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## V. ENVIRONMENTAL IMPACT ANALYSIS

### D. CULTURAL RESOURCES

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#### INTRODUCTION

This section summarizes and incorporates by reference the information presented in the Phase 1 Archeological Survey of the Marina del Rey Tower Study Area, Los Angeles, Los Angeles County, California prepared by W & S Consulting, November 20, 2006 and the Data Recovery Plan for CA-LAN-47, (Technical Report 07-05) Marina del Rey, California prepared by Ciolek-Torrello et al. of Statistical Research, Inc. in February 2007. These reports are attached as Appendix D-1 and Appendix D-2, respectively, to this Draft EIR.

#### ENVIRONMENTAL SETTING

The proposed project involves the construction of a multistory mixed-use building on an approximately 1.09-acre parcel located at 4363 Lincoln Boulevard, in the Venice community planning area of the City of Los Angeles. The triangular-shaped project site is generally bounded by Lincoln Boulevard on the northeast, a surface (medical center) parking lot on the southwest, and Ralphs grocery store on the northwest. The site is currently in use as a car rental facility and is surrounded by commercial development. An abandoned Pacific Electric Railroad right-of-way runs through the southeastern part of the property from Lincoln Boulevard to Admiralty Way.

#### Historic Background

A small portion (approximately 600 square meters) of southeastern portion of the property, along the Pacific Railway right-of-way is within the recorded boundaries of a documented prehistoric archaeological site, the Admiralty site, CA-LAN-47. This site, which extends into the Marina, was first recorded as a large, prehistoric site in the 1940s. Salvage investigations carried out during the construction of the Marina in the 1960s uncovered human remains. During the early 1990s, intensive data recovery excavations by Statistical Research, Inc. (SRI), in the old railroad right-of-way immediately west of the property found a midden area (a prehistoric refuse heap) with only a few isolated human bones. Using ethnographic and ethnohistoric documents, some scholars have concluded that the site represented the remains of Sa'angna, by some accounts a Gabrielino village occupied in the Ballona Wetlands during the time of Spanish contact. Based on this, the area surrounding the project area has been designated a portion of the City of Los Angeles Historic-Cultural Monument No. 490. Investigations by SRI at CA-LAN-47, however, found no evidence of a historical-period Native American village, but rather a prehistoric late period settlement that had been situated along the edge of the old Ballona Lagoon. SRI's extensive ethnohistoric research in the region has also failed to identify any evidence to support the placement of Sa'angna in the Ballona area. Instead, SRI has found

ethnographic and archaeological evidence that indicates Native American settlement in the Ballona, during the early historic period, was concentrated over a mile to the southeast, along Centinela Creek and the edge of the Westchester Bluffs. SRI also identified the Channel Gateway site (CA-LAN-1596H) 150 meters west of the project area. This site represents early twentieth century agricultural, commercial and industrial activities.

The proposed project site was once along the margins of a part of the Ballona Wetlands, which consisted of lagoons, tidal flats and marshes where Ballona and Centinela Creeks emptied into Santa Monica Bay. Environmental conditions have changed dramatically in the last few hundred years. Although no natural vegetation still exists in the immediate area, given the history of development which the area has experienced, it is likely that the site originally contained a coastal sage scrub habitat, with access to marsh vegetation, tidal flats and the littoral zone.

Fingers of sandy alluvium, which reached out from the base of the Westchester Bluffs, made inviting places for people to camp and to process the food they collected from the marsh and lagoon. Spring-fed Centinela Creek flowed along the base of the bluffs, providing an ample source of freshwater for these camps. The bluffs overlooking the wetlands also were an important place for prehistoric settlement. The project site, located at the northeastern edge of the marsh, is one of only three known sites, two prehistoric and one historical-period Native American site, found away from the bluffs and Centinela Creek. The proposed project site is situated in a zone known to have comprised a portion of the prehistoric Canaliño culture area (Rogers 1929; Wallace 1955) and historically to have been located within the territory of the Gabrielino ethnolinguistic group (Kroeber 1925; Johnston 1962; Bean and Smith 1978).

