IV. ENVIRONMENTAL IMPACT ANALYSIS

P. CULTURAL RESOURCES

(2) ARCHAEOLOGICAL RESOURCES

1.0 INTRODUCTION

This section addresses the potential impacts that could occur from the proposed development on archaeological resources that could potentially be present in the Proposed Project site. The analysis addresses the impacts that would occur for the Project as Proposed, for the Project’s Equivalency Program and for the Project’s secondary impacts that would occur from the implementation of the Project’s off-site mitigation measures.

Archaeological resources are the material remains of past human life and behavior. These resources often have scientific, cultural, religious, and educational value. By law, the effects of the Project need to be evaluated for significant archaeological sites that are at least 50 years old.

2.0 ENVIRONMENTAL SETTING

2.1 Regulatory Framework

2.1.1 Federal Level

The National Historic Preservation Act of 1966 (NHPA), as amended, established the Advisory Council on Historic Preservation (an independent Federal agency) to advise the President and Congress on historic preservation matters, to recommend measures to coordinate Federal historic preservation activities, and to comment on federal actions affecting properties included in or eligible for inclusion in the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to consider the effects of their actions on historic properties, provide for public participation, and invite interested parties to participate in a process to address adverse effects on historical properties. To comply with Section 106 of the NHPA, the Advisory Council on Historic Preservation has developed the following five-step process:538

(1) Determine if the Proposed Project is an undertaking subject to the NHPA.

(2) Identify historical properties and evaluate their eligibility for inclusion in the National Register.

(3) Determine whether the federal action, including permit actions, would have an adverse effect on historical properties.

(4) Resolve the adverse effect of the Project culminating in a Memorandum of Agreement or Programmatic Agreement among the parties.

(5) Proceed with undertaking if the parties cannot come to an agreement, proceed with the federal action after taking into account the Advisory Council on Historic Preservation comments.

Pursuant to Section 800.13 of the regulations (36 CFR Part 800) that implement Section 106 of the National Historic Preservation Act (16 U.S.C. 470f), a Programmatic Agreement among the U.S. Army Corps of Engineers Los Angeles District, the Federal Advisory Council on Historic Preservation and the State Historic Preservation Officer was executed on October 22, 1991 (Appendix O-1 of the EIR). The agreement was reached in connection with the granting of a federal permit by the United States Army Corps of Engineers for the fill of wetlands within the former Playa Vista Planning Area (USACE Permit No 90-426-EV). The USACE conferred with the Native American Heritage Commission and invited all affiliated Native American organizations and/or individuals to review the Agreement; two local Native American groups of Gabrielino descent responded and signed the Programmatic Agreement. In October 2001, the Programmatic Agreement was extended to cover the time period through October 22, 2011.

In compliance with the Programmatic Agreement, the U.S. Army Corps of Engineers (USACE) inventoried the Area of Potential Effect (APE) for historic properties and developed Archaeological Treatment Plans and an Historic Resources Treatment Plan for historic properties that will be adversely affected by the Proposed Project.


540 Sudol, Mark F., Chief, Regulatory Branch, Department of the Army, letter to Mr. Marc Huffman, Playa Vista, October 30, 2001.

The Programmatic Agreement addresses all of the former Playa Vista Planning Area. It assures that the 1992 permit authorizing the fill of wetlands within the Proposed Project site will be administered in accordance with the requirements of the Playa Vista Archaeological and Historical Research Design that are applicable to the land outside of the wetland pockets as well as within.

The Research Design provides a comprehensive framework for evaluating archaeological and historical resources that may be affected by the Proposed Project. The Research Design presents relevant research questions, provides current knowledge of the archaeological and historical resources, describes potential impacts to prehistoric resources, and outlines future steps to mitigate potential adverse impacts of the Proposed Project on these resources. The Research Design has been approved by the U.S. Army Corps of Engineers, the State Historic Preservation Officer, the California Coastal Commission, the City of Los Angeles, the U.S. Department of Justice, the Sixth Council District of the Los Angeles City Council, and Native Americans of Gabrielino descent.542 A peer review panel of three archaeologists543 has also reviewed the Research Design, as required by the archaeological guidelines of the California Coastal Act. The final Research Design incorporates relevant information and comments obtained from public agencies and individuals knowledgeable about archaeological sites and the history of the Project site. Based on that design, on-going field research has been occurring through the present.

In April 2003, SRI prepared an update to the Research Design to bring it current with research activities of the past 12 years: “At the Base of the Bluffs.”544 The update addresses activities regarding the Proposed Project, inclusive of research, resource boundary testing, National Register evaluations, and an Archaeological Treatment Plan (ATP) for resources encountered in the Proposed Project Site. As such, the update constitutes the Project specific Research Design and Treatment Plan for the Proposed Project.

The Programmatic Agreement stated the USACE determination that development within the former Playa Vista Planning Area would have an effect on properties included in, or eligible for, the National Register. The Programmatic Agreement specifies that development within the land area covered by the Programmatic Agreement shall be administered in accordance with

542 The approval by the Sixth Council District was prior to redistricting and assignment of the Proposed Project site to the Eleventh Council District.

543 The peer review panel consisted of Dr. Patricia Martz (California State University, Los Angeles), Dr. Charles Rosaire (Curator Emeritus of the Los Angeles County Museum), and Dr. John Johnson (Curator of Anthropology, Santa Barbara Museum of Natural History). Interested groups include the Native Americans of Gabrielino descent.

specific terms and conditions in order to take into account the effects of any development on historical properties.

2.1.2 State Level

The California Environmental Quality Act (CEQA), is the principal statute governing environmental review of projects occurring in the state.

There are two areas of CEQA that are relevant to the process for evaluating the significance of archaeological resources. Section 21083.2 of the California Public Resources Code sets forth the process for evaluation and treatment of “unique archaeological resources.” In addition, archaeological resources also may be “historical resources” under Sections 21084 and 21084.1 of the California Public Resources Code.

