APPENDIX B – SECTION 4(f)

Summary

This appendix documents the project's compliance with Section 4(f) of the US. Department of Transportation Act. It includes Section 4(f) Evaluation for one property (the Kinsey Mansion) and *de minimis* determinations for three Section 4(f) properties. It also includes a discussion about other resources evaluated in relation to the requirements of Section 4(f). The table and figures below summarize all Section 4(f) properties and use status.

Table S1: List of Section 4(f) properties within the project vicinity and use status

	Name of Property	Type of Property	Alternative 1	Alternative 2	No Build
1	The Kinsey Mansion located south of Quail Lake at 34860 Lancaster Road	Historic	Use	Use	No use
2	Angeles Aqueduct (which intersects SR-138 near the community of Neenach, around 300m east of Three Points Road)	Historic	De minimis impact	De minimis impact	No use
3	The Big Creek East-West Transmission Line that intersects SR-138 below the Bailey Substation	Historic	De minimis impact	De minimis impact	No use
4	Big Creek Hydroelectric System Historic District	Historic	De minimis impact	De minimis impact	No use
5	Los Angeles Department of Water and Power Transmission Line	Historic	De minimis impact	De minimis impact	No use
6	The Bell Telephone and Telegraph Switching Station located southeast of Quail Lake along SR-138	Historic	No use	No use	No use
7	The Antelope-Magunden #2 Transmission Line that intersects SR-138 just east of 140th Street West	Historic	No use	No use	No use
8	Hungry Valley Off Road Vehicle Recreation Area (west of I-5 and SR-138 intersection)	Recreation	No use	No use	No use
9	Neenach Wildlife Sanctuary at 210 th Street, north of SR-138	Wildlife Refuge	No use	No use	No use
10	Desert and Mountain Conservation Authority Natural Reserve at SR-138 (south of) and 150 th Street	Wildlife Refuge	No use	No use	No use
11	The conservation parcel owned by the MRCA (Mountain Recreation and Conservation Authority) at SR-138 and 212 th Street, south of SR-138	Wildlife Refuge	No use	No use	No use
12, 13, 14	The conservation parcels owned by the MRCA (Mountain Recreation and Conservation Authority) in the vicinity of the project	Wildlife Refuge	No use	No use	No use
15	Segments of the Pacific Crest Trail from C-6 to approximately C-8 and from approximately 400 feet south of the SR-138 to 0.5 mile further south.	Recreation	No Use	No Use	No use

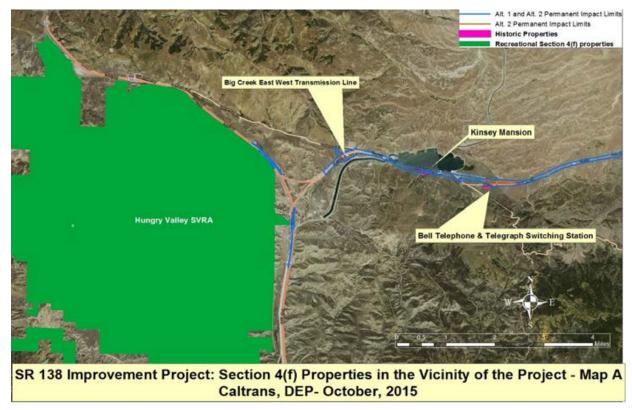


Figure S1: Section 4(f) Properties in the Vicinity of the Project – Map A

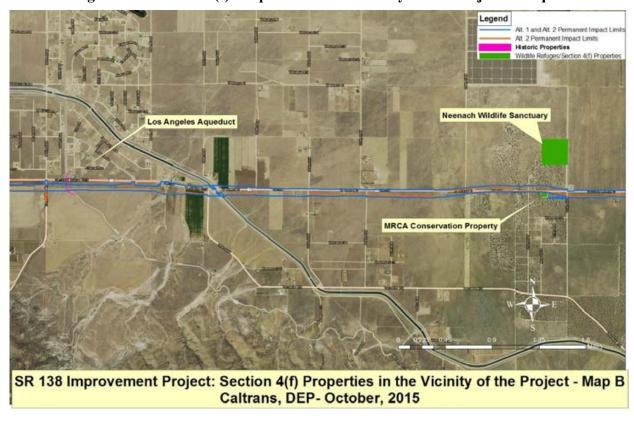


Figure S2: Section 4(f) Properties in the Vicinity of the Project – Map B

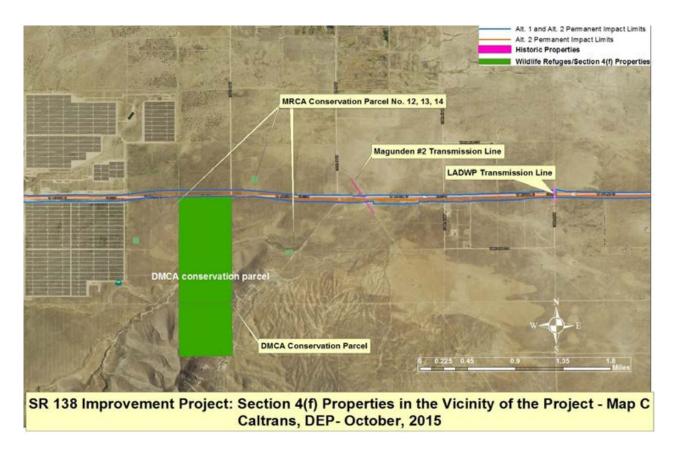


Figure S3: Section 4(f) Properties in the Vicinity of the Project – Map C

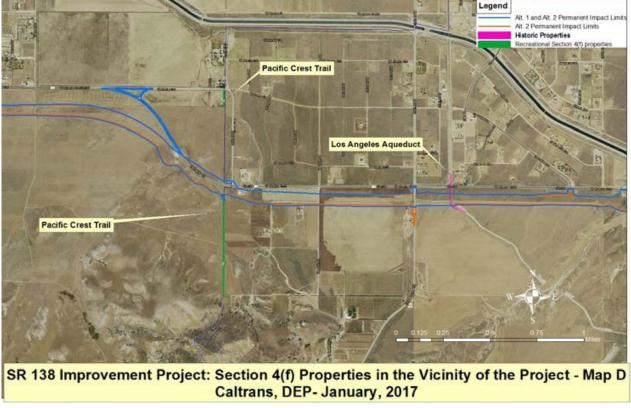


Figure S4: Section 4(f) Properties in the Vicinity of the Project – Map D

Appendix B• Section 4(f)

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B1-Section 4(f) Evaluation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

This Section 4(f) Evaluation was completed using information from the Finding of Adverse Effect for the 138 NW Corridor Project (2016), Noise Study (2016), Visual Impact Assessment (2015), Natural Environmental Study (2016), Air Quality Study (2016), and Water Quality Study (2016).

1. Introduction

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

2. Description of Proposed Project

The California Department of Transportation (Caltrans), in cooperation with the Los Angeles County Metropolitan Transportation Authority (Metro), propose to widen and improve approximately 36.8 miles of State Route 138 (SR-138) between the Interstate 5 (I-5) interchange and the State Route 14 (SR-14) interchange.

The existing facility is a 2-lane highway that contributes to the local circulation network and provides an alternate route for east-west traffic in northwest (NW) Los Angeles County. The NW SR-138 Corridor Improvement Project (project) would widen SR-138 and provide operational and safety improvements. The project corridor spans east-west approximately 36.8 miles (Post Mile [PM] 0.0 to PM 36.8) in the NW portion of Los Angeles County, just south of the Kern County border.

PROJECT DESCRIPTION

This section describes the proposed action and the project alternatives that were developed to achieve the identified purpose and need of the project while avoiding or minimizing environmental impacts. The alternatives are the No Build Alternative, Alternative 1 (Freeway/Expressway) with or without a design option for a bypass around Antelope Acres, and Alternative 2 (Expressway/ Conventional Highway).

SR-138 is an undivided 2-lane highway that travels from I-5 around the south side of Quail Lake and east to SR-14. SR-138 is not a controlled-access facility; access and egress points include at-grade intersections with paved and unpaved roads and driveways. The existing roadway consists of two 12-foot lanes with variable shoulders ranging from 2- to 4-foot paved to 8 foot unpaved non-standard shoulders.

The purpose of the project is to improve mobility and operations in northwest Los Angeles County, enhance safety within the SR-138 Corridor based on current and future projected traffic conditions, and accommodate foreseeable increases in travel and goods movement within northern Los Angeles County.

The need for the proposed project is derived from foreseeable increases in travel demand that would exceed the current capacity of SR-138 and higher than average state-wide fatal accident rates at several locations

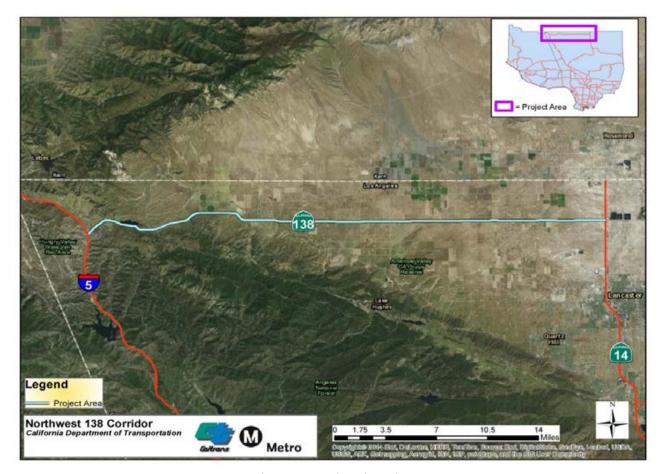


Figure 1. Project location

2.1. Project Purpose and Need

The purpose of the project is to improve mobility and operations in northwest Los Angeles County; enhance safety within the SR-138 Corridor; and accommodate foreseeable increases in travel and goods movement within northern Los Angeles County.

The project is needed to improve mobility and operations on SR-138 and in NW Los Angeles County and enhance safety within the SR-138 Corridor based on current and future projected traffic conditions.

The project would accommodate foreseeable increases in travel and goods movement within northern Los Angeles County. In the coming decades, NW Los Angeles County is anticipated to experience large-scale growth and economic activity, which is projected to generate traffic volumes that would exceed the capacity of the existing facility. In addition, the existing corridor has limited passing opportunities, steeper grades with slower moving vehicles, limited or no paved shoulders, utility poles within the roadway right-of-way, unlimited access to the roadway from adjoining parcels, and a lack of intersection channelization that allows traffic to turn outside of through traffic lanes. Furthermore, fatal accident rates are much higher than the state average.

Please see Chapter 1: Purpose and Need, of the Draft EIR/EIS for additional information.

2.2. Project Alternatives

There are three alternatives under the proposed project and they are the following: 1.) No Build Alternative 2.) Build Alternative 1 (Freeway / Expressway) with a design option for a Bypass around Antelope Acres, and 3.) Build Alternative 2 (Expressway / Limited Access Conventional Highway). These alternatives are described in detail below.

ALTERNATIVES

NO-BUILD ALTERNATIVE

Implementation of the No-Build Alternative would maintain the existing configuration of SR-138 and would not result in improvements to the route. However, additional residential, commercial, and interregional development is anticipated to occur in Antelope Valley in the future. With Los Angeles to the southeast and Bakersfield to the northwest, this area is poised for large-scale growth, which is anticipated to result in increased traffic demands beyond the capacity of the existing system (Caltrans, 2008).

The No-Build Alternative would not accommodate the projected population growth or expected substantial increase in goods movement truck traffic in Northern Los Angeles County and the existing corridor would not be improved. As discussed in the Project Study Report/ Project Development Study (PSR/PDS), the existing SR-138 corridor is projected to degrade and operate consistently at a Level of Service (LOS) E and F for 2040 conditions (Caltrans, 2008). The No-Build Alternative could result in indirect impacts on air quality, mobility, safety, and the economy within Northern Los Angeles County. There would be increased maintenance costs to maintain the route without any other improvements.

BUILD ALTERNATIVE 1 | Freeway – Expressway

Alternative 1 (Freeway/Expressway) would include a 6-lane freeway from the I-5 interchange connector ramps to County Road 300th Street West , and a 4-lane expressway from County Road 300th Street West to the SR-14 interchange generally following the existing alignment of SR-138. There would also be improvements to the I-5/SR-138 and SR-138/SR-14 freeway connections and structure over the SR-14. Study limits on I-5 are from PM 79.5 to PM 83.1 and on SR -14 the limits are from PM 73.4 to PM 74.4.

