

# APPENDIX 3.17-A KNE TRIBAL CULTURAL RESOURCES TECHNICAL REPORT

# TRIBAL CULTURAL RESOURCES TECHNICAL REPORT

## K LINE NORTHERN EXTENSION



# K LINE NORTHERN EXTENSION TRANSIT CORRIDOR PROJECT

# **Tribal Cultural Resources Technical Report**

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# ABBREVIATIONS/ACRONYMS

ACRONYMS	DEFINITION		
AA	Alternatives Analysis		
AB	Assembly Bill		
Advanced AA	Advanced Alternatives Analysis		
BCE	Before the Common Era		
CE	Common Era		
CEQA	California Environmental Quality Act		
CFR	Code of Federal Regulations		
CRHR	California Register of Historical Resources		
Division 16	Division 16 Southwestern Maintenance Yard		
EIR	Environmental Impact Report		
HPOZs	Historic Preservation Overlay Zones		
KNE	K Line Northern Extension		
LAX	Los Angeles International Airport		
LRT	light rail transit		
Ma	Million Years Ago		
Metro	Los Angeles County Metropolitan Transportation Authority		
MLD	Most Likely Descendant		
MSF	Maintenance and Storage Facility		
n.d.	no date		
NAHC	Native American Heritage Commission		
NHPA	National Historic Preservation Act		
NRHP	National Register of Historic Places		
OCS	overhead contact system		
PRC	Public Resources Code		
Project	K Line Northern Extension Project		



ACRONYMS	DEFINITION
ROW	right-of-way
RSA	Resource Study Area
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SCAG	Southern California Association of Governments
SCCIC	South Central Coastal Information Center
SEM	sequential excavation method
SLF	Sacred Lands File
TBM	tunnel boring machine
TCR	Tribal Cultural Resource
USC	United States Code

# CHAPTER 1 INTRODUCTION

#### 1.1 PROJECT OVERVIEW

The Los Angeles County Metropolitan Transportation Authority (Metro) is preparing a Draft Environmental Impact Report (EIR) for the K Line Northern Extension Transit Corridor Project (the Project) (Figure 2-1). The Project would provide a northern extension of the Metro light rail transit (LRT) K Line from the Metro E Line (Expo) to the Metro D Line (Purple) and B Line (Red) heavy rail transit lines. The Project would serve as a critical regional connection, linking the South Bay, the Los Angeles International Airport (LAX) area, South Los Angeles, Inglewood, and Crenshaw corridor to Mid-City, Central Los Angeles, West Hollywood, and Hollywood, allowing for further connections to points north in the San Fernando Valley via the Metro B Line. The Project would also connect major activity centers and areas of high population and employment density.

#### 1.2 TECHNICAL REPORT SUMMARY

This technical report evaluates the Project's environmental impacts as they relate to tribal cultural resources (TCRs). It describes existing conditions, the current applicable regulatory setting, potential impacts from construction and operation of the alignment alternatives, stations, design option, and maintenance and storage facility (MSF), as well as mitigation measures where applicable. This technical report was conducted in compliance with the California Environmental Quality Act (CEQA) (Sections 21000 et seq.) and the CEQA Guidelines (Section 15000 et seq.), which require state and local agencies to identify the significant environmental impacts of their actions, including significant impacts associated with tribal cultural resources, and to avoid or mitigate those impacts, when feasible.

The technical report is organized into eight chapters:

- Chapter 1 Introduction, provides an overview of the Project and a summary of the technical report's contents.
- Chapter 2 Project Description, provides a description of the Project's alignment alternatives, stations, design option, and MSF. This section also describes the construction approach for the Project.
- Chapter 3 Regulatory Framework, discusses applicable federal, state, and local regulatory requirements, including plans and policies relevant to Project jurisdictions.
- Chapter 4 Methodology and Significance Thresholds, describes the analysis methodologies applied for this Project and provides a summary of CEQA significance thresholds adopted by state and local jurisdictions.
- Chapter 5 Existing Setting, describes the existing conditions as relevant to the Project's alignment alternatives, stations, design option, and MSF.
- Chapter 6 Impacts and Mitigation Measures, discusses the impact analyses conducted for the Project's alignment alternatives, stations, design option, and MSF, and discusses



applicable mitigation measures. It also discusses any project measures that would be implemented as part of design and construction of the Project.

- Chapter 7 Cumulative Impacts, discusses the cumulative impacts for the Project's alignment alternatives, stations, design option, and MSF.
- Chapter 8 References, lists the references used to prepare this technical report.

## CHAPTER 2 **PROJECT DESCRIPTION**

This section provides information pertinent to the components of the Project as evaluated in the technical report. The Project components for evaluation in this technical report include three light rail alignment alternatives with stations, one design option, and one MSF.

#### 2.1 ALIGNMENT ALTERNATIVES

As shown in Figure 2-1, each of the three alignment alternatives would provide a northern extension of the Metro K Line from its current terminus at the Expo/Crenshaw Station to the Metro B Line Hollywood/Highland Station. All three alignment alternatives would operate entirely underground in parallel twin-bore tunnels with some station elements at the surface, including the station entrance and ventilation structures. Due to the Project length and pending funding availability, the alignment alternatives would be constructed sequentially in sections.

The alignment alternatives are as follows:

- Alignment Alternative 1: San Vicente—Fairfax. This alignment alternative would travel north from the existing Metro K Line Expo/Crenshaw Station before heading northwest under San Vicente Boulevard, with a connection to the future Metro D Line Wilshire/Fairfax Station. It would continue north under Fairfax Avenue before turning west under Beverly Boulevard to rejoin San Vicente Boulevard. The alignment would then turn east under Santa Monica Boulevard, and then turn north just east of La Brea Avenue to follow Highland Avenue north to connect to the Metro B Line at the Hollywood/Highland Station.
- Alignment Alternative 2: Fairfax. This alignment alternative would travel north from the existing Metro K Line Expo/Crenshaw Station before heading northwest under San Vicente Boulevard and north under Fairfax Avenue, where it would connect with the future Metro D Line Wilshire/Fairfax Station. It would continue north under Fairfax Avenue and turn east under Santa Monica Boulevard. The alignment would then turn north just east of La Brea Avenue to follow Highland Avenue north to connect to the Metro B Line at the Hollywood/Highland Station.
- Alignment Alternative 3: La Brea. This alignment alternative would travel north from the existing Metro K Line Expo/Crenshaw Station before heading northwest under San Vicente Boulevard and north under La Brea Avenue, where it would connect with the future Metro D Line Wilshire/La Brea Station. From there, it would continue north under La Brea Avenue and turn northeast north of Fountain Avenue to follow Highland Avenue to connect with the Metro B Line at the Hollywood/Highland Station.

Table 2-1 provides a summary of the characteristics of each of the alignment alternatives and Table 2-2 identifies which stations would be constructed under each alignment alternative. In total, 12 station areas are identified, including the option to extend to the Hollywood Bowl.



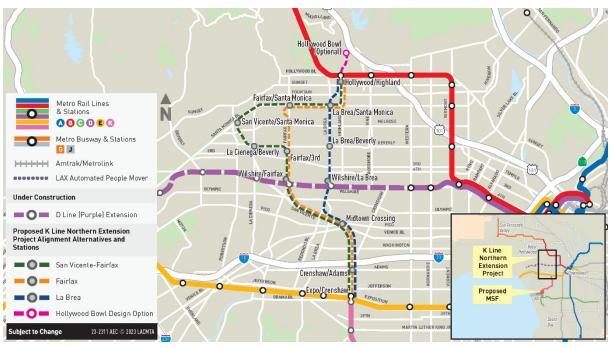


FIGURE 2-1. K LINE NORTHERN EXTENSION ALIGNMENT ALTERNATIVES

Source: Connect Los Angeles Partners 2023

TABLE 2-1. CHARACTERISTICS OF THE ALIGNMENT ALTERNATIVES AND DESIGN OPTION

	ALIG	DESIGN OPTION		
PROJECT COMPONENTS	1. SAN VICENTE- FAIRFAX	2. FAIRFAX	3. LA BREA	HOLLYWOOD BOWL EXTENSION
Alignment Length	9.7 miles underground	7.9 miles underground	6.2 miles underground	+ 0.8 mile underground
Stations	9 underground	7 underground	6 underground	+1 underground
Travel time from Expo/Crenshaw to Hollywood/Highland Station	19 min	15 min	12 min	+2 min (from Hollywood/Highland)



#### **TABLE 2-2. STATIONS BY ALIGNMENT ALTERNATIVE**

STATION	SAN VICENTE-FAIRFAX	FAIRFAX	LA BREA
Crenshaw/Adams (City of Los Angeles)	•		•
Midtown Crossing (City of Los Angeles)	•		•
Wilshire/Fairfax (City of Los Angeles)	•	•	
Fairfax/3 <sup>rd</sup> (City of Los Angeles)	•	•	
La Cienega/Beverly (City of Los Angeles)	•		
San Vicente/Santa Monica (City of West Hollywood)	•		
Fairfax/Santa Monica (City of West Hollywood)	•		
La Brea/Santa Monica (City of West Hollywood)	•		•
Hollywood/Highland (City of Los Angeles)	•		
Wilshire/La Brea (City of Los Angeles)			•
La Brea/Beverly (City of Los Angeles)			
Hollywood Bowl (City of Los Angeles)	•		



### 2.2 HOLLYWOOD BOWL DESIGN OPTION

For every alignment alternative, there is one design option under consideration. The Hollywood Bowl Design Option includes an alternate terminus station at the Hollywood Bowl, north of the proposed Hollywood/Highland Station, as shown in Figure 2-2.

■ B Line & Station Proposed K Line Northern Extension Project Alignment Alternatives and Stations ■ 🔘 ■ San Vicente-Fairfax Fairfax ■ 🔘 ■ La Brea ■○■ Hollywood Bowl **Design Option** Subject to Change **HOLLYWOOD BOWL DESIGN OPTION** ODINST 101 FRANKLIN AV FRANKLIN AV YUCCA ST HOLLYWOOD/HIGHLAND STATION HAWTHORN AV SELMA AV SUNSET BL

FIGURE 2-2. HOLLYWOOD BOWL DESIGN OPTION



#### 2.3 MAINTENANCE AND STORAGE FACILITY

An MSF would be constructed that would expand the Division 16 Maintenance Yard (Division 16), the existing MSF for the Metro K Line near LAX, as shown in Figure 2-3. The MSF would provide equipment and facilities to accommodate daily servicing and cleaning, inspection and repairs, and storage of light rail vehicles that are not in service. The MSF would be the primary physical employment center for rail operation employees, including train operators, maintenance workers, supervisors, administrators, security personnel, and other roles. If the Project is opened in sections, operation of the extended K Line from the Expo/Crenshaw Station to the Metro D Line could be accommodated within the existing Division 16 site with four new storage tracks.



FIGURE 2-3. MAINTENANCE AND STORAGE FACILITY



#### 2.4 CONSTRUCTION APPROACH

The Project would be constructed in sections that would be built sequentially, depending on available funding. The development of the Project would employ conventional construction methods, techniques, and equipment similar to other Metro projects that require underground tunneling. Detailed information on construction techniques can be found in the KNE Construction Approach Report. Major construction activities for the Project include surveys and preconstruction, which consist of local business surveys, building and utility assessments, and site preparations; right-of-way acquisition; tunnel construction, including tunnel boring machine (TBM) excavation and segmental lining and installation; utility relocation and installation work; station, crossover, and connection box construction; MSF construction, including site grading, maintenance building construction, and storage and access track construction; street restorations, including paving and sidewalks; ventilation and emergency egress construction; systems installation and facilities, including trackbed, rail, overhead contact system, conduit, electrical substation, and communications and signaling construction; and construction of other ancillary facilities.

