KROC COMMUNITY CENTER
CULTURAL RESOURCES TECHNICAL REPORT

Prepared for:

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SECTION 1.0
INTRODUCTION

1.1 PROBLEM STATEMENT

This Cultural Resources Technical Report was prepared to assess the potential effects of construction, operation, and maintenance of the proposed Kroc Community Center (proposed project) on cultural resources and the ability to avoid or resolve adverse effects. The proposed project would be located partially within a storm water dry retention basin and park known as Hamilton Bowl / Chittick Field, in City of Long Beach, County of Los Angeles, California. This 19-acre retention basin / park is owned and operated by the County of Los Angeles Department of Public Works, which embodies the responsibility and authority of the Los Angeles County Flood Control District.[1] Land use decisions required to accommodate the proposed project would be subject to discretionary approvals by the City of Long Beach. Acting in their capacity as lead agency under the California Environmental Quality Act (CEQA), the City of Long Beach would need to determine the potential for the proposed project to result in significant impacts, consider mitigation measures and alternatives capable of avoiding significant impacts, and take the environmental effects of the proposed action into consideration as part of their decision-making process.

1.2 PURPOSE

This Cultural Resources Technical Report provides the substantial evidence on which the required evaluation of feasibility, environmental analysis, and findings of fact in relation to cultural resources can be made. The Cultural Resources Technical Report documents the presence or absence of cultural resources that are afforded protection pursuant to CEQA and other relevant federal, state, and local statues and regulations. This Cultural Resources Technical Report was prepared as an aid to support project-planning efforts to minimize impacts to cultural resources and to provide the City of Long Beach with data with regard to the potential effects of the proposed project on cultural resources, as well as feasible avoidance and minimization measures to reduce impacts to the maximum extent practicable.

1.3 INTENDED AUDIENCE

This Cultural Resources Technical Report presents the results of the cultural resources assessment for consideration by the City of Long Beach, as the lead agency, and by trustee and responsible agencies, including the State Historic Preservation Officer and the public.

1.4 SCOPE OF THE INVESTIGATION

The analysis of cultural resources consists of a summary of the regulatory framework that guides the decision-making process to be undertaken by the City of Long Beach; a description of the methods employed to support the characterization and evaluation of cultural resources within the proposed project site; the analysis of baseline conditions for cultural resources; the potential for the proposed project to affect cultural resources; and opportunities to avoid, minimize, or mitigate the potential effects of the proposed project. The report addresses each of the environmental issues considered in

[1] County of Los Angeles Department of Public Works. March 2008. "Flood Control and Water Conservation." Available at: http://ladpw.org/wrd/report/0203/fc-wc.cfm

Appendix G of the State CEQA Guidelines for cultural resources:[2]

- Unique paleontological resources or sites or unique geologic features
- Archaeological resources
- Historical resources
- Human remains

1.5 SOURCES OF RELEVANT INFORMATION

Information used in the preparation of this Cultural Resources Technical Report was derived from background research and literature review, including published and gray literature, consultation with experts knowledgeable of the cultural resources identified as having the potential to occur within the proposed project study area, and field investigation. Sources of relevant information are cited in footnotes and compiled in the References section of this document.

1.6 WORKING DEFINITIONS

There are a number of technical terms that are used in the characterization of baseline conditions and assessment of the potential for the proposed project to result in effects to cultural resources. A glossary of terms used in this report is provided as Appendix A, *Glossary of Terms*.

[2] *California Code of Regulations*, Title 14, Division 6, Chapter 3, Section 15000–15387, Appendix G.

SECTION 2.0
PROJECT LOCATION AND DESCRIPTION

2.1 PROJECT LOCATION

The proposed Kroc Community Center (proposed project) site is located in the central part of the City of Long Beach (City) on a site known as the Hamilton Bowl / Chittick Field. The site consists of approximately 19 acres of undeveloped parcels of land that are used as a storm water dry retention basin. The proposed project site is located approximately 2 miles east of the 710 freeway, approximately 1.45 miles south of the 405 Freeway, and approximately 4.7 miles west of the 605 Freeway (Figure 2.1-1, *Regional Vicinity Map*). The site is located at 1900 Walnut Avenue, in the City of Long Beach, County of Los Angeles, California. The proposed project site is bounded by local residential streets, including East 20th Street, a small flood control area and Signal Hill to the north; a 12'0" alley between Rose Avenue and Gardenia Avenue to the east; a small strip of commercial development off East Pacific Coast Highway to the south; and Walnut Avenue to the west (Figure 2.1-2, *Project Location Map*). The Hamilton Bowl / Chittick Field site is currently owned and operated by the County of Los Angeles Department of Public Works.

The proposed project site appears on the U.S. Geological Survey (USGS) 7.5-minute series Long Beach topographic quadrangle (Figure 2.1-3, *Topographic Map*).[1] The elevation of the proposed project site ranges from approximately 3 feet to approximately 16 feet below mean seal level (msl). The proposed project site is roughly 1.87 miles north of the Pacific Ocean.

2.2 PROJECT ELEMENTS

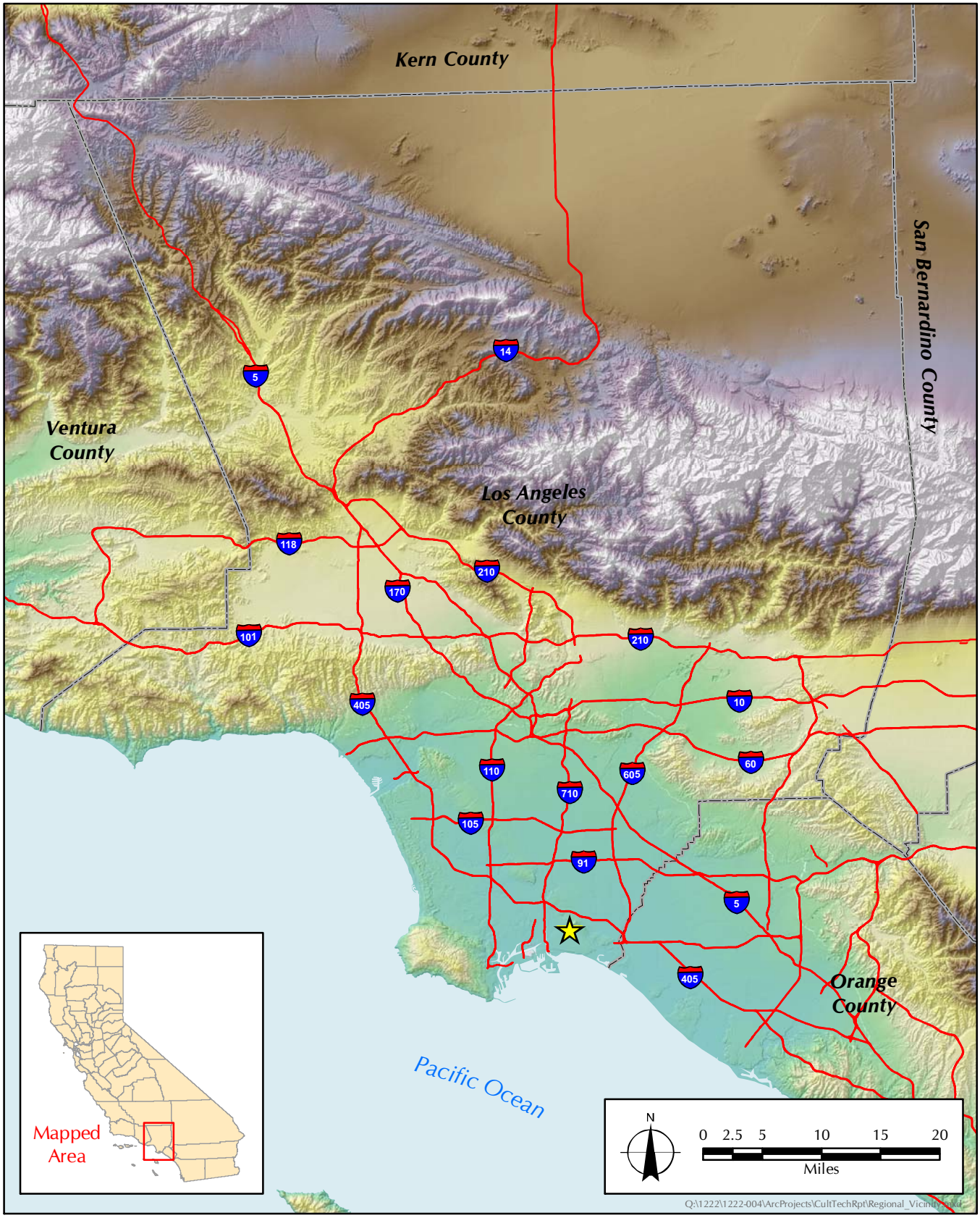
The proposed project would consist of a recreational facility that includes both indoor and outdoor components (Figure 2.2-1, *Site Plan*). Up to 7 acres of the Hamilton Bowl / Chittick Field site would be developed as the location of the proposed project, which would include a 170,536-square-foot three-building facility built atop 346,762 square feet of raised building pads. Approximately 12 acres of land located around and below the building pads would continue to serve their current function as a flood detention basin for the City of Signal Hill, California. The pump station located at the southern end of the Hamilton Bowl / Chittick Field site would be expanded and would remain in operation. The proposed Kroc Community Center and main entrance to the facility would be situated along the western side of the Hamilton Bowl / Chittick Field off Walnut Avenue. A secondary access to the proposed site would be located at Rose Avenue off East Pacific Coast Highway. In addition, there will be an emergency-only access located on 19th Street that would be used as a point of access to relieve traffic to and from the site during special events.

2.2.1 Proposed Kroc Community Center Components[2]

The indoor components intended for the proposed project would be enclosed in an approximately 170,536-square-foot, three-building, two- to four-story complex and would include the following:

[1] U.S. Geological Survey. 1964 (Photorevised 1981). 7.5-Minute Series, Long Beach, California, Topographic Quadrangle. Reston, VA.

[2] Salvation Army Southern California Division. 30 July 2007. Kroc Facilities and Program Design.