BUILD ALTERNATIVE 1 WITH DESIGN OPTION 1 Antelope Acres Bypass

Antelope Acres Bypass. There is a design option with this alternative to include a bypass route around the Antelope Acres community. This option was developed to reduce the impacts to the existing residences of Antelope Acres due to the proposed four-lane expressway along the existing alignment of SR-138. The alignment would bypass the community to the north along West Avenue C and going from west to east, the alignment would begin to deviate from the existing SR-138 near 100th Street West and continue in a northeasterly direction towards West Avenue C. After paralleling West Avenue C for approximately one mile, the alignment would

continue in a southeasterly direction back towards the existing SR-138, and eventually join the existing SR-138 near 70th Street West. The existing highway would be relinquished to the County as a local roadway between 100th Street West and 70th Street West, with additional speed reduction measures proposed to reduce cut-through traffic.

BUILD ALTERNATIVE 2 Expressway – Conventional Highway

Alternative 2 (Expressway/Highway) would include a 6-lane freeway from the I-5 interchange connector ramps to Gorman Post Road, a 6-lane expressway from the Gorman Post Road interchange to County Road 300th Street West, a 4-lane expressway from 300th Street West to County Road 240th Street West, and a 4-lane limited access Conventional Highway from County Road 240th Street West to the SR-14 interchange, generally following the existing alignment of SR-138. There would also be improvements to the I-5/SR-138 and SR-138/SR-14 freeway connections and the structure over the SR-14. The study limits on these connectors would be the same as Alternative 1; on I-5 from PM 79.5 to PM 83.1 and on SR -14 the limits are from PM 73.4 to PM 74.4.

For Alternative 1 (with or without the Antelope Acres Bypass design option), and Alternative 2, new overcrossings would also be considered at various intersections with local roads including 60th Street West, 90th Street West, 110th Street West, 170th Street West, 190th Street West, 210th Street West, and Three Points Road to enhance traffic safety and improve local vehicular, pedestrian and bicycle circulation.

Common design features of Alternatives 1 and Alternative 2 are:

- The improvement of three non-standard curve locations on the existing alignment to 80 miles per hour (mph) design speed;
- Utility pole relocations would be required throughout the corridor and new easements would are required for maintenance access;
- Relocations of existing and proposed Southern California Edison (SCE) and Los Angeles Department of Water and Power (LADWP) high voltage transmission lines may be required at four or more locations:
- Improvements to both the I-5 and SR-14 interchange connections to improve the existing ramps;
- Use of existing roadway as a local frontage road in areas where the proposed alignment deviates from the existing alignment to provide local circulation or to maintain current parcel access. The existing highway would be relinquished to the County as a local roadway;
- Two existing bridges at the I-5/SR-138 separation for the SB connections (Bridge #53-1798 L and R) within the project area have non-standard vertical clearance. No improvements are proposed;
- Existing drainage system along the corridor would be modified and replaced as needed to be compatible with the proposed facility. Cross culverts with sufficient capacity would be installed at various locations to allow for passage of the 100-year storm event without overtopping the roadway.
- Alignment options that reduce impacts to Quail Lake. This includes the elimination of the standard median and use of a barrier to reduce the impacts to a historic property and hillside adjacent to Quail Lake;

- Existing bicycle and pedestrian facilities would be maintained and/or enhanced. The existing bicycle routes south of SR-138 and east of 245th Street West would continue to be utilized. These routes follow parallel County Roads. Between 300th Street West and 245th Street West, bicycle access would be provided by utilizing the existing SR-138 roadway which would be replaced by the proposed alignment south of the existing. Further west, the new access road proposed along the overhead utility corridor between the Cement Plant Road and 300th Street West would accommodate bicycle access. To maintain the continuity of the bike routes within the western project limits, a bicycle path is proposed along the access road between the highway and Quail Lake outside of Caltrans R/W.
- Traffic Management Plans (TMP) would be developed during final design;
- Maintenance vehicle pullout locations and other considerations would be coordinated with Caltrans Maintenance staff;
- Construction staging would require that one lane of traffic in each direction be open to the public at all times. The anticipated construction staging would allow construction of new lanes adjacent to the existing lanes (either north or south of the existing roadway), allowing traffic to continue to use the existing lanes during construction. Then traffic would be allowed to use the new lanes during the construction of the remaining lanes over the existing roadway; and
- Vegetation removal within the SR-138 corridor would likely be required to complete the project. Dust control measures would be implemented.

For more information about the project description, see the EIR/EIS, Chapter 2.

2.3 Alternatives considered but eliminated from further discussion

As part of the previous studies, the following alternatives were considered and rejected from further consideration:

- The Transportation System Management (TSM) Alternative was developed to strategize improvements to the facility without major changes to the overall capacity. This alternative had improvements to the vertical and horizontal roadway alignment in areas that are currently non-standard, shoulder widening, localized intersection improvements, and additional lanes to improve safety and traffic flow at focused areas. Upgrades to signage and lighting were also evaluated to improve safety and operations.
- The TSM Alternative was studied and evaluated in all of the technical studies for the proposed project but does not meet the purpose and need of the project. As a stand-alone alternative it could not improve mobility and operations, enhance safety within the SR-138 Corridor, and accommodate foreseeable increases in travel and goods movement within northern Los Angeles County. However, it could be implemented as an early phase to Alternative 1 to improve safety and assist in the short-term goals of the overall project.
- A six-lane freeway proposal from I-5 to SR-14 was previously considered based upon the findings from travel demand forecasts completed as part of this study. However, research suggests that a six-lane facility is not required east of 300th Street West, and such findings are consistent with what was previously studied and recommended as part of the 2004

NCCHCS Study and subsequent 2008 PSR (PDS). The Freeway was also not warranted east of 300th Street West as limiting the access to interchange locations would require significant interchange construction to provide freeway access along the entire corridor. An expressway type facility provided the flexibility of providing access without having to construct full freeway interchange access and was more consistent with the types of access required east of 300th Street West. This option was removed from future consideration.

- An alignment option was requested through stakeholder meetings to go to the north of Quail Lake. Although this would provide more room for the full six-lane divided facility, it had significant environmental issues. This alternative was shown to cross sensitive habitat and considered undesirable from an environmental impact standpoint. It would have major impacts to the Quail Lake drainage shed along the northern portion of the lake. Furthermore, its configuration posed access challenges for property owners such as the State Department of Water Resources to Quail Lake and the California Aqueduct System. Crossing the aqueduct would require a very large and costly structure similar to the one that was built for the existing Cement Plant Road. For these reasons, this alternative was removed from further consideration.
- During the PSR (PDS) alignment studies, an alternative to move the road further south around Quail Lake was considered. This was an attempt to avoid impacting a historic resource (Kinsey Mansion) immediately adjacent to Quail Lake. This alternative required significant earthwork and impacted the existing hillside just south of the lake. The impacts and costs for this alignment option was too significant to consider further. For this reason, this alternative was removed from further consideration.
- Alignment along the Ridge Route was studied briefly in the PSR (PDS) as well as during the initial review of possible alignments of this current study. The Ridge Route is a very physically constrained alignment that runs along mountainous terrain and has significant limitation when compared to the current alignment of the existing SR-138. Major earthwork would be needed to provide a similar high capacity alignment alternative. Significant alignment design exceptions would be required and these would be considered inferior to the existing alignment due to cost, impacts, and limited access to the facility. Due to these impacts and associated challenges, this alignment alternative was also removed from further consideration.
- The Median Rail Alternative was also considered at one point which included passenger rail service along the SR-138 corridor between I-5 and SR-14. The Median Rail Alternative would be incorporated into the Build Alternative 1 between SR-14 and 300th Street West by preserving an 86-foot wide median for future roadway widening or passenger rail service. However, between 300th Street West and I-5, this Median Rail Alternative was eliminated and a narrower 22-foot wide median was proposed instead to avoid impacting the West Branch of the California Aqueduct, as well as preventing a full take of a historic structure and extensive grading along the hillsides south of Quail Lake.
- The Full- Viaduct Option over the south side of Quail Lake was considered specifically to avoid the use of the historic mansion as Section 4(f) property. It is also a variation of Build Alternatives 1 and 2. In this option the proposed alignment would be placed north of the existing

SR-138. This would require the proposed build alternatives to be placed on two separate 58 feet wide mile-long viaduct structures spaced 40 feet from each other over the south side of Quail Lake. By placing the roadway on mile-long viaducts, this alignment configuration presents major longitudinal and cost impacts. This alternative's estimated construction cost would be an additional \$165 million and would have the potential to permanently impact wetlands along the south side of the lake. Additionally, this alternative would require additional right-of-way (ROW) acquisition from the Department of Water Resources (DWR), which is not anticipated to be accepted by the DWR. This alternative, therefore, was eliminated from further consideration due to the multiple factors outlined above.

The Half-Viaduct Option north of the existing highway is a variation of Build Alternatives 1 and 2 and partially over Quail Lake. This option was considered specifically to minimize the impact to the historic mansion while reducing the impact on Quail Lake and its surrounding wetland as would happen with the Full-Viaduct Option. At the Quail Lake location, this alignment would use the existing highway for the eastbound travel lanes and widen the westbound travel lanes. Such a configuration would require the westbound travel lanes to be placed on a mile-long viaduct structure over the south side of the lake. This alternative would cost an additional \$80 million to construct and impact a total of more than 5 acres of wetland. Furthermore, the alignment would also eliminate DWR's current access along the lake frontage and would hamper their maintenance operations and overall access to the lake and aqueduct. This alternative would require Department of Water Resources (DWR) right of way along and on Quail Lake which is not expected to be accepted by DWR. In addition, this alternative would require relocation of overhead utilities from the north to the south side of the road in front of the Kinsey Mansion. Such an undertaking would require an access easements that could be combined with the Kinsey Mansion access driveway and would be south of the existing highway and on the Kinsey Mansion parcel. Because of the multiple factors outlined above this alternative was eliminated from further consideration.

2. Description of Section 4(f) Properties

The Section 4(f) property being evaluated in this document is the historic Kinsey Mansion. The Kinsey Mansion is privately owned and is located south of Quail Lake at 34860 Lancaster Road within the APE. The property faces north overlooking a vast front lawn and consists of ornamentation and statues, a white picket fence, and views of Quail Lake. Access to the property is from a personal driveway with two-point access to SR-138, secured behind fencing and gates.

The Kinsey Mansion was found eligible for inclusion on the National Register at the local level of significance under Criterion C with a period of significance equal to its construction date of 1946. The Kinsey Mansion is eligible under Criterion C because it is as an excellent high-style example of Neoclassical architecture in Los Angeles County. In addition, the Kinsey Mansion retains sufficient integrity to convey that significance. SHPO has concurred on the eligibility for the National Register of this property.

Contributing elements to the Kinsey Mansion include its massing, Georgian-style pediment over the door, Chinese Chippendale railing on the roofline façade, side wing, full-façade porch, and classical columns along the porch façade. In addition, the mansion is a rare example of Neoclassical

architecture in the desert area of Los Angeles County. The large front yard that includes decorations, lawn ornamentation, statues, and other iconic features contributes to the feeling and setting of the mansion. Contributing elements to the significance of the Kinsey Mansion property include the mansion building at the southern end of the property and the front lawn bounded by a driveway on both the eastern and western ends of the lawn and a white picket fence on the northern end, adjacent to SR-138 (Figure 2). Non-contributing elements include the detached garage in the rear of the property and the two smaller residential buildings east of the mansion, but within the same parcel and property. These buildings are not related in construction dates or architectural influences. Because the build alternatives would result in physical alteration to part of the Kinsey Mansion property [36 CFR 800.5(a)(2)(i)j, the proposed project would result in an adverse effect on the Kinsey Mansion. Proposed mitigation measures have been developed to minimize this impact. SHPO concurrence on the Finding of Adverse Effect was obtained on April 11, 2017 (See Appendix I). For more information about this property please see the Cultural Section of the DEIS/EIR.



Figure 2: Kinsey Mansion

3. Impacts on Section 4(f) Property

Land incorporation/Section 4(f) use:

Build Alternatives 1 and 2 each proposes to construct a new alignment for SR-138 which would impact the front lawn of the Kinsey Mansion property. The State of California would purchase approximately 4 acres from this historic property as transportation ROW. The main building and side building would not be impacted. However, many of the Mansion's Neoclassical eclectic design-defining features such as the white picket fence and large half-circle private driveway, as well as the iconic lawn ornamentation would be cleared. Therefore, under both of these Build alternatives, land from this historic property would be permanently incorporated into the proposed transportation

facility-SR 138 (Figure 3). This would constitute a use under Section 4(f) and would result in an adverse effect on the Kinsey Mansion under Section 106.



Figure 3: Relationship between Alternative 1, Alternative 2, and the historic Kinsey Mansion (Alt. 1 and Alt. 2 overlap each other at this location)

Under the No Build Alternative: The Kinsey Mansion would remain fully intact with views of Quail Lake. There would be no adverse effect to the Kinsey Mansion with this alternative. Therefore, there would be no use of this property under Section 4(f).

Accessibility

Under Build Alternatives 1 and 2, the original access to the property directly from SR-138 would be eliminated. The project proposes to provide access to the house by placing a frontage driveway along Caltrans ROW to the Gorman Post Road interchange.

Under the No Build Alternative, no new alignment, features or construction activities are proposed at this location. No change or impact to mansion access would occur.

Visual

Under Build Alternatives 1 and 2:

Residents of the mansion would experience a visual impact. Due to the physical widening of SR-138, the white picket fence would be removed and approximately half of the mansion's front yard would be taken. A low retaining wall would be installed to hold back the slope and a frontage road would be created to provide access for residents of the mansion. Several mature non- native trees would be removed and would provide a greater view of Quail Lake and the new highway corridor. The presence and view of the highway would be increased both through proximity and increased size of the facility, as well as the loss of trees blocking that portion of the view. For viewers, motorists, and other travelers along the newly constructed corridor, the view of the mansion would be altered with the removal of trees, removal or relocation of some lawn ornaments or artifacts, and closer proximity of the eastbound highway lanes to the mansion itself. The mansion would be seen in a smaller yard, but set off by being apparently raised up on the retaining wall - the height would not be changed, but there would be a psychological or optical effect. Although the mansion would be closer to eastbound traffic, this effect of being raised up by the retaining wall would serve as a kind of mitigation trading one type of distance for another. Overall the visual impact at this location is moderate. It should also be noted that the modified setting of the mansion would be sufficient to convey the character defining features of the historic resource, therefore the visual changes would not contribute to an adverse effect under Section 106.

Mitigation measures include treating the retaining wall with a rustic rock finish and installation of fencing visually similar to the original fencing, as well as planting trees in the front yard per coordination with the property owner. These measures would reduce the impact of the proposed changes and could increase the visual vividness of the resource.

Under the *No build Alternative*, no new alignment, features or construction activities are proposed at this location. No change or impact in the view of or from the Mansion would occur.

Noise

Under *Build Alternatives 1 and 2*: Based on the results from the Noise Study Report, the noise level is expected to increase by 12.3 dBA at the Kinsey Mansion. Based on the results in the Noise Abatement Decision Report, the proposed soundwall is not cost reasonable pursuant to 23 CFR 772. However, the soundwall is still proposed for noise impacts under CEQA; see Section 4.2.3.

Under the *No build Alternative:* There would be no increase in noise level at this location. Therefore, no noise impact to the mansion would be expected.

Air Quality

The Air Quality Impact Study concludes that no federal violation would result from the implementation of these alternatives; therefore, there would be no adverse permanent air quality impacts to the Kinsey Mansion.

During construction, a short-term worsening of air quality may occur due to the release of particulate emissions generated by site preparation, excavation, grading, hauling, and other

activities related to construction. Emissions from construction equipment are also anticipated. However, measures AQ-1 to AQ-6 (see Section 3.6, Construction Impact, Air Quality, of the EIR/EIS for more details) would substantially reduce the short-term air quality impacts during construction of these alternatives, ensuring compliance with air quality regulations and minimizing air quality impacts to the mansion during project construction.

Vegetation and Water Quality

The results of the Biological studies show that some trees and vegetation on the mansion property would be removed as part of project construction. Such vegetation includes developed scrub oak chaparral, rubber rabbitbrush scrub, non-native species and ornamental trees. Some of the vegetation provide foraging habitat for select species of birds and raptors, which include sensitive species. However, there is very low potential for these species to occur within the impacted area and the proposed clearing and removal limits would not destroy or modify designated critical habitat.

Due to the foraging habitat provided by these plant communities, Caltrans would provide a qualified biologist on-site to implement avoidance and minimization measures during construction. See the Measures to Minimize Harms Section below for more information about these measures.

No water quality impacts to the mansion would be expected as the result of the project.

4. Avoidance Alternatives

Alternatives to the use of Section 4(f) property have been evaluated. These alternatives are discussed below.

4.1. Alternatives that would not require the use of any section 4(f) property

According to the FHWA's Section 4(f) Policy Paper, an avoidance alternative is an alternative that would avoid any use of Section 4(f) property. Below is the discussion of the alternatives that would not require the use of any Section 4(f) property.

23 CFR 774.17 set forth six factors to consider when determining whether an alternative is prudent. 23 CFR 774.17 (3) specifies that an alternative is not prudent if:

- (i) It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- (ii) It results in unacceptable safety or operational problems;
- (iii) After reasonable mitigation, it still causes:
 - (A) Severe social, economic, or environmental impacts;
 - (B) Severe disruption to established communities;
 - (C) Severe disproportionate impacts to minority or low income populations; or
 - (D) Severe impacts to environmental resources protected under other Federal statutes;
- (iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- (v) It causes other unique problems or unusual factors; or

(vi) It involves multiple factors in paragraphs (3)(i) through (3)(v) of this definition, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

No-Build Alternative

The No-Build Alternative would maintain the existing configuration of SR-138. It would not involve any improvements to SR-138. The No-Build Alternative would not accommodate the projected population growth or expected substantial increases in goods movement truck traffic in Northern Los Angeles County. Unnecessary vehicle and truck trips would continue through urbanized areas and congested urban freeways in the Los Angeles basin. Existing operational and safety design features of the corridor would not be improved. No regional transportation system accessibility would be achieved. Thus the No-Build Alternative would not meet the purpose and need of the project based on (3)(i) and (3)(ii). Therefore the No Build Project is not feasible and prudent.

<u>Transportation System Management Alternative</u>

A stand-alone Transportation System Management (TSM) Alternative would include improvements to the vertical and horizontal roadway alignment in areas that are currently non-standard, shoulder widening, intersection improvements, and additional lanes to improve safety and traffic flow at focused areas. Upgrades to signage and lighting were also evaluated to improve safety and operations. Limited relocation of utility poles and other subsurface utilities is anticipated at the proposed curve correction area. Minor utility relocation and adjustment may be required throughout the corridor. The existing drainage system would be modified to be compatible with the proposed shoulder widening and lane additions at intersections.

This alternative would avoid all Section 4(f) properties. It would not involve the use of the historic Kinsey Mansion, Los Angeles Aqueduct, or transmission lines.

However, as discussed below this alternative would not fully meet the purpose and need of the project. As a stand-alone alternative it could not improve mobility and operations, enhance safety within the SR-138 Corridor, and accommodate foreseeable increases in travel and goods movement within northern Los Angeles County.

- Mobility: The TSM Alternative would only partially address the need for improved
 mobility within the corridor because vehicular traffic would still travel on a 2-way rural
 highway with nonstandard roadway features. Under current conditions, motorists' mobility
 would be challenged by speed limit changes, traffic signal- and stop-controlled
 intersections, and direct-access points (e.g., driveways and local roadways) that impede
 traffic flow.
- Level of Service and Congestion: The TSM Alternative would not adequately address systemic conditions that would contribute to future traffic congestion.
- Safety: The TSM Alternative would not address the need for improved safety and reliability across the entire corridor. The current accident rates would continue at the localized "hot-spots".

• Regional Transportation System Accessibility: The TSM Alternative would not achieve a high level of accessibility to the regional transportation system because it would rely on the existing limited route across the region.

Based on the 23 CFR 774.17, the TSM Alternative would: i/ Compromises the project so that it is unreasonable given the purpose and need, and ii/ Results in unacceptable safety or operational problems. Therefore, the TSM Alternative would not be feasible and prudent.

Any other build alternatives would encroach into existing Section 4(f) property such as the historic Los Angeles Aqueduct and would require permanent ROW acquisition for transportation purposes. This would be considered a Section 4(f) use. Therefore, there is no other feasible and prudent avoidance alternative for the project.

4.2. Alternative options that would avoid the use of individual Kinsey Mansion property

FHWA's Section 4(f) Policy paper specifies that "even if all of the alternatives use a Section 4(f) property, there is still a duty to try to avoid the individual Section 4(f) properties within each alternative." The Policy Paper also states that "If Section 4(f) avoidance alternatives were eliminated during the earlier phases of project development for reasons unrelated to Section 4(f) impacts or a failure to meet the project purpose and need, they may need to be reconsidered in the Section 4(f) process. In addition, it is often necessary to develop and analyze new alternatives, or new variations of alternatives rejected for non-Section 4(f) reasons during the earlier phases." Design Options to avoid Individual Section 4(f) - The historic Kinsey Mansion were therefore considered. Below is the summary of this consideration.

Two project design options that were previously rejected were reconsidered. In addition, a new option was considered in an attempt to avoid using the individual historic mansion. The three alternative options are the following: 1.) Alternative Option North of the Quail Lake 2.) Alternative Option South of the Kinsey Mansion and 3.) Full Viaduct Alternative Option over the south side of Quail Lake.

Alternative Option North of Quail Lake

This option (Figure 4) was considered during the early planning (PID stage) and was rejected from further consideration. It was reconsidered in an attempt to avoid the use of the historic mansion under Section 4(f). This option is a variation of Alternative 1 and 2. Under this option, the six-lane facility is moved to the Northside of Quail Lake. There would be a structure crossing the California Aqueduct north of the lake.

Although this option would provide more room for the full six-lane divided facility, it has environmental issues. Major impacts to the Quail Lake watershed along the northern portion of the lake have been identified, as well as access challenges for affected surrounding properties which include Quail Lake and California Aqueduct. Furthermore, such a design poses an engineering challenge as the placement of a roadway adjacent to the Lake and the crossing through the California Aqueduct would require a very large, costly structure similar to the one that was built for the Cement Plant Road. Such large physical features crossing sensitive habitat would impede

wildlife movement. These would be severe impacts to environmental resources protected under other federal statutes and would involve paragraphs (iii) (A) and (D) of 23 CFR 774.17 (3), which specify that (iii) After reasonable mitigation, it still causes:

- (A) Severe social, economic, or environmental impacts;
- (D) Severe impacts to environmental resources protected under other Federal statutes; Furthermore, this alternative would cost an additional \$44 million to construct and would require significant mitigation to lessen the environmental impacts. This would involve paragraph (iv) of 23 CFR 774.17 (3) which specifies that:
 - (iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;

This alternative, therefore, was considered not feasible and prudent, and eliminated from further consideration based on 23 CFR 774.17 (3) (vi) as it involves multiple factors in 23 CFR 774.17 (3)(i) through (3)(v), that cumulatively cause unique problems or impacts of extraordinary magnitude.

Alternative Option South of Kinsey Mansion

This option (Figure 4) was considered during the early planning (PID stage) and was rejected for further consideration. It is reconsidered in an attempt to avoid the use of the historic mansion under Section 4(f). This option is a variation of Alternative 1 and 2 in which the six-lane facility is moved further to the south to avoid the Kinsey Mansion and Quail Lake altogether.

The hillside south of the lake is designated as Significant Ecological Area per Los Angeles County Department of Regional Planning. The construction of a new roadway and associated drainages along this hillside would create a barrier to wildlife movement, jeopardize slope stability, disturb groundwater quality, and threaten the health of the surrounding wetlands. These would involve paragraphs (iii) (A) and (D) of 23 CFR 774.17 (3), which specify that (iii) After reasonable mitigation, it still causes:

- (A) Severe social, economic, or environmental impacts;
- (D) Severe impacts to environmental resources protected under other Federal statutes; Furthermore, from an engineering standpoint, the existing topography presents significant vertical alignment challenges for this option to be considered. In order to provide longitudinal grades equal or less than the allowed maximum of 6%, the proposed cutting and filling of the hillside would extend more than 50 feet in height. Such a proposed vertical alignment would result in significant earthwork and would cost an additional \$20 million to construct and would be required to provide considerable environmental mitigation measures. This would involve paragraphs (iv) and (v) of 23 CFR 774.17 (3) which state:
- (iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- (v) It causes other unique problems or unusual factors;

This alternative, therefore, was considered not feasible and prudent, and eliminated from further consideration based on 23 CFR 774.17 (3) (vi) as it involves multiple factors in 23 CFR 774.17 (3)(i) through (3)(v), that cumulatively cause unique problems or impacts of extraordinary magnitude.

Full Viaduct Alternative Option over the south side of Quail Lake

This option (Figure 4) was considered specifically to avoid the use of the historic mansion as the Section 4(f) property. It is also a variation of the Alternative 1 and Alternative 2. Under this option,

eastbound and westbound travel lanes would be placed on two separate 58-foot wide mile-long viaduct structures over the south side of Quail Lake spaced 40 feet from each other.

This alignment configuration however presents major longitudinal impacts to Quail Lake and thus would cause a unique problem. This narrow corridor between Kinsey Mansion and Quail Lake is a wetland and placing the roadway on mile-long viaducts would encroach upon this sensitive habitat. Permanent ROW acquisition would be required from the Department of Water Resources, and considering the biological sensitivity of the land, it is very unlikely they would permit land for this specific configuration. This would involve paragraph (v) of 23 CFR 774.17 (3) which is that (v) It causes other unique problems or unusual factors; In addition, it is estimated that the mile-long viaducts would cost an additional \$165 million to construct and pose a high risk of endangering existing wetland health. These would involve paragraphs (iii) (A) and (D) and paragraph (iv) of 23 CFR 774.17 (3), which are:

- (iii) After reasonable mitigation, it still causes:
 - (A) Severe social, economic, or environmental impacts;
- (D) Severe impacts to environmental resources protected under other Federal statutes; (iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;

This alternative, therefore, was considered not feasible and prudent and eliminated from further consideration based on 23 CFR 774.17 and (3) (vi) as it involves multiple factors in 23 CFR 774.17 (3)(i) through (3)(v), that cumulatively cause unique problems or impacts of extraordinary magnitude.

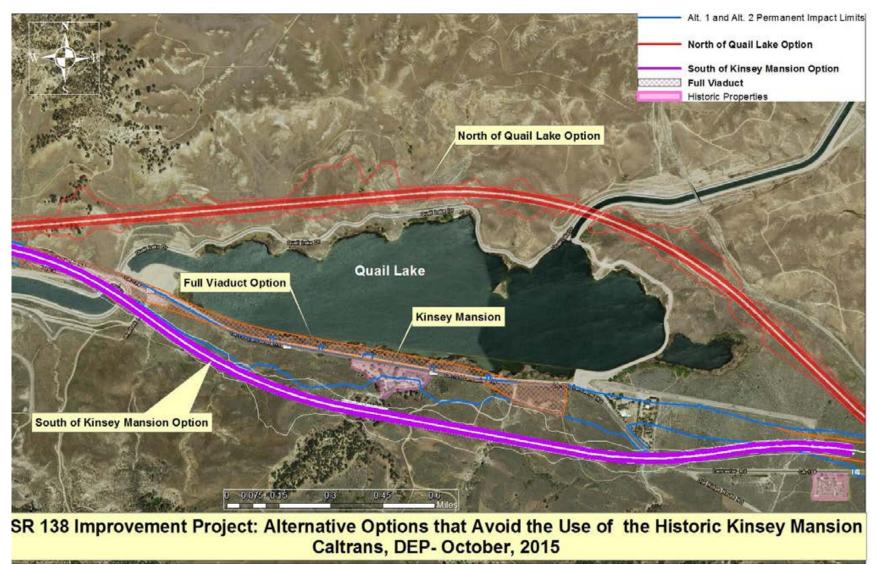


Figure 4: The North Quail Lake, South Mansion, and Full Viaduct Alternative Options

5. Measures to Minimize Harm to the Section 4(f) Property

Many non-standard design exceptions were made for Build Alternatives 1 and 2 in order to reduce the impacts to Kinsey Mansion. Utilizing standard design features and specifications would require the full removal of the Kinsey Mansion as the presence of Quail Lake and the wetland areas north of the existing SR-138 would force the roadway alignment through the Mansion and the hillside to the south.

In order to preserve the structure, the full standard median of 62 feet was reduced to a non-standard median width of 22 feet. In addition, a non-standard width for the Clear Recovery Zone was applied and median barriers would be placed at edge of shoulder to protect motorists from utility poles. Although the use occurs through the lawn area, the house is avoided.

Access to the house was also preserved by placing a frontage driveway along the Caltrans ROW to the Gorman Post Road interchange. These measures were incorporated into the project's design to maintain and preserve access for residents. Additionally, the extent of right of way acquisition would be further minimized through the use of a retaining wall instead of the earth slope to stabilize the roadway at the Kinsey Mansion. This would also provide an opportunity for a combined access road for the utilities and bike path along the edge of the existing highway and adjacent to the shoulder barrier that separates Caltrans ROW.

A project-specific Programmatic Agreement was executed on June 23, 2017 to identify measures to address impacts to the Kinsey Manor.

In addition, the following measures are proposed to minimize the impacts to the Kinsey Mansion. (These constitute Avoidance, Minimization, and Mitigation measures CUL-4- CUL-5 and BIO-146-BIO-149).

- Caltrans will provide project design plans to the State Historic Preservation Officer (SHPO) for review and comment for the retaining wall, fencing, and relocated driveway associated with the Kinsey Mansion to ensure conformance with the Secretary of Interior's Standards for the Treatment of Historic Properties. Specifically, fencing visually similar to the original fencing would be installed at the mansion and a retaining wall at this location would be treated with a rustic rock finish, including color.
- Caltrans will create electronic content for a smartphone traveler application that describes and interprets the historic and cultural properties along the State Route 138, between Interstate 5 and State Route 14.
- Whenever possible, the plant communities within the mansion property would be preserved in place.
- A qualified biologist shall protect the plant communities within the mansion by establishing an Environmentally Sensitive Area (ESA), using brightly colored fencing and monitoring any clearing and grubbing related construction activities.
- When impacts to the above mentioned plant communities are unavoidable, trees and large shrubs would be trimmed under the direction of a licensed arborist. Large trees and shrubs marked for removal would be relocated to nursery by a qualified arborist and preserved to be replaced on-site

once construction is complete, whenever possible. This would be done in coordination with the property owner.

- On-site mitigation plantings shall have a plant establishment period of no less than two years. On-site mitigation plantings shall be monitored by a qualified biologist to determine health and viability. If it is determined that an on-site planting is in poor health, it shall be replaced by a healthy individual and monitored.
- Other applicable Construction Air Quality and Water Quality minimization measures would be incorporated. Please see the Air Quality Section and Water Quality Section for more information.

6. Coordination

As the NEPA Assigned Lead Agency, Caltrans has consulted with SHPO about the National Register eligibility and adverse effect finding for the Kinsey Mansion. This Section 4(f) evaluation has been sent to SHPO and Department of Interior for review and comments during the public review period. SHPO has concurred with the finding of Adverse Effect under Section 106 on April 11, 2017. A project-specific Programmatic Agreement was executed on June 23, 2017 to identify measures to address impacts to the Kinsey Manor.

7. Least Harm Analysis

As discussed above, there is no prudent and feasible alternative that completely avoids the use of Section 4(f) property. 23 CFR 774.3 requires that only the alternative that causes the least overall harm in light of the statute's preservation purpose can be chosen. The least overall harm is determined by balancing the following:

- 1. Ability to mitigate adverse impacts to each Section 4(f) resource;
- 2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features;
- 3. Relative significance of each Section 4(f) property;
- 4. Views of the officials with jurisdiction over each Section 4(f) property;
- 5. Degree to which each alternative meets the purpose and need;
- 6. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
- 7. Substantial differences in costs among alternatives.

Based on the regulations stated, the only two remaining alternatives considered for the Preliminary Least Harm Analysis are Build Alternatives 1 and 2. Below is the preliminary discussion of the above factors for these 2 alternatives.

1. Ability to mitigate adverse impacts to each Section 4(f) resource:

Kinsey Mansion: Build Alternatives 1 and 2 have the same footprints at the Kinsey Mansion location. Both acquire the same amount of land and have an adverse effect under Section 106 of the National Historic Preservation Act on the Mansion. Therefore, the ability to mitigate adverse impact to this mansion would be equal for both alternatives.

Los Angeles Aqueduct; The Big Creek East-West Transmission Line; and the Big Creek Hydroelectric System Historic District: Besides the impacts to the Kinsey Mansion, Build Alternatives 1 and 2 also have de minimis impacts to the following three Section 4(f) properties: the historic Los Angeles Aqueduct; the Big Creek East-West Transmission Line; and the Big Creek Hydroelectric System Historic District. Similar to the Kinsey Mansion, both Build alternatives have the same foot print on the Big Creek East-West Transmission Line and the associated historic district. Therefore, both alternatives would have an equal level of impact and the ability to mitigate/minimize the impacts to these properties remain unchanged.

2. Relative severity of the remaining harm, after mitigation, to the protected activities and attributes or features

As previously mentioned in Section 1 above, both Build alternatives would have the same footprints; thus equal impacts and mitigation levels for the Kinsey Mansion, the Big Creek East-West Transmission Line; and the Big Creek Hydroelectric System Historic District. The relative severity of the remaining harm, after mitigation and minimization to these three properties would be equal under both alternatives. In regards to the Los Angeles Aqueduct, Alternative 2 would have slightly wider impact compared to Alternative 1. However, the function and integrity of the property would not be affected by any of these alternatives so the severity of the remaining harm to the protected activities, attributes and features of this property are considered the same.

3. Relative significance of each Section 4(f) property:

This factor is not relevant.

4. Views of the officials with jurisdiction over each Section 4(f) property:

It is anticipated that the SHPO would view these two alternatives as equal and not have preference of any alternative over the other as the difference in impact to historic and Section 4(f) properties is nominal.

5. Degree to which each alternative meets the purpose and need:

The capacity of the two alternatives is the same. Both meet the purpose and need of the project. However, from a mainline traffic and operations perspective, Alternative 1 limits local access locations as required for freeways/expressways. Alternative 2, east of 245th Street West is a conventional highway with some limitations on access, which was provided to address the concerns over right of way impacts and access issues associated with an expressway through the local community which had development on both sides of the highway (ie. Antelope Acres). Alternative 1 provides additional opportunities to add capacity in the future with the wider median required in the design of new expressways.

1. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); The following table shows the summary of adverse impacts to resources not protected by Section 4(f). It can be seen from the table that in general, both alternatives would

have the same impacts to resources. However, for Housing impact, the magnitude of impact under Alternative 1 (17 housing units) is larger than under Alternative 2 (14 housing units).

Potential Impact (References to "significance" are pursuant to CEQA)	No Build	Build Alternative 1	Build Alternative 1 with Antelope Acres Loop Design Option	Build Alternative 2
Land Use and Planning (Consistency with General Plan)	No Impacts	Antelope Acres would be spatially divided if Build Alternative 1 was implemented. No significant impacts with the inclusion of the proposed minimization and/or mitigation measures. Consistent with General Plan.	Consistent with General Plan, no significant impacts.	Antelope Acres would be spatially divided if Build Alternative 2 was implemented. No significant impacts with the inclusion of the proposed minimization and/or mitigation measures. Consistent with General Plan.
Community/ Economic	No Impact	Alternative 1 would bisect the Antelope Acres community. It would benefit the community by providing safer crossings. It would impact the community by limiting access and change the community character with the widening of the roadway and other highway safety features (ie. guardrails etc.)	No significant impacts with the inclusion of avoidance and minimization measures identified.	Alternative 2 would bisect the Antelope Acres community. It would benefit the community by providing safer crossings. It would impact the community by limiting access and change the community character with the widening of the roadway and other highway safety features (ie. guardrails etc).

