April 14, 2022

VIA Email

In reply, refer to: NASA_2022_0304_001

Mr. Jonathan Ikan
Center Cultural Resources Manager
NASA Ames Research Center
Mail Stop 213-8
Moffett Field, CA 94035

Subject: Building 55 Pipeline Excavation Project, NASA Ames Research Center, Santa Clara County

Dear Mr. Ikan:

The California State Historic Preservation Officer (SHPO) has received the March 3, 2022, letter initiating consultation regarding an undertaking at NASA Ames Research Center (ARC). NASA is consulting with the State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. §306108), as amended, and its implementing regulations at 36 CFR Part 800. Along with the letter, NASA submitted a Memorandum, prepared by AECOM dated March 2, 2022, that provides the Section 106 analysis, project maps, and photographs.

NASA proposes remedial activities to address environmental impacts associated with a release from the former Building 55 petroleum pipeline at the former NAS Moffett Field. In 2018, petroleum hydrocarbons were discovered in soil and groundwater near the southeast corner of Hangar 2. The remedial activities include soil excavation and groundwater sampling to address petroleum constituents at a former Navy pipeline. The project activities would include:

1. A pre-work inspection and concrete cutting/demolition;
2. Geophysical survey and exposure of any underground utilities by hand-digging;
3. Excavation of impacted soil to 5' below ground surface, to the extent practicable, from the first pre-delineated cell;
4. Application of Klozu® CR to the resulting excavation floor through bucket (or paddle) mixing for additional treatment of residual petroleum impacts in soil and groundwater;
5. Backfill of the excavation with clean compacted fill material;
6. Repeating the excavation, amendment application, and backfill activities (steps 3, 4, and 5) at each cell;
7. Completion of a survey of the excavated areas;
8. Installation, development, and sample of five new 14 to 14.5' deep, 2' diameter groundwater monitoring wells for post-treatment performance monitoring;
9. Characterization, transport, and off-site disposal of the excavated soil; and
10. Restoration of site surface conditions and a post-work inspection.

NASA identified the Area of Potential Effects (APE) for the undertaking limited to the excavation and restoration footprint. Below-grade activities are limited to the excavation areas for the project with a vertical APE of 5' maximum depth to access utilities and remove soil, and groundwater monitoring well installation with a vertical APE of a 14.5' maximum depth.

Based upon the 2017 archaeological investigation at NASA ARC, the proposed work is in an area of heightened sensitivity for near-surface prehistoric archaeological resources based on its proximity to two previously recorded prehistoric archaeological resources, CA-SCL-14 and CA-SCL-15, but a 1991 survey of Moffett Field conducted by Basin Research Associates failed to relocate any surficial evidence of the sites, and concluded that, due to development of the area, the sites were likely destroyed. Although these resources were identified as destroyed, the potential for redeposited material exists within areas mapped with prehistoric sensitivity.

The APE also is sensitive for historic-period resources based on historical mapping, which shows the APE within an agricultural building complex depicted on the 1899 Palo Alto, California, topographic quadrangle and near a “redwood post and mound” feature depicted on the 1859 plat of Rancho Posolomi.

Ground disturbance in the APE would be limited to excavation through existing concrete pavement to remove contaminated soil to a depth of 5' in a location previously disturbed by the installation of the underground pipeline. The 2017 study concluded that both prehistoric and historic-era resources could be present to a maximum depth of 5' to 6' below existing grade, based on the typical depth of features associated with these resource types (AECOM 2017). Because the APE is entirely paved, further archaeological survey is not possible. However, because a moderate potential exists for prehistoric and historic-period archaeological resources to be encountered in the APE, NASA will conduct archaeological monitoring during excavation.

The APE is located in the NAS Sunnyvale Historic District and has been previously surveyed for historical significance. The APE covers an area of concrete pavement and an underground pipeline that are not contributing to the district. The surface and texture of the concrete are not distinctive. The closest district contributors to the APE are Hangar 2, Hangar 3, and MF1002 – Aircraft Parking Apron.

No Federally Recognized Tribes are associated with the geographical boundaries of NASA ARC or this undertaking. As part of a previous archaeological study of the entire
ARC property, a Sacred Lands File search and a list of Native American tribes and representatives with a known interest in the area was requested from the Native American Heritage Commission (NAHC). The NAHC responded on July 28, 2021, indicating that the Sacred Lands File search was negative and providing a list of 11 non-federally recognized Native American representatives who may have additional information regarding cultural resources in the vicinity of the ARC property. Since then, NASA ARC has consulted with these representatives on undertakings that have had the potential to affect cultural resources at known sites and in areas with high sensitivity for prehistoric archaeological resources. These representatives have not provided any additional information regarding known sacred lands or previously undocumented archaeological resources. Due to the highly disturbed nature of the project site, NASA ARC has not consulted with the non-federally recognized Native American representatives on this undertaking.

Based upon the absence of known archaeological resource or contributors to the NAS Sunnyvale Historic District within the APE, NASA proposes a Finding of No Adverse Effect for this undertaking.

After reviewing the information submitted, the SHPO offers the following comments.

• This project qualifies as an undertaking with the potential to affect historic properties.
• The APE is sufficient to take direct and indirect effects of the undertaking into account.
• Identification and evaluation efforts are sufficient.
• Based upon the information submitted, the SHPO has no objection to the proposed Finding of No Adverse Effect for this undertaking.
• Please be advised that under certain circumstances, such as unanticipated discovery or a change in project description, NASA may have additional future responsibilities for this undertaking under 36 CFR Part 800.

If there are any questions or concerns, please contact State Historian Mark Beason, at (916) 445-7047 or mark.beason@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer