unearthed with native material. If the animals are in good health, those individuals shall be immediately relocated to the designated relocation area, as discussed above.

**Minimization Measure BIO-3:** A pre-construction bat clearance survey shall be conducted by a qualified biologist within 3 days of the start of any ground disturbing activities to determine the presence or absence of bats within the BSA. The biologist shall be notified at least 7 days in advance of construction. Construction shall avoid structures where bat day and night roosts have been confirmed to the maximum extent feasible.
Where maternity roosting has been confirmed, demolition and pile driving activities within 500 feet of these structures shall avoid the recognized bat maternity season March 1 to October 31) to prevent potential mortality of flightless young bats.

**Minimization Measure BIO-4:** To ensure burrowing owl remain absent from the project site and would not be impacted from implementation of the proposed project, a burrowing owl pre-construction clearance survey shall be conducted by a qualified biologist within 3 days of the start of any ground disturbing activities in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation. The biologist shall be notified at least 7 days in advance of construction.

If burrowing owls are observed within the proposed project footprint during the pre-construction surveys and would be impacted from implementation of the project, a burrowing owl relocation plan shall be prepared and submitted to CDFW for review and approval prior to commencement of vegetation clearing/grubbing, grading, and construction activities. The burrowing owl relocation plan shall outline methods to relocate any burrowing owls occurring within the project footprint and ensure compliance with the MBTA and Fish and Game Code.

**Mitigation Measure:**

**Mitigation Measure BIO-5:** Since alkali mariposa lily has been previously documented within the BSA, the following shall be implemented by a qualified biologist prior to and during construction:

- Establish fencing that identifies the environmentally sensitive area (ESA) and surrounding areas known to support alkali mariposa lily.

- Conduct further rare plant surveys during the appropriate blooming period for alkali mariposa lily (April to June) prior to construction in order to document any additional locations of alkali mariposa lily and, if found, each location shall be included in the fenced ESA and surrounding areas.

- During clearing and grubbing activities, a biological monitor shall be present to ensure the ESA is not disturbed by construction.

- If impacts cannot be avoided, bulbs of this species shall be collected and propagated at nurseries pre-approved by the City of Lancaster and County of Los Angeles and replanted on-site, whenever possible. For any on-site mitigation plantings, these plantings shall have a plant reestablishment period no less than two years. On-site mitigation plantings shall be monitored by a qualified biologist seasonally to determine health and viability. If it is determined that an on-site planting is in poor health, it shall be replaced by a healthy individual and monitored until established, as determined by the project biologist.

- If on-site relocation of individuals or on-site plantings are not possible after construction is complete, off-site mitigation shall be conducted. The following shall be implemented for off-site mitigation, if necessary.
  - Translocation and bulb/seed collection with propagation shall be located on an off-site preserved property acceptable to the City of Lancaster and County of Los Angeles. The property shall be composed
of habitat characteristics suitable to support special-status plant species, in particular alkali mariposa lily, including but not limited to: appropriate soils, elevation, hydrology, and habitat.

- The suitability of the proposed preservation site shall be verified by CDFW. The property shall be conserved via recordation of a conservation easement in favor of a CDFW-due diligence approved local conservation entity to protect the special-status plant species on the property in perpetuity. Alternatively, the land may be transferred in fee title to a CDFW-approved local conservation entity.

- A management fund shall be established by the City and shall consist of an interest-bearing account with the amount of capital necessary to generate sufficient interest and/or income to fund all monitoring, management, and protection of the conservation area(s), including but not limited to, reasonable administrative overhead, biological monitoring, invasive species and trash removal, fencing and signage replacement and repair, law enforcement measures, long-term management reporting (as described below), and other actions designed to maintain and improve the habitat of the conserved land(s), in perpetuity. A Property Analysis Record, or substantially equivalent analysis, shall be conducted by the City and approved by CDFW to determine the management needs and costs described above, which then would be used to calculate the capital needed for the management of the fund. This management fund shall be held and managed by a CDFW-approved local conservation entity.

- To protect the mitigation area(s), the City shall place appropriate fencing and/or natural barriers and signage around the perimeter of each site. Except for uses appropriate to a habitat conservation area, the public shall not have access to the mitigation area(s), and no activities shall be permitted within the site, except maintenance of habitat, including the removal of nonnative plant species, trash, and debris, and the installation of native plant materials.

- Prior to any ground disturbance, the City shall prepare a special-status plant species planting plan (Plan). The Plan shall require a replacement that is biologically equivalent or superior by area and ensure a minimum 80 percent survivorship at the end of a five-year monitoring period, which shall be verified by the monitoring biologist. At a minimum, the five-year plan shall include the following information:

1) A description of the existing conditions of the receiver site(s), characterizing the suitability of the site(s) for the special-status plant species, and documenting the acreage of the site.

2) A description of how the site would be preserved in perpetuity (i.e., conservation easement) and the name of the CDFW-approved due diligence entity that would hold the easement.

3) Qualifications of the monitoring biologist.

4) Receiver site preparation for transplanting.

5) Goals for success.

6) Schedule.

7) Propagation techniques.
8) Transplant and seedling installation methods.
9) Plant spacing.
10) Performance criteria for success, including provision for control of non-native and invasive species.
11) Monitoring and reporting procedures for each of the five years of the monitoring period.
12) Adaptive management strategies, including a contingency plan should the site fail to meet the specified success criteria.
13) Maintenance requirements that would be reviewed and approved by the County.

If the monitoring biologist determines that the minimum 80 percent survivorship criterion has not been achieved at the end of the five-year monitoring period, monitoring shall continue until this success criterion is achieved. Additional plantings may also be necessary to achieve the 80 percent survivorship criterion.

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

*Less Than Significant Impact.* Three plant communities were observed within the boundaries of the BSA: desert saltbush scrub, disturbed desert saltbush scrub, and desert apricot scrub. In addition, there are four human-modified areas that would be classified as tamarisk row, basin, disturbed, and developed. These plant communities and human-modified areas are described in further detail below.

**Desert Saltbush Scrub**

The desert saltbush scrub plant community is the dominant plant community with the BSA and encompasses approximately 328.24 acres throughout the BSA. The desert saltbush scrub plant community is found in the undeveloped areas within and surrounding the project footprint. This plant community is generally dominated by spiny saltbush (*Atriplex confertifolia*), Mojave saltbush (*Atriplex spinifera*), rubber rabbitbrush (*Ericameria nauseosa*), and matchweed (*Gutierrezia microcephala*). Other co-dominant species include silverscale saltbush (*Atriplex argentea*), big saltbush (*Atriplex lentiformis*), and alkali heath (*Frankenia salina*). Groundcover is sparsely covered by red brome (*Bromus madritensis ssp. rubens*), Mediterranean grass (*Schismus barbatus*), salt grass (*Distichlis spicata*), shortpodded mustard (*Hirschfeldia incana*), and mouse barley (*Hordeum murinum*). A discrete section of the desert saltbush scrub on the southern edge of the shoulder of Avenue G supports scattered individuals of red willow (*Salix laevigata*), Goodding’s black willow (*Salix gooddingii*), and mule fat (*Baccharis salicifolia*). Most of the desert saltbush scrub plant community is relatively undisturbed, although there are dirt roads extending north-to-south primarily through the eastern portion of the BSA. Remnant homeless encampments were observed north and south of Avenue G generally in association with Amargosa Creek and where the desert saltbush scrub community intersects with the desert apricot scrub community (see below).

**Disturbed Desert Saltbush Scrub**

Approximately 6.54 acres of the desert saltbush scrub was classified as disturbed desert saltbush scrub. These areas are concentrated around the existing SR-14 (SR-
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138)/Avenue G interchange and consist of those areas that were formerly cleared, generally for the construction of the existing SR-14 (SR-138)/Avenue G interchange and are now revegetating with patchy vegetation characteristic of the desert saltbush scrub community.

**Desert Apricot Scrub**

The desert apricot scrub plant community is generally associated with Amargosa Creek and is present both north and south of Avenue G on the eastern side of SR-14 (SR-138). Portions of this plant community are located within the proposed project footprint adjacent to Avenue G. This plant community encompasses approximately 3.08 acres within the BSA and is present within and intermixed with the desert saltbush scrub. This plant community is dominated by desert apricot (*Prunus fremontii*), which is found singly or in small patches within this on-site community.

**Basin**

Pond Two, as identified by the National Wetlands Inventory (NWI) Mapper, is a basin located on the southern end of the BSA, east of SR-14 (SR-138) and south of Avenue G. Pond Two is located south of the SR-14 (SR-138) northbound exit ramp where a portion of it extends into the proposed project footprint. The basin bottom encompasses approximately 13.56 acres within the BSA. The basin was dry at the time of the survey; however, the basin bottom supported sparse cocklebur (*Xanthium strumarium*) and white sweetclover (*Melilotus albus*). Cottonwood (*Populus fremontii*) trees lined the bank and slopes of the basin.

**Tamarisk Row**

A tamarisk windrow is located on the northern end of the BSA, outside of the proposed project footprint, and encompasses a total of approximately 0.6 acre within the BSA on both sides of SR-14 (SR-138). Tamarisk (*Tamarix* sp.) has been planted in rows both east and west of SR-14 (SR-138).

**Disturbed**

Disturbed areas are the unpaved areas that are primarily or entirely devoid of vegetation. Disturbed areas are located throughout the BSA and encompass approximately 35.93 acres. These areas encompass the unpaved roads, especially on the BSA’s eastern side, the center median of SR-14 (SR-138), and the road shoulder of Avenue G.

**Developed**

Developed areas within the BSA encompass paved, impervious surfaces, and areas that have been extensively altered. Within the BSA, developed areas encompass approximately 23.51 acres and include Avenue G, SR-14 (SR-138) and its associated on- and off-ramps, and the dirt bike track.

**Identified Habitats of Concern**

Habitats are considered to be of special concern based on (1) federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) support the habitat requirements of special-status plants or animals. State and/or federal jurisdictional features (i.e., lakes, rivers, streams, ephemeral drainages, jurisdictional
streambed and bank, and wetlands) are also considered natural communities of special concern.

Based on the NES/JD, no natural communities of special concern were identified during the records search as potentially occurring within the BSA. However, two drainage jurisdictional features (Amargosa Creek and Ancillary Feature) were observed within the eastern portion of the BSA, as well as several NWI mapped wetlands that would qualify as natural communities of special concern. Implementation of the proposed project would not impact jurisdictional features within the BSA. No impacts would result in this regard.

**Critical Habitat**

Critical Habitat refers to the specific areas within the geographical area of a species, at the time it is listed, which include those physical or biological features that are essential to the survival and eventual recovery of a species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not.

The BSA is not located within federally designated Critical Habitat; therefore, a Section 7 consultation is not required for loss or adverse modification of Critical Habitat. There is no designated Critical Habitat within a 15-mile radius of the BSA. No impacts would result in this regard.

**Noxious Weeds**

Noxious weed species include species designated as federal noxious weeds by USDA, species listed by the California Department of Food and Agriculture, and other exotic pest plants designated by the California Invasive Plant Council. Invasive plant species are abundant throughout much of the BSA. Some of the more commonly occurring exotic plants in the BSA include red brome, Mediterranean grass, mouse barley, and redstem filaree (*Erodium cicutarium*). With compliance with Minimization Measure BIO-6, all construction equipment would be required to be inspected and cleaned prior to use in the proposed project footprint in order to minimize the importation of non-native plant material. In conclusion, the project would result in less than significant impacts from noxious weeds and compliance with Minimization Measure BIO-6 would further reduce the project’s less than significant impacts.

**Avoidance and Minimization Measures:**

**Minimization Measure BIO-6:** Prior to start of construction, all construction equipment shall be inspected and cleaned by the construction contractor prior to use in the proposed project footprint in order to minimize the importation of non-native plant material.

**3.4(c)** Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

*No Impact.* There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge or fill materials into “waters of the United States” pursuant to Section 404 of the Federal CWA and Section 10 of the Rivers and Harbors Act. The
CDFW regulates alterations to streambeds and banks under Fish and Wildlife Code Sections 1600 et seq., and the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act.

There are two drainage features within the eastern portion of the BSA, as well as four NWI mapped seasonal ponds (refer to Figure 3.4-1, Potential Jurisdictional Resources). Amargosa Creek conveys storm flows in a north to northeast direction in the eastern portion of the BSA through the proposed project footprint of Avenue G, east of SR-14 (SR-138). Within the BSA, Amargosa Creek consists of the rectangular Pond Two (dry at the time of the visit), which detains channelized flows from the south and discharges excessive flows northwest into an excavated trapezoidal channel. From here, Amargosa Creek flows north towards Avenue G. At Avenue G, flows are conveyed through three adjacent box culverts under the road, each approximately 14 feet wide and 3 to 4 feet in height. North of Avenue G, flows currently appear to be conveyed along the westbound shoulder of the road for approximately 380 feet before turning and conveying flows northeast beyond the BSA and terminating approximately 5 miles northeast at Rosamond Lake (dry lakebed).

In addition to Amargosa Creek, there is a separate ancillary feature east of Amargosa Creek, an ephemeral drainage feature that appears to convey nuisance flows north from Avenue G. The partially excavated channel is evident only north of Avenue G, showing no evidence of flows coming from the south. This ancillary feature currently conveys flows primarily as runoff from Avenue G, within the proposed project footprint, into its lowered shoulders, and eventually through a 24-inch culvert and northwest to rejoin Amargosa Creek approximately 500 feet outside of the BSA. Finally, there are four seasonal ponds, as recognized by the NWI, located within the BSA (southeast, southwest, and northwest of the interchange), but entirely outside of the project footprint. These isolated features appear to inundate seasonally from their local watersheds during substantial rain events.

Amargosa Creek and the ancillary feature are assumed to be intrastate, isolated, non-navigable features that do not connect to any Traditional Navigable Waters and, therefore, do not fall under the regulatory authority of the Corps. However, the two drainage features and NWI mapped seasonal ponds would qualify as waters of the State under the jurisdiction of the Regional Board and jurisdictional streambed under the jurisdiction of CDFW. Construction of the proposed project would not impact any of these jurisdictional waters. Further, as no wetlands are located within the project footprint, no impacts to wetlands would result.
Potential Jurisdictional Resources

Legend

- Reference Points
- Culvert
- Project Site (Includes All Build Alternatives)
- Biological Study Area
- CDFW
- Streambed / Banks
- Regional Board
- Waters of the State

Figure 3.4-1

SR-14 (SR-138)/AVENUE G INTERCHANGE IMPROVEMENTS AND AVENUE G WIDENING PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Figure 3.4-1
3.4(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 Impact.** Habitat linkages provide links between larger undeveloped habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species but inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The generally flat topography of the BSA provides a broad area for wildlife to move through, and the slightly depressed pathway of Amargosa Creek and the Ancillary Feature may provide a more focused movement corridor. In addition, there are numerous culverts and box culverts within the BSA that could be used as wildlife crossings for animals seeking to pass from one side of the existing roads to another. These include two 48-inch culverts and five 10-foot box culverts located underneath SR-14 (SR-138), as well as three 14-foot box culverts located underneath Avenue G. The box culverts under SR-14 (SR-138) are approximately 2 to 3 feet in height, and the box culverts under Avenue G are approximately 3 to 4 feet in height.

Construction during the avian nesting season (generally February 1 to September 1) may disrupt avian nesting behaviors. Pursuant to the MBTA and California Fish and Game Code, removal of any trees, shrubs, or any other potential nesting habitat should be conducted outside the avian nesting season. However, if ground disturbance and vegetation removal cannot occur outside of the nesting season, a pre-construction clearance survey for nesting birds would be required to be conducted within three days of the start of any ground disturbing activities to ensure that no nesting birds would be disturbed during construction (Minimization Measure BIO-1). The biologist conducting the clearance survey should document a negative survey with a brief letter report indicating that no impacts to active avian nests would occur. If an active avian nest is discovered during the pre-construction clearance survey, construction activities would be required to stay outside of a 150-foot buffer around the active nest. For raptor species, this buffer is expanded to 500 feet. A biological monitor would also be present prior to and during construction to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, normal construction activities would occur.

Although they are not expected to be on-site, as part of the nesting bird clearance survey, a pre-construction burrowing owl (*Athene cunicularia*) clearance survey would be required to be conducted to ensure that burrowing owl remain absent from the BSA. Based on the current condition of habitat within the BSA, focused protocol burrowing owl surveys are not recommended. In addition, Minimization Measure BIO-3 would require a bat clearance survey be conducted within three days of the start of any ground disturbing activities. Target areas would include both the Avenue G/SR-14 (SR-138) interchange, where bats may roost under the existing bridge in holes or cracks in the concrete, as well as in the open spaces of desert saltbush scrub, where...
bats may forage. In conclusion, impacts to native resident or migratory fish or wildlife species would be less than significant.

3.4(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.

Los Angeles County General Plan and Antelope Valley Area Plan

The Los Angeles County General Plan 2035 (County General Plan) contains a goal (Goal C/NR 3) to permanently and sustainably preserve genetically and physically diverse biological resources and ecological systems including habitat linkages, forests, the coastal zone, riparian habitats, streambeds, wetlands, woodlands, alpine habitat, chaparral, shrublands, and Significant Ecological Areas (SEAs). To achieve this goal, the County has created eleven policies. Those policies that are relevant to the general area include the following:

1) Policy C/NR 3.1: Conserve and enhance the ecological function of diverse natural habitats and biological resources;

2) Policy C/NR 3.3: Restore upland communities and significant riparian resources, such as degraded streams, rivers, and wetlands to maintain ecological function;

3) Policy C/NR 3.8: Discourage development in areas with identified significant biological resources, such as SEAs; and

4) Policy C/NR 3.11: Discourage development in riparian habitats, streambeds, wetlands, and other native woodlands in order to maintain and support their preservation in a natural state, unaltered by grading, fill, or diversion activities.

The Antelope Valley Area Plan, prepared by the Los Angeles County Department of Regional Planning, dated June 2015, was developed to specialize the goals and policies of the Countywide General Plan so that they would best fit the goals and needs of the Antelope Valley region. It contains a single goal for Biology (Goal COS 4) to protect sensitive habitats and species to promote biodiversity, with ten policies to achieve that goal. Those policies that are relevant to the general area include the following:

1) Policy COS 4.5: Subject to local, state or federal laws, require new development to provide adequate buffers from preserves, sanctuaries, habitat areas, wildlife corridors, State Parks, and National Forest lands, except within Economic Opportunity Areas;

2) Policy COS 4.6: Encourage connections between natural open space areas to allow for wildlife movement;

3) Policy COS 4.7: Restrict fencing in wildlife corridors. Where fencing is necessary for privacy or safety, require appropriate development standards that maximize opportunities for wildlife movement;
4) Policy COS 4.8: Ensure ongoing habitat preservation by coordinating with the California Department of Fish and [Wildlife] to obtain the latest information regarding threatened and endangered species;

5) Policy COS 4.9: Ensure water bodies are well-maintained to protect habitat areas and provide water to local species; and

6) Policy COS 4.10: Restrict development that would reduce the size of water bodies, minimizing the potential for loss of habitat and water supply.

The BSA is not located within any of the identified SEAs identified in the Los Angeles County General Plan. Further, implementation of the proposed project would not have a negative impact on the biological goals and objectives of the Los Angeles County General Plan and Antelope Valley Area Plan.

City of Lancaster General Plan

The City’s General Plan, Plan for the Natural Environment, contains Objective 3.4 that is pertinent to the proposed project: Identify, preserve and maintain important biological systems within the Lancaster sphere of influence, and educate the general public about these resources, which include the Joshua Tree – California Juniper Woodlands, areas that support endangered or sensitive species, and other natural areas of regional significance. To achieve this objective, the City has created five policies. Those policies that are relevant to the general area include the following:

1) Policy 3.4.1: Ensure the comprehensive management of programs for significant biological resources that remain within the Lancaster sphere of influence;

2) Policy 3.4.2: Preserve significant desert wash areas to protect sensitive species that utilize these habitat areas; and

3) Policy 3.4.4: Ensure that development proposals, including City sponsored projects, are analyzed for short- and long-term impacts to biological resources and that appropriate mitigation measures are implemented.

As discussed in Response 3.4(a), with implementation of Minimization Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-6, and Mitigation Measure BIO-5, no significant environmental impacts to special status plant or wildlife species or habitat would result from the proposed project. With compliance with these minimization measures, as well as Mitigation Measure BIO-5, the project would not result in significant short- or long-term impacts to biological resources or sensitive species that utilize on-site habitat. Thus, the project would be consistent with the City’s General Plan and impacts in this regard would be reduced to less than significant levels with compliance with mitigation.
3.4(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.* No HCPs or NCCPs are associated with the project site.\(^2\) No impacts would occur in this regard.

# 3.5 Cultural Resources

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CULTURAL RESOURCES. Would the project:</strong></td>
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<tr>
<td>a. Cause a substantial adverse change in the significance</td>
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<tr>
<td>of a historical resource as defined in CEQA Guidelines §15064.5?</td>
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<td>b. Cause a substantial adverse change in the significance</td>
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<tr>
<td>of an archaeological resource pursuant to CEQA Guidelines §15064.5?</td>
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<td>c. Directly or indirectly destroy a unique paleontological</td>
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<td>resource or site or unique geologic feature?</td>
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<td>d. Disturb any human remains, including those interred outside of formal</td>
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<tr>
<td>cemeteries?</td>
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A Historical Resources Compliance Report/Archaeological Survey Report (HRCR/ASR) was completed for the project and approved in June 2017 (Cogstone Resource Management) and a Combined Paleontological Identification and Evaluation Report (PIR/PER) prepared in March 2017 (Cogstone Resource Management). The results of these studies are included in the discussion below.

## REGULATORY SETTING

“Cultural resources” as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

### National Historic Preservation Act of 1966

The *National Historic Preservation Act (NHPA)* of 1966, as amended, sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places (NRHP). Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2014, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans.

### California Public Resources Code

*California Public Resources Code (PRC) Section 5024.1* established the California Register of Historical Resources and requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources.
Paleontological Resources

Paleontology is the study of life in past geologic time based on fossil plants and animals. Although there is no federal law that specifically protects natural or paleontological resources, there are a number of laws that have been interpreted to do so—the primary law being the Antiquities Act of 1906, which protects historic or prehistoric ruins or monuments and objects of antiquity. This Act has been amended to specifically allow funding for paleontological mitigation. Under California law, paleontological resources are protected by the California Environmental Quality Act, the California Administrative Code, Title 14, Section 4306 et seq., and Public Resources Code Section 5097.5.

AFFECTED ENVIRONMENT

Prehistoric Resources

The western Mojave Desert is cross-cut by a major cultural and linguistic boundary that extends from the western foothills of the Tehachapi Mountains to Twentynine Palms. Takic groups inhabited the area south of the boundary, while Numic groups were located north of the boundary. The Project Area Limits (PAL) is situated within the traditional use areas of the Vanyume/Serrano. Within a wider area, ethnographic records describe the Emigdiano and Castac (Interior) Chumash as using the mountainous areas west of the western end of Antelope Valley and the Gabrielino use area as south/southeast (beyond the San Gabriel Mountains). The following discussion provides information on the Vanyume/Serrano.

The ethnographic inhabitants of the Mojave Desert included multiple Native American groups. The western Mojave was home to the Kitanemuk but both Vanyume (desert Serrano) and Mountain Serrano were known to also inhabit this area. All of these groups were related and spoke dialects of the Serrano language.

Desert settlements were near sources of water. The prehistoric residents were gatherers and hunters. Plant and animal resources in the desert were utilized for food and materials. Seasonal travel to exploit particular resources such as nuts in the foothills was common. Willow frames with tule hatching were used for houses and ramadas. Houses were used mostly for sleeping with most activities taking place outdoors under the ramada. Village sweathouses were typical.

Native American life in the Antelope Valley had two unique geographic characteristics: (1) its location as a natural access corridor (and principal trade route) linking the California coast with early trails that extended south to Mexico, north into California's Central Valley, and east as far as the Southwest culture region; and (2) the abundance of natural springs and lakes. This combination resulted in the flourishing of major trade and interaction routes through the Antelope Valley as early as at least 3,000 to 4,000 years ago. Consequently, a number of sizeable permanent villages persisted over several millennia because the Antelope Valley residents could take advantage of both coastal and desert resources and adaptation.

Historic Resources

The first fully documented Spanish contact in the vicinity of the project site came in 1776 when a Franciscan priest, Father Francisco Garces, came through the Mojave Desert on his way to Monterey. In 1808, a Spanish military expedition was dispatched to the Antelope Valley. By 1811, according to Mission records, "resettlement" of at least two entire villages had been accomplished.
(Sturtevant 1978). Increasingly, the people of the valley were being "resettled" to the San Fernando Mission (Moore 2001).

The slow decline in the population of the Antelope Valley followed that of other native California societies. Disease spread by contact with the missions and forced labor continued to take its toll. To the Europeans, tribal and clan affiliation held little meaning (Sturtevant 1978). As with many California cultures, the old ways began to die along with the Native people. By the time California became a U.S. territory in 1848, few Antelope Valley Indians remained (Sepehri 2002).

Not long after California joined the Union in 1850, the U.S. Congress directed the United States Army to send teams of skilled land surveyors to investigate potential railroad routes not only to connect the east to the west, but other routes as well. For two years, from 1853 to 1854, Lieutenant Robert Stockton Williamson of the United States Army Corps of Topographical Engineers and his team surveyed all the potential wagon road and railroad routes on the Pacific Coast between the Columbia River and San Diego.

Founded in 1884, the Town of Lancaster owes its development to the establishment of the Southern Pacific Railroad in the Antelope Valley. The railroad constructed the first houses in Lancaster for its employees (City of Lancaster 2006). The town’s name is attributed to an employee of the Southern Pacific Railroad, a Mr. Purnell, who was responsible for naming all the stations (City of Lancaster n.d.) In 1884, real estate developer M. L. Wicks purchased six sections of land from Southern Pacific and began subdividing and selling lots (City of Lancaster 2006).

The Lancaster News began publication in 1886, making it the first weekly newspaper in the Antelope Valley (City of Palmdale n.d.). By 1890, Lancaster was an established and prosperous town, owing to the completion of the railroad and the accessibility of pure water at the local water stop. In the 1890s, a grammar school was constructed on 10th Street that was made of bricks that had been fired in a kiln near town (City of Lancaster n.d.).

With the discovery of gold in 1898 in the hills north of Lancaster and the discovery of borax in the mountains surrounding the Antelope Valley, there was an influx of prospectors and the development of the mining industry. (City of Lancaster n.d.). During the 1890s, the mining industry provided employment to many people in the area who could no longer work in the agricultural industry because of drought (City of Lancaster n.d.).

**Paleontological Resources**

The proposed project is partially located within the northern portion of the City and partially within unincorporated areas of Los Angeles County. The project area is in a rural portion of the City and County. The project area lies at elevations of approximately 2,310 to 2,320 feet. Four Pleistocene localities are known to occur near to the project area, producing camel (*Camelops hesternus, Camelops sp.*), and mammoth (*Mammuthus sp.*), as well as fish, reptiles, and small mammals. Pleistocene fossils are typically found more than 10 feet deep in the valley areas of California. However, in the area of Lake Thompson, fossils are known to occur as shallow as 3 or 4 feet deep.

**Archaeological Resources**

Based on information at the South Central Coastal Information Center (SCCIC) (part of the California Historical Resources Information System), in total, 20 previous studies have been conducted within one mile of the project area. Of these, four examined land within the study area, whereas the other 16 examined land within the records-search buffer area. In total, 12 previously
recorded resources have been identified within the one-mile records-search buffer, but no cultural resources are located within the project area.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.5(a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?

No Impact. According to the HRCR/ASR, a search of archaeological and historical records was conducted at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Inventory System (CHRIS) located at California State University, Fullerton on June 6, 2016 by Cogstone. The records search included the PAL and a one-mile radius buffer. The records search resulted in 20 previously conducted cultural resources studies within a one-mile radius of the PAL; of these four studies included portions of the PAL. No known cultural resources have been previously recorded within the PAL. A total of 12 cultural resources have been previously documented outside the PAL but within the one-mile search radius. Of these resources, four are prehistoric isolates, five are historic-era archaeological sites, two are historic-era isolates, and one is a historic-era linear built resource. None of the resources are listed in the Archaeological Determinations of Eligibility or Historical Resources Inventory maintained by the California Office of Historic Preservation.

An intensive pedestrian survey of the PAL was performed to locate any visible archaeological resources. A large portion of the PAL (40 percent) consists of paved roadway. Areas of visible ground surface were located along the unpaved shoulders of Avenue G and the undeveloped perimeter of the PAL. Ground surface visibility in these areas was good (60-70 percent) and vegetation was sparse.