The coastal Southern California region contains an archaeological record that represents a wide array of cultural traditions spanning much of the Holocene Epoch (approximately 10,000 years ago to the present). The coastal landscape throughout the Southern California coast, especially during the early to mid-Holocene, featured lagoons, large estuaries and bays harboring a rich community of life, such as mollusk, fish and waterfowl. Wallace (1955) suggested four prehistoric periods for coastal Southern California, which emphasize the archaeological cultures and the relationships between them. The four periods are briefly described below:

The Early Man/Big Game Hunting era is the earliest period, and is correlated with the end of the Pleistocene or Ice Age. This would represent an occupation prior to about 10,000 years before present (BP). The deposits from this era are characterized by crude stone chopping tools, rock art and a limited number of large, fluted projectile points which most likely functioned as parts of spears. Although it is likely that these spear points were used in southern California, the isolated nature of the discovered artifacts precludes any certain inference about their use or function in the southern California region.

The next period, often referred to as the Millingstone Period, occurred from about 10,000 BP to 3,000 BP, with most sites of this stage dating between 8,500 and 3,500 years in age. Recent studies (Erlandson 1988; Erlandson and Colton 1991) provide evidence of a significant, even if small, population of coastal hunter-gatherers in the region before 7,000 years ago. Evidence indicates that members of this coastal group were generalized foragers, whose primary protein sources were shellfish and other marine sources. Later Early Millingstone sites (approximately 6,000 BP) contain large numbers of groundstone artifacts, along with crude choppers, scraper planes and other core/cobble tools.

The third prehistoric period, known as the Intermediate Period, is believed to have begun about 3,500 years ago and to have lasted until about 1200 in the Common Era (CE). It is marked on the coast by a growing exploitation of marine resources, the appearance of the hopper mortar (Eberhart 1961) and a diversification and increase in the number of chipped stone tools. Projectile points, in particular, are more common at sites than previously, and artifacts such as fishhooks and bone gorges also appear.

The final prehistoric period began about 1,000 BP and ended with the arrival of Europeans. This final period was a time of tremendous population growth along the southern California coast. There are more sites, and a greater variety of sites with greater internal differentiation, than at any other time in prehistory. Villages with complex site layouts and burial grounds with highly variable mortuary treatments appeared, suggesting the development of social differentiation. Settlement also changed fundamentally in the Ballona, but not what one might expect, at least initially. As the Ballona Lagoon became a sediment-choked estuary, all areas of the wetlands were abandoned except the lagoon edge. For a short time, the only occupied area of the Ballona was the sandy knoll on which the Admiralty site was situated. Eventually, however, population was concentrated in one very large community, nested for 1.5 km along the base of the bluff, at two sites, LAN-62 and LAN-211, near the mouth of Centinela Creek. At 2000 BP, nearly every habitable location on the bluff tops and along Centinela Creek had hosted human activity. Less than a thousand years later, occupation was concentrated in one small area.

During this period, among the Chumash to the northwest, a rise in social complexity has been shown to have been associated with the development of craft specialization, involving the use of standardized micro-drills to mass produce shell beads on Santa Cruz Island (Arnold 1987). This apparently contributed if not caused the appearance of a simple chiefdom in the southern Chumash region (Whitley and Clewlow 1979; Whitley and Beaudry 1991).

While there is no direct evidence that the Gabrielino developed into a chiefdom like the neighboring Chumash, the Canaliño period nonetheless witnessed a florescence of local aboriginal culture paralleling the Chumash case. With the associated local expansion in population and the establishment of permanent settlements on the coast, a high degree of sociopolitical complexity and a sophisticated maritime economy developed. It was during this period that the inhabitants of the Santa Barbara Channel and Los Angeles

County region achieved levels of cultural and social sophistication perhaps unrivaled by hunter-gatherer groups anywhere else in the world.

In 1771, Mission San Gabriel was founded. The clerical leaders of the mission encouraged, and then forced natives from the Los Angeles area to congregate at San Gabriel, from where they acquired the name Gabrielino. As the natives moved out of the west Los Angeles area, Spanish stock raisers moved in. By 1819, the Machado and Talamantes families were running cattle in the area of Ballona Creek (Adler 1969:2). Rancho La Ballona was granted to members of these two families in 1839. The rancho lasted until 1865, when Machado, by that time one of the wealthiest men in Los Angeles, died. The rancho was divided and numerous heirs were granted small parcels, most of which were sold to Americans within a decade.

