

**PROGRAMMATIC AGREEMENT
AMONG
THE U.S. DEPARTMENT OF VETERANS AFFAIRS, VETERANS HEALTH
ADMINISTRATION, GREATER LOS ANGELES HEALTHCARE SYSTEM,
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,
AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING REDEVELOPMENT OF THE WEST LOS ANGELES CAMPUS OF THE
VETERANS AFFAIRS GREATER LOS ANGELES HEALTHCARE SYSTEM**

WHEREAS, the West Los Angeles (WLA) Campus of the Veterans Affairs (VA) Greater Los Angeles Healthcare System (GLAHS), located at 11301 Wilshire Boulevard in Los Angeles, California, has developed and is implementing a Master Plan (MP) to guide redevelopment of the WLA Campus to better serve the needs of Veterans in the GLAHS service area (undertaking)¹; and

WHEREAS, the MP shall assist VA to determine and implement the most effective use of the WLA Campus for Veterans, particularly for homeless Veterans, including underserved populations, such as female Veterans, aging Veterans, and those who are severely physically or mentally disabled. The primary considerations include: (a) the provision of appropriate levels of supportive housing on the WLA Campus, in renovated existing buildings or newly constructed facilities, while taking into account the Los Angeles County assessments of available housing units in the greater Los Angeles community; (b) respect for individual Veteran choices on whether to seek housing at WLA or in the local community; (c) parameters of applicable law; and (d) the need for appropriate levels of bridge and emergency housing along with short-term treatment services on the WLA Campus to provide state-of-the-art primary care, mental health care, and addiction services to Veterans through rehabilitation and/or renovation of WLA Campus buildings; demolition; new construction; and consolidation of services; and

WHEREAS, the WLA Leasing Act of 2016 (PL 114-226) allows the Secretary of VA to enter into leases for the use and renovation of the WLA Campus to provide supportive housing and specific, community-based support services; and

WHEREAS, VA determined that the undertaking may adversely affect historic properties listed in or eligible for listing in the National Register of Historic Places (NRHP) and is therefore subject to Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800, as amended (collectively referred to here as "Section 106"), and has consulted with the Advisory Council on Historic Preservation (ACHP) and the California State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800; and

WHEREAS, VA notified the SHPO and ACHP that VA would incorporate the review procedures for historic properties usually carried out separately under 36 CFR §§ 800.3 through 800.6, into its National Environmental Policy Act (NEPA) analysis, a process referred to as substitution and outlined at 36 CFR § 800.8(c), and the ACHP has chosen to participate in consultation; and

WHEREAS, VA, through consultation with the SHPO and ACHP, has determined that it shall fulfill its Section 106 responsibilities for the undertaking through the development and implementation of this programmatic agreement (PA) under 36 CFR §§ 800.8(c)(1)(v) and 800.14(b), including § 800.14(b)(1)(ii), which recognizes that a PA may be used when effects on historic properties cannot be fully determined prior to approval of an undertaking; and

¹ Master Plan as used in this document includes the 2016 Draft Master Plan and any subsequent document refinements.

WHEREAS, VA invited the Soboba Band of Luiseno Indians and Torres Martinez Desert Cahuilla Indians to participate in consultation as federally recognized Indian Tribes with cultural and/or religious affiliation to Los Angeles County in accordance with 36 CFR § 800.2(c)(ii); and

WHEREAS, as of April 25, 2019 neither Indian Tribe has accepted VA's invitation to participate in this consultation; and

WHEREAS, VA contacted the California Native American Heritage Commission in an effort to identify local Indian tribes that may attach religious and/or cultural significance to the WLA Campus, in accordance with 36 CFR § 800.2(c)(5), and invited the Gabrielino Tongva Nation, the Gabrielino Tongva Tribe, the Gabrielino Tongva Indians of California, the Gabrielino/Tongva San Gabriel Band of Mission Indians, and the Tongva Ancestral Territorial Tribal Nation to participate in consultation; and

WHEREAS, the Tongva Ancestral Territorial Tribal Nation, the Gabrielino Band of Mission Indians, and the Gabrielino Tongva Indians of California accepted VA's invitation and have participated in this consultation as Consulting Parties; and

WHEREAS, VA invited the 1887 Fund, the Los Angeles Conservancy, the West Los Angeles Veterans Collective, and the Veterans Park Conservancy to participate in this consultation as Consulting Parties, in accordance with 36 CFR § 800.2(c)(5), and they accepted VA's invitation and have participated in this consultation as Consulting Parties; and

WHEREAS, VA contacted the California Preservation Foundation, the Los Angeles City Historical Society, the Los Angeles City/County Native American Indian Commission, the Los Angeles County Board of Supervisors, the Los Angeles Office of Historic Resources, the Historical Society of Southern California, the National Trust for Historic Preservation, and the Society for California Archaeology to participate in consultation, but they either did not respond or declined to participate; and

WHEREAS, VA, in consultation with the SHPO, has determined the Area of Potential Effects (APE), which encompasses the entire WLA Campus and the Los Angeles National Cemetery (LANC), pursuant to 36 CFR § 800.4(a)(1) (Attachment A); and

WHEREAS, areas of the WLA Campus and all of the LANC were listed in the NRHP as the West Los Angeles VA National Register Historic District (WLA VA NRHD) under Criteria A and C (Reference # 14000926); and

WHEREAS, VA, in consultation with the SHPO, identified that the following historic properties within the APE may be affected by the undertaking: the WLA VA NRHD, the Wadsworth Chapel (Building #20) and the Streetcar Depot (Building #66), which are individually listed in the NRHP; and

WHEREAS, VA, in consultation with the SHPO, has determined the undertaking has the potential to affect unidentified archaeological sites that may be eligible for listing in the NRHP and has developed an archaeological sensitivity model (ASM) to assist in the methodology of archaeological identification and it was approved by the SHPO and the ACHP and most recently updated on June 27, 2018; and

WHEREAS, VA developed a draft list of WLA Campus preservation priorities that best represents the historic character of the WLA VA NRHD and provided it for comment to Consulting Parties on October 25, 2018 and to the public, as an attachment to the Draft Programmatic Environmental Impact Statement, on December 14, 2018, which shall be finalized in consultation with SHPO and other Consulting Parties; and

WHEREAS, VA shall use a phased approach to assess the undertaking's effects to historic properties, pursuant to 36 CFR § 800.5(a)(3) and as stipulated below; and

WHEREAS, VA requested a Program Comment (PC), pursuant to 36 CFR § 800.14(e), to provide the agency with an alternative way to comply with its responsibilities under Section 106 of the NHPA regarding its vacant and underutilized properties, and on October 26, 2018, the ACHP issued the PC, and VA may instead choose to comply with the PC for real property actions at the WLA Campus that meet the terms of the PC; and

WHEREAS, VA has concluded Section 106 consultation for independent undertakings involving the rehabilitation of Buildings 205, 207, 208, and 209, and such undertakings are outside the purview of this PA; and

NOW, THEREFORE, VA, the SHPO and ACHP agree that implementation of the following stipulations evidence that VA has taken into account the effects of the undertaking on historic properties, and this PA evidences compliance with Section 106 in accordance with 36 CFR § 800.8(c)(4)(i)(B).

STIPULATIONS

VA shall ensure that the following measures are carried out:

I. APPLICABILITY

- a. VA is responsible for ensuring implementation of the stipulations in this PA associated with the undertaking, including those actions undertaken by private developers and non-profit organizations through enhanced use leases and other agreements.
- b. The Anti-Deficiency Act, 31 U.S.C. 1341, prohibits federal agencies from incurring an obligation of funds in advance of or in excess of available appropriations. Accordingly, the parties agree that any requirement for the obligation of funds arising from the terms of this PA shall be subject to the availability of appropriated funds for that purpose, and that this agreement shall not be interpreted to require the obligation of funds in violation of the Anti-Deficiency Act.

II. GENERAL

- a. The SHPO prefers all official correspondence in hard copy as appropriate. Email communications are acceptable; however, required communications to or from the SHPO for project reviews as defined below, including specific comments on the undertaking, shall be submitted in hard copy on agency letterhead or agreed upon templates.
- b. Time designations shall be in calendar days. Failure to comment within specified time designations shall not prevent VA from proceeding in the process as outlined in this PA.
- c. For the purposes of this PA, the definitions provided in 36 CFR §§ 800.16(a) through (z) shall apply.
- d. VA shall ensure that all work carried out pursuant to this PA shall be done by or under the supervision of historic preservation professionals meeting the applicable Secretary of the Interior's *Professional Qualification Standards* (36 CFR Part 61).

