

## 4.11 Historic, Archaeological, and Paleontological Resources

This chapter describes affected environment for cultural resources, as well as the impacts on cultural resources that would result from the proposed project and alternatives and the mitigation measures that would reduce these impacts. Cultural resources customarily include archaeological resources, ethnographic resources, and those of the historic built environment (architectural resources). Paleontological resources, which include the fossilized remains of vertebrates, invertebrates, and plants, as well as fossil tracks and trackways, are also considered in this section. For the evaluation of Section 4(f) resources, refer to Chapter 6.0, Section 4(f) Evaluation. The regulatory framework and methodology are found in Appendix F. Agency coordination and the cultural effects report are found in Appendix I, Cultural Resources.

### National Register Criteria for Evaluation

In order for a property to be considered for inclusion in the National Register of Historic Places (NRHP) it must meet the criteria for evaluation set forth in 36 CFR Part 60.4, as follows:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of design, setting, materials, workmanship, feeling, and association and

- are associated with events that have made a significant contribution to the broad patterns of our history (A); or
- are associated with the lives of persons significant in our past (B); or
- 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 (C); or
- have yielded, or may be likely to yield, information important in prehistory or history (D).

Among other criteria considerations, a property that has achieved significance within the last 50 years is not considered eligible for inclusion in the NRHP unless certain exceptional conditions are met.

### California Register Criteria for Evaluation

All properties listed in or determined eligible for the NRHP are automatically listed in the CR, and are, therefore, historical resources for the purposes of CEQA. In addition, Section 15064.5 of the CEQA Guidelines states that the term “historical resources” shall include the following:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CR (PRC SS5024.1, Title 14 CCR, Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the PRC or identified as significant in an historical resource survey

meeting the requirements section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CR (PRC SS5024.1, Title 14 CCR, Section 4852), including the following:
  - ▶ Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - ▶ Is associated with the lives of persons important in our past;
  - ▶ Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
  - ▶ Has yielded, or may be likely to yield, information important in prehistory or history.
  - ▶ The fact that a resource is not listed in, or determined to be eligible for listing in the CR, not included in a local register of historical resources (pursuant to section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC sections 5020.1(j) or 5024.1.

As with the NRHP, a property that has achieved significance within the last 50 years is not considered eligible for the CR unless it is of exceptional importance.

#### **Identifying Historic Properties**

For the proposed project, surveys have been undertaken and documentation prepared in accordance with the Secretary of Interior's Standards and Guidelines for Identification of Historic Properties (48 FR 44716), using personnel who meet the Secretary of Interior's Professional Standards (48 FR 22716) in the fields of ethnography, pre-historic archaeology, historic archaeology, architectural history, and history. For the purposes of this document, the broad pool of cultural resources within the Area of Potential Effects (APE) that require evaluation for National Register eligibility may be categorized into two major types, as follows:

- Archaeological Resources, which include resources that represent important evidence of past human behavior, including portable artifacts such as arrowheads or tin cans; non-portable "features" such as cooking hearths, foundations, and privies; or residues

such as food remains and charcoal. Archaeological remains can be virtually any age, from yesterday's trash to prehistoric deposits thousands of years old.

- Historic and Architectural Resources, which include man-made features that comprise the recognizable built environment. This category typically includes extant, above-ground buildings and structures that date from the earliest territorial settlements until the present day.

#### **4.11.1 Affected Environment/Existing Conditions**

##### **4.11.1.1 The Area of Potential Effects**

As defined in the Section 106 regulations, the APE means “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties.” The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking” [36 CFR §800.16(d)]. Beginning July 23, 2008, the FTA consulted with the SHPO to determine, document and define the APE. At the meeting the SHPO concurred with the APE definition (see SHPO meeting minutes, Appendix I).

The APE boundaries were further refined upon selection of the LPA and based on the project definition. The refined APE map (Appendix I) was provided to SHPO on February 18, 2011. Figure 4-41 shows the APE Map for the project. SHPO provided no additional comments on the refined APE. For historic and architectural resources, the proposed indirect APE generally includes all parcels adjacent to both sides of the proposed project alignment, including stations, subway or open-cut construction areas, and areas proposed for acquisition. In addition, the indirect APE includes areas that may be subject to potential project-related effects, including visual or audible effects, and settlement effects that may result from construction or implementation of the proposed project. For extremely large parcels (i.e., Centinela Park, Inglewood Park Cemetery, and Los Angeles International Airport) containing large building and structure complexes, the indirect APE extends 200 feet from the direct APE and contains only the front row of buildings and structures.

For archaeological and paleontological resources, the proposed direct APE includes the proposed at-grade and underground right-of-way or areas of direct ground disturbance. The direct APE also includes areas with permanent site improvements and areas for staging and temporary construction activities.

In order to anticipate effects that may result from both above-ground construction and implementation and subterranean construction and implementation, the proposed vertical APE extends from approximately the existing ground surface to 25 feet above the existing ground surface and approximately 80 feet below the existing ground surface.

**4.11.1.2 Prehistoric and Historical Archaeological Resources Identified  
 Archival Research**

**California Historical Information System Record Search**

A cultural resources records search for the Crenshaw/LAX Transit Corridor Project was performed at the California Historical Information System (CHRIS) South Central Coastal Information Center (SCCIC) on January 2, 2008. The records search included a review of available documents and site records within a 0.25-mile buffer of the project direct APE. In addition to official maps and records, the following sources of information were consulted as part of the records search:

- National Register of Historic Places – Listed Properties (2006, updated to present)
- California Register of Historical Resources (2006, and review of minutes from State Historic Resources Commission meetings thereafter)
- California Inventory of Historical Resources (1976)
- California State Historical Landmarks (1996 and updates)
- California Points of Historical Interest (1992 and updates)
- Office of Historic Preservation Historic Property Directory and Determinations of Eligibility (2008)

**Prior Studies within 0.25-miles of the Direct APE**

The SCCIC records search indicates that 50 cultural resource studies have been conducted within 0.25 miles of the direct APE (Figure 4-41). Fourteen of these studies are located within portions of the direct APE and five are adjacent to the direct APE. The studies are listed in Appendix I, Cultural Resources.

**Previously Recorded Archaeological Resources within 0.25 miles of the Direct APE.**

The SCCIC records search indicates there are three previously recorded archaeological resources within a 0.25-mile buffer of the direct APE (Table 4-31). Two are prehistoric resources and one is of an unknown type as the site record is missing from the SCCIC. Of the three archaeological resources, one (CA-LAN-80) is located adjacent to the direct APE. The remaining two (CA-LAN-171 and CA-LAN-1336) are located outside, but within 0.25-mile of the direct APE.

**Table 4-31. Previously Recorded Archaeological Resources within 0.25-mile buffer of the direct APE**

Primary Number	Trinomial	Description	Recorded by and Year	NRHP Eligibility	Proximity to Direct APE
P-19-000080	CA-LAN-80	Prehistoric: artifact scatter and human remains	Ariss, R. 1949	Not evaluated because discovered prior to 1950	Adjacent
P-19-000171	CA-LAN-171	Prehistoric: Human Remains	Heizer, R. 1950	Not evaluated because discovered in 1950	Outside
P-19-001336	CA-LAN-1336	Unknown: Site record missing from SCCIC	Unknown	Unknown, Recorded as landmark and not a site	Outside

Source: South Central Coastal Information Center

Figure 4-41. Overview of APE Map

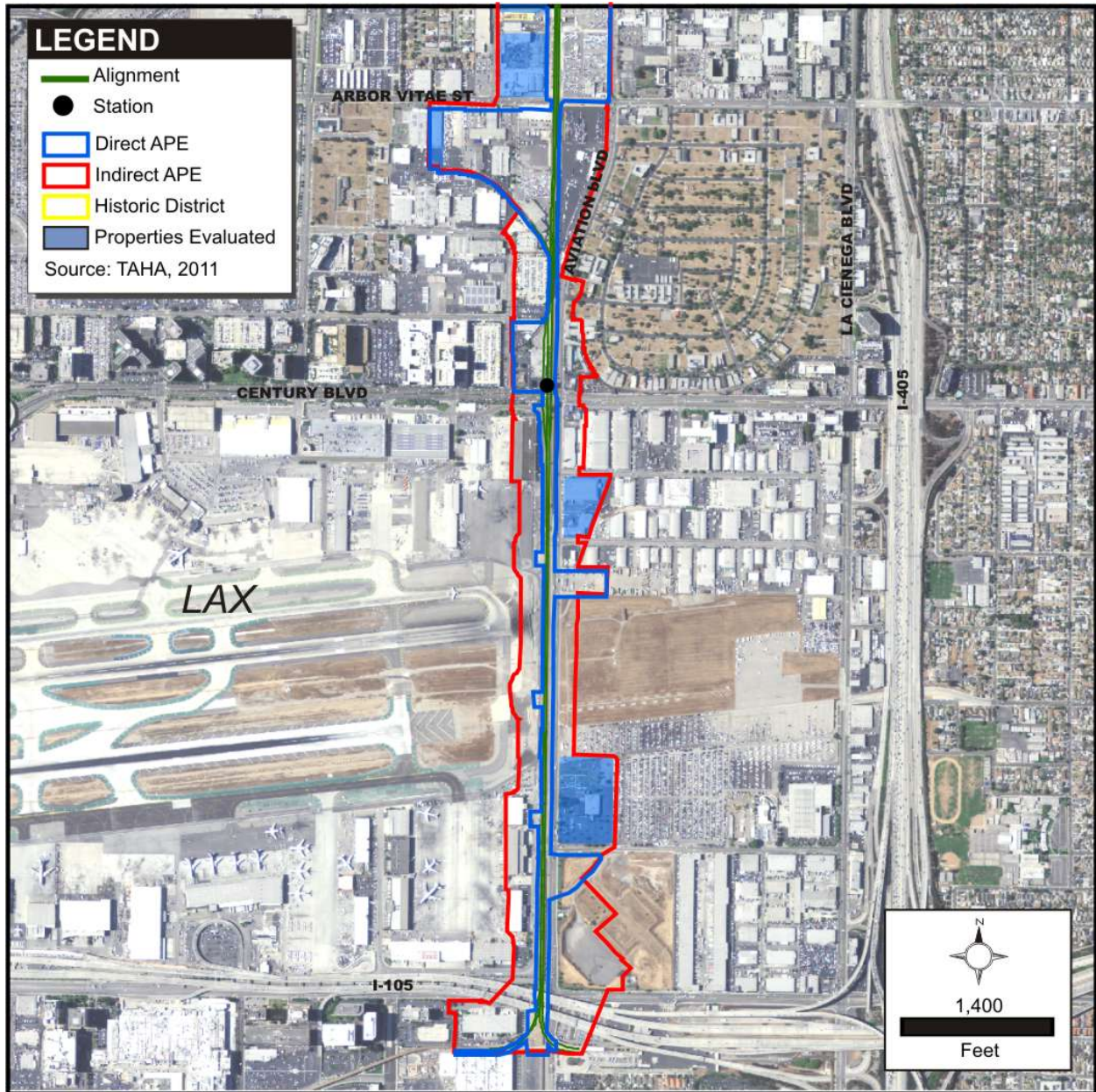


Figure 4-41. Overview of APE Map (continued)



