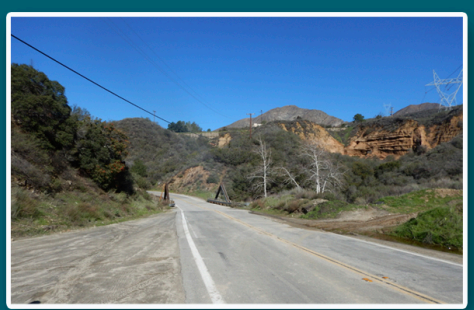
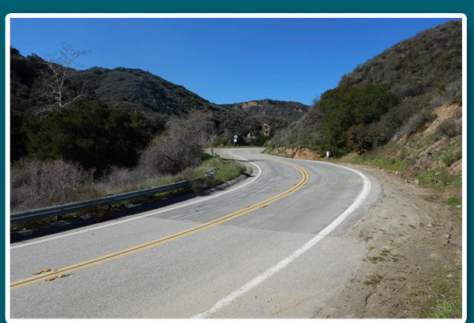
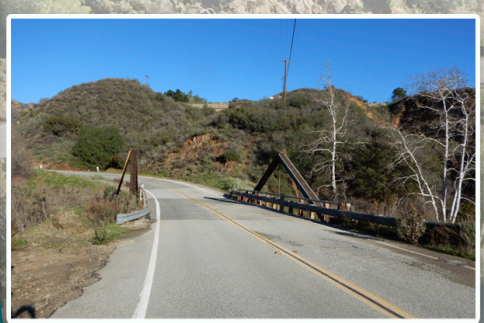
Public Review | April 2019

Little Tujunga Canyon Road over Buck Canyon Bridge Replacement

INITIAL STUDY / MITIGATED NEGATIVE DECLARATION







Prepared for:
County of Los Angeles
Department of Public Works

Prepared by:
Michael Baker
INTERNATIONAL

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PUBLIC REVIEW
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Little Tujunga Canyon Road over Buck Canyon Bridge Replacement

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April 2019

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1.0 INTRODUCTION

The proposed Little Tujunga Canyon Road over Buck Canyon Bridge Replacement (herein referenced as the "project") involves the replacement of the existing Little Tujunga Canyon Road Bridge over Buck Canyon Creek with an improved bridge structure within unincorporated Los Angeles County. Following a preliminary review of the proposed project, the County of Los Angeles, Public Works (County) has determined that it is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the direct, indirect, and cumulative environmental effects of the project, as proposed.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with Sections 15051 and 15367 of the California Code of Regulations (CCR), the County is identified as the Lead Agency for the proposed project. Under the CEQA (Public Resources Code Section 21000-21177) and pursuant to Section 15063 of the CCR, the County is required to undertake the preparation of an Initial Study to determine if the proposed project would have a significant environmental impact. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that any aspect of the project may cause a significant environmental effect, the Lead Agency shall further find that an Environmental Impact Report (EIR) is warranted to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall find that the proposed project would not have a significant effect on the environment and shall prepare a Negative Declaration. Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such impacts may occur (Section 21080(c), Public Resources Code).

The environmental documentation, which is ultimately selected by the County in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the project. The resulting documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required.

The environmental documentation and supporting analysis is subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to the County. Following review of any comments received, the County will consider these comments as a part of the project's environmental review and include them with the Initial Study documentation for consideration by the County.

1.2 PURPOSE

Section 15063 of the CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study shall include:

- A description of the project, including the location of the project;
- Identification of the environmental setting;
- Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
- Discussion of ways to mitigate significant effects identified, if any;
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study.

1.3 CONSULTATION

As soon as the Lead Agency (in this case, the County) has determined that an Initial Study would be required for the project, the Lead Agency is directed to consult informally with all Responsible Agencies and Trustee Agencies that are responsible for resources affected by the project, in order to obtain the recommendations of those agencies as to whether an EIR or Negative Declaration should be prepared for the project. Following receipt of any written comments from those agencies, the Lead Agency considers any recommendations of those agencies in the formulation of the preliminary findings. Following completion of this Initial Study, the Lead Agency initiates formal consultation with these and other governmental agencies as required under CEQA and its implementing guidelines.

1.4 INCORPORATION BY REFERENCE

The following documents were utilized during preparation of this Initial Study, and are incorporated into this document by reference. These documents are available for review at the County of Los Angeles Department of Regional Planning located at 320 West Temple Street, Los Angeles, California, 90012.

- *County of Los Angeles General Plan 2035* (adopted on October 6, 2015). The *County of Los Angeles General Plan 2035* (*General Plan*) provides the policy framework and establishes the long-range vision for how and where the unincorporated areas will grow, and establishes goals, policies, and programs to foster healthy, livable, and sustainable communities. It serves as a tool and frame of reference for use by County officials and citizens. Other public agencies use the *General Plan* in determining the required capacity and location of public facilities and services needed to serve the County's population. The *General Plan* includes a total of 10 different elements that incorporate specific goals and policies to guide growth and preserve the qualities within the County that define the natural and built environment. These nine elements consist of:

  - Land Use Element;
  - Mobility Element;
  - Air Quality Element;
  - Conservation and Natural Resources Element;
  - Parks and Recreation Element;
  - Noise Element;
  - Safety Element;
  - Public Services and Facilities Element;
  - Economic Development Element; and
  - Housing Element.

  The elements contained in the *General Plan* are those required by the California Government Code Section 65302, in addition to four optional elements (Air Quality, Public Services and Facilities, Park and Recreation, and Economic Development) as permitted by California Government Code Section 65303. The *General Plan* is the foundational document for all community based plans that serve the unincorporated areas. The *General Plan* identifies 11 Area Plans. The purpose of the Planning Areas Framework is to provide a mechanism for local communities to work with the County to develop plans that respond to their unique and diverse character.

- *County of Los Angeles General Plan Final Environmental Impact Report* (March 2015). The *County of Los Angeles General Plan Final Environmental Impact Report* (*General Plan EIR*) reviews the existing conditions of the County, analyzes potential environmental impacts from implementation of the *General Plan*, identifies policies from the proposed *General Plan* that serve to reduce and minimize impacts, and identifies additional mitigation measures, if necessary, to reduce potentially significant impacts of the *General Plan*. Based on analysis provided within the *General Plan EIR*, buildout of the *General Plan* was found to result in significant and unavoidable impacts related to agriculture and forestry resources, air quality, biological resources, cultural

resources, greenhouse gas emissions, mineral resources, noise, transportation/traffic, and utilities and service systems.

- *County of Los Angeles Municipal Code and Zoning Ordinance*. The *County of Los Angeles Municipal Code* provides regulations for governmental operations, development, infrastructure, public safety, and business operations within the County. Title 22, Planning and Zoning, of the *County of Los Angeles Municipal Code* represents the County's *Zoning Ordinance*. The *Zoning Ordinance* is intended to promote the growth of the County in an orderly manner and to promote and protect the public health, safety, peace, comfort and general welfare within the County. The *Zoning Ordinance* promotes compatibility between the natural and built environment and ensures compatibility with corresponding *General Plan* land use designations and intensities. It also promotes the development of a safe, effective circulation and transportation network that accommodates the needs of all modes of transportation.

- *Antelope Valley Area Plan* (June 2015). The *Antelope Valley Area Plan* is a component of the County *General Plan* that refines the countywide goals and policies in the *General Plan* by addressing specific issues relevant to the Antelope Valley, such as community maintenance and appearance, and provides more specific guidance on elements already found in the *General Plan.* The Antelope Valley planning area is bounded by the Kern County border to the north, the Ventura County border to the west, the Angeles National Forest (inclusive) to the south, and the San Bernardino County border to the east. This area covers approximately 1,800 square miles and includes over two dozen communities (excluding the Cities of Lancaster and Palmdale). The Area Plan is a blueprint for future development and conservation in the Antelope Valley that informs decision-making at all levels to help ensure that individual activities are consistent with, and supportive of, the communities' vision.

- *United States Forest Service (USFS) Land Management Plan, Part 2 – Angeles National Forest Strategy* (September 2005). The *USFS Land Management Plan, Part 2 – Angeles National Forest Strategy (Land Management Plan)* is the second part of the three-part (vision, strategy and design criteria) land and resource management plan for the Angeles National Forest. The *Land Management Plan* provides the strategic direction and program emphasis objectives that are expected to result in the sustainability (social, economic and ecological) of the national forest and, over the long-term, the maintenance of a healthy forest. The legislative mandate for the management of national forests requires that public lands be conservatively used and managed in order to ensure their sustainability and to guarantee that future generations will continue to benefit from their many values.

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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

Regionally, the project site is located in the San Gabriel Mountains of the Angeles National Forest, in an unincorporated portion of central Los Angeles County; refer to Exhibit 2-1, *Regional Vicinity*. Locally, the project site is located approximately 4 miles north of the Foothill Freeway (Interstate 210 [I-210]), approximately 4.7 miles northeast of the Pacoima neighborhood in the City of Los Angeles, and 3 miles east of the community of Sylmar; refer to Exhibit 2-2, *Site Vicinity*.

2.2 ENVIRONMENTAL SETTING

The proposed project area is located within the natural setting of the Angeles National Forest. The immediate surrounding area is generally undeveloped; development is limited to roadways and a few rural neighborhoods approximately 0.25 miles to the northwest, as well as the Wildlife Waystation to the north which consists of an animal sanctuary within a small rural area. There is a Southern California Edison (SCE) lattice tower staging area (tower pad) in the northeastern portion of the project area, the tower supporting an electric transmission line that spans the eastern portion of the project area.

The existing bridge runs generally from south to north and spans across Buck Canyon Creek. There are no existing bicycle or pedestrian lanes on Little Tujunga Canyon Road within the project limits.

Buck Canyon Creek runs through the center of the project site underneath Little Tujunga Canyon Road, and is an earthen, ephemeral drainage feature (with the exception of the Little Tujunga Canyon Road bridge/abutments and a concrete apron energy dissipater downstream of the bridge). It conveys storm flows in a generally northwest to southeast direction, originating over two miles to the west, through patches of riparian corridors.

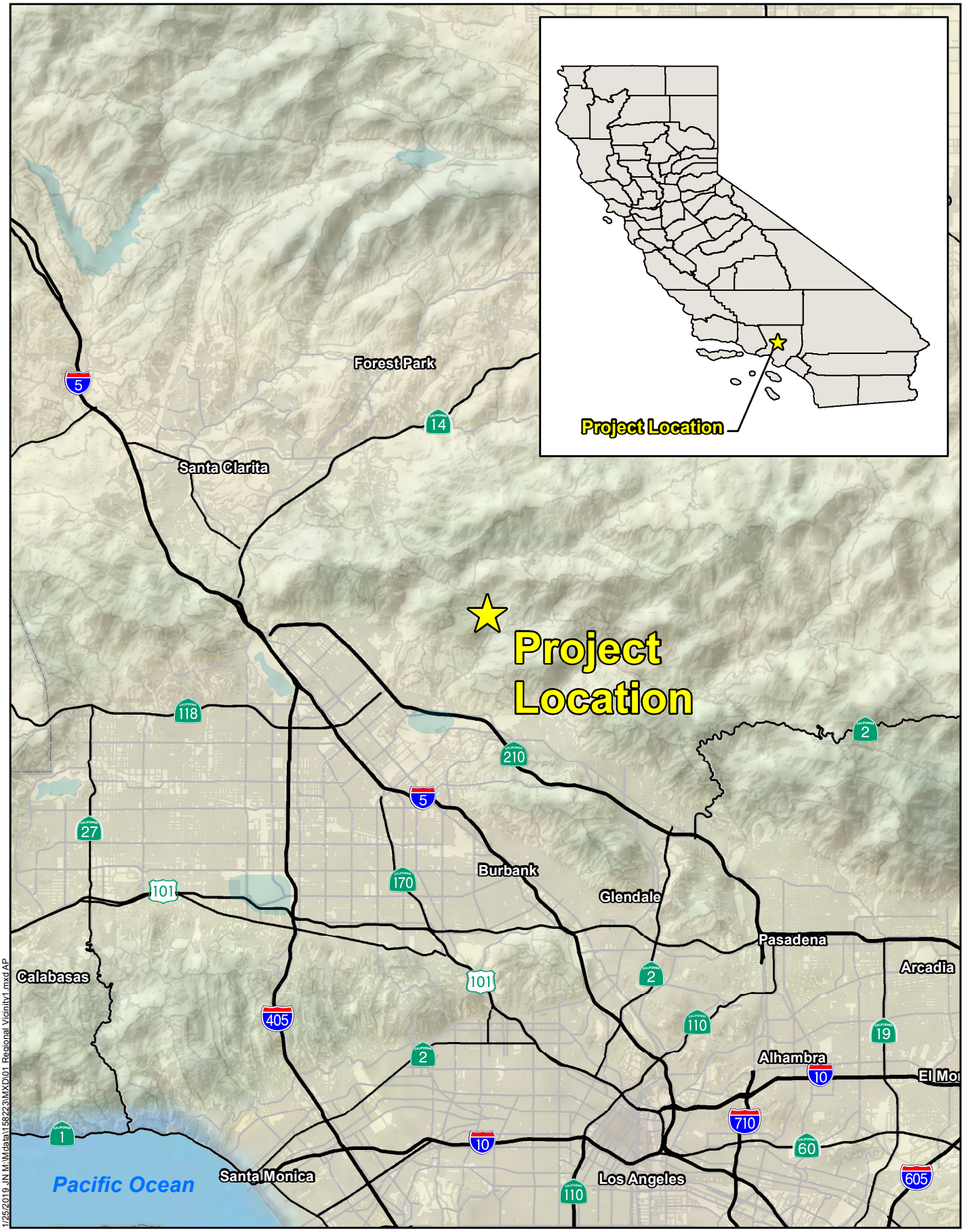
The area surrounding the project site is generally undeveloped and consists mainly of open space within the Angeles National Forest. Surrounding uses in proximity to the project site include:

- Open space (Angeles National Forest) to the south;
- Open space (Angeles National Forest), rural neighborhood, and the Wildlife Waystation to the north;
- Open space and Buck Canyon Creek to the west; and
- Open space and Buck Canyon Creek to the east.

2.3 EXISTING GENERAL PLAN AND ZONING

Little Tujunga Canyon Road is designated "Limited Secondary Highway" by the *Los Angeles County General Plan 2035* (General Plan) *Mobility Element*, Figure 7.3, "Highway Plan Policy Map." The bridge is listed as Bridge No. 0592 in the Los Angeles County bridge inventory.

As a roadway facility, Little Tujunga Canyon Road does not have a land use designation under the *General Plan* or a zoning designation under the *Antelope Valley Area Plan* Zoning Map. However, *General Plan* land use designations within and adjacent to the project area include RL-10 (Rural Land 1 dwelling unit [du]/10 gross acres [ac]) and OS-NF (Open Space National Forest), as shown on *General Plan* Figure 5.1 (adopted by the LA County Board of Supervisors on June 16, 2015). In addition, the project site is located within the boundaries of the *Antelope Valley Area Plan* (June 2015). The land use designation of the project area is OS-NF (Open Space National Forest), as shown on *Antelope Valley Area Plan* Map 2.1, and the zoning designation is W (Watershed), as shown on the *Antelope Valley Area Plan* Zoning Map.



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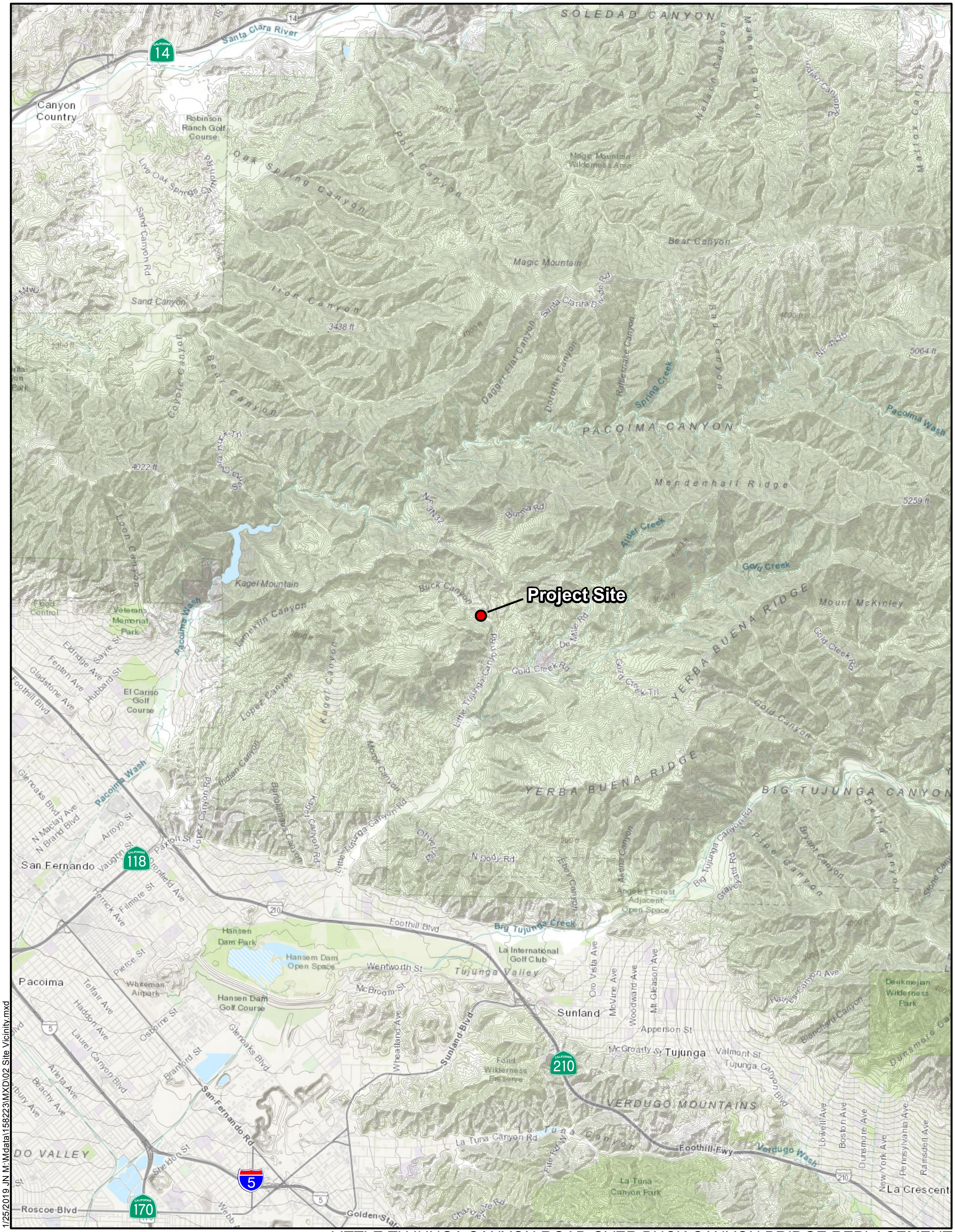
Source: ESRI Relief Map, National Highway Planning Network

LITTLE TUJUNGA CANYON ROAD OVER BUCK CANYON BRIDGE REPLACEMENT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Regional Vicinity

Exhibit 1



1/25/2019 JN M:\Mdata\158223\MXD\02 Site Vicinity.mxd

LITTLE TUJUNGA CANYON ROAD OVER BUCK CANYON BRIDGE REPLACEMENT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Site Vicinity

Michael Baker INTERNATIONAL

0 1 2 Miles

Source: San Bernardino County, ESRI USA Topographic Basemap, USGS

Exhibit 2-2

In addition, the project is located within the boundaries of the Los Angeles River District of the Angeles National Forest (forest). According to the planning document that guides projects within the forest, the *Land Management Plan, Part 2 Angeles National Forest Strategy* (LMP) (September 20, 2005), both the proposed project area's designated LMP Land Use Zone and designated LMP Place is "Back Country." In addition, Little Tujunga Canyon Road is identified within the LMP as one of the forest's "Designated Transportation Corridors."