Potential Impact (References to "significance" are pursuant to CEQA)	No Build	Build Alternative 1	Build Alternative 1 with Antelope Acres Loop Design Option	Build Alternative 2
Farmland	No Impact	Permanent Impacts would occur to 0.75 acres of Unique Farmland, 21.5 acres of Prime Farmland, and 1104 acres of Grazing Land. There would be no impacts to farmland of Statewide Importance (as classified by the CA Department of Conservation).	Permanent Impacts would occur to 1.5 acres of Unique Farmland, 21.5 acres of Prime Farmland, and 1121 acres of Grazing Land. There would be no impacts to farmland of Statewide Importance (as classified by the CA Department of Conservation).	Permanent Impacts would occur to 0.75 acres of Unique Farmland, 21.5 acres of Prime Farmland, and 184 acres of Grazing Land. There would be no impacts to farmland of Statewide Importance (as classified by the CA Department of Conservation).
Housing	No housing units or	An estimated 17 housing	An estimated 11	An estimated 14 housing
Displacement/	businesses would be	units/ 2 businesses would be	housing units/ 2	units/ 2 businesses would
Business	displaced	displaced.	businesses would be	be displaced.
Displacement			displaced.	
Environmental	No Environmental	No EJ impacts.	No EJ impacts	No EJ impacts
Justice	Justice (EJ) impacts			
Utilities and	No disruption or	Utilities would be relocated	Same as Alternative 1	Same as Alternative 1
Emergency	displacement	along the corridor. No		
Services		significant impacts are anticipated.		
Traffic, Pedestrian and Bike Access	No impacts or improvements	Existing facilities would be maintained and/or enhanced.	Same as Alternative 1	Same as Alternative 1

Potential Impact (References to "significance" are pursuant to CEQA)	No Build	Build Alternative 1	Build Alternative 1 with Antelope Acres Loop Design Option	Build Alternative 2
Visual Quality	No change in visual quality or character	Visual impacts would be less than significant with the avoidance and minimization measures included.	Same as Alternative 1	Same as Alternative 1
Cultural/ Historical Resources	No impact	Historic property would be adversely affected.	Same as Alternative 1	Same as Alternative 1
Paleontological Resources	No Impact	Implementation of the paleontological resources mitigation plan would facilitate the identification and treatment of paleontological resources. Impacts would be less than significant.	Same as Alternative 1	Same as Alternative 1
Archeological Resources	No impact	Impacts to archaeological resources are still unknown as access is restricted to certain properties. A Programmatic Agreement with the State Historic Preservation Officer was approved on June 23, 2017 to establish a phased identification and evaluation process once access is granted. If eligible historic properties are identified as adversely affected, mitigation measures will be identified to reduce impacts.	Same as Alternative 1	Same as Alternative 1

Potential Impact (References to "significance" are pursuant to CEQA)	No Build	Build Alternative 1	Build Alternative 1 with Antelope Acres Loop Design Option	Build Alternative 2
Flood Control/ Hydrology/ Water Quality/ Stormwater	No impact	With implementation of recommended measures, Best Management Practices (BMPs) and development of a Storm water Mitigation Plan (SWMP), direct impacts associated with Alternative 1 would be less than significant.	Same as Alternative 1	With implementation of recommended measures, BMP's and development of a SWMP, direct impacts associated with Alternative 2 would be less than significant.
Geology/ Soils/ Seismicity	No impact	Potential impacts would be temporary, and exposed soils and cut slopes would be stabilized after construction is complete. No significant impacts with appropriate avoidance, minimization, and/or mitigation measures.	Same as Alternative 1	Same as Alternative 1
Hazardous Waste/ Materials	No impact	Project-specific impacts related to hazardous waste/materials would be avoided, minimized and mitigated through conformance with applicable regulatory requirements and implementation of the avoidance, minimization, and/or mitigation measures.	Same as Alternative 1	Same as Alternative 1

Potential Impact (References to "significance" are pursuant to CEQA)	No Build	Build Alternative 1	Build Alternative 1 with Antelope Acres Loop Design Option	Build Alternative 2
Air Quality	Potentially inconsistent with regional plans and programs such as the 2016 Regional Transportation Plan and 2017 Federal Transportation Improvement Plan since the project would not be constructed as approved in the Regional Transportation Plan for the area.	During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by excavation, grading, hauling, and other activities related to construction. No significant impacts with the implementation of the avoidance, minimization, and/or mitigation measures described.	Same as Alternative 1	Same as Alternative 1
Noise	No change in noise.	Noise would increase- significant impacts under CEQA for some properties.	Same as Alternative 1	Same as Alternative 1
Energy	No impact	No impact	No impact	No impact

Potential Impact (References to "significance" are pursuant to CEQA)	No Build	Build Alternative 1	Build Alternative 1 with Antelope Acres Loop Design Option	Build Alternative 2
Biological Resources	No impact	Potential to permanently impact 4.57 acres and temporarily impact 0.72 acres of southern cottonwood willow riparian forest and southern willow scrub. Approximately 14.74 acres of Joshua tree woodland, and 81.29 acres of California juniper woodland may be potentially impacted. Potential to have permanent impacts to no more than 1.63 acres of WUS found within the BSA. In addition, five (5) special-status plants and 28 special-status wildlife species have the potential to be impacted. Potential impacts to several desert kit fox dens, burrowing owl, and foraging habitat loss of Swainson's hawk and golden eagle.	Same as Alternative 1	Potential to permanently impact 4.57 acres and temporarily impact 0.72 acres of southern cottonwood willow riparian forest and southern willow scrub. Approximately 7.71 acres of Joshua tree woodland, and 68.06 acres of California juniper woodland may be potentially impacted. Potential to have permanent impacts to no more than 1.63 acres of WUS found within the BSA. In addition, five (5) special-status plants and 28 special-status wildlife species have the potential to be impacted. Potential impacts to several desert kit fox dens, burrowing owl, and foraging habitat loss of Swainson's hawk and golden eagle.
Section 4(f) Properties	No impact	Individual evaluation for the Historic property (Kinsey mansion) and three <i>de minimus</i> findings for historic resources.	Same as Alternative 1	Same as Alternative 1
Cumulative and Secondary Impacts	None	Biological Resources (Natural Communities),	Same as Alternative 1	Same as Alternative 1

Potential Impact (References to "significance" are pursuant to CEQA)	No Build	Build Alternative 1	Build Alternative 1 with Antelope Acres Loop Design Option	Build Alternative 2
		Noise (Substantial Noise Increase- CEQA), and Farmland.		
Estimated Project Cost	No cost	\$830 million	\$839 million	\$725 million

6. Substantial difference in costs among alternatives.

The estimated cost for Alternative 1 is \$830 million, Alternative 1 with the Antelope Acres loop option is \$839 million, and Alternative 2 is estimated at \$725 million. Alternative 1 (without the Antelope Acres loop) is \$105 million or approximately 16% higher than the estimated cost for Alternative 2.

Based on the above considerations, there is no feasible and prudent alternative to the use of land from the Kinsey Mansion and the proposed action includes all possible planning to minimize harm to this mansion resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

B2- Section 4(f) De Minimis Determination

Section 6009(a) of SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users) amended Section 4(f) legislation at 23 U.S.C. 138 and 49 U.S.C. 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This revision provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 CFR 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

The Alternative 1 and Alternative 2 each would have *de minimis* impacts on three historic/Section 4(f) properties, which are the Los Angeles Aqueduct, the Big Creek East-West Transmission Line, and the Big Creek Hydroelectric System Historic District. The following sections discuss in more details.

1. Los Angeles Aqueduct

Property Description

Los Angeles Aqueduct is a water conveyance system, owned and operated by the Los Angeles Department of Water and Power. The system delivers water from the Owens River in the Eastern Sierra Nevada Mountains to Los Angeles, California. It is 223 miles long and consists of lined and unlined open channels, concrete conduits, lined tunnels, steel and concrete pipes, and bypass reservoirs.

The Los Angeles Aqueduct intersects the SR-138 corridor at approximately ½ mile east of Three Points Road near the community of Neenach.

The Los Angeles Aqueduct was found eligible for the NRHP at the State level under Criteria A, B, and C with a Period of Significance from 1913-1940. The Los Angeles Aqueduct is eligible under Criterion A because it is a primary component of an extremely significant water project that led to the successful development of the City of Los Angeles and the Southern California region. The Los Angeles Aqueduct is eligible under Criterion B because it was primarily conceived by William Mulholland and remains one of the most significant achievements of his engineering knowledge and expertise as it shaped the development of the City of Los Angeles and Southern California. The Los Angeles Aqueduct is eligible under Criterion C because it has magnificent engineering qualities and features and was one of the greatest water works projects in the world at the time of its construction. In addition, the Los Angeles Aqueduct retains sufficient integrity to convey that significance.

As mentioned above, the short segment that intersects the APE includes a large underground, yet partially exposed, concrete pipe which is considered a contributing element to the eligible property. The Los Angeles Aqueduct was previously determined eligible for the NRHP through the Section 106 process; and SHPO has agreed with the eligibility consensus determination.



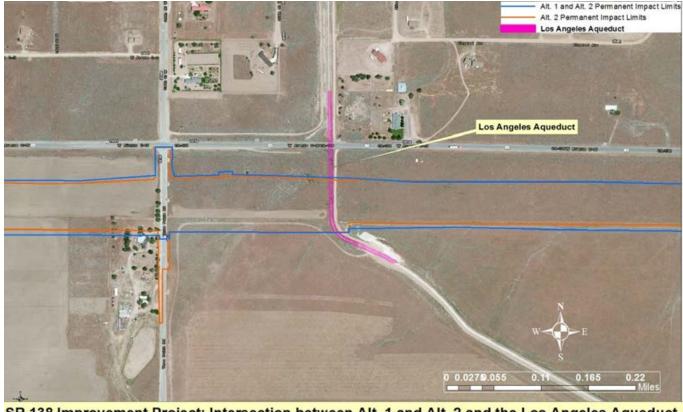
Figure 5: Los Angeles Aqueduct adjacent to the project area.

Use of the Los Angeles Aqueduct

Build Alternatives 1 and 2 both propose to construct a new alignment for SR-138 several hundred feet south of the existing alignment at the location of the Los Angeles Aqueduct (Figure 6). At this location the Los Angeles Aqueduct is located underground. Both Build alternatives would be built above ground and would include the construction of a special crossing over the shallow large-diameter pipes. This particular configuration is designed so that it would physically avoid contact with the historic pipes. Each of these Build alternatives would permanently incorporate the aqueduct's right of way (the top of the underground pipe) in the form of highway easement into the transportation system. This permanent ROW incorporation/easement is considered a Section 4(f) use of this historic property.

Why the use is de minimis: Although the right of way on top of the pipe would be incorporated into the transportation system, the Los Angeles Aqueduct would remain fully intact and would not be physically altered or removed in any way. The significance of the Aqueduct is not tied to the physical environment around this segment of the Aqueduct or subject to any visual or audial limitations. The Finding of Adverse Effect concludes that there would be no adverse effect to the Los Angeles Aqueduct with Alternatives 1 and 2. Concurrence from SHPO on this determination was obtained on April, 11, 2017. Therefore, the use under Section 4(f) would result in de minimis impact to this property.

Under the No Build Alternative, the Los Angeles Aqueduct would remain fully intact with no changes or alterations. There would be no adverse effect to the Los Angeles Aqueduct with this alternative.



SR 138 Improvement Project: Intersection between Alt. 1 and Alt. 2 and the Los Angeles Aqueduct Caltrans, DEP- October, 2015

Figure 6: The intersection between the project and the Los Angeles Aqueduct.

Minimization measures:

No minimization measures would be needed.

Coordination:

Caltrans has consulted with the SHPO about a No Adverse Effect finding in regard to the Los Angeles Aqueduct. The SHPO has been informed of Caltrans' intent to make a *de minimis* impact finding based on their written concurrence in the Section 106 determination of "no adverse effect." The SHPO has concurred with the Section 106 determination of no adverse effect for this property on April 11, 2017.

2. Big Creek East-West Transmission Line

Property description:

The Big Creek East-West Transmission Line corridor consists of two parallel transmission lines with steel lattice towers that cross SR-138 approximately ¼ mile southwest of the Bailey Substation and Gorman Post Road. The Big Creek East-West Transmission Line is a contributing

element to the Big Creek Hydroelectric System (BCHS) Historic District (discussed below). The Big Creek Transmission Line is eligible for inclusion on the National Register at the State and National level of significance under Criteria A, B, and C as a contributing element to the Big Creek Hydroelectric System Historic District (BCHS Historic District) with a period of significance the same as that of the BCHS Historic District, which is 1911 to 1929. The steel lattice towers are contributing elements (Figure 7). Non-contributing elements include the conductor wire and insulators which, through routine and regular maintenance, likely have been replaced. More detailed description of this property can be found in the Cultural section of the EIR/EIS.