Commercial and industrial interest in the area began in the 1880s, with speculative schemes and recreational use of the Ballona for hunting and fishing. This was followed by the founding of Venice just after the turn of the century. In the early twentieth century, the oil industry took an interest in the Ballona Wetlands and, by 1931 there were 325 wells in operation in the area (Altschul et al. 1991). Working alongside the oil wells were truck farmers, many of whom were Japanese. In the 1940s the Ballona became associated with Howard Hughes, who purchased large portions of the Ballona to pursue his movie-making interests. With the entry of the United States into World War II, Hughes shifted the orientation of the region's economy when he built the Culver City plant to manufacture military aircraft. The establishment of Marina del Rey in the 1960s led to a renewal of interest in recreational activities. Today, the region boasts a diverse economy and lifestyle, ranging from movie production to light industry and upscale residential development.

### **Regulatory Framework**

Generally, a lead agency must consider a property an historic resource under the California Environmental Quality Act if it is eligible for listing in the California Register of Historical Resources (CRHR). The CRHR is modeled after the National Register of Historic Places (NRHP). Furthermore, a property is presumed to be historically significant if it is listed in a local register of historic resources or has been identified as historically significant in an historic resources survey (provided certain criteria and requirements are satisfied) unless a preponderance of evidence demonstrates that the property is not historically or culturally significant. The NRHP and CRHR designation programs are discussed below.

#### *National Register of Historic Places*

The NRHP is "an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."

### Criteria

To be eligible for listing in the NRHP, a property must be at least fifty years of age and possess significance in American history and culture, architecture, or archaeology. A property of potential significance must meet one or more of four established criteria:

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

### Physical Integrity

According to NRHP Bulletin 15, "to be eligible for listing in the NRHP, a property must not only be shown to be significant under NRHP criteria, but it also must have integrity." Integrity is defined in NRHP Bulletin 15 as "the ability of a property to convey its significance." Within the concept of integrity, the NRHP recognizes seven aspects or qualities that in various combinations define integrity. They are feeling, association, workmanship, location, design, setting and materials.

### Context

To be eligible for listing in the NRHP, a property must also be significant within an historic context. NRHP Bulletin 15 states that the significance of an historic property can be judged only when it is evaluated within its historic context. Historic contexts are "those patterns, themes, or trends in history by which a specific...property or site is understood and its meaning...is made clear." A property must represent an important aspect of the area's history or prehistory and possess the requisite integrity to qualify for the NRHP.

### *California Register of Historical Resources*

In 1992 Governor Wilson signed AB 2881 into law establishing the CRHR. The CRHR is an authoritative guide used by state and local agencies, private groups and citizens to identify historic resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.

The CRHR consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process. The CRHR automatically includes the following:

- California properties listed in the NRHP and those formally Determined Eligible for the NRHP.
- California registered Historical Landmarks from No. 0770 onward.
- Those California Points of Historical Interest that have been evaluated by the Office of Historic Preservation (OHP) and have been recommended to the State Historical Resources Commission for inclusion on the CRHR.

The criteria for eligibility of listing in the CRHR are based upon NRHP criteria, but are identified as 1-4 instead of A-D. To be eligible for listing in the CRHR, a property must be at least fifty years of age and possess significance at the local, State, or national level, under one or more of the following four criteria:

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

CEQA also requires the lead agency to (1) consider whether the project will have a significant effect on unique archaeological resources not eligible for listing in the CRHR and (2) avoid unique archaeological resources when feasible or mitigate any effects to less than significant levels (PRC 21083.2). As used in CEQA, “a unique archaeological resource means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type;
- (3) Is directly associated with a scientifically recognized important prehistoric event or person [PRC 21083.2(g)].

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 at a site or the period that significant individuals made their important contributions to a site. Integrity is the ability of a property to convey its significance. The seven primary aspects of integrity are location, design, setting, materials, workmanship, feeling and association. Simply stated, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.

## **Methodology**

To adequately address this study area for compliance with the current CEQA guidelines, the following tasks were completed:

### *Archival Records Search*

An archival records search was conducted at the California State University, Fullerton, Archeological Information Center (AIC), by AIC staff members to determine;

- (i) if prehistoric or historical archeological sites had been recorded previously within the project site;
- (ii) if the project site had previously been systematically surveyed by archeologists; and/or
- (iii) whether the region of the project site was known to contain archeological sites and thereby be considered archeologically sensitive.