2.4 PROJECT BACKGROUND

The County of Los Angeles has proposed the Little Tujunga Canyon Road over Buck Canyon Bridge Replacement Project in order to meet current bridge design standards, and improve the safety for pedestrians, bicyclists, and vehicle users in the project area. The existing Little Tujunga Canyon Road Bridge structure was built in 1928, and has undergone one widening in 1959. It is a timber A-frame bridge supported by timber pile abutments and substandard travel lanes (a 12-foot lane and 1-foot shoulder in each direction). The existing bridge is classified as functionally obsolete and 16-ton trucks and greater are prohibited from traveling on the bridge. The proposed project would replace the existing bridge with a new bridge to meet current engineering standards, improving safety for all users of the bridge in the area.

2.5 PROJECT CHARACTERISTICS

BRIDGE REPLACEMENT

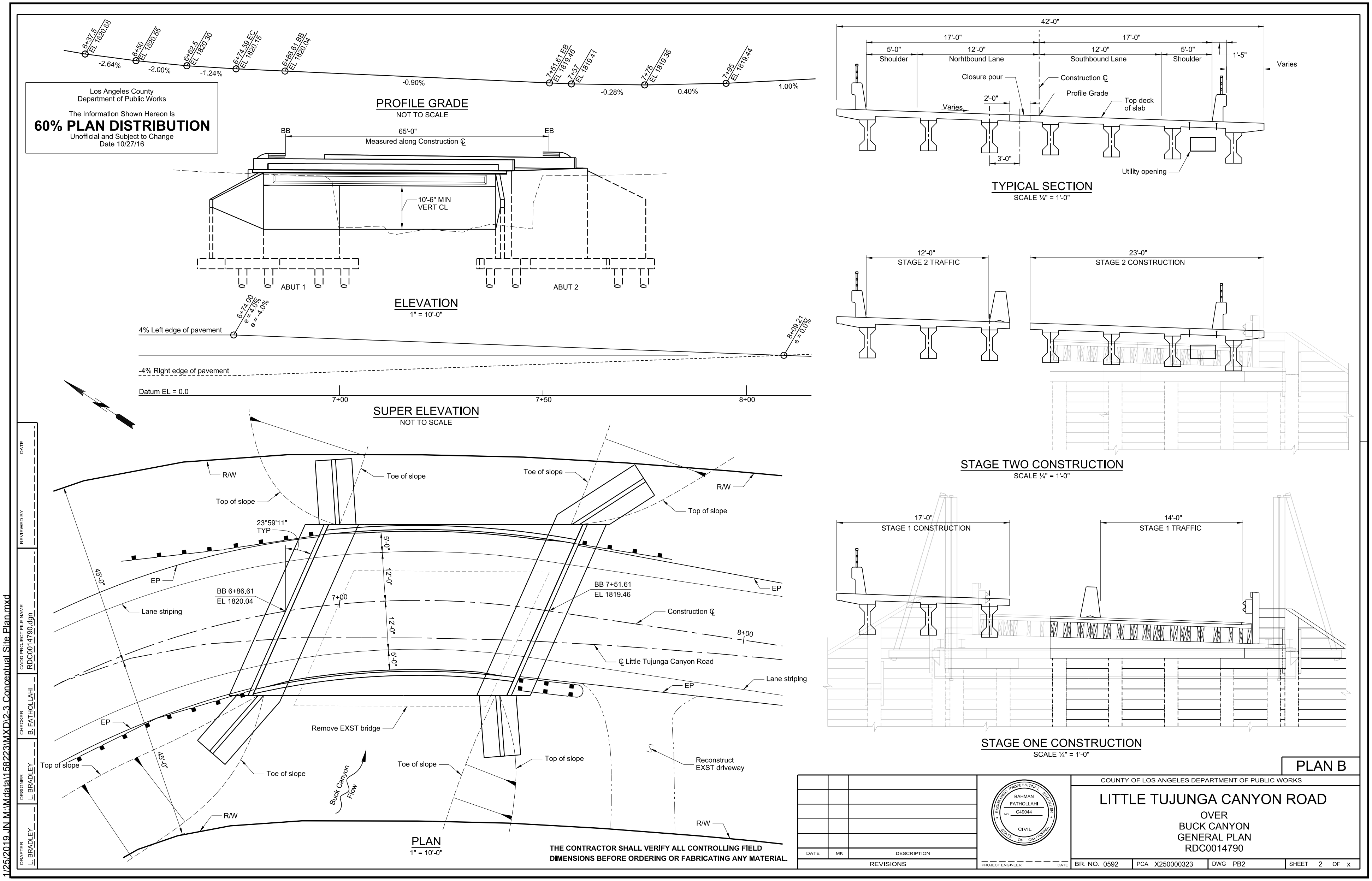
The proposed project would implement the replacement of the existing bridge and reconstruction of the adjacent roadway to improve operations and safety in the project area. The new bridge would be a 65-foot-long, 42-foot-wide single-span precast, pre-stressed concrete I-girder structure supported by abutments on deep pile foundations across Buck Canyon Creek. The new bridge would consist of a 12-foot lane and 5-foot shoulder in each direction. Concrete barriers with tubular handrails would be installed on both sides of the bridge. New wingwalls would be constructed; the top of the new concrete deck is expected to be approximately one foot above the existing deck.

The project would also include approximately 385 feet of roadway reconstruction, including approximately 235 feet on the north side of the bridge and 150 feet on the south side of the bridge. The reconstructed roadway width would vary from the existing 26 feet to 34 feet, in order to accommodate the new travel lane and shoulder widths on the bridge. Metal beam guardrails would be installed at the approach corners.

Refer to Exhibit 2-3, *Conceptual Site Plan*, and Exhibit 2-4, *Impact Area Map*. These improvements would address existing deficiencies, improve safety, and implement improvements consistent with goals and policies contained within the *County of Los Angeles General Plan Mobility Element,* the *Antelope Valley Area Plan,* and the *Angeles National Forest Land Management Plan.*

UTILITIES

Existing utilities would not require relocation as part of the proposed project improvements. There is a Southern California Edison (SCE) lattice tower staging area (tower pad) in the northeastern portion of the project area. The tower supports an electric transmission line, as well as a Verizon phone line, that spans the eastern portion of the project area. These utilities would be protected-in-place during project construction, and the County would coordinate with SCE to conduct short term de-energization in order to protect the deep pile drill rig equipment from potential contact with the nearby power lines during drilling operations.



LITTLE TUJUNGA CANYON ROAD OVER BUCK CANYON BRIDGE REPLACEMENT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Conceptual Site Plan

Not to Scale

Source: County of Los Angeles Public Works

Exhibit 2-3

LITTLE TUJUNGA CANYON ROAD OVER BUCK CANYON BRIDGE REPLACEMENT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

Michael Baker INTERNATIONAL

Not to Scale

Impact Area Map

Exhibit 2-4

LANDSCAPING

There is no existing manmade landscaping within the project area, since the project area consists of predominately open space associated with the surrounding Angeles National Forest. Vegetation in the project area includes several natural plant communities, as well as disturbed habitat and developed areas associated with the rural and animal sanctuary land uses located to the north of the project site. In addition, the Buck Canyon Creek is a freshwater forested/shrub wetland feature which conveys flows generally northwest to southeast through the center of the project site, underneath Little Tujunga Canyon Road, with tributaries and areas further upstream and downstream of Buck Canyon Creek described as riverine. Therefore, the proposed improvements may require removal of natural vegetation for construction of bridge improvements. No trees would be removed as part of project implementation.

RIGHT-OF-WAY

The existing roadway is located within County of Los Angeles and Caltrans roadway right-of-way (ROW). The proposed roadway improvements would not require the acquisition of any ROW in the project area. However, small portions of the new wingwalls would be constructed outside of the existing U.S. Forest Service (USFS) Special Use Permit. Currently, the USFS is working to amend the existing permit to accommodate the new wingwalls.

HAZARDOUS MATERIALS

A *Limited Hazardous Materials Survey* (November 14, 2017) was prepared for the proposed project, which includes the results of a field survey for asbestos, lead-based paint, and treated wood waste. The survey identified the presence of lead surface coatings and asbestos containing materials within the existing bridge structure. In addition, the existing timber to be removed from the bridge structure is categorized as treated wood waste.

2.6 PHASING

The project would be constructed in two phases in order to keep the bridge open to the public throughout the construction period. It should be noted that construction access to the project site would occur from points within the project footprint. Phase 1 construction would occur at the east side of the existing bridge, and one-way traffic would be maintained on the west side of the bridge. Phase 2 construction would occur at the west side and one-way traffic would be maintained on the east side of the bridge. Typical construction activities for each phase would consist of:

- Mobilization;
- Clear and Grub;
- Traffic Control;
- Install Temporary Shoring;
- Bridge Removal;
- Excavation;
- Cast in drilled hole (CIDH) Pile Installation;
- Substructure Construction (pile caps, abutments, wingwalls, backwall); and
- Superstructure Construction.

Construction is anticipated to begin in Spring 2020 and would conclude in Fall 2020. No nighttime construction would be required.

2.7 PERMITS AND APPROVALS

The proposed project would require permits and approvals from the County of Los Angeles, USFS, and other agencies prior to construction. These permits and approvals are described below and may change as the project proceeds.

County of Los Angeles
- California Environmental Quality Act (CEQA) Clearance

Los Angeles Regional Water Quality Control Board (RWQCB)
- Section 401 Water Quality Certification

California Department of Transportation (Caltrans)
- Encroachment Permit

California Department of Fish and Wildlife (CDFW)
- California Fish and Game Code Section 1602 Streambed Alteration Agreement

U.S. Forest Service (USFS)
- Special Use Permit Amendment

U.S. Army Corps of Engineers (ACOE)
- Clean Water Act Section 404 Nationwide Permit 14 – *Linear Transportation Projects*

3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1.	**Project Title:** Little Tujunga Canyon Road over Buck Canyon Bridge Replacement
2.	**Lead Agency Name and Address:** County of Los Angeles Department of Public Works 900 S. Fremont Street Alhambra, CA 91803
3.	**Contact Person and Phone Number:** Ebigalle Voigt, Senior Civil Engineering Assistant 626/458-3967 County of Los Angeles Department of Public Works
4.	**Project Location:** Regionally, the project site is located in the San Gabriel Mountains of the Angeles National Forest, in an unincorporated portion of central Los Angeles County. Locally, the project site is located approximately 4 miles north of the Foothill Freeway (Interstate 210 [I-210]), approximately 4.7 miles northeast of the Pacoima neighborhood in the City of Los Angeles, and approximately 3 miles east of the community of Sylmar.
5.	**Project Sponsor's Name and Address:** County of Los Angeles Department of Public Works 900 S. Fremont Street Alhambra, CA 91803
6.	**General Plan Designation:** Little Tujunga Canyon Road is designated "Limited Secondary Highway" by the *Los Angeles County General Plan 2035* (General Plan) *Mobility Element.* The project site is located within the boundaries of the Antelope Valley Area Plan of the *General Plan,* as shown on *General Plan* Figure 5.1, "Planning Areas Framework." The land use designations within and adjacent to the project area include RL-10 (Rural Land 1 dwelling unit [du]/10 gross acres [ac]) and OS-NF (Open Space National Forest), as shown on the *Antelope Valley Area Plan* Land Use Map.
7.	**Zoning:** As roadway facility, Little Tujunga Canyon Road does not have a designation under the *County of Los Angeles Development Code.* However, the zoning designation for the project area is W (Watershed), as shown on the *Antelope Valley Area Plan* Zoning Map.
8.	**Description of the Project:** The proposed project would replace the existing bridge and construct roadway improvements to improve operations in the project area. These improvements would address existing deficiencies and implement improvements consistent with the *General Plan Mobility Element*. Additional details regarding the project are provided in Section 2.5, *Project Characteristics*.

9.	**Surrounding Land Uses and Setting:** • Open space (Angeles National Forest) to the south; • Open space (Angeles National Forest), rural neighborhood, and the Wildlife Waystation to the north; • Open space and Buck Canyon Creek to the west; and • Open space and Buck Canyon Creek to the east.
10.	**Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).** Refer to Section 2.7, *Permits and Approvals*, for a description of the range of local, regional, and State approvals anticipated to be required for the project. Additional approvals may be required as the project entitlement process moves forward.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant Impact with Mitigation Incorporated," as indicated by the checklist on the following pages.

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

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

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

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines* and used by the County of Los Angeles in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- *No Impact*. The development will not have any measurable environmental impact on the environment.
- *Less Than Significant Impact*. The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.
- *Less Than Significant Impact With Mitigation Incorporated*. The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.
- *Potentially Significant Impact*. The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

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4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study/Environmental Checklist. Explanations are provided for each item.

4.1 AESTHETICS

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

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

Less Than Significant Impact. The proposed project site is located within an area that is designated as a scenic resource, the Angeles National Forest, within both the County's *General Plan* and the *Antelope Valley Area Plan.* In addition, according to the *Land Management Plan, Part 2 Angeles National Forest Strategy* (LMP) (September 20, 2005), the project area is designated as having high scenic integrity on the LMP Scenic Integrity Objectives Map.

The project site is relatively undeveloped, with the exception of Little Tujunga Canyon Road, several residences located approximately 0.25 miles to the northwest, and the Wildlife Waystation to the north which consists of an animal sanctuary. In addition, according to the Figure 4.2 of the *Antelope Valley Area Plan's*, "Scenic Drives Map," Little Tujunga Road is identified as a Scenic Drive route.

The proposed project would involve roadway improvements on Little Tujunga Canyon Road by replacing the existing bridge over Buck Canyon Creek. The project would not result in any impacts to views of the surrounding Angeles National Forest, nor would the project affect the designation of Little Tujunga Canyon Road as an identified Scenic Drive route. In addition, the project would not include the development of any structures that would substantially alter views associated with any scenic vista. The existing A-frame bridge is substantially taller and more visually prominent than the proposed bridge. As such, the proposed bridge replacement would result in beneficial visual impacts in the project area in regards to scale and visual massing.

The proposed improvements may require removal of natural vegetation for construction of bridge improvements; however, no trees would be removed as part of the project. Project implementation would not substantially alter the appearance of the landscape in the project area. The bridge replacement and proposed road improvements would be compatible with the existing aesthetic characteristics of the project area. Available views to and within the Angeles National Forest would remain. Little Tujunga Canyon Road would continue to function as a Scenic Drive route and retain its Scenic Drive designation. As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. There are no officially-designated State scenic highways within proximity to the project site.[1] The nearest Officially Designated State Scenic Highway is a stretch of State Route (SR) 210, the Foothill Freeway, located approximately 4 miles to the south. There are no Eligible State Scenic Highways (not officially designated) within proximity the project site. The proposed project would not affect scenic resources along SR-210.

As discussed in Impact 4.1a, above, Little Tujunga Road is identified as a Scenic Drive route, as shown on Figure 4.2 of the *Antelope Valley Area Plan's*, "Scenic Drives Map." However, the project is not anticipated to adversely impact views along Little Tujunga Road. The project involves replacement of an existing bridge, and would not include any new structures that would substantially alter views in the vicinity. The existing A-frame bridge is substantially taller and more visually prominent than the proposed bridge. As such, the proposed bridge replacement would result in beneficial visual impacts in the project area in regards to scale and visual massing. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact.

Short-Term Impacts

Short-term construction activities associated with the proposed project would temporarily impact the character/quality of the project site. Exposed surfaces, construction debris, equipment, and truck traffic would temporarily impact views from surrounding uses. The project would be completed in two phases to keep the bridge open to the public through construction. Phase 1 construction would occur at the east side of the existing bridge, and one-way traffic would be maintained on the west side. Phase 2 would construct the west side and one-way traffic would be maintained on the east side. The construction process is anticipated to begin in Spring 2020 and conclude in Fall 2020.

Construction impacts may affect surrounding residential receptors, and travelers along Little Tujunga Canyon Road. Upon completion, the character/quality of the project area would appear similar to the existing condition. However, in order to minimize temporary impacts to the existing visual character or quality of the site and its surroundings during the construction process, the project plans and specifications would include the County's standardized Best Management Practices (BMPs). The BMPs would include provisions including, but not limited to, indicating the equipment and vehicle staging areas, stockpiling of materials, fencing (i.e., temporary security/screening fencing with opaque material). Staging areas would be screened from view from surrounding uses as feasible. Vehicles would be kept clean and free of mud and dust before leaving the project site, and surrounding streets would be swept as necessary such that they are maintained free of dirt and debris. With implementation of existing standardized County BMPs, construction-related impacts would be less than significant.

[1] California Department of Transportation website, http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, accessed January 23, 2019.

Long-Term Impacts

As discussed above, the project area is designated as having high scenic integrity on the LMP Scenic Integrity Objectives Map. As such, the project is subject to the following LMP landscape aesthetics strategy, provided to help achieve the desired conditions and goals described in the LMP:
LM 3 – Landscape Character: Maintain the character of key places to preserve their intact nature and valued attributes:

- Maintain the integrity of the expansive, unencumbered landscapes and traditional cultural features that provide the distinctive character of the place.
- Promote the planning and improvement of infrastructure along federal and state scenic travel routes.
- Promote the consideration of key landscape character in other landscape analyses such as Fireshed.

The proposed project would consist of replacement of the existing Little Tujunga Canyon Road over Buck Canyon Bridge. The project would not result in long-term impacts to any scenic resources, including the surrounding Angeles National Forest. Although Little Tujunga Canyon Road is identified as a scenic roadway, the project improvements to Little Tujunga Canyon Road would not substantially alter its appearance or function. Proposed improvements would appear similar to the existing Little Tujunga Canyon Road Bridge. Available views to surrounding areas would remain.

The proposed project involves a bridge replacement. The project would also include reconstruction of up to 235 feet of roadway on each side of the bridge. The reconstructed roadway width would vary from existing 26 feet to 34 feet to accommodate the new travel lane width on the bridge. Metal beam guardrails would be installed at the approach corners. These improvements are consistent with the existing visual character along Little Tujunga Canyon Road, and the project would not include any new land uses or structures that would substantially alter the aesthetic characteristics of the project area. The existing A-frame bridge is substantially taller and more visually prominent than the proposed bridge. As such, the proposed bridge replacement would result in beneficial visual impacts in the project area in regard to scale and visual massing. With implementation of the project, it is not expected that a substantial degradation of the visual character or quality would occur. Thus, long-term effects would be less than significant.

Mitigation Measures: No mitigation is required.

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 passes through windows, and light from exterior sources (i.e., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Light introduction can be a nuisance to adjacent uses and diminish the view of the clear night sky. Currently, light and glare in the project vicinity is produced mainly by vehicle headlights traveling on Little Tujunga Canyon Road. Due to the undeveloped nature of the project site and location in the Angeles National Forest, there is very little existing street lighting or lighting from the adjacent residential uses to the northwest of the site.

The project would not result in impacts related to light and glare during construction since no nighttime construction would occur. Therefore, short-term impacts in this regard would be less than significant.