<u>Uses of the Big Creek East-West Transmission Line</u>

Alternatives 1 and 2 both propose to widen the existing SR-138 just east of the Big Creek East-West Transmission Line corridor. There are three towers located adjacent to the project area. Depending on the design of the project, two or three of these towers would be relocated to a nearby locations. Alternative 1 and Alternative 2 both would incorporate the land from these towers into the transportation system. This land incorporation would be considered as use under Section 4(f).

Why the use is de minimis: Result from Section 106 concludes that under both Alternatives 1 and 2, the Big Creek East-West Transmission Line corridor would remain fully intact and would not be physically altered or removed in any way. The significance of the transmission line corridor is tied with its association to the Big Creek Hydroelectric System and its integrity remains as its existing linear route through the area and its physical and associative connection with the BCHS Historic District would not change or be affected in any way. Caltrans and the property owner would have an agreement regarding the maintenance access to these towers. As a result of such findings, there would be no adverse effect to the Big Creek East-West Transmission Line. The SHPO has concurred with this no-adverse effect finding. Therefore, the use would result in a de minimis impact to this property.

Under the No Build Alternative the Big Creek East-West Transmission Line would remain fully intact with no changes or alterations. As a result, it would result in no Section 4(f) use of this property.

Minimization measures:

No minimization measures would be needed.



SR 138 Improvement Project: Intersection between Alt. 1 and Alt. 2 and the Big Creek Transmission Line Caltrans, DEP- October, 2015

Figure 7. Relationship between the build alternatives and the Big Creek East West Transmission Line.

Coordination:

Caltrans has consulted with the SHPO about a No Adverse Effect finding in regard to the Big Creek East-West Transmission Line. The SHPO has been informed of Caltrans' intent to make a *de minimis* impact finding based on their written concurrence in the Section 106 determination of "no adverse effect.", and they have concurred with the Section 106 determination of no adverse effect for this property.

3. Big Creek Hydroelectric System Historic District

Property description:

The Big Creek Hydroelectric System Historic District (BCHSHD) contains dams, tunnels, powerhouses, penstocks, incline railroads, and surge chambers (located in the Sierras in Fresno County), as well as transmission lines, two of which crosses the SR-138 APE. The transmission lines carry power to the Los Angeles area. The transmission lines that cross the SR-138 are the Big Creek East-West Transmission Line (discussed above) and the Antelope-Magunden #2 Transmission Line which crosses the existing and proposed SR-138 at just east of 140th street. Description of the Antelope-Magunden #2 Transmission Line can be found in the Section 3 below.

The BCHSHD was found eligible for inclusion on the National Register at both the statewide and national level of significance under Criteria A, B, and C with a period of significance from

1911 to 1929. The Historic District is composed of those buildings and structures that date to the period of significance and are related to the hydroelectric developments of those years, and have good integrity.

The BCHSHD is eligible under Criterion A because the planning, construction, and operation of the large, complex, and interrelated power system served and helped make possible the development of the Los Angeles Metropolitan Area. This was a significant contribution to the broad patterns of history. The BCHSHD is eligible under Criterion B because it is associated with the lives of John Eastwood, Henry Huntington, and George Ward. These pioneering hydroelectric engineers were central to the project and are known for their grand-scale vision, ability to conceptualize the plan, and develop one of the world's greatest engineering projects of the early twentieth century. The BCHSHD is eligible under Criterion C because it illustrates and enhances our understanding of hydroelectric systems and their uses, construction characteristics, and is a premier example of distinctive construction techniques on a grand scale.

Use of the Big Creek Hydroelectric System District:

The only two contributing elements of this historic district within the APE of the project are the Big Creek East-West Transmission Line (discussed above) and the Antelope-Magunden #2 Transmission Line. As discussed above, both Build alternatives 1 and 2 would incorporate land from two or three towers of the Big Creek East-West Transmission Line into the transportation right-of-way. This land incorporation would be considered as use of the BCHSHD under Section 4(f). No land of the Magunden #2 Transmission Line would be incorporated into the project's right of way.

Why the use is de minimis: Similar to the Big Creek East West Transmission Line, the result of Section 106 concludes that both Build alternatives would result in no adverse effect to the Antelope-Magunden #2 Transmission Line or the BCHSHD. Therefore, the 4(f) use would result in de minimis to this historic district.

Under the No Build Alternative, the BCHSHD would remain fully intact with no changes or alterations and would result in no use of this property.

Minimization measures:

No minimization measures would be needed

Coordination:

Caltrans has consulted with the SHPO about a No Adverse Effect finding in regard to the Big Creek East-West Transmission Line. The SHPO has been informed of Caltrans' intent to make a *de minimis* impact finding based on their written concurrence in the Section 106 determination of "no adverse effect." The SHPO has concurred with the Section 106 determination of no adverse effect for this property.

4. Los Angeles Department of Water and Power Transmission Line

Property description:

The Los Angeles Department of Water and Power (LADWP) Transmission Line consists of a transmission line with steel lattice towers that crosses SR-138 at 120th Street West. The LADWP Transmission Line could not be evaluated because sufficient information was not available during focused archival research, and an evaluation against all four criteria was not possible. Despite extensive outreach to LADWP, the only historical information available was obtained from historical aerial photographs showing that the transmission line is more than 50 years old. Under Section 106, Caltrans has assumed eligibility under Criterion A of the NRHP for the LADWP Transmission Line. Therefore this transmission line is considered a Section 4(f) property. It can be assumed that the character defining feature of the transmission line is the corridor through which it travels. The steel lattice towers are contributing elements of this property. Non-contributing elements include the conductor wire and insulators which, through routine and regular maintenance, likely have been replaced.

Use of the LADWP Transmission Line:

Alternative 1 and Alternative 2 both would involve a removal or relocation of the singular steel lattice transmission tower located within APE and would incorporate land from this tower into the transportation system. This land incorporation would be considered as use under Section 4(f).

Why the use is de minimis: Result from Section 106 concludes that under both Alternatives 1 and 2, the LADWP Transmission Line, the LADWP Transmission Line would remain in its same linear alignment and overall location and setting, as well as retain its association with the development of Los Angeles County. In addition, the design and workmanship of the overall LADWP Transmission Line system would remain intact. In all, the LADWP Transmission Line would not be altered, destroyed, or changed as a result of the alternatives. As a result of such findings, there would be no adverse effect to the LADWP Transmission Line. The SHPO has concurred with this no-adverse effect finding. Therefore, the use would result in a *de minimis* impact to this property.

Under the No Build Alternative the LADWP Transmission Line would remain fully intact with no changes or alterations. As a result, it would result in no Section 4(f) use of this property.

Minimization measures: No minimization measures would be needed.

Coordination:

Caltrans has consulted with the SHPO about a No Adverse Effect finding in regard to the Big Creek East-West Transmission Line. The SHPO has been informed of Caltrans' intent to make a de minimis impact finding based on their written concurrence in the Section 106 determination of "no adverse effect." The SHPO has concurred with the Section 106 determination of no adverse effect for this property.

B3-Resources Evaluated Relative to the Requirements of Section 4(f)

This section discusses parks, recreational facilities and wildlife refuges within 0.5 mile of the project footprint and historic properties within project APE that do not trigger Section 4(f) protection either because: (1) they are not publicly owned, (2) they are not open to the public, (3) they are not eligible historic properties, (4) the project does not permanently use the property and does not hinder the preservation of the property, or (5) the proximity impacts do not result in constructive use.

1. Hungry Valley Off-Road Vehicular Recreation Area

Hungry Valley SVRA is located west of the SR 138/I-5 Interchange. The park covers approximately 20,000 acres, includes 11 campgrounds, and 150 miles of riding trail. The primary purpose of this land is to provide sustainable off-highway motor vehicle recreation for its visitors. In addition, it also provides other educational and recreational activities. Hungry Valley SVRA is owned by California State Parks, Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division. It is open to the public and is significant. It is considered a Section 4(f) property.

Land incorporation

The Build alternatives do not permanently incorporate any land from this park, and no temporary occupancy of/construction easement from the park would be needed.

Accessibility

There are three public entry points to the park and they are the following: 1.) North entrance at Peace Valley Road 2.) South entrance at Hungry Valley Road, and 3.) Quail Lake Road under the I-5, adjacent to the project's improvements along the I-5. The north and south entrances are far from the project area and would not be permanently affected by the project or temporary affected during construction. Although the access through Quail Lake Road is adjacent to the project's construction area, it would not be affected permanently or temporary during project construction

Noise

The Noise Study Report (2015) concludes that the project is not anticipated to have any adverse noise effects on the park.

Visual

The Visual Impact Assessment (2014) concludes that the project is not anticipated to have any adverse visual impacts on the park.

Air Quality

The Air Quality Impact Study concludes that no federal violation would result from the implementation of the build alternatives; therefore, there would be no adverse permanent air quality impact to the park. During construction, a short-term worsening of air quality may occur due to the release of particulate emissions generated by site preparation, excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment are

also anticipated. However, Measures AQ-1 to AQ-6 (See Section 3.6, Construction Impacts on Air Quality of the EIR/EIS for more details) would reduce the stationary and mobile source emissions, ensuring compliance with air quality regulations and minimizing air quality impacts during project construction.

Vegetation and Water Quality

Work would be outside the park's ROW, and the project would incorporate all BMPs into the construction operations; therefore, no vegetation or water quality impacts on this park are anticipated.

Conclusion

The proposed project would not cause a constructive use of the Hungry Valley SVRA because the proximity impacts would not substantially impair the protected activities, features, or attributes of this facility.

2. Desert and Mountain Conservation Authority Natural Preserve at 150th street

Property description

The DMCA Preserve Area covers two adjoining parcels located immediately south of the existing SR-138, at 150th Street, with a total area of approximately 480 acres. It is owned by the Desert and Mountains Conservation Authority (DMCA), which is a Joint Powers Agreement between the Antelope Valley Resource Conservation District (Special District of the State of California) and the Santa Monica Mountains Conservancy.

The DMCA Preserve's primary function and purpose is to be preserved in its natural state for wildlife and habitat conservation purposes. It was created as a result of a mitigation measures to compensate for the impacts to habitat and wildlife due to development in the adjacent area. DMCA holds the land in perpetuity. There are no other resources or facilities on the property and currently no activities are permitted on the preserve other than walking and viewing the land. Currently, the property can be accessed from the existing SR-138. For the purpose of this project's analysis related to the Section 4(f), the reserve is considered a wildlife refuge and thus a Section 4(f) property.

Land incorporation

The project alternatives would not permanently incorporate any land from this property and no temporary occupancy of land would be involved. Therefore, the project would not result in direct use of this parcel.

Accessibility

Under Alternatives 1 and 2 the project's alignment would be located north of this parcel and the roadway would be shifted slightly north, away from the existing SR-138 and from this property. The current access through SR138 would be removed and new access would be provided from the north at 150th street. A median U-Turn on the mainline would also be provided for access to the property from the mainline westbound.

Please see the following section for a discussion about other proximity impacts.

3. Mountain Regional Conservation Authority Conservation Property at 212th Street

Property description

This property is located immediately south of the existing SR-138 at 212th Street and is within the Los Angeles County Department of Regional Planning's designated Significant Ecological Area. The area covers approximately 2.1 acres and is dominated by Joshua Trees. There are also other flora and fauna species. The property is owned by the Mountain Recreation and Conservation Authority (MRCA), which is a public agency. The primary purpose of this property is to protect Joshua Tree Woodlands. It is also to protect all other flora and fauna species and to maintain animal crossing areas along SR-138. In addition, it is for the protection of the highway view shed. Currently, the property can be accessed from the existing SR-138 at Avenue D. For the purpose of this project's analysis related to the Section 4(f), this resource is considered a wildlife refuge and thus a Section 4(f) property.

Land incorporation

The project does not permanently incorporate any land from this property, and no temporary occupancy /construction easement from the parcel would be needed.

Accessibility

Under both Build alternatives the project's alignment would be located north of this parcel and the roadway would be shifted slightly north, away from the existing SR-138 and from this property. The current access through SR-138 would be removed and new access would be provided from the south east of the parcel, at 210th street. A median U-Turn on the main line would also be provided for access to the property from the westbound.

