# Appendix F Cultural and Paleontological Resources Assessment





## CULTURAL AND PALEONTOLOGICAL RESOURCE ASSESSMENT FOR THE CITY OF GARDENA LAND USE PLAN & ZONING AMENDMENT PROJECT, CITY OF GARDENA, LOS ANGELES COUNTY, CALIFORNIA

#### Prepared for:

Starla Baker, Principal Planner De Novo Planning Group

#### **Authors:**

Sandy Duarte, B.A. Kelly Vreeland, M.S. Shannon Lopez, M.A.

#### **Principal Investigators:**

John Gust, Ph.D. Kim Scott, M.S.

#### **Date**

Revised July 2023

Cogstone Project Number: 5119

Type of Study: Cultural Resources and Paleontological Resource Assessment

Sites: P-19-190051

USGS 7.5' Quadrangles: Inglewood (1981), Torrance (1981)

**Area:** 404.26 acres

*Key Words:* Cultural and Paleontological Resources Assessment, City of Gardena, Los Angeles County; Gabrielino/Gabrieleño/Tongva territory, middle to late Pleistocene old alluvium, late Pleistocene to

Holocene young alluvial fan deposits and young alluvium, Housing Element Update

## TABLE OF CONTENTS

SUMMARY OF FINDINGS	1
INTRODUCTION	1
PURPOSE OF STUDY	1
PROJECT LOCATION	2
PROJECT BACKGROUND	
PROJECT PERSONNEL	
REGULATORY ENVIRONMENT	10
STATE LAWS AND REGULATIONS	
CALIFORNIA ENVIRONMENTAL QUALITY ACT	
TRIBAL CULTURAL RESOURCES	
Public Resources Code	
NATIVE AMERICAN HUMAN REMAINS	
CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307	
DEFINITION OF SIGNIFICANCE FOR PALEONTOLOGICAL RESOURCES	
BACKGROUND	13
GEOLOGICAL SETTING	
PALEONTOLOGICAL SETTING	
ENVIRONMENTAL SETTING	
PREHISTORIC SETTING	
ETHNOGRAPHY	
HISTORIC SETTING	23
RECORD SEARCHES	26
PALEONTOLOGICAL RECORD SEARCH	
CALIFORNIA HISTORIC RESOURCES INFORMATION SYSTEM	
RESOURCES WITHIN PROJECT AREA	
RESOURCES WITHIN CITY LIMITS	
NATIVE AMERICAN CONSULTATION	
CRHR EVALUATION	
EVALUATION FOR SIGNIFICANCE IN THE CALIFORNIA REGISTER OF HISTORICAL	
RESOURCES	
CRITERION 1: ASSOCIATED WITH EVENTS THAT HAVE MADE A SIGNIFICANT CONTRIBUTION TO THE BROAD A	
OF LOCAL OR REGIONAL HISTORY OR THE CULTURAL HERITAGE OF CALIFORNIA OR THE UNITED STATES  CRITERION 2: ASSOCIATED WITH THE LIVES OF PERSONS IMPORTANT TO LOCAL, CALIFORNIA OR NATIONAL	L HISTORY.
CRITERION 3: EMBODIES THE DISTINCTIVE CHARACTERISTICS OF A TYPE, PERIOD, REGION OR METHOD OF	
CONSTRUCTION OR REPRESENTS THE WORK OF A MASTER OR POSSESSES HIGH ARTISTIC VALUES	
Criterion 4: It has yielded, or has the potential to yield, information important to the prehibitory of the local area, California, or the nation.	
STUDY FINDINGS AND CONCLUSIONS	39
PALEONTOLOGICAL SENSITIVITY	
CULTURAL RESOURCES SENSITIVITY	41
RECOMMENDATIONS	42

PALEONTOLOGY	42
CULTURAL RESOURCES	42
SUGGESTED MITIGATION MEASURES	43
MM PAL-1	43
MM CUL-1	43
MM CUL-2	44
MM CUL-3	44
REFERENCES CITED	45
APPENDIX A. QUALIFICATIONS	50
APPENDIX B. PALEONTOLOGICAL RECORD SEARCH	58
APPENDIX C. PREVIOUS CULTURAL RESOURCES STUDIES WITHIN THE CITY OF GARDEN.	61
APPENDIX D. CALIFORNIA BUILT ENVIRONMENT RESOURCE DIRECTORY FOR CITY OF	
GARDENA	67
APPENDIX E. NATIVE AMERICAN CONSULTATION	89
APPENDIX F. PALEONTOLOGICAL SENSITIVITY RANKING CRITERIA	93
APPENDIX G. DPR FORMS	95

## LIST OF FIGURES

FIGURE 1. PROJECT VICINITY MAP	1
FIGURE 2. PROJECT LOCATION MAP (1 OF 2)	4
FIGURE 3. PROJECT LOCATION MAP (2 OF 2)	
FIGURE 4. PROJECT AERIAL MAP	6
FIGURE 5. PARCELS PROPOSED FOR CHANGES TO GENERAL PLAN LAND USE	7
FIGURE 6. PARCELS PROPOSED FOR CHANGES TO ZONES	8
FIGURE 7. PROJECT GEOLOGY MAP	15
FIGURE 8. TRIBAL BOUNDARY MAP	22
FIGURE 9. LAND GRANT MAP	24
FIGURE 10. JULY 2022 PHOTOGRAPH OF THE WEST FAÇADE OF 15916 CRENSHAW BOULEVARD (CALVARY	
BAPTIST CHURCH; P-19-190051). COURTESY OF GOOGLE MAPS 2022.	38
LIST OF TABLES	
TABLE 1. PROJECT AREA CADASTRAL INFORMATION	2
TABLE 2. CITY OF GARDENA CADASTRAL INFORMATION	2
TABLE 3. CULTURAL PATTERNS AND PHASES	
TABLE 4. FOSSIL LOCALITIES FROM NEAR TO THE PROJECT AREA	
TABLE 5. PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN THE CITY OF GARDENA	
TABLE 6. ADDITIONAL SOURCES CONSULTED	
TABLE 7. LAND PATENTS	
TABLE 8. 1981 GARDENA HISTORICAL RESOURCES SURVEY	
TABLE 9. PALEONTOLOGICAL SENSITIVITY RANKINGS	
TABLE D-1. BERD DIRECTORY FOR CITY OF GARDENA	68

#### **SUMMARY OF FINDINGS**

The objective of this study is to review and summarize available information regarding known paleontological, archaeological, and historical resources within designated parcels within the boundaries of the City of Gardena (City) to support the City of Gardena Land Use Plan & Zoning Amendment Project (Project). The City of Gardena is the lead agency under the California Environmental Quality Act (CEQA).

Located in the South Bay region of Los Angeles County, 13 miles south of downtown Los Angeles, Gardena is an urban community encompassing 5.7 square miles. Gardena is situated near four major freeways: Harbor (I-110), San Diego (I-405), Century (I-105), and Artesia (SR-91). Surrounding communities are Hawthorne and Los Angeles County to the north and west, Torrance to the south and west, and Los Angeles to the south and east.

The City of Gardena Land Use Plan, Zoning Code & Zoning Amendment Project (herein referred to as "Land Use Plan and Zoning Amendments Project" or "Project") proposes changes to the land use designation and zoning for parcels located throughout the City of Gardena (City). Textual changes to the land use plan and Zoning Code also apply to properties throughout the City.

This Land Use Plan and Zoning Amendments Project is a result of the City's recent adoption of the 6<sup>th</sup> Cycle Housing Element for 2021 – 2029 (Housing Element). Housing element law requires local governments to adequately plan to meet their existing and projected housing needs, including their share of the regional housing needs allocation (RHNA) (California Government Code Sections 65580-65588) based on a Regional Housing Needs Plan (RHNP) developed by councils of government. The Southern California Association of Governments (SCAG) determined that the City of Gardena will need to accommodate the development of 5,735 units during the 8-year planning period.

Cogstone requested a search of the California Historical Resources Information System (CHRIS) from the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton on February 10, 2022 which included the entire proposed Project Area and the entire City of Gardena (City). Results of the record search indicate that 15 previous studies have been completed within the Project Area parcels and an additional 31 previous studies have been completed within the City.

Eight cultural resources have been recorded within the City, P-19-000101, P-19-177369, P-19-177464, P-19-188449, P-19-190051, P-19-190623, P-19-190646 and P-19-192741. One resource, P-19-190051, is located within the potential housing sites that constitute the Project Area.

A Sacred Lands File search was requested from the Native American Heritage Commission (NAHC) on February 10, 2022. The NAHC responded on March 31, 2022, with a negative search result indicating that there are no known sacred lands or resources within the Project Area

or immediate vicinity. The City of Gardena conducted Native American consultations in compliance with Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18).

#### Paleontological Resources

The Project is mapped as middle to late Pleistocene (774,000 - 11,700 years ago) old alluvium, and late Pleistocene to Holocene (less than 129,000 years ago) young alluvial fan deposits and young alluvium. The paleontological record search through the Natural History Museum of Los Angeles County revealed no fossil localities from within the Project or within a one mile radius of the Project. Additional records from the University of California Museum of Paleontology database, the PaleoBiology Database, and print sources were searched for fossil records. The additional records searches showed that there are 13 fossil localities that are known from terrestrial deposits within a seven-mile radius of the Project. Extinct megafauna from these localities include mammoth (†Mammuthus sp.), horse (†Equus sp.), pronghorn (†Breameryx sp.), camel (†Camelidae), and bison (†Bison sp.).

Old alluvium sediments are assigned a moderate potential for fossils. Sediments near to the Project Area mapped as Holocene at the surface produced fossils starting at 24 feet deep. Given this, Young alluvial fan deposits and young alluvium have low potential for fossils above 20 feet below the modern surface (PFYC 2) due to the lack of fossils in these deposits, and moderate potential for fossils (PFYC 3) at depths exceeding 20 feet below the modern surface due to similar deposits producing fossils at that depth near to the study area.

Based upon fossils found in similar sediments nearby, full-time paleontological monitoring is currently recommended for the mass excavations in areas mapped as old alluvium, and excavations greater than 20 feet deep in areas mapped as young alluvial fan deposits and young alluvium. Drilling or pile driving activities regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling will not have information about formation, depth, or context.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during project development, all work must cease near the find immediately.

#### Cultural Resources

Cogstone reviewed the SCCIC records search, SLF search results, and the geological maps of the area. According to the SCCIC records search results, both of the previously recorded archaeological (one prehistoric-aged, one historic-aged) sites within the City are located in the southeast corner of the City. This small number of previously identified resources is likely due as much to limited attempts at identification as it is absence of resources, as only a small portion of the City (less than 5 percent) has been systematically surveyed for cultural resources. Almost all land within the City is built out, but it is built upon alluvium with variable potential to preserve subsurface cultural resources. The Calvary Baptist Church (P-19-190051) is the only resource recorded within the parcels that have been identified by the City as places for potential housing growth.

All these data sources considered, due to previous disturbance by grading activities the sensitivity for historic-aged cultural deposits is assessed to be low. Cultural sensitivity for deeply buried prehistoric cultural resources is assessed to be low to moderate. The sensitivities are the same for project parcels and the City as a whole.

Only a small portion of the City has undergone systematic pedestrian survey for archaeological resources, and the systematic study for built environment resources is over 40 years old. Cogstone recommends the City require a cultural resources assessment in areas of planned development or redevelopment in which past documented ground disturbance of some or all of the Project Area is less than five feet, such as old parking lots.

Cogstone recommends that all structures that are 45 years old or older be evaluated prior to their destruction or significant alteration. We also recommend that the City select a number of Project Area (General Plan or Zone Change) parcels for City-sponsored study of the historical significance of buildings within the City of Gardena.

We also recommend that the City consider adopting a historic preservation ordinance (LA Conservancy 2020) to guide the City's implementation of the General Plan policy of protecting Gardena's cultural resources.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during project development, all work must cease near the find immediately.

### **INTRODUCTION**

#### **PURPOSE OF STUDY**

The objective of this study is to review and summarize available information regarding known paleontological, archaeological, and historical resources within designated parcels within the boundaries of the City of Gardena (City) to support the City of Gardena Land Use Plan & Zoning Amendment Project (Project; Figure 1). The City of Gardena is the lead agency under the California Environmental Quality Act (CEQA).

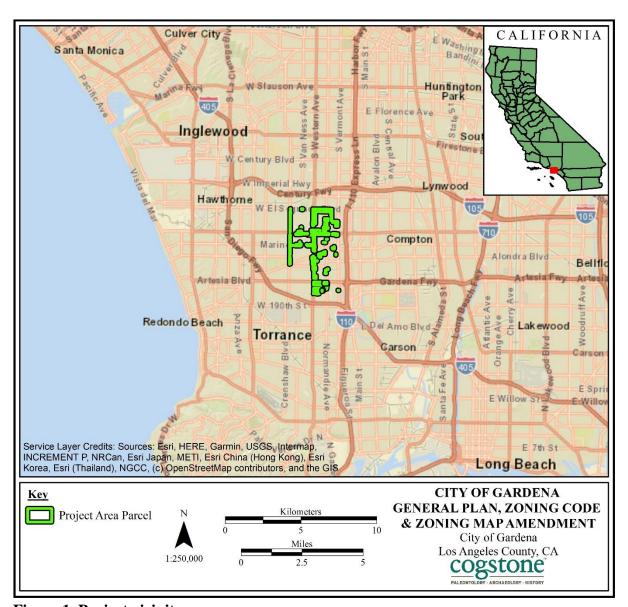


Figure 1. Project vicinity map

#### PROJECT LOCATION

Located in the South Bay region of Los Angeles County, 13 miles south of downtown Los Angeles, Gardena is an urban community encompassing 5.7 square miles. Gardena is situated near four major freeways: Harbor (I-110), San Diego (I-405), Century (I-105), and Artesia (SR-91). Surrounding communities are Hawthorne and Los Angeles County to the north and west, Torrance to the south and west, and Los Angeles to the south and east (Figures 2, 3, and 4).

The City of Gardena Land Use Plan, Zoning Code & Zoning Amendment Project (herein referred to as "Land Use Plan and Zoning Amendments Project" or "Project") proposes changes to the land use designation and zoning for parcels located throughout the City of Gardena (City). Textual changes to the land use plan and Zoning Code also apply to properties throughout the City. The parcels proposed for changes to their existing land use designations are identified on Figure 5 (Parcels Proposed for Changes to General Plan Land Use), and the parcels proposed for changes to their existing zone are identified on Figure 6 (Parcels Proposed for Changes to Zones).

The Project Area is located throughout the City of Gardena within the United States Geological Survey (USGS) 7.5-minute Inglewood and Torrance topographic quadrangle maps (Figures 2 and 3) and covers 404.26 acres. Tables 1 and 2 summarize the cadastral information for the Project Area and for the City.

**Table 1. Project Area Cadastral Information** 

USGS 7.5 Topographic Quad(s)	Township	Range	Section(s)
Inglewood	3S	14W	13, 14, 23, 24, 25, 26
Torrance	3S	14W	36

**Table 2. City of Gardena Cadastral Information** 

USGS 7.5 Topographic	Township	Range	Section(s)		
Quad(s)					
Inglewood	3S	14W	13, 14, 15, 22, 23, 24, 25, 26, 27		
Torrance	3S	13W	31		
		14W	36		

#### PROJECT BACKGROUND

This Land Use Plan and Zoning Amendments Project is a result of the City's recent adoption of the  $6^{th}$  Cycle Housing Element for 2021 - 2029 (Housing Element). Housing element law requires local governments to adequately plan to meet their existing and projected housing needs, including their share of the regional housing needs allocation (RHNA) (California Government

Code Sections 65580-65588) based on a Regional Housing Needs Plan (RHNP) developed by councils of government. The Southern California Association of Governments (SCAG) determined that the City of Gardena will need to accommodate the development of 5,735 units during the 8-year planning period.

Government Code Section 65583(a)(3) requires local governments to prepare an inventory of land suitable for residential development, including vacant sites and sites having the potential for redevelopment, and an analysis of the relationship of zoning on these sites to public facilities and services. The inventory of land suitable for residential development shall be used to identify sites that can be developed for housing within the planning period. The Gardena Housing Element contained Inventory Sites that accommodated its RHNA allocation along with an approximate 22 percent buffer for affordable units.

Because the City has limited vacant or underutilized properties within the existing residential and mixed-use zones to accommodate the RHNA number, the Housing Element requires that almost all of the Inventory Sites be provided with one of four housing overlays and that certain amendments be made to the Gardena Zoning Code, in part to provide for ministerial approval of affordable projects and also to provide objective zoning standards.

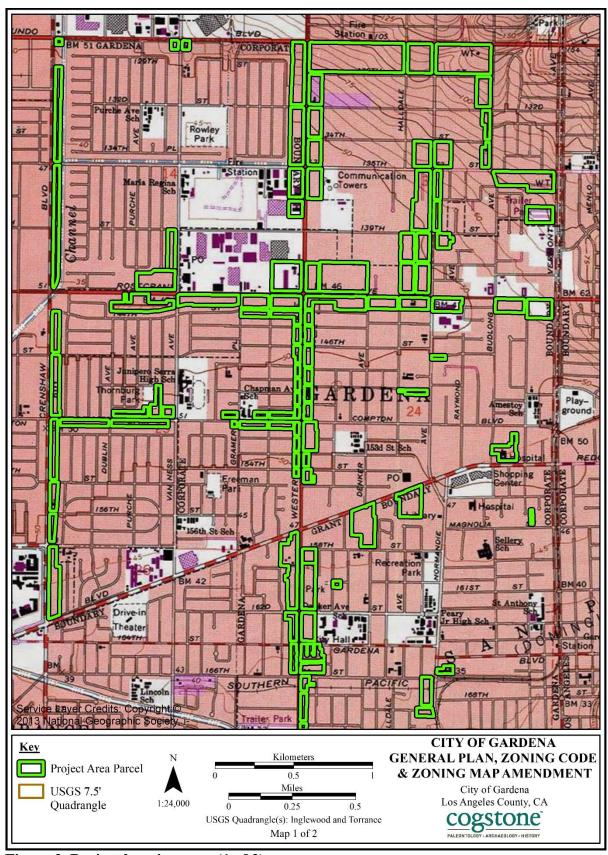


Figure 2. Project location map (1 of 2)

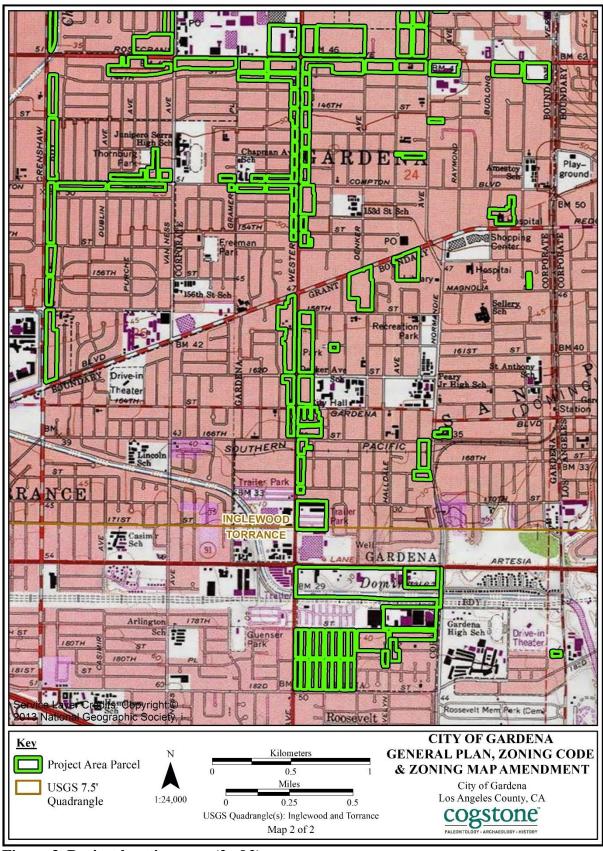


Figure 3. Project location map (2 of 2)