Regarding unique archaeological resources, CEQA provides that:

“As part of the determination made pursuant to Section 21080.1, the lead agency shall determine whether the project may have a significant effect on archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the issue of those resources. An environmental impact report, if otherwise necessary, shall not address the issue of nonunique archaeological resources.”

Under CEQA, “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 or historic event or person.”

545 California Public Resources Code Section 21083.2(a).
546 California Public Resources Code Section 21083.2(g).
No further consideration need be given to a nonunique archaeological resource, “other than the simple recording of its existence by the lead agency if it so elects.”

For unique archaeological resources, the statute also provides examples of treatments. If it can be demonstrated that a project will cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. Examples of that treatment, in no order of preference, may include, but are not limited to, any of the following:

“(1) Planning construction to avoid archaeological sites.

(2) Deeding archaeological sites into permanent conservation easements.

(3) Capping or covering archaeological sites with a layer of soil before building on the sites.

(4) Planning parks, greenspace, or other open space to incorporate archaeological sites.”

Regarding mitigation, the statute also provides that excavation “shall be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project. Excavation as mitigation shall not be required for a unique archaeological resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the resource, if this determination is documented in the environmental impact report.”

The CEQA process for evaluating historical resources, including archaeological resources that may be historical resources, is set forth in Section 15064.5 of the State CEQA Guidelines. According to the Section 15064.5(c)(1), the first step is for the lead agency to determine if the resource is an historical resource under the following criteria which are set forth in Section 15064.5(a):

(1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code [Section] 5024.1, Title 14 CCR, Section 4850 et seq.).

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547 California Public Resources Code Section 21083.2(h).
548 California Public Resources Code Section 21083.2(b); see also State CEQA Guidelines Section 15126.4(b)(3).
549 California Public Resources Code Section 21083.2(d).
(2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

(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 or history.

Where an archaeological site does not meet these criteria “but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2.”\(^{550}\) In those cases where an “archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.”\(^{551}\)

\(^{550}\) State CEQA Guidelines Section 15064.5(c)(3).

\(^{551}\) State CEQA Guidelines Section 15064.5(c)(4).
Under the California Register statute, any California resource formally determined eligible for listing in the National Register of Historic Places is automatically listed in the California Register. Therefore, those archaeological sites within the Project site that have been determined eligible for the National Register under the Programmatic Agreement are also listed in the California Register and are historical archaeological resources for purposes of CEQA.

In coordination with other laws outside of CEQA, the State CEQA Guidelines also sets forth special rules where there is a likelihood of Native American human remains within the project:

A lead agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code [Sections] 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission. Action implementing such an agreement is exempt from:

1. The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).

2. The requirements of CEQA and the Coastal Act.

Under CEQA, a project “that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” There is a substantial adverse change in the significance of an historical resource in the case of “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.” The State CEQA Guidelines sets forth the process for evaluating when the significance of an historical resource is materially impaired. This would occur when a project demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in

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552 California Public Resources Code Section 5024.1.
553 State CEQA Guidelines Section 15064.5(d); see also State CEQA Guidelines Section 15064.5(e) for requirements in the event of unanticipated discovery of human remains.
554 California Public Resources Code Section 21084.1; State CEQA Guidelines Section 15064.5(b).
555 State CEQA Guidelines Section 15064.5(b)(1).
the California Register of Historical Resources, a local register of historical resources or its identification in an historical resources survey.556

The State CEQA Guidelines provide guidance for the consideration of archaeological resources. Section 15126.4(b)(3) states:

“Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature. The following factors shall be considered and discussed in an EIR for a project involving such an archaeological site:

(A) Preservation in place is the preferred manner of mitigating impacts to archaeological sites. Preservation in place maintains the relationship between artifacts and the archaeological context. Preservation may also avoid conflict with religious or cultural values of groups associated with the site.

(B) Preservation in place may be accomplished by, but is not limited to, the following:

1. Planning construction to avoid archaeological sites;

2. Incorporation of sites within parks, greenspace, or other open space;

3. Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site.

4. Deeding the site into a permanent conservation easement.

(C) When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code.

(D) Data recovery shall not be required for an historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource, provided that the determination is documented in the EIR and

556 State CEQA Guidelines Section 15064.5(b)(2).
that the studies are deposited with the California Historical Resources Regional Information Center.\textsuperscript{557}

2.1.3 City of Los Angeles

The Proposed Project would also be required to comply with the Standard Specifications for Public Works Construction, Section 6.3-2. This regulation requires that ground disturbing activities be halted in the area of a paleontological or archaeological find until such time a resource expert can review the find, determine its significance and, if required, determine appropriate mitigation measures. This regulation only applies to public projects. However, required mitigation measures associated with the Project could apply to public projects; therefore, this regulation still applies to the Project.

2.2 Existing Conditions

2.2.1 Archaeological and Historical Records in the Regional Context

The following discussion has been extracted from the Playa Vista Archaeological and Historical Project Research Design by Jeffrey H. Altschul, et al.\textsuperscript{558} and a more recent report and archaeological investigations in the Project area by Jeffrey H. Altschul, et al.\textsuperscript{559}

2.2.1.1 Archaeological Record

The earliest commonly accepted dates of human occupation of the Los Angeles Basin are from the La Brea site upstream of the Ballona Lagoon near downtown Los Angeles. Skeletal remains from “La Brea Woman” have been dated to about 9,000 years ago, around the same time as the “big game hunting tradition for mammoths” and other large animals were established over much of North America. Beyond these skeletal remains, few artifacts of this time have been found in Los Angeles County.

Evidence of human use in the Ballona Lagoon begins about 4,500 B.C. Excavations at five large midden sites on the top of the bluffs adjacent to the Project site suggest that the area was visited repeatedly for the next 3,500 years. Early occupation appears to have been exclusively temporary camps from which small groups exploited the resources of the wetlands

\textsuperscript{557} State CEQA Guidelines Section 15126.4(b)(3).