Biological resources

The project has been designed to avoid the properties at 150th Street/Ave. D and 212th Street/Avenue D. All construction-related activities would be conducted outside of the identified conservation parcels' right-of-way and the project would not directly impact their biological resources. Avoidance measures would be implemented during construction. This includes that a qualified biologist would establish an Environmentally Sensitive Area (ESA) using brightly colored fencing to protect the parcels vegetation communities.

Even though construction activities would occur outside these parcels, temporary impacts to these parcels could include dust, noise and vibration from construction which may temporarily impact nesting birds from February 15-September 1 or temporarily impact wildlife that may travel through the parcel. Minimization measures would include pre-construction bird nesting surveys within 150 feet of the project limits and raptor nesting surveys within 500 feet of the project limits. Appropriate buffers would be in place to protect individuals from dust and noise. Once nesting birds are confirmed to be no longer present, construction would resume along the construction buffer zone with a biological monitor present.

Indirect wildlife impacts may include increased light, glare and noise that may impact wildlife movements or degrade adjacent habitat for nesting birds. Nighttime illumination is known to adversely affect some species of wildlife in natural areas. It can disturb breeding and foraging behavior and potentially alter breeding cycles of birds, mammals, and nocturnal invertebrates. If

uncontrolled, such lighting proximal to these movement corridors could adversely impact the composition and behavior of the wildlife that occur in these areas. This indirect impact is considered moderate compared to the current illumination of the highway. To minimize these indirect wildlife impacts, the follow mitigation measure would be implemented:

- Use lighting in areas only where necessary for safety and signage. All lighting should be downcast to minimize lighting of natural areas, particularly rivers, washes and drainages.
- Eliminate all lighting in other areas. Further studies would be conducted to evaluate the need for lighting along this parcel.
- The design of a new freeway would include wildlife crossing structures that are as natural and easy for wildlife to cross as possible to promote use by local wildlife. Further studies would be conducted to evaluate a wildlife crossing along this parcel to avoid adverse wildlife movement impacts to this parcel. Specific designs of the culverts would be prepared in consultation with the regulatory agencies see the Biological Resource Section for the list of measures about wildlife crossings.
- Install fencing along the route that prevent wildlife from crossing in areas other than intended wildlife crossing locations. Fencing shall be installed to channel wildlife to the intended crossing locations.
- Fencing shall be maintained throughout the existence of the SR-138.
- A biological monitor shall be present to observe activities of wildlife during construction adjacent to this parcel. If activities are noted to affect wildlife, a biological monitor shall stop construction activities as necessary and propose mitigation measures outlined in the Natural Environment Study.

Visual

Permanent change in visual resources affecting these properties would be characterized as low to moderate. The project would include landscaping compatible with the surrounding landscape. See the Visual Section of the document for more information and minimization measures.

Air Quality

During construction, a short-term worsening of air quality may occur due to the release of particulate emissions generated by site preparation, excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment are also anticipated. However, Measures AQ-1 to AQ-6 (See Section 3.6, Construction Impacts on Air Quality of the EIR/EIS for more details) would reduce the stationary and mobile source emissions, ensuring compliance with air quality regulations and minimizing air quality impacts during project construction.

Conclusion

The proposed project would not cause a constructive use of the Desert and Mountain

Conservation Authority Natural Preserve at 150th street and Mountain Regional Conservation Authority Conservation Property at 212th Street because the proximity impacts would not substantially impair the protected activities, features, or attributes of this property.

4. The Neenach Wildlife Sanctuary

The Neenach Wildlife Sanctuary (Sanctuary) is located immediately adjacent to the 210th Street West, approximately 0.25 miles north of the existing SR-138 within the significant ecological area of Joshua Tree Woodland. If either Build alternatives 1 or 2 are to be considered, it would be approximately 900 feet from the main alignments. This area is owned and managed by the Los Angeles County Department of Parks and Recreation. The purpose of this 40-acre Sanctuary is to preserve and display a wide variety of distinct flora and fauna, including Joshua Trees, juniper, and rabbit bush, blacktailed jackrabbit, chipmunk, burrowing owl, cactus wren, California thrasher, roadrunner, California rock wren, Mojave rattlesnake, glossy snake, nightsnake, lyre Snake, dessert spiny lizard, desert hairy scorpions, and California ebony tarantula. Public access is allowed in this area. This sanctuary is considered significant and thus is considered a Section 4(f) property for the purpose of this project analysis.

Land incorporation

The project does not permanently incorporate any land from this property, and no temporary occupancy /construction easement from the parcel would be needed.

Accessibility

Access to this parcel would not be permanently or temporarily affected. During construction, access to the parcel would be maintained.

Visual

This sanctuary is located far from the project alignment, at a distance of around 900 feet. Visual effect is not readily apparent at this location so the project would not have adverse visual impact at this location.

Noise

During the construction phases of the project, noise from construction activities may intermittently dominate the work area. The Noise Study Report states that equipment involved in construction is expected to generate noise levels ranging from 70 to 90 dBA at a distance of 50 feet. Noise produced by construction equipment would be reduced over distance at a rate of about 6 dBA per doubling of distance. Normally, construction noise levels should not exceed 86 dBA (Lmax) at a distance of 50 feet. No adverse noise impacts from construction are anticipated for the Neenach Sanctuary because construction would be short term and would be conducted in accordance with Caltrans standard specifications which requires that noise levels generated during construction shall comply with applicable local, state, and federal regulations.

Air Quality

During construction, a short-term worsening of air quality may occur due to the release of particulate emissions generated by site preparation, excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment are also anticipated.

However, Measures AQ-1 to AQ-6 (please see Section 3.6, Construction Impacts on Air Quality of the EIR/EIS for more details) would reduce the stationary and mobile source emissions, ensuring compliance with air quality regulations and minimizing air quality impacts during project construction.

Conclusion

The project build alternatives would not result in constructive use of this sanctuary because proximity impacts would not substantially impair the protected activities, features, or attributes of this facility.

5. The Bell Telephone and Telegraph Switching Station

Property description

The Bell Telephone and Telegraph Switching Station (Bell Station) is a fenced-in building complex located within the project APE at 33700 West Lancaster Boulevard. The Bell Station was found eligible for inclusion on the National Register at the local level of significance under Criteria A and C with a period of significance from 1927 to 1934 which includes its construction and early years of use when it served as a communications switching station. An eligibility consensus determination with SHPO is pending. The Bell Station is eligible under Criterion A because it served a valuable purpose of extending the network range of the communication industry in Los Angeles County into the developing rural regions of Southern California and was an important element of the expansion of the entire Los Angeles communication industry at the local level. The Bell Station is eligible under Criterion C because several of the buildings on the property are excellent examples of the Spanish Revival style of architecture, particularly for rural Los Angeles County. In addition, the Bell Station retains sufficient integrity to convey that significance.

Contributing elements to the Bell Station include all of the original buildings constructed on the property that were designed in the Spanish Revival style of architecture and their features such as the tile roof, stucco siding, elaborate chimneys, large focal windows, covered porches, and decorative vents. For more detailed description of this property see the Cultural Section of the EIR/EIS.

Land incorporation

The ultimate ROW for Build Alternatives 1 and 2 would be located several hundred feet north of the existing SR-138 alignment at the location of the Bell Switching Station. These alternatives would not permanently incorporate any land from this property, and no temporary occupancy or construction easements from the parcel would be needed.

Impact

The results from Section 106 study concludes that under these alternatives, the Bell Switching Station's significance as a valuable communications network facility for the developing rural regions of Southern California remains intact with no changes and the integrity of its Spanish Revival style of architecture remains high. The Bell Switching Station's significance is not dependent on any view sheds of the area or adjacent access from SR-138. The introduction of the audible element with the new SR-138 route would be minor and consistent with the noise already existing with the current highway. Therefore, the audible element of the new SR-138 would have

no effect on the integrity of the Bell Switching Station. There would be no adverse effect to the Bell Switching Station with Alternatives 1 or 2. Consultation is ongoing with the SHPO for the effect determination in regard to the Bell Station.

Under the No Build Alternative the Bell Switching Station would remain fully intact with no changes or alterations. There would be no adverse effect to the Bell Switching Station.

Conclusion

The project build alternatives would not result in constructive use of this property because proximity impacts would not substantially impair the protected activities, features, or attributes of this property.

6. Antelope-Magunden #2 Transmission Line

Property description

A 600-meter segment of the Antelope-Magunden #2 Transmission Line intersects the APE and SR-138 just east of 140th Street West. The Antelope-Magunden #2 Transmission Line, similar to the Big Creek East-West Transmission Line, is eligible for inclusion on the National Register at the State and National level of significance under Criteria A and C as a contributing element to the BCHS Historic District. The character-defining features of this transmission line can be assumed to be the corridor through which it travels; similar to a roadway, fence line, or other linear feature. Contributing elements include the steel lattice towers. Non-contributing elements include the conductor wire and insulators which, through routine and regular maintenance, likely have been replaced. This property is considered a Section 4(f) property.

Land incorporation

The project would not permanently incorporate any land from this facility into the project's right of way. None of the transmission towers would be removed or relocated. No temporary occupancy of this property would be involved.

Impact

Under Alternatives 1 and 2, the Antelope-Magunden #2 Transmission Line would remain fully intact and would not be physically altered or removed in any way. The significance of the transmission line corridor is tied with its association to the Big Creek Hydroelectric System and its integrity remains as its existing linear route through the area and its physical and associative connection with the BCHS Historic District would not change or be affected in any way. Result of Section 106 evaluation concludes that there would be no adverse effect to the Antelope-Magunden #2 Transmission Line as the result of the project.

Under the No Build Alternative the Antelope-Magunden #2 Transmission Line would remain fully intact with no changes or alterations. There would be no adverse effect to the Antelope-Magunden #2 Transmission Line.

Conclusion

The project build alternatives would not result in constructive use of this property because proximity impacts would not substantially impair the protected activities, features, or attributes of this property.

7. Quail Lake

Quail Lake is located on the north side of the existing SR-138 at around 2.5 miles east from the I-5 and SR-138 junction. This lake covers an area of approximately 250 acres. Quail Lake was originally a pond created by a cataclysmic movement of the San Andreas Fault ages ago. As part of the California State Water Project, Quail Lake was enlarged to move water safely across the fault. It is owned by the CA Department of Water Resources, a public agency. There are also secondary recreational activities at Quail Lake which include fishing, hiking, and bird watching. The lake is open to the public from sunrise to sundown.

Coordination with LADWP confirms that although there are recreational activities occurring at this lake, the designated primary purpose of this lake remains as a water storage and transportation; therefore, recreation use of this property is considered a secondary use. Provisions of Section 4(f) are not triggered according to FHWA's Policy Paper (Q&A #1A), which specifies that publicly owned land is considered to be a park or recreational area protected under Section 4(f) when its primary purpose is as a park or recreation area. A property's primary function is defined by how it is intended to be managed. Incidental, secondary, occasional, or dispersed activities similar to park or recreational activities do not constitute a primary purpose within the context of Section 4(f).

8. Existing Pacific Crest Trail Segment within vicinity of SR-138

The Pacific Crest Trail (PCT) is a 2,665 mile hiking and equestrian trail stretching from Mexico to Canada. The PCT overlaps many of the Angeles National Forest trails. This trail is a designated National Scenic Trail (1968) and is managed by the U.S. Forest Service through the Pacific Crest Association. Visitors come from around the world to explore this most diverse and scenic trail. Although the trail is designated as the National Scenic Trail, many portions of the PCT on paper are still being developed on the ground and can be modified depending on the actual condition on the ground and land ownership/right of way.

Within the vicinity of the project, there are several segments of the existing PCT. The proposed project would incorporate land from the existing PCT from approximately 50 feet north to 200 feet south of the existing SR-138.

The trail portion that is within the existing SR-138 right-of-way: FHWA's guidance on trails specifies that if the publicly owned path or trail is simply described as occupying the right-of-way of the highway and is not limited to any specific location within the right-of-way, a Section 4(f) use of land would not occur provided that adjustments or changes in the alignment of the highway or the trail would not substantially impair the continuity of the path or trail. This portion of the trail occupies the SR138 right-of-way in general and the project proposes a new grade separation structure (standard Box Culverts) at the location where the existing Pacific Crest Trail crosses the SR-138 to

maintain the continuity of the trail. Therefore, Section 4(f) use of land would not occur and provisions of Section would not apply to this portion.