Proposed Project Location

FIGURE 2.1-1
Regional Vicinity Map

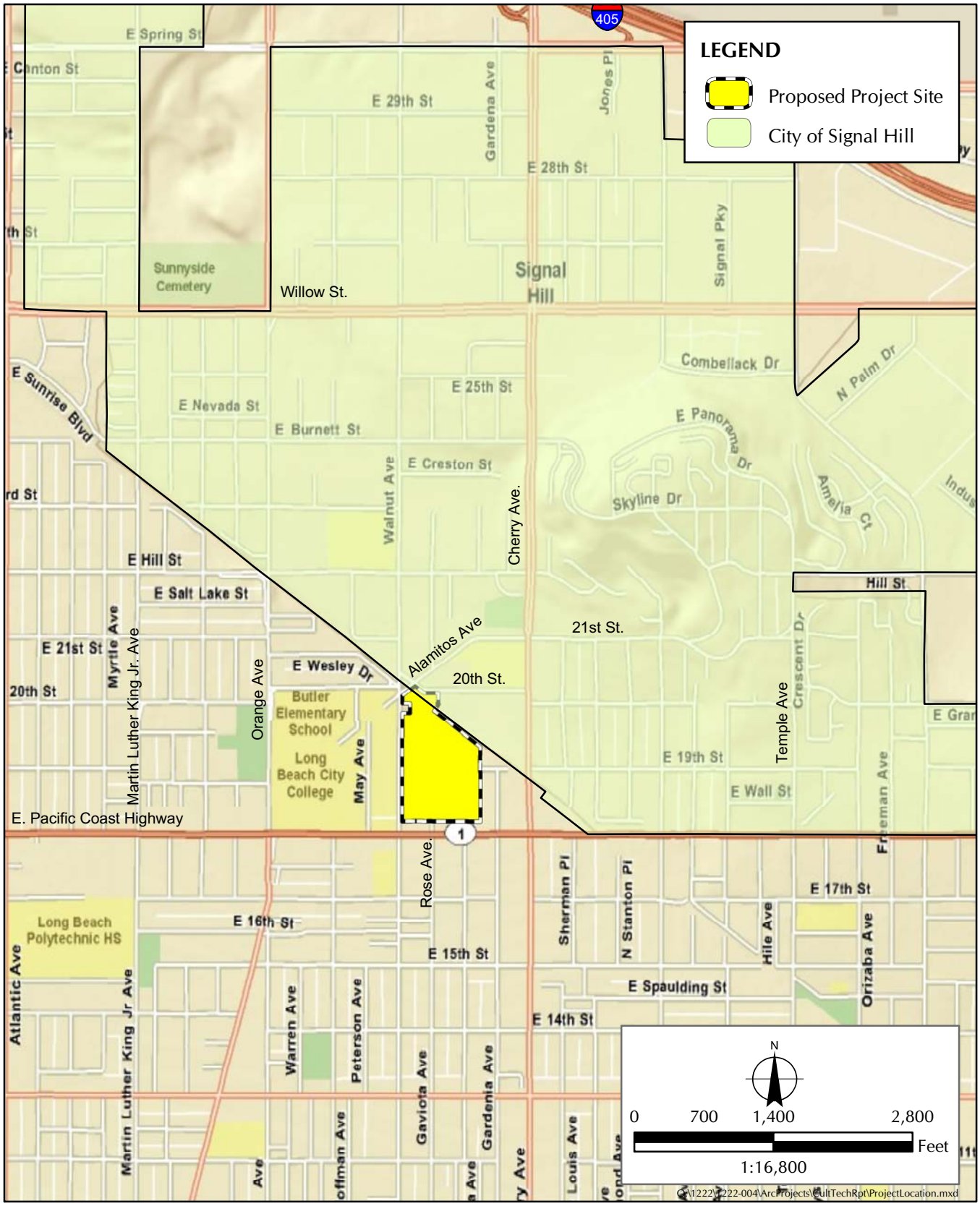
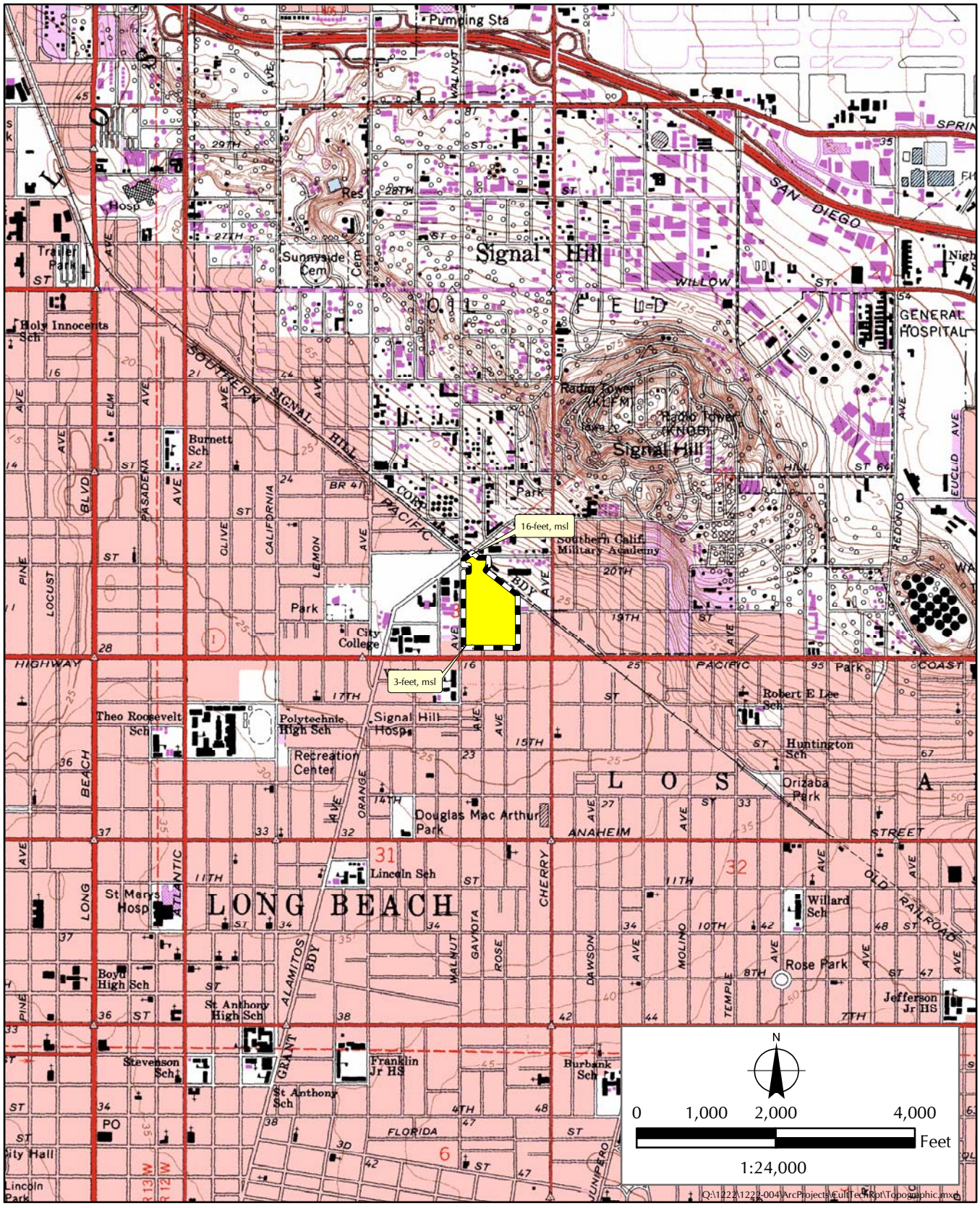


FIGURE 2.1-2

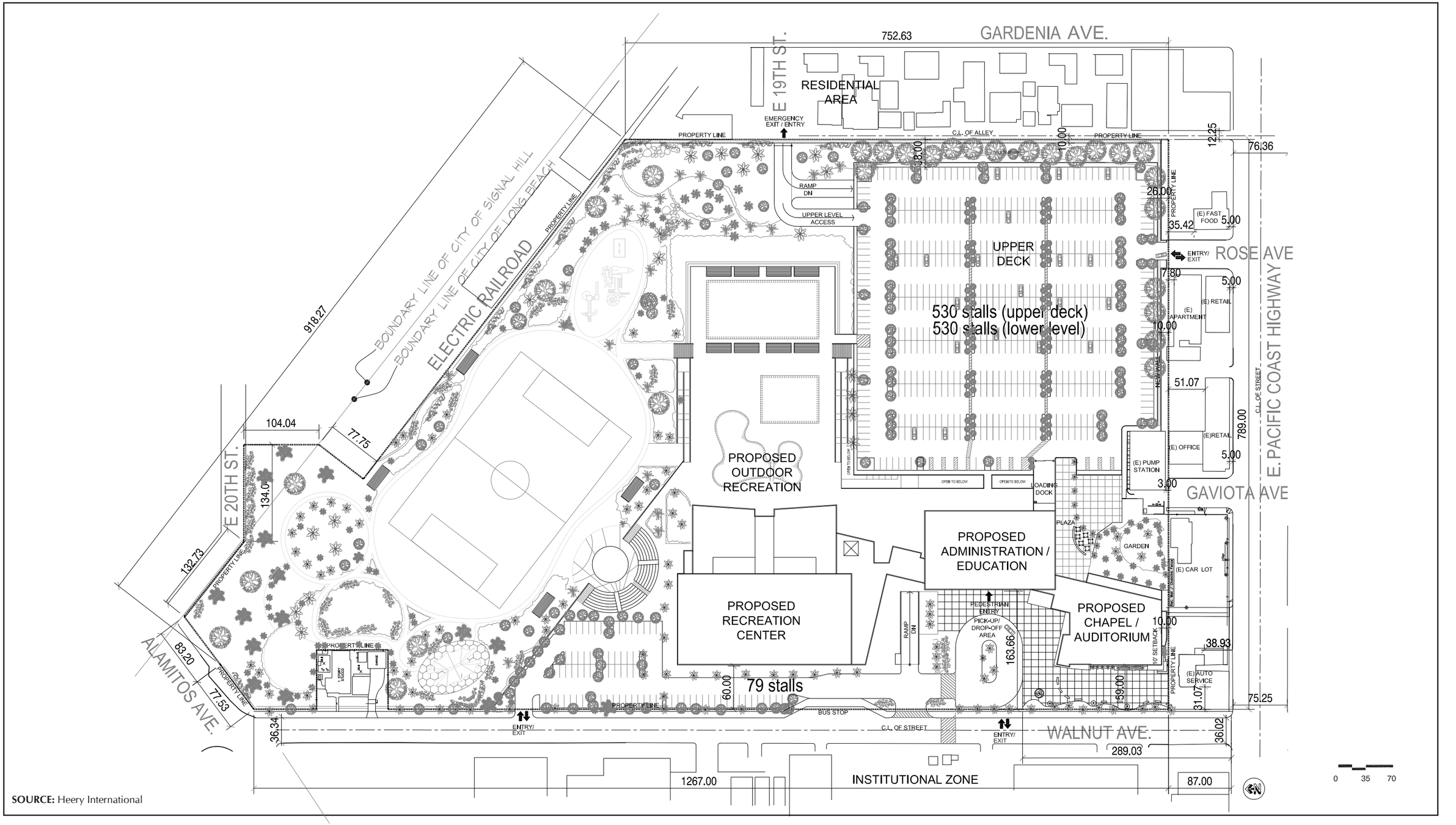
Project Location Map



Proposed Project Site

FIGURE 2.1-3

Topographic Map



SOURCE: Heery International

FIGURE 2.2-1
Site Plan

- **Chapel/Auditorium:** This roughly 12,455-square-foot structure would be located near the southwest corner of the proposed project site near East Pacific Coast Highway and Walnut Avenue. This two-story building would include a lobby, lecture halls, stage, and backstage areas.

- **Administration/Education Building:** This roughly 73,910-square-foot building would be set back from Walnut Avenue and situated off the northeast corner of the Chapel/Auditorium. This four-story building would house a drop-in daycare, a 3,500-square-foot kitchen, art studios, multipurpose rooms, classrooms, a library, a computer lab, and administrative offices.

- **Recreation Center:** This approximately 84,171-square-foot building would be located to the north of the Administration/Education Building. This two-story building would consist of a gymnasium, classrooms, a fitness center, exercise rooms, a weight room, locker rooms, a game room, and an indoor therapy pool.

The outdoor components would consist of the following:

- **Outdoor Recreation:** This space would consist of a playing field (discussed below) and 2 acres of gardens, play yards, and horticulture areas. The outdoor recreation complex would include a 50-meter pool, a warm-up pool, and a leisure pool with fountains, slides, and children's area. Other site amenities would include a playground, walking trails, a roughly 10,000-square-foot amphitheater, an outdoor climbing wall, a challenge course, an exterior patio, and a horticulture area.

- **Recreation "Soccer" Field:** This space would be a 4-acre field that would accommodate up to 5,000 spectators. It would be adjacent to a 10,000-square-foot amphitheater that would accommodate up to 750 spectators in a bowl-shaped seating area.[3]

2.2.2 Construction Scenario

While the construction of the proposed project is envisioned as a single continuous process to be completed in 29 months between the years 2009 and 2012, the construction phases for the proposed project would serve two essential stages: the reconfiguration of the existing detention basin and the construction of the proposed facility buildings and development of the associated site improvements. The 886,065-gross-square-foot proposed project would be constructed in four phases that would fall into one of the two stages. The reconfiguration of the existing detention basin would entail Phase I and Phase II. Phase I would be the demolition of existing elements on the site, and Phase II would be the earthwork required to create the building pads. Portions of the existing detention basin will be deepened between 24 and 36 inches by mass grading. The construction of the proposed facility would include Phase III, drainage improvements related to the storm water management, and Phase IV, the construction of the 170,536-gross-square-foot buildings and of the remaining 715,259-square-foot space for the parking lots, gardens, aquatic center, and sports fields.

[3] Salvation Army Southern California Division. 30 July 2007. Kroc Facilities and Program Design.

SECTION 3.0
REGULATORY FRAMEWORK

This regulatory framework identifies the federal, state, and local statutes, regulations, and guidelines that govern the identification and treatment of cultural resources and analysis of potential impacts to cultural resources. The lead agency must consider this regulatory framework when rendering decisions on projects that have the potential to affect cultural resources.

3.1 FEDERAL

3.1.1 National Historic Preservation Act of 1966[1]

Enacted in 1966, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the federal, state, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage, and created the Advisory Council on Historic Preservation (ACHP).

3.1.1.1 Section 106

Section 106 of the NHPA states that federal agencies with direct or indirect jurisdiction over federally funded, assisted, or licensed undertakings must take into account the effect of the undertaking on any historic property that is included in or eligible for inclusion in the NRHP and that the ACHP must be afforded an opportunity to comment—through a process outlined in the ACHP regulations, in Title 36 of the Code of Federal Regulations (CFR) Part 800—on such undertakings. The Section 106 process involves identification of significant historic resources within an "area of potential effect," determination if the undertaking will cause an adverse effect on historic resources, and resolution of those adverse effects through execution of a Memorandum of Agreement. In addition to the ACHP, interested members of the public—including individuals, organizations, and agencies (such as the California Office of Historic Preservation)—are provided with opportunities to participate in the process.

No federal involvement is included in the proposed project; therefore, the Section 106 process is not applicable.

3.1.1.2 National Register of Historic Places

The NRHP was established by the NHPA of 1966 as "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."[2] The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history,

[1] *United States Code*, 16 USC 470.

[2] *Code of Federal Regulations*, 36 CFR 60.2.

architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance also must possess integrity of location, design, setting, materials, workmanship, feeling, and association. A property is eligible for the NRHP if it is significant under one or more of four established criteria:[3]

Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history;

Criterion B: It is associated with the lives of persons who are significant in our past;

Criterion C: 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, or represents a significant and distinguishable entity whose components may lack individual distinction; and/or

Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history.

Ordinarily, cemeteries, birthplaces, or graves of historic figures; properties owned by religious institutions or used for religious purposes; structures that have been moved from their original locations; reconstructed historic buildings; and properties that are primarily commemorative in nature are not considered eligible for the NRHP, unless they satisfy certain conditions. In general, a resource must be 50 years old to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

3.1.2 Secretary of the Interior's Standards for the Treatment of Historic Properties

Evolving from the *Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for Applying the Standards* that were developed in 1976, the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* was published in 1995 and codified as 36 CFR 67. Neither technical nor prescriptive, these standards are "intended to promote responsible preservation practices that help protect our Nation's irreplaceable cultural resources."[4] *Preservation* acknowledges a resource as a document of its history over time and emphasizes stabilization, maintenance, and repair of existing historic fabric. *Rehabilitation* not only incorporates the retention of features that convey historic character but also accommodates alterations and additions to facilitate continuing or new uses. *Restoration* involves the retention and replacement of features from a specific period of significance. *Reconstruction*, the least used treatment, provides a basis for recreating a missing resource. These standards have been adopted, or are used informally, by many agencies at all levels of government to review projects that affect historic resources.