Figure 4-41. Overview of APE Map (continued)

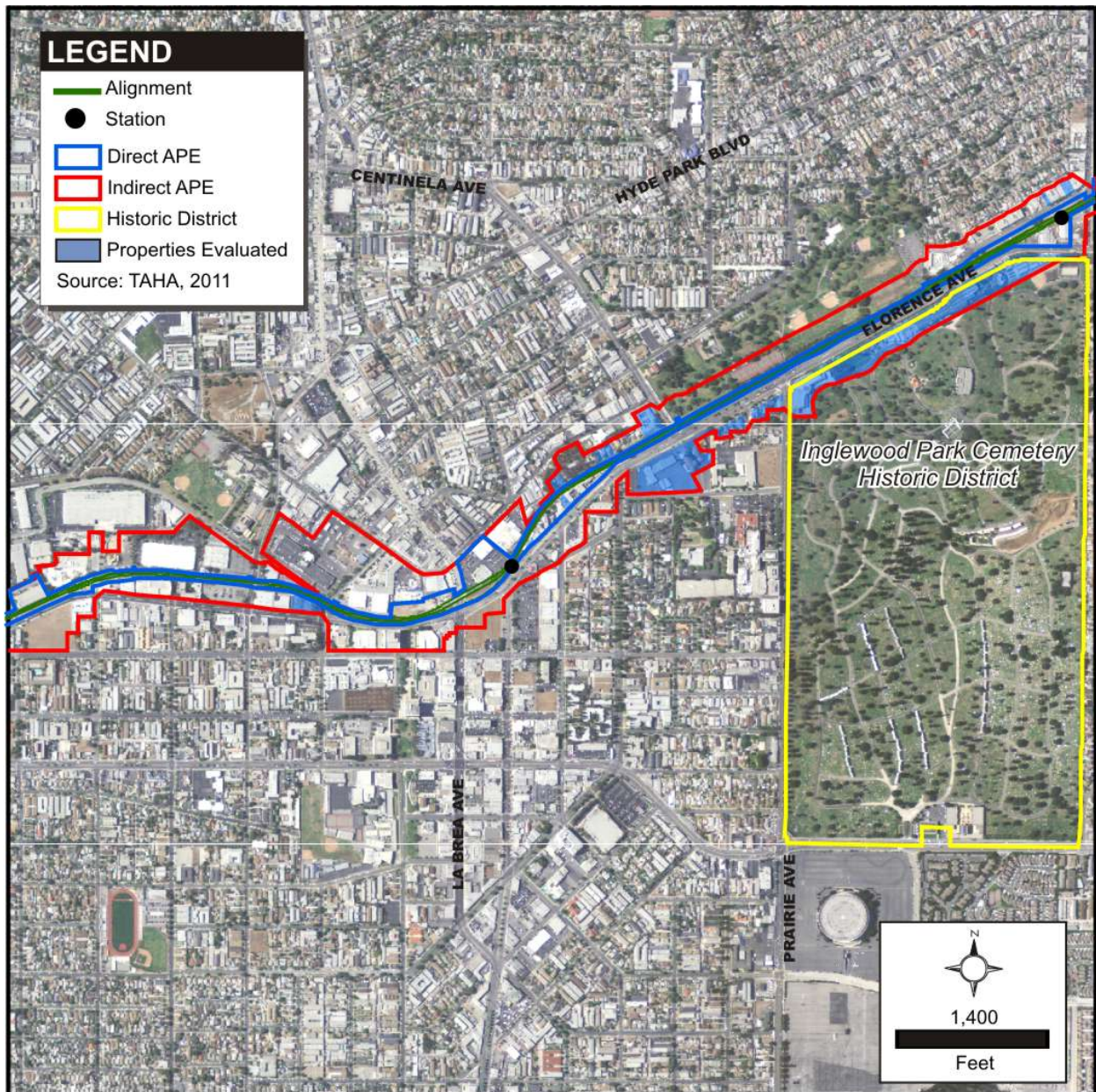


Figure 4-41. Overview of APE Map (continued)

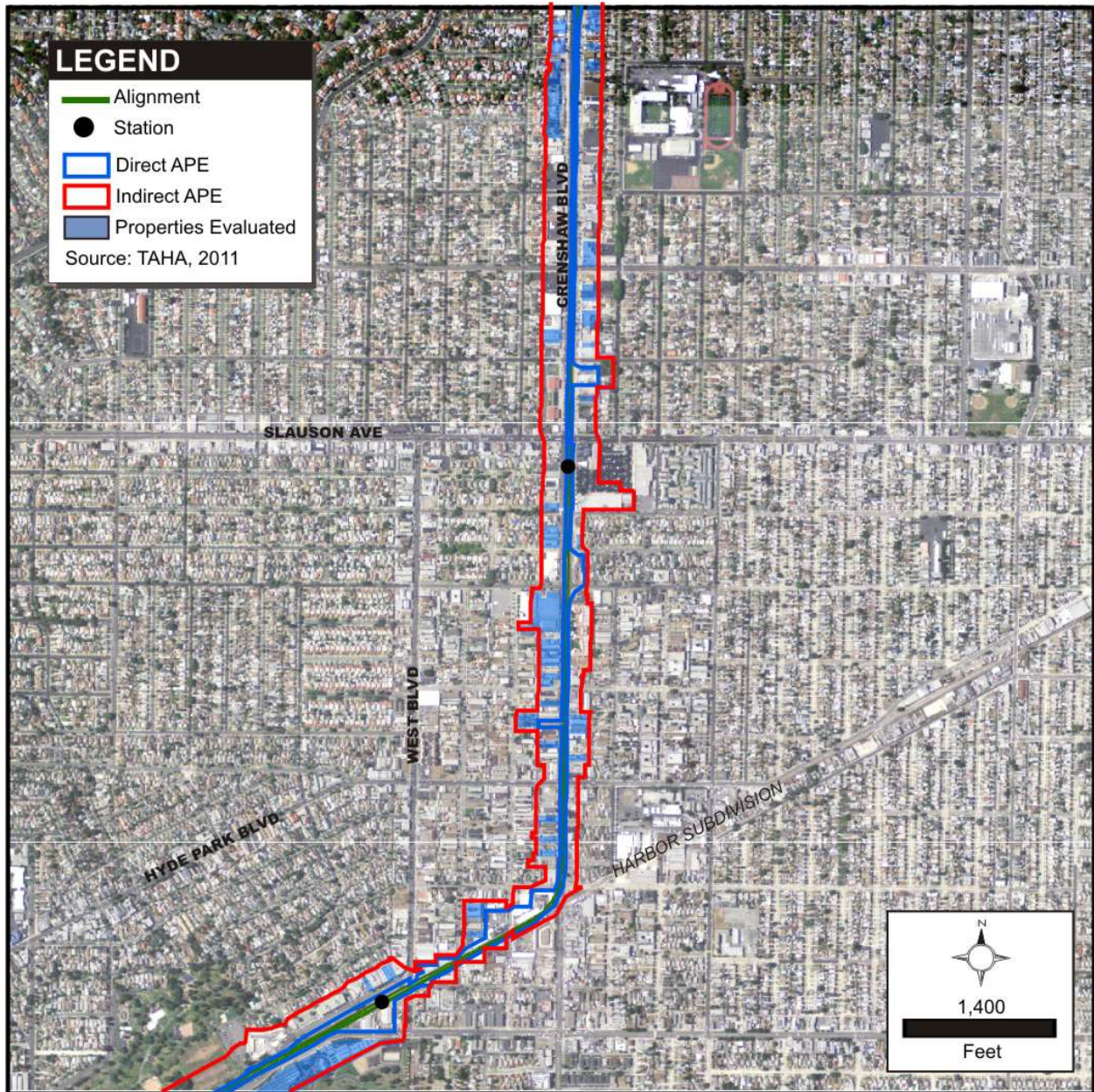


Figure 4-41. Overview of APE Map (continued)



**CA-LAN-80** is a prehistoric burial site located immediately adjacent to the direct APE. It included two separate burial features that were discovered 3 feet and 11 feet below the original ground surface during. They were exposed in the excavation of the Broadway Store (now WalMart) basement's southeast corner in 1946. R. Ariss excavated the site in 1946, accessioned the collected materials at the Los Angeles County Museum (now the Natural History Museum of Los Angeles County), and formally recorded the site in 1949. The site consists of skeletal remains from at least two individuals, abalone shell, worked marine shell, an obsidian projectile point tip, a chert flake, and a schist groundstone artifact. Trace amounts of red ochre and charcoal were also present. The features were encountered in a distinct stratum beneath a layer of alluvial sediment. Based on the stratigraphy and his knowledge of local geography, Ariss (1949) suggested that the materials represented secondary burials deposited in black clay and subsequently covered by flood sediments. The site has not been formally evaluated for NRHP or CRHR eligibility. At the time of its discovery, there were no State or Federal standards by which archaeological or historic sites were evaluated, therefore it was only documented. The previous site documentation does not provide a sufficient amount of archaeological data to adequately evaluate the site for NRHP significance.

**CA-LAN-171** is a prehistoric burial site known as the “Angeles Mesa find” located approximately 0.25-mile west of the direct APE. The site was reported by Chester H. Stock in 1924 and formally recorded by Heizer in 1950. It consists of at least six burials that were found between 19 and 23 feet below surface “within an area of not more than 12 square feet” (Stock 1924:3). The remains were associated with a quartzite boulder and a small awl-like object, and were found within a series of alluvial sediments. The site has not been formally evaluated for NRHP or CRHR eligibility.

**CA-LAN-1336** is an archaeological site located approximately 500 feet west of the direct APE, just southwest of CA-LAN-80. The site type, age, condition, and NRHP/CRHR eligibility status is unknown due to missing site forms.