The proposed project would not create a new source of light or glare during long-term operations. The proposed project would maintain the existing street lighting along Little Tujunga Canyon Road. Long-term lighting intensity would not be altered and no substantial increase in light or glare in the project area would occur, in comparison to existing conditions. Therefore, long-term impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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4.2 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:	**Potentially Significant Impact**	**Less Than Significant Impact With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?			✓	
d. Result in the loss of forest land or conversion of forest land to non-forest use?			✓	
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			✓	

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 proposed project site is located within the Angeles National Forest. No farmland exists within the site vicinity. In addition, based on the *Los Angeles County Important Farmland 2016 Map* prepared by the California Department of Conservation, the proposed project site does not occur upon any area designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.[1] Thus, no impacts would occur in this regard.

***Mitigation Measures*:** No mitigation is required.

[1] California Department of Conservation Farmland Mapping and Monitoring Program, *Los Angeles County Important Farmland 2016 Map*, accessed January 22, 2019.

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

No Impact. Existing land uses in the project area include RL-10 (Rural Land 1 dwelling unit [du]/10 gross acres [ac]) and OS-NF (Open Space National Forest). No agricultural uses exist within the site vicinity, nor do any Williamson Act contracts. Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Less Than Significant Impact. The proposed project is located within the Angeles National Forest. According to the *Natural Environment Study* (August 2018) that was prepared for the project, project construction would result in a temporary loss of 0.02-acre of oak riparian woodland. However, no permanent impacts to oak riparian woodland would occur. Therefore, there would be no permanent loss or conversion of forest land and a less than significant impact is anticipated.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Refer to Response 4.2(c), above. The project would result in a temporary loss of 0.02-acre of oak riparian woodland, however, no permanent loss or conversion of forest land would occur. Therefore, a less than significant impact is anticipated.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. As stated above in Responses 4.2(c) and 4.2(d), the project site occurs within an area that is void of agricultural resources; however, the project site is located within the Angeles National Forest. The project would not result in the permanent conversion of forest land to non-forest use, as described above. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

4.3 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:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✓	
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)?			✓	
d. Expose sensitive receptors to substantial pollutant concentrations?			✓	
e. Create objectionable odors affecting a substantial number of people?			✓	

REGULATORY FRAMEWORK

Federal Clean Air Act

The Federal Clean Air Act (FCAA) (1977 amendments - 42 USC 7401 *et. seq.*) states that the federal government is prohibited from engaging in, supporting, providing financial assistance for, licensing, permitting, or approving any activity that does not conform to an applicable State Implementation Plan (SIP). Federal actions relating to transportation plans, programs, and projects developed, funded, or approved under 23 USC of the Federal Transit Act (40 USC 1601 *et. seq.*) are covered under separate regulations for transportation conformity.

In the 1990 FCAA amendments, the U.S. Environmental Protection Agency (EPA) included provisions requiring federal agencies to ensure that actions undertaken in nonattainment or attainment-maintenance areas are consistent with applicable SIPs. The process of determining whether or not a federal action is consistent with an applicable SIP is called conformity.

California Clean Air Act

The California Air Resources Board (CARB) administers air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards are generally more stringent and apply to more pollutants than the National Ambient Air Quality Standards (NAAQS). 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.

South Coast Air Quality Management District

The 2016 Air Quality Management Plan (2016 AQMP) is a regional blueprint for achieving air quality standards and healthful air in the South Coast Air Basin (Basin) and those portions of the Salton Sea Air Basin (SSAB) that are under the South Coast Air Quality Management District's (SCAQMD's) jurisdiction. The 2016 AQMP represents a new

approach, focusing on available, proven, and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts is to reduce emissions from mobile sources. The AQMP relies on a regional and multi-level partnership of governmental agencies at the federal, state, regional, and local level. These agencies (EPA, CARB, local governments, Southern California Association of Governments [SCAG] and the SCAQMD) are the primary agencies that implement the AQMP programs. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's latest *Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The 2016 AQMP includes integrated strategies and measures to meet the NAAQS.

Air Quality Management

Pursuant to the FCAA, the EPA has established NAAQS for the following air pollutants: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$, respectively), and lead (Pb). These pollutants are referred to as criteria pollutants because numerical criteria have been established for each pollutant, which define acceptable levels of exposure. The EPA has revised the NAAQS several times since their original implementation and will continue to do so as the health effects of exposure to air pollution are better understood.

As previously stated, states with air quality that did not achieve the NAAQS were required to develop and maintain SIPs. These plans constitute a federally enforceable definition of the state's approach (or "plan") and schedule for the attainment of the NAAQS. Air quality management areas were designated as "attainment," "nonattainment," or "unclassified"[1] for individual pollutants depending on whether or not they achieve the applicable NAAQS and CAAQS for each pollutant. It is important to note that because the NAAQS and CAAQS differ in many cases, it is possible for an area to be designated attainment by the EPA (meets NAAQS) and nonattainment by CARB (does not meet CAAQS) for the same pollutant. The NAAQS and the CAAQS are summarized in Table 4.3-1, *National and California Ambient Air Quality Standards*.

Attainment Status

The Basin is an attainment area for CO, NO_2, and SO_2 for both state and federal standards. The Basin is a nonattainment area for O_3 and $PM_{2.5}$ under both state and federal standards. The Basin is nonattainment for PM_{10} under state standards and serious maintenance under federal standards; refer to Table 4.3-2, *South Coast Air Basin Air Quality Attainment Status*.

[1] According to the EPA, "attainment" is defined as any area that meets the national primary or secondary ambient air quality standard for the pollutant; "nonattainment" is defined as any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant; and "unclassified" is defined as any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant.

Table 4.3-1
National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 μg/m³)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 μg/m³)		0.070 ppm (137 μg/m³)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 μg/m³	Gravimetric or Beta Attenuation	150 μg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 μg/m³		--		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard		35 μg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 μg/m³	Gravimetric or Beta Attenuation	12.0 μg/m³	15 μg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	None	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		--	--	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 μg/m³)	Gas Phase Chemiluminescence	100 ppb (188 μg/m³)	Same as Primary Standard	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)		0.053 ppm (100 μg/m³)		
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 μg/m³)	Ultraviolet Fluorescence	75 ppb (196 μg/m³)	--	Ultraviolet Fluorescence; Spectrophotometry (ParaosaniSline Method)
	3 Hour	--		--	0.5 ppm (1300 μg/m³)	
	24 Hour	0.04 ppm (105 μg/m³)		0.14 ppm (for certain areas)	--	
	Annual Arithmetic Mean	--		0.30 ppm (for certain areas)	--	
Lead[12,13] (Pb)	30 Day Average	1.5 μg/m³	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 μg/m³	Same as Primary Standard	
	Rolling 3-Month Average[10]	--		0.15 μg/m³		
Visibility Reducing Particles[14]	8 Hour	Extinction coefficient of 0.23 per kilometer – visibility of ten miles or more (0.07 – 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24 Hour	25 μg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 μg/m³)	Gas Chromatography			

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM_{10}, $PM_{2.5}$, and visibility reducing particles, are values that are not to be exceeded. All other are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current Federal policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent procedure which can be shown to the satisfaction of CARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. CARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. National lead standard, rolling 3-month average: final rule signed October 15, 2008.
14. In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: California Air Resources Board, May 14, 2016.

Table 4.3-2
South Coast Air Basin Air Quality Attainment Status

Pollutant	State	Federal
Carbon Monoxide (CO)	Attainment	Attainment/Serious Maintenance
Ozone (O_3) (1-hour standard)	Nonattainment	Revoked June 2005
Ozone (O_3) (8-hour standard)	Nonattainment	Extreme Nonattainment
Nitrogen Dioxide (NO_2) (annual standard)	Attainment	Attainment/Maintenance
Sulfur Dioxide (SO_2)	Attainment	Unclassified/Attainment
Particulate Matter <10 microns (PM_{10})	Nonattainment	Attainment/Serious Maintenance[1, 2]
Particulate Matter <2.5 microns ($PM_{2.5}$)	Nonattainment	Moderate Nonattainment
Lead	Attainment	Attainment
Sulfates	Attainment	--
Hydrogen Sulfides	Unclassified	--
Vinyl Chloride	Attainment	--

Notes:
1. The U.S. EPA eliminated the annual PM_{10} standard in its final rule revision in October 2006.
2. The U.S. EPA redesignated the Basin as Attainment/Maintenance on July 26, 2013.

Sources:
1. California Air Resources Board, *Area Designations*, accessed May 30, 2017. (http://www.arb.ca.gov/desig/desig.htm); and
2. U.S. Environmental Protection Agency, *The Green Book Nonattainment Areas for Criteria Pollutants*, accessed May 30, 2017. (https://www.epa.gov/green-book).

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

Less Than Significant Impact. Consistency with the 2016 AQMP means that a project is consistent with the goals, objectives, and assumptions set forth in the 2016 AQMP that are designed to achieve Federal and State air quality standards. The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017 and incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy, and updated emission inventory methodologies for various source categories. According to the SCAQMD CEQA Air Quality Handbook, in order to determine consistency with the 2016 AQMP, two main criteria must be addressed:

- Whether the project would increase the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the 20016 AQMP; and

- Whether or not the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the 2016 AQMP.

As indicated in the operational analysis provided in Response 4.3.b, below, the proposed project would not exceed the SCAQMD's thresholds of significance. Therefore, the proposed project is consistent with the 2016 AQMP in this regard. The project site is designated as "Limited Secondary Highway" by the *Los Angeles County General Plan 2035* (General Plan) *Mobility Element*, Figure 7.3, "Highway Plan Policy Map." As a roadway facility, Little Tujunga Canyon Road does not have zoning designation. The proposed enhancements to the project site are consistent with these designations, and the project would not induce substantial population growth either directly or indirectly. Therefore, the proposed project is consistent with the 2016 AQMP and impacts would be less than significant in this regard.

Mitigation Measures: No mitigation is required.

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

***Less Than Significant Impact*.**

Short-Term (Construction) Emissions

Construction Emissions

Construction activities would involve earthwork, paving, and bridge/roadway construction. Construction of the proposed project is anticipated to commence in Spring 2020 and be completed by Fall 2020. Construction activities would involve approximately 2,900 cubic yards cut and approximately 1,200 cubic yards of fill. It is not known at this time if the earthwork would be balanced; therefore, this analysis conservatively assumes that the excess 1,700 cubic yards would be exported off-site. Table 4.3-3, *Construction Air Emissions*, depicts the construction emissions associated with the project. Emitted pollutants would include ROG, CO, NO_X, PM_{10}, and $PM_{2.5}$. The largest amount of ROG, CO, and NO_X emissions would occur during the earthwork phase. PM_{10} and $PM_{2.5}$ emissions would occur from fugitive dust (due to earthwork and excavation) and from construction equipment exhaust. The majority of PM_{10} and $PM_{2.5}$ emissions would be generated by fugitive dust from earthwork activities.

Table 4.3-3
Construction Air Emissions

Emissions Source	Pollutant (pounds/day)[1,2]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2019						
Unmitigated Emissions	2.43	22.74	15.65	0.03	5.44	3.2
Mitigated Emissions	2.43	22.74	15.65	0.03	2.53	1.63
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Is Threshold Exceeded After Mitigation?	***No***	***No***	***No***	***No***	***No***	***No***
2020						
Unmitigated Emissions	2.18	15.67	14.36	0.03	1.12	0.86
Mitigated Emissions	2.18	15.67	14.36	0.03	1.05	0.84
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*150*	*55*

Notes:
1. Emissions were calculated using California Emission Estimator Model (CalEEMod), as recommended by the South Coast Air Quality Management District (SCAQMD).
2. The reduction/credits for construction emission mitigations are based on mitigation included in the CalEEMod model and as typically required by the SCAQMD. The mitigation includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.
3. Refer to Appendix A, *Air Quality/Greenhouse Gas Data*, for assumptions used in this analysis.

As shown in Table 4.3-3, construction-related emissions would not exceed the established SCAQMD thresholds for criteria pollutants. During construction activities, the project would also be required to comply with standard SCAQMD regulations, such as Rule 403 (Dust Control), which requires that excessive fugitive dust emissions be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Compliance with SCAQMD Rules and Regulations would reduce short-term fugitive dust impacts on nearby sensitive receptors; therefore, a less than significant impact would occur upon adherence to existing SCAQMD requirements.

Long-Term (Operational) Emissions

The proposed project would not introduce any new buildings or uses that would increase the number of vehicle trips to the project area. The proposed bridge replacement project would not result in any increase in roadway capacity that could result in additional vehicular traffic along Little Tujunga Canyon Road, and thus would not result in significant mobile source emissions that would exceed SCAQMD thresholds. Additionally, the proposed improvements would not generate any long-term stationary source emissions. Therefore, the project would not result in any new operational emissions. No impacts would result in this regard.

Mitigation Measures: No mitigation is required.

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.

Cumulative Construction Impacts

With respect to the proposed project's construction-period air quality emissions and cumulative Basin-wide conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the 2016 AQMP pursuant to FCAA mandates. As such, the proposed project would comply with SCAQMD Rule 403 requirements, and standardized County Best Management Practices (BMPs) to ensure project-related emissions would not contribute to an exceedance of the State and Federal Ambient Air Quality Standards or further exacerbate concentrations of existing non-attainment pollutants (i.e., ozone and $PM_{2.5}$). Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the proposed project. In addition, the proposed project would comply with adopted 2016 AQMP emissions control measures. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects throughout the Basin, which would include related projects.

Compliance with SCAQMD rules and regulations and County BMPs would reduce the project's construction-related impacts to a less than significant level during construction. Thus, it can be reasonably inferred that the project-related construction emissions, in combination with those from other projects in the area, would not substantially deteriorate the local air quality. Thus, a less than significant cumulatively considerable impact would occur in this regard.

Cumulative Long-Term Impacts

As discussed previously, the proposed project would not result in long-term air quality impacts, since it is not considered a trip generating land use and would not increase the vehicular capacity along Little Tujunga Canyon Road. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the proposed project would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant. Therefore, cumulative operational impacts associated with implementation of the proposed project would be less than significant.

Mitigation Measures: No mitigation is required.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing localized significance thresholds for construction and operations impacts (area sources only).

Localized Significance Thresholds (LST)

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables for one, two, and five acre projects emitting CO, NO_X, $PM_{2.5}$, or PM_{10}. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The project is located within Sensitive Receptor Area (SRA) 15, San Gabriel Mountains.

The project would disturb approximately 1.25 acres; therefore, the LST thresholds for one acre was conservatively utilized for the construction LST analysis. It is noted that an operational LST analysis was not prepared, as the project would not result in direct operational emissions. The closest sensitive receptors to the project site are residential uses 0.25 miles to the northwest (approximately 400 meters). Table 4.3-4, *Localized Significance of Emissions*, illustrates that construction-related emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ would not exceed the LSTs for SRA 15. Therefore, localized significance impacts from construction would be less than significant.

Table 4.3-4
Localized Significance of Emissions

Source	Pollutant (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction - 2019				
Total Unmitigated Emissions	22.68	14.89	5.32	3.17
Localized Significance Threshold[1]	180	6,789	110	59
Thresholds Exceeded?	***No***	***No***	***No***	***No***
Construction - 2020				
Total Unmitigated Emissions	14.79	13.19	0.80	0.77
Localized Significance Threshold[1]	180	6,789	110	59
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Note:
1. The Localized Significance Threshold was interpolated using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The interpolated Localized Significance Threshold was based on the anticipated daily acreage disturbance for construction, the distance to sensitive receptors, and the source receptor area (SRA 15).

Mitigation Measures: No mitigation is required.

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 identified by the SCAQMD as being associated with odor complaints.

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

Mitigation Measures: No mitigation is required.

4.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
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?			✓	
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?			✓	
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			✓	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			✓	

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 Impact With Mitigation Incorporated. A *Natural Environment Study* (August 2018) (refer to Appendix B, *Natural Environment Study*) was prepared for the proposed project, which includes the results of a field survey and records search. According to the *Natural Environment Study,* the proposed project area consists of undeveloped lands of the Angeles National Forest comprised of natural plant communities, with the Little Tujunga Canyon Road and the associated bridge crossing over Buck Canyon. The project area consists of steep hills to moderately steep slopes dominated by a mosaic and/or various combinations of Diegan coastal sage scrub and southern mixed chaparral, with compositions of species from both at their ecotones. Buck Canyon Creek conveys flows west to east through the center of the project site. Buck Canyon Creek within the project site is mapped as a freshwater forested/shrub wetland feature by the National Wetlands Inventory (NWI), with tributaries and areas further upstream and downstream of Buck Canyon Creek described as riverine. However, all of these resources are ephemeral, with potential intermittence upstream of the project site.

Plant Communities

Five (5) native plant communities were observed and mapped within the proposed project area during the field survey: oak riparian woodland, southern willow scrub, mule fat scrub, Diegan coastal sage scrub, and southern mixed chaparral. In addition, three (3) human-modified areas mapped as disturbed habitat, bare ground, and developed were observed.

Six (6) natural communities of special concern were identified during the CNDDB records search as potentially occurring within the proposed project area: Riversidean alluvial fan sage scrub; southern California arroyo chub/Santa Ana sucker stream; southern coast live oak riparian forest; southern cottonwood willow riparian forest; southern mixed riparian forest; and southern sycamore alder riparian woodland. Within the project site is southern willow scrub and mule fat scrub, which was mapped by NWI as freshwater forested/shrub wetland. Further upstream is a patch of oak riparian woodland, with scattered individuals of western sycamore (*Platanus racemosa*) upstream and downstream of the project site. Impacts for the proposed project are to southern willow scrub and mule fat scrub, which will require notification to, compensatory mitigation as deemed appropriate by, and permits/authorization from, the regulatory agencies.

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. The proposed project area is not located within any Federally-designated Critical Habitat; therefore, consultation with the United States Fish and Wildlife Service (USFWS) will not be required for loss or adverse modification of critical habitat. The nearest critical habitat is located over three miles to the south and south east, designated for Santa Ana sucker (*Catostomus santaanae*), with critical habitat of coastal California gnatcatcher (*Polioptila californica californica*) approximately six miles to the northwest.

Special-Status Plants

The August 2018 Natural Environment Study includes the results of field surveys and records searches conducted in 2017 and 2018. The California Natural Diversity Database (CNDDB), California Native Plant Society Online Inventory of Rare and Endangered Vascular Plants (CNPS), and USFWS literature search identified thirteen (13) special-status plant species as having the potential to occur within the project area, including six (6) natural communities of special concern. A field survey was conducted on January 25, 2017, during which five (5) native plant communities were observed including: oak riparian woodland, southern willow scrub, mule fat scrub, Diegan coastal sage scrub, and southern mixed chaparral. However, this survey was conducted outside of the peak blooming periods for plant species that were identified as having a moderate or high potential for occurrence in the January 2017 records search and habitat assessment. Thus, a subsequent rare plant survey was conducted during the peak blooming periods (March-June); with specific field observations made on April 18, May 16, and June 15, 2018. This survey included observations made in a 500-foot buffer area around the project site, in addition to the project site itself. The rare plant surveys also included field observations of the changes in observable plant species that occurred after a wildfire affected the topography of the project vicinity in September 2017.