[3] *Code of Federal Regulations*, 36 CFR 60.4.

[4] Weeks, Kay D., and Anne E. Grimmer. 1995. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstruction Historic Buildings*. Washington, DC: U.S. Department of the Interior, National Park Service.

3.1.3 Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally funded institution housing Native American remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

3.2 STATE OF CALIFORNIA

3.2.1 California Environmental Quality Act[5]

Pursuant to the California Environmental Quality Act (CEQA), a historical resource is a resource listed in, or eligible for listing in, the California Register of Historical Resources (CRHR). In addition, resources included in a local register of historical resources or identified as significant in a local survey conducted in accordance with state guidelines also are considered historical resources under CEQA, unless a preponderance of the facts demonstrates otherwise. According to CEQA, the fact that a resource is not listed in or determined eligible for listing in the CRHR or is not included in a local register or survey shall not preclude a Lead Agency, as defined by CEQA, from determining that the resource may be a historical resource as defined in California Public Resources Code (PRC) Section 5024.1.[6] Pursuant to CEQA, a project with an effect that may cause a substantial adverse change in the significance of an historical resource may have a significant effect on the environment.[7]

CEQA also applies to effects on archaeological sites. Archaeological sites may be eligible for the CRHR and thus would qualify as historical resources under CEQA. If an archaeological site does not satisfy the criteria as a historical resource but does meet the definition of a "unique archaeological resource," it is also subject to CEQA. A unique archaeological resource is defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:[8]

(1) It contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information.

(2) It has a special and particular quality such as being the oldest of its type or the best available example of its type.

(3) It is directly associated with a scientifically recognized important prehistoric or historic event or person.

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[5] *California Public Resources Code*, Division Thirteen, Statutes 21083.2, 21084.1.

[6] *California Code of Regulations*. Title 14, Chapter 3. CEQA Guidelines. Section 15064.5(a).

[7] *California Code of Regulations*. Title 14, Chapter 3. CEQA Guidelines. Section 15064.5(b).

[8] *California Public Resources Code*, Section 21083.2(g).

3.2.2 California Register of Historical Resources

Created in 1992 and implemented in 1998, CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change."[9] Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP criteria:[10]

Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Criterion 2: It is associated with the lives of persons important in our past.

Criterion 3: It embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.

Criterion 4: It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.[11] It is possible that a resource whose integrity does not satisfy NRHP criteria still may be eligible for listing in the CRHR. Similarly, resources that have achieved significance within the past 50 years may be eligible for inclusion in the CRHR if enough time has lapsed to obtain a scholarly perspective on the events or individuals associated with the resource.[12]

3.2.3 California Historical Landmarks[13]

California Historical Landmarks are buildings, structures, sites, or places that have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value and that have been determined to have statewide historical significance by meeting at least one of the criteria listed below. The resource also must be approved for designation by the

[9] *California Public Resources Code*, Section 5024.1(a).

[10] *California Public Resources Code*, Section 5024.1(c).

[11] Office of Historic Preservation. n.d. "Technical Assistance Bulletin 6: California Register and National Register, A Comparison (for purposes of determining eligibility for the California Register)." Available at: http://www.ohp.parks.ca.gov

[12] Office of Historic Preservation. n.d. "Technical Assistance Bulletin 6: California Register and National Register, A Comparison (for purposes of determining eligibility for the California Register)." Available at: http://www.ohp.parks.ca.gov

[13] Office of Historic Preservation. Accessed 17 July 2006. "California Historical Landmarks Registration Program." Available at: http://ohp.parks.ca.gov

County Board of Supervisors or be recommended by the State Historical Resources Commission and be officially designated by the Director of California State Parks. The specific standards now in use were first applied in the designation of CHL 770. CHLs 770 and above are automatically listed in the CRHR.

To be eligible for designation as a *landmark*, a resource must meet at least one of the following criteria:

- Be the first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California)
- Be associated with an individual or group having a profound influence on the history of California
- Be a prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or be one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder

The proposed project site does not include any California Historical Landmarks.

3.2.4 California Points of Historical Interest[14]

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. California Points of Historical Interest designated after December 1997 and recommended by the State Historical Resources Commission also are listed in the CRHR. No historical resource may be designated as both a *landmark* and a *point*. If a point is subsequently granted status as a landmark, the point designation will be retired.

To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria:

- Be the first, last, only, or most significant of its type within the local geographic region (city or county)
- Be associated with an individual or group having a profound influence on the history of the local area
- Be a prototype of, or an outstanding example of, a period, style, architectural movement, or construction, or be one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder

The proposed project site does not include any California Points of Historical Interest.

[14] Office of Historic Preservation. Accessed 17 July 2006. "California Points of Historical Interest, Registrations Programs." Available at: http://ohp.parks.ca.gov

3.2.5 Native American Heritage Commission

Section 5097.91 of the PRC established the Native American Heritage Commission (NAHC), whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Section 5097.98 of the PRC specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

There are no listed Native American Sacred Lands within the proposed project site.

3.2.6 Government Code Sections 6254(r) and 6254.10

These sections of the PRC were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the NAHC." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

3.2.7 Health and Safety Code Sections 7050 and 7052

Health and Safety Code Section 7050.5 declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground-disturbing activities must cease and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

3.2.8 Penal Code Section 622.5

Penal Code Section 622.5 provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands but specifically excludes the landowner.

3.2.9 Public Resources Code Section 5097.5

PRC Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

3.3 LOCAL

3.3.1 City of Long Beach Municipal Code

The City of Long Beach Cultural Heritage Commission Ordinance (Title 2, Chapter 2.63) establishes a landmark designation process, as well as the requirement for permits and/or certificates of appropriateness issued by the Cultural Heritage Commission for all "exterior physical changes" to landmark structures or contributors to designated historic districts. As of October 2008, 130 landmarks and 17 historic districts have been designated.

A resource must meet one or more of the following criteria of significance[15] to be designated as a landmark or landmark district:

- (A) It possesses a significant character, interest, or value attributable to the development, heritage, or cultural characteristics of the city, the Southern California region, the state or the nation.
- (B) It is the site of an historic event with a significant place in history.
- (C) It is associated with the life of a person or persons significant to the community, city, region or nation.
- (D) It portrays the environment in an era of history characterized by a distinctive architectural style.
- (E) It embodies those distinguishing characteristics of an architectural type or engineering specimen.
- (F) It is the work of a person or persons whose work has significantly influenced the development of the city or the Southern California region.
- (G) It contains elements of design, detail, materials, or craftsmanship that represent a significant innovation.
- (H) It is a part of or related to a distinctive area and should be developed or preserved according to a specific historical, cultural or architectural motif.
- (I) It represents an established and familiar visual feature of a neighborhood or community due to its unique location or specific distinguishing characteristic.
- (J) It is, or has been, a valuable information source important to the prehistory or history of the city, the Southern California region, or the state.
- (K) It is one of the few remaining examples in the city, region, state, or nation possessing distinguishing characteristics of an architectural or historical type.[16]

[15] City of Long Beach, Cultural Heritage Commission Ordinance, Title 2, Chapter 2.63.050.

[16] Two additional criteria relating to the designation of historic trees as landmarks have recently been added to the City of Long Beach Municipal Code, but they are not relevant to this report and were excluded for that reason.

SECTION 4.0
METHODOLOGY

This section of the Cultural Resources Technical Report describes the methods employed in the characterization and evaluation of cultural resources at the proposed project site. The study methods were designed to provide the substantial evidence required to address the scope of analysis recommended in Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines[1] and policies related to cultural resources, paleontological resources, archaeological resources (prehistoric and historic), historical resources, Native American sacred sites, and human remains.

4.1 PALEONTOLOGICAL RESOURCES

The potential to yield paleontological resources within the approximately 19-acre proposed project site was assessed in relation to a three-tier probability analysis:

- **High:** Sedimentary geologic units and other geologic units that have yielded unique paleontological resources
- **Moderate:** Older alluvium geologic units
- **Low to none:** Younger alluvium and metamorphic and igneous geologic units

The potential presence of paleontological resources within the proposed project site and vicinity was determined through a records search at the Natural History Museum of Los Angeles County (NHMLAC) (Appendix B, *Paleontological Resources Records Search Correspondence*). The records search consisted of review of the paleontological locality and specimen data collection for the proposed project site from the NHMLAC.[2] In addition, the Geologic Map of the Long Beach 30' × 60' Quadrangle, California,[3] was reviewed to identify the rock units that underlay the proposed project site and to ascertain their potential to yield paleontological resources.

4.2 ARCHAEOLOGICAL AND HISTORICAL RESOURCES

The methodology undertaken to identify and evaluate archaeological and historical resources was designed to accomplish the following goals:

- Identification of previously known, recorded, and/or designated resources
- Identification of potentially significant resources
- Evaluation of the significance of properties using established criteria within the framework of a historic context, in accordance with the Secretary of the Interior's Standards for Evaluation

[1] *California Code of Regulations*. Title 14, Division 6, Chapter 3, Section 15000–15387, Appendix G.

[2] McLeod, Samuel A. 13 November 2007. "Vertebrate Paleontology Section, Natural History Museum of Los Angeles County, Los Angeles, California." Letter response to Amy Commendador-Dudgeon, Sapphos Environmental, Inc., Pasadena, CA.

[3] Saucedo, G.J., H.G. Greene, M.P. Kennedy, and S.P. Bezore. 2003. Geologic Map of the *Long Beach* 30' x 60' Quadrangle, California, Version 1.0. California Department of Conservation, California Geological Survey.

4.2.1 Record Search and Literature Review

Preparation of this report included the use of information housed at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton, one of the 12 independent centers operated under contract to the Office of Historic Preservation for the purpose of maintaining the federally and state-mandated California Historical Resources Inventory (HRI). The SCCIC records search was conducted by Sapphos Environmental, Inc. cultural resources staff.

A literature review was undertaken to determine if the proposed project would have the potential to adversely affect known archaeological and historical resources. Published and unpublished literature was reviewed. An archaeological and historical resources records search for the proposed project site and surrounding 1-mile radius was conducted in October 2007 by Sapphos Environmental, Inc. staff and architectural historians at SCCIC (Figure 4.2.1-1, *Records Search Study Area*). This search included a review of all known relevant cultural resource surveys and excavation reports and examination of the 2007 editions of the HRI,[4] the National Register of Historic Places (NRHP),[5] the listing of California Historic Landmarks (CHL),[6] and the California Points of Historical Interest (CPHI).[7]

Additional research was conducted in public records and a number of repositories, including building permits, as-built plans and drawings of the Low-flow Pump Station available at the County of Los Angeles Department of Public Works, historical newspaper clippings indexed by ProQuest Newspaper Database, and historical aerial maps and photographs.

4.2.2 Historical Resources Evaluation

An intensive-level survey of the proposed project site was performed between October 2007 and November 2007. The goals of the survey were to identify any buildings, structures, objects, or districts on or adjacent to the proposed project site that meet the CEQA definition of a historical resource. The survey was conducted in accordance with the *Instructions for Recording Historical Resources*[8] and *National Register Bulletin 24*, "Guidelines for Local Surveys."[9] Each building and structure was inspected, photographed, and documented. Character-defining features were identified and assessed in accordance with *Preservation Brief No. 17*, "Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character."[10] This information was recorded on State of California Department of Parks and Recreation Historic Resources Inventory forms (DPR 523 series)

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[4] California Office of Historic Preservation. 2007. *California Historical Resources Inventory, 2004*. Fullerton, CA: California State University, Fullerton, Department of Anthropology, South Central Coastal Information Center.

[5] California Office of Historic Preservation. 2007. *National Register of Historic Places*. Fullerton, CA: California State University, Fullerton, Department of Anthropology, South Central Coastal Information Center.

[6] California Office of Historic Preservation. 2007. *California Historic Landmarks*. Fullerton, CA: California State University, Fullerton, Department of Anthropology, South Central Coastal Information Center.

[7] California Office of Historic Preservation. 2007. *California Points of Historical Interest*. Fullerton, CA: California State University, Fullerton, Department of Anthropology, South Central Coastal Information Center.

[8] Office of Historic Preservation. March 1995. *Instructions for Recording Historical Resources*. Sacramento, CA. Available at: http://ohp.parks.ca.gov

[9] U.S. Department of the Interior, National Park Service. Accessed 18 August 2006. *National Register Bulletin 24. Guidelines for Local Surveys: A Basis for Preservation Planning*. Washington, DC. Available at: http://www.cr.nps.gov/nr/publications/bulletins/nrb24/chapter1.htm

[10] Nelson, Lee H., FAIA. September 1988. *Preservation Brief No. 17: Architectural Character: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character*. Washington, DC: U.S. Department of the Interior, National Park Service, Technical Preservation Services. Available at: www.cr.nps.gov/hps/tps/briefs/brief17.htm

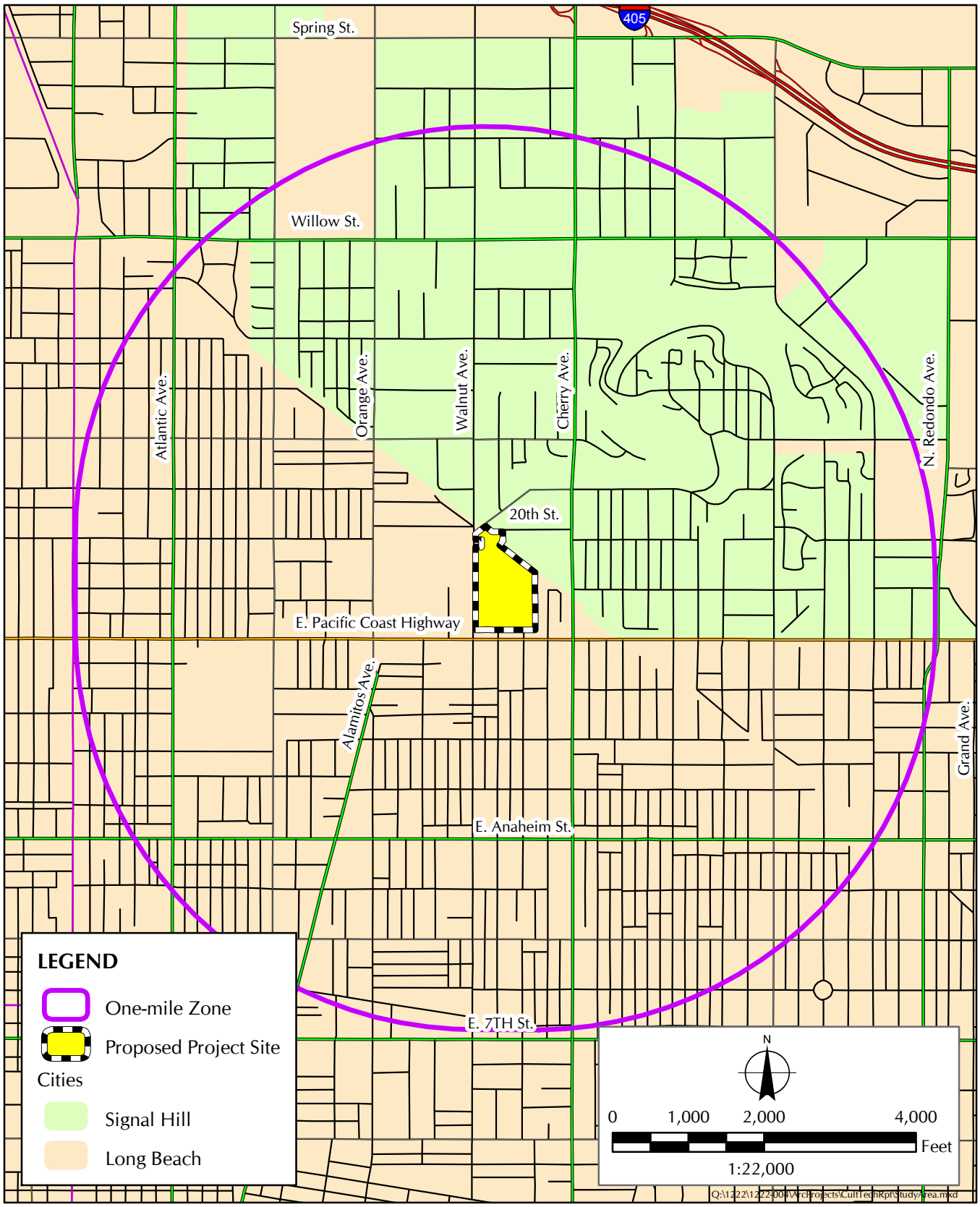

FIGURE 4.2.1-1

Records Search Study Area

(Appendix C, *California Historic Resources Inventory DPR 523 Forms*). A historic context was developed to provide a framework for evaluation. Resources were evaluated using the criteria of significance for listing in the NRHP and California Register of Historical Resources (CRHR). The results of the survey are presented in Section 5, *Results*.

4.2.3 Consultation

This Cultural Resources Technical Report also documents coordination with several different agencies and entities:

- County of Los Angeles Department of Public Works
- State of California Native American Heritage Commission (NAHC)
- Natural History Museum of Los Angeles County (NHMLAC)
- City of Long Beach

Coordination with the NAHC to ascertain the presence of known sacred sites or human remains within the proposed project boundary was initiated by Sapphos Environmental, Inc. in November 2007 (Appendix D, *Native American Consultation Correspondence*).[11] On the recommendation of the NAHC, Sapphos Environmental, Inc. sent letters to eight Native American contacts classified by the NAHC as potential sources of information related to cultural resources in the vicinity of the property. To date, none of the Native American individuals contacted by Sapphos Environmental, Inc. have responded to these letters of inquiry.

4.3 HUMAN REMAINS

The potential presence of human remains, including those interred outside of formal cemeteries, was assessed through the inquiry to the NAHC and examination of historic topographic maps[12] for the presence of cemetery icons. In addition, the history of the property was reviewed to determine if any burials were recorded on the site.

4.4 PERSONNEL

Sapphos Environmental, Inc. cultural resources manager, Ms. Leslie Heumann, supervised the work efforts. Ms. Amy Commendador-Dungeon and Mr. Clarus Backes prepared the archaeological and paleontological sections of this report. Ms. Shannon Carmack and Ms. Laura Carias prepared the historical resources sections of this report. Ms. Carias assisted with research and project coordination. Ms. Heumann, Ms. Carmack, and Ms. Carias meet the Secretary of the Interior's Professional Qualification Standards for Architectural History. Ms. Commendador-Dungeon and Mr. Backes meet the Secretary of the Interior's Professional Qualification Standards for Archaeology.

[11] Singleton, Dave, Program Analyst, California Native American Heritage Commission, Sacramento, CA. 8 November 2007. Letter response to Christina Poon, Sapphos Environmental, Inc., Pasadena, CA.

[12] Environmental Data Resources, Inc. 2007. Historical Topographic Map Report for Kroc Community Center, Long Beach, CA 90806. Inquiry Number 2015389.1. Milford, CT.

SECTION 5.0
RESULTS

This section of the Cultural Resources Technical Report characterizes and evaluates the potential for construction, operation, and maintenance of the proposed Kroc Community Center (proposed project) to affect cultural resources within the proposed project site. This section is organized according to the categories of resources specified in Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines: paleontological resources, archaeological resources, historical resources, and human remains. Although the discipline of archaeology addresses both prehistoric and historic archaeological resources, for clarity of analysis and presentation, prehistoric period resources are presented as archaeological resources, and historic period resources are presented as historical resources.[1] The discussion of each resource category consists of a context that provides background information and a framework for evaluation, a resource characterization that describes previously identified cultural resources and existing cultural resources, an impact analysis that includes significance thresholds and an itemization of potential impacts, and recommended mitigation measures that would avoid or reduce potential project impacts.

5.1 PALEONTOLOGICAL RESOURCES

5.1.1 Paleontological Context

The geology of the proposed project site consists of a thin layer of Quaternary Alluvium underlain by surficial sediments of older Quaternary terrace deposits, primarily terrestrial but with some marine components (Pico Formation). This terrace deposit is considered to have high sensitivity for paleontological resources.[2]

5.1.2 Paleontological Resources Characterization

The results of the records search indicate that there are no known vertebrate fossil localities recorded within the proposed project site. However, the proposed project site is located within an area with a high level of sensitivity to contain unique paleontological resources. It is not in the vicinity of recognized unique geologic features. The geology of the proposed project site is composed of thin surface layer of Quaternary Alluvium and is underlain by older Quaternary terrace deposits that have the potential to contain significant fossil vertebrates. Although the actual depth of these potentially sensitive terrace deposits within the proposed project site is unknown, the location of the closest known previously recorded fossil, identified as LACM 7493, indicates that these deposits may be found very close to the surface. LACM 7493 was found almost directly east of the southern portion of the proposed project site along East Pacific Coast Highway just west of Grand Avenue and consisted of a specimen of fossil camel (*Camelops*) found at a depth of 8.5 feet below the surface. Several other specimens have also been found in the nearby area. LACM 3260, located east-southeast of the proposed project site along Anaheim Street, produced a specimen of fossil bison (*Bison*) at an unknown depth. LACM 1021 (same as LACM 1932) and

[1] The prehistoric period is defined as the era prior to European contact with native populations, which occurred around 1769, when Gaspar de Portolá made the first attempt to colonize the region.

[2] McLeod, Samuel A. 13 November 2007. "Vertebrate Paleontology Section, Natural History Museum of Los Angeles County, Los Angeles, California." Letter response to Amy Commendador-Dudgeon, Sapphos Environmental, Inc., Pasadena, CA.

LACM 3245 were found just east of the north end of the proposed project site along Spring Street near the intersection with Cherry Avenue. LACM 1021 consisted of a fossil mammoth (*Mammuthus*) from an unknown depth, and LACM 3245 produced extensive fossil fish fauna at 37 feet below the surface. These known fossil localities in older Quaternary terrace deposits indicate that the proposed project site has the potential to contain significant fossil vertebrates.[3]

5.1.3 Paleontological Impacts Analysis

5.1.3.1 Significance Threshold

Appendix G of the State CEQA Guidelines indicates that a project may have a significant effect on the environment if it would directly or indirectly destroy a unique paleontological resource or a unique geological feature.

5.1.3.2 Impacts

The proposed project site is located within an area underlain by older Quaternary terrace deposits, which are considered to have high sensitivity for paleontological resources and, therefore, have the potential to reveal important vertebrate fossils that can contribute to the life history of the area. While the precise depth of these older Quaternary terrace deposits within the proposed project site is unknown, they are likely on or near the surface of the Hamilton Bowl, a manmade basin. Therefore, implementation of the proposed project is anticipated to result in excavations into these older Quaternary terrace deposits. As a result, the proposed project has the potential to result in significant impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource, therefore requiring the consideration of mitigation measures to reduce impacts to below the level of significance.

5.1.4 Paleontological Mitigation Measures

5.1.4.1 Measure Cultural-1

The impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource from the proposed project shall be reduced to below the level of significance through the salvage and disposition of paleontological resources that result from all earthmoving activities involving disturbances of the older Quaternary terrace deposits. Ground-disturbing activities include, but are not limited to, drilling, excavation, trenching, and grading. If paleontological resources are encountered during ground-disturbing activities, the City of Long Beach shall require and be responsible for salvage and recovery of those resources consistent with standards for such recovery established by the Society of Vertebrate Paleontology.[4]

Because the precise depth of strata considered highly sensitive for paleontological resources is unknown, the City of Long Beach shall be responsible for and ensure that construction monitoring by qualified paleontological monitor be implemented during all earthmoving activities that involve

[3] McLeod, Samuel A. 13 November 2007. "Vertebrate Paleontology Section, Natural History Museum of Los Angeles County, Los Angeles, California." Letter response to Amy Commendador-Dudgeon, Sapphos Environmental, Inc., Pasadena, CA.

[4] Society of Vertebrate Paleontology. Accessed 11 December 2008. "Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines." Available at: http://www.vertpaleo.org/society/polstatconformimpactmigig.cfm.

disturbance of native soil (i.e., soil that has not been artificially introduced and has not accumulated through the Hamilton Bowl's function as a flood control basin). The paleontological monitor shall coordinate a preconstruction briefing to provide information regarding the protection of paleontological resources. Construction personnel shall be trained in procedures to be followed in the event that a fossil site or fossil occurrence is encountered during construction. An information package shall be provided for construction personnel not present at the initial preconstruction briefing.

Should a potentially unique paleontological resource be encountered, a qualified paleontologist will be contacted and retained by the City of Long Beach. The Society for Vertebrate Paleontology defines a *qualified paleontologist* as

> A practicing scientist who is recognized in the paleontologic community and is proficient in vertebrate paleontology, as demonstrated by:
>
> 1. Institutional affiliations or appropriate credentials,
> 2. Ability to recognize and recover vertebrate fossils in the field,
> 3. Local geological and biostratigraphic expertise,
> 4. Proficiency in identifying vertebrate fossils, and
> 5. Publications in scientific journals."[5]

If fossil localities are discovered, the paleontologist shall proceed according to guidelines offered by the Society for Vertebrate Paleontology.[6] This includes the controlled collection of fossil and geologic samples for processing, screen washing to recover small specimens (if applicable), and specimen preparation to a point of stabilization and identification.

All significant specimens collected shall be appropriately prepared, identified, and catalogued prior to their placement in a permanent accredited repository, such as the Natural History Museum of Los Angeles County. The qualified paleontologist shall be required to secure a written agreement with a recognized repository, regarding the final disposition, permanent storage, and maintenance of any significant fossil remains and associated specimen data and corresponding geologic and geographic site data that might be recovered as a result of the specified monitoring program. The written agreement shall specify the level of treatment (e.g., preparation, identification, curation, and cataloguing) required before the fossil collection would be accepted for storage. In addition, a technical report shall be completed. If the fossil collection is unable to be placed in an accredited repository, the collection may be donated by the City of Long Beach to local schools for educational purposes.

Daily logs shall be kept by the qualified paleontological monitor during all monitoring activities. The daily monitoring log shall be keyed to a location map to indicate the area monitored, the date, and assigned personnel. In addition, this log shall include information of the type of rock encountered, fossil specimens recovered, and associated specimen data. Within 90 days of the

[5] Society of Vertebrate Paleontology. Accessed 11 December 2008. "Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines." Available at: http://www.vertpaleo.org/society/polstatconformimpactmigig.cfm.

