



# **NASA AMES: N225B SUBSTATION MODIFICATION FOR PG&E FAULT CURRENTS**

***February 12, 2020***

**HISTORIC RESOURCES GROUP**

**PREPARED FOR**

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# 1.0 INTRODUCTION

## 1.1 PURPOSE

The National Aeronautics and Space Administration (NASA) Ames Research Center (ARC) proposes the N225B Substation Modification for Pacific Gas & Electric (PG&E) Fault Currents Project (the “Project” or “Undertaking”) at ARC, Moffett Field, Santa Clara County, California. As the lead federal agency, NASA is responsible for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (54 United States Code 30101 et seq.), which requires federal agencies to consider the effects of their activities and programs on historic properties, and its implementing regulations in 36 Code of Federal Regulations (CFR) Part 800. The purpose of this report is to provide necessary information for compliance with Section 106, including a description of the Undertaking and the Area of Potential Effects (APE), the methodology used to identify historic properties within the APE, and an assessment of potential effects resulting from the Undertaking.

## 1.2 BACKGROUND

The Naval Air Station (NAS) Sunnyvale was originally established as the West Coast base for the U.S. Navy’s Lighter-than-Air aviation program of the 1920s and 1930s. The air station was officially commissioned in 1933, by which time Hangar 1 and the associated campus of administrative and residential buildings now known as Shenandoah Plaza had been constructed. Following the dissolution of the dirigible defense program in 1935, the facility was used by the Army; in 1940 it was converted to the West Coast Air Corps Training Facility. Following the United States entry into World War II, the base was returned to the U.S. Navy and in 1942 it was recommissioned Naval Air Station Moffett Field. Following the closure of Moffett Field as a military base in 1994, NASA Ames acquired stewardship of the property.

In 1994, the United States Naval Air Station (NAS) Sunnyvale, California Historic District was listed in the National Register of Historic Places. In 2013, NASA submitted to the California Office of Historic Preservation (OHP) and the Advisory Council on Historic Preservation (ACHP) a statement of significance for Moffett Federal Airfield. NASA determined that the airfield and its component features were eligible for listing in the National Register as contributors to the NAS Sunnyvale Historic District. In 2017, the NASA Ames Wind Tunnel Historic District was listed in the National Register.

There are no historic properties located within the APE

## 1.3 PROJECT LOCATION

The proposed Project is located between NASA Ames N225B Main Substation and the PG&E Substation within the NASA Ames Research Center, located at the south end of San Francisco Bay, between the cities of Mountain View and Sunnyvale, in Santa Clara County, California. The

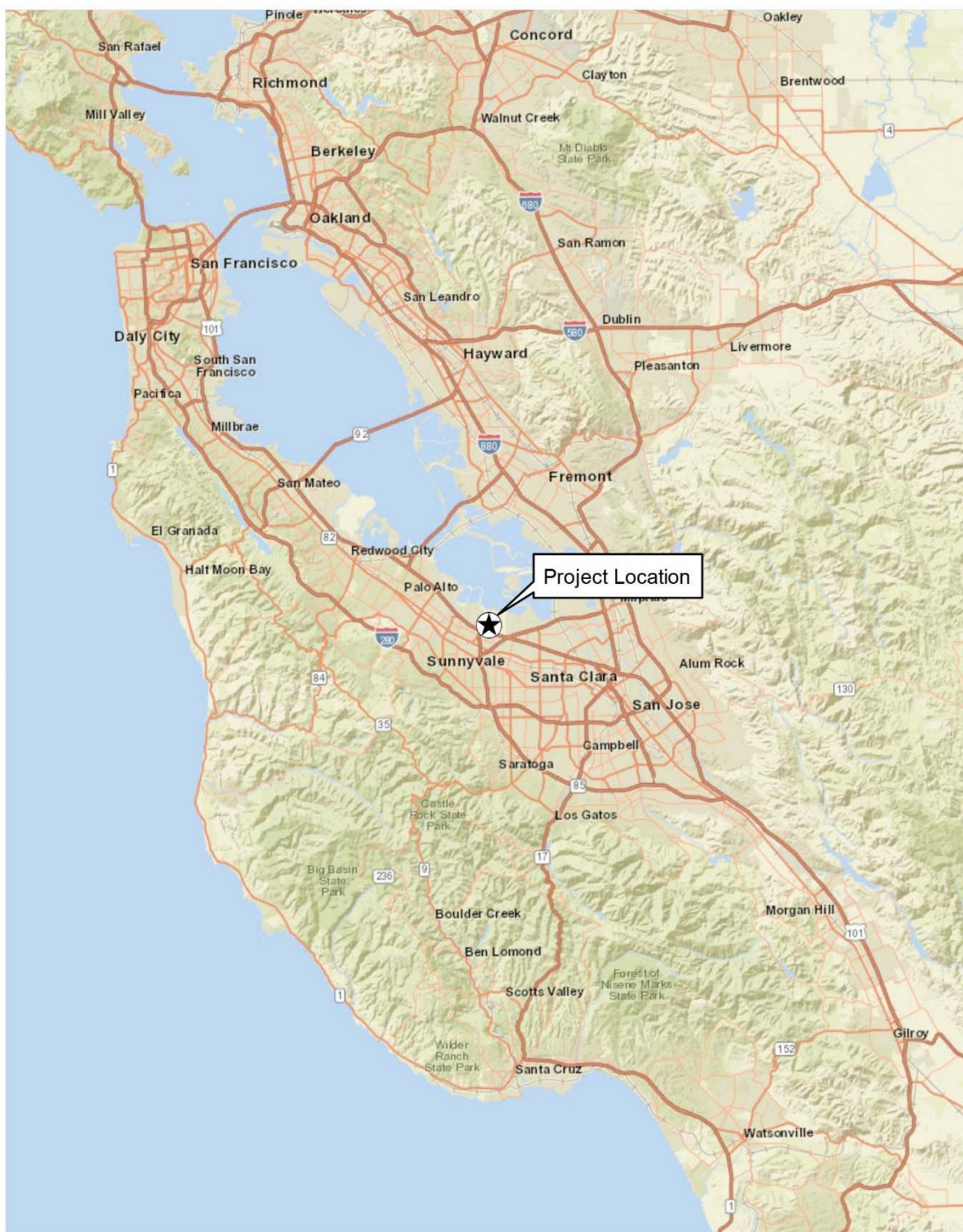
irregularly shaped, approximately 1,930-acre property is roughly bounded to the north by San Francisco Bay, to the west by Stevens Creek, to the south by Highway 101 and Manila Avenue, and to the east by Enterprise Way and East Patrol Road. The Undertaking involves the installation of eight (8) pull boxes and conduit below grade between the two substations, which are located in the northwest quadrant of the NASA Ames property.

A Project Location Map is included in Figure 1. A Site Map is included in Figure 2.

