MacArthur Lake Stormwater Capture Project

Draft Environmental Impact Report

Appendix D | Cultural Resources Technical Report

Prepared for

City of Los Angeles

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CITY OF LOS ANGELES
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Prepared by

CDM Smith

State Clearinghouse No. 2022040153 | **May 2024**

Appendix D
Cultural Resources Technical Report

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ArchaeoPaleo Resource Management, Inc.
A full-service Archaeology and Paleontology company
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Phase 1 Archaeological, Paleontological, and Built Environment Assessment for the MacArthur Lake Stormwater Capture Project, City of Los Angeles, Los Angeles County, California

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CONFIDENTIALITY NOTE: This document contains sensitive or confidential information regarding the location of archaeological sites which should not be disclosed to the general public or other unauthorized persons. Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. Therefore, information regarding the location, character, or ownership of archaeological or other heritage resources is exempt from the Freedom of Information Act pursuant to 16 USC 470w-3 (National Historic Preservation Act) and 16 USC Section 470(h) (Archaeological Resources Protections Act). This report and records that relate to archaeological sites information maintained by the Department of Parks and Recreation, the State Historical Resources Commission, or the State Lands Commission are exempt from the California Public Records Act (Government Code Section 6250 et seq., see Government Code Section 6254.19). In addition, Government Code Section 6254 explicitly authorizes public agencies to withhold information from the public relating to Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission.

EXECUTIVE SUMMARY

ArchaeoPaleo Resource Management, Inc. (APRMI) was contracted by CDM Smith to conduct a Phase 1 Archaeological, Paleontological, and Built Environment Assessment of the MacArthur Lake Stormwater Capture Project (Project). The Cultural Resource Project area is located in a historically developed urban area within the Westlake neighborhood, west of downtown Los Angeles, within Township 1 south and Range 13 west, as denoted on the Hollywood, California 7.5 United States Geological Survey topographic quadrangle (2018 edition).

The Proposed Project is a City of Los Angeles, LA Sanitation and Environment water quality project and would be funded by the County of Los Angeles Safe Clean Water Program. This program is in place for projects that increase local water supplies, improve water quality, provide community enhancements, and protect public health. The Proposed Project would implement a regional multi-benefit stormwater project in MacArthur Park as part of this water program to assist in meeting the water quality total maximum daily load (TMDL) limits for the Ballona Creek watershed and the current National Pollutant Discharge Elimination System (NPDES) permit. To accomplish this goal, the Project aims to divert and treat stormwater flows from the existing underground storm drain system and discharge it into MacArthur Lake for storage, discharge into the sanitary sewer, or return the treated water to the storm drain system.

The Phase 1 Archaeological, Paleontological, and Built Environment Assessment was conducted to determine the potential effects of the Project to cultural resources. For the assessment APRMI conducted a field reconnaissance survey, and requested a paleontological records check from the Los Angeles Natural History Museum, a cultural records search from the South Central Coastal Information Center, a Sacred Lands File Search with a Native American Contacts list from the Native American Heritage Commission (NAHC), with multiple additional prehistoric and historic record searches and reference materials resourced, as well as addressing multiple historic built environment and historic building assessments that have occurred within the last twenty years.

The field reconnaissance survey was conducted on November 19, 2021, to evaluate the presence of any historic, cultural, or tribal resources on or near the Cultural Resource Project area to determine if the proposed development would have any significant adverse impact on such resources. The survey also included the initial assessment of any historic structures that might be impacted by the Project. The Cultural Resource Project area has been determined to be an approximately 1,200 square foot multi-use park with a lake, and other amenities. It is located in a historic residential and commercial neighborhood that was created in the late 1800s. The Park itself is designated as a Los Angeles Cultural Monument and contains multiple historic statues and artwork. Additionally, directly to the south of the Park, there are several historic and/or potentially historic structures that were observed on Grand View Street and along 7th Street, specifically those in-between Grand View Street and Lake Street.

The Natural History Museum of Los Angeles County (NHMLA) conducted a paleontological Records Check, in which the results identified eight fossil localities that lie directly within MacArthur Park (but not in the Cultural Resource Project area) and six localities near MacArthur Park. Furthermore, the results also state that six vertebrate fossil sites have been recorded near the Cultural Resource Project area within similar sedimentary deposits that may be found on the

Project site. These soils include Holocene and Pleistocene alluvial sediments, and the underlying marine sediments of the Puente formation, as confirmed by the 1991 geologic map of the Hollywood and Burbank (south ½) quadrangle. Project grading or shallow excavation within these sediments have a potential to uncover significant fossils at the time of Project development. APRMI recommends that substantial excavation, including trenching for utilities, be monitored by a Society of Vertebrate Paleontology (SVP)-qualified paleontological resource construction monitor(s).

On February 14, 2022, a cultural research records search was conducted by the South Central Coastal Information Center (SCCIC) to identify the presence or absence of any previously recorded cultural (prehistoric/tribal/historic) resources that are located within the direct area of the Project or within a quarter-mile (1/4) radius. The results of the record search a total of five were recorded within the immediate Cultural Resource Project area and the remaining fifteen were all recorded at least within a 1/4 mile radius, but these resources would not be affected by the Project, since the resources were identified outside of the direct Cultural Resource Project area. Besides the actual Park itself, there are multiple historic buildings adjacent to the Park, some of which may be indirectly impacted by construction vibrations. These impacts are addressed in the Construction Noise and Vibration analysis in the Draft EIR. None of the historic buildings would be directly impacted by the Project. APRMI recommends that any Project excavation on the Park itself and during utility trench excavation be monitored full-time by a qualified archaeological resource construction monitor(s), per the Secretary of Interior (SOI) standards.

APRMI requested a Sacred Lands File Search for the proposed Project from the Native American Heritage Commission (NAHC). The NAHC concluded the Cultural Resource Project area to be negative for the presence of known tribal resources, but due to the confidentiality of information regarding Native American sacred sites meant to protect them from public harm, the NAHC could not elaborate further.

This report outlines the contextual history for the Project region, the research methodology, and results of the research conducted for this assessment. Also included are the recommended mitigation measures to minimize impacts on cultural, paleontological, and tribal resources to a less than significant impact.

ACRONYMS

AB	Assembly Bill
AF	Artificial Fill
AMSL	Above Mean Sea Level
APRMI	ArchaeoPaleo Resource Management, Inc.
ARC	Archives & Resource Center
BERD	Built Environment Resource Directory
BP	Before Present
CCR	California Code of Regulations
CE	Common Era
CEQA	California Environmental Quality Act
CHL	California Historic Landmarks
CHRIS	California Historical Resources Information System
CR	California Register
CRA	City of Los Angeles Community Redevelopment Agency
Corps	US Army Corps. Of Engineers
CPHI	California Points of Historical Interest
CRHR	California Register of Historical Resources
CRM	Cultural Resource Management
DCTWRP	Donald C. Tillman Water Reclamation Plant
DPR	Department of Parks and Recreation
EIR	Environmental Impact Report
GIS	Geographic Information Systems
HCM	Historic Cultural Monument
HRI	Historic Resources Inventory
HSC	California Health and Safety Code
LACMVP	Los Angeles County Museum Vertebrate Paleontology
LASAN	Los Angeles Sanitation and Environment
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Program
mya	Million Years Ago
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHMLA	Natural History Museum of Los Angeles
NHPA	National Historic Preservation Act
NOP	Notice of Preparation
NR	National Register
NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
PE	Pacific Electric
PRC	Public Resources Code
QA	Quaternary Alluvium
RPA	Registered Professional Archaeologist
SOI	Secretary of the Interior
SCCIC	South Central Coastal Information Center
SPRR	Southern Pacific Railroad
SVP	Society for Vertebrate Paleontology
USGS	United States Geologic Service
WPA	Work Projects Administration

Table of Contents

LIST OF FIGURES

LIST OF TABLES

1.0 INTRODUCTION

The City of Los Angeles LA Sanitation & Environment (LASAN) seeks to develop a storm water capture system in the vicinity of MacArthur Park. As proposed, the MacArthur Lake Stormwater Capture Project (Project), would capture and treat stormwater in the Westlake neighborhood to improve water quality downstream in the Ballona Creek. The Project would also offset the use of potable water by storing treated stormwater in the lake.

To facilitate the CEQA requirements for the Proposed Project, ArchaeoPaleo Resource Management, Inc. (APRMI) was contracted by CDM Smith to perform a Phase 1 Archaeological, Paleontological, and Built Environment Assessment that would determine the potential sensitivity of paleontological, cultural resources (prehistoric and historic archaeological/tribal) and built resources within and around the Cultural Resource Project area. As part of the Project CEQA assessment, APRMI conducted a field reconnaissance survey to document and photograph the current state of the Cultural Resource Project area's vegetative cover, identify the type and state of soil exposed on the surface, and record any paleontological, archaeological, and/or tribal sites or observations on the surface. This also included recording and photographing the built environment to determine if buildings would be impacted and, if so, to what extent such impact may be significant.

Since field reconnaissance only is meant for surficial observation, paleontological and archaeological research of the Cultural Resource Project area and surrounding vicinity was also conducted to identify previously recorded resources. APRMI conducted the following research methods: paleontological records check from the Los Angeles Natural History Museum including an APRMI-led review of the Paleobiology Database; a cultural records search from the South Central Coastal Information Center along with a thorough review of United States Geological Survey (USGS) historic topographic maps and historic aerial photographs; and a Sacred Lands File Search attached with a Native American Contacts list. Research of additional database resources, as well of multiple previous historic building assessments, was conducted for direct and/or indirect impacts to the built environment. This report discusses the methodology and results of the research conducted to state the level of sensitivity identified and determine the appropriate mitigation measure recommendations for this Project.

1.1 Project Description

Under the current design, storm water from an existing storm drain located south of MacArthur Park (the Park) would be diverted to a pre-treatment unit and pump station located near the intersection of Lake Street and West 7th Street. Pipelines would be installed in Lake Street and across West 7th Street to convey the diverted flows into and out of MacArthur Park and to convey water from the lake to the sanitary sewer. These components would all be located underground on the west side of the street that connect to a storm drain line within the perpendicular alleyway behind the building located at 2208 West 7th Street. After exiting the pump station, the diverted flows would be conveyed via underground pipelines either into MacArthur Lake for storage, or to a treatment unit to be installed on the southern margin of MacArthur Park. Flows that are treated in the treatment unit would be conveyed to the storm drain system through a small section of

pipeline placed under South Grand View Street that would connect to an existing pipeline located in that street. Water in MacArthur Lake, including the flows discharged to the lake, would be circulated into an above ground treatment wetland area that is proposed to be constructed as part of this Project, near the western boundary of the MacArthur Park Lake. This treatment wetland would be used as a way to naturally filter the discharged storm water to then be recharged back into MacArthur Lake.

1.2 Project Location

The Cultural Resource Project area is located within the City of Los Angeles, Los Angeles County, California. Specifically, the Park is located at 2230 West 6th Street in central Los Angeles within the Westlake neighborhood, west of Downtown Los Angeles (Figures 1-3). MacArthur Park is bounded by 6th Street to the north, 7th Street to the south, South Park View Street to the west, and South Alvarado Street to the east. Wilshire Boulevard extends east/west through the Park dividing it into northern and southern halves. The Cultural Resource Project area is the southern portion of the Park, approximately 200 feet of the northern sections of Lake Street and Grand View Street, and an approximate 300 foot section of West 7th Street between Lake View Street and Grand View Street. The proposed treatment wetlands area would be located along the western margin of MacArthur Lake, approximately 300 feet northeast of the intersection at South Park View Street and West 7th Street.

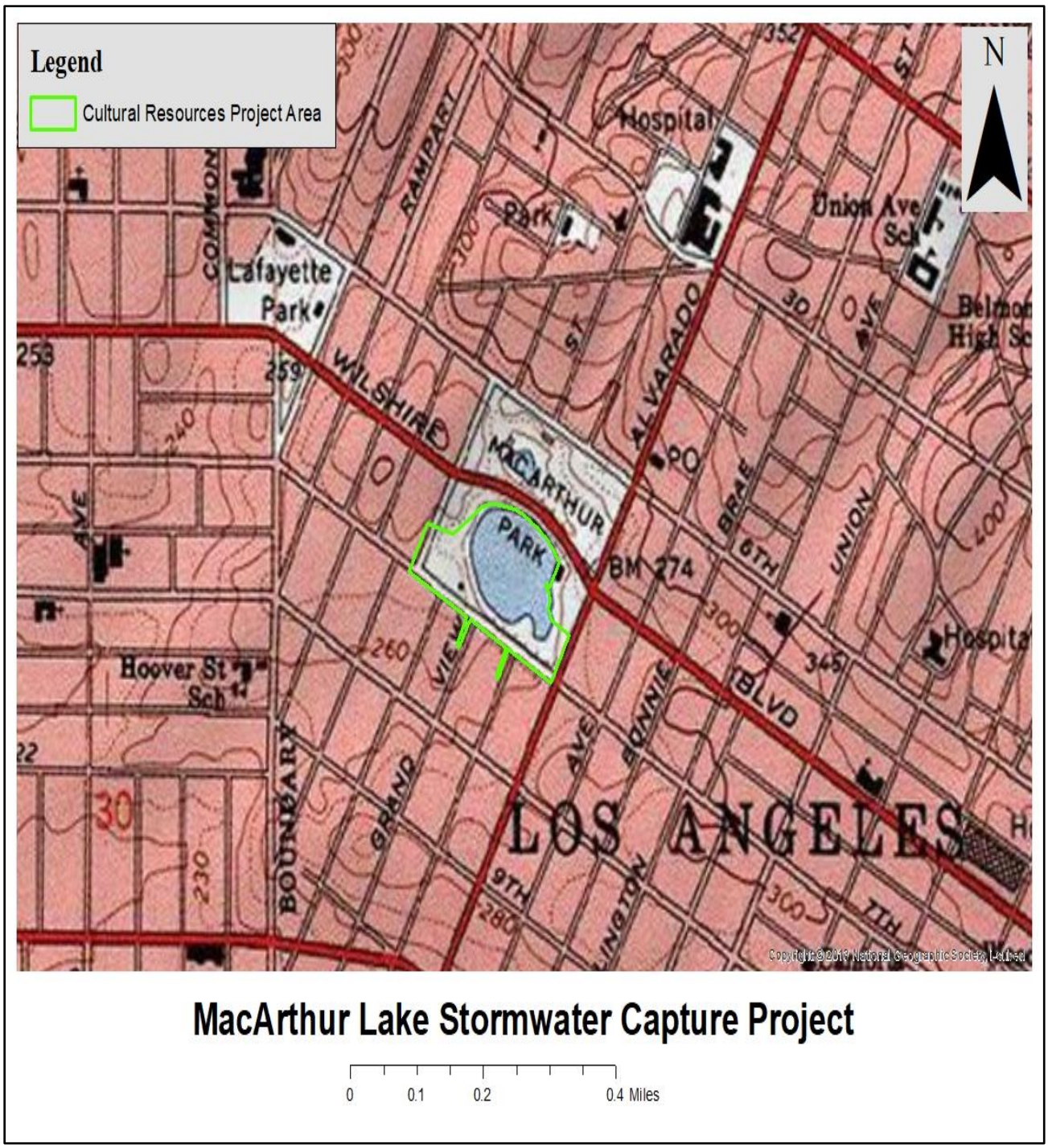

Figure 1. Topographic overview of the Cultural Resource Project area that is highlighted in green. Source: *Esri, 2013 United States Geological Survey, National Geographic*

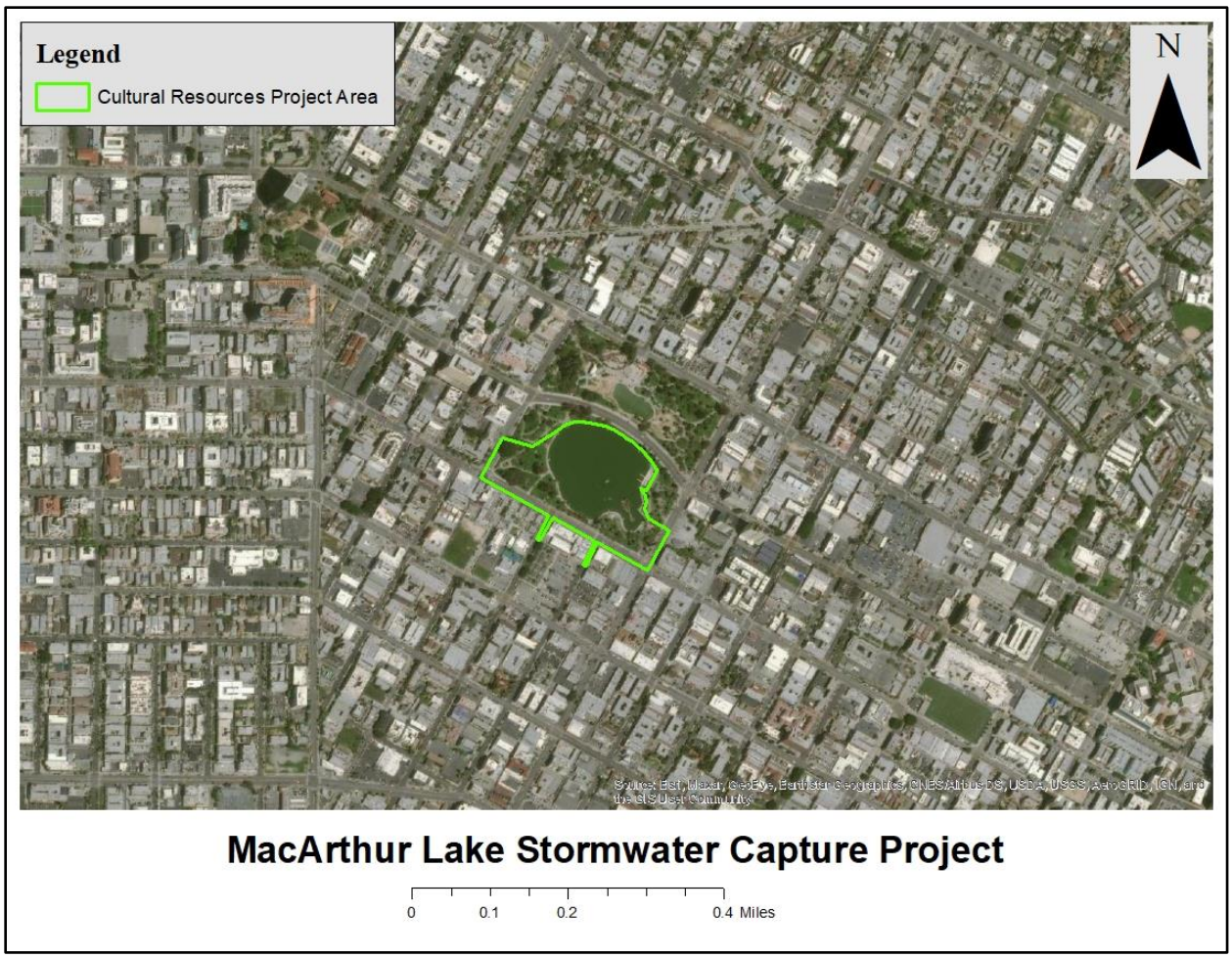

Figure 2. Satellite overview of Cultural Resource Project area that is highlighted in green. Source: *Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community*

1.3 Natural Setting

The Project is within the City of Los Angeles approximately one mile west of the downtown Los Angeles, in the Westlake neighborhood. The City of Los Angeles is described as an urban area with industrial infrastructure and residential building sprawled throughout the city. The geographic area is interspersed with low hills and marine terraces on the coast that separate inland urbanized environments from coastal bays, lagoons, and sandy beaches (Lichtenstein and Turner 2004). The geographic area also contains several mountain ranges such as the Transverse and Peninsular Ranges in Ventura, Los Angeles and San Diego counties, respectively (Department of Water and Power, 2009). Elevation of the geographic area ranges from sea level at the coast to around 200 feet for most of the urban areas (State of California, 2005). Due to urbanization, vegetation is constrained to the mountains consisting mostly of scrub and chaparral.