The tunnels would be bored with TBMs, and the stations and track crossover boxes would be constructed via cut-and-cover methods, which entail excavating down from the ground surface and stabilizing the ground with an excavation support, then placing temporary decking surfaces above the excavation and conducting all excavation inside the supported area. The tunnel and station associated with the Hollywood Bowl Design Option would be constructed by sequential excavation method (SEM), which entails conventional mining techniques and equipment for hard rock excavation, which would reduce surface impacts.

Construction staging areas have been identified at each of the station locations, which are described and illustrated in Appendix A of the KNE Construction Approach Report. In order to construct a station, a minimum of one to two acres of construction staging sites would be needed for the duration of the station construction period. A larger construction staging site of three to four acres would be required if the site is also used to launch the TBMs and support tunneling activities. The TBM launch sites have been identified at the Midtown Crossing, San Vicente/Santa Monica, and La Brea/Santa Monica Stations. Temporary street, lane, sidewalk and bike lane closures as well as street reconfigurations will be part of construction activities. Construction and operational impacts on TCRs are identified and discussed in this technical report.

## CHAPTER 3 **REGULATORY FRAMEWORK**

This chapter identifies federal, state, and local laws, regulations, and ordinances relevant to the impact analysis of TCRs.

#### 3.1 FEDERAL REGULATIONS

#### 3.1.1 NATIONAL HISTORIC PRESERVATION ACT

The National Historic Preservation Act (NHPA) (54 United States Code [USC] 300101 et seq.) establishes a program for the preservation of historic properties throughout the United States and provides a framework for identifying and treating historical and archaeological resources under CEQA. Section 106 of the NHPA (54 USC 306108) and its implementing regulations (36 Code of Federal Regulations [CFR] 800), requires that federal projects or projects under federal jurisdiction consider the effect of an undertaking on properties eligible for or included in the National Register of Historic Places (NRHP). Historic properties that are listed in or eligible for the NRHP are considered historical resources for the purposes of CEQA.

The NHPA establishes the NRHP, which is "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 CFR 60.2). To be eligible for listing in the NRHP, a property must be at least 50 years old (or have reached 50 years old by the project completion date) and possess significance in American history and culture, architecture, engineering, or archaeology to meet one or more of four established criteria (36 CFR 60.4):

- Criterion A. Association with events that have made a significant contribution to the broad patterns of our history;
- Criterion B. Association with the lives of persons significant in our past;
- Criterion C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and/or
- Criterion D. Have yielded, or may be likely to yield, information important in prehistory or history.

Cultural resources eligible for listing in the NRHP are considered "historic properties" and may include buildings, sites, structures, objects, and historic districts. A potential historic property less than 50 years of age may be eligible under NRHP Criteria Consideration G if it can be demonstrated that sufficient time has passed to understand its historic importance (National Register Bulletin 15, page 43). To be eligible for listing in the NRHP, a property must also have integrity, which is defined as "the ability of a property to convey its significance." The NRHP recognizes seven aspects or qualities



that, considered together or apart, define integrity: feeling, association, workmanship, location, design, setting, and materials (National Register Bulletin 15, pages 44–45).

The implementing regulations include a provision for early and effective communication with interested parties, such as Native American tribes. Under this provision (36 CFR 800.2[A]), the lead agency is responsible for contacting local Native American representatives and informing them of the project's intent and nature. The Native American representative is then provided "a reasonable opportunity to identify [the Tribe's] concerns about historic properties; advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance; articulate [their] views on the undertaking's effects on such properties; and participate in the resolution of adverse effects." This initial good faith effort lays the groundwork for ongoing shareholder consultation in earnest.

#### 3.2 STATE REGULATIONS

#### 3.2.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA (Public Resources Code [PRC] Sections 21000 et seq.) is intended to prevent significant avoidable impacts to the environment by requiring feasible alternatives or mitigation measures. If cultural resources are identified within the vicinity of the Project, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the significance of the cultural resource.

The CEQA Guidelines (Title 14, California Code of Regulations, Sections 15000 et seq.,) are administrative regulations governing implementation of CEQA and reflect the requirements set forth in the PRC. The CEQA Guidelines (Section 15064.5(a)) define a "historical resource" as the following:

- California properties formally determined eligible for, or listed in, the California Register of Historical Resources (CRHR).
- Those resources included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC, or identified as significant in a historical resources survey meeting the requirements of Section 5024.1(g) of the PRC.
- Those resources that a lead agency determines to be historically significant provided the determination is based on substantial evidence.
- Resources not listed in or previously determined eligible for listing in the state or local registers but determined by a lead agency as historical resources as defined in PRC Sections 5020.1(j) or 5024.1.

#### 3.2.2 CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The CRHR is used by state and local agencies, private groups, and citizens to identify, evaluate, and register existing historical resources within the state and to indicate which of those resources should be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR consists of properties that are listed automatically (by previous listing in the NRHP) as well as those that must



be nominated through an application and public hearing process. Properties eligible for listing in the CRHR may include buildings, sites, structures, objects, and historic districts. It is possible a property may not retain sufficient integrity to meet the criteria for listing in the NRHP but may still be eligible for listing in the CRHR based on significance related to California, rather than national, history. An altered property may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data (California Code of Regulations Section 4852 I). To be eligible for listing in the CRHR, a property must be at least 45 years of age and possess significance at the local, state, or national level, under one or more of the following four criteria:

- 1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- 2. It is associated with the lives of persons important to local, California, or national history;
- 3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; and/or
- 4. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

A resource less than 45 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historic importance. While the enabling legislation for the CRHR is less rigorous than the NRHP with regard to the issue of integrity, there is the expectation that properties reflect their appearance during their period of significance (PRC Section 4852).

#### 3.2.3 CALIFORNIA STATE ASSEMBLY BILL 52

On September 25, 2014, Governor Jerry Brown signed into law Assembly Bill (AB) 52, which requires public agencies to consult with tribes during the CEQA process. The law went into effect on July 1, 2015. The intent of AB 52 is to "set forth a process and scope that clarifies California tribal government involvement in the CEQA process, including specific requirements and timing for lead agencies to consult with tribes on avoiding or mitigating impacts to Tribal Cultural Resources." AB 52 applies to projects that require an EIR or a Negative Declaration/Mitigated Negative Declaration.

AB 52 defined a new resource category called Tribal Cultural Resources, amended the CEQA statute, and required amendments to the CEQA Guidelines to address consultation with California Native American tribes as a part of the CEQA process. Pursuant to PRC Section 2108.3.2, tribal governments can request consultation with a lead agency and give input regarding potential impacts to TCRs before the agency decides what type of environmental review is necessary for a project. The PRC further requires avoiding damage to TCRs, if feasible. If not, lead agencies must mitigate impacts to TCRs to the extent feasible.

Section 21074 of the PRC defines "Tribal Cultural Resources" as a resource that is either of the following:

- 1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - a. Included or determined to be eligible for inclusion in the CRHR.



- b. Included in a local register of historical resources as defined in subdivision (k) of PRC Section 5020.1.
- 2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
  - a. A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
  - b. A historical resource described in PRC Section 21084.1, a unique archaeological resource as defined in subdivision (g) of PRC Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of PRC Section 21083.2 may also be a TCR if it conforms with the criteria of subdivision (a).

#### 3.2.4 CALIFORNIA HEALTH AND SAFETY CODE

California Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98 outline procedures to be followed in the event human remains are discovered during the implementation of California projects. If human remains are encountered, all work must stop at that location and the County Coroner must be immediately notified and advised of the finding. The County Coroner would investigate "the manner and cause of any death" and make recommendations concerning treatment of the human remains. The County Coroner must make their determination within two working days of being notified. If the human remains are determined to be Native American, the County Coroner shall contact the California Native American Heritage Commission (NAHC). The NAHC would in turn "... immediately notify those persons it believes to be most likely descended from the deceased Native American." The Most Likely Descendants (MLDs) would then inspect the site and make recommendations for the disposition of the discovered human remains. This recommendation from the MLDs may consist of a number of actions or treatments, including the potential scientific analysis of the remains and associated items.

#### 3.2.5 CALIFORNIA NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to provide a process for the identification and repatriation of these items to the appropriate tribes.



#### 3.3 LOCAL REGULATIONS

#### 3.3.1 COUNTY OF LOS ANGELES

The Historic Preservation Ordinance establishes a local register and a Historical Landmarks and Records Commission to oversee the enforcement of preservation policies that relate to planning, demolition, alteration, and new construction. Actions to resources that are locally registered or eligible for registration are reviewed by the Historical Landmarks and Records Commission for appropriateness.

#### 3.3.2 CITY OF LOS ANGELES

#### 3.3.2.1 CITY OF LOS ANGELES ENVIRONMENTAL QUALITY ACT GUIDELINES

The City of Los Angeles Environmental Quality Act Guidelines (1981, amended July 31, 2002) contains three articles. Article I declares that, in 2002, the city adopted the state CEQA Guidelines, contained in Title 14, California Code of Regulations, Sections 150000 et seq., and incorporates all future amendments and additions to those guidelines as may be adopted by the state. Article II defines the activities by city agencies that are exempt from the requirements of CEQA, including, among others, emergency and ministerial projects. Article III defines the categorical exemptions, which are organized by classes of projects that have been determined not to have a significant effect on the environment and are therefore exempt from the provisions of CEQA.

# 3.3.2.2 CITY OF LOS ANGELES, ADMINISTRATIVE CODE, DIVISION 22, CHAPTER 9, ARTICLE 1 (ORDINANCE NO. 178402), 1962

Ordinance No. 178402 established the Cultural Heritage Commission to identify and protect architectural, historical, and cultural buildings, structures, and sites that are important to the city's history and cultural heritage. The Cultural Heritage Commission oversees the designation and protection of Los Angeles Historic-Cultural Monuments, which are defined as any site (including significant trees or other plant life located on site), building, or structure of particular historic or cultural significance to the city, including historic structures or sites, that:

- Reflect or exemplify the broad cultural, political, economic, or social history of the nation, state, or community;
- Are identified with historic personages or important events in the main currents of national, state, or local history;
- Embody the distinguishing characteristics of an architectural-type specimen, are inherently valuable for a study of a period, style, or method of construction; or
- Are notable works of a master builder, designer, or architect whose individual genius influenced his or her age.



Ordinance No.185472 (2018) amended Section 22.171 of Article 1, Chapter 9, Division 22 of the Los Angeles Administrative Code to clarify Los Angeles Historic-Cultural Monument designation criteria, enhance due process and notification procedures affecting property owners, and provide for extensions of time limits.

# 3.3.2.3 CITY OF LOS ANGELES, MUNICIPAL CODE, CHAPTER I, ARTICLE 2, SECTION 12.20.3 (ORDINANCE NO. 175891), 1979 (AMENDED 2004)

This code contains procedures for the designation and protection of new Historic Preservation Overlay Zones (HPOZs) for any area of the city with buildings, structures, landscaping, natural features, or lots having historic, architectural, cultural, or aesthetic significance in the "interest of the health, economic prosperity, cultural enrichment and general welfare of the people." Ordinance 175891 protects and enhances "unique and irreplaceable" reminders of the city's history, enhances property values, fosters public appreciation of the city, promotes education in the city's history, facilitates the involvement of diverse neighborhoods in the historic preservation process, and ensures compliance with CEQA. The ordinance describes the powers and duties of HPOZ boards and the review processes for projects within HPOZs. The City Department of Planning establishes and administers HPOZs in concert with the city council.

#### 3.3.2.4 CITY OF LOS ANGELES GENERAL PLAN, CONSERVATION ELEMENT, 2001

The Conservation Element of the City of Los Angeles General Plan contains the following objectives pertaining to the protection of the archaeological, paleontological, cultural, and historic resources in the city:

- Protect the city's archaeological and paleontological resources for historical, cultural, research, and/or educational purposes.
- Protect important cultural and historical sites and resources for historical, cultural, research, and community educational purposes.