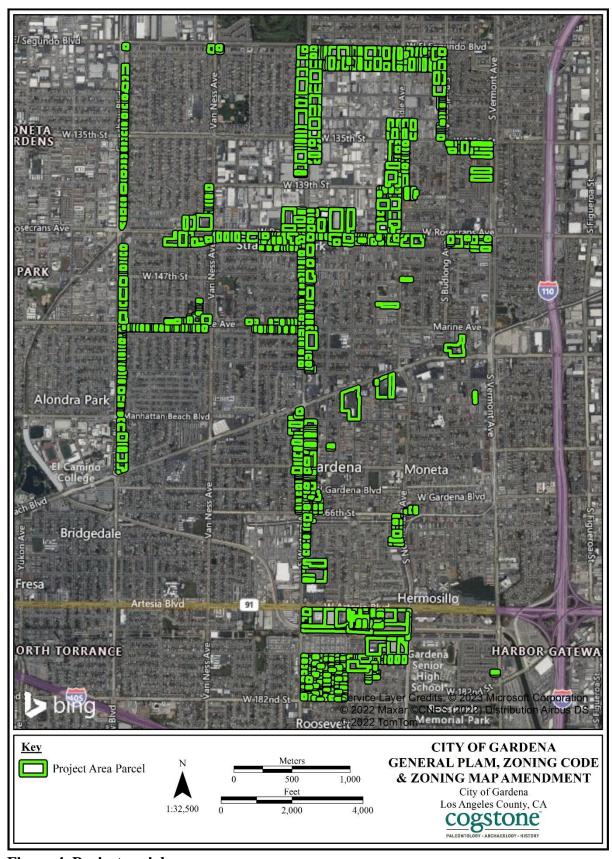


Figure 4. Project aerial map

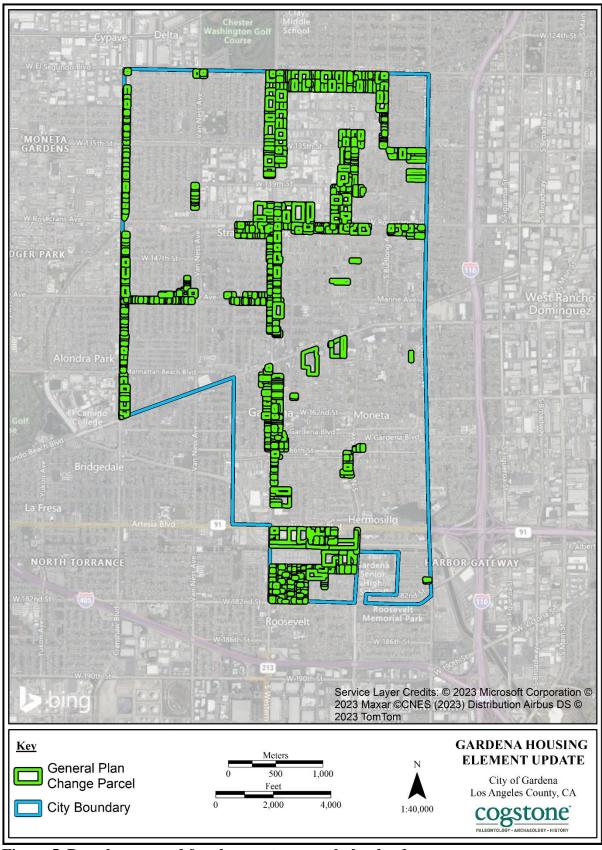


Figure 5. Parcels proposed for changes to general plan land use

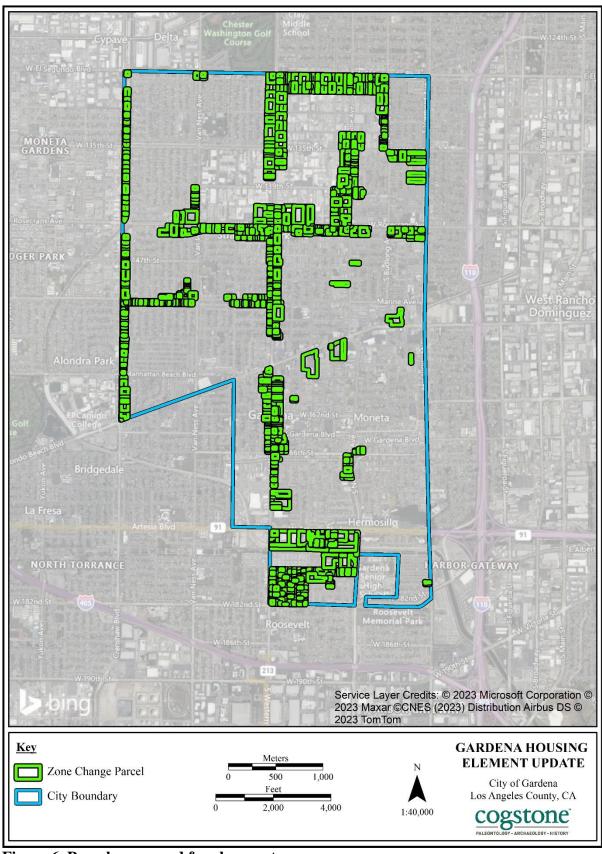


Figure 6. Parcels proposed for changes to zones

#### PROJECT PERSONNEL

Cogstone Resource Management, Inc. (Cogstone) conducted the cultural and paleontological resources study. Resumes of key personnel are provided in Appendix A.

- John Gust, RPA, served as the Principal Investigator for Archaeology, and co-authored this report. Dr. Gust has a Ph.D in Anthropology from the University of California (UC), Riverside and more than eleven years of experience in archaeology.
- Kim Scott served as the Principal Investigator for Paleontology for the Project and wrote the geology, paleontology, environmental, and geoarchaeological sections of this report. Ms. Scott holds an M.S. in Biology with an emphasis in paleontology from California State University (CSU), San Bernardino and a B.S. in Geology from University of California, Los Angeles (UCLA). She is a qualified vertebrate paleontologist and sedimentary geologist with more than 27 years of experience in California paleontology and sedimentary geology.
- Sandy Duarte completed the additional sources consulted section and co-authored this report. Mrs. Duarte holds a B.A. in Anthropology from UC Santa Barbara, and has more than 18 years of experience in California archaeology.
- Kelly Vreeland co-authored the geological and paleontological portions of this report.
   Mrs. Vreeland has an M.S. and a B.S. in Geology, with an emphasis in paleontology,
   from CSU Fullerton as well as 10 years of experience in California paleontology and
   geology.
- Shannon Lopez conducted historic society consultation and drafted portions of this report. Ms. Lopez holds an M.A. in History from CSU Fullerton and has more than four years of experience as an architectural historian.
- Logan Freeberg conducted the archaeological and paleontological record searches and prepared the maps for the report. He has a certificate in Geographic Information Systems (GIS) from CSU Fullerton and a B.A. in Anthropology from UC Santa Barbara and has more than 19 years of experience in southern California archaeology.
- Debbie Webster provided technical editing. Ms. Webster has more than 21 years of experience in technical writing.
- Molly Valasik was Task Manager for the Project and provided overall QA/QC. Ms. Valasik has an M.A. in Anthropology from Kent State University in Ohio and over 13

years of experience in southern California archaeology.

• Eric Scott provided QA/QC for the paleontology and geology sections of this report. Mr. Scott has an M.A. in Anthropology, with an emphasis in biological paleoanthropology, from UCLA, and more than 38 years of experience in California paleontology.

#### REGULATORY ENVIRONMENT

#### STATE LAWS AND REGULATIONS

#### CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA states that: It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

CEQA declares that it is state policy to: "take all action necessary to provide the people of this state with...historic environmental qualities." It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

#### TRIBAL CULTURAL RESOURCES

As of 2015, CEQA established that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (Public Resources Code, § 21084.2). In order to be considered a "tribal cultural resource," a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

To help determine whether a project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally

affiliated with the geographic area of a proposed project. If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code §20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.

#### PUBLIC RESOURCES CODE

Section 5097.5: No 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 (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. 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.

#### CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (CRHR) is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks No. 770 and above. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic resources 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.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

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

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance.

Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

#### NATIVE AMERICAN HUMAN REMAINS

Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and Public Resources Code §5097.98), as reviewed below:

In the event that human remains are encountered during project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.

#### CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307

This section states that "No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value."

#### DEFINITION OF SIGNIFICANCE FOR PALEONTOLOGICAL RESOURCES

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;

- 2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
- 3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
- 4. The fossils demonstrate unusual or spectacular circumstances in the history of life;
- 5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer 2003; Scott et al. 2004).

#### **BACKGROUND**

The geologic, paleontological, and environmental sections below provide information on the environmental factors that affect archaeological and paleontological resources, while the prehistoric and historical settings provide information on the history of land use in the general Project region.

#### **GEOLOGICAL SETTING**

The Project lies within the Los Angeles Basin, a sedimentary basin which includes the coastal plains of Los Angeles and Orange counties and extends west to Catalina Island, California. This region is bounded by the Santa Ana Mountains to the east, the Santa Monica Mountains to the north, and the San Joaquin Hills to the south. The Los Angeles Basin began to develop in the early Miocene, about 23 million years ago, initially in a marine setting. Through time the basin transitioned to terrestrial deposition by the middle Pleistocene, about 1 million years ago.

The Los Angeles Basin is part of the coastal section of the northernmost Peninsular Range Geomorphic Province, and is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Subparallel faults branching off from the San Andreas Fault to the east create the local mountains and hills. The Peninsular Ranges Geomorphic

Province is located in the southwestern corner of California and is bounded by the Transverse Ranges Geomorphic Province to the north and the Colorado Desert Geomorphic Province to the east (Wagner 2002).

The Project is mapped as middle to late Pleistocene (774,000 - 11,700 years ago) old alluvium, and late Pleistocene to Holocene (less than 129,000 years ago) young alluvial fan deposits and young alluvium (Figure 7; Saucedo et al. 2016).

#### OLD ALLUVIUM, UNDIVIDED; MIDDLE TO LATE PLEISTOCENE

These fluvial deposits consist of layered poorly sorted, moderately well-indurated, moderately dissected, gravels to clays (Saucedo et al. 2016).

#### YOUNG ALLUVIAL FAN DEPOSITS, UNDIVIDED; LATE PLEISTOCENE TO HOLOCENE

These young alluvial fan deposits are late Pleistocene to Holocene in age. They consist of poorly sorted and poorly consolidated clay, sand, gravel, and cobble (Saucedo et al. 2016).

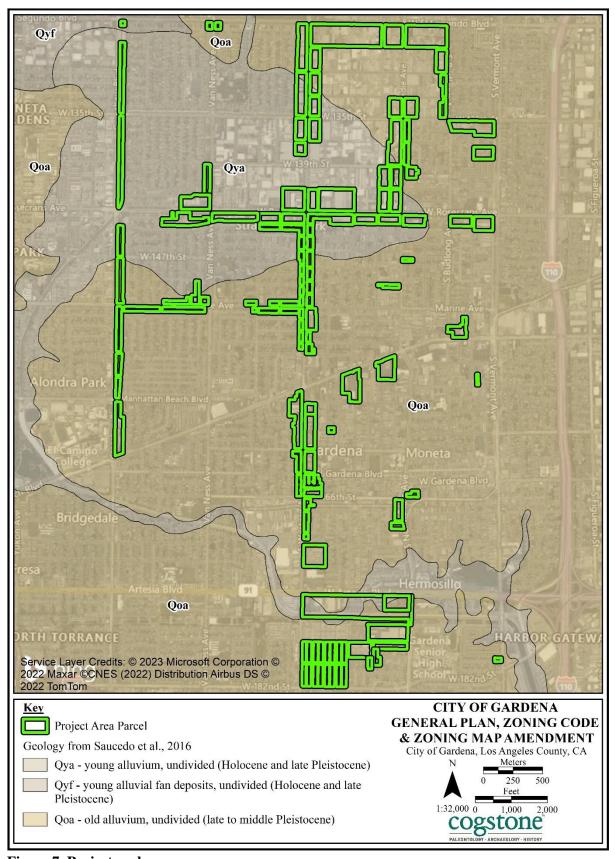


Figure 7. Project geology map

#### YOUNG ALLUVIUM, UNDIVIDED; LATE PLEISTOCENE TO HOLOCENE

The late Pleistocene to Holocene young alluvium was deposited between 129,000 years ago and through into historic times. These flood plain deposits consist of poorly sorted, permeable clays, silt, and silty sand (Saucedo et al. 2016).

#### PALEONTOLOGICAL SETTING

During the past 100,000 years or so, southern California's climate has shifted from the cooler and damper conditions of the last glacial period to the warmer and dryer conditions of the Holocene interglacial which began approximately 11,000 years ago. While continental ice sheets covered the interior of northern North America, southern California was ice free.

Fossils of Monterey cypress (*Hesperocyparis macrocarpa*), Monterey pine (*Pinus radiata*), and Torrey pine (*Pinus* sp. cf. *P. torreyana*) have been found in middle to late Pleistocene deposits in the Wilshire District of Los Angeles (Scott et al. 2014). Fossils of Monterey cypress are also known from middle to late Pleistocene deposits in Costa Mesa, California, as well as from the late Pleistocene Rancho La Brea asphalt seeps of the Wilshire District of Los Angeles (Axelrod and Govean 1996; Stock and Harris 1992). Today, the most restricted conifers (Monterey cypress and Torrey pine) only inhabit locations on the coasts with cool, moist summers characterized by abundant sea fog. These locations experience a mean summer high temperature of 70°F - 83°F (21.1°C - 28.3°C). Winters are cool and damp with average precipitation of 10.59 - 32.41 inches (26.90 - 82.32 cm; Intellicast 2022; The Weather Channel 2022). Cold water upwellings due to submarine canyons adjacent to the shore near the relict populations create these conditions.

#### **ENVIRONMENTAL SETTING**

Located in Los Angeles County, the Project is situated approximately 10 miles south-southwest of downtown Los Angeles. The Los Angeles River lays approximately 8 miles to the east, Compton Creek is 2.5 miles to the east, and the Pacific Ocean is approximately 6 miles to the west.

The current Mediterranean-like climate is characterized by warm, dry summers and cool, moist winters, with rainfall predominantly falling between November and May. Mild breezes reach the area from the Pacific Ocean, located west of the Project Area.

Prior to development, the native vegetation of the Project Area consisted of California coastal sage scrub. Typical species include California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis* var. *consanguinea*), California buckwheat (*Eriogonum fasciculatum*), lemonade berry (*Rhus integrifolia*), poison oak (*Toxicodendron diversiloba*), purple sage (*Salvia*)

*leucophylla*), and black sage (*Salvia mellifera*; Ornduff et al. 2003). Additional common species include brittlebush (*Encelia californica*), chamise (*Adenostoma fasciculatum*), white sage (*Salvia apiana*), Our Lord's candle (*Hesperoyucca whipplei*), and prickly pear cactus (*Opuntia*; Hall 2007).

Large native land mammals of the region included mule deer (*Odocoileus hemionus*), bighorn sheep (\$\frac{1}{\pm}Ovis canadensis\$), tule elk (\$\frac{1}{\pm}Cervus canadensis nannodes\$), pronghorn (\$\frac{1}{\pm}Antilocapra americana\$), bison (\$\frac{1}{\pm}Bison bison\$), bobcat (\$\frac{1}{\pm}Lynx rufus\$), mountain lion (\$\frac{1}{\pm}Felis concolor\$), jaguar (\$\frac{1}{\pm}Panthera onca\$), coyote (Canis latrans), grey wolf (\$\frac{1}{\pm}Canis lupus\$), black and grizzly bears (\$\frac{1}{\pm}Ursus americanus\$, \$\frac{1}{\pm}Ursus arctos\$). Smaller native fauna included rabbits (\$\frac{1}{\pm}Lepus californicus\$, Sylvilagus audubonii, \$\frac{1}{\pm}Sylvilagus bachmani\$), desert tortoise (\$\frac{1}{\pm}Gopherus agassizii\$), and numerous other species (California Department of Fish and Game 2020).

Today, after approximately a century of urban and suburban development, the vegetation of the area is instead typified by imported species. Grasses such as slender wild oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), and giant reed (*Arundo donax*); shrubs and trees including blackwood acacia (*Acacia melanoxylon*), saltcedar (*Tamarix ramosissima*), eucalyptus (*Eucalyptus* spp.), and Brazilian pepper (*Schinus terebinthifolius*) are common (Cal-IPC 2006). In recent history, urban development has driven most animals from the area, although mule deer, bobcat, and coyotes still occur in the surrounding hills.

#### PREHISTORIC SETTING

Approaches to prehistoric frameworks have changed over the past half century from being based on material attributes to radiocarbon chronologies to association with cultural traditions. Archaeologists defined a material complex consisting of an abundance of milling stones (for grinding food items) with few projectile points or vertebrate faunal remains dating from about 7 to 3 thousand years before the present as the "Millingstone Horizon" (Wallace 1955). Later, the "Millingstone Horizon" was redefined as a cultural tradition named the Encinitas Tradition (Warren 1968) with various regional expressions including Topanga and La Jolla. Use by archaeologists varied as some adopted a generalized Encinitas Tradition without regional variations, some continued to use "Millingstone Horizon" and some used Middle Holocene (the time period) to indicate this observed pattern (Sutton and Gardner 2010:1-2).

Recently, it was recognized that generalized terminology is suppressing the identification of cultural, spatial, and temporal variation and the movement of peoples throughout space and time. These factors are critical to understanding adaptation and change (Sutton and Gardner 2010:1-2). The Encinitas Tradition characteristics are abundant metates and manos, crudely made core and flake tools, bone tools, shell ornaments, very few projectile points with subsistence focusing on

<sup>&</sup>lt;sup>1</sup> ‡ - indicates that the species has been extirpated from Southern California.

collecting (plants, shellfish, etc.; Sutton and Gardner 2010:7). Faunal remains vary by location but include shellfish, land animals, marine mammals, and fish.

The Encinitas Tradition is currently redefined as comprising four geographical patterns (Sutton and Gardner 2010:8-25). These are (1) Topanga in coastal Los Angeles and Orange counties, (2) La Jolla in coastal San Diego County, (3) Greven Knoll in inland San Bernardino, Riverside, Orange, and Los Angeles counties, and (4) Pauma in inland San Diego County.

About 3,500 years before present the Encinitas Tradition was replaced in the greater Los Angeles Basin by the Del Rey Tradition (Sutton 2010). This tradition has been generally assigned to the Intermediate and Late Prehistoric periods. The changes that initiated the beginning of the Intermediate Period include new settlement patterns, economic foci, and artifact types that coincided with the arrival of a biologically distinctive population. The Intermediate and Late Prehistoric periods have not been well-defined. Many archaeologists have proposed, however, that the beginning of the Intermediate marked the arrival of Takic-speaking groups (from the Mojave Desert, southern Sierra Nevada, and San Joaquin Valley) and that the Late Prehistoric Period reflected Shoshonean groups (from the Great Basin). Related cultural and biological changes occurred on the southern Channel Islands about 300 years later.

As defined by Sutton (2010), the Del Rey Tradition replaces usage of the Intermediate and Late Prehistoric designations for both the southern California mainland and the southern Channel Islands. Within the Del Rey Tradition are two regional patterns named Angeles and Island. The Del Rey Tradition represents the arrival, divergence, and development of the Gabrielino in southern California.

#### PREHISTORIC CHRONOLOGY

The latest cultural revisions for the Project Area define traits for time phases of the Topanga pattern of the Encinitas Tradition applicable to coastal Los Angeles and Orange counties (Sutton and Gardner 2010; Table 3). This pattern is replaced in the Project Area by the Angeles pattern of the Del Rey Tradition later in time (Sutton 2010).

**Table 3. Cultural Patterns and Phases** 

Phase		Material Culture	Other Traits
Topongo	<b>BP</b> 8,500	Abundant manos and metates,	Shellfish and hunting important,
Topanga	· ·	many core tools and scrapers,	secondary burials under metate cairns
1	to	1 *	
	5,000	few but large points, charmstones, cogged stones, early discoidals, faunal remains	(some with long bones only), some extended inhumations, no cremations
		rare	

Phase	Dates BP	Material Culture	Other Traits
Topanga II	5,000 to 3,500	Abundant but decreasing manos and metates, adoption of mortars and pestles, smaller points, cogged stones, late discoidals, fewer scraper planes and core tools, some stone balls and charmstones	Shellfish important, addition of acorns, reburial of long bones only, addition of flexed inhumations (some beneath metate cairns), cremations rare
Topanga III	3,500 to 1,000	Abundant but decreasing manos and metates, increasing use of mortars and pestles, wider variety of small projectile points, stone- lined ovens	Hunting and gathering important, flexed inhumations (some under rock cairns), cremations rare, possible subsistence focus on yucca/agave
Angeles IV	1,000 to 800	Cottonwood arrow points for arrows appear, Olivella cupped beads and Mytilus shell disks appear, some imported pottery appears, possible appearance of ceramic pipes	Changes in settlement pattern to fewer but larger permanent villages, flexed primary inhumations, cremations uncommon
Angeles V	800 to 450	Artifact abundance and size increases, steatite trade from islands increases, larger and more elaborate effigies	Development of mainland dialect of Gabrielino, settlement in open grasslands, exploitation of marine resources declined and use of small seeds increased, flexed primary inhumations, cremations uncommon
Angeles VI	450 to 150	Addition of locally made pottery, metal needle-drilled Olivella beads, addition of Euro- American material culture (glass beads and metal tools)	Use of domesticated animals, flexed primary inhumations continue, some cremations

Topanga Pattern groups were relatively small and highly mobile. Sites known are temporary campsites, not villages and tend to be along the coast in wetlands, bays, coastal plains, near-coastal valleys, marine terraces, and mountains. The Topanga toolkit is dominated by manos and metates with projectile points scarce (Sutton and Gardner 2010:9).

In Topanga Phase I other typical characteristics were a few mortars and pestles, abundant core tools (scraper planes, choppers, and hammerstones), relatively few large, leaf-shaped projectile points, cogged stones, and early discoidals. Secondary inhumation under cairns was the common mortuary practice. In Orange County as many as 600 flexed burials were present at one site and dated 6,435 radiocarbon years before present (Sutton and Gardner 2010:9, 13).

In Topanga Phase II, flexed burials and secondary burial under cairns continued. Adoption of the mortar and pestle is a marker of this phase. Other typical artifacts include manos, metates, scrapers, core tools, discoidals, charmstones, cogged stones and an increase in the number of projectile points. In Orange County stabilization of sea level during this time period resulted in increased use of estuary, near shore, and local terrestrial food sources (Sutton and Gardner 2010:14-16).

In Topanga Phase III, there was continuing abundance of metates, manos, and core tools plus increasing amounts of mortars and pestles. More numerous and varied types of projectile points are observed along with the introduction of stone-line earthen ovens. Cooking features such as these were possibly used to bake yucca or agave. Both flexed and extended burials are known (Sutton and Gardner 2010:17).

The Angeles pattern generally is restricted to the mainland and appears to have been less technologically conservative and more ecologically diverse, with a largely terrestrial focus and greater emphases on hunting and nearshore fishing (Sutton 2010).