#### **California Historical Landmark**

CHL 363, known as Centinela Springs, is located less than 0.25-mile north of the direct APE. According to the landmark record, Centinela Springs once flowed from their source in a deep water basin that has existed since the Pleistocene Era. Prehistoric animals, Native Americans, and early Historic period Inglewood settlers were attracted to the springs by the pure artesian water. The springs and neighboring valley were named after the “sentinels” guarding cattle in the area. The springs are located within Centinela Park. No archaeological materials have been formally recorded in association with this landmark.

#### **Field Survey**

An archaeological survey of the approximately 8.5-mile long direct APE on February 7, 2011. The survey included both intensive and reconnaissance level efforts. A reconnaissance level survey was conducted in highly developed portions of the direct APE where there was near zero ground visibility. In these instances any exposed soil such as planters or other landscaped areas were examined for the presence of cultural resources. An intensive level survey was conducted in areas of the direct APE that were

unobstructed by standing buildings or structures, such as undeveloped lots or parklands. Survey of these areas was conducted using transects spaced no more than two meters apart. Digital photographs were taken of the direct APE. All field notes, digital photographs, and records related to the current study are on file locally and with FTA.

#### **4.11.1.3 Native American Coordination**

The NAHC Sacred Lands File search indicated the presence of cultural resources important to Native Americans within 0.5-mile of the project area. The California Native American Heritage Commission (NAHC) was contacted by letter dated June 15, 2010, requesting a review of the Sacred Lands File. The NAHC responded on June 28, 2010 and stated that there are Native American cultural resources in the project area and provided a list of Native American groups and individual contacts for Los Angeles County. The NAHC response included a list of nine Native American contacts that may have knowledge of cultural resources in the project area. There are no federally recognized Native American Tribes within the Los Angeles region. (Table 4-32)

Letters were sent via U.S. mail to each Native American contact on July 7, 2010 requesting information regarding potential cultural resources that may be located within the project APE. These letters included location maps and a description of the proposed project and its related APE (Appendix I). A second series of nearly identical letters was mailed to the contacts on January 7, 2011. A follow up with each contact via telephone was conducted on January 24, 2011.

Two responses were received to these contact efforts. On January 19, 2011, Andy Salas, Chairperson of the Shoshonean Gabrielino Band of Mission Indians, stated via e-mail that the project is within a culturally sensitive area and recommended a Native American monitor be on site for ground disturbing activities. On January 26, 2011, Anthony Morales of the Gabrielino/Tongva San Gabriel Band of Mission Indians expressed concern about sites in the project area but did not mention specific sites or site locations. He requested to be updated on the project as it continues.

Intensive pedestrian surveys were conducted within two areas of the direct APE. These areas consisted of undeveloped parcels and parklands. Ground visibility varied between 10 and 30 percent as these areas contained ornamental landscaping, gravel, and modern refuse. They include the following locations:

- Portions of Centinela Park located within the direct APE (Assessor's Parcel Number [APN] 4013027901 and 4015015902).
- Parcel located on Florence Avenue south of La Brea Avenue (APN 4016030014).

In addition, three areas of the direct APE could not be intensively surveyed because they were inaccessible due to the presence of fencing. They include the following locations:

- Parcel on Florence Avenue, south of Hindry Avenue (APN 4127024903).
- Parcel on Aviation Boulevard south of 111th Street (APN 4129037913)
- Parcel between Aviation Boulevard and Hornet Way (APN 4138001908).

**Table 4-32. Native American Coordination**

Native American Contact	Letter Sent	Date of Reply	Follow Up	Results
Bernie Acuna, Gabrielino-Tongva Tribe 1875 Century Park East, #1500 Los Angeles, CA 90067	07/02/2010 U.S. Mail 01/07/2011 U.S. Mail	n/a	01/24/2011: Voice mailbox full; unable to reach by mobile phone.	No further action.
Cindi Alvitre Ti'At Society 6515 E. Seaside Walk, #C Long Beach, CA 90803	07/02/2010 U.S. Mail 01/07/2011 U.S. Mail	n/a	01/24/2011: Left message on machine.	No further action.
Ron Andrade, Director Los Angeles Native American Indian Commission 3175 West 6th St., Room 403 Los Angeles, CA 90020	07/02/2010 U.S. Mail 01/07/2011 U.S. Mail	n/a	01/24/2011: Left message on machine.	No further action.
Linda Candelaria, Chairwoman Gabrielino-Tongva Tribe 1875 Century Park East, # 1500 Los Angeles, CA 90067	07/02/2010 U.S. Mail 01/07/2011 U.S. Mail	n/a	01/24/2011: Left message on mobile phone voicemail.	No further action.
Robert Dorame Gabrielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, CA 90707	07/02/2010 U.S. Mail 01/07/2011 U.S. Mail	n/a	01/24/2011: Spoke with Mr. Dorame.	01/24/2011: Mr. Dorame said he had not checked yet for sensitivity in the project area and would get back to the project team. No further action.
Sam Dunlap Gabrielino Tongva Nation P.O. Box 86908 Los Angeles, CA 90086	07/02/2010 U.S. Mail 01/07/2011 U.S. Mail	n/a	01/24/2011: Spoke with Mr. Dunlap.	01/24/2011: Mr. Dunlap said he had not read the letter yet and would call or email if he did have questions or concerns. No further action.
Anthony Morales Gabrielino/Tongva San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, CA 91778	07/02/2010 U.S. Mail 01/07/2011 U.S. Mail	n/a	01/24/2011: Left message on machine. 01/26/2011: Spoke with Mr. Morales.	01/26/2011: Mr. Morales expressed concern about sites present in the project area but did not specify which sites and where. He would like to be updated on the project as it continues. No further action.
John Tommy Rosas Tongva Ancestral Territorial Tribal Nation	07/02/2010 Email 01/07/2011 Email	n/a	01/24/2011: Left message on machine.	No further action.
Andy Salas, Chairperson Shoshoneon Gabrielino Band of Mission Indians P.O. Box 393 Covina, CA 91723	07/02/2010 U.S. Mail 01/07/2011 U.S. Mail	01/19/2011: via email	01/24/2011: Did not call due to correspondence via email with Mr. Salas.	01/19/2011: Mr. Salas emailed recommending a Native American monitor be present for all ground disturbing activities. No further action.

The remainder of the approximately 8.5-mile long direct APE contained extremely poor (less than five percent) ground visibility due to the presence of buildings and pavement and was subject to a reconnaissance level survey.

The survey did not encounter any newly identified archaeological resources within the direct APE. Because the exact location of the previously recorded site (CA-LAN-80) is unknown, an attempt to rediscover the site was made due to the presence of previously recorded human remains which could potentially be encountered during ground disturbing activities within the direct APE. The current study did not relocate the site; the site is obstructed by a paved parking lot, extensive landscaping and the Wal-Mart building. No artifacts or archaeological resources were found during the field survey.

#### **4.11.1.4 Historic and Architectural Resources Identified Records Search**

A background research survey was undertaken to identify previously documented historic and architectural resources within and near the APE and to help establish a context for resource significance. National, state and local inventories of architectural/historic resources were examined in order to identify significant local historical events and personages, development patterns, and unique interpretations of architectural styles. The following inventories and sources were consulted:

- The NRHP, National Register Information System
- California Register of Historical Resources
- California Office of Historic Preservation Historical Resources Inventory System
- California Historical Landmarks
- California Points of Historical Interest
- Inglewood Park Cemetery History web site: <http://www.inglewoodparkcemetery.org/heritage.html>
- City of Los Angeles Office of Historic Preservation list of Historic-Cultural Monuments
- City of Inglewood General Plan Update, 2006
- City of Inglewood “Main Street Inglewood” historic survey

#### **Field Survey**

A field survey of all properties within the APE was undertaken according to standard Section 106 regulations and related procedures.

#### **Significant Historic and Architectural Resources Identified**

Intensive pedestrian surveys were conducted within two areas of the direct APE. These areas consisted of undeveloped parcels and parklands. Ground visibility varied between 10 and 30 percent as these areas contained ornamental landscaping, gravel, and modern refuse. They include the following locations:

- Parcel located on Florence Avenue south of La Brea Avenue (APN 4016030014).



- Portions of Centinela Park located within the direct APE (Assessor’s Parcel Number [APN] 4013027901 and 4015015902).

In addition, three areas of the direct APE could not be intensively surveyed because they were inaccessible due to the presence of fencing (see Figure 4-1). They include the following locations:

- Parcel on Florence Avenue, south of Hindry Avenue (APN 4127024903).
- Parcel on Aviation Boulevard south of 111th Street (APN 4129037913)
- Parcel between Aviation Boulevard and Hornet Way (APN 4138001908).

The remainder of the approximately 8.5-mile long direct APE contained extremely poor (less than five percent) ground visibility due to the presence of buildings and pavement and was subject to a reconnaissance level survey.

Properties listed in the NRHP or determined eligible for listing in the NRHP are automatically listed in the California Register. The final determination of historic properties listed below was subject to SHPO concurrence which was provided on May 23, 2011 and is included in Appendix I. Table 4-33 identifies all properties which have been identified in the APE that have been evaluated according to NRHP criteria as a result of the Section 106 compliance process for the proposed project. Appendix I also provides the list of 440 original properties that were identified as being potentially eligible for the NRHP. 210 of these properties were evaluated and 230 were not evaluated because of improvements made to those properties after 1968 exempted them due to a lack of integrity.

**Table 4-33. Properties Within the APE Found Eligible for the National Register of Historic Places**

APN	Building Name and Address	Year Built*	Jurisdiction	California Register Criteria
4125-010-014 4125-010-015	Merle Norman, 9030 , 9130 Bellanca Ave	1950, 1952	Los Angeles	3S
4012-031-027, 4012-031-929	Inglewood Park Cemetery, 720 Florence Ave	1905	Inglewood	3D
5013-015-015	Harrison Ross Mortuary, 4601 Crenshaw Blvd	1930	Los Angeles	3S
5032-002-054	Broadway Department Store (WalMart), 4101 Crenshaw Blvd	1945	Los Angeles	3S
5033-004-900	Department of Water and Power, 4030 Crenshaw Blvd	1959	Los Angeles	3S, 3D
5032-002-055	May Company (Macy’s), 4005 Crenshaw Blvd	1947	Los Angeles	2S2
5045-019-040, 5045-019-039	Angelus Funeral Home, 3887 Crenshaw Blvd	1934	Los Angeles	3S
Numerous properties (35)	Leimert Park Historic District	1927-1959	Los Angeles	3D

**California Register Criteria:**

**2S2** - Individual property determined eligible for NR by a consensus through Section 106 process.  
**3D** – Eligible for NR as a contributor to a historic district.