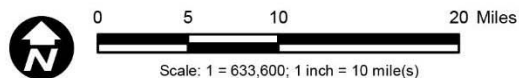
## **1.4 PROJECT TEAM**

This report was prepared by Christine Lazzaretto, Managing Principal, Historic Resources Group. Barb Siskin, MA, RPA, Principal, Far Western Anthropological Research Group, Inc. contributed to this report based on the archaeological technical study “NASA Ames Research Center: Archaeological Resources Study,” (AECOM, February 2017). Both are qualified professionals who meet the Secretary of the Interior’s Professional Qualification Standards (36 Code of Federal Regulations [C.F.R.] Part 61) in their respective fields of architectural history and archaeology.

FIGURE 1. PROJECT LOCATION MAP



Source: ESRI, AECOM, NASA





## 2.0 DESCRIPTION OF THE UNDERTAKING

### 2.1 PROJECT DESCRIPTION

The Project site is located near the western edge of the NASA Ames property, roughly between Wright Avenue and Parsons Avenue and south of Hunsaker Road. The Undertaking consists of substation modifications for PG&E fault currents to Substation N225B, located at the southeast corner of the intersection of Parsons Avenue and Hunsaker Road.

The Undertaking consists of the following:

- 1) Two (2) subterranean horizontal directional drills, approximately four and one-quarter inches in diameter, between a minimum depth of 36 inches and a maximum depth of 120 inches, to install two (2) four-inch-diameter conduits between the NASA Main Substation (N225B) and the PG&E Ames Substation, located at the southwest corner of the intersection of Wright Avenue and Hunsaker Road;
- 2) Installation of eight (8) pull boxes, each 3 feet 10 inches wide by 5 feet 10 inches long by 5 feet 1 inch deep, over a total horizontal distance of approximately 1,040 linear feet between the two substations (see attached diagram); and
- 3) Installation of approximately 50 linear feet of one-inch-diameter rigid galvanized steel (RGS) conduit underground beginning at pull boxes 1 and 2 outside the fence enclosure at N225B Main Substation, and surface mounted on dead-end pad from four inch conduit stub-ups to 115 kV breaker control cabinets on dead-end pad (shown on attached diagram).

See Figure 3 for specific locations and additional detail.

### 2.2 GROUND DISTURBING ACTIVITIES

The Project includes ground disturbance up to an approximate depth of five feet for the installation of eight (8) pull boxes; horizontal drilling at a maximum depth of 10 feet for the installation of conduit between the two substations; and 50 linear feet of RGS conduit at pull boxes 1 and 2.



The following pages were redacted from this public posting:

Figure 3. Project Details

### 3.0 AREA OF POTENTIAL EFFECTS

The Area of Potential Effects (APE) is defined as the geographic area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties (36 Code of Federal Regulations [CFR] Part 800, Protection of Historic Properties, Section [§]800.16(d)). These changes may include physical destruction, damage, or alteration of a property; change in the character of the property's use or of physical features within its setting that contributes to its historic significance; and introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features (36 CFR § 800.5(a)(2)). The locations of various known historic properties within the Project vicinity were carefully considered.

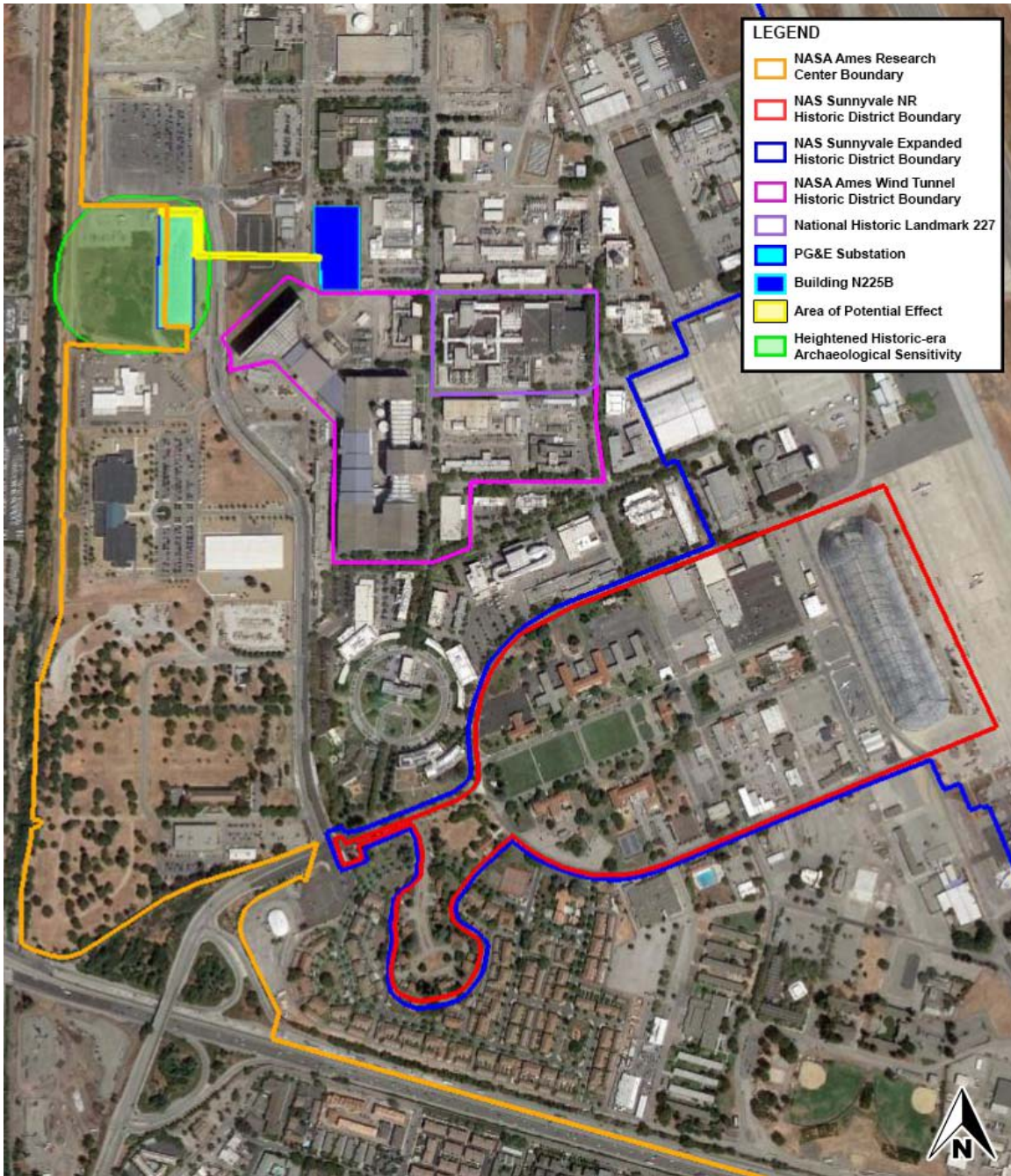
Historic properties located on the NASA Ames site include the National Register-designated United States Naval Air Station, Sunnyvale Historic District; the 2013 extended NAS Sunnyvale Historic District boundary; the National Register-designated Ames Wind Tunnel Historic District; the Unitary Plan Wind Tunnel, which is within the Wind Tunnel Historic District boundary and was designated a National Historic Landmark in 1985; and the Arc Jet Complex and Flight and Guidance Simulation Laboratory, listed in the National Register in 2018. However, the Undertaking is limited to below-grade electrical improvements. The Project site does not encompass any of the historic properties on the NASA Ames property, and the work would not potentially affect adjacent historic properties through physical means, nor result in indirect effects. Therefore, there is no architectural APE for this Project.