The Angeles IV phase is marked by new material items including Cottonwood points for arrows, Olivella cupped beads, Mytilus shell disks, birdstones (zoomorphic effigies with magicoreligious properties), and trade items from the Southwest including pottery. It appears that populations increased and that there was a change in the settlement pattern to fewer but larger, permanent villages. Presence and utility of steatite vessels may have impeded the diffusion of pottery into the Los Angeles Basin. The settlement pattern altered to one of fewer and larger permanent villages. Smaller special-purpose sites continued to be used (Sutton 2010).

Angeles V components contain more and larger steatite artifacts, including larger vessels, more elaborate effigies, and comals. Settlement locations shifted from woodland to open grasslands. The exploitation of marine resources seems to have declined and use of small seeds increased. Many Gabrielino inhumations contained grave goods while cremations did not (Sutton 2010).

The Angeles VI phase reflects the ethnographic mainland Gabrielino of the post-contact period (i.e., after A.D. 1542; Sutton 2010). One of the first changes in Gabrielino culture after contact was undoubtedly population loss due to disease, coupled with resulting social and political disruption. Angeles VI material culture is essentially Angeles V augmented by a number of Euro-American tools and materials, including glass beads and metal tools such as knives and needles (used in bead manufacture). The frequency of Euro-American material culture increased through time until it constituted the vast majority of materials used. Locally produced brownware pottery appears along with metal needle-drilled Olivella disk beads.

The ethnographic mainland Gabrielino subsistence system was based primarily on terrestrial hunting and gathering, although nearshore fish and shellfish played important roles. Sea

mammals, especially whales (likely from beached carcasses), were prized. In addition, a number of European plant and animal domesticates were obtained and exploited. Ethnographically, the mainland Gabrielino practiced interment and some cremation.

#### **ETHNOGRAPHY**

Early Native American peoples of the Project Area are poorly understood. They were replaced about 1,000 years ago by the Gabrielino (Tongva) who were semi-sedentary hunters and gatherers. The Gabrielino speak a language that is part of the Takic language family. Their territory encompassed a vast area stretching from Topanga Canyon in the northwest, to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast and the Southern Channel Islands, in all an area of more than 2,500 square miles (Bean and Smith 1978; McCawley 1996; Figure 8). At European contact, the tribe consisted of more than 5,000 people living in various settlements throughout the area. Some of the villages could be quite large, housing up to 150 people.

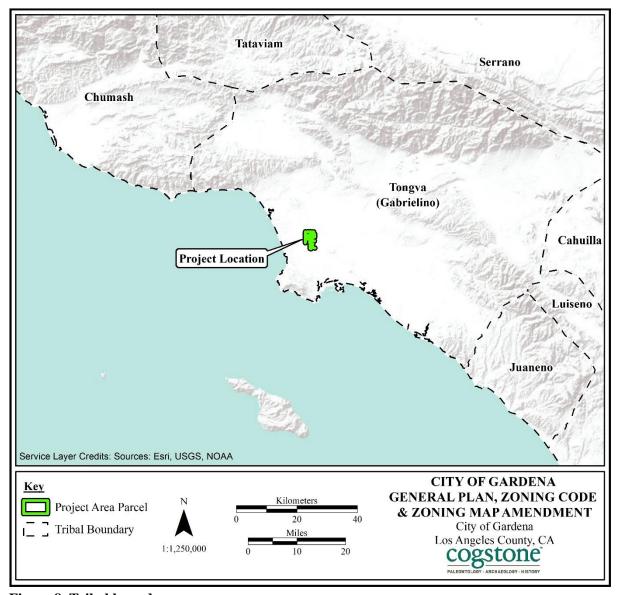


Figure 8. Tribal boundary map

The Gabrielino are considered to have been one of the wealthiest tribes and to have greatly influenced tribes they traded with (Kroeber 1976:621). Houses were domed, circular structures thatched with tule or similar materials (Bean and Smith 1978:542). The best known artifacts were made of steatite and were highly prized. Many common everyday items were decorated with inlaid shell or carvings reflecting an elaborately developed artisanship (Bean and Smith 1978:542).

The main food zones utilized were marine, woodland and grassland (Bean and Smith 1978). Plant foods were, by far, the greatest part of the traditional diet at contact. Acorns were the most important single food source. Villages were located near water sources necessary for the leaching of acorns, which was a daily occurrence. Grass seeds were the next most abundant

plant food used along with chia. Seeds were parched, ground, and cooked as mush in various combinations according to taste and availability. Greens and fruits were eaten raw or cooked or sometimes dried for storage. Bulbs, roots, and tubers were dug in the spring and summer and usually eaten fresh. Mushrooms and tree fungus were prized as delicacies. Various teas were made from flowers, fruits, stems, and roots for medicinal cures as well as beverages (Bean and Smith 1978:538-540).

The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Most predators were avoided as food, as were tree squirrels and most reptiles. Trout and other fish were caught in the streams, while salmon were available when they ran in the larger creeks. Marine foods were extensively utilized. Sea mammals, fish, and crustaceans were hunted and gathered from both the shoreline and the open ocean, using reed and dugout canoes. Shellfish were the most common resource, including abalone, turbans, mussels, clams, scallops, bubble shells, and others (Bean and Smith 1978:538-540).

The Project Area was not home to any known major villages. The closest known named villages are Tevaaxa'anga 5.9 miles east-southeast of and 6.65, and Saa'anga miles northwest of the Project Area. However, smaller villages and seasonal camps may have been present closer to the Project Area.

#### HISTORIC SETTING

#### **EARLY CALIFORNIA HISTORY**

Juan Cabrillo was the first European to sail along the coast of California in 1542 and was followed in 1602 by Sebastian Vizcaino. Between 1769 and 1822 the Spanish had colonized California and established missions, presidios and pueblos (Bean and Rawls 1993).

In 1821 Mexico won its independence from Spain and worked to lessen the wealth and power held by the missions. The Secularization Act was passed in 1833, giving the vast mission lands to the Mexican governor and downgrading the missions' status to that of parish churches. The governor then redistributed the former mission lands in the form of grants, to private owners. Ranchos in California numbered over 500 by 1846, all but approximately 30 of which resulted from land grants (Bean and Rawls 1993). A portion of the southern part of the the Project Area overlaps with the San Pedro (Dominguez) land grant (Figure 9).

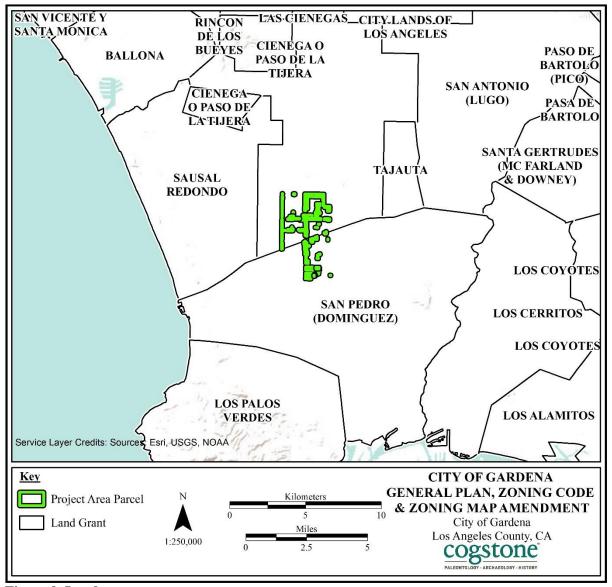


Figure 9. Land grant map

Following the signing of the Treaty of Guadalupe Hidalgo on February 2, 1848, which ceased American/Mexican hostilities, the region transitioned to the American Period of California. In 1850, California was granted statehood and although the United States promised to honor the land grants, the process of defining rancho boundaries and proving legal ownership became time consuming and expensive. Legal debts led to bankruptcies followed by the rise in prices of beef, hide, and tallow. This combined with flooding and drought was detrimental to the cattle industry. Ranchos were divided up and sold inexpensively (Robinson 1948).

#### CITY OF GARDENA HISTORY

In 1784, in recognition of his years of military service, Spanish soldier Juan Jose Dominquez received thousands of acres of land upon which he established Rancho San Pedro. Part of this

land grant became Gardena Valley (see Figure 9). In 1869, General William Starke Rosecrans purchased 16,000 acres in the Gardena Valley, which he promptly subdivided and sold off. Spencer Roane Thorpe was among the first to purchase property from Rosecrans near 161<sup>st</sup> and Figueroa streets in the Gardena Valley. Various ranchers and farmers also purchased land in the valley and by 1887 the settlement of Gardena was born (Gardena Heritage Committee 2006). It is speculated the name "Gardena" is credited to Thorpe or his daughter after the land's reputation as a "garden spot." The valley remained one of the few areas between Los Angeles and the west coast with a reliable source of water (fed by the Dominquez Slough) during the dry seasons.

From 1886 to 1887, Gardena underwent a significant population and real-estate boom as a result of the construction of the first railroad in the Gardena Valley, which ran from Agricultural Park in Los Angeles to the town site of Rosecrans. Known as the Rosecrans Rapid Transit Railway, the railway was purchased in 1889 by the Redondo Railway Company. The Redondo Railway Company constructed approximately 20 miles of rail between Los Angeles and Redondo, which resulted in Gardena's downtown area moving from Figueroa Street to Vermont Avenue (Gardena Heritage Committee 2006).

Key to the settlement's early farming economy, many Japanese immigrants moved to Gardena to work as farmers, nurserymen, and gardeners; prominent crops included strawberries, blackberries, raspberries, tomatoes, alfalfa, and barley. Gardena's vast berry fields earned the area the title of "Berryland" and the reputation as South California's berry capital (Gardena Heritage Committee 2006).

In the early 1900s, Gardena was known as a rural "Japantown" with a large Japanese community second only to Los Angeles' Little Tokyo. First-generation Japanese (*Issei*) responsible for the development and growth of berry agriculture in the region arrived between 1902 and 1906 and referred to their settlement within Gardena as "Moneta." With the growing Issei population came the formation of the Japanese Association of Moneta (Sato 2009).

Following the onset of World War I, Gardena's berry industry fell into decline as they were replaced with the cultivation of what was considered more vital crops for the war effort. After the war, residential development gradually replaced Gardena's farmland. Despite the decline of local agriculture, Gardena's wholesale flower industry was on the rise with 22 nurseries within its city limits by 1940. In September 1930, Gardena incorporated with the neighboring settlements of Strawberry Park and Moneta to become the City of Gardena (Sato 2009).

From 1936 to 1980, Gardena operated as the only legalized gambling city in the county. Gardena's gambling monopoly was so successful it was said there were more poker tables in the city than in the entirety of the United States (Gardena Heritage Committee 2006).

#### **RECORD SEARCHES**

#### PALEONTOLOGICAL RECORD SEARCH

A paleontological record search of the Project was obtained from the Natural History Museum of Los Angeles County (Bell 2022; Appendix B). Additional records from the University of California Museum of Paleontology database (UCMP 2022), the PaleoBiology Database (PBDB 2022), and print sources were searched for fossil records.

No recorded paleontological localities producing vertebrate fossils were found within one mile of the Project Area. A total of 13 localities are known from Pleistocene deposits between one and seven miles from the Project. Extinct megafauna from these sites include mammoth (†*Mammuthus* sp.), horse (†*Equus* sp.), pronghorn (†*Breameryx* sp.), camel (†Camelidae), and bison (†*Bison* sp.; Table 4). All of the fossils were a minimum of 5 feet deep in deposits mapped as late Pleistocene at the surface, while sediments mapped as Holocene at the surface yielded fossils starting at 24 feet deep.

Table 4. Fossil localities from near to the Project Area

Common Name	Taxon	Depth below original surface	Formation mapped at surface	Age/ dates	Locality	Location	Reference
mammoth	†Mammuthus sp.	15 to 20 feet	older alluvium (Qoa)	late Pleistocene	LACM 1344, 3266, 3365	South Los Angeles: near I-110 and Athens on the Hill	Bell 2022
mammoth	†Mammuthus sp.	5 feet	older alluvium (Qoa)	Pleistocene	LACM 3382	Compton: west of the I-710, east of Wilmington Ave., north of Artesia Blvd.	Jefferson 1991, Bell 2022
elephant relative	†Proboscidea	30 feet	(()oa)	late Pleistocene	LACM 3319	Long Beach: east of Wilmington Ave. north of Artesia Blvd.	Jefferson 1991, Bell 2022
bison	†Bison sp.	unknown					
rodent mammoth speckled	Rodentia † Mammuthus sp. Citharichthys	14 feet	older alluvium (Qoa)	Pleistocene	LACM 3789	Westchester: 8734 Bellanca Ave. south of Manchester Ave.	McLeod 2015, Jefferson 1991
mammoth, juvenile	stigmaeus † Mammuthus sp.	40 feet	older alluvium (Qoa)	Pleistocene	LACM 7332	Los Angeles: west 98th St. west of Bellanca Ave.	McLeod 2015
elephant	† Proboscidea	25 feet	Qoe	Pleistocene	LACM 3264	Los Angeles International Airport, Tom Bradley International Terminal	McLeod 2015

Common Name	Taxon	Depth below original surface	Formation mapped at surface	Age/ dates	Locality	Location	Reference
mammoth	† <i>Mammuthus</i> sp.	unknown	Quaternary deposits	Pleistocene	LACM 2035	El Segundo: near the intersection of Prairie Ave. and 139th St.	Miller 1971, Jefferson 1991, McLeod 2018
bison	†Bison sp.	unknown	younger alluvial fan (Qyf)	Pleistocene- Holocene	LACM 1165	Carson: Alameda St. or Sepulveda Blvd.	McLeod 2019
camel	†Camelidae	24 feet	younger alluvial fan (Qya)	Pleistocene- Holocene	LACM 4129	Carson: Alameda or 223rd Sts.	McLeod 2017
mammoth	†Mammuthus sp.	10 feet	older alluvium (Qoa)	Pleistocene	LACM 1919	Dominguez Hills: west of Wilmington Ave., south of 223rd St.	McLeod 2017
mammoth	†Mammuthus sp.	8-10 feet	older alluvium (Qoa)	Pleistocene	LACM 1643	Dominguez Hills: near 190th or Annalee Ave.	Jefferson 1991, McLeod 2017a

#### CALIFORNIA HISTORIC RESOURCES INFORMATION SYSTEM

Cogstone requested a search of the California Historical Resources Information System (CHRIS) from the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton on February 10, 2022, which included the entire proposed Project Area and the entire City of Gardena (City). Results of the record search indicate that 15 previous studies have been completed within the Project Area parcels and an additional 31 previous studies have been completed within the City (Appendix C).

Eight cultural resources have been recorded within the City, P-19-000101, P-19-177369, P-19-177464, P-19-188449, P-19-190051, P-19-190623, P-19-190646 and P-19-192741. One resource, P-19-190051, is located within the potential housing sites that constitute the Project Area (Table 5).

Table 5. Previously Recorded Cultural Resources within the City of Gardena

Primary	Trinomi	Resource Type	Resource Description	Year	Project Area	NRHP/
No. (P-	al No.			Recorded	or City Limits	CRHR
<b>19-</b> )	(CA-					Status
	LAN-)					
000101	000101	Prehistoric Archaeological Site	Artifact deposit and human burials	1939	Within City Limits	Unevaluated
177369		Historic Archaeological Site	South Gardena Parksite/Dominguez Slough. Around 60 acres of ponds and marshland.	1981	Within City Limits	Unevaluated
177464		Historic Built Environment	Commercial building. Gardena Department Store, 1106 Gardena Boulevard. Flat stepped roof, concrete masonry, 1938.	2007	Within City Limits	NR – Not Eligible
188449		Historic Built Environment	Commercial building. Gardena Community Outpatient Clinic, 1251 W. Redondo Beach Boulevard. 3- story rectangular shaped Modern style, 1963.	2008	Within City Limits	NR – Not Eligible CR – Not Evaluated
190051		Historic Built Environment	Church building. Calvary Baptist Church, 15916 Crenshaw Boulevard. 2-story, irregular shaped Modern style, 1956.	2010	Within Project Area	NR – Not Eligible CR – Not Evaluated
190623		Historic Built Environment	Commercial building. Gardena Western Business Park, 13200 South Western Avenue. Modern/Contemporary, 1961.	2012	Within City Limits	NR – Not Eligible
190646		Historic Built Environment	Tower structure. Steel-lattice transmission tower with concrete foundation. 17795 Normandie Avenue. Modern style, 1929.	2012	Within City Limits	NR – Not Eligible CR – Not Evaluated

Primary	Trinomi	Resource Type	Resource Description	Year	Project Area	NRHP/
No. (P-	al No.			Recorded	or City Limits	CRHR
19-)	(CA-					Status
	LAN-)					
192741		Historic Built Environment	Single family residence. 1348 West 168 <sup>th</sup> Street. 1-story, Craftsman style rectangular plan with gabled wood roof, 1922. Resource was demolished in 2019.	2013	Within City Limits	NR/CR – Not Eligible

# RESOURCES WITHIN PROJECT AREA P-19-190051

Site P-19-190051 was originally recorded by K.A. Crawford in 2010 as the Calvary Baptist Church constructed in 1956. Located at 15916 Crenshaw Boulevard, the property is described as a two-story, irregular shaped, asymmetrical building in the Modern style. The building was originally built and used as a men's clothing store from 1956 to 1979 when it was sold and converted to a church. In 1991, the second story was added and the building was significantly altered. The property was evaluated for listing in the NRHP but was recommended as not eligible for listing (Crawford 2011).

#### **RESOURCES WITHIN CITY LIMITS**

#### P-19-000101 (CA-LAN-101)

Site P-19-000101 was originally recorded by F.H. Racer in 1939 as a small prehistoric site located on the south side of Gardena at the western end of a blind street from Vermont Avenue and east of Normandie Avenue. "A number of skeletons was uncovered" and "a number of artifacts was uncovered" (Racer 1939b).

#### P-19-177369

Site P-19-177369 was originally recorded as the South Gardena Parksite, also known as the Dominguez Slough, located near the corner of Vermont Avenue and Artesia Boulevard. The slough is described as being shallow ponds and low shrubbery with various associated wildlife. The site was acquired by the State of California in the 1970s with the intent to become recreational land use. However, controversy over the development has kept the site from being transformed. (Unknown 1981). The site is now within the Gardena Willows Wetland Preserve.

#### P-19-177464

Site P-19-177464 was originally recorded by Dana E. Supernowicz in 2007 as a one-story, flat stepped roof design, concrete masonry commercial building constructed in 1938. The Gardena Department Store building is located in the central business district of Gardena at 1106 Gardena Boulevard. While the subject property reflects commerce and trade in the central business district of Gardena from the late 1930s through the 1950s, the building's key architectural design characteristics appear to have been severely damaged by extensive renovation and remodeling in the past three decades. Because of these extensive changes the property has lost integrity of design, materials, workmanship, and feeling. Therefore, the property was recommended not individually eligible for the National Register of Historic Places (NRHP) under Criterion A, B, or C (Supernowicz 2007).

#### P-19-188449

Site P-19-188449 was originally recorded by K.A. Crawford in 2008 as a three-story, rectangular shaped, asymmetrical, commercial building of Modern design, constructed in 1963. The

Gardena Community Outpatient Clinic building is located at 1251 West Redondo Beach Boulevard. The building was originally built and used as medical office space and retains its overall integrity with little to no alterations, while still maintaining the original workmanship and design. The property was evaluated for listing in the NRHP but was recommended 6Y: "Determined ineligible for NR by consensus through Section 106 process-Not evaluated for CR or Local Listing" (Crawford 2008).

#### P-19-190623

Site P-19-190623 was originally recorded by Brent D. Johnson in 2012 as the Gardena Western Business Park constructed in 1961. Located at 13200 South Western Avenue, the property is described as a one-story manufacturing building surrounded by Modern style industrial buildings. The building was originally built for light industrial/manufacturing and has retained that association since it was constructed. The original workmanship and materials used have remained intact. The property was evaluated for listing in the NRHP but was recommended not eligible (Johnson 2012).

#### P-19-190646

Site P-19-190646 was originally recorded by K.A. Crawford in 2013 as Southern California Edison M7-T4 Mesa-Redondo electrical transmission tower constructed in 1929. Located at 17795 Normandie Avenue, the structure is described as a steel lattice type transmission tower with rectangular shaped concrete footings. An equipment storage area is located at the base of the tower. The structure is in good condition and has retained its original workmanship and design with little to no alterations. The property was evaluated for listing in the NRHP but was recommended not eligible. The property was not evaluated for eligibility for the CRHP (Crawford 2013).

#### P-19-192741

Site P-19-192741 was originally recorded by Kara Brunzell in 2018 as a Craftsman style single-family residence constructed in 1922. Located at 1348 West 168<sup>th</sup> Street, the structure was described as a one-story rectangular plan with a gabled wood shingle roof and a secondary living quarters building located directly adjacent. The secondary building was described as a Ranch style house with L-shaped plan with cross-gabled roof. The property was evaluated for listing in the NRHP and CRHP but was recommended not eligible (Brunzell 2018). This resource was demolished in 2019.

#### **OTHER SOURCES**

In addition to the SCCIC records search, a variety of sources were consulted in May 2022 to obtain information regarding the cultural context of the Project Area (Table 6). Sources included the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), California Built Environment Resource Directory BERD), California Historical

Landmarks (CHL), California Points of Historical Interest (CPHI), and a 1981 Gardena Historical Resources Survey. Specific information about the Project Area, obtained from historic-era maps and aerial photographs, is presented in the Project Area History section.