[6] Society of Vertebrate Paleontology. Accessed 11 December 2008. "Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines." Available at: http://www.vertpaleo.org/society/polstatconformimpactmigig.cfm.

completion of any salvage operation or monitoring activities, a mitigation report shall be submitted to the Historic Preservation Office/Officer for the City of Long Beach with an appended and itemized inventory of the specimens. The report and inventory, when submitted to the City of Long Beach, signify the completion of the program to mitigate impacts to paleontological resources.

Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach.

5.2 ARCHAEOLOGICAL RESOURCES

5.2.1 Archaeological Context

5.2.1.1 Ethnographic Context

At the time of contact, the Native American group subsequently known as the Gabrielino tribe occupied nearly the entire basin comprising the Counties of Los Angeles and Orange. Named after the Mission San Gabriel, the Gabrielino are thought to have been one of the two wealthiest and largest ethnic groups in aboriginal Southern California,[7] the other being the Chumash. The affluence of the Gabrielino was largely due to the wealth of natural resources within the land base they controlled, which included the rich coastal areas between Topanga Canyon and Aliso Creek, and the offshore islands of San Clemente, San Nicolas, and Santa Catalina. Inland Gabrielino territory included the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers, and was bounded on the north by the San Gabriel Mountains, extended to the east to the area of the current-day City of San Bernardino, and bounded on the south by the Santa Ana Mountains.[8]

Gabrielino language belonged to the Takic family of the Uto-Aztecan linguistic stock and comprised four to six distinct dialects.[9,10] Ancestors of the ethnographically described Gabrielino are believed to have arrived in the Los Angeles Basin around 500 BC, eventually establishing permanent settlements and displacing a preexisting population.[11] Little is known of Gabrielino social and political organization. Gabrielino communities were autonomous, comprising several related, nuclear families and led by hereditary chiefdom.[12] Bean and Smith argue for the existence of at least three hierarchically ordered social classes among the Gabrielino: an elite class consisting of chiefs and their immediate families; an economically established, hereditary middle class; and a lower class of individuals engaged in ordinary socioeconomic pursuits.[13] Territorial boundaries

[7] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 538.

[8] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 538.

[9] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 538.

[10] Kroeber, A.L. 1925. *Bureau of American Ethnology Bulletin 78*. "Handbook of the Indians of California." Washington, DC: Smithsonian Institution, p. 620.

[11] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 540.

[12] Kroeber, A.L. 1925. *Bureau of American Ethnology Bulletin 78*. "Handbook of the Indians of California." Washington, DC: Smithsonian Institution, p. 633.

[13] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 543.

were marked and controlled by both individuals and villages.[14,15] Many researchers assert that the Gabrielino cremated their dead until the mission era, when the Spanish imposed interment,[16,17] although precontact cemeteries have been excavated in the area.[18]

5.2.1.1.1 Subsistence and Trade

The Gabrielino practiced a hunter-gatherer subsistence strategy utilizing large primary settlements and smaller, seasonal, resource procurement camps. Hunting involved both large and small game, including deer, rabbit, squirrel, snake, rat, and a wide variety of insects. Hunting on land was carried out with the bow and arrow, deadfalls, snares, and traps. Smoke and throwing clubs were used to hunt burrowing animals. Some meat taboos were held by the Gabrielino: bear, rattlesnake, stingray, and raven were not consumed because these animals were believed to be messengers of the god Chingichngish.

An important part of the seasonal round for inland Gabrielino groups was the establishment of shell-gathering camps along the coast north of San Pedro during winter months.[19] In addition, aquatic animals—such as fish, whales, seals, and sea otters—constituted an important part of the diet of coastal populations and were hunted with harpoons, spear throwers, and clubs.[20] Although fishing generally took place along rivers and from shore, open-water fishing between the mainland and the islands was also practiced using boats made from wood planks and asphalt. Gabrielino fishing equipment also included fishhooks made of shell, nets, basketry traps, and poison substances obtained from plants.[21]

A wide variety of plant foods were consumed by the Gabrielino. Most important of these were acorns, which are rich in nutrients and have a high content of fiber and fat. Other plants consumed by the Gabrielino included the seeds of the islay (*Prunus ilicifolia*), which were ground into a meal, and the seeds and shoots of the chía (*Salvia columbariae*), which were eaten raw, made into loaves, or mixed with water to make a beverage. Roots and bulbs were included in the diet of mainland and island groups, along with clover, wild sunflower seeds, and cholla seeds. Wild tobacco was used for medicinal purposes and as a sedative and narcotic.[22]

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[14] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 543.

[15] McCawley, W. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Banning, CA: Malki Museum Press, p. 25.

[16] Reid, Hiram A. 1895. *History of Pasadena*. Pasadena, CA: Pasadena History Company, p. 31.

[17] Kroeber, A.L. 1925. *Bureau of American Ethnology Bulletin 78*. "Handbook of the Indians of California." Washington, DC: Smithsonian Institution, p. 633.

[18] Walker, Edwin F. 1951. A Cemetery at the Sheldon Reservoir Site in Pasadena. In: *Five Prehistoric Archaeological Sites in Los Angeles County, California*. Los Angeles, CA: Southwest Museum, pp. 70–80.

[19] McCawley, W. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Banning, CA: Malki Museum Press, p. 27.

[20] McCawley, W. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Banning, CA: Malki Museum Press, pp. 116–117, 121, 126.

[21] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 546.

[22] McCawley, W. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Banning, CA: Malki Museum Press, pp., 128–131.

The Gabrielinos engaged in trade among themselves and with other groups. Archaeological evidence suggests that Uto-Aztecan-speaking groups such as the Gabrielino inhabited San Nicolas Island by 8,500 years ago; by 5,000 years ago, the inhabitants of the island were involved in an exchange network of symbolic items and raw materials.[23] On Santa Catalina Island, a steatite (soapstone) "industry" developed. This rock is abundant on the island and was widely exported to mainland Gabrielino as raw material for artistic or ritualistic objects, as well as for functional objects, such as bowls, mortars, pestles, comals, and arrow shaft straighteners.[24] In exchange, the island inhabitants received acorns, different types of seeds, obsidian, and deerskin, from both mainland Gabrielino and other inland groups, such as the Serrano. Coastal people exchanged shell and shell beads, dried fish, sea otter pelts, and salt.

5.2.1.1.2 Settlement

Early Spanish accounts indicate that the Gabrielino lived in permanent villages with a population ranging from 50 to 200 individuals, and that in 1770, total Gabrielino population within the Los Angeles Basin exceeded 5,000 people.[25,26] Several types of structures characterized the Gabrielino villages: single-family homes took the form of domed circular structures averaging 12 to 35 feet in diameter and covered with tule, ferm, or carrizo, while communal structures measured more than 60 feet in diameter and could house three or four families. Sweathouses, menstrual huts, and ceremonial enclosures were also common features of many villages.[27, 28]

Archaeological evidence suggests that several Gabrielino communities may have been present in the City of Long Beach area prior to Spanish contact and that each community may have controlled an area up to 10 square miles in size. These areas may have been shaped irregularly, with each consisting of a small area of coastline attached to a larger inland area that included riparian and chaparral habitats, thus allowing a diversified economy within a fairly small geographic area.[29] Among the best-researched Gabrielino communities in the City of Long Beach was Puvungna, a large settlement and important ceremonial site that was probably located approximately 3½ miles southeast of the proposed project site, in the area historically occupied by Rancho Los Alamitos and currently occupied by California State University, Long Beach (CSULB).[30] Puvungna probably served as a ritual center for Gabrielino communities in the region; the village is thought to be the origin of the Chingichngish doctrine, a historic-period religion based on rituals involving

[23] Arnold, J.E., M.R. Walsh, and S.E. Hollimon. 2004. The Archaeology of California. *Journal of Archaeological Research*, *12*(1): 1–73.

[24] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, pp. 542, 547.

[25] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 540.

[26] McCawley, William. 1996. *The First Angelinos*. Banning, CA: Malki Museum Press, p. 25.

[27] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 542.

[28] McCawley, William. 1996. *The First Angelinos*. Banning, CA: Malki Museum Press, p. 29.

[29] Grenda, D.R., and J.H. Atschul. 2002. "A Moveable Feast: Isolation and Mobility Among Southern California Hunter Gatherers." In Islands and Mainlanders: Prehistoric Context for the Southern California Bight, eds. J.H. Atschul and D.R. Grenda. Tucson, AZ: SRI Press, pp. 143–144.

[30] McCawley, W. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Banning, CA: Malki Museum Press, p. 71.

hallucinogenic *datura*, or jimsonweed.[31] Sites associated with Puvungna were added to the National Register of Historic Places (NRHP) in 1974 and 1982. Since the mid-1960s, efforts by CSULB to build on undeveloped portions of the campus thought to lie within the boundaries of Puvungna have been contested through lawsuits and protests by local Gabrielino groups.

5.2.1.2 Prehistoric Regional and Local Chronology

Because of the relatively long record of Euro-American impact to the Los Angeles Basin, much of the material record associated with the prehistoric ancestors of the Gabrielino has not been available to modern archaeological research. Thus, culture-historical chronologies applied to the area have been more or less borrowed from better-known adjacent regions and particularly from coastal and desert areas. Although sites within the region clearly show influence from both coastal and desert groups, this report primarily follows the broader chronology devised by King[32] and refined by Arnold[33] for the coastal areas (Table 5.2.1.2-1, *Coastal Regional Chronology*). Their chronology is based on changes and trends in shell beads generally associated with burial assemblages, on subsistence and settlement patterns, and on analyses of the microlithic industry in Chumash territory.

TABLE 5.2.1.2-1
COASTAL REGIONAL CHRONOLOGY

Epoch	Coastal Region	Dates
Middle to Late Holocene	Early Period	Circa 5500 to 600 BC
Late Holocene	Middle Period	Circa 600 BC to AD 1150
Late Holocene	Transitional Period	AD 1150 to 1300
Late Holocene	Late Period	AD 1300 to Historic Period (post-1782)

5.2.1.2.1 Early Period (5500–600 BC)

The latter part of the Early Period is characterized by high numbers of ground stone implements, such as manos (handstones) and metates (milling slabs). These artifacts suggest that plant foods, and particularly hard seeds, increasingly became dietary staples during this period.[34] Grave goods from areas throughout California suggest that relatively egalitarian social systems prevailed during the Early Period.

5.2.1.2.2 Middle Period (600 BC–AD 1150)

During the Middle Period, changes occurred in the types of plant foods exploited and in the technologies used to process them. Yucca buds and acorns were processed through roasting or

[31] Bean, L.J., and S.B. Vane. 1978. "Cults and Their Transformations." In *Handbook of North American Indians, Vol. 8: California*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, p. 669.

[32] King, Chester D. 1990. *Evolution of the Chumash Society: A Comparative Study of Artifacts Used for Social System Maintenance in the Santa Barbara Channel Region before A.D. 1804*. New York: Garland.

[33] Arnold, Jeanne, E. 1992. "Complex Hunter-Gatherer-Fishers of Pre-historic California: Chiefs, Specialists, and Maritime Adaptations of the Channel Islands." In *American Antiquity*, *vol.* 57. Washington, DC: Society for American Archaeology, pp. 60–84.

[34] King, Chester D., Charles Smith and Tom King. 1974. *Archaeological Report Related to the Interpretation of Archaeological Resources Present at Vasquez Rocks County Park*. Prepared for County of Los Angeles Department of Parks and Recreation, p. 44.

leaching techniques, allowing the consumption of these otherwise inedible plants. The introduction of these fleshy foods to the diet is signaled by technological changes: the use of portable milling equipment (manos and metates) used in the processing of hard seeds apparently declined, while permanent milling features such as bedrock mortars and pestles increased in frequency. As population densities and sedentism increased, food storage became an increasingly common practice. King et al. interpret differing quantities and qualities of grave goods among burials in several Southern California sites as evidence that social differentiation may have increased during the Middle Period and then declined during the subsequent Transitional and Late Periods.[35] The Middle Period also apparently brought a shift in the production of shell beads, with *Haliotis* and *Olivella* beads changing from rectangular to circular varieties. Overall, there was an increase in the variety of ornaments present in Southern California sites at this time,[36] although bead production did not become a form of craft specialization per se until later periods.[37]

5.2.1.2.3 Transitional Period (AD 1150–1300)

The end of the Middle Period and the beginning of the Transitional Period are characterized by the nucleation of previously independent villages. This time also marks the appearance of simple chiefdoms in Chumash territory, characterized by complex socioeconomic relationships, hereditary inequality, and defined leadership. This higher complexity is evidenced in the archaeological record by the presence of craft specialization, advanced boating technology, extensive exchange networks, and subsistence patterns. Craft specialization is represented in microblade production and in increased manufacturing of shell beads from the thickest part (the callus) of the *Olivella* shells. Toward the end of the Transitional Period and beginning of the Late Period, *Olivella* callus beads began to be used as currency in the exchange system. Although beads were produced in coastal areas, changes in bead production also were reflected inland as a result of trading systems.[38] The development of a sophisticated water craft, the plank canoe or *tomol*, intensified existing trade networks among the islands and mainland, thus affecting exchange throughout inland California.

5.2.1.2.4 Late Period (AD 1300–1782) and Historic Period (Post-1782)

During the Late Period, the trade networks continued to expand among islanders and between coastal and inland populations. In coastal areas, production of beads and microliths increased, while standardization of manufactured items became more common. Similar intensification of bead and microlith production is not as well-known inland; ethnographic evidence suggests that the collection of foods (such as acorn, seeds, and bulbs) and the manufacturing of other items (such

[35] King, Chester D., Charles Smith and Tom King. 1974. *Archaeological Report Related to the Interpretation of Archaeological Resources Present at Vasquez Rocks County Park*. Prepared for County of Los Angeles Department of Parks and Recreation, pp. 44–45.

