

National Aeronautics and Space Administration



Ames Research Center
Moffett Field, California 94035

December 5, 2023

Ms. Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks & Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Attn: Mr. Mark Beason

Subject: Section 106 Consultation for the Fall Protection Project at Ames Research Center,
Moffett Field, Santa Clara County, California

Dear Ms. Polanco:

The National Aeronautics and Space Administration (NASA) Ames Research Center (ARC) requests Section 106 consultation on the proposed Fall Protection Project (project or undertaking) at ARC, Moffett Field, Santa Clara County, California. As the lead Federal agency, NASA ARC has determined this project constitutes an undertaking under Section 106 of the National Historic Preservation Act of 1966 (54 United States Code §306108), as amended.

NASA ARC retained AECOM to conduct a technical study for this project. The study was conducted by cultural resources professional who meet the Secretary of the Interior's professional qualifications standards (36 CFR Part 62; 48 Federal Register 44738). The technical memo prepared by AECOM, dated December 4, 2023, which includes a description of the undertaking, the Area of Potential Effects (APE), identification efforts, and an assessment of potential effects resulting from the undertaking, is enclosed for your review. For further details on the following summary, see the attached report.

Description on the Undertaking

NASA proposes to install fall protection guardrails for life-safety requirements on the roofs of eight buildings: Buildings N203, N210, N215, N220, N230, N238, N239A, and N260. Currently, none of these buildings have rooftop fall protection except for an approximately 50' section on

the south end of the west side of Building N210 that would be removed and replaced as part of the proposed project.

New fixed guardrails would be attached to the inside of the roof parapets at Buildings N203, N210, N215, N220, N230, and N260. The fixed guardrails consist of metal pipe top rails and midrails spaced a maximum of 19" apart. The guardrails would be attached to metal pipe railing posts that vary in height between 39" to 45" above the roof surface, and are placed at 8' maximum intervals (see attachment, Section 7 and 8 on Sheet S-501 in Appendix B).

At Buildings N238 and N239, a non-permanent ballasted railing system would be installed on the roof that uses weighted bases instead of mounting plates (see attachment, Appendix C). The ballasted railing system has the same height criteria as the fixed systems and vary in height between 39" to 45" above the roof surface. This style of fall protection guardrails was selected for Buildings N238 and N239 because it was deemed structurally infeasible to attach railing systems to the roof parapets of these buildings.

Area of Potential Effects

The APE is defined to address both direct and indirect impacts on known and potential historic properties and encompasses areas that may be affected by both temporary and permanent construction activities. The APE overlaps with the National Register of Historic Places (NRHP)-listed NASA Ames Wind Tunnel Historic District and the potentially NRHP-eligible National Advisory Committee for Aeronautics (NACA) Ames Historic District (NACA District) and accounts for potential effects on the entire districts. However, because the project proposes installation of rooftop fall protection guardrails that would result in limited in visual impacts to the immediate surroundings of the buildings, the discontinuous APE focuses on each building where the guardrails would be installed and includes a 50' buffer around each building footprint to encompass any associated buildings (see attachment, Appendix A; Figure 3). The APE contains Buildings N203, N210, N215, N220, N230, N234, Steam Vacuum System (SVS), N238, N239, N239A, and N260. No below-grade activities are proposed for this project, so consideration of archaeological resources is not included.

Identification Efforts

The APE has been previously surveyed for architectural resources that have been evaluated for NRHP eligibility, including the NRHP-listed NASA Ames Wind Tunnel Historic District, the potentially NRHP-eligible NACA District, and the NRHP-listed Arc Jet Complex. A formal survey of the NASA Ames Campus buildings is currently being conducted under a separate scope of work as part of a comprehensive "gate-to-gate" architectural survey (anticipated completion date is Spring 2024). For the purposes of this study, previous identification efforts are considered adequate in identifying potential historic properties in the APE.

Affected Historic Properties

The APE contains the NRHP-listed NASA Ames Wind Tunnel, including Buildings N215 and N220; the NRHP-listed Arc Jet Complex, including Buildings N234 and N238 and the SVS; and the potentially NRHP-eligible NACA District, including N203, N210, N215, and N220. Building

N260 is less than 50 years old and does not meet Criteria Consideration G for exceptional significance; therefore, it is not eligible for the NRHP.