The Project proposes limited ground disturbance to install eight (8) pull boxes that are approximately five feet deep; horizontal drilling at a maximum of 10 feet deep to install conduit over a distance of approximately 1,040 linear feet; and installation of 50 linear feet of RGS conduit at pull boxes 1 and 2. There are no known archaeological resources in the area; however, pull boxes 5, 6, 7, and 8 (shown in Figure 3) and a portion of the new conduit will be installed in an area that was identified as sensitive for the potential presence of subsurface historic-era archaeological resources in the 2017 archaeological study commissioned by NASA for use in evaluating potential effects on the site. The extent of Project-related underground disturbances, however, are limited in nature based on the horizontal drilling methods proposed for Project implementation. The vertical APE of ten feet is proposed for the Undertaking along the identified route (shown in the map in Figure 5).<sup>1</sup>

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<sup>1</sup> APE approved by NASA, January 23, 2020.

FIGURE 5. AREA OF POTENTIAL EFFECT



## 4.0 CONSULTING PARTIES

Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and afford the ACHP a reasonable opportunity to comment. The historic preservation review process mandated by Section 106 is outlined in regulations issued by ACHP, “Protection of Historic Properties” (36 CFR Part 800.2(c)(3-5) and Part 800.2(d)). Coordination and consultation with the public, public agencies, Native Americans, SHPO, appropriate Tribal Historic Preservation Officers (THPOs), ACHP, and other consulting parties in a manner that reflects the nature and complexity of the undertaking is a key aspect of Section 106 compliance.

There are no Federally Recognized Tribes associated with this location; however, the following groups have been consulted in compliance with 36 CFR Part 800.4(a)(4):

- Amah Mutsun Tribal Band
- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Ohlone Indian Tribe

Consultation letters are attached in Appendix A.

## 5.0 IDENTIFICATION OF HISTORIC PROPERTIES

Historic properties, as defined in 36 CFR Section 800.16(l)(1), include any district, site, building, structure, or object that is included in or eligible for listing in the National Register of Historic Places (NRHP).

### 5.1 ARCHITECTURAL PROPERTIES

The physical character of the NASA Ames property varies widely due to the property's large size, numerous periods of development, and multiple uses. The Undertaking is located in the western portion of the site, in an area primarily characterized by open space and surface parking lots, outside the boundaries of the documented historic properties associated with the NASA Ames property as a whole. There have been numerous previous studies to inform an understanding of the historic significance of the site and identify and evaluate potential historic properties. Substation N225B and the PG&E Ames substation have not been identified as significant in any previous study and are therefore not considered historic properties requiring further consideration. In addition, the Undertaking is not located within the boundaries of any of the historic districts on the site. The APE is adjacent to the NASA Ames Wind Tunnel Historic District, which is located immediately to the east of Substation N225B. The NASA Ames Wind Tunnel Historic District is largely utilitarian in nature, predominantly characterized by the wind tunnels and their support buildings set among mature trees, lawns, and hardscape features. However, because the Undertaking is not located within the district boundary and is limited to subterranean ground disturbance within a tightly defined span, there are no architectural historic properties that would be potentially affected by the Undertaking, and no need to consider indirect effects.

### 5.2 ARCHAEOLOGICAL PROPERTIES

In February 2017, AECOM prepared for NASA the "NASA Ames Research Center Archaeological Resources Study," to provide guidance for archaeological resources management at ARC in support of NASA's obligations under the NHPA of 1966.<sup>2</sup> The study identified the potential for archaeological resources at ARC through an extensive records search of prior surveys, previously recorded resources, historic maps, Sacred Land Files from the Native American Heritage Commission, and hundreds of geotechnical investigations conducted at NASA ARC. Using these sources, the study presented a series of maps based on cumulative source materials that illustrate areas of archaeological sensitivity. The study identified four categories of archaeological sensitivity:

- Heightened Historic-era Archaeological Sensitivity: Locations where pre-1931 development occurred, namely structures associated with agricultural activities in the area.

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<sup>2</sup> AECOM, "NASA Ames Research Center: Archaeological Resources Study," February 2017.

- Heightened Prehistoric-era Archaeological Sensitivity: Locations where archaeological materials that reflect earlier periods of human occupation and activity, spanning an approximate 13,500 years.
- Heightened Geoarchaeological Sensitivity: Locations where materials related to older periods of human activity that were subject to geological processes over thousands of years.
- Low Archaeological Sensitivity: Areas within NASA ARC that were not designated within the aforementioned categories were determined to have a low potential for containing archaeological resources.

The AECOM 2017 study received concurrence from the SHPO on June 22, 2017, for future use as the baseline study for Section 106 compliant archaeological investigations. According to the composite sensitivity map included in that report and shown in Figure 6, the Undertaking is generally located in an area of low archaeological sensitivity and has a low potential for containing archaeological resources. However, four of the pull boxes and a portion of the new conduit will be installed in an area identified in the 2017 study as having heightened historic-era archaeological sensitivity (defined as pre-1931 development associated with agricultural activities in the area).

In the event of discovery of unknown subsurface archaeological resources, NASA would follow its standard operating procedures for unanticipated discoveries consistent with 36 CFR 800.13 as outlined in the Integrated Cultural Resources Management Plan (AECOM 2014), which would halt work in the vicinity of the discovery and engage a qualified archaeologist to evaluate the discovery and determine the need for mitigation or consultation with the SHPO.

**The following content was redacted from this public posting:**

Archaeological Sensitivity Map

## 6.0 FINDING OF EFFECT

The Criteria of Adverse Effect pursuant to 36 C.F.R. 800.5(a)(1) were applied to assess effects of the Undertaking on historic properties within the APE:

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative.

To comply with Section 106, the criteria of adverse effect are applied to historic properties in the Undertaking's APE, pursuant to 36 CFR Section 800.5(a). A finding of no adverse effect may be appropriate when the undertaking's effects do not meet the threshold set forth in the criteria of adverse effect, or conditions are imposed to ensure review of rehabilitation plans for conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties (codified in 36 CFR Section 68). If a finding of adverse effect is made, mitigation is proposed and resolution of adverse effects occurs through consultation in accordance with 36 CFR Section 800.6(a) to avoid, minimize, or mitigate adverse effects on historic properties.