Section 3 of the Conservation Element outlines archaeological and paleontological sites (and to a lesser degree, resources) while Section 5 provides guidance on cultural and historical conservation and protection measures (including HPOVs). These two sections of the Conservation Element protect significant archaeological and paleontological resources and historic sites and structures for future generations. The Conservation Element also provides the five types of historic protection designations in the city: Historic-Cultural Monuments, CRHR-listed or eligible resources, NRHP-listed or eligible properties, Community Redevelopment Agency designations, and HPOVs.

In order to identify and protect significant archaeological and paleontological sites or resources that are known to exist or that are identified during land development, demolition, or property modification, the departments of Building and Safety, City Planning, and Cultural Affairs will establish permit processes, monitoring, enforcement guidelines, and periodic revision of regulations and procedures (City Planning Commission 2001).

# CHAPTER 4 METHODOLOGY AND SIGNIFICANCE THRESHOLDS

#### 4.1 METHODOLOGY

The purpose of this assessment is to evaluate the Project against thresholds of significance as the basis for determining the level of impacts related to TCRs. The methodology for this analysis includes the delineation of a Resource Study Area (RSA) discussed in Section 5.2; consultation with Native American tribes traditionally and culturally affiliated with the RSA and vicinity; and identification of potential TCRs through archival research and a targeted field survey.

#### 4.1.1 ASSEMBLY BILL 52 CONSULTATION

On May 25, 2021, Metro initiated consultation efforts with Native American representatives who were included on the NAHC consultation list. Tribal representatives from the Gabrieleño Band of Mission Indians – Kizh Nation, Gabrieleño/Tongva San Gabriel Band of Mission Indians, Gabrieliño/Tongva Nation, Gabrieliño Tongva Indians of California Tribal Council, and Gabrieliño – Tongva Tribe were informed of Metro's intent to prepare a Draft EIR for the Project. Pursuant to CEQA Guidelines Section 21080.3.1(d), the email correspondence included a brief Project description, maps showing the location of the Project, and contact information for Metro's designated point of contact.

On March 30, 2023, Metro reinitiated consultation with Native American representatives from the AB 52 list provided by the NAHC as part of the Sacred Lands File (SLF) search conducted in January 2023 (see Section 5.3.1.2). Mandatory Project information—Project description, maps, and Metro's point of contact—was distributed to the representatives via email.

On April 5, 2023, the Fernandeño Tataviam Band of Mission Indians requested that Metro complete the mandatory project intake form on-line to determine the level of consultation, if any, is required. The tribe provided Metro with its ancestral territory map on April 18, 2023, with instructions to reach out to the tribe for consultation in areas shown within the tribal boundary. Metro determined that the Project was outside of the tribal boundary, as such, no further communication was conducted.

On April 12, 2023, the Gabrieleño Band of Mission Indians – Kizh Nation, requested consultation, and a meeting with tribal representatives was conducted on June 13, 2023.

#### 4.1.2 ARCHIVAL RESEARCH

Archaeologists who meet the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) and are familiar with the resources in the vicinity of the Project and research considerations conducted the archival research for this study. The following sections outline the sources of the archival research.



#### 4.1.2.1 SOUTH CENTRAL COASTAL INFORMATION CENTER RECORDS SEARCH

A records search for the vicinity of the Project was conducted at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System, California State University, Fullerton on January 12 and 18, 2023, and on February 22, 2023. The SCCIC, an affiliate of the California Office of Historic Preservation, is the official state repository of cultural resources records and studies for Los Angeles County. The search included a review of all recorded prehistoric archaeological sites within a 0.25-mile radius of the Project RSA and a review of all recorded historic archaeological and architectural sites and cultural resource reports on file within a 0.25-mile radius of the RSA. In addition, the California Points of Historical Interest, the California Historical Landmarks, the CRHR, the NRHP, the California State Historic Resources Inventory, and local registers were reviewed. Historical U.S. Geological Survey quadrangle maps were also reviewed.

#### 4.1.2.2 NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH

In addition to the SCCIC records search, the NAHC conducted an SLF search on January 19, 2023, to identify Native American cultural resources that may be Traditional Cultural Properties or TCRs that might be affected by the Project, as required by CEQA as amended by AB 52. Ethnographic Research and Review of Academic Literature

A review of primary and secondary ethnographic literature and historic maps was conducted to identify possible locations for TCRs that may not be captured in the SCCIC records search. This review included identifying natural resources and landscape features that may be of interest to tribal communities, historic roads and trails, and village locations and other traditional place names. Sources consulted include General Land Office survey maps; U.S. Geological Survey historical topographic maps; Huntington Library Digital Archives; Library of Congress; and University of California Libraries Online Archive of California. Results of this review are summarized in Section 5.1.4.

#### 4.1.3 FIELD SURVEY

A targeted field survey was conducted on March 8 and 17, 2023, by a qualified archaeologist (36 CFR Part 61) to identify archaeological resources in the RSA. Because a majority of the vicinity of the Project is developed, prior to the survey a desktop review of the RSA was conducted to identify potential areas with exposed ground surface that could be inspected for evidence of material culture. Satellite imagery was used to map undeveloped lots and landscaped areas along roads, sidewalks, and other public areas in the RSA that could be examined for traces of archaeological resources.

Archaeological resources represent evidence of past human behavior and include portable artifacts such as stone tools, glass bottles, and tin cans; non-portable "features" such as cooking hearths, foundations, and privies; and residues such as food remains and charcoal. Archaeological remains can be virtually any age, from recent historic-period materials to prehistoric deposits that are thousands of years old. The field survey results are detailed in Section 5.3.3.



#### 4.2 CEQA SIGNIFICANCE THRESHOLDS

In accordance with Appendix G of the 2022 State CEQA Guidelines, the Project would have a significant impact related to TCRs if it would cause a substantial adverse change in the significance of a TCR, defined in PRC Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- Impact TCR-1: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
- Impact TCR-2: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

# CHAPTER 5 **EXISTING SETTING**

#### 5.1 REGIONAL SETTING

The Project is located in a relatively flat area of the Los Angeles Basin. The basin is surrounded by the Santa Monica Mountains to the northwest, the San Gabriel Mountains to the north, and the San Bernardino and San Jacinto Mountains to the east. The basin was formed by alluvial and fluvial deposits derived from these surrounding mountains. Today, the Project is in a densely populated and heavily developed city landscape.

The climate in this region is classified as Mediterranean, with dry, warm summers and mild winters with occasional storms. The area has a temperature range from approximately 80 degrees Fahrenheit in August and September to the mid-40s in January and December. The rainy season typically falls between October and April, with wetter months (exceeding two inches per month) from December through March (Western Regional Climate Center 2006).

#### 5.1.1 GEOLOGIC SETTING

The Los Angeles Basin is a structural depression approximately 50 miles long and 20 miles wide in the northernmost Peninsular Ranges Geomorphic Province of California (Ingersoll and Rumelhart 1999). The Los Angeles Basin developed as a result of tectonic forces and the San Andreas fault zone, with subsidence occurring 18 to 3 million years ago (Ma) (Critelli et al. 1995). While sediments dating back to the Cretaceous (66 Ma) are preserved in the basin, continuous sedimentation began in the middle Miocene (around 13 Ma) (Yerkes et al. 1965). Since that time, sediments have eroded into the basin from the surrounding highlands, resulting in thousands of feet of accumulation (Yerkes et al. 1965). Most of these sediments are marine, as they eroded from surrounding highlands until sea level dropped in the Pleistocene Epoch and deposition of the alluvial sediments that compose the uppermost units in the Los Angeles Basin began.

Geologic mapping indicates that most of the surface in the vicinity of the Project is covered with Pleistocene-aged (11,700 BP to 2.58 Ma) alluvium, alluvial fan, and valley deposits (mapped as Qae in Figure 5-1 and Figure 5-2). A small portion of the Project is covered by Holocene-aged (less than 11,700 BP) alluvium mapped as Qa. At the very northern tip of the Project, outcrops of the Topanga Formation cross the RSA.



Hollywood Bowl WOOD HILLS HOLLYWOOD Fairfax/Santa Monica SANTA MONICA BL La Brea/Santa Monica WEST San Vicente/Santa Monica HOLLYWOOD La Brea/Beverly La Cienega/Beverly HANCOCK PARK Fairfax/3rd Resource Study Area **Existing Metro Rail Lines** 0 & Stations Wilshire/La Brea **30E Under Construction** Wilshire/Fairfax KOREATOWN ■ ■ Purple (D Line) Extension Proposed K Line Northern Extension **Project Alignment Alternatives and Stations** ■ ■ San Vicente-Fairfax - - Fairfax MIDICITY VENICEBL - La Brea - O - Hollywood Bowl Design Option Surficial Deposits - Overlapping Project Unconsolidated detrital sediments Oc - Holocene Clay and sand of pre-development marshlands Qa - Holocene Alluvium Qg Qa Qf Older Surficial Sediments

Qae - Late Pleistocene Alluvium

Qoa - Late Pleistocene Older Alluvium,

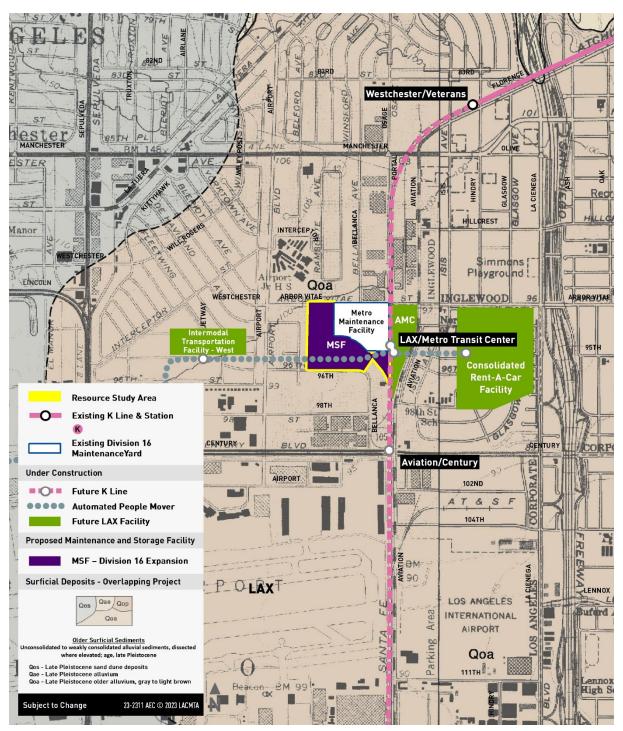
gray to light brown Qoa WEST ADAMS JEFFERSON PARK JEFFERSON Tush Expo/Crenshaw Middle Topanga Formation and Volcanic Rocks Subject to Change 23-2311 AEC © 2023 LACMTA

FIGURE 5-1. SURFICIAL DEPOSITS NEAR THE ALIGNMENT ALTERNATIVES

Source: Yerkes et al. 1965, Connect Los Angeles Partners 2023



#### FIGURE 5-2. SURFICIAL DEPOSITS NEAR THE MSF



Source: Yerkes et al. 1965, Connect Los Angeles Partners 2023



Recent alluvial deposits (Qa, Qyf) are common throughout the northern half of the Project. The younger alluvium is characterized by deposits of gravel and sand that form active parts of alluvial valleys. Late Pleistocene deposits (Qae) contain deposits of unsorted boulders, cobbles, gravel, and sand that form inactive parts of alluvial fans.

Pleistocene-aged alluvial fan deposits cover large portions of the Project. In general, these alluvial sediments are composed of tan to reddish-brown sandstone and siltstone deposited during the late to middle Pleistocene.

The upper claystone unit of the Topanga Formation is identified as occurring in extensive outcrops that make up the hills at the northern end of the Project. This unit consists of micaceous clay shale or claystone (Ttusi) with thin sandstone interbedded basalt (Tvb). The Topanga Formation is interpreted to represent wave-dominated coastal deposits grading into river-dominated deltaic deposits and fluvial deposits in the upper parts of the formation (Critelli and Ingersoll 1995). The Topanga Formation dates to the middle Miocene, around 16 to 20 million years ago.