1.4 Project Personnel

Robin Turner, M.A. is the Principal Investigator and President for APRMI. She holds a Master of Arts degree in Anthropology, with an emphasis on Public Archaeology, from California State University, Northridge. Ms. Turner has over 30 years of experience in the Cultural Resource

Management (CRM) and the paleontological fields and has conducted major field and technical investigations throughout southern California. She meets the *Secretary of the Interior's Professional Qualifications Standards* for Archaeology and is a qualified professional paleontologist per the Society of Vertebrate Paleontology's guidelines. Ms. Turner is a Research Associate at the Natural History Museum of Los Angeles County and at the George C. Page Museum of La Brea Discoveries, as well as a Scientific Advisor to the Buena Vista Museum of Natural History and Sciences in Bakersfield. She is also a past Planning Commissioner for the City of Culver City and is a past museum chair for the Culver City Historical Society. Ms. Turner served as the principal investigator and project manager for this project as well as the final editor for this document.

Miguel Angel Miguel, B.S. is a Staff Paleontologist with APRMI. Mr. Miguel has 3 years of experience excavating, analyzing, and monitoring archaeological and paleontological materials. His work includes conducting research on Agnostid trilobite hypostomes with use of systematics, with 3D microscopes for appendage identification of Agnostid trilobites. His field and laboratory work emphasized archaeological and paleontological contexts, such as basic map analysis, rock and mineral identification, invertebrate fossil identification. He holds a Bachelor of Science in Geology from California Lutheran University. Mr. Miguel has extensive experience with GIS mapping, lithic identification, and sedimentary analysis. Mr. Miguel participated in the field reconnaissance, and prepared sections of this report.

Viridiana M. Garcia, M.A. is a Staff Archaeologist with APRMI. She holds a Master of Arts degree in Anthropology, with an emphasis in Bioarchaeology, from George Mason University. Ms. Garcia has 5 years of experience excavating and analyzing archaeological materials and human remains. Her work includes serving as an intern at the Smithsonian Department of Anthropology rehousing and cataloging Neolithic archaeological materials and as a lab assistant for the George Mason University zooarchaeological lab. Her work emphasized archaeological and bioarchaeological contexts such as prehistoric architecture, human osteology, ceramics, and reconnaissance. Ms. Garcia contributed to the writing of this report.

Shannon L. Loftus is a Certified Architectural Historian and Senior Staff Archaeologist and Project Manager for APRMI. She holds a Master of Arts degree in Historic Preservation, with an emphasis on historic structure assessments and evaluations from Savannah College of Art and Design, Savannah, Georgia; and a Bachelor of Arts degree in Anthropology from Union Institute and University, Cincinnati, Ohio. Ms. Loftus is a Registered Professional Archaeologist (RPA) with over fifteen years' experience in CRM. She satisfies the *Secretary of the Interior's Professional Qualifications Standards* as a professional architectural historian and archaeologist. In addition, she possesses paleontological field experience pertaining to late Pleistocene terrestrial fossils within Los Angeles, Orange, and Santa Barbara Counties.

2.0 REGULATORY FRAMEWORK

While many of the laws stated below do not apply to this Project, we have added them for continuity in Cultural Resources laws, as well as in case the City of Los Angeles deems them to be required at a later date if the Project requirements change prior to or during construction.

2.1 Federal Laws/Regulations/Guidelines

2.1.1 Antiquities Act of 1906

The Antiquities Act of 1906 (16 USC § 431 *et seq*.) provides for the establishment and preservation of national monuments, historic landmarks, and historic or prehistoric structures, or other items of interest on federally owned lands. Additionally, Section 433 of this act prohibits the purposeful taking, excavation, damage, and destruction of historic or prehistoric ruins, monuments, or other objects of antiquity on federally owned lands. Other "objects of antiquity" are interpreted to include paleontological remains.

2.1.2 National Environmental Policy Act of 1969

The National Environmental Policy Act (NEPA) of 1969, specifically P.L. 91-190, 83 Stat. 852, 42 USC §§ 4321-4327, mandates the preservation of "important historic, cultural, and natural aspects of our national heritage" (§101.b4). In addition, NEPA is interpreted as providing for the protection and preservation of paleontological remains.

2.1.3 Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) mandates the following:

> The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking an any district, site, building, structure or object that is included in or eligible for inclusion in the National Register [of Historic Places (NRHP)]. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation [The Council], established under Title II of this Act, reasonable opportunity to comment with regard to such an undertaking. [16 U.S.C. § 470f]

An effect, or "adverse effect," as defined by 36 CFR §800.5 (a)(1), occurs when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register [NRHP] in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

To further clarify the meaning of what constitutes an adverse effect, 36 CFR §800.5 (a)(2) identifies the following: physical destruction, alteration that is not in keeping with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* per 36 CFR §68, removal, change of use, alteration of property setting, relocation, application of intrusive elements, neglect, and change of ownership (federal to non-federal).

The NHPA (16 U.S.C. § *et seq.*) defines a historic resource as significant if eligible for inclusion in the National Register of Historic Places (NRHP) as defined by one of four eligibility criteria set forth in 36 CFR §60.4A. Determination of historic resource significance is carried out via

implementation of the Section 106 process of the NHPA, as set forth by the Council per 36 CFR §800 "Protection of Historic Properties." Such significant historic resources can include archaeological sites of pre-historic or historic context, historic buildings, structures, or objects of state, local, or federal importance that retain integrity of location, design, setting, feeling, association, material, and/or workmanship and:

(A) Are associated with events which have made a significant contribution to the broad patterns of our history, or
(B) Are associated with the lives of persons significant in our past, or
(C) Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value, or are representative of significant and distinguishable entity of which the component may lack individual distinction, or
(D) Yield, or are likely to yield, data important to our understanding of prehistory and/or history.

2.4.1 Society of Vertebrate Paleontology Procedures and Guidelines

The Society of Vertebrate Paleontology (SVP), an international scientific organization of professional paleontologists, has issued guidelines and policy statements entitled *Assessment and mitigation of adverse impacts to nonrenewable paleontologic resources - standard guidelines* (SVP 1995, 2014), *Member Bylaw on Ethics Statement, Article 12 – Code of Ethics* (SVP 2009), and *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources* (SVP 2010). These statements outline acceptable professional practices in paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, curation, and specimen preparation, identification, and analysis.

According to the SVP (2014: Line 189), *significant nonrenewable paleontological resources* are "vertebrate fossils and their taphonomic and associated environmental indicators." While the SVP definition of nonrenewable paleontological resources "excludes invertebrate or botanical fossils . . . [c]ertain plant and invertebrate fossils or assemblages may be defined as significant by a project paleontologist, local paleontologist, specialists, or special interest groups, or by Lead Agencies or local governments" (SVP 2014: Lines 190-194).

Fossil remains in general are not found unless exposed by natural forces or by human activity. A paleontologist cannot determine fossil quality or quantity until a geological unit is exposed/disturbed or until alluvial deposits are disturbed. Paleontologists make conclusions about sensitivity based upon what types of fossils have been found previously in the same type of rock unit or sediment type and based upon the likelihood that the depositional environment resulted in the burial and preservation of fossils (SVP 2014). The SVP (2014: Lines 15-30) states

> The determination of a site's (or rock unit's) degree of paleontological potential is first founded on a review of pertinent geological and paleontological literature and on locality records of specimens deposited in institutions. This preliminary review may suggest particular areas of known high potential. If an area of high potential cannot be delimited from the literature search and specimen records, a surface survey will determine the fossiliferous potential and extent of the sedimentary units within a specific project. The field survey may extend outside the defined project to areas

where rock units are better exposed. If an area is determined to have a high potential for containing paleontologic resources, a program to mitigate impacts is developed. In areas of high sensitivity a pre-excavation survey prior to excavation is recommended to locate surface concentrations of fossils which might need special salvage methods. The sensitivity of rock units in which fossils are known to occur may be divided into three operational categories:

I. HIGH POTENTIAL. Rock units [or alluvial or aeolian deposits] from which vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include, but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.

II. UNDETERMINED POTENTIAL. Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

III. LOW POTENTIAL. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils. Such units will be poorly represented by specimens in institutional collections. These deposits generally will not require protection or salvage operations.

Fossils are seldom distributed uniformly within a rock unit or within an alluvial or fluvial deposit. Even if the majority of a rock unit or deposit lacks fossil remains, the same rock unit or deposit may contain concentrations of fossils in specific locations. In addition, within a fossiliferous portion of the rock unit, fossil remains may be present in varying densities. Because the presence or location of fossils within a rock unit cannot be discovered without exposure, SVP (2014) standard guidelines state that the entire rock unit possesses one level of sensitivity. Most fossil sites recorded during construction-impact mitigation studies have had no pre-project surface expression. Monitoring of construction-related excavation of a rock unit by an experienced paleontologist increases the probability that scientifically significant fossils will be discovered and preserved.

According to SVP (2009: Article 12.1-4), vertebrate paleontologists must ensure that vertebrate fossils are collected in a professional manner, "which includes the detailed recording of pertinent contextual data, such as geographic, stratigraphic, sedimentologic and taphonomic information." The ethics bylaw also states that fossil "vertebrate specimens should be prepared by, or under the supervision of, trained personnel" (SVP 2009: Article 12.3) and that "[s]cientifically significant fossil vertebrate specimens, along with ancillary data, should be curated and accessioned in the collections of repositories charged in perpetuity with conserving fossil vertebrates for scientific study and education (e.g., accredited museums, universities, colleges and other educational institutions)" (SVP 2009: Article 12.4). The SVP (2014: Lines 1-5) standard guidelines state that

vertebrate fossils are significant, nonrenewable paleontological resources and that the

> potential for destruction or degradation by construction impacts to paleontologic resources on public lands (federal, state, county, or municipal) and land selected for development under the jurisdiction of various governmental planning agencies is recognized. Protection of paleontological resources includes: (a) assessment of the potential property to contain significant nonrenewable paleontologic resources which might be directly or indirectly impacted, damaged, or destroyed by development, and (b) formulation and implementation of measures to mitigate adverse impacts, including permanent preservation of the site and/or permanent preservation of salvaged materials in established institutions.

Under the criteria stated above, all fossil remains may be considered *significant* by California Environmental Quality Act (CEQA) standards. *Significant* fossil remains may also be considered *scientifically significant* by the SVP. An individual fossil specimen is considered *scientifically significant* if it is:

- Identifiable
- Complete
- Well preserved
- Age diagnostic
- Useful in paleoenvironmental reconstruction
- A type or topotypic specimen
- A member of a rare species
- A species that is part of a taxonomically diverse assemblage
- A skeletal element different from, or a specimen more complete than, those now available for that species (SVP 1995, 2010, 2014; Scott and Springer 2003)

Both terrestrial and marine fossil remains are considered scientifically significant because they have the potential to indicate the geological age of the sedimentary unit, and its depositional environment. Additionally, vertebrate remains are comparatively rare in the fossil record. Fossil plants are also considered scientifically significant because they are sensitive indicators of their environment and help paleontologists reconstruct paleoenvironments.

2.1.5 Native American Graves Protection and Repatriation Act (25 USC Section 3001 et seq.)

The discovery of human remains is always a possibility during construction-related disturbances. The Native American Graves Protection and Repatriation Act, or NAGPRA, was enacted November 16, 1990. It states that the "ownership or control of Native American cultural items," which include human remains, funerary objects, sacred objects, and objects of cultural patrimony, that are "excavated or discovered on Federal or tribal lands" after the law went into effect is held by the lineal descendants of the Native American (or Hawaiian) to whom the objects originally belonged. If the lineal descendants cannot be found, then their ownership is conferred to the "Indian" tribe or Native Hawaiian organization on whose land the objects or remains were discovered or that has the closest cultural affiliation.

2.2 State Laws

2.2.1 California Register of Historical Resources (PRC §5024.1)

The California State Historical Resources Commission enacted Public Resources Code §5024.1, which established the California Register of Historical Resources (CRHR). The statute encourages public recognition and protection of resources of architectural, historical, archaeological, and cultural significance. The register itself is a listing of all properties considered to be significant historical resources in the state. Resources are considered significant (and thus eligible for the register) if they retain integrity and meet one of the following criteria:

1) Associated with events which have made a significant contribution to the broad patterns of California's history and historical heritage
2) Associated with the lives of persons significant in California's past
3) Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value, or
4) Yield, or are likely to yield, information important in prehistory or history.

The California Register specifically provides that historical resources listed or determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria, are resources that must be given consideration under CEQA (see below). Other resources, such as resources listed on local registers or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register is not automatic.

According to the federal laws to which the State of California defers when its own laws do not apply to a situation, historical resources are evaluated if they are 50 years or older, unless they are exceptional according to a set of criteria considerations. The Instructions for Recording Historical Resources (California Office of Historic Preservation [OHP] 1995:2) states that "[a]ny physical evidence of human activities over 45 years old may be recorded for purposes of inclusion in the OHP's filing system." This five-year difference is to compensate for the amount of time that usually occurs between a resource's discovery and its official documentation as well as the implementation of any mitigation procedures.

2.2.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) is a statute that requires state and local agencies to identify significant environmental impacts of their actions, including damages to cultural or historical resources, in order to avoid or mitigate those adverse impacts or changes. §15064.5(b)(1) of CEQA establishes "substantial adverse change" as the "demolition, destruction, relocation, or alteration…such that the significance of an historical resource would be materially impaired" (see below for the definition of *historical resource*). The "threshold of significance" is the level at which a lead agency finds the effects of a Project to be significant.

The destruction of unique, non-renewable cultural resources is a significant impact on that resource that requires mitigation of the impact. Construction excavation in archaeologically sensitive deposits that underlie a Cultural Resource Project area may result in a significant impact that could be prevented, minimized, or mitigated through the development of project alternatives (e.g., avoidance of the cultural resource) or mitigation measures for the purpose of recovering data that might otherwise be destroyed (e.g. archaeological excavation prior to construction excavation and

archaeological monitoring of construction excavation of a known site; or archaeological monitoring of construction excavation of an archaeologically sensitive area). Even if a historical resource, an archaeological site, or human remains cannot be identified within a Cultural Resource Project area before project implementation (i.e., if the resources are not visible on the surface during a Phase I survey, or if Extended Phase II testing does not reveal subsurface archaeological material), the area may still be archaeologically sensitive, based on the characteristics of the environmental background of the area or its current environmental setting, and if said resources are predicted to exist within the Cultural Resource Project area/remains could be present within the Cultural Resource Project area. Mitigation measures to avoid project impacts to as-yet undiscovered historical resources or human remains may be employed by the Lead Agency, even if these resources have not been identified within or adjacent to the Cultural Resource Project area. A study must consider a project's current baseline environmental setting and physical conditions so that the lead agency can determine whether project impacts would cause a significant change to that environment.

§15091 (d) of the CEQA Guidelines requires the Lead Agency to adopt a program for reporting on or monitoring the changes—that it has either required for the project or has made a condition of approval—in order to avoid or substantially lessen significant environmental effects. A Mitigation Monitoring and Reporting Program (MMRP) provides for the monitoring of mitigation measures that may be required by a project's Environmental Impact Report (EIR), if the EIR identifies potentially significant adverse impacts and mitigation measures to reduce those impacts. An archaeological resources/built environment data recovery or monitoring plan may be part of an MMRP if archaeological resources/built environment will be affected.

A significant historical resource, as defined by CEQA, is referred to as a "Historical Resource." Such Historical Resources have been determined eligible for inclusion in the CRHR per Title 14, California Code of Regulations (CCR), §15064.5(a)(3), and include historic properties eligible for inclusion on the National Register of Historic Places (NRHP) per PRC §5024.1, or are historically significant at a local level, such as a city, town, community, or county.

Paleontological resources are addressed by Appendix G (Part V) of CEQA, which indicates that the destruction of unique, non-renewable paleontological resources is a significant impact on the environment that requires mitigation of the impact. It specifically asks whether a project would "directly or indirectly destroy a unique paleontological resource or site or unique geological feature." Excavations in paleontologically sensitive deposits that underlie a Cultural Resource Project area may result in a significant impact that can be mitigated via the salvage and identification of excavated fossils from the deposit.

2.2.3 California Administrative Code

Title 14, Section 4307 of the California Administrative Code states that "no person shall remove, injure, deface, or destroy any object of paleontological, archaeological, or historical interest or value."

2.2.4 Public Resources Code

Section 5097.5 of the California Public Resources Code (PRC) protects both cultural and paleontological resources. It states that

> [n]o person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.

As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.

2.2.5 Native American Heritage Act

The Native American Heritage Act, passed by California in 1976, established the Native American Heritage Commission (NAHC) for the purpose of protecting Native American religious values on state property (PRC §5097.9). The NAHC not only protects the heritage of California Native Americans, but also ensures their participation in matters concerning heritage sites. The commission's duty is to assist both federal and state agencies in protecting Native American sacred places and provide recommendations concerning Native American heritage in accordance with environmental law and policy. As required by Government Code §65352.3 and §65562.5, for purposes of consultation with California Native American Tribes, the NAHC maintains a list of California Native American Tribes with whom local governments and public agencies may consult.

The act also protects burials from disturbance, vandalism, and accidental destruction. It stipulates what specific procedures, laid out in the California Health and Safety Code (HSC), must be implemented if a Native American burial is uncovered during project construction or archaeological data recovery.

2.2.6 Senate Bill 18

The California Senate Bill 18, passed in 2004, establishes a procedure to help California indigenous tribes and jurisdictions define tribal cultural resources and sacred areas more clearly as well as incorporate their protection into a General or Specific Plan prior to its adoption or amendment. The law also requires that California cities and counties contact and consult with California Native American tribes prior to designating land as open space. By involving tribes in local land use decisions, impacts to sites of cultural significance can be mitigated.

2.2.7 Assembly Bill 52

Assembly Bill (AB) 52, was approved and passed on September 25, 2014 by California State Governor Gerry "Jerry" Brown, Jr. The act has amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3, relating to California's Native American populations. Assembly Bill 52 applies to

projects for which a Notice of Preparation (NOP) or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) is filed on or after July 1, 2015. This bill recognizes California Native American tribes' expertise regarding cultural resources and provides a method for agencies to incorporate tribal knowledge into their CEQA environmental review and decision-making processes. California Native American tribes can now establish a standing request to consult with a lead agency regarding any proposed project subject to CEQA in the geographic area with which the tribe is traditionally and culturally affiliated. The definition of tribal cultural resources, as per PRC Section 21074(a)(1) and (2), encompasses "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" that are included or determined to be eligible for inclusion in the California Register or included in a local register of historical resources. A tribal cultural resource may also be determined by a lead agency, in its discretion and supported by substantial evidence. PRC section 21080.3.1(a-e) outlines and defines the initial consultation process required from the lead agency as follows:

21080.3.1(a): The Legislature finds and declares that California Native American tribes traditionally and culturally affiliated with a geographic area have expertise concerning their tribal cultural resources.

21080.3.1(b): Prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if:

(1) The California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and

(2) The California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation. When responding to the lead agency, the California Native American tribe shall designate a lead contact person. If the California Native American tribe does not designate a lead contact person, or designates multiple lead contact people, the lead agency shall defer to the individual listed on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004. For purposes of this section and Section 21080.3.2, "consultation" shall have the same meaning as provided in Section 65352.4 of the Government Code.

21080.3.1(c): To expedite the requirements of this section, the Native American Heritage Commission shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated with the Cultural Resource Project area.

21080.3.1(d): Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

21080.3.1(e): The lead agency shall begin the consultation process within 30 days of receiving a California Native American tribe's request for consultation.