III. PRESERVATION PRIORITIES

- a. To inform long-term facility planning at the WLA Campus, VA developed a draft list of preservation priorities for the contributing resources to the WLA VA NRHD based on their relative significance. Non-contributing resources and campus resources outside the WLA VA NRHD are not preservation priorities. VA shall take into consideration these preservation priorities during project development, with the goal of avoiding and/or

minimizing adverse effects to the district, including cumulative effects. VA shall consult with the SHPO and Consulting Parties to seek agreement on the final list of preservation priorities following execution of this PA, and the final list of priorities will be incorporated into the final Campus Historic Resource Plan (CHRP) (see Stipulation VI). If VA, the SHPO and the Consulting Parties cannot reach agreement on preservation priorities that meet the historic property management goals for the WLA VA NRHD within the CHRP timeline as described in Stipulation VI, VA shall proceed in accordance with Stipulation IX.

IV. REVIEW PROCEDURES

a. Review Process for all projects

- i. VA shall submit all proposed MP projects to the SHPO for review and comment on a Project Review Template (PRT) in hard copy. VA shall develop this PRT in consultation with the SHPO within 60 days of executing this PA. If VA and the SHPO cannot reach agreement on a PRT that meets the documentation standards outlined in 36 CFR § 800.11, VA shall proceed in accordance with Stipulation IX.
- ii. VA shall post each submitted PRT when it is submitted to the SHPO, along with related responses and correspondence among the signatories, to the MP website and notify Consulting Parties of new postings.
- iii. VA and the SHPO shall consider any comments received on the PRT from other Consulting Parties within 30 days of posting.
- iv. Until completion of the PRT, VA shall submit any proposed MP projects following 36 CFR § 800.5.
- v. If submitted projects change in a way that VA determines requires revision of the finding of effect, VA will submit a revised PRT with an updated finding of effect in keeping with 36 CFR § 800.5(d).

b. Review Process for No Historic Properties Affected and/or No Adverse Effects to Historic Properties

- i. VA shall submit to the SHPO a PRT with the basis of the finding of effect. VA shall not submit construction documentation as part of the PRT, unless it is needed to substantiate the finding of effect in which case VA will submit the design at or before 35% development. The SHPO has 30 days to respond; if the SHPO does not respond in 30 days, VA may proceed.
- ii. The SHPO shall respond with either concurrence or a request for more information.
 - a. If the SHPO concurs, documentation of such concurrence shall evidence completion of consultation for the project.
 - b. If construction documentation is needed to demonstrate that the project shall not affect historic properties or shall not adversely affect historic properties, VA shall submit supporting documentation as outlined in the PRT at or before 35% of Design Development and at or before 95% of Construction Drawings, including incorporation of comments from the SHPO and a determination that the project continues to meet the Secretary of the Interior's *Standards for the Treatment of Historic Properties (SOI Standards)*.
- iii. If the SHPO requests more information, SHPO shall have 30 additional days to review new information from VA and provide comments. If the SHPO does not respond within this timeframe, VA may proceed.
- iv. If the SHPO concurs following VA's submission of additional information, documentation of the SHPO's concurrence shall evidence completion of consultation. If the SHPO does not concur with VA's finding for the project, VA may either:

1. Revise its initial finding and proceed with the appropriate review process, or
 2. Proceed in accordance with Stipulation IX.
- c. Review Process for Adverse Effects to Historic Properties
- i. VA shall submit to the SHPO a PRT describing the project, with an explanation of previous efforts to avoid and/or minimize effects, and post it to the MP website. VA shall alert other consulting parties of the posting and proceed with consultation under 36 CFR § 800.6.
 - ii. VA shall consult with the SHPO to develop a template memorandum of agreement (MOA). VA and SHPO will endeavor to complete this template MOA within 60 days of execution of this PA. If VA determines that further consultation will not be productive, VA will proceed in accordance with Stipulation IX. If VA determines that consultation is proceeding in good faith, VA will continue to consult for an additional 60 days to finalize the template MOA. The final template MOA will be included in the CHRP.

V. UPDATES TO THE MASTER PLAN

- a. VA shall notify signatories of proposed updates to the MP and notify the SHPO and all other Consulting Parties of public comment periods and/or meetings related to the update(s).
- b. VA shall assess the cumulative effects of the proposed updates on the integrity of the WLA VA NRHD.
 - i. If VA determines that the proposed changes to the WLA Campus would diminish the integrity of the WLA VA NRHD to the extent that the district would be ineligible for listing in the NRHP, VA shall consult with the SHPO and other Consulting Parties, pursuant to 36 CFR § 800.6.
 - ii. If VA determines that the WLA VA NRHD would remain a historic property following proposed changes, it shall continue to follow the review procedures in Stipulation IV.

VI. AVOIDANCE AND MINIMIZATION OF ADVERSE EFFECTS TO HISTORIC PROPERTIES

- a. VA shall create a CHRP to guide the redevelopment of the WLA Campus to ensure that good design practice begins during planning and takes into account character-defining features and the integrity of the WLA NRHD and contributing resources.
 - i. The CHRP shall be based on the *SOI Standards* with specific references to the *Standards for Rehabilitation*, as well as the WLA VA NRHD NRHP nomination (2014).
 - ii. The CHRP shall provide comprehensive design guidelines for rehabilitation, renovation, additions, and new construction, intended to avoid and minimize adverse effects to the WLA VA NRHD, including cumulative effects.
 - iii. The CHRP shall provide specific direction for the WLA Campus, with tailored guidance for specific areas, based on the final list of preservation priorities developed per Stipulation III.
 - iv. The CHRP will include the template MOA and list of types of adverse effects not requiring an MOA developed per Stipulation IV(c).
 - v. VA shall submit a draft CHRP to all Consulting Parties for review and comment within 120 days of executing this PA.
 - vi. VA shall finalize the CHRP within 365 days of executing this PA.
 - vii. Prior to finalizing the CHRP, VA shall use the *SOI Standards* as guidance for redevelopment and new construction in the WLA VA NRHD.

- viii. Upon completion of the CHRP, all references within this PA to *SOI Standards* shall also be interpreted to include the CHRP.

VII. ARCHAEOLOGICAL MEASURES

- a. VA, in consultation with the ACHP, the SHPO, and Consulting Parties, developed an ASM for the WLA Campus (Attachment B). The ASM identifies areas of high, moderate, low and very low probability for intact archaeological resources. The ASM shall be updated as necessary pending subsurface discoveries and/or any new information that further informs the understanding, identification and treatment of historic properties on the WLA Campus. VA shall follow the ASM for identification of buried historic properties.
 - i. VA, in consultation with the SHPO and other Consulting Parties, shall develop a process for updating the ASM and create a negative finding form within 60 days of executing this PA. If VA and the SHPO cannot reach agreement on a process for updating the ASM or the form that meets the historic property management goals for the WLA NRHD, VA shall transmit documentation of the consultation efforts to the ACHP to review and proceed according to Stipulation IX.
 - ii. VA shall submit a negative finding form if no sites are found.
- b. Evaluation and Avoidance/Mitigation
 - i. If potentially eligible resources are found while monitoring, VA shall follow the ASM methodology consistent with 36 CFR § 800.4(c).
 - ii. If archaeological resources are found while conducting Buried Site Testing, work will be halted, and a qualified archaeologist shall recommend to VA whether the discovery is eligible for listing in the NRHP by evaluating it in accordance with 36 CFR § 60.4.
 - iii. If VA finds that the resource is not an historic property, and if the SHPO concurs or does not respond within 30 days, VA may proceed without further review.
 - iv. If VA determines that the resource is an historic property, VA shall seek to avoid it. If VA cannot avoid the resource, VA shall prepare and implement a data recovery plan specific to the resource.
 - v. The SHPO and interested Consulting Parties shall be afforded the opportunity to review a summary of work describing the evaluation, finding of effect, and the data recovery plan. However, these reports shall not be posted to the MP website due to the protected and sensitive nature of archaeological information.
 - vi. Final reporting shall be done only after all work has been completed, with the SHPO/Consulting Party review.
 - vii. If VA and the SHPO cannot concur on the eligibility of archaeological finds or finding of effect, VA shall transmit documentation of the consultation efforts related to archaeology to the ACHP to review and proceed according to Stipulation IX.

VIII. ANNUAL REPORTING AND MEETING

- a. Each year, upon the execution date of this PA, and until its expiration or termination, VA shall provide the SHPO with an Annual Report summarizing and detailing work undertaken pursuant to its terms and post it to the MP website to inform the Consulting Parties. This report shall include any proposed scheduling changes; information concerning preservation priorities, unanticipated discoveries, any issues or problems encountered during the undertaking's implementation; VA's analysis of cumulative effects; and any disputes and objections received in VA's efforts to fulfill the terms of this PA.
- b. VA shall host an Annual Meeting with Consulting Parties to review the projects undertaken to implement the MP and review cumulative effects. VA shall include the date of the

meeting as part of the annual report. This meeting shall occur more than 2 weeks after but within 6 weeks of posting of the Annual Report.