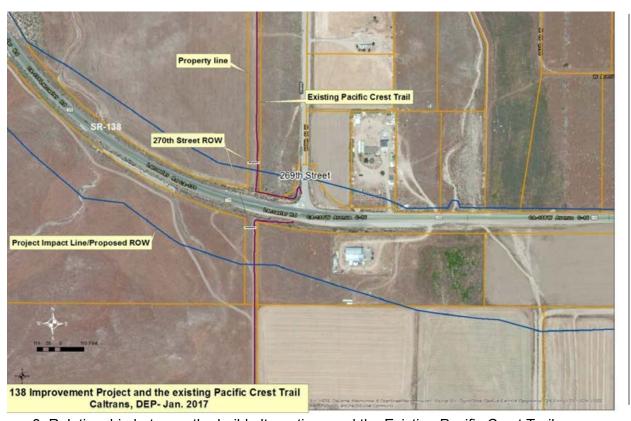


Figure 8. Relationship between the build alternatives and the Existing Pacific Crest Trail

The trail portions from Avenue C-8 to the existing SR-138 and SR-138 to approximately 380 feet south of the SR-138 right-of-way: FHWA's Section 4(f) Policy Paper, Q&A 15B states that ".... National Scenic Trails (other than the Continental Divide National Scenic Trail) and National Recreation Trails that are on publicly owned recreation land are subject to Section 4(f), provided the trail physically exists on the ground thereby enabling active recreational use." These portions of the existing Pacific Crest Trail have been in continuous use on the ground and are located on privately owned land. The US Forest Service received an easement from the Tejon Ranch Corporation for the trail in March 1994 so these portions can be considered "publicly owned". However, these portions are located on land that had already been dedicated to the County for the purpose of public local road/transportation before 1931. This land is shown in the County Assessor's map as the 270th Street, which is part of the local transportation system (see Figure 9 below). Therefore, transportation is essentially the primary purpose of the land, and recreation is considered junior or secondary use. Thus, this land would not meet the "primary purpose" criterion to be considered "recreation land" for the purpose of 4(f). FHWA's Guidance also specifies that if the trail or shared used path is on land that is part of the local transportation system, then Section 4(f) does not apply (FHWA's Section 4(f) Policy Paper, Q&A 15A). This land is shown in the County Assessor's map as the 270th Street, which is part of the local transportation system. Therefore, Section 4(f) does not apply to these segments, and provisions of Section 4(f) are not triggered.

It should, however, be noted that even though the Section 4(f) does not apply, impacts to these trail segments are considered and discussed as part of section 3.1.1 Land Use and section 3.1.4 Community Impact, and minimization measures are incorporated as appropriate.

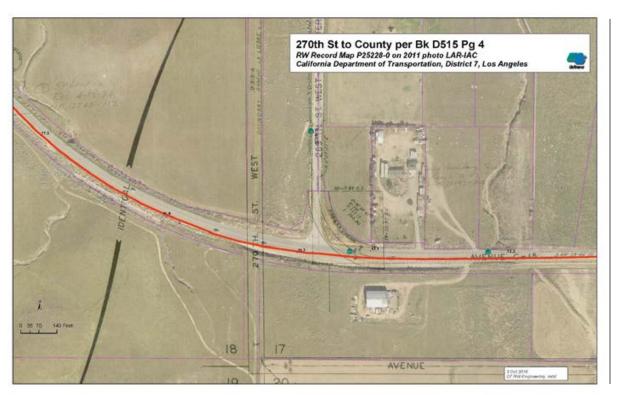


Figure 9. Right-of-way map of the vicinity of existing SR-138 at the existing PCT

The PCT portions from Avenue C-6 to Avenue C-8 and from 380 feet to 0.5 mile south of the existing SR-138 right-of-way (see Figure 10 below): These portions of the PCT are located on public land and privately owned land. The Forest Service was granted easements for these trails portions by the West Union School District and Tejon Ranch Corporation. No dedication for public roads is evident at these locations. Therefore, these trail portions are considered on the public recreation land and would be protected under Section 4(f). However, the project would not directly incorporate any land from these portions into the transportation system. In regards to air quality, the proposed Build Alternatives would not cause violations of the federal PM10 or PM2.5 standards in the region, thus there would be no adverse permanent air quality impact to the trail. Although during construction, short-term worsening of air quality may occur due to various construction activities and equipment, compliance with Caltrans Standard Specifications Sections 10, 18, and 7-1.01F and the South Coast Air Quality Management District (SCAQMD) and Antelope Valley Air Quality Management District (AVAQMD) Rules and Regulations during construction would reduce construction-related air quality impacts. Visual impact at this location should be similar to Key View #9 where the PCT would be relocated to. It is anticipated to be an increase in visual vividness by creating a portal through which to view the other side of the trail. This would result in a slight

improvement to the visual quality. Noise level at this location is anticipated to be typical noise level at or near freeway locations where hiking trails cross. Since hiking is the main recreational activity of this trail, which does not require a quiet environment, the function of the trail is not anticipated to be substantially diminished or impaired due to the noise impacts of the project. In addition, the project would ensure that access and continuity of the trail be maintained. Thus, no impacts that would substantially impair the use of the trail are anticipated. Therefore, the project would not result in a direct or constructive use of this trail under Section 4(f).

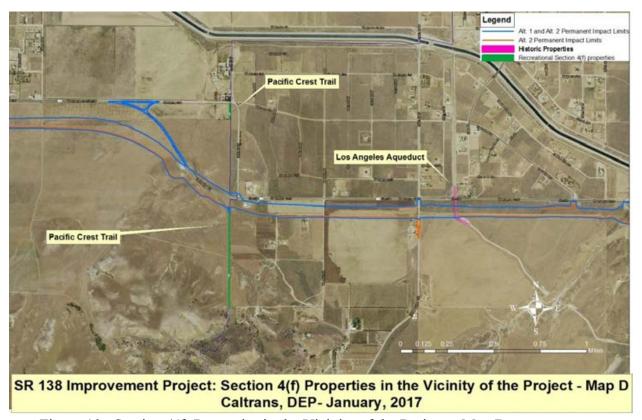


Figure 10: Section 4(f) Properties in the Vicinity of the Project – Map D

9. Planned Realignment of the Pacific Crest Trail Segment and Tejon Ranch Conservation Easement within vicinity of SR-138

The Forest Service is working with the Pacific Crest Trail Association and the Tejon Ranch Conservancy to include a layered set of easements on the Tejon Ranch Company's land that would allow for the PCT to be relocated from its current location on the floor of the Mojave Desert to the crest of the Tehachapi Mountains. In the vicinity of the project, the realignment is planned to move the PCT crossing from 269th Street West to 300th Street West along the SR-138. This land is currently owned by the Tejon Ranch Company. There have been discussions that Tejon Ranch Company would donate the conservation easement to the Forest Service. However, this easement is currently held by the Tejon Ranch Conservancy, which is a private entity and has not been donated to the Forest Service. FHWA's Policy Paper (Q&A #25)

specifies that when privately-held properties formally designate into a Master Plan for future park/recreation development, Section 4(f) is not applicable. They must be publicly owned at present. Accordingly, the provisions of Section 4(f) are not triggered in regards to this planned realigned PCT trail or the Tejon Ranch conservation land. It should, however, be noted that even though the Section 4(f) does not apply, impacts to this planned realigned PCT are considered and discussed as part of section 3.1.1 Land Use and section 3.1.4 Community Impact, and minimization measures are incorporated as appropriate.

10. Portions of Los Angeles County's Planned Trails

The proposed Alternatives 1 and 2 would intersect with the following Los Angeles County's adopted future recreational trails.

- Trail along Three Points Road/260 Street West,
- Trail along Los Angeles Aqueduct near the community of Neenach, around 300 feet east of Three Points Road,
- Trail along 90th Street,
- Trail along the California Aqueduct, continuing on along the 245th Street West,
- Trail east of 140th Street along the Southern California Edison power line.

Coordination with the Los Angeles County Department of Parks and Recreation indicated that 3 of these proposed trails, which are along Three Points Road, 90th Street and east of 140th Street, are within private land with no present public ownership or easement. FHWA's Policy Paper (Q&A #25) specifies that when privately-held properties formally designate into a Master Plan for future park/recreation development, Section 4(f) is not applicable. They must be publicly owned at present. Accordingly, the provisions of Section 4(f) are not triggered for these trails. The remaining two adopted trails are located on the public land - the Los Angeles Aqueduct and California Aqueduct, which are owned by the City of Los Angeles Department of Water and Power and State of California Department of Water Resources. However, coordination with the City DWP and CADWR indicate that their aqueduct land is designated primarily for water supply purpose, not for recreation. Current or future recreational activities on their land would be secondary use only. Therefore, provisions of Section 4(f) are not triggered according to FHWA's Policy Paper (Q&A #1A and #25), which specifies that in order for publicly owned land to be considered as park or recreational area protected under Section 4(f), its primary purpose has to be as a park or recreation area, or it is presently formally designated as such.

There may be existing recreational uses along the above trails. However, these uses either occur on the current private land or on the public land not designated for recreation. Therefore, they are not considered Section 4(f) properties.

11. Archaeological site CA-LAN--3723

Archaeological site CA-LAN—3723 is a lithic reduction site most likely used for reducing rhyolite lithic material obtained from the prehistoric rhyolite quarry at Fairmont Butte, about one mile to the south. For more information about this site please see the Cultural Section of the EIR/EIS. The northernmost portion of this site which is outside the Area of Direct Impact (ADI) is assumed by Caltrans to be eligible for the NR.

According to exception 23 CFR 774.13(b), Section 4(f) applies to archaeological sites that are on or eligible for the NRHP and that warrant preservation in place. Section 4(f) does not apply to an archaeological resource that is important chiefly because of what can be learned through data recovery and has minimal value for preservation in place. This northernmost portion of the archaeological site is assumed eligible for listing in the NRHP but is determined important chiefly because of what can be learned through data recovery and has minimal value for preservation in place. SHPO does not object to this conclusion. Therefore, provisions of Section 4(f) are not triggered, and exception 23 CFR 774.13(b) is applied to this archeological site.

12. Archaeological Site CA-LAN-4640

Archaeological site CA-LAN-4640 is a prehistoric temporary campsite in the western part of the APE on a ridge overlooking Quail Lake. Similar to Site CA-LAN-4621 discussed above, some surface cultural material was collected, but the subsurface material was evaluated as eligible for the NRHP under Criterion D because it has the potential to address the research themes of settlement patterns, subsistence, lithic reduction, ethnicity, and chronology. For more information about this site please see the Cultural Section of the EIR/EIS. It has been determined that this site is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place. The SHPO has concurred with the eligibility determination.

According to exception 23 CFR 774.13(b), Section 4(f) applies to archaeological sites that are on or eligible for the NRHP and that warrant preservation in place. Section 4(f) does not apply to an archaeological resource that is important chiefly because of what can be learned through data recovery and has minimal value for preservation in place. Similar to the above site, this archaeological site is eligible for listing in the NRHP but is important chiefly because of what can be learned through data recovery and has minimal value for preservation in place. SHPO does not object to this determination . Therefore, provisions of Section 4(f) are not triggered, and exception 23 CFR 774.13(b) is applied to this archeological site.

13. Archaeological Site CA-LAN-4620

Archaeological site P19-004620 is likely a lithic reduction site for rhyolite obtained from nearby Fairmont Butte. This site is assumed eligible for the National Register under Criterion D by Caltrans for this project.

According to exception 23 CFR 774.13(b), Section 4(f) applies to archaeological sites that are on or eligible for the NRHP and that warrant preservation in place. Section 4(f) does not apply to an archaeological resource that is important chiefly because of what can be learned through data recovery and has minimal value for preservation in place. Similar to the above site, this archaeological site is eligible for listing in the NRHP but is important chiefly because of what can be learned through data recovery and has minimal value for preservation in place. SHPO does not object to this determination. Therefore, provisions of Section 4(f) are not triggered, and exception 23 CFR 774.13(b) is applied to this archeological site.

Section 6(f) Consideration

The project would not convert land from any Section 4(f) properties or parkland that have been acquired or developed using money from the Land and Water Conservation Act. Therefore, provisions of Section 6(f) are not triggered.

References

23 CFR 774: Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites (Section 4(f)).

Section 4(f) Policy Paper, July 20, 2012.

Noise Study Report, 2016.

Air Quality Report, July 2016

Visual Impact Assessment, August 2015.

SR138 NW Project Finding of Adverse Effects, 2016.

Natural Environmental Study, October 2016

Water Quality Study, 2016

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