**Table 6. Additional Sources Consulted** 

Source	Results
National Register of Historic Places (NRHP;	Negative
1979-2002 & supplements)	
California Register of Historical Resources	Negative
(CRHR)	
California Built Environment Resource	Negative for historical resources within
Directory (BERD)	target parcels; Complete list for City of
	Gardena is in Appendix D.
California Historical Landmarks (CHL)	Negative
California Points of Historical Interest (CPHI)	Negative
Caltrans Historic Bridge Inventory (2016)	Negative
Historic USGS Topographic Maps	The earliest historical topographic map for
	the Project Area is the 1896 Redondo
	(1:62,500) USGS historical topographic
	map which shows city developments, such
	as streets and residential homes, and shows
	the Southern Pacific Railroad within the
	PA. The 1924 Torrance (1:24,000) USGS
	historical topographic map shows more
	development within the project. The 1934
	Torrance (1:24000) USGS historical
	topographic map which shows the Pacific
	Electric railway within the PA. The 1950
	Inglewood (1:24,000) USGS historical
	topographic map shows most of The
	Electric railway no longer present and the
	west part of the Southern Pacific Railroad
	also no longer present. The map also shows
	the Dominguez channel in current
	orientation.

Source	Results
Historic US Department of Agriculture Aerial	The earliest USDA historic aerial
Photographs	photograph for the Project Area dates to
	1952 and shows residential development
	within the PA. The 1963 shows further
	residential and commercial development
	with the PA. The 1980 USDA historic aerial
	photograph shows additional development
	at northern end of PA. No visible changes
	between the 1985 and the 2018 historic
	aerial photograph for the Project Area.
Bureau of Land Management (BLM) General	Positive: See Table 7
Land Office Records	
1981 Gardena Historical Resources Survey	Positive; see Table 8

**Table 7. Land Patents** 

Name(s)	Year	Accession Number	Type	T; R; Section
John J Tomlinson	1874	CA0500058	State Volume	T: 3S; R: 14W,
			Patent	Section 13: SE
				1/4
State of California	1870	CACAAA 000105	Serial Patent	T: 3S; R: 14W,
		CACAAA 073075		Section 13, 14,
		CACAAA 017739		23, 24, 26, 36
		CACAAA 006218 01		
Jose Aquino,	1858	CACAAA 084909	Serial Patent	T: 3S; R: 14W,
Andres Dominguez,				Section 23, 24,
Esteban Dominguez,				25, 26, 36
Feliciana Dominguez,				
Jose Dominguez,				
Madalina Dominguez,				
Manuel Dominguez,				
Maria Dominguez,				
Maria Jesus Dominguez,				
Pedro Dominguez				
United States of America	1869	CACAAA 011840	Serial Patent	T: 3S; R: 14W,
		CACAAA 019166 01		Section 36

#### **Dominguez Family and Rancho San Pedro**

In 1784, then Spanish King Carlos III issued the Rancho San Pedro to Juan Jose Dominquez. As the first Spanish land grant in California, the rancho consisted of 75,000 acres as well as the entirety of Los Angeles harbor. A retired Spanish soldier, Juan Jose Dominguez owned the Rancho until his death in 1809. The Rancho passed to Cristobal Dominguez, Juan Jose's

nephew and fellow soldier within the Spanish army. In 1817, Cristobal requested the Rancho be re-granted to his name resulting in the first official survey of the land. In 1825, Cristobal Dominguez died, leaving the Rancho to the eldest son of his eight children, 22 year old Manuel Dominguez. After Cristobal's death, Manuel, his siblings, and their mother moved to Los Angeles and built homes on the Rancho. In 1927, Manuel married Maria Engracia de Cota, the daughter of a Los Angeles Commissioner for the Mexican government (Friends of Rancho San Pedro 2020).

After the war of Mexican Independence from Spain, the Rancho was recognized by the Mexican government as the property of the Dominguez family. In 1828, Manuel Dominguez was elected as a member of the Los Angeles City Council and then Mayor of Los Angeles in 1832. Following the signing of the treaty of Guadalupe-Hidalgo in 1848 and subsequent annexation of California to the United States, Manuel sought a United States land patent for his Rancho. On December 18, 1858, President James Buchanan signed the patent which by that time included 25,000 acres. In 1882, Manuel died, and the land passed to his daughters Anita Dominguez de Cuyer, Guadalupe Dominguez, Dolores Dominguez de Watson, Victoria Dominguez de Carson, Susana Dominguez de Del Amo, and Maria de los Reyes Dominguez de Francis (Friends of Rancho San Pedro 2020).

**Table 8. 1981 Gardena Historical Resources Survey** 

Address	Year	Architectural style	Condition	NRHP/CRHR
				Status
2007 W Compton Blvd	1936	Spanish Colonial	Extant	Not known
(Marine Ave)		Revival		
17826 S Hobart Ave		Colonial Revival	Extant	Not known
17904 S Hobart Ave	1900	Colonial Revival/	Extant	Not known
		Queen Anne		
14512 S Western Ave	1910	Commercial/	No Longer	Not known
		Utilitarian	Extant	
15032 S Western Ave	1950	Pop Fantasy	Extant	Not known
16411 S Western Ave	1918	Commercial/	No Longer	Not known
		Utilitarian	Extant	
16417 S Western Ave	1920	Commercial/	No Longer	Not known
		Utilitarian	Extant	
16501 Western Ave	1915	Commercial/	Extant	Not known
		Utilitarian		
16522 S Western Ave	1918	Commercial/	Extant	Not known
		Utilitarian		
16535 S Western Ave	1931	Commercial/	Extant	Not known
(16531 S Western Ave)		Utilitarian		

Address	Year	Architectural style	Condition	NRHP/CRHR
				Status
1727 W 130th St	1926	Craftsman	No Longer	Not known
			Extant	
1433 W 139th St	1928	Vernacular/	Extant	Not known
		Spanish Colonial		
1820 W 162nd St	1935	Spanish Colonial	Extant	Not known
1745 W 165th Pl	1929	Mediterranean	Extant	Not known

The 1981 Gardena Historical Resource Survey has since been adopted by the City of Gardena by resolution and set forth procedures to preserve the identified structures.

#### NATIVE AMERICAN CONSULTATION

A Sacred Lands File search was requested from the Native American Heritage Commission (NAHC) on February 10, 2022. The NAHC responded on March 31, 2022, with a negative search result indicating that there are no known sacred lands or resources within the Project Area or immediate vicinity (Appendix E). The City of Gardena conducted Native American consultations in compliance with Assembly Bill 52 (AB 52) and Senate Bill 18 (SB 18).

#### CRHR EVALUATION

The religious building at 15916 Crenshaw Boulevard (Figure 10) in the City of Gardena (Calvary Baptist Church; P-19-190051) was documented and evaluated for historic significance by K. A. Crawford on May 28, 2010. The building was described as constructed in the Modern style, two-story, asymmetrical, irregular shaped, and multi-level. The first floor was constructed in 1956 and the second story was added in 1991. The building was noted to be in good condition.



Figure 10. July 2022 photograph of the West façade of 15916 Crenshaw Boulevard (Calvary Baptist Church; P-19-190051). Courtesy of Google Maps 2022.

The building was evaluated for historical significance and recommended as not eligible for listing in the NRHP under any criteria. The status code 6Z (Found ineligible for National Register, California Register, or Local designation through survey evaluation) (Crawford 2010) was applied in error as the resource had not been evaluated for listing in the CRHR or local registers.

In November 2012, the building was revisited by Dana E. Supernowicz of Historic Resource Associates. Ms. Supernowicz reevaluated the building for historic significance and recommended not eligible for listing in the NRHP under status code 6Y (Determined ineligible for NR by consensus through Section 106 process-Not evaluated for CR or Local Listing) (Supernowicz 2012).

On May 31, 2023, architectural historian, Shannon Lopez of Cogstone Resource Management reviewed the 2008 and 2012 site record as well as recent photographs of the building's exterior. There appears to be no notable alterations to the exterior of the building since it was first recorded. Ms. Lopez reevaluated this building for historical significance and potential listing in the CRHR.

# EVALUATION FOR SIGNIFICANCE IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES

CRITERION 1: ASSOCIATED WITH EVENTS THAT HAVE MADE A SIGNIFICANT CONTRIBUTION TO THE BROAD PATTERNS OF LOCAL OR REGIONAL HISTORY OR THE CULTURAL HERITAGE OF CALIFORNIA OR THE UNITED STATES.

After a review of historic newspapers, this building is not associated with events that have made a significant contribution to the broad patterns of local or regional history. Therefore, this building is recommended not eligible for listing in the California Register of Historical Resources (CRHR) under Criterion 1.

# CRITERION 2: ASSOCIATED WITH THE LIVES OF PERSONS IMPORTANT TO LOCAL, CALIFORNIA OR NATIONAL HISTORY.

After a review of historic newspapers, this building is not associated with the lives of persons important to local, California, or national history. Therefore, this building is recommended not eligible for listing in the CRHR under Criterion 2.

# CRITERION 3: EMBODIES THE DISTINCTIVE CHARACTERISTICS OF A TYPE, PERIOD, REGION OR METHOD OF CONSTRUCTION OR REPRESENTS THE WORK OF A MASTER OR POSSESSES HIGH ARTISTIC VALUES.

This building is an unremarkable representation of the Modern architectural style. The 1991 addition of the second story substantially impacts the building's overall integrity of design, materials, workmanship, and feeling. Due to the building's lack of exceptional architecture and loss of integrity, this building is recommended not eligible for listing in the CRHR under Criterion 3.

# CRITERION 4: IT HAS YIELDED, OR HAS THE POTENTIAL TO YIELD, INFORMATION IMPORTANT TO THE PREHISTORY OR HISTORY OF THE LOCAL AREA, CALIFORNIA, OR THE NATION. Criterion 4 is most often applied to archaeological sites and districts but can also apply to buildings, structures, and/or objects. This building does not exhibit a local variation of a standard design or construction technique that can yield important information (such as construction expertise or availability of local materials). Recording of this building has collected all pertinent data but has not provided information important to history at any level. Due to a lack of significance, this resource is recommended not eligible for listing in the CRHR under Criterion 4.

As P-19-190051 (Calvary Baptist Church) lacks significance under all criteria, issue of integrity are moot. The resource is recommended as not eligible for listing in the CRHR or at the local level.

#### STUDY FINDINGS AND CONCLUSIONS

#### PALEONTOLOGICAL SENSITIVITY

A multilevel ranking system was developed by professional resource managers within the Bureau of Land Management (BLM) as a practical tool to assess the sensitivity of sediments for fossils. The Potential Fossil Yield Classification (PFYC) system (BLM 2016; Appendix F) has a multi-level scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings.

Fossil resources occur in geologic units (e.g., formations or members). The probability for finding significant fossils in a Project Area can be broadly predicted from previous records of fossils recovered from the geologic units present in and/or adjacent to the study area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria

All alluvial deposits may increase or decrease in fossiliferous potential depending on how coarse the sediments are. Sediments that are close to their basement rock source are typically coarse; those farther from the basement rock source are finer. The chance of fossils being preserved greatly increases once the average size of the sediment particles is reduced to 5 mm or less in diameter. Moreover, fossil preservation also greatly increases with rapid burial in flood-plains, rivers, lakes, oceans, etc. Remains left on the ground surface become weathered by the sun or consumed by scavengers and bacterial activity, usually within 20 years or less. So the sands, silts, and clays of flood-plains, rivers, lakes, and oceans are the most likely sediments to contain fossils.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment.

The Project is mapped primarily as middle to late Pleistocene old alluvium, with late Pleistocene to Holocene young alluvial fan deposits and young alluvium mapped at the surface in some areas. A records search revealed that all of the fossils previously recovered within a seven-mile radius were a minimum of five feet deep in deposits mapped as Pleistocene at the surface; areas mapped as Holocene at the surface produced fossils starting at 24 feet deep. Given this, old alluvium less than five feet below the modern surface is assigned a low potential for fossils (PFYC 2, Table 9), and old alluvium more than five feet below the surface are assigned a moderate potential for fossils. The young alluvial fan deposits and young alluvium are assigned a low potential for fossils above 20 feet below the modern surface (PFYC 2) due to the lack of fossils in these deposits; more than 20 feet below the modern surface, sediments are interpreted to have moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area.

**Table 9. Paleontological Sensitivity Rankings** 

		PFYC rankings				
Rock Unit	5 very high	4 high	3 moderate	2 low	1 very low	
older alluvium, middle to late Pleistocene			more than 5 feet	less than 5 feet		

	deep	deep	
young alluvial fan,	more than	less than	
undivided; late	20 feet	20 feet	
Pleistocene to Holocene	deep	deep	
young alluvium,	more than	less than	
undivided; late	20 feet	20 feet	
Pleistocene to Holocene	deep	deep	

#### **CULTURAL RESOURCES SENSITIVITY**

Cogstone reviewed the SCCIC records search, SLF search results, and the geological maps of the area. According to the SCCIC records search results, both of the previously recorded archaeological (one prehistoric-aged, one historic-aged) sites within the City are located in the southeast corner of the City. This small number of previously identified resources is likely due as much to limited attempts at identification as it is absence of resources, as only a small portion of the City (less than 5 percent)<sup>2</sup> has been systematically surveyed for cultural resources. Almost all land within the City is built out, but it is built upon alluvium with variable potential to preserve subsurface cultural resources.

All these data sources considered, due to previous disturbance by grading activities the sensitivity for historic-aged cultural deposits is assessed to be low. Cultural sensitivity for deeply buried prehistoric cultural resources is assessed to be low to moderate. The sensitivities are the same for project parcels and the City as a whole.

The other six resources that have been identified by the SCCIC within the City are (or were) all historic built environment resources. Of these, three are also located within the southeast corner of the City. The three remaining resources are or were located along or north of West Redondo Beach Boulevard and include the Calvary Baptist Church (P-19-190051), the only resource recorded within the parcels that have been identified by the City as places for potential housing growth. the Calvary Baptist Church (P-19-190051) was reevaluated using Department of Parks and Recreation (DPR) 523 series forms as part of this current and is recommended as not eligible for inclusion in the CRHR (Appendix G). A 1981 historical (built environment) resources survey identified six resources to be nominated for listing in the NRHP. The survey report was never adopted and by 2005 three of the six resources had been demolished (GRC Associates 2005:13). Further, resources created only three years before the 1981 study (now 45 years old) would be recorded and evaluated for NRHP/CRHR listing eligibility if encountered today, and resources created only eight years before the 1981 study (now 50 years old) could be nominated for listing in the NRHP/CRHR under the standard criteria.

Cogstone 41

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<sup>&</sup>lt;sup>2</sup> SCCIC provides some study areas from earlier reports as point and line data (without area) making precise calculations of areas previously surveyed impossible.

#### RECOMMENDATIONS

#### **PALEONTOLOGY**

The Project is mapped primarily as middle to late Pleistocene old alluvium; latest Pleistocene and Holocene young alluvial fan deposits and young alluvium are also mapped at the surface in some areas. The record search revealed no fossil localities from within the Project or the immediate vicinity; however, localities are known from near to the Project from sediments similar to those found within the Project boundaries.

Old alluvium is assigned a moderate potential for fossils (PFYC 3). Sediments mapped as Holocene at the surface produced fossils starting at 24 feet deep near to the Project Area. The young alluvial fan deposits and young alluvium are assigned a low potential for fossils above 20 feet below the modern surface (PFYC 2) due to the lack of fossils in these deposits. Sediments deeper than 20 feet below the modern surface the young alluvial fan deposits and young alluvium are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area.

Based upon fossils found in similar sediments nearby, full-time paleontological monitoring is currently recommended for the mass excavations in areas mapped as old alluvium, and for excavations greater than 20 feet deep in areas mapped as young alluvial fan deposits and young alluvium. Drilling or pile driving activities regardless of depth, have a low potential to produce fossils meeting significance criteria because any fossils brought up by the auger during drilling will not have information about formation, depth or context.

#### **CULTURAL RESOURCES**

Only a small portion of the City has undergone systematic pedestrian survey for archaeological resources, and the systematic study for built environment resources is over 40 years old. Cogstone recommends the City require a cultural resources assessment in areas of planned development or redevelopment in which past documented ground disturbance of some or all of the Project Area is less than five feet, such as old parking lots.

Cogstone recommends that all structures that are 45 years old or older be evaluated prior to their destruction or significant alteration. We also recommend that the City select a number of Project Area parcels for a City-sponsored study of the historical significance of buildings within the City of Gardena.

We also recommend that the City consider adopting a historic preservation ordinance (LA Conservancy 2020) to guide the City's implementation of the General Plan policy of protecting Gardena's cultural resources.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during project development, all work must cease near the find immediately.

In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met.

#### SUGGESTED MITIGATION MEASURES

#### MM PAL-1.

City staff shall require applicants for future proposed projects with planned impacts in undisturbed sediments ranked moderate or above to either (1) provide a technical paleontological assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified professional paleontologist who meets the standards set forth by the Society of Vertebrate Paleontology or (2) agree to monitoring all excavations below five feet. If resources are known or reasonably anticipated the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provides a fossil recovery protocol that includes data to be collected, requires professional identification, radiocarbon dates and other special studies as appropriate, requires curation at local curation facility such as the John D. Cooper Center operated by the County of Orange for fossils meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of fossil specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the fossils.

#### MM CUL-1.

City staff shall require applicants for future proposed projects with intact extant building(s) more than 45 years old to provide a historic resource technical study evaluating the significance and

data potential of the resource under CEQA. If significance criteria are met, detailed mitigation recommendations are required as part of the technical study. All work shall be performed by a qualified architectural historian meeting Secretary of the Interior Standards.

#### MM CUL-2.

City staff shall require applicants for future proposed ground disturbing projects to choose to either (1) provide a technical cultural resources assessment consisting of a record search, survey, background context and project specific recommendations performed by a qualified archaeologist meeting Secretary of the Interior Standards or (2) agree to full-time monitoring by an archaeologist and a Native American. If resources are known or reasonably anticipated the recommendations shall provide a detailed mitigation plan which shall require monitoring during grading and other earthmoving activities in undisturbed sediments, provide a treatment plan for potential resources that includes data to be collected, requires professional identification, other special studies as appropriate, requires curation at a repository for artifacts meeting significance criteria, requires a comprehensive final mitigation compliance report including a catalog of specimens with museum numbers and an appendix containing a letter from the museum stating that they are in possession of the materials.

#### MM CUL-3.

Unanticipated discoveries of human remains shall require immediate cessation of ground disturbance within 50 feet and notification to City staff and the County Coroner and shall follow state law as stated in Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.9

#### REFERENCES CITED

#### Axelrod, D. I., and F. Govean

1996 An Early Pleistocene Closed-Cone Pine Forest at Costa Mesa, Southern California. *International Journal of Plant Science* 157(3):323–329.

#### Bean, W., and J. J. Rawls

1993 California: An Interpretive History. 4th Edition. McGraw Hill, New York.

#### Bean, L. J., and C. R. Smith

1978 Gabrielino. In *California*, edited by Robert F. Heizer, pp. 538-549. Handbook of North American Indians, William C. Sturtevant, general editor, Volume 8. Smithsonian Institution, Washington, D.C.

#### Bell, Alyssa (Natural History Museum of Los Angeles County)

Vertebrate Paleontological resources for the proposed Gardena Housing Element Update, City of Gardena, Los Angeles County, project area. Appendix B.

#### BLM (Bureau of Land Management)

2016 *Potential Fossil Yield Classification (PFYC)* System. <a href="https://www.blm.gov/policy/im-2016-124">https://www.blm.gov/policy/im-2016-124</a>.

#### Brunzell, Kara

2018 "1348 W. 168<sup>th</sup> Street." *P-19-192741*. Department of Parks and Recreation. Recorded by Kara Brunzell, October 1, 2018. Copy on file at the South Central Coastal Information Center.

#### Cal-IPC

2006 California Invasive Plant Inventory, Cal-IPC Publication 2006-02. Berkeley, CA: The California Invasive Plant Council. <a href="https://www.cal-ipc.org/docs/ip/inventory/pdf/Inventory2006.pdf">https://www.cal-ipc.org/docs/ip/inventory/pdf/Inventory2006.pdf</a>, accessed June 2020.

#### California Department of Fish and Game

2020 California Listing of Managed Species. <a href="https://wildlife.ca.gov/Conservation/Mammals">https://wildlife.ca.gov/Conservation/Mammals</a>, accessed June 2020.

#### Campbell, Lex F.

2011 "Gardena Senior High School." *P-19-190006*. Department of Parks and Recreation. Recorded by Lex F. Campbell, November 9, 2011. Copy on file at the South Central Coastal Information Center.

#### Crawford, K. A.

2008 "T-Mobile LA33308A." *P-19-188449*. Department of Parks and Recreation. Recorded by K.A. Crawford, October 29, 2008. Copy on file at the South Central Coastal Information Center.

- 2010 "AT&T Mobility LLC LA0656-04/Calvary Baptist Church." P-19-190051. Department of Parks and Recreation. Recorded by K.A. Crawford, May 28, 2010. Copy on file at the South Central Coastal Information Center.
- 2013 "T-Mobile West LLC LA02550A M7-T4 Mesa Redondo 220kV." *P-19-190646*.

  Department of Parks and Recreation. Recorded by K.A. Crawford, July, 20, 2013.

  Copy on file at the South Central Coastal Information Center.

#### Friends of Rancho San Pedro

"History of Dominguez Rancho Adobe Museum." *Dominguez Rancho Adobe Museum*. https://dominguezrancho.org/domingo-rancho-history/, accessed March 1, 2022.

#### Gardena Heritage Committee

2006 Images of America: Gardena. Arcadia Publishing, Charleston.

#### Google Maps

2022 "15916 Crenshaw Blvd., Gardena". Google Street view. Available at:

https://www.google.com/maps/place. Accessed: May 31, 2023.