IX. DISPUTE RESOLUTION

- a. Should a Signatory object in writing to the implementation of any stipulation(s) of this PA, VA shall consult with that party or parties to resolve the objection. If VA determines that such objection cannot be resolved, VA shall:
 - i. Forward all documentation relevant to the dispute, including VA's proposed resolution, to the ACHP. ACHP shall provide VA with its advice on the resolution of the objection within 30 days of receiving adequate documentation.
 1. Adequate documentation shall include a copy of this PA, the written objection of the Signatory, VA's response to the objection, and any supporting documentation.
 - ii. VA shall take into account any advice or comments from the ACHP in determining a final decision on the dispute.
 - iii. VA shall document its final decision and notify the Signatories of it. VA shall then proceed in accordance with its final decision. VA shall post its final decision(s) on the MP website.
 - iv. VA's responsibility to carry out all other actions subject to the terms of this PA that are not the subject of the dispute remain unchanged.

X. AMENDMENT AND TERMINATION

- a. This PA may be amended if any Signatory requests an amendment and it is agreed to in writing by all Signatories. The amendment shall go into effect on the date of the signature by the final Signatory once filed with the ACHP.
 - i. If any Signatory to this PA determines that its terms shall not or cannot be carried out, that party shall immediately consult with the other Signatories to attempt to develop an amendment.
 - ii. If within 60 days an amendment cannot be reached, any Signatory may terminate the PA upon written notification to the other Signatories. VA shall post notice of a termination on the MP website.
- b. Upon termination of this PA, if any new MP projects do not have an effect determination and resolution accepted by all Signatory Parties, VA shall either consult to execute another agreement or request ACHP comments, pursuant to 36 CFR § 800.6(c)(8). This PA may be terminated without further consultation by the execution of a subsequent agreement that explicitly terminates or supersedes this PA.
- c. Termination of the PA shall require VA to comply with 36 CFR Part 800, as amended for any new MP projects that do not have an agreed upon effect determination, in keeping with Stipulations IV-VII.

XI. DURATION

- a. This PA shall be effective on the date of the signature by the final Signatory, once filed with the ACHP.
- b. This PA shall be executed in counterparts, with a separate page for each Signatory. VA shall post a complete copy of the executed PA, including all signatory pages and Attachments, to the MP website.
- c. This PA shall remain in effect for a period of 10 years from the date of execution, unless it is terminated prior to that date. No later than 12 months prior to expiration of the PA, VA may initiate consultation with the signatories to determine whether the PA shall be extended for a period of five or more additional years. Unless the Signatories unanimously agree on an

extension, this PA shall automatically expire and have no further force or effect in accordance with the stipulated timetable.

EXECUTION AND IMPLEMENTATION of this PA evidences that VA has afforded the ACHP a reasonable opportunity to comment on the undertaking and its effects on historic properties, that VA has taken into account the effects of the undertaking on historic properties, and that VA has satisfied its NHPA responsibilities.

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REGARDING REDEVELOPMENT OF THE WEST LOS ANGELES CAMPUS OF THE
VETERANS AFFAIRS GREATER LOS ANGELES HEALTHCARE SYSTEM**

SIGNATORY

U.S. Department of Veterans Affairs



Ann R. Brown, FACHE, Director, Greater Los Angeles Healthcare System

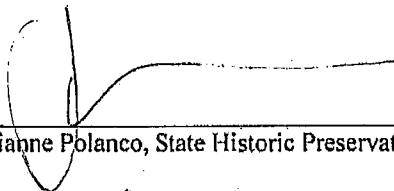
4/30/19

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SIGNATORY

California State Historic Preservation Officer



Julianne Polanco, State Historic Preservation Officer


20 April 2019

Date

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SIGNATORY

Advisory Council on Historic Preservation



John M. Fowler, Executive Director

5/1/19

Date

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CONCURRING PARTY

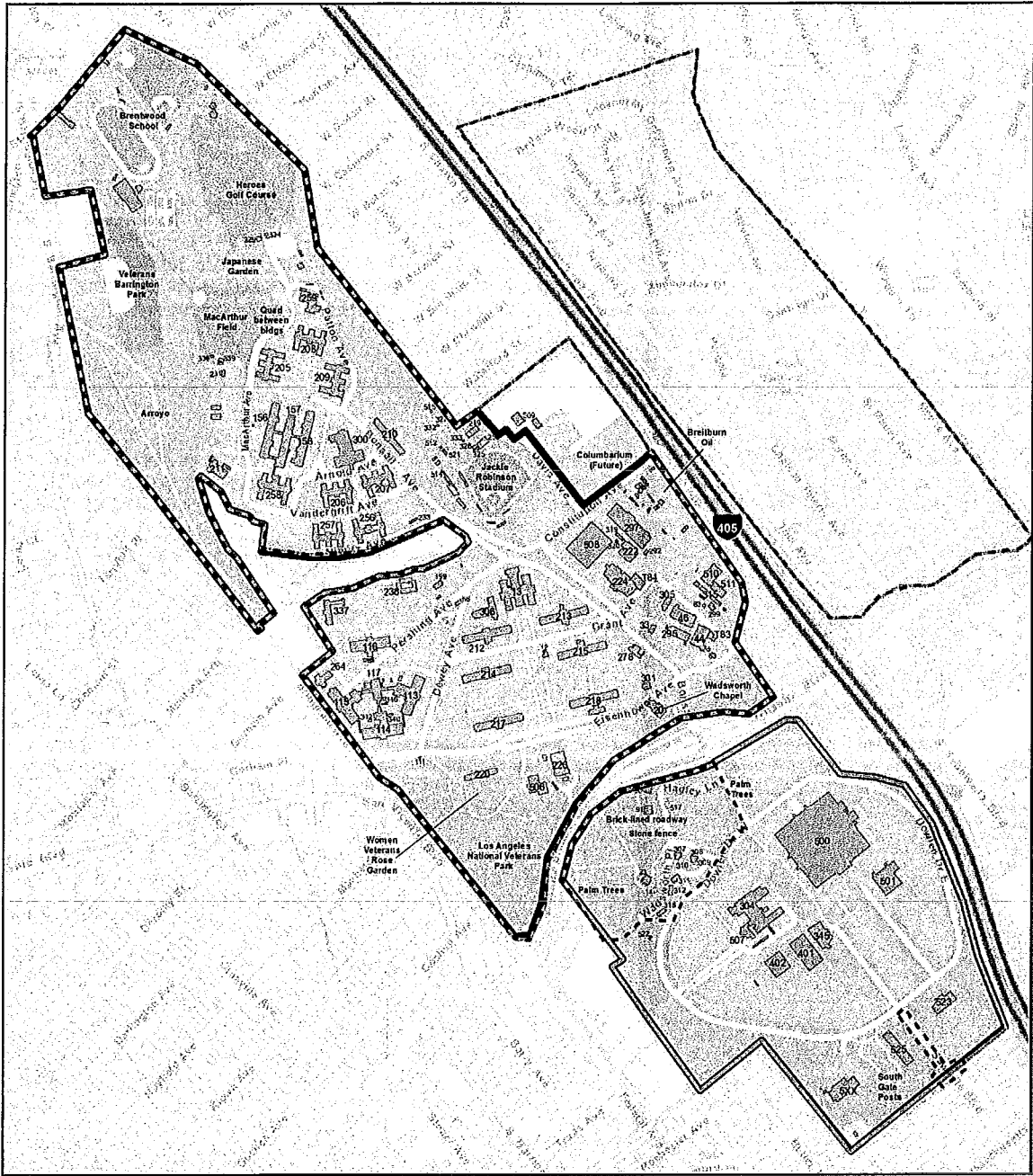
West Los Angeles Veterans Collective

TBD

Date

Attachment A

Map of the Area of Potential Effect



Area of Potential Effect

- Area of Potential Effect (APE)
- WLA Campus Boundary
- WLA VA NRHD Boundary
- Campus Buildings
- Parking

- Land Uses**
- Developed Space
 - Paved Areas
 - Open Space
 - Recreation

N

NAD 1983 UTM Zone 10N

0 250 500 1,000 1,500

Feet

Sources: Esri, West LA VA

Archaeological Sensitivity Model

Veterans Affairs Greater Los Angeles Healthcare System Campus Master Plan

City of Los Angeles, Los Angeles County, California

Prepared for:

Row 10 Historic Preservation Solutions, LLC
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New Orleans, LA 70117

Prepared by:

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Duke CRM Project Number: C-0243



June 2018

Per California Government Code 6254.10 archaeological site location information is exempt from the California Public Records Act. Therefore archaeological site location information should be kept confidential and not be made available for public view.