**3S** - Appears eligible for NR as an individual property through survey evaluation.

**4.11.1.5 Paleontological Resources Identified  
Paleontological Review**

For this project, a paleontological collections records search was conducted by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (LACM). A detailed review of museum collections records was performed to identify any known vertebrate fossil localities within at least 1 mile of the proposed project and to identify the geologic units within the project area and vicinity. (Table 4-34) In addition, the following published geologic maps were consulted:

- Preliminary geologic map of the Los Angeles 30' x 60' quadrangle, California: Version 1.0, scale 1:100,000 (Yerkes et al., 2003)
- Geologic map of the Venice and Inglewood quadrangles, Los Angeles County, California. Dibblee Geology Center Map #DF-322 (Dibblee, 2007)

**Table 4-34. Previously Discovered Paleontological Resources In and Around the Project Area**

LACM Locality Number(s) and Approximate Location	Geologic Formation	Age	Taxa
LACM 1159; just west of the northern terminus of the project area near the intersection of Rodeo Rd and Buckingham Rd	Quaternary sediments	Pleistocene	<i>Homo sapiens</i> (human)
LACM 3366, 3367, 3369, and 3370; west of the northern terminus of the project area along the Southern Pacific Railway and Rodeo Rd between Crenshaw Blvd and Ballona Creek	Older Quaternary sediments	Pleistocene	<i>Camelops</i> (camel), <i>Mammut</i> (mastodon), <i>Equus</i> (horse), and <i>Smilodon</i> (sabretooth cat)
LACM 3252; in the Hyde Park area south of Hyde Park Blvd and east of Crenshaw Blvd west of 8th Ave	Older Quaternary sediments	Pleistocene	<i>Bison</i> (bison) and <i>Camelops</i> (camel)
LACM 5888; south of Florence Ave and east of Crenshaw Blvd east of 8th Ave	Older Quaternary sediments	Pleistocene	<i>Mammut</i> (mastodon)
LACM 1170; in Centinela Park, east of Centinela Ave and bounded on the southeast by Florence Ave	Quaternary (Late Pleistocene) sands	Late Pleistocene	<i>Fulica americana</i> (coot), <i>Megalonyx jeffersoni</i> (ground sloth), <i>Mammut americana</i> (mastodon), Rodentia (rodent), <i>Mustela frenata</i> (weasel), <i>Smilodon californicus</i> (sabretooth cat) <i>Equus</i> (horse), <i>Platygonus</i> (peccary), <i>Camelops hesternus</i> (camel), <i>Capromeryx minor</i> (pronghorn antelope), <i>Odocoileus hemionus</i> (deer), and <i>Bison antiquus</i> (bison)
LACM 1180; near the intersection of Manchester Ave and Airport Blvd	Older Quaternary sediments	Pleistocene	<i>Mammuthus</i> (mammoth), <i>Equus</i> (horse)
LACM 4942; directly across Manchester Ave from locality LACM 1180	Older Quaternary sediments	Pleistocene	<i>Bison</i> (bison)
LACM 3789; just south of Manchester Ave east of Bellanca Ave	Older Quaternary sediments	Pleistocene	<i>Citharichthys stigmaeus</i> (speckled sanddab), <i>Mammuthus</i> (mammoth), and Rodentia (rodent)
LACM 7332; north of Century Blvd and east of Airport Blvd	Older Quaternary sediments	Pleistocene	<i>Mammuthus</i> (mammoth)
LACM 3264; LAX airport	Older Quaternary sediments	Pleistocene	Proboscidea (fossil elephant)

Source: Rhue, 2011

- Geologic map of the Hollywood and Burbank (South 1/2) quadrangles, Los Angeles County, California. Dibblee Geology Center Map #DF-30 (Dibblee, 1991)
- Geologic map of the Long Beach 30' x 60' quadrangle, California: a digital database: Southern California Areal Mapping Project, Regional Geologic Map No. 5, scale 1:100,000 (Saucedo et al., 2003)

Following the museum records search and geologic map review, a field reconnaissance survey was conducted for the purposes of inspecting the project area for any rock outcrops, determining areas in which fossil-bearing geologic units could be exposed during project construction and site characterization and documentation.

### **Quaternary Alluvium**

Quaternary older alluvial deposits underlie the majority of the project alignment from south of the Crenshaw Boulevard/48th Street intersection to the southern terminus at the Metro Green Line. These older surficial deposits are unconsolidated to weakly consolidated and locally dissected where elevated and are composed of gray to light brown pebble-gravel, sand and silty clay (Dibblee, 2007).

Throughout southern California, older alluvium and alluvial terrace deposits have produced Pleistocene-age fossils from numerous localities. Sixty Pleistocene localities, exclusive of Rancho La Brea, were reviewed by Miller (1971), and many localities have been discovered since then. Pleistocene taxa from alluvial and terrace deposits include amphibians (toad, frog, newt), reptiles (pond turtle, desert tortoise, fence lizard, alligator lizard, rattlesnake, gopher snake), birds (duck, hawk, burrowing owl, quail, coot, sparrow) and mammals (shrew, ground sloth, jack rabbit, cottontail rabbit, ground squirrel, pocket gopher, pocket mouse, kangaroo rat, deer mouse, mouse, wood rat, vole, muskrat, coyote, dire wolf, weasel, sabertooth cat, mammoth, mastodon, horse, camel, antelope, deer, bison) (Miller, 1971). Older alluvium (sediments not part of an active stream channel) can provide important paleoecological data even if it does not contain the remains of extinct organisms. Older alluvium has been assigned a high paleontological resource sensitivity.

Quaternary younger alluvial deposits underlie approximately the northern one-third of the project alignment north of the intersection of Crenshaw Boulevard/48th Street intersection to the northern terminus at the Crenshaw/Exposition Station. Surficial deposits of younger Quaternary alluvium consist of unconsolidated gravel, sand, silt, and clay deposited in modern stream channels and fluvial slope wash. These young sediments may overlie older alluvium at varying depths. Older alluvial sediments may be slightly to moderately consolidated but are generally only distinguishable through relative dating and stratigraphic position.

Holocene-aged deposits contain the remains of modern organisms and are too young to contain fossils. Younger alluvial deposits are determined to have a low potential for paleontological resources. However, because they are often underlain by older alluvium they are considered to have a paleontological sensitivity ranging from low to high, increasing with depth.

### **Project Area**

According to geologic mapping, the proposed project area is underlain by older and younger Quaternary alluvium. Museum collections records maintained by the LACM were searched, and thirteen previously recorded vertebrate fossil localities were discovered in the immediate and general vicinity of the project area). These vertebrate fossil localities were discovered within the same or similar geologic sediments that are present within the project area. Each locality yielded one or more vertebrate fossil specimens including small terrestrial mammals such as rodents and large megafauna such as mammoths and mastodons. For those localities reporting, the range of depth of discovery was as shallow as 6 feet to as deep as 40 feet below the ground surface (Rhue, 2011).

A field reconnaissance survey was performed to examine the project area for any potential rock outcrops or surface exposures of the underlying geology. A windshield survey was conducted in all areas accessible by automobile. The reconnaissance survey confirmed that the project area is highly disturbed by existing urban structures and no surficial exposures of Quaternary alluvial deposits, young or old, was apparent.

## **4.11.2 Environmental Impacts/Environmental Consequences**

### **4.11.2.1 Section 106 Process**

In order to comply with Section 106 of the National Historic Preservation Act, any effects of the proposed undertaking on properties listed in or determined eligible for inclusion in the NRHP must be analyzed by applying the Criteria of Adverse Effect [36 CFR Part 800.5(a)], as follows:

*(1) Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.*

*(2) Examples of adverse effects. Adverse effects on historic properties include, but are not limited to:*

*(i) Physical destruction of or damage to all or part of the property;*

*(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;*

*(iii) Removal of the property from its historic location;*

*(iv) Change of the character of the property's use or of physical features within the property's setting that contributes to its historic significance;*

*(v) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;*

*(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and*

*(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.*

The Section 106 criteria apply to archaeological, historic and architectural resources that are listed in or eligible for listing in the NRHP. The Section 106 criteria do not apply to paleontological resources. For a discussion of potential use to Section 4(f) resources, refer to Chapter 6.0.

#### **4.11.2.2 No-Build Alternative**

The No-Build Alternative would include all existing highway and transit services and facilities, the committed highway and transit projects in Metro's current LRTP, and the committed highway and transit projects in SCAG's 2008 RTP. Although the No-Build Alternative would include construction, the location of the projects under this alternative would not disturb archaeological or paleontological resources, or to demolish or alter historic or architectural resources within the APE. In addition, the projects under the No-Build Alternative will undergo project-specific environmental review, as appropriate.

#### **4.11.2.3 LPA Archaeological Resources**

The direct APE should be considered sensitive for historical resources, including both prehistoric and historic archaeological sites. Although no previously recorded cultural resources are located within the direct APE, there are two previously recorded prehistoric archaeological sites containing human remains. One (CA-LAN-80) is located adjacent to the direct APE, the other CA-LAN-171 is located outside the direct APE, approximately 0.25-mile to the west of the alignment. The majority of the construction would occur below the right-of-way of Crenshaw Boulevard, where previous excavation for utility lines has gone to depths of 40 feet below the surface. However, CA-LAN-80 was discovered during construction of a store basement, and it is unclear from the site record the true extent of the site. Therefore it is possible for portions of the site to still exist and potentially be impacted by the LPA. Because Native American cultural resources have been identified within 0.25-mile of the direct APE, there is the potential to encounter previously unidentified Native American cultural resources within the direct APE.

In addition historic maps indicate that most parcels within the direct APE were occupied by commercial or residential buildings. CHL-363, Centinela Springs is located within the direct APE, approximately 440 feet south of the alignment. No archaeological materials

have been formally recorded in association with this landmark. The LPA would not adversely affect this resource. CA-LAN-1336 is an archaeological site located outside the direct APE, approximately 500 feet to the southwest of CA-LAN-171. The site type, age, condition, and NRHP/CRHR eligibility status is unknown due to missing site forms. Because the site is outside the direct APE, no adverse affects to this resource are anticipated to occur.

The LPA has the potential to affect archaeological sites where excavation or grading is needed for below grade configuration, footings for the aerial configuration, or foundations for traction power substations, other buildings or station platforms. No known archaeological resources listed in or eligible for listing in the NRHP would be affected by the LPA. However, discovery of archaeological resources is possible during excavation activities. Mitigation Measure **CR1**, described below, would be implemented to insure no adverse impact would occur to archaeological resources. If a NRHP-eligible archaeological resource is damaged or destroyed, construction of the LPA would result in an adverse effect under Section 106 and NEPA.