#### GRC Associates, Inc.

2005 Final Environmental Impact Report. City of Gardena General Plan 2006, SCH#2005021125. Report prepared for the City of Gardena, California.

#### Hall, C. A. Jr.

2007 Western Transverse Ranges. In *Introduction to the Geology of Southern California and Its Native Plants*, pp. 233-279. University of California Press, Berkeley.

#### Intellicast

2020 https://www.wunderground.com/intellicast, accessed June 2020.

#### Jefferson, G. T.

1991 A catalogue of Late Quaternary vertebrates from California–part two, mammals: Natural History Museum of Loas Angeles.

#### Johnson, Brent D.

2012 "Western & 135<sup>th</sup> Street / LA0097." *P-19-190623*. Department of Parks and Recreation. Recorded by Brent D. Johnson, June 7, 2012. Copy on file at the South Central Coastal Information Center.

#### Kroeber, A. L.

1976 *Handbook of the Indians of California*. Dover Publications, Inc., New York. Reprint of 1925 book.

#### LA Conservancy

2020 Gardena. <a href="https://www.laconservancy.org/communities/gardena">https://www.laconservancy.org/communities/gardena</a>, accessed August 25, 2022.

#### McCawley, William

1996 First Angelinos: the Gabrielino Indians of Los Angeles. Malki Museum Press/Ballena Press, Banning, California.

#### McLeod, S. (Natural History Museum of Los Angeles County)

- 2015 Vertebrate Paleontology Records Check for paleontological resources for the proposed Park Place El Segundo Project, Cogstone Project # 3116, in the City of El Segundo, Los Angeles County, project area.
- 2017a Vertebrate Paleontology Records Check for paleontological resources for the proposed MUST Facility Project, Cogstone Project # 3993, in the City of Long Beach, Long Beach, Los Angeles County, California, project area. On file with Cogstone, Orange, CA.
- 2017b Vertebrate Paleontology Records Check for paleontological resources for the proposed 2300 Redondo Ave Project, Cogstone Project # 4139, in the City of Long Beach, Long Beach, Los Angeles County, California, project area. On file with Cogstone, Orange, CA.
- 2018 Vertebrate Paleontology Records Check for paleontological resources for the proposed Aviation Blvd Project, Cogstone Project # 4273, in the City of Manhattan Beach, Los Angeles County, project area.
- 2019 Vertebrate Paleontology Records Check for paleontological resources for the proposed Century Villages at Cabrillo Project, Cogstone Project # 4791, in the City of Long Beach, Los Angeles County.

#### Miller, W. E.

1971 Pleistocene vertebrates of the Los Angeles Basin and vicinity (exclusive of Rancho La Brea). Los Angeles County Museum of Natural History Bulletin, Science Series 10:1-124.

#### **NETROnline**

- 1952 *Historic Aerials*. Available at: <a href="https://www.historicaerials.com/viewer">https://www.historicaerials.com/viewer</a>. Accessed: September 13, 2022.
- 1963 *Historic Aerials*. Available at: <a href="https://www.historicaerials.com/viewer">https://www.historicaerials.com/viewer</a>. Accessed: September 13, 2022.
- 1972 *Historic Aerials*. Available at: <a href="https://www.historicaerials.com/viewer">https://www.historicaerials.com/viewer</a>. Accessed: September 13, 2022.
- 1992 *Historic Aerials*. Available at: <a href="https://www.historicaerials.com/viewer">https://www.historicaerials.com/viewer</a>. Accessed: September 13, 2022.

#### Ornduff, R., P. M. Faber, and T. Keeler-Wolf

2003 Introduction to California Plant Life, Revised Edition. California Natural History Guides, Volume 69. University of California Press, Berkeley.

#### **PBDB**

2022 Records search of the Paleobiology Database. Accessed May 2022.

#### Racer, F.H.

1939a "19-000088." *Archaeological Site Survey Record*. Recorded by R.H. Racer, April 1939. Copy on file at the South Central Coastal Information Center.

1939b "19-000101." *Archaeological Site Survey Record*. Recorded by R.H. Racer, April 1939. Copy on file at the South Central Coastal Information Center.

#### Robinson, W. W.

1948 Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads. University Press, Berkeley, California.

#### Sato, Dale Ann

2009 Images of America: Japanese Americans of the South Bay. Arcadia Publishing, Charleston.

#### Saucedo, G. J., H. G. Greene, M. P. Kennedy, and S. P. Bezore

Geologic Map of the Long Beach 30' x 60' Quadrangle, California: California Geological Survey Regional Geologic Map Series Map No. 5, version 2.0; map scale 1:100,000; accessed June 2020.

ftp://ftp.consrv.ca.gov/pub/dmg/rgmp/Prelim\_geo\_pdf/Long\_Beach\_100k\_v2.0\_Map.pdf

#### Scott, K., C. Richards, and S. Gust

2014 Paleontological Monitoring Compliance Report for the Metro Purple Line Extension Shaft Project Los Angeles, Los Angeles County, California. On file with Cogstone, Orange, California.

#### Scott, E., and K. Springer

2003 CEQA and Fossil Preservation in Southern California. *The Environmental Monitor*, Winter: 4-10, 17.

#### Scott, E., K. Springer, and J. C. Sagebiel

Vertebrate Paleontology in the Mojave Desert: the Continuing Importance of 'Follow Through' in Preserving Paleontologic Resources, p. 65-70, in M. W. Allen and J. Reed (eds.), *The Human Journey and Ancient Life in California's Deserts: Proceedings from the 2001 Millennium Conference*. Maturango Museum Publication No. 15, Ridgecrest, California.

#### Stock, C., and J. Harris, J.

1992 Rancho La Brea: a Record of Pleistocene Life in California. *Natural History Museum of Los Angeles County Science Series* 37.

#### Supernowicz, Dana E.

- 2007 "Gardena Department Store Building." *P-19-177464*. Department of Parks and Recreation. Recorded by Dana E. Supernowicz, May 2007. Copy on file at the South Central Coastal Information Center.
- 2012 P-19-190051. State of California Department of Parks and Recreation. DPR523 forms.

#### Sutton, M.

2010 The Del Rey Tradition and its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44(2):1-54.

#### Sutton, M., and J. Gardner

2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1-64.

#### Tachibana, Judy M.,

1981 "Gardena Historical Resources Survey". Prepared by Judy M. Tachibana Project Coordinator for the City of Gardena. Submitted to the Office of Historic Preservation Department of Parks and Recreation State of California.

#### The Weather Channel

2020 The Weather Channel. <a href="http://www.weather.com/">http://www.weather.com/</a>, accessed June 2020.

#### **UCMP**

2022 Records search of the University of California, Berkeley paleontology database. Accessed online May 2022.

#### Unknown

"South Gardena Parksite." *P-19-177369*. Historic Resource Inventory, March 1981. Copy on file at the South Central Coastal Information Center.

#### Wagner, D. L.

2002 California Geomorphic Provinces. California Geological Survey note 36.
<a href="https://www.contracosta.ca.gov/DocumentCenter/View/34134/CGS-2002-California-Geomorphic-ProvincesNote-36-PDF">https://www.contracosta.ca.gov/DocumentCenter/View/34134/CGS-2002-California-Geomorphic-ProvincesNote-36-PDF</a>, accessed June 2020.

#### Wallace, William J.

1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214-230.

#### Warren, Claude N.

1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. In *Archaic Prehistory in Western United States*, edited by C. Irwin-Williams. *Eastern New Mexico University Contributions in Anthropology* 1(3):1-14.

### APPENDIX A. QUALIFICATIONS





#### **EDUCATION**

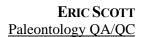
2009 M.A., Anthropology, Kent State University, Kent, Ohio
 2006 B.A., Anthropology, Ohio State University, Columbus, Ohio

#### **SUMMARY QUALIFICATIONS**

Ms. Valasik is a Registered Professional Archaeologist (RPA) with more than 13 years of experience. She is a skilled professional who is well-versed in the compliance procedures of the California Environmental Quality Act (CEQA) and Section 106 of the National Historic Preservation Act (NHPA) and regularly prepares cultural resources assessment reports for many federal, state, and local agencies throughout California. Ms. Valasik has managed a variety of projects at Cogstone in the water, transportation, energy, development, and federal sectors. She meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*. She is accepted as a principal investigator for prehistoric archaeology by the State Office of Historic Preservation's Information Centers.

#### SELECTED EXPERIENCE

- Brea 265 Specific Plan, City of Brea, Orange County, CA. The objective of this study was to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the proposed Specific Plan. This study provided environmental documentation as required by CEQA. A Paleontological Resource Impact Mitigation Program and full-time monitoring was recommended. Due to the high sensitivity for subsurface archaeological resources, a cultural resources mitigation plan and monitoring was also recommended. Sub to PlaceWorks. Project Manager and Principal Investigator for Archaeology. 2018-2019
- La Verne General Plan Update, City of La Verne, Los Angeles County, CA. Cogstone reviewed and summarized available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of La Verne to support an update of the City's General Plan. Cogstone conducted archaeological and paleontological record searches, extensive historical research at City Hall, a Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC), and a general analysis of impacts of future projects within the city that may adversely affect paleontological, archaeological, or historic resources was provided along with mitigation recommendations. Sub to De Novo. Principal Investigator for Archaeology. 2018
- River Street Marketplace, City of San Juan Capistrano, Orange County, CA. Cogstone conducted record searches, literature studies, and intensive archaeological and paleontological surveys to determine the potential effects to cultural and paleontological resources resulting from the construction of 64,900 square feet of proposed commercial and office space, along with associated improvements. The proposed project consisted of five buildings and was located on a 5.6-acre property occupied by the Ito Nursery which has been in operation since 1970. Sub to PlaceWorks. Principal Investigator for Archaeology. 2018
- Whittier Boulevard/Three Intersection Improvements, City of Whittier, Los Angeles County, CA. Cogstone conducted intensive-level cultural resources surveys and prepared technical studies for improvements proposed for three intersections at Colima Road, Santa Fe Springs Road and Painter Avenue in a disturbed urban environment. Managed records search, Sacred Lands search, NAHC consultation, and APE mapping. Sub to Michael Baker. Principal Investigator for Archaeology. 2016-2018
- Irvine General Plan Update Phase II, City of Irvine, Orange County, CA. Cogstone conducted a study to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of Irvine to support the Phase II update of the City's General Plan. A general analysis of impacts of future projects within the City of Irvine that may adversely affect paleontological, archaeological, or historic resources was provided along with mitigation recommendations. Sub to Placeworks. Principal Investigator for Archaeology. 2018-2019





#### **EDUCATION**

M.A., Anthropology (Biological), University of California, Los Angeles
 B.A., Anthropology (Physical), California State University, Northridge

#### **SUMMARY OF QUALIFICATIONS**

Mr. Scott is a professional vertebrate paleontologist with over four decades of experience in paleontological mitigation, fieldwork, curation, and research. He is an emeritus paleontology curator at the San Bernardino County Museum, an adjunct instructor at California State University, San Bernardino, and a research associate of the Natural History Museum of Los Angeles County and the La Brea Tar Pits and Museum. He is a 30+ year member of the Society of Vertebrate Paleontology, an international society of professional scientists where he currently serves on the Government Affairs Committee and also holds membership in the Geological Society of America and other professional societies. Mr. Scott has published over 40 research articles in professional scientific journals.

#### SELECTED EXPERIENCE

Purple Line Extension (Westside Subway), Sections 1 and 2, Metropolitan Transit Authority (METRO), Los Angeles, CA. The project involves construction of seven stations from the existing Purple Line at Wilshire/Western Avenue along Wilshire Boulevard to the Veterans Administration Hospital in Westwood for 8.6 miles. Cogstone supervises paleontological monitoring, fossil recovery, and fossil preparation in the lab. Sub to JV West (Section 1) and AECOM (Section 2). Principal Paleontologist. 2017-ongoing

Deep Soil Mixing Pilot Project, Community of Pacific Palisades, Los Angeles County, CA. As part of an on-call contract with the Los Angeles Bureau of Engineering (LABOE), Cogstone provided cultural and paleontological resources monitoring as well as managed Native American monitoring during ground-disturbing activities. The City of Los Angeles was the lead agency under the California Environmental Quality Act (CEQA). Monitoring for the Project was conducted in compliance with the Contingency Plan conditions for the Coastal Development Permit (CDP) from the California Coastal Commission (CCC). No cultural or paleontological resources were identified. No further work was necessary. Sub to ICF. Principal Investigator for Paleontology. 2020

Gates Canyon Stormwater Capture Project, unincorporated area of Calabasas, Los Angeles County, CA. Cogstone conducted cultural and paleontological resources monitoring for 31 days during proposed improvements to Gates Canyon Park that would allow the capture and storage of stormwater runoff from an adjacent 105-acre residential area. Monitoring complied with program mitigation measures and as defined by the County of Los Angeles, Department of Public Works (LACDPW). LACDPW was the project proponent and acted as the lead agency under CEOA. Sub to Aspen Environmental. Task Manager. 2019

Irvine General Plan Update – Phase II, City of Irvine, Orange County, CA. Cogstone conducted a study to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of Irvine to support the Phase II update of the City's General Plan. A general analysis of impacts of future projects within the City of Irvine that may adversely affect paleontological, archaeological, or historic resources was provided along with mitigation recommendations. Sub to PlaceWorks. Paleontology QA/QC. 2018-2019

Camino de la Cumbre Project, City of Sherman Oaks, Los Angeles County, CA. Cogstone conducted a paleontological resources assessment to determine the potential for impacting fossil resources during excavations of the Camino de la Cumbre residential development project. Services included a records search, background research, pedestrian survey, and report preparation. Sub to Ridge, Inc. Task Manager. 2018



#### JOHN GUST

#### Principal Investigator for Archaeology

#### **EDUCATION**

- 2016 Ph.D., Department of Anthropology, University of California, Riverside (UCR)
- 2011 M.A., Department of Anthropology, UCR
- 2007 M.A., Applied Geography, University of Colorado, Colorado Springs (UCCS)
- 2002 B.A., Department of Anthropology, minor in Geography/Environmental Studies, UCCS

#### **SUMMARY QUALIFICATIONS**

Dr. Gust is a Registered Professional Archaeologist (RPA) with over ten years of experience in field archaeology. He meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and his field expertise includes pedestrian surveys, excavation monitoring, resource recording, and historic artifact analysis. Dr. Gust has managed cultural assessments for over 20 cellular tower projects and multiple assessments for construction of commercial and residential structures. He has also managed cultural resources monitoring projects for both public and private sector clients. Dr. Gust is a member of the Society for California Archaeology, Society for American Archaeology, and the American Anthropological Association.

#### SELECTED EXPERIENCE

Dogwood Road Project, City of El Centro, Imperial County, CA. Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Agriculture (USDA) Part 70-B RD Funding assisted housing on a 2.2-acre parcel. Cogstone conducted a record search, pedestrian survey, and determined that no further cultural resources work was necessary. The assessment provided environmental documentation as required by Section 106 of the National Historic Preservation Act (NHPA) and the California Environmental Quality Act (CEQA). The City of El Centro acted as the lead agency. Sub to Partner Science & Engineering, Inc. Principal Investigator for Archaeology. 2019-2020

Euclid Fueling Station Project, City of Santa Ana, Orange County, CA. Cogstone conducted a cultural resources assessment to determine the potential impacts to cultural and paleontological resources during the construction of a convenience store, associated parking, gas station, and underground fuel storage tank. The assessment was conducted to meet the requirements of CEQA with the City of Santa Ana acting as lead agency. Cogstone conducted record searches, a Sacred Lands File Search, an intensive pedestrian survey, gave mitigation recommendations, and produced a report. Sub to Sagecrest Planning + Environmental. Principal Investigator for Archaeology. 2019

Jackson St HUD 58 EA Project, City of Riverside, Riverside County, CA. Cogstone conducted a cultural resources assessment to determine the potential effects to cultural resources resulting from the construction of United States Department of Housing and Urban Development (HUD) assisted housing on a 3.58-acre parcel. This assessment provided environmental documentation as required by Section 106 of the NHPA. The City of Riverside was the lead agency. Cogstone conducted a records search, a Sacred Lands File Search, a pedestrian survey, and produced a report. Sub to Partner Science & Engineering. Principal Investigator for Archaeology and Report Author. 2019

Heathercliff Malibu Development Project, City of Malibu, Los Angeles County, CA. Cogstone conducted a study to determine the potential impacts to cultural resources resulting from the construction of a single residence bounded by Heathercliff Road to the southeast and the Pacific Coast Highway to the northwest. This study included all information required by the City of Malibu Archaeology Guidelines. Cogstone conducted a record search, Sacred Lands File Search, pedestrian survey, and produced an assessment. Sub to ACS Construction. Principal Investigator for Archaeology and Report Author. 2019



#### KIM SCOTT

#### Principal Investigator for Paleontology

#### **EDUCATION**

2013 M.S., Biology, with paleontology emphasis, California State University, San Bernardino B.S., Geology, with paleontology emphasis, University of California, Los Angeles

#### **SUMMARY QUALIFICATIONS**

Ms. Scott has over 27 years of experience in California as a paleontologist and sedimentary geologist. She has worked extensively in the field surveying, monitoring, and salvaging fossils on over 100 projects. In addition, she has special skills in fossil preparation (cleaning and stabilization) and in the preparation of stratigraphic sections and other documentation for fossil localities. She has written over 100 assessments and monitoring compliance reports to all agency requirements. Ms. Scott serves as company safety officer and is the author of the company safety and paleontology manuals. She is a Member of the Society of Vertebrate Paleontology and the Geological Society of America.

#### SELECTED PROJECTS

- Irvine General Plan Update Phase II, City of Irvine, Orange County, CA. Cogstone conducted a study to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of Irvine to support the Phase II update of the City's General Plan. A general analysis of impacts of future projects within the City of Irvine that may adversely affect paleontological, archaeological, or historic resources was provided along with mitigation recommendations. Sub to Placeworks. Principal Paleontologist. 2018-2019
- **City of La Verne General Plan, Los Angeles County, CA.** The Project was for an update to the City's General Plan, a 5,446-acre area. Provided a Paleontological and Cultural Assessment Report for the City. Sub to De Novo Planning Group. Principal Paleontologist. 2018.
- Interstate 405 Paleontological Resources Mitigation Plan, Los Angeles and Orange Counties, CA. Improvements to a 6-miles of Interstate 405 (I-405) between State Route 73 and Interstate 605. Provided a Paleontological Mitigation and Monitoring Plan. Sub to OC 405 Partners. Principal Paleontologist. 2018.
- Park Place Extension Project, City of El Segundo, Los Angeles County, CA. The City proposed to extend Park Place from Allied Way to Nash Street with a railroad grade separation to implement a critical Project improving traffic and circulation in the Project Area. Provided a combined Paleontological Identification and Evaluation Report. Sub to Michael Baker International. Principal Paleontologist. 2017
- **Lakeview Senior Housing Development, City of Anaheim, Orange County, CA.** Project included the development of 149 senior apartment units: 139 market-rate units and 10 affordable units. Paleontological Assessment Report. Under contract to Placeworks. Principal Paleontologist and Report Author. 2017
- State Route 57 Northbound Widening Project, Caltrans District 12/ Orange County Transportation Authority (OCTA), City of Anaheim, Orange County, CA. Caltrans widened State Route 57 between Orangewood and Katella Avenues. Paleontological Identification Report (PM 11.5/12.5; EA 0M9700). Under contract to WSP. Principal Paleontologist and Report Author. 2017
- Interstate 605 and Katella Interchange Improvement Project, Caltrans District 12/ Orange County Transportation Authority (OCTA), City of Anaheim, Orange County, CA. Caltrans updated the southbound onramp to the interchange at Katella Avenue. Combined Paleontological Identification and Evaluation Report (PM 1.1/1.6; EA 0K8700). Under contract to Michael Baker International. Principal Paleontologist and Report Author. 2017



## SHANNON LOPEZ Architectural Historian and Co-Author

#### **EDUCATION**

M.A., History (with an emphasis in architecture), California State University, Fullerton
 B.A., History, Minor in Asian-Pacific Studies, California State University, Dominguez Hills

#### **SUMMARY OF QUALIFICATIONS**

Ms. Lopez is a qualified historian and she meets the Secretary of the Interior's *Standards and Guidelines for Architectural History*. She is experienced in architectural history research and surveys along with photo documentation and recording of built environment resources for local and federal projects. Ms. Lopez is acknowledged as an approved Architectural Historian by Caltrans. She has extensive knowledge with Native American consultation, consultation with city and county historical societies, and analysis of primary and secondary sources. Additionally, she is an approved Reader at the Huntington Library by the Los Angeles Office of Historic Resources.