DUKE CULTURAL RESOURCES MANAGEMENT

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INTRODUCTION

The Veterans Affairs Greater Los Angeles Healthcare System (VAGLAHS) Campus is located in the densely urbanized Brentwood neighborhood (Figure 1). The Department of Veterans Affairs is preparing a new Master Plan to help revitalize the campus to be more Veteran focused. Some of the planned changes will involve construction of new facilities that could impact both previously recorded and undiscovered cultural resources. Because future construction activities may have adverse effects on undiscovered, buried archaeological sites not visible during archaeological survey or testing, Row 10 Historic Preservation Solutions contracted Duke Cultural Resources Management, LLC (DUKE CRM), to evaluate the VAGLAHS Campus for areas with sensitivity for intact buried sites. This report summarizes a buried site sensitivity (BSS) model created to predict areas where archaeological resources are most likely to occur in the 367-acre VAGLAHS Project Area (Figure 2). This BSS model provides a baseline for planning future development on the VAGLAHS property and is designed to minimize the costs and disruptions associated with construction monitoring and emergency site treatment.

PROJECT SETTING

The VAGLAHS Project Area is located on the southern piedmont of the Santa Monica Mountains, overlooking the Los Angeles Basin. The Project Area is situated primarily on alluvial fan surfaces associated with Sepulveda Canyon drainages. Before urbanization of the area, extensive wetlands associated with Ballona Creek were present in the low-lying coastal plain to the south.

PREHISTORIC SENSITIVITY MODEL

Archaeological pedestrian surveys are the standard method used to document the presence and spatial distribution of archaeological sites with cultural material exposed on the modern ground surface. In some locations, however, sediment deposited by post-occupation geological processes or modern human activities has buried sites deeply enough that no surficial evidence of their presence exists.

Effective strategies for predicting where buried prehistoric archaeological sites are likely to exist require knowledge of the local geomorphology and soil-stratigraphy because these factors largely determine where archaeological sites dating to specific time periods are likely to be found and whether or not the archaeological deposits are sufficiently intact to retain significance. Because comprehensive geomorphic studies in the VAGLAHS Project Area are not feasible, existing geological, environmental, land use, and archaeological data were used to construct a BSS model for predicting where buried sites are most likely to occur. Although this approach lacks the resolution that an extensive geomorphological study would provide, it nonetheless allows identification of areas likely to have surface deposits young enough to contain archaeological remains. In addition, this approach permits low-energy depositional settings where sites would most likely be preserved to be differentiated from high-energy settings where archaeological deposits would generally occur in secondary (reworked) contexts with little data potential. Finally, consideration of topographic parameters, proximity to important prehistoric resources, and the spatial distribution of previously documented prehistoric archaeological sites allows areas with especially high likelihood for deeply buried prehistoric archaeological deposits to be identified.

Modeling Methodology

The BSS model was created using Esri ArcGIS 10.3.1 software. Development of the VAGLAHS BSS model involved three main steps. First, Project extent, environmental and cultural resources baseline data were acquired. Next, the age and origin of surficial geologic deposits were inferred. Finally, areas predicted to have different levels of sensitivity were identified using a variety of environmental and cultural criteria, as described below. This resulted in the VAGLAHS Study Area being subdivided into areas predicted to have Very Low, Low, Moderate, and High sensitivity for buried prehistoric archaeological sites.

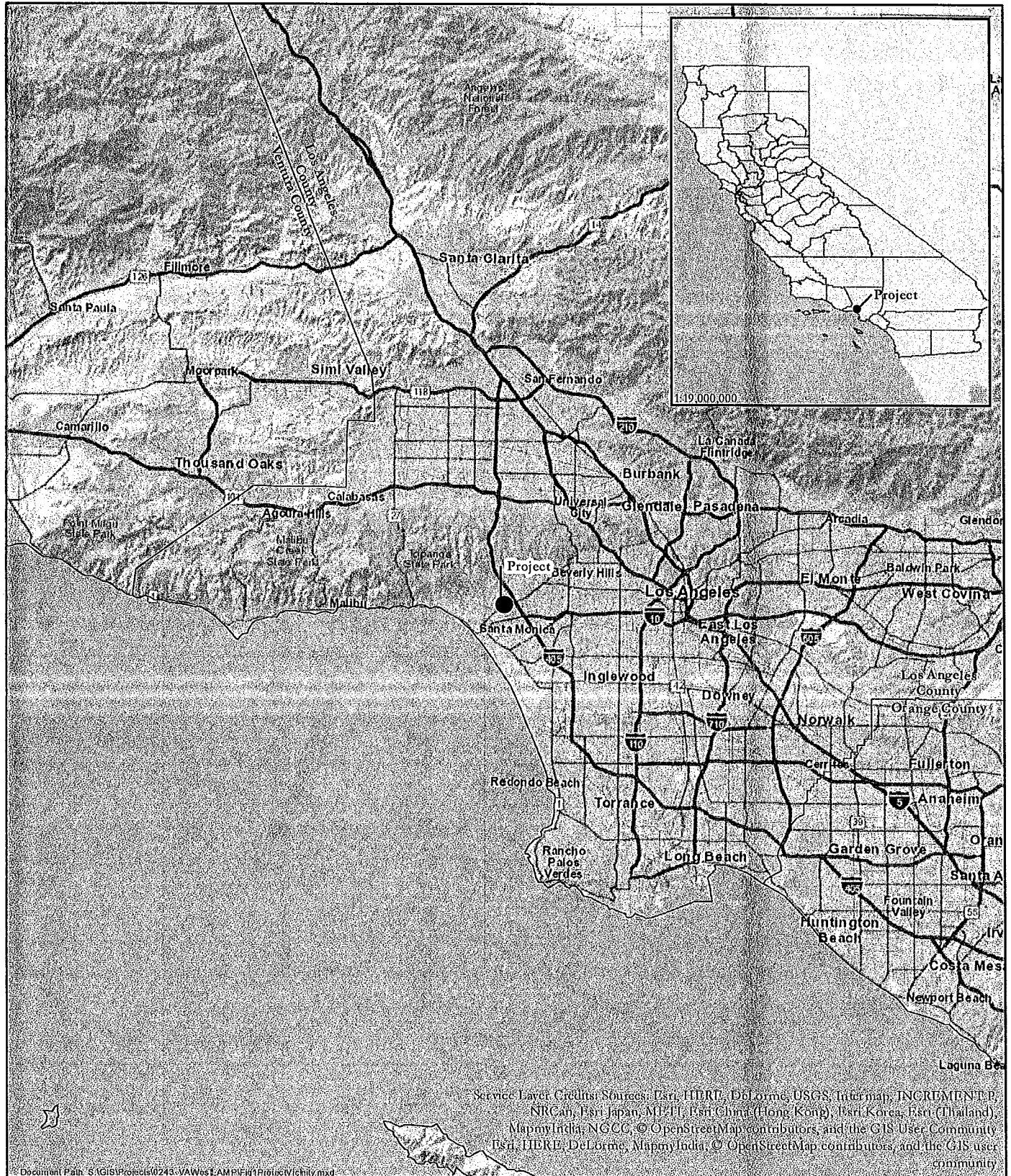
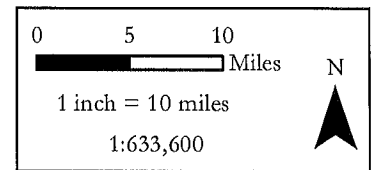


Figure 1- Project Vicinity
Archaeological Sensitivity Model
Veterans Affairs
West Los Angeles Master Plan