A total of four historic-era resources consisting of a can scatter, a refuse scatter, a linear fence, and an isolate were identified during the pedestrian survey; refer to Table 3.5-1, Historic-Era Resource Descriptions.

Table 3.5-1: Historic-Era Resource Descriptions

<table>
<thead>
<tr>
<th>Temp Name</th>
<th>Resource Type</th>
<th>Resource Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016_06_23_SMN.05</td>
<td>Historic Archaeological Site</td>
<td>Historic refuse scatter</td>
</tr>
<tr>
<td>2016_06_24_SMN.02</td>
<td>Historic Archaeological Site</td>
<td>Can scatter, 9 &quot;Shellzone&quot; cans</td>
</tr>
<tr>
<td>2016_06_23_SMN.04</td>
<td>Historic Isolate</td>
<td>Historic &quot;Royal Crown&quot; bottle, broken</td>
</tr>
<tr>
<td>2016_06_24_SMN.01</td>
<td>Historic Linear Feature</td>
<td>Partial fence</td>
</tr>
</tbody>
</table>


Based on the HRCR/ASR, these newly recorded resources described in Table 3.5-1 appear to meet the criteria set forth in the Section 106 Programmatic Agreement (Section 106 PA) (as properties exempt from evaluation) and, pursuant to Public Resources Code (PRC) 15064.5(a), are not historical resources for purposes CEQA, since they do not meet any of the California Register of Historical Resources criteria as outlined in PRC sections 5024.1. These four historic-era resources were exempted from evaluation under the following criteria:
Chapter 3 California Environmental Quality Act (CEQA) Checklist

3.5.5 (b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

Less Than Significant Impact. As discussed in Response 3.5(a), no known cultural resources, including archeological resources, have been previously recorded within the PAL. A total of 12 cultural resources have been previously documented outside the PAL but within the one-mile search radius. Of these resources, five are historic-era archaeological sites were noted. The geomorphology analysis, conducted as part of the HRCR/ASR indicates the potential for buried archaeological deposits is low to very low.

The maximum depth of excavation for the project is ten feet (3 meters) for excavations related to bridge footings. Portions of the bridge work will be within a fill setting where there is no potential for buried archaeological deposits. Deeper excavations will impact native sediments which have a low potential for buried archaeological deposits. Excavations in the remainder of the PAL will be a maximum of five feet (1.5 meters). The potential for buried archaeological deposits outside of the bridge work ranges from poor to very poor in areas mapped as modern alluvium. Although the age of most of the underlying sediments is good to find buried sites, the presence of B horizons in the Pond loam and the Pond-Oban Complex makes their presence unlikely.

Notwithstanding, it is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if site[s] discovered during site disturbance activities cannot be avoided by the project. If buried cultural materials are encountered during construction, Minimization Measure CUL-1 would be required, stopping work in that area until a qualified archaeologist can evaluate the nature and significance of the find.

In conclusion, significant archeological resources are not anticipated to be encountered during site disturbance and, in the event that unknown cultural resources are encountered during site disturbance activities, Minimization Measure CUL-1 would be required to be implemented. Thus, impacts in this regard are less than significant.

- **Archaeological Property Types:** Isolated historic finds consisting of fewer than three artifacts per 100 square meters and isolated refuse dumps and scatters over 50 years old that lack specific associations; and

- **Architectural and Historical Property Type 1:** Minor, ubiquitous, or fragmentary infrastructure elements such as fences, walls, gates, and gateposts.

Thus, the research presented in the HRCR/ASR revealed no significant resources nor state- or federally-listed properties in the PAL. No impacts would result in this regard.

A total of three Caltrans bridges are located within the PAL: Bridge 53-1860 Avenue “G” OC, Bridge 53-2285 Avenue G Drain 1, and Bridge 53C2902 Avenue G. Each has been evaluated by Caltrans as a Category 5 bridge and determined not eligible for listing on the NRHP. Further, these bridge structures are not locally designated or otherwise identified as significant in a local survey meeting of Office of Historic Preservation standards. Thus, these on-site bridge structures are not considered significant resources and no impacts would result in this regard.
Avoidance and Minimization Measures:

Minimization Measure CUL-1: If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area shall be diverted until a qualified archaeologist, retained by the City of Lancaster, can assess the nature and significance of the find. If evidence of subsurface tribal cultural resources is found, the archaeologist shall contact the Native American Heritage Commission to determine the appropriate Native American monitor for the find. The archaeologist shall confer with applicable agencies and/or tribes about the appropriate treatment of the site, and to develop appropriate mitigation. Work shall only resume after mitigation is complete and after its approval by the California State Historic Preservation Officer.

3.5(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. Based on the PIR/PER, four Pleistocene localities are known to occur near to the project area, producing camel (Camelops hesternus, Camelops sp.), and mammoth (Mammuthus sp.) as well as fish, reptiles and small mammals. Pleistocene fossils are typically found more than 10 feet deep in the valley areas of California. However, in the area of Lake Thompson, fossils are known to occur as shallow as 3 or 4 feet deep.

As part of the PIR/PER, a pedestrian survey of the undeveloped ground surface of the project area was conducted on June 23 and 24, 2016. The survey consisted of walking parallel transects, spaced at no greater than 15-meter intervals, where accessible, within the project boundaries while closely inspecting the ground surface. The sediments were incised more than a couple of feet only in a few areas. Although sediments that appeared promising for fossils were observed, particularly the Lake Thompson sediments, no fossils were encountered.

Geological setting and fossil localities were considered in determining paleontological sensitivity according to Caltrans criteria. All Holocene sediments are ranked as low but in Lancaster and Rosamond, confirmed Pleistocene fossils have been found as shallow as 3 to 4 feet from the original surface in the Lake Thompson beds. As the project is situated on the lake margin, this increases the potential for finding fossils. Additionally, the Holocene alluvium and alluvial fan deposits cover Pleistocene sediments that may have been deposited in Lake Thompson. As such, all units are classified as high potential more than 4 feet below the original ground surface.

The project would create surface or subsurface impacts that may adversely impact potential paleontological resources. Vertical impacts are expected to be as much as 10 feet deep for the bridge footings and as much as 5 feet deep for other activities. Grading, excavation, and other surface and subsurface excavation in defined areas of the project site have the potential to impact significant nonrenewable fossil resources of Pleistocene age. Although there is an increased potential to find fossils, no known fossils have been encountered. A Paleontological Mitigation Plan would be prepared by a qualified paleontologist to outline monitoring requirements in excavations more than 4 feet deep for all sediments (Minimization Measure CUL-2). Therefore, impacts from the project on paleontological resources would be less than significant.
Avoidance and Minimization Measures:

Minimization Measure CUL-2: The City of Lancaster shall retain a qualified paleontologist to prepare a Paleontological Mitigation Plan prior to excavation activities. The Plan shall include monitoring requirements for excavations more than 4 feet deep, including practices to be implemented in the event a resource is discovered. Should resources be discovered during excavation, the qualified paleontologist shall evaluate the find and outline appropriate mitigation requirements, as necessary.

3.5(d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. No conditions exist that suggest human remains are likely to be found on the project site. Human remains, including those interred outside of designated cemeteries, are not anticipated to be encountered during earth removal or disturbance activities. However, in the event that unknown human remains are found, those remains would require proper treatment, in accordance with applicable laws.

If human remains are discovered during construction, State Health and Safety Code Section 7050.5 states that further disturbance and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner shall be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC), which shall then notify the Most Likely Descendant (MLD). At this time, the person who discovered the remains shall contact the City and Caltrans Division of Environmental Planning, so that they may work with the MLD on the respectful treatment and deposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable. Thus, impacts would be less than significant.
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### 3.6 Geology and Soils

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tr>
<td><strong>GEOLOGY AND SOILS. Would the project:</strong></td>
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<tr>
<td>a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</td>
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<tr>
<td>1) 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.</td>
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<td>2) Strong seismic ground shaking?</td>
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<td>3) Seismic-related ground failure, including liquefaction?</td>
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<td>4) Landslides?</td>
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<tr>
<td>b. Result in substantial soil erosion or the loss of topsoil?</td>
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<tr>
<td>c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</td>
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<tr>
<td>d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</td>
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<tr>
<td>e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?</td>
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</table>

A District Preliminary Geotechnical Report (DPGR) was completed for the project in April 2017 (Earth Mechanics, Inc.). The study supports the discussion included below.

**REGULATORY SETTING**

**Lancaster Municipal Code**

The *City of Lancaster Municipal Code*, Chapter 15.08, Building Code, incorporates the California Building Code and sets forth standards for construction to minimize hazards and damage from seismic events, including earthquakes and liquefaction.

**Caltrans Highway Design Manual**

The *Caltrans Highway Design Manual* regulates all highway construction details for Caltrans projects, and sets forth construction standards that are designed to minimize hazards and damage from seismic events, including earthquakes and liquefaction.
California Department of Conservation, Division of Mines and Geology

The California Department of Conservation, Division of Mines and Geology, prepares inventory maps for all areas of California, indicating geological hazards, such as earthquake faults, soils prone to liquefaction, and areas prone to landslides.

This section discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Caltrans’ Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans projects. Caltrans evaluates project design according to the anticipated Maximum Credible Earthquake (MCE), from young faults in and near California. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

AFFECTED ENVIRONMENT

The project site is located in the plains of the northwestern Mojave Desert physiographic province, in the area known as Antelope Valley. This province is characterized by rugged mountain peaks and small ranges separated by wide valleys and flat desert plains. Dry lakes (playas) occupy the low parts of most plains and valleys.

The project area is subject to moderate to high seismicity. The orientation of the fault, direction of fault movement, and size of an earthquake can be described by the fault geometry and seismic moment (or moment magnitude). These parameters are determined from waveform analysis of the seismograms produced by an earthquake.

There are a number of major faults in the region that are capable of producing earthquake moment magnitudes larger than 7. The nearest local faults capable of substantial earthquakes include the Clearwater and Garlock Faults. In addition, the San Andreas Fault Zone (SAFZ) is located approximately 9.8 miles southwest of the project site. Soils between 20th Street West and 10th Street West are susceptible to liquefaction and seismically-induced settlement.

The project site is underlain by Holocene alluvium, Holocene alluvial fan deposits, and Holocene to late Pleistocene younger playa deposits. All Holocene sediments are ranked as low but in Lancaster and Rosamond, confirmed Pleistocene fossils have been found as shallow as 3 to 4 feet from the original surface in the Lake Thompson beds. As the project is situated on the lake margin, this increases the potential for finding fossils. Additionally, the Holocene alluvium and alluvial fan deposits cover Pleistocene sediments that may have been deposited in Lake Thompson. As such, all units are classified as high potential more than 4 feet below the original ground surface.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.6(a)(1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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?

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3.6(a)(2) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less Than Significant Impact. The site is subject to shaking from both local and distant earthquakes. The project would include the construction of a bridge, ramps, and other transportation structures that could be affected by strong ground motion from the movement along the Clearwater and Garlock Faults, as well as the SAFZ. However, the project would meet current seismic standards, and would not increase exposure to existing hazards in the project area. The proposed project would be designed in accordance with Caltrans' design and construction standards and would be subject to further recommendations from the site-specific geotechnical field report to be prepared during the final design phase (Minimization Measure GEO-1). Thus, impacts from strong seismic ground shaking would be less than significant.

Avoidance and Minimization Measures:

Minimization Measure GEO-1: Prior to final design review and approval, the City of Lancaster shall conduct a detailed site-specific geotechnical field investigation and prepare a final geotechnical design report following Caltrans design and construction standards. The report shall address, at a minimum, site-specific soil and seismic constraints and shall recommend specific design measures to minimize impacts related to seismic-induced human injury and structural damage. These design measures shall be incorporated into project plans and specifications.

3.6(a)(3) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less Than Significant Impact. The proposed project would not expose people to additional seismic-related ground failure or liquefaction, because the proposed project would replace existing transportation infrastructure and would not implement any new land uses. Based on the DPGR, soils between 20th Street West and 10th Street West are susceptible to liquefaction and seismically-induced settlement. Although project may be subject to hazards related to seismically-induced ground failure, the project would be designed in accordance with Caltrans’ design and construction standards. Thus, impacts in this regard would be reduced to less than significant levels. In addition, compliance with Minimization Measure GEO-1 would further reduce the project’s less than significant impacts.

3.6(a)(4) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving Landslides?

No Impact. According to the DPGR, the topography of the project site is flat without any natural slopes. Although there are embankments associated with the existing interchange, they are engineered slopes and do not represent a hazard related to

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landslides. As such, the landslide potential is considered low, and no impacts would result in this regard.

3.6(b) Result in substantial soil erosion or the loss of topsoil?

_**Less Than Significant Impact.**_ Based on the DPGR, surficial soils on existing slopes within the project limits are mostly sandy soils and are subject to erosion. However, as noted in Response 3.8(c) the project would be subject to existing water quality requirements under the National Pollutant Discharge Elimination System (NPDES) program. With adherence to these existing standards, impacts related to erosion would be less than significant.

3.6(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

_**Less Than Significant Impact.**_ As noted above in Responses 3.6(a)(2) and 3.6(a)(3), the project site is subject to strong seismic ground shaking and is also situated in an area known to be susceptible to liquefaction and seismically-induced settlement. Although these hazards may exist, the proposed project would be designed in accordance with Caltrans’ design and construction standards. Minimization Measure GEO-1 would require additional recommendations from the site-specific geotechnical field report to be prepared during the final design phase. Therefore, impacts on soil stability would be less than significant.

3.6(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

_**Less Than Significant Impact.**_ According to the DPGR, on-site soils consist predominantly of sand and silt. The sandy soils are primarily gravelly sand and silty sand, which are not expected to be expansive. However, the silty soils consist of clayey silt and sandy clayey silt, which have a moderate expansion potential. Although a potential for expansive soils exists, the project would be designed in accordance with Caltrans’ design and construction standards. Site-specific soils testing would be conducted, and compliance with these Caltrans standards and geotechnical recommendations would reduce impacts related to expansive soils to a level below significance. In addition, the project would be subject to further recommendations from the site-specific geotechnical field report to be prepared during the final design phase (Minimization Measure GEO-1). Thus, impacts pertaining to expansive soils would be less than significant.

3.6(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

_**No Impact.**_ The project would not involve the use of septic tanks or alternative wastewater disposal systems. No impact would occur in this regard.
### 3.7 Greenhouse Gas Emissions

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Signiﬁcant and Unavoidable Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Signiﬁcant Impact</th>
<th>No Impact</th>
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</thead>
<tbody>
<tr>
<td><strong>Greenhouse Gas Emissions. Would the project:</strong></td>
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<tr>
<td>a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</td>
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<tr>
<td>b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</td>
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<tr>
<td>Caltrans has used the best available information based to the extent possible on scientific and factual information, to describe, calculate, or estimate the amount of greenhouse gas emissions that may occur related to this project. The analysis included in the climate change section of this document provides the public and decision-makers as much information about the project as possible. It is Caltrans’ determination that in the absence of statewide-adopted thresholds or GHG emissions limits, it is too speculative to make a significance determination regarding an individual project’s direct and indirect impacts with respect to global climate change. Caltrans remains committed to implementing measures to reduce the potential effects of the project. These measures are outlined in the climate change section that follows the CEQA checklist and related discussions.</td>
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Caltrans, as the Lead Agency, conducted a quantitative analysis of operational greenhouse gas (GHG) emissions using project-specific traffic data and EMFAC2014. A summary of results is provided in **Section 3.20, Climate Change.**
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### 3.8 Hazards and Hazardous Materials

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<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HAZARDS AND HAZARDOUS MATERIALS. Would the project:</strong></td>
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<tr>
<td>a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</td>
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<tr>
<td>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?</td>
<td>☐</td>
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<tr>
<td>c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</td>
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<tr>
<td>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?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>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 for people residing or working in the project area?</td>
<td>☐</td>
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<tr>
<td>f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?</td>
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<tr>
<td>g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</td>
<td>☐</td>
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</tr>
<tr>
<td>h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</td>
<td>☐</td>
<td>☒</td>
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</table>

A Phase I Initial Site Assessment (Phase I ISA) was completed for the project in January 2018 (Michael Baker International). The study supports the discussion included below.

**REGULATORY SETTING**

According to the U.S. Environmental Protection Agency (EPA), a “hazardous” waste is defined as one “which because of its quantity, concentrations, or physiochemical or infectious properties, may either increase mortality or produce irreversible or incapacitating illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed” (U.S. Public Health and Welfare Code Section 6903). Special handling and management are required for materials and wastes that exhibit hazardous properties. Treatment, storage, transport, and disposal of these materials are highly
regulated at both the Federal and State levels. Compliance with Federal and State hazardous materials laws and regulations minimizes the potential risks to the public and the environment presented by these potential hazards, which include the following, among others:

- Resources Conservation and Recovery Act (RCRA) – hazardous waste management;
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – cleanup of contamination;
- Superfund Amendment and Reauthorization Act (SARA) – cleanup of contamination; and

These laws provide the “cradle to grave” regulation of hazardous wastes. Businesses, institutions, and other entities that generate hazardous waste are required to identify and track their hazardous waste from the point of generation until it is recycled, reused, or disposed of. The primary responsibility for implementing RCRA is assigned to the EPA, although individual states are encouraged to seek authorization to implement some or all RCRA provisions.

The EPA and the Department of Toxic Substances Control (DTSC) have developed and continue to update lists of hazardous wastes subject to regulation. In addition to the EPA and DTSC, the Regional Water Quality Control Board (RWQCB), Los Angeles Region (Region 4), is the enforcing agency for the protection and restoration of water resources, including remediation of unauthorized releases of hazardous substances in soil and groundwater. Other State agencies involved in hazardous materials management include the Office of Emergency Services, California Department of Transportation (Caltrans), California Highway Patrol (CHP), and California Department of Resources Recycling and Recovery (CalRecycle). California hazardous materials management laws include the following, among others:

- Hazardous Materials Management Act – business plan reporting;
- Hazardous Substance Act – cleanup of contamination;
- Hazardous Waste Control Act – hazardous waste management; and

**Accidental Release Prevention Law**

The State’s Accidental Release Prevention Law provides for consistency with Federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the State and Federal programs. State and Federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the Federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the Certified Unified Program Agencies (CUPAs) and requires that any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the responsible CUPA as a manager of regulated substances and prepare a Risk Management Plan. A Risk Management Plan must contain an offsite consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and
Chapter 3 California Environmental Quality Act (CEQA) Checklist

accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel. The Business Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

California Department of Toxic Substances Control

The responsibility for implementation of RCRA was given to California Environmental Protection Agency’s (CalEPA’s) DTSC in August 1992. The DTSC is also responsible for implementing and enforcing California’s own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and regulate a larger number of chemicals. Hazardous wastes regulated by California, but not by EPA, are called “non-RCRA hazardous wastes.”

Elevated lead concentrations exist in soils along older roadways as a result of from the historical use of leaded gasoline. The DTSC has regulatory authority over hazardous waste, including aerially deposited lead (ADL). Caltrans and the DTSC have entered into a Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (Agreement) effective July 1, 2016.¹ The Agreement applies to soils on the state highway system with elevated lead derived from leaded fuel tailpipe emissions. The Agreement specifically is intended to ensure worker health and safety, public safety, and proper disposal of ADL-hazardous materials during project construction.

State Water Resources Control Board

Brownfields are underutilized properties where reuse is hindered by the actual or suspected presence of pollution or contamination. The goals of the SWRCB Brownfield Program are to:

- Expedite and facilitate site cleanups and closures for Brownfield sites to support reuse of those sites;
- Preserve open space and greenfields;
- Protect groundwater and surface water resources, safeguard public health, and promote environmental justice; and
- Streamline site assessment, clean up, monitoring, and closure requirements and procedures within the various SWRCB site cleanup programs.

Site cleanup responsibilities for brownfields primarily reside within four main programs at the SWRCB: the Underground Storage Tank Program; Site Cleanup Program; Department of Defense Program; and the Land Disposal Program. These SWRCB cleanup programs are charged with ensuring sites are remediated to protect California’s surface and groundwater and return it to beneficial use.

The Los Angeles RWQCB is the enforcing agency for the protection and restoration of water resources, including remediation of unauthorized releases of hazardous substances in soil and groundwater. The UST Section directs environmental cleanup activities at leaking UST sites. Such sites include active and inactive gasoline stations, agricultural sites, brownfield


SR-14 (SR-138)/Avenue G Interchange Improvements and Avenue G Widening Project  
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redevelopment sites, airports, bulk petrochemical storage terminals, pipeline facilities, and various chemical and industrial facilities. The Site Cleanup Section oversees activities at non-UST sites where soil or groundwater contamination have occurred. Many of these sites are former industrial facilities and dry cleaners, where chlorinated solvents were spilled, or have leaked into the soil or groundwater.

**Transport of Hazardous Materials/Wastes**

Transportation of hazardous materials/wastes is regulated by California Code of Regulations (CCR) Title 26. The U.S. Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials. The DOT establishes regulations for safe handling procedures (i.e., packaging, marking, labeling, and routing). CHP and Caltrans enforce Federal and State regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between Federal, State, and local governmental authorities and private persons through a State-mandated Emergency Management Plan.

**Los Angeles County Health Hazardous Materials Division**

In May 1982, the Los Angeles County Board of Supervisors established the Hazardous Materials Control Program within the Department of Health Services. Originally, the Program focused on the inspection of businesses that generate hazardous waste, but has since expanded to include hazardous materials inspections, criminal investigations, site mitigation oversight, and emergency response operations. On July 1, 1991, the Program was transferred to the Los Angeles County Fire Department (LACFD) and its name changed to the Health Hazardous Materials Division (HHMD).

The HHMD’s mission is to protect the public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight. The Hazardous Materials Specialists are environmental health professionals dedicated to preventing pollution by serving both the public and business communities in Los Angeles County.

The Los Angeles County Fire Department is the designated CUPA serving the City of Lancaster.

**AFFECTED ENVIRONMENT**

**Potential Soil and Groundwater Contamination**

Based on the Phase I ISA, there is a potential for existing hazardous materials to be present within on-site soils in association with existing uses and past activities that have occurred on-site. Transportation uses are currently and have been historically located within the boundaries of the project site. An on-site historical release of hazardous materials was reported in the California Hazardous Material Incident Report System (CHMIRS) database on February 7, 1989. Although a specific address could not be obtained, this release was reported to the west of the intersection of Avenue G and SR-14 (SR-138). No information regarding the material type or quantity information was reported within the CHMIRS database. No evidence of contaminated soil or groundwater underlying the project site as a result of off-site properties was identified.

Based on the Phase I ISA, soil piles (with organic material and crushed asphalt) were noted at Assessor’s Parcel Number (APN) 3118-005-905, owned by the City of Lancaster. Based on interviews conducted with the City of Lancaster, it was indicated that the original use of the soil
piles was to allow contractors to dump sod in this location which was being removed from nearby homes. However, the exact content of these soil piles is unknown and could potentially include demolition materials, which would present an asbestos-containing materials (ACMs)/Lead-based paints (LBPs) concern, as well as Total Petroleum Hydrocarbons (TPH), Volatile Organic Compounds (VOCs), and metals. Further, there is a concern for TPH, VOCs, and metals in soils at properties situated near Caltrans ROW (SR-14 [SR-138]) due to the potential for a release as a result of nearby freeway uses (Assessor’s Parcel Numbers 3114-010-025, -029, and -037 and 3114-011-018, -020, -026, and -031).

**Aerially Deposited Lead**

The Phase I ISA determined that, although transportation uses were present in the project area before 1915, these roadways, including Avenue G, were not heavily used and are unlikely to include elevated levels of lead in soils. However, SR-14 (SR-138) is a primary highway within the State of California and is anticipated to have experienced heavier traffic by the mid-1960s. Therefore, the potential for lead contamination to exist within on-site soils along SR-14 (SR-138) due to aerially deposited lead (ADL) is more likely.

**On-Site Bridge Structure**

Due to the age of the bridge structure, constructed in 1968, there is a potential for ACMs to be present within the on-site bridge structure.

**On-Site Treated Wood Waste**

Treated wood waste comes from old wood that has been treated with chemical preservatives. These chemicals help protect the wood from insect attack and fungal decay while it’s being used. Fence posts, sill plates, landscape timbers, pilings, guardrails, and decking, to name a few, are all examples of chemically treated wood. Treated wood waste contains hazardous chemicals that pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals used to preserve wood and are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from touching, inhaling or ingesting treated wood waste particulate (e.g., sawdust and smoke). According to the Phase I ISA, treated wood waste was present via existing on-site guard rails. However, no visible evidence to suggest the release of treated wood waste was apparent.

**Lead Based Paint**

LBPs were commonly used in traffic striping materials before the discontinued use of lead chromate pigment in traffic striping/marking materials and hot-melt Thermoplastic stripe materials (discontinued in 1997 and 2006, respectively). Based on the Phase I ISA, traffic striping along SR-14 (SR-138), Avenue G, and 10th Street West was placed after 2014. However, LBPs in traffic striping along SR-14 (SR-138) may be present.

**On-Site Utilities**

According to the Phase I ISA, one pole-mounted transformer and one pad-mounted transformer were noted on-site, to the west of the intersection of SR-14 (SR-138) and Avenue G. No evidence of a release of potential polychlorinated biphenyls (PCB) fluids was noted.
ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.8(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact. Development of the proposed project would reconfigure the existing SR-14 (SR-138)/Avenue G interchange and widen Avenue G through the project area. The proposed project would not involve the routinely increased handling, storage, or transport of hazardous materials, compared to the existing condition. No impacts would result in this regard.

3.8(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 Impact. Based on the Phase I ISA, there is a potential for existing hazardous materials to be present within on-site soils in association with existing uses and past activities that have occurred on-site. These potential hazardous materials could be accidentally released during site disturbance activities as part of project construction, which are discussed as follows:

Past Releases

There is a concern for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and metals in soils at properties situated near Caltrans ROW (SR-14 [SR-138]) that are proposed for Caltrans acquisition due to the potential for a release as a result of nearby freeway uses (Assessor's Parcel Numbers 3114-010-025, -029, and -037 and 3114-011-018, -020, -026, and -031). Minimization Measure HAZ-1 for Phase II Site Investigation sampling for all properties proposed for Caltrans ROW acquisition would occur. Further, in the event that unknown hazardous materials/waste are encountered during construction activities, Minimization Measure HAZ-8 would require implementation of a Construction Contingency Plan (CCP) in accordance with Caltrans’ Unknown Hazards Procedures for Construction. The CCP would include provisions for the handling of hazardous materials/waste, as well as emergency response in the event that unidentified hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes are discovered during construction activities. The CCP would also address field screening, contaminant materials testing methods, mitigation and contaminate management requirements, and health and safety requirements for construction workers. Thus, impacts in this regard are less than significant.

On-Site Bridge Structure

Implementation of the proposed project would involve either modification or demolition of the existing Avenue G Overcrossing bridge structure. Due to the age of the bridge structure, constructed in 1968, there is a potential for ACMs, which could be released into the environment during proposed demolition or renovation activities. Pursuant to the Antelope Valley Air Quality Management District (AVAQMD) regulations, an asbestos survey must be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and California Occupational Health and Safety Administration (Cal/OSHA) Certified Asbestos Consultant to determine the levels of asbestos in the on-site structure (Minimization Measure HAZ-2). Compliance with District Rule 1403...
(Asbestos Emissions from Demolition/Renovation Activities) would also be required for any demolition or renovation work involving ACMs. Thus, impacts in this regard are less than significant.

**Traffic Striping Materials**

Proposed disturbance of traffic striping along SR-14 (SR-138) during construction of the proposed project could result in a release of LBP into the environment. Minimization Measure HAZ-3 would require a Lead-Based Paints Certified Specialist to conduct Phase II sampling during the PS&E Phase to confirm the presence or absence of LBP. Should LBP be present, all removed materials should be properly handled, stored, transported, and disposed of at an approved Landfill Facility, as recommended by the Certified Specialist. Thus, impacts in this regard are less than significant.

**Treated Wood Waste**

According to the Phase I ISA, no visible evidence to suggest the release of treated wood waste was apparent. However, the project may require the removal/disposal of treated wood associated with on-site guardrails. The removal and disposal of treated wood waste would be required to comply with Caltrans’ Standard Specifications Section 14-11 pertaining to the disposal of treated wood (Minimization Measure HAZ-4). Thus, impacts in this regard are less than significant.