Files and records at the AIC indicate that the project site itself has never been surveyed but that the project address is listed as part of City of Los Angeles Historic-Cultural Monument No. 490, known as Sa’angna. According to this listing:

This site, a portion of the Oxford Triangle Property, was a major village and burial ground circa 1540 of Gabrielino Indians and contains remains of tools, jewelry and weapons. Located at 4213-4363 South Lincoln Boulevard and Admiralty Way.

The site was dedicated on May 1, 1990.

Records at the AIC indicate that the project site is immediately adjacent to the boundary of a recorded archeological site, CA-LAN-47. This site is also known as the Admiralty site and it is apparently the same cultural resource as Los Angeles Historic-Cultural Monument No. 490.

CA-LAN-47 was first recorded around 1948, with archeological excavations on it initially occurring in 1961. These resulted from the construction of Yacht Basin F, to the south of the current study area on the ocean side of Admiralty Way. The 1961 excavation recovered at least two human burials, which appeared to be randomly placed within a shell midden, rather than in a formal cemetery. Subsequent

development in this general area revealed additional areas of site deposit, all located to the south of Admiralty Way and the project site.

More detailed excavations were conducted on the inland side of Admiralty Way by SRI in 1989. This more extensive excavation demonstrated that the midden deposit extended to the southwest edge of the proposed project site. Four isolated human bones were recovered during these excavations. Radiocarbon dates were restricted to CE 1050 to 1150 or the Terminal Middle Period. Projectile points included a number of pre-CE 500 spear points and fragments and numerous arrow points that are common in this portion of southern California after about CE 1200, suggesting that the span of occupation extended from sometime during the Middle Period into the Late Prehistoric Period. This interpretation is supported by shell beads also found at the site, which are similar in age. Notably absent from the collection are examples of protohistoric or historic beads, post-dating about CE 1600.

Although no archeological investigations have been completed within the project site, excavations on the property immediately adjacent to the site to the west, indicate that midden deposits extend to the western limit of the project site.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G to the State CEQA Guidelines, a significant impact would occur if a project would:

- (a) Cause a substantial adverse change in significance of a historical resource as defined in CEQA Section 15064.5;
- (b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines;
- (c) Directly or indirectly destroying a unique paleontological resource or site or unique geologic feature; or
- (d) Disturb any human remains, including those interred outside of formal cemeteries.

Furthermore, as set forth in the City of Los Angeles Draft L.A. CEQA Thresholds Guide, a project would normally have a significant impact upon historic resources if it would result in a substantial adverse change of an historic resource. A substantial adverse change in significance occurs if the project involves:

- (a) Demolition of a significant resource;



- (b) Relocation that does not maintain the integrity and significance of a significant resource; conversion, rehabilitation or alteration of a significant resource which does not conform to the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating historic Buildings; or
- (c) Construction that reduces the integrity or significance of important resources on the site or in the vicinity.

A project would normally have a significant impact upon archeological resources if it could disturb, damage, or degrade an archeological resource or its setting that is found to be important under the criteria of CEQA because it:

- (d) is associated with an event or person of recognized importance in California or American prehistory or of recognized scientific importance in prehistory;
- (e) can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archeological research questions;
- (f) has a special or particular quality, such as the oldest, best, largest, or last surviving example of its kind;
- (g) is at least 100-years-old<sup>1</sup> and possesses substantial stratigraphic integrity;
- (h) involves important research questions that historical research has shown can be answered only with archeological methods;

A determination of significance regarding paleontological resources shall be made on a case-by-case basis, considering the following factors:

- (i) whether, or the degree to which, the project might result in the permanent loss of, or loss of access to, a paleontological resource; and
- (j) whether the paleontological resource is of regional or statewide significance.

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<sup>1</sup> Although CEQA criteria state that "important archaeological resources" are those which are at least 100-years-old, the CRHR provides that any site found eligible for nomination to the NRHP will automatically be included within the CRHR and subject to all protections thereof. The NRHP requires that a site or structure be at least 50-years-old.