#### SELECTED EXPERIENCE

- Los Angeles Harbor College, City of Los Angeles, Los Angeles County, CA. Cogstone conducted a study to determine the potential impacts to cultural resources for the proposed demolition, renovation, and construction at the college. Three of the buildings scheduled for demolition were considered historic in age and required evaluation under the California Environmental Quality Act (CEQA). Cogstone conducted a records search, historical society outreach, a pedestrian survey, and produced a Historic Resources Evaluation Report. Sub to PlaceWorks. Architectural Historian. 2020
- Long Beach Municipal Urban Stormwater Treatment (MUST) Project, Los Angeles County, CA. In 2017, Cogstone prepared a cultural and paleontological resources assessment for the proposed construction of a stormwater facility. The project intended to improve the water quality of existing urban runoff to the Los Angeles River, and ultimately to the Long Beach Harbor. Services included pedestrian surveys, records searches, background research, built environment assessment, Native American consultation, and reporting. In 2020, Cogstone produced a Paleontological Resources Management Plan to propose effective mitigation of potential impacts to paleontological resources resulting from proposed construction of MUST and its associated Wetlands project. Sub to Michael Baker. Architectural Historian. 2020
- Fresno West Area Specific Plan, City of Fresno, Fresno County, CA. Cogstone conducted a study to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the city in order to guide future growth and development. Cogstone conducted a records search and in-depth background research. Of the 82 previously recorded cultural resources, 78 were built environment. Three mitigation measures were recommended for future development. The City of Fresno acted as the lead agency under CEQA. Sub to De Novo. Architectural Historian. 2019
- Purple Line Extension (Westside Subway) Crack Propagation Reassessment, City of Beverly Hills, Los Angeles County, CA. On behalf of METRO, Cogstone was approved to reassess the exterior façade of the old Porsche building located on Wilshire Boulevard. The purpose of this reassessment was to document and compare the cracks of the current building during construction of the underground subway with those recorded in a pre-construction survey. Architectural Monitor. 2018
- **3800 W. 6<sup>th</sup> Street Mixed-Used Development, Koreatown, Los Angeles County, CA.** Cogstone conducted a paleontological and cultural resources assessment for proposed construction of a 21-story mixed-use development with two levels of underground parking. Services included records search, built environment survey, resource recording and technical report. Architectural Historian. 2018



#### SANDY DUARTE Archaeologist and Co-Author

#### **EDUCATION**

2002 B.A., Cultural Anthropology, University of California, Santa Barbara

#### TRAINING AND CERTIFICATIONS

HAZWOPER Certified – Certified American Red Cross CPR; Certified American Red Cross Standard First Aid Applied Archaeology of Southern California, USDA Forest Service, San Bernardino National Forest Railroad Security Certified

#### **SUMMARY OF QUALIFICATIONS**

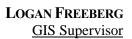
Ms. Duarte is a skilled archaeologist with 18 years of experience in monitoring, surveying, and excavation in California. She has experience with Native American consultation as required by Section 106 of the National Historic Preservation Act (NHPA) and under Senate Bill 18 for the protection and management of cultural resources. Beginning in 2006, Ms. Duarte worked for the U.S. Forest Service in the Biology, Timber, and Geology Department as an archaeologist, including serving as a trained wild-land firefighter to preserve archaeological sites in forest fires. Additional skills include paleontological identification, fossil preparation, artifact identification and preparation, and final report preparation.

#### SELECTED EXPERIENCE

Newport Village Project, City of Newport Beach, Orange County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during proposed construction of 14 residential condominium units, 108 apartment units, and 121,370 square feet of mixed-use development. The project would also have publicly accessible waterfront promenade with 844 parking spaces in surface-level and subterranean parking. Services included records searches, pedestrian survey, Sacred Lands File search from the Native American Heritage Commission (NAHC), background research, and reporting. The City of Newport Beach acted as the lead agency under the California Environmental Quality Act (CEQA). Sub to Cox, Castle & Nicholson LLP. Archaeologist. 2019-2020

# Prologis Vermont Avenue and Redondo Beach Industrial Project, City of Los Angeles, Los Angeles County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during proposed construction of an industrial center, 223 automobile parking spaces, 32 bicycle parking spaces, 36 high truck loading positions, and parking stalls for truck trailers. Services included records searches, pedestrian survey, Sacred Lands File search from the NAHC, background research, and reporting. The City of Los Angeles acted as the lead agency under CEQA. Sub to PlaceWorks. Archaeologist. 2019-2020

- Bell Gardens Water Reservoir Project, City of Bell Gardens, Los Angeles County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during improvements which included a new two-million-gallon reservoir, booster pump station, well to be drilled, and other components. Services included record searches, Sacred Lands File search from the NAHC, and an intensive-pedestrian survey of the 1.7-acre project area. Sub to Infrastructure Engineers. Archaeologist/Co-Author. 2019-2020
- Firestone Phoenix, City of Los Angeles, Los Angeles County, CA. Cogstone provided cultural resources monitoring during ground-disturbing construction activities. Excavation activities included grubbing, mechanical excavation, and grading. Cogstone also conducted Worker Environmental Awareness Program (WEAP) training for construction personnel. Two artifacts were collected during monitoring and returned to the property owner. All work was completed in compliance with NEPA, CEQA, PRC, and project specific requirements from the Los Angeles County Development Authority (LACDA). A cultural resources monitoring compliance report was submitted upon completion of monitoring. Sub to A Community of Friends. Archaeologist. 2019-2020





#### **EDUCATION**

2018 Geographic Information Systems (GIS) Certificate, California State University, Fullerton

2003 B.A., Anthropology, University of California, Santa Barbara

#### **SUMMARY QUALIFICATIONS**

Mr. Freeberg has over 19 years of experience in cultural resource management and has extensive experience in field surveying, data recovery, monitoring, and excavation of archaeological and paleontological resources associated with land development projects in the private and public sectors. He has conducted all phases of archaeological work, including fieldwork, laboratory analysis, research, and reporting. Mr. Freeberg also has a strong grounding in conventional field and laboratory methods and is skilled in the use of ArcGIS.

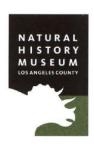
#### SELECTED PROJECTS

**Euclid Fueling Station Project, City of Santa Ana, Riverside County, CA.** Cogstone conducted a cultural resources assessment to determine the potential impacts to cultural and paleontological resources during the construction of a convenience store, associated parking, gas station, and underground fuel storage tank. The assessment was conducted to meet the requirements of the California Environmental Quality Act (CEQA) with the City of Santa Ana acting as lead agency. Cogstone conducted record searches, a Sacred Lands File Search, an intensive pedestrian survey, gave mitigation recommendations, and produced a report. Sub to Sagecrest Planning + Environmental. GIS Supervisor. 2019

**Laguna Creek Trail and Bruceville Road Project, Caltrans District 3, City of Elk Grove, Sacramento County, CA.** The City of Elk Grove, in cooperation with Caltrans, proposed multiple trail extensions and gap closures in effort to provide connecting links that would ultimately provide trail users with access to a vast system of trails, with connections to parks, schools, community centers, commercial retail and office areas, and transit facilities. Cogstone conducted pedestrian surveys, records search, and prepared an Archaeological Survey Report and a Historic Property Survey Report. Sub to Helix Environmental. GIS Technician. 2019

- Roosevelt Park Regional Stormwater Capture Project, unincorporated area of Florence-Firestone, Los Angeles County, CA. Conducted cultural and paleontological monitoring during all ground disturbing activities in native sediments. This project included the construction of three diversion structures and pipelines. Sub to Environmental Advisors. GIS Technician. 2019
- **Goddard School Project, City of Chino Hills, San Bernardino County, CA.** Cogstone produced a paleontological resources mitigation and monitoring program for a proposed 59,129 square foot development consisting of a one-story, 10,587-square foot pre-school/daycare with nine classrooms, fenced play yards and play structures, and a parking lot with 40 stalls. Cogstone put forward mitigation measures that included monitoring for all ground-breaking activities, paleontological resource awareness training for construction personnel, and the completion of a final mitigation report. GIS Technician. 2019
- Euclid Fueling Station Project, City of Santa Ana, Orange County, CA. This study was conducted to determine the potential impacts to archaeological and paleontological resources during construction activities for a proposed 7-Eleven gas station and convenience store. The proposed project entailed the construction of the convenience store, associated parking, gas station, and underground fuel storage tank. Planned vertical impacts included approximately three to four feet of fill removal over at least some of the site, a trench approximately eight feet deep for utilities, and approximately 12 feet for the new fuel storage tanks. Sub to Sagecrest Environmental. GIS Technician. 2019
- **Fresno West Area Specific Plan, City of Fresno, Fresno County, CA.** The objective of this study was to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of Fresno's West Area Specific Plan. Cogstone's services included record searches, mapping, and extensive background research. Sub to De Novo Planning. GIS Technician. 2019

#### APPENDIX B. PALEONTOLOGICAL RECORD SEARCH



Natural History Museum of Los Angeles County 900 Exposition Boulevard Los Angeles, CA 90007 tel 213.763.DINO www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

February 21, 2022

Cogstone Resource Management Attn: Logan Freeberg

re: Paleontological resources for the Gardena Housing Element Update Project (5119)

#### Dear Logan:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the Gardena Housing Element Update project area as outlined on the portion of the Inglewood and Torrance USGS topographic quadrangle map that you sent to me via e-mail on February 10, 2022. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Таха	Depth
	Near the intersection of	Unknown formation		
LACM IP 16169	S Main St and Hwy 91	(Pleistocene)	Scallop (Leptopecten)	Unknown
LACM IP 237	near Crenshaw Blvd	Unknown formation		
	and 190th Street	(Pleistocene)	Invertebrates (unspecified)	Unknown
LACM VP 3266		Unnamed formation		
	W Athens Blvd &	(Pleistocene,		15-18 feet
	Menlo Ave	calcareous siltstone)	Uncatalogued vertebrates	bgs
LACM VP 3365	Athens on the Hill, Los Angeles (more precise information not	Unnamed formation	M	
	available)	(Pleistocene)	Mammoth ( <i>Mammuthus</i> )	Unknown
LACM VP 3382	NE of the intersection of Artesia Blvd and Williams Ave., Compton	Unknown formation (Pleistocene; brown clay silt)	Mammoth ( <i>Mammuthus</i> )	5 feet bgs
	Intersection of Carson	Unnamed formation	Mariirioti (Mariiridurds)	o leet bys
LACM VP 3319	St. & Alameda St	(Pleistocene)	Mammoth (Mammuthus)	30 feet bgs

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

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As

such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,

Alyssa Bell, Ph.D.

Alyssa Bell

Natural History Museum of Los Angeles County

enclosure: invoice

# APPENDIX C. PREVIOUS CULTURAL RESOURCES STUDIES WITHIN THE CITY OF GARDEN

Report No. (LA-)	Author(s)	Title	Year	Distance (miles) from Project Area
00114	Clewlow, William C. Jr.	Evaluation of the Archaeological Resources and Potential Impact of Proposed New Freeway Construction on the Harbor Freeway (Route 11) and (sic)	1974	Within Project Area
02904	Stickel, Gary E.	Draft Report a Phase I Cultural Resources Literature Search for the West Basin Water Reclamation Project	1993	Within City Limits
03572		Cultural Resource Investigation for the Proposed Willows Wetland Restoration Project	1997	Within City Limits
04644	Duke, Curt	Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 653-01, County of Los Angeles, California	1999	Within Project Area
05331	Romani, John F.	Archaeological Survey Report for the 07-la-110 Harbor Freeway Transitway Corridor Project	1982	Within City Limits
05497	Duke, Curt	Cultural Resource Assessment Cingular Wireless Facility No. Sm 051-01 Los Angeles County, California	2001	Within City Limits
05996	Duke, Curt	Cultural Resource Assessment AT&T Wireless Services Facility No. 05146a Los Angeles County, California	2002	Within City Limits
06017	Duke, Curt	Cultural Resource Assessment AT&T Wireless Services Facility No. 05190a Los Angeles County, California	2002	Within City Limits
06022	Duke, Curt	Cultural Resource Assessment AT&T Wireless Services Facility No. 05047 Los Angeles County, California	2002	Within City Limits
06023	Duke, Curt	Cultural Resource Assessment AT&T Wireless Services Facility No. 05040a Los Angeles County, California	2002	Within City Limits
06027	Duke, Curt	Cultural Resource Assessment AT&T Wireless Services Facility No. 05189a Los Angeles County, California	2002	Within City Limits
06028	Duke, Curt	Cultural Resource Assessment AT&T Wireless Services Facility No. 05147 Los Angeles County, California	2002	Within City Limits
06036	Duke, Curt	Cultural Resource Assessment AT&T Wireless Services Facility No. 05051a Los Angeles County, California	2002	Within Project Area

Report No. (LA-)	Author(s)	Title	Year	Distance (miles) from Project Area
07401	Bonner, Wayne H.	Cultural Resource Records Search and Site Visit Results for Cingular Wireless Facility Candidate Sm-365-03 (C&H West) 1611 West Rosecrans Avenue, Gardena, Los Angeles County, California	2004	Within Project Area
07418	Bonner, Wayne H.	Cultural Resource Records Search and Site Visit Results for Sprint Facility Candidate La70xc325d (Edward Thornburg Park), 2320 West 149 <sup>th</sup> Street, Gardena, Los Angeles County, California	2005	Within City Limits
07688	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for Cingular Wireless Candidate Lsanca0101 (Berendo and 161 <sup>st</sup> Street) 16125 Ainsworth Street, Gardena, Los Angeles County, California	2006	Within City Limits
07689	Bonner, Wayne H.	Cultural Resources Records Search Results and Site Visit for Sprint Candidate La70xc303f (Gardena Ice Co.) 16526 South Normandie Avenue, Gardena, Los Angeles County, California	2005	Within City Limits
07868	Wlodarski, Robert J.	Record Search and Field Reconnaissance Phase for the Proposed Royal Street Communications Wireless Telecommunications Site La0505a (SCE Brighton Substation), Located at 1925 West Rosecrans Avenue, Gardena, Los Angeles County, California 90249	2006	Within Project Area
07898	Tomes, Angel	Historical Architectural Evaluation of Fire Station No. 79, City of Los Angeles, Los Angeles County, California	2004	Within City Limits
07989	Bonner, Wayne H. and Kathleen A. Crawford	Direct APE Historic Structural Assessment for Cingular Telecommunications Facility Candidate El-049-11 (SCE/Western Torrance) Western Avenue and Artesia Boulevard, Torrance, Los Angeles County, California	2005	Within City Limits
08412	Billat, Lorna	1535 West 130 <sup>th</sup> Street/la-70xc309e, Cellular Antenna Installation on New Monopalm, Gardena, Los Angeles County, Ca 90249	2007	Within Project Area

Report No. (LA-)	Author(s)	Title	Year	Distance (miles) from Project Area
08780	Supernowicz, Dana E.	Cultural Resources Study of the Gardena Department Store Project Sprint-Nextel Site No. La70xc303g, 1106 W. Gardena Boulevard, Gardena, Los Angeles County, California 90247	2007	Within City Limits
09184	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for Royal Street Communications, LLC Candidate LA2883A (Dynasty SCE), 17414 South Western Avenue, Gardena, Los Angeles County, California	2007	Within City Limits
09225	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for Sprint Nextel Candidate LA60XR341D (Vincent Bell Memorial Park), 17408 South Halldale Avenue, Gardena, Los Angeles County, California	2007	Within City Limits
09511	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate LA33308A (Redondo Associates), 1251 West Redondo Beach Blvd, Gardena, Los Angeles County, California	2008	Within City Limits
09512	Bonner, Wayne H. and Kathleen Crawford	Direct APE Historic Architectural Assessment for T-Mobile USA Candidate LA33308A (Redondo Associates), 1251 West Redondo Beach Blvd., Gardena, Los Angeles County, California	2008	Within City Limits
09813	Wayne H. Bonner	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate LA33307A (Junipero Serra High School), 14830 Van Ness Ave., Gardena, Los Angeles County, CA	2008	Within City Limits
10333	McKenna, Jeanette M.	A Brief Historic Context Statement Prepared for the General Plan Update: The City of Torrance, Los Angeles County, California	2009	Within Project Area
10438	Wlodarski, Robert	A Phase I Archaeological Study for the Sage Park Apartments Project, W. 177 <sup>th</sup> Street, S. Budlong Avenue, Normandie Avenue and Gardena High School, City of Gardena, County of Los Angeles, California	2010	Within City Limits

Report No. (LA-)	Author(s)	Title	Year	Distance (miles) from Project Area
10567	Hogan, Michael, Bai "Tom" Tang, Josh Smallwood, Laura Hensley Shaker, and Casey Tibbitt	Identification and Evaluation of Historic Properties – West Basin Municipal Water District Harbor- South Bay Water Recycling Project Proposed Project Laterals	2005	Within City Limits
11095	Fulton, Phil	Cultural Resource Assessment, Verizon Wireless Services Blackbird Facility, City of Long Beach, Los Angeles County, California	2009	Within Project Area
11096	White, Laura	Cultural Resources Records Search and Site Visit Results for T-Mobile USA Facility LA33690B (Bell Park) in the City of Gardena, Los Angeles County, California	2009	Within City Limits
11150	Maxwell, Pamela	West Basin Municipal Water District Harbor/ South Bay Water Recycling Project	2003	Within City Limits
11482	Racer, F.H.	Camp Sites in Harbor District – F.H. Racer	1939	Within City Limits
11617	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC Candidate LA0656 (Cavalry Baptist), CASPR No: 3551015757, 15916 Crenshaw Boulevard, Gardena, Los Angeles County, California	2011	Within Project Area
11648	Crawford, Kathleen	Direct APE Historic Architectural Assessment for AT&T Mobility, LLC Candidate LA0101- 01, USID 25785 (Pacific Bell/Gardena), 16215 South Ainsworth Avenue, Los Angeles, Los Angeles County, California	2011	Within City Limits
11716	Amaglio, Alessandro	Seismic Retrofit, Gardena Senior High School, Los Angeles Unified School District	2012	Within City Limits
11902	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for AT&T Mobility, LLC, Candidate LA0656-04 (Calvary Baptist Church), 15916 Crenshaw Boulevard, Gardena, Los Angeles County, CA	2010	Within Project Area

Report No. (LA-)	Author(s)	Title	Year	Distance (miles) from Project Area
11903	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for Clearwire Candidate CA- LOSO539B (Crossroads), 15916 Crenshaw Boulevard, Gardena, CA	2010	Within Project Area
11948	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA33308A (Redondo Associates) 1251 West Redondo Beach Boulevard, Gardena, Los Angeles County, California	2012	Within City Limits
11973	Unknown	Crenshaw/LAX Transit Corridor Project Final Environmental Impact Report/Final Environmental Impact Statement	2011	Within City Limits
12052	Bonner, Wayne	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA02150A (LA150-LA-150- 10)15916 Crenshaw Boulevard, Gardena, California	2012	Within Project Area
12054	Supernowicz, Dana	Cultural Resources Study of the Crossroads Learning Center Project MetroPCS California, LLC Site No. MLAX04199 15916 Crenshaw Boulevard, Gardena, Los Angeles County, California 90249	2012	Within Project Area
12416	Gust, Sherri and Brent Johnson	Cultural Resources Records Search and Site Visit for AT&T Mobility, LLC Site: LA0097/Western & 135 <sup>th</sup> Street, 13200 South Western Avenue, Gardena, California	2012	Within Project Area
12461	Bonner, Wayne and Crawford, Kathleen	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate LA02550A (M7-T4 Mesa-Redondo 220kV) 17795 Normandie Avenue, Gardena, Los Angeles County, California	2013	Within City Limits
12483	Supernowicz, Dana	Cultural Resources Study of the Crossroads Learning Center Project MetroPCS California, LLC Site No. MLAX04199, 15916 Crenshaw Boulevard, Gardena, Los Angeles County, California 90249	2012	Within Project Area

# APPENDIX D. CALIFORNIA BUILT ENVIRONMENT RESOURCE DIRECTORY FOR CITY OF GARDENA

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177439	430676	28115	Moneta Water & Power Building, So Cal Edison Monet	19-0247- 001^ Survey Number   Moneta Water & Power Building, So Cal Edison Moneta Subst'n^ Other Name	1820	162 <sup>nd</sup> St	90247	Manhattan Pl (Corridor)	5s2, 0247- 0088-0000						P	1929
	680900				14000	Ardath Ave	92049		6y, 12/23/2013, Hud_2013_1 220_008				4059- 011- 007			1957
	680907				17016	Brighton Wy	90247		6y, 08/12/2013, Hud_2013_0 805_014				6106- 045- 005			1959
	680819				15213	Casimir Ave	90249		6y, 12/13/2012, Hud_2012_1 213_002				4069- 008- 017			1942
	517061	181357	Calvary Baptist Church		15916	Crenshaw Blvd	90249		6y, 01/14/2011, Fcc100823c   6y, 01/24/2011, FCC100901a						P	1956
	680796				13103	Daphne Ave	90249		6y, 02/07/2013, Hud_2013_0 207_003				4060- 013- 029			1955
	516447	182232			13115	Daphne Ave	90247		6y, 04/11/2011, Hud110323e						P	1955
	680906				17815	E Harvard Blvd	92048		6y, 08/12/2013, Hud_2013_0 805_013				6106- 016- 018			1948

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177375	430612	28051	Bathrick Hall, Desert Room	19-0247- 001^ Survey Number	1004	Gardena Ave	90247	Vermont Ave (Corridor)	5s2, 0247- 0023-0000				6111- 001- 019		P	1905
177376	430613	28052	Ernst Sweet Shop Trojan Room	19-0247- 001^ Survey Number	1005	Gardena Ave	90247	Vermont Ave (Corridor)	5s2, 0247- 0024-0000				6113- 021- 005		P	1919
177377	430614	28053	Gardena Post Office, Martins Jewelers	19-0247- 001^ Survey Number	1007	Gardena Ave	90247	Vermont Ave (Corridor)	5s2, 0247- 0025-0000						P	1919
	467217	65025	Residence		1024	Gardena Ave			6y, 12/31/1986, Hud8612031						U	
177378	430615	28054	Kurata Department Store, Laundry and Cleaning Vill	19-0247- 001^ Survey Number   Kurata Department Store, Laundry and Cleaning Village^ Other Name	1024	Gardena Ave	90247	New Hampshire Blvd. (Corridor)	5s2, 0247- 0026-0000   7r, 0247- 0114-0000				6111- 001- 015		P	1917
	467216	65024	Residence		1040	Gardena Ave			6y, 12/31/1986, Hud861203k						U	
177379	430616	28055	George W Flaer Shop, Pocket Book Exchange	19-0247- 001^ Survey Number	1040	Gardena Ave	90247	New Hampshire Blvd (Corridor)	5s2, 0247- 0027-0000   7r, 0247- 0115-0000				6111- 001- 008		P	1918
177380	430617	28056	Gardena United States Post Office	19-0247- 001^ Survey Number	1103	Gardena Ave	90247	Berendo (Corridor)	3s, 0247- 0028-0000				6113- 018- 900		F	1939
177381	430618	28057	Edward L Warner House	19-0247- 001^ Survey Number	1123	Gardena Ave	90247	Berendo (Corridor)	5s2, 0247- 0029-0000				6113- 018- 003		P	1912