Under PRC section 21080.3.2 (a) the following topics are potential consultation discussions:

- The type of environmental review necessary
- The significance of tribal cultural resources
- The significance of the project's impacts on the tribal cultural resources
- Project alternatives
- Appropriate measures for preservation
- Mitigation measures

Consultation is considered complete if the parties agree to measure(s) to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource, or if a party acting in good faith and after reasonable effort, concludes that a mutual agreement cannot be reached (PRC 2108.3.2(b)(1-2)). This section does not limit the ability of a California Native American tribe or the public to submit information to the lead agency regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any appropriate measures to mitigate the impact. This section also does not limit the ability of the lead agency or project proponent to incorporate changes and additions to the project as a result of the consultation, even if not legally required. If the project proponent or its consultants participate in the consultation, those parties shall respect the principles set forth in this section.

PRC section 21082.3(a)(b) requires any mitigation measures agreed upon in the consultation conducted pursuant to PRC section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the significant impacts to tribal cultural resources. If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following: (1) Whether the proposed project has a significant impact on an identified tribal cultural resource. (2) Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.

Any information including, but not limited to, the location, description, and the use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public (PRC section 21082.3(c). If a California Native American tribe has requested consultation pursuant to PRC section 21080.3.1 and has failed to provide comments to the lead agency, failed to engage in the consultation process, or if the lead agency has complied with PRC section 21080.3.1(d) and the California Native American tribe has failed to request

consultation within 30 days, the lead agency may certify an Environmental Impact Report or adopt a Mitigated Negative Declaration.

Suggested mitigation measures after lead agencies determine that a project may cause a substantial adverse change to tribal cultural resources are outlined under PRC section 21084.3 as follows:

- Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
    - Protecting the cultural character and integrity of the resource.
    - Protecting the traditional use of the resource.
    - Protecting the confidentiality of the resource.
    - Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    - Protecting the resource.

2.2.8 California Health and Safety Code

Section 7050.5 of the HSC states that if human remains are found, construction and/or excavation must cease within the general vicinity, and the remains must be inspected by the county coroner. If the coroner determines that they are Native American in origin, then the coroner must contact the NAHC. The NAHC will then determine and notify a Most Likely Descendant (MLD). The MLD must complete inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Sections 8010-8011 of the HSC establish a state repatriation policy that is consistent with and facilitates implementation of NAGPRA. NAGPRA was passed in 1990 and required that museums and federal agencies document all Native American human remains within their collections, or uncovered on projects, as well as their cultural ties. These agencies must then notify any tribe that may be affiliated with the remains and provide the opportunity for their repatriation along with any associated cultural items (grave goods). The California state version (Cal NAGPRA) mandates publicly funded agencies (state and local government agencies) and museums to repatriate human remains and associated cultural items to California Native American Tribes, not just federally recognized tribes within California, and establishes penalties for noncompliance.

2.3 Local Laws and Policies

2.3.1 County of Los Angeles General Plan

Los Angeles County considers its "historic, cultural, and paleontological resources [as] non-renewable and irreplaceable" (County of Los Angeles 2014:155). In order to protect these resources, the County is guided by federal and state laws regarding such resources. The County's goal (C/NR 14) is to "[m]itigate all impacts from new development on or adjacent to historic,

cultural, and paleontological resources to the greatest extent feasible" and to "[e]nsure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources." The County also has policies to "[s]upport the preservation and rehabilitation of historic buildings" and to "[e]nsure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004)" (County of Los Angeles 2014:159). One method the County has employed to successfully preserve historic, cultural, and paleontological resources is maintaining a "local registry or landmarks commission" that identifies historic, cultural, and paleontological resources that are not identified by state and federal programs (County of Los Angeles 2014:158). This registry, known as the Los Angeles County Historical Landmarks and Records Commission "reviews and recommends cultural heritage resources in the unincorporated areas for inclusion in the State Historic Resources Inventory" (County of Los Angeles 2014:155).

(As stated in the Los Angeles County General Plan 2015)

- Policy C/NR 14.1: Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.
- Policy C/NR 14.2: Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.
- Policy C/NR 14.3: Support the preservation and rehabilitation of historic buildings.
- Policy C/NR 14.4: Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).
- Policy C/NR 14.5: Promote public awareness of historic, cultural, and paleontological resources.
- Policy C/NR 14.6: Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

2.3.2 City of Los Angeles Cultural Heritage Ordinance

As per Section 22.171.7 of the City of Los Angeles' Cultural Heritage Ordinance, "a Historic-Cultural Monument (Monument) is any site (including significant trees or other plant life located on the site), building or structure of particular historic or cultural significance to the City of Los Angeles. A proposed Monument may be designated by the City Council upon the recommendation of the Commission if it meets at least one of the following criteria:

1. Is identified with important events of national, state, or local history or exemplifies significant contributions to the broad cultural, economic or social history of the nation, state, city or community.
2. Is associated with the lives of historic personages important to national, state, city, or local history; or
3. Embodies the distinctive characteristics of a style, type, period, or method of construction; or represents a notable work of a master designer, builder, or architect whose individual genius influenced his or her age."

3.0 GEOLOGIC SETTING

Stratigraphic divisions found in rock sequences reflect geologic changes, and thus have provided the basis for determining geologic time scales. Geologic eons are divided into eras, which are divided into periods, which are divided into series or epochs. Table 1 outlines the geologic eras, periods, and series discussed in this report and is based on one created by the USGS Geologic Names Committee (2007). Geologic eras previous to those discussed in this report are not included in the table.

Table 1. Divisions of Recent Geologic Time (U.S. Geological Survey Geologic Names Committee, 2010)

Eon	Era	Period or Subperiod		Series or Epoch
Phanerozoic (543 mya to present)	**Cenozoic** 65.5 mya to Present	**Quaternary** 1.5 million years ago (mya) to the Present	**Neogene**	**Holocene** 11,477 years ago (+/- 85 years) to the Present
				Pleistocene ("The Great Ice Age") 1.5 million to approximately 11,477 (+/- 85 years) years ago
		Tertiary 65.5 to 1.5 mya		**Pliocene** 5.3 to 1.5 mya
				Miocene 23 to 5.3 mya
			Paleogene	**Oligocene** 33.9 to 23.0 mya
				Eocene 55.8 to 33.9 mya
				Paleocene 65.5 to 58.8 mya

Approximately 17 to 18 million years ago (mya) in the early Miocene Epoch, the constant collision of the East Pacific Rise with the continental margin subduction zone of the Pacific Plate and North American Plate led to a change in plate tectonic movement. As the spreading zone of the East Pacific Rise reached the Los Angeles County area, tectonic movement was converted into a transform (lateral) motion. This new boundary and motion became known as the San Andreas Fault system. As the Pacific Plate moved northward relative to the North American plate several subparallel right-slip faults were formed which broke off crustal blocks from the North American Plate and were added to the Pacific Plate which is known as microplate capture (Nicholson et al., 1994; Dickinson, 1996; and Atwater and Stock, 1998).

These crustal blocks pivoted and separated in places to create fault-bounded chasms which became deep, narrow, rapidly subsiding basins. The rotation of these crustal blocks also created what would become the east-west trending Transverse Ranges, a group of mountain ranges in southern California, which includes the Orocopia Mountains, the San Gabriel Mountains, the Santa Ynez Mountains, the Santa Monica Mountains, and the Channel Islands (Luyendyk et al. 1985). Los Angeles County, which is predominately situated above the eastern portion of the Pacific Plate, was only crustal land that was quickly depressed and submerged underwater as the subsiding basins were created (Quinn 2001). By the middle Miocene Epoch, these submarine basins were subdivided into the Ventura Basin, the San Gabriel Basin, the San Fernando Basin, and the Los

Angeles Basin. Over time, the basins accumulated huge thicknesses of deep-water marine shales and sandstones, as well as deposits of siliceous shale and diatomites (formed from diatoms, or single-celled algae with cell walls made of silica) (Conrey 1967; Crowell 1981; Fritsche et al. 1998; Luyendyk et al. 1985; Schwartz and Colburn 1987; Woodford et al. 1954).

The Los Angeles Basin accumulated marine sediment over 6 miles deep in only 6 million years (Luyendyk et al. 1985) and continued to subside through the early Pliocene. Eventually the Los Angeles Basin was separated from the open ocean by a submarine ridge (Quinn 2001) and evidently cutting off some of the quantity of marine sediments. Throughout the basin's creation, sea levels fluctuated due to alternating glacial and interglacial episodes (Quinn 1992). During these phases, the area under water expanded and contracted, and the inland stratigraphic layers (not including the coast and the Santa Monica Plain) alternate between marine and continental sediments (Woodford et al. 1954). There was also an overall decrease in local oceanic depth over time during the interglacial periods. This decrease, coupled with increasing deposition, resulted in the eventual termination of the submarine central Los Angeles Basin. Continuous non-marine deposition commenced in the later Quaternary period whereby alluvial stream deposits accumulated on top of the earlier marine deposits and was only interrupted by erosion (Quinn 1992). These alluvial stream deposits originated from the floodwaters that were transported from the surrounding mountains by the Los Angeles, San Gabriel, and Santa Ana rivers (Schoenherr 1992). The Los Angeles Basin experienced one last (shallow) marine episode during the late Pleistocene prior to the most recent glaciation period. This glaciation period saw an increase in precipitation and subsequent acceleration in erosion of the Santa Monica Mountains. The resultant increased deposition of fluvial sediments in the basin constitutes the latest stage of the Pleistocene and is often referred to as the Rancholabrean age (Quinn 1992). This designation is named after the fauna recovered from Rancho La Brea and is applied to the later Pleistocene epoch of North America.

As denoted on the 1991 Geologic Map of the Hollywood and Burbank (south ½) quadrangles (Figure 4), the Project site is overlain by surficial Quaternary Alluvium (*Qa*) that is concentrated primarily in the middle section of MacArthur Park. These sediments consist of clay, sand, and gravel deposited from natural geologic processes or once existing stream channels (Dibblee, T.W., and Ehrenspeck, H.E., ed. 1991). Along the west, north, and eastern boundaries of the Project site, older surficial sediments (*Qae*) of Pleistocene age were identified which are similar to *Qa* but also includes alluvial fan sediments of the neighboring mountain regions. Exact thickness of these deposits is variable and currently, it is not known how thick these sediments are beneath the Cultural Resource Project area. Additionally, both of these sedimentary units have produced various invertebrate and vertebrate fossil localities throughout the Los Angeles Basin. The most famous and known Quaternary aged fossil locality in the Los Angeles Basin is known as the fauna of Rancho La Brea. This location is in the middle of downtown Los Angeles, and approximately 4 miles west of the Project location. Its asphalt deposits are found within the Quaternary alluvium of the Pleistocene and has preserved various specimens such as sabre-tooth cats (*Smilodon californicus*), dire wolf (*Canis lupus furlong*), and much more. This location has also produced an entire recreation of the Pleistocene through its preservations of smaller organisms like birds and mollusks but especially due the preservation of plants and insects of that time. Though the La Brea Tar Pits, as it is commonly known, may be further west of the Cultural Resource Project area, there always exists a potential to uncover such fossils of similar importance since the extent of oil wells

and asphalt seeps in the Los Angeles Basin can be highly unpredictable. Further discussion of the potential for uncovering paleontological resources is discussed in detail in Section 6.1.

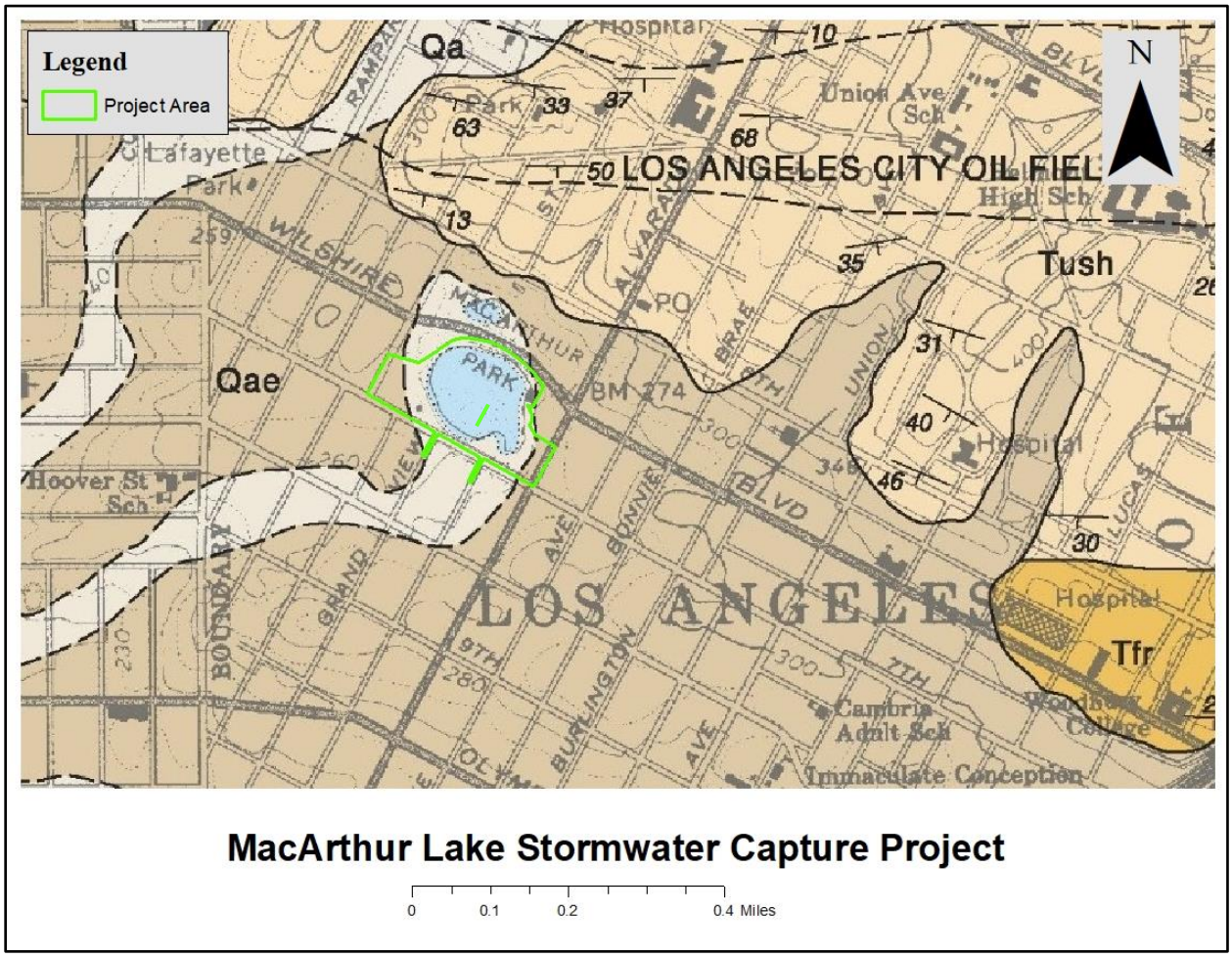

Figure 3. 1991 Geologic Map of the Hollywood and Burbank (south ½) quadrangles, Los Angeles, California with Cultural Resource Project area outlined in green. (Dibblee, T.W., and Ehrenspeck, H.E., ed. 1991)

4.0 CULTURAL SETTING

The cultural record for southern California has been divided into two general time periods: the prehistoric and the historic. The prehistoric period is the time prior to written documentation and colonization. The historic period represents the time from which written documentation was kept for this area: from the first Spanish explorers in the 1500s to the 1950s.

4.1 Prehistoric Background

4.1.1 Western Fluted Point Tradition or the Paleo-Indian Period (±12,000 - 11,000 Before Present or B.P. [±10,000 - 9,000 BCE (Before the Common or Current or Christian Era)])

Prehistoric human land use for the region of the Cultural Resource Project area potentially dates

as far back as approximately 12,000 years ago. Evidence of this early habitation comes from the City of Los Angeles, California which has two of the earliest sites that contain human remains in all of the Americas: "La Brea Woman" and "Los Angeles Man". Found in 1914, the "La Brea Woman" site is comprised of the osteological remains of a young Native American woman discovered in Pit 10 at the La Brea Tar Pits (located at the George C. Page Museum, also known as the La Brea Tar Pits) within Hancock Park. Her remains were found in association with extinct ice age fauna and a small, possibly domestic, dog (*Canus* sp.). Artifacts associated with her remains include shell and stone artifacts and a mano (hand grinding stone) fragment. At the time of discovery, her remains were dated to approximately 40,000 years ago based upon associated fossils (Stock and Harris 1992). The presence of the mano fragment, though, as well as the type of shell and stone artifacts, call into question this early date. Artifacts such as these are not present within the archaeological record of southern California until approximately 8,500 to 9,000 BP (see Moratto 1984: 53-54; Stock and Harris 1992: 21-23). Additionally, radiocarbon dates of treated samples (to decontaminate the bones of intrusive carbon) from her remains yielded a date of 9,000 +/- 80 B.P. Another discovery at the La Brea Tar Pits, indicating the early presence of humans in the Americas, and specifically California, comes from long bones from three Pleistocene animal species. These bones include one tibia and three femora from saber-tooth cats (*Smilodon fatalis*), one radius from a bison (*Bison* spp.), and one femur from a California lion (*Felis atrox*). All of these bones appear to have cut marks and grooves on them, likely the result of human activity. They have been radiocarbon dated to 15,200 +/- 800 B.P. (Moratto 1984/2004).

The "Los Angeles Man" site contained several human skull fragments found in 1936 by Work Projects Administration (WPA) workers excavating a storm drain along a former route of the Los Angeles River, north of Baldwin Hills by La Cienega Boulevard and Jefferson Boulevard. The site is approximately 3.4 meters deep situated in an ancient streambed (Moratto 1984/2004). Approximately, 350 meters away at the same depth as the human bone discovery, two teeth and several bones of an Imperial Mammoth (*Mammuthus imperator*) were also unearthed. Both the mammoth bones and the human remains were dated, using a fluorine-based dating method, to approximately 20,000 years old. Other early evidence of Los Angeles human habitation has dated the Los Angeles Man to 8,000 to 10,000 B.P. (Moratto 1984/2004).

4.1.2 San Dieguito Tradition or Western Pluvial Lakes/Paleo-Coastal Tradition (11,000 - 7,500 B.P. [9,000 – 5,500 BCE])

Other prehistoric human archaeological records date to as early as 11,000 B.P. near the beginning of the Archaic Period in coastal southern California with the San Dieguito Tradition. The San Dieguito Tradition denotes an archaeological period that is found throughout southern California, described as a generalized hunting tradition dating from 9,000 to 10,000 years ago. It has since been subsumed into the longer Western Pluvial Lakes Tradition, which is characterized by adaptations to inland lake, marsh, and grassland environments, as well as its coastal variant (Paleo-Coastal Tradition) distinguished by adaptations to estuary and bay shores. The tradition ended about 8,000-7,000 B.P. when the climate deteriorated and lakes started drying up. The people from this period were possibly descended from Paleo-Indians who inhabited the desert regions of southeastern California (Moratto 1984/2004; Warren 1968).

The San Dieguito people that inhabited the shores of pluvial lakes and marshes exploited the chaparral zone environments and resources, possibly depending upon a broad array of vegetative

resources. They subsisted primarily on chaparral-related resources such as mule deer, rabbits, and plants, but were not known to have harvested the hard seeds of the chaparral plants and moved often as they depleted the local resources (Bean and Smith 1978; Chartkoff and Chartkoff 1984; Moratto 1984/2004). Their toolkits included foliate knives and points (Lake Mojave and Silver Lake points), lanceolate bifaces, lithic crescents, scrapers, choppers, planes, hammerstones, and several types of cores, drills, and gravers. Along the coast, diets included not only land animals and plants, but also mollusks, waterfowl, and limited amounts of sea mammals and fish. Coastal toolkits included additional items such as pitted stones, asphaltum, pointed-bone objects, and shell spoons and ornaments (Moratto 1984/2004).