\textsuperscript{558} Altschul, Jeffrey H., et al., 1991, Playa Vista Archaeological and Historical Project: Research Design.

\textsuperscript{559} Altschul, Jeffrey, H., et al., Playa Vista Archaeological and Historical Project, At the Base of the Bluff, Archaeological Inventory and Evaluation along Lower Centinela Creek, Marina del Rey, California. Statistical Research, Inc. Tucson, AZ, Redlands, CA, April 2003.
for short periods before moving elsewhere. Occupation became more intensive and continuous from 1000 B.C. to A.D. 1000; four previously recorded archaeological sites on top of the Bluffs, adjacent to the Project site, have evidence of occupation during that period. The first evidence of settlement in the area derives from five sites along the Centinela Ditch, and one site near the southeastern edge of the historical lagoon near Lincoln Boulevard and Bluff Creek Drive.\textsuperscript{560-561}

Whereas use of the bluff tops decreased dramatically after A.D. 1000, recent radiocarbon dates indicate that the lagoon edge was occupied for at least another 500 years. Although the Project site and surrounding areas were favored locations for settlement, beginning about A.D. 500 and continuing until about A.D. 1100, an apparent shift in settlement preference from the top of the bluffs to the edge of the Ballona Lagoon and its freshwater tributaries of Ballona Creek and Centinela Ditch occurred. The shift to the edge of the lagoon and its freshwater tributaries could have been to maintain access to critical resources. Prehistoric use of the Ballona Lagoon appears to have ended around A.D. 1100 based on current information, although the reasons for the abandonment of the Ballona Lagoon area are unknown.

\subsection*{2.2.1.2 Historical Record}

European exploration of California began in 1542, with the arrival of Juan Rodriguez Cabrillo, but it was not until 1769 that the Spanish presence was felt in the Los Angeles Basin. At that time, Don Gaspar de Portola first made contact with the group of Native Americans that later became known as the Gabrielino. Portola reported stopping at a Native American village called “Yang’na” on the Los Angeles River near present day downtown Los Angeles, but he did not cross the Ballona Lagoon on his route to Monterey.

At the time of Portola, the Ballona Lagoon may have been occupied by Cupan speakers of the Takic language family. These people called themselves Kumi’vit, but they are better known by the name given them by Spaniards, Gabrielino. Archaeological evidence indicates that the Gabrielino moved out of the Great Basin and southern California deserts and settled the Southern California coast by at least A.D. 500. Evidence of proto-historic settlement of the Ballona is best documented at CA-LAN-211 in the Proposed Project area.\textsuperscript{562} This site may be the remains of Indians who returned to the Ballona after leaving the mission. Some anthropologists suggest that a Gabrielino village named “Saan” or “Sa’angna” was situated in the Ballona.

\begin{thebibliography}{9}
\bibitem{560} Grenda, Donn R., Jeffery A. Homburg, and Jeffery H. Altschul, the Centinela Site (CA-LAN-60): Data Recovery at a Middle Period Creek-Edge Site in the Ballona wetlands, Los Angeles County, California. Statistical Research Technical Series 45.
\bibitem{562} Jeff Altschul, personal communication, February 19, 2003.
\end{thebibliography}
Lagoon area prior to missionization. However, that name does not appear in the historical records.\footnote{Van Horn, David M. and White, Laurie, S. “A Study of Sa’angna.” 1997, Statistical Research, Inc}

Two years after the 1769 Portola expedition, Mission San Gabriel was founded in what is now the City of San Gabriel. The local Native Americans were first encouraged and later forced to move to the mission. Large numbers of Native Americans died from disease or intolerable living conditions during this period.

By the late 1700s and early 1800s, Ballona Creek and the lagoon area were periodically used by Spanish ranchers from Los Angeles County and San Gabriel Valley for stock pasturage. In 1839, Rancho La Ballona was granted by Governor Alvarado to the Machado and Talamantes families. These families used most of the land for cattle. The break-up of Rancho La Ballona began in 1857 with the death of Talamantes followed by the death of Machado in 1865. Most of their heirs sold the land within a decade. During this time the Union Army encampment of Camp Latham was established in 1861 about 5 miles inland on Ballona Creek north of the Project site, but was abandoned in 1862.

The advent of the railroad in the Ballona area and elsewhere in the mid-1880s led to a land boom that resulted in the development of Santa Monica and Ocean Park. Land speculation schemes such as Port Ballona in 1887 foreshadowed the development of present-day Marina del Rey. The development of communities currently surrounding the project area occurred during the early twentieth century. These communities include: (1) Playa del Rey, formerly Port Ballona, which originally consisted of a hotel, pavilion, boathouse, hunting clubs, and a motordrome for auto-racing in the Ballona Lagoon; (2) Venice, modeled after the Italian city including canals; (3) Culver City, the early home of the movie industry and aircraft research; and (4) Westchester, the seat of Loyola Marymount University.

Commercial and industrial enterprises began to move into the Ballona area during the early twentieth century. Oil wells and refineries became commonplace. By 1931, there were 325 active oil wells in the Ballona Lagoon, with refineries and tanks built on islands of fill.\footnote{Schofield, R., Hughes Aircraft, retired, telephone communication, July 30, 1990} World War II and increased oil demand depleted most of the Ballona oil wells, and most of the derricks were dismantled in the 1950s and 1960s.

The natural setting and accessibility of Ballona Creek led the movie industry to nearby Culver City. The corresponding increase in urban development prompted the channelization of Ballona Creek for flood control. In the early 1920s, the upper course of the creek was
channelized to about present day Lincoln Boulevard. The channelization was completed by the U.S. Army Corps of Engineers in 1935, at the suggestion of the Los Angeles Flood Control District. Although subject to tidal fluctuations, the channelized lower course of Ballona Creek became a two-mile rowing course used by sculling crews from the surrounding universities.