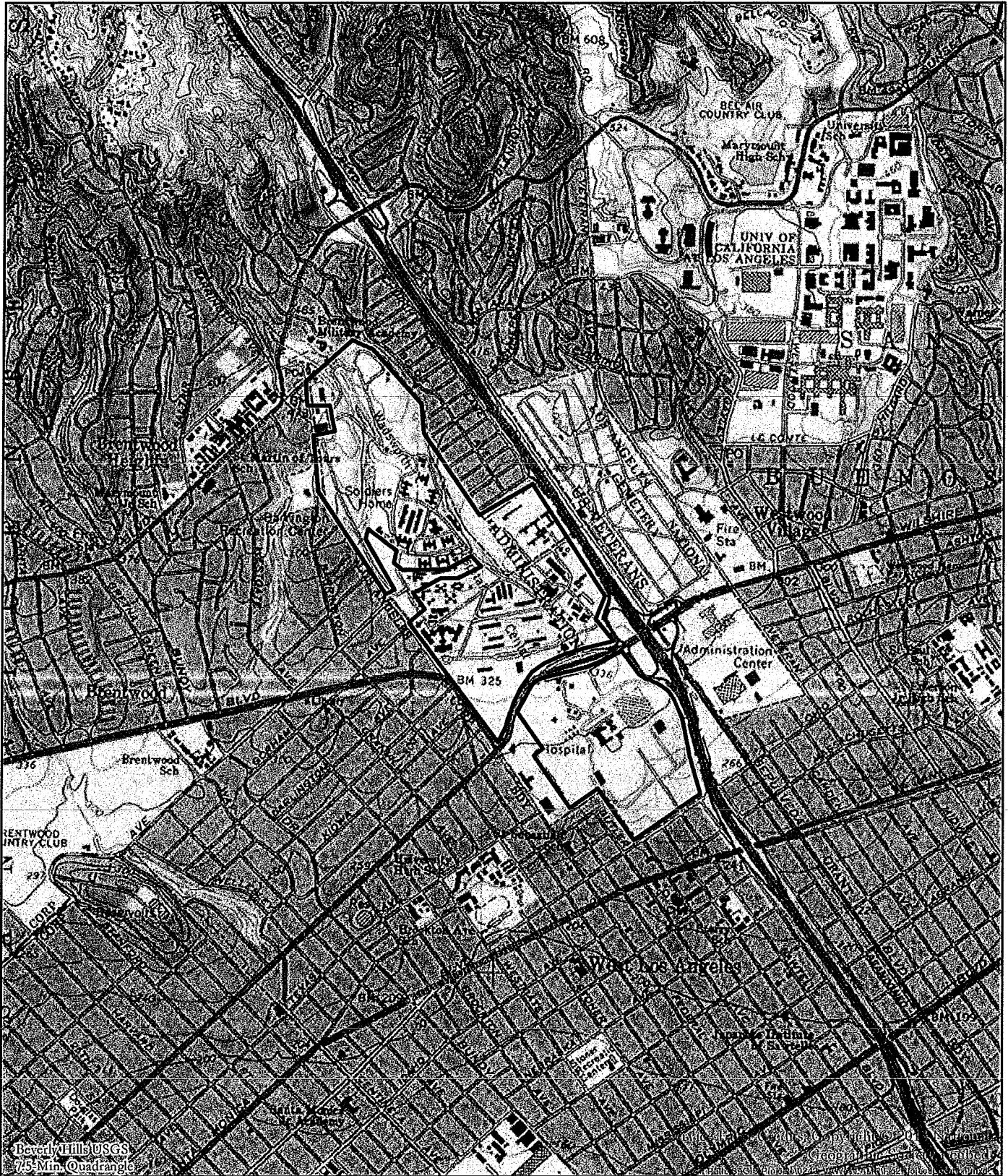


Figure 2- Project Location


Archaeological Sensitivity Model

Veterans Affairs

West Los Angeles Master Plan



 Project

0 1,000 2,000
 Feet

1 inch = 2,000 feet

1:24,000



DUKE CULTURAL RESOURCES MANAGEMENT

Data Sources

The sensitivity model was tailored especially for the VAGLAHS Project Area using soil maps and descriptions, geologic maps, satellite imagery, topographic maps, aerial photographs, utility maps, and known prehistoric archaeological surface site distributions to identify areas most likely to contain deeply buried prehistoric archaeological sites. These data sources are detailed in Table 1.

Table 1: Information Sources Consulted During Sensitivity Model Construction

Type	Details
Surficial Geology	<ul style="list-style-type: none"> • Bedrossian et al. (2012) • Bedrossian and Roffers (2012) • Campbell et al. (2014) • Mirro et al. (2012)
Soils	<ul style="list-style-type: none"> • Web Soil Survey (2017) • Nelson et al. (1919) • Mirro et al. (2012) • 08-VAGLAHS-Campus-Draft-Master-Plan-Appendix-B-North-Campus-Civil-Analysis-final.pdf supplied by Row 10
Pre-Development Slope	1925 Sawtelle, California, USGS topographic quadrangle, 1:24000
Prehistoric archaeological sites	19-000382.pdf Resource PDF supplied by Row 10: site record for CA-LAN-382 Abdo-Hintzman and Mirro (2015)
Springs	19-000382.pdf Resource PDF supplied by Row 10: site record for CA-LAN-382 1902 Santa Monica, California, USGS topographic quadrangle, 1:62500
Mechanical Grading and Built Environment	1921 Santa Monica, California, USGS topographic quadrangle 1:62300 1925 Sawtelle, California, USGS topographic quadrangle, 1:24000 1950 Beverly Hills, California, USGS topographic quadrangle 1:24000 1966 Beverly Hills, California, USGS topographic quadrangle 1:24000 2012 Beverly Hills, California, USGS topographic quadrangle 1:24000 Aerial photos provided by Row 10: <ul style="list-style-type: none"> ○ 1927: 19270228_c-30_a-1.tif; 19270731_c-113_37.tif; 19270731_c-113_38.tif ○ 1934: 19340627_c-3060_4x.tif ○ 1938: 19371231_axj-1938_26-17.tif (5/22/38) ○ 1956: 19560630_c-22555_14-19.tif (9/8/56) ○ 1960: 19600430_c-23870_1592.tif (5/20/60) ○ 1965: 19651129_c-25019_229.tif ○ 1971: 19710228_tg-2755_18-13.tif (4/5/71) ○ 1976: 19760131_tg-7600_11-40.tif (3/12/76) ○ 1982: 19820130_ami-la-82_11432.tif Satellite imagery: ArcGIS Online World Imagery basemap (Source: National Agriculture Imagery Program (NAIP), United States Department of Agriculture (USDA) Farm Service Agency (FSA) (6/16/2016) Digital Elevation Model (DEM) and Hillshade: Los Angeles Regional Imagery Acquisition Consortium (LAR-IAC), Los Angeles County GIS Data Portal https://public.gis.lacounty.gov/public/rest/services/LACounty_Dynamic/Elevation/MapServer Utility maps provided by Row 10: 08-VAGLAHS-Campus-Draft-Master-Plan-Appendix-B-North-Campus-Civil-Analysis-final.pdf 1910 map of the NHDVS water system provided by Row 10 1888 Santa Monica Detail Irrigation Map, created by The California Department

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	of Engineering, georeferenced by and downloaded from http://davidrumsey.georeferencer.com/maps/23248018097/ 1880 Los Angeles and San Bernardino Topography Map by William Hammond Hall, Office of State Engineer. Georeferenced and found at https://www.davidrumsey.com/maps3795.html
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Assumptions

Three underlying assumptions of the BSS model are: (1) prehistoric people did not arrive in California in substantial numbers earlier than about 14,000 years ago, around the end of the Pleistocene epoch; (2) Holocene soils in the region can be consistently differentiated from Pleistocene soils using soil morphology traits and established soils chronosequences; and (3) intact archaeological sites are unlikely to be preserved in high-energy depositional environments characterized by coarse-textured (gravelly) sediments.

The accuracy of the sensitivity levels predicted in the VAGLAHS Project Area is dependent on a number of factors, foremost of which is the accuracy of the geology and soil maps used to differentiate Holocene and Pleistocene landforms. Differentiation of areas with High versus Moderate sensitivity in part depends on the accuracy of the assumptions regarding the propensity for human settlements and activity areas to be near water sources, lithic resources, or stable geomorphic surfaces, and the tendency for sites to occur in clusters across the landscape. In addition, hydrologic conditions today are not necessarily accurate representations of past conditions, and surface site distributions are not always complete or accurate, as surveys vary in quality and some sites were undoubtedly destroyed before archaeological surveys were conducted.

Model Construction and Results

Criteria used to categorize the sensitivity of the VAGLAHS Project Area for buried prehistoric sites are summarized in Table 2 and described in detail below.