Early Archaic populations consisted of small, band level in size, groups of people approximately totaling a dozen individuals, or one or two families. The artifact assemblages associated with the "La Brea Woman" and "Los Angeles Man" sites bear similarities with this small band level size groups. During the late San Dieguito Tradition, bone awls and needles became common, and used to make baskets, nets, and clothing (Chartkoff and Chartkoff 1984). Evidence also suggests that the northern Channel Islands (Santa Rosa and San Miguel islands) were inhabited approximately 9,000 years ago, indicating a sophisticated means of ocean travel, perhaps via plank canoes (Raab and Yatsko 1990; Bean and Smith 1978; Chartkoff and Chartkoff 1984; Moratto 1984/2004).

4.1.3 Encinitas Tradition or Milling Stone Horizon, Topanga I Phase (7,500 - 5,000 B.P. [5,500 – 3,000 BCE])

Between 8,000 and 6,000 B.P., regional exploitation of food resources in California became more systematic and efficient resulting in environmental niche specialization and greater regional difference, as evidenced by the variety in tool kit assemblages. Flourishing between 7,500 and 5,000 B.P., the individuals of the Encinitas Tradition continued to exploit game and vegetation in the same traditions devised by their San Dieguito predecessors but added seasonal foraging strategies that yielded protein rich plant material, such as the hard seeds of chaparral plants, to their diet. Midden deposits evinced slightly different subsistence patterns between groups depending on local ecology. The people inhabiting the coastal shoreline harvested vast amounts of shellfish and sea mammals, although not fish. Other groups practiced seasonal exploitation of resources by moving between the coastal littoral (shoreline) and chaparral zones. As the groups became more efficient in their hunting and gathering strategies, the populations of the groups increased to two to three times as large as they had been earlier in the Archaic (Wallace 1955; Warren 1968; Moratto 2004; Chartkoff and Chartkoff 1984). Encinitas Tradition tool kits became more specialized, with more regional variation than seen with their San Dieguito predecessors. Certain tool types were retained, such as basic heavy-duty choppers and scrapers (core tools). New tool forms appeared as well, including large numbers of milling slabs and handstones (metates and manos) used to grind hard seeds, and a modest number of projectile points were added, such as the Pinto Point, that were somewhat smaller than those of previous eras. The Encinitas people also manufactured enigmatic items such as gear-like "cogwheels" and stone disks, for which there is no known utilitarian purpose. These "cogwheels" or "cogstones" required great investment of manufacturing time and energy, seemingly with no relationship to subsistence. When associated with formalized (but rudimentary) differential burials, these items suggest that the Encinitas life-way was more socio-culturally complex than that of the San Dieguito Tradition (Chartkoff and Chartkoff 1984; Moratto 1984/2004; Sutton and Gardner 2006:8). Human burials from this phase are characterized as secondary burials, often consisting only of long bones, with some inhumations

but no cremations.

4.1.4 Campbell Tradition or Intermediate Horizon, Topanga II and III phases (5,000 – 1,000 B.P. [3,000 BCE – 1000 CE (Common or Current or Christian Era)])

During the Campbell Tradition, ca. 5,000-4,500 B.P., new forms of subsistence procurement and technology, as well as increasing societal changes, began to emerge throughout southern California. Core settlements increased in physical size and population. Many Native American settlements were located in transitional ecological zones, which provided these groups with a broad-spectrum of subsistence without extensive migration, resulting in village-style communities surrounded by peripheral settlements. Faunal remains and numerous projectile points (including harpoon points and arrowheads) demonstrate the renewed reliance on hunting, with both land and sea mammals that were exploited. Fish were incorporated into the diet again, though at low levels, at this time. Acorns became part of the subsistence base, as evidenced by the increased presence of the mortar and pestle. Other tools present include flake scrapers and a variety of shell and bone ornaments (Warren 1968; Wallace 1955; Chartkoff and Chartkoff 1984; Moratto 1984/2004).

The stabilization of seasonal settlement patterns, due to the onset of a semi-sedentary residence, led to socio-cultural changes in the communities that provided new forms of social and political relationships and trade networks. These changes are seen archaeologically through the presence of exotic items, such as marine shell beads at inland archaeological sites, and the development of more formal mortuary customs that involved both cremations and various burial forms, as well as the inclusion of grave goods. These "advances" demonstrate that societies were becoming increasingly complex (Chartkoff and Chartkoff 1984; Moratto 1984/2004). Sutton and Gardner characterize human burials from this time as mostly flexed inhumations with some continuation of secondary long bone interment burials (2006:8). Cremations are present during these phases, but extremely rare.

4.1.5 Late Prehistoric (1,000 – 400 B.P. [1,000 – 1,542 CE])

During the Late Prehistoric, regional differences throughout California fully developed, resulting in the tribal groups that are currently known (Wallace 1955). Populations of these culturally distinct groups continued to rise as did territorially defined sedentary settlement patterns. Resource exploitation, including fishing, intensified while large-scale hunting and gathering operations provided varied sources of subsistence on the other. The diversity and quantity of trade increased with the development of a shell-bead money system. Linked to the development of these trade networks was the establishment of non-egalitarian political systems that increased social complexity within the cultures, as evinced by marked differences in access to goods and services both within and between local Native American communities. Societies became highly stratified with hierarchies based upon wealth, occupation, and/or lineage. The increased subsistence intensification, sedentism, and complexity are documented in the archaeological record of the Gabrieleño people and their linguistically distinct Chumash neighbors to the west (Chartkoff and Chartkoff 1984; Moratto 1984/2004). Though these are two examples observed by Chartkoff and Moratto, other mission Native Americans that mirrored the similar advances of recorded complexity included the Gabrieleno Tongva, the Kizh people, the Tataviam people, the Kitnanemuk people, and the Vanyume people which also inhabited the various regions in the Project vicinity. Other changes that occurred during this period include the increased use of the

bow and arrow, the application of asphaltum to various items, and the manufacture of many new types of artifacts such as shell tools (fishhooks) and ornaments (beads and pendants), stone bowls, animal effigies, bone tools and ornaments (awls, scepters, hairpins, fishhooks, whistles, and tubes), and pottery vessels in the south. Burials are formally marked and the remains face in a particular direction. While some of these practices started along the coast in earlier times, their occurrence at interior locations was a new development (Moratto 1984/2004).

Prior to the Late Prehistoric, the "Shoshonean Tradition" way of life infused (or intruded) into the southern California region, mainly through immigration but also through trait diffusion from the interior to the coast. It is theorized that the immigration originated from the environmental decline that in turn affected substance procurement in the Great Basin. Long-term droughts forced people to migrate from the Great Basin region southwestward into the southern California interior and finally towards the coast. These migrants at first inhabited the less-desirable, sparsely inhabited areas. They brought with them new traditions and artifacts including cremation, pottery, and small triangular arrow points. The result of this immigration event is often referred to as the "Shoshonean Wedge" (Moratto 1984/2004; Chartkoff and Chartkoff 1984).While the social complexity of these groups began to increase within these migrating populations during the Late Archaic Period [3,000 to 1,500 B.P. (1,000 BCE to 500 CE)], it was particularly apparent during the Late Prehistoric Horizon. When the "Shoshoneans" migrated to the coast, they quickly adapted to the surroundings, their success the result of borrowing the technologies and economic practices of their new neighbors including a maritime subsistence base (Moratto 1984/2004). Bull (1977) theorizes that the Shoshonean groups actually replaced and intermarried with the indigenous groups. This contact has resulted in a complex archaeological record, characterized by defined cultural territories for hunting and sea exploitation.

4.2 Ethnographic Background

Since physical borders did not exist between tribes and other entities, the Cultural Resource Project area and surrounding vicinity included many tribal groups. While the Chumash and Kitanemuk generally lived outside the Cultural Resource Project area's territory, many of the people from those tribes have been listed by the NAHC as part of their ancestral homeland. The tribal groups that lived, and still do, around the Cultural Resource Project area are listed in this section. The Project property is located in a region where prehistoric cultural history is historically minimally documented and/or understood (Kroeber 1925; Hanks 1971; Moratto 1984/2004; King 1994; Sutton 1996). At the time of the arrival of the Spanish, the Native American people, named the Tataviam, occupied various locals in the Project vicinity which included the Santa Clara River Valley and northward to the southern Antelope Valley. However, other Native American culture groups, including the Chumash to the west, and the Gabrieliño/Tongva/Kizh Nation tribes to the south and southeast, include this area as part of their territory.

Figure 4. Gabrieleño women outside of the San Gabriel Mission

The name Gabrieleño was given to the local Native Americans by the Spaniards at the time of European contact. While the Gabrieleño people have been mostly associated with the San Gabriel Mission, their territory was much larger. In fact, the name Gabrieleño was derived from the name of the first Spanish Catholic Mission established in the Los Angeles area (Figure 5) (Pitt and Pitt 1997; Street 2008). The Gabrieleño people, at the time of European contact, were regarded as the richest, largest, and most dominant group in southern California aside from the Chumash, in part due to the abundance of resources available to them in the general Los Angeles area. They were not agriculturists since their economy was based on hunting and gathering, including fishing and acorn processing, as well as trade. One object of trade was steatite or soapstone, an easily carved metamorphic talc-schist rock useful for cookware, containers, and art. The local southern Californian source of steatite is located on Santa Catalina Island, part of a locally unique geological terrain. Additional tribes in the Los Angeles area lived near the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers, along the Pacific Coast, as well as the offshore islands of Santa Catalina, San Clemente, and San Nicolas. The Gabrieleño groups that lived near the ocean were believed, along with their northwestern neighbors the Chumash, to have regularly navigated the ocean near the shore. Less frequent ocean goers included the San Diegan groups to the south. The Gabrieleño constructed ocean-going canoes, called ti'at, which were built using planks sewn together edge to edge with plant and sinew material, and subsequently caulked with either pine

pitch or, more commonly, asphaltum that washed ashore from oil seeps or was imported to the coastal locations from the area associated with the present-day La Brea Tar Pits. The canoes could hold as many as twelve people along with trade goods and supplies (Blackburn 1978; Bean and Smith 1978).

4.3 Historic Background

The Historic Period begins when the first Spanish explorers recorded in writing their observations of the area and its inhabitants. The Historic Period in California is divided into four general phases: the Exploration Period (1542 to 1769 CE), the Spanish Period (1769 to 1821 CE), the Mexican Period (1821 to 1846 CE), and the American Period (1846 CE to Present).

4.3.1 Exploration Period (1542 to 1769 CE)

European explorers made sporadic visits into the general Los Angeles area during the 16th century. For example, Juan Rodríguez Cabrillo, an ethnic Portuguese explorer working for the Spanish crown, arrived at San Pedro Bay in 1542 (Chartkoff and Chartkoff 1984), although the bay was not named until 1602 by Sebastian Vizcaíno during his survey of the Pacific shore between Acapulco and Oregon (Gumprecht 1999). Extensive Spanish interaction with the Gabrieleño began in 1769 when Gaspar de Portolá led an overland expedition from San Diego across southern California with Franciscan Padre Juan Crespí as part of a plan to affirm Spanish control over California that was threatened by the Russians and the British. Juan Crespí recorded this expedition in his diaries and records. According to interpretations of these documents, the expedition party traveled through present day Elysian Park during the beginning of August and was awed by a river that flowed from the northwest, past Elysian Park, and southward. It was Portolá who named the river *El Rio de Nuestra Señora la Reina de los Angeles de Porciúncula*, which translates to "The River of Our Lady Queen of the Angels of *Porciúncula*." (The river *Porciúncula* is the present-day Los Angeles River, now mainly a concrete waterway.) The expedition travelers camped in that area. It is documented that they crossed the San Gabriel and Santa Ana Rivers as well. While much of the water of the Los Angeles and San Gabriel Rivers flows underground, the waters of the Los Angeles River were forced above the river sands at Griffith Park and Elysian Park by underground geological formations before they dropped again below the sands south of what is now downtown Los Angeles. Only during severe winter floods would there be substantial aboveground water that would appear in the riverbeds of all three rivers. Crespí described the Los Angeles River as only slightly smaller than the two other rivers. The Los Angeles River's main riverbed, downstream from the Los Angeles area and Bunker Hill, may well have been near what is now Washington Boulevard and Ballona Creek as it was during the early 1800s, though Crespí's chronicle indicates it following its more currently known southerly flow. A major flood in 1825 shifted its main course southward to join the San Gabriel River at one of that river's old course alignments (Gumprecht 1999). The Portola expedition returned to Los Angeles during the winter on its way back to San Diego from the San Francisco Bay area, having missed its initial destination, Monterey Bay. Portolá would head another expedition through Los Angeles in the spring of 1770, again on the way to Monterey Bay (Starr 2005).

4.3.2 Spanish Period (1769 to 1821 CE)

Twelve years after Portola's voyages, an expedition organized by the Spanish Governor of

California, Felipe de Neve, established a pueblo on the coastal plain of the Los Angeles River. This new town was one day's ride north of San Pedro and was dedicated on September 4, 1781. The town, like the river, was named after St. Francis of Assisi's first church, St. Mary of the Angels, or *El Pueblo de (Nuestra Señora) la Reina de los Angeles (de Porciúncula)*. The company of settlers was recruited by de Neve from the Mexican states of Sonora and Sinaloa and was known as *Los Pobladores* (the "townspeople" or "populators"). The original group was led by Captain Fernando Javier Rivera y Moncada and was comprised of eleven families made up of 11 men, 11 women, and 22 children. The settlers were of various ethnicities including those of Spanish, African, and Native American descent, as well as some of mixed race (mulattos and mestizos). Over time, the area known as the Ciudad de Los Angeles became the "City of Angels," and on April 4, 1850, it became known as the City of Los Angeles (Mason 2004; Pitt and Pitt 1997).

The goal of the Spanish colonization effort was not only to create local populations of settling peasants and merchants, but also to include native peoples who already occupied the region into those populations. In order to incorporate the indigenous tribes, efforts were made to educate them and convert them to Christianity, turning them from "savages" into "intelligent beings—*gente de razón*" (Chartkoff and Chartkoff 1984: 258). It is for this reason that religious missions became the cornerstone of colonization. Padre Junípero Serra, who founded 21 missions in 52 years, directed the missionization of California (Chartkoff and Chartkoff 1984). Two of those missions were in Los Angeles: *Misión del Santo Arcángel San Gabriel de los Temblores* (San Gabriel Mission) now known as *Mission Vieja* established on September 8, 1771 by the Padres Angel Somera and Pedro Bonito Cambon, and *San Fernando Rey de España* Mission on September 8, 1797 by Padre Fermín Lasuén (Pitt and Pitt 1997). In order to support the Spanish settlements, missions did not just attempt to convert California Indians, but also used them to work on the farms and ranches present on mission grounds. Many of the Gabrieleño were gradually forced to move to the San Gabriel or San Fernando Missions and provide labor, as were many of the Native Americans living on the coastal plains and inland valleys at the time, though small groups escaped such confinement (Bean and Smith 1978).

In the 1760's, a Spanish soldier named Juan Jose Dominguez accompanied Padre Junípero Serra as part of the small band of military men who helped to protect the padres. When Dominguez retired in 1782, he was rewarded a vast expanse of 75,000 acres of land, which he named Rancho San Pedro. It stretched from the Los Angeles River to the Pacific Ocean on the west. This is the land that would later encompass the cities of Carson, Torrance, Redondo Beach, Lomita, Wilmington, and parts of San Pedro. At the center of this vast ranch was the Dominguez Rancho homestead, located in what today is the eastern portion of the City of Carson, known as Dominguez Hills. The nephew of Juan Jose Dominguez eventually established the Ranch Adobe in 1826, which still stands today as a historic location.

The forced interaction with the Spanish marked the beginning of the decline of the indigenous population as a powerful force shaping the nature of the Los Angeles area. Their population was already declining, even before the arrival of a large number of Spanish, from diseases introduced by earlier explorers (Bean and Smith 1978). Mass conversions of the Gabrieleño people began in 1778 when certain village chiefs turned to Catholicism. These Gabrieleño assisted the Spanish, even though many other Gabrieleño resisted the colonization and started revolts. In 1796, the recruits used traditional Gabrieleño subsistence practices to feed the general population of the

missions. By 1800, the original Gabrieleño villages were empty and the Gabrieleños and other Native Americans provided much of the labor for the European ranches, farms, and communities. The shift from hunting and gathering to a sort of feudal existence led to dietary deficiencies that eventually caused population reduction. The local population greatly suffered from the European epidemics as their population dwindled rapidly (Bean and Smith 1978). During this time, only fragmentary ethnographic information was recorded. Because of the lack of collected data, the *Tongva*, a group that once flourished in the rich Los Angeles environment, is one of the Native American groups that is least known ethnographically (Gumprecht 1999).

4.3.3 Mexican Period (1821 to 1846 CE)

The start of the Mexican Period began when Mexico gained its independence from Spain in 1821. At the same time, the Mission system began to break down, and eventually, around 1834, the secularization of the Mission system in Alta California ended. After Mexico gained independence from Spain, California experienced a period of thriving ranchos between the years of 1821-1848. The word *rancho* was a general term covering farms, ranches, and settlements. The term was also used to denote a specific time frame (the Rancho Period) that encompassed the authorization of land grants in Alta California by King Carlos III of Spain (1784) as well as its redefinition with the acceptance of the State of California in the United States (1850). Some researchers restrict the Rancho Period to the time from 1824 to 1847 when the Mexican governors awarded some 800 land grants (Figure 6), most of which were former mission lands in which the Native Americans at the time were supposed to have some legal claim. The Spanish authorities had only made some 20 land grants before Mexico's Independence in 1821. Many of the land grants were or became cattle ranches, a major economic activity at that time. The Native American tribes supplied most of the labor (Starr 2005; Wlodarski 1998).

Figure 5. Spanish and Mexican ranchos of Los Angeles County (Eddy, Gerald A. 1937)

4.3.4 American Period (A.D. 1848 to Present)

American military forces were present within California during the summer of 1846 as a result of the Mexican-American War. Rapidly, Mexican resistance deteriorated, and the United States occupied Mexico City in 1848, marking the beginning of the American Period (1848 to Present). In February 1848, California became a U.S. holding with the signing of the Treaty of Guadalupe Hidalgo. This treaty ended the Mexican-American War and ceded much of the southwest (California, Nevada, Utah, and portions of Arizona, New Mexico, Colorado, and Wyoming) to the United States. A month earlier, on January 24, 1848, gold was discovered along the American River, near Sacramento. The following year resulted in over 150,000 miners, known as "49-ers," descending upon California. That same year, 1849, California petitioned Congress for admission

to the Union as a "free state." As a result of the Compromise of 1850, California was admitted to the Union as the 31st state on September 9, 1850 and was slave-free (Chartkoff and Chartkoff 1984; State of California 2015b). In 1862, the Homestead Act was passed, allowing individuals to claim up to 160 acres of undeveloped federal land for freehold title, provided that the claimant filed an application, improved the land, and then filed for title within five years (U.S. Congress 1863).

While the Treaty of Guadalupe Hidalgo required the United States to grant citizenship to the Indians of former Mexican territories, the Constitution of California did not offer the Indians protection under the law, considering them non-persons (Cook 1971). At the first State Constitutional Convention, California Indians' right to vote was denied, and in 1850, the Act for the Government and Protection of Indians was passed by the State Legislature that greatly reduced the rights of Indians and enacted harsh punishments for any crimes committed by Indians. The Act practically legalized Indian slavery by allowing city officials to arrest Indians for vagrancy (drunkenness) and then sell them to ranchers and other people to serve as a private "labor force." The law was not repealed until 1866 in order to comply with the 14th Amendment of the U.S. Constitution. However, Native Californians did not gain citizenship until 1917 when the California Supreme Court declared them citizens. Subsequently, the Indian Citizenship Act was passed in 1924 granting Indians the right to vote, but it would be more than 50 years before Indians were guaranteed their "constitutional right of religion" (OHP 1988).