During the 1920s and 1930s, Japanese truck farmers leased most of the land in the former Playa Vista Planning Area from Joseph Mesmer, and raised celery crops in the low marshy area of the Ballona Wetlands, west of Lincoln Boulevard. By 1942, the Japanese farmers and their families were relocated to detention camps in reaction to the attack on Pearl Harbor. Members of the local Hispanic community, including Pepe Lopez, assumed the Japanese leases.

Lands within the former Playa Vista Planning Area became associated with Howard Hughes during the early 1940s. Hughes, a millionaire industrialist, who parlayed his inherited fortune into an empire and who made substantial contributions in the fields of aviation and film making, purchased most and, eventually, all of the former Playa Vista Planning Area. Hughes initially acquired Playa Vista to make movies. Later, he used the property for the construction of an aircraft plant to consolidate his aviation interests in southern California into one large facility. This plant, referred to as the “Culver City” plant and the “Hughes Aircraft site,” was constructed east of the Proposed Project site within the Playa Vista First Phase Project site. A small portion of the plant site, including two structures, extends into the Proposed Project site.

In the 1960s, the small craft harbor of Marina del Rey was constructed north of Hughes’ property adjacent to the Ballona Flood Control Channel. Centinela Creek Flood Control Channel, north and east of Hughes’ property, was also constructed in the early 1960s by the U.S. Army Corps of Engineers in cooperation with the Los Angeles Flood Control District.\[565\]-\[566\]

In 1984, McDonnell Douglas Corporation purchased Hughes Helicopter and leased that portion of the Plant Site that is located within the Project site. Both McDonnell Douglas and Hughes Helicopter vacated the Playa Vista Property in 1994.

2.2.2 Cultural Resource Surveys

Many prehistoric sites have been found in the Ballona region over the last 60 years. Much of the area has been professionally surveyed, with excavations undertaken at sites on the Del Rey Hills north of Playa Vista, along Centinela Ditch within the Playa Vista First Phase


\[566\] Tweten, J.F., formerly of Hughes Aircraft, retired, Culver City, California, personal communication July 13, 1990.
Archaeological sites in and around the Project site were visited by collectors and amateur archaeologists beginning in the 1930s. Malcolm Farmer, working in the 1930s, and William Dean, active in the late 1940s and early 1950s, noted an archaeological site later designated as CA-LAN-62 by Stuart Peck of the Southwestern Museum. Peck found inhumations (burials) and cremations as well as a variety of artifacts. All materials recovered by Peck are deposited with the Southwest Museum.

In 1950, Charles Rozaire and Russell Belous, who were then undergraduates at UCLA, visited and recorded 23 sites in the Ballona area. In 1979, R.L. Pence was contracted by the Summa Corporation to conduct a reconnaissance level survey of the entire Playa Vista Planning Area. Pence’s survey was cursory in nature; not all areas were examined. Pence briefly describes 17 sites, 16 of which had been previously surveyed. Among those described were CA-LAN-62 within the Proposed Project site. In the 1980s, further investigations were performed under the direction of Dr. David Van Horn including data recovery of sites on the bluff tops and to conduct test excavations of CA-LAN-62 and CA-LAN-211.

In 1990, Statistical Research, Inc. (SRI) conducted a systematic pedestrian survey of the entire area covered by the Programmatic Agreement. According to the survey, the various episodes of construction and fill that have occurred over the Playa Vista site have greatly hampered the visibility and evidence of cultural resources that may have once been exposed. In response, there has been ongoing research to discover and evaluate buried archaeological sites on lands within the area subject to the Programmatic Agreement.

Five Archaeological Treatment Plans (ATPs) have been implemented by SRI, and approved by the USACE, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation. Of these, one is for a site located within the Proposed Project area and the remaining four are for off-site locations in the vicinity of the Proposed Project. The ATP within the Proposed Project site was prepared in 1991 and involved CA-LAN-62 and CA-LAN-211. Subsequently, it was found that as previously defined, CA-LAN-62 and CA-LAN-211 were one large site. This combined site is now referred to as CA-LAN-62. The designation CA-LAN-211 was reused for another archaeological site in the Proposed Project site. A new ATP has been prepared for the newly designated site, CA-LAN-211/H, and is currently under review by the
USACE, the State Historic Preservation Officer, the Advisory Council on Historic Preservation and two groups representing the Gabrielino Indians.⁵⁶⁷

If additional archaeological sites are found, the USACE will determine the eligibility of unevaluated archaeological properties in consultation with the State Historic Preservation Officer and in accordance with the Programmatic Agreement. As appropriate, ATPs will then be developed, which will include details for dealing with properties discovered during the implementation of the Proposed Project.

### 2.2.3 Archaeological Resources on the Proposed Project Site

Under the research program implemented by SRI, for the area subject to the Programmatic Agreement, 22 loci of cultural materials have been identified. Of these 22 loci, four are fully or partially located within the Proposed Project site. These four loci are described in Table 183 on page 1213.

Under the Research Design some of the archaeological sites on the Proposed Project site as well as throughout the Ballona region have been evaluated as eligible for listing in the National Register of Historic Places as an historic district. This district has been named the Ballona Lagoon Archaeological District. Sites formally recorded within the proposed district (recorded at UCLA and/or the South Central Coast Information Center) that are included in or overlap a portion of the Proposed Project site include CA-LAN-62, CA-LAN-211/H, CA-LAN-1932H, and CA-LAN-2769.

All of the sites are archaeological in nature. One of the sites also includes concentrations of historical cultural material that was redeposited (CA-LAN-1932H). Only CA-LAN-62 and CA-LAN-211/H have been recommended to be eligible for the National Register.

With the formal determination of National Register eligibility of the Ballona Lagoon Archaeological District, this District is also listed in the California Register. Therefore, the sites included within the District are also historical archaeological resources for purposes of CEQA. Based on the archaeological evaluations undertaken by SRI, beyond the sites within the District, no other potential archaeological site within the Project site is eligible for the California Register as an historical archaeological resource.