**Pole-Mounted Transformers**

According to the Phase I ISA, one pole-mounted transformer and one pad-mounted transformer were noted on-site, to the west of the intersection of SR-14 (SR-138) and Avenue G. No evidence of a release of potential PCB fluids was noted. However, site disturbance activities could result in an accidental release of PCBs to the environment. Minimization Measure HAZ-5 would ensure safety of construction workers and the environment regard to relocation or removal of the potential PCB-containing transformers. Thus, impacts in this regard are less than significant.

**Soil Piles**

Based on the Phase I ISA, soil piles (with organic material and crushed asphalt) were noted at APN 3118-005-905, owned by the City of Lancaster. Based on interviews conducted with the City of Lancaster, it was indicated that the original use of the soil piles was to allow contractors to dump sod in this location which was being removed from nearby homes. However, the exact content of these soil piles is unknown and could potentially include demolition materials, which would present an ACM/LBP concern, as well as TPH, VOCs, metals, etc. It is acknowledged that ROW acquisition at this property would be associated with City ROW and not Caltrans ROW.

With compliance with the recommended Minimization Measure HAZ-6, these soil piles would be required to be removed from this property and properly disposed at an approved landfill facility. Prior to removal, a qualified Phase II/Site Characterization Specialist would be required to sample the soil piles to ensure proper disposal. Further, should any fill need to be imported, those soils would also be required to be sampled to confirm no contamination exists in imported fill materials. Thus, impacts in this regard are less than significant.
Aerially Deposited Lead

The potential for lead contamination to exist within on-site soils along SR-14 (SR-138) due to ADL exists. Minimization Measure HAZ-7 would require a Phase II/Site Characterization Specialist to conduct sampling within SR-14 (SR-138) ROW within the project site in order to determine whether or not contamination exists in association with ADL. Results of the sampling would indicate the level of remediation efforts that may be required, if necessary, as recommended by the Specialist. Thus, impacts in this regard are less than significant.

Avoidance and minimization measures HAZ-1 through HAZ-8 would be implemented as part of the project. Impacts from the release of hazardous materials would be less than significant.

Avoidance and Minimization Measures:

Minimization Measure HAZ-1: A Phase II/Site Characterization Specialist shall conduct sampling within properties proposed for Caltrans right-of-way acquisition (Assessor's Parcel Numbers 3114-010-025, -029, and -037 and 3114-011-018, -020, -026, and -031) for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and metals.

Minimization Measure HAZ-2: A certified asbestos consultant (CAC) shall perform an ACM survey by during the PS&E phase to meet the requirements of the Antelope Valley Air Quality Management District (AVAQMD). If ACM is detected, the ACMs should be removed prior to demolition/modification of the bridge structure. The CAC should monitor the disposal of the ACMs as they are uncovered and should ensure ACMs are removed prior to the start of construction.

Minimization Measure HAZ-3: A Lead-Based Paints Certified Specialist shall conduct Phase II sampling during the PS&E Phase to confirm the presence or absence of LBPs. Should LBPs be present, all demolition materials shall be properly handled, transported, and disposed of at an approved Landfill Facility, as recommended by the Certified Specialist.

Minimization Measure HAZ-4: The removal and disposal of treated wood waste shall comply with the California Department of Transportation's Standard Specifications Section 14-11 pertaining to the disposal of treated wood waste.

Minimization Measure HAZ-5: Any transformer to be relocated/removed during site construction/demolition shall be sampled and analyzed for PCBs. All relocation/removal activities shall be conducted under the purview of the local purveyor to identify proper handling procedures regarding PCBs, should PCBs be present.

Minimization Measure HAZ-6: Prior to site disturbance activities at Assessor's Parcel Number (APN) 3118-005-905, the existing debris/soil piles shall be sampled by a qualified Phase II/Site Characterization Specialist for hazardous wastes (including TPH, VOCs, and metals) and properly disposed of at an off-site permitted landfill facility. Further, should any import fill materials be required, those materials shall be sampled by the specialist for chemicals of concern prior to import. Should any elevated chemicals be present, those materials shall not be used for fill materials at the project site.
**Minimization Measure HAZ-7:** A Phase II/Site Characterization Specialist shall conduct sampling within SR-14 (SR-138) ROW within the project site in order to determine whether or not aerially deposited lead ADL contamination exists. Results of the sampling would indicate the level of remediation efforts that will be required.

**Minimization Measure HAZ-8:** Prior to the start of construction, a contractor shall prepare a Construction Contingency Plan (CCP) in accordance with Caltrans’ Unknown Hazards Procedures for Construction. The CCP should include provisions for the handling of hazardous materials/waste, as well as emergency response in the event that unidentified hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes are discovered during construction activities. The CCP should address field screening, contaminant materials testing methods, mitigation and contaminate management requirements, and health and safety requirements for construction workers.

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

**No Impact.** The nearest school sites (Creative Learning Center-AV Montessori located at 1702 Bow Way and Mariposa Elementary School located at 737 West Avenue H-6) are located approximately 1.3 miles south and 1.5 miles southeast, respectively, of the project site. Thus, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of a school site. No impact would result in this regard.

3.8(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.** Government Code Section 65962.5 requires the DTSC and SWRCB to compile and update a regulatory sites listing (per the criteria of the Section). The California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code. Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the CCR, to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

Based on the Phase I ISA, no areas of the project site, including those properties proposed for ROW acquisition, are listed pursuant to Government Code Section 65962.5. No impacts would result in this regard.

3.8(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 for people residing or working in the project area?**

**No Impact.** The project site is located approximately 1.55 miles southeast of William J. Fox Airfield. According to Figure 2A, Compatibility Map, of the General William J. Fox Airfield Land Use Compatibility Plan, adopted December 1, 2004, the project site is situated within Zone E. For Zone E, there is a hazard to flight, airspace review is required for objects greater than 100 feet tall, deed notice is required, and major
spectator-oriented sports stadiums, amphitheaters, and concert halls are discouraged beneath the principal flight tracks. For specific flight hazards associated with Zone E, these include physical (e.g., tall objects), visual, and electronic forms of interference with the safety of aircraft operations. Land use development that may cause the attraction of birds to increase (e.g., landfills or certain agricultural uses) is also prohibited. Further, although no explicit upper limit on land usage intensity is defined for Zone E, land uses of the types listed (uses that attract very high concentrations of people in confined areas) are discouraged in locations below or near the principal arrival and departure flight tracks. This limitation notwithstanding, no use shall be prohibited in Zone E if its usage intensity is such that it would be permitted in Zone D.

Development of the proposed project would reconfigure the existing SR-14 (SR-138)/Avenue G interchange and widen Avenue G through the project area. The proposed project would be consistent with the requirements for Zone E identified in the General William J. Fox Airfield Land Use Compatibility Plan. Further, implementation of the proposed project would not increase hazards associated with the project’s proximity to the William J. Fox Airfield, compared to existing conditions. Thus, no new impact, compared to the existing condition, would result.

3.8(f)  For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. There are no private airstrips situated within the vicinity of the project site. No impacts would result in this regard.

3.8(g)  Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The City has a fully-equipped and maintained Emergency Operations Center (EOC) located at City Hall (44933 Fern Avenue) and an alternate EOC located at the City Maintenance Yard at 615 West Avenue H. Activation of the center can be ordered by the City Manager, the Deputy City Manager, the Assistant to the City Manager, the Parks, Recreation and Arts Director, or the Housing and Neighborhood Services/Redevelopment Director, based on who is the acting Director of Emergency Services/EOC Director, or who is acting on behalf of the acting EOC Director, or an appointed representative. The City also implements a volunteer Community Emergency Response Team (CERT). The Lancaster CERT is part of the larger Antelope Valley CERT (AVCERT) that serves Lancaster, Palmdale, Quartz Hill, Lake Los Angeles, Acton, Agua Dulce, and the nearby lakes and valleys areas. Lancaster maintains a Search and Rescue Team through its CERT program, in addition to the services provided by the Los Angeles County Search & Rescue (Los Angeles County Sheriff). These volunteers assist public safety agencies in rescue activities if requested. Different branches of the Operations section have the ability to supervise search and rescue activities, based on the type of event.

Currently, the project site is comprised of SR-14 (SR-138) and Avenue G. Based on Figure 9.1-3, Evacuation Routes, of the General Plan 2030 Master Environmental Assessment, SR-14 (SR-138) is an identified evacuation route. Construction of the roundabouts and associated ramp realignments would conflict with existing ramps and ramp intersections. The interchange would need to be closed to SR-14 (SR-138) vehicle access and through-traffic on Avenue G during construction. As discussed in Response 3.15(e), the project proposes to post notice of interchange closure in advance of the Avenue H and Avenue F interchanges in accordance with Caltrans
standards. Avenue G traffic would need to be detoured to Avenue H at 30th Street West to the west of the interchange and 10th Street West to the east of the interchange.

This interchange/road closure and associated detours would be temporary in nature. During this time, increased congestion at Avenue F and Avenue H may result. These impacts would be short-term, limited to the construction period, and would cease upon completion of construction. Therefore, impacts pertaining to roadway/interchange closures/detours would be less than significant. Further, Minimization Measure TRA-1 would require the City to prepare a Construction Traffic Control Plan (CTCP). The CTCP would include a public awareness campaign, construction zone enforcement enhancement program, installation of advance information signage, and preparation of temporary detour plans during the Plans, Specification, and Estimates (PS&E) design phase for the project. The CTCP would be required to be distributed to the project construction contractors as well as local agency traffic enforcement and construction inspectors. Thus, impacts in this regard are less than significant.

Avoidance and Minimization Measures:

Refer to Minimization Measure TRA-1.

3.8(h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. According to the California Department of Forestry and Fire Protection (CalFire), the project site is not located within the vicinity of a “Very High Fire Hazard Severity Zone.” Thus, no impact would occur in this regard.

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### 3.9 Hydrology and Water Quality

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<td>a. Violate any water quality standards or waste discharge requirements?</td>
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<td>b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</td>
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<td>c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</td>
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<td>d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</td>
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<td>e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?</td>
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<td>f. Otherwise substantially degrade water quality?</td>
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<td>g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?</td>
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<td>h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?</td>
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<td>i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?</td>
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<td>j. Inundation by seiche, tsunami, or mudflow?</td>
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The Water Quality Technical Memorandum (WQTM) was completed for the project in February 2017 (Michael Baker International). The study supports the discussion included below.
Chapter 3 California Environmental Quality Act (CEQA) Checklist

REGULATORY SETTING

Clean Water Act

Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit to discharge dredged or fill material within a water of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit (Order No. 2012-0011-DWQ, NPDES No. CAS000003) to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the Statewide permit, and projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the SWRCB’s Statewide General Construction Permit (Order No. 2009-0009-DWQ, NPDES No. CAS000002). All construction projects over one acre require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction.

AFFECTED ENVIRONMENT

The Antelope Valley is considered a “closed” basin, meaning that no river systems drain out of it to the ocean or other river system. A large portion of the project area is subject to flooding. This is caused by uncontrolled runoff from the San Gabriel foothills flowing across the flat desert basin. Runoff flows north out of several major canyons, then spreads out and flows across the alluvial fans, eventually reaching the dry lake beds including Rogers, Rosamond, and Buckhorn all located northeast of the City. Much of the study area is subject to sheet flow, the type of flooding in which water flows over large areas with depths of only a few inches.¹

Most localized drainage problems correspond closely to natural tributaries. Flood hazards are most severe in the southwestern foothill region of the City, where debris-laden flows move at the greatest velocity. Storm flows in the undeveloped portions of the study area eventually reach wide north-south swales and are then intercepted by various flood control channels or natural creek beds. The drainage channels of greatest concern are Amargosa Creek, Anaverde Creek, Fairmont Creek, and Little Rock Creek.

There are a number of existing local and regional flood control facilities in the project area, including channels, storm drains, and retention basins. Local streets are generally used to convey water runoff, which tends to flow in sheets over paved surfaces and collect in low-lying areas. In many areas, local streets are designed to accommodate 10-year and/or 25-year storm flows within the right-of-way.²

¹ City of Lancaster, Final Master Environmental Assessment, City of Lancaster 2030 General Plan, April 2009.
² City of Lancaster, General Plan 2030 Master Environmental Assessment, April 2009.

SR-14 (SR-138)/Avenue G Interchange Improvements and Avenue G Widening Project
Initial Study/Proposed Mitigated Negative Declaration
City of Lancaster
January 2019
ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.9(a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. The proposed project would have the potential to affect water quality during both short-term construction and long-term operations. The project’s potential short-term construction impacts would be minimized through adherence to the SWRCB Construction General Permit (CGP). As noted in the WQTM dated February 2017 (Michael Baker International), the CGP would require that the project include a SWPPP. The SWPPP would identify a range of Best Management Practices (BMPs) to be implemented during the construction process. According to the WQTM, short-term construction BMPs may include, but are not limited to, site management BMPs, non-stormwater BMPs, erosion control, and sediment control. With adherence to the CGP and implementation of required BMPs, potential water quality impacts during construction would be less than significant.

The project’s potential long-term operational water quality effects would be minimized through adherence to the Caltrans Statewide NPDES Permit. The Statewide NPDES Permit requires implementation of a number of post-construction BMPs and runoff reduction measures to minimize impacts to water quality. Based on the WQTM, structural and non-structural BMPs may include, but are not limited to site design BMPs, preservation of existing flow patterns, preservation of drainage density, low impact development (LID) BMPs, infiltration BMPs, and biotreatment BMPs. With adherence to the Caltrans Statewide NPDES Permit and implementation of required BMPs, impacts related to long-term project operations would be less than significant.

3.9(b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. The proposed project would not substantially deplete groundwater supplies nor otherwise have an effect on groundwater usage, since it is a roadway improvement project and would not involve land uses that result in water consumption (housing, golf courses, agriculture, etc.). Water consumption associated with the project would be limited to that required for construction (dust suppression, concrete mixing, etc.). This water usage is anticipated to be nominal and would not have the capacity to substantially affect groundwater usage or levels.

The project would result in roadway improvements that would result in an increase in impervious surfaces as compared to existing conditions. However, this proposed increase would be minor relative to the amount of undisturbed, vacant/pervious land in site vicinity. As such, the project would not have the capacity to result in a net deficit in aquifer volume or a lowering of the local groundwater table, and impacts would be less than significant.

3.9(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
**Less Than Significant Impact.** The proposed project would not substantially alter the existing drainage pattern of the site, due to the flat terrain in the project area and because the site is already developed with existing roadway and freeway infrastructure, including drainage facilities. Development of the proposed project would not impact/alter existing drainage facilities. As noted above in Response 3.9(a), the project would be subject the Caltrans Statewide NPDES Permit. The Statewide NPDES Permit requires implementation of a number of post-construction BMPs and runoff reduction measures to minimize impacts to water quality. With adherence to the Caltrans Statewide NPDES Permit and implementation of required BMPs, impacts related to erosion and siltation would be less than significant.

3.9(d) **Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

*No Impact.* As noted in Response 3.9(c), above, the proposed project would not substantially alter the existing drainage pattern of the site, due to the flat terrain and because the site is already developed with existing roadway and freeway infrastructure, including drainage facilities. No impacts would result in this regard.

3.9(e) **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

*Less Than Significant Impact.* Refer to Responses 3.9(a) and 3.9(c), above. Impacts in this regard would be less than significant.

3.9(f) **Otherwise substantially degrade water quality?**

*Less Than Significant Impact.* The project would not otherwise have a potential to adversely affect water quality in the project area. Upon adherence to the requirements of the CGP and Caltrans Statewide NPDES Permit, impacts in this regard would be less than significant.

3.9(g) **Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

*No Impact.* There is no housing associated with the project, and no impact would occur in this regard.

3.9(h) **Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

*No Impact.* The proposed project would not place a habitable structure within the 100-year floodplain. As such, no impacts would result in this regard.
Chapter 3 California Environmental Quality Act (CEQA) Checklist

3.9(i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

*No Impact.* The project area is not located in the vicinity of a dam or levee separating land from a water body. Thus, no impacts would result in this regard.

3.9(j) Inundation by seiche, tsunami, or mudflow?

*No Impact.* The proposed project site is situated over 50 miles from the Pacific Ocean and is not subject to inundation by tsunami. In addition, due to the flat topography in the project area, hazards related to mudflow are considered minimal. Although Pond Two (a City-operated basin along Amargosa Creek) is situated adjacent to the project site to the southeast, it is not of sufficient size or capacity to result in a seiche event capable of resulting in a hazard to people or property. As such, no impact would result in this regard.
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3.10 Land Use and Planning

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<td>LAND USE AND PLANNING. Would the project:</td>
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<td>a. Physically divide an established community?</td>
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<tr>
<td>b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</td>
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<td>c. Conflict with any applicable habitat conservation plan or natural community conservation plan?</td>
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REGULATORY SETTING

City of Lancaster General Plan

The City’s General Plan sets forth standards for land use and transportation within City boundaries. It designates Avenue G as a “Major Arterial,” with six through lanes and a 100-foot right-of-way.

Los Angeles County General Plan

The County’s General Plan identifies “Significant Ecological Areas” throughout the County and sets forth standards for any development within them.

California Fish and Game Code, Chapter 10, Division 3, Section 2800 (Community Conservation Planning Act)

Established by SB 107 in 2003, this law authorizes the Department of Fish and Wildlife (CDFW) to enter into agreements (that will be required to meet specified conditions) with any person or public entity for the purpose of preparing a natural community conservation plan to provide comprehensive management and conservation of multiple wildlife species.

AFFECTED ENVIRONMENT

For those portions in the City of Lancaster, the western portion of the project site and surrounding land uses to the northwest, west, and southwest consist of vacant light industrial land uses located within the Fox Field Industrial Corridor Specific Plan (SP 95-02). Land uses to the east of SR-14 (SR-138) and south of Avenue G are vacant land located in an area designated and zoned for Heavy Industrial land uses. Amargosa Creek and associated pond features are designated and zoned for open space.

Land uses to the north of Avenue G (primarily east of the interchange) are located within unincorporated Los Angeles County. These areas are primarily vacant, with the area immediately north of Avenue G designated for and zoned for light industrial use, heavy industrial, public, and rural residential uses.
ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.10(a) Physically divide an established community?

*No Impact.* The proposed project would not physically divide an established community. Avenue G and SR-14 (SR-138) are existing transportation infrastructure facilities that would be modified as part of the project. No new linear transportation features would be created. In addition, the project site is situated within a predominantly vacant area, and no established communities exist. Thus, no impact would occur in this regard.

3.10(b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

*No Impact.* The City’s General Plan designates Avenue G as a Major Arterial, with 6 through lanes and a 100-foot right-of-way. The proposed improvements would be consistent with this designation. As the project would improve access in the project area for vehicular and non-vehicular traffic, the project would not have the capacity to conflict with applicable land use plans, policies, or regulations within the City of Lancaster or County of Los Angeles. No impact would result in this regard.

3.10(c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

*No Impact.* Based on the CDFW’s *California Regional Conservation Plans Map* (August 2015), there are no habitat conservation plans or natural community conservation plans that apply to the project area. In addition, based on County of Los Angeles geographic information system (GIS) mapping, the project site is not located within or near a Significant Ecological Area (SEA). Thus, no impacts would occur in this regard.

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3.11 Mineral Resources

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<td>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?</td>
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<td>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?</td>
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REGULATORY SETTING

State of California, Department of Conservation, California Geological Survey

The California Geological Survey (CGS) identifies and classifies mineral resource areas throughout the state for the purposes of the protection and development of mineral resources through the land-use planning process. This is mandated by the Surface Mining and Reclamation Act of 1975 (SMARA). The CGS publishes mineral land classification maps and reports. Local agencies are required to use the classification information when developing land-use plans and when making land-use decisions.

City of Lancaster 2030 General Plan Master Environmental Assessment

The City has mapped identified SMARA mineral resources, as depicted on Figure 2-4, Mineral Resources, of the City’s 2030 General Plan Master Environmental Assessment (MEA). Specifically, the City of Lancaster is located in the SMARA-identified Palmdale Production-Consumption (PC) region. A P-C region is the market area of a mineral commodity, including such minerals as sand and gravel. The State Geologist classifies Mineral Resource Zones (MRZ) within a P-C region based on the following geological factors:

- MRZ-1 indicates an area that contains no resources;
- MRZ-2 indicates the existence of a deposit that meets certain criteria for value and marketability;
- MRZ-3 indicates an area which contains potential but presently unproven resources; and
- MRZ-4 are areas where it is not possible at present to assign any of the above categories.

Per Figure 2-4 of the MEA, the City of Lancaster includes both MRZ-1 and MRZ-3 resource areas. The MRZ-3 classification indicates potentially significant mineral deposits that can be reclassified as significant mineral deposits through either a petition or regular periodic review by the State. This reclassification can occur in the event of a change in the mineral resources, or if a threat to the extraction of mineral deposits develops. Once areas within their jurisdiction have been classified as MRZ-3, cities and counties may prepare a report in order to determine the economic viability and extent of mineral and aggregate resources. However, it is not considered likely that the Lancaster area has large, valuable mineral and aggregate deposits.
AFFECTED ENVIRONMENT

Historically, the western Mojave Desert region has been an important source of both metallic and nonmetallic minerals and rocks.¹ However, the project is located in a rural area of Lancaster. The project area does not include any active mines, or locally-important mineral resources recovery sites delineated in the City of Lancaster General Plan 2030.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.11(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. Currently, there are no active mines within the City. According to Figure 2-4 of the MEA, the project site is situated within MRZ-3. MRZ-3 indicates that although no known mineral resources are present, this zone is an area that contains potentially significant mineral deposits. There are no mineral recovery activities occurring on-site. Implementation of the proposed project would result in continued use of the project site for transportation-related uses. The project would not result in impacts to known mineral resources, nor would the project result in the potential of unknown mineral resources to become depleted. Thus, no impact would result in this regard.

3.11(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. Refer to Response 3.11(a).

¹ City of Lancaster, General Plan 2030 Master Environmental Assessment, dated April 2009.
3.12 Noise and Vibration

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<td>NOISE AND VIBRATION. Would the project result in:</td>
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<td>a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</td>
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<td>☐</td>
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</tr>
<tr>
<td>b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>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 expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>

A Noise Memorandum was completed for the project in February 2017 (Michael Baker International). The study supports the discussion included below.

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately 3 dBA to around 140 dBA.

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks, and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3.0 dBA and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance.
There are a number of metrics used to characterize community noise exposure, which fluctuate constantly over time. One such metric, the equivalent sound level ($L_{eq}$), represents a constant sound that, over the specified period, has the same sound energy as the time-varying sound. Noise exposure over a longer period of time is often evaluated based on the Day-Night Sound Level ($L_{dn}$). This is a measure of 24-hour noise levels that incorporates a 10-dBA penalty for sounds occurring between 10:00 p.m. and 7:00 a.m. The penalty is intended to reflect the increased human sensitivity to noises occurring during nighttime hours, particularly at times when people are sleeping and there are lower ambient noise conditions. Typical $L_{dn}$ noise levels for light and medium density residential areas range from 55 dBA to 65 dBA.

**REGULATORY SETTING**

**City of Lancaster General Plan**

The Noise Element of the General Plan identifies and evaluates unwanted noise sources in the City, and establishes goals and policies for reducing noise levels in the City. The City’s noise compatibility standards are presented in Table 3.12-1, Noise Compatible Land Use Objectives, for various land uses throughout the City.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Maximum Exterior CNEL</th>
<th>Maximum Interior CNEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural, Single-Family, Multiple-Family Residential</td>
<td>65 dBA</td>
<td>45 dBA</td>
</tr>
<tr>
<td>Schools:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classrooms</td>
<td>65 dBA</td>
<td>45 dBA</td>
</tr>
<tr>
<td>Playgrounds</td>
<td>70 dBA</td>
<td></td>
</tr>
<tr>
<td>Libraries</td>
<td>-</td>
<td>50 dBA</td>
</tr>
<tr>
<td>Hospitals/Convalescent Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Areas</td>
<td>-</td>
<td>50 dBA</td>
</tr>
<tr>
<td>Sleeping Areas</td>
<td>-</td>
<td>40 dBA</td>
</tr>
<tr>
<td>Commercial and Industrial</td>
<td>70 dBA</td>
<td>-</td>
</tr>
<tr>
<td>Office Areas</td>
<td>-</td>
<td>50 dBA</td>
</tr>
</tbody>
</table>

CNEL = Community Noise Equivalent Level; dBA = A-weighted decibels.

Source: City of Lancaster, General Plan 2030, July 14, 2009.

**City of Lancaster Municipal Code**

Chapter 8.24, *Noise Regulations*, of the Lancaster Municipal Code (Municipal Code) is known as the City’s Noise Ordinance, which includes standards and regulations pertaining to noise. The Noise Ordinance is designed to control unnecessary, excessive, and annoying sounds generated on one piece of property from impacting an adjacent property, and to protect residential areas from noise sources.

Section 8.24.040, *Loud, Unnecessary and Unusual Noises Prohibited – Construction and Building*, of the Municipal Code describes the following exemptions to the Noise Ordinance, which are applicable to the project:

Except as otherwise provided in this chapter, a person at any time on Sunday or any day between the hours of eight p.m. and seven a.m. shall not perform any construction or repair work of any kind upon any building or structure or perform any earth excavating, filling or moving where any of the foregoing entails the use of any air compressor, jack hammer, power-driven drill, riveting machine, excavator, diesel-powered truck, tractor or other earth-moving equipment, hard hammers on steel or iron or any other machine tool,
device or equipment which makes loud noises within five hundred (500) feet of an occupied dwelling, apartment, hotel, mobile home or other place of residence.

AFFECTED ENVIRONMENT

Noise Sources

The four primary noise sources in the vicinity of the project site include:

- **State Route 138 (SR-14)**, the Antelope Valley Freeway, is the primary north-south route crossing the City and runs through the project site. Traffic is relatively moderate for a freeway, ranging from 37,500 average daily vehicle trips (ADT) just north of the project site to 38,500 ADT immediately south of the project.\(^1\)

- **Avenue G** runs east-west through project site. According to the MEA, traffic on Avenue G ranges from 2,000 ADT just west of the project site to 1,900 ADT immediately east of the project.

- **William J. Fox Airport** is located approximately 1.66 miles to the northwest of the project site.\(^2\) However, according to the MEA, the project site is located outside the William J. Fox Airport 55 Community Noise Equivalent Level (CNEL) noise contour.

- **Union Pacific Railroad** runs in a north-south direction approximately 1,580 feet to the east of the project site. According to the Master Environmental Assessment, railroad traffic generates noise levels of approximately 66 dBA L\(_{dn}\) at a distance of 200 feet.

Noise Receptors

Noise receptors are places or structures used by people who would be subjected to project-generated noise; sensitive noise receptors include land uses such as hospitals, nursing homes, schools, libraries, laboratories, etc. The closest noise receptor includes a single-family residence located approximately one-half mile from the project site; the next closest receptors include a residential neighborhood located approximately 0.70-mile to the southeast. No new sensitive noise receptors exist in or are planned nearby.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.12(a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

*No Impact.*

Construction Noise

According to the Noise Memorandum, noise from project construction activities may intermittently dominate the noise environment in the immediate area of construction.

---


Construction noise would result from the transport of construction workers and equipment and materials to and from the project site, as well as from roadway construction activities. Construction noise is regulated by Caltrans Standard Specifications Section 14-8.02 (Noise Control), which states that noise levels generated during construction shall comply with applicable local and state regulations, and that all equipment shall be fitted with adequate mufflers according to the manufacturers’ specifications. As noted above, the closest sensitive receptors are located more than 2,500 feet away from the project construction area. Construction would be conducted in accordance with Caltrans Standard Specifications Section 14-8.02 and applicable local noise standards. Construction noise would be short-term and intermittent. Based on the distance of the nearest sensitive receptors, no adverse noise impacts would result.

Operational Noise

The project consists of widening or replacing the Avenue G bridge overcrossing, realignment of all on- and off-ramps, roundabouts at northbound and southbound ramp terminus intersections, elimination of loop on-ramps, and Avenue G arterial improvements, including bicycle lanes and/or pedestrian facilities. As noted in the Noise Memorandum, the closest noise-sensitive receptors are located over 2,500 feet from the project site, and no permits have been issued for future development of noise-sensitive receptors within 2,500 feet of the project site. The Caltrans’ Traffic Noise Analysis Protocol, May 2011 (TNAP) states that receptors located beyond 500 feet from the project area do not need to be considered for analysis unless there is a reasonable expectation that noise impacts would extend beyond that boundary. As such, traffic noise impacts would not occur at noise-sensitive receptors, and no impact would occur in this regard.

3.12(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact.