The MOSs would have less excavation required than the LPA because a segment of the below-grade alignment would be removed under both MOSs. The possibility of encountering archaeological resource would be less than the LPA. Because the MOSs are shorter, there would be fewer affected properties compared to the LPA. Therefore, similar impacts to archaeological resources would occur for the MOSs as described for the LPA.

### **Design Options**

The design options would have similar impacts to archaeological resources as the LPA. Similar to the LPA, no known archaeological resources would be affected by the LPA design options. The design options would require additional excavation near Centinela Avenue, for the Below-Grade Crossing at Centinela, near Leimert Park, for the optional below-grade station at Vernon Avenue, and near the Broadway Building (WalMart) for the alternate southwest portal at the Crenshaw/King Station. Discovery of archaeological resources is possible during excavation activities associated with the columns and for the construction of the underground connection to the Broadway building. Although, the excavation depth of this connection would not exceed the previous excavation depth for the Broadway building, discovery of archaeological resources is possible during excavation. Mitigation Measures **CR1**, described below, would be implemented to ensure that no adverse impact would occur to archaeological resources.

### **Paleontological Resources**

Adverse impacts on surface or subsurface paleontological resources are the result of destruction by breakage and crushing during excavation. In areas containing paleontologically sensitive geologic units, surface disturbance has the potential to adversely impact an unknown quantity of surface and subsurface fossils. Without mitigation, these fossils, as well as the paleontological data they could provide if properly salvaged and documented, could be adversely impacted (destroyed), rendering them permanently unavailable. Based upon the results of the paleontological research the entire project area is considered an area with high paleontological sensitivity.

Implementation of Mitigation Measure **CR2**, as described below, would be implemented as appropriate to ensure that no adverse impact would occur.

The MOSs would have less excavation required than the LPA because a segment of the below-grade alignment would be removed under both MOSs. The possibility of encountering paleontological resource would be less than for the LPA. Because the MOSs are shorter, there would be fewer affected properties compared to the LPA. Therefore, similar impacts to paleontological resources would occur for the MOSs as described for the LPA.

### **Design Options**

The design options would have similar impacts to paleontological resources as the LPA. Similar to the LPA, no known paleontological resources would be affected by the LPA design options. The design options would require additional excavation near Centinela Avenue, for the Below-Grade Crossing at Centinela, near Leimert Park, for the optional below-grade station at Vernon Avenue, and near the Broadway Building (WalMart) for the alternate southwest portal at the Crenshaw/King Station. Discovery of paleontological resources is possible during excavation activities associated with the columns. Mitigation Measures **CR1** and **CR2**, described below, would be implemented to ensure that no adverse impact would occur to paleontological resources.

### **Historic and Architectural Resources**

The LPA effects on historic and architectural resources are focused on an evaluation of potentially direct impacts, buildings close to major excavation, and the introduction of major visual elements such as elevated guideways and support columns, stations, traction power substations, properties to be acquired and where major permanent changes are made to the setting. The portions of the LPA that are at-grade in the existing street or rail right-of-way are not expected to introduce elements that are out of character with this heavily developed urban corridor. Rail transit in the project area had a historic precedent with the Los Angeles Railway (LARy) trolleys that ran along Crenshaw Boulevard, south of Leimert Park Boulevard. The LARy trolleys featured tracks and overhead wires, which would be re-introduced in this area with the LPA, which involves the reinstallation of trackwork and an overhead contact system (OCS). The OCS poles would be approximately 25 feet tall, would be installed at intervals of 90 to 170 feet, and would generally be located in the center of the right of way between the two tracks, wherever possible, thereby having little long term visual effect on the buildings along either side of the street. Rail transit and activity is also compatible with the historic operations of the Atchison, Topeka and Santa Fe Railway that has long operated along the Harbor Subdivision in the project area. The indirect impacts from noise and vibration, air quality, and visual effects to historic properties within the APE would not be adverse, would not require mitigation, and do not warrant further detailed analysis in this section of the environmental document. Table 4-35 provides a summary of eligible historic properties and the impact of the LPA on those resources. More than 440 potentially eligible properties within the direct and indirect APE were identified through the survey effort and 210 of these properties retained integrity to warrant consideration for historical significance. The following National Register-eligible historic and architectural resources were found to have the potential to be affected by the LPA:

**Table 4-35. Summary of Impacts from LPA to Properties Within the APE Found Eligible for the National Register of Historic Places**

Building Name and Address	Eligibility	Adversely Affect Building	Adversely Affect Access or Use (Air Quality, Noise, Vibration, Visual)	Mitigation
<b>National Eligible Properties</b>				
Merle Norman	C/3, Late Moderne	No	No	No
Inglewood Park Cemetery	C/3 and d, Lawn cemetery movement	No	No	No
Harrison Ross Mortuary	C/3, Increasingly rare and intact Spanish Colonial Revival	No	No	No
Broadway Department Store (WalMart)	C/3, Late Moderne style, role in WWII LA economy	No	No	No
Department of Water and Power	C/3, Post-war Modern institutional architecture	No	No	No
May Company (Macy's)	C/3 CRHR listed for architectural firm, style, and role in post WWII LA economy	No	No	No
Angelus Funeral Home	A/1 and C/3 and g, Economic development in African American community and work of a master	No	No	No
Leimert Park Historic District (35 Buildings and Leimert Plaza Park))	A/1 and C/3, Planned development of LA and intact group of properties from early to mid 20th century	No	No	No

Source: SWCA, 2011.

**Merle Norman.** The Merle Norman Cosmetics headquarters is located adjacent to Harbor Subdivision Railroad Right-of-Way and the Site #15 – Manchester/Aviation Maintenance Facility Alternative (Figure 4-42). Five of the seven buildings for this facility were constructed before 1965. The property was determined eligible for listing on the National Register under Criterion C/3 as an example of Late Moderne. The rear of the Merle Norman facility is located adjacent to the west of the Project alignment along the Harbor Subdivision, north of Arbor Vitae Street. Access and parking for the facility is along Bellanca Avenue and would not be affected by the project. Operational activity would not generate adverse noise or vibration levels that would affect Merle Norman. No adverse effects would occur to the Merle Norman Cosmetics headquarters.

**Inglewood Park Cemetery.** The Inglewood Park Cemetery is located on the south side of Florence Avenue between West Boulevard and Prairie Avenue (Figure 4-43). The cemetery was established in 1905 and now includes a church, landscaping and associated cemetery buildings. In 1913, Inglewood Park built the Inglewood Mausoleum, the first community mausoleum in the State of California. Many of the original settlers of the Centinela Valley and the South Bay region, as well as a number of Civil War veterans are entombed in this mausoleum. The Mausoleum of the Golden West was built during the 1930s through the 1960s, followed by the Manchester Garden Mausoleum, constructed in the 1970s. The property was determined eligible for listing on the National Register

Figure 4-42. Merle Norman Cosmetics Headquarters – 9030 Bellanca Avenue



Figure 4-43. Inglewood Park Cemetery – 720 Florence Avenue



under Criterion C/3 and Criteria Consideration D as an example of a lawn cemetery movement. Access for the facility is along Florence Avenue and Manchester Boulevard and would not be affected by the project. Parking is available within the facility. Operational activity would not generate adverse noise or vibration levels to the Inglewood Park Cemetery due to the distance between the cemetery and the alignment. No adverse effects would occur to the Inglewood Park Cemetery.

**Harrison Ross Mortuary.** Harrison Ross Mortuary contains a Spanish Colonial Revival style commercial building, constructed in 1930 (Figure 4-44). Despite described alterations, the building is recognizable to its original appearance and retains requisite integrity to be eligible for listing in the National and California registers at the local level under Criteria C/3 as an increasingly rare, intact example of the Spanish Colonial Revival style commercial architecture that was popular in Southern California during the 1920s.

The alignment would be located below-grade within the center of the street right-of-way. There would be no direct change to the historic property or its setting and the Harrison Ross Mortuary has access from Brynhurst Avenue. Operational activity would not generate adverse noise or vibration levels to the Harrison Ross Mortuary based on the distance. Therefore, the project would not result in an adverse effect related to historic and architectural resources.

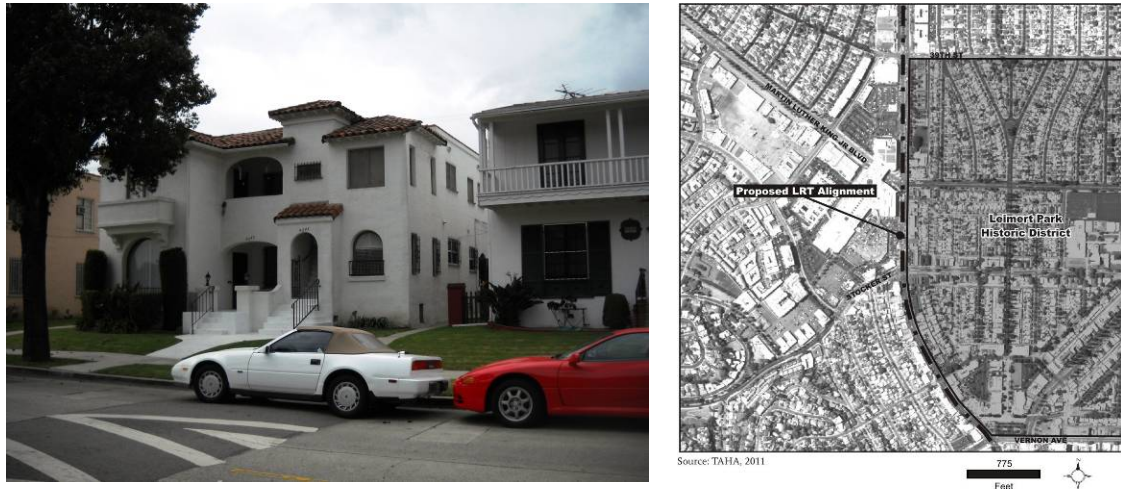
**Figure 4-44. Harrison Ross Mortuary – 4601 Crenshaw Boulevard**



**Leimert Park Historic District.** The Leimert Park District is closely linked to the history and culture of African Americans in Los Angeles (Figure 4-45). With desegregation in 1942 and migration of African Americans to this initially white-dominated area, the community and the neighboring Crenshaw District eventually became one of the largest black middle-class neighborhoods in the United States. The district was determined eligible for listing on the National Register under Criterion A/1 and C/3 for association with planned development of Los Angeles and as an intact group of properties from early to mid 20th century.