Several examples of adverse effects are listed in 36 C.F.R. 800.5(a)(2). The following assessment examines the Undertaking under each of those examples, including an analysis of compliance with the Secretary of the Interior's Standards for Rehabilitation.

**i. Physical destruction of or damage to all or part of the property**

There are no architectural historic properties in the APE. Any potential physical impacts to archaeological historic properties are considered in the discussion of the Undertaking's compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Therefore, there would be no physical destruction or damage to any historic property as a result of the Project, and the Undertaking would not cause an adverse effect under this criterion.

**ii. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's standards for the treatment of historic properties (36 C.F.R. part 68) and applicable guidelines**



With the SHPO's agreement, if a property is restored, rehabilitated, repaired, maintained, stabilized, remediated, or otherwise changed in accordance with the Standards, then it will not be considered an adverse effect.

The Secretary of the Interior's Standards for the Treatment of Historic Properties (the Standards) provide guidance for reviewing proposed projects that may affect historic resources. The Standards and associated guidelines address four distinct historic "treatments," including: (1) preservation; (2) rehabilitation; (3) restoration; and (4) reconstruction. The specific Standards and guidelines associated with each of these possible treatments are provided on the National Park Service's website regarding the treatment of historic resources.

The intent of the Standards is to assist the long-term preservation of a property's significance through the preservation, rehabilitation, and maintenance of historic materials and features. The Standards pertain to historic buildings of all materials, construction types, sizes, and occupancy and encompass the exterior and interior of the buildings. The Standards also encompass related landscape features and the building's site and environment, as well as attached, adjacent, or related new construction.

The Standards for Rehabilitation (36 CFR 67) address the most prevalent treatment. "Rehabilitation" is defined as "the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values." As stated in the definition, the treatment "rehabilitation" assumes that at least some repair or alteration of the historic building will be needed in order to provide for an efficient contemporary use; however, these repairs and alterations must not damage or destroy materials, features, or finishes that are important in defining the building's historic character.

The following is an assessment of the Undertaking for compliance with the applicable Secretary of the Interior's Standards for Rehabilitation and the associated guidelines. Because the Undertaking involves only subterranean infrastructure improvements that are not located within a historic district, it will not change the use of any historic property; remove distinctive materials or alter features, spaces or spatial relationships of any historic property; add conjectural features or elements from other properties; alter or remove changes that have acquired significance; alter or remove distinctive materials, features, finishes, construction techniques or examples of craftsmanship that characterize a historic property; repair or replace deteriorated features; propose chemical or physical treatments; or include new additions, alterations or related new construction. Therefore, only Standard 8 applies to the Undertaking.

*Standard 8: Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

The Undertaking proposes the installation of eight (8) pull boxes and horizontal drilling for new conduit between Substation N225B and the PG&E Substation. There are no known archaeological

resources within the Project footprint, and the Project proposes horizontal drilling and not trenching in order to limit ground disturbance to a tightly contained area. However, four (4) of the pull boxes and a portion of the conduit would traverse an area identified as having heightened historic archaeological sensitivity. Therefore, in the event of discovery of unknown subsurface archaeological resources, NASA would follow its standard operating procedures for unanticipated discoveries consistent with 36 CFR 800.13 as outlined in the Integrated Cultural Resources Management Plan (AECOM 2014), which would halt work in the vicinity of the discovery and engage a qualified archaeologist to evaluate the discovery and determine the need for mitigation or consultation with the SHPO.

The Undertaking meets Standard 8, which is the only Standard applicable to the Undertaking. Therefore, the Undertaking would not cause an adverse effect under this criterion.

**iii. Removal of the property from its historic location**

The Undertaking would not remove a historic property from its historic location. Therefore, the Undertaking would not cause an adverse effect under this criterion.

**iv. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance**

The Undertaking involves the installation of eight (8) pull boxes and horizontal drilling to add new subterranean electrical conduit between Substation N225B and the PG&E Ames Substation. Because the proposed work is subterranean, the Undertaking would not change the character of any historic property's use or setting and would not cause an adverse effect under this criterion.

**v. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features**

No visual, atmospheric, or audible elements would be introduced by this Project that would diminish the integrity of any historic property. Therefore, the Undertaking would not cause an adverse effect under this criterion.

**vi. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization**

The Undertaking would not involve the neglect of a property that causes its deterioration and therefore will not cause an adverse effect under this criterion.

**vii. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance**

The Undertaking does not involve the transfer, lease, or sale of property out of Federal ownership or control. Therefore, the Undertaking would not cause an adverse effect under this criterion.

## 7.0 CONCLUSION

The NASA Ames N225B Substation Modification for PG&E Fault Currents Project includes the installation of eight (8) pull boxes and horizontal drilling to install conduit below grade between Substation N225B and the Pacific Gas & Electric (PG&E) Ames substation, located in the northwest quadrant of the NASA Ames property. There are no architectural historic properties within the APE for the proposed Undertaking. In the event of discovery of unknown subsurface archaeological resources, NASA would follow its standard operating procedures for unanticipated discoveries consistent with 36 CFR 800.13 as outlined in the Integrated Cultural Resources Management Plan (AECOM 2014). The proposed Undertaking would not alter, directly or indirectly, any of the characteristics of a historic property that qualify it for inclusion in the NRHP. Therefore, a finding of No Adverse Effect per 36 CFR § 800.5(b) would be appropriate for this Undertaking.

## 8.0 REFERENCES

- AECOM. 2013. Historic Property Survey Report for the Airfield at NASA Ames Research Center, Moffett Field, California. On file at ARC.
- AECOM. 2014. Draft Integrated Cultural Resources Management Plan. On file at ARC.
- AECOM. 2017. NASA Ames Research Center Archaeological Resources Study. On file at ARC.
- NPS (National Park Service). 2017 (revised). The Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings.
- NRHP (National Register of Historic Places). 1994. National Register of Historic Places, U.S. Naval Air Station Sunnyvale, California Historic District, Moffett Field, Santa Clara County, California, NR #94000045.
- NRHP. 2017. National Register of Historic Places, NASA Ames Wind Tunnel Historic District, Santa Clara, California, NR #SG100000470.

## **APPENDIX A: CONSULTING PARTY LETTERS**

National Aeronautics and Space Administration



**Ames Research Center**  
Moffett Field, California 94035

February 5, 2020

Monica Arellano  
Muwekma Ohlone Indian Tribe of the San Francisco Bay Area  
20885 Redwood Road, Suite 232  
Castro Valley, CA 94546

Re: Notification to Potential Consulting Parties of the NASA Ames: N225B Substation Modification for PG&E Fault Currents Project.