Construction

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Groundborne vibrations from construction activities rarely reach levels that damage structures.

The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition,
not all buildings respond similarly to vibration generated by construction equipment. The vibration produced by construction equipment is illustrated in Table 3.12-2, Typical Vibration Levels for Construction Equipment.

### Table 3.12-2: Typical Vibration Levels for Construction Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Approximate peak particle velocity at 25 feet (inches/second)</th>
<th>Approximate peak particle velocity at 50 feet (inches/second)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large bulldozer</td>
<td>0.089</td>
<td>0.031</td>
</tr>
<tr>
<td>Loaded trucks</td>
<td>0.076</td>
<td>0.027</td>
</tr>
<tr>
<td>Small bulldozer</td>
<td>0.003</td>
<td>0.001</td>
</tr>
<tr>
<td>Jackhammer</td>
<td>0.035</td>
<td>0.012</td>
</tr>
<tr>
<td>Auger/drill rigs</td>
<td>0.089</td>
<td>0.031</td>
</tr>
<tr>
<td>Pile driver</td>
<td>0.644</td>
<td>0.228</td>
</tr>
<tr>
<td>Vibratory hammer</td>
<td>0.035</td>
<td>0.012</td>
</tr>
<tr>
<td>Vibratory compactor/roller</td>
<td>0.003</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Notes:
2. Calculated using the following formula:

\[
PPV_{\text{equi}} = PPV_{\text{ref}} \times (25/D)^{1.5}
\]

where:
- \(PPV\) (equip) = the peak particle velocity in inch per second of the equipment adjusted for the distance
- \(PPV\) (ref) = the reference vibration level in inch per second from Table 12-2 of the FTA Transit Noise and Vibration Impact Assessment Guidelines
- \(D\) = the distance from the equipment to the receiver


The nearest structure to the project site is located approximately 780 feet to the southwest. Groundborne vibration decreases rapidly with distance. As indicated in Table 3.12-2, based on the Federal Transit Administration (FTA) data, vibration velocities from typical heavy construction equipment operation that would be used during project construction range from 0.003 to 0.089 inch-per-second peak particle velocity (PPV) at 25 feet from the source of activity, and would range from 0.001 to 0.031 inch-per-second PPV at 50 feet. With regard to the proposed project, groundborne vibration would be generated primarily during grading activities on-site and by off-site haul-truck travel. In addition, pile driving activities may be required for the proposed Avenue G overcrossing bridge structure construction. As the nearest structure is located approximately 780 feet from the project site (at the Antelope Valley Fairgrounds), proposed construction activities would not be capable of exceeding the 0.2 inch-per-second PPV significance threshold for vibration. Therefore, vibration impacts would be less than significant.

### Operations

Vibration impacts associated with the proposed project would be minimal. Highway traffic vibration affects structures nominally, with the exception to receptors that are extremely sensitive to vibration, including historic buildings, or activities (e.g., medical procedures/surgery, electron microscopy, etc.). However, there are no structures or vibration-sensitive uses in the vicinity of the project site. As noted above, the nearest structure is located approximately 780 feet from the project site. A less than significant impact would occur in this regard.
3.12(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

*No Impact.* The proposed project would not increase long-term noise levels in the project area; refer to Response 3.12(a) above. In addition, noise increases during project construction would be short-term in nature and would cease upon completion. As such, no impact would occur in this regard.

3.12(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

*No Impact.* As noted in Response 3.12(a), project construction would temporarily increase noise levels in the project area. However, there are no sensitive receptors in close proximity to the project site that would be impacted by construction noise (located more than 2,500 feet from the project site). Therefore, no impact would occur in this regard.

3.12(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 expose people residing or working in the project area to excessive noise levels?

*No Impact.* The project site is located outside of the 55 CNEL contour for William J. Fox Airfield. As such, excessive noise levels would not occur in the project vicinity. No impact would occur in this regard.

3.12(f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

*No Impact.* The nearest private airstrip is Little Buttes Antique Airfield located approximately 7.1 miles to the northwest of the project site. Therefore, the project would not expose people residing or working in the project area to excessive noise levels from this airstrip. No impact would occur in this regard.

---

3.13 Population and Housing

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>POPULATION AND HOUSING. Would the project:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Induce substantial 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)?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

REGULATORY SETTING

Lancaster General Plan

The City’s General Plan sets forth population and housing estimates and goals.

AFFECTED ENVIRONMENT

Lancaster is a medium sized city over 40 miles northeast of Downtown Los Angeles. Lancaster had an estimated population of 160,316 in 2017, making up only approximately 1.5 percent of the population of Los Angeles County. The City’s population increased by approximately 3,400 people from 2010 to 2017, about a two percent population increase over a seven-year period.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.13(a) Induce substantial 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)?

Less Than Significant Impact. The proposed project would not induce substantial population growth. Although development of the proposed project would reconfigure the existing SR-14 (SR-138)/Avenue G interchange and widen Avenue G through the project area, no increase in the capacity of the interchange would result. Avenue G improvements would include one travel lane in each direction, a striped centerline, bicycle lanes, graded shoulders, and sidewalks at the interchange. No increase in the capacity along Avenue G would result. Further, Avenue G is designated as a “Major Arterial” per Figure 6-1, Street Classifications, of the MEA. Major arterials are designated as 84-foot roadways with three lanes in each direction, within a 100-foot right-of-way. The proposed cross-section for Avenue G (east of SR-14 [SR-138]) is consistent with the City’s street classification of Major Arterial, and thus consistent with...
the intent of the General Plan. In addition, the project would be consistent with the City’s Master Plan of Complete Streets (and associated goals and policies related to complete streets within the General Plan), which encourages the development of a complete streets network throughout the community to create a more balanced transportation system for all users. Thus, as no increased capacity of Avenue G would result, implementation of the proposed project would not indirectly result in an increase in population through the extension of roads or infrastructure.

3.13(b) **Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

*No Impact.* The proposed project would not displace existing housing, as no housing is present on-site. No impact would result in this regard.

3.13(c) **Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

*No Impact.* The project would not displace substantial numbers of people, as no people are currently present at the project site. No construction of replacement housing would be required elsewhere. No impact would result in this regard.
Chapter 3 California Environmental Quality Act (CEQA) Checklist

3.14 Public Services

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

**PUBLIC SERVICES.**

a. 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:

<table>
<thead>
<tr>
<th>1) Fire protection?</th>
<th>☐</th>
<th>☐</th>
<th>☐</th>
<th>☑</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Police protection?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>3) Schools?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>4) Parks?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>5) Other public facilities?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

**REGULATORY SETTING**

**Local**

The City of Lancaster General Plan 2030 addresses disaster preparedness for the future (City of Lancaster, 2009). The following objectives, policies, and specific actions are applicable to the project and emergency services in the project area.

- **Goal 5:** To provide a system of emergency services that will enable the City to act promptly with appropriate measures in the event of a natural or man-made disaster, to save lives, alleviate human suffering, minimize damage and maintain the capability to effectively continue City operations.

- **Objective 5.1:** Maintain a level of preparedness to respond to emergency situations which will save lives, protect property, and facilitate recovery with a minimum of disruption.

- **Policy 5.1.1:** Expand access to resource through the coordination and cooperation in planning and operations along multi-agency and jurisdictional lines to ensure adequate public services during major emergencies.

- **Specific Action 5.1.1(c):** Maintain ongoing coordination and cooperation with jurisdictions, and work closely with emergency responders, community partners and residents to engage in comprehensive disaster planning to improve regional capabilities to respond to disaster situations.

Additionally, the City has prepared an Emergency Operations Plan (City of Lancaster, 2010). The Emergency Operations Plan is a flexible, multi-hazard document that addresses the City of Lancaster’s planned response and short-term recovery to extraordinary emergency/disaster situations associated with natural disasters, technological incidents, and national security emergencies. The plan does not address normal day-to-day emergencies or the well-established...
Chapter 3 California Environmental Quality Act (CEQA) Checklist

and routine procedures used in coping with such emergencies. Instead, the operational concepts reflected in the plan focus on potential large-scale disasters that can generate unique situations requiring unusual responses. Los Angeles County also prepared an Operational Area Emergency Response Plan (Los Angeles County, 1998) to be implemented in the event of extraordinary emergency/disaster situations, including natural disasters, technological incidents, and national security emergencies.

AFFECTED ENVIRONMENT

The City of Lancaster contracts with the Los Angeles County Fire Department (LACFD) to receive fire and paramedic services. Emergency services include fire suppression, fire prevention, paramedic response, swift water rescue, hazardous materials response, and other types of emergency services.

There are no fire stations in the project area, but the following stations are the closest responders to the project area:

- Fire Station 33 at 44947 Date Avenue;
- Fire Station 112 at 8812 West Avenue E-8;
- Fire Station 130 at 44558 40th Street West; and
- Fire Station 117 at 44851 30th Street East.

The Los Angeles County Sheriff's Department-Antelope Valley Stations provide law enforcement services to Lancaster. The Lancaster Sheriff's station is in the project area:

- Los Angeles County Sheriff's Department at 501 West Lancaster Boulevard.

The California Highway Patrol is a law enforcement agency that has jurisdiction over all California highways. The following California Highway Patrol Station is Lancaster in the project area:

- California Highway Patrol at 2041 West Avenue I.

The following hospitals are in the project area:

- Antelope Valley Hospital at 1600 Avenue J; and
- High Desert Health System at 44600 North 60th Street West.

The City has in place emergency operations plans and the Los Angeles County Operational Area Emergency Response Plan to be implemented in the event of emergency or disaster situations.

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Chapter 3 California Environmental Quality Act (CEQA) Checklist

The Lancaster School District (LACSD) serves students in pre-school through 8th grade. The following LACSD schools are near the project area:

- Desert View Elementary School at 1555 West Avenue H10; and
- Mariposa Elementary School at 737 West Avenue H-6.

The Antelope Valley Union High School District (AVUHSD) serves students in 7th through 12th grades. The following AVUHSD schools are near the project area:

- Phoenix High School at 228 East Avenue H-8.

The following private schools are near the project area:

- Lightwood Academy at 44863 33rd Street West;
- Antelope Valley Adventist School at 45002 Fern Avenue; and
- Sacred Heart School at 625 West Kettering Street.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

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:

3.14(a)(1) Fire protection?

No Impact. The proposed project would not affect fire protection services. Rather, the project would improve connectivity in the project area for vehicular traffic, including fire protection vehicles. As such, response times could potentially be decreased as a result of the project. In addition, the project does not include any growth-inducing land uses that would create an increase in demand for services. No impacts to fire protection services would result.

3.14(a)(2) Police protection?

No Impact. The proposed project would not affect police protection services. Rather, the project would improve connectivity in the project area for vehicular traffic, including law enforcement vehicles. As such, response times could potentially be decreased as a result of the project. In addition, the project does not include any growth-inducing land uses that would create an increase in demand for services. No impacts to police protection services would result.

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3.14(a)(3)  Schools?

No Impact. The proposed project consists of roadway improvements that would not generate new students. As such, additional demand for school capacity would not occur. No impacts to schools would result.

3.14(a)(4)  Parks?

No Impact. The proposed project consists of roadway improvements that would not increase the population in the area. As such, additional demand for park capacity would not occur. No impacts to parks as a result of increased population are anticipated.

3.14(a)(5)  Other public facilities?

No Impact. The proposed project would not have the capacity to affect other public facilities, since it is a roadway infrastructure improvement and would not generate any population growth requiring public services. Thus, no impacts would occur in this regard.
3.15  Recreation

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECREATION.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

REGULATORY SETTING

Local

The City of Lancaster General Plan 2030 includes efforts to support and grow the existing parks and recreational facilities of Lancaster (City of Lancaster, 2009a). Below are specific land use goals and policies from the plan that are related to the project.

- Objective 10.2: Through the adoption and implementation of a Master Plan of trails, establish and maintain a hierarchical system of trails (including equestrian, bicycle, and pedestrian trails) providing recreational opportunities and an alternative means of reaching schools, parks and natural areas, and planes of employment, and connecting to regional trail systems.

The Lancaster Parks, Recreation, Open Space, and Cultural Master Plan was developed through collaboration between staff, elected and agency officials, and community members (City of Lancaster, 2007). Adopted in 2007, it represents the first master plan developed for the Lancaster Department of Parks, Recreation and Arts. The plan has three major purposes: 1) Present a long-term vision and goals for the Parks Department and for the community for the next 20 to 25 years; 2) Describe current and future needs, interests, and community preferences for parks, recreation, arts programs, and facilities; and 3) Develop a process and priorities for managing the Parks Department’s commitments so that new requests and initiatives are considered in light of existing commitments.

The Lancaster Master Plan of Trails and Bikeways was developed in implementation of several policies and actions developed through the Parks, Recreation, and Open Space and Cultural Master Plan (City of Lancaster, 2012). The Lancaster Master Plan of Trails and Bikeways includes goals, policies, and actions related to bicycle and pedestrian facilities and the user experience.
Chapter 3 California Environmental Quality Act (CEQA) Checklist

AFFECTED ENVIRONMENT

There are more than 450 acres of parkland and recreational facilities in Lancaster. No parks are located within the project vicinity. The nearest park is the Apollo Community Regional Park, located approximately 1.28 miles to the northwest of the project site.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.15(a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project consists of roadway improvements that would not increase park use due to a new resident population. As such, additional demand for park and recreational facilities would not occur. The nearest park is the Apollo Community Regional Park, located approximately 1.28 miles to the northwest of the project site. The propose project would not impact the Apollo Community Regional Park at this distance. No impacts to existing parks are anticipated.

3.15(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project does not include parks or recreational facilities, nor does it require any construction or expansion of recreational facilities resulting in an adverse environmental affect. Therefore, no impacts would result in this regard.

---

3.16 Transportation/Traffic

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRANSPORTATION/TRAFFIC. Would the project:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</td>
<td>□</td>
<td>□</td>
<td>☒</td>
<td>□</td>
</tr>
<tr>
<td>b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>☒</td>
</tr>
<tr>
<td>c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>☒</td>
</tr>
<tr>
<td>d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</td>
<td>□</td>
<td>□</td>
<td>☒</td>
<td>□</td>
</tr>
<tr>
<td>e. Result in inadequate emergency access?</td>
<td>□</td>
<td>☒</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?</td>
<td>□</td>
<td>□</td>
<td>☒</td>
<td>□</td>
</tr>
</tbody>
</table>

A Traffic Operations Analysis Report (Traffic Study) was completed for the project in March 2018 ( Iteris, Inc.). The study supports the discussion included below.

REGULATORY SETTING

This section discusses the project’s impacts on traffic and circulation, both during construction (construction impacts) and after completion of the project (long-term impacts).

Basic Freeway Segments

Per the Traffic Study, peak hour volumes along the freeway mainline are analyzed using the methodology contained in Chapter 11, Basic Freeway Segments, of the Highway Capacity Manual 2010 (HCM 2010), with calculations performed using the Highway Capacity Software (HCS 2010). The LOS for freeway segments is estimated using the HCM 2010 methodology for basic freeway segments, as shown in Table 3.16-1, Basic Freeway Segment Level of Service Criteria. The basic freeway segment can be characterized by two performance measures: density (passenger cars per mile per lane [pc/hr/ln]), and volume to capacity (v/c) ratio. These performance measures indicate how well traffic volumes and flow are being accommodated by the freeway segment.
Table 3.16-1: Basic Freeway Segment Level of Service Criteria

<table>
<thead>
<tr>
<th>Level of Service (LOS)</th>
<th>Density (passenger cars per mile per lane [pc/mi/ln])</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>≤11</td>
</tr>
<tr>
<td>B</td>
<td>&gt;11-18</td>
</tr>
<tr>
<td>C</td>
<td>&gt;18-26</td>
</tr>
<tr>
<td>D</td>
<td>&gt;26-35</td>
</tr>
<tr>
<td>E</td>
<td>&gt;35-45</td>
</tr>
<tr>
<td>F</td>
<td>&gt;45 or Demand exceeds capacity</td>
</tr>
</tbody>
</table>


For basic freeway segments, density is used to measure “level of service,” or LOS. The LOS density ranges are listed in Table 3.16-1. When demand conditions exceed capacity, forced flow results and the formulas used for estimating density and average speed are no longer applicable. As such, estimates for density and average speed are not provided for LOS “F” conditions due to this limitation of the methodology.

**Freeway Ramp Junction**

Peak hour ramp operations are analyzed using the methodology contained in Chapter 13, *Freeway Merge and Diverge Segments*, of the HCM 2010. This analysis examines the LOS within the ramp influence areas of the freeway. The analysis of the on-ramps examines the impact of merging onto the freeway, while the analysis of the off-ramps examines the impacts of diverging from the freeway. Consistent with HCM 2010 procedures, a single-lane on-ramp that results in a lane addition is not analyzed as a merge area. A dual-lane off-ramp that results in a lane drop is analyzed as a major diverge area. Lane additions and major diverge areas are analyzed by means of a capacity analysis at each leg of the lane addition or major diverge area. A summary of the merge and diverge performance criteria is shown in Table 3.16-2, Freeway Ramp Junction Level of Service Criteria.

Table 3.16-2: Freeway Ramp Junction Level of Service Criteria

<table>
<thead>
<tr>
<th>Level of Service (LOS)</th>
<th>Density (passenger cars per mile per lane [pc/mi/ln])</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>≤10</td>
</tr>
<tr>
<td>B</td>
<td>&gt;10-20</td>
</tr>
<tr>
<td>C</td>
<td>&gt;20-28</td>
</tr>
<tr>
<td>D</td>
<td>&gt;28-35</td>
</tr>
<tr>
<td>E</td>
<td>&gt;35</td>
</tr>
<tr>
<td>F</td>
<td>Demand exceeds capacity</td>
</tr>
</tbody>
</table>


**Intersections**

Intersection levels of service analyses were conducted using the HCM 2010 methodology (based on vehicle delay) for the study intersections. Under the HCM 2010 methodology, the intersection LOS’ were analyzed with a saturation flow rate of 1,900 pc/hr/ln, which is the default value for HCM 2010 methodology.
Signalized intersections were analyzed using SYNCHRO 9, and roundabouts were analyzed using SIDRA INTERSECTION 6.1, a LOS program specifically tailored to roundabout intersections. The LOS criteria is provided in Table 3.16-3, Intersection Level of Service Criteria. The minimum acceptable level of service standard for intersections was determined to be LOS D.¹

### Table 3.16-3: Intersection Level of Service Criteria

<table>
<thead>
<tr>
<th>Level of Service (LOS)</th>
<th>Signalized Intersection Control Delay (seconds per vehicle)</th>
<th>Unsignalized Intersection Control Delay (seconds per vehicle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>≤10</td>
<td>≤10</td>
</tr>
<tr>
<td>B</td>
<td>≥10 and ≤20</td>
<td>&gt;10 and ≤15</td>
</tr>
<tr>
<td>C</td>
<td>&gt;20 and ≤35</td>
<td>&gt;15 and ≤25</td>
</tr>
<tr>
<td>D</td>
<td>&gt;35 and ≤55</td>
<td>&gt;25 and ≤35</td>
</tr>
<tr>
<td>E</td>
<td>&gt;55 and ≤80</td>
<td>&gt;35 and ≤50</td>
</tr>
<tr>
<td>F</td>
<td>&gt;80</td>
<td>&gt;50</td>
</tr>
</tbody>
</table>


### Accessibility

Caltrans is committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public is provided to persons with disabilities.

### AFFECTED ENVIRONMENT

The Traffic Study obtained the existing traffic forecasts (documented in 2014) from the 2040 Forecasts for SR-14 Interchanges – Avenue G (Forecast Memorandum), prepared by Fehr & Peers consultants, dated August 2, 2016. The Forecast Memorandum is provided in Appendix B of the Traffic Study. The purpose of the Forecast Memorandum was to develop future traffic forecasts for use in the interchange studies along the SR-14 (SR-138) corridor to ensure consistency between future forecasts at several locations and allow the City of Lancaster to test the priority and phasing of improvements.

This section discusses the existing conditions for the basic freeway segments, freeway ramps, and intersections. The project study area as well as the freeway and intersection analysis locations are shown in Figure 3.16-1, Study Area and Analysis Locations.

¹ City of Lancaster, 2030 General Plan Master Environmental Assessment, at footnote 17, page 6-10.
Basic Freeway Segments

The existing freeway mainline LOS conditions are summarized in Table 3.16-4, Existing Basic Freeway Segment Conditions. As indicated in Table 3.16-4, all of the basic freeway segments are operating at LOS B or better.

Table 3.16-4: Existing Basic Freeway Segment Conditions

<table>
<thead>
<tr>
<th>SR-14 (SR-138) Freeway Segment</th>
<th>Type</th>
<th>Lanes</th>
<th>AM Density</th>
<th>AM LOS</th>
<th>PM Density</th>
<th>PM LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Northbound</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue H On-ramp to Avenue G Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>12.9</td>
<td>B</td>
<td>12.1</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G Off-ramp to Avenue G EB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>12.1</td>
<td>B</td>
<td>11.6</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G EB On-ramp to Avenue G WB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>12.8</td>
<td>B</td>
<td>11.7</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G WB On-ramp to Avenue F Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>12.9</td>
<td>B</td>
<td>12.0</td>
<td>B</td>
</tr>
<tr>
<td><strong>Southbound</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue F On-ramp to Avenue G Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>10.4</td>
<td>A</td>
<td>15.3</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G Off-ramp to Avenue G WB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>10.1</td>
<td>A</td>
<td>14.4</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G WB On-ramp to Avenue G EB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>10.1</td>
<td>A</td>
<td>14.6</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G EB On-ramp to Avenue H Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>10.3</td>
<td>A</td>
<td>15.1</td>
<td>B</td>
</tr>
</tbody>
</table>


Freeway Ramp Junction

The existing freeway ramp junction LOS conditions are summarized in Table 3.16-5, Existing Freeway Ramp Junction Conditions. As indicated in Table 3.16-5, all the ramp junctions are currently operating at LOS C or better.

Table 3.16-5: Existing Freeway Ramp Junction Conditions

<table>
<thead>
<tr>
<th>SR-14 (SR-138) Freeway Ramp</th>
<th>Type</th>
<th>AM</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Density</td>
<td>LOS</td>
</tr>
<tr>
<td><strong>Northbound</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G Off-ramp</td>
<td>Diverge</td>
<td>18.5</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G EB On-ramp</td>
<td>Merge</td>
<td>15.1</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G WB On-ramp</td>
<td>Merge</td>
<td>15.8</td>
<td>B</td>
</tr>
<tr>
<td><strong>Southbound</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G Off-ramp</td>
<td>Diverge</td>
<td>15.5</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G WB On-ramp</td>
<td>Merge</td>
<td>12.8</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G EB On-ramp</td>
<td>Merge</td>
<td>13.0</td>
<td>B</td>
</tr>
</tbody>
</table>

Figure 3.16-1

Study Area and Analysis Locations


SR-14 (SR-138)/AVENUE G INTERCHANGE IMPROVEMENTS AND AVENUE G WIDENING PROJECT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Study Area and Analysis Locations
Intersections

A LOS analysis for the study intersections was conducted based on both AM and PM peak hour volumes. The existing intersection LOS conditions are summarized in Table 3.16-6, Existing Intersection Level of Service Conditions. As shown in Table 3.16-6, all study intersections currently operate at LOS A during both the AM and PM peak hours.

Table 3.16-6: Existing Intersection Level of Service Conditions

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Control Type</th>
<th>AM Peak Hour</th>
<th>PM Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>30th Street and Avenue G</td>
<td>TWSC</td>
<td>1.3</td>
<td>A</td>
</tr>
<tr>
<td>SR-14 (SR-138) SB Ramp and Avenue G</td>
<td>TWSC</td>
<td>1.5</td>
<td>A</td>
</tr>
<tr>
<td>SR-14 (SR-138) NB Ramp and Avenue G</td>
<td>TWSC</td>
<td>4.2</td>
<td>A</td>
</tr>
<tr>
<td>10th Street and Avenue G</td>
<td>TWSC</td>
<td>2.1</td>
<td>A</td>
</tr>
</tbody>
</table>


ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.16(a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

*Less Than Significant Impact.* Traffic operational analysis was performed for ramp and local street intersections, mainline segments, and merge/diverge locations on SR-14 (SR-138). Operational analyses were completed for the following scenarios:

- Opening Year (2020); and
- Future Year (2040).

The Opening Year forecasts were developed by extrapolating traffic volumes between the existing conditions and projected future conditions, based on the Forecast Memorandum.

**Opening Year (2020)**

*Basic Freeway Segments*

A LOS analysis of the freeway segments was conducted to present the Opening Year traffic conditions. The results of the Opening Year freeway mainline LOS analysis are summarized in Table 3.16-7, Opening Year Basic Freeway Segment Analysis. As shown in Table 3.16-7, all of the basic freeway segments for the project study area are projected to operate at LOS B or better under Opening Year “without project” condition. Upon construction of the proposed project, all of the basic freeway segments are projected to continue to operate at LOS B or better under the Opening Year.
### Table 3.16-7: Opening Year Basic Freeway Segment Analysis

<table>
<thead>
<tr>
<th>SR-14 (SR-138) Freeway Segment</th>
<th>Type</th>
<th>Lanes</th>
<th>AM Density</th>
<th>AM LOS</th>
<th>PM Density</th>
<th>PM LOS</th>
<th>“Without Project” Basic Freeway Segment</th>
<th>“With Project” Basic Freeway Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northbound</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue H On-ramp to Avenue G Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>13.8</td>
<td>B</td>
<td>12.9</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G Off-ramp to Avenue G EB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>12.9</td>
<td>B</td>
<td>12.4</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G EB On-ramp to Avenue G WB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>13.6</td>
<td>B</td>
<td>12.5</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G WB On-ramp to Avenue F Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>13.8</td>
<td>B</td>
<td>12.8</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southbound</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue F On-ramp to Avenue G Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>11.4</td>
<td>B</td>
<td>16.6</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G Off-ramp to Avenue G WB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>11.0</td>
<td>A</td>
<td>15.6</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G WB On-ramp to Avenue G EB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>11.0</td>
<td>B</td>
<td>15.9</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G EB On-ramp to Avenue H Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>11.3</td>
<td>B</td>
<td>16.4</td>
<td>B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


### Freeway Ramp Junction

The results of the Opening Year freeway ramp junction LOS is summarized in **Table 3.16-8**, Opening Year Freeway Ramp Junction Analysis. As depicted in **Table 3.16-8**, all freeway ramp junction locations are projected to operate at LOS C or better under the Opening Year “without project” conditions. Upon construction of the proposed project, all freeway ramp junction locations are projected to continue to operate at LOS C or better under the Opening Year.

### Table 3.16-8: Opening Year Freeway Ramp Junction Analysis

<table>
<thead>
<tr>
<th>SR-14 (SR-138) Freeway Ramp</th>
<th>Type</th>
<th>“Without Project” Freeway Ramp</th>
<th>“With Project” Freeway Ramp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northbound</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G Off-ramp</td>
<td>Diverge</td>
<td>19.6 B</td>
<td>19.6 B</td>
</tr>
<tr>
<td>Avenue G EB On-ramp</td>
<td>Merge</td>
<td>16.5 B</td>
<td>16.5 B</td>
</tr>
<tr>
<td>Avenue G WB On-ramp</td>
<td>Merge</td>
<td>16.8 B</td>
<td>16.8 B</td>
</tr>
<tr>
<td>Southbound</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G Off-ramp</td>
<td>Diverge</td>
<td>16.7 B</td>
<td>16.7 B</td>
</tr>
<tr>
<td>Avenue G WB On-ramp</td>
<td>Merge</td>
<td>13.8 B</td>
<td>13.8 B</td>
</tr>
<tr>
<td>Avenue G EB On-ramp</td>
<td>Merge</td>
<td>14.0 B</td>
<td>14.0 B</td>
</tr>
</tbody>
</table>


### Intersections

A LOS analysis for the study intersections was conducted based on both AM and PM peak hour volumes. The results of the Opening Year intersection LOS analysis is summarized in **Table 3.16-9**, Opening Year Intersection Levels of Service. As shown in **Table 3.16-9**, all four study intersections are projected to operate at LOS A during both AM and PM peak hours under the Opening Year “without project” conditions. Upon construction of the proposed project, all four study intersections are projected to continue to operate at LOS A during both AM and PM peak hours under the Opening Year.
Table 3.16-9: Opening Year Intersection Levels of Service

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Control Type</th>
<th>&quot;Without Project&quot;</th>
<th>&quot;With Project&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM Peak Hour</td>
<td>PM Peak Hour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delay LOS</td>
<td>Delay LOS</td>
</tr>
<tr>
<td>30th Street and Avenue G</td>
<td>TWSC</td>
<td>2.0 A</td>
<td>2.7 A</td>
</tr>
<tr>
<td>SR-14 (SR-138) SB Ramp and Avenue G</td>
<td>TWSC</td>
<td>1.6 A</td>
<td>3.6 A</td>
</tr>
<tr>
<td>SR-14 (SR-138) NB Ramp and Avenue G</td>
<td>TWSC</td>
<td>4.5 A</td>
<td>2.5 A</td>
</tr>
<tr>
<td>10th Street and Avenue G</td>
<td>TWSC</td>
<td>2.3 A</td>
<td>3.2 A</td>
</tr>
</tbody>
</table>

TWSC – Two-Way Stop Control


Future Year (2040)

Basic Freeway Segments

The results of the Future Year freeway mainline LOS analysis is summarized in Table 3.16-10, Future Year Basic Freeway Segment Analysis. As shown in Table 3.16-10, all of the basic freeway segments are projected to operate at LOS C or better under Future Year “without project” conditions. Upon construction of the proposed project, all basic freeway segments are projected to operate at LOS C or better under the Future Year.