Any cultural deposits that are or may have been present within the RSA would likely have been located on or near the surface within younger alluvium (Qaa) deposits.

#### 5.1.2 PREHISTORIC CONTEXT

The prehistory of the Southern California coastal region is typically divided into Early, Middle, and Late Periods, with an initial Paleo-Indian period dating to the late Pleistocene and early Holocene (Wallace 1955; Warren 1968).

#### 5.1.2.1 PALEO-INDIAN PERIOD (13,000 TO 10,000 BP)

The limited evidence of Paleo-Indian hunting technology observed in the California archaeological record and the more recent identification of early sites along the Pacific Coast of the United States suggest that the earliest people to colonize California likely arrived along the shores and settled into these rich coastal environments (Erlandson et al. 2007:53; Willis and Des Lauriers 2011). In the Southern California coastal region, the earliest evidence of human occupation comes from a handful of sites where early tools and some human remains dating from 7,000 to around 13,000 years ago have been identified (Erlandson 2012:21).

Among the Paleo-Indian sites in the region are the Arlington Spring and Daisy Cave sites, located on the Northern Channel Islands, which have produced human remains that are 12,000 years in age and artifacts dating to around 9,500 cal BP. Other mainland coastal sites adjacent to the Northern Channel Islands have produced deposits that are around 8,000 and 7,000 years in age (Erlandson et al. 2007:57). In the Los Angeles region, the oldest component of the Malaga Cove site has been estimated at approximately 8,000 years old (Glassow et al. 2007:192). The first people to settle in what is now Southern California appear to have practiced a generalized hunting, gathering, and fishing subsistence strategy that relied heavily on fish and shellfish. The resources associated with this period are characterized by small sites and assemblages containing expedient stone tools, unifacial stone tools, leaf-shaped or stemmed bifaces and projectile points, crescents, bone fish gorges, and spire



removed Olivella beads, with no evidence of milling implements (Erlandson et al. 2007; Glassow et al. 2007; Willis and Des Lauriers 2011).

#### 5.1.2.2 EARLY PERIOD (8000 TO 3000 BP)

Although people are known to have inhabited what is now Southern California beginning at least 13,000 years BP (Arnold et al. 2004), the first solid evidence of human occupation in the Los Angeles Basin dates to roughly 9000 BP and is associated with a period known as the Early Period or the Millingstone Horizon (Wallace 1955; Warren 1968). Millingstone populations established permanent settlements located primarily on the coast and in the vicinity of estuaries, lagoons, lakes, streams, and marshes where a variety of resources were exploited, including seeds, fish, shellfish, small mammals, and birds. Early Period occupations are typically identified by the presence of handstones (manos) and millingstones (metates). Sites from this time period typically contain shell middens; large numbers of milling implements; expedient core and cobble stone tools; flaked stone tools; distinctive cogged stone implements; and infrequent side-notched dart points (Fenenga 1953). The subsistence focus of populations at inland sites appears to have been plant food processing and hunting activities. Along the coast, populations invested in maritime food gathering strategies, including near-shore and deep-sea fishing, as well as shellfish collection (Grenda 1997).

#### 5.1.2.3 MIDDLE PERIOD (2550 TO 800 BP)

Although many aspects of Millingstone culture persisted, by 3000 BP, several socioeconomic changes had occurred, including changes in material culture through time (Erlandson 1994; Wallace 1955; Warren 1968). These changes are associated with the period known as the Middle Period or Intermediate Horizon (Wallace 1955). Increasing population size coincides with intensified exploitation of terrestrial and marine resources (Erlandson 1994). This was accomplished, in part, through use of new technological innovations such as the circular shell fishhook on the coast, and, in inland areas, use of the mortar and pestle to process an important new vegetal food staple, acorns (Altschul and Grenda 2002). This strategy was also made possible through the adoption of the atlatl and dart, resulting in a more diverse hunting capability (Warren 1968). A shift in settlement patterns to larger and more centralized habitations, may have indicated increasing territoriality and sedentism among local populations (Erlandson 1994). During the Middle Period, labor specialization emerged; trading networks became an increasingly important means by which both utilitarian and non-utilitarian materials were acquired; and travel routes were extended.

#### 5.1.2.4 LATE PERIOD (800 TO 400 BP)

The Late Period, spanning from approximately 800 years ago to the Spanish Mission era), is the period associated with the emergence of contemporary Native American groups. The Late Period is notable for a dramatic increase in the number of habitation and food processing sites. These sites include a higher density of bone tools, numerous types of Olivella shell beads, circular fishhooks, and occasional pottery vessels (Miller 1991). Between 800 and 200 BP, small arrow-sized projectile points, of the Desert side-notched and Cottonwood triangular series, were adopted along what is now the Southern California coast (Altschul and Grenda 2002). Following European contact, glass trade beads and metal



items were first introduced into the archaeological record. Burial practices shifted to cremation in what is now the Los Angeles Basin and northern Orange County. However, at many coastal and most Channel Island sites, interment remained the common practice (Moratto 1984).

The changes seen at the beginning of this period may reflect the movement of Shoshonean speakers from the eastern deserts into the area that is now the Southern California coast, or the movement of desert-adapted Shoshonean speakers may have occurred as much as 2,000 years earlier (Bean and Smith 1978; Sutton 2009).

At the time of European contact, the vicinity of the Project was occupied by Shoshonean-speaking Gabrieliño people who inhabited what is now the Los Angeles Basin and Orange County down to Aliso Creek (Kroeber 1925). The northern San Fernando Valley was the northernmost extent of the territory occupied by people the Spanish referred to as the Fernadeño, a name that derived from nearby Mission San Fernando. The Fernadeño spoke one of four regional Uto-Aztecan dialects of Gabrieliño, a Cupan language in the Takic family, and were culturally identical to the Gabrieliño. The Tataviam and Chumash, of the Hokan Chumashan language family, lived to the north and west of this territory, respectively, and it is likely that the territorial boundaries between these linguistically distinct groups fluctuated in prehistoric times (Bean and Smith 1978; Shipley 1978).

Occupying what is now the Southern Channel Islands and adjacent mainland areas of Los Angeles and Orange Counties, the Gabrieliño were second only to their Chumash neighbors in terms of population size, regional influence, and degree of sedentism<sup>1</sup> (Bean and Smith 1978). The Gabrieliño may have numbered around 5,000 in the pre-contact period (Kroeber 1925). Maps produced by early explorers indicate the existence of at least 40 villages, but as many as 100 may have existed prior to contact with Europeans (Bean and Smith 1978; McCawley 1996; Reid 1939[1852]).

Prehistoric subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls, rabbit drives, and by burning undergrowth, and larger game such as deer were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison (Bean and Smith 1978; Reid 1939[1852]). The primary plant resources were the acorn, gathered in the fall and processed with mortar and pestle, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly leafed-cherry (Reid 1939 [1852]).

#### 5.1.3 HISTORIC CONTEXT

#### 5.1.3.1 LOS ANGELES REGION

The Los Angeles area is bordered by the Santa Monica Mountains to the northwest, the San Gabriel Mountains to the north, and the San Bernardino and San Jacinto Mountains to the east. The historical era in California began with Spanish colonization and is often divided into three distinctive chronological and historical periods: the Spanish or Mission Period (1542 to 1821), the Mexican or

<sup>&</sup>lt;sup>1</sup> Sedentism refers to the practice of living in one place permanently.



Rancho Period (1821 to 1848), and the American Period (1848 to present). The history of Los Angeles is characterized by population influx and diversity, as well as infrastructural and architectural developments.

In 1781, a small group of pobladores, or townspeople, of African, Native American, and Spanish descent settled the west bank of the Los Angeles River (Rio Porciúncula) and established the Pueblo de la Reina de Los Angeles (the Pueblo of the Queen of the Angels, or Los Angeles) (National Park Service 2021). The pueblo was an outpost for the Spanish, who intended to create a series of civilian pueblos and military presidios to support Catholic religious missions and expand colonial influence in the area. The Los Angeles pueblo slowly gained importance as a center of commerce and had a population of 315 by 1800. After Mexico won its independence from Spain in 1821, the authority of the California missions began to decline, ending with their secularization in 1834. In response, Spain initiated a series of land grants to colonize Alta California These land grants, also known as ranchos, commonly fell under ownership of Spanish loyalists. Until the American Period began in 1848 with the signing of the Treaty of Guadalupe Hidalgo, the Pueblo de la Reina de Los Angeles and its surrounding area continued to operate as a center of economic activity and farmland, and it was virtually unaffected by any political changes (Robinson 1981).

The beginning of the American Period and the subsequent Gold Rush resulted in a boom to the Southern California cattle industry in response to the demand for goods and services by Northern California miners. In the 1860s, many rancho families lost titles to their land, creating room for development by new U.S. settlers. By the 1870s, Los Angeles expanded beyond the original pueblo with new subdivisions and tracts. In that period, Southern California's citrus industry flourished, and the San Fernando Valley emerged as the center for wheat cultivation. Between 1876 and 1887, the completion of the Southern Pacific Railroad and the Atchison, Topeka, and Santa Fe Railway ignited a real estate boom that created hundreds of new towns and further expanded Los Angeles. The city's population grew from 5,700 in 1870 to 50,000 in 1890. By the turn of the twentieth century, Los Angeles had become a leading West Coast metropolis (Fogelson 1967).

In the first half of the twentieth century, Los Angeles continued to grow as agriculture became a crucial part of the local economy. In 1915, the City of Los Angeles annexed the neighboring San Fernando Valley, a rapidly growing agricultural center due to the new water supply from William Mulholland's Los Angeles Aqueduct, completed in 1913. By the 1920s, the citrus industry fueled the local economy, driving the price of land for orange and lemon orchards as high as \$5,000 an acre, eight times greater than the cost of other land. Other local crops included olives, alfalfa, apricots, asparagus, barley, hay, beans, beets, cabbage, citrus, corn, lettuce, melons, peaches, potatoes, pumpkins, squash, tomatoes, and walnuts (County of Los Angeles n.d.).

During the first three decades of the twentieth century, more than 2 million people moved to Los Angeles County, transforming it from a largely agricultural region into a major metropolitan area. By 1945, Los Angeles had undertaken 95 annexations, expanding from a 28-square-mile agrarian pueblo into a densely populated city covering more than 450 square miles (Robinson 1979). Following World War II, developers increasingly purchased large portions of agricultural land in response to the city's growing population. The 1950s experienced large tracts of land developing into new



neighborhoods and the construction of the city's complex freeway system. During the post-war era, Los Angeles developed as a sprawling metropolis that came to represent modern American culture with its freeway system, entertainment industry, affordable neighborhoods, and high-tech aqueducts (Robinson 1979).

#### 5.1.4 ETHNOGRAPHIC SETTING

As mentioned in Section 5.1.2.4, at the time of European contact, the vicinity of the Project was occupied by the Gabrieliño. Figure 5-3 provides ethnographic tribal boundaries for the Gabrieliño and their neighbors, though it is likely that the territorial boundaries between these linguistically distinct groups fluctuated in prehistoric times.

Gabrieliño villages are reported by early explorers to have been most abundant near the Los Angeles River, in the area north of what is now downtown, known as the Glendale Narrows, and those areas along the river's various outlets into the ocean. The nearest documented villages include Koruuvanga, approximately 5 miles west of the northern end of the Project; Maawnga located approximately 6 miles west; and Ya'angna and Geveronga, which may be approximately 5 miles west of the northern extent of the Project (McCawley 1996). Saa'anga is approximately 2 miles from the proposed MSF site at the far south end of the Project. Koruuvanga, meaning we are in warmth or we are in the sun (McCawley 1996), is the location of an active spring where a Gabrieliño Village was located, and it is now managed by the Gabrieliño-Tongva Springs Foundation (Mapping Indigenous LA 2022). The village of Maawnga is reportedly located on the Rancho de los Feliz. The exact location of this village remains unknown, but the southernmost part of Rancho de los Feliz occupied part of today's Elysian Park, approximately 6 miles east of the Project. The community of Ya'angna was located somewhere in the vicinity of the Los Angeles Civic Center and is generally believed to be the unnamed settlement visited and described in 1769 by the Portolá expedition. At the time of Portolá's visit, the village of Ya'angna may have supported a population of at least 200. Ya'angna was later reported to have contained anywhere from 500 to 1,500 huts, suggesting an even greater population (McCawley 1996).