Dear Ms. Arellano:

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended), the NASA Ames Research Center (ARC) Historic Preservation Office (NASA) is inviting potentially interested parties to consult on the proposed NASA Ames project: N225B Substation Modification for PG&E Fault Currents Project. This project is located between NASA Ames N225B Main Substation and the PG&E Substation within the NASA Ames Research Center, at the south end of San Francisco Bay, between the cities of Mountain View and Sunnyvale, in Santa Clara County, California. This federal Undertaking includes the installation of eight pull boxes and horizontal drilling to install conduit below grade near the western edge of the NASA Ames property, roughly between Wright Avenue and Parsons Avenue and south of Hunsaker Road. The Undertaking consists of substation modifications for PG&E fault currents to Substation N225B, located at the southeast corner of the intersection of Parsons Avenue and Hunsaker Road. The Project Area of Potential Effects (APE) includes ground disturbance up to an approximate depth of five feet for the installation of eight (8) handholes; horizontal drilling at a maximum depth of 10 feet for the installation of conduit between the two substations; and 50 linear feet of RGS conduit at pull boxes 1 and 2. A map of APE is attached for your reference.

In February 2017, AECOM prepared the "NASA Ames Research Center Archaeological Resources Study," on behalf of NASA, to provide guidance for archaeological resources management at ARC in support of NASA's obligations under the NHPA of 1966. The study resulted in the identification of the potential for archaeological resources at ARC through an extensive records search of prior surveys, previously recorded resources at the Northwest Information Center of the California Historical Resources Information System, historic maps, request for data from the Sacred Land Files from the Native American Heritage Commission, and analysis of hundreds of geotechnical investigations conducted at NASA ARC. The California State Historic Preservation Officer (SHPO) concurred on this study on June 22, 2017, for future use as the baseline study for archaeological investigations and buried archaeological site sensitivity at the NASA ARC. According to the composite archaeological sensitivity map included in that report and shown in Figure 6, the APE is generally located in an area of low archaeological sensitivity and has a low potential for the presence of archaeological resources. However, four of the pull boxes and a portion of the new conduit will be installed in an area identified in the 2017 study as having heightened historic-era archaeological sensitivity (defined as pre-1931 development associated with agricultural activities in the area).

Although no Traditional Cultural Properties or Sacred Sites have been identified within the APE area, and no Federally Recognized Tribes are associated with this location, the Native American Heritage Commission (NAHC) indicated that your organization may have an interest in the NASA Ames Research Center area.

If you wish to participate as a Consulting Party, please notify us in writing within 30 days of receipt of this letter. Consulting parties will be consulted regarding the proposed project work to ensure the appropriate treatment of any culturally significant items that may be impacted by the Undertaking. Please contact me at [Jonathan.D.Ikan@nasa.gov](mailto:Jonathan.D.Ikan@nasa.gov) or 650-604-6859 if you have any questions or need additional information.

Sincerely,

Jonathan Ikan  
Cultural Resource Manager, Facilities Engineering Branch  
NASA Ames Research Center, Mail Stop 213-8  
Moffett Field, CA 94035  
(605) 604-6859  
[Jonathan.d.ikan@nasa.gov](mailto:Jonathan.d.ikan@nasa.gov)

Cc:

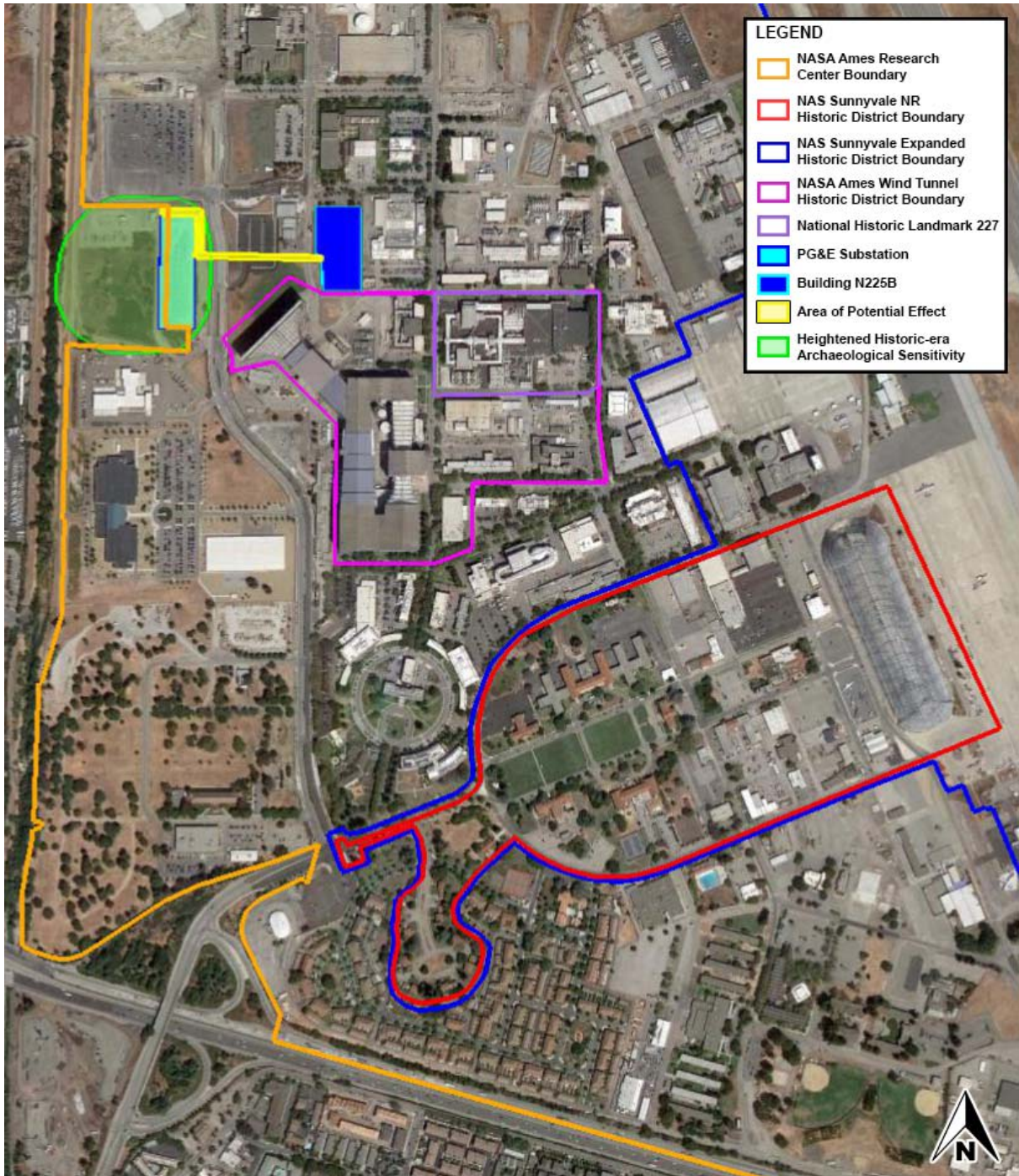
Ms. Rebecca Klein, NASA FPO  
Environmental Management Division  
NASA Headquarters  
300 E Street, SW  
Washington, DC 20546-0001

Valentin Lopez, Amah Mutsun Tribal Band  
Irene Zwierlein, Amah Mutsun Tribal Band of Mission San Juan Bautista  
Ann Marie Sayers, Indian Canyon Mutsun Band of Costanoan  
Monica Arellano, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area  
Andrew Galvan, The Ohlone Indian Tribe

Attachments:

Figure 1. Area of Potential Effect

ATTACHMENT A.  
AREA OF POTENTIAL EFFECT





National Aeronautics and Space Administration



**Ames Research Center**  
Moffett Field, California 94035

February 5, 2020

Ann Marie Sayers, Chairperson  
Indian Canyon Mutsun Band of Costanoan  
P.O. Box 28  
Hollister, CA 95024

Re: Notification to Potential Consulting Parties of the NASA Ames: N225B Substation Modification for PG&E Fault Currents Project.