Table 3.16-10: Future Year Basic Freeway Segment Analysis

<table>
<thead>
<tr>
<th>SR-14 (SR-138) Freeway Segment</th>
<th>Type</th>
<th>Lanes</th>
<th>&quot;Without Project&quot; Basic Freeway Segment</th>
<th>&quot;With Project&quot; Basic Freeway Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Density LOS</td>
<td>Density LOS</td>
</tr>
<tr>
<td>Northbound</td>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Avenue H On-ramp to Avenue G Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>16.9 B</td>
<td>16.1 B</td>
</tr>
<tr>
<td>Avenue G Off-ramp to Avenue G EB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>15.5 B</td>
<td>15.3 B</td>
</tr>
<tr>
<td>Avenue G EB On-ramp to Avenue G WB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>16.4 B</td>
<td>15.5 B</td>
</tr>
<tr>
<td>Avenue G WB On-ramp to Avenue F Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>16.6 B</td>
<td>15.9 B</td>
</tr>
<tr>
<td>Southbound</td>
<td></td>
<td></td>
<td>AM</td>
<td>PM</td>
</tr>
<tr>
<td>Avenue F On-ramp to Avenue G Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>14.5 B</td>
<td>21.1 C</td>
</tr>
<tr>
<td>Avenue G Off-ramp to Avenue G WB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>13.9 B</td>
<td>19.9 C</td>
</tr>
<tr>
<td>Avenue G WB On-ramp to Avenue G EB On-ramp</td>
<td>Basic</td>
<td>2</td>
<td>14.1 B</td>
<td>20.9 C</td>
</tr>
<tr>
<td>Avenue G EB On-ramp to Avenue H Off-ramp</td>
<td>Basic</td>
<td>2</td>
<td>14.4 B</td>
<td>21.5 C</td>
</tr>
</tbody>
</table>


Freeway Ramp Junction

The results of the Future Year freeway ramp junction LOS is summarized in Table 3.16-11, Future Year Freeway Ramp Junction Analysis. As shown in Table 3.16-11, all freeway ramp junction locations are projected to operate at LOS D or better under the Future Year “without project” conditions. Upon construction of the proposed project, all freeway ramp junction locations are projected to continue to operate at LOS D or better under the Future Year.
Table 3.16-11: Future Year Freeway Ramp Junction Analysis

<table>
<thead>
<tr>
<th>SR-14 (SR-138) Freeway Ramp</th>
<th>Type</th>
<th>“Without Project” Freeway Ramp</th>
<th>“With Project” Freeway Ramp</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM Density</td>
<td>LOS</td>
</tr>
<tr>
<td>Northbound</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G Off-ramp</td>
<td>Diverge</td>
<td>23.3</td>
<td>C</td>
</tr>
<tr>
<td>Avenue G EB On-ramp</td>
<td>Merge</td>
<td>19.6</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G WB On-ramp</td>
<td>Merge</td>
<td>19.9</td>
<td>B</td>
</tr>
<tr>
<td>Southbound</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avenue G Off-ramp</td>
<td>Diverge</td>
<td>20.4</td>
<td>C</td>
</tr>
<tr>
<td>Avenue G WB On-ramp</td>
<td>Merge</td>
<td>17.1</td>
<td>B</td>
</tr>
<tr>
<td>Avenue G EB On-ramp</td>
<td>Merge</td>
<td>17.4</td>
<td>B</td>
</tr>
</tbody>
</table>


Intersections

The results of the Future Year intersection LOS analysis is summarized in Table 3.16-12, Future Year Intersection Levels of Service. As shown, all four study intersections are projected to operate at LOS A during both AM and PM peak hours under the Future Year. Upon construction of the proposed project, all four study intersections are projected to continue to operate at LOS A during both AM and PM peak hours under the Future Year.

Table 3.16-12: Future Year Intersection Levels of Service

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Control Type</th>
<th>AM Peak Hour</th>
<th>PM Peak Hour</th>
<th>Control Type</th>
<th>AM Peak Hour</th>
<th>PM Peak Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Delay</td>
<td>LOS</td>
<td>Delay</td>
<td>LOS</td>
<td>Delay</td>
</tr>
<tr>
<td>30th Street and Avenue G</td>
<td>TWSC</td>
<td>3.7</td>
<td>A</td>
<td>4.2</td>
<td>A</td>
<td>TWSC</td>
</tr>
<tr>
<td>SR-14 (SR-138) SB Ramp and</td>
<td>TWSC</td>
<td>1.9</td>
<td>A</td>
<td>3.5</td>
<td>A</td>
<td>Roundabout</td>
</tr>
<tr>
<td>Avenue G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SR-14 (SR-138) NB Ramp and</td>
<td>TWSC</td>
<td>5.0</td>
<td>A</td>
<td>2.8</td>
<td>A</td>
<td>Roundabout</td>
</tr>
<tr>
<td>Avenue G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10th Street and Avenue G</td>
<td>TWSC</td>
<td>2.6</td>
<td>A</td>
<td>4.0</td>
<td>A</td>
<td>TWSC</td>
</tr>
</tbody>
</table>

TWSC – Two-Way Stop Control

Conclusion

Based on the Traffic Study, no deficient conditions exist for the existing, Opening Year, and Future Year “without project” conditions. Upon construction of the proposed project, no deficient conditions would result for the Opening Year or Future Year conditions for study area basic freeway segments, freeway ramp junctions, or intersections. Thus, impacts in this regard are less than significant and no mitigation is required.

Temporary Road Closures

Construction of the roundabouts and associated ramp realignments would conflict with existing ramps and ramp intersections. The interchange would need to be closed to SR-14 (SR-138) vehicle access and through-traffic on Avenue G during construction.
The project proposes to post notice of interchange closure in advance of the Avenue H and Avenue F interchanges in accordance with Caltrans standards. Avenue G traffic would need to be detoured to Avenue H at 30th Street West to the west of the interchange and 10th Street West to the east of the interchange.

This interchange/road closure and associated detours would be temporary in nature. During this time, increased congestion at Avenue F and Avenue H may result. These impacts would be short-term, limited to the construction period, and would cease upon completion of construction. Therefore, impacts pertaining to roadway/interchange closures/detours would be less than significant. Further, Minimization Measure TRA-1 would require the City to prepare a Construction Traffic Control Plan (CTCP). The CTCP would include a public awareness campaign, construction zone enforcement enhancement program, installation of advance information signage, and preparation of temporary detour plans during the Plans, Specification, and Estimates (PS&E) design phase for the project. The CTCP would be required to be distributed to the project construction contractors as well as local agency traffic enforcement and construction inspectors. Thus, the project would result in less than significant impacts pertaining to roadway/interchange closures/detours.

**Avoidance and Minimization Measures:**

**Minimization Measure TRA-1:** Prior to contract bidding, the City of Lancaster shall prepare a Construction Traffic Control Plan (CTCP). The CTCP shall be distributed to potential project contractors with request-for-bid documents as well as to local agency traffic enforcement and construction inspectors. The information provided shall include access and traffic management plans detailing any projected temporary street/interchange closures or expected traffic delays due to construction vehicles using the roadways. The CTCP shall include the following elements:

- Public awareness campaign particularly related to the scheduling of work;
- Construction zone enforcement enhancement program (COZEEP);
- Utilization of portable changeable message signs (PCMS);
- Advance information signing pertaining to date, time, and durations of closures; and
- Preparation of temporary detour plans during the Plans, Specification, and Estimates (PS&E) design phase.

**3.16(b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

*No Impact.* According to the *2010 Congestion Management Program for Los Angeles County* (2010 CMP), prepared by the Los Angeles County Metropolitan Transportation Authority (Metro), there are no designated CMP highway or roadway facilities located in the project’s study area. Thus, the proposed project would have no impact on CMP facilities.
3.16(c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project would not result in changes to air traffic patterns, as the project consists of interchange/roadway improvements and the project site is not located within a site that could affect air traffic. No impacts to air traffic and associated safety requirements would result.

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

Less Than Significant Impact. The SR-14 (SR-138)/Avenue G interchange was constructed in 1968 as a partial cloverleaf configuration that reflects the high priority that was given to automobiles at that time and with minimal consideration to pedestrians and bicyclists. The existing conditions on Avenue G east of the interchange include a single yellow dashed centerline, one lane in each direction, and no paved shoulders. This makes it difficult for motorists exiting the freeway to make a left-turn across on-coming traffic and requires the left-turning vehicle to block the through lane in the process. Active transportation modes must currently traverse along the graded shoulders while cyclists must either ride on the graded shoulder or take the lane, which is not signed or marked as a bicycle route.

According to the Federal Highway Administration (FHWA), 1/3 of all intersection crashes, and more than 40 percent of fatal crashes, occur at stop sign controlled intersections. Traffic accident data for the SR-14 (SR-138)/Avenue G interchange ramps within the project study limits were obtained from Caltrans Traffic Accident Surveillance and Analysis Systems (TASAS) Table B for a three-year period between April 1, 2012 and March 31, 2015. The analysis compares the actual accident rate to the statewide average accident rate.

Table 3.16-13. Accident Rates for Existing Interchange Ramps, provides the accident data for the ramps within the study limits. During the 3-year period, there were a total of two accidents on the southbound ramps of the SR-14 (SR-138)/Avenue G interchange with no injury accident or accidents involving fatalities. One of these accidents occurred under wet conditions and the other involved multiple vehicles. For the northbound ramps, there was one accident that did not involve any injuries or fatalities.

Table 3.16-13: Accident Rates for Existing Interchange Ramps

<table>
<thead>
<tr>
<th>Segment</th>
<th>Number of Accidents</th>
<th>Accident Rates (accidents per million vehicle miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fatalities</td>
<td>Injuries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NB Off-ramp to Avenue G</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SB On-ramp from EB Avenue G</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NB On-ramp from EB Avenue G</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SB On-ramp from WB Avenue G</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NB On-ramp from WB Avenue G</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SB Off-ramp to Avenue G</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

As shown in the Table 3.16-13, the actual accident rates for the following ramps are higher than the statewide average for similar facilities:

- Northbound Off-Ramp to Avenue G;
- Southbound On-Ramp from EB Avenue G; and
- Southbound Off-Ramp to Avenue G.

Based on the accident data by collision type, two out of the three accidents were due to hitting an object. Collision type for one of the accidents was not stated.

Development of the proposed project would enhance traffic operations and improve safety through the interchange by reconfiguring the ramp intersection controls and widening Avenue G. These proposed improvements would include buffered bicycle lanes and raised median, enhancing safety by separating on-coming traffic.

The intersections at the interchange ramps with Avenue G are being reconfigured to include roundabouts as the method of intersection control, which would help reduce vehicle speeds through the project limits. The project would improve access and safety for pedestrians and bicyclists by installing on-street buffered bicycle lanes throughout the project and wide sidewalks through the interchange. The project provides opportunities to meet ADA requirements. Last, the proposed roundabout features would be designed to accommodate oversized trucks in accordance with Caltrans design standards.

It is acknowledged that an Intersection Control Evaluation (ICE) Analysis Technical Memorandum (ICE Analysis Memorandum), prepared by Iteris, dated March 1, 2018, has been prepared to evaluate and screen various intersection control options at the SR-14 (SR-138)/Avenue G interchange, including traffic signals, roundabouts, and stop control; refer to ICE Analysis Memorandum. Based on the analysis presented in the ICE Analysis Memorandum, both interchange study intersections are forecast to operate at acceptable levels of service in future year 2040 assuming the any of the three traffic control types evaluated (including roundabouts). The preferred recommendation is the roundabout configuration due to safety benefits and improved bicycle movement through the interchange along Avenue G.

Thus, implementation of the proposed project would result in improved safety for vehicles, pedestrians, and bicyclist, compared to the existing condition, and impacts in this regard would be less than significant.

3.16(e) Result in inadequate emergency access?

Less Than Significant Impact. As discussed in Response 3.8(g), development of the proposed project would not result in inadequate emergency access. Short-term impacts from construction activities could temporarily interfere with emergency access. Therefore, impacts pertaining to roadway/interchange closures/detours would be less than significant. Further, the project would be required to comply with Minimization Measure TRA-1, as detailed in Response 3.16(a). Thus, impacts in this regard would be less than significant.
Avoidance and Minimization Measures:

Refer to Minimization Measure TRA-1, above.

3.16(f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant Impact. Currently, Avenue G is not designated as a bicycle path or trail through the project site. However, according to the Master Plan of Trails and Bikeways, dated March 2012, a Class I, paved bicycle path along the Avenue G right-of-way from 40th Street West east to Sierra Highway is proposed. Currently, within the project site, existing pedestrians must travel along the graded shoulders while bicyclists must either ride on the graded shoulder or take the travel lane, which is not signed or marked as a bicycle route. Further, no bus stops are present in the vicinity.

Implementation of the proposed project would improve access for pedestrian/bicyclist travel through the interchange and bicyclists along Avenue G. The project would provide complete street features, including widening Avenue G west of the interchange to provide one lane in each direction, a striped median, and on-street bicycle lanes. Widening Avenue G through the interchange would provide one lane in each direction, a raised median, buffered bicycle lanes, and sidewalks. Widening Avenue G east of the interchange would provide one lane in each direction, a raised median, and buffered bicycle lanes. The project also proposes improvements facilitate pedestrian travel by providing a raised median separating oncoming traffic and providing ADA-compliant curb access ramps and crosswalks through the interchange.

In general, the proposed project would improve access and safety for pedestrians and bicyclists by installing on-street buffered bicycle lanes and wide sidewalks. It is acknowledged that the high-speed free-right turns on the existing loop entrance ramps would be eliminated as part of the project, which is more user-friendly for active transportation modes, as it decreases vehicle speeds.

Thus, implementation of the proposed project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. As the project results in an overall beneficial impact to the performance and safety of these facilities, impacts in this regard are less than significant.
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3.17 Tribal Cultural Resources

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>
| 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:

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

|             | ☐ | ☐ | ☐ | ☒ |

b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

|             | ☐ | ☐ | ☒ | ☐ |

A Historical Resources Compliance Report/Archaeological Survey Report (HRCR/ASR) was completed for the project in June 2017 (Cogstone Resource Management). The study supports the discussion included below.

REGULATORY SETTING

“Cultural resources” as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

National Historic Preservation Act of 1966

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2014, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans.

U.S. Department of Transportation Act

Section 4(f) of the U.S. Department of Transportation Act regulates the “use” of land of public and/or historic properties and applies only to projects that must be approved by the U.S. Secretary of Transportation (e.g., federally-funded projects).
California Public Resources Code

California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources and requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

Assembly Bill 52

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to “begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project.” Section 21074 of AB 52 also defines a new category of resources under CEQA called “tribal cultural resources.” Tribal cultural resources are defined as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

In compliance with AB 52, Caltrans sent letters to those tribes that have requested to be listed pursuant to AB 52 for Caltrans and the City of Lancaster, as well as those recommended for notification by the Native American Heritage Commission (NAHC) on August 24, 2016.

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to tribal cultural resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this environmental document.

AFFECTED ENVIRONMENT

The NAHC was contacted for a list of traditional-use areas or sacred sites within the project area and for a list of specific Native American groups or individuals who could provide additional information on cultural resources within the project area. On June 5, 2016, a request for a Sacred Lands Files search was submitted to the NAHC. On June 8, 2016, the NAHC responded that the Sacred Lands Files search was completed, with negative results.

The NAHC response letter included a list of four tribes with traditional lands or cultural places located within the boundaries of Los Angeles County who should be invited to consult on the project for the purpose of mitigating impacts to tribal cultural resources. In addition to the four recommended tribal organizations, the City of Lancaster and Caltrans District 7 recommended consultation with two more tribal organizations. A total of six tribal organizations were consulted: the Colorado River Indian Tribes (CRIT), the Fernandeño Tataviam Band of Mission Indians, the Gabrieleno Band of Mission Indians – Kizh Nation, the San Fernando Band of Mission Indians, the San Manuel Band of Mission Indians, and the Soboba Band of Luiseno Indians. On August 24, 2016, Caltrans District 7 sent a letter to each of these tribes, asking them to provide additional information on cultural resources within the project area under the requirements of AB 52.
Caltrans District 7 then followed up with each of the six tribes with e-mails and phone calls. Caltrans received a response from CRIT on September 7, 2016. CRIT did not specifically request further consultation for the project, nor did CRIT provide information regarding known tribal cultural resources at the project site. However, CRIT did discuss their concern regarding the removal of artifacts from the project area and corresponding destruction of CRIT’s footprint on the landscape. As such, CRIT requested that all prehistoric cultural resources be avoided if feasible. If avoidance of the site is infeasible, then CRIT requested that the resources be left in-situ or reburied in a nearby area, after consultation. Native American consultation documentation is available in Appendix B.

ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

3.17(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)?

_No Impact._ As discussed in Response 3.5(a), no known cultural resources, including archeological resources, have been previously recorded within the PAL. A total of 12 cultural resources have been previously documented outside the PAL but within the one-mile search radius. Of these resources, five are historic-era archaeological sites were noted. The geomorphology analysis, conducted as part of the HRCR/ASR indicates the potential for buried archaeological deposits is low to very low. The research presented in the HRCR/ASR revealed no significant resources nor state- or federally-listed properties in the PAL. Thus, no impacts would result in this regard.

3.17(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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

_Less Than Significant Impact._ For the purposes of AB 52, Caltrans received a response from CRIT on September 7, 2016. CRIT did not specifically request further consultation for the project, nor did CRIT provide information regarding known tribal cultural resources at the project site. However, CRIT did discuss their concern regarding the removal of artifacts from the project area and corresponding destruction of CRIT’s footprint on the landscape. As such, CRIT requested that all prehistoric cultural resources be avoided if feasible. If avoidance of the site is infeasible, then CRIT requested that the resources be left in-situ or reburied in a nearby area, after consultation.

It is Caltrans’ policy to avoid cultural resources whenever possible. Further investigations may be needed if site[s] discovered during site disturbance activities cannot be avoided by the project. If buried cultural materials are encountered during construction, Minimization Measure CUL-1 would be required, stopping work in that area until a qualified archaeologist can evaluate the nature and significance of the find. Should the nature of the find potentially involve tribal cultural resources, the archaeologist would be required to contact the NAHC to determine the appropriate Native American monitor for the find. The archaeologist shall confer with applicable agencies and/or tribes about the appropriate treatment of the site and to develop
appropriate mitigation. Work would only resume after mitigation is complete. Thus, impacts would be less than significant in this regard.

**Avoidance and Minimization Measures:**

Refer to *Minimization Measure CUL-1.*
3.18 Utilities and Service Systems

<table>
<thead>
<tr>
<th>Utilities and Service Systems. Would the project:</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
<tr>
<td>b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
<tr>
<td>c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
<tr>
<td>d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
<tr>
<td>e. 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?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
</tr>
<tr>
<td>f. Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
</tr>
<tr>
<td>g. Comply with federal, state, and local statutes and regulations related to solid waste?</td>
<td>☐</td>
<td>☐</td>
<td>✗</td>
<td>☐</td>
</tr>
</tbody>
</table>

REGULATORY SETTING

Assembly Bill 939

The Integrated Waste Management Act (Assembly Bill [AB] 939) established an integrated waste management hierarchy to guide the California Integrated Waste Management Board and local agencies in implementation, in order of priority: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal.

Senate Bill 2202

Senate Bill (SB) 2202 requires development of a model for source reduction and recycling elements. The bill requires the California Integrated Waste Management Board to provide local jurisdictions and private businesses with information, tools, and mathematical models to assist with meeting or exceeding the diversion requirement pursuant to Public Resources Code Section 14780.
AFFECTED ENVIRONMENT

Water and Wastewater

The City receives its water utility services through the Los Angeles County Water Works District No. 40, Antelope Valley, Regions 4 and 34. Approximately 55 percent of the water supplied by the district is treated or banked surface water, and the remaining 45 percent is groundwater extracted from district wells, as well as the Sacramento River/San Joaquin Delta via the State Water Project.\(^1\) Los Angeles County Water Works District No. 40, Antelope Valley, Regions 4 and 34 has 49,775 active municipal connections and has supplied 34,570 acre-feet of water annually as of 2015.

The Lancaster Water Reclamation Plant (WRP) is located at 1865 West Avenue D and occupies 554 acres east of SR-14 (SR-138). The Lancaster WRP provides tertiary treatment of up to 18 million gallons of wastewater per day.\(^2\) The Lancaster WRP serves a population of approximately 160,000 people. In addition to producing recycled water, the Lancaster WRP processes all wastewater solids generated at the plant. The wastewater solids are anaerobically digested, centrifugally dewatered, and further dried in drying beds. The dried biosolids are hauled away and beneficially used. Methane gas is produced during the digestion process and is used to heat the anaerobic digesters.

Electric Power and Natural Gas

As of May 13, 2014, the City elected to implement a Community Choice Aggregation (CCA) program for their local energy supply through AB 117. Through the Lancaster Community Choice Aggregation (LCCA) program, electricity would be obtained from competitive suppliers to meet the City’s retail electric service customers’ electricity demand while the electricity would continue to be delivered utilizing the SCE distribution grid.\(^3\) Participation in the CCA program is completely voluntary; energy consumers maintain the option to receive bundled retail electric service from SCE or an alternative provider. LCCA allows the City to utilize alternative fuels whenever possible to achieve energy goals. Energy goals include the State’s California Renewable Portfolio Standard requiring 25 percent of electricity used within the City to be provided by renewable generation by 2016 and 33 percent by 2020, and the City’s goal to become the first Zero Net Energy City.

LCCA selected two energy suppliers that provide energy for the program under an initial energy services contract. The first supplier, Constellation, is a leading competitive energy supplier in the United States, and is the customer-facing business of Exelon. Constellation provides retail and wholesale customers with electricity, natural gas, and renewable energy supply services, in addition to energy management services, which includes renewable energy development. The second supplier, Direct Energy, is one of North America’s largest competitive energy suppliers of electricity, natural gas and related services. Direct Energy is wholly owned by Centrica plc, one of the world’s leading integrated energy companies. The City continues to pursue and implement...
renewable energy solutions to supplement existing third-party energy supply, including a 20-acre, 5-megawatt Sierra SunTower solar farm.4

**Solid Waste**

Waste Management disposal provides trash collection services in Lancaster. The majority of the City’s waste is taken to the Lancaster Landfill and Recycling Center. The City currently disposes of nearly 2,500 tons of municipal solid waste to the landfill annually.5 The City identified several initiatives to reduce waste production in the City of Lancaster Climate Action Plan, published in June 2016.

**Telecommunications Systems**

Telecommunications companies that provide services to the project area include Verizon, CenturyLink Communications, AT&T, and Sprint.

**ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES**

3.18(a) **Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

*No Impact.* The proposed project consists of roadway improvements to SR-14 (SR-138) and Avenue G and would not generate wastewater. As such, no wastewater treatment would be required, and no impacts would occur in this regard.

3.18(b) **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

*No Impact.* The proposed project consists of roadway improvements and would not result in uses that would require new water or wastewater treatment facilities, or expansion of existing facilities. Thus, no impacts would occur in this regard.

3.18(c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

*No Impact.* The project site is currently developed with roadway and freeway infrastructure, including drainage facilities. As discussed in Section 3.8(c), the project would not impact existing drainage facilities, and is not anticipated to necessitate expansion of such facilities. Therefore, no impacts are anticipated in this regard.

3.18(d) **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

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No Impact. The project consists of roadway improvements and would not require water supplies (other than water needed during construction activities). Therefore, no impact would occur with regard to water supplies.

3.18(e)  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. The project consists of roadway improvements and would not generate wastewater. As such, the project would not require a capacity determination from the local wastewater treatment provider. No impacts would occur in this regard.

3.18(f)  Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

Less Than Significant Impact. As a roadway infrastructure improvement, the proposed project would not generate solid waste during long-term operations. It is noted that the proposed project would generate waste during construction activities, including concrete, asphalt, and soil debris. The project site is served by the Lancaster Landfill and Recycling Center, operated by Waste Management Inc. The Lancaster Landfill and Recycling Center has a remaining capacity of approximately 14,514,648 cubic yards (cy)\(^6\); as such, it is anticipated that the Lancaster Landfill and Recycling Center would have adequate capacity to accommodate the project’s disposal needs. Thus, impacts would be less than significant in this regard.

3.18(g)  Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. AB 939 requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. SB 2202 clarified that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000. Consistency with the required State of California’s solid waste laws, including AB 939 and SB 2202 would ensure solid waste are reduced during construction. Theodore, impacts in this regard would be less than significant.

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3.19 Mandatory Findings of Significance

<table>
<thead>
<tr>
<th>Threshold</th>
<th>Significant and Unavoidable Impact</th>
<th>Less Than Significant With Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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**MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:**

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<tr>
<td>a.</td>
<td>Does the project 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?</td>
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<td>b.</td>
<td>Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</td>
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<td>c.</td>
<td>Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</td>
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**ENVIRONMENTAL CONSEQUENCES, AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES**

3.19(a) **Less Than Significant With Mitigation Incorporated.** The proposed project includes roadway widening and interchange improvements at SR-14 (SR-138) and along Avenue G. As part of the NES/JD, a habitat assessment was conducted to document baseline conditions of the habitat and to identify special status species and natural communities of special concern potentially occurring within the Biological Study Area (BSA). It was determined that the project would not substantially reduce the habitat of a fish or wildlife species, cause a 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 upon implementation of Minimization Measures BIO-1 through BIO-5, Minimization Measure BIO-6, and Mitigation Measure BIO-5.

No known cultural resources are present on-site. Therefore, impacts from the project would be less than significant. In the event that unknown cultural or tribal cultural resources are uncovered during site disturbance activities, implementation of the Minimization Measure CUL-1 would be required. Potential impacts pertaining to the elimination of important examples of the major periods of California history or prehistory are less than significant.

3.19(b) **Less Than Significant Impact.** Development of the proposed project would not result in significant cumulatively considerable impacts with compliance with recommended minimization measures identified in this IS/MND. It is acknowledged that the City has secured Measure R funding through construction for improvements at five interchanges within the SR-14 (SR-138) corridor. The corridor projects include
interchange and arterial improvements at Avenue G (the proposed project), Avenue J, Avenue K, Avenue L, and Avenue M. Cumulatively, these five projects would result in environmental impacts. However, each of these projects would be required to undergo CEQA compliance on a project-by-project basis. Each project would be required to comply with existing federal, state (including Caltrans), and local (including the City of Lancaster) laws, regulations, and standards, as well as applicable CEQA-required mitigation measures on a project-by-project basis, reducing the overall cumulatively considerable impacts. Further, it is acknowledged that each of these projects would be expanding the existing infrastructure to meet planned growth anticipated under the City’s and County’s General Plan. Development of these transportation projects would alleviate projected congestion, safety, and implement complete street policies pertaining to increasing active transportation modes in the City. Thus, these cumulative contributions would be beneficial in nature.

As documented through this IS/MND, the proposed project would be required to comply with recommended avoidance, minimization, and/or mitigation measures, as well as federal, state, and local laws and regulations, which would reduce environment impacts to less than significant levels, resulting in less than significant cumulatively considerable impacts for operations of the project. Construction of the project would require interchange/roadway closures and detours during construction. The project would be required to comply with Minimization Measure TRA-1, which would require the City to prepare a Construction Traffic Control Plan (CTCP). The CTCP would include a public awareness campaign, construction zone enforcement enhancement program, installation of advance information signage, and preparation of temporary detour plans during the Plans, Specification, and Estimates (PS&E) design phase for the project. The CTCP would be required to be distributed to the project construction contractors as well as local agency traffic enforcement and construction inspectors. With compliance with the recommended Minimization Measure TRA-1, the project’s closures/detours would be coordinated with the other interchange projects proposed along the SR-14 (SR-138) corridor to ensure adequate access and ensure that significant traffic impacts do not occur at any single interchange. Thus, a less than significant cumulatively considerable impact would result.