Ya'angna was the Pueblo of Los Angeles approximately 5 miles east of the Project. Geveronga is known to have been located adjoining the Pueblo of Los Angeles (McCawley 1996). The community of Saa'anga, also called Saa'an or Saan, was reportedly located at the Ballona wetlands, approximately 2 miles north of the proposed MSF site.





FIGURE 5-3. ETHNOGRAPHIC TRIBAL BOUNDARIES

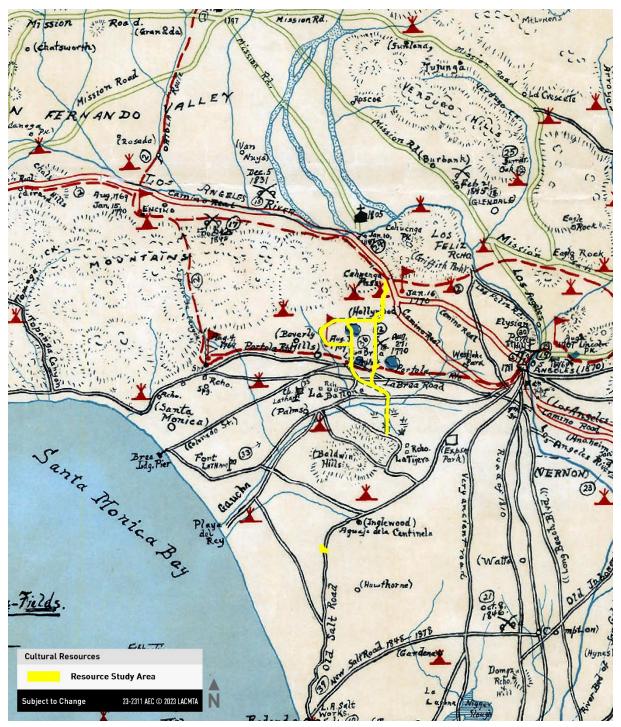
Source: McCawley 1996, Connect Los Angeles Partners 2023



The vicinity of the Project does not appear to include any documented historic villages or place names identified in the ethnographic record. However, the full extent and exact location of these villages are not well defined. The Kirkman – Harriman pictorial and historical map of Los Angeles County: 1860 A.D. 1937 A.D. (1938) depicts a variety of historic settlements, trails, and geographic locations (Figure 5-4). This illustrated map depicts unnamed villages in the northern vicinity of the Project that do not appear to correspond with the ethnohistoric settlements discussed above. Two symbols for Native American villages are located at the southwest mouth of Cahuenga Pass, with the northernmost Project components extending into the area of the eastern village marker in the Hollywood Hills. Another unnamed village symbol is present about 1.6 miles northwest of the western Project boundary near the confluence of Franklin and Coldwater Canyons. No Rancho or village markers were observed on other historic maps that were reviewed, including General Land Office survey plat maps from the 1870s and 1880s (Bureau of Land Management 2006).



FIGURE 5-4. KIRKMAN - HARRIMAN PICTORIAL AND HISTORICAL MAP OF LOS ANGELES COUNTY



Source: Kirkman and Harriman 1938, Connect Los Angeles Partners 2023



With an expansive territory that encompassed resource-rich island, coastal, and inland environments, the Gabrieliño developed a thriving society with intensive regional economic interactions by the time the Spanish arrived in California. Structurally, families were organized into lineage groups that were headed by a chief or *tomyaar*. Sedentary communities consisted of one or more of these lineage groups in which power relations and political authority varied. These groups would maintain permanent territories that included primary villages with multiple seasonal settlements and temporary use sites for ritual practice, plant gathering, or hunting, among other activities. Settlement and subsistence strategies varied across environmental zones and ecotones that extended from islands and the coast to mountainous regions and inland valleys. Generally, families would gather together at the primary village in winter months and disperse to smaller camps throughout the year to take advantage of seasonally available plant and animal resources (McCawley 1996).

Most villages had a *yovaar*, which was a religious structure with an open courtyard and ritual structures surrounded by brush fencing, near the center of the camp. The houses belonging to elite members of society were placed near the *yovaar*, with homes for other members of the village located farther out. Sweat huts were located near streams or springs. Windbreaks, raised granaries, playing fields, and burial grounds were also common components of a village (McCawley 1996).

Communities were regularly in contact with one another through a system of annual "ritual congregations" during which elites and non-elites forged social, political, and economic bonds. Religious and craft-based organizations and guilds were a major structuring element of Gabrieliño society as well.

Material culture, defined as the tools, clothing, adornments, and other objects manufactured and used by a group, were made with expert craftsmanship and artistry. Soapstone, bone, wood, and plant-based crafts were exchanged locally and regionally. Common objects found in the home might include cooking, gathering, and storage baskets; steatite comals (cooking slabs) and cooking pots; portable milling equipment; wooden cooking implements; shell spoons; toys and games; and pottery vessels. Bone saws and awls, shell fishhooks, needles, awls, and stone knives and drills were also important implements in daily life. Wooden war clubs, self- and sinew-backed bows, simple and compound arrows, and slings were used for hunting and fighting (Bean and Smith 1978).

The Gabrieliño maintained sophisticated and deeply meaningful religious and ceremonial traditions that incorporated creation stories, puberty rituals, shamanism, taboos, burial rituals, and annual celebrations (Bean and Smith 1978). Some Gabrieliño shamans participated in the elite Chumash religious and political group known as the *antap*. Additionally, the Gabrieliño religion associated with the creator-god Chengiichngech spread through much of Southern California and persisted through missionization (Bean and Smith 1978).

Several trails commonly used by the Gabrieliño and their neighbors, such as the Chumash, Tataviam, and Serrano, have been documented around the Los Angeles Basin. These routes likely served as the foundation of roads, highways, and railroads that developed through time following the colonization

<sup>&</sup>lt;sup>2</sup> A self-backed bow is a bow made from a single piece of wood.



of the region by the Spanish (Davis 1961). A map of trails identified in ethnographic literature does not depict any routes in the vicinity of the Project; the closest north-south trail was likely the El Camino Viejo a Los Angeles, located to the east of the Project (Davis 1961:5). The Kirkman – Harriman pictorial and historical map of Los Angeles County: 1860 A.D. 1937 A.D. (1938) places the estimated route of the Portolá expedition across the Project near the proposed Wilshire/Fairfax and the Wilshire/La Brea station locations. A network of roads is depicted across the region, several of which bisect the RSA, including the La Brea Road. The map scale is fairly large at 1:200,000 and is based off of historic maps and accounts. For this reason, it is useful in indicating that there were historic-period travel routes, likely based on tribal trail networks, in the vicinity of the RSA, though their exact locations are difficult to verify. The 1877 Map of the County of Los Angeles, compiled from U.S. Land Surveys, records of private surveys, and other reliable sources, depicts an overland trail extending through Cahuenga Pass just east of the RSA and the Monte Vista Road extending east/west across Rancho La Brea, intersecting with the Project. General Land Office plat maps also depict several road and trail segments in the vicinity of the Project, including the east-west Brea Road and the north-south Telegraph Road, which may have intersected the RSA at the northern end in Cahuenga Pass (Bureau of Land Management 2006). No historic trails or travel routes have been formally recorded within the RSA.

The Portolá expedition of 1769 was likely the first time Europeans made direct contact with the people living in the vicinity of the Project. The expedition passed through the vicinity of the Project and camped near present-day La Cienega Boulevard between Olympic Boulevard and Gregory Way in the City of Beverly Hills. Multiple villages were encountered as the expedition traveled through this region (Castillo 2021).

Missions were established in the years that followed the Portolá expedition, the fourth being the Mission San Gabriel Arcángel founded in 1771 near the present-day city of Montebello. By the early 1800s, most of the surviving Gabrieliño population had entered the mission system. The Gabrieliño who inhabited what is now Los Angeles County were under the jurisdiction of either Mission San Gabriel or Mission San Fernando. Following the establishment of the mission system and the coerced participation in new economic and social structures, Gabrieliño people and their neighbors engaged in active and passive forms of resistance to maintain connections to their families, language, and traditions (Castillo 2021).

After Mexican independence in 1821, the authority of the Alta California missions gradually declined, culminating with their secularization in 1834, and nearly all of the Gabrieliños went north. Gabrieliño populations were particularly devastated by early Spanish colonization efforts, such that, by the late 1800s, very few Gabrieliño people remained in their native homeland. Some fled to refuges farther inland or to villages of neighboring tribes to the north or south, while others perished from disease and conflict with the invading Spanish, who established the Pueblo of Los Angeles in the middle of Gabrieliño territory. However, some Gabrieliño remained in the vicinity of Los Angeles. Their numbers were supplemented by the numerous other Native Americans, who flooded into Los Angeles after secularization.

Toward the end of the Mexican period, a number of Native American workers' settlements were located around Los Angeles. The Rancheria de los Poblanos was located southeast of the corner of



Alameda Street and Commercial Street from 1836 to 1845, when it was razed by the City of Los Angeles. Another rancheria, the history of which is less well known, may have been located approximately 1 mile upslope from the Los Angeles Plaza (McCawley 1996).

The vicinity of the Project has been subject to decades of development, and little remains of the flora or fauna endemic to the region. Historically, there were likely patches of useful plant resources in the area, but none remain to indicate what type of gathering or processing activities may have been undertaken by tribes in the area. An 1873 General Land Office survey plat of the area maps patches of cacti and underbrush, stands of cottonwood, sycamore, and black walnut trees. The Gabrieliño people traditionally used these plants.

Historic maps also indicate the Project crosses several unnamed watercourses that drain into the Los Angeles Basin, which would have provided lush riparian corridors with abundant plants and animals used by tribes. The 1894 Los Angeles, California 15-minute quadrangle shows the southern terminus of the Project extends to a marshy confluence with standing water from which Ballona Creek flows. The proposed San Vicente/Santa Monica station location is also located in a marshy flat at the confluence of creeks draining from Franklin Canyon, Coldwater Canyon, and other unnamed canyons. These marshy environments would have provided ideal locations for the acquisition of a resources. Though many of the watercourses have been eradicated or channelized, historically they would have provided sources of fresh water that created ideal conditions for certain plant resources and local fauna. Temporary camps and activity areas were also commonly established near reliable sources of fresh water. While no known such sites have been identified within 0.25 mile of the RSA, the presence of washes and drainages in the vicinity of the Project indicate the potential for encountering TCRs.

The La Brea Tar Pits are located along the central portion of the Project and were a significant mineral deposit used by Native people. The tar pits were an important source of ashphaltum, which was used by Native people to waterproof baskets and boats, among other things. The use of this source by the Gabrieliño people was noted by the Portolá expedition. The remains of a woman dating to at least 9,000 years ago has also been identified within one of the tar pits, attesting to the antiquity of their importance (Fuller et al. 2016).

### 5.2 RESOURCE STUDY AREA

The RSA is the specialized study area delineated for this assessment. The RSA for TCRs was delineated based on the proposed physical configuration of the alignment alternatives and stations, design option, and MSF, including all areas where temporary or permanent ground disturbance and property acquisitions may occur. The RSA is defined as the area necessary to construct, operate, and maintain the alignment alternatives and stations, design option, and MSF, and includes all proposed right-of-way (ROW), acquisition, and construction areas. The RSA is documented on Figure 5-5 and in Appendix A.