In 1851, the United States Congress authorized a commission to create treaties with California Indians with the goal of extinguishing all Indian land titles and instead establishing reservation land, as had been done in many other states. However, the State Senate objected to the treaties as the land that was to be used for reservations was good for agriculture and rich in minerals. As a result, the U.S. senators from California convinced the U.S. Senate to not ratify the treaties that were drawn. They were then filed with an injunction of secrecy that was not removed until 1905. The signed treaties became known as the "Lost 18 Treaties of 1852" (Castillo 1978; Johnston 1962; OHP 1988). Reservation land was still set up in California, under the leadership of Edward F. Beale and Benjamin D. Wilson, superintendent and sub-agent of Indian Affairs for California, but no new treaties were negotiated. In addition, after the treaties were "rediscovered," legislation was passed to purchase small tracts of lands, later known as *rancherías*, in central and north central California for "landless Indians" in those areas. Therefore, some California Indians did manage to obtain reservation land by agreeing to move to specific locations. The quality of life on reservations, though, was sometimes poor because of limited resources. There was often a lack of water, and squatters were sometimes allowed to graze their cattle on reservation land, thereby destroying crops that were supposed to feed and support the Indians (OHP 1988).

The General Allotment Act of 1887, or the Dawes Act, was meant to provide California Indian families or individuals with lands. These lands were held in trust by the Bureau of Indian Affairs for 25 years, and if, after 25 years, the Indians had cultivated the land and become self-sufficient, they would gain title to the land. While the act appeared to benefit the Indians, it was designed to weaken the power of tribal governments. Many California Indians recognized the Act's ultimate goal and instead chose to either purchase land or fight for the lands they believed to be theirs in the courts. Most court cases eventually sided with American settlers, though, and most Indians were evicted (OHP 1988). As for the lands of which Indians did manage to gain ownership, most of them were taken away by laws enacted since 1900 (Chartkoff and Chartkoff 1984). The

California Indian Jurisdictional Acts, or Lea Act, was passed in 1928 that allowed California Indians to either lay claim to certain lands in court or gain recompense, however Indians gained few victories and were often left homeless (OHP 1988).

One of the reasons that it was difficult for California Indians to obtain land was due to the arrival of the railroads in the late 1800s and early 1900s, which brought in a new influx of immigrants. The rail lines initially only connected the Los Angeles area to the Pacific Ocean, but California would be connected to the rest of the country when Central Pacific and other major railroad companies started working on a southern transcontinental route across the United States known as the Sunset Route. This route was completed in 1883 and connected San Francisco to New Orleans. The portion of the route built through the Los Angeles area was constructed by Southern Pacific in the 1870s (see below). The Southern Pacific enjoyed a railroad monopoly in California until 1885 when the Atchison, Topeka, and Santa Fe (AT&SF) completed a line into southern California. The two railroads then "engaged each other in a fierce rate war" that drove passenger ticket prices to as low as one dollar (Tang 2003:5). This competition resulted in significant immigration to southern California, which was a large factor in the southern California land boom in the 1880s. New towns emerged on newly acquired land and on former cattle ranches both along the coast and in the valleys. With the advent of refrigerated cars, the railroads were able to transport perishable produce, including fresh fruit, to distant eastern cities. This development enabled southern California to become a major agricultural center (Tang 2003, 2009), thus further depleting the land available to California Indians.

Native Americans faced dangers beyond what they had experienced through missionization and loss of territory. Vigilante groups and militias were established to kill Indians and to kidnap their children. As a result, close to 100,000 Californian Indians perished and much of the tribal continuity throughout the state was extinguished (Castillo 1978). The last comprehensive survey of the Gabrielino occurred in 1852. It found that most of the traditional communities had disappeared, the use of the indigenous language had declined, and many traditional ceremonies and practices had been abandoned (McCawley 1996). By 1900, they had "ceased to exist as a culturally identifiable group" (Bean and Smith 1978:540).

4.3.5 History of the Project Vicinity

In the early 1880s, the lake (MacArthur Park) served as a drinking water reservoir that was connected to the *Zanja Madre* (Mother Trench). The *Zanja Madre* was the original aqueduct that carried water to the *Pueblo de Los Angeles* (City of Los Angeles) from the *Río Porciúncula* (Los Angeles River). The city abandoned the non-pressurized system for a pressurized pipe system and so the land was no longer of benefit to the community. However, the property's natural marshland with an alkali lake and scenic and biological value was unappreciated; soon after it was used as a city dump for many decades (Meares 2018). Due to inconsistencies in historic records, it is unclear exactly how Los Angeles came into possession of the land that became the park (Strawn 2008). It is speculated that after many failed attempts to sell the property, two Los Angeles developers managed to have the property declared as a city park and by 1890, the old dump site had been renovated and opened to the public as an impressive public park (Los Angeles Magazine). Native shrubs, trees, grass, and flowers were planted around the property, and the renovation caused the Park to grow in popularity. People came from all over the Los Angeles basin for the recreation amenities such as picnicking grounds and horse-drawn buggy rides, and to stroll the park's

perimeter. The Westlake neighborhood became an upscale vacation destination, surrounded by luxury hotels and homes with lake side views, often referred to as the Champs-Élysées of Los Angeles.

Since its establishment, the park lay in the direct path of a main road, causing a detour that impeded traffic to downtown Los Angeles and stunted development. Wilshire Boulevard began on the west end of the lake but did not connect to the last leg of the street, then known as Orange Street (renamed Wilshire Blvd. when the streets were connected. In the 1930s, city leaders proposed several plans to fix the detour the park created including, building an ornamental bridge and underwater tunnel. In the end the cheapest option was chosen, a road that bisected the lake and park. The Westlake residents and business owners were against the construction of a major road because of the major destruction it would cause to the ecosystem of the park (Meares 2018). Despite these protests from the community a viaduct across the park joined the original length of Wilshire Blvd. and Orange Street giving commuters access into downtown. The road connection divided the lake in half; subsequently, the northern half was drained and an amphitheater, bandshell, soccer fields, playground and recreation center were built. As previously stated, the Park's original name was Westlake Park; in 1942 it was renamed MacArthur Park after General Douglas MacArthur (Los Angeles Conservancy).

MacArthur Park was designated City of Los Angles Historic Cultural Monument #100 on May 1st, 1972. As the years passed the Park suffered from neglect and in the 1980s crime in the area increased at an alarming rate and the lake became contaminated (Los Angeles Times, 1993). The Park has been used as a filming location for several movies, television shows, and music videos. In 1976 a film was shot at the park titled *In MacArthur Park,* written, and directed by Bruce Schwartz. Many attempts to revitalize the lake, clean up the water, and control crime have been made throughout the years. In 2021 and early 2022, the City of Los Angeles rehabilitated the southern portion of the Park, including new landscaping, sidewalk repairs, recreational amenities, new lights, and security cameras. The northern portion of the park is scheduled for rehabilitation later in 2022 (Los Angeles Times, 2022). Today, the Westlake neighborhood that encompasses 2.72-square-miles, that also includes the Park, is among the highest density of any community both in the City and County of Los Angeles (Los Angeles Times, 2002).

The buildings adjacent to the Park on West 7th, Lake, and Grand View Streets, built between 1910 and 1934, are an important part of the Westlake Community. Several historic resource studies have stated that some of them appear eligible for the National Register. See section 6.2.4 Built Environment in this document for additional information.

Figure 6. Aerial view of Westlake Park in 1921, before the Wilshire Boulevard causeway split the lake. Courtesy of the Title Insurance and Trust, and C.C. Pierce Photography Collection, USC Libraries

5.0 METHODOLOGY

5.1 Paleontological Resources Records Check

On December 23, 2021, APRMI requested a paleontological resources records check for the Proposed Project from the Vertebrate Paleontology Department of the Natural History Museum of Los Angeles County (NHMLA). To determine the paleontological sensitivity of the Cultural Resource Project area, this records check consisted of a thorough review of the museum's paleontology collection records of recorded fossil sites in and/or near the Cultural Resource Project area. The record check was conducted on February 5th of 2022, by Dr. Alyssa Bell, NHM Collections Manager.

A thorough search of the Paleobiology Database was also conducted by Miguel Miguel of APRMI

on February 24th, 2022. The Paleobiology Database allows users to search through various taxonomic groups of fossils recorded by nearly 400 scientists from over 130 institutions in 24 countries. This resource was used to search for additional paleontological records that may be present within the Cultural Resource Project area and to better understand the sensitivity of the general Project vicinity.

5.2 Cultural Resources Records Search

On December 23, 2021, APRMI requested a cultural resource records and literature search from the South Central Coastal Information Center (SCCIC), the local repository for the California Historical Resources Information System (CHRIS), located on the campus of California State University Fullerton, in Fullerton, California, to identify any cultural resources on or near the Project site. The results for this request were received on February 14, 2022. A quarter-mile search radius was utilized around the Project. This records search reviews current inventories of the NRHP, CRHR, California Historical Landmarks (CHL), California Points of Historical Interest (CPHI), and the Built Environment Resource Directory (BERD). For the purposes of this assessment, the OHP's definition of historic resources was used in that any building or object that is 50 years of age or older is considered historic (OHP 1995).

5.3 Archival Research

The Los Angeles Historic Resources Inventory is an online information and management system that inventories, maps and helps protect the City of Los Angeles' significant historic resources. The inventory was examined for the historic built environment, including architecturally significant buildings and places of social importance (historic districts, bridges, parks, and streetscapes) for additional background information of such resources. As part of this process, the 2009 Westlake Recovery Community Redevelopment Survey Results were also assessed since the purpose of the survey, completed in cooperation with the City of Los Angeles Office of Historic Resources (OHR), was to identify, document, and evaluate potential historic buildings and structures in the Westlake neighborhood. This survey was conducted in 2009 by LSA Associates, Inc. and does not reflect the opinions or recommendations of APRMI.

The Built Environment Resource Directory (BERD) is available online but is not always included in the results provided by the SCCIC. The BERD was reviewed to find information of current inventories of the NRHP, CHL, CPHI, the California State Historic Resources Inventory (HRI) for Los Angeles County, and the CRHR to determine any local resources that have been previously evaluated for historic significance. For the purposes of this assessment, the OHP's definition of historic resources was used in that any building or object that is 45 years of age or older is considered historic (OHP 1995).

Additional research was conducted through different inventory databases and/or historic societies to acquire more information or knowledge of cultural resources near the Cultural Resource Project area. Zimas, NavigateLA, HistoricPlacesLA, and SurveyLA databases were reviewed for additional information regarding the historic structures in the Westlake community.

5.4 Field Reconnaissance

On November 19, 2021, Ms. Robin Turner conducted field reconnaissance of the Cultural Resource Project area to evaluate the presence of any paleontological or cultural resources to determine if the development of the Project would have any significant direct or indirect adverse impacts on such resources. The Cultural Resource Project area was surveyed beginning along Wilshire Boulevard and South Park View Street progressing southwest towards the intersection of West 7th Street and South Park View Street. Ms. Turner then continued eastward along West 7th Street and transecting westward along two small streets known as South Grand View Street and South Lake Street. As part of this survey, Ms. Turner observed the current vegetation, topography, and fauna within MacArthur Park and the surrounding urban environment. Most observations were photographed and noted for any potential significant adverse impacts that may be caused by the development of the Project. All photos and field notes are stored in the APRMI office.

6.0 RESULTS OF RECORDS SEARCHES

6.1 Paleontological Resources Records Check

The Natural History Museum of Los Angeles County records check, conducted by Alyssa Bell, indicates **positive** results for known vertebrate fossil localities near the boundaries of the Cultural Resource Project area. Exact locations of these localities were not provided. In total, eight (8) fossil localities were identified within MacArthur Park (outside of Cultural Resource Project area), and six (6) were identified in the surrounding vicinity. The localities found within MacArthur Park were located near Wilshire Boulevard, none were found within the Cultural Resource Project area. All these locations varied in depths below the ground surface ranging from 5 feet to 80 feet. The eight localities within MacArthur Park were all found within sediments of the Puente Formation. On average, the depth of these fossil localities was 60 feet below the ground surface. The results also identify that at least one fossil locality has been found in the general vicinity within Quaternary Alluvium at the southeast corner of Serrano Avenue and Wilshire Boulevard. This further increases the potential to uncover paleontological resources during Project construction since these deposits are known to be present at the surface level of the Cultural Resource Project area (see Geologic Background). Additionally, approximately 1 to 2 miles west of MacArthur Park, two localities have been uncovered at shallow depths of 5 to 8 feet in an unknown formation. This presents more evidence of the unpredictability of paleontological resources in the general Project vicinity. A total summary of the types of fossils, approximate locations, and depth of discovery can be seen in Table 2[1].

[1] Please note that APRMI reports the results exactly as the NHMLA reports them. One locality number may consist of multiple localities and is indicated by a dashed number.

Table 2. Results of Paleontological Resources Records Check adjacent or within a quarter-mile of Cultural Resource Project area

Locality Number	Location	Formation	Taxa	Depth
LACM VP 6254	NW corner of intersection of Wilshire Blvd. & Alvarado	Puente Formation	Marine mammal (*Cetacea)*	Unrecorded elevation of 225 feet above sea level
LACM IP 16840-16842	Wilshire Blvd in W MacArthur Park	Puente Formation	Invertebrates (unspecified)	60 feet bgs
LACM VP 6198	Beneath Wilshire Blvd through MacArthur Park	Puente Formation (laminated siltstone)	Fish (*Osteichthyes)*	60 feet bgs
LACM VP 6199-6201	W of MacArthur Park pocket track; beneath Wilshire Blvd.	Puente Formation (laminated siltsone)	Fish (*Osteichthyes)*	60 feet bgs
LACM VP 6202	Near SE corner of 6th St & Vermont Ave	Puente Formation (siltstone and laminated siltstone)	Fish (*Osteichthyes)*	Approx. 60 bgs
LACM VP 6203	W of Wilshire Blvd. / Vermont Ave. Metro Redline station	Puente Formation	Eel (*Anguilliformes*), needlefish (*Belonidae*)	80 feet bgs
LACM VP 6204	Near the SE corner of Serrano Ave. & Wilshire Blvd.	Older Alluvium (pebble-gravel; sand; silt & clay)	Uncatalogued vertebrate fossils	65 feet bgs
LACM VP 1893	Between Gramercy and Western Ave in Santa Monica Freeway cut	Unknown formation (Pleistocene, sands & gravel)	Bison (*Bison antiquus*), Mammoth (*Mammuthus*)	unrecorded
LACM VP 3250	Madison & Middlebury Streets	Unknown formation (Pleistocene)	Mammoth (*Mammuthus*)	8 feet bgs
LACM 5845	West side of Western Ave. just north of Council St	Unknown formation (Pleistocene, unconsolidated yellow sediments)	Mastodon (Mammutidae)	5-6 feet bgs

VP, Vertebrate Paleontology;IP Invertabrate Paleontology; bgs, below ground surface

Upon conclusion of researching the Paleobiology database, additional information identified that 5 occurrences of anglerfish have been recorded in the general vicinity of the Cultural Resource Project area within the Puente Hills formation. No further details were provided with regard to exact locations, or depths of discovery.

No known fossil localities would be impacted during Project development. However, since the extent of ground-disturbing activities would vary per area, there exists a potential to uncover unknown paleontological resources. This potential is possible by the evidence from the two records searches that demonstrate that fossils have already been uncovered in the same deposits that underlie the Cultural Resource Project area itself, and some fossils have been found at shallow depths in nearby locations. As a result, it is recommended that any substantial excavation below the surface within the Quaternary Alluvium, older Quaternary Alluvium, or the Puente Hills formation deposits, should be monitored closely by a paleontologist. Sediment samples from the Proposed Project should also be collected and processed, to SVP standards, to determine the potential to find micro fossil remains. Any fossil remains recovered during this mitigation effort

should be accessioned to an accredited and permanent scientific institution for the benefit of current and future generations.

6.2 Cultural Resources Records Search

Results of the cultural records search were received on February 14, 2022. Results of the cultural records search are discussed in detail below and listed as catalog numbers assigned by the SCCIC and are specific to previously recorded archaeological (prehistoric and historic, ethno-graphic and multi-component) resources within the Cultural Resource Project area. Any building assessment discussed below that states NRHP, CRHR, or HCM criterion determinations are made by the author or investigators of the studies or site record and not made by APRMI. Criterion requirements may be viewed in Regulatory Setting section.

6.2.1 Prehistoric Sites and Isolate(s)

According to the results provided by the SCCIC, no previously recorded archaeological sites or isolates are located on, or adjacent to (up to ¼ mile), the Cultural Resource Project area. During the construction of the Metro Red Line Subway Project (that runs from Downtown Los Angeles to North Hollywood) significant archaeological resources were encountered near Union Station, El Pueblo de Los Angeles, Hancock Park, and Campo de Cahuenga, which are all further than ¼ mile from the Cultural Resource Project area. Although the Metro Red Line transects underneath part of MacArthur Park, the SCCIC results state that no resources were encountered during the construction of the Westlake/MacArthur Metro hub station. The SCCIC states that even though no known cultural resources were previously recorded, there is still the possibility of uncovering archaeological sites or isolates during ground disturbing activities.

6.2.2 Historic Sites and Isolate(s)

According to the SCCIC results, no previously recorded historic sites or isolates, such as historic trash pits, were identified within the Project property or within a quarter-mile radius of the Project alignment.

6.2.3 Reports and Studies

Twenty-one studies and assessments were conducted within the Cultural Resource Project area and/or within a quarter mile. These studies were conducted during various developments and by different researchers spanning from 1983 to 2013. A thorough review of these documents was conducted to identify any cultural resources that previous researchers may have recorded. Of these studies, a total of five (5) were recorded within the immediate Cultural Resource Project area and the remaining sixteen (15 a total of five were recorded within the immediate Cultural Resource Project area and the remaining fifteen were all recorded at least within a 1/4 mile radius) were all recorded at least within a 1/4 mile radius. These documents varied from surveys, initial studies from nearby developments, and other environmental documents. A total of ten (10) documents identified cultural resources which included archaeological and built resources. However, not all of these resources were located within or near the Cultural Resource Project area as these documents often extended their boundaries past those of this Project. To better understand if these

resources were in fact uncovered or recorded within or near the Cultural Resource Project area, Table 3 is provided as a summary.