No special-status plants were observed during the 2017 habitat assessment, however, three (3) special-status plant species were observed during the 2018 rare plant survey. A total of thirteen (13) special-status plant species were identified during the CNDDB, CNPS, and USFWS records search as potentially occurring within the proposed project area. Based on habitat requirements for specific species, availability and quality of habitats needed by special-status plant species, and known distribution, Plummer's mariposa-lily (*Calochortus plummerae*) was determined to have a high potential to occur within the project area, with two-hundred (200) individual plants observed 400 feet from the project site on an east-facing slope of the buffer area surveyed during the 2018 rare plant survey, but none found within

or in close proximity to the project site. One hundred (100) individual Lewis' clarkia (*Clarkia lewisi*) plants were observed within the buffer zone, but only five (5) individual Lewis' clarkia plants were observed within the temporary impact areas of the project site. These plants were observed above the southern bank of Buck Canyon Creek, and along the western edge of the permanent impact area near the access road. Two (2) individual Southern California black walnut (*Juglans californica*) trees were observed within the buffer area approximately 150 feet east of the project site, and would not be affected by the project.

Catalina mariposa lily (*Calochortus catalinae*) and Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*), were determined to have a moderate potential, but were not observed in the field. There is a low potential for Braunton's milk-vetch (*Astragalus brauntonii*), Nevin's barberry (*Berberis nevinii*), San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), and slender-horned spineflower (*Dodecahema leptoceras*), these being State- and/or Federally-listed species, to occur within the project site as suitable habitat is marginally present; however, the nearest occurrences for these species are over 3 miles from the project site. All other special-status animal species either have a low potential (some even less so within the project site) or are not expected to occur.

According to the *Natural Environment Study*, development of the proposed project has the potential to result in a temporary loss of suitable habitat for the above plant species, totaling approximately 0.10 acre of Diegan coastal sage scrub, 0.02 acre of southern mixed chaparral, and 0.02 acre of oak riparian woodland, with a permanent loss of approximately 0.09 acre of Diegan coastal sage scrub and 0.01 acre of southern mixed chaparral. Permanent or temporary indirect impacts to individuals could result from competition with invasive plant species if invasive plant seeds are spread into new areas during construction. Further, exposure to excessive dust could coat plants adjacent to the project site and affect photosynthesis, reducing plant vigor. Therefore, Mitigation Measures BIO-1 through BIO-3, described below, shall be implemented to mitigate for possible direct and indirect impacts to special-status plants. In addition, to increase the availability of suitable habitat and general habitat quality within the project area, it is recommended that all temporarily disturbed areas that are not paved or otherwise permanently designated as part of the road improvements be revegetated or hydroseeded with native plant species similar to pre-project conditions, as a standard County Best Management Practice (BMP). With implementation of this BMP and Mitigation Measures BIO-1 through BIO-3, impacts to sensitive plant species would be less than significant.

Wildlife

According to the *Natural Environment Study*, potential impacts to the following wildlife may occur:

- *Fish:* Although surface waters were flowing at the time of the survey, no fish were observed or are expected to occur within the proposed project area. The nearest water body suitable to support fish species is located over four miles south, at Big Tujunga Creek.

- *Amphibians:* No amphibians were observed on or within the vicinity of the proposed project site. Buck Canyon Creek and the surrounding uplands provide habitat suitable to support amphibian species such as tree frogs (*Pseudacris* spp.) and newts and salamanders (Family *Salamandridae*).

- *Reptiles:* No reptile species were observed in the proposed project area during the field survey, but likely due to relatively cold weather on the day of the survey and recent rains, many of which are still aestivating (i.e., in a prolonged state of torpor or dormancy). Nonetheless, the project area provides habitat suitable to support a number of reptile species, including a number of commonly-occurring snakes and lizards (Order *Squamata*).

- *Birds:* The plant communities found within the proposed project area provide suitable nesting and foraging opportunities for a limited variety of resident and migrant avian species. A total of 12 avian species were detected during the biological resources survey, including common raven (*Corvus corax*), western scrub-jay (*Aphelocoma californica*), California towhee (*Melozone crissalis*), Bewick's wren (*Thryomanes bewickii*), and yellow-rumped warbler (*Setophaga coronata*).

- *Mammals:* Two mammals were detected in the proposed project area during the field survey via direct observation or via sign: California ground squirrel (*Otospermophilus beecheyi*) and raccoon (*Procyon lotor*). Most mammal species are nocturnal and are difficult to observe during a diurnal field survey; nonetheless, the project area provides suitable habitat for a number of other mammalian species, including coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), desert cottontail (*Sylvilagus audubonii*), rats and mice (Order *Rodentia*), and other commonly-occurring species. Further, although no evidence was observed, bats (order *Chiroptera*) could roost under the overpass and likely forage throughout the project area.

- *Special-Status Animals:* A total of twenty-one (21) special-status animal species were identified by the CNDDB and USFWS records searches as potentially occurring within the project area. None of the 21 special-status wildlife species were observed within the proposed project area during the habitat assessment. Based on habitat requirements for specific species, availability and quality of habitats needed by special-status animal species, and known distribution, coastal whiptail (*Aspidoscelis tigris stejnegeri*), silvery legless lizard (*Anniella pulchra pulchra*), Townsend's big-eared bat (*Corynorhinus townsendii*), prairie falcon (*Falco mexicanus*), California condor (*Gymnogyps californianus*) were determined to have a moderate potential to occur within the project area. There is a low potential for arroyo toad (*Anaxyrus californicus*), Swainson's hawk (*Buteo* swainsoni), coastal California gnatcatcher, and least Bell's vireo (*Vireo bellii pusillus*), these being State- and/or Federally-listed species, to occur within the project area as suitable habitat is marginally present; however, the nearest occurrences for these species are over four miles from the site. All other special-status animal species either have a low potential (some even less so within the project site) or are not expected to occur.

Development of the proposed project has the potential to have both direct and indirect impacts to the above species. Construction disturbance (e.g., access, staging, noise, visual disruptions) primarily during warmer times of the year may directly, but temporarily affect coastal whiptail and silvery legless lizard, both of which are year-round residents in southern California. Potential roosting habitat for Townsend's big-eared bat is present within the project site at the bridge. Although no evidence of bat roosting was observed within the project site, there is a potential for direct impacts to roosting Townsend's big-eared bat if present during construction, with temporary impacts to foraging habitat. Although there is a low potential for prairie falcon and California condor to nest in the cliffs within the project area, project activities would only have the potential to disturb prairie falcon during late fall, winter, and early spring, as this species is a winter resident in southern California, and California condor if present at the time of construction. Minimal habitat within the proposed project footprint would be temporarily lost due to project activities, totaling approximately 0.10 acre of Diegan coastal sage scrub, 0.02 acre of southern mixed chaparral, and 0.02 acre of oak riparian woodland, 0.09 acre of southern willow scrub, and 0.14 acre of mule fat scrub, with a permanent loss of approximately 0.09 acre of Diegan coastal sage scrub, 0.01 acre of southern mixed chaparral, 0.02 acre of southern willow scrub, and 0.01 acre of mule fat scrub. Indirect impacts would be generally restricted to long-term habitat degradation, primarily through the unintended spread of non-native weed seeds within the project area, which may result in changing plant composition and lower the quality of the on-site natural habitat.

Construction during the avian nesting season (typically January through July for raptors, and February through August for other avian species) has the potential to directly affect nests and/or disrupt nesting behaviors potentially resulting in temporary or permanent nest abandonment, loss of young, or displacement.

Nesting birds are protected pursuant to the Migratory Bird Treaty Act (MBTA), and California Fish and Game Code (CFGC) Sections 3503, 3503.3, 3511, and 3513 prohibit the take, possession, or destruction of birds, their nests or eggs). In order to protect migratory bird species, 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. Habitat throughout the project area has the potential to provide refuge cover from predators, perching sites, and favorable conditions for avian nesting opportunities that could be affected by project-related activities. 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. If construction activities are scheduled during the avian breeding season, Mitigation Measures BIO-4 through BIO-6, described below, should be implemented to mitigate for possible direct and indirect impacts to nesting birds and special-status animals.

Implementation of Mitigation Measures BIO-1 through BIO-6 would reduce potentially substantial adverse effects, 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, to a less than significant level.

Mitigation Measures:

BIO-1 Prior to construction, a qualified biologist shall flag all individuals of Lewis' clarkia located within the project footprint for avoidance, if feasible. If avoidance is not feasible for constructability purposes, removal of these individuals of Lewis' clarkia should be warranted considering the limited amount of loss relative to the local population size, and that Lewis' clarkia is not listed for protection under the California or Federal Endangered Species Acts, rather is a California Rare Plant Rank (CRPR) 4.3 species ("Plants of limited distribution – a Watch List; Not very threatened in California [less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known]", thereby affording it no legal protection other than at the discretion of the lead agency, the Los Angeles County Department of Public Works.

BIO-2 Prior to ground disturbance and vegetation clearing activities, construction work areas and access limits shall be clearly staked, and all equipment and personnel shall remain within the limits of work during all project-related activities. This requirement shall be indicated within project specifications, subject to verification by the Los Angeles County Department of Public Works.

BIO-3 All construction equipment, if left off-site, shall be thoroughly cleaned of all weed seeds prior to entering the limits of disturbance to avoid the spread of invasive species. This requirement shall be indicated within project specifications, subject to verification by the Los Angeles County Department of Public Works.

BIO-4 Project activities should be conducted outside of the avian breeding season (typically January through July for raptors and February through August for other species). If not practical, a qualified biologist shall conduct a nesting bird survey within three days prior to vegetation clearing and initial ground disturbing activities to determine the presence or absence of nesting birds with the potential to be affected by the project.

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 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) 300 feet for other non-listed species. Any nests occurring within these distances shall have a no-disturbance buffer established around them. This distance may be adjusted only in coordination with the CDFW.

A qualified biologist shall periodically monitor any confirmed active nest(s) during construction. No construction within a buffer shall be allowed until the biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest).

BIO-5 Within three days prior to project commencement, a qualified biologist shall conduct a roosting bat survey at the Little Tujunga Canyon Road Bridge. If roosting bats are determined present within the project site, appropriate measures in coordination with and as directed by the CDFW shall be implemented. This

requirement shall be indicated within project specifications, subject to verification by the Los Angeles County Department of Public Works.

BIO-6 Prior to any vegetation clearing and during initial ground disturbing activities, a qualified biologist shall be present to assist in the avoidance of impacts to wildlife individuals. If individuals are observed within or adjacent the project footprint, the biologist shall allow individuals to disperse or move a safe distance away from the project site. For special-status species, coordination with and direction from CDFW shall be required. This requirement shall be indicated within project specifications, subject to verification by the Los Angeles County Department of Public Works.

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. A *Jurisdictional Delineation* (March 2017) was prepared for the proposed project as part of the *Natural Environment Study*, which identifies and delineates hydrological features within the proposed project area that are potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Federal Clean Water Act (CWA), Regional Water Quality Control Board (Regional Board) pursuant to CWA Section 401 and/or Section 13263 of the California Porter-Cologne Water Quality Control Act, and CDFW pursuant to Sections 1600 *et seq*. of the California Fish and Game Code (CFGC). According to the *Jurisdictional Delineation,* there are four drainage features within the proposed project area (Buck Canyon Creek and its Tributaries A, B, and C). Within the project site, Buck Canyon Creek is an earthen, ephemeral drainage feature and a riparian corridor (with the exception of the bridge and a concrete apron immediately downstream). Due to its connectivity with the Los Angeles River (Relatively Permanent Waters) and the Pacific Ocean (Traditional Navigable Waters), Buck Canyon Creek and its tributaries containing an Ordinary High Water Mark are considered waters of the U.S. (WoUS) subject to jurisdiction of the Corps pursuant to Section 404 of the Federal CWA and Regional Board pursuant to CWA Section 401.

Further, streambed/banks within the project area, and riparian vegetation where present, are subject to CDFW jurisdiction pursuant to Section 1600 *et seq.* of the CFGC. The proposed project would result in approximately 0.05 acre of permanent impacts and 0.11 acre of temporary impacts to non-wetland WoUS (376 linear feet), and approximately 0.07 acre of permanent impacts and 0.30 acre of temporary impacts to primarily riparian-vegetated streambed. Prior to project construction, mitigation to offset impacts must be agreed upon, and the following permits/authorization procured:

- Corps CWA Section 404 Nationwide Permit 14 – *Linear Transportation Projects* for impacts associated with dredge and fill material to non-wetland WoUS;
- Regional Board CWA Section 401 Water Quality Certification for impacts associated with dredge and fill material to WoUS; and
- CDFW CFGC Section 1602 Streambed Alteration Agreement (or other approval such as an Operation by Law letter or Letter of Non-Substantial Impact) for impacts/alteration to streambed/banks and associated riparian vegetation.

Upon consultation with these regulatory agencies and acquisition of required permits and approvals required under existing Federal and State law (which would require implementation of avoidance, minimization, and mitigation measures as determined necessary by the agencies), impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. According to the *Jurisdictional Delineation* prepared for the proposed project, a review of USFWS NWI (2017) maps was conducted to determine the presence of federally protected wetlands in the proposed project area. One feature, Buck Canyon Creek, has been mapped within the project site as Freshwater Forested/Shrub Wetland (PFO/SSC: Palustrine, Forested, Scrub-Shrub, and Seasonally Flooded), with tributaries and further upstream and downstream of Buck Canyon Creek described as Riverine (R3UBF: Riverine, Upper Perennial, Unconsolidated Bottom, and Semi-permanently Flooded).

Identification of wetlands is based on a three-parameter approach involving the predominance or prevalence of hydrophytic vegetation, and indicators of hydric soils and wetland hydrology. Hydrophytic vegetation (plants that are typically found occurring 33 percent or more in wetland conditions) is based on designations provided in *The National Wetland Plant List: 2016 wetland ratings.* (Lichvar et al. 2016). Hydric soils are those permanently or seasonally saturated by water resulting in anaerobic conditions. Hydric soils mapped by the USDA, NRCS are listed on the *National Hydric Soils List 2015* (USDA, NRCS 2015), which were used for reference. Hydric soils on-site, identified examining soil profile characteristics using *Munsell Soil Color Charts* (Munsell Color 2009) are those that meet hydric soil indicators as defined in the Regional Supplement. Wetland hydrology is present upon identifying at least one primary or two secondary indicators, as provided in the Regional Supplement. In order to be considered a wetland, an area must exhibit at least minimal characteristics within these three parameters.

During the field visit to the proposed project area, two Sample Points (SP1 and SP2) within the project site were examined for wetland indicators (hydrophytic vegetation, hydric soils, and wetland hydrology) where a prevalence of hydrophytic vegetation warranted an investigation, one within mule fat scrub upstream and the other within southern willow scrub downstream. Both hydrophytic vegetation and wetlands hydrology were observed within the project site, however, hydric soils were not observed within the project site. Therefore, because the three-parameter criteria were not met at either location (SP1 and SP2) that had the highest likelihood of wetlands within the project site, it was determined that no wetlands occur within the project site. There is a potential for wetlands to occur upstream, but outside of the project limits. Thus, a less than significant impact regarding wetlands would occur and no mitigation is required.

Mitigation Measures: No mitigation is required.

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 proposed project area is relatively undeveloped, thereby limiting the restrictions of wildlife movement, with the bridge allowing for safe, unimpeded crossing under Little Tujunga Canyon Road. The proposed bridge replacement and approach improvements are not expected to affect existing opportunities for wildlife movement. Therefore, a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. The proposed project would not conflict with local policies or ordinances protecting biological resources. The County's Significant Ecological Area (SEA) Program, for those SEAs located in unincorporated areas, is administered through the County's General Plan goals, policies and implementation program, and the SEA Ordinance. As discussed in Impact 4.4(f) below, the proposed project site is not located within the boundaries of a SEA.

As discussed in Section 4.2, *Agriculture and Forestry Resources*, of this IS/MND, there would be a temporary loss of 0.02-acre of oak riparian woodland with project implementation; however, no permanent loss of oak riparian woodland would occur. In addition, the project is exempt from the County Oak Tree Preservation Ordinance, and an Oak Tree Permit is not required. No impact would occur.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. According to the California Department of Fish and Wildlife's *California Regional Conservation Plans Map,* the proposed project is not located within the boundaries of any Habitat Conservation Plan or Natural Community Conservation Plan.[1] According to the Los Angeles County Department of Regional Planning's *Significant Ecological Areas and Coastal Resource Areas Policy Map,* the project is not located within the boundaries of an area identified as an SEA.[2] The Tujunga Valley/Hansen Dam is identified as a SEA, however, the project site is located over four miles away from the Tujunga Valley/Hansen Dam and will not have any impacts to this resource. In addition, according to the Antelope Valley Area Plan's *Significant Ecological Areas Map,* the project is not located within the boundaries of an area identified as a SEA, although it is located within the boundaries of the Angeles National Forest.[3] As such, the project is subject to the provisions regarding biological resources within the USFS *Land Management Plan, Part 2 Angeles National Forest Strategy* (LMP) (September 20, 2005).

There is currently an existing USFS Special Use Permit for the proposed project area. Small portions of the new wingwalls associated with the proposed project would be constructed outside of the existing USFS Special Use Permit. However, the USFS is currently working to amend the existing permit to accommodate the new wingwalls. The proposed project would improve operations on Little Tujunga Canyon Road by replacing the existing functionally obsolete bridge over Buck Canyon Creek with an improved bridge structure. These improvements would address existing deficiencies, improve safety, and implement improvements consistent with goals, policies, and strategies contained within the LMP. Therefore, the proposed project would not result in significant impacts to biological resources, and impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

[1] California Department of Fish and Wildlife, *California Regional Conservation Plans Map*, August 2015.
[2] Los Angeles County Department of Regional Planning, *Significant Ecological Areas and Coastal Resource Areas Policy Map,* Figure 9.3, February 2015.
[3] Los Angeles County Department of Regional Planning, *Antelope Valley Area Plan*, Map 4.5, June 2015.

4.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?			✓	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?		✓		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
d. Disturb any human remains, including those interred outside of formal cemeteries?			✓	

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

Less Than Significant Impact. The *Cultural Resources Assessment for the Little Tujunga Canyon Road Bridge Replacement Project*, dated July 2017, refer to Appendix C, *Cultural Resources Assessment*, included a field survey and records search of the South Central Coast Information Center (SCCIC) database. The results of the record search indicate that 14 previous studies have been completed within a one-mile radius of the project area. Based on the results of the field survey and records search, three historic-age resources are located within the project area: Little Tujunga Canyon Road Bridge (P-19-187823), Little Tujunga Canyon Road (P-19-187823), and Little Tujunga Canyon Culverts (P-19-188396).

Little Tujunga Canyon Road Bridge is a bridge built in 1928 and widened in 1954 and further altered in 1959. It has been previously evaluated by Caltrans and found not eligible for listing in the National Register of Historic Places (NRHP). The bridge was also recorded and evaluated in 2003 and found not eligible for listing in the NRHP, nor appears to be a historical resource for purposes of CEQA. Additionally, project implementation would not impact Little Tujunga Canyon Road (P-19-187823) or Little Tujunga Canyon Culverts (P-19-188396). Therefore, a less than significant impact to historical resources would occur.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact With Mitigation Incorporated. As noted above, the *Cultural Resources Assessment* included a search for archaeological and historical records through the SCCIC. The record search included the project boundaries and a one-mile radius around the project boundaries. Sources consulted include the National Register of Historical Places, California Register of Historic Resources, California Inventory of Historic Resources, California Historical Landmarks, and California Points of Historical Interest. Based on the records search, no archaeological resources have been previously documented within project boundaries.