Table 183

CULTURAL SITES WITHIN THE PROPOSED PROJECT

<table>
<thead>
<tr>
<th>Permanent No.</th>
<th>Description</th>
<th>Site Size (in meters)</th>
<th>Depth of Deposits</th>
<th>Artifacts</th>
<th>Human Remains Present</th>
<th>Shell</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA-LAN-1932H</td>
<td>historic trash deposit</td>
<td>480 x 30</td>
<td>undetermined</td>
<td>earthenware ironstone porcelain clear, green and brown glass</td>
<td>No</td>
<td>none</td>
<td>Not Eligible</td>
</tr>
<tr>
<td></td>
<td>shell midden</td>
<td>100 x 50</td>
<td>30 cm</td>
<td>lithic debitage shell beads, misc. animal bone</td>
<td>No</td>
<td>Chione sp. Augopecten sp. Ostrea lurida</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>CA-LAN-2769</td>
<td>shell scatter</td>
<td>90 x 3</td>
<td>undetermined</td>
<td>debitage stone bowl fragment</td>
<td>No</td>
<td>Chione californiensis Chione undatella Protothaca staminea Ostrea lurida</td>
<td>Not Eligible, secondary deposit</td>
</tr>
<tr>
<td>CA-LAN-211/H</td>
<td>shell midden</td>
<td>75 x 3</td>
<td>lmt</td>
<td>debitage, mortar projectile points, shell and glass beads, misc. animal bone</td>
<td>No</td>
<td>Chione californiensis misc. unidentifiable fragments</td>
<td>Eligible b</td>
</tr>
<tr>
<td>CA-LAN-62</td>
<td>shell midden</td>
<td>45 x 30</td>
<td>undetermined</td>
<td>debitage cores, shell beads, projectile points, misc. animal bone present</td>
<td>Yes</td>
<td>Trachycardium quadrangenarium Haliotis cracherodii Chione californiensis Chione undatella Chione fluctagra Pecten sp. Ostrea lurida</td>
<td>Eligible b</td>
</tr>
</tbody>
</table>

a Determined not eligible for listing on the National Register.
b Determined eligible for listing on the National Register.

Previous work has demonstrated that data retrieved from these sites can be used to address many of the questions listed under the historical context themes, human-land relationships and cultural history and cultural dynamics. Specifically, the test excavations at CA-LAN-62, 211/H, and 1932H have recovered faunal and subsistence related remains in substantial numbers. Based on artifacts recovered, many of these sites appear to be multicomponent, dating from at least 3,000 years ago, until the early 1800s.

Only CA-LAN-62 and CA-LAN-211/H are intact. CA-LAN-1932H represents fill taken most likely from CA-LAN-211/H to level the runway. Preservation is generally excellent as evidenced by bone and shell recovered during the test excavations. The sites have yielded large quantities of floral, faunal, and shell remains from intact deposits from which research questions relating to prehistoric subsistence can be addressed; adequate samples of projectile points, shell beads, obsidian artifacts, charcoal, shell, and bone to investigate chronological questions; sufficient quantities of microliths to investigate the technology of these peculiar Ballona lithic industries; and substantial numbers of diagnostic artifacts, such as projectile points, shell beads, and historic trade goods (if present) to examine questions of cultural affiliation. These sites, therefore, are considered contributing members of the district.

Human remains have been found at CA-LAN-62. As per the California Health and Safety Code Section 7050.5 and Public Resources Code 5097.98, the Native American Heritage Commission designated a Most Likely Descendant. SRI has been coordinating with the Most Likely Descendant according to State statutes. The Most Likely Descendant has provided a written protocol for the excavation of human remains which SRI is implementing.  

3.0 IMPACT ANALYSIS

3.1 Methodology

The Research Design contained in the Cultural Resources Technical Report, Appendix O-4 of the EIR, was developed to identify and evaluate archaeological and historical resources and to address federal laws including, but not limited to, the National Historic Preservation Act, NEPA, Archaeology and Historic Preservation Act, and regulations set forth in the California Environmental Quality Act (CEQA).

The archaeological resources Research Design,\(^{569}\) includes an intensive pedestrian survey of the Proposed Project site. The Research Design also compiles all published and unpublished materials pertaining to archaeological resources in the Marina del Rey area, establishes historic contexts for evaluating the significance of archaeological resources; and develops a program for the mitigation of impacts on significant archaeological resources resulting from the proposed development. The Research Design reflected review and input from all relevant governmental agencies, a peer review panel, and interested Native American groups.

### 3.2 Significance Threshold

The Draft City of Los Angeles CEQA Guidelines (p. M.2-3) state that a project would normally have a significant impact upon archaeological resources if it could disturb, damage, or degrade an archaeological resource or its setting is found to be important under the criteria of CEQA because it:

1. Is associated with an event or person of recognized importance in California or American prehistory or of recognized scientific importance in prehistory;
2. Can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions;
3. Has a special or particular quality, such as the oldest, best, largest, or last surviving example of its kind;
4. Is at least 100-years-old\(^{570}\) and possesses substantial stratigraphic integrity; or
5. Involves important research questions that historical research has shown can be answered only with archaeological methods.

Based on these factors, the Proposed Project would have a significant impact on archaeological resources if:

- Project activities would disturb, damage, or degrade a unique archaeological resource or an archaeological historic resource, or setting of the resource.

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\(^{570}\) As noted in the Draft LA CEQA Thresholds Guide (p. M.2-12, fn. 3), although the CEQA criteria state that “important” archaeological resources are those which are at least 100-years-old, the California Register provides that any site found eligible for nomination to the National Register will automatically be included within the California Register and subject to all protections thereof. The National Register requires, except in exceptional circumstances that resources be at least 50-years-old.
3.3 Project Design Features

As noted above, the Proposed Project is subject to the stipulations set forth in a Programmatic Agreement. The Programmatic Agreement was entered into among the U.S. Army Corps of Engineers, the Advisory Council on Historic Preservation, and the State Historic Preservation Officer in September 1991, with the participation of the Applicant and two groups of local Native Americans of Gabrielino descent. The Programmatic Agreement incorporates the U.S. Army Corps of Engineers determination that the Playa Vista development would have an effect on properties included in, or eligible for, the National Register. The Programmatic Agreement specifies that development of the Playa Vista Property shall be administered in accordance with specific terms and conditions in order to take into account the effects of the Project on archaeological resources or historical properties. The following provisions of the Programmatic Agreement are applicable to the Proposed Project.