Table 3. List of SCCIC Cultural Reports and Studies Identified

Within Cultural Resource Project area				
Report Number	**Author(s)**	**Year**	**Title**	**Cultural Resources identified in or within ¼ mile of Cultural Resource Project area**
LA-01578	Unknown	1983	Technical Report Archaeological Resources Los Angeles Rapid Rail Transit Project Draft Environmental Impact Statement and Environmental Impact Report	No
LA-03496	Unknown	N/A	Draft Environmental Impact Report Transit Corridor Specific Plan Park Mile Specific Plan Amendments	No
LA-04514	Slawson, Dana N.	1999	Historical Resources Impact Assessment for Proposed Improvements to MacArthur Park, Los Angeles, California	No
LA-08251	Gust, Sherri and Heather Puckett	2004	Los Angeles Metro Red Line Project, Segments 2 and 3 Archaeological Resources Impact Mitigation Program Final Report of Findings	No
LA-10507	Unknown	1983	Technical Report Historical/Architectural Resources - Los Angeles Rail Rapid Transit Project "Metro Rail" Draft Environmental Impact Statement and Environmental Impact Report	No
Within ¼ mile of Cultural Resource Project area				
Report Number	**Author(s)**	**Year**	**Title**	**Cultural Resources identified adjacent or within ¼ mile of Cultural Resource Project area**
LA-03103	Greenwood, Roberta S.	1993	Cultural Resources Impact Mitigation Program Angeles Metro Red Line Segment 1	No
LA-06395	Unknown	2000	Housing for Homeless Veterans, Veterans Administration Grant and Per Diem Transitional Housing Program, Los Angeles County	No

LA-07562	Greenwood, Roberta S.	1987	Additional Information for DSEIS, Core Study Alignments 1, 2, 3, 4, and 5	No
LA-07565	Unknown	1987	Technical Report Archaeology Los Angeles Rail Rapid Transit Project "Metro Rail" Core Study, Candidate Alignments 1 to 5	No
LA-07566	Hatheway, Roger G. and Peter, Kevin J.	1987	Technical Report DSEIS, Core Study Alignments 1, 2, 3, 4, and 5	No
LA-07762	Bonner, Wayne H.	2006	Cultural Resources Records Search Results and Site Visit for T-Mobile Candidate LA 03269b (Sixth Street Storage), 2500 West 6th Street, Los Angeles, Los Angeles County, California	No
LA-08008	Bonner, Wayne H.	2004	Cultural Resource Survey, and Direct APE and Indirect APE Historic Architectural Assessments for Sprint Telecommunications Facility Candidate La60xc165a (clinica), 2412 West 7th Street, Los Angeles, Los Angeles County, California	**Adjacent:** **19-187495:** Building located at 2412 West 7th Street. Determined ineligible for NR by consensus through Section 106 process. Not evaluated for CR or Local Listing. **19-187496:** Building located at 2414 West 7th Street. Determined ineligible for NR by consensus through Section 106 process. Not evaluated for CR or Local Listing.
LA-08020	Unknown	1987	Technical Report: Cultural Resources Los Angeles Rail Rapid Transit Project "Metro Rail" Core Study	No
LA-08124	Wood, Catherine M.	2007	Archaeological Survey Report for the Seven Maples Senior Apartments Project Located at 2530-2618-2632 West 7th Street and 702 704 South Rampart Boulevard, Los Angeles, California	No

LA-08126	Wood, Catherine M.	2007	Archaeological Survey Report for the Multifamily Apartment Building Project Located at 501-511 South Bonnie Brae Street, Los Angeles, California	No
LA-08418	Supernowicz, Dana E.	2007	Cultural Resources Study of the Bonnie Brae Project, Royal Street Communications Site No. La0177b, 729 S. Bonnie Brae Street, Los Angeles, California 90057	No
LA-08950	Wood, Catherine M.	2007	Archaeological Survey Report for the 7th & Coronado Family Apartments Project Located at 2614 & 2614 1/2 West 7th Street and 717-723 South Coronado Street, Los Angeles, California	No
LA-09806	Dana E. Supernowicz	2009	Collocation Submission Packet for American Storage, 6th Street, Los Angeles	**Within ¼ mile:** **19-170022:** Building located at 2500 W. 6th Street. Appears eligible for National Registry as an individual property through survey evaluation.
LA-11283	Loftus, Shannon	2010	Cultural Resource Records Search Records Search and Site Survey - Clearwire Site CALOS 4749 A Clinica, 2412 West 7th Street, Los Angeles, Los Angeles County, California, 90057	**Adjacent:** **19-187495:** Building located at 2414 West 7th Street. Determined ineligible for NR by consensus through Section 106 process. Not evaluated for CR or Local Listing.
LA-12746	Bonner, Wayne and Crawford, Kathleen	2013	Cultural Resources Records Search and Site Visit Results for T Mobile West, LLC Candidate LA03269B (Sixth Street Storage) 2500 West 6th Street, Los Angeles, Los Angeles County, California	**Adjacent:** **19-187495:** Building located at 2414 West 7th Street. Determined ineligible for NR by consensus through Section 106 process. Not evaluated for CR or Local Listing. **Within ¼ mile:** **19-166819:** Buildings located at 672 South

				Lafayette Park Place. Currently listed under the National Register of Historic Places. **No Impact.** **19-176200:** Building located at 671 South Coronado Street. Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the California Register of Historic Places. **No Impact.** **19-180718:** Building located at 2619 Wilshire Boulevard. Individual property determined eligible for NR by a consensus through Section 106 process. Listed in the California Register of Historic Places. **No Impact.**

6.2.4 Built Environment

Several historic buildings and structures have been recorded within a quarter mile of the Cultural Resource Project area. Multiple surveys have determined that MacArthur Park and 13 buildings (Table 4) have been evaluated and approved to be listed in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or Los Angeles Historic Cultural Monuments (HCM). MacArthur Park is recognized as a Los Angeles HCM #100. These buildings were built between 1898-1929 and are all qualified under Los Angeles HCM.

Major pieces of art have been erected in the park since its establishment (Wallach 2006). A sculpture of General Douglas MacArthur, the Park's namesake, was created by sculptor Roger Noble Burnham in 1955. A few of the early works of art are the Otis Group and Prometheus Bringing Fire to Earth. Otis Group consists of three sculptures placed on stone blocks depicting General Harrison Gray Otis, a newsboy, and a soldier. The Otis Group sculptures were created by Paul Troubetskoy in 1920. Today, the sculpture of the soldier is not present at Macarthur Park. Prometheus Bringing Fire to the Earth was designed by Nina Saemundsson in 1935 and it depicts the Greek mythological god Prometheus. Several additional pieces of art were created between the late 1970s and through the 1980s such as: Hungarian Freedom Fighters Memorial (1974), The Big Candy (1987), Entry Arches (1986), Clocktower-Monument to the Unknown (1987), Pyramids

(1985). All these serve as a representation of time through art and contribute to the community's cultural awareness.

Previously recorded historic buildings and places may still experience indirect affects, which include but are not limited to, visual, auditory, and vibrational impacts, and all areas used for Project staging and temporary construction along Wilshire Boulevard, 7th Street, South Grand View Street, and South Park View Street. The Park itself has the highest potential to experience direct effects caused by visual and vibrational impacts due to ground disturbing activities during construction. The NRHP is the United States federal government's official list of districts, sites, buildings, structures, and objects deemed worthy of preservation for their historical significance. The CRHR is the California state government equivalent of the NRHP, and the HCM is the official list of districts, sites, buildings, structures, and objects deemed worthy of preservation for their historical significance within the County of Los Angeles. Criterion requirements may be viewed in Regulatory Setting section, and more detailed OHP Criterion is listed in Appendix D of this report. None of the buildings listed in Table 4 would be directly affected by the Project except LA Historic-Cultural Monument No. 100, which is MacArthur Park itself. CDM Smith states that a conversation was had with Lambert Giessinger, Historic Preservation Architect at the Office of Historic Resources on June 28, 2022, to understand if the Project will affect MacArthur Park and According to CDM Smith "Mr. Giessinger noted that the park has changed tremendously over the years. He also said that the project would have no impact on any character-defining features of the park and that he seems this project as compatible new construction".

Recorded evaluations in Table 4 state NRHP, CRHR, or HCM Criterion determinations made by the authors or investigators of the building evaluation records and not by APRMI. Potential indirect effects may occur to some of the buildings due to construction related vibrations, but that will be addressed in the Project vibrational report.

Table 4. Buildings listed in NRHP, CRHR, or Los Angeles HCM

Resource	Comments	Register Qualified Under
General Douglas MacArthur Park	Established in 1890s Resource is still standing and would be affected by Project.	LA Historic-Cultural Monument No. 100
Chouinard Institute of The Arts 2301 W 8th St	Built in 1929 Resource is still standing and will not be affected by Project.	LA Historic-Cultural Monument No. 454
Park Plaza Hotel Originally Elks Club 601-607 S Park View St	Built in 1925 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 267
Westlake Theatre 636 S Alvarado St	Built in 1926 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 546
Park Wilshire Building 2422-2424 W Wilshire Blvd	Built in 1924 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 934

La Fonda Restaurant Building 2501 W Wilshire Blvd	Built in 1926 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 268
Bonnie Brae Apartments Historically Known As "Post Hotel" 818-822 S Bonnie Brae St	Built in 1927 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 45
Coronado Place Historically Known as Wilshire Apartments 826 S Coronado St	Built in 1917 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 167 Eligible for listing in the NRHP since 1994
Granada Shopper & Studios Building 666-678 S Lafayette Park Place	Built in 1927 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 238 Property placed on NRHP list on 11/20/1986
Grieri-Musser House 403 S Bonnie Brae St	Built in 1898 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 333
Charles B. Booth Residence and Carriage House 824-826 S Bonnie Brae St	Built in 1893 Resource still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 491
The Bryson Apartment Hotel 2701 Wilshire Blvd	Built in 1913 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 653 Property placed on NRHP list on 04/07/1983
Arcady Apartments Also Known as Wilshire Royale and Fifield Manor Wilshire 2615-2627 W Wilshire Blvd	Built in 1927 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 1124
Carriage House Historically Known as Suzanna Machado Bernard House 841-845 S Lake St	Built in 1901 Resource is still standing and would not be affected by Project.	LA Historic-Cultural Monument No. 208 Property placed on NRHP list on 09/04/1979

6.3 Archival Research Results

6.3.1 Archival Tribal Research

Through archival research for Native American concerns, it was concluded that the closest Gabrielino/Tongva villages were located approximately 2 to 3 miles east of the Cultural Resource Project area. These two villages, named the Yaanga and Geveronga, are documented through ethnographic accounts. For many reasons the actual village locations are not clearly known, but the Yaanga (also called Yang-Ya, Yangna, and Yabit) and Geveronga are thought to have been located near Los Angeles's original plaza, near present-day Union Station. Only ethnographic accounts and a small amount of direct archaeological evidence currently exists regarding the location of the villages and thus their geographical extent is unknown (McCawley 1996).

6.3.2 Archival Built Environment Research

Regarding the historic built environment, the SurveyLA (2014) assessment states some of the oldest residential and commercial development in Los Angeles is in the Westlake community. The area was first surveyed in 1857 before the area began to grow. People began settling in the area in the 1860s, where this location west of downtown was a popular alternative, compared to lower elevations that had been affected by a series of floods. The Westlake area become a desirable place for residential development as the population began to grow. The first recorded subdivision was in 1877 with the construction of the Fairmount Tract, a 132 residential lot located near the Cultural Resource Project area on 9th St and Wilshire Blvd. By the mid-1880s much of the Westlake community had been subdivided and construction of many neighborhoods was underway. The map below shows the timeframe of building development.

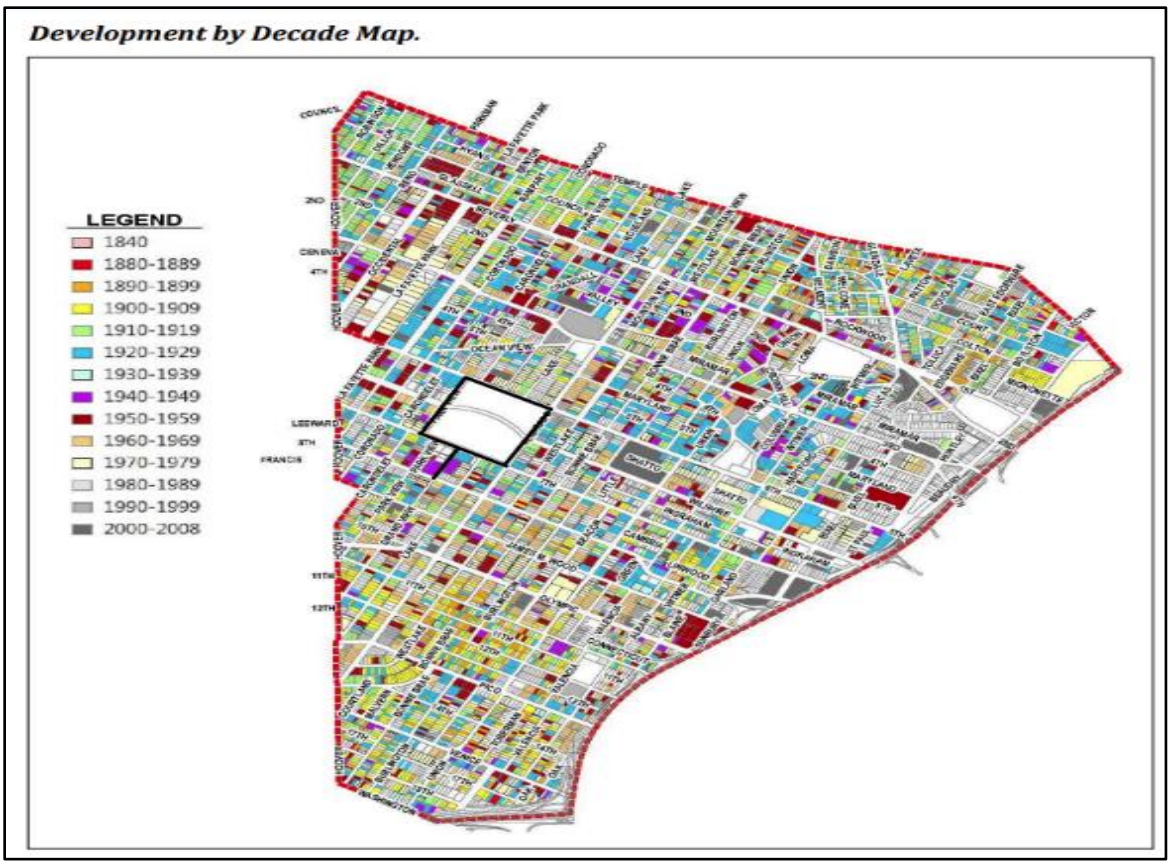

Figure 7. Development by Decade Map from the SurveyLA Los Angeles Historic Resources Survey: Historic Resources Survey Report Westlake Community Plan Area 2014. Cultural Resource Project area and MacArthur Park is outlined in black

To further understand the historic built environment of the Cultural Resource Project area, APRMI investigated past building assessments and designations associated with the Westlake Recovery Community Redevelopment Plan. Results from the SCCIC occasionally are not fully updated, so conducting additional research assures that all resources, reported and non-reported, will be properly addressed and protected. In 2009, the *Intensive Survey for the Westlake Recovery*

Redevelopment Area report was conducted by LSA Associates, Inc. (LSA), which was contracted under the City of Los Angeles Community Redevelopment Agency (CRA). The purpose of this survey was to identify, document, and evaluate all properties aged 50 years or older in the Westlake area. These properties were then determined to be eligible or ineligible for the NRHP, CRHR, and/or for designation as a City of Los Angeles Historic Cultural Monument (HCM).

After careful review of this document, buildings near the Cultural Resources Project Area addresses 2214[2]West 7th[3]Street (1929) and 2126 West 7th Street (1916), were determined by LSA to be of concern regarding their preservation. LSA assigned these two blocks of buildings a California Historic Resource Status Codes of 3S and 3B. The California State Parks, Office of Historic Preservation, in its *Instructions for Recording Historical Resources,* provide a three-digit evaluation code for use in classifying potential historic resources. The first digit indicates the general category of evaluation. The letter code indicates whether the resource is separately eligible (S), eligible as part of a district (D), or both (B). The third digit is a code that describes some of the circumstances or conditions of the evaluation. A 3S status states, "appears eligible for national register (NR) as an individual property through survey evaluation" (OPH 1995). A 3B status states, "appears eligible for NR both individually and as a contributor to a NR eligible district through survey evaluation". These buildings therefore have been evaluated under the National Register of Historic Places (NRHP) Evaluation Criteria and are considered associated with events which have made a significant contribution to the broad patterns of our history; associated with the lives of persons significant in the past; embodies the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value, or are representative of significant and distinguishable entity of which the component may lack individual distinction; or yields, or is likely to yield, data important to the understanding of prehistory and/or history.

According to the *Intensive Survey for the Westlake Recovery Redevelopment Area* by LSA in 2009, these properties are eligible for 3S because they meet the A/1/1 streetcar commercial theme requirements found on pages 59-60, as follows:

<u>To be eligible under the streetcar commercial theme (Criterion A/1/1), a property must:</u>

- Be constructed between 1910 and 1934 for commercial uses;
- Be within two city blocks of a historical streetcar route; and
- Exhibit the common characteristics of a streetcar commercial property type.
    - *Character-defining Features, One-story Stores and Office*
        - One-story rectangular or L-shaped massing, in rare cases with a mezzanine level or partial second story.
        - Flat roof with parapet or classical cornice.

[2] Note that the building listed in The *Intensive Survey for the Westlake Recovery Redevelopment Area* report by LSA in Table C (page 59) is one building with two addresses 2212 and 2214 W 7th Street and only 2214 is discussed in the LSA report. Likewise, 2126 W 7th Street is comprised of multiple addresses which include 2126, 2128, 2130 W 7th Street. LSA only addresses 2126 W 7th Street in the report.

        - Multiple storefronts at the ground floor, opening directly onto the sidewalk.
    - *Character-defining Features, Mixed-use Commercial*
        - Two to four stories in height, with a rectangular or L-shaped massing.
        - Upper story features a row of windows for office space, with period-Revival or Beaux.
        - Arts-style ornamentation.
    - *Exceptional characteristics of this type include*
        - Ornate applied ornamentation or architectural features, including towers, friezes, upper floor.
        - Balconies, or decorative trim at windows, doors, or storefronts.
        - Location on a prominent street corner, often with the form of the building adopting a rounded or chamfered corner to complement its location.
        - Intact original wooden storefronts.

- *Integrity requirements:*
    a. Location (historical association with a nearby historical streetcar route).
    b. Feeling (must "read" as an early 20th century commercial building).
    c. Design (window and storefront openings are intact).
    d. Workmanship (applied decoration is mostly intact some decoration may be missing).
    e. Association.
    f. Materials (mostly original wall cladding, storefronts, and windows).
    g. Setting (relationship to sidewalk is preserved).
- *Integrity Considerations:*
    - Storefront signage is commonly changed to suit the branding and priorities of multiple retail tenants. This includes new signage and storefront decoration that has obscured (but not clearly destroyed or replaced) original wall finishes decorative elements.
    - Interior spaces may have been remodeled over the years to suit multiple retail tenants.
    - Storefronts may have been replaced, but the openings should remain the same.

Under CEQA, the definition of a historic resource is a resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources, local historic register, or National Register of Historic Places (PRC §5024.1). Since this survey has determined the buildings to be eligible for such a registration, they must be treated

as historic resources. APRMI considers these buildings to be sensitive to intense vibrations. Both of these buildings are located near proposed construction for stormwater pipe installation. The construction vibration analysis conducted by CDM Smith has found that construction activities would cause significant impacts to some adjacent buildings. Therefore, vibrations during construction related activities would significantly impact the historic integrity of some of these buildings. Mitigation is provided in the Draft EIR.

7.0 RESULTS OF FIELD RECONNAISSANCE

Results of the field reconnaissance has determined the area to be a predominately urbanized area with a large urban park known as MacArthur Park (Figures 8 through 13). Natural and ornamental vegetation is concentrated within the Park and consists of various flowering trees, hedges, and other flowering plants. Wildlife in the area consisted of squirrels, crows, Black-Crowned Night Herons, and various ducks. Several areas of the Project were capped by either asphalt or concrete, including all areas outside of the actual MacArthur Park location, so surface observation was mostly conducted within the confines of MacArthur Park. In areas where ground visibility was noted, the soil observed on the surface included alluvial silts, and sand with gravels of various origin. An initial historic monument and building assessment was conducted at the time of field reconnaissance.

Figure 8. View towards the northwest of the MacArthur Park Lake

Figure 9. View the *Clocktower- Monument to the Unknown* installation

Figure 10. View of the General MacArthur Monument in the Park.

Figure 11. View of the Wilshire Boulevard underpass.

Figure 12. View towards the northwest corner of the park where Levitt Pavilion is located.