Dear Chairperson Sayers:

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended), the NASA Ames Research Center (ARC) Historic Preservation Office (NASA) is inviting potentially interested parties to consult on the proposed NASA Ames project: N225B Substation Modification for PG&E Fault Currents Project. This project is located between NASA Ames N225B Main Substation and the PG&E Substation within the NASA Ames Research Center, at the south end of San Francisco Bay, between the cities of Mountain View and Sunnyvale, in Santa Clara County, California. This federal Undertaking includes the installation of eight pull boxes and horizontal drilling to install conduit below grade near the western edge of the NASA Ames property, roughly between Wright Avenue and Parsons Avenue and south of Hunsaker Road. The Undertaking consists of substation modifications for PG&E fault currents to Substation N225B, located at the southeast corner of the intersection of Parsons Avenue and Hunsaker Road. The Project Area of Potential Effects (APE) includes ground disturbance up to an approximate depth of five feet for the installation of eight (8) handholes; horizontal drilling at a maximum depth of 10 feet for the installation of conduit between the two substations; and 50 linear feet of RGS conduit at pull boxes 1 and 2. A map of APE is attached for your reference.

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be installed in an area identified in the 2017 study as having heightened historic-era archaeological sensitivity (defined as pre-1931 development associated with agricultural activities in the area).

Although no Traditional Cultural Properties or Sacred Sites have been identified within the APE area, and no Federally Recognized Tribes are associated with this location, the Native American Heritage Commission (NAHC) indicated that your organization may have an interest in the NASA Ames Research Center area.

If you wish to participate as a Consulting Party, please notify us in writing within 30 days of receipt of this letter. Consulting parties will be consulted regarding the proposed project work to ensure the appropriate treatment of any culturally significant items that may be impacted by the Undertaking. Please contact me at [Jonathan.D.Ikan@nasa.gov](mailto:Jonathan.D.Ikan@nasa.gov) or 650-604-6859 if you have any questions or need additional information.

Sincerely,

Jonathan Ikan  
Cultural Resource Manager, Facilities Engineering Branch  
NASA Ames Research Center, Mail Stop 213-8  
Moffett Field, CA 94035  
(605) 604-6859  
[Jonathan.d.ikan@nasa.gov](mailto:Jonathan.d.ikan@nasa.gov)

Cc:

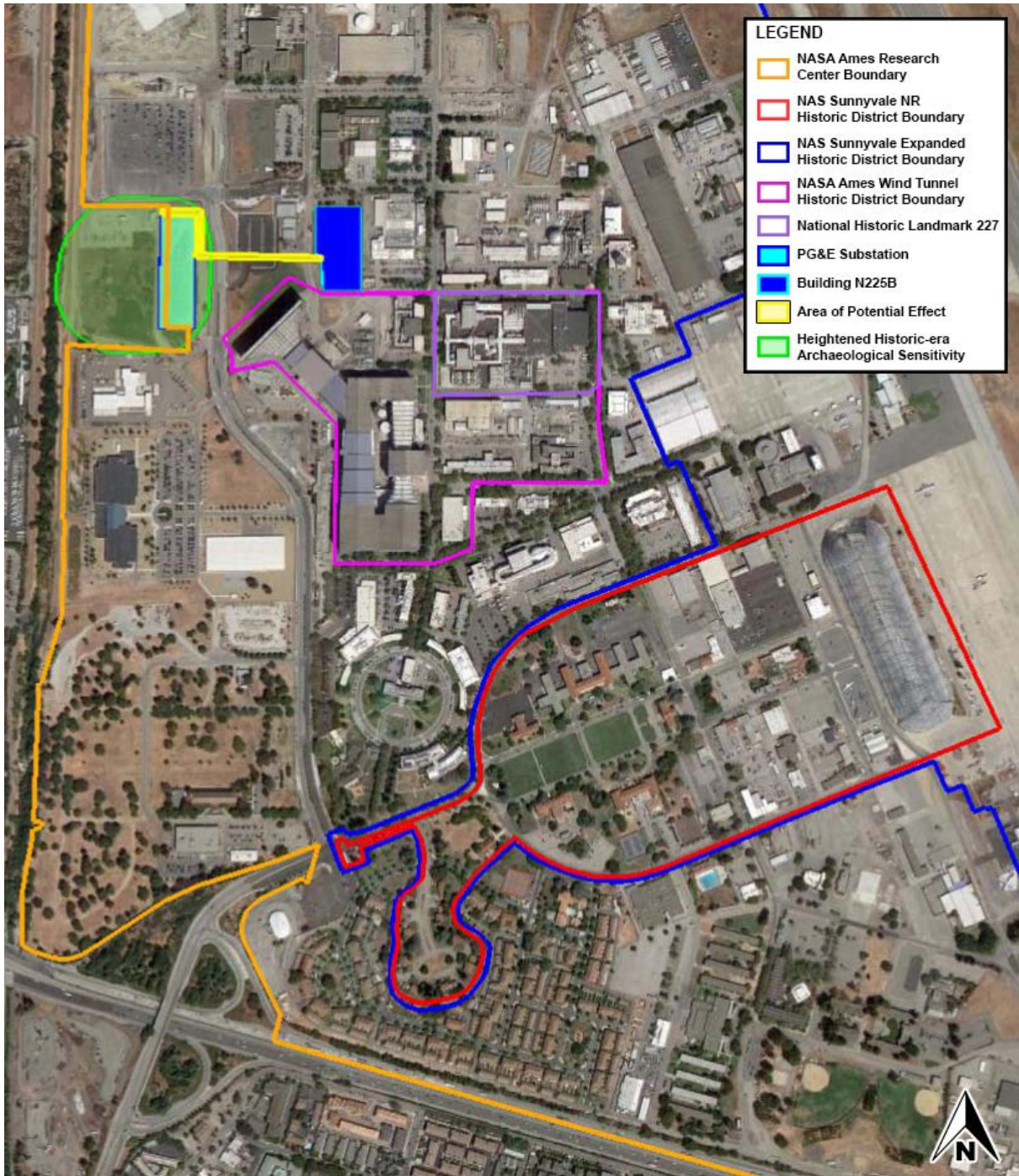
Ms. Rebecca Klein, NASA FPO  
Environmental Management Division  
NASA Headquarters  
300 E Street, SW  
Washington, DC 20546-0001

Valentin Lopez, Amah Mutsun Tribal Band  
Irene Zwierlein, Amah Mutsun Tribal Band of Mission San Juan Bautista  
Ann Marie Sayers, Indian Canyon Mutsun Band of Costanoan  
Monica Arellano, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area  
Andrew Galvan, The Ohlone Indian Tribe

Attachments:

Figure 1. Area of Potential Effect

ATTACHMENT A.  
AREA OF POTENTIAL EFFECT



National Aeronautics and Space Administration



**Ames Research Center**  
Moffett Field, California 94035

February 5, 2020

Valentin Lopez, Chairperson  
Amah Mutsun Tribal Band  
P.O. Box 5272  
Galt, CA 95632

Re: Notification to Potential Consulting Parties of the NASA Ames: N225B Substation Modification for PG&E Fault Currents Project.