The project alignment would be located underground along this district in the median of Crenshaw Boulevard, south of Martin Luther King Jr. Boulevard. No acquisition of contributing buildings to the historic district would occur. Operational activity would not generate adverse noise or vibration levels at buildings within the district. Therefore, the LPA would not result in an adverse effect related to historic and architectural resources.

Figure 4-45. Contributing Building in Leimert Park Historic District



**Broadway Department Store.** The Broadway building was designed by architect Albert B. Gardner in the Streamline Moderne style, and constructed between 1945 and 1947 as the major anchor in the Broadway-Crenshaw Square as it was originally called (Figure 4-46). Broadway's new store was the largest in the nation at the time with 208,000 square feet of retail space and, combined with the adjacent retail stores and supermarket represented almost 550,000 square feet of enclosed space. All of this was carefully integrated with 13 acres of the smaller and ancillary retail structures surrounding the Broadway store were demolished, and in the early 1990s, a new enclosed shopping mall was constructed immediately behind. While the setting has changed somewhat, the Broadway store still retains sufficient integrity to be eligible for listing in the NRHP under Criterion C/3, as an important early example of Late Modern suburban department store design in the early Post World War II period. The period of significance for the property is 1947.

The project alignment would be located underground along this segment, with a station located in the median of Crenshaw Boulevard, south of Martin Luther King Jr. Boulevard. The portal for this station would be located near the southeast corner of the intersection. Operational activity would not generate adverse noise or vibration levels at the Broadway building. Therefore, the project would not result in an adverse effect related to historic and architectural resources.

**May Company Department Store.** The May Company Department Store was designed by architect Albert C. Martin, who is recognized for his contribution to commercial, institutional and civic architecture/buildings throughout Los Angeles during the Post World War II period (Figure 4-47). The property was determined eligible for listing on the National Register under Criterion C/3 and is listed in the California Register of Historic Places for association with an architectural firm, its architectural style, and its role in the post World War II Los Angeles economy. The building retains integrity from the period of significance. The period of significance for the property is 1947.

Figure 4-46. Broadway Department Store (now Wal-Mart) – 4101 Crenshaw Boulevard



Figure 4-47. May Company Department Store (now Macy's) – 4005 Crenshaw Boulevard



The project alignment would be located underground along this segment, with a station located in the median of Crenshaw Boulevard, south of Martin Luther King Jr. Boulevard. No acquisition of this property would be required for the project. Operational activity would not generate adverse noise or vibration levels at the May Company Department Store. Therefore, the project would not result in an adverse effect related to historic and architectural resources.

**Department of Water and Power Building.** The Department of Water and Power building is eligible for listing in the NRHP under Criterion C, as a good example of Post World War II Modern institutional architecture, which retains a high level of integrity from the period of significance (Figure 4-48). It is also a contributor to the Leimert Park Historical District. The period of significance for the property is 1955. The Department of Water and Power Building is currently used as a district office, and is located immediately adjacent to the sidewalk on Crenshaw Boulevard. At this point in the corridor, the light rail alignment would be located below grade within the center of the street right-of-way. The facility has access along Crenshaw Boulevard and Martin Luther King Jr. Boulevard and has dedicated off-street parking. Operational activity would not generate adverse noise or vibration levels. Therefore, the project would not result in an adverse effect related to historic and architectural resources.

**Figure 4-48. Department of Water and Power – 4030 Crenshaw Boulevard**



**Angelus Funeral Home.** Angeles Funeral Home was founded in 1922 by Fred Shaw in a home located at 1030 East Jefferson Boulevard, Los Angeles. In 1924, Louis George Robinson purchased the business and partnered with Lorenzo Bowdoin and John L. Hill (Figure 4-49). While it is not clear exactly when the Angelus Funeral Home relocated to the site at 3886 Crenshaw Boulevard, it appears that John L. Hill was the assessed owner by 1961. Williams was chosen to design the New Formalist style complex. The property is eligible for listing in the NRHP under Criteria A/1, C/3 and Criteria Consideration G for economic development in an African American community and being the work of a master.

At this point in the corridor, the light rail alignment would be located below grade within the center of the street right-of-way. The facility has access along Crenshaw Boulevard and has dedicated off-street parking. Operational activity would not generate adverse noise or vibration levels. The TPSS location adjacent to Angelus Funeral Home that was previously identified has been relocated away from this resource. Therefore, the project would not result in an adverse effect related to historic and architectural resources.

Figure 4-49. Angelus Funeral Home – 3886 Crenshaw Boulevard



### SHPO Consultation

Consultation with the SHPO and other cultural resources stakeholders has been ongoing throughout the Section 106 process. Metro and FTA have received SHPO concurrence on the APE for the project and with the determination of eligibility and the finding of no adverse effect for these resources. The SHPO concurrence and cultural effects report is provided in Appendix I. Contract specifications are developed to prohibit the use of pile driving near any identified sensitive structures. Therefore, no adverse effect would occur to historic and architectural resources.

Because the MOSs are shorter, there would be fewer potentially affected properties compared to the LPA. Therefore, similar impacts to historic and architectural resources would occur for the MOSs as described for the LPA.

### Design Options

No direct adverse effects would occur to historic properties within the APE that are in the vicinity of the Partially-Covered LAX Trench Option, the Below-Grade Crossing at Centinela, and the optional Aviation/Manchester Station. The indirect impacts from noise and vibration, air quality, and visual effects to historic properties within the APE that are in the vicinity of the Partially-Covered LAX Trench Option, the Below-Grade Crossing at Centinela, and the optional Aviation/Manchester Station, are not adverse, would not require mitigation, and do not warrant further detailed analysis. Therefore, these options are not anticipated to have an adverse impact on historic and architectural resources.

**Optional Below-Grade at Vernon.** A potential configuration for this optional station would be below Crenshaw Boulevard in the vicinity of Historic Leimert Park District. Similar to the LPA, this option would not adversely affect historic properties. The below-grade tunnel would not travel beneath any contributing buildings in the Leimert Park Historic District. Therefore, this option would not result in any adverse effect on historic and architectural resources.

**Alternate Southwest Portal at the Crenshaw/King Station.** The alternate southwest portal would be located on landscaped frontage that was originally a frontage road that ran in front of the historic Broadway building. A portal in this location could also involve an underground connection into the basement of the department store and a permanent underground easement would be required in order to facilitate this connection. The alternate portal would not generate adverse noise and vibration levels at the Broadway building during operation of the project. The impacts on this resource would not be adverse, as this connection would not substantially diminish the features and attributes of the resource. Mitigation Measure **V6** from the Visual Resource Section would be implemented to reduce potential impacts to historic properties and structures.

#### 4.11.3 Mitigation Measures

Under Section 106 and CEQA, anticipated effects and/or impacts must be either: 1) avoided, 2) reduced, or 3) mitigated to an appropriate level to satisfy federal and state requirements for treatment of historic properties. Where neither avoidance nor reduction of effects to a suitable level is possible in establishing the final design, construction, and operation details for the undertaking, mitigation measures must be agreed upon by all appropriate parties through a Cultural Resources Monitoring and Mitigation Plan (CRMMP) among FTA, Metro, the State Historic Preservation Officer (SHPO), and other appropriate participating parties.

##### **CR1 Treatment of Undiscovered Archaeological Resources**

Construction personnel shall be informed of the potential for encountering significant archaeological and paleontological resources along Crenshaw Boulevard in the vicinity of the Crenshaw/King Station, and instructed in the identification of fossils and other potential resources. All construction personnel shall be informed of the need to stop work on the project site until a qualified archaeologist or paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Monitors with Native American qualifications shall be used at a minimum for construction within a ½ mile of the Crenshaw/King Station. If human remains are encountered during construction, all work shall cease in the area of potential affect and the Los Angeles County Coroner's Office shall be contacted pursuant to procedures set forth in Public Resources Code Section 5097 et seq. and Health and Safety Code in Sections 7050.5, 7051, and 7054 with respect to treatment and removal, Native American involvement, burial treatment, and re-burial, if necessary.

A detailed CRMMP would be prepared prior to implementation of this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementation of a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected. If cultural resources are discovered or if previously identified resources are affected in an unanticipated manner, the Monitoring Plan would also ensure that such resources receive mitigation to reduce the impact to less-than-significant levels. This plan would include, but not be limited to, the following elements:

- Worker training
- Archaeological monitoring
- The scientific evaluation and mitigation of archaeological discoveries
- Native American participation, as needed
- Appropriate treatment of human remains, if applicable
- Reporting of monitoring and mitigation results

**CR2 Paleontological Monitoring**

- A qualified paleontologist shall produce a Paleontological Monitoring and Mitigation Plan (PMMP) for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. All efforts to avoid delays in project schedules shall be made.
- All project-related ground disturbances that could potentially affect previously undisturbed Quaternary older alluvial deposits shall be monitored by a qualified paleontological monitor under the supervision of a qualified paleontologist on a full-time basis because these geologic units are determined to have a high paleontological sensitivity. Very shallow surficial excavations (less than 5 feet) within areas of previous disturbance or areas mapped as Quaternary younger alluvial deposits or Artificial fill shall be monitored on a part-time basis to ensure that underlying sensitive units (i.e. older alluvium) are not adversely affected. The location of subsurface sensitive sediments shall be determined by the qualified paleontologist upon review of project grading plans.
- Paleontological monitors shall be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data to prevent construction delays. This equipment shall include handheld global positioning system (GPS) receivers, digital cameras and cell phones, as well as a tool kit containing specimen containers and matrix sampling bags, field labels, field tools (awls, hammers, chisels, shovels, etc.) and plaster kits. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis.
- Any collected fossils shall be transported to a paleontological laboratory for processing where they will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis and repositied in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County).
- The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository. The final

report shall include, but not be limited to, a discussion of the results of the mitigation and monitoring program, an evaluation and analysis of the fossils collected (including an assessment of their significance, age and geologic context), an itemized inventory of fossils collected, a confidential appendix of locality and specimen data with locality maps and photographs, an appendix of curation agreements and other appropriate communications, and a copy of the project-specific paleontological monitoring and mitigation plan.

#### 4.11.4 CEQA Determination

Properties eligible for the National Register and California Register of Historic Places are determined to be historic resources under CEQA. All properties found eligible for the National Register of Historic Places are automatically found eligible for the California Register. In addition, the CEQA Guidelines states that the term “historical resources” shall include the following:

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the CR
- A resource included in a local register of historical resources or identified as significant in an historical resource survey
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the following criteria for listing on the CR:
  - ▶ Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - ▶ Is associated with the lives of persons important in our past;
  - ▶ Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
  - ▶ Has yielded, or may be likely to yield, information important in prehistory or history.