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177382	430619	28058	The Wood House	19-0247- 001^ Survey Number	1154	Gardena Ave	90247	Budlong Ave (Corridor)	5s2, 0247- 0030-0000				6111- 005- 004		P	1912
177383	430620	28059	The Bathrick House	19-0247- 001^ Survey Number	1157	Gardena Ave	90247	Budlong (Corridor)	5s2, 0247- 0031-0000   6y, 05/22/1989, Hud871027c				6113- 018- 010		P	1906
177384	430621	28060			1212	Gardena Ave	90247	Budlong Ave (Corridor)	5s2, 0247- 0032-0000				6111- 006- 001		P	1934
177385	430622	28061	The Simgen House	19-0247- 001^ Survey Number	1220	Gardena Ave	90247	Budlong Ave (Corridor)	7r, 0247- 0033-0000				6111- 006- 003		P	1912
177386	430623	28062	The Chapman House	19-0247- 001^ Survey Number	1304	Gardena Ave	90247	Raymond (Corridor)	5s2, 0247- 0034-0000				6111- 006- 012		P	1910
177387	430624	28063	The Delilght House	19-0247- 001^ Survey Number	1328	Gardena Ave	90247	Normandie (Corridor)	5s2, 0247- 0035-0000				6111- 007- 005		P	1908
	493640	97879	Peary Middle School		1415	Gardena Ave			6y, 08/15/1994, Doe-19-94- 0454-0000   6y, 08/15/1994, Hrg940202z						D	
177388	430625	28064	Gardena High School, Peary Junior High School	19-0247- 001^ Survey Number	1415	Gardena Ave	90247	Normandie (Corridor)					6105- 019- 002		M	1906
177389	430626	28065	Gardena Fire Station, Tropics Okazuya	19-0247- 001^ Survey Number	1434	Gardena Ave	90247	Normandie (Corridor)	5s2, 0247- 0037-0000				6105- 019- 038		P	1929
177390	430627	28066	Gardena Valley Church	19-0247- 001^ Survey Number	1842	Gardena Ave	90247	Manhattan Pl (Corridor)	5s2, 0247- 0038-0000				4066- 024- 013		P	1922

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177370	430607	28046	Gardena Elementary School	19-0247- 001^ Survey Number	647	Gardena Ave	90247	Estrella Ave (Corridor)	5s2, 0247- 0018-0000				6120- 022- 900		M	1949
177371	430608	28047	Isaac S. Ball House	19-0247- 001^ Survey Number	739	Gardena Ave	90247	Hoover Ave (Corridor)	5s2, 0247- 0019-0000				6120- 019- 031		P	1906
177372	430609	28048	Dr J. F. Spencer House	19-0247- 001^ Survey Number	749	Gardena Ave	90247	Orchard (Corridor)	5s2, 0247- 0020-0000				6120- 019- 032		P	1907
177373	430610	28049	Jeffers General Store, Gardena Hotel	19-0247- 001^ Survey Number	825	Gardena Ave	90247	Menlo Ave (Corridor)	5s2, 0247- 0021-0000				6120- 018- 023		P	1900
177374	430611	28050	Thomas Drug Store	19-0247- 001^ Survey Number	855	Gardena Ave	90247	Vermont Ave (Corridor)	5s2, 0247- 0022-0000				6120- 018- 003		P	1929
	480289	81588			1012	Gardena Blvd			6y, 08/29/1989, Hud871027c						U	1931
	480288	81587			1019	Gardena Blvd			6y, 08/29/1989, Hud871027c						U	1923
	480280	81579			1044	Gardena Blvd			6y, 05/22/1989, Hud871027c						U	1946
	467214	65022	Residence		1106	Gardena Blvd			6y, 12/31/1986, Hud861203i						U	
177464	430701	28140	Gardena Theatre, Gardena Department Store		1106	Gardena Blvd	90247		7r, 0247- 0113-0000				6111 004 002		P	1939
	467215	65023	Residence		1124	Gardena Blvd			6y, 12/31/1986, Hud861203j						U	
177465	430702	28143	Photograph y		1124	Gardena Blvd	90247		7r, 0247- 0116-0000				6111 004 005		P	1940
177466	430703	28144	Office Building		1128	Gardena Blvd	90247		7r, 0247- 0117-0000				6111 004 005		P	1934

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177467	430704	28145	Toya Jewelers		1132	Gardena Blvd	90247		7r, 0247- 0118-0000				6111 004 005		P	1940
	480290	81589			1209	Gardena Blvd			6y, 08/29/1989, Hud871027c						U	1930
	480284	81583			1332	Gardena Blvd			6y, 08/29/1989, Hud871027c						U	1926
	680854				14635	Halldale Ave	90247		6y, 05/24/2013, Hud_2013_0 521_004				6103- 019- 034			1947
177400	430637	28076	The Ybarra House	19-0247- 001^ Survey Number	16417	Manhatta n Pl	90247	164 <sup>th</sup> St (Corridor)	5s2, 0247- 0048-0000				4066- 024- 014		U	1920
	514588	184054			1120	Marine Ave	90247		6y, 10/11/2010, Hud100927k				6114- 026- 050		P	1930
	665285				1339	Marine Ave	90247		6y, 06/08/2016, Hud_2016_0 606_006				6114- 007- 031			1951
	672687				1836	Marine Ave	90249		6y, 07/03/2017, Hud_2017_0 605_001							1907
	494137	98621			2201	Marine Ave			6y, 11/30/1995, Hud951019g						P	1945
	494136	98620			2222	Marine Ave			6y, 11/30/1995, Hud951019g						P	1940
	494135	98619			2228	Marine Ave			6y, 11/30/1995, Hud951019g						P	1940
	494134	98618			2304	Marine Ave			6y, 11/30/1995, Hud951019g						P	1940

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
1)	494132	98616			2315	Marine Ave			6y, 11/30/1995, Hud951019g						P	1940
	494133	98617			2322	Marine Ave			6y, 11/30/1995, Hud951019g						P	1940
	665659				13408	New Hampshir e Ave	90247		6y, 06/22/2016, Hud_2016_0 620_009				6115- 028- 009			1947
	675136				14919	Normand ie Ave	90247		6y, 05/02/2014, Hud_2014_0 430_002				6103- 029- 137			1961
	510233	187292			13712	Purche Ave	90249		6y, 10/20/2011, Hud111017b				4059- 0003- 31		P	1956
	515971	182575			14734	S Berendo Ave	90249		6y, 03/30/2011, Hud110321o				6114- 031- 028		P	1959
177356	430593	28032	Herbert Jeffers House	19-0247- 001^ Survey Number	16525	S Berendo Ave	90247	165 <sup>th</sup> Pl. (Corridor)	5s2,0247- 0004-0000				6111- 004- 024		P	1905
177357	430594	28033	Gardena Bible Church	19-0247- 001^ Survey Number	15801	S Brighton Ave	90247	158 <sup>th</sup> St (Corridor)	5s2, 0247- 0005-0000				6105- 014- 023		P	1947
177358	430595	28034			16119	S Brighton Ave	90247	162 <sup>nd</sup> St (Corridor)	5s2, 0247- 0006-0000						U	1900
	675416				13316	S Budlong Ave	90247		6y, 07/24/2017, Hud_2017_0 724_010				6115- 024- 004			1947
177359	430596	28035			14006	S Budlong Ave	90247	140 <sup>th</sup> Pl (Corridor)	5s2, 0247- 0007-0000						U	1910
	680844				14428	S Budlong Ave	90247		6y, 04/24/2013, Hud_2013_0 423_004				6114- 019- 005			1949

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177360	430597	28036	George Nelson Young House	19-0247- 001^ Survey Number	14827	S Budlong Ave	90247	149 <sup>th</sup> (Corridor)	5s2, 0247- 0008-0000				6114- 016- 018		P	1912
177361	430598	28037			15029	S Budlong Ave	90247	Compton Blvd. (Corridor)	5s2, 0247- 0009-0000				6114- 014- 028		P	1915
	665284				13102	S Catalina Ave	92047		6y, 06/08/2016, Hud_2016_0 606_005				6115- 034- 007			1950
177365	430602	28041	Harrell House	19-0247- 001^ Survey Number	16523	S Dalton Ave	90247	166 <sup>th</sup> St (Corridor)	5s2, 0247- 0013-0000				6105- 017- 056		P	1905
19- 177366	430603	28042	Robert F Cline House	19-0247- 001^ Survey Number	16825	S Dalton Ave	90247	168 <sup>th</sup> St (Corridor)	5s2, 0247- 0014-0000				6106- 023- 016		P	1910
177367	430604	28043			14707	S Denker Ave	90247	147 <sup>th</sup> St (Corridor)	5s2, 0247- 0015-0000				6103- 027- 024		P	1895
177368	430605	28044	Adam House	19-0247- 001^ Survey Number	16939	S Denker Ave	90247	169 Th St (Corridor)	5s2, 0247- 0016-0000				6106- 012- 007		P	1901
177391	430628	28067	Japanese Communit y Center, Gardena Valley Japanese	19-0247- 001^ Survey Number   Japanese Community Center, Gardena Valley Japanese Ins^ Other Name	16215	S Grammer cy Pl	90247	162 <sup>nd</sup> St (Corridor)	5s2, 0247- 0039-0000				4066- 016- 050		P	1976
177392	430629	28068	Tahitian Village Mobile Park	19-0247- 001^ Survey Number	17100	S Grammer cy Pl	90247	Artesia Blvd (Corridor)	5s2, 0247- 0040-0000				4094- 006- 004		P	1958
177393	430630	28069	The Vickers Home	19-0247- 001^ Survey Number	15017	S Halldale Ave	90247	Compton (Corridor)	5s2, 0247- 0041-0000				6103- 026- 022		P	1914

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel Mil No	epost	Ownership	Construction Year(s)
177395	430632	28071	The Dehart House	19-0247- 001^ Survey Number	15927	S Halldale Ave	90247	160 <sup>th</sup> St (Corridor)	5s2, 0247- 0043-0000				6105- 013- 012		P	1913
	663974				14708	S Harvard Blvd	90247		6y, 12/18/2015, Hud_2015_1 218_001				6103- 027- 006			1950-1950
177394	430631	28070	The Mary Wolf House	19-0247- 001^ Survey Number	16419	S Harvard Blvd	90247	165 <sup>th</sup> St (Corridor)	5s2, 0247- 0042-0000				6105- 002- 013		P	1912
177397	430634	28073			16930	S Hobart Ave	90247	169 <sup>th</sup> St (Corridor)	5s2, 0247- 0045-0000				6106- 004- 014		P	1925
177396	430633	28072			17826	S Hobart Ave	90247	178 <sup>th</sup> St (Corridor)	5s2, 0247- 0044-0000				6106- 016- 004		P	1900
177399	430636	28075			17904	S Hobart Ave	90247	180 <sup>th</sup> St (Corridor)	5s2, 0247- 0047-0000				6106- 016- 008		P	1900
177398	430635	28074			14703	S Kingsley Dr	90247	147 <sup>th</sup> St (Corridor)	3s, 0247- 0046-0000				6103- 028- 014		P	1900
177402	430639	28078	The John Schroeder House	19-0247- 001^ Survey Number	16503	S Manhatta n Pl	90247	Gardena Blvd (Corridor)	5s2, 0247- 0050-0000				4066- 024- 018		P	1914
	514842	184221			14907	S Mariposa Ave	90247		6y, 09/27/2010, Hud1009071				6114- 007- 028		P	1944
	570496	127536			13717	S Menlo Ave	90247		6y, 01/31/2001, Hud010201b   7k, 08/01/2002, Doe-19-01- 0082-0000							1947

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177403	430640	28079	Fernandez House	19-0247- 001^ Survey Number	13211	S Normand ie Ave	90247	132 <sup>nd</sup> St (Corridor)	5s2, 0247- 0051-0000				6102- 009- 014		P	1925
	510555	187668			14610	S Normand ie Ave	90247		6y, 01/06/2012, Hud111229c				6114- 003- 017		P	1987
177404	430641	28080			15220	S Normand ie Ave	90247	Compton Blvd (Corridor)	5s2, 0247- 0052-0000				6114- 009- 001		P	1920
177405	430642	28081	The Samuel K Woodward House	19-0247- 001^ Survey Number	15309	S Normand ie Ave	90247	Redondo Beach Blvd (Corridor)	5s2, 0247- 0053-0000				6103- 007- 036		P	1888
177406	430643	28082	The Wednesday Progressive Clubhouse		16121	S Orchard Ave	90247	Alondra Blvd (Corridor)	5s2, 0247- 0054-0000				6120- 019- 013		P	1912
177407	430644	28083	The William McCarrell House	19-0247- 001^ Survey Number	16215	S Orchard Ave	90247	164 <sup>th</sup> St (Corridor)	5s2, 0247- 0055-0000				6120- 019- 018		P	1906
177408	430645	28084			16221	S Orchard Ave	90247	164 <sup>th</sup> St (Corridor)	5s2, 0247- 0056-0000				6120- 019- 048		P	1907
177409	430646	28085			16229	S Orchard Ave	90247	164 <sup>th</sup> St (Corridor)	5s2, 0247- 0057-0000				6120- 019- 022		P	1907
177410	430647	28086			16321	S Orchard Ave	90247	164 <sup>th</sup> St (Corridor)	5s2, 0247- 0058-0000				6120- 019- 026		P	1920
177411	430648	28087	John S. Kuns House, Burt A. Collins House	19-0247- 001^ Survey Number	16404	S Orchard Ave	90247	164 <sup>th</sup> St (Corridor)	5s2, 0247- 0059-0000				6120- 022- 002		P	1912

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177412	430649	28088	Aaron W. Frazer House	19-0247- 001^ Survey Number	15104	S Raymond Ave	90247	Compton Blvd (Corridor)	5s2, 0247- 0060-0000				6114- 012- 005		P	1918
	680905				16930	S Raymond Ave	90247		6y, 08/12/2013, Hud_2013_0 805_001				6111- 014- 006			1954
	672294				13111	S Saint Andrews Pl	92049		6y, 05/09/2017, Hud_2017_0 508_006							1995
177413	430650	28089	Embassy Theatre	19-0247- 001^ Survey Number   Embassy Palace, Eldorado Room^ Other Name	15401	S Vermont Ave	90247	Redondo Beach Blvd (Corridor)	5s2, 0247- 0062-0000				6113- 035- 034		P	1935
177414	430651	28090	William A And Karen M Wills House, Miller House	19-0247- 001^ Survey Number	15625	S Vermont Ave	90247	156 <sup>th</sup> St (Corridor)	3s, 0247- 0063-0000						P	1908
177415	430652	28091	The Rudd House	19-0247- 001^ Survey Number	15911	S Vermont Ave	90247	159 <sup>th</sup> St (Corridor)	5s2, 0247- 0064-0000				6113- 028- 009		P	1900
	681596		AT&T/ Pacific Bell		17200	S Vermont St	90247		6y, 10/26/2018, Fcc_2018_09 28_005				6121- 015- 801			1965
	470388	68288	Gardena Historic District			S Western Ave			2s2, 05/23/1989, Doe-19-89- 0042-9999   2s2, 05/23/1989, Hud890207b						U	

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177416	430653	28092			14512	S Western Ave	90247	145 <sup>th</sup> St (Corridor)	5s2, 0247- 0065-0000				6130- 014- 039		P	1910
177417	430654	28093	The Donut King	19-0247- 001^ Survey Number	15032	S Western Ave	90247	Compton Blvd. (Corridor)	5s2, 0247- 0066-0000				6103- 021- 031		P	1950
177418	430655	28094			16411	S Western Ave	90247	Gardena Blvd (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0004   2d2, 05/23/1989, Hud890207b   5s2, 0247- 0067-0000		470388		4066- 025- 016		P	1918
177419	430656	28095	Gardena Valley News Building Central Garage	19-0247- 001^ Survey Number	16417	S Western Ave	90247	Gardena Blvd (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0005   2d2, 05/23/1989, Hud890207b   5s2, 0247- 0068-0000		470388		4066- 025- 017		P	1920
	573616	123554			16446	S Western Ave	90247	Gardena Blvd (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0001   2d2, 05/23/1989, Hud890207b		470388				U	
	573618	123557			16461	S Western Ave	90247	Gardena Blvd (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0006   2d2, 05/23/1989, Hud890207b		470388				U	

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177420	430657	28096	Olsens Grocery Store, Cameo Chair Building	19-0247- 001^ Survey Number	16501	S Western Ave	90247	165 <sup>th</sup> St (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0007   2d2, 05/23/1989, Hud890207b   5s2, 0247- 0069-0000		470388		4066- 025- 020		P	1915
	573617	123556			16520	S Western Ave	90247	Gardena Blvd (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0002   2d2, 05/23/1989, Hud890207b		470388				U	
177421	430658	28097	Moneta Commercia I Bank, Bank Club	19-0247- 001^ Survey Number	16522	S Western Ave	90247	166 <sup>th</sup> St (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0003   2d2, 05/23/1989, Hud890207b   5s2, 0247- 0070-0000		470388		6105- 001- 001		P	1918
	573619	123558			16523	S Western Ave	90247	Gardena Blvd (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0008   2d2, 05/23/1989, Hud890207b		470388				U	
	573620	123560			16531	S Western Ave	90247	Gardena Blvd (Corridor)	2d2, 05/23/1989, Doe-19-89- 0042-0009   2d2, 05/23/1989, Hud890207b		470388				U	

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel Milep No	Ost Ownership	Construction Year(s)
177422	430659	28098	Carrell Building, Gardena Printing	19-0247- 001^ Survey Number   Bar^ Other Name   Dance^ Other Name	16535	S Western Ave	90247	166 <sup>th</sup> St (Corridor)	3s, 0247- 0071-0000				4066- 025- 025	P	1931
	672297				13904	S Wilkie Ave	92049		6y, 05/02/2017, Hud_2017_0 508_005				4059- 012- 011		
	514425	184312			15412	S Wilton Pl	90249		6y, 08/05/2011, Hud110803 m				4063- 009- 008	P	1952
	675201				13704	Spinning Ave	90249		6y, 05/07/2014, Hud_2014_0 505_007				4059- 001- 026		1956
	675204				14948	Sutro Ave	90249		6y, 05/28/2014, Hud_2014_0 527_003   6y, 05/29/2014, Hud_2014_0 505_006   6y, 05/29/2014, Hud_2014_0 505_006				4064- 022- 009		1942
	663976				15067	Sutro Ave	90249		6y, 11/30/2015, Hud_2015_1 130_001				4064- 019- 023		1942
	668709				15523	Van Ness Ave	90249		6y, 10/17/2016, Hud_2016_1 017_005				4069- 014- 023		1943
177423	430660	28099	The Howard House	19-0247- 001^ Survey Number	1727	W 130 <sup>th</sup> St	90247	Western Ave (Corridor)	5s2, 0247- 0072-0000				6102- 001- 022	P	1926

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
- ,	667949				812	W 132 <sup>nd</sup> St	90247		6u, 08/01/2002,							1949
	514498	184110			2908	W 133 <sup>rd</sup> St	90249		6y, 08/04/2011, Hud110728b				4060- 008- 025		P	1955
	513349	184677			2919	W 133 <sup>rd</sup> St	90249		6y, 11/22/2010, Hud101110b				4060- 007- 048		P	1956
	657296				2008	W 134 <sup>th</sup> St	90249		6y, 10/29/2014,				4061- 016- 017			
177424	430661	28100	Kobata Nursery (Office)	19-0247- 001^ Survey Number	1433	W 139 <sup>th</sup> St	90247	Brighton Ave (Corridor)	5s2, 0247- 0073-0000						P	1928
177425	430662	28101	The James Kobata House	19-0247- 001^ Survey Number	1448	W 139 <sup>th</sup> St	90247	Brighton Ave (Corridor)	5s2, 0247- 0074-0000				6120- 020- 013		P	1935
	680786				2617	W 141 Pl	90249		6y, 09/19/2012, Hud120917k				4059- 020- 001			1962
	680789				2907	W 141 Pl	90249		6y, 09/19/2012, Hud120917j				6103- 030- 021			1960
	680776		2621 W 141 <sup>st</sup> Pl		2621	W 141 <sup>st</sup> Pl	90249		6y, 11/20/2012, Hud_2012_1 120_002				4059- 020- 002			1959
	514576	184041			2811	W 141 <sup>st</sup>	90249		6y, 10/01/2010, Hud100916d				4059- 020- 009		P	1959
	514527	184141			2904	W 141 <sup>st</sup> Pl	90249		6y, 01/07/2011, Hud101217g						P	
	514575	184040			2911	W 141 <sup>st</sup> Pl	90249		6y, 10/01/2010, Hud100916e				4059- 020- 013		P	1958
	512050	186019			2923	W 141 <sup>st</sup> Pl	90249		6y, 10/19/2011, Hud111014n				4059- 020- 016		P	1958