#### FIGURE 5-5. RESOURCE STUDY AREA



Source: Connect Los Angeles Partners 2023



#### 5.3 INVENTORY RESULTS

#### 5.3.1 AB 52 CONSULTATION

On June 13, 2023, a consultation meeting was held with Andrew Salas and Matthew Teutimez of the Gabrieleño Band of Mission Indians — Kizh Nation, and Roger Martin and Georgia Sheridan of Metro. As a result of the meeting and continuing AB 52 consultation, the tribe shared maps and provided oral history that demonstrated their connection to the LA County area. They also indicated that their threshold for determining significance differs from the scientific approach archaeologists use. Archaeologists, for example, consider original disposition and context a determining factor of a resource's significance. The tribe, however, believes resources recovered from disturbed soils can be significant and are important. Additionally, the tribe expressed concerns that Project mitigation measures adequately protect tribal resources.

At this time, consultation with the Gabrieleño Band of Mission Indians – Kizh Nation is ongoing, and additional comments and feedback may be received. Documents pertaining to AB 52 consultation efforts are provided in Confidential Appendix B.

#### 5.3.2 ARCHIVAL RESEARCH

#### 5.3.2.1 SOUTH CENTRAL COASTAL INFORMATION CENTER RECORDS SEARCH

The records search identified 144 investigations previously conducted within a 0.25-mile radius of the RSA. Of these, 47 overlap with the RSA. The full list of investigations is provided in Confidential Appendix C.

The records search identified 134 previously recorded cultural resources (see Confidential Appendix C) within a 0.25-mile radius of the RSA. Of these, 128 are historic, one is prehistoric, and one is multi-component. A total of 36 historic-period resources are within the RSA. No previously recorded cultural resources of Native American origin overlap with the RSA; however, a nearby prehistoric site [P-19-000159 (CA-LAN-191)] is described in the section below. Detailed results of the SCCIC records search are provided in Confidential Appendix C.

#### P-19-000159 (CA-LAN-191)

P-19-000159 (CA-LAN-191) is the archaeological site number for the La Brea Tar Pits, located approximately 0.25 mile east of the RSA where the San Vicente—Fairfax and Fairfax Alternatives intersect with Wilshire Boulevard. The site form indicates that a human skull and other human parts were observed in Pit 10 between 6 and 9 feet, and wooden foreshaft bunts, dart shafts, and a stone "cog" were removed from Pits 61 and 67 (Heizer 1949).



#### 5.3.2.2 NATIVE AMERICAN HERITAGE COMMISSION SACRED LANDS FILE SEARCH

The results of the SLF search indicates that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs. Documents pertaining to the SLF search are included in Confidential Appendix B.

The NAHC also identified 10 Native American representatives for AB 52 consultation efforts and recommended contacting the Fernandeño Tataviam Band of Mission Indians and the Gabrieleño/Tongva San Gabriel Band of Mission Indians for additional information. The AB 52 tribal consultation list was provided to Metro on January 23, 2023, and includes the following entities:

- Fernandeño Tataviam Band of Mission Indians
- Gabrieleño Band of Mission Indians Kizh Nation
- Gabrieleño/Tongva San Gabriel Band of Mission Indians
- Gabrieliño /Tongva Nation
- Gabrieliño Tongva Indians of California Tribal Council
- Gabrieliño -Tongva Tribe
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseño Indians

#### 5.3.3 FIELD SURVEY

Unpaved areas within station locations, TBM launch and retrieval sites, construction staging areas, and locations identified during the desktop review were inspected closely during the survey. Where necessary, transects no more than 15 meters wide were walked along unpaved areas. However, most exposed surfaces consisted of narrow landscaping elements that were too small to require transects. Observed soils varied across the survey area but generally consisted of heavily disturbed native soil or imported fill. Vegetation consisted of non-native grasses and non-native landscaping plants, including trees, shrubs, and flowers (Figure 5-6). Modern or temporally undiagnostic refuse was observed in many locations and included plastic or paper food and beverage container waste, glass fragments, building materials (e.g., brick, concrete, tile, etc.), and various metal scrap. No new or previously documented archaeological resources were observed in the course of the survey.







Source: Connect Los Angeles Partners 2023

## 5.4 TRIBAL CULTURAL RESOURCES IN THE RESOURCE STUDY AREA

This analysis, consisting of an SCCIC records search, NAHC SLF search, additional archival research, targeted field survey, and AB 52 consultation efforts, failed to identify any TCRs within the RSA. No TCRs were identified in the RSA for any of the alignment alternatives and stations, the design option, or the MSF site.

# CHAPTER 6 IMPACTS AND MITIGATION MEASURES

#### 6.1 IMPACT ANALYSIS

This section presents the evaluation of impacts related to TCRs, as well as the corresponding mitigation measures, where applicable. Both construction and operational impacts are evaluated. Table 6-1 in Section 6.1.3 provides a summary of the impact conclusions.

Project measures are design features, best management practices, or other commitments that Metro implements as part of all alignment alternatives and stations, the design option, and the MSF to reduce or avoid environmental effects associated with the Project. Project measures are not the same as mitigation measures, which are used to reduce an environmental impact's significance level. Where applicable, project measures are identified here as part of the evaluation of environmental impacts in this chapter. There are no project measures specific to TCRs that have been identified to date.

#### 6.1.1 IMPACT TCR-1: TRIBAL CULTURAL RESOURCES LISTED OR ELIGIBLE FOR LISTING

**Impact TCR-1:** Would the Project cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k)?

#### 6.1.1.1 ALIGNMENT ALTERNATIVE 1: SAN VICENTE-FAIRFAX

The SCCIC records search, NAHC SLF search, additional archival research, targeted field survey, and AB 52 consultation efforts did not identify any TCRs listed or eligible for listing in the CRHR or in a local register of historical resources, within the San Vicente—Fairfax Alignment Alternative RSA; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the San Vicente—Fairfax Alternative RSA.

#### CONSTRUCTION IMPACTS

Significant Impact. Buried TCRs may exist within the San Vicente—Fairfax Alignment Alternative RSA, and it is possible these resources could be unearthed during Project excavation activities. The proposed alignment for this alternative is largely within the public ROW that has already been disturbed with utility and street construction, but these disturbances were relatively shallow. Shallow construction work, such as for the at-grade portions of the alignment, have limited potential to encounter intact TCRs due to prior disturbance, but other proposed construction activities, such as mass excavation required for the nine new stations and tunnel construction, have the potential to encounter deeper, intact archaeological deposits. Based upon the likelihood of encountering intact archaeological deposits during certain construction activities, the San Vicente—Fairfax Alignment Alternative has the potential to cause a substantial adverse change in the significance of a TCR listed



or eligible for listing in the CRHR or in a local register of historical resources. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### **OPERATIONAL IMPACTS**

**No Impact.** Operational activities associated with the San Vicenta-Fairfax Alignment Alternative would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the San Vicente—Fairfax Alignment Alternative would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to TCRs listed or eligible for listing in the CRHR or in a local register of historical resources.

#### 6.1.1.2 ALIGNMENT ALTERNATIVE 2: FAIRFAX

The SCCIC records search, NAHC SLF search, additional archival research, targeted field survey, and AB 52 consultation efforts did not identify any TCRs listed or eligible for listing in the CRHR or in a local register of historical resources within the Fairfax Alignment Alternative RSA; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the Fairfax Alternative RSA.

#### CONSTRUCTION IMPACTS

Significant Impact. Buried TCRs may exist within the Fairfax Alignment Alternative RSA, and it is possible these resources could be unearthed during Project excavation activities. The proposed alignment for this alternative is largely within the public ROW that has already been disturbed with utility and street construction, but these disturbances were relatively shallow. Shallow construction work, such as for the at-grade portions of the alignment, have limited potential to encounter intact TCRs due to prior disturbance, but other proposed construction activities, such as mass excavation required for the seven new stations and tunnel construction, have the potential to encounter deeper, intact archaeological deposits. Based upon the likelihood of encountering intact archaeological deposits during certain construction activities, the Fairfax Alignment Alternative has the potential to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the CRHR or in a local register of historical resources. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### **OPERATIONAL IMPACTS**

**No Impact.** Operational activities associated with the Fairfax Alignment Alternative would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the Fairfax Alignment Alternative would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to TCRs listed or eligible for listing in the CRHR or in a local register of historical resources.



#### 6.1.1.3 ALIGNMENT ALTERNATIVE 3: LA BREA

The SCCIC records search, NAHC SLF search, additional archival research, targeted field survey, and AB 52 consultation efforts did not identify any TCRs listed or eligible for listing in the CRHR or in a local register of historical resources within the La Brea Alignment Alternative RSA; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the La Brea Alternative RSA.

#### **CONSTRUCTION IMPACTS**

Significant Impact. Buried TCRs may exist within the La Brea Alignment Alternative RSA and it is possible these resources could be unearthed during Project excavation activities. The proposed alignment for this alternative is largely within the public ROW that has already been disturbed with utility and street construction, but these disturbances were relatively shallow. Shallow construction work, such as for the at-grade portions of the alignment, have limited potential to encounter intact TCRs due to prior disturbance, but other proposed construction activities, such as mass excavation required for the six new stations and tunnel construction, have the potential to encounter deeper, intact archaeological deposits. Based upon the likelihood of encountering intact archaeological deposits during certain construction activities, the La Brea Alignment Alternative has the potential to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the CRHR or in a local register of historical resources. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### **OPERATIONAL IMPACTS**

**No Impact.** Operational activities associated with the La Brea Alignment Alternative would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the La Brea Alignment Alternative would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to TCRs listed or eligible for listing in the CRHR or in a local register of historical resources.

#### 6.1.1.4 HOLLYWOOD BOWL DESIGN OPTION

The SCCIC records search, NAHC SLF search, additional archival research, targeted field survey, and AB 52 consultation efforts did not identify any TCRs listed or eligible for listing in the CRHR or in a local register of historical resources within the design option RSA; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the Hollywood Bowl Design Option RSA.



#### CONSTRUCTION IMPACTS

Significant Impact. Buried TCRs may exist within the design option RSA, and it is possible these resources could be unearthed during excavation activities. The proposed alignment for the design option is largely within the public ROW that has already been disturbed with utility and street construction, but these disturbances were relatively shallow. Shallow construction work, such as for the at-grade portions of the proposed alignments, would be unlikely to encounter intact TCRs due to prior disturbance, but other proposed construction activities, such as mass excavation required for the new stations and tunnel construction, have the potential to encounter deeper, intact archaeological deposits. Based upon the likelihood of encountering intact archaeological deposits during certain construction activities, the Hollywood Bowl Design Option has the potential to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the CRHR or in a local register of historical resources. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### **OPERATIONAL IMPACTS**

**No Impact.** Operational activities associated with the Hollywood Bowl Design Option would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the Hollywood Bowl Design Option would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to TCRs listed or eligible for listing in the CRHR or in a local register of historical resources.

#### 6.1.1.5 MAINTENANCE AND STORAGE FACILITY

The SCCIC records search, NAHC SLF search, additional archival research, targeted field survey, and AB 52 consultation efforts did not identify any TCRs listed or eligible for listing in the CRHR or in a local register of historical resources within the MSF RSA; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the MSF RSA.

#### CONSTRUCTION IMPACTS

Less Than Significant Impact. Buried TCRs may exist within the MSF RSA, and it is possible these resources could be unearthed during Project excavation activities; however, it is anticipated that these activities within the MSF RSA would be minimal and/or relatively shallow. Because the MSF RSA is almost entirely developed, the minimal and/or shallow construction work that would be required during construction would be unlikely to encounter intact TCRs. Therefore, construction of the MSF does not have the potential to cause a substantial adverse change in the significance of a TCR, impacts to TCRs listed or eligible for listing in the CRHR or in a local register of historical resources would be less than significant.



#### OPERATIONAL IMPACTS

**No Impact.** Operational activities associated with the MSF would be limited to operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the MSF would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to TCRs listed or eligible for listing in the CRHR or in a local register of historical resources.

#### 6.1.2 IMPACT TCR-2: RESOURCES DETERMINED SIGNIFICANT BY THE LEAD AGENCY

**Impact TCR-2:** Would the Project cause a substantial adverse change in the significance of a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1?