As stated above, CEQA mandates public disclosure of a project's potential impacts on archaeological sites, historic properties and Native American sacred places. If the project has a potential to impact an archaeological site, the lead agency must determine whether the site is a historic resource. Accordingly, archaeological sites are historic resources when they are "listed in or determined eligible for listing in," the California Register of Historic Resources (CRHR).<sup>2</sup> The CRHR criteria define a significant cultural resource as one which:

- (a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (b) Is associated with the lives of persons important in our past;
- (c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- (d) Has yielded, or may be likely to yield, information important in prehistory and history.

In enacting the CRHR, the Legislature amended CEQA to clarify which properties are significant, as well as which project impacts are considered to be significantly adverse. A project with an effect that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment. A substantial adverse change in the significance a historic resource means demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. The significance of a historic resource is materially impaired when a project demolishes or materially alters in an adverse manner those physical characteristics that convey its significance and that justify its inclusion in or eligibility for inclusion in the CRHR, local register, or its identification in a historic resources survey.

## **Project Impacts**

### ***Historic Resources***

Based upon the results of records review, including State and federal databases, and an onsite field inspection, there are no known historical resources on the project site. Therefore, development of the proposed project would not cause a substantial adverse change in the significance of any known historical resource. Impacts to historic resources would be less than significant.

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<sup>2</sup> *California Register of Historic Resources, Section 15064.5 [a].*

### ***Archeological Resources***

Based upon the results of records review, including State and federal databases, and an immediately adjacent field inspection, there is a high potential for archeological resources to be present on a least a portion of the project site. Therefore, development of the proposed project could cause a substantial adverse change in the significance of a known archeological resource. Impacts to archeological resources would be potentially significant.

### ***Paleontological Resources***

All portions of the project site have been developed and as such, have been subject to ground disturbing activities such as grading, which could have damaged, destroyed, or removed any paleontological resources that could have been present. Thus, the potential for unique paleontological resources to be present is considered low. However, due to the lack of previous paleontological studies on the project site, it is unknown whether paleontological resources exist at depths that have not been previously excavated.

The proposed project would include the grading and excavation activities. During grading and excavation, there is a possibility of encountering unknown paleontological deposits. Without proper care during grading and excavation, unknown resources could be damaged or destroyed. Therefore, project impacts on unknown paleontological resources would be potentially significant.

### ***Human Remains***

Based upon the results of the records review and field inspections immediately adjacent to the project site, there is the potential for pre-historic human remains to occur on the project site. Therefore, the proposed project may disturb human remains, including those interred outside of a formal cemetery development. Impacts to human remains would be potentially significant.

## **CUMULATIVE IMPACTS**

As previously discussed, there are no historical resources located on the project site. Therefore, the project, in combination with related projects in the vicinity, would not result in a cumulative impact on historical resources.

Development of the related projects would also require grading and excavation that could potentially affect archaeological or paleontological resources or human remains. The cumulative effect of these projects could contribute to the continued loss of subsurface cultural resource, if these resources are not protected upon discovery. CEQA requirements for protecting archaeological and paleontological resources and human remains are applicable to all development in the City of Los Angeles, as are local cultural resource protection ordinances. If subsurface cultural resources are protected upon discovery as

required by law, impacts to those resources would be cumulatively less than significant and would not be cumulatively considerable.

## MITIGATION MEASURES

While it is understood that pursuant to CEQA Guidelines 15126.4 (b)(3)(A) and (B) that preservation in place is the preferred means of mitigating potential impacts to archeological resources, this method has been considered and found infeasible<sup>3</sup> due to the physical and economic constraints of the proposed project. Due to the limited amount of developable area of the project site, the proposed construction footprint for the project requires the entirety of the project site, thus there is no capacity to avoid the potential archeological site through avoidance, deeding the site into a permanent conservation easement, capping the site with chemically stable soil or incorporating the site within an open space.

Therefore, the following mitigation measures pursuant to CEQA Guidelines 15126.4 (b)(3)(C), as recommended by the Data Recovery Plan for CA-LAN-47, (Technical Report 07-05) Marina del Rey, California (MP for CA-LAN-47) prepared by Ciolek-Torrello et al. of Statistical Research, Inc. in February 2007 (attached as Appendix D-2), would be implemented to mitigate potential impacts to archaeological resources, human remains and/or paleontological resources to a less-than-significant level:

### D-1 PLAN OF WORK – ARTIFACT RECOVERY PROGRAM

#### Boundary Identification

Define the site boundaries within the project area through mechanical excavation. The current site boundary, based upon work by Altschul et al. (1992) and Dillon et al. (1988), indicates that LAN-47 extends into the project area, primarily within the Pacific Electric Railroad right-of-way. This part of the site, however, may be its northeast boundary.