The impacts analysis for the National Register eligible properties and archaeological and paleontological resources is included in the NEPA/Section 106 impacts sub-section above. The CEQA Impacts conclusion is provided below. The CEQA determination compares the effects of the proposed project, design options and MOSs with the existing conditions described in the affected environment/existing conditions section. In accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant impact related to cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archeological resource pursuant to section 15064.5;
- Directly or indirectly destroy a unique paleontological resources or site or unique geologic feature; and/or
- Disturb any human remains, including those interred outside of formal cemeteries.

#### **No-Build Alternative**

Although the No-Build Alternative would include construction, the location of the projects under this alternative would not disturb archaeological or paleontological resources, or demolish or alter historic or architectural resources within the APE. In addition, the projects under the No-Build Alternative will undergo project-specific environmental review, as appropriate.

#### **LPA**

##### ***Archaeological Resources***

No known archaeological resources listed in or eligible for listing in the NRHP would be affected by the LPA. However, discovery of archaeological resources is possible during excavation activities. If an archaeological resource that is a CEQA-historical resource is damaged or destroyed, construction of the LPA would result in a significant effect under CEQA.

##### ***Paleontological Resources***

Based upon the paleontological review, the majority of the project area has a high level of sensitivity for paleontological resources, especially at depths below five feet. If construction of the LPA destroys a significant paleontological resource, it would be a significant effect under CEQA.

##### ***Historic and Architectural Resources***

The impacts for the buildings that were identified as eligible for the National Register were discussed under the NEPA analysis. Properties identified as eligible for the National Register are automatically eligible for the California Register. The impact discussion of the National Register properties for the NEPA analysis would also apply under CEQA for the California Register. In addition to the nationally-eligible properties, the following properties eligible for the California Register have the potential to be affected by the project.

**Proud Bird.** The Proud Bird was built in 1966 by Kenneth S. Wing, a prominent Long Beach architect who designed buildings throughout Southern California (Figure 4-51). It was built as a themed, destination-restaurant business. Its location allowed patrons to watch airplanes arrive and depart from the airport as they dined. Loudspeakers installed throughout the restaurant allowed customers to listen to radio control tower as they directed planes on and off the runway.

The proposed LRT tracks would be located within a trench within the Harbor Subdivision adjacent to the LAX runways 25L and 25R. The Proud Bird (restaurant) is located over 200 feet east of the alignment across Aviation Boulevard. There would be no direct change to the historic property or its setting and the Proud Bird has dedicated off-street parking that is accessible from 111th Street and Aviation Boulevard. Operational

activity would not generate adverse noise or vibration levels or adversely affect the views of LAX from the Proud Bird. Therefore, the project would not result in an adverse effect related to historic and architectural resources.

Figure 4-51. Proud Bird - 11022 Aviation Boulevard



**Centinela Park (Edward Vincent Jr. Park).** Edward Vincent Jr. Park is located north and adjacent to the Harbor Subdivision near Centinela and Florence Avenues (Figure 4-50).

This park contains the Inglewood Veterans Memorial building and Centinela Springs. The park was established in the 1900s and there is one recorded archaeological site (19-000181), one CHL (CHL 363 and 19-186555) and one historic structure (19-188002) located within the park. California Historic Landmark No. 363 (site number 19-186555) commemorates the site of the Centinela Springs within the park.

Figure 4-50. Edward Vincent Jr. Park – 700 Warren Lane



The park includes an amphitheater, used primarily for public concerts and rallies, which is located approximately 525 feet away from the alignment. Uses in this amphitheater occur infrequently (approximately 2-3 times a year) and generally involve the use of amplified sound. Edward Vincent Jr. Park is located adjacent to Centinela Avenue and Florence Avenue, both of which experience a high volume of automobile traffic. Access and parking for the facility would not be affected by the operation of the project. Operational activity would not generate adverse noise or vibration levels or visually impair the features of the park. Therefore, no adverse effects would occur.

**Edison Substation – Florence Avenue and Fir Avenue.** The Edison Transformer House is an early example of a small-scale power distribution station/transformer house for the Edison power company (Figure 4-52). It retains a high level of integrity from the period of significance. The exact construction date for the building is not known; however, it appears to date to the early 1920s. The primary character defining elevation of the building faces south onto Florence Avenue, with secondary character defining elevations facing east and west.

**Figure 4-52. Edison Substation – Florence and Fir Avenues**



The LPA would not require any acquisition of the Edison Substation which is eligible for local designation and is considered a historical resource under CEQA. No infrastructure or buildings would be altered or removed as a result of the project. Project-related activity on or near the property would not result in vibration impacts or settlement to this historical resource and no physical effect to the building would occur. Therefore, less-than-significant impacts would occur.

**Residences along La Colina Drive.** There are four residences along La Colina Drive in the City of Inglewood (333, 337, 375, and 377) were found locally eligible as good examples of early twentieth century residential architecture (Figure 4-53).

The Florence/La Brea Station and Park and Ride facility would not result in vibration impacts to the four residences along La Colina which were found eligible for local designation and is considered a historical resource under CEQA. The project would not result in physical effects to the buildings and less-than-significant impacts would occur.

Figure 4-53. Residence along La Colina Avenue



**Maverick's Flat.** Maverick's Flat is one of the most influential and pioneering live music venues showcasing established and emerging Soul and Rhythm & Blues artists during the mid-1960s through the 1970s (Figure 4-54). The club attracted a diverse audience of both African American and white youth during the period. It is eligible for listing in the NRHP under Criterion A for its association with the popular Soul and Rhythm & Blues music scene in Los Angeles during the mid 1960s. The property was established as Los Angeles City Historic-Cultural Monument #679 on April 25, 2000; therefore, it is a historical resource for the purposes of CEQA. The period of significance for the property is 1966. Maverick's Flat is a redevelopment project that has recently been renovated and continues to operate as an entertainment venue.

Figure 4-54. Maverick's Flat - 4225 Crenshaw Boulevard



Maverick's Flat is located immediately adjacent to the sidewalk on Crenshaw Boulevard with a zero setback. The proposed LRT tracks would be located within tunnel within the center of the street right-of-way. There would be no direct change to the historic property or its setting and Maverick's Flat has dedicated off-street parking that is accessible from Crenshaw Boulevard, and the alley directly behind to the west Operational activity would not generate adverse noise or vibration levels. Therefore, the project would not result in an adverse effect related to historic and architectural resources.

**Los Angeles Sentinel.** The Los Angeles Sentinel building was constructed in 1988 and has been the site of the Los Angeles Sentinel newspaper since 1993 (Figure 4-55). Founded in 1933 by Leon Washington Jr., the Sentinel is the west-coast's oldest African American newspaper. The paper became an important part of African American life in Los Angeles, and was influential in covering the Civil-Rights Movement.

At this point in the corridor, the Light Rail alignment would be located below grade within the center of the street right-of-way. The facility has access from Crenshaw Boulevard and Bronson Avenue and has dedicated off-street parking. Operational activity would not generate adverse noise or vibration levels. Therefore, the project would not result in an adverse effect related to historic and architectural resources.

**Figure 4-55. Los Angeles Sentinel – 3800 Crenshaw Boulevard**



The MOSs would have less excavation required than the LPA because a segment of the below-grade alignment would be removed under both MOSs. The possibility of encountering archaeological or paleontological resource would be less than with the LPA. Therefore, similar impacts to archaeological, historic and architectural, and paleontological resources would occur for the MOSs as described for the LPA.

### **Design Options**

The design options would have similar impacts to archaeological, historic and architectural, and paleontological resources as the LPA. The design options would require additional excavation near Centinela Avenue, for the Below-Grade Crossing at Centinela, near Leimert Park, for the optional below-grade station at Vernon Avenue, and near the Broadway Building (WalMart) for the alternate southwest portal at the Crenshaw/King Station.

The optional below-grade station at Vernon Avenue would require underground easements of two properties which are eligible for the California Register and are considered historical resources under CEQA. The alignment would require permanent underground easements for the bored tunnel that would be built beneath these properties. The tunnel boring machine would not result in physical damage to these properties. There would be no direct change to these historic properties and operational activity would not generate adverse noise or vibration levels. Therefore, the project would result in a less-than-significant impact related to historic and architectural resources for the optional below-grade station at Vernon Avenue. The alternate southwest portal at the Crenshaw/King Station would be in close proximity to the Broadway building. Although a station portal would not result in vibration-related operational activity, a potential visual impact would occur if the design of the at-grade portal did not complement the Broadway Building. Implementation of Mitigation Measure **V6** from the Visual Resources Section would reduce potential effects to less than significant.

#### 4.11.5 Impacts Remaining After Mitigation

With implementation of Mitigation Measure **CR1**, the impacts would not be adverse under NEPA and less than significant by compliance with accidental find provisions (regulatory compliance). No further mitigation would be required and there would be no remainder adverse effects under NEPA and no remainder significant impacts under CEQA. With implementation of Mitigation Measure **CR2**, impacts to paleontological resources would be eliminated or reduced by complying with the local, State and/or federal regulatory requirements and/or permits for potential paleontological resources. Therefore, no additional measures to mitigate impacts are required. The impacts from project-related vibration would not be adverse under NEPA and less than significant under CEQA. With implementation of Mitigation Measure **V6**, the potential impacts from inconsistent visual character with the historic Broadway building of the alternate southwest station portal would not be adverse under NEPA and less than significant under CEQA.

## 4.12 Parklands and Community Facilities

This section presents information on existing parklands and community facilities that are located along and/or within 0.25-mile of both sides of the project alignment and stations. Typically, transit improvements have the potential to enhance accessibility to parklands and community facilities, particularly for those individuals who are transit dependent. However, the physical features associated with the operation of the transit improvements can also have adverse effects through the acquisition of physical property or the disruption to users of parklands and other community facilities and their associated services.

### 4.12.1 Affected Environment/Existing Conditions

#### 4.12.1.1 General Setting

The study area encompasses a number of jurisdictions and agencies, including the unincorporated portions of the Los Angeles County (View Park/Windsor Hills) and the Cities of Los Angeles, Inglewood, and El Segundo. Figure 4-56 through Figure 4-59 show the locations of the various types of facilities that are in proximity to the alignment and Table 4-36 through Table 4-38 list the locations.

### 4.12.2 Environmental Impacts/Environmental Consequences

#### 4.12.2.1 Methodology

Potential impacts to parkland and community facilities were assessed by conducting an inventory of all facilities located within 0.25-mile of both sides of the project alignments and stations, and identifying those that are in closest proximity to determine facilities that would be directly or indirectly impacted by the proposed transit improvements. Direct impacts involve physical acquisition, displacement, visual alteration, or relocation of parkland or a community facility, and indirect impacts involve changes to visual quality, and pedestrian or vehicular access. Direct impacts would only occur at facilities located adjacent to the alignments. Similarly, indirect impacts would be most likely to occur at facilities adjacent to or in closest proximity to the project alignments.