The Programmatic Agreement assures that the permit which authorized the fill of wetlands on the Proposed Project site will be administered in accordance with the requirements of the Playa Vista Research Design.

The Programmatic Agreement also identifies the area and sites that were known at the time of signing, includes measures that ensure these sites are protected, and includes, among other provisions, the following:571

- The U.S. Army Corps of Engineers shall determine the eligibility of unevaluated historical properties in consultation with the State Historic Preservation Officer and in accordance with 36 CFR 800.4 (c). In addition, the Project “Research Design” which has been developed in consultation with the U.S. Army Corps of Engineers and the California State Historic Preservation Officer, would guide the evaluation of the historical properties. Treatment Plans shall be developed based on these evaluations.

- The U.S. Army Corps of Engineers shall ensure that an Archaeological Treatment Plan is developed in consultation with the State Historic Preservation Office for all historical properties within the Project’s Area of Potential Effect, that are determined to be eligible for the National Register in accordance with the following stipulations. See Appendix O-4 of the Cultural Resources Technical Appendices.

- The Archaeological Treatment Plan for the Project shall be consistent with the Secretary of the Interior’s Standards and Guidelines for Archaeological Documentation (48 FR 44734-37), the California Office of Historic Preservation’s

571 The status of these sites is described in detail in Volume II, and below under Section 2.4.1 Project Buildout.

- Archaeological Treatment Plans for the Project will be developed and implemented prior to the commencement of ground-disturbing activities in the Areas of Potential Effect.

• If cultural deposits are discovered during the Project’s land-disturbing activities, the Project Applicant would treat them in accordance with the provisions of the Archaeological Treatment Plan. If cultural deposits are discovered for which there is no treatment plan, the Project Applicant will cause a temporary halt to these activities and immediately notify the U.S. Army Corps of Engineers, the State Historic Preservation Officer and the Advisory Council on Historic Preservation of the discoveries. The U.S. Army Corps of Engineers shall ensure that a plan is developed for treating the unexpected discovery.

• The U.S. Army Corps of Engineers shall ensure that all materials and records resulting from implementation of this agreement are curated in accordance with 36 CFR Part 79. This regulation establishes definitions, standards, procedures, and guidelines to be followed by federal agencies to preserve collections of prehistoric and historic materials, remains, and associated records.

• All plans prepared under the Programmatic Agreement shall include a schedule for the submission and review by the U.S. Army Corps of Engineers, and the State Historic Preservation Officer of technical reports, progress reports, and the methods by which all parties, including interested Native Americans, would be kept informed.

3.4 Project Impacts

3.4.1 Proposed Project Impacts

The significance threshold for Archaeological Resources is based on consideration of both the threshold described in the Draft Los Angeles CEQA Thresholds Guide (p. M.2-3) (Guide) and provisions of CEQA. The recommended threshold in the Guide (see Subsection 3.2, above) includes two components. The first threshold component identifies effects that could cause an impact: “…if (the project) could disturb, damage, or degrade an archaeological resource
or its setting….” That portion of the language in the Guide has been incorporated directly into the threshold.

The second threshold component identifies the resources that are of concern. Per the Guide, a resource can be significantly impacted if it is found to be important under the criteria of CEQA because it: (1) is associated with an event or person of recognized importance in California or American prehistory or of recognized scientific importance in prehistory; (2) provides information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions; (3) has a special or particular quality, such as the oldest, best, largest, or last surviving example of its kind; (4) is at least 100 years old and possesses substantial stratigraphic integrity; or (5) involves important research questions that historical research has shown can be answered only with archaeological methods. These factors have been taken into consideration in the significance threshold which incorporates Section 21083.2(g) of the Public Resources Code and Section 15064.5(a) of the CEQA guidelines. The threshold addresses impacts on “unique archaeological resources or their settings, or an archaeological historical resource.”

The City’s five attributes are assumed to be “unique archaeological resources.” Use of the term “unique archaeological resource” in the significance threshold incorporates a term defined in Section 21083.2(g) of the Public Resources Code. Section 21083.2(g) defines three attributes that contribute to a resource being classified as unique. These three attributes are substantially similar to the City’s first three attributes. The remaining two City attributes are more far reaching than those defined in Public Resources Code Section 21083.2(g).

Use of the term “archaeological historical resource” in the significance threshold incorporates a concept presented in Section 15064.5(a) of the State CEQA Guidelines that addresses archaeological resources that are also classified as historical resources. As described in Section 15064.5(b)(1), “Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resources or its immediate surrounding such that the significance of an historical resource would be materially impaired.” These criteria are included within the portion of the significance threshold used in this analysis that addresses the disturbance, damage, or degradation of historical resources.

Both the Urban Development and Habitat Creation/Restoration components of the Proposed Project include activities that would cause earth disturbance in areas that may contain cultural resources. As such the following discussion pertains to the Project as a whole.

As summarized in Table 183 on page 1213, several of the sites analyzed to date are fully or partially located on the Proposed Project site. The Proposed Project site contains cultural loci CA-LAN-1932H (historical period trash dump and redeposited shell midden), CA-LAN-2769
(shell scatter), CA-LAN-211/H (shell midden), and CA-LAN-62 (shell midden). Of these cultural loci, CA-LAN-211/H, and CA-LAN-62 have been identified as potentially significant cultural resources. These loci were tested and CA-LAN-62 has been determined to be eligible for listing in the National Register and CA-LAN-211/H is under review. CA-LAN-2769 and CA-LAN-1932H have been tested, and are not recommended to be eligible for listing in the National Register.