Mechanical trenching using an excavator with a flat bucket, or other similar equipment, will be restricted to portions of the project area outside of the recorded boundaries of the Admiralty site. Trenches will be extended to these boundaries to confirm the horizontal and vertical boundaries of LAN-47 within the project area.

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3 Under Public Resources Code 21061.1 'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.

## **Hand Excavation**

Based on the results of boundary identification, a qualified archeological consultant will identify those areas that are to be targeted for hand excavation. Prior to excavation, any mechanical stripping of overburden will be accomplished and any historical-period resources will be identified. Hand excavation will be conducted on 25 percent of the in situ prehistoric site material present in the project area. Excavation of any historical-period properties will be carried out in addition to this sample. Depending on the size of the area to be excavated, as determined by boundary identification, large block excavations will be placed in the heart of the intact midden to identify activity areas and features. Block excavations will be carried out using 1-by-1-m units to maintain spatial control of recovered materials. All 1-by-1-m hand excavation units will be dug in 10-cm levels to the base of the cultural deposit.

Any features found will be fully exposed by hand in 1-by-1-m units. These features will then be drawn and photographed in plan as exposed. Next, features will be sectioned, with their profiles drawn and photographed, followed by the excavation of the second half. Appropriate samples, including chronometric, flotation, pollen, and soil, will be taken from each unit by strata and from the base, middle, and top of each feature.

To process the excavated material for most excavation units efficiently, a mechanical wet-screening facility will be employed. A Powerscreen Mark II (or similar) screening plant, fitted with a double-deck 1/2-over-1/8-inch wire mesh, and spray nozzles will be used to wet-screen the hand-excavated materials from nonfeature contexts. Matrix from non-burial features will be processed in a Dausman Flote-tech Model A (or similar) flotation device. By contrast, matrix from any burial features found will be dry-screened by hand through 1/16-inch screens. After screening, the matrix from any burial will be collected for later reburial with the excavated remains.

Tracking excavations and the quantities of materials will be accomplished by the following set of procedures. Networked computers tied to a central database will allow all manual-excavation forms to be data-entered and printed in the field. In this manner, data entry tasks will be completed in the field. Data entries will be checked for errors and corrected while the archaeologists responsible for completing field forms and performing hand-excavation of units are on-site and before features are processed. A bar-code system will also be used to label excavation lots. Point-provenienced artifacts will also be given a bar-coded label to speed the inventory process and to ensure that none of these artifacts will be misplaced or separated from provenience information. The use of bar codes and in-field data entry will work to speed the excavation, screening and field inventory process, and most importantly, assist with quality control.

### **Mechanical Stripping and Monitoring**

Mechanical stripping and archaeological monitoring of the site material will be the final phase of fieldwork. A quarter of the site material on the project area will be excavated by hand. The other three-quarters will be mechanically stripped to the base of cultural deposits, consistent with the grading envelope of project construction. Archaeologists will direct the mechanical stripping of the area, so that stripping can be done in a controlled manner and allow all diagnostic artifacts, features, and human remains to be identified.

Mechanical stripping will be accomplished using an excavator with a flat bucket, a Gradall tracked excavator, or similar equipment. Stripping procedures will involve the removal of all in situ site materials in small (ca. 2–10-cm) lifts approximately 4 m wide, dug stratigraphically until culturally sterile strata are reached. Stripping-unit number and provenience designation numbers will be assigned to the various stratigraphic levels excavated and sampled. This activity will be closely monitored by a team of qualified archaeologists who will continually check for the presence of cultural features and diagnostic artifacts.

When prehistoric or historical-period cultural features or burials are encountered during stripping, mechanical stripping will be stopped and moved to another area prior to mapping, photographing, and hand excavating the burials or features. Isolated artifacts determined to be either culturally or temporally diagnostic will be mapped using a total station and then collected for analysis. Finally, once hand excavation and mechanical stripping are accomplished, archaeological monitoring of native-ground-disturbing activity will continue to ensure that all prehistoric and historical-period components of the site are identified and mitigated.