Three buildings in the APE, Buildings N230, N239, and N239A, have not been formally evaluated. However, because formal evaluation is pending and the nature of this project is unlikely to cause substantially change any identified or inferred character-defining features of these potential historic properties, NASA ARC proposes to treat these buildings as eligible for the purposes of this consultation.

The following table summarizes the historic properties in the APE and the effects of the project:

Building Number and Name	Built Date	NRHP Evaluation Status	Effects Analysis
Building N203 – Administration Support Building	1942	potential contributor (proposed NACA District); pot individually eligible	no adverse effect
Building N210 –Flight Systems Research Lab	1941	potential contributor (proposed NACA District); pot individually eligible	no adverse effect
Building N215 –NASA/Army Aerodynamics & Health Unit	1941	listed contributor (NASA Ames Wind Tunnel Historic District); potential contributor (proposed NACA District)	no adverse effect
Building N220 – Technical Services Building	1940	listed contributor (NASA Ames Wind Tunnel Historic District); potential contributor (proposed NACA District)	no adverse effect
Building N230 – Physical Science Research Lab	1960	not formally evaluated; assumed eligible for this project	no adverse effect
Building N234 – Thermal Protection Lab	1962	listed in the NRHP (Arc Jet Complex)	no adverse effect
Building N238 - Arc Jet Lab	1964	listed in the NRHP (Arc Jet Complex)	no adverse effect
Steam Vacuum System (SVS)	1962	listed in the NRHP (Arc Jet Complex)	no adverse effect
Building N239 – Life Science Lab	1965	not formally evaluated; assumed eligible for this project	no adverse effect
Building N239A – Life Science Lab High Bay / 50’ Diameter Low-G Simulator 1	1966	not formally evaluated; assumed eligible for this project	no adverse effect
Building N260 – Fluid Mechanics Lab	1987	not eligible (less than 50 years old and does not demonstrate exceptional significance under Criteria Consideration G)	no effect

Effects Assessment

The Criteria of Adverse Effect were applied to assess the undertaking’s potential effects on the historic properties in the APE, including Buildings N203, N210, N215, N220, N230, and N239, the Arc Jet Complex, and the NASA Ames Wind Tunnel Historic District, and the proposed NACA District. This assessment of effects found that the installation of the proposed fall protection guardrails is consistent with the Secretary of the Interior’s Standards for the Treatment

of Historic Properties, and the proposed project will not result in any adverse effects, including cumulative, on historic properties.

Finding of Effect

Based on the assessment conducted by qualified cultural resources professionals, NASA ARC has made a finding of No Adverse Effect for this undertaking.

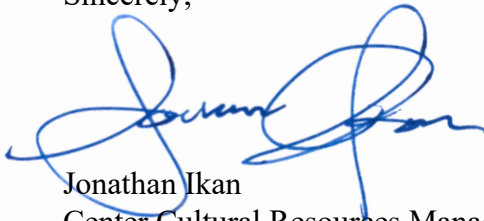
Consultation Efforts

Due to the limited scope of the project and its limited potential to cause effects on the historic properties, NASA ARC has not identified additional consulting parties for this Section 106 review. However, NASA ARC is making these findings available to the public via the NASA ARC Historic Preservation Office website (<https://historicproperties.arc.nasa.gov/section106.html>).

NASA ARC requests the State Historic Preservation Officer's concurrence on NASA's finding of No Adverse Effect for this undertaking pursuant to 36 CFR 800.5(b). Please provide a response within 30 days of receipt of this letter, as specified in 36 CFR 800.5(c).

Please contact me at jonathan.d.ikan@nasa.gov or at (650) 604-6859 with your comments or questions.

Sincerely,



Jonathan Ikan
Center Cultural Resources Manager



Ames Research Center, MS 213-8
Moffett Field, California 94035

cc:

HQ/EMD/Rebecca Klein, Ph.D., RPA

Enclosures

Section 106 Technical Memorandum on the Fall Protection Project, AECOM, dated December 4, 2023.