3.19(c) Less Than Significant Impact. Previous sections of this IS/MND reviewed the proposed project’s potential impacts related to aesthetics, air pollution, noise, greenhouse gas emissions, geology and soils, and other issues. The project would be required to comply with existing federal, state, and local laws and regulations as well as recommended minimization measures. With implementation of federal, state, and local laws and regulations and minimization measures, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings. Impact in this regard are less than significant.
3.20 Climate Change

The Air Quality Assessment was completed for the project in September 2018 (Michael Baker International). The results of this study are included in the discussion below.

CLIMATE CHANGE

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth’s climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), HFC-23 (fluoroform), HFC-134a (1,1,1,2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles) are the largest contributors of GHG emissions. The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

Two terms are typically used when discussing how we address the impacts of climate change: “greenhouse gas mitigation” and “adaptation.” Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or “mitigate” the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels).

REGULATORY SETTING

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset...
management, project development and design, and operations and maintenance practices. This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability." Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life. Addressing these factors up front in the planning process will assist in decision-making and improve efficiency at the program level and will inform the analysis and stewardship needs of project-level decision-making.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

The Energy Policy Act of 1992 (EPACT92, 102nd Congress H.R.776.ENR): With this act, Congress set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. EPACT92 consists of 27 titles detailing various measures designed to lessen the nation’s dependence on imported energy, provide incentives for clean and renewable energy, and promote energy conservation in buildings. Title III of EPACT92 addresses alternative fuels. It gave the U.S. Department of Energy administrative power to regulate the minimum number of light-duty alternative fuel vehicles required in certain federal fleets beginning in fiscal year 1993. The primary goal of the Program is to cut petroleum use in the United States by 2.5 billion gallons per year by 2020.

Energy Policy Act of 2005 (109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) Indian energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Standards: This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the Corporate Average Fuel Economy (CAFE) program on the basis of each manufacturer’s average fuel economy for the portion of its vehicles produced for sale in the United States.

U.S. EPA’s authority to regulate GHG emissions stems from the U.S. Supreme Court decision in Massachusetts v. EPA (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court’s ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court’s interpretation of the existing Act and EPA’s assessment of the scientific evidence that form the basis for EPA’s regulatory actions.

U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010 and significantly increased the fuel economy of all new passenger cars and light trucks sold in the United States. The standards required these vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. In August 2012, the federal government adopted the second rule that increases fuel economy for the fleet of passenger cars, light-duty trucks, and medium-duty

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passenger vehicles for model years 2017 and beyond to average fuel economy of 54.5 miles per gallon by 2025. Because NHTSA cannot set standards beyond model year 2021 due to statutory obligations and the rules’ long timeframe, a mid-term evaluation is included in the rule. The Mid-Term Evaluation is the overarching process by which NHTSA, EPA, and ARB will decide on CAFE and GHG emissions standard stringency for model years 2022–2025. NHTSA has not formally adopted standards for model years 2022 through 2025. However, the EPA finalized its mid-term review in January 2017, affirming that the target fleet average of at least 54.5 miles per gallon by 2025 was appropriate. In March 2017, President Trump ordered EPA to reopen the review and reconsider the mileage target.⁴

NHTSA and EPA issued a Final Rule for “Phase 2” for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution in October 2016. The agencies estimate that the standards will save up to 2 billion barrels of oil and reduce CO₂ emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018–2027 vehicles.

**State**

With the passage of legislation including State Senate and Assembly bills and executive orders, California has been innovative and proactive in addressing GHG emissions and climate change.

**Assembly Bill 1493, Pavley Vehicular Emissions: Greenhouse Gases, 2002:** This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.

**Executive Order S-3-05 (June 1, 2005):** The goal of this executive order (EO) is to reduce California’s GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill 32 in 2006 and SB 32 in 2016.

**Assembly Bill 32 (AB 32), Chapter 488, 2006: Núñez and Pavley, The Global Warming Solutions Act of 2006:** AB 32 codified the 2020 GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

**Executive Order S-01-07 (January 18, 2007):** This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor’s 2030 and 2050 GHG reduction goals.

Senate Bill 97 (SB 97), Chapter 185, 2007, Greenhouse Gas Emissions: This bill requires the Governor’s Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.

Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a “Sustainable Communities Strategy” (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

Senate Bill 391 (SB 391), Chapter 585, 2009, California Transportation Plan: This bill requires the State’s long-range transportation plan to meet California’s climate change goals under AB 32.

Executive Order B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

Executive Order B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e). Finally, it requires the Natural Resources Agency to update the state’s climate adaptation strategy, Safeguarding California, every 3 years, and to ensure that its provisions are fully implemented.

Senate Bill 32, (SB 32) Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

ENVIRONMENTAL SETTING

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 (AB 32), which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020. The Scoping Plan was first approved by ARB in 2008 and must be updated every 5 years. The second updated plan, California’s 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32.

The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the updated Scoping Plan, ARB released the GHG inventory for California.5 ARB is responsible for maintaining and updating California’s GHG Inventory per H&SC Section 39607.4. The associated forecast/projection is an estimate of the emissions anticipated to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented.

An emissions projection estimates future emissions based on current emissions, expected regulatory implementation, and other technological, social, economic, and behavioral patterns. The projected 2020 emissions provided in Figure 3.20-1, 2020 Business as Usual (BAU) Emissions Projection 2014 Edition, represent a business-as-usual (BAU) scenario assuming none of the Scoping Plan measures are implemented. The 2020 BAU emissions estimate assists ARB in demonstrating progress toward meeting the 2020 goal of 431 MMTCO$_2$e$^6$. The 2018 edition of the GHG emissions inventory (released July 2018) found total California emissions of 429 MMTCO$_2$e for 2016.

**Figure 3.20-1: 2020 Business as Usual (BAU) Emissions Projection 2014 Edition**

![Emissions Projection Graph](https://www.arb.ca.gov/cc/inventory/data/bau.htm)

The 2020 BAU emissions projection was revisited in support of the First Update to the Scoping Plan (2014). This projection accounts for updates to the economic forecasts of fuel and energy demand as well as other factors. It also accounts for the effects of the 2008 economic recession and the projected recovery. The total emissions expected in the 2020 BAU scenario include reductions anticipated from Pavley I and the Renewable Electricity Standard (30 MMTCO$_2$e total). With these reductions in the baseline, estimated 2020 statewide BAU emissions are 509 MMTCO$_2$e.

**PROJECT ANALYSIS**

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its incremental change in emissions when combined with the contributions of all other sources of GHG.$^7$ In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130). To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is a difficult, if not impossible, task.

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$^6$ The revised target using Global Warming Potentials (GWP) from the IPCC Fourth Assessment Report (AR4).

$^7$ This approach is supported by the AEP: Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).
GHG emissions for transportation projects can be divided into those produced during operations and those produced during construction. The following represents a best faith effort to describe the potential GHG emissions related to the proposed project.

- **Long-Term Operational Emissions.** As discussed in the Air Quality Assessment, the proposed project would include interchange and arterial improvements, as well as realignment of freeway ramps, and would not increase freeway capacity or truck capacity. Additionally, improvements to the proposed project would include widening Avenue G to provide one lane in each direction and buffered bike lanes. Improved bike lanes, safer pedestrian access, and complete streets features would promote use of alternative modes furthering the potential for the project to reduce GHG emissions. Because the existing condition already includes one lane in each direction, these improvements would not increase the capacity of the roadway. Thus, the proposed improvements would not directly generate new operational emissions in the project area.

- **Construction Emissions.** Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

According to the Air Quality Assessment, GHG emissions associated with project construction would be 1,360.66 tons (1,234.37 metric tons)\(^8\) of CO\(_2\)eq during the approximately 18-month construction period.

Caltrans Standard Specifications Section 14.9-02, Air Pollution Control, requires contractors to comply with federal, state, and local rules, regulations, ordinances, and statutes, including those established by the CARB and regional or local air quality districts. Regulations that reduce vehicle emissions, such as idling restrictions, may also reduce GHG emissions. The City will implement a construction traffic control plan to minimize construction-related detours and vehicle idling to the extent possible.

**CEQA Conclusion**

While the project will result in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. While it is Caltrans’ determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project’s direct impact and its contribution on the cumulative scale to climate change, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

As discussed in Response 3.7(a), daily VMT and VHT in the project area would be similar compared to existing conditions as a result of project implementation. The proposed project is programmed in the RTP/SCS (RTP ID LA0G927) and is therefore recognized as an improvement.

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\(^8\) Based on the Roadway Construction Emissions Model (RCEM) (Version 8.1.0) developed by the Sacramento Metropolitan Air Quality Management District (SMAQMD).
project that would improve transportation operations in the region. The proposed project would improve traffic operations, enhance safety, and accommodate improved access for active transportation modes in the project area. As such, the project would not conflict with an applicable GHG plan, policy or regulation.

**Greenhouse Gas Reduction Strategies**

**Statewide Efforts**

In an effort to further the vision of California’s GHG reduction targets outlined an AB 32 and SB 32, Governor Brown identified key climate change strategy pillars (concepts). These pillars highlight the idea that several major areas of the California economy will need to reduce emissions to meet the 2030 GHG emissions target. These pillars are (1) reducing today’s petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; 5) managing farm and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state’s climate adaptation strategy, Safeguarding California.

**Figure 3.20-2: The Governor’s Climate Change Pillars: 2030 Greenhouse Gas Reduction Goals**

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that we build on our past successes in reducing criteria and toxic air pollutants from transportation and goods movement activities. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. One of Governor Brown’s key pillars sets the ambitious goal of reducing today’s petroleum use in cars and trucks by up to 50 percent by 2030.

Governor Brown called for support to manage natural and working lands, including forests, rangelands, farms, wetlands, and soils, so they can store carbon. These lands have the ability to remove carbon dioxide from the atmosphere through biological processes, and to then sequester carbon in above- and below-ground matter.
Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set a new interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California’s future statewide, integrated, multimodal transportation system. It serves as an umbrella document for all of the other statewide transportation planning documents.

SB 391 (Liu 2009) requires the CTP to meet California’s climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state’s transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share.
- Reducing VMT per capita.
- Reducing Caltrans’ internal operational (buildings, facilities, and fuel) GHG emissions.

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several funding and technical assistance programs that have GHG reduction benefits. These include the Bicycle Transportation Program, Safe Routes to School, Transportation Enhancement Funds, and Transit Planning Grants. A more extensive description of these programs can be found in Caltrans Activities to Address Climate Change (2013).

Caltrans Director’s Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a department policy that will ensure coordinated efforts to incorporate climate change into departmental decisions and activities.

Caltrans Activities to Address Climate Change (April 2013) provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce GHG emissions resulting from agency operations.
Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- Project features include bicycle lanes with buffer, graded shoulders, and sidewalks, to promote active transportation and reduce motor vehicle use.

- Caltrans Standard Specifications Section 14.9-02, Air Pollution Control, requires contractors to comply with federal, state, and local rules, regulations, ordinances, and statutes, including those established by the CARB and regional or local air quality districts. Regulations that reduce vehicle emissions, such as idling restrictions, may also reduce GHG emissions.

Avoidance and Minimization Measures:

**Minimization Measure CC-1:** According to the Caltrans Standard Specifications, idling time for lane closure during construction will be limited to 10 minutes in each direction. In addition, the contractor will comply with all Antelope Valley Air Quality Management District (AVAQMD) rules, ordinances, and regulations regarding air quality restrictions.

**Minimization Measure CC-2:** As part of the Southern California Association of Governments (SCAG), 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), project level GHG reduction measures were provided to reduce impacts including those pertaining to climate change. The following project level GHG reduction measures would apply:

- The project will utilize energy and fuel efficient vehicles and equipment that meet and exceed U.S. EPA/NHTSA/CARB standards relating to fuel efficiency and emission reduction.

- The project will use the minimum feasible amount of GHG-emitting construction materials.

- The project will use cement blended with the maximum feasible amount of fly ash or other materials that reduce GHG emissions from cement production.

- The project will incorporate design measures to reduce GHG emissions from solid waste management through solid waste reduction, recycling and reuse.

- The project will recycle construction debris.

**Minimization Measure AQ-5:** In order to further minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with the State-mandated emission control devices pursuant to State emission regulations and standard construction practices.

**Minimization Measure TRA-1:** Prior to contract bidding, the City of Lancaster shall prepare a Construction Traffic Control Plan (CTCP) to minimize traffic delays and idling emissions. The CTCP shall be distributed to potential project contractors with request-for-bid documents as well as to local agency traffic enforcement and construction inspectors. The information provided shall include access and traffic management plans detailing any projected temporary
street/interchange closures or expected traffic delays due to construction vehicles using the roadways. The CTCP shall include the following elements:

- Public awareness campaign particularly related to the scheduling of work;
- Construction zone enforcement enhancement program (COZEERP);
- Utilization of portable changeable message signs (PCMS);
- Advance information signing pertaining to date, time, and durations of closures; and
- Preparation of temporary detour plans during the Plans, Specification, and Estimates (PS&E) design phase.

**ADAPTATION STRATEGIES**

“Adaptation strategies” refer to how Caltrans and others can plan for the effects of climate change on the state’s transportation infrastructure and strengthen or protect the facilities from damage—or, put another way, planning and design for resilience. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. These types of impacts to the transportation infrastructure may also have economic and strategic ramifications.

**Federal Efforts**

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the CEQ, the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011⁹, outlining the federal government’s progress in expanding and strengthening the nation’s capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provided an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as fresh water, and providing accessible climate information and tools to help decision-makers manage climate risks.

The federal Department of Transportation issued *U.S. DOT Policy Statement on Climate Adaptation* in June 2011, committing to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely and that transportation infrastructure, services and operations remain effective in current and future climate conditions.”¹⁰

To further the DOT Policy Statement, on December 15, 2014, FHWA issued order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*).¹¹ This directive established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. The FHWA will work

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⁹ [https://obamawhitehouse.archives.gov/administration/eop/ceq/initiatives/resilience](https://obamawhitehouse.archives.gov/administration/eop/ceq/initiatives/resilience).


to integrate consideration of these risks into its planning, operations, policies, and programs in order to promote preparedness and resilience; safeguard federal investments; and ensure the safety, reliability, and sustainability of the nation’s transportation systems.

FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels.\textsuperscript{12}

State Efforts

On November 14, 2008, then-Governor Arnold Schwarzenegger signed EO S-13-08, which directed a number of state agencies to address California’s vulnerability to sea-level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea-level rise and directed all state agencies planning to construct projects in areas vulnerable to future sea-level rise to consider a range of sea-level rise scenarios for the years 2050 and 2100, assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea-level rise. Sea-level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, and storm surge and storm wave data.

Governor Schwarzenegger also requested the National Academy of Sciences to prepare an assessment report to recommend how California should plan for future sea-level rise. The final report, Sea-Level Rise for the Coasts of California, Oregon, and Washington (Sea-Level Rise Assessment Report)\textsuperscript{13} was released in June 2012 and included relative sea-level rise projections for the three states, taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge, and land subsidence rates; and the range of uncertainty in selected sea-level rise projections. It provided a synthesis of existing information on projected sea-level rise impacts to state infrastructure (such as roads, public facilities, and beaches), natural areas, and coastal and marine ecosystems; and a discussion of future research needs regarding sea-level rise.

In response to EO S-13-08, the California Natural Resources Agency (Resources Agency), in coordination with local, regional, state, federal, and public and private entities, developed. The California Climate Adaptation Strategy (Dec 2009),\textsuperscript{14} which summarized the best available science on climate change impacts to California, assessed California’s vulnerability to the identified impacts, and outlined solutions that can be implemented within and across state agencies to promote resiliency. The adaptation strategy was updated and rebranded in 2014 as Safeguarding California: Reducing Climate Risk (Safeguarding California Plan).

Governor Jerry Brown enhanced the overall adaptation planning effort by signing EO B-30-15 in April 2015, requiring state agencies to factor climate change into all planning and investment decisions. In March 2016, sector-specific Implementation Action Plans that demonstrate how state agencies are implementing EO B-30-15 were added to the Safeguarding California Plan. This effort represents a multi-agency, cross-sector approach to addressing adaptation to climate change-related events statewide.

EO S-13-08 also gave rise to the State of California Sea-Level Rise Interim Guidance Document (SLR Guidance), produced by the Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT), of which Caltrans is a member. First published in 2010, the document provided “guidance for incorporating sea-level rise (SLR) projections into planning and decision

\textsuperscript{12} https://www.fhwa.dot.gov/environment/sustainability/resilience/.
\textsuperscript{14} http://www.climatechange.ca.gov/adaptation/strategy/index.html.
making for projects in California,” specifically, “information and recommendations to enhance consistency across agencies in their development of approaches to SLR.”

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation, and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is actively engaged in working towards identifying these risks throughout the state and will work to incorporate this information into all planning and investment decisions as directed in EO B-30-15.

The proposed project is outside the coastal zone and not in an area subject to sea-level rise. However, a 100-year floodplain is present along Amargosa Creek, trending in a northeastern direction across the project area. The project would result in roadway improvements that would result in an increase in impervious surfaces as compared to existing conditions. However, the proposed project would not substantially alter the existing drainage pattern of the site, due to the flat terrain in the project area and because the site is already developed with existing roadway and freeway infrastructure, including drainage facilities.

Chapter 4.0 COMMENTS AND COORDINATION

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, Project Development Team (PDT) meetings, interagency coordination meetings, and a public hearing. This chapter summarizes the results of the Department’s efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

A Notice of Availability will be published in the Antelope Valley Press inviting the public to comment on the proposed project and environmental document and offering the opportunity to request that a public hearing be conducted. In addition, the IS/Proposed Mitigated Negative Declaration and Draft Project Report will be made available for public review at Caltrans District 7, 100 South Main Street, Los Angeles, California; the Lancaster City Hall, 44933 North Fern Avenue, Lancaster, California; the Lancaster Public Library, 601 W Lancaster Boulevard, Lancaster, California; and the County of Los Angeles Library, 5040 West Avenue M-2, Quartz Hill, California 93536.

The IS/Proposed Mitigated Negative Declaration will be circulated for 30 days for public comment. If a public hearing is held, the City will also prepare and publish public notices of the hearing 30 and 15 days before the hearing date. These hearing notices are subject to Caltrans review prior to publication. The City will receive any public comments and transmit them to Caltrans with the finalized copy of the Final Initial Study/Mitigated Negative Declaration (IS/MND). The City will then prepare and submit a Notice of Completion to the California State Clearinghouse and Caltrans. Barring substantial new information requiring additional environmental review, Caltrans will approve the Final IS/MND.

Additionally, continued consultation and coordination between public agencies has occurred throughout preparation of the IS. These efforts are outlined below:

- June 8, 2016: the San Manuel Band of Mission Indians, the Fernandeño Tataviam Band of Mission Indians, the Colorado River Indian Tribe, the San Fernando Band of Mission Indians, and the San Manuel Band of Mission Indians. Copies of letters can be found in Appendix B.

- August 24, 2016: Letters requesting any information related to cultural resources or heritage sites within or adjacent to the project were sent to the San Manuel Band of Mission Indians, the Fernandeño Tataviam Band of Mission Indians, the Colorado River Indian Tribe, the San Fernando Band of Mission Indians, and the San Manuel Band of Mission Indians for their review and input.

- September 7, 2016: Mr. Dennis Patch on behalf of the Colorado River Indian Tribes indicated their concern regarding the removal of artifacts from the Project Area Limits (PAL) and corresponding destruction of the Tribe’s footprint on the landscape. The Tribe requested that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided if feasible. If avoidance is infeasible, the Tribe requests that resources be left in-situ or reburied in a nearby area, after construction. Mr. Patch also requested that in the event any human remains or objects subject to provision of the
Native American Graves Repatriation Act, or cultural resources such as sites, trails, artifacts are identified during ground disturbances, to please contact him within 48 hours.

- June 8, 2017: Ms. Kimia Fatehi on behalf of the Fernandeño Tataviam Band of Mission Indians indicated that she was unable to locate sensitive tribal cultural resources that may be impacted by the project. Ms. Kimia Fatehi requested a copy of the report once completed.

- June 7, 2017: Mr. Andy Salas of the Gabrieleno Band of Mission Indians – Kizh Nation indicated that he has information regarding the traditional trading routes that were utilized in the vicinity of the project during prehistory. However, Mr. Salas indicated that he would like to defer to the Yuhaaviatam people, also known as the San Manuel Tribe.

- June 8, 2017: Ms. Megan Wilson, Archaeologist/GIS Technician with Cogstone, wrote to Mr. Andy Salas of the Gabrieleno Band of Mission Indians – Kizh Nation requesting a contact for the Yuhaaviatam people. Mr. Andy Salas replied with a contact.

- June 9, 2017: Ms. Kelly Ewing-Toledo, Senior Environmental Planner with Caltrans District 7, wrote to Ms. Kimia Fatehi on behalf of the Fernandeño Tataviam Band of Mission Indians, stating that upon project completion Ms. Kimia Fatehi will receive a copy of the ASR/HPSR.

- June 14, 2017: Mr. Lee Clauss on behalf of the San Manuel Band of Mission Indians indicated that the San Manuel Tribe does not have any concerns with the projects implementation.
Chapter 5.0  LIST OF PREPARERS

The following staff assisted in the preparation of this document:

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Los Angeles, CA 90012-3606
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Ryan Chiene, Environmental Analyst and Noise Specialist
Achilles Malisos, Air Quality/GHG, and Noise Specialist
Danielle Regimbal, Air Quality/GHG Specialist
Travis McGill, Biologist
Richard Beck, Regulatory Specialist
Dan Rosie, Biologist
Linda Bo, Technical Editor/Graphic Artist

Responsibility:  Initial Study/Mitigated Negative Declaration
Air Quality Assessment
Jurisdictional Delineation Report
Phase I Initial Site Assessment
Natural Environment Study
Noise Memorandum
Water Quality Technical Memorandum
List of Preparers

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714.974.8300

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Molly L. Valasik, M.A., RPA, Principal Investigator for Prehistoric Archaeology
Kim Scott, M.S., Qualified Principal Paleontologist

Responsibility: Historical Resources Compliance Report/Archaeological Survey Report
Combined Paleontological Identification and Evaluation Report

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(Alahesh) A. Thurairajah, PE, Project Engineer
Michael Hoshiyama, CEG, Project Geologist
Lino Cheang, GE, Project Manager

Responsibility: Preliminary Geotechnical Report

ITERIS
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Santa Ana, California 92705-5551
949.270.9400

Rajat Parashar, Senior Transportation Planner

Responsibility: Traffic Operations Analysis Report
Chapter 6.0 DISTRIBUTION LIST

LOCATIONS WHERE IS/MND CAN BE VIEWED

Copies of the IS/MND were made available for viewing at the following locations:

Caltrans website: http://www.dot.ca.gov/dist07/resources/envdocs
Lancaster City Hall
44933 Fern Avenue
Lancaster, CA 93534

Caltrans District 7
100 S. Main Street
Los Angeles, CA 90012
Lancaster Regional Library
601 W Lancaster Boulevard
Lancaster, CA 93534

ELECTED OFFICIALS

Federal

Senator Dianne Feinstein
11111 Santa Monica Boulevard, Suite 915
Los Angeles, CA 90025
Congressman Kevin McCarthy
4100 Empire Drive, Suite 150
Bakersfield, CA 93309

Senator Kamala Harris
312 N. Spring Street, Suite 1748
Los Angeles, CA 90012

State

Assemblymember Tom Lackey
41319 12th Street West, Suite 105
Palmdale, CA 93551
State Senator Scott Wilk
848 W. Lancaster Boulevard, Suite 101
Lancaster, CA 93534

County

Supervisor Kathryn Barger
1113 W. Avenue M-4, Suite A
Palmdale, CA 93551

City of Lancaster

City Manager Jason Caudle
44933 Fern Avenue
Lancaster, CA 93534
Councilmember Raj Malhi
44933 Fern Avenue
Lancaster, CA 93534

Mayor R. Rex Parris
44933 Fern Avenue
Lancaster, CA 93534
Councilmember Angela Underwood-Jacobs
44933 Fern Avenue
Lancaster, CA 93534
### City of Lancaster (continued)

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<tr>
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<tr>
<td>Vice Mayor</td>
<td>Marvin Crist</td>
<td>44933 Fern Avenue</td>
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<tr>
<td>Councilmember</td>
<td>Ken Mann</td>
<td>44933 Fern Avenue</td>
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### City of Palmdale

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<th>Position</th>
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<tr>
<td>City Manager</td>
<td>James Purtee</td>
<td>38300 Sierra Highway</td>
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<td>Palmdale, CA 93550</td>
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<tr>
<td>Mayor Pro Tem/</td>
<td>Austin Bishop</td>
<td>38300 Sierra Highway, Suite A</td>
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<td>Councilmember Richard J. Loa</td>
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<td>Mayor Steven D. Hofbauer</td>
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<tr>
<td>Councilmember Laura Bettencourt</td>
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<td>Councilmember Juan Carrillo</td>
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### GOVERNMENTAL AGENCIES

### Federal Agencies

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<tr>
<th>Agency</th>
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<tr>
<td>U.S. Environmental Protection Agency</td>
<td>600 Wilshire Boulevard, Suite 1460</td>
</tr>
<tr>
<td></td>
<td>Los Angeles, CA 90017</td>
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<tr>
<td>U.S. Environmental Protection Agency</td>
<td>Region 9, Environmental Review Office</td>
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<tr>
<td></td>
<td>75 Hawthorne Street, (ENF-4-2)</td>
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<td></td>
<td>San Francisco, CA 94105</td>
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<tr>
<td>NOAA Fisheries</td>
<td>West Coast Region</td>
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<td></td>
<td>501 W. Ocean Boulevard, Suite 4200</td>
</tr>
<tr>
<td></td>
<td>Long Beach, CA 90802-4213</td>
</tr>
<tr>
<td>NOAA Fisheries</td>
<td>Office of Ecology and Conservation</td>
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<tr>
<td></td>
<td>1401 Constitution Avenue, Room 6800</td>
</tr>
<tr>
<td></td>
<td>Washington, DC 20230</td>
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<tr>
<td>USDC National Oceanic and Atmospheric</td>
<td>1315 East West Highway</td>
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<tr>
<td>Administration (NOAA)</td>
<td>Silver Spring, MD 20910</td>
</tr>
<tr>
<td>US Federal Emergency Management Agency</td>
<td>1111 Broadway, Suite 1200</td>
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<tr>
<td></td>
<td>Oakland, CA 94607-4052</td>
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<tr>
<td>US Fish and Wildlife Service</td>
<td>370 Amapola Avenue, #114</td>
</tr>
<tr>
<td></td>
<td>Torrance, CA 90501</td>
</tr>
<tr>
<td>US Department of Transportation Federal</td>
<td>888 S. Figueroa Street, Suite 750</td>
</tr>
<tr>
<td>Highway Administration California Division</td>
<td>Los Angeles, CA 90017</td>
</tr>
<tr>
<td>US Department of Interior</td>
<td>333 Bush Street, Suite 500</td>
</tr>
<tr>
<td>National Park Service</td>
<td>San Francisco, CA 94104-2828</td>
</tr>
<tr>
<td>U.S. Army Corps of Engineers</td>
<td>915 Wilshire Boulevard, Suite 980</td>
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</table>
### Federal Agencies (continued)

- **U.S. Fish and Wildlife Service**  
  2493 Portola Road, Suite B  
  Ventura, CA 93003

- **Native American Heritage Commission**  
  915 Capitol Mall, Room 364  
  Sacramento, CA 95814

- **Advisory Council on Historic Preservation**  
  401 F St. NW, Suite 308  
  Washington, DC 20001-2637

### State Agencies

- **California Air Resources Board**  
  Air Quality Science and Planning Division  
  P.O. Box 2815  
  Sacramento, CA 95812

- **California Department of Fish and Wildlife South Coast Region**  
  P.O. Box 942874, MS-27  
  San Diego, CA 92123

- **California Department of Transportation Division of Environmental Analysis**  
  P.O. Box 942874, MS-27  
  Sacramento, CA 94274-0001

- **California Regional Water Quality Control Board Los Angeles Region**  
  320 West Fourth Street, Suite 200  
  Los Angeles, CA 90013

- **California Natural Resources Agency**  
  1416 Ninth Street, Suite 1311  
  Sacramento, CA 95814

- **Governor’s Office of Planning & Research State Clearinghouse**  
  P.O. Box 3044  
  Sacramento, CA 95812-3044

- **California Environmental Protection Agency**  
  1001 I Street, P.O. Box 2815  
  Sacramento, CA 95812

- **California Department of Parks and Recreation**  
  1416 9th Street  
  Sacramento, CA 95814

- **California Department of Toxic Substances Control**  
  P.O. Box 806  
  Sacramento, CA 95812-0806

- **California State Historic Preservation Officer**  
  1725 23rd Street, Suite 100  
  Sacramento, CA 95816

- **California Department of Fish and Wildlife**  
  P.O. Box 1179  
  Ventura, CA 93012

- **California Department of Water Resources**  
  P.O. Box 942836  
  Sacramento, CA 94236
Regional Agencies

LA County Waterworks Districts
#40 Lancaster Office/Antelope Valley Office
260 East Avenue K-8
Lancaster, CA  93535

South Coast Air Quality Management District
Flood Control District
21865 Copley Drive
Diamond Bar, CA  91765

Southern California Association of Governments
818 West 7th Street, 12th Floor
Los Angeles, CA  90017

Southern California Edison Company
SCE Corp
P.O. Box 800
Rosemead, CA  91770

Metropolitan Transportation Authority
One Gateway Plaza
Los Angeles, CA  90012-2952

Los Angeles County Agencies

County of Los Angeles
Department of Public Works
900 S. Fremont Avenue
Alhambra, CA  91803

County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, CA  90012

County of Los Angeles
Antelope Valley - Division Headquarters
Fire Station #129
42110 6th Street West
Lancaster, CA  93534

County of Los Angeles
Sheriff's Department
Lancaster Station
501 W. Lancaster Boulevard
Lancaster, CA  93534

City of Lancaster Agencies

City of Lancaster City Manager
44933 Fern Avenue
Lancaster, CA  93534

City of Lancaster Planning Department
44933 Fern Avenue
Lancaster, CA  93534

City of Lancaster Parks, Recreation & Arts
44933 Fern Avenue
Lancaster, CA  93534

City of Lancaster Development Services
44933 Fern Avenue
Lancaster, CA  93534

Antelope Valley Union High School District
44811 North Sierra Highway
Lancaster, CA  93534

Lancaster School District
44711 N. Cedar Avenue
Lancaster, CA  93534
Chapter 7.0 REFERENCES

These materials were used in preparing this Initial Study and Mitigated Negative Declaration:


5. Air Quality Planning Branch, AQPSD, *Area Designations for State Ambient Air Quality Standards PM$_{2.5}$*, December 2015.