Dear Chairperson Lopez:

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended), the NASA Ames Research Center (ARC) Historic Preservation Office (NASA) is inviting potentially interested parties to consult on the proposed NASA Ames project: N225B Substation Modification for PG&E Fault Currents Project. This project is located between NASA Ames N225B Main Substation and the PG&E Substation within the NASA Ames Research Center, at the south end of San Francisco Bay, between the cities of Mountain View and Sunnyvale, in Santa Clara County, California. This federal Undertaking includes the installation of eight pull boxes and horizontal drilling to install conduit below grade near the western edge of the NASA Ames property, roughly between Wright Avenue and Parsons Avenue and south of Hunsaker Road. The Undertaking consists of substation modifications for PG&E fault currents to Substation N225B, located at the southeast corner of the intersection of Parsons Avenue and Hunsaker Road. The Project Area of Potential Effects (APE) includes ground disturbance up to an approximate depth of five feet for the installation of eight (8) handholes; horizontal drilling at a maximum depth of 10 feet for the installation of conduit between the two substations; and 50 linear feet of RGS conduit at pull boxes 1 and 2. A map of APE is attached for your reference.

In February 2017, AECOM prepared the "NASA Ames Research Center Archaeological Resources Study," on behalf of NASA, to provide guidance for archaeological resources management at ARC in support of NASA's obligations under the NHPA of 1966. The study resulted in the identification of the potential for archaeological resources at ARC through an extensive records search of prior surveys, previously recorded resources at the Northwest Information Center of the California Historical Resources Information System, historic maps, request for data from the Sacred Land Files from the Native American Heritage Commission, and analysis of hundreds of geotechnical investigations conducted at NASA ARC. The California State Historic Preservation Officer (SHPO) concurred on this study on June 22, 2017, for future use as the baseline study for archaeological investigations and buried archaeological site sensitivity at the NASA ARC. According to the composite archaeological sensitivity map included in that report and shown in Figure 6, the APE is generally located in an area of low archaeological sensitivity and has a low potential for the

presence of archaeological resources. However, four of the pull boxes and a portion of the new conduit will be installed in an area identified in the 2017 study as having heightened historic-era archaeological sensitivity (defined as pre-1931 development associated with agricultural activities in the area).

Although no Traditional Cultural Properties or Sacred Sites have been identified within the APE area, and no Federally Recognized Tribes are associated with this location, the Native American Heritage Commission (NAHC) indicated that your organization may have an interest in the NASA Ames Research Center area.

If you wish to participate as a Consulting Party, please notify us in writing within 30 days of receipt of this letter. Consulting parties will be consulted regarding the proposed project work to ensure the appropriate treatment of any culturally significant items that may be impacted by the Undertaking. Please contact me at [Jonathan.D.Ikan@nasa.gov](mailto:Jonathan.D.Ikan@nasa.gov) or 650-604-6859 if you have any questions or need additional information.

Sincerely,

Jonathan Ikan  
Cultural Resource Manager, Facilities Engineering Branch  
NASA Ames Research Center, Mail Stop 213-8  
Moffett Field, CA 94035  
(605) 604-6859  
[Jonathan.d.ikan@nasa.gov](mailto:Jonathan.d.ikan@nasa.gov)

Cc:

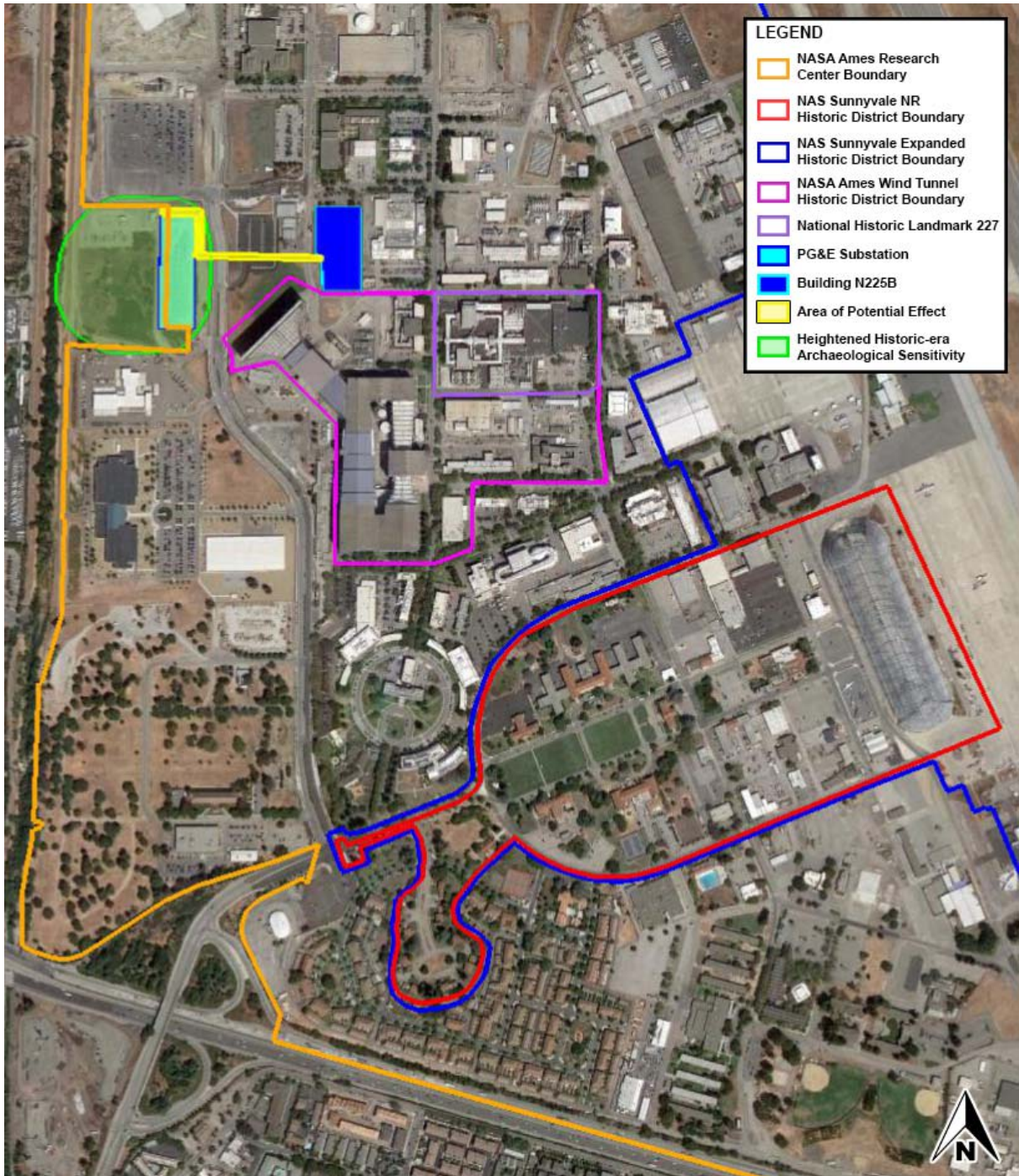
Ms. Rebecca Klein, NASA FPO  
Environmental Management Division  
NASA Headquarters  
300 E Street, SW  
Washington, DC 20546-0001