Table 2: Prehistoric Site Sensitivity Criteria

Type	Details
High	Holocene Alluvium (Qya) AND Within 200 m of a stream, spring, wetland, Pleistocene fan terrace margin, mountain front, or known (or suspected) prehistoric archaeological site
Moderate	Holocene Alluvium (Qya) AND More than 200 m from a stream, spring, wetland, Pleistocene fan terrace margin, mountain front, or known prehistoric archaeological site
Low	Pleistocene Alluvium (Qof) AND No indication of significant surface disturbance and native ground surface slope less than ~25%
Very Low	Pleistocene Alluvium (Qof) AND Mechanically graded or highly disturbed (\geq upper 1 foot) or very steep (greater than ~25%) native ground surface slope

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Pleistocene Landforms

Human occupation in California is conventionally believed to post-date approximately 14,000 calendar years before present (Moratto 1984:30), roughly coinciding with the ~12,000 cal BP (Before Present) boundary between the Holocene and Pleistocene epochs of the Quaternary period. Therefore, the VAGLAHS Project Area was first divided by mapped surficial geology and soil type into Holocene alluvial fans and Pleistocene alluvial fans (Figure 3) based on published surficial geology and soil maps (Table 1).

Geological maps (Bedrossian et al. 2012; Campbell et al. 2014) indicate that the higher fan terrace surfaces in the Project Area consist of old alluvial fan deposits (map unit Qof). Areas of Qof constitute 83% of the VAGLAHS Project Area. This Late to Middle Pleistocene unit consists of slightly to moderately consolidated, moderately dissected, alluvial fan deposits composed of boulders, cobbles, gravels, sand, and silt. Modern soil maps are of limited use because of extensive urbanization. Appendix B of the Draft Master Plan, however, indicates that Ramona series soils occur on the Pleistocene terrace surfaces. Ramona soils (Typic Haploxeralfs) have strongly developed profiles that include an argillic (clay-enriched) horizon that is reddened to 5YR Munsell hues. These soils have been interpreted to have a late Pleistocene age (McFadden 1982). An early 20th century soil map (Nelson et al. 1919), created before the Project Area was dominated by urban land use, indicates Pleasanton loam soils on Qof surfaces. This soil type is similar to Ramona, but is characterized by slightly weaker development and a gravelly substratum.

Qof areas have minimal sensitivity for buried prehistoric archaeological sites because they consist of Pleistocene deposits too old to contain archaeological material. Even though shallowly buried archaeological sites (less than approximately 2 ft below the native ground surface) could occur in these contexts, such sites would probably have some surface expression in areas with minimal surface disturbance because bioturbation processes (such as rodent burrowing) or pedoturbation processes (such as clay shrink-swell cycles) would likely have brought some buried archaeological materials to the surface. In urbanized areas, however, such shallow sites may have been destroyed by development before they could be recorded.

The sensitivity of Qof for buried prehistoric sites was classified as either Very Low or Low (Figure 4). Portions of the VAGLAHS Campus assigned to the Very Low category include areas where the ground surface has been significantly disturbed by modern human activities and shallow or surface sites are very unlikely to be preserved (Figure 5). Such areas were primarily delineated using georeferenced topographic maps, aerial photographs, and utility maps to identify areas that were impacted by mechanical grading, building sites, transportation corridors (roads and railroads), or utilities (gas, oil, water, electric, telecommunication, sewer storm drains, and steam lines). Very Low sensitivity status was also assigned to very steep areas (>25% slope) where sites are unlikely to occur or be preserved (Figure 5). Extensive urban development, especially after ca. 1950, has drastically modified the Project Area topography by leveling large areas with cut and fill. However, the 1925 USGS Sawtelle 1:24000 quadrangle, which has 5 ft contours, provides a good representation of pre-urbanization topography and was used to define the very steep areas. The majority of Qof was determined to have Very Low sensitivity for buried prehistoric sites (Figure 4). The remaining portions of Qof that failed to meet the disturbance or steepness criteria were assigned to the Low sensitivity category for buried prehistoric sites.

Buried site testing (BST) conducted in 2012 by Applied EarthWorks, Inc., (Mirro et al. 2012) at Lot 38 provides local confirmation of the predictions of the sensitivity model. Trenches dug in Qof areas predicted by the BSS model to have Very Low sensitivity for buried prehistoric sites indicate that artificial fill containing historical debris is 2.1 to more than 4.2 meters (m) thick in this area. This fill overlies intact Pleistocene alluvium that was truncated by mechanical grading and capped by the artificial fill. During archaeological monitoring in the vicinity of Lot 20, Applied EarthWorks, Inc., (Abdo-Hintzman and Mirro 2015) noted scattered marine shell on the Pleistocene terrace scarp, which they concluded plausibly represents the “displaced and redeposited” remains of a shell midden site originally located on the hospital complex grounds.

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Holocene Landforms

Geological maps (Campbell et al. 2014; Bedrossian et al. 2012) indicate that the younger, lower fan surfaces in the VAGLAHS Project Area consist of young alluvium (map unit Qya). Qya deposits are inset into older Qof alluvium, but Qya deposits generally appear to be more than 1.5 m thick. Qya surfaces constitute 17% of the Project Area (Figure 3). This Holocene to late Pleistocene unit consists of unconsolidated to slightly consolidated, undissected to slightly dissected fan alluvium composed of clay, silt, sand, and gravel. The relatively fine-grained texture of Qya deposits suggests low- to moderate-energy depositional environments generally conducive to the nondestructive burial of sites.

Appendix B of the Draft Master Plan and a historic soil map (Nelson et al. 1919) indicate that Yolo series soils occur on the Qya fan surface. Yolo soils (Mollic Xerofluvents) have a weakly developed profile with a thick, organic enriched A horizon overlying unaltered alluvium. The typical pedon soil description suggests that it often contains a buried A horizon, suggesting episodic deposition and buried paleosurfaces. Because Yolo soils are weakly developed Entisols, they probably formed in Holocene deposits (McFadden 1982).

Qya deposits have much higher sensitivity than Qof deposits for buried prehistoric archaeological sites because they date to the Holocene and therefore are young enough to contain archaeological material. Archaeological material buried by more than 1-2 feet of sediment is unlikely to be brought to the present ground surface by bioturbation or pedoturbation, and any deeply buried sites in such contexts are not likely to be detected during traditional pedestrian surveys. Even though disturbances associated with urbanization such as grading and building construction may have destroyed surface or shallowly buried sites in Qya areas, it is possible that deeply buried prehistoric sites are preserved intact in undisturbed Holocene alluvium below the zone of disturbance or artificial fill. Evidence of mechanical grading, utility trenching, or other surficial disturbance in some areas may mean that the upper few feet of some Qya areas are not sensitive for either buried or surface prehistoric sites. Nonetheless, deeper undisturbed Qya deposits likely retain integrity and are considered sensitive for buried prehistoric cultural resources. Whether future development of these areas disturbs sensitive deposits depends on the depth of the associated disturbance and the thickness of surficial deposits either composed of artificial fill or already highly disturbed by prior development activities.

The sensitivity of Qya areas is classified as either Moderate or High for buried prehistoric sites (Figure 4). Various environmental and cultural factors make some Qya areas more likely to contain buried archaeological sites than other areas. Several of these factors most relevant to the VAGLAHS area were incorporated into the BSS model so that areas with High sensitivity could be differentiated from areas with Moderate sensitivity (Figure 5; Table 2). Environmental factors considered when predicting areas with enhanced sensitivity include proximity to water and stable geomorphic surfaces. Because no bedrock outcrops that could serve as prehistoric toolstone quarries occur in the Project Area or immediately surrounding area, this variable was not considered. Qya areas not meeting any of the environmental or cultural sensitivity-enhancing criteria described below are assigned Moderate sensitivity for buried prehistoric sites.

Fresh water was a critical but often scarce resource for the prehistoric occupants of southern California. Hydrological features such as streams and springs would have attracted prehistoric people, even if water was only periodically present. It is reasonable to assume that both buried and surface sites would be more common near water sources. As such, the model predicts High sensitivity for buried sites in Qya areas within 200 m of a stream, wetland, or spring.

Surface site distributions in southern California suggest that buried prehistoric sites are more likely to occur in Holocene alluvium near the margins of Pleistocene surfaces. Because Pleistocene fan remnants are elevated above younger, more active floodplain and fan surfaces, the Pleistocene surfaces were attractive, stable occupation surfaces near lowland resources. As such, the BSS model predicts High sensitivity in Qya deposits within 200 m of elevated Pleistocene surfaces.