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
17)	514572	184037			2924	W 141 <sup>st</sup> Pl	90249		6y, 10/01/2010, Hud100916f				4059- 019- 002		P	1960
	516076	182476			2927	W 141 <sup>st</sup> Pl			6y, 03/30/2011, Hud110321p							
	680825				2057	W 144 St	90249		6y, 12/05/2012, Hud_2012_1 203_006				4062- 001- 024			1952
	664005				1202	W 144 <sup>th</sup> St	90247		6y, 11/03/2015, Hud_2015_1 029_005				6114- 034- 024			1957
	663918				1206	W 144 <sup>th</sup> St	92047		6y, 11/13/2015, Hud_2015_1 110_001   6y, 11/13/2015, Hud_2015_1 112_001				6114- 034- 023			1957
	664009				1219	W 144 <sup>th</sup> St	92047		6y, 11/03/2015, Hud_2015_1 029_008				6114- 034- 005			1957
	664007				1226	W 144 <sup>th</sup> St	90247		6y, 11/03/2015, Hud_2015_1 029_007				6114- 034- 013			1958
	664003				1242	W 144 <sup>th</sup> St	92047		6y, 11/03/2015, Hud_2015_1 029_003				6114- 034- 014			1958
	664004				1247	W 144 <sup>th</sup> St	90247		6y, 11/03/2015, Hud_2015_1 029_004				6114- 034- 012			1958
	511193	187071			1715	W 144 <sup>th</sup> St	90247		6y, 01/25/2012, Hud120117a   6y, 07/27/2012, Hud120713a				6103- 002- 042		P	1960

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177426	430663	28102			1418	W 145 <sup>th</sup> St	90247	Normandie (Corridor)	5s2, 0247- 0075-0000						P	1915
177427	430664	28103			1519	W 145 <sup>th</sup> St	90247	145 <sup>th</sup> St (Corridor)	5s2, 0247- 0076-0000				6103- 005- 045		P	1910
	510557	187670			1522	W 145 <sup>th</sup> St	90247		6y, 01/06/2012, Hud111229a				6103- 012- 105		P	1958
177428	430665	28104	The John R Brown House	19-0247- 001^ Survey Number	1708	W 145 <sup>th</sup> St	90247	Western Ave (Corridor)	5s2, 0247- 0077-0000				6103- 014- 050		P	1928
177429	430666	28105	The Charles E. Wallin House	19-0247- 001^ Survey Number	1726	W 145 <sup>th</sup> St	90247	Western Ave (Corridor)	3s, 0247- 0078-0000				6103- 014- 047		P	1893
177430	430667	28106	110,000		1742	W 145 <sup>th</sup> St	90247	Western Ave (Corridor)	5s2, 0247- 0079-0000				6103- 014- 043		P	1898
	516084	182487			1611	W 146 St	90247		6y, 06/02/2011, Hud110527f						P	1968
177431	430668	28107	The Paul C Carter House	19-0247- 001^ Survey Number	1504	W 146 <sup>th</sup> St	90247	Halldale (Corridor)	5s2, 0247- 0080-0000				6103- 019- 020		P	1914
	680807				1713	W 147 <sup>th</sup> St	90247		6y, 08/17/2012, Hud120810b				6103- 021- 011			1956
	680802				1735	W 147 <sup>th</sup> St	90247		6y, 08/17/2012, Hud120810a				6103- 030- 021			1962
	510556	187669			1739	W 147 <sup>th</sup> St	90247		6y, 01/06/2012, Hud111229b				6103- 030- 020		P	1957

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
19)	675417				1819	W 148 <sup>th</sup>	90249		6y, 09/11/2017, Hud_2017_0 911_005				4062- 016- 017			1944
	665658				1120	W 149 <sup>th</sup> St	90247		6y, 06/22/2016, Hud_2016_0 620_008   6y, 07/22/2016, Hud_2016_0 620_008				6114- 024- 004			1953
177432	430669	28108			1836	W 152 <sup>nd</sup> St	90247	Western Ave (Corridor)	5s2, 0247- 0081-0000				4063- 006- 010		P	1926
177433	430670	28109			1860	W 152 <sup>nd</sup> St	90247	Western Ave (Corridor)	5s2, 0247- 0082-0000				4063- 006- 008		P	1920
	510553	187666			1923	W 154 <sup>th</sup>	90249		6y, 01/06/2012, Hud111229d				4063- 008- 029		P	1952
	511541	186593			2629	W 155 <sup>th</sup> St	90249		6y, 06/25/2010, Hud100527g				4069- 017- 019			1943
	680808				2116	W 157 <sup>th</sup> St	90249		6y, 08/17/2012, Hud120810c				4063- 014- 008			1960
	511192	187069			2132	W 157 <sup>th</sup> St	90249		6y, 01/25/2012, Hud120113a				4063- 014- 004		P	1960
	676319				2403	W 157 <sup>th</sup> St	90249		6y, 10/28/2016, Hud_2016_1 003_003				4069- 024- 014			1943

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel Milepo	st Ownership	Construction Year(s)
177434	430671	28110			1011	W 161 <sup>st</sup> St	90247	New Hampshire (Corridor)	5s2, 0247- 0083-0000				6113- 028- 011	P	1911
177435	430672	28111			1022	W 161 <sup>st</sup> St	90247	Vermont (Corridor)	5s2, 0247- 0084-0000				6113- 024- 009	P	1917
1177436	430673	28112	Fred S. Thompson House	19-0247- 001^ Survey Number	1029	W 161 <sup>st</sup> St	90247	Berendo (Corridor)	5s2, 0247- 0085-0000				6113- 027- 019	P	1910
177437	430674	28113	The Jeff Clark House	19-0247- 001^ Survey Number	1203	W 162 <sup>nd</sup> St	90247	Budlong (Corridor)	7n, 0247- 0086-0000				6113- 011- 012	P	1926
177438	430675	28114	The Earl H Stewart House	19-0247- 001^ Survey Number	1212	W 162 <sup>nd</sup> St	90247	Budlong (Corridor)	5s2, 0247- 0087-0000				6113- 013- 009	P	1925
	680778		1157 W 163 <sup>rd</sup> St		1157	W 163 <sup>rd</sup> St	90247		6y, 11/20/2012, Hud_2012_1 120_003				6113- 022- 011		1946
	480279	81578			1027	W 164 <sup>th</sup> St			6y, 05/22/1989, Hud871027c					U	1918
177443	430680	28119	Willie W. Dow House	19-0247- 001^ Survey Number	1037	W 164 <sup>th</sup> St	90247	New Hampshire (Corridor)	5s2, 0247- 0092-0000				6113- 020- 014	P	1902
177444	430681	28120	McComick Mortuary	19-0247- 001^ Survey Number	1044	W 164 <sup>th</sup> St	90247	New Hampshire (Corridor)	7n, 0247- 0093-0000				6113- 020- 009	P	1914
	480281	81580			1047	W 164 <sup>th</sup> St			6y, 05/22/1989, Hud871027c					U	1940
177445	430682	28121	Carl E. Huntington House	19-0247- 001^ Survey Number	1054	W 164 <sup>th</sup> St	90247	Berendo (Corridor)	5s2, 0247- 0094-0000				6113- 020- 007	P	1912

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel No	Milepost	Ownership	Construction Year(s)
177442	430679	28118	McMillan Mortuary	19-0247- 001^ Survey Number	1061	W 164 <sup>th</sup> St	90247	Vermont (Corridor)	5s2, 0247- 0091-0000				6113- 021- 007		P	1912
177447	430684	28123			110	W 164 <sup>th</sup> St	90247	Berendo (Corridor)	5s2, 0247- 0096-0000				6113- 018- 021		P	1908
1177446	430683	28122	The Stillman Gates House	19-0247- 001^ Survey Number	1104	W 164 <sup>th</sup> St	90247	Berendo (Corridor)	5s2, 0247- 0095-0000				6113- 018- 022		P	1905
	511237	186894			1110	W 164 <sup>th</sup> St	90247		6y, Hud111012a						P	1903
177448	430685	28124	The Phillip B. Chase House	19-0247- 001^ Survey Number	1133	W 164 <sup>th</sup> St	90247		5s2, 0247- 0097-0000				6113- 019- 008		P	1905
177449	430686	28125	The Sarah Fuber House	19-0247- 001^ Survey Number	1144	W 164 <sup>th</sup> St	90247	Berendo (Corridor)	5s2, 0247- 0098-0000				6113- 018- 014		P	1909
177450	430687	28126	The Milton B. Clark House	19-0247- 001^ Survey Number	1253	W 164 <sup>th</sup> St	90247	Raymond (Corridor)	5s2, 0247- 0099-0000				6113- 015- 022		P	1913
177440	430677	28116	The Beri Fanning House	19-0247- 001^ Survey Number	802	W 164 <sup>th</sup> St	90247	Menlo Ave (Corridor)	7n, 0247- 0089-0000				6120- 018- 032		P	1900
177441	430678	28117	John W. Klasgye House, Hark House	19-0247- 001^ Survey Number	835	W 164 <sup>th</sup> St	90247	Menlo Ave (Corridor)					6120- 018- 022		P	1892
177452	430689	28128	The Arellano House	19-0247- 001^ Survey Number	1745	W 165 <sup>th</sup> Pl	90247		5s2, 0247- 0101-0000				6105- 002- 017		P	1905
177451	430688	28127	Gardena First United Methodist Church	19-0247- 001^ Survey Number	812	W 165 <sup>th</sup>	90247	Menlo Ave (Corridor)	5s2, 0247- 0100-0000				6121- 007- 034		P	1950

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel M No	Iilepost	Ownership	Construction Year(s)
177453	430690	28129			1122	W 166 <sup>th</sup> St	90247		5s2, 0247- 0102-0000						P	1928
177454	430691	28130			1139	W 166 <sup>th</sup> St	90247	New Hampshire (Corridor)	5s2, 0247- 0103-0000				6111- 005- 010		P	1905
177457	430694	28133	The Mary & Nimrod Woody House	19-0247- 001^ Survey Number	1215	W 166 <sup>th</sup> St	90247	Normandie (Corridor)	5s2, 0247- 0106-0000				6111- 006- 025		P	1907
177458	430695	28134			1247	W 166 <sup>th</sup> St	90247	Normandie (Corridor)	5s2, 0247- 0107-0000						P	1908
177455	430692	28131	The Charles E Smith House	19-0247- 001^ Survey Number	1309	W 166 <sup>th</sup> St	90247	Normandie (Corridor)	5s2, 0247- 0104-0000				6111- 006- 014		P	1911
177456	430693	28132	Gardena Buddhist Church	19-0247- 001^ Survey Number	1517	W 166 <sup>th</sup> St	90247		5s2, 0247- 0105-0000				6105- 017- 044		P	1963
177462	430699	28138			1038	W 167 <sup>th</sup> St	90247	New Hampshire (Corridor)	5s2, 0247- 0111-0000				6111- 003- 011		P	1924
177459	430696	28135	The First United Methodist Church	19-0247- 001^ Survey Number	739	W 167 <sup>th</sup> St	90247	Hoover Ave (Corridor)	5s2, 0247- 0108-0000				6121- 006- 037		P	1900
177460	430697	28136	The Abel L. Lewis House	19-0247- 001^ Survey Number	750	W 167 <sup>th</sup> St	90247	Hoover Ave (Corridor)	5s2, 0247- 0109-0000				6121- 008- 017		P	1892
177461	430698	28137			757	W 167 <sup>th</sup> St	90247	Hoover Ave (Corridor)	5s2, 0247- 0110-0000				6121- 006- 034		P	1910

Primary No (P- 19-)	Otis ID	Property Number	Name	Aliases and Alias Types	Street Number	Street Name	Zip	Other Geography	Evaluation Info	District Elements	Parent District	Associated Resources	Parcel Milepost No	Ownership	Construction Year(s)
177463	430700	28139			1430	W 182 <sup>nd</sup> St	90247	Normandie (Corridor)	5s2, 0247- 0112-0000				6108- 017- 007	P	1895
177353	430590	28029	Barbara P Jones House	19-0247- 001^ Survey Number	730	W Alondra Blvd	90247	Hoover Ave (Corridor)	5s2, 0247- 0001-0000					P	1908
177354	430591	28030	Dr Paul W McMath House	19-0247- 001^ Survey Number	835	W Alondra Blvd	90247	Menlo Park (Corridor)	5s2, 0247- 0002-0000				6120- 016-04	P	1922
177355	430592	28031			838	W Alondra Blvd	90247	Menlo Park (Corridor)	5s2, 0247- 0003-0000				6120- 017- 001	P	1908
177362	430599	28038	Strawberry Park Library	19-0247- 001^ Survey Number	1218	W Compton Blvd	90247	Budlong Ave (Corridor)	5s2, 0247- 0010-0000				6114- 012- 011	P	1929
177363	430600	28039	Pursche House	19-0247- 001^ Survey Number	1305	W Compton Blvd	90247	Raymond (Corridor)	5s2, 0247- 0011-0000				6114- 008- 016	P	1933
177364	430601	28040	Hiraizumi House	19-0247- 001^ Survey Number	2007	W Compton Blvd	90249	Grammerc y Pl (Corridor)	5s2, 0247- 0012-0000				4062- 013- 019	P	1936
177401	430638	28077			1107	W Magnolia Ave	90247	Vermont (Corridor)	5s2, 0247- 0049-0000				6113- 033- 013	P	1905
	522790	174905			1251	W Redondo Beach Blvd	90247		6y, 01/08/2009, Fcc081201b				6114- 011- 023	P	1963
	513082	185033			2901	W Rosecran s Ave	90249		6y, 08/29/2011, Hud110826j				4059- 019- 030	P	1958
	516087	182490			2917	W Rosecran s Ave	90249		6y, 06/02/2011, Hud110527d				4059- 019- 034	P	1958
	516085	182488			2929	W Rosecran s Ave	90249		6y, 06/02/2011, Hud110527e				4059- 019- 036	P	1978

### APPENDIX E. NATIVE AMERICAN CONSULTATION

#### Sacred Lands File & Native American Contacts List Request

#### Native American Heritage Commission

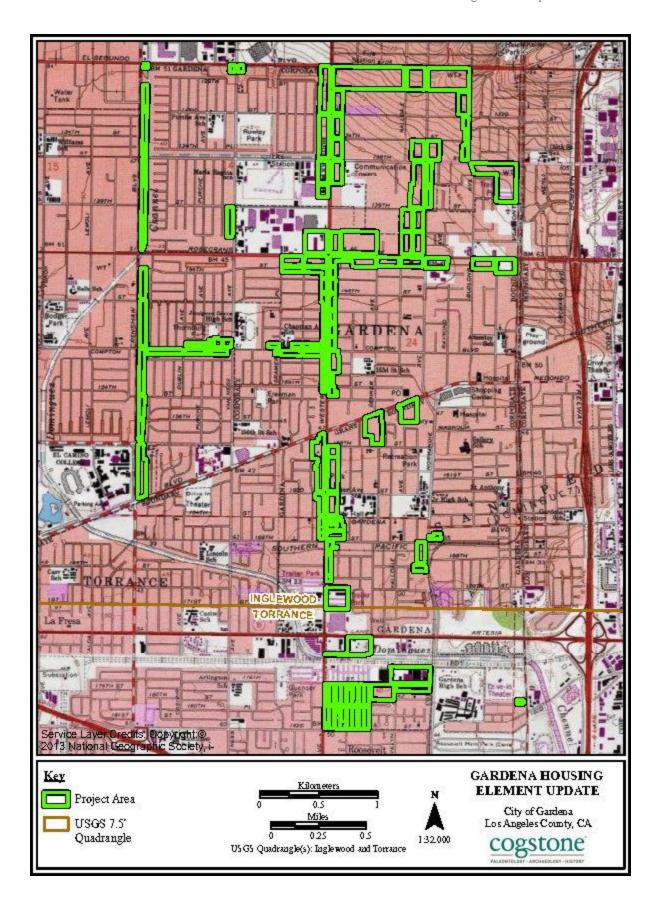
1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691 916-373-3710 916-373-5471 – Fax nahc@nahc.ca.gov

Ir formation Below is Required for a Sacred Lands File Search

?roject: <u>Gardena l</u>	Housing Element Updat	e Project
County: <u>Los Angel</u>	es	
USGS Quadrangle	Name: <u>Inglewood and T</u>	Forrance 7.5'
Fownship: 3S	Range: <u>14W</u>	Section(s): 13, 14, 23, 24, 25, 26, 36
Cownship:	Range: Sect	zion(s):
Company/Firm/Ag	ency: <u>Cogstone Resourc</u>	e Management
Street Address: <u>151</u>	8 W. Taft Ave.	
City: Orange		Zip: <u>92865</u>
Phone: 714-974-83(	00	
Fax: 714-974-8303		
Email: cagstanacan	sult@coastone com	

#### Project Description:

The City of Gardena (City) is in the process of updating its Housing Element for the Sixth Cycle which is due October 15, 2021. The City will adopt the Housing Element in accordance with the statutory deadline. At some point while the Housing Element is in process, the City will begin the process of amending the land use portion of the General Plan and the City's zoning map and ordinances to correspond to the Sixth Cycle Housing Element Update.





Chairperson Laura Miranda Luiseño

Vice Charperson Reginald Pagaling Chumash

Paruamentarian Russell Attebery Koruk

Storetary Sara Dutschke Miwok

Commissioner William Mungary Paiute/White Mountain Apache

Commissioner Isaac Bojorquez Chlone-Costanoan

Commissioner Buffy McQuillen Yokayo Pomo, Yuki, Nomlaki

Commissioner **Wayne Nelson** Luiseño

Commissioner Stanley Rodriguez Kumeyaray

Executive Secretary Raymond C. Hitchcock Miwok/Nisenan

NAHC HEADQUARTERS 1550 Harbor Boulevard Suite 100 West Sacramento, California 95691 (916) 373-3710 nahc@nahc.ca.gov NAHC.ca.gov STATE OF CALIFORNIA

Gavin Newsom, Governor

#### NATIVE AMERICAN HERITAGE COMMISSION

March 29, 2022

Cogstone Resource Management

Via Email to: cogstoneconsult@cogstone.com

Re: Gardena Housing Element Update Project, Los Angeles County

To Whom It May Concern:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were <u>negative</u>. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: <a href="mailto:Andrew.Green@nahc.ca.gov">Andrew.Green@nahc.ca.gov</a>.

Sincerely,

Andrew Green

Cultural Resources Analyst

ndrew Green

Attachment

Page 1 of 1

# APPENDIX F. PALEONTOLOGICAL SENSITIVITY RANKING CRITERIA

PFYC Description Summary (BLM 2016)	PFYC Rank
<b>Very Low</b> . The occurrence of significant fossils is non-existent or extremely rare. Includes igneous (excluding air-fall and reworked volcanic ash units), metamorphic, or Precambrian rocks. Assessment or mitigation of paleontological resources is usually unnecessary except in very rare or isolated circumstances that result in the unanticipated presence of fossils.	1
<b>Low</b> . Sedimentary geologic units that are unlikely to contain vertebrate or scientifically significant nonvertebrate fossils. Includes rock units less than 10,000 years old and sediments with significant physical and chemical changes (e.g., diagenetic alteration) which decrease the potential for fossil preservation. Assessment or mitigation of paleontological resources is not likely to be necessary.	2
Moderate. Units are known to contain vertebrate or scientifically significant nonvertebrate fossils, but these occurrences are widely scattered and/or of low abundance. Common invertebrate or plant fossils may be found and opportunities may exist for casual collecting. Paleontological mitigation strategies will be based on the nature of the proposed activity.  Management considerations cover a broad range of options that may include record searches, predisturbance surveys, monitoring, mitigation, or avoidance. Surface-disturbing activities may require assessment by a qualified paleontologist to determine whether significant paleontological resources occur in the area of a proposed action, and whether the action could affect the paleontological resources.	3
High. Geologic units containing a high occurrence of significant fossils. Fossils must be abundant per locality. Vertebrates or scientifically significant invertebrate or plant fossils are known to occur and have been documented, but may vary in occurrence and predictability.  Mitigation plans must consider the nature of the proposed disturbance, such as removal or penetration of protective surface alluvium or soils, potential for future accelerated erosion, or increased ease of access that could result in looting. Detailed field assessment is normally required and on-site monitoring or spot-checking may be necessary during land disturbing activities. In some cases avoidance of known paleontological resources may be necessary.	4
Very High. Highly fossiliferous geologic units that consistently and predictably produce vertebrate or scientifically significant invertebrate or plant fossils. Vertebrate fossils or scientifically significant invertebrate fossils are known or can reasonably be expected to occur in the impacted area. Paleontological resources are highly susceptible to adverse impacts from surface disturbing activities.  Paleontological mitigation may be necessary before or during surface disturbing activities. The area should be assessed prior to land tenure adjustments. Pre-work surveys are usually needed and on-site monitoring may be necessary during land use activities. Avoidance or resource preservation through controlled access, designation of areas of avoidance, or special management designations should be considered.	5
Unknown. An assignment of "Unknown" may indicate the unit or area is poorly studied and field studies are needed to verify the presence or absence of paleontological resources. The unit may exhibit features or preservational conditions that suggest significant fossils could be present, but little information about the actual unit or area is known.  Literature searches or consultation with professional colleagues may allow an unknown unit to be provisionally assigned to another Class, but the geological unit should be formally assigned to a Class after adequate survey and research is performed to make an informed determination.	U
<b>Water or Ice.</b> Typically used only for areas which have been covered thus preventing an examination of the underlying geology.	W, I

### APPENDIX G. DPR FORMS