#### 6.1.2.1 ALIGNMENT ALTERNATIVE 1: SAN VICENTE-FAIRFAX

To date, the lead agency has not determined that a resource within the San Vicente—Fairfax Alignment Alternative RSA is significant; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the San-Vicente—Fairfax Alternative RSA.

#### CONSTRUCTION IMPACTS

Significant Impact. Buried TCRs may exist within the San Vicente—Fairfax Alignment Alternative RSA, and it is possible these resources could be unearthed during Project excavation activities. Although portions of the proposed alinement are within previously disturbed soils with limited potential to contain intact resources, tribal representatives from the Gabrieleño Band of Mission Indians — Kizh Nation have indicated that resources found within disturbed contexts are important to the Tribe. As such, all proposed construction activities, including mass excavations required for new stations and tunnel construction, as well as shallow construction work for at-grade portions of the alignment, have the potential to encounter significant TCRs. Based upon the likelihood of encountering significant TCRs during construction activities, the San Vicente—Fairfax Alignment Alternative has the potential to cause a substantial adverse change in the significance of a resource determined significant by the lead agency. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### OPERATIONAL IMPACTS

**No Impact.** Operational activities associated with the San Vicenta-Fairfax Alignment Alternative would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the San Vicente—Fairfax Alignment Alternative would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to resources determined significant by the lead agency.



#### 6.1.2.2 ALIGNMENT ALTERNATIVE 2: FAIRFAX

To date, the lead agency has not determined that a resource within the Fairfax Alignment Alternative RSA is significant; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the Fairfax Alternative RSA.

#### CONSTRUCTION IMPACTS

Significant Impact. Buried TCRs may exist within the Fairfax Alignment Alternative RSA, and it is possible these resources could be unearthed during Project excavation activities. Although portions of the proposed alinement are within previously disturbed soils with limited potential to contain intact resources, tribal representatives from the Gabrieleño Band of Mission Indians – Kizh Nation have indicated that resources found within disturbed contexts are important to the Tribe. As such, all proposed construction activities, including mass excavations required for new stations and tunnel construction, as well as shallow construction work for at-grade portions of the alignment, have the potential to encounter significant TCRs. Based upon the likelihood of encountering significant TCRs during construction activities, the Fairfax Alignment Alternative has the potential to cause a substantial adverse change in the significance of a resource determined significant by the lead agency. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### **OPERATIONAL IMPACTS**

**No Impact.** Operational activities associated with the Fairfax Alignment Alternative would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the Fairfax Alignment Alternative would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to resources determined significant by the lead agency.

#### 6.1.2.3 ALIGNMENT ALTERNATIVE 3: LA BREA

To date, the lead agency has not determined that a resource within the La Brea Alignment Alternative RSA is significant; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the La Brea Alternative RSA.



#### CONSTRUCTION IMPACTS

Significant Impact. Buried TCRs may exist within the La Brea Alignment Alternative RSA and it is possible these resources could be unearthed during Project excavation activities. Although portions of the proposed alinement are within previously disturbed soils with limited potential to contain intact resources, tribal representatives from the Gabrieleño Band of Mission Indians – Kizh Nation have indicated that resources found within disturbed contexts are important to the Tribe. As such, all proposed construction activities, including mass excavations required for new stations and tunnel construction, as well as shallow construction work for at-grade portions of the alignment, have the potential to encounter significant TCRs. Based upon the likelihood of encountering significant TCRs during construction activities, the La Brea Alignment Alternative has the potential to cause a substantial adverse change in the significance of a resource determined significant by the lead agency. Impacts would be potentially significant. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### **OPERATIONAL IMPACTS**

**No Impact.** Operational activities associated with the La Brea Alignment Alternative would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the Le Brea Alignment Alternative would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to resources determined significant by the lead agency.

#### 6.1.2.4 HOLLYWOOD BOWL DESIGN OPTION

To date, the lead agency has not determined that a resource within the Hollywood Bowl Design Option RSA is significant; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the Hollywood Bowl Design Option RSA.

#### **CONSTRUCTION IMPACTS**

Significant Impact. Buried TCRs may exist within the design option RSA, and it is possible these resources could be unearthed during Project excavation activities. Although portions of the proposed alinement are within previously disturbed soils with limited potential to contain intact resources, tribal representatives from the Gabrieleño Band of Mission Indians – Kizh Nation have indicated that resources found within disturbed contexts are important to the Tribe. As such, all proposed construction activities, including mass excavations required for new stations and tunnel construction, as well as shallow construction work for at-grade portions of the alignment, have the potential to encounter significant TCRs. Based upon the likelihood of encountering significant TCRs during construction activities, the Hollywood Bowl Design Option has the potential to cause a substantial adverse change in the significance of a resource determined significant by the lead agency. Impacts



would be potentially significant. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### **OPERATIONAL IMPACTS**

**No Impact.** Operational activities associated with the Hollywood Bowl Design Option would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the Hollywood Bowl Design Option would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to resources determined significant by the lead agency.

#### 6.1.2.5 MAINTENANCE AND STORAGE FACILITY

To date, the lead agency has not determined that a resource within the MSF RSA is significant; however, the study did identify Gabrieliño villages, burials, and important prehistoric resource areas nearby (as described in Section 5.1.4). Additionally, the NAHC SLF search was confirmed that the region contains Native American cultural resources, Traditional Cultural Properties, and/or TCRs (as described in Section 5.3.2.2). Therefore, it is possible that unknown TCRs may be buried within the MSF RSA.

#### CONSTRUCTION IMPACTS

Significant Impact. Buried TCRs may exist within the MSF RSA, and it is possible these resources could be unearthed during Project excavation activities. Because the MSF RSA is almost entirely developed, the minimal and/or shallow construction work that would be required during construction would be unlikely to encounter intact TCRs. However, tribal representatives from the Gabrieleño Band of Mission Indians –Kizh Nation have indicated that resources found within disturbed contexts are important to the Tribe. As such, all proposed construction activities have the potential to encounter significant TCRs. Based upon the likelihood of encountering significant TCRs during construction activities, the MSF has the potential to cause a substantial adverse change in the significance of a resource determined significant by the lead agency. Impacts would be potentially significant. Therefore, impacts during construction would be potentially significant, and mitigation is required (see Section 6.2).

#### OPERATIONAL IMPACTS

**No Impact.** Operational activities associated with the MSF would be limited to the operation and maintenance of the Project and would not include further ground-disturbing activities. As a result, operation of the MSF would not cause a substantial adverse change in the significance of a TCR. Therefore, there would be no operational impacts to resources determined significant by the lead agency.

#### 6.1.3 SUMMARY OF IMPACT CONCLUSIONS

Table 6-1 provides a summary of the impact conclusions discussed in this section.



#### TABLE 6-1. IMPACT CONCLUSION SUMMARY TABLE

	IMPACT CONCLUSION					
IMPACT SIGNIFICANCE THRESHOLD	ALIGNMENT ALTERNATIVE 1: SAN VICENTE-FAIRFAX	ALIGNMENT ALTERNATIVE 2: FAIRFAX	ALIGNMENT ALTERNATIVE 3: LA BREA	HOLLYWOOD BOWL DESIGN OPTION	MAINTENANCE AND STORAGE FACILITY	
Impact TCR-1: Would the Project cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k)?	Construction: Significant Operation: No Impact	Construction: Significant Operation: No Impact	Construction: Significant Operation: No Impact	Construction: Significant Operation: No Impact	Construction: Less Than Significant Operation: No Impact	
Impact TCR-2: Would the Project cause a substantial adverse change in the significance of a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1?	Construction: Significant Operation: No Impact	Construction: Significant Operation: No Impact	Construction: Significant Operation: No Impact	Construction: Significant Operation: No Impact	Construction: Significant Operation: No Impact	

Source: Connect Los Angeles Partners 2023



#### 6.2 MITIGATION MEASURES

The following mitigation measures are provided to reduce the significant project impacts identified in Section 6.1 to less than significant levels.

#### 6.2.1 MITIGATION FOR IMPACT TCR-1: TCR LISTED OR ELIGIBLE FOR LISTING

#### 6.2.1.1 ALIGNMENT ALTERNATIVE 1: SAN VICENTE-FAIRFAX

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Prior to any ground-disturbing activities, all construction personnel shall be provided with appropriate tribal and cultural resources training. The training shall instruct the personnel regarding the legal framework protecting cultural resources and TCRs, typical kinds of cultural resources and TCRs that may be found during construction, and proper procedures and notifications if cultural resources and/or TCRs are discovered. The training shall be prepared by a Secretary of the Interior professionally qualified archaeologist, in consultation with interested Native American tribes consulting under AB 52, and include types of cultural and tribal cultural resources and artifacts that would be considered potentially significant during construction.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Project-related ground-disturbing activities shall be monitored by a Native American representative from an NAHC identified tribe. The tribal monitor shall be ancestrally affiliated with the project vicinity and qualified by their tribe to monitor for TCRs.

In the event that an archaeological resource is discovered during project construction, all work shall be halted within 50 feet of the find until the find has been assessed by the tribal monitor and a Secretary of the Interior professionally qualified archaeologist. If the find is determined to be of Native American origin, regardless of any significance evaluation determined by Metro based on the initial assessment of the find by the qualified archaeologist, the Native American tribes that consulted on the proposed project pursuant to AB 52 shall be notified and be provided information about the find to allow for early input from the tribal representatives with regard to the potential significance and treatment of the resource. Resources shall be treated with culturally appropriate dignity, taking into consideration the tribal cultural values and meaning of the resource. The input of all consulting tribes shall be considered in the preparation of any required treatment plan activities prepared by the qualified archaeologist for any prehistoric archaeological resources or tribal cultural resources identified during the project. Work in the area of the discovery may not resume until evaluation and treatment of the resource is completed and/or the resource is recovered and removed from the site. Construction activities may continue on other parts of the construction site while evaluation and treatment of the resource occurs.



#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown TCRs eligible for listing in the CRHR or a local register of historical resources to a less than significant level for construction of the San Vicente–Fairfax Alignment Alternative.

#### OPERATIONAL MITIGATION MEASURES

**No Impact.** There would be no impacts to unknown TCRs eligible for listing in the CRHR or a local register of historical resources during operations; no mitigation measures are required for operation of the San Vicente–Fairfax Alignment Alternative.

#### 6.2.1.2 ALIGNMENT ALTERNATIVE 2: FAIRFAX

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-1.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-2.

#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown TCRs eligible for listing in the CRHR or a local register of historical resources to a less than significant level for construction of the Fairfax Alignment Alternative.

#### **OPERATIONAL MITIGATION MEASURES**

**No Impact.** There would be no impacts to TCRs eligible for listing in the CRHR or a local register of historical resources during operations; no mitigation measures are required for operation of the Fairfax Alignment Alternative.

#### 6.2.1.3 ALIGNMENT ALTERNATIVE 3: LA BREA

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-1.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-2.



#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown TCRs eligible for listing in the CRHR or a local register of historical resources to a less than significant level for construction of the La Brea Alignment Alternative.

#### **OPERATIONAL MITIGATION**

**No Impact**. There would be no impacts to TCRs eligible for listing in the CRHR or a local register of historical resources during operations; no mitigation measures are required for operation of the La Brea Alignment Alternative.

#### 6.2.1.4 HOLLYWOOD BOWL DESIGN OPTION

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-1.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-2.

#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown TCRs eligible for listing in the CRHR or a local register of historical resources to a less than significant level for construction of the Hollywood Bowl Design Option.

#### **OPERATIONAL MITIGATION**

**No Impact.** There would be no impacts to TCRs eligible for listing in the CRHR or a local register of historical resources during operations; no mitigation measures are required for operation of the Hollywood Bowl Design Option.

#### 6.2.1.5 MAINTENANCE AND STORAGE FACILITY

#### CONSTRUCTION MITIGATION MEASURES

Impacts to TCRs eligible for listing in the CRHR or a local register of historical resources during construction would be less than significant; no mitigation measures are required during construction of the MSF.