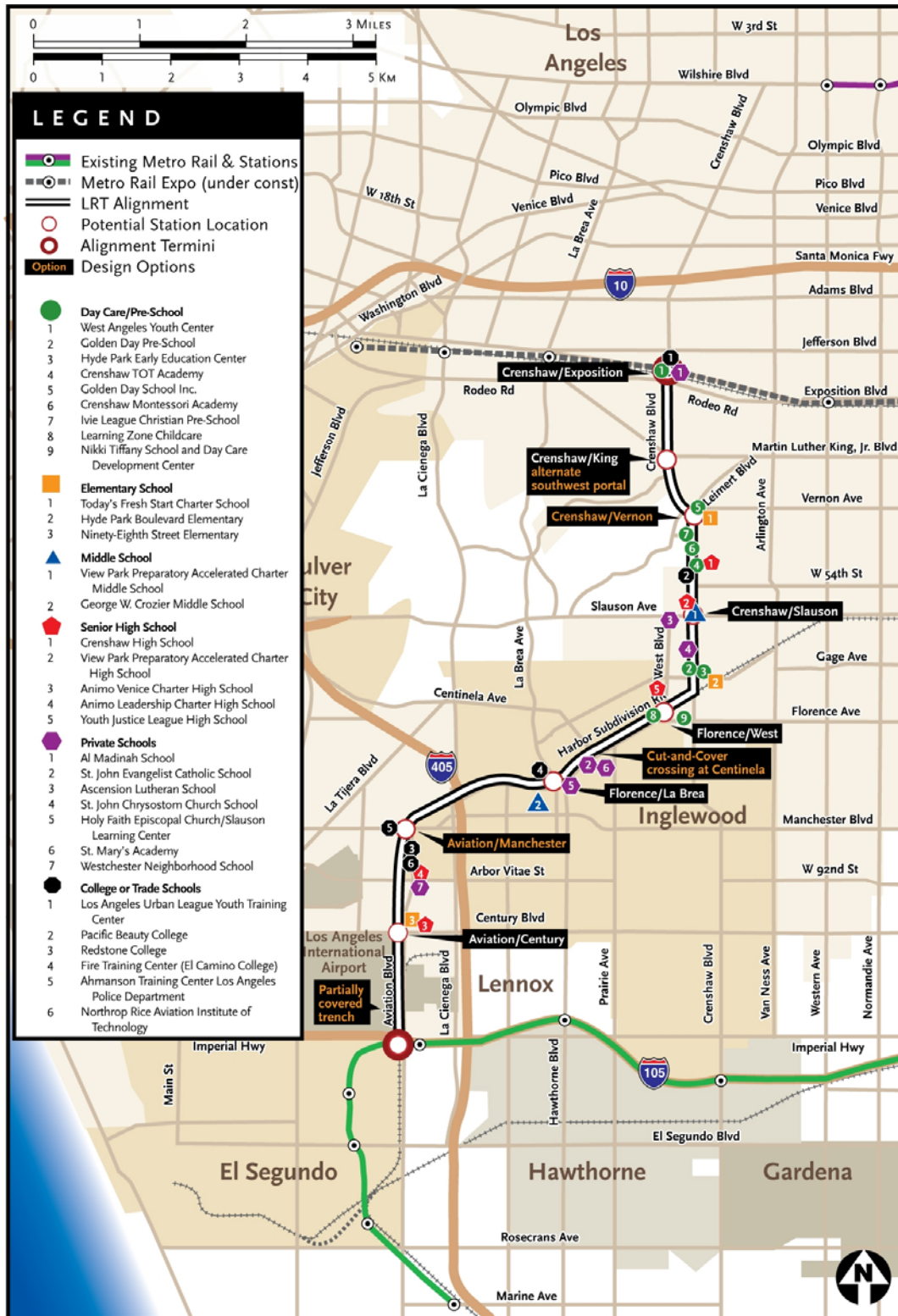
Chapter 6.0 of the FEIS/FEIR contains the evaluation of resources protected under Section 4(f) of the Department of Transportation Act of 1966, as amended (hereinafter referred to as Section 4(f) resources. Section 4(f) protects publicly-owned land of parks, recreational areas, and wildlife refuges. Pedestrian and vehicular access is further discussed in Section 3.0 Transportation Impacts and Mitigation. Visual impacts are discussed in Section 4.4 Visual Resources. Existing and future safety and security issues for motorists and the surrounding community are discussed in Section 4.14 Safety and Security. Other potential indirect impacts related to air quality and noise impacts are addressed in Sections 4.5 Air Quality and 4.6 Noise and Vibration.

Figure 4-56. Parklands and Public Services



Source: ESRI Basemap Data (ArcView 9.1) and field survey (January 12, 2008)

Figure 4-57. Educational Facilities



Source: ESRI Basemap Data (ArcView 9.1) and field survey (January 12, 2008)

Figure 4-58. Religious Facilities



Source: ESRI Basemap Data (ArcView 9.1) and field survey (January 12, 2008)

Figure 4-59. Hospital/Convalescent



Source: ESRI Basemap Data (ArcView 9.1) and field survey (January 12, 2008)

Table 4-36. Parklands and Recreation Resources within 0.25-mile of the Proposed Project

Map No <sup>1</sup>	Name	Type of Facility	Approx. Size (acres)	Location	Regulatory Agency	Proximity to Alignment (feet)	Proximity to Nearest Station (feet)
<b>Parklands</b>							
1	Leimert Park	Park only - No-Buildings or equipment	1.9	Northwest corner of Vernon Ave and Crenshaw Blvd	City of Los Angeles	25	90 optional Crenshaw/Vernon
2	Grevillea Park	Park only - No-Buildings or equipment	1.5	231 So. Grevillea Ave	City of Inglewood	800	1,700 Florence/La Brea
3	Rogers Park Recreation/Community Center	Buildings: 1 Multipurpose Recreation Building, 33,500 square feet, including gymnasium/basketball court with bleachers, auditorium for classes/productions, portable boxing ring, weight room, pool room, table tennis, meeting rooms, handball court, snack bar/kitchen, park office, restroom, and outdoor preschool area.  Equipment: 1 playground 2 lighted tennis courts 1 picnic area 1 full basketball court 1 lighted Little League baseball field 1 lighted football/soccer field 1 wading pool 1 restroom skate park (future)	9	400 West Beach Ave	City of Inglewood	300	2,375 Florence/La Brea

Table 4-36. Parklands and Recreation Resources within 0.25-mile of the Proposed Project (continued)

Map No <sup>1</sup>	Name	Type of Facility	Approx. Size (acres)	Location	Regulatory Agency	Proximity to Alignment (feet)	Proximity to Nearest Station (feet)
4	Edward Vincent Jr. (Centinela) Park	Buildings: 1 Veteran's Memorial Building, 1 pool complex (Olympic size adult pool, 3-foot-deep youth training pool, toddler's wading pool, renovated bathhouse with ADA restrooms), 1 ramped community playhouse with restrooms, 1 ramped multipurpose/Girl Scout facility with restrooms, 1 outdoor Amphitheater, 1 park maintenance building.  Equipment: 5 playgrounds 8 tennis courts 3 picnic areas 2 basketball courts 2 lighted and fenced softball fields 2 lighted and fenced football/soccer fields 1 pool complex (1 Olympic regulation-size swimming pool, 1 training pool, 1 wading pool, ADA-compliant bathhouse) 6 freestanding restroom facilities 3 parking lots	55	700 Warren Ln	City of Inglewood	Adjacent	1,175 Florence/West
<b>Other Recreation</b>							
1	Museum of African-American Art	Museum	--	4005 Crenshaw Blvd	Private	80	325 Crenshaw/King

Source: CDM and TAHA, 2011

<sup>1</sup>Map numbers correspond to Figure 4-56

**Table 4-37. Public Services Within 0.25-mile of the Project**

Map No. <sup>1</sup>	Station	Address	Area of Project Served	Proximity to Alignment (feet)	Proximity to Nearest Station (feet)
<b>Police Services<sup>2</sup></b>					
2	Inglewood Police Station	1 West Manchester Blvd, Inglewood	City of Inglewood	1,225	1,900 optional Aviation/ Manchester
<b>Fire Services<sup>2</sup></b>					
2	LAFD Fire Station Number 95	10010 International Rd, Los Angeles	LAX area of Los Angeles	775	975 Aviation/ Century
3	LACoFD Fire Station Number 171	141 West Regent St, Inglewood	City of Inglewood and LA County	300	1,500 Florence/La Brea

Source: CDM and TAHA, 2011

<sup>1</sup> Map numbers correspond to Figure 4-56

<sup>2</sup> LAFD Fire Station #94 and LAPD Station are not within 0.25-mile of the project and is therefore not included in this table; however the stations serve the project area.

LAPD – Los Angeles Police Department

LAFD – Los Angeles Fire Department

LACFD – Los Angeles County Fire Department

**Table 4-38. Other Community Facilities within 0.25-mile of the Project**

Map No. <sup>1</sup>	Name	Location	Proximity to Alignment/ (feet)	Proximity to Nearest Station (feet)
<b>Educational Facilities</b>				
<b>Day Care and Pre-Schools</b>				
1	West Angeles Youth Center	Crenshaw/Exposition Blvds intersection	220	130 Crenshaw/Exposition
2	Golden Day Pre-School	6422 Crenshaw Blvd	25	2,300 Crenshaw/Slauson
3	Hyde Park Early Education Center	6428 11th Ave, Los Angeles	450	2,300 Crenshaw/Slauson
4	Crenshaw TOT Academy	5148 Crenshaw Blvd, Los Angeles	100	2,800 Crenshaw/Slauson
5	Golden Day School Inc.	4476 Crenshaw Blvd, Los Angeles	220	140 optional Crenshaw/Vernon
6	Crenshaw Montessori Academy	4914 Crenshaw Blvd, Los Angeles	50	1,300 optional Crenshaw/Vernon
7	Ivie League Christian Pre-School	4827 Crenshaw Blvd, Los Angeles	50	1,000 optional Crenshaw/Vernon
8	Learning Zone Childcare	901 E Redondo Blvd, Inglewood	125	670 Florence/West
9	Nikka Tiffany School and Day Care	7112 S Victoria Ave, Los Angeles	600	975 Florence/West