According to the *Cultural Resources Assessment*, no archaeological resources were identified during the site survey. Project construction would have a maximum depth of excavation of approximately 30 feet for the bridge abutments. Specific factors of the project – such as the lack of archaeological sites in the project vicinity, the steepness and

ruggedness of the area, as well as the disturbance by construction of the existing roadway – indicate that the potential for discovery of archaeological deposits, including buried archaeological deposits, materials, or features, by implementation of this project is low. Therefore, the proposed project is unlikely to cause a substantial adverse change in the significance of an archaeological resource. In an effort to further minimize this impact and in response to AB 52 Native American consultation conducted for the project as discussed in Section 4.17, *Tribal Cultural Resources*, Measures CUL-1 and CUL-2 would be incorporated. Measure CUL-1 would require that in the event of an unanticipated discovery during project construction, construction activity shall cease, and a qualified archaeologist shall be consulted for evaluation of the find. Measure CUL-2 would require that the Los Angeles County Department of Public Works prepare a plan that identifies areas of anticipated construction-related ground disturbance greater than 5 feet in depth on the project site, and allows for a Native American monitor to be present during construction activities in these areas. Measures CUL-1 and CUL-2 would reduce potentially significant impacts to a less than significant level.

Mitigation Measures:

CUL-1 If evidence of subsurface cultural resources is found during construction, excavation and other construction activity within the immediate area of the find shall cease and the construction contractor shall contact the Los Angeles County Department of Public Works. With direction from Department of Public Works, an archaeologist certified by the County of Los Angeles shall evaluate the find. If warranted, the archaeologist shall develop a plan of mitigation which may include, but shall not be limited, to, salvage excavation, laboratory analysis and processing, research, curation of the find in a local museum or repository, and preparation of a report summarizing the find.

CUL-2 The Los Angeles County Department of Public Works shall prepare a plan that identifies areas of the project where ground disturbance occurs over 5 feet in depth in previously undeveloped areas. Native American tribes previously requesting such notice shall be notified of work that is anticipated to occur in these areas prior to ground disturbing construction activities. The Department of Public Works shall accommodate a professional Native American monitor on the project site on a volunteer basis. The professional Native American monitor shall follow standard construction safety protocol.

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

Less Than Significant Impact With Mitigation Incorporated. The project location is mapped as the middle-to-early Pleistocene Saugus Formation, Cretaceous granodiorite, and early-to-middle Mesozoic gneiss. Only the sediments of the Saugus Formation have potential to contain fossils as the other rock types that do not preserve fossils. Results of the record search indicate that no previous fossil localities have been recorded within the project boundaries and only one nearby. An ancient horse fossil (*Pliohippus* sp.) was recovered from the Saugus Formation in Doane Canyon, which feeds into Big Tujunga Canyon to the east of the project area.

During the site survey, the sediments were confirmed as the terrestrial Saugus Formation. The only Saugus Formation outcrop within the study area was heavily overgrown and no fossils were observed during the survey. Based on the results of the records search, the Saugus Formation is assigned a low (PFYC 2) fossil potential. Both the granodiorite and gneiss are assigned a very low (PFYC 1) fossil potential. Therefore, paleontological monitoring is not recommended for the project due to the unlikelihood of encountering any significant vertebrate fossil remains.

The maximum depth of project-related ground disturbance is approximately 30 feet for the abutments, with very little other earthmoving anticipated. Due to the low likelihood for paleontological resources in the project area and the limited proposed depth of excavation into native soils during project construction, it is not anticipated that paleontological resources would be impacted as a result of construction. Therefore, the project would not be expected to disturb any unique paleontological resource or alter any unique geologic feature not previously disturbed. Accordingly, less than significant impacts to paleontological resources would occur as a result of the proposed project. However, in the unlikely event that paleontological resources are encountered during ground-disturbing activities,

Mitigation Measure CUL-3 has been incorporated. Measure CUL-3 would require that construction activity cease and a paleontologist be consulted for evaluation of paleontological resources, should such resources be discovered during project construction.

Mitigation Measures:

CUL-3 If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity within the immediate area of the find shall cease and the construction contractor shall contact the Los Angeles County Department of Public Works. With direction from the Department of Public Works, a paleontologist certified by the County of Los Angeles shall evaluate the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of identified resources.

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. Due to the steepness and ruggedness of the area, as well as the disturbance by construction of the existing roadway, it is not anticipated that human remains, including those interred outside of formal cemeteries, would be encountered during earth removal or disturbance activities. If human remains are found, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Section 7050.5-7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the Native American Heritage Commission and consultation with the individual identified by the Native American Heritage Commission to be the "most likely descendant." If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains until the County coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains. Following compliance with existing State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard would be considered less than significant.

Mitigation Measures: No mitigation is required.

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4.6 GEOLOGY AND SOILS

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

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

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.

Less Than Significant Impact. Southern California, including the project area, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo (AP) Earthquake Fault Zone.

According to the State of California Department of Conservation Alquist-Priolo Earthquake Fault Zone Map – Sunland Quadrangle, there are several faults located within the project area. The closest AP Earthquake Fault Zone to the project site is the northwest-striking San Gabriel Fault, which is the dominant geological structure in the northern half of the Sunland Quadrangle.[1] However, the project site is not situated within a designated Alquist-Priolo Earthquake Fault Zone, and no known faults are known to occur beneath the site. Therefore, a less than significant impact would occur in this regard.

[1] State of California Department of Conservation, California Geological Survey, Alquist-Priolo Earthquake Fault Zone Maps, http://www.quake.ca.gov/gmaps/ap/ap_maps.htm accessed January 22, 2019.

Mitigation Measures: No mitigation is required.

2) Strong seismic ground shaking?

Less Than Significant Impact. Southern California has numerous active seismic faults subjecting residents to potential earthquake and seismic-related hazards. Seismic activity poses two types of potential hazards for residents and structures, categorized either as primary or secondary hazards. Primary hazards include ground rupture, ground shaking, ground displacement, subsidence, and uplift from earth movement. Primary hazards can also induce secondary hazards such as ground failure (lurch cracking, lateral spreading, and slope failure), liquefaction, water waves (seiches), movement on nearby faults (sympathetic fault movement), dam failure, and fires.

Regionally, the project site is located in the Western San Gabriel Mountains, within the Western Transverse Ranges geomorphic province. The San Gabriel Fault is located approximately 0.35 miles due north of the project location and is not considered active. A portion of the San Fernando Fault Zone is located approximately one mile due south of the project site, which ruptured during the 1971 Sylmar earthquake, and is considered active by the State of California..

According to the Geotechnical Investigation prepared for the project in December 2015, the project site is located within the upper plate of the Lopez Thrust Fault, which is not considered active. This fault has thrust Pre-Cretaceous crystalline bedrock over sedimentary units of the Lower Pleistocene Saugus Formation. Subsurface conditions of the site are characterized by crystalline bedrock on both sides of Buck Canyon and at the existing abutments. Soil classification for river bed material for the use of scour determination is poorly graded sand with silt and gravel. Onsite soils are not considered corrosive or deleterious to concrete structures or ferrous materials. No groundwater or surface water in the creek was encountered during the investigation.

The proposed project would include demolition of the existing Little Tujunga Canyon Bridge, and the construction of a new bridge structure over Buck Canyon Creek. The existing Little Tujunga Canyon Bridge is over 90 years old and does not meet current bridge design standards. The proposed project would result in the construction of a new bridge meeting current engineering standards, resulting in a beneficial impact in regard to safety during a seismic event.

The Geotechnical Investigation prepared for the project includes site-specific recommendations for bridge design and construction of deep and shallow bridge foundations and retaining walls, for Load and Resistance Factor Design (LRFD) and Work Stress Design (WSD), as well as earthwork, temporary shoring and excavation recommendations and construction considerations. Implementation of recommendations provided within the Geotechnical Investigation would minimize impacts in regard to geologic hazards, including seismic shaking. In addition, the improved bridge would be required to adhere to existing parameters for seismic safety per the California Building Code (CBC) and County standards including Title 26 of the *Los Angeles County Building Code (LACBC)* (Grading Code). Therefore, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

3) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Liquefaction is characterized by a loss of shear strength in the affected soil layers, thereby causing the soils to behave as a viscous liquid. Susceptibility to liquefaction is based on geologic and geotechnical data. River channels and floodplains are considered most susceptible to liquefaction, while alluvial fans have a lower susceptibility. Depth to groundwater is another important element in the susceptibility to liquefaction. Groundwater shallower than 30 feet results in high to very high susceptibility to liquefaction, while deeper water results in low and very low susceptibility.

According to the Geotechnical Investigation prepared for the project, there is little potential risk for liquefaction because the site is underlain by bedrock near the surface. In addition, groundwater was not encountered, but minor seepage was encountered at 46 feet at the time of exploration, and groundwater is not anticipated during construction. As stated within Impact 4.6(a)(2), above, the proposed project would implement site-specific recommendations provided within the Geotechnical Investigation and adhere to the CBC and County Grading Code. Therefore, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

4) Landslides?

Less Than Significant Impact. Landslides are a geologic hazard, with some moving slowly and causing damage gradually, and others moving rapidly and causing unexpected damage. Gravity is the force driving landslide movement. Factors that commonly allow the force of gravity to overcome the resistance of earth material to landslide movement include saturation by water, steepening of slopes by erosion or construction, alternate freezing or thawing, and seismic shaking.

Based on the Seismic Hazard Zones Map – Sunland Quadrangle, prepared by the State of California Department of Conservation, the project site is located in an area not evaluated for seismic landslides. However, the proposed project would not affect subsurface geology. Bridge and roadway design and construction would implement site-specific recommendations provided within the Geotechnical Investigation and comply with the CBC and County Grading Code. Therefore, risks related to landslides would be minimized and a less than significant impact would occur.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Refer to Response 4.9(a) for a detailed response regarding the potential for water quality impacts (including soil erosion and the loss of topsoil) during the short-term construction process and long-term operations. Appropriate erosion control Best Management Practices (BMP's) would be utilized as included in the County of Los Angeles Department of Public Works Construction BMP Manual. In addition, the project contractor would be required to comply with all earthwork and grading requirements set forth in the Geotechnical Investigation. Therefore, the proposed project would not result in significant impacts.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Based on analysis provided in Responses 4.6(a) (3) and 4.6(a)(4), the project site is underlain by bedrock near the surface, and the proposed project would not result in significant impacts related to on-site or off-site landslides or liquefaction or collapse. Implementation of site-specific recommendations provided within the Geotechnical Investigation and adherence to the CBC and County Grading Code would minimize impacts related to liquefaction. A less than significant impact would occur.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Refer to Response 4.6(c), above. The proposed project area is underlain by bedrock near the surface. With implementation of site-specific recommendations provided within the Geotechnical Investigation and adherence to the CBC and County Grading Code, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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. No septic tanks or alternative wastewater systems would be constructed as part of the proposed project, and no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

4.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

GLOBAL CLIMATE CHANGE

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 400 million tons of carbon dioxide (CO_2) per year.[1] Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit over the next century. Methane (CH_4) is also an important GHG that potentially contributes to global climate change. GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well-mixed, their impact on the atmosphere is mostly independent of the point of emission.

REGULATIONS AND SIGNIFICANCE CRITERIA

The Intergovernmental Panel on Climate Change (IPCC) developed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 parts per million CO_2 equivalent[2] (CO_2eq) concentration is required to keep global mean warming below two degrees Celsius, which in turn is assumed to be necessary to avoid significant levels of climate change.

Executive Order S-3-05 was issued in June 2005, which established the following GHG emission reduction targets:

- 2010: Reduce GHG emissions to 2000 levels
- 2020: Reduce GHG emissions to 1990 levels
- 2050: Reduce GHG emissions to 80 percent below 1990 levels

Assembly Bill 32 (AB 32) requires that the California Air Resources Board (CARB) determine what the statewide GHG emissions level was in 1990, and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB has approved a 2020 emissions limit of 427 million metric tons (MMT) of CO_2eq.

Executive Order (EO) B-30-15, which was issued in April 2015, requires statewide GHG emissions to be reduced 40 percent below 1990 levels by 2030. Senate Bill 32 (SB 32), signed into law in September 2016, codifies the 2030 GHG reduction target in EO B-30-15. The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

[1] California Environmental Protection Agency, *California Greenhouse Gas Emission Inventory - 2015 Edition*, http://www.arb.ca.gov/cc/inventory/data/data.htm, accessed January 22, 2019.

[2] Carbon Dioxide Equivalent (CO_2eq) – A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. GHG emissions from the proposed project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

In June 2008, the California Governor's Office of Planning and Research published a Technical Advisory, which provides informal guidance for public agencies as they address the issue of climate change in *CEQA* documents.[3] This is assessed by determining whether a proposed project is consistent with or obstructs the 39 Recommended Actions identified by CARB in its *Climate Change Scoping Plan* which includes nine Early Action Measures (qualitative approach). The Attorney General's Mitigation Measures identify areas where GHG emissions reductions can be achieved in order to achieve the goals of AB 32. As set forth in the California Governor's Office of Planning and Research Technical Advisory and in the proposed amendments to the *CEQA Guidelines* Section 15064.4, this analysis examines whether the proposed project's GHG emissions are significant based on a qualitative and performance based standard (Proposed *CEQA Guidelines* Section 15064.4(a)(1) and (2)).

South Coast Air Quality Management District Thresholds

At this time, there is no absolute consensus in the State of California among CEQA lead agencies regarding the analysis of global climate change and the selection of significance criteria. In fact, numerous organizations, both public and private, have released advisories and guidance with recommendations designed to assist decision-makers in the evaluation of GHG emissions given the current uncertainty regarding when emissions reach the point of significance. Lead agencies may elect to rely on thresholds of significance recommended or adopted by State or regional agencies with expertise in the field of global climate change.

The SCAQMD has formed a GHG CEQA Significance Threshold Working Group (Working Group) to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting No. 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.[4]

With the tiered approach, the project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. For all non-industrial projects, the SCAQMD is proposing a screening threshold of 3,000 $MTCO_2eq$ per year. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three options. Under the Tier 4 first option, the SCAQMD initially outlined that the project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. However, the Working Group did not provide a recommendation for this approach. Under the Tier 4 second option, the Working Group folded this into the third Option. Under the Tier 4 third option, the project would be excluded if it was below an efficiency-based threshold of 4.8 $MTCO_2eq$ per service population (SP) per year or 3.0 $MTCO_2eq$ per SP for post-2020 projects.[5] Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

[3] Governor's Office of Planning and Research, *CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review*, 2008.

[4] The most recent SCAQMD GHG CEQA Significance Threshold Working Group meeting was held on September 2010.

[5] The project-level efficiency-based threshold of 4.8 $MTCO_2eq$ per SP per year is relative to the 2020 target date. The SCAQMD has also proposed efficiency-based thresholds relative to the 2035 target date to be consistent with the GHG reduction target date of SB 375. GHG reductions by the SB 375 target date of 2035 would be approximately 40 percent. Applying this 40 percent reduction to the 2020 targets results in an efficiency threshold for plans of 4.1 $MTCO_2eq$ per SP per year and an efficiency threshold at the project level of 3.0 $MTCO_2eq$/year.

The 3,000 $MTCO_2eq$/yr non-industrial screening threshold has been selected as the significance threshold, as it is most applicable to the proposed project. The 3,000 $MTCO_2eq$ threshold is used in addition to the qualitative thresholds of significance set forth below from Section VII of Appendix G to the CEQA Guidelines.

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

***Less Than Significant Impact*.**

Project-Related Sources of Greenhouse Gases

Project-related GHG emissions would include emissions from construction activities. Construction of the project would result in direct emissions of CO_2, N_2O, and CH_4 from the operation of construction equipment. Transport of materials and construction workers to and from the project site would also result in GHG emissions. Construction activities would be short-term in duration and would cease upon project completion. Construction of the proposed project is anticipated to commence in Spring 2020 and be completed by Fall 2020. Construction activities would involve approximately 2,900 cubic yards cut and approximately 1,200 cubic yards of fill. It is not known at this time if the earthwork would be balanced; therefore, this analysis conservatively assumes that the excess 1,700 cubic yards would be exported off-site. Construction-generated GHG emissions were calculated using the California Emissions Estimator Model, which estimated a total of 105.24 $MTCO_2eq$ would be generated during construction of the proposed project. Refer to Appendix A, *Air Quality/Greenhouse Gas Data,* for assumptions and calculations used in the GHG emissions analysis.

In terms of operational GHG emissions, the proposed project involves roadway and bridge improvements and does not propose a trip-generating land use, nor would it result in an increase in vehicular capacity along Little Tujunga Canyon Road. The proposed project would not include the provision of new permanent stationary or mobile sources of emissions, and therefore, by its very nature, would not generate quantifiable GHG emissions from project operations. The project does not propose any buildings and therefore no permanent source or stationary source emissions. Therefore, neither construction nor operation of the project would generate GHG emissions in excess of the SCAQMD screening threshold of 3,000 $MTCO_2eq$ per year. GHG impacts would be less than significant.

***Mitigation Measures*:** No mitigation is required.

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

***Less Than Significant Impact*.** As discussed previously, the principal State plan and policy adopted for the purpose of reducing GHG emissions is AB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. Similar and intermediate goals are expressed in Executive Orders S-3-05 and B-30-15. The project's construction related GHG emissions would be very small when compared to SCAQMD screening thresholds. Therefore, the project does not conflict with these plans and regulations. Senate Bill (SB) 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or alternative planning strategy (APS) that would address land use allocation in that MPOs Regional Transportation Plan (RTP). The principles of SB 375 are incorporated in SCAG's 2016 RTP/SCS. The proposed project is not a housing development project, and is not a trip generating transportation project. Therefore, the project would not conflict with the goals of SB 375 or the SCAG RTP/SCS. Implementation of the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. There would be no impact in this regard.

***Mitigation Measures*:** No mitigation is required.

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4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
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?				✓
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
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?			✓	

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

Less Than Significant Impact. The short-term construction process for the proposed project would not involve the routine transport, use, or disposal of hazardous materials. With the exception of utilizing gasoline and diesel fuels for construction equipment, no other hazardous materials would be transported to or from the proposed project site, or used in the construction process. Fuels and solvents for construction would be stored and utilized pursuant to existing regulatory requirements. Therefore, short-term construction impacts would be less than significant in this regard.

As a roadway facility, long-term operation of the proposed roadway would not itself require the transport, use, or disposal of hazardous materials. However, it is reasonable to assume that vehicles transporting hazardous materials to other destinations may utilize the proposed roadway. Impacts in this regard would be less than significant upon adherence to existing Federal and State standards. These standards include *Code of Federal Regulations* (*CFR*) Title 49, Part 177, *Carriage by Public Highway*, which sets standards for acceptable types of hazardous materials that can

be transported by vehicle, inspections, driver training, recordkeeping, and loading and unloading; *California Health and Safety Code* Division 20, Chapter 6.5, which sets strict permitting requirements for hazardous waste haulers and establishes contingency measures in the event of upset. Further, it is acknowledged that operation of the proposed project would not increase the routine transport of hazardous materials compared to the existing condition, since the proposed project would not increase roadway capacity and is intended to improve the safety and operation of the existing bridge. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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.

Short-Term Impacts

A *Limited Hazardous Materials Survey* (November 14, 2017) (refer to Appendix D, *Limited Hazardous Materials Survey*) was prepared for the proposed project, which includes the results of a field survey for asbestos, lead-based paint (LBP), and treated wood waste (TWW). These potentially hazardous wastes could be disturbed as part of demolition of the existing bridge, resulting in a potential health hazard for construction workers and receptors in the surrounding area. The results of the *Limited Hazardous Materials Survey* are summarized below.