#### OPERATIONAL MITIGATION MEASURES

There would be no impacts to TCRs eligible for listing in the CRHR or a local register of historical resources during operations; no mitigation measures are required for operation of the MSF.



# 6.2.2 MITIGATION FOR IMPACT TCR-2: RESOURCES DETERMINED SIGNIFICANT BY THE LEAD AGENCY

#### 6.2.2.1 ALIGNMENT ALTERNATIVE 1: SAN VICENTE-FAIRFAX

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-1.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-2.

#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown resources determined significant by the lead agency to a less than significant level for construction of the San Vicente–Fairfax Alignment Alternative.

#### OPERATIONAL MITIGATION MEASURES

**No Impact**. There would be no impacts to unknown resources determined significant by the lead agency during operations; no mitigation measures are required for operation of the San Vicente–Fairfax Alignment Alternative.

#### 6.2.2.2 ALIGNMENT ALTERNATIVE 2: FAIRFAX

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-1.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-2.

#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown resources determined significant by the lead agency to a less than significant level for construction of the Fairfax Alignment Alternative.



#### OPERATIONAL MITIGATION MEASURES

**No Impact.** There would be no impacts to resources determined significant by the lead agency during operations; no mitigation measures are required for operation of the Fairfax Alignment Alternative.

#### 6.2.2.3 ALIGNMENT ALTERNATIVE 3: LA BREA

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-1.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-2.

#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown resources determined significant by the lead agency to a less than significant level for construction of the La Brea Alignment Alternative.

#### **OPERATIONAL MITIGATION MEASURES**

**No Impact.** There would be no impacts to resources determined significant by the lead agency during operations; no mitigation measures are required for operation of the La Brea Alignment Alternative.

#### 6.2.2.4 HOLLYWOOD BOWL DESIGN OPTION

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-1.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-2.

#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown resources determined significant by the lead agency to a less than significant level for construction of the Hollywood Bowl Design Option.



#### OPERATIONAL MITIGATION MEASURES

**No Impact.** There would be no impacts to resources determined significant by the lead agency during operations; no mitigation measures are required for operation of the Hollywood Bowl Design Option.

#### 6.2.2.5 MAINTENANCE AND STORAGE FACILITY

#### CONSTRUCTION MITIGATION MEASURES

#### MITIGATION MEASURE MM TCR-1: CULTURAL RESOURCES IDENTIFICATION TRAINING

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-1.

#### MITIGATION MEASURE MM TCR-2: NATIVE AMERICAN MONITORING AND CONSULTATION

Refer to Section 6.2.1.1 for a description of mitigation measure MM TCR-2.

#### IMPACT SIGNIFICANCE AFTER MITIGATION

**Less Than Significant After Mitigation.** Implementation of mitigation measures MM TCR-1 and MM TCR-2 would reduce impacts to unknown resources determined significant by the lead agency to a less than significant level for construction of the MSF.

#### OPERATIONAL MITIGATION MEASURES

**No Impact.** There would be no impacts to resources determined significant by the lead agency during operations; no mitigation measures are required for operation of the MSF.

# CHAPTER 7 **CUMULATIVE IMPACTS**

#### 7.1 INTRODUCTION

Under the state CEQA Guidelines, cumulative impacts are defined as two or more individual impacts that, when considered together, are considerable or would compound and increase other environmental impacts (Section 15355). These cumulative impacts must be discussed in an EIR when the project's incremental effect is "cumulatively considerable" (Section 15130). "Cumulatively considerable" is defined as when the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (Section 15065(a)(3)).

CEQA Guidelines Section 15130(b)(1) includes two methodology approaches for assessing cumulative impacts. One approach is a "list of past, present, and probable future projects producing related or cumulative impacts" (CEQA Guidelines Section 15130(b)(1)(A)). The other approach is a "summary of projections contained in an adopted local, regional, or statewide plan, or related document, that describes or evaluates conditions contributing to the cumulative effect" (CEQA Guidelines Section 15030 (b)(1)(B)). For the purposes of this analysis, the latter approach is used due to the long Project implementation time. The forecasted Project completion timeframe is in the mid- to late-2040s based on Metro Measure M funding. Due to the long-term nature of the Project's implementation, a list of land use and transportation projects is insufficient for the cumulative analysis since the currently known projects would be completed and operational by the Project's forecasted completion. In addition, it is highly likely many additional projects will be proposed and constructed between now and project implementation in 20 years; therefore, any project list developed now would be incomplete and incorrect.

The Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Plan is the adopted long-range forecast for population, households, and employment within the six-county Southern California region, which includes all Project elements. The Project is also included in the SCAG 2020 RTP/SCS Plan, as well as Metro's 2020 Long Range Transportation Plan. The RTP/SCS was adopted in 2020 and proposes land use and transportation strategies to improve mobility options and achieve a more sustainable growth pattern (SCAG 2020). SCAG worked in close coordination with decision-makers and the public across multiple jurisdictions throughout the SCAG region to create the plan. The population, household, and employment growth projections from this plan are used to assess regional growth and its cumulative impact within the vicinity of the Project.

For the cumulative analysis, the RSA is defined as a half-mile radius from the stations, the design option, and the MSF. The half-mile radius is used for all resources to ensure consistency in evaluating cumulative effects. Table 7-1 shows the projected net growth in population, households, and employment between 2019 and 2045 for a half-mile radius from all Project stations, the design option, and the MSF. The data in the table were calculated by merging the SCAG 2020 RTP/SCS growth projections with the SCAG Tier 2 Transportation Analysis Zone boundaries for Los Angeles County, then assessed for a half-mile radius around the stations, the design option, and the MSF. The data show the projected growth from transportation and development projects, as well as associated infrastructure, that when combined with the Project's construction and operation, could result in cumulative effects.



TABLE 7-1. SCAG PROJECTED PERCENT GROWTH FOR HALF-MILE BUFFER AREAS, 2019-2045

HALF-MILE BUFFER AREA	POPULATION % GROWTH	HOUSEHOLD % GROWTH	EMPLOYMENT % GROWTH				
STATIONS							
Expo/Crenshaw	46.0	65.9	26.4				
Crenshaw/Adams	35.6	56.3	19.6				
Midtown Crossing	20.2	33.1	21.1				
Wilshire/Fairfax	19.8	21.2	6.2				
Fairfax/3 <sup>rd</sup>	21.9	23.1	6.5				
La Cienega/Beverly	30.7	31.3	6.1				
San Vicente/Santa Monica	11.5	11.4	46.2				
Fairfax/Santa Monica	7.2	7.7	49.5				
La Brea/Santa Monica	16.0	17.2	42.6				
Hollywood/Highland	16.2	15.0	3.0				
Wilshire/La Brea	22.8	24.3	9.4				
La Brea/Beverly	17.9	24.5	14.5				
DESIGN OPTION							
Hollywood Bowl Design Option	30.4	29.0	17.4				
MAINTENANCE AND STORAGE FACILITY							
MSF	14.0	15.9	9.9				

Source: SCAG 2020 RTP/SCS Growth Forecast Note: MSF = maintenance and storage facility

#### 7.2 CUMULATIVE IMPACTS

The geographical cumulative impact area for this analysis consists of the RSA where TCRs are protected by various federal, state, and local regulations as outlined in Chapter 3.

#### 7.2.1 ALIGNMENTS AND STATIONS

Based on the results of this analysis, the alignments and stations have the potential to cause a significant impact related to unknown TCRs. Development of the alignments and stations in combination with other projects located in the adjacent area would increase the potential for impacts to TCRs and could contribute to the loss of such resources in the region. The potential that development consistent with local plans would affect TCRs during construction is determined by a variety of factors, including the type of development that is proposed. However, impacts from the alignments and stations combined with surrounding development would be less than significant with implementation of Project-specific mitigation measures.



#### 7.2.2 HOLLYWOOD BOWL DESIGN OPTION

Based on the results of this analysis, the Hollywood Bowl Design Option has the potential to cause a significant impact related to unknown TCRs. Development of the design option in combination with other projects located in the adjacent area would increase the potential for impacts to TCRs and could contribute to the loss of such resources in the region. The potential that development consistent with local plans would affect TCRs during construction is determined by a variety of factors, including the type of development that is proposed. However, impacts from the design option combined with surrounding development would be less than significant with implementation of mitigation measures.

#### 7.2.3 MAINTENANCE AND STORAGE FACILITY

Based on the results of this analysis, the MSF has the potential to cause a significant impact related to unknown TCRs. Development of the MSF in combination with other projects located in the adjacent area would increase the potential for impacts to TCRs and could contribute to the loss of such resources in the region. The potential that development consistent with local plans would affect TCRs during construction is determined by a variety of factors, including the type of development that is proposed. However, impacts from the MSF combined with surrounding development would be less than significant with implementation of Project-specific mitigation measures.

#### 7.3 CUMULATIVE MITIGATION MEASURES

The Project's effects on TCRs for the alignment alternatives and stations, design option, and MSF would not be cumulatively considerable. Therefore, no mitigation is required under CEQA.

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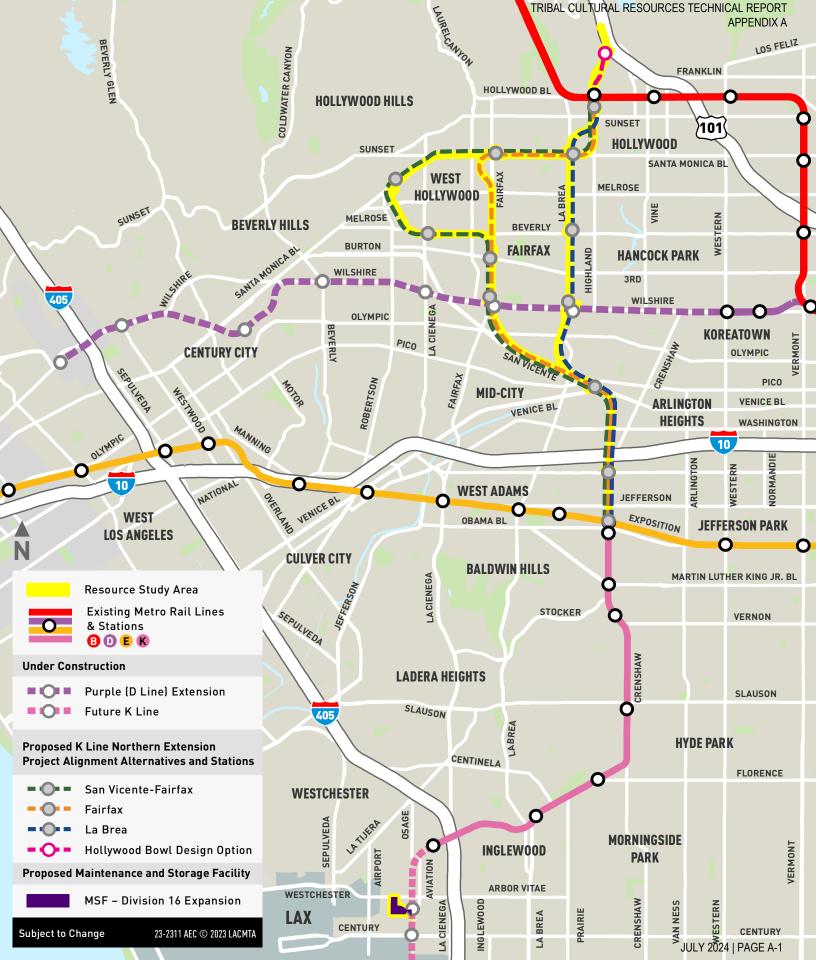
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# APPENDIX A **RESOURCE STUDY AREA MAP**





# APPENDIX B **AB 52 CONSULTATION AND NAHC SLF SEARCH RESULTS – CONFIDENTIAL**



# APPENDIX C SCCIC RECORD SEARCH RESULTS – CONFIDENTIAL