Valentin Lopez, Amah Mutsun Tribal Band  
Irene Zwierlein, Amah Mutsun Tribal Band of Mission San Juan Bautista  
Ann Marie Sayers, Indian Canyon Mutsun Band of Costanoan  
Monica Arellano, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area  
Andrew Galvan, The Ohlone Indian Tribe

Attachments:

Figure 1. Area of Potential Effect

ATTACHMENT A.  
AREA OF POTENTIAL EFFECT



National Aeronautics and Space Administration



**Ames Research Center**  
Moffett Field, California 94035

February 5, 2020

Irene Zwierlein, Chairperson  
Amah Mutsun Tribal Band of Mission San Juan Bautista  
789 Canada Road  
Woodside, CA 94062

Re: Notification to Potential Consulting Parties of the NASA Ames: N225B Substation Modification for PG&E Fault Currents Project.

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Cultural Resource Manager, Facilities Engineering Branch  
NASA Ames Research Center, Mail Stop 213-8  
Moffett Field, CA 94035  
(605) 604-6859  
[Jonathan.d.ikan@nasa.gov](mailto:Jonathan.d.ikan@nasa.gov)

Cc:

Ms. Rebecca Klein, NASA FPO  
Environmental Management Division  
NASA Headquarters  
300 E Street, SW  
Washington, DC 20546-0001

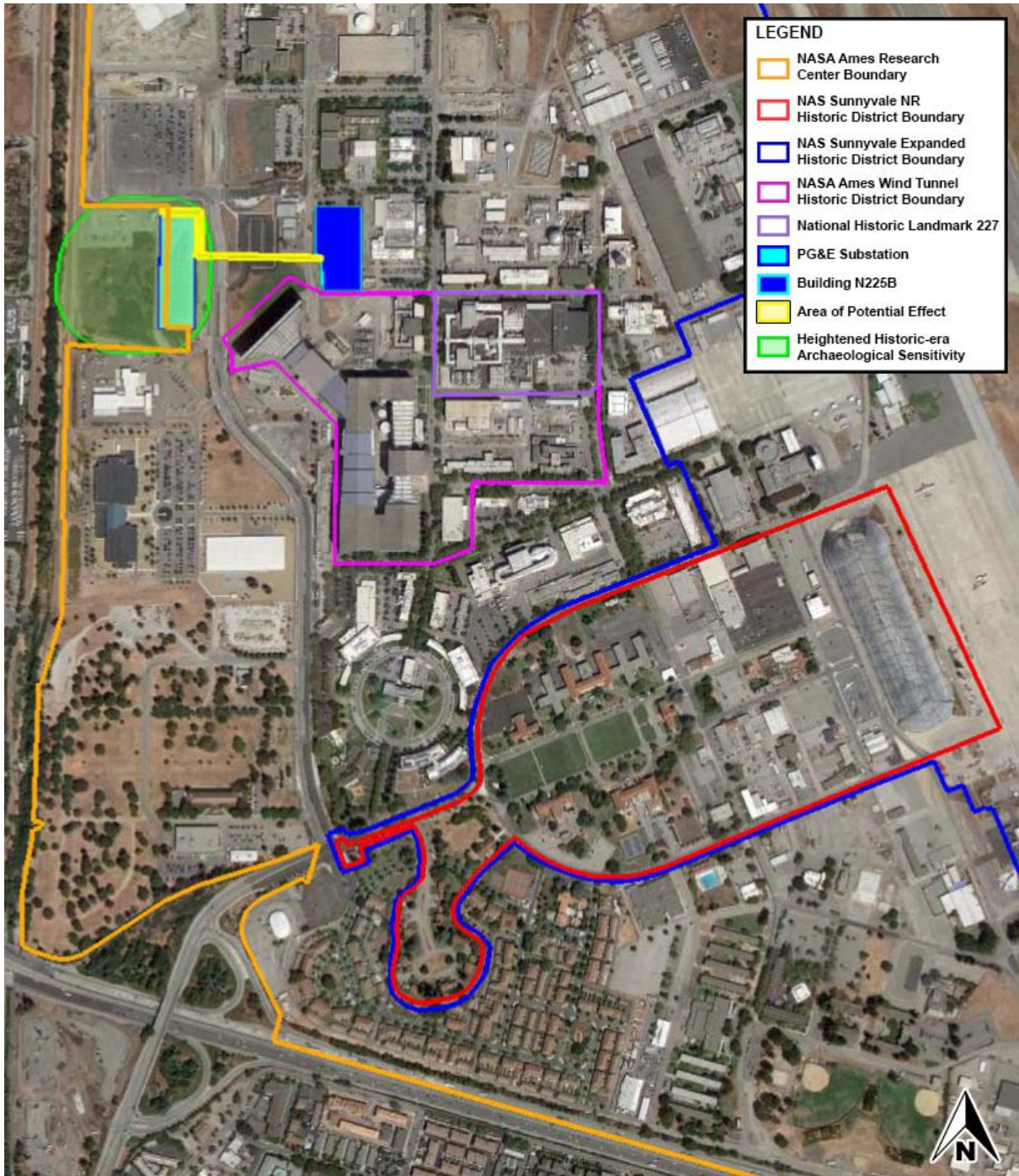
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**Ames Research Center**  
Moffett Field, California 94035

February 5, 2020

Andrew Galvan  
The Ohlone Indian Tribe  
P.O. Box 3388  
Fremont, CA 94539

Re: Notification to Potential Consulting Parties of the NASA Ames: N225B Substation Modification for PG&E Fault Currents Project.

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Cc:

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Environmental Management Division  
NASA Headquarters  
300 E Street, SW  
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