- Lead Surface Coatings - The grey (shiny) paint with the orange under layer on the metal beams supporting the bridge and the black paint with the orange under layer on the metal poles at the apex of the timber "A" frame on the sides of the bridge contain concentrations of lead greater than the regulatory level of 5,000 parts per million (ppm) of lead and are considered LBP.

  The grey paint on the metal beams supporting the bridge and the grey paint on the metal beams of the "A" frame on the sides of the bridge contain detectable levels of lead below 5,000 ppm. Although these paints did not meet or exceed the level of 5,000 ppm for LBP, these surface coatings contain detectable levels of lead and are regulated by California Division of Occupational Safety and Health (Cal/OSHA).

- Asbestos Containing Materials (ACM) - The grey mastic on the "A" frame timber contains asbestos and is considered to be ACM.

- Treated Wood Waste (TWW) - The existing pressure-treated wood to be removed from the bridge structure is categorized as TWW.

Based on the presence of hazardous materials as described above and in the *Limited Hazardous Materials Survey,* proposed grading and excavation activities associated with project construction may result in the release of hazardous materials into the environment. However, compliance with California Division of Occupational Safety and Health (Cal/OSHA) regulations regarding both employee training and certification for workers potentially exposed to lead, ACM, and/or TWW, and removal and disposal of lead, ACM, and/or TWW, would reduce this potentially significant impact to a less than significant level. Cal/OSHA Title 8, CCR 1532.1 requires employers to treat any employee conducting any of several "trigger tasks" commonly associated with renovation and demolition activities such as torching, manual demolition, or using non-HEPA (high-efficiency particulate air) equipped tools or vacuums, as if they were exposed above the permissible exposure limit (PEL) of 50 micrograms per cubic meter ($\mu g/m^3$) until an exposure assessment shows otherwise. Renovation or demolition of components coated with LBP or other lead-containing materials shall require workers who are appropriately certified, trained, and employ proper work methods and protective equipment to minimize exposure to themselves and the surrounding environment. Any areas of peeling or deteriorating

paint shall be stabilized to prevent loose and flaking paint from becoming detached and impacting the surrounding environment. The paint shall be abated in any areas that may require cutting.

Painted surfaces of the bridge located in areas not accessible at the time of the survey, as well as suspect asbestos materials in areas not accessible, and which were not tested for lead content or ACM, cannot be presumed to be free of lead or ACM. Therefore, if renovation or demolition activities reveal paint types that were not sampled, additional sampling would be required prior to activities that would disturb the painted surfaces, unless those surfaces are presumed to contain lead.

The existing timber to be removed from the bridge structure is categorized as TWW and shall be removed and disposed of per Title 22, CCR, Section 67386 "Alternative Management Standards for Treated Wood Waste." This regulation also requires the employer to provide training for all employees handling TWW and all employees that may reasonably be expected to contact TWW.

In addition, during the short-term period of project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment.

Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and Federal law, as described above. Short-term construction-related impacts would be less than significant and no mitigation is required.

Long-Term Operational Impacts

Refer to Response 4.8(a), above, for a description of impacts related to existing and proposed operations at the site. Impacts in this regard would be less than significant. Further, operation of the proposed project would include transportation uses similar to the existing condition, and would not introduce any new land uses that would require the use of hazardous materials. Operations of the proposed project would not increase impacts regarding accidental conditions, compared to the existing condition; rather, the project would result in beneficial safety impacts since it would replace a bridge constructed in 1928 with a new bridge meeting current design and safety standards. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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 proposed project would not result in hazardous emissions or hazardous materials that would pose a potential health hazard. There are no existing or proposed schools within one-quarter mile of the project site. The nearest school to the site is Lakeview Charter Academy Middle School, located at 11465 Kagel Canyon Street in Lake View Terrace (approximately 4.2 miles south of the project site). Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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. The project site is not reported on a list maintained pursuant to Government Code Section 65962.5.[1] No impact would result in this regard.

Mitigation Measures: No mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The nearest airport to the project site is the Whiteman Airport (KWHP), located approximately 6.5 miles to the southwest. The project site is not located within the boundaries of any Airport Safety Zones. In addition, the project does not involve any new structures, and does not involve a use that would result in a safety hazard for people residing or working in that area. Therefore, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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. No private airstrips exist in the project vicinity. Thus, no impacts would occur.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. The proposed project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. During construction activities, access within the project area and across the bridge would be maintained at all times. The project would use a stage construction approach, where one half of the bridge would be constructed at a time to ensure continuous access across Buck Canyon Bridge. During long-term operations, the proposed project would result in beneficial impacts related to emergency response/evacuation, as a new, reinforced bridge structure would be constructed at the same location as the existing bridge. As such, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. The proposed project site is located within the natural setting of the Angeles National Forest. The immediate surrounding area is generally undeveloped; development is limited to roadways and a few rural neighborhoods. According to the County's *General Plan Fire Hazard Severity Zones Policy Map* (Figure 12.5, dated May 2014), the project site is located within an identified "Very High Fire Hazard" severity zone. However, the proposed project is a transportation improvement project, and would not involve any habitable structures. Therefore, although

[1] California Environmental Protection Agency, *Cortese List Data Resources*, http://www.calepa.ca.gov/SiteCleanup/CorteseList/, accessed January 23, 2019.

the project is located in a very high fire hazard severity zone, the project would not expose structures or people to the risk of wildland fires. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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4.9 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?			✓	
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)?			✓	
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?			✓	
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?			✓	
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			✓	
f. Otherwise substantially degrade water quality?			✓	
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?				✓
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			✓	
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?				✓
j. Inundation by seiche, tsunami, or mudflow?			✓	

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

***Less Than Significant Impact*.**

Short-Term Construction Impacts

The proposed project would disturb less than one acre of land, and therefore, the project would not be subject to National Pollutant Discharge Elimination System (NPDES) permit requirements. The Los Angeles County Department of Public Works (LACDPW) would coordinate with the Los Angeles Regional Water Quality Control Board (LARWQCB) and the U.S. Army Corps of Engineers (ACOE) to obtain Section 401 and Section 404 permits. In addition, standard County Best Management Practices (BMP's) would be implemented to minimize potential construction-related water quality impacts. BMPs for construction activities may include measures to control pollutants at particular sources, such as fueling areas, trash storage areas, outdoor materials storage areas, and outdoor work areas. BMPs are also used

during treatment of the pollutants at these particular source areas. Therefore, short-term construction-related impacts regarding water quality would be less than significant upon adherence to existing County BMP requirements.

Long-Term Operational Impacts

As a bridge replacement project, it is not anticipated that the proposed project would result in a substantial change in water quality conditions at the site. The project does not include any structures or uses that would generate water quality pollutants or cause a violation of water quality standards or waste discharge requirements. Although the project may result in a minor increase in impervious area, this increase would be nominal and existing stormwater drainage improvements in the project site vicinity would continue to serve the project site, and the project would function similar to existing conditions. Therefore, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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 project would result in a nominal increase in impervious area in comparison to existing conditions, as the new bridge structure would be wider than the existing Little Tujunga Canyon Bridge. However, groundwater percolation at the project site would not be affected by the proposed project, particularly since drainage from the proposed bridge would be directed to Buck Canyon Creek, similar to existing conditions. The proposed bridge would not result in a noticeable deficit in aquifer volume or a lowering of the groundwater table, nor would the project involve or require the extraction of groundwater. As such, the project would not have the ability to substantially affect groundwater levels in the site vicinity. Moreover, any dewatering activities would be required to comply with Waste Discharge Requirements (WDRs), as issued by the LARWQCB. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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 involve the replacement of the existing Little Tujunga Canyon Road bridge structure. The proposed bridge would be constructed on precast, prestressed concrete I-girders within Buck Canyon Creek, in addition to new bridge abutments and wingwalls. The proposed project would not alter the course of Buck Canyon Creek, and all proposed bridge components within the creek would be designed in accordance with County standards to ensure that stormwater conveyance capacity is maintained, and that substantial on- or off-site erosion does not occur. Upon compliance with existing County design requirements and the County's review of project plans and specifications, impacts related to long-term operations would be less than significant.

It is possible that drainage patterns would be altered during short-term construction activities. However, as noted above in Response 4.9(a), short-term construction impacts related to erosion and siltation would be minimized through adherence to standard County BMPs related to water quality. Thus, runoff from the site would not result in substantial erosion or siltation on- or off-site. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. As stated in Response 4.9(c), the proposed bridge would be constructed on concrete I-girders within Buck Canyon Creek, in addition to new bridge abutments and wingwalls. The proposed project would not alter the course of Buck Canyon Creek, and all proposed bridge components within the creek would be designed in accordance with County standards to ensure that stormwater conveyance capacity is maintained to minimize hazards in regard to on- or off-site flooding. Upon compliance with existing County design requirements and the County's review of project plans and specifications, impacts related to long-term operations would be less than significant.

Mitigation Measures: No mitigation is required.

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 4.9(a), 4.9(c), and 4.9(d), above.

Mitigation Measures: No mitigation is required.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact. The proposed project is not anticipated to result in water quality impacts other than the potential short-term construction and long-term operational impacts identified above in Responses 4.9(a), 4.9(c), and 4.9(d). Compliance with existing County BMP and design requirements addressing both short-term construction and long-term operational effects would minimize impacts to a less than significant level.

Mitigation Measures: No mitigation is required.

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. The project proposed area is included within the boundaries of Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06037C1100F (September 26, 2008). However, this panel is noted to be a non-printed flood map boundary by FEMA, and no FEMA flood hazard information is available for this panel.[1] According to the County's *General Plan Flood Hazard Zones Policy Map (*Figure 12.2, April 2013), the proposed project site is not located within the boundaries of either a 100-year or 500-year flood zone. In addition, the proposed project would not include the construction of any housing. It should also be noted that roadway improvement projects such as the proposed project that do not impound water and are not certified as levees are typically ignored on floodplain mapping. Thus, no impacts would occur.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. As stated above in Response 4.9(g), the project site is located within an area identified as a non-printed flood map boundary by FEMA. However, according to the County's *General Plan Flood Hazard Zones Policy Map (*Figure 12.2, April 2013), the proposed project site is not located within the boundaries of either a 100-year or 500-year flood zone. As stated in Response 4.9(c), the proposed bridge would be constructed on concrete I-girders within Buck Canyon Creek, in addition to new bridge abutments and wingwalls. The proposed project would not alter

[1] Federal Emergency Management Agency Web Portal (Flood Insurance Rate Map #06037C1100F, September 26, 2008), https://msc.fema.gov/ accessed Janaury 23, 2019.

the course of Buck Canyon Creek, and all proposed bridge components within the creek would be designed in accordance with County standards to ensure that stormwater conveyance capacity is maintained to minimize hazards in regard to on- or off-site flooding. Upon compliance with existing County design requirements and the County's review of project plans and specifications, impacts related to long-term operations would be less than significant.

Mitigation Measures: No mitigation is required.

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. According to the *County of Los Angeles All-Hazard Mitigation Plan* (February 2014) "Dam Inundation Areas and County-Operated Critical Facilities" Map (Map 6-18), the proposed project site is not located within a levee or dam inundation area. Therefore, project implementation would not increase the exposure of people or structures to a significant risk involving flooding as a result of the failure of a levee or dam, and no impacts would occur.

Mitigation Measures: No mitigation is required.

j) Inundation by seiche, tsunami, or mudflow?

Less Than Significant Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity.

No enclosed bodies of water exist in proximity to the proposed project site. Thus, impacts in regard to seiche would be less than significant.

The proposed project site is located approximately 23.5 miles inland from the Pacific Ocean. According to the *County of Los* Angeles *All-Hazard Mitigation Plan* (February 2014) "Potential Local Source Tsunami Regions along the California Coast" Map (Figure 8-1), the proposed project site is not located within an area at risk for tsunami inundation. In addition, given its distance from the coast and intervening topography and features, the risk of inundation due to tsunami is also considered less than significant.

Potential risk from mudflow (i.e., mudslide, debris flow) within the proposed project area is considered to be moderate due to the project site's location within a mountainous area. Steep slopes and areas at the bottom of slopes or canyons are areas that are particularly at risk. However, as noted above in Response 4.9(a), short-term construction impacts related to erosion would be minimized through implementation of standard County BMPs related to water quality. In addition, the project would not include any habitable structures that would expose people to risk of mudflow, since the project proposes the replacement of an existing bridge facility. In addition, the proposed project would not represent a change in the use of the project site and would not increase the risks associated with mudflow as compared to existing conditions. Therefore, impacts in regard to mudflow would be less than significant.

Mitigation Measures: No mitigation is required.

4.10 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				✓
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?			✓	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓

a) Physically divide an established community?

No Impact. The proposed project would not result in impacts related to the division of an established community. The project site is located along an existing roadway (Little Tujunga Canyon Road), and is comprised of an existing bridge structure within the Angeles National Forest. Development in the project area is limited to roadways and a few rural neighborhoods approximately 0.25 miles to the northwest, as well as the Wildlife Waystation to the north, which consists of an animal sanctuary within a small rural area.

The proposed project would result in the demolition of the existing bridge structure, and construction of an improved bridge structure. As such, the proposed project would be similar to existing conditions, and would not have the potential to create a barrier between developed uses. Rather, the project would result in a beneficial impact in this regard since it would provide improved safety for pedestrians, bicyclists, and vehicular users on Little Tujunga Canyon Road. Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. Little Tujunga Canyon Road is designated "Limited Secondary Highway" by the *Los Angeles County General Plan 2035* (General Plan) *Mobility Element*, Figure 7.3, "Highway Plan Policy Map." *General Plan* land use designations within and adjacent to the project area include RL-10 (Rural Land 1 dwelling unit [du]/10 gross acres [ac]) and OS-NF (Open Space National Forest), as shown on *General Plan* Figure 5.1 (adopted by the LA County Board of Supervisors on June 16, 2015). In addition, the project site is located within the boundaries of the *Antelope Valley Area Plan* (June 2015). The land use designation of the project site is OS-NF (Open Space National Forest), as shown on *Antelope Valley Area Plan* Map 2.1, and the zoning designation is W (Watershed), as shown on the *Antelope Valley Area Plan* Zoning Map.

The project is also located within the boundaries of the Los Angeles River District of the Angeles National Forest (forest), which is managed by the U.S. Forest Service (USFS). The planning document that guides projects within the forest is the *Land Management Plan, Part 2 Angeles National Forest Strategy* (LMP), adopted by Record of Decision signed on September 20, 2005. The LMP describes the strategic direction and program emphasis objectives that are expected to result in the sustainability (social, economic and ecological) of the forest and, over the long-term, the

maintenance of a healthy forest. The LMP defines and describes eight (8) land use zones for the forest, which are an on-the-ground manifestation of the desired conditions and are the primary tools used to describe the strategic direction, including the management intent and suitable uses for areas of the forest where the zone is used. These land use zones, shown in Table 4.10-1, *Angeles National Forest Land Use Zones and Distribution*, below in order of decreasing land use intensity, are used to help demonstrate clearly management's intent and to indicate the anticipated level of public land use in any area (Place) of the forest. This "Place-Based Program Emphasis" is intended to provide a better understanding of what types of management is expected in specific areas of the forest.

Table 4.10-1
Angeles National Forest Land Use Zones and Distribution

Forest Area	Acreage	Percent of Total Forest Area (approx.)
Developed Area Interface (DAI) • Areas adjacent to communities or concentrated use areas and developed sites with more scattered or isolated community infrastructure.	85,828	12.9
Back Country (BC) • Areas of the national forest that are generally undeveloped and with few roads.	161,392	24.3
Back Country Non-Motorized (BCNM) • Areas of the national forest that are generally undeveloped with no roads.	248,219	37.5
Back Country Motorized Use Restricted (BCMUR) • Areas of the national forest that are generally undeveloped and with few roads (facilities in some remote areas).	52,971	7.9
Critical Biological (CB) • Areas of the national forest managed for the protection of species at risk.	3,920	0.59
Recommended Wilderness (RW) • This zone includes land that the USFS is recommending to Congress for wilderness designation and would be managed in the same manner as existing wilderness.	13,231	1.99
Existing Wilderness (EW) • This zone includes Congressionally designated wildernesses. Only uses consistent with all applicable wilderness legislation and the primitive character are allowed in existing and recommended wilderness.	81,924	12.3
(San Dimas) Experimental Forest (EF) • Research and demonstration area; generally closed to the public except by permit	15,498	2.3
Total	**662,983**	**100.0**

Source: U.S. Forest Service, 2005.

According to the LMP Land Use Zone Map and the LMP Places Map, both the proposed project area's LMP land use zone and place are designated as "Back Country." As shown in Table 4.10-1 and Exhibit 4-1, *U.S. Forest Service Land Use Map*, Back Country is described as "areas of the national forest that are generally undeveloped and with few roads." Most of the forest's remote recreation and administrative facilities are found in this zone, and the level of human use and infrastructure is generally low to moderate. In addition, Little Tujunga Canyon Road is identified within the LMP as one of the forest's "Designated Transportation Corridors."[1] As such, the project is subject to the following LMP land use strategy, provided to help achieve the desired conditions and goals described in the LMP:

Trans 1 – Transportation System: Plan, design, construct, and maintain National Forest System roads and trails to meet plan objectives, to promote sustainable resource conditions, and to safely accommodate anticipated levels and types of use.

[1] U.S. Forest Service, Land Management Plan, Part 2 Angeles National Forest Strategy (LMP), September 20, 2005, Table 482.

USDA UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Pacific Southwest Region

Angeles National Forest

September 2005

Final Land Managment Plan
Alternative 4a Selected

Land-Use Zones

Legend

National Forest Boundary
Pacific Crest Trail
Highways

Special Designations

Research Natural Area
Special Interest Area
Wild and Scenic River (eligible)

Land Ownership

Adjacent Forest Land
Non-Forest System Land

Land-Use Zones

Back Country
Back Country, Non-Motorized
Critical Biological
Developed Area Interface
Experimental Forest
Existing Wilderness
Recommended Wilderness
Back Country Motorized Use Restricted

0 1 2 4 6 8 10 Miles

N W E S

Liebre Mountain
Pyramid Lake
Piru Creek
Castaic
Fish Canyon
San Francisquito Creek
San Francisquito Canyon
Lake Castaic
Lake Piru
SESPE WILDERNESS
LOS PADRES NATIONAL FOREST
SANTA CLARITA
LANCASTER
PALMDALE
Soledad Canyon
Aliso-Arrastre North
Aliso-Arrastre Middle
Lower Little Rock Creek
Little Rock Creek
Devil's Punchbowl
South Fork Big Rock Creek
South Fork Little Rock Creek
Mt. Baden-Powell
Wrightwood
Project Site
Little Rock Creek Trib. (Cooper Canyon)
Upper Big Tujunga
SAN GABRIEL WILDERNESS
Sheep Mountain (Sheep Mountain Wilderness)
SHEEP MOUNTAIN WILDERNESS
Mt. San Antonio
San Antonio Creek
Cucamonga A (Cucamonga Wilderness)
CUCAMONGA WILDERNESS
Mt. Baldy Village
SAN BERNARDINO NATIONAL FOREST
San Gabriel River- N. Fork
San Gabriel River- E. Fork
San Gabriel River- W. Fork
West Fork San Gabriel River
Falls Canyon
SAN DIMAS EXPERIMENTAL FOREST
Fern Canyon
SAN FERNANDO
BURBANK
GLENDALE
PASADENA
ARCADIA

0 2.5 5 10 Miles

Source: USFS

Michael Baker INTERNATIONAL

LITTLE TUJUNGA CANYON ROAD OVER BUCK CANYON BRIDGE REPLACEMENT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND)

U.S. Forest Service Land Use Map

Exhibit 4-1

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There is currently an existing USFS Special Use Permit for the proposed project area. Small portions of the new wingwalls associated with the proposed project would be constructed outside of the existing USFS Special Use Permit. However, the USFS is currently working to amend the existing permit to accommodate the new wingwalls. In addition, the project would not result in the implementation of any new land uses, nor would it require a change in land use designations or zoning for any existing uses. The proposed project would improve operations on Little Tujunga Canyon Road by replacing the existing functionally obsolete bridge over Buck Canyon Creek with an improved bridge structure. These improvements would address existing deficiencies, improve safety, and implement improvements consistent with goals, policies, and strategies contained within the *County of Los Angeles General Plan Mobility Element,* the *Antelope Valley Area Plan,* and the *Angeles National Forest Land Management Plan* (LMP). Thus, a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. As stated in Response 4.4(f), the proposed project is not located within the boundaries of an identified conservation area, Habitat Conservation Plan or Natural Community Conservation Plan. In addition, the project is not located within the boundaries of an area identified as a Significant Ecological Area (SEA). However, as discussed within Responses 4.4(a) through 4.4(e), the proposed project would not result in significant impacts to biological resources. As such, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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4.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

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. The proposed project would involve improvements to the existing bridge and adjacent roadway to improve operations in the project area. According to the Los Angeles County Department of Regional Planning's Interactive GIS website, no mineral recovery activities currently occur in the project area, and the project site is not underlain by any known mineral resources of value to the region and residents of the state.[1] Thus, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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 4.11(a), above. No impacts would occur relative to 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.