### **Treatment of Human Remains**

In recognition of the fact that previous excavations at LAN-47 yielded small numbers of human remains, in the event that human remains are encountered during boundary identification, data recovery, mechanical stripping or archaeological monitoring, all ground-disturbing activities will cease in the immediate area and the City of Los Angeles Department of Public Works Department and the Los Angeles County Coroner shall be immediately notified. If the remains are determined to be Native American, the NAHC shall be notified within 24 hours, who in turn shall notify the person determined to be the most likely descendant of the local Native Americans who shall provide guidance for the appropriate disposition of the remains. Disposition of the human remains and associated grave goods will be in accordance with procedures and requirements set forth in California Health and Safety Code Section 7050.5 and PRC 5097.91 and 5097.98, as amended.

## Analyses

To address artifacts and faunal materials in middens, a qualified archeological consultant will analyze materials from particular strata and features, or what has been referred to as “strong” contexts (e.g., hearths and activity areas). All proveniences will be entered into a database to allow for records and materials to be tracked from the field through the analysis phase. As each material class is analyzed, the results will be entered into the database. All database information is linked and will accompany the collection to curation.

Analysis will be conducted on the following classes of material: flaked stone, ground stone, shell artifacts, bone artifacts, vertebrate faunal, invertebrate faunal, ostracod, soil, and paleobotanical. Chronometric studies will also be performed.

Methodology for each type of analysis shall be performed per the requirements of the Data Recovery Plan for CA-LAN-47, (Technical Report 07-05) Marina del Rey, California prepared by Ciolek-Torrello et al. of Statistical Research, Inc. in February 2007.

## Curation and Data Dissemination

All project-related notes, records, photographs and sorted materials will be curated at a repository that meets federal standards and in accordance with 36 CFR 79. The results of data recovery at LAN-47 will be presented in a technical report of professional standards. This report will contain a summary of the project history, background information on the environment and cultural history, the project research design, fieldwork results, the results of the various analyses, and an assessment of settlement in the Ballona Lagoon region. The report will be presented in draft form to the lead agency of the project, as well as the State Historic Preservation Officer (SHPO). Additionally, local governments and affected Native American groups will be provided copies of the draft report. All comments will be incorporated into the final report. Copies of the final report will be provided to the lead agency, as well as affected Native American groups and local governments. The report will be made available to the profession and general public through the Statistical Research Technical Series

- D-2** The project applicant shall identify a qualified paleontologist prior to any excavation, grading, or construction. The City of Los Angeles Planning Department shall approve the selected paleontologist prior to issuance of the grading permit. The project paleontologist shall attend the pre-grading meeting to discuss how to recognize paleontological resources in the soil during grading activities. The prime construction contractor and any subcontractor(s) shall be cautioned on the legal and/or regulatory implications of knowingly destroying paleontological resources or removing paleontological resources from the project site.

- D-3** If paleontological resources are encountered during the course of site development activities, work in that area shall be halted and the project paleontologist shall be notified of the find. The project paleontologist shall have the authority to temporarily divert or redirect grading to allow time to evaluate any exposed fossil material. "Temporarily" shall be two working days for the evaluation process.
- D-4** If the project paleontologist determines that the resource is significant, then any scientifically significant specimens shall be properly collected by the project paleontologist. During collecting activities, contextual stratigraphic data shall also be collected. The data will include lithologic descriptions, photographs, measured stratigraphic sections, and field notes.
- D-5** Scientifically significant specimens shall be prepared to the point of identification (not exhibition), stabilized, identified, and offered for curation to a suitable repository that has a retrievable storage system.
- D-6** The project paleontologist shall prepare a final report at the end of the earthmoving activities; the report shall include an itemized inventory of recovered fossils and appropriate stratigraphic and locality data. The project paleontologist shall send one copy of the report to the City of Los Angeles Planning Department; another copy should accompany any fossils, along with field logs and photographs, to the designated repository.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Prior to mitigation, impacts with respect to historical resources would be less-than-significant.

Impacts to archaeological resources, human remains and paleontological resources are potentially significant as a result of the construction of the proposed project. However, implementation of Mitigation Measures D-1 through D-6 provided above would ensure that potential impacts would be less than significant.