12. California Code of Regulations, Title 14 Section 15063(c)(3)(D).


42. Los Angeles County Fire Department, *North Regional Offices*, https://www.fire.lacounty.gov/fire-prevention-division/regional-inspection-offices-n/, accessed December 12, 2018


Appendix A:
Avoidance, Minimization, and/or Mitigation Summary
AVOIDANCE, MINIMIZATION, AND/OR MITIGATION SUMMARY

In order to ensure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project’s final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.
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<table>
<thead>
<tr>
<th>Measure</th>
<th>Type</th>
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<th>Comments</th>
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<tr>
<td><strong>AQ-1:</strong> Prior to the issuance of grading permits or approval of grading plans, a dust control plan shall be a part of the construction contract standard specifications, which shall include measures to meet the requirements of AVAQMD Rules 402 (Nuisance) and 403 (Fugitive Dust). Such measures may include, but are not limited to, the following:</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Contract Administrator</td>
<td>This is a required minimization measure for air quality.</td>
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<td>• Attempt to phase and schedule activities to avoid high-ozone days and first-stage smog alerts.</td>
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<td>• Discontinue operation during second-stage smog alerts.</td>
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<td>• All haul trucks shall be covered prior to leaving the site to prevent dust from impacting the surrounding areas.</td>
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<td>• Comply with AVAQMD Rule 403, particularly to minimize fugitive dust to surrounding areas. AVAQMD Rule 403 should be adhered to, ensuring the cleanup of the construction-related dirt on approach routes to the site, and the application of water and/or chemical dust retardants that solidify loose soils, should be implemented for construction vehicle access, as directed by the Resident Engineer.</td>
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<td>• Moisten soil each day prior to commencing grading to depth of soil cut.</td>
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<td>• Water exposed surfaces at least twice a day under calm conditions, and as often as needed on windy days or during very dry weather in order to maintain a surface crust and minimize the release of visible emissions from the construction site.</td>
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<td>• Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation.</td>
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<td>• Wash mud-covered tires and under carriages of trucks leaving construction sites.</td>
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<td>• Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud that would otherwise be carried off by trucks departing project sites.</td>
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<td>• Securely cover all loads of fill coming to the site with a tight-fitting tarp.</td>
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<td>• Cease grading during periods when winds exceed 25 mph.</td>
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<td>• Provide for permanent sealing of all graded areas, as applicable, at the earliest practicable time after soil disturbance.</td>
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<td>• Maintain construction equipment in peak operating condition so as to reduce operating emissions.</td>
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<td>• Use low-sulfur diesel fuel in all equipment.</td>
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<td>• Use electric equipment whenever practicable/shut off engines when not in use.</td>
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<td>AQ-2:</td>
<td>Project grading plans shall show the duration of construction. Ozone precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer’s specifications, to the satisfaction of the Resident Engineer, which may include periodic inspections of construction equipment.</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Contract Administrator; Resident Engineer</td>
<td>This is a required minimization measure for air quality.</td>
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<td>AQ-3:</td>
<td>All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 231.14(b)(f), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Contract Administrator</td>
<td>This is a required minimization measure for air quality.</td>
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<td>AQ-4:</td>
<td>The contractor shall adhere to Caltrans Standard Specifications for Construction (2015) Sections 14-9.02 (Air Pollution Control) and 10-5 (Dust Control).</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Contract Administrator</td>
<td>This is a required minimization measure for air quality.</td>
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<td>AQ-5:</td>
<td>In order to further minimize construction-related emissions, all construction vehicles and construction equipment would be required to be equipped with the State-mandated emission control devices pursuant to State emission regulations and standard construction practices.</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Contract Administrator</td>
<td>This is a required minimization measure for air quality.</td>
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<td>BIO-1:</td>
<td>If construction occurs during the avian nesting season (February 1 to September 1), the following shall be conducted:</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Project Biologist</td>
<td>This is a required minimization measure for biological resources.</td>
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<td>• A pre-construction nesting bird clearance survey shall be conducted within 3 days of the start of any ground disturbing activities to determine the presence or absence of nesting birds within the Biological Study Area (BSA). A qualified biologist shall conduct the survey.</td>
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<td>• If no active bird nests are observed on the project site during the clearance survey, the biologist shall document the negative results with a brief letter report indicating that no impacts to active bird nests would occur. Upon submittal of the letter to the Public Works Director, construction can proceed.</td>
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<td>• If an active nest is found, the bird shall be identified to species and the approximate distance from the closest work site to the nest shall be estimated. No additional measures need to be implemented if active nests are more than the following distances from the nearest work site: a) 500 feet for raptors or listed species; or b) 150 feet for non-listed passerines. Any nests occurring within these distances shall have a no-disturbance buffer implemented.</td>
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<td>around them (at least a 300-foot buffer), as delineated by a biological monitor. These distances may be increased according to the judgment of the qualified biologist and may be decreased only with written approval from the CDFW. • A qualified biologist shall periodically monitor any confirmed nest sites (with no-disturbance buffers) during construction to determine if grading activities occurring outside the buffer zone disturb the birds. The qualified biologist may require increasing the buffer zone, if necessary, to prevent nest abandonment. The nest trees shall be monitored until all nests have been abandoned (for non-project related reasons) or the young have fledged. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions as determined by the biological monitor, normal construction activities can occur.</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Project Biologist</td>
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<td>This is a required minimization measure for biological resources.</td>
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**BIO-2:** The following shall be implemented by a qualified biologist prior to and during construction:

- A pre-construction clearance survey shall be conducted for coast horned lizard and silvery legless lizard within the proposed project footprint. Surveys shall utilize hand search methods within the project footprint where this species is expected to be found (i.e., under shrubs, other vegetation, or debris on sandy soils). All lizards found within the project footprint shall be captured and released into designated relocation areas within the BSA (but outside of the project footprint), as recommended by the qualified biologist and approved by the City, no more than one hour after capture. Any captured lizards shall be placed immediately into containers containing sand and kept at a constant cool temperature until release.
- The qualified biologist shall be present in the study area during the initial grading activities in order to recover any coast horned lizard or silvery legless lizard that may be excavated/unearthed with native material. If the animals are in good health, those individuals shall be immediately relocated to the designated relocation area, as discussed above.

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<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Project Biologist</td>
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<td>This is a required minimization measure for biological resources.</td>
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**BIO-3:** A pre-construction bat clearance survey shall be conducted by a qualified biologist within 3 days of the start of any ground disturbing activities to determine the presence or absence of bats within the BSA. Construction shall avoid structures where bat day and night roosts have been confirmed to the maximum extent feasible.

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<td>This is a required minimization measure for biological resources.</td>
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<td>Where maternity roosting has been confirmed, demolition and pile driving activities within 500 feet of these structures shall avoid the recognized bat maternity season (March 1 to October 31) to prevent potential mortality of flightless young bats.</td>
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<td>This is a required minimization measure for biological resources.</td>
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<td><strong>BIO-4:</strong> To ensure burrowing owl remain absent from the project site and would not be impacted from implementation of the proposed project, a burrowing owl pre-construction clearance survey shall be conducted by a qualified biologist within 3 days of the start of any ground disturbing activities in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation. If burrowing owls are observed within the proposed project footprint during the pre-construction surveys and would be impacted from implementation of the project, a burrowing owl relocation plan shall be prepared and submitted to CDFW for review and approval prior to commencement of vegetation clearing/grubbing, grading, and construction activities. The burrowing owl relocation plan shall outline methods to relocate any burrowing owls occurring within the project footprint and ensure compliance with the MBTA and Fish and Game Code.</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Project Biologist</td>
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| **BIO-5:** Since alkali mariposa lily has been previously documented within the BSA, the following shall be implemented by a qualified biologist prior to and during construction:  
  - Establish fencing that identifies the environmentally sensitive area (ESA) and surrounding areas known to support alkali mariposa lily,  
  - Conduct further rare plant surveys during the appropriate blooming period for alkali mariposa lily (April to June) prior to construction in order to document any additional locations of alkali mariposa lily and, if found, each location shall be included in the fenced ESA and surrounding areas.  
  - During clearing and grubbing activities, a biological monitor shall be present to ensure the ESA is not disturbed by construction.  
  - If impacts cannot be avoided, bulbs of this species shall be collected and propagated at nurseries pre-approved by the City of Lancaster and County of Los Angeles and replanted on-site, wherever possible. For any on-site mitigation plantings, these plantings shall have a plant reestablishment period no less than two years. On-site mitigation plantings shall be monitored by a qualified biologist seasonally to determine health and viability. If it is determined that an on-site planting is in poor health, it shall be replaced by a healthy individual and monitored until established, as determined by the project biologist. | Mitigation | Preconstruction/ Construction | City of Lancaster; Project Biologist | | This is a required mitigation measure for biological resources. |
- If on-site relocation of individuals or on-site plantings are not possible after construction is complete, off-site mitigation shall be conducted. The following shall be implemented for off-site mitigation, if necessary.
  - Translocation and bulb/seed collection with propagation shall be located on an off-site preserved property acceptable to the City of Lancaster and County of Los Angeles. The property shall be composed of habitat characteristics suitable to support special-status plant species, in particular alkali mariposa lily, including but not limited to: appropriate soils, elevation, hydrology, and habitat.
  - The suitability of the proposed preservation site shall be verified by CDFW. The property shall be conserved via recordation of a conservation easement in favor of a CDFW-due diligence approved local conservation entity to protect the special-status plant species on the property in perpetuity. Alternatively, the land may be transferred in fee title to a CDFW-approved local conservation entity.
  - A management fund shall be established by the City and shall consist of an interest-bearing account with the amount of capital necessary to generate sufficient interest and/or income to fund all monitoring, management, and protection of the conservation area(s), including but not limited to, reasonable administrative overhead, biological monitoring, invasive species and trash removal, fencing and signage replacement and repair, law enforcement measures, long-term management reporting (as described below), and other actions designed to maintain and improve the habitat of the conserved land(s), in perpetuity. A Property Analysis Record, or substantially equivalent analysis, shall be conducted by the City and approved by CDFW to determine the management needs and costs described above, which then would be used to calculate the capital needed for the management of the fund. This management fund shall be held and managed by a CDFW-approved local conservation entity.
  - To protect the mitigation area(s), the City shall place appropriate fencing and/or natural barriers and signage around the perimeter of each site. Except for uses appropriate to a habitat conservation area, the public shall not have access to the mitigation area(s), and no activities shall be permitted within the site, except maintenance of habitat, including the removal of nonnative plant species, trash, and debris, and the installation of native plant materials.
  - Prior to any ground disturbance, the City shall prepare a special-status plant species planting plan (Plan). The Plan shall require a replacement that is biologically equivalent or superior by area and ensure a minimum 80 percent survivorship at the end of a

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SR-14 (SR-138)/Avenue G Interchange Improvements and Avenue G Widening Project  
Initial Study/Proposed Mitigated Negative Declaration  
City of Lancaster  
January 2019
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<td>five-year monitoring period, which shall be verified by the monitoring biologist. At a minimum, the five-year plan shall include the following information: 1) A description of the existing conditions of the receiver site(s), characterizing the suitability of the site(s) for the special-status plant species, and documenting the acreage of the site. 2) A description of how the site would be preserved in perpetuity [i.e., conservation easement] and the name of the CDFW-approved due diligence entity that would hold the easement. 3) Qualifications of the monitoring biologist. 4) Receiver site preparation for transplanting. 5) Goals for success. 6) Schedule. 7) Propagation techniques. 8) Transplant and seedling installation methods. 9) Plant spacing. 10) Performance criteria for success, including provision for control of non-native and invasive species. 11) Monitoring and reporting procedures for each of the five years of the monitoring period. 12) Adaptive management strategies, including a contingency plan should the site fail to meet the specified success criteria. 13) Maintenance requirements that would be reviewed and approved by the County.</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction/ Construction</td>
<td>City of Lancaster; Contract Administrator</td>
<td>This is a required minimization measure for biological resources.</td>
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<td>BIO-6: Prior to start of construction, all construction equipment shall be inspected and cleaned by the construction contractor prior to use in the proposed project footprint in order to minimize the importation of non-native plant material.</td>
<td>Avoidance &amp; Minimization</td>
<td>Construction</td>
<td>City of Lancaster</td>
<td>This is a required minimization measure for cultural resources.</td>
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<td>CUL-1: If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area shall be diverted until a qualified archaeologist, retained by the City of Lancaster, can assess the nature and significance of the find. If evidence of subsurface tribal cultural resources is found, the archaeologist shall contact the Native American Heritage</td>
<td>Avoidance &amp; Minimization</td>
<td>Construction</td>
<td>City of Lancaster</td>
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<td>Commission to determine the appropriate Native American monitor for the find. The archaeologist shall confer with applicable agencies and/or tribes about the appropriate treatment of the site, and to develop appropriate mitigation. Work shall only resume after mitigation is complete and after its approval by the California State Historic Preservation Officer.</td>
<td>Construction</td>
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<td>This is a required minimization measure for cultural resources.</td>
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<td>CUL-2:</td>
<td>The City of Lancaster shall retain a qualified paleontologist to prepare a Paleontological Mitigation Plan prior to excavation activities. The Plan shall include monitoring requirements for excavations more than 4 feet deep, including practices to be implemented in the event a resource is discovered. Should resources be discovered during excavation, the qualified paleontologist shall evaluate the find and outline appropriate mitigation requirements, as necessary.</td>
<td>Avoidance &amp; Minimization</td>
<td>Construction</td>
<td>City of Lancaster</td>
<td>This is a required minimization measure for geology and soils.</td>
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<td>GEO-1:</td>
<td>Prior to final design review and approval, the City of Lancaster shall conduct a detailed site-specific geotechnical field investigation and prepare a final geotechnical design report following Caltrans design and construction standards. The report shall address, at a minimum, site-specific soil and seismic constraints and shall recommend specific design measures to minimize impacts related to seismic-induced human injury and structural damage. These design measures shall be incorporated into project plans and specifications.</td>
<td>Avoidance &amp; Minimization</td>
<td>Prior to Final Design Review and Approval</td>
<td>City of Lancaster</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>HAZ-1:</td>
<td>A Phase II/Site Characterization Specialist shall conduct sampling within properties proposed for Caltrans right-of-way acquisition (Assessor's Parcel Numbers 3114-010-025, -029, and -037 and 3114-011-018, -020, -026, and -031) for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and metals.</td>
<td>Avoidance &amp; Minimization</td>
<td>During the Plans, Specification, and Estimate (PS&amp;E) Phase</td>
<td>City of Lancaster, Phase II/Site Characterization Specialist</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>HAZ-2:</td>
<td>A certified asbestos consultant (CAC) shall perform an ACM survey by during the PS&amp;E phase to meet the requirements of the Antelope Valley Air Quality Management District (AVAQMD). If ACM is detected, the ACMs should be removed prior to demolition/modification of the bridge structure. The CAC should monitor the disposal of the ACMs as they are uncovered and should ensure ACMs are removed prior to the start of construction.</td>
<td>Avoidance &amp; Minimization</td>
<td>During the Plans, Specification, and Estimate (PS&amp;E) Phase</td>
<td>City of Lancaster, Certified Asbestos Abatement Specialist</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>HAZ-3:</td>
<td>Lead-Based Paints Certified Specialist shall conduct Phase II sampling during the PS&amp;E Phase to confirm the presence or absence of LBPs. Should LBPs be present, all demolition materials shall be properly handled, transported, and disposed of at an approved Landfill Facility, as recommended by the Certified Specialist.</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction</td>
<td>City of Lancaster, Certified Asbestos Abatement Specialist</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>HAZ-4:</td>
<td>The removal and disposal of treated wood waste shall comply with the California Department of Transportation’s Standard Specifications Section 14-11 pertaining to the disposal of treated wood waste.</td>
<td>Avoidance &amp; Minimization</td>
<td>Construction</td>
<td>City of Lancaster; Local Purveyor</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>HAZ-5:</td>
<td>Any transformer to be relocated/removed during site construction/demolition shall be sampled and analyzed for PCBs. All relocation/removal activities shall be conducted under the purview of the local purveyor to identify proper handling procedures regarding PCBs, should PCBs be present.</td>
<td>Avoidance &amp; Minimization</td>
<td>Construction</td>
<td>City of Lancaster; Local Purveyor</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>HAZ-6:</td>
<td>Prior to site disturbance activities at Assessor’s Parcel Number (APN) 3118-005-905, the existing debris/soil piles shall be sampled by a qualified Phase II/Site Characterization Specialist for hazardous wastes (including TPH, VOCs, and metals) and properly disposed of at an off-site permitted landfill facility. Further, should any import fill materials be required, those materials shall be sampled by the specialist for chemicals of concern prior to import. Should any elevated chemicals be present, those materials shall not be used for fill materials at the project site.</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction</td>
<td>City of Lancaster; Phase II/Site Characterization Specialist</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>HAZ-7:</td>
<td>A Phase II/Site Characterization Specialist shall conduct sampling within SR-14 (SR-138) ROW within the project site in order to determine whether or not aerially deposited lead AkD deposits exist. Results of the sampling would indicate the level of remediation efforts that will be required.</td>
<td>Avoidance &amp; Minimization</td>
<td>During the Plans, Specification, and Estimate (PS&amp;E) Phase</td>
<td>City of Lancaster, Phase II/Site Characterization Specialist</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>HAZ-8:</td>
<td>Prior to the start of construction, a contractor shall prepare a Construction Contingency Plan (CCP) in accordance with Caltrans’ Unknown Hazards Procedures for Construction. The CCP should include provisions for the handling of hazardous materials/waste, as well as emergency response in the event that unidentified hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes are discovered during construction activities. The CCP should address field screening, contaminant materials testing methods, mitigation and contain management</td>
<td>Avoidance &amp; Minimization</td>
<td>Preconstruction phase</td>
<td>City of Lancaster</td>
<td>This is a required minimization measure for hazards and hazardous materials.</td>
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<td>TRA-1: Prior to contract bidding, the City of Lancaster shall prepare a Construction Traffic Control Plan (CTCP). The CTCP shall be distributed to potential project contractors with request-for-bid documents as well as to local agency traffic enforcement and construction inspectors. The information provided shall include access and traffic management plans detailing any projected temporary street/interchange closures or expected traffic delays due to construction vehicles using the roadways. The CTCP shall include the following elements:</td>
<td>Avoidance &amp; Minimization</td>
<td>Prior to Contract Bidding</td>
<td>City of Lancaster</td>
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<td>This is a required minimization measure for transportation/traffic.</td>
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<td>CC-1: According to the Caltrans Standard Specifications, idling time for lane closure during construction will be limited to 10 minutes in each direction. In addition, the contractor will comply with all Antelope Valley Air Quality Management District (AVAQMD) rules, ordinances, and regulations regarding air quality restrictions.</td>
<td>Avoidance &amp; Minimization</td>
<td>Pre-construction and construction phases</td>
<td>City of Lancaster; Contract Administrator</td>
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<td>This is a required minimization measure for climate change.</td>
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<td>CC-2: As part of the Southern California Association of Governments (SCAG), 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), project level mitigation measures were provided to reduce impacts including those pertaining to climate change. The following project level mitigation measures would apply:</td>
<td>Avoidance &amp; Minimization</td>
<td>Pre-construction and construction phases</td>
<td>City of Lancaster; Contract Administrator</td>
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<td>This is a required minimization measure for climate change.</td>
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<td>requirements, and health and safety requirements for construction workers.</td>
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<tr>
<td>Measure</td>
<td>Type</td>
<td>Phase</td>
<td>Responsible Party</td>
<td>Completion Date</td>
<td>Comments</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>• The project will use cement blended with the maximum feasible amount of fly ash or other materials that reduce GHG emissions from cement production.</td>
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<tr>
<td>• The project will incorporate design measures to reduce GHG emissions from solid waste management through solid waste reduction, recycling and reuse.</td>
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<tr>
<td>• The project will recycle construction debris.</td>
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</tbody>
</table>
Appendix B:
Native American Consultation Documentation
June 8, 2016

Megan Wilson
Cogstone

Sent by E-mail: MWilson@cogstone.com
Number of Pages: 3

RE: Proposed SR-138, Avenue G Project, City of Lancaster, Lancaster West USGS Quadrangle, Los Angeles County, California

Dear Ms. Wilson:

Attached is a contact list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. A search of the SFL was completed for the USGS quadrangle information provided with negative results.

Our records indicate that the lead agency for this project has not requested a Native American Consultation List for the purposes of formal consultation. Lists for cultural resource assessments are different than consultation lists. Please note that the intent of the referenced codes below is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects under AB-52.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources;

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
   - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
   - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
   - If the probability is low, moderate, or high that cultural resources are located in the APE.
2. The results of any archaeological inventory survey that was conducted, including:
   - Any report that may contain site forms, site significance, and suggested mitigation measurers.
   - All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission.

4. Any ethnographic studies conducted for any area including all or part of the potential APE; and

5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand well help to facilitate the consultation process.

The results of these searches and surveys should be included in the “Tribal Cultural Resources” subsection of the Cultural Resources section of the environmental document submitted for review.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: gayle.totton@naho.ca.gov.

Sincerely,

[Signature]

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst
Native American Contact List
Los Angeles County
June 8, 2016

San Manuel Band of Mission Indians
Lynn Valbuena, Chairwoman
26569 Community Center Serrano
Highland, CA 92346
(909) 864-8933
(909) 864-3370 Fax

Fernandeno Tataviam Band of Mission Indians
Rudy Ortega Jr., President
1019 2nd Street Fernandeno
San Fernando, CA 91340 Tataviam
(818) 837-0794 Office
(818) 837-0796 Fax

Colorado River Indian Tribe
Dennis Patch, Chairman
26600 Mojave Road Mojave
Parker, AZ 85344 Chemehuevi
crit.museum@yahoo.com
(928) 669-9211 Tribal Office
(928) 669-8970 ext 21
(928) 669-1925 Fax

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838 Tataviam
Newhall, CA 91322 Serrano
tsen2u@hotmail.com Kitanemuk
(760) 885-0955 Cell

San Manuel Band of Mission Indians
Daniel McCarthy, M.S., Director-CRM Dept.
26569 Community Center Drive Serrano
Highland, CA 92346
dmccarthy@sanmanuel-nsn.gov
(909) 864-8933 Ext 3248
(909) 862-5152 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person or agency of statutory responsibility as defined in Public Resources Code Sections 21080.1.1, Section 70593.5 of the Health and Safety Code, Section 5087.9d of the Public Resources Code and Section 5087.9c of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SR-138, Avenue G Project, City of Lancaster, Lancaster West USGS Quadrangle, Los Angeles County, California.
## Native American Consultation Log for the SR-138/Ave G Interchange Project

<table>
<thead>
<tr>
<th>Native American Group/Individual</th>
<th>Contact Source(s)</th>
<th>Date(s) and Method of First Contact Attempt</th>
<th>Date(s) and Method of Second Contact Attempt</th>
<th>Date(s) and Method of Third Contact Attempt</th>
<th>Date of Response</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado River Indian Tribe Dennis Patch, Chairman</td>
<td>NAHC/City of Lancaster</td>
<td>8/24/2016, letter sent by Caltrans, District 7</td>
<td>-</td>
<td>-</td>
<td>9/7/2016</td>
<td>On September 7, 2016 Mr. Dennis Patch on behalf of the Colorado River Indian Tribes indicated their concern regarding the removal of artifacts from the PAL and corresponding destruction of the Tribe's footprint on the landscape. The Tribe requested that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided if feasible. If avoidance is infeasible, the Tribe requests that resources be left in situ or reburied in a nearby area, after construction. Mr. Patch also requested that in the event any human remains or objects subject to provision of the Native American Graves Repatriation Act, or cultural resources such as sites, trails, artifacts are identified during ground disturbances, to please contact him within 48 hours. Lastly, Mr. Patch mentioned that the Colorado River Indian Tribe do not have any specific comments on the proposed project and instead defer to the comments of other affiliated tribes.</td>
</tr>
<tr>
<td>Fernandeno Tataviam Band of Mission Indians Caitlin B. Gulley Tribal Historic and Cultural Preservation Officer</td>
<td>NAHC/City of Lancaster</td>
<td>8/24/2016, letter sent by Caltrans, District 7</td>
<td>5/31/2017, email</td>
<td>6/7/2017, email</td>
<td>6/8/2017</td>
<td>On June 8, 2017 Ms. Kimia Fatehi on behalf of the Fernandeno Tataviam Band of Mission Indians indicated that she was unable to locate sensitive tribal cultural resources that may be impacted by the SR 138 Ave. G Project. Ms. Fatehi requested a copy of the report once completed.</td>
</tr>
<tr>
<td>Gabrieleno Band of Mission Indians – Kizh Nation Andrew Salas, Chairman</td>
<td>City of Lancaster</td>
<td>8/24/2016, letter sent by Caltrans, District 7</td>
<td>5/31/2017, email</td>
<td>6/7/2017, phone conversation and email</td>
<td>6/7/2017</td>
<td>On June 7, 2017 Mr. Andy Salas of the Gabrieleno Band of Mission Indians – Kizh Nation indicated that he has information regarding the traditional trading routes that were utilized in the vicinity of the Project during prehistory. However, Mr. Salas indicated that he would like to defer to the Tuhaaviatam people, also known as the San Manuel Tribe.</td>
</tr>
<tr>
<td>Native American Group/Individual</td>
<td>Contact Source(s)</td>
<td>Date(s) and Method of First Contact Attempt</td>
<td>Date(s) and Method of Second Contact Attempt</td>
<td>Date(s) and Method of Third Contact Attempt</td>
<td>Date of Response</td>
<td>Comments</td>
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<tr>
<td>Chairperson</td>
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</tr>
<tr>
<td>San Manuel Band of Mission Indians</td>
<td>NAHC/City of Lancaster/Caltrans District 7</td>
<td>8/24/2016, letter sent by Caltrans, District 7</td>
<td>5/31/2017, email</td>
<td>6/8/2017, voicemail, phone conversation, and email</td>
<td>6/14/2017</td>
<td>On June 14, 2017 Mr. Lee Clauss on behalf of the San Manuel Band of Mission Indians indicated that the San Manuel Tribe does not have any concern's with the Project's implementation, as planned, at the current time of communication (6/14/2017). However, the San Manuel Tribe requested the following language be made a part of the project/permit/plan conditions: 1. 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. 2. In the event that Native American 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, San Manuel Band of Mission Indians will be contacted if any such find occurs and be provided information and permitted/invited to perform a site visit when the archaeologist makes his/her assessment, so as to provide Tribal input. 3. If significant Native American historical resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, an SOI-qualified archaeologist shall be retained to develop an cultural resources Treatment Plan, as well as a Discovery and Monitoring Plan, the drafts of which shall be provided to San Manuel Band of Mission Indians for review and comment. a. All in-field investigations, assessments, and/or data recovery...</td>
</tr>
<tr>
<td>Native American Group/Individual</td>
<td>Contact Source(s)</td>
<td>Date(s) and Method of First Contact Attempt</td>
<td>Date(s) and Method of Second Contact Attempt</td>
<td>Date(s) and Method of Third Contact Attempt</td>
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</tr>
</tbody>
</table>
| Soboba Band of Luiseno Indians  | Caltrans District 7 | 8/24/2016, letter sent by Caltrans, District 7 | 5/31/2017, email | 6/7/2017, voicemail | N/A | monitored by a San Manuel Band of Mission Indians Tribal Participant(s).  
| Joseph Ontiveros                |                   |                                            |                                            |                                            |                 | **The San Manuel Tribe requested that their emails not be copied into the report.** |

enacted pursuant to the finalized Treatment Plan shall be monitored by a San Manuel Band of Mission Indians Tribal Participant(s).  
b. The Lead Agency and/or applicant shall, in good faith, consult with San Manuel Band of Mission Indians on the disposition and treatment of any artifacts or other cultural materials encountered during the project.  