[36] King, Chester D. 1990. *Evolution of the Chumash Society: A Comparative Study of Artifacts Used for Social System Maintenance in the Santa Barbara Channel Region before A.D. 1804*. New York: Garland.

[37] Arnold, Jeanne E., and Anthony Graesch. 2004. "The Later Evolution of the Island Chumash." In *Foundations of Chumash Complexity*, ed. Jeanne Arnold Cotsen. Los Angeles, CA: Institute of Archaeology, University of California, Los Angeles, p. 5.

[38] Arnold, Jeanne E., and Anthony Graesch. 2004. "The Later Evolution of the Island Chumash." In *Foundations of Chumash Complexity*, ed. Jeanne Arnold Cotsen. Los Angeles, CA: Institute of Archaeology, University of California, Los Angeles, pp. 6–7.

as baskets and bowls) intensified, thus providing inland groups with currency that could be traded for needed coastal products.[39]

The first Spanish contact with the island Gabrielino took place in 1520, when Juan Rodriguez Cabrillo arrived on Santa Catalina Island. In 1769, Gaspar de Portolá made the first attempt to colonize Gabrielino territory, and Portola is believed to have met the Gabrielino chief Hahamovic at the Gabrielino village *Hahamog-na,* on the Arroyo Seco near Garfias Spring in South Pasadena.[40,41] In 1771, the Spanish established the Mission San Gabriel Archangel, and the decimation of the Gabrielino had begun.[42]

5.2.2 Archaeological Resource Characterization

There are no known archaeological resources within the proposed project site, and one archaeological resource has been recorded within the immediate vicinity surrounding the proposed project site. The results of the records search at the South Central Coastal Information Center (SCCIC) indicate that the proposed project site has never been surveyed for the presence of archaeological resources. Within 1 mile from the proposed project site, 20 previous archaeological assessments have been conducted, resulting in the recordation of one archaeological resource (Table 5.2.2-1, *Surveys Conducted within 1 Mile of the Hamilton Bowl / Chittick Field)*. The single previously recorded archaeological resource, CA-LAN-837, is a prehistoric site consisting of a shell midden deposit located on the western edge of Signal Hill,[43] approximately a 0.5 mile north of the proposed project site.

TABLE 5.2.2-1
SURVEYS CONDUCTED WITHIN 1 MILE OF THE HAMILTON BOWL / CHITTICK FIELD

Report Number	Year	Reference
LA1481	1985	Padon, Beth. 1985. Signal Hill City Hall: Archaeological Record Search.
LA3651	1976	Cotrell, Marie G. 1976. Record Search for Area No. 1 in the City of Signal Hill. Archaeological Research, Inc.
LA4476	1999	Maki, Mary. 1999. Negative Phase I Archaeological Survey and Impact Assessment for 0.5 Acre Southwest Park Project No. D9654-99, City of Signal Hill, Los Angeles County, CA. Conejo Archaeological Consultants.
LA4477	1999	Woldarski, Robert J. 1999. A Phase I Archaeological Study for the Proposed Signal Hill Senior Housing Project, Crescent Heights Tract, Walnut and 25th Street, Los Angeles County, CA. HEART.
LA4478	1999	Woldarski, Robert J. 1999. A Phase I Archaeological Study for the Proposed Signal Hill Senior Housing Project, Crescent Heights Tract, Walnut and 25th Street, Los Angeles County, CA. HEART.
LA4752	1999	Curt, Duke. 1999. Cultural Resource Assessment for the Pacific Bell

[39] Arnold, Jeanne E. 1993. "Labor and the Rise of Complex Hunter-Gatherers." *Journal of Anthropological Archaeology*, *12*:75–119.

[40] Reid, Hiram A. 1895. *History of Pasadena.* Pasadena, CA: Pasadena History Company, p. 19.

[41] Zack, Michele. 2004. Altadena: Between Wilderness and City. Altadena, CA: Altadena Historical Society, p. 8.

[42] Bean, L.J., and C.R. Smith. 1978. "Gabrielino." In *Handbook of North American Indians, Vol. 8*, ed. R.F. Heizer. Washington, DC: Smithsonian Institution, pp. 540–541.

[43] Fenega, G., Archaeological Research, Inc. 1973. Archaeological Site Survey Record for LAN-837. On file at Sapphos Environmental, Inc., Pasadena, CA.

Report Number	Year	Reference
		Mobile Services Facility LA629-02, County of Los Angeles, CA. LSA Associates.
LA5121	1999	Curt, Duke. 1999. Cultural Resource Assessment for the Pacific Bell Mobile Services Facility LA629-03, County of Los Angeles, CA. LSA Associates.
LA5405	2000	McKenna, Jeannette. 2000. A Phase I Cultural Resource Investigation of the City of Signal Hill Home Depot Commercial Center Project Area, Signal Hill, Los Angeles County, CA. McKenna et al.
LA5406	2001	Maki, Mary. 2001. Negative Phase I Archaeological Survey of 5.6 Acres for the Las Brias Neighborhood Redevelopment Project, City of Signal Hill, Los Angeles County, CA. Conejo Archaeological Consultants.
LA5408	1999	Maki, Mary. 1999. Negative Phase I Archaeological Survey and Impact Assessment of 0.5 Acre Southwest Park/Project No. D96545-99, City of Signal Hill, Los Angeles County, CA. Conejo Archaeological Consultants.
LA6038	2001	Olomi, Ahmad. 2001. Nextel Telecommunications Facility, Hamilton Bowl (CA-7810A), 1883 Cherry Avenue, Long Beach, CA. Geotechnical Solutions, Inc.
LA6823	2003	Mason, Roger D., Cary D, Cotteman and Evelyn Chandler. 2003. Cultural Resources Records Search and Building Evaluation Report for a Verizon Telecommunication Facility: Polytechnic in the City of Long Beach, Los Angeles County, CA. Chambers Group, Inc.
LA6828	2003	Harper, Caprice D. 2003. Cultural Resource Assessment Cingular Wireless Facility No. SM 221-01, Signal Hill, Los Angeles County, California. LSA Associates.
LA6937	2003	Shepard, Richard, S. 2003. Cultural Resources Constraints Assessment: City View at Signal Hill Redevelopment Project, City of Signal Hill, Los Angeles County, CA. Bone Terra Consulting.
LA7181	1999	Becker, Kenneth M. 1999. Boundary Definition at Tujunga Village (CA-LAN-167), Hansen Dam Flood Control Basin, Los Angeles County, CA. Statistical Research.
LA7226	1998	Demcak, Carol. 1998. Report of Phase I Archaeological Assessment for the Proposed Atlantic/Hill Development, City of Long Beach. ARMC.
LA8166	2007	Earth Touch, Inc. 2007. East Pacific Coast Highway and Cherry Avenue, Project Number LA-0594A. Earth Touch, Inc.
LA8432	2004	Bonner, Wayne. 2004. Cultural Resource Record Search Results and Site Visit for Cingular Wireless Facility Candidate SC-562-01 (MLK Park), 1950 Lemon Avenue, Long Beach, Los Angeles, CA. Michael Brandman Associates.
LA8434	2004	Bonner, Wayne. 2004. Cultural Resource Record Search Results and Site Visit for Nextel Communications Site Candidate CA 7747-C (New Dolphin), 2875 Junipero Avenue, Signal Hill, Los Angeles, CA. Michael Brandman Associates.
LA8484	2003	Schmidt, Andrew and Noelle Storey. 2003. Draft Historical Resources Assessment of 1777 and 1778 East 20th Street, Bonner, City of Signal Hill, for the Long Beach Unified School District. Jones and Stokes.

As a result of consultation with the NAHC to identify the presence of known Native American sacred sites, it was determined that no Native American cultural resources are listed in the sacred lands file for the proposed project site.[44] The NAHC identified seven tribal members and

[44] Singleton, Dave, Program analyst, Native American Heritage Commission, Sacramento, CA. 8 November 2007. Letter

recommended that they be contacted for further information with regard to the presence of cultural resources within the proposed project site. Letters describing the proposed project and its location were sent to these individuals, but none replied. Therefore, based on the information available, there are no known Native American areas of traditional cultural significance within the property.

5.2.3 Archaeological Impact Analysis

5.2.3.1 Significance Threshold

Archaeological resources under CEQA may meet the definition of a either historical resource or unique archaeological resource. A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of a historical resource is defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. The significance of a historical resource would be significantly impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register of Historical Resources (CRHR), a local register of historic resources pursuant to Section 5020.1(k) of the Public Resources Code, or a historic resources survey's meeting the requirements of Section 5024.1(g) of the Public Resources Code. With regard to unique archaeological resources, CEQA states that when a project would cause damage to a unique archaeological resource, reasonable efforts must be made to preserve the resource in place or leave the resource in an undisturbed state. Mitigation measures are required to the extent that a unique archaeological resource may be damaged or destroyed by a project.

5.2.3.2 Impacts

The proposed project would not result in significant impacts to cultural resources related to a substantial adverse change in the significance of a prehistoric archaeological resource. It is not anticipated that the excavations associated with the proposed project would encounter undisturbed, native soils. There are no known prehistoric resources within the proposed project site. Due to the level of disturbance that has occurred with historical development and construction, agriculture and landscaping, it is unlikely that such resources are present within the proposed project site.

5.3 HISTORIC RESOURCES

5.3.1 Historical Context

5.3.1.1 Historical Development of Long Beach

The City of Long Beach is located in southwestern portion of the County of Los Angeles, which received the earliest European visitors in the late 18th century with the arrival of Spanish explorers and missionaries. Mission San Gabriel Archangel, originally founded in what is now Montebello, was awarded jurisdiction over most of this region after its establishment in 1771. Ten years later, the Pobladores, a group of 12 families from present-day Mexico, founded a community in what is

response to Christina Poon, Sapphos Environmental, Inc., Pasadena, CA.

now downtown Los Angeles. The settlers, who were reportedly recruited to establish a farming community to relieve Alta California's dependence on imported grain, named the area el Pueblo de Nuestra Señora la Reina de Los Angeles de Porciuncula.[45]

During the Spanish and subsequent Mexican reign over Alta California, the southern portion of present-day County of Los Angeles was held in a variety of land grants. In 1784, Juan Manuel Nieto, a Spanish soldier, had been granted 300,000 acres (an amount reduced in 1790 to 167,000 acres) to reward his military service. After his death in 1804, the land became the property of his heirs; in 1834, it was divided into five smaller ranchos, including Rancho Los Alamitos and Rancho Los Cerritos. These two ranchos spanned the majority of what now comprises the City of Long Beach; Alamitos Avenue along the eastern edge of the study area traces the boundary that separated the two ranchos.

The City of Long Beach (originally Willmore City) was founded in 1881 from a small portion of the Rancho Los Cerritos as William Willmore's American Colony project. The southern manager for the California Immigrant Union, Willmore was a promoter not only of local real estate but also of the Southern California lifestyle, a concept that was initially overstated but ultimately lasting.[46] As did other promoters in emerging Southern California towns, Willmore capitalized on key locale-specific assets; Willmore City was touted as a healthful seaside resort in newspapers throughout the country. Despite extensive marketing, Willmore's days as a promoter of the Southern California lifestyle were not successful, and Jotham Bixby resumed ownership by default in 1884. Bixby sold the town to a new syndicate called the Long Beach Land and Water Company, who changed the colony's name to Long Beach. In 1887, the Long Beach Development Company took ownership of the land.[47]

In addition to the promise of a healthful climate and picturesque seascape, the tourist trade and stream of settlers were influenced by the establishment of accessible railway transportation. Travelers and settlers from the East and Midwest, drawn by the 1880s real estate boom, had come en masse to California and Southern California following the completion of the joint Central Pacific–Union Pacific transcontinental railroad to San Francisco in 1869. Competition between the two primary railway companies—the Atchison, Topeka, and Santa Fe and the Southern Pacific—further spurred on tourism and settlement to California. Both rail companies cut passenger rates sharply to win passengers, with the ticket price from the Missouri Valley to Southern California dropping to one dollar per passage. From 1887 to 1889, more than 60 new towns were laid out in Southern California, although most of these consisted of unimproved subdivided lots. By 1889, the real estate boom had collapsed, but the period of prosperity had resulted in a considerable increase in wealth in Southern California in general and had brought approximately 137,000 tourists-cum-residents to the region.[48]

The City of Long Beach promoters and business people sought to attract newcomers from other local cities, some of which exceeded the City's population by thousands and even tens of thousands. This goal was assisted by the availability of local rail transportation. Trains had been serving the general area since 1869, when Phineas Banning constructed a 22-mile railway from Los

[45] Robinson, W.W. 1959. *Los Angeles from the Days of the Pueblo*, p. 5. San Francisco, CA: California Historical Society.

[46] McWilliams, Carey. 1946. *Southern California: An Island on the Land*. Layton, UT: Gibbs Smith, pp. 96, 119.

[47] Weinman, Lois J., and Gary E. Stickel. 1978. *Los Angeles–Long Beach Harbor Areas Cultural Resource Survey*. Prepared for: U.S. Army Corps of Engineers, Los Angeles, p. 63.

[48] McWilliams, Carey. 1946. *Southern California: An Island on the Land*. Layton, UT: Gibbs Smith, pp. 113–122.