Under the California Register statute, any California resource formally determined eligible for listing in the National Register of Historic Places is automatically listed in the California Register. Therefore, those archaeological sites within the Project site that have been determined eligible for the National Register under the Programmatic Agreement are also listed in the California Register and are historical archaeological resources for purposes of CEQA.

In designing the riparian corridor, the Project applicant along with regulatory agencies including the City of Los Angeles, the Corps of Engineers, the State Historic Preservation Office, and the Advisory Council on Historic Preservation, considered the impacts of the project element on cultural resources. The design ensures that sections of the significant archaeological sites along the bluffs are preserved. These will be protected within the open space designated as part of the riparian corridor. The corridor itself, however, cannot be placed in such a way as to avoid all portions of these archaeological sites and still function as a hydraulic feature.

For these reasons, the only feasible mitigation measure in those portions of the significant archaeological sites that will be adversely impacted by the riparian corridor is data recovery. The extent and nature of data recovery along with other mitigation measures for portions of the sites that will not be impacted by construction are set forth in the Research Design and Archaeological Treatment Plans for CA-LAN-62 and CA-LAN-211/H.

As these sites have been discovered, and are being scientifically evaluated and treated per the required protocols, any potential impacts from Proposed Project activities on these sites will have been mitigated prior to the onset of Project construction.

Significant direct impacts to archaeological resources within the Proposed Project site could result from construction-related excavation/grading activities that disturb or destroy archaeological sites and artifacts, or encourage unauthorized collection of artifacts by souvenir hunters.

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572 Public Resources Code Section 5024.1.

The potential for loss of cultural resources and information could be significant if any archaeological or historical resources were disturbed or removed without an analysis of their cultural significance or without documentation of their context in relation to the surrounding environment. In addition, disturbances of burial remains or associated artifacts could result in significant impacts to these cultural resources for Native Americans.

Other Proposed Project activities might not directly disturb archaeological resources, but could produce indirect significant adverse impacts through placement of buildings or other structures which preclude access to, and scientific investigations of, unknown resources. Acceptable archaeological techniques for avoiding archaeological sites are available to reduce or eliminate impacts by burying or “capping” sites to preserve the cultural material. It should be noted, however, that archaeological deposits are lying in compacted and, in some cases, contaminated soils. Archaeological resources kept in place in contaminated and compacted soils could also incur damage by remaining in such conditions.

As described above, an ongoing research program has been occurring within the Proposed Project site and its environs. Based on the work-to-date, a large amount of artifacts have been discovered and analyzed, and archaeological sites have been identified. Nonetheless, there is a potential for new discovery.

As described in the Project Design Features, encountered resources would be evaluated and treated per the protocols established in the Programmatic Agreement and ATP for CA-LAN-62 and CA-LAN-211/H. Such evaluation and treatment would allow for scientific discovery and contributions to the body of knowledge regarding California and American prehistory and history. The evaluation and treatment undertaken pursuant to these requirements would preclude, through approved and required mitigation techniques, significant impacts from the disturbance, damage or degradation of unique archaeological resources, or archaeological historic resources that may be encountered. With the implementation of the Project Design Features impacts would be reduced to a less-than-significant level. Mitigation Measures are proposed below to require implementation of the Project Design Features.

### 3.4.2 Equivalency Program Impacts

The preceding analysis of potential impacts on archaeological resources addressed the following issues: (1) destruction of resources; (2) exposure of resources to unauthorized collection; and (3) limiting access to resources. Such impacts could occur as a result of site preparation activities (e.g., excavation) or the placement of buildings within the Project site.

The exchange of office uses for retail and/or assisted living units would be accomplished within the same building parameters, and would occur at relatively limited locations within the
Project site. Furthermore, under the Equivalency Program, there would be no substantial variation in the Project’s street configurations, building pad elevations, or the depth of excavation. Potential changes in land use under the Equivalency Program would therefore have no substantial effect on the proposed earth moving activities and their associated impacts because all that is changing is the type of use occupying a building.

All of the recommended mitigation measures (discussed in Subsection 4.0, Mitigation Measures, below) to minimize impacts on archaeological resources would be applicable to the Equivalency Program, as well as the Proposed Project. Since excavation and building placement would be the same as with the Proposed Project, and the mitigation measures would be the same, potential impacts on archaeological resources would be the same. Thus, implementation of the Equivalency Program, as is the case with the Proposed Project, would not result in a permanent loss of, or loss of access to, archaeological resources, and impacts would be less than significant.

3.4.3 Impacts of Off-Site Improvements

Proposed Project development could result in secondary impacts arising from implementation of the Project’s mitigation measures, as well as the direct impacts described above. Mitigation measures within Section IV.K.(1), Traffic and Circulation, require physical improvements in transportation facilities at numerous locations including roadway widening at seven locations, as described in Subsection 5.8 of that Section. In addition, as discussed in Section IV.N.(1), Water Consumption, the Proposed Project would require the construction of a water regulator station in the vicinity of Jefferson Boulevard and Mesmer Avenue.

No impacts are expected to occur to archaeological resources. Excavation for the off-site improvements would be surficial and located in previously disturbed areas. All of the off-site improvements except the water regulator station occur within or adjacent to existing roadways. The water regulator station would include a small amount of piping equipment that would most likely be located just above ground. Excavation would be required to the depth of the existing main water line.

Further, no archaeological resources are known to occur at any of the off-site locations. An archaeological records search was performed to identify potential resources in the area of the proposed improvements. The records search did not identify any resources that would be affected. One of the reports identified in the search pertains to the monitoring of previous construction activities involving the median between North Culver and South Culver Boulevard.

574 “Records Search Request for Seven Areas Located in Venice, Inglewood, and Beverly Hills Quadrangles, Los Angeles County, California,” South Central Coastal Information Center, California Historical Resources Information System, UCLA Institute of Technology
which is also the location of two of the Proposed Project’s roadway widenings. No resources were encountered during the previous construction of the median. The roadway widenings along the median would merely rework the previously disturbed areas.