Cultural factors include proximity to previously recorded sites. Buried archaeological sites in southern California are often discovered near surface sites or in areas with a relatively high density of archaeological sites (Onken 2003). Therefore, the BSS model predicts enhanced sensitivity for buried prehistoric sites within

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200 m of previously recorded prehistoric archaeological sites. That said, only one prehistoric site—the Serra Spring site (CA-LAN-382)—has been recorded in the vicinity of the VAGLAHS Campus, and it is located 500 m *outside* the Project Area. However, during archaeological monitoring in the vicinity of Lot 20, Applied EarthWorks, Inc., (Abdo-Hintzman and Mirro 2015) noted scattered marine shell on the Pleistocene terrace scarp, which they concluded plausibly represents the “displaced and redeposited” remains of a shell midden site originally located on the hospital complex grounds. Although exactly where this site was located is somewhat ambiguous, the BSS model assumes a prehistoric site once existed on or near the hospital, and Qya areas within 200 m of the hypothesized location of this site were accordingly assigned High sensitivity. Criteria for differentiating Moderate versus High sensitivity areas are informed by the results of extensive BST Programs associated with large archaeological projects conducted elsewhere in southern California. These include the Eastside Reservoir (ESRP) and Inland Feeder Pipeline (IFP) projects, both Metropolitan Water District of Southern California undertakings. Deeply buried sites discovered in these project areas tended to be in Holocene alluvial deposits located within 200 m of elevated landforms (e.g., mountain fronts, inselbergs, or terrace remnants), stream drainages, or known surface sites (Onken 2001, 2003).

BST investigations conducted by Applied EarthWorks, Inc., (Mirro et al. 2012) near Lot 299 in 2012 provide local confirmation of the predictions of the sensitivity model. Trenches dug to a depth of 4.2 m in Qya areas predicted by the BSS model to have High sensitivity for buried prehistoric sites indicate that subsurface deposits can vary greatly over short distances. One trench exposed stratified silty sand and gravelly sand, whereas the other trench exposed relatively homogenous silty clay that probably represents artificial fill. The stratified deposits are weakly soil-altered and represent Holocene alluvium. This alluvium was deposited in an environment that fluctuated between moderately high energy and relatively low energy. Gravelly sand deposits represent relatively high energy environments in alluvial fan distributary channels, and this environment was not conducive to site preservation. Silty sand deposits, in contrast, represent lower energy sheet wash deposition that could bury archaeological sites without significantly affecting their integrity. Therefore, these deposits, when considered as a whole, retain sensitivity for buried prehistoric archaeological deposits.

HISTORIC SENSITIVITY MODEL

Prior to the construction of the National Home for Disabled Volunteer Soldiers (NHDVS), Pacific Branch in 1888, the land was part of the Barrett Villa Tract. The previous land use associated with the VAGLAHS Campus has its roots in the agrarian culture of west Los Angeles. Prior to the 1880s the land appears to be associated largely with grazing livestock and cultivating various crops. The VAGLAHS land was once part of Rancho San Vicente y Santa Monica, belonging to John Percival Jones and Arcadia Bandini de Baker and Rancho San Jose de Buenos Ayres, owned by John Wolfskill. The location was promoted for its “rich, fertile soil; extent of land cleared and ready for construction or cultivation; excellent drainage; healthy climate; and views of city and ocean” (NRHP nomination. “West Los Angeles Veterans Affairs Historic District, 2014, section 8, page 42). Review of historic maps from 1880 and 1888 do not show any indication of permanent habitation within or near the VAGLAHS prior to the establishment of the NHDVS.

Sensitivity for historical archaeological sites is largely based on the location of older buildings associated with the NHDVS (Figure 6 and Table 3). This period overlaps with the Second-Generation Veterans Hospital period (1923-1952). A 1910 map of the NHDVS depicts the layout for the NHDVS water system, which was integral in establishing in-home pressurized water and the ability to create indoor plumbing, as well improving health-care services. Assuming the 1910 map is accurate, as early as 1910, almost the entire facility had underground piped water distributed from Brown’s Lake, a 1-million-gallon reservoir to the east, as well as what appears to be at least two wells just north of the Southern Pacific Railroad tracks. The piped water system, which was fed through an 8” and 10” cast iron pipe indicates that most, if not all, of the facility, may have had indoor plumbing by 1910, eliminating the need for privies or outdoor toilets. North of the Southern Pacific Railroad tracks and south of Pacific Avenue is a pond, which may have been used for discharged water or sewerage disposal.

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In regards to refuse, based on a circa 1930 map included in the National Register of Historic Places nomination for the campus (Chattel et al. 2014) with numbered and labeled buildings, there is an incinerator labeled "Building 63" located in the northeast quadrant of the campus within the "Utility Area." The use of an incinerator on the campus suggests that refuse disposal was, at least by 1930, being carried out on-site through incineration versus on or off-site disposal in ravines, gullies, or a common dump site.

In addition, by the early 1900s, municipal garbage service may have been available for the facility, curtailing the need for disposal near residences or other buildings. Despite various disposal techniques, such as incineration or trash collection, municipalities, as well as institutions and private companies or corporations, sometimes took advantage of natural conditions for refuse disposal. For the subject property, incineration in burn barrels would likely have caused some consternation among residents and perhaps staff, due to foul smelling odors, particularly in the summer when conditions prohibited good air flow.

By the early part of the 20th century modern infrastructure (water system, plumbing, garbage service, and an incinerator) was in place, making archaeological deposits from after this period less likely. Historic archaeological deposits are most likely from the on-set of the NHDVS, 1888 though circa 1920.

Table 3: Historic Site Sensitivity Criteria

Type	Details
High	Associated with development and occupation of the VA facility during the NHDVS period through circa 1920. There is a higher likelihood of privies, refuse pits, and refuse deposits. This category also includes buried infrastructure such as wells, pipelines, sewers, foundations, etc.
Moderate	Communal refuse deposits or mass dump locations situated in natural landforms such as gullies, arroyos, canyons, etc.
Low	Diffuse refuse deposits, including diffuse deposits associated with post circa 1920 development or zones of dispersed occupation outside the core areas of development or occupation. Mechanically graded or highly disturbed (\geq upper 1 foot)

RECOMMENDATIONS

Monitoring recommendations are based on the findings described above. The BSS predictive model results suggest minimal likelihood of encountering deeply buried prehistoric archaeological material during future construction activities on the old, elevated Pleistocene surfaces that comprise 83% (305 acres) of the VAGLAHS Campus. This probability is especially low in areas assigned Very Low sensitivity, and therefore no archaeological monitoring is recommended during future ground-disturbing activities for these areas. In contrast, areas predicted to have Low sensitivity should be "spot-checked" by monitors during construction activities or undergo BST trenching overseen by a qualified geoarchaeologist prior to construction. Alternatively, Low sensitivity areas may be reclassified as Very Low sensitivity if evidence beyond that used in this evaluation (such as grading plans from past construction projects) indicates significant surface disturbance in these areas.

The BSS model suggests greater likelihood of encountering deeply buried prehistoric archaeological material during future construction activities on the younger, Holocene alluvial fan surfaces that comprise 17% (62 acres) of the VAGLAHS Campus. Fulltime archaeological monitoring is recommended during future ground-disturbing activities for these areas of the VAGLAHS campus predicted to have Moderate or High sensitivity for buried prehistoric sites, with greater monitoring effort focused on the High sensitivity areas. Alternatively, BST could be conducted prior to development to determine if all or part of the area to be impacted consists of deposits not sensitive for buried prehistoric archaeological material (such as artificial fill or Pleistocene alluvium) down to the depth of planned construction disturbance (plus a 1–2 ft buffer). This outcome would result in the monitoring recommendation being changed to no construction monitoring required for these

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particular areas. However, if sensitive deposits were encountered during BST, it is recommended that a 0.075m³ sample per 30-cm level be screened for archaeological material because mitigating archaeological sites found during construction is significantly more expensive than mitigating them prior to construction.