Angeles to San Pedro. In 1891, the Long Beach City Council allowed the Los Angeles Terminal Railroad Company to install a rail line along Ocean Avenue to connect the City of Long Beach with Los Angeles.[49] By 1898, Southern Pacific had taken over the Long Beach Railroad line along Second Street at Pacific Avenue.

From 1895 to 1902, the geographic boundary of most development within the City of Long Beach expanded northwest to Anaheim Street (north) and Monterey Avenue (west) to accommodate the growing population, which had increased to approximately 4,000 residents.

By the turn of the 20th century, Long Beach's economy seemed fully dependent on tourism. In the early 20th century, however, another industry began to emerge in the City of Long Beach to rival tourism. In 1905, the Los Angeles Dock and Terminal Company purchased the 800 acres of marshland that had been included in the original sale of the town to the City of Long Beach Development Company (1887) and began to improve the area in preparation for shipping. Beginning in 1906, the San Gabriel River was dredged, and a 1,400-foot turning basin and three channels were created.[50] A 500-foot-long municipal wharf was constructed on Channel 3 in 1911, and the Port of Long Beach opened in June 1911. The City of Long Beach regained its substantially improved, 800 acre of marshlands-turned-harbor in early 1917 after devastating floods in 1914 and 1916 caused the collapse of the Los Angeles Dock and Terminal Company. The harbor ultimately played a role in wartime shipping, including the transportation of ships, food, clothing, and munitions, as well as the construction of ships and submarines, among the many other World War I support efforts in which the City of Long Beach residents engaged. The following year, the City of Long Beach and the U.S. Army Corps of Engineers permanently established regular navigation between the Los Angeles and the City of Long Beach inner harbors by improving the Cerritos Channel.[51,52]

In addition to the tourism trade and nascent shipping industry at the harbor, agriculture played a role in Long Beach's economy. Willmore's vision of a seaside resort town with light agricultural uses was close to being a reality; however, agriculture was not as important economically in the City of Long Beach as it was in many other Southern California cities and towns. Many small-scale family farms, some with livestock, were scattered throughout the rural areas of the City of Long Beach. Other small- and midsized farms, ranches, and dairies thrived to the north and east of the growing downtown core, as far as Anaheim Street and east to about Temple Avenue in the early 20th century and later at Signal Hill.[53]

A series of annexations to the City of Long Beach in the 1900s—including the absorption of Alamitos Beach (1905) to the east, Carroll Park (1908), and Belmont Heights (1911), and convenient transportation, seaside amenities, and a burgeoning harbor industry—helped increase

[49] Johnson Heumann Research Associates. 1988. *Expanded Downtown Long Beach Historic Survey, Final Report*. City of Long Beach, Office of Neighborhood and Historic Preservation, p. 13.

[50] Weinman, Lois J., and Gary E. Stickel. 1978. *Los Angeles-Long Beach Harbor Areas Cultural Resource Survey*. Prepared for: U.S. Army Corps of Engineers, Los Angeles, p. 63.

[51] Weinman, Lois J., and Gary E. Stickel. 1978. *Los Angeles-Long Beach Harbor Areas Cultural Resource Survey*. Prepared for: U.S. Army Corps of Engineers, Los Angeles, p. 64.

[52] Berner, Loretta. 1990. "A Step Back in Time." In *Shades of the Past. Journal of the Historical Society of Long Beach*, ed. Lorette Berner. Long Beach, CA, p. 67.

[53] Ward, Harry E. 1976. No title. In *Long Beach As I Remember It, 1776–1976*, ed. by Donald E. Van Liew. Los Alamitos, CA: Hwong, p. 45.

the permanent local population.[54,55] Sanborn maps indicate that, from 1902 to 1905, Long Beach's population tripled from approximately 4,000 to 12,000. By 1910, the population was 17,809,[56] and the City of Long Beach had expanded to approximately 10 square miles.[57]

In 1921, the discovery of oil in Signal Hill by the Shell Oil Company brought radical changes to the City of Long Beach, as the ownership, production, and sale of oil became the City's primary economic industry.[58] The field in Signal Hill proved remarkably rich in oil, producing 859 million barrels of oil and more than 100 million cubic feet of natural gas in the first 50 years. Speculators, promoters, and experienced oilmen descended on Signal Hill, competing for mineral leases.[59] Although Signal Hill was an unincorporated island within the City of Long Beach, the building boom resulting from oil production in Signal Hill had a dramatic effect on Long Beach's population.[60] From 1920 to 1925, the population more than doubled, growing from 55,000 in 1920 to an estimated 135,000 in 1925.[61,62] The discovery of oil had created millionaires out of ordinary citizens and investors, and the effects were felt throughout the City of Long Beach, particularly downtown and along the shoreline.

After the 1929 stock market crash, the City of Long Beach's diversified economy allowed the City to weather the first years of the Depression relatively well. In the decade leading up to the stock market crash, between 1920 and 1929, Long Beach's population tripled. Development slowed significantly after the crash, as it did in communities across the country, accompanied by a corresponding drop in the rate of population increase, slowing new construction.

In March 1933, the City of Long Beach was hit by a 6.3-magnitude earthquake that toppled masonry buildings, shook houses and apartments off their foundations, damaged and destroyed schools and churches, and disabled the City's natural gas service. Aftershocks continued for more than a year. Reconstruction was financed with federal reconstruction grants and loans, which coupled with the activity generated through rebuilding, rejuvenated the local economy.[63] Many buildings that were repaired or reconstructed during this period incorporated the Art Deco or Streamline Moderne styles popular at the time. In 1935, funding provided by the federal Works

[54] Mullio, Cara, and Jennifer Volland. 2004. *Long Beach Architecture: The Unexpected Metropolis*. Santa Monica, CA: Hennessey and Ingalls, p. 23.

[55] Weinman, Lois J., and Gary E. Stickel. 1978. *Los Angeles-Long Beach Harbor Areas Cultural Resource Survey*. Prepared for: U.S. Army Corps of Engineers, Los Angeles, p. 63.

[56] U.S. Census Bureau. 1910. Census records for the City of Long Beach. On file, City of Long Beach Office of Neighborhood and Historic Preservation.

[57] Harshbarger, Tom. Spring 1999. "History in a Seashell." *California State University Long Beach, University Magazine Online*, *3*(1). Available at: http://www.csulb.edu

[58] Robinson, W.W. 1948. *Long Beach: A Calendar of Events in the Making of a City*. Reprinted. Los Angeles, CA: Title Insurance and Trust Company. Available at: City of Long Beach Office of Neighborhood and Historic Preservation, p. 14.

[59] Berner, Loretta. 1995. "Al Brown Remembers the Pike." In *Shades of the Past. Journal of the Historical Society of Long Beach*, ed. by Loretta Berner. Long Beach, CA, pp. 18–19.

[60] Robinson, W.W. 1948. *Long Beach: A Calendar of Events in the Making of a City*. Reprinted. Los Angeles, CA: Title Insurance and Trust Company. Available at: City of Long Beach Office of Neighborhood and Historic Preservation, p. 14.

[61] Johnson Heumann Research Associates. 1988. *Expanded Downtown Long Beach Historic Survey, Final Report*. City of Long Beach, Office of Neighborhood and Historic Preservation, p. 14.

[62] U.S. Census Bureau. 1920. Census Records for the City of Long Beach. On file, City of Long Beach Office of Neighborhood and Historic Preservation.

[63] Mullio, Cara, and Jennifer Volland. 2004. *Long Beach Architecture: The Unexpected Metropolis*. Santa Monica, CA: Hennessey and Ingalls, p. 31.

Progress Administration (which later became the Works Projects Administration, WPA) was used to build and improve parks and transportation facilities, as well as civic and recreational buildings throughout the City of Long Beach, and the Art Deco style was the prominent style of architecture used.

5.3.1.2 Development of the Hamilton Bowl

The recreational area known as the Hamilton Bowl / Chittick Field is situated at the intersection of East Pacific Coast Highway and Walnut Avenue, just northeast of downtown Long Beach. The area was well-known to flood and was first designated as a drainage reservoir in 1915. This section of the City of Long Beach suffered a damaging flood in 1935, which led to the construction of the Hamilton Bowl and an associated pump station by the U.S. Army Corps of Engineers in 1936.[64] The site, formerly known as "the sump," was enlarged and improved to hold the excess storm water discharge from the Los Angeles River watershed. The site was designed to be used during the summer months for recreation and to act as a drainage reservoir during the rainy season.[65,66] A comparison of the Sanborn maps dated 1923 and 1950 indicates that approximately 72 parcels, many of which contained single-family dwellings, were cleared to make room for the project.[67] The purpose of the Art Deco–style Low-flow Pump Station was to pump the excess water back into the Los Angeles River channel when storm waters receded.

A dedication ceremony for the facility planned for October 1936 was cancelled due to heavy rains, presaging a series of local flood events in subsequent years.[68] The following year, another season of torrential rains caused havoc throughout Long Beach, causing the Hamilton Bowl to overflow and forcing the evacuation of numerous families from their homes. The City of Long Beach attempted to transfer ownership and management of the Hamilton Bowl over to the County Flood Control District; however, after initialing agreeing to annex the facility to the flood control district, the County refused, arguing it was the City of Long Beach's responsibility to manage the site.[69,70] Despite enlarging the Hamilton Bowl to a depth of 50 feet, the basin notoriously flooded during the 1930s and 1940s.[71,72] By 1954, officials had come to the realization that the pump station was too small for the amount of rain that fell each year, and plans were underway to relieve the stress put forth on the station.[73] At that time, accumulated floodwaters were pumped from the bowl through a gravity line to a pumping station 2 ½ miles west and into the flood control channel.[74] A

[64] *Press-Telegram*. "City's Water Reserve Stored Here; Flood Drainage Project Ready; Plans for Hamilton Bowl Dedication Are Being Made by Long Beach City Officials." 5 October 1936, p. B1.

[65] *Press-Telegram*. "Drain Bowl Annexed to Flood Zone." 24 August 1937, p. B1.

[66] *Press-Telegram*. "City's Water Reserve Stored Here; Flood Drainage Project Ready; Plans for Hamilton Bowl Dedication Are Being Made by Long Beach City Officials." 5 October 1936, p. B1.

[67] Sanborn Map Company, 1923 and 1950. "Long Beach, California." Volume 2, Map 243.

[68] *Press-Telegram*. "Hamilton Bowl Dedication Cancelled; Affair Postponed as Rain Leaves Reservoir in Muddy Shape." 23 October 1936, p. B5.

[69] *Press-Telegram*. "Drain Bowl Annexed to Flood Zone." 24 August 1937, p. B1.

[70] *Press-Telegram*. "Sump Upkeep Ruled Duty of the City; County Disclaims Responsibility for Hamilton Drain Bowl." 18 December 1937, p. B1.

[71] *Los Angeles Times*. "More Gale Dean Hunted." 26 September 1939, p. 1.

[72] *Los Angeles Times*. "Army to Act in Power Strike" 23 February 1944, p. 1.

[73] *Los Angeles Times*. "Drain System to L. B. to be Started Soon." 6 June 1954, p. 15.

[74] *Los Angeles Times*. "Drain System for L. B. to be Started Soon." 6 June 1954, p. 15.

new pump station, located along Gaviota Avenue and north of East Pacific Coast Highway, was constructed circa 1972.

A single-family residence, designated "bachelor quarters" on the original blueprints, was constructed in 1953 near the southeast corner of Walnut Avenue and Alamitos Avenue. Although the parcel is sectioned off from the Hamilton Bowl with a chain-linked fence, it was once considered to be part of the Hamilton Bowl. The residence was constructed to house the caretaker of the Hamilton Bowl and was later remodeled in 1963 and renamed "operator quarters" on the blueprints. It is unclear for how long the residence was directly connected to the drainage sump, but the residence is now privately owned and is not part of the proposed project. It was about this same time that public restrooms for the recreational field were constructed. According to historic aerials, the public restrooms were constructed sometime between 1953 and 1960 and were remodeled at a later time (date unknown).

5.3.1.3 Art Deco Architecture

Rebuilding the City of Long Beach following the devastating earthquake of 1933 was heavily influenced by the architectural style that became known as Art Deco. Art Deco was introduced to America in 1922 when the *Chicago Tribune* held a competition for the design of its new building. Eliel Saarinen designed the second place winner, an ethereal skyscraper with characteristics of Art Deco design, which was highly influential on architects in the United States. The style was popularized worldwide by the Paris 1925 *Exposition Internationale des Arts Décoratifs et Industriels Modernes*. Art Deco designs incorporated stylized classical forms, zigzags, and vertical accents.[75,76] In the United States, this type of architecture was particularly favored by the federal Works Progress Administration (which later became the Works Projects Administration), who combined it with Beaux Arts classicism to produce the PWA Moderne[77] style often used for government buildings in the 1930s.

The Low-flow Pump Station built in 1935/1936 incorporates stylistic elements of Art Deco design. Art Deco buildings are characterized by smooth wall surfaces broken by piers and enlivened zigzags, chevrons, low-relief geometrical patterns often in the form of parallel straight lines, and stylized floral motifs. Ornamentation is mostly concentrated around window and door openings, with stylized string courses along roof edges or parapets.[78] Roofs are flat or step back and up in a series of increments. As opposed to the Streamline Moderne style that gained popularity in the 1930s, a vertical emphasis is often pronounced in the Art Deco style.