Notwithstanding, the City of Los Angeles “Standard Specifications for Public Works Construction,” Section 6-3.2 requires that grading, excavation, or other ground disturbing activities for a public project be halted in the area of a paleontological or archaeological find, until such time as a resource expert can review the find, determine its significance, and if required, determine appropriate mitigation measures. If such a resource were encountered, within the City of Los Angeles, Public Works Section 6-3.2 would be applied. Therefore, none of the off-site improvements would result in significant impacts, unto themselves, nor would the off-site improvements, in combination with the Proposed Project result in a significant impact.

4.0 MITIGATION MEASURES

Mitigation Measures for the Proposed Project and the Equivalency Program

• Prior to the issuance of any grading/excavation or building permits, the measures required within the approved Archaeological Treatment Plans for the properties designated as LAN-211/H and LAN-62, which have been determined eligible for listing in the National Register of Historic Places and accepted by the U.S. Army Corps of Engineers, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation shall be implemented. The archaeological treatment plans shall be consistent with the following: the Secretary of Interior Guidelines for Archaeological Documentation; the California Office of Historic Preservation’s Archaeological Resource Management Reports: Recommended Contents and Format, and Guidelines for Archaeological Research Designs; the Department of the Interior’s Guidelines for Federal Agency Responsibilities under Sections 106 and 110 of the National Historic Preservation Act; and take into account the Council’s publication, Treatment of Archaeological Properties – A Handbook.

• Prior to issuance of grading/excavation or building permits, a professional archaeologist shall be retained that meets the Secretary of Interior’s guidelines and is listed in the Register of Professional Archaeologists to implement the Research Design and comply with the Programmatic Agreement.

• Historic resources eligible for listing in the National Register of Historic Places shall be avoided or unavoidable disturbance be mitigated through data recovery, documentation, analysis, and curation. Archeological treatment plans required by the Programmatic Agreement shall be developed and implemented, as applicable. All
materials and records resulting from implementation of the Programmatic Agreement shall be curated in accordance with 36 Code of Federal Regulations Part 79.

- In addition to a qualified archaeologist, a representative of the Gabrielino Indians shall be retained to monitor subsurface archaeological excavations. Prior to issuance of grading or building permits, evidence shall be provided for placement in the subject file with the City Planning Department that a Native American monitor has been retained.

- In the event that previously unknown archaeological and historical resources are discovered during construction, grading/excavation/construction shall temporarily be halted. The U.S. Army Corps of Engineers and the State Historic Preservation Officer shall immediately be notified to provide these agencies with the opportunity to assess the resources and offer recommendations for treatment required by the Programmatic Agreement.

- The Project archaeologist shall monitor ground disturbing activities in areas where significant archaeological or historical materials are discovered or detected. If cultural resources are discovered during grading/excavation/construction monitoring, such resources shall be evaluated for their eligibility for listing in the National Register of Historic Places. If potentially significant resources are encountered, a letter of notification shall be provided in a timely manner to the Department of City Planning, in addition to the report (described below) that is filed at the completion of grading. If eligible, an archaeological treatment plan shall be developed and implemented in accordance with the Programmatic Agreement.

- Following completion of grading activities, a qualified archaeologist, who meets the Secretary of Interior Guidelines and is listed in the Register of Professional Archaeologists, shall prepare a report of the results of archaeological investigations to the City of Los Angeles Department of City Planning, other appropriate public agencies, and concurring parties as specified in the Programmatic Agreement. The report shall be submitted to the above parties according to the schedules established in the respective ATPs.

- If a commemorative display center for items of cultural significance should be provided in the Playa Vista First Phase Project, representative artifacts from the Proposed Project site, should they be discovered, or accurate replicas shall be made available for the display at the display center.
5.0 UNAVOIDABLE ADVERSE IMPACTS

The impact analysis identified several potential direct and indirect adverse impacts on archaeological or historical resources associated with excavation and incidental unauthorized collecting. These impacts would be similar under both the Proposed Project and the Equivalency Program. Encountered resources would be evaluated and treated per the protocols established the Programmatic Agreement and related Archaeological Research Design. Such evaluation and treatment would allow for scientific discovery and contributions to the body of knowledge regarding California and/or American prehistory and history. The evaluation and treatment undertaken pursuant to these requirements would preclude, through approved and required mitigation techniques, significant impacts from the disturbance, damage or degradation of unique archaeological resources or archaeologic historic resources that may be encountered. With the implementation of the Programmatic Agreement and mitigation measures listed above, impacts for the Proposed Project and Equivalency Program would be reduced to a less-than-significant level. No adverse impacts on archaeological resources are expected from the construction of the Project’s off-site improvements.

6.0 CUMULATIVE IMPACTS

Development of the Proposed Project, inclusive of the Equivalency Program and the construction of the off-site improvements, in combination with the related projects, could contribute to the cumulative loss of cultural (archaeological and historical) resources within the region, city, and state as a whole. All potential sites are required to be evaluated prior to construction activities. Depending on the outcome of these evaluations, there could be possible effects on cultural (archaeological and historical) resources.

Related Project #24, the Catellus project on the West Bluffs, is developing an area where several archaeological sites are located. These sites have been known since the 1930s, and previous data recovery has mitigated the loss of information associated with these two sites. Recent monitoring during grading activities has uncovered a variety of cultural resources, including human remains, which are being dealt with in accordance with the mitigation measures adopted for that project and applicable federal and state regulations.

At the same time, construction activity conducted under regulations often provides a vehicle for preservation of historic structures and discovery of new archaeological resources that would otherwise remain unknown. To the extent individual related projects would be required to comply with applicable laws, the potential disturbance, damage or degradation of unique archaeological resources, or archaeologic historic resources could be mitigated. The cumulative total of all related project development creates the potential for additional impacts upon archaeological resources. Although each project must develop adequate mitigation measures to
substantially lessen or avoid impacts on an individual basis, the incidental loss of all project-study area archaeological resources may constitute a significant cumulative impact.