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 3- Surficial Geology

Archaeological Sensitivity Model


Veterans Affairs


West Los Angeles Master Plan



 Project

Alluvial Fan Deposit Type

 Holocene

 Pleistocene

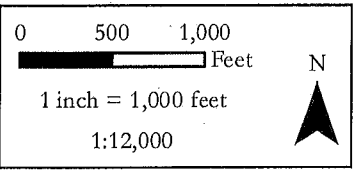


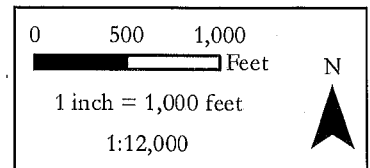


Figure 4- Predicted Sensitivity for Prehistoric Archaeology

*Archaeological Sensitivity Model
Veterans Affairs
West Los Angeles Master Plan*



- Project
- Sensitivity**
- Very Low
- Low
- Moderate
- High












Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, ©

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Figure 5- Sensitivity Factors for Buried Prehistoric Sites
Archaeological Sensitivity Model
Veterans Affairs
West Los Angeles Master Plan



-  Project
- Factors Decreasing Qof Sensitivity**
-  Native slope greater than ~25%
-  Mechanically graded surface

- Factors Enhancing Qya Sensitivity**
-  Within 200 meters of a spring or wetland
-  Within 200 meters of a stream
-  Within 200 meters of a possible prehistoric site
-  Within 200 meters of an elevated Pleistocene surface

0 500 1,000
 Feet
 1 inch = 1,000 feet
 1:12,000
 N



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 6- Predicted Sensitivity for Historic Archaeology

*Archaeological Sensitivity Model
Veterans Affairs
West Los Angeles Master Plan*



- Project
- Sensitivity**
- Low
- Moderate
- High

0 500 1,000
 Feet
 1 inch = 1,000 feet
 1:12,000

N



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**Figure 7- Predicted Sensitivity for
Historic and Prehistoric Archaeology**

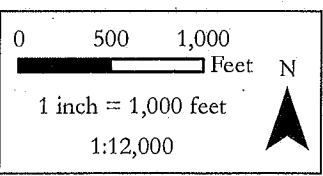
*Archaeological Sensitivity Model
Veterans Affairs West Los Angeles Master Plan*



Project

Sensitivity

- Low- (Spot-Check Monitoring or BST)
- Moderate- (Part-Time Monitoring or BST)
- High- (Full-Time Monitoring or BST)



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Archaeological Treatment

Archaeological investigations shall occur at the following level of effort. In areas of:

High Sensitivity (Full-Time Monitoring or BST)- monitoring shall be full-time or BST shall be undertaken;

Moderate Sensitivity (Part-Time Monitoring or BST)- monitoring shall be part-time or BST shall be undertaken;

Low Sensitivity (Spot-Check Monitoring or BST)- monitoring shall be spot-checked or BST shall be undertaken;

Very Low Sensitivity monitoring/BST is not required.

The "archaeological monitor" (B.A./B.S. in anthropology, or related discipline with an emphasis in archaeology and demonstrated experience and competence in archaeological fieldwork) shall work under the direct supervision of a "qualified archaeologist" (Secretary of Interior Professional Qualification Standards- M.A./M.S. in anthropology, or related discipline with an emphasis in archaeology and demonstrated experience and competence in archaeological research, fieldwork, reporting, and curation). VA intends to execute a Programmatic Agreement that will codify the methodology outlined below.

1. The qualified archaeologist shall be on-site at the pre-construction meeting to discuss monitoring protocols.
2. In the event of an archaeological discovery, the monitor shall flag the area and notify the VA Resident Engineer or equivalent VA employee immediately. The contractor shall follow the construction contract protocols. No further disturbance in the flagged area shall occur until the VA Resident Engineer has cleared the area.
3. In consultation with the qualified archaeologist, the monitor shall quickly assess the nature and significance of the find. If the discovery is not significant it shall be quickly mapped, documented, removed and the area cleared.
4. If the discovery is potentially significant, the qualified archaeologist shall notify the VA Federal Preservation Officer or equivalent VA employee prior to the start of construction activities. The VAGLAHS shall consult with the California State Historic Preservation Officer (SHPO), consulting Native American groups (Gabrielino Tongva Indians of California Tribal Council, Gabrieleño Band of Mission Indians/Kizh Nation, and Tongva Ancestral Territorial Tribal Nation), and the Advisory Council on Historic Preservation (ACHP) within 48 hours of determining significance, notifying them of the potential National Register eligibility of the discovery and the proposed plan to resolve adverse effects. The plan may include avoidance, minimization, and/or mitigation, or a combination of treatment options.
5. The SHPO, Native American Tribes, and the ACHP have 48 hours to respond.
6. The VAGLAHS shall take into account the comments of the SHPO, Native American groups, and ACHP, and carry out the plan. After the plan has been executed a report will be submitted to the SHPO, Native American groups, and ACHP.
7. An archaeological report will be prepared upon completion of all mitigation efforts. The report will be submitted to South Central Coastal Information Center, located at CSU, Fullerton upon completion of the project.
8. Cultural material that is determined eligible for the National Register shall be curated in perpetuity at an institution meeting the requirements of 36 CFR 79.
9. Cultural Material that is not eligible for the National Register shall be maintained through the end of all project related activities, then it shall either be kept by the VAGLAHS for public history displays or permanently loaned to local historical societies, universities, museums, or Native American groups. If no local historical societies, universities, museums, or Native American groups will accept the material it will be discarded.
10. This archaeological sensitivity model will be updated at least every 5 years, or sooner, if VA chooses.

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NAGPRA

If human remains are encountered, no further work shall occur within 100 feet of the discovery until the VA can determine the origin of the human remains. If the human remains are determined to be Native American in origin the VA shall comply with the Native American Graves Protection and Repatriation Act (NAGPRA) which includes ancestral human remains, funerary objects, sacred objects, and objects of cultural patrimony. The VA Resident Engineer or equivalent employee shall consult with VA Federal Preservation Officer and a qualified archaeologist. The VA shall consult with local Native American groups that are most likely culturally affiliated with the remains in developing a plan of action for the protection and repatriation of the human remains (43 CFR 10).

REFERENCES

- Abdo-Hintzman, K., and Mirro, M.
2015 Cultural Resource Monitoring Report for the REC Solar Photovoltaic System Installation Project, West Los Angeles Veterans Administration Medical Center, Los Angeles County, California, Prepared by Applied EarthWorks, Inc. Hemet, CA Prepared For REC Solar Commercial Corporation, San Luis Obispo, CA 93401.
- Bedrossian, T.L., and Roffers, P.
2012 Geologic Compilation of Quaternary Surficial Deposits in southern California, Los Angeles 30' X 60' quadrangle: California Geological Survey, Special Report 217. (revised), Plate 9, scale 1:100,000.
- Bedrossian, T.L., Roffers, P., Hayhurst, C.A., Lancaster, J.T., and Short, W.R.
2012 Geologic Compilation of Quaternary Surficial Deposits in southern California: California Geological Survey, Special Report 217 (revised), 21 p., 25 plates, scale 1:100,000.
- Robert Chattel, Jenna Snow, Susan O'Carroll, Shannon Ferguson, Kathryn McGee, Marissa Moshier, Shane Swerdlow, Sally Stokes, Allison Lyons
2014 National Register of Historic Places Registration Form, West Los Angeles Veterans Affairs Historic District. Prepared by Chattel, Inc. for the Department of Veterans Affairs.
- Campbell, R.H., Wills, C.J., Irvine, P.J., and Swanson, B.J.
2014 Geologic Compilation of Quaternary Surficial Deposits in southern California, Los Angeles 30' X 60' quadrangle: California Geological Survey, Special Report 217 (revised; version 2.1), Plate 9, scale 1:100,000.
ftp://ftp.consrv.ca.gov/pub/dmg/rgmp/Prelim_geo_pdf/Los_Angeles_100k_v2.1_Map.pdf
- McFadden, L.D.
1982 The Impacts of Temporal and Spatial Climatic Change on Alluvial Soils Genesis in Southern California: Tucson, University of Arizona, Ph.D. dissertation, 430 pp.
- Mirro, M, DeBusk, J.L., and Hamilton, M.C.
2012 Archaeological Resources Buried Site Testing for the Solar Photovoltaic System Installation Project, West Los Angeles Veterans Affairs Facilities, Los Angeles County, California, Prepared By Applied EarthWorks, Inc. Pasadena, CA Prepared For REC Solar, San Luis Obispo, CA 93401.
- Moratto, M.J.
1984 *California Archaeology*. Academic Press, Orlando, Florida, 757 pp.
- Nelson, J.W., Zinn, C.J., Strahorn, A.T., Watson, E.B., and Dunn, J.E.
1919 Soil survey of Los Angeles area, California [From Field Operations, 1916]. United States Agriculture Department. Soils Bureau; University of California Agricultural Experiment Station. 78 p.

DUKE CULTURAL RESOURCES MANAGEMENT

Onken, J.

- 2001 Eastside Reservoir Project, Buried Site Testing Synthesis. In Metropolitan Water District of Southern California, Eastside Reservoir Project, Final Report of Archaeological Investigations, Volume I: Project Overview and Summary of Archaeological Investigations, Chapter 6. Applied EarthWorks, Inc., Hemet, California. Submitted to the Metropolitan Water District of Southern California, Los Angeles, California.
- 2003 Buried Site Sensitivity Model and Testing Results for Riverside County. In Metropolitan Water District of Southern California, Inland Feeder Pipeline Project, Final Synthetic Report of Archaeological Findings, Riverside County, California, Chapter 3, pp. 53–83. Applied EarthWorks, Inc., Hemet, California. Submitted to the Metropolitan Water District of Southern California, Los Angeles, California.

Web Soil Survey

- 2017 <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx> [accessed 11/9/17].