Figure 13. View of the playground and Pyramid art installation (left)

No paleontological or archaeological resources were observed or identified on the surface of the Cultural Resource Project area. Despite these negative results, Dr. Alyssa Bell, the NHMLA Collections Manager, has identified various fossil locales within similar sediments as those located

at the subsurface level of the Cultural Resource Project area. Grading or shallow excavations within these sediments have a potential to uncover significant fossils at the time of Project development. Additionally, the SCCIC results have shown that archaeological resources have been recovered in various locales in the wider Project proximity at least within a quarter mile. The unpredictable nature of archaeological resources therefore indicates that there is a potential to uncover such resources at the same time as grading or shallow excavations associated with the development of the Project.

Cultural Resource Project Area Vicinity

As part of this reconnaissance, Ms. Turner also surveyed the built environment near and within the Cultural Resource Project area to assess for any potential buildings that may be directly or indirectly impacted during development of the Project. The built environment is summarized in Figure 14 through Figure 22. Additionally, the results indicate if a property meets the criteria or requirements to be listed in the NRHP, CRHR, or HCM as a historical resource.

Figure 14. 2410-2414 W 7th St (left) and 2416-2422 W 7th St (right)

Figure 14:
A survey conducted in 2004 of the property at 2412 W 7th Street [4](left) Departments of Parks and Recreation (DPR) form (19-187495) states the property is a four-story commercial building and states that the property was built in 1924 and classifies it as French Eclectic architecture. Overall, the building has retained its architectural integrity. The property was not owned or built by a

[4] DPR 19-187495 was conducted for address 2412 W 7th Street. It is important to note that the building consists of multiple address 2410-2414 W 7th Street and that the DPR mislabeled the building and should have been for 2410-2414 W 7th Street.

person(s) of significance, and was not associated with any significant events and, therefore, the survey determined the structure does not appear to qualify for any of the NRHP criteria. The property was not evaluated for CRHP or local eligibility.

A survey was also conducted for 2414 W 7th Street (right) in 2004. However, the DPR form (19-187496) mislabeled the property, and the correct address should have been 2416-2422 W 7th St. The survey describes the building as a two-story commercial building that was constructed in 1925 with Spanish Colonial Revival architecture. Aside from some modifications overall, the structure has maintained its architectural integrity. The property was not owned or built by a person(s) of significance, and was not associated with any significant events and, therefore, the survey determined the structure does not appear to qualify for any of the NRHP criteria. The property was not evaluated for CRHP or local eligibility. However, during the subsequent *2009 Intensive Survey for the Westlake Recovery Redevelopment* the addresses 2410 and 2414 W 7th Street were given the 3S status code because they appear to be eligible for NR eligibility. (The address 2412 W 7th Street was not listed on the list of properties given a 3S status code despite being within the same building.) No further evaluations have been conducted on this building and it is not currently listed in the NRHP, CRHR, or HCM. None of these buildings are currently considered historic properties or historic structures, but they are considered as historic resource under broader CEQA definition. A historic resource is a resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources, local historic register, or National Register of Historic Places (PRC §5024.1). Since the most recent survey of these buildings states they are eligible for registration to a historic resource registry, then they are in fact considered a historic resource and must be treated as such. The CDM Smith led construction vibration analysis did not find any direct or indirect impacts to this building from construction, including construction-related vibration. Therefore, these historic resources would not be significantly impacted by vibrations that could reduce the historic integrity of the buildings.

Figure 15. Charles White Elementary School, where Harrison Gray Otis' house was originally located

Figure 15:
2401 Wilshire Boulevard, the Charles White Elementary School, was originally built in 1897 for Harrison Gray Otis to serve as his "bivouac" or temporary camp. Before his death in 1917, he bestowed the property to the County of Los Angeles asking that it be used for the advancement of

the arts. The following year the Otis Art Institute was initiated. The building was redesigned and rebuilt in 1957 by Austin, Field & Fry. 2425 Wilshire Boulevard, the building next to 2401, was acquired to expand the development of the school. By 1957, the entire facility had been dismantled and redesigned. The Otis Art Institute moved locations in 1997 and in 2004 the Charles White Elementary School moved into the building. Today, the building bears modern architecture and no remnants of the historic architecture remains. Despite its history, the Otis Art Institute/Charles White Elementary School building is not listed in the in the NRHP, CRHR, HCM, nor is it considered historic in age. None of these buildings are considered historic properties, structures, or resources under the definitions of CEQA. For the purposes of this assessment, these buildings are therefore only historic in age based on the State Historic Preservation Office definition of "age" in which any property that is 50 years old is considered historic. However, this is not enough to place historic significance to these buildings under CEQA. Moreover, the vibration analysis conducted by CDM Smith did not identify any direct or indirect impacts to this building from construction, including construction-related vibration. Therefore, there would not be any significant impacts to this building.

Figure 16. American Cement Headquarters

Figure 16:
675 S Parkview Street was known as the American Cement Headquarters. It was originally built in 1961 and considered a commercial use building. It currently stands at 13 stories tall and was designed by architectural firm Daniel, Mann, Johnson, and Mendenhall (DMJM). The building's architectural style is corporate international, and the most notable feature is the latticework of 450 precast concrete "X" and other symbols that is covering its north and south façades like an exoskeleton. The building is not listed in the NRHP, CRHR, or HCM. This building is not considered a historic property, structure, or resource under the definitions of CEQA. Therefore, for the purposes of this assessment, this building is only considered historic in age based on the State Historic Preservation Office definition of "age" in which any property that is 50 years old is considered historic. However, this is not enough to place historic significance to these buildings under CEQA. Moreover, the vibration analysis conducted by CDM Smith did not identify any direct or indirect impacts to this building from construction, including construction-related vibration. Therefore, there would not be any significant impacts to this building.

Figure 17. Westlake Theatre

Figure 17:
638 S. Alvarado Street is known as the Westlake Theatre. It was built in 1926 and considered a commercial entertainment theatre. This building is registered as Los Angeles Historic-Cultural Monument No. 546 and registered in the NRHP. The theatre was used for motion pictures and vaudeville shows that seated almost 2,000 patrons. It was designed by Richard Mortimer Bates Jr. in the Spanish Colonial Revival style with baroque ornamentation. The facade features Churrigueresque detailing of floral patterns and cartouche relief. The interior contains Adamesque references and murals by Anthony Heinsbergen. During the Great Depression, the theatre closed and before its reopening the building was renovated by theatre architect S. Charles Lee. All the way up to the 1960s, the Westlake Theatre operated as a cinema. In 1991 the building was used for large scale flea markets. This building has gone through various owners, some of which have proposed to rehabilitate the theatre, but as of today, the building is listed for sale and no major alterations have been made. For the purposes of CEQA, this building is considered a historic property and historic resource since it is listed in the Los Angeles Historic-Cultural Monument. However, this building is not located within or in close proximity to the Cultural Resource Project area. Therefore, despite its historic significance, no direct or indirect adverse impacts would be caused to this building.

Figure 18. 714-760 S Grand View Street Apartments

Figure 18:
714-760 S Grand View Street Apartments are historically known as the Honeymoon Cottages. These apartments were built in 1940 and serve as a residential complex. The apartments are bordered by an alley on the north, east, and southern edges of their property line. They consist of 18, one-story Minimal Traditional style duplexes on six parcels. The duplexes have all gone through extensive renovations which include the replacement of windows, relocation of interior water heaters to the exterior, addition of exterior decorative features such as tile accents, and

changes to the exterior landscaping features. Originally, the complex was built at the same time as the Apartment Streetcar Suburbs that occurred between 1904-1940. Although the property was within walking distance to streetcar lines, it was built at the very end of the period of significance for this theme and property type as an infill development and was not important in the development of streetcar suburbs or the Westlake Neighborhood. According to the former Westlake Community Redevelopment Agency, these buildings are not considered historically significant. In 2019 a project was proposed that would involve the demolition of these 18 duplexes for the construction of a 6-story, multi-family residential building with 100 units. According to the project plans, only units 714-716 would have been in the direct line of work for that project. (Addresses 714 thru 728 S. Grand View Street are the closest in proximity to the Proposed Project.) The Grand View Apartments are not listed as eligible for the NRHP, CRHR, or HCM. None of these buildings are considered historic properties, structures, or resources under the definitions of CEQA. For the purposes of this assessment, these buildings are therefore only historic in age based on the SHPO definition of "age" in which any property that is 50 years old is considered historic. However, this is not enough to place historic significance to these buildings under CEQA. Moreover, the vibration analysis conducted by CDM Smith did not identify any direct or indirect impacts to these buildings from construction, including construction-related vibration and therefore there would not be any significant impacts to the buildings.

Figure 19. 2228 W 7th Street

Figure 19:
The building at 2228 W 7th Street was built in 1922. It is a commercial building that has been used for medical purposes in the past although is currently vacant. A review of the Zimas, NavigateLA, HistoricPlacesLA, and SurveyLA databases did not produce any further information regarding this property, therefore a determination on the historic status of the property cannot be made. No historic record of the building has been located. However, in Figure 4 of the *2009 Intensive Survey for the Westlake Recovery Redevelopment Area Report* this building is identified as an individually

Significant Contributor. No other information regarding the building is provided. The exterior of the building appears to have gone through some alterations. Currently, the building is not listed in the in the NRHP, CRHR, or HCM. Since this building is not listed or considered eligible for historic registry, it is not considered a historic property, structure, or resource under the definitions of CEQA. This building is only considered historic in age based on the SHPO definition of "age" in which any property that is 50 years old is considered historic. Due to this building's location in close proximity to the installation of the stormwater pipe along Grand View Street, indirect effects from vibrations are expected to adversely affect this building. While this is a significant impact for purposes of the construction vibration analysis (as reported in the Draft EIR), this is not enough to place historic significance to this building under CEQA and therefore there would not be a significant impact on historic resources due to construction-related vibration.

Figure 20. 2424-2426 W. 7th Street

Figure 20:
2424-2426 W 7th Street was built in 1909 and are currently considered commercial buildings. The properties have been used for various commercial purposes, especially as a place of worship. Currently, these buildings are not listed in the NRHP, CRHR, or HCM. These address are historic in age but are currently not eligible for listing as a historical resource according to federal and CEQA criteria and requirements. Additionally, these properties are outside of the extent of the current Cultural Resource Project area and would not be directly or indirectly affected during Project development.

Figure 21. 2100-2122 W 7th Street

Figure 21:
2100-2122 W 7th Street is a commercial strip located south of MacArthur Park. The buildings were constructed at different times between 1909 to 1923 and are typical store fronts with no significant architectural features. None of these buildings are listed in the NRHP, CRHR, or HCM. The vibration analysis conducted by CDM Smith did not identify any impacts from construction vibration to any of the buildings in the commercial strip identified as 2100-2122 W. 7th Street and therefore there would not be any significant impacts to these buildings.

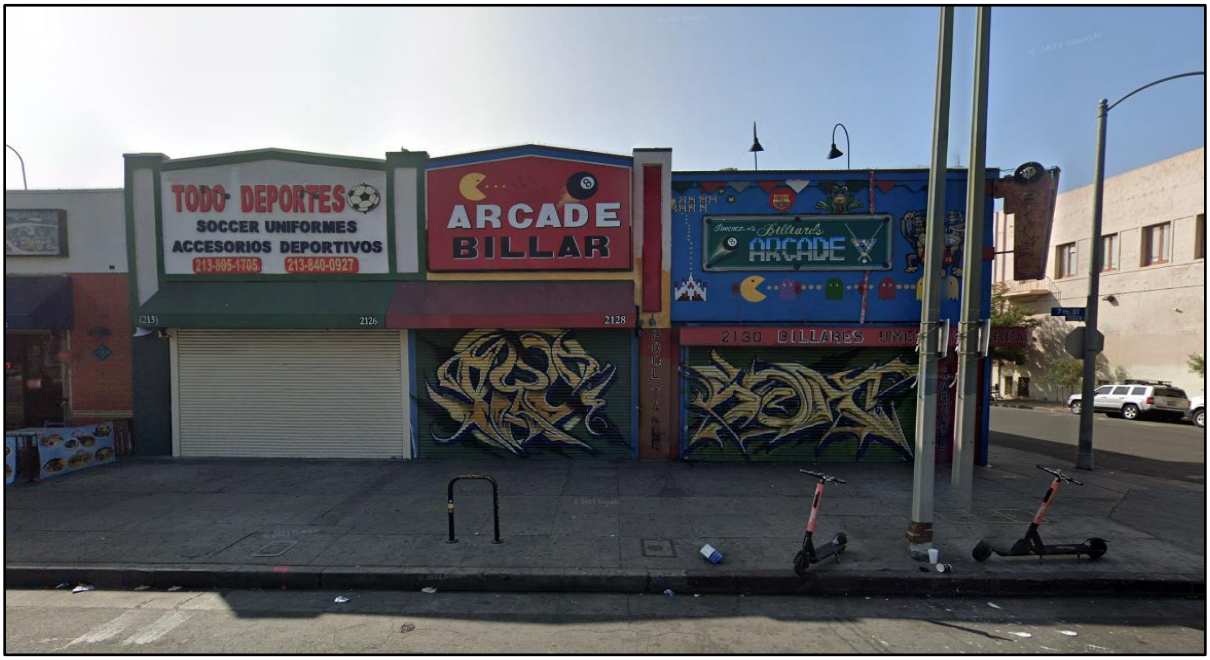

Figure 22. 2126-2130 W 7th Street (photo from *GoogleMaps* "Street View")

Figure 22:
The building located at 2126 West 7th Street (Figure 22) was built in 1916, has been determined by LSA Associates to be potentially eligible for NRHP listing. Under CEQA, the definition of a

historic resource is a resource that is listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources, the local historic register, or National Register of Historic Places (PRC §5024.1). Since the most recent survey of these buildings states they are listed as eligible for registration to a historic resource registry, then they are in fact considered a historic resource. For the purposes of this assessment, these buildings (i.e., 2126-2130 W. 7th Street) are therefore historic resources. Due to the location of 2128 and 2130 W. 7th Street in close proximity to the installation of the project components on Lake Street, indirect effects from vibrations are expected to adversely affect these buildings. Specifically, the CDM Smith led construction vibration determined that the Project would have significant impacts to 2128-2130 W. 7th Street from construction-related vibration. Therefore, the project could result in a significant impact from vibrations that could reduce the historic integrity of the buildings.

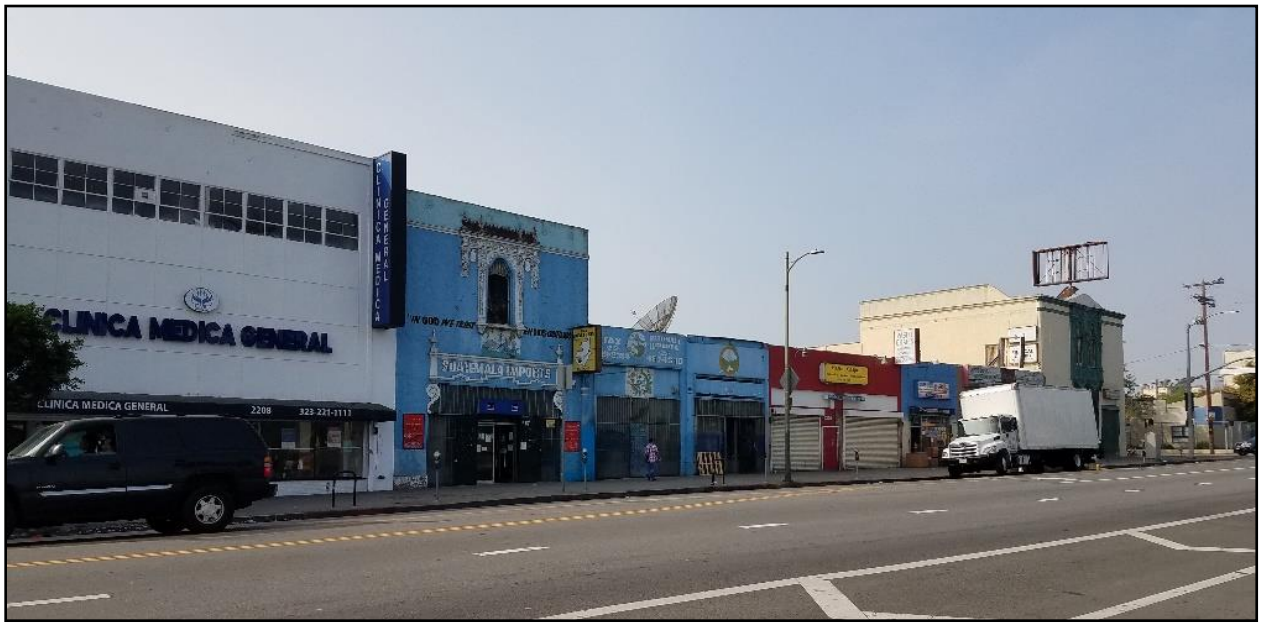

Figure 23. 2208-2226 W 7th Street

Figure 23:
2208-2226 W 7th Street was built between 1922 and 1927. These are commercial buildings used for retail, medical, and as a place of worship. Of these buildings, the periwinkle blue building, pictured center, is located at 2214 [5]West 7th Street (1922). All of the buildings located east of 2208 W. 7th Street to Grand View Street (i.e., 2212-2228 W. 7th Street) have been determined by LSA Associates to be eligible for NRHP listing due to their period-revival style and being located in the streetcar commercial node. Under CEQA, the definition of a historic resource is a resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources, local historic register, or National Register of Historic Places (PRC §5024.1). Since the most recent survey of these buildings states they are listed as eligible for registration to a historic resource registry, then they are considered a historic resource. For the purposes of this assessment, these buildings are therefore historic resources. However, the

[5] Building at 2214 W 7th Street consists of multiple addresses 2212/2214 W 7th Street. It is unclear if 2216-2218 are part of 2212/2214 W 7th Street or if they are separate buildings. Therefore, to remain conservative and based off LSA's designation addresses 2212-2226 W 7th Street are considered cultural resources.

vibration analysis conducted by CDM Smith did not identify any direct or indirect impacts to these buildings from construction, including construction-related vibration, and therefore there would not be any significant impacts to these buildings.

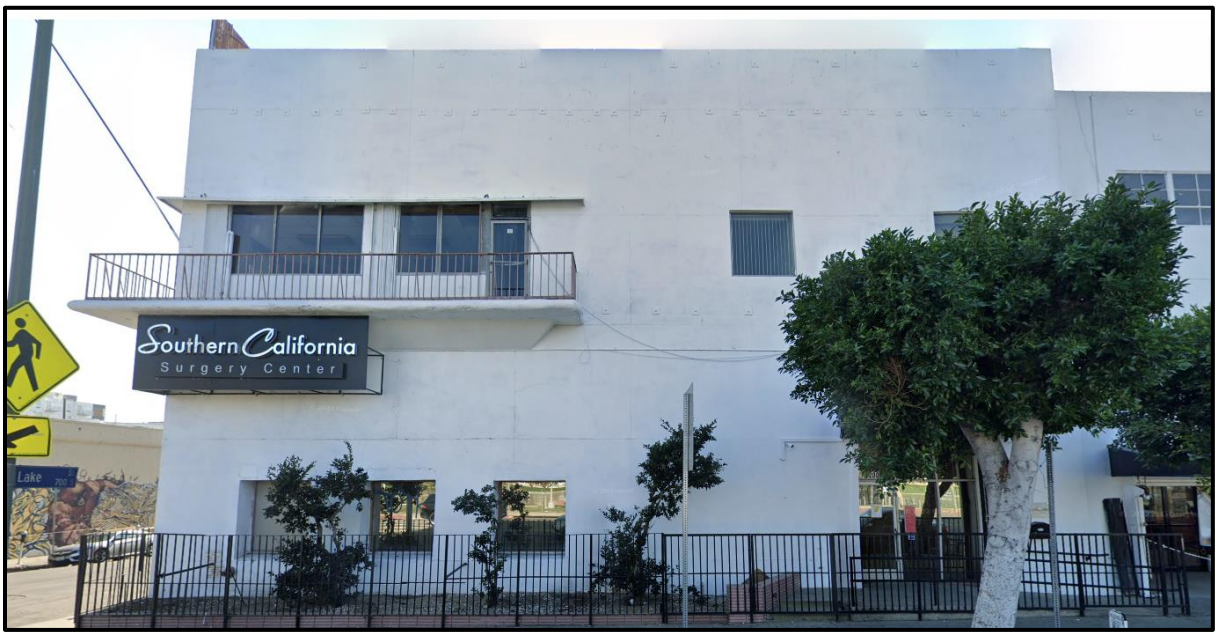

Figure 24. 2200-2204 W 7th Street

Figure 24:
No information could be located regarding the structure 2200-2204 W 7th St. Its date of construction is not available. A review of the Zimas, NavigateLA, HistoricPlacesLA, and SurveyLA databases did not produce any further information regarding these properties, therefore these properties are not considered historic under the definitions of CEQA. Despite the lack of historic significance, this building is in close proximity to proposed excavations on Lake Street. Due to the location of 2200 W. 7th Street in close proximity to the installation of the project components on Lake Street and across W. 7th Street, effects from vibrations are expected to adversely affect this building. While this is a significant impact for purposes of the construction vibration analysis (as reported in the Draft EIR), this is not enough to place historic significance to this building under CEQA and therefore there would not be a significant impact on historic resources due to construction-related vibration.