**The San Manuel Tribe requested that their emails not be copied into the report.**
August 24, 2016

Tribal Organization
Tribal Contact
Address,
City, State Zip

Dear Representative,

The City of Lancaster, with the California Department of Transportation (Caltrans), propose to improve multi-modal circulation and traffic operations and enhance safety at the existing SR-138/Avenue G interchange. The project would include ramp and intersection reconfigurations, widening of Avenue G by one lane in each direction west of SR-138, interim widening of Avenue G east of SR-138 to include eight-foot wide shoulders and a ten-feet wide two-way left-turn lane, ultimate widening of Avenue G east of SR-138 from two lanes to four lanes with a raised median, and enhanced active transportation access for bicyclists and pedestrians.

As part of the cultural resource studies, Caltrans is undertaking an Archaeological Survey Report of the Area of Potential Effects (APE) for the proposed project. As part of the archaeological survey, Caltrans has conducted a search of the records at the South Central Coastal Information Center at California State University, Fullerton, and has searched other historical and archaeological database resources. Initial results of these efforts have found that no Native American sites exist near the proposed project. Caltrans has also consulted with the Native American Heritage Commission and found that no traditional cultural places were known to exist within or near the project area.

The reason for this letter is to ensure that resources are protected to the maximum extent feasible by asking for any information regarding the presence of sensitive Native American cultural resources, such as Traditional Cultural Properties or other sensitive resources within the project area described above. Please consider this letter and preliminary project information as the formal notification of a proposed project as required under the California Environmental Quality Act, specifically Public Resources Code (PRC) 21080.3.1 and Chapter 552 Statutes of 2014 (i.e., AB 52). Please respond within 30 days, pursuant to PRC 21080.3.1(d) if you would like to consult on this project.

While we would prefer your response to be in writing, feel free to contact me by email at kelly.ewing-toledo@dot.ca.gov or by phone at (213) 897-4095. Be assured that Caltrans keeps all information provided confidential, and limits any knowledge to a few select staff who have signed confidentiality agreements.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."
Thank you in advance for helping us identify if any of these resources are in the project area, so we can work with you to protect them to the maximum extent feasible. Please contact me if you have any questions regarding this letter at (213) 897-4095.

Sincerely,

[Signature]

Kelly Ewing-Toledo, Senior Environmental Planner
Heritage Resources Coordinator
Caltrans District 7
100 South Main Street, Los Angeles, CA 90012
Figure 1. Project Vicinity
Figure 2. Project Location
COLORADO RIVER INDIAN TRIBES
Tribal Historic Preservation Office
26600 Mohave Road
Parker, Arizona 85344
Telephone: (928)-669-5832  Fax: (928)-669-5843

September 7, 2016

Dear Kelly Toledo:

The Colorado River Indian Tribes' Tribal Historic Preservation Office ('CRIT THPO') has received your letter dated August 24, 2016 regarding the proposal to Improve Multi-Modal Circulation and Traffic Operations and Enhance Safety at the Existing SR-138/Avenue G Interchange Project.

As a preliminary matter, the Colorado River Indian Tribes are a federally recognized Indian tribe comprised of over 4,000 members belonging to the Mohave, Chemehuevi, Hopi and Navajo Tribes. The almost 300,000 acre Colorado River Indian Reservation sits astride the Colorado River between Blythe, California and Parker, Arizona. The ancestral homelands of the Tribe's members, however, extend far beyond the Reservation boundaries. Significant portions of public and private lands in California, Arizona and Nevada were occupied by the ancestors of the Colorado River Indian Tribes' Mohave and Chemehuevi members since time immemorial. These landscapes remain imbued with substantial cultural, spiritual and religious significance for the Tribes' current members and future generations. For this reason, we have a strong interest in ensuring that potential cultural resource impacts are adequately considered and mitigated.

In particular, the Colorado River Indian Tribes are concerned about the removal of artifacts from this area and corresponding destruction of the Tribes' footprint on this landscape. As such, the Tribes request that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided if feasible. If avoidance of the site is infeasible, then the Tribes request that the resources be left in-situ or reburied in a nearby area, after consultation. This language should be incorporated into enforceable mitigation measures.

In addition, we respond as follows:

______ Given the potential impact of the project on important cultural resources, the Colorado River Indian Tribes request in-person government-to-government consultation. Please contact the CRIT THPO to discuss our concerns and schedule a meeting with Tribal Council.
CRIT THPO
Project Name: SR 138 Ave G Project
Date: September 9, 2006
Page 2

\[ \checkmark \] In the event any human remains or objects subject to provision of the Native American Graves Protection and Repatriation Act, or cultural resources such as sites, trails, artifacts are identified during ground disturbance, please contact the CRIT THPO within 48 hours.

\[ \checkmark \] The Colorado River Indian Tribes request tribal monitoring of any ground disturbing activity as a condition of project approval. The Tribes request notification of any opportunities to provide tribal monitoring for the project.

\[ \checkmark \] The Colorado River Indian Tribes do not have any specific comment on the proposed project and instead defer to the comments of other affiliated tribes.

Thank you for your consideration. Please contact the undersigned if you have any questions or concerns.

Sincerely,

COLORADO RIVER INDIAN TRIBES
TRIBAL HISTORIC PRESERVATION OFFICE

David Harper, Director
26600 Mohave Road
Parker, AZ 85344
Phone: (928) 669-5822
E-mail: david.harper@crit-nsn.gov
critthpo@crit-nsn.gov
Megan Wilson

From: Ewing-Toledo. Kelly@DOT <kelly.ewing-toledo@dot.ca.gov>
Sent: Friday, June 09, 2017 1:23 PM
To: Kimia Fatehi
Cc: Megan Wilson; Mattiussi Gutierrez, Sarah@DOT
Subject: RE: No Comments: SR 138 Avenue G Project, City of Lancaster, CA

Thanks for responding Kimia. We'll see that you receive the ASR/HPSR for this project upon completion. Have a nice weekend.
--Kelly

Kelly Ewing-Toledo, Senior Environmental Planner
Heritage Resources Coordinator
Cahuilla District 7
100 S. Main St., Los Angeles, CA 90012
213.897.4095

From: Kimia Fatehi [mailto:kfatehi@tataviam-nsn.us]
Sent: Thursday, June 08, 2017 4:19 PM
To: Ewing-Toledo, Kelly@DOT <kelly.ewing-toledo@dot.ca.gov>
Cc: Megan Wilson <mwilson@coastone.com>
Subject: No Comments: SR 138 Avenue G Project, City of Lancaster, CA

Good morning Kelly,

I hope this finds you well. Megan Wilson of Cogstone kindly informed me that the Tribe still has time to submit its comments to the original notification letter, dated as of August 24, 2016. Upon finally having the opportunity to review our database, I did not locate sensitive tribal cultural resources that may be impacted by your project. The nearest resources we have recorded are over 4 miles from your project. I apologize if this has created any delays.

Actually, if there are any cultural resources surveys for this project, it would be great to have a copy to place on file for future reference. I believe the only archaeological survey report I have recorded is for the SR 138 Northwest Corridor. Otherwise, thank you so much for the opportunity to comment.

Sincerely,
Kimia

---
Kimia Fatehi
Director, Public Relations
Officer, Tribal Historic and Cultural Preservation
Fernandeño Tataviam Band of Mission Indians
1019 Second Street, Suite 1
San Fernando, California 91340
Mobile: (949) 236-2838
Office: (818) 837-0794
Website: http://www.tataviam-nsn.us
Megan Wilson

From: Megan Wilson <mwilson@cogstone.com>
Sent: Thursday, June 08, 2017 10:19 AM
To: 'Andy'
Subject: RE: AB52 Request for Consultation Follow up for the SR 138 Avenue G Project, City of Lancaster, CA

Great, they are on my list. Thanks again for your time and clarification.
-Megan

---

From: Andy [mailto:gabrielenoindians@yahoo.com]
Sent: Thursday, June 08, 2017 10:17 AM
To: Megan Wilson
Subject: Re: AB52 Request for Consultation Follow up for the SR 138 Avenue G Project, City of Lancaster, CA

Serrano - San Manuel tribe

Sent from my iPhone

On Jun 8, 2017, at 10:04 AM, Megan Wilson <mwilson@cogstone.com> wrote:

Mr. Salas,
Thank you very much for taking the time to review your notes and responding to my request for the SR 138 Project, Avenue G Project.
I would like to confirm that I reach out to the correct contact person you have in mind for the Yuhaaviatam group, do you have a contact for that person? I would like to confirm that I have the tribal contact for them on my list from the NAI-C.
Thank you again,
-Megan

---

From: Gabrieleno Band of Mission Indians [mailto:gabrielenoindians@yahoo.com]
Sent: Wednesday, June 07, 2017 4:52 PM
To: Megan Wilson
Cc: Matt Teutlmez.Kizh Gabrieleno
Subject: Re: AB52 Request for Consultation Follow up for the SR 138 Avenue G Project, City of Lancaster, CA

Megan,
We do have information regarding traditional trading routes that were utilized during our prehistory times that were within the area location. However I think we are going to defer this project to the Yuhaaviatam people of that area. Thank you
Sincerely,

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians - Kizh Nation
PO Box 393
Covina, CA 91723
cell: (628)928-4131
On Wednesday, June 7, 2017 4:24 PM, Megan Wilson <mwilson@Cogstone.com> wrote:

Mr. Salas,
We just spoke on the phone regarding the SR138 Ave. G Project. You needed some time to gather information regarding a trading route and a location named Lanza. I have to leave for the day, but I want to continue our conversation. I can try calling again tomorrow or if you like, you can put them in writing and I will include your comments into the report. If you prefer a phone call, what is a good time?

Thank you,
-Megan

From: Megan Wilson [mailto:mwilson@Cogstone.com]
Sent: Wednesday, May 31, 2017 11:53 AM
To: gabrielenoindians@yahoo.com
Subject: AB52 Request for Consultation Follow up for the SR 138 Avenue G Project, City of Lancaster, CA

Good afternoon,
I would like to follow up on an AB52 request for consultation for the SR 138 Avenue G Project located in the City of Lancaster, Los Angeles County. Caltrans, District 7 is the CEQA lead for this Project and I am following up on their behalf. Please see the attached document of the original consultation letter sent on August 24, 2016.

You may forward your responses to me, or send them directly to the Caltrans, District 7 contact person.
Her name is Kelly Ewing-Toledo, Senior Environmental Planner
Heritage Resources Coordinator Caltrans District 7
100 South Main Street, Los Angeles CA 90012
(213)897-4095
kelly.ewing-toledo@dot.ca.gov

Thank you very much,
<image001.jpg>
From: Megan Wilson <mwilson@cogstone.com>
Sent: Thursday, June 08, 2017 10:46 AM
To: 'tsen2u@hotmail.com'
Subject: FW: AB52 Request for Consultation Follow up for the SR 138 Avenue G Project, City of Lancaster, CA
Attachments: Valenzuela, SFBM1.pdf

Mr. Valenzuela,
I am following up on a AB52 request for consultation on behalf of Caltrans for the SR 139 Avenue G Project located in the City of Lancaster. If you have not already, I would like to request your attention to the attached letter. Please let me know if you have any questions or comments.
Thank you,
-Megan

From: Megan Wilson [mailto:mwilson@cogstone.com]
Sent: Wednesday, May 31, 2017 11:56 AM
To: 'tsen2u@hotmail.com'
Subject: AB52 Request for Consultation Follow up for the SR 138 Avenue G Project, City of Lancaster, CA

Good afternoon,
I would like to follow up on an AB52 request for consultation for the SR 138 Avenue G Project located in the City of Lancaster, Los Angeles County. Caltrans, District 7 is the CEQA lead for this Project and I am following up on their behalf. Please see the attached document of the original consultation letter sent on August 24, 2016.

You may forward your responses to me, or send them directly to the Caltrans, District 7 contact person. Her name is Kelly Ewing-Toledo, Senior Environmental Planner
Heritage Resources Coordinator Caltrans District 7
100 South Main Street, Los Angeles CA 90012
(213)897-4095
kelly.ewing-toledo@dot.ca.gov

Thank you very much,
Good afternoon,

I would like to follow up on an AB52 request for consultation for the SR 138 Avenue G Project located in the City of Lancaster, Los Angeles County. Caltrans, District 7 is the CEQA lead for this Project and I am following up on their behalf. Please see the attached document of the original consultation letter sent on August 24, 2016.

You may forward your responses to me, or send them directly to the Caltrans, District 7 contact person.

Her name is Kelly Ewing-Toledo, Senior Environmental Planner
Heritage Resources Coordinator Caltrans District 7
100 South Main Street, Los Angeles CA 90012
(213)897-4095
kelly.ewing-toledo@dot.ca.gov

Thank you very much,
Appendix C:

Title VI
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April 2018

NON-DISCRIMINATION
POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.”

Related federal statutes and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email Title.VI@dot.ca.gov, or visit the website www.dot.ca.gov.

Laurie Berman
Director
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Appendix D:
Threatened and Endangered Species List
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### Table D-1: Potentially Occurring Special-Status Biological Resources

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
<th>Habitat</th>
<th>Observed On-site</th>
<th>Potential to Occur</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SPECIAL-STATUS WILDLIFE SPECIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agelaius tricolor</td>
<td>tricolored blackbird</td>
<td>Fed:</td>
<td>Range is limited to the coastal areas of the Pacific coast of North America, from Northern California to upper Baja California. Can be found in a wide variety of habitat including annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields, cattle feedlots, and dairies. Occasionally forage in riparian scrub habitats along marsh borders. Basic habitat requirements for breeding include open accessible water, protected nesting substrate (freshwater marsh dominated by cattails, willows, and bulrushes [<em>Schoenoplectus</em> sp.]), and either flooded or thorny or spiny vegetation and suitable foraging space providing adequate insect prey.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Locally this species is most likely to occur at Piute Ponds, Apollo Community Park, and other irrigated fields.</td>
</tr>
<tr>
<td>Anniella pulchra pulchra</td>
<td>silvery legless lizard</td>
<td>Fed:</td>
<td>Occurs primarily in areas with sandy or loose loamy soils under sparse vegetation of beaches, chaparral, or pine-oak woodland; or near sycamores, oaks, or cottonwoods that grow on stream terraces. Often found under or in the close vicinity of logs, rocks, old boards, and the compacted debris of woodrat nests.</td>
<td>No</td>
<td>Low. While there are some drainages within the BSA, they likely do not provide enough subsurface soil moisture to support this species.</td>
</tr>
<tr>
<td>Asio flammeus</td>
<td>short-eared owl</td>
<td>Fed:</td>
<td>Occurs in swamps, marshlands, meadows, and irrigated fields. Can occur in both freshwater and saltwater habitats. Nests on the ground in areas concealed by tule patches or dry vegetation.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Locally this species is most likely to occur at Piute Ponds.</td>
</tr>
<tr>
<td>Athene cunicularia</td>
<td>burrowing owl</td>
<td>Fed:</td>
<td>Primarily a grassland species, but it persists and even thrives in some landscapes highly altered by human activity. Occurs in open, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The overriding characteristics of suitable habitat appear to be burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation.</td>
<td>No</td>
<td>Low. There marginal foraging habitat with the BSA. Burrows capable of supporting this species were not found within the BSA.</td>
</tr>
<tr>
<td>Bombus crotchii</td>
<td>Crotch bumble bee</td>
<td>Fed:</td>
<td>Exclusive to coastal California east towards the Sierra-Cascade Crest; less common in western Nevada.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site.</td>
</tr>
</tbody>
</table>

Fed: California, CA: South Coast.
<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
<th>Habitat</th>
<th>Observed On-site</th>
<th>Potential to Occur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buteo regalis</td>
<td>ferruginous hawk</td>
<td>Fed: None</td>
<td>Occurs primarily in open grasslands and fields, but may be</td>
<td>No</td>
<td>Moderate. May forage over the site but does not nest in this region.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA: WL</td>
<td>found in sagebrush flats, desert scrub, low foothills, or</td>
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<td></td>
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<td></td>
<td>along the edges of pinyon-juniper woodland. Feeds primarily on small</td>
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<td></td>
<td></td>
<td>mammals and typically found in agricultural or open fields.</td>
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</tr>
<tr>
<td>Buteo swainsoni</td>
<td>Swainson’s hawk</td>
<td>Fed: None</td>
<td>Typical habitat is open desert, grassland, or cropland</td>
<td>No</td>
<td>Moderate. This species has been well documented in the immediate surrounding area. May forage over the site but there is no nesting habitat.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA: THR</td>
<td>containing scattered, large trees or small groves. Breeds in</td>
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<td></td>
<td></td>
<td></td>
<td>stands with few trees in juniper-sage flats, riparian areas, and in</td>
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<td></td>
<td>oak savannah in the Central Valley. Forages in adjacent grassland or</td>
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<td></td>
<td></td>
<td></td>
<td>suitable grain or alfalfa fields or livestock pastures.</td>
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</tr>
<tr>
<td>Charadrius alexandrinus nivosus</td>
<td>western snowy</td>
<td>Fed: THR</td>
<td>Occurs on sandy beaches, salt pond levees and along the shores of</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Locally this species is most likely to occur at Piute Ponds and Rosamond Dry Lake.</td>
</tr>
<tr>
<td></td>
<td>plover</td>
<td>CA: SSC</td>
<td>large alkali lakes. Requires sandy or gravelly substrate for nesting.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charadrius montanus</td>
<td>mountain plover</td>
<td>Fed: None</td>
<td>Found in short grasslands, freshly-plowed fields, newly-</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat. Locally this species is most likely to be found in agricultural fields.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA: SSC</td>
<td>sprouting grain fields, and sometimes in sod farms. Prefers short</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>vegetation or bare ground with flat topography, particularly</td>
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<td>grazed areas or areas with fossorial rodents.</td>
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<tr>
<td>Corynorhinus townsendii</td>
<td>Townsend's big-</td>
<td>Fed: None</td>
<td>This species uses a variety of habitats, almost always near coves,</td>
<td>No</td>
<td>Low. There is marginal foraging habitat, and it may forage within the biological study area. There is no roosting habitat.</td>
</tr>
<tr>
<td></td>
<td>eared bat</td>
<td>CA: CTHR, SSC</td>
<td>cliffs, rock ledges, or other roosting areas. They can be found in</td>
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<td>pine forest and arid desert scrub habitats. This species prefers large</td>
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<td>open areas for roosting and do not tuck themselves into cracks or</td>
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<td></td>
<td>crevices. Extremely sensitive to human disturbance.</td>
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</tr>
<tr>
<td>Falco columbarius</td>
<td>merlin</td>
<td>Fed: None</td>
<td>Nest in forested openings, edges, and along rivers across northern</td>
<td>No</td>
<td>Moderate. May forage over the site but does not nest in this region.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CA: WL</td>
<td>North America. Found in open forests, grasslands, and especially</td>
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<td></td>
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<td>coastal areas with flocks of small songbirds or shorebirds.</td>
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</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
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</tr>
<tr>
<td><em>Gopherus agassizii</em></td>
<td>desert tortoise</td>
<td>Fed: THR</td>
<td>Widely distributed in the Mojave, Sonoran, and Colorado deserts from below sea level to 7,220 feet. Most common in desert scrub, desert wash, and Joshua tree habitats, but occurs in almost every desert habitat except those on the most precipitous slopes.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Burrows capable of supporting this species were not found within the BSA.</td>
</tr>
<tr>
<td><em>Gymnogyps californianus</em></td>
<td>California condor</td>
<td>Fed: END</td>
<td>Requires vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Nests in caves on cliff faces and forages up to 100 miles from its roost/nest.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. This species is most likely to be found in the surrounding mountains.</td>
</tr>
<tr>
<td><em>Lanius ludovicianus</em></td>
<td>loggerhead shrike</td>
<td>Fed: None</td>
<td>Often found in broken woodlands, shrublands, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats.</td>
<td>Yes</td>
<td>Present. This species was observed in several locations in the BSA during the field survey.</td>
</tr>
<tr>
<td><em>Phrynosoma blainvillii</em></td>
<td>coast horned lizard</td>
<td>Fed: None</td>
<td>Occurs in a wide variety of vegetation types including coastal sage scrub, annual grassland, chaparral, oak woodland, riparian woodland and coniferous forest. In inland areas, this species is restricted to areas with pockets of open microhabitat, created by disturbance (i.e. fire, floods, roads, grazing, fire breaks). The key elements of such habitats are loose, fine soils with a high sand fraction; an abundance of native ants or other insects; and open areas with limited overstory for basking and low, but relatively dense shrubs for refuge.</td>
<td>No</td>
<td>Moderate. The entire biological study area represents suitable habitat.</td>
</tr>
<tr>
<td><em>Plegadis chihi</em></td>
<td>white-faced ibis</td>
<td>Fed: None</td>
<td>Prefers to feed in fresh emergent wetland, shallow lacustrine waters, muddy ground of wet meadows, and irrigated or flooded pastures and croplands. Nests in dense, fresh emergent wetland.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. Locally this species is most likely to occur at Piute Ponds, Apollo Community Park, and other irrigated fields.</td>
</tr>
</tbody>
</table>
### Appendix D – Potentially Occurring Special-Status Biological Resources

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Vireo bellii pusillus</strong></td>
<td>least Bell’s vireo</td>
<td>Fed: END</td>
<td>Primarily occupy Riverine riparian habitat that typically feature dense cover within 1 - 2 meters of the ground and a dense, stratified canopy. Typically it is associated with southern willow scrub, cottonwood-willow forest, mule fat scrub, sycamore alluvial woodlands, coast live oak riparian forest, arroyo willow riparian forest, or mesquite in desert localities. It uses habitat which is limited to the immediate vicinity of water courses, 2,000 feet elevation in the interior.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat on-site. This species is rare on this side of the mountains and there are very few records.</td>
</tr>
<tr>
<td><strong>Xerospermophilus mohavensis</strong></td>
<td>Mohave ground squirrel</td>
<td>Fed: None</td>
<td>Optimal habitats are open desert scrub, alkali desert scrub, and Joshua tree woodland. Prefers flat or moderately sloping terrain, and is not typically found in steep areas or rocky areas. It is not known to inhabit desert pavement habitat.</td>
<td>No</td>
<td>Low. While there is suitable habitat throughout the BSA, there are no known extant records of this species for this general area anymore.</td>
</tr>
</tbody>
</table>

### SPECIAL-STATUS PLANT SPECIES

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Status</th>
<th>Habitat</th>
<th>Observed On-site</th>
<th>Potential to Occur</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Astragalus preussii var. laxiflorus</strong></td>
<td>Lancaster milk-vetch</td>
<td>Fed: None</td>
<td>Grows in chenopod scrub and is only found in the area surrounding Lancaster and Edwards Air Force Base. Found at approximately 2297 feet in elevation. Blooming period is from March to May.</td>
<td>No</td>
<td>Moderate. There is suitable habitat throughout the biological study area.</td>
</tr>
<tr>
<td><strong>Calochortus striatus</strong></td>
<td>alkali mariposa lily</td>
<td>Fed: None</td>
<td>Found in chaparral, chenopod scrub, Mojavean desert scrub, and meadows and seeps in alkaline and mesic soils. Found at elevations ranging from 230 to 5,233 feet. Blooming period is from April to June.</td>
<td>Yes - during the April 2015 rare plant survey conducted by GPA Consulting</td>
<td>High. This species was documented within the biological study area in 2015 by GPA Consulting but was not observed in 2016.</td>
</tr>
<tr>
<td><strong>Canbya candida</strong></td>
<td>white pygmy-poppy</td>
<td>Fed: None</td>
<td>Occurs on gravelly, sandy, granitic soils in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. Grows in elevation from 2,297 to 5,249 feet. Bloom period is from March to June.</td>
<td>No</td>
<td>Moderate. There is suitable habitat throughout the biological study area.</td>
</tr>
<tr>
<td><strong>Chorizanthe parryi var. parryi</strong></td>
<td>Parry’s spineflower</td>
<td>Fed: None</td>
<td>Occurs on sandy and/or rocky soils in chaparral, coastal sage scrub, and sandy openings within alluvial washes and margins. Found at elevations ranging from 951 to 3,773 feet. Blooming period is from April to June.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat.</td>
</tr>
<tr>
<td>Scientific Name</td>
<td>Common Name</td>
<td>Status</td>
<td>Habitat</td>
<td>Observed On-site</td>
<td>Potential to Occur</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------</td>
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</tr>
<tr>
<td><em>Cymopterus deserticola</em></td>
<td>desert cymopterus</td>
<td>Fed: None</td>
<td>Occurs in Joshua tree woodland and Mojavean desert scrub in sandy soils. Found at elevations ranging from 2,067 to 4,921 feet. Blooming period is from March to May.</td>
<td>No</td>
<td>Moderate. There is suitable habitat throughout the biological study area.</td>
</tr>
<tr>
<td><em>Eriastrum rosamondense</em></td>
<td>Rosamond eriastrum</td>
<td>Fed: None</td>
<td>Found in openings in chenopod scrub and at the edges of vernal pools, usually in sandy, alkaline hummocks. Found at elevations ranging from 2,297 to 2,346 feet. Blooming period is from April to July.</td>
<td>No</td>
<td>Moderate. This species was documented immediately east of the biological study area in 1993 but was not observed in 2016.</td>
</tr>
<tr>
<td><em>Eriophyllum mohavense</em></td>
<td>Barstow woolly sunflower</td>
<td>Fed: None</td>
<td>Grows in chenopod scrub, Mojavean desert scrub, and in playas. Found at elevations ranging from 1,640 to 3,150 feet. Blooming period is from March to May.</td>
<td>No</td>
<td>Moderate. There is suitable habitat throughout the biological study area.</td>
</tr>
<tr>
<td><em>Loeflingia squarrosa var. artemisiarum</em></td>
<td>sagebrush loeflingia</td>
<td>Fed: None</td>
<td>Grows in sandy soils in desert dunes, Great Basin scrub, and Sonoran desert scrub. Found at elevations ranging from 2,297 to 5,299 feet. Blooming period is from April to May.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat.</td>
</tr>
<tr>
<td><em>Puccinellia simplex</em></td>
<td>California alkali grass</td>
<td>Fed: None</td>
<td>Occurs in chenopod scrub, meadows and seeps, valley and foothill grassland, and vernal pools in alkaline, vernaally mesic soils, as well as in sinks, flats, and on lake margins. Found at elevations ranging from 7 to 3,051 feet. Blooming period is from March to May.</td>
<td>No</td>
<td>Presumed absent. There is no suitable habitat.</td>
</tr>
</tbody>
</table>

**Threat Ranks**

- **0.1** - Seriously threatened in California
- **0.2** - Moderately threatened in California
Appendix E:
Technical Studies
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Technical Studies

The following studies were prepared for this environmental document:


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