Mitigation Measures: No mitigation is required.

[1] Los Angeles County Department of Regional Planning GIS-NET3 website, http://rpgis.isd.lacounty.gov/GIS-NET3_Public/Viewer.html accessed January 23, 2019.

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4.12 NOISE

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				✓
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
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?				✓
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?				✓

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 deemphasizes 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 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 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.

Two of the primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receiver and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receiver. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receiver, sound enhancements caused by reflections, and focusing caused by various meteorological conditions.

REGULATORY SETTING

Public agencies have established noise guidelines and standards to protect citizens from potential hearing damage and other various adverse physiological and social effects associated with noise. The proposed project is located within the Angeles National Forest in unincorporated Los Angeles County. In order to quantitatively assess construction noise impacts, the County of Los Angeles noise standards have been used in this analysis.

County of Los Angeles Noise Standards

Section 12.08 of the County of Los Angeles Code (County Code) contains the County Noise Ordinance. The County Noise Ordinance prohibits unnecessary, excessive, and annoying sounds from sources on private properties by setting limits that cannot be exceeded at adjacent properties. Section 12.08.440 of the County Code prohibits construction noise between the hours of 7:00 p.m. and 7:00 a.m. on weekdays (including Saturday), and at any time on Sunday or a federal holiday if it creates a disturbance across a residential or commercial real-property line. The County also sets maximum construction noise levels "at residential structures". As shown in Table 4.12-1, *County of Los Angeles Noise Limits*, the daytime noise level limit at single-family residences for mobile equipment is 75 dBA.

Table 4.12-1
County of Los Angeles Noise Limits

Time Interval	Single-Family Residential (dBA)	Multi-Family Residential (dBA)	Semi-Residential or Commercial (dBA)
Mobile Equipment			
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75	80	85
Daily, 8:00 p.m. to 7:00 a.m., and all day Sunday and legal holidays	60	64	70
Stationary Equipment			
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60	65	70
Daily, 8:00 PM to 7:00 AM, and all day Sunday and legal holidays	50	55	60
dBA = A-weighted decibel			

The County's Noise Ordinance requirements are not applicable to mobile noise sources such as automobiles or heavy trucks when traveling in a legal manner on public roadways or on private property. Mobile noise source control is preempted by federal and State laws. Section 12.08.560 of the County Code states, "Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 in/sec over the range of 1 to 100 Hertz."

County Code Section 12.08.570 (Activities Exempt from Chapter Restrictions) exempts certain activities from the provisions of County Noise Ordinance, including emergency, railroad, federal or state pre-exempted activities, and

public health and safety activities, etc. County Code Section 12.08.570(H) provides exemptions from the County Noise Ordinance for public health and safety activities. Specifically, County Code Section 12.08.570(H) states, "Public Health and Safety Activities. All transportation, flood control, and utility company maintenance and construction operations at any time on public right-of-way, and those situations which may occur on private real property deemed necessary to serve the best interest of the public and to protect the public's health and well-being, including but not limited to street sweeping, debris and limb removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, snow removal, house moving, vacuuming catch basins, removal of damaged poles and vehicles, repair of water hydrants and mains, gas lines, oil lines, sewers, etc." As such, the proposed project is exempt from the noise requirements under County Code 12.08.440.

EXISTING NOISE SOURCES

The proposed project area is located within the natural setting of the Angeles National Forest. The immediate surrounding area is generally undeveloped; development is limited to roadways and a few rural neighborhoods approximately 0.25 miles to the northwest, as well as the Wildlife Waystation to the north which consists of an animal sanctuary within a small rural area. Based on historical data, traffic volumes along Little Tujunga Canyon Road are approximately 9,000 vehicles per day and would be the predominant noise source in the area.[1]

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?

Less Than Significant Impact. It is difficult to specify noise levels that are generally acceptable to everyone; what is annoying to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels, or based on studies of the ability of people to sleep, talk, or work under various noise conditions. However, all such studies recognize that individual responses vary considerably. Standards usually address the needs of the majority of the general population.

Short-Term Noise Impacts

Typical noise levels generated by construction equipment are shown in Table 4.12-2, *Typical Maximum Noise Levels Generated by Construction Equipment*. Operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be due to random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

It should be noted that the project would not require pile driving. Rather, piles would be driven utilizing the cast-in-drilled-hole (CIDH) method. This system is generally preferable from an acoustic and vibration standpoint as it does not involve the typical "impact" noise associated with driving a pile.[2] Typical heavy construction equipment would include bulldozers, excavators, dump trucks, frontend loaders, graders, and industrial/concrete saws. Construction activities would include demolition, which may result in impact noise. Because of the effects of noise attenuation, the distance from the noise source to a receptor is a primary consideration in determining the noise level experienced at the receptor. As previously discussed, the nearest sensitive receptors are rural residences approximately 0.25 miles to the northwest. Because different construction stages involve different pieces of equipment and may involve only localized portions of a site, each construction stage can result in different noise levels being generated depending on the distance to sensitive receptors.

[1] Los Angeles County Department of Regional Planning, *Revised Draft Program EIR for the County of Los Angeles' Proposed Santa Clarita Valley Area Plan*, November 2010.
[2] California Department of Transportation, *Bridge Memo to Designers, Section 3-1: Deep Foundations*, June 2014.

Table 4.12-2
Typical Maximum Noise Levels Generated by Construction Equipment

Type of Equipment	Acoustical Use Factor[1]	L_{max} at 50 Feet (dBA)
Concrete Saw	20	90
Concrete Mixer Truck	40	79
Concrete Saw	20	90
Backhoe	40	78
Dozer	40	82
Truck	40	88
Paver	50	77
Roller	20	80
Tractor	40	84

1. Acoustical Use Factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Source: Federal Highway Administration, *Roadway Construction Noise Model (FHWA-HEP-05-054)*, January 2006.

As noted above, the proposed project is exempt from County's Noise Ordinance, as provided under County Code Section 12.08.570(H). However, in order to provide a comprehensive and conservative analysis of potential noise impacts, the anticipated short-term and intermittent construction noise levels generated during site construction activities (i.e., during demolition, grading, construction, and paving activities) were modeled using the FHWA's Roadway Construction Noise Model (FHWA-HEP-05-054) (dated January 2006). Table 4.12-3, *Project Construction Maximum Noise Levels at Sensitive Receptors*, identifies the estimated maximum construction noise levels at the closest sensitive receptor (approximately 0.25-mile northwest of the project site). As shown in Table 4.12-3, noise levels would range between 56.6 dBA L_{max} and 61.1 dBA L_{max} at the nearest receptor to the project site, which are below the County's allowable mobile equipment noise level (i.e., 75 dBA from 7:00 a.m. to 8:00 p.m. daily, except for Sundays and legal holidays) for single-family residential uses; refer to Table 4.12-1. Therefore, impacts in this regard would be less than significant.

Table 4.12-3
Project Construction Maximum Noise Levels at Sensitive Receptors

Construction Phase/Activity	Receptor Location			Estimated Exterior Construction Noise Level (dBA L_{max})[2]
	Land Use	Direction	Distance (ft)[1]	
Demolition[3]	Single-Family Residential	Northwest	1,230 (0.25-mile)	61.1
Grading[4]				56.6
Building Construction[5]				56.6
Paving[6]				56.6

1. Distance is from the nearest receptor to the closest construction activity area of the project site.
2. Derived from the FHWA Roadway Construction Noise Model (FHWA-HEP-05-054), Jan 2006. Refer to Appendix E, *Noise Data*, for noise modeling assumptions and results.
3. Assumes the use of 1 concrete/industrial saw, 1 rubber tired dozer, and 3 tractors/loaders/backhoes.
4. Assumes the use of 1 grader, 1 rubber tired dozer, and 1 tractor/loader/backhoe.
5. Assumes the use of 1 crane, 1 forklift, 1 generator set, 1 tractor/loader/backhoe, and 3 welders.
6. Assumes the use of 1 cement and mortar mixer, 1 paver, 1 paving equipment, 1 roller, and 1 tractor/loader/backhoe.

Long-Term Noise Impacts

The proposed project would not introduce any new uses that would result in an increase of noise levels in the project area. The improvements are proposed at Little Tujunga Bridge and its immediate approach areas. No uses are proposed that would directly increase vehicular trips in the study area, and the proposed project would not increase vehicular capacity along Little Tujunga Canyon Road. Therefore, no long-term noise impacts would result with implementation of the proposed project.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. Project construction can generate varying degrees of ground-borne 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. Ground-borne vibrations from construction activities rarely reach levels that damage structures.

The Federal Transit Administration (FTA) has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.20 inch/second) appears to be conservative. 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. Typical vibration produced by construction equipment is illustrated in Table 4.12-4, *Typical Vibration Levels for Construction Equipment*.

Table 4.12-4
Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inches/second)	Approximate peak particle velocity at 550 feet (inches/second)
Large bulldozer	0.089	0.000862
Loaded trucks	0.076	0.000736
Small bulldozer	0.003	0.000029
Jackhammer	0.035	0.000339
Vibratory compactor/roller	0.210	0.002035

Notes:
1. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006. Table 12-2.
2. Calculated using the following formula:

$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

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

Ground-borne vibration decreases rapidly with distance. As previously discussed, the proposed project would not require pile driving. Per Table 4.12-4, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.003 to 0.210 inch-per-second peak particle velocity (PPV) at

25 feet from the source of activity. Construction activities would occur approximately 550 feet from the nearest structures (buildings associated with the Wildlife Waystation animal sanctuary). As noted in Table 4.12-4, vibration at 550 feet would range from 0.000029 to 0.002035 PPV. Therefore, vibration from construction activities would not exceed the 0.20 inch-per-second PPV FTA criteria nor the County's 0.01 inch-per-second PPV significance threshold at the nearest structures. Thus, a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact.

Long-Term Mobile Noise Impacts

The project would not generate new vehicular trips as a result of implementation, nor would it increase vehicular capacity along Little Tujunga Canyon Road. Thus, no impact is anticipated in this regard.

Long-Term Stationary Noise Impacts

Upon project completion, noise in the project area would remain similar to existing noise levels. The proposed enhancements would not involve any sources of stationary noise (i.e., pumps, generators, etc.). Therefore, no impact would result in this regard.

d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above the levels existing without the project?

Less Than Significant Impact. Refer to Responses 4.12(a) and 4.12(b), above.

Mitigation Measures: No mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project is not located within an airport land use plan or within two miles of a public or private airport. Therefore, implementation of the proposed project would not result in exposure of people residing or working in the project area to excessive or high noise impact levels.

Mitigation Measures: No mitigation is required.

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. Refer to Response 4.12(e).

Mitigation Measures: No mitigation is required.

4.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?				✓
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				✓
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓

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)?

No Impact. The proposed project would not involve the construction of any homes, businesses, or other uses that would result in direct population growth. The project would involve the replacement of the existing Little Tujunga Canyon Road Bridge over Buck Canyon in order to improve the bridge's safety and reliability. In addition, the project would not represent the removal of a barrier to growth, since the bridge is already an existing facility and the project would not increase vehicular capacity along Little Tujunga Canyon Road. As such, no impacts relative to direct or indirect substantial population growth would occur.

Mitigation Measures: No mitigation is required.

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

No Impact. The proposed roadway improvements would occur within existing public right-of-way (ROW) and would not require the acquisition of any permanent ROW. The project would not displace any housing. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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

No Impact. The proposed roadway improvements would occur within existing ROW and would not require the acquisition of any permanent ROW. The project would not displace any people. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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4.14 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
1) Fire protection?				✓
2) Police protection?				✓
3) Schools?				✓
4) Parks?				✓
5) Other public facilities?				✓

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:

1) Fire protection?

No Impact. The County of Los Angeles Fire Department (LACFD) provides fire protection within the project area. Cooperative agreements exist among the LACFD and the USFS for mutual aid and assistance. The nearest station to the project site is Station #63, located at 4526 Ramsdell Avenue, La Crescenta, California 91214, approximately 14 miles southeast of the project site.

As a roadway improvement, the proposed project would not substantially increase the need for fire protection services. No habitable structures are proposed, and as discussed in Response 4.13(a), the project would not directly or indirectly induce population growth. Moreover, since the project would provide improvements that would upgrade the existing bridge to meet current bridge design and seismic safety standards, and improve the safety for motorists in the project area, the project would result in beneficial impacts related to emergency response and roadway connectivity. As such, no impacts relative to fire protection services would occur.

Mitigation Measures: No mitigation is required.

2) Police protection?

No Impact. The County of Los Angeles Sheriff's Department (LASD) provides police protection within the project area. Cooperative agreements exist among the LASD and the USFS for mutual aid and assistance. The nearest station to the project site is Station #12, located at 4554 Briggs Avenue, La Crescenta, California, 91214, approximately 16 miles southeast of the project site. As a roadway improvement, the proposed project would not substantially increase the need for police protection services. No habitable structures are proposed, and as discussed in Response 4.13(a), the project would not directly or indirectly induce population growth. Moreover, since the project would provide roadway

improvements that would upgrade the existing bridge to meet current bridge design and seismic safety standards, and improve the safety for motorists in the project area, the project would result in beneficial impacts related to emergency response and roadway connectivity. Therefore, no impacts relative to police protection services are anticipated with project implementation.

Mitigation Measures: No mitigation is required.

3) Schools?

No Impact. The proposed project would not directly or indirectly result in any student generation, as no homes or other growth inducing uses are proposed. Implementation of the proposed project would not result in the need for the construction of additional school facilities, as the project would not result in an increase in population. Therefore, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

4) Parks?

No Impact. As a roadway improvement, the project would not generate the need for new or physically altered park facilities. No habitable structures are proposed as part of the project, nor would the project result in any direct or indirect growth inducement. Thus, no impacts are anticipated in this regard.

Mitigation Measures: No mitigation is required.

5) Other public facilities?

No Impact. As shown above in Responses 4.14(a)(1) through 4.14(a)(4), the proposed project would not result in significant impacts on public services or facilities. No other public facilities are anticipated to be affected by the project. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

4.15 RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			✓	

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?

Less Than Significant Impact. The proposed project is completely located within the Angeles National Forest, with an estimated 650,000 acres of recreational opportunity. The Angeles National Forest was established on July 1, 1908 and is located in the San Gabriel Mountains of Los Angeles County, just north of Metropolitan Los Angeles. The land within the Angeles National Forest is diverse, both in appearance and terrain. Elevations range from roughly 1,200 to 10,064 feet above sea level, with much of the forest covered with dense chaparral that changes to pine and fir-covered slopes in higher elevations. The Pacific Crest Trail crosses the forest, which originates at the U.S. Border with Mexico to the northern border with Canada. Within the forest there are roughly 36 picnic areas, 66 campgrounds, and two ski areas.

According to the *Land Management Plan, Part 2 Angeles National Forest Strategy* (LMP) (September 20, 2005) Recreation Opportunity Map, the proposed project is designated as "Roaded Natural" within the Recreation Opportunity Spectrum (ROS) objectives. No portion of the project site falls within a primitive or semi-primitive ROS objective area. In addition, no portion of the project area falls within an "Existing Wilderness" or "Recommended Wilderness" land use zone (only uses that are consistent with all applicable wilderness legislation and the primitive character are allowed in Existing and Recommended Wilderness ROS objective areas).

The proposed project would not result in an increase in demand on existing parks or other recreational facilities, including those located within the Angeles National Forest, and would not result physical deterioration of these facilities. The project would replace an existing bridge within the forest, and project construction and operation would not require any modification or disturbance that would restrict recreational activities within the forest, nor would it result in adverse impacts to the forest. The proposed project would not increase vehicular capacity along Little Tujunga Canyon Road. Therefore, recreation impacts would be less than significant in this regard.

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?

Less Than Significant Impact. As stated in Response 4.15(a) above, the proposed project consists of replacement of an existing bridge within the Angeles National Forest. The project would not result in an increase in demand on parks or other recreational facilities, including those located within the Angeles National Forest, and would not result in an adverse physical effect on the environment. No recreational facilities would be constructed as part of the project. As such, impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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4.16 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	
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?				✓
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?			✓	
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e. Result in inadequate emergency access?			✓	
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?			✓	

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*.** The proposed project is the replacement of a 90-year-old bridge that is classified as functionally obsolete, and does not meet current bridge design and seismic safety standards. The existing Little Tujunga Canyon Road Bridge structure was built in 1928, and has undergone one widening in 1959. It is a timber A-frame bridge with timber piles and substandard travel lanes: a 12-foot lane and 1-foot shoulder in each direction. Sixteen-ton trucks and greater are prohibited from traveling on the bridge. The proposed project would construct a new bridge meeting current engineering standards in order to improve safety for all users of the bridge in the area.

The County of Los Angeles conducts over 1,600 vehicular traffic volume counts per year. The data is a five-year compilation of Average Daily Traffic (ADT) gathered largely from the unincorporated areas of the County of Los Angeles. The data includes the location, count date, 24-hour ADT, AM peak, and PM peak. The most recent traffic counts for the roadway on which the proposed project site is located (Little Tujunga Canyon Road north of Gold Creek Road) were obtained on December 8, 2015. Table 4.16-1, *Existing Conditions AM/PM Peak Hour Study Location*, summarizes the results of this traffic count. It should be noted that levels of service are not included in the traffic count data.

Table 4.16-1
Existing Conditions AM/PM Peak Hour Study Location

Location	Direction	24 Hour Volume	Existing AM Peak Hour	Existing PM Peak Hour
Little Tujunga Canyon Road north of Gold Creek Road	NB	150	15	17
	SB	156	19	24
	Total	**306**	**34**	**41**

Source: Los Angeles County Public Works Department website https://dpw.lacounty.gov/tnl/trafficcounts/ accessed 5-25-17.