5.3.2 Historical Resources Characterization

The intensive level historic resources survey of the proposed project site resulted in the determination that there are three buildings and one site located within the proposed project site

[75] McAlester, Virginia, and Lee McAlester. 1984. *A Field Guide to American Houses*. New York: Alfred A. Knopf, p. 465.

[76] Gowans, Alan. 1991. *Styles and Types of North American Architecture*. New York: HarperCollins.

[77] PWA refers to the Public Works Administration established in 1933 and was intended to fund the construction of public works projects. Similarly, the WPA was established in 1932 under the Herbert Hoover (originally called the Reform Finance Corporation) and employed people on relief until 1943. WPA employees constructed many public buildings, projects, and roads. Although separate entities, both the WPA and the PWA funded similar construction projects and were often mistaken for one another.

[78] Blumenson, John J.-G. 1977. *Identifying American Architecture*. New York: W.W. Norton, p. 77.

boundaries and that one of these, the Low-flow Pump Station, qualifies as a historical resource as defined by CEQA (Figure 5.3.2-1, *Existing Conditions, Proposed Project Site*):

- Low-flow Pump Station (1935/1936)
- Public Restrooms (between 1953 and 1960)
- Hamilton Bowl (1935/1936)
- Hamilton Bowl Pump Station (circa 1972)

No properties within or adjacent to the proposed project site have previously been determined to be historical resources pursuant to CEQA. The Low-flow Pump Station, the Public Restrooms, and the Hamilton Bowl are older than 45 years of age and were carried forward for evaluation of historical significance: The third building within the proposed project site, the Hamilton Bowl Pump Station, was not evaluated for historical significance because it was constructed during the 1970s and therefore is less than 45 years old. In addition, a field inspection and preliminary research of the Hamilton Bowl Pump Station indicated that the building is not of exceptional historical or architectural importance.

5.3.2.1 Low-flow Pump Station (Walnut Avenue, Parcel No. 7216-012-902)

Located at the western edge of the proposed project site along Walnut Avenue, the Low-flow Pump Station was constructed in 1935/1936 and displays Art Deco styling (Figure 5.3.2.1-1, *Low-flow Pump Station*). Character-defining features of the Low-flow Pump Station include the following:

- Poured concrete walls
- Piers with vertical bands that step inwards
- Metal sash windows
- Flat roof
- Geometric designs along roofline

The pump house was constructed during a key time in Long Beach's architectural history. Although the Low-flow Pump Station was not constructed as a direct result of the 1933 Long Beach Earthquake, it was constructed at a time when the City of Long Beach was being rebuilt. The Low-flow Pump Station exhibits integrity as a good example of Art Deco architecture.

The Low-flow Pump Station was a direct result of the flooding that occurred in that area of Long Beach. The "sump," as the area was once called, was located south of East 20th Avenue and west of Walnut Avenue and was created in 1919 to support flood waters. The area was expanded in 1935, and the pump station was constructed. The funding for the pump station was part of a large construction effort put forth by the U.S. Army Corps of Engineers. Although there is no evidence showing that the Low-flow Pump Station was constructed under the Works Progress Administration or any other New Deal program, it was a federally funded project. During this time, many public buildings were constructed using the Art Deco style. The Low-flow Pump Station exhibits integrity of location, design, setting, materials, workmanship, feeling, and association, and retains all its character-defining features, including smooth concrete walls, metal sash windows, flat roof, piers with vertical bands that step inwards, and geometric designs along the roofline.

The Low-flow Pump Station satisfies the definition of a historical resource pursuant to CEQA [State CEQA Guidelines Section 15064.5(3)]. It meets Criterion 3 for listing in the CRHR for its embodiment of the distinctive characteristics of an Art Deco style industrial building constructed

FIGURE 5.3.2-1

Existing Conditions, Proposed Project Site

FIGURE 5.3.2.1-1
Low-flow Pump Station

by the federal government in the City of Long Beach during the 1930s. In addition, the Low-flow Pump Station appears eligible for listing in the NRHP under Criterion C at the local level of significance as an example of a federal industrial building built in the Art Deco style in the 1930s. The Low-flow Pump Station also qualifies for designation as a City of Long Beach Landmark under three criteria: Criterion A, for its historical importance as a record of local and federal government flood control efforts; Criterion D, for its portrayal of the City of Long Beach in the 1930s, when the Art Deco style was highly influential; and Criterion E, for its embodiment of the distinguishing characteristics of an architectural type, a public industrial building in the Art Deco style.

5.3.2.2 Public Restrooms (Walnut Avenue, Parcel No. 7216-012-902)

The Public Restrooms were built between 1953 and 1960 and display postwar utilitarian styling (Figure 5.3.2.2-1, *Public Restrooms*). Located on a sloped site, the Public Restrooms project over the ground on exposed metal supports. The building is rectangular in plan, with poured concrete walls covered in stucco, a shed roof, horizontal metal louver windows, and a metal staircase that spans a flood control ditch. The Public Restrooms were constructed within the Hamilton Bowl / Chittick Field to support its recreational function as a field that is actively used during the summer months. Alterations to the building include replacements of doors, window screens, and lighting with vandal-proof equivalents.

An example of a modest, postwar utilitarian style, the Public Restrooms are not historical resources as defined by CEQA. The building does not meet the criteria for listing in the CRHR or the NRHP. The building has not made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion A/1); it is not associated with the lives of persons important to local, California, or national history (Criterion B/2); it does not possess high artistic values or embody the distinctive characteristics of a type, period, region, or method of construction (Criterion C/3); and it has no potential to yield information important to the prehistory or history of the local area, California, or the nation (Criterion D/4). In addition, the building does not meet any of the criteria of significance for designation as a City of Long Beach Landmark.

5.3.2.3 The Hamilton Bowl (Walnut Avenue, Parcel No. 7216-012-902)

Established in 1935 on a property formerly known as the sump and developed as a winter reservoir/retention basin and summer park, the Hamilton Bowl (Figure 5.3.2.3-1, *Hamilton Bowl*) is a simple catch basin for storm water discharge from the Los Angeles River watershed. The basin measures approximately 1,200 feet by 800 feet. In addition to three buildings, the property contains softball fields, stadium lights, and bleachers. It is in fair condition and retains a modest level of integrity.

The Hamilton Bowl is not a historical resource as defined by CEQA. The Hamilton Bowl does not meet the criteria for listing in the CRHR or the NRHP. When considered in light of a context of local flood water control, engineering achievements, U.S. Army Corps of Engineers projects, or the development of recreational facilities, the Hamilton Bowl has not made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion A/1); it is not associated with the lives of persons important to local, California, or national history (Criterion B/2); it does not embody the distinctive characteristics of a type, period, region, or method of construction, nor does it possess high artistic value (Criterion C/3); and it has no potential to yield information important to the prehistory or history of the local area, California,

FIGURE 5.3.2.2-1
Public Restrooms

View facing northeast

View facing south

FIGURE 5.3.2.3-1
Hamilton Bowl

or the nation (Criterion D/4). In addition, the Hamilton Bowl does not meet any of the criteria of significance for designation as a City of Long Beach Landmark or Landmark District.

5.3.3 Impact Analysis

5.3.3.1 Significance Thresholds

Under CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of a historical resource is defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. The significance of a historical resource would be significantly impaired when a project demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR, a local register of historic resources pursuant to Section 5020.1(k) of the Public Resources Code, or historic resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code. In general, a project that follows the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and associated guidelines shall be considered as mitigated to below the level of significance.[79]

5.3.3.2 Impacts to Historical Resources

The proposed project would result in a significant direct impact to one historical resource, the Low-flow Pump Station, which would be demolished as a result of implementation of the proposed project. The Low-flow Pump Station is a historical resource as defined by CEQA [PRC 5024.1, 14 CCR Section 4850(d)(1)]. Demolition of a historical resource would result in a significant adverse change to cultural resources related to historical resources, therefore requiring the consideration of mitigation measures. Although not capable of reducing impacts to below the level of significance, one mitigation measure has been identified that would reduce project impacts on the one historical resource to the maximum extent practicable.

5.3.3.3 Cumulative Impacts to Historical Resources

The incremental impact of the proposed project—when evaluated in relation to past, present, or reasonably foreseeable, probable future projects—would be expected to cause significant impacts to historical resources in the City of Long Beach. Several significant examples of the Art Deco style have been previously demolished in the City of Long Beach. Therefore, implementation of the proposed project would cause an incremental impact when considered with the related past, present, or reasonably foreseeable, probable future project.

[79] Weeks, Kay D., and Anne E. Grimmer. 1995. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstruction Historic Buildings*. Washington, DC: U.S. Department of the Interior, National Park Service.

5.3.4 Mitigation Measure

Potentially significant adverse impacts to historical resources have been identified in relation to the Low-flow Pump Station as a result of the proposed project. The following mitigation measure is proposed to address these impacts.

5.3.4.1 Measure Cultural-2

Direct and cumulative impacts related to the loss of one historical resource, the Low-flow Pump Station, shall be reduced, although not below the level of significance, through archival documentation of as-found conditions. Prior to issuance of demolition permits, the City of Long Beach shall ensure that documentation of the Low-flow Pump Station is completed by the applicant in the form of a Historic American Buildings Survey that shall comply with the *Secretary of the Interior's Standards for Architectural and Engineering Documentation*. The documentation shall include large-format photographic recordation; detailed historic narrative report, including description, history, and statement of significance; measured architectural drawings (as-built and/or current conditions); and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the Secretary of the Interior's Professional Qualification Standards for History and/or Architectural History. The original archival quality documentation shall be offered as donated material to the National Park Service Heritage Documentation Program, Historic American Buildings Survey, for inclusion in the Library of Congress. Archival copies of the documentation would also be submitted to the Long Beach Public Library, Historical Society of Long Beach, California State University Long Beach, Office of Historic Preservation, and the South Central Coastal Information Center, where it would be available to local researchers. Completion of this mitigation measure shall be monitored and enforced by the City of Long Beach.

5.4 HUMAN REMAINS

5.4.1 Human Remains Context

The interment of human remains among California Native Americans can be classified into three methods: inhumation (burial), cremation, and a combination of both inhumation and cremation. The preferred method varied depending on the region and cultural group, and some groups practiced both methods simultaneously depending on the situation in which the individual died. With interment came the practice of grave goods, a practice favored by most tribes in California. Grave goods usually consisted of beads of various materials, knifes, projectile points, and exotic trade items, among other objects.

Interment of human remains among pioneers and homesteaders also varied between inhumation and cremation. The internment method chosen was a result of the circumstances and location at the time of death, as well as the religion or cultural beliefs. In the late-19th and early 20th centuries, cemeteries were few and often located at some distance. Burial on the homestead grounds was often a preferred alternative.

5.4.2 Human Remains Resource Characterization

Reviews of historic maps,[80] along with the results of the records search with the NAHC,[81] indicate that there are no known Native American or historic period cemeteries, nor known informal Native American burials, within the vicinity of the proposed project site.

5.4.3 Human Remains Impacts Analysis

5.4.3.1 Significance Threshold

While a significance threshold for impacts to human remains is not explicitly stated in CEQA, Appendix G of the State CEQA Guidelines indicates that any disturbance of human remains could be potentially considered an impact to cultural resources, particularly with respect to Native American graves and burials.

5.4.3.2 Impacts

The proposed project would not be expected to directly or indirectly disturb human remains, including those interred outside of formal cemeteries. The results of the archaeological records search, review of historic maps,[82] the NAHC Sacred Lands File search,[83] and the intensive-level historical resources survey indicate that no historic period or Native American burial grounds are located within or in proximity to the proposed project site. Although there are no known burial sites within the proposed project site, the potential disruption of an unanticipated encounter of human remains during ground-disturbing activities constitutes a significant impact requiring the consideration of mitigation measures.

5.4.4 Human Remains Mitigation Measure

5.4.4.1 Measure Cultural-3

Although the discovery of human remains is not anticipated during ground-disturbing activities for the proposed project, a process has been delineated by the State of California for addressing the unanticipated discovery of human remains:

> Unanticipated Discovery of Human Remains (Public Resources Code 5097): The Los Angeles County Coroner shall be notified within 24 hours of the discovery of human remains. Upon discovery of human remains, there shall be no further excavation or disturbance of the site or any of that area reasonably suspected to overlie adjacent human remains until the following conditions are met:

[80] Environmental Data Resources, Inc. 2007. Historical Topographic Map Report for Kroc Community Center, Long Beach, CA 90806. Inquiry Number 2015389.1. Milford, CT.

[81] Singleton, Dave, Program Analyst, California Native American Heritage Commission, Sacramento, CA. 8 November 2007. Letter response to Christina Poon, Sapphos Environmental, Inc., Pasadena, CA.

[82] Environmental Data Resources, Inc. 2007. Historical Topographic Map Report for Kroc Community Center, Long Beach, CA 90806. Inquiry Number 2015389.1. Milford, CT.

[83] Singleton, Dave, Native American Heritage Commission, Sacramento, California. 6 September 2007. Letter to Amy Commendador-Dudgeon, Sapphos Environmental, Inc., Pasadena, CA.

The Los Angeles County Coroner has determined that no investigation of the cause of death is required, and

If the remains are of Native American origin, the descendants from the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

5.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of mitigation measures Cultural-1 and Cultural-3 would reduce impacts to cultural resources related to an adverse change in the significance of paleontological resources and human remains to below the level of significance.

Implementation of measure Cultural-2 would reduce significant direct and cumulative impacts to historical resources scheduled for demolition to the maximum extent feasible. However, the demolition of this historical resource would still remain a significant adverse impact.