8.0 SACRED LAND FILES RESULTS

APRMI requested a Sacred Lands File Search for the proposed Cultural Resource Project area from the Native American Heritage Commission (NAHC) on December 20, 2021. The NAHC's search of the Sacred Lands Inventory, was conducted and received on January 26, 2022, with **negative** results.

The City of Los Angeles will fulfill its obligations pursuant to Assembly Bill 52, including the tribal consultation process if requested by any tribe that is currently listed in the City of Los Angeles Assembly Bill 52 consultation list. The City will also maintain all associated documentation of any consultation that takes place between the City of Los Angeles and California Native Americans. CDM Smith will address the consultation process and associated documentation that takes place between the City of Los Angles and California Native Americans in the CEQA document.

9.0 CONCLUSIONS

The field reconnaissance of the Cultural Resource Project area yielded **negative** results for archaeological and paleontological resources. Pedestrian surveys only allow surficial observation, and the ground visibility on the Project is poor due to the existing landscaping, parking lots, and structures present on the majority of the Cultural Resource Project area. The Project is an in use multi-purpose urban park that is landscaped with ornamental vegetation. Despite the negative field results, there is still the potential to encounter cultural resources during Project related grubbing, grading, and excavation activities.

Collections Manager, Dr. Alyssa Bell of the Natural History Museum of Los Angeles County, stated in the paleontological records check results that there are **positive** results regarding fossil localities that have been recorded within MacArthur Park, which is near the Cultural Resource Project area. Holocene/Pleistocene alluvial sediments have produced fossil specimens of bison, mammoth, and mastodon in the region at varying depths. Within the Cultural Resource Project area marine mammal, fish, and invertebrate fossils have been recorded at 60 feet below the ground surface. Within the quarter-mile radius of the Project fish, eel, bison, mammoth, and mastodon fossils remains have been discovered at depths of 5 feet below the ground surface and deeper. Although the field reconnaissance yielded negative results for paleontological resources, this does not preclude the possibility to uncover paleontological sites or fossil remains within the Cultural Resource Project area.

Per the SCCIC Record Search and the Native American Heritage Commission Sacred Lands File, no Native American or historic sites, features, or isolates have been previously recorded on the Project site. This **negative** determination does not preclude the possibility to uncover archaeological sites within the Cultural Resource Project area during excavation in naïve soils.

The built environment assessment has concluded that MacArthur Park itself is considered a Historic Resource, property, and registered as Los Angeles Historic Monument #100. According to Lambert Giessinger, Historic Preservation Architect at the Office of Historic Resources, the proposed development would have no impact on any character-defining features of this historic resource

Under CEQA, the definition of a historic resource is a resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources, local historic register, or National Register of Historic Places. Based on this definition, APRMI has identified several historic resources, properties, or registered landmarks within the

Cultural Resource Project area. Table 5 summarizes all buildings identified as historic resources, under the CEQA definition and the identified impact as a result of the Project. Of these resources, the most common impact is caused by vibrations as identified in the CDM Smith led construction vibration impact assessment.

Table 5. Summarized table of Historic Resources within or within mile of Cultural Resource Area

MacArthur Park	Historic Resource and Property. Registered as Los Angeles Historic Monument	Within Cultural Resource Project Area	No impact	According to Lambert Giessinger, Historic Preservation Architect at the Office of Historic Resources, the proposed development would have no impact
2410-2214 W 7th Street (Appears as 2214 in documentation and excludes 2410 which is incorrect)	Historic Resource	Within Cultural Resource Project Area	Less than significant	Historic Resource is in proximity to proposed pipe installation. Vibration impacts to these buildings would be less than significant. Therefore, vibrations during construction related activities would not significantly impact the historic integrity of these building.
2416-2422 W 7th Street (appears as 2414 W 7th Street in all documentation which is incorrect)	Historic Resource	Within Cultural Resource Project Area	No impact	The CDM Smith led construction vibration analysis did not find any direct or indirect impacts to this building from construction, including construction-related vibration.
2126-2130 W 7th Street	Historic Resource	Within Cultural Resource Project Area	Vibration impacts may damage historic integrity	Historic Resource is in close proximity to installation of several project components. Vibration impacts may cause significant adverse impacts to these buildings. Therefore, vibrations during construction related activities would significantly impact the historic integrity of these building. The recommended mitigation measures in the CDM

				Smith led construction vibration analysis would reduce these impacts to a less than significant level.
2212-2226 W 7th Street	Historic Resource	Within Cultural Resource Project Area	Vibration impacts may damage historic integrity	Historic Resource is in close proximity to proposed pipe installation. Vibration impacts may cause significant adverse impacts to these adjacent buildings. Therefore, vibrations during construction related activities will significantly impact the historic integrity of these building. The recommended mitigation measures in the CDM Smith led construction vibration analysis would reduce these impacts to a less than significant level.
2228 W 7th Street	Historic Resource	Within Cultural Resource Project Area	Vibration impacts may damage historic integrity	Historic Resource is in close proximity to proposed pipe installation. Vibration impacts may cause significant adverse impacts to these adjacent buildings. Therefore, vibrations during construction related activities will significantly impact the historic integrity of these building. The recommended mitigation measures in the CDM Smith led construction vibration analysis would reduce these impacts to a less than significant level.

Additionally, other building/addresses were considered to only be historic in age as defined by SHPO in which any property that is 50 years old is considered historic. However, this is not enough to place historic significance to these buildings under CEQA and therefore there cannot be treated as such. Construction related vibrational impacts may damage some of these buildings, but not their historic integrity. Table 6 summarizes these buildings that are only historic in age.

Table 6. Summarized table of Historic aged buildings within or within ¼ mile of Cultural Resource Project Area

Address	Historic Significance	Location	Impact	Notes
2401 Wilshire Boulevard	Historic Age	Within Cultural Resource Project Area	Vibration impacts would be less than significant	Not significant under CEQA historic resource definition. Historic in age based on SHPO definition. Would not be impacted by vibrations.
675 S Parkview Street	Historic Age	Within Cultural Resource Project Area	Vibration impacts would be less than significant	Not significant under CEQA historic resource definition. Historic in age based on SHPO definition. Would not be impacted by vibrations.
714-760 S. Grand View	Historic Age	Within Cultural Resource Project Area	Vibration impacts would be less than significant	Not significant under CEQA historic resource definition. Historic in age based on SHPO definition. Would not be impacted by vibrations.
2424-2426 W 7th Street	Historic Age	Within ¼ mile of Cultural Resource Project Area	No Impact	Not significant under CEQA historic resource definition.
2100-2122 W 7th Street	Historic Age	Within Cultural Resource Project Area	No Impact	Not significant under CEQA historic resource definition.
2200-2204 W 7th Street	Age Unknown	Within Cultural Resource Project Area	No Impact	Not significant under CEQA historic resource definition.
638 S. Alvarado St	Historic Resource and Property. Registered as Los Angeles Historic Monument	Within ¼ mile of Cultural Resource Project Area	No Impact	No Impact.

10.0 RECOMMENDATIONS

While there are no known prehistoric and historic artifacts, sites, or features that have been recovered within the boundaries of the Project or within a quarter mile, that might have been due to the lack of preservation during early urban development. There is a possibility that subsurface archeological resources may still be present. Therefore, it is recommended that full-time archaeological resource monitoring in native soil be conducted by a qualified archaeologist during excavation both on the Park itself as well as any off site utility trenching and entrance/exit pits until the archaeologist deems that they are no longer needed to monitor Project excavation. After the conclusion of Native American consultation, a Native American monitor, with ties to the area, be allowed to monitor the Project excavation, if the City of Los Angeles consultation requests it.

Table 4 lists the properties that are eligible to be listed in the NRHP, CRHR, or HCM and considered historic resources according to the NEPA and CEQA requirements. The table also lists properties that appear to eligible to be listed in the NRHP, CRHR, or HCM but have not been properly evaluated. Additionally, the table also lists properties that do not meet CEQA requirements for eligibility as a historic resource but are historic in age. By archaeological definition a structure or artifact is historic if it is 50 years or older. Only the addresses 2214 W. 7th Street and 2126 W. 7th Street are directly associated with the streetcar route because they were offices for the even though they are all along the route. CDM Smith reported that the construction vibration analysis would cause significant impact to the buildings discussed in Section 7: Cultural Resource Project Area Vicinity. As previously discussed, W. 7th Street is associated with the historical streetcar route. Only two of the building addresses are associated with the streetcar but all of them are of historic in age. Therefore, in cultural resources terms, vibrational impacts may be significant since they are considered historic older structures and/or fragile structures. For that reason, mitigation measures have been recommended for Project excavation around these buildings. The same is said with the S. Grand View Apartments located at 714-760 S. Grand View.

The Cultural Resource Project area has a known potential for paleontological resources per Dr. Alyssa Bell of the NHMLA, stating fossils have been recovered in the direct Cultural Resource Project area. The sediments present in the Cultural Resources Project area consists of older Quaternary alluvium that has yielded significant vertebrate fossil remains at other locations nearby. While surficial sediment is unlikely to yield paleontological resources, fossiliferous sediment may be present at an unknown depth. Under the current design, a pre-treatment unit, pump station, and associated pipelines would be installed near the intersection of Lake Street and West 7th Street. These components would all be located underground on the west side of the street and connecting to a manhole within the perpendicular alleyway behind the building located at 2208 West 7th Street. Additionally, a small section of 18-inch-diameter pipeline would be placed below South Grand View Street and connecting to an existing manhole located under West 7th Street. These connections and pipelines are anticipated to connect to a filtration system that would be installed on the southern margin of MacArthur Park Lake. The depths of the excavation for the installation of these units are only estimated at the moment. The Project site sits above three different sediment formations. Pleistocene fossils have been recovered near the Project area at 5-6 feet below the ground surface. Fossil remains may be encountered at any depth in native soils. Therefore, any Project related excavation should be monitored by a qualified paleontologist for potential fossil remains. Full time monitoring in native soils during storm water infiltration and retention system

and wetland excavation is required by a qualified paleontologist. All off-site trenching requires paleontological monitoring. If there is evidence that microfossils (small teeth or bone fragments weathering out of the sediment) is observed at any time during mitigation monitoring, soil samples of the native sediment should be collected and processed per SVP guidelines.

Once excavation activities in native soil have been completed, any prehistoric, historic, or paleontological sites that were located during excavation, must be recorded, and the artifacts or fossil remains must be cleaned, catalogued, photographed, and prepared for curation and accession to a legal local repository, such as the Natural History Museum of Los Angeles County, for final curation. A final Report of Findings (or Negative Findings) must be completed and sent to the City of Los Angeles, the legal curation repository, the State of California, and additional agencies if required.

Table 7 provides the recommended Mitigation Monitoring Measures for the Project. The Westlake Community in general is considered a remarkable area that is mostly intact from the time that MacArthur Park and adjacent buildings were developed.

Table 7. Recommended Mitigation Measures

Impact	***Mitigation Measure***	***Impact after Mitigation Measure***
HR-1 Excavation activities associated with the proposed Project could result in the destruction, damage, or alteration of the character of known historically significant buildings and properties.	MM-HR-1a MacArthur Park is LAHCM - Historic Monument # 100. Prior to the commencement of construction, a professional Lead Archaeologist, to OHP standards, must be retained for this Project. MM-HR-1b Several historic buildings adjacent to the MacArthur Park have been identified that may be indirectly impacted by excavation related vibrations due to the historic age of the buildings or eligibility to the NRHP, CRHR, or HCM. To avoid indirect damage to buildings along the local historic streetcar line to a less than significant level, construction equipment will require rubber tires (no track equipment) next to the buildings on W. 7th Street. This determination does not apply to the construction equipment MacArthur Park itself.	Less than Significant.

CR-1 Ground disturbing activities associated with Project construction could uncover significant prehistoric or historic archaeological deposits that qualify as cultural resources as defined in Section 15064.5 of the CEQA Guidelines. Damage or destruction of such resources would be a significant impact.	MM-CR-1a Prior to the commencement of construction, the professional qualified archaeologist shall create a Worker's Environmental Awareness Program (WEAP) pamphlet that will be provided as training for construction personnel to understand regulatory requirements for the protection of cultural resources. This training shall include examples of archaeological cultural resources that may be on site and state protocols to follow if discoveries are made. The archaeologist shall develop the training and any supplemental materials necessary to execute this Mitigation Measure. MM-CR-1b Full time Archaeological resources monitoring shall be conducted by a degreed professional archaeological resource monitor, during Project related earth-disturbing activities in native soil, per OHP standards, under the supervision of a qualified Lead Archaeologist. MM-CR-1c An approved Native American monitor, with documented ancestral ties to the area consistent with the standards of the Native American Heritage Commission (NAHC) may be requested of the City of Los Angeles, after Native American Consultation, to monitor ground disturbing activities that involve excavation of previously undisturbed soil. Monitoring will entail visual inspection Project related earth-disturbing activities (e.g., grading, trenching, utility installation, etc.) MM-CR-1d If an archaeological resource is encountered during construction when an archaeological monitor is not on site, all construction shall cease within at least 50 feet of the discovery and the Archaeological Principal Investigator and Lead Archaeologist must be notified. Work shall not resume in the direct area of the discovery until it is assessed by the Principal Investigator and/or Lead Archaeologist and they indicate that construction can resume. MM-CR1e If an archaeological discovery cannot be preserved in situ and requires an excavation team or requires additional time to collect cultural resources, a Treatment Plan (TP) will be developed and the area cordoned off and secured so that an archaeological resources excavation team, led by the Principal Investigator and Lead Archaeologist, may recover the cultural resources out of that contained area. Once the Principal Investigator has determined that the collection process is complete for a given area or locality, construction activity will resume in that localized area. If human remains are encountered at any point during Project excavation, the Project proponent will immediately cease all work on the	Less than Significant

	Project until the coroner deems it appropriate to resume. All procedures before and after the human remains are removed are dictated by law must they be implemented. MM-CR-1f All significant cultural resources collected will be prepared in a properly equipped archaeological laboratory to a point ready for curation. Laboratory work will be identified, catalogued, analyzed, photographed, and delivered to an accredited museum repository for permanent curation and storage, with accompanying Project notes, maps, and photographs shall also be filed at the repository. The cost of curation will be assessed by the repository and is the responsibility of the Project proponent. At the conclusion of laboratory work, but prior to museum curation, a final report will be prepared describing the results of the cultural mitigation monitoring efforts associated with the project. The report will include a summary of the field and laboratory methods, an overview of the cultural background within the project vicinity, a list of cultural resources recovered (if any), an analysis of cultural resources recovered (if any) and their scientific significance, and recommendations. A copy of the report will be submitted to the designated museum repository, the State of California CHRIS System, and the City of Los Angeles.	
CR-2 Native American human remains may be inadvertently uncovered during project construction.	MM-CR- areexcavation the MLD will be called if not already on site, and all on the Project. The coroner will be called immediately, and the Project will not resume until the coroner deems it appropriate to do so. All procedures before and after the human remains are removed are dictated by law must they be implemented.	Less than Significant
PAL-1 Development of the proposed Project could potentially disturb undiscovered paleontological resources present on the Project site.	MM-PAL-1a Prior to the commencement of construction, a Qualified Paleontologist shall be retained who will create a separate Worker's Environmental Awareness Program (WEAP) pamphlet that will be provided as training to construction personnel to understand regulatory requirements for the protection of paleontological resources. This training shall include examples of paleontological resources to be aware of in the vicinity, and protocols to follow if discoveries are made. The paleontologist shall develop the training and any supplemental materials necessary to execute said training. MM-PAL-1b Paleontological resources monitoring shall be conducted during all excavation on the Project in native soils by a qualified paleontological resource monitor, per Society for Vertebrate Paleontology (2010) standards, under the supervision	Less than Significant

	of a qualified Lead Paleontologist. Monitoring will entail the visual inspection of excavated or graded areas at the Park as well as trenching, sidewalls, and entrance/exit pits during Project excavation. The qualified paleontological resources monitor will periodically assess monitoring results in consultation with the Lead Paleontologist. If no (or few) significant fossils have been exposed the Lead Paleontologist may determine that full time monitoring is no longer necessary, and periodic spot checks or no further monitoring may be recommended. During construction monitoring, the monitor should process soil samples for micro-fauna per SVP guidelines. MM-PAL-1c In the event that a paleontological resource is encountered when a monitor is not on site, all construction shall cease within at least 50 feet of the discovery and the Principal Investigator and Lead Paleontologist must be notified immediately. If the monitor is present at the time of discovery, then the monitor will have the authority to temporarily divert the construction equipment around the find and notify the Principal Investigator and Lead Paleontologist until it is assessed for scientific significance. Work shall not resume in the direct area of the discovery until the it is assessed by the Principal Investigator and/or Lead Paleontologist indicates that construction can resume. MM-PAL-1c If a paleontological discovery requires an excavation team or requires additional time to collect specimens, the area will be cordoned off and secured so that a paleontological resources excavation crew, led by the Principal Investigator and Lead Paleontologist, may retrieve the remains out of that localized area of in situ deposits while excavation, monitored by a paleontological resource monitor, can continue in other areas. Once the Principal Investigator and Lead Paleontologist has determined that the collection process is complete for a given area or locality, construction activity will resume in that localized area. MM-PAL-1d All significant fossils collected will be prepared in a properly equipped paleontology laboratory to a point ready for curation. Preparation will include the careful removal of excess matrix from fossil materials and stabilizing and repairing specimens, as necessary. Any fossils encountered and recovered shall be prepared to the point of identification and catalogued before they are donated to their final repository. Following laboratory work, all fossil specimens will be identified to the lowest taxonomic level, catalogued, analyzed, and delivered to an accredited museum repository for permanent curation and storage. All accompanying notes, maps,	

	and photographs shall also be filed at the repository. The cost of curation is assessed by the repository and is the responsibility of the Project proponent. MM-PAL1e At the conclusion of laboratory work, but prior to museum curation, a final paleontological report will be prepared describing the results of the paleontological mitigation monitoring efforts associated with the Project. The report will include a summary of the field and laboratory methods, an overview of the geology and paleontology in the project vicinity, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. If the monitoring efforts produced fossils, a copy of the report will also be submitted to the designated museum repository, the Natural History Museum of Los Angeles County, and the City of Los Angeles.	

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