As shown in Table 4.16-1, Little Tujunga Canyon Road north of Gold Creek Road currently has a low ADT. The proposed project would not result in an increase in ADT, as the project would not increase vehicular capacity. Rather, the project would construct a new bridge meeting current engineering standards in order to improve safety for all users of the bridge in the area, thus resulting in beneficial impacts in regard to safety for all modes of transportation in the project area. Impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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. The *Los Angeles County Congestion Management Program* (*CMP)* is intended to reduce traffic congestion and provide a mechanism for coordinating land use and development decisions throughout Los Angeles County. The *CMP* states that if a project generating 50 or more trips during either the AM or PM weekday peak hours for intersections, or more than 150 trips on the freeway in either direction, a *CMP* traffic impact analysis is required.

As a roadway improvement the project would not generate any new land uses or associated vehicle trips. Rather, the project would result in beneficial impacts in regard to traffic congestion and safety in the project area. Therefore, no *CMP* traffic impact analysis is required for the proposed project, and no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. The nearest airport to the project site is the Whiteman Airport (KWHP), located approximately 6.5 miles to the southwest. The project site is not located within the boundaries of any Airport Safety Zones. In addition, due to the nature and scope of the proposed project (bridge replacement), implementation would not have the capacity to result in a change in air traffic patterns. Therefore, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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. Upon completion of construction of the new Little Tujunga Canyon Road Bridge, the project would result in beneficial impacts in regard to hazards. The project would result in an improved, seismically-reinforced bridge over Buck Canyon Creek and would maintain similar roadway geometry as what exists today. No

permanent design features would be implemented that would substantially increase hazards. Thus, impacts related to long-term operations would be less than significant.

The project would be constructed utilizing a stage construction approach to allow traffic to remain open at all times. Thus, the project would be constructed in two phases: Phase 1 construction would occur at the east side of the existing bridge, and one-way traffic would be maintained on the west side of the bridge; Phase 2 construction would occur at the west side and one-way traffic would be maintained on the east side of the bridge. During this time when one-way traffic is required, a potential for traffic hazards exists. However, these impacts would be temporary and would cease upon project completion. In addition, in accordance with existing County standards, the project would develop and implement a standardized Traffic Management Plan (TMP) during construction to minimize impacts in this regard. The TMP would meet County traffic control guidelines, and would include potential measures such as advanced notification to drivers and surrounding uses, construction signage, temporary striping plans, construction vehicle routing plans, and the need for a construction flagperson to direct traffic during heavy equipment use, among others. With implementation of a TMP during construction, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

e) Result in inadequate emergency access?

Less Than Significant Impact. Refer to Response 4.16(d), above. The project would result in beneficial impacts in regard to traffic safety and reliability through the replacement of the existing bridge, and impacts would be less than significant in regard to long-term operations.

As noted above, the project would be constructed utilizing a stage construction approach to allow traffic to remain open at all times. Thus, the project would be constructed in two phases: Phase 1 construction would occur at the east side of the existing bridge, and one-way traffic would be maintained on the west side of the bridge; Phase 2 construction would occur at the west side and one-way traffic would be maintained on the east side of the bridge. The TMP that would be developed and implemented during project construction under existing County requirements would require that the Los Angeles County Fire Department and Los Angeles County Sheriff's Department are notified at least three days in advance of the commencement of construction activities that could impede movement along Little Tujunga Canyon Road. With implementation of the TMP, short-term construction impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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. The proposed project would involve roadway improvements consistent with the *Los Angeles County General Plan, Antelope Valley Area Plan,* and the USFS *Land Management Plan, Part 2 Angeles National Forest Strategy*. Generally, the proposed project would result in beneficial impacts to transportation efficiency and safety in the project area.

As a roadway improvement, the project would not generate any new land uses or associated vehicle trips, nor would it generate the demand for additional transit services in the project area. There are currently no bicycle lanes or pedestrian facilities in the project area. Therefore, the proposed project would not conflict with any policies, plans, or programs related to public or alternative transportation and impacts would be less than significant.

Mitigation Measures: No mitigation is required.

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4.17 TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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:				
1) 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		✓		
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		✓		

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.

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.

a) 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:

1) 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

Less Than Significant Impact With Mitigation Incorporated. According to the *Cultural Resources Assessment for the Little Tujunga Canyon Road Bridge Replacement Project,* dated July 2017 (refer to Appendix C, *Cultural Resources Assessment*), a Sacred Lands File search request was submitted to the Native American Heritage Commission (NAHC) on January 20, 2017. The NAHC replied on February 22, 2017 that their research returned negative results for sacred lands located within the project area. The County of Los Angeles notified the two tribes, Fernandeno Tataviam Band of Mission Indians, and Gabrielino Tongva Tribe San Gabriel Band of Mission Indians, whom previously requested notification under AB 52.

In compliance with AB 52, the County mailed letters to the two tribes, notifying each tribe of the opportunity to consult with the County regarding the proposed project. The Fernandeño Tataviam Band of Mission Indians (Tataviam) responded to the County's request for consultation on July 31, 2017, and recommended that a professional Native American monitor be present for any ground-disturbing construction activities occurring at greater than 5 feet in depth. The Los Angeles County Public Works Department provided a response letter to the Tataviam on May 3, 2018, which provides mitigation measures for implementation during construction, as described below.

Based on the analysis in the *Cultural Resources Assessment*, given the lack of archaeological sites documented in the project area, the steepness and ruggedness of the area, as well as the disturbance by construction of the existing roadway, the potential for discovery of archaeological deposits, including tribal cultural resources as defined in Public Resources Code (PRC) Section 21074, is considered low. Therefore, the proposed project would not have a significant impact to a historical resource, as defined in PRC Section 5020.1(k). As noted in Section 4.5, *Cultural Resources*, Mitigation Measures CUL-1 and CUL-2 would be implemented to minimize impacts to sensitive resources in the unlikely event they are found during the construction process. Measure CUL-1 would require that in the event of an unanticipated discovery during project construction, construction activity shall cease and a qualified archaeologist shall be consulted for evaluation of the find. In response to the recommendation for Native American monitoring from the Tataviam Tribe, Measure CUL-2 would require that the Los Angeles County Department of Public Works prepare a plan that identifies areas of anticipated construction-related ground disturbance at greater than 5 feet in depth on the project site, and would allow a Native American monitor to be present during construction activities in these areas. Thus, with implementation of Measures CUL-1 and CUL-2, impacts to a listed or eligible resource under the California Register of Historical Resources or a local register as defined under PRC section 5020.1(k) are anticipated to be less than significant.

Mitigation Measures: Refer to Mitigation Measures CUL-1 and CUL-2.

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

Less Than Significant Impact With Mitigation Incorporated. Refer to Response 4.17(a). In compliance with AB 52, the County distributed letters to potentially affected tribes for consultation regarding the proposed project. The Fernandeño Tataviam Band of Mission Indians (Tataviam) responded to the County's request for consultation on July 31, 2017, and recommended that a professional Native American monitor be present for any ground-disturbing construction activities occurring at greater than 5 feet in depth. Impacts pertaining to tribal resources as defined in PRC Section 5024.1 would be less than significant with implementation of Mitigation Measures CUL-1 and CUL-2.

Mitigation Measures: Refer to Mitigation Measures CUL-1 and CUL-2.

4.18 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
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?				✓
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?			✓	
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				✓
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?				✓
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	

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

No Impact. The proposed project would result in the replacement of the existing Little Tujunga Canyon Road Bridge. The project would not include the construction of any uses capable of producing wastewater. As such, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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. Refer to Impact 4.18(a) above. The project would not require or result in the construction of any water or wastewater treatment facilities. No impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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?

Less Than Significant Impact. The proposed project would involve replacing the existing Little Tujunga Canyon bridge with a wider bridge that meets current bridge design and seismic safety standards, resulting in a minor temporary alteration to existing drainage patterns at the project site. As discussed in Section 4.9, *Hydrology and Water Quality*, the proposed bridge would be constructed on precast, prestressed concrete I-girders within Buck Canyon Creek, in

addition to new bridge abutments and wingwalls. The proposed project would not alter the course of Buck Canyon Creek, and all proposed bridge components within the creek would be designed in accordance with County standards to ensure that stormwater conveyance capacity is maintained. Impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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

No Impact. As a bridge replacement, the proposed project would not introduce a new land use that would result in water consumption. As such, no impacts would occur in this regard.

Mitigation Measures: No mitigation is required.

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. Refer to Responses 4.17(a) and 4.17(b), above.

Mitigation Measures: No mitigation is required.

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

Less Than Significant Impact. The proposed project would result in replacement of an existing bridge. The project would not include any habitable structures, and would not have the capability to produce solid waste during long-term operations. Although the project may require the disposal of debris during the grading/excavation process (soil, asphalt, etc.), the generation of these materials would be short-term in nature and would not have the capability to substantially affect the capacity of regional landfills. Thus, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation is required.

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

No Impact. The proposed project would comply with all Federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and County requirements for solid waste generated during the construction process. No impacts relative to solid waste statutes and regulations would occur.

Mitigation Measures: No mitigation is required.

4.19 MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?		✓		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			✓	
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			✓	

a) 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?

Less Than Significant Impact With Mitigation Incorporated. As concluded in Section 4.4, *Biological Resources*, the project has the potential to result in impacts to sensitive plant and animal species. In addition, as noted in Section 4.5, *Cultural Resources*, the project may result in impacts to cultural resources. Therefore, additional analysis and technical studies were conducted in order to determine whether the proposed project would 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, or 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.

As shown within Section 4.4, *Biological Resources*, three (3) special-status plants were observed within the 500-foot buffer zone included in the survey area during the 2018 rare plant surveys, and Lewis's clarkia was observed within the proposed project site. However, a total of thirteen (13) special-status plant species were identified during the California Natural Diversity Database (CNDDB), California Native Plant Society Online Inventory of Rare and Endangered Vascular Plants (CNPS), and United States Fish and Wildlife Service (USFWS) records search as potentially occurring within the proposed project area. Development of the proposed project has the potential to result in a temporary loss of suitable habitat for these plant species as identified in Section 4.4, totaling approximately 0.10 acre of Diegan coastal sage scrub, 0.02 acre of southern mixed chaparral, and 0.02 acre of oak riparian woodland, with a permanent loss of approximately 0.09 acre of Diegan coastal sage scrub and 0.01 acre of southern mixed chaparral. Permanent or temporary indirect impacts to individuals could result from competition with invasive plant

species if invasive plant seeds are spread into new areas during construction. Upon implementation of recommended Mitigation Measures BIO-1 through BIO-3 impacts to special-status plant species would be less than significant.

No special-status animal species were observed within the proposed project area during the habitat assessment. However, a total of twenty-one (21) special-status animal species were identified by the CNDDB and USFWS records searches as potentially occurring within the project area. Development of the proposed project has the potential to have both direct and indirect impacts to these animal species as identified in Section 4.4. Construction disturbance (e.g., access, staging, noise, visual disruptions) primarily during warmer times of the year may directly, but temporarily affect coastal whiptail and silvery legless lizard, both of which are year-round residents in southern California. Potential roosting habitat for Townsend's big-eared bat is present within the project site at the bridge. Although no evidence of bat roosting was observed within the project site, there is a potential for direct impacts to roosting Townsend's big-eared bat if present during construction, with temporary impacts to foraging habitat. Although there is a low potential for prairie falcon and California condor to nest in the cliffs within the project area, project activities would only have the potential to disturb prairie falcon during late fall, winter, and early spring, as this species is a winter resident in southern California, and California condor if present at the time of construction. Minimal habitat within the proposed project footprint would be temporarily lost due to project activities, totaling approximately 0.10 acre of Diegan coastal sage scrub, 0.02 acre of southern mixed chaparral, and 0.02 acre of oak riparian woodland, 0.09 acre of southern willow scrub, and 0.14 acre of mule fat scrub, with a permanent loss of approximately 0.09 acre of Diegan coastal sage scrub, 0.01 acre of southern mixed chaparral, 0.02 acre of southern willow scrub, and 0.01 acre of mule fat scrub. Indirect impacts would be generally restricted to long-term habitat degradation, primarily through the unintended spread of non-native weed seeds within the project area, which may result in changing plant composition and lower the quality of the on-site natural habitat.

Construction during the avian nesting season (typically January through July for raptors, and February through August for other avian species) has the potential to directly affect nests and/or disrupt nesting behaviors potentially resulting in temporary or permanent nest abandonment, loss of young, or displacement. If construction activities are scheduled during the avian breeding season, Mitigation Measures BIO-4 through BIO-6 shall be implemented to mitigate for possible direct and indirect impacts to nesting birds and special-status animals.

Further, as described within Section 4.5, *Cultural Resources*, the potential for encountering archaeological and paleontological resources as a result of project construction is considered low. However, in the unlikely event resources are discovered during ground disturbance, Mitigation Measures CUL-1 through CUL-3 would be required to minimize potential impacts. With implementation of recommended mitigation, the project is not anticipated to eliminate important examples of the major periods of California history or prehistory. Thus, impacts in this regard would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. The proposed project would result in replacement of the Little Tujunga Canyon Road over Buck Canyon Bridge, consistent with the goals of the *Los Angeles County General Plan, Antelope Valley Area Plan,* and the USFS *Land Management Plan, Part 2 Angeles National Forest Strategy*. The project would not result in any new land uses or a change in land use at the site. The project would not result in substantial population growth within the area, either directly or indirectly. No reasonably foreseeable future projects within the immediate project vicinity are known at this time. The County is proposing the Little Tujunga Canyon Road over Pacoima Wash Bridge Replacement Project located approximately two miles northwest of the project site; however, it is not anticipated that these two bridge projects would have the capacity to result in cumulatively considerable impacts. Although the project may incrementally affect other resources that were determined to be less than significant, the project's contribution to these effects is not considered "cumulatively considerable", and impacts would be less than significant in this regard.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. Previous sections of this Initial Study reviewed the proposed project's potential impacts related to aesthetics, air quality, geology and soils, greenhouse gases, hydrology/water quality, noise, hazards and hazardous materials, traffic, and other issues. As concluded in these previous discussions, the proposed project would result in less than significant environmental impacts with implementation of standard County Best Management Practices (BMPs) and the recommended mitigation measures. Therefore, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings.

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4.20 REFERENCES

The following references were utilized during preparation of this Initial Study/Environmental Checklist. These documents are available for review at the County of Los Angeles Department of Public Works Department located at 900 South Fremont Street, Alhambra, California 91803.

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22. Federal Highway Administration, Roadway Construction Noise Model (FHWA-HEP-05-054), January 2006.

23. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006, http://www.fta.dot.gov/documents/FTA_Noise_and_Vibration_ Manual.pdf.

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30. South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology,* Appendix C, June 2003 (revised 2009), http://www.aqmd.gov/ CEQA/handbook/LST/LST.html.

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4.21 REPORT PREPARATION PERSONNEL

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5.0 INVENTORY OF MITIGATION MEASURES

BIOLOGICAL RESOURCES

BIO-1 Crews should avoid individuals of Lewis' clarkia. Prior to construction, a qualified biologist should flag all individuals of this species located within the project footprint for avoidance, if feasible. If avoidance is not feasible for constructability purposes, removal of these individuals of Lewis' clarkia should be warranted considering the limited amount of loss relative to the local population size, and that Lewis' clarkia is not listed for protection under the California or Federal Endangered Species Acts, rather is a California Rare Plant Rank (CRPR) 4.3 species ("Plants of limited distribution – a Watch List; Not very threatened in California [less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known]"), thereby affording it no legal protection other than at the discretion of the lead agency, the County of Los Angeles Department of Public Works.

BIO-2 Prior to ground disturbance and vegetation clearing activities, construction work areas and access limits shall be clearly staked, and all equipment and personnel shall remain within the limits of work during all project-related activities. This requirement shall be indicated within project specifications, subject to verification by the Los Angeles County Department of Public Works.

BIO-3 All construction equipment, if left off-site, shall be thoroughly cleaned of all weed seeds prior to entering the limits of disturbance to avoid the spread of invasive species. This requirement shall be indicated within project specifications, subject to verification by the Los Angeles County Department of Public Works.

BIO-4 Project activities should be conducted outside of the avian breeding season (typically January through July for raptors and February through August for other species). If not practical, a qualified biologist shall conduct a nesting bird survey within three days prior to vegetation clearing and initial ground disturbing activities to determine the presence or absence of nesting birds with the potential to be affected by the project.

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 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) 300 feet for other non-listed species. Any nests occurring within these distances shall have a no-disturbance buffer established around them. This distance may be adjusted only in coordination with the CDFW.

A qualified biologist shall periodically monitor any confirmed active nest(s) during construction. No construction within a buffer shall be allowed until the biologist has determined that the nest is no longer active (i.e., the nestlings have fledged and are no longer reliant on the nest).

BIO-5 Within three days prior to project commencement, a qualified biologist shall conduct a roosting bat survey at the Little Tujunga Canyon Road Bridge. If roosting bats are determined present within the project site, appropriate measures in coordination with and as directed by the CDFW shall be implemented. This requirement shall be indicated within project specifications, subject to verification by the Los Angeles County Department of Public Works.

BIO-6 Prior to any vegetation clearing and during initial ground disturbing activities, a qualified biologist shall be present to assist in the avoidance of impacts to wildlife individuals. If individuals are observed within or adjacent the project footprint, the biologist shall allow individuals to disperse or move a safe distance

away from the project site. For special-status species, coordination with and direction from CDFW shall be required. This requirement shall be indicated within project specifications, subject to verification by the Los Angeles County Department of Public Works.

CULTURAL RESOURCES

CUL-1 If evidence of subsurface cultural resources is found during construction, excavation and other construction activity within the immediate area of the find shall cease and the construction contractor shall contact the Los Angeles County Department of Public Works. With direction from Department of Public Works, an archaeologist certified by the County of Los Angeles shall evaluate the find. If warranted, the archaeologist shall develop a plan of mitigation which may include, but shall not be limited, to, salvage excavation, laboratory analysis and processing, research, curation of the find in a local museum or repository, and preparation of a report summarizing the find.

CUL-2 The Los Angeles County Department of Public Works shall prepare a plan that identifies areas of the project where ground disturbance occurs over 5 feet in depth in previously undeveloped areas. Native American tribes previously requesting such notice shall be notified of work that is anticipated to occur in these areas prior to ground disturbing construction activities. The Department of Public Works shall accommodate a professional Native American monitor on the project site on a volunteer basis. The professional Native American monitor shall follow standard construction safety protocol.

CUL-3 If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity within the immediate area of the find shall cease and the construction contractor shall contact the Los Angeles County Department of Public Works. With direction from the Department of Public Works, a paleontologist certified by the County of Los Angeles shall evaluate the find. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of identified resources.

6.0 CONSULTANT RECOMMENDATION

Based on the information and environmental analysis contained in the Initial Study/Environmental Checklist, we recommend that the County of Los Angeles prepares a Mitigated Negative Declaration for the Little Tujunga Canyon Road over Buck Canyon Bridge Replacement. We find that the proposed project could have a significant effect on a number of environmental issues, but that mitigation measures have been identified that reduce such impacts to a less than significant level. We recommend that the second category be selected for the County's determination (see Section 7.0, *Lead Agency Determination*).

April 2019
Date

Alan Ashimine, Project Manager
Michael Baker International

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7.0 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. —

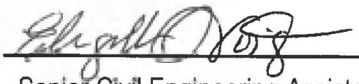
I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 5.0 have been added. A MITIGATED NEGATIVE DECLARATION will be prepared. ✓

I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. —

I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. —

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant Impact with Mitigation Incorporated," as indicated by the analysis provided within this Initial Study.

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

Signature:	
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