

**PROGRAMMATIC AGREEMENT
AMONG
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
THE VIRGINIA STATE HISTORIC PRESERVATION OFFICE, AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
FOR
MANAGEMENT OF FACILITIES, INFRASTRUCTURE, AND SITES AT
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION'S
LANGLEY RESEARCH CENTER, HAMPTON, VIRGINIA**

WHEREAS, The National Aeronautics and Space Administration (NASA) manages and operates the Langley Research Center (NASA LaRC), located in Hampton, Virginia; and

WHEREAS, NASA LaRC has determined that the operation, management, and administration of NASA LaRC entails undertakings that may affect properties included in or eligible for inclusion in the National Register of Historic Places (NRHP), including the proposed NASA LaRC Historic District (DHR ID# 114-5313), and National Historic Landmarks (NHL), and has consulted with the Advisory Council on Historic Preservation (ACHP) and the Virginia State Historic Preservation Office (SHPO) to develop this Programmatic Agreement (Agreement) pursuant to Section 800.14(b)(1) of the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470f) and Section 110(f) of the same Act (16 U.S.C. 470h-2(f)); and

WHEREAS, NASA LaRC elected to fulfill its obligations under Section 106 of the NHPA through execution and implementation of this Agreement, as provided for in 36 CFR Part 800.14(b), and through development and implementation of a revised Cultural Resource Management Plan (CRMP) under the terms of this Agreement; and

WHEREAS, the purpose of this Agreement is to ensure that the historic, engineering, and architectural significance of the historic properties under the jurisdiction of NASA LaRC are recognized and considered in the course of ongoing NASA LaRC programs and to provide a protocol for the reuse, modification, replacement or removal of historic facilities associated with current and future programs; and

WHEREAS, this Agreement covers the management of existing and future historic, ground-based facilities and structures that are listed or determined eligible for listing in the NRHP that are owned by NASA LaRC; and

WHEREAS, this Agreement also covers the New Town Project, which NASA proposes in order to modernize the center core of its research campus, reduce infrastructure and operations and maintenance costs, and create green space, and which is described in the document titled *Strategic Concept Plan for New Town, NASA Langley Research Center, Hampton VA (Leo Daly: 2005)* and its subsequent modifications which may be proposed as a result of funding and other factors; and

WHEREAS, NASA LaRC proposes to phase implementation of the New Town Project consisting of the construction of new buildings, rehabilitation of existing buildings, and the demolition of buildings by implementing it in phases over at least fifteen years; and

WHEREAS, pursuant to Section 800.14(b)(1)(iii), NASA LaRC has consulted with the SHPO and has determined that the New Town Project may have an adverse effect on the NASA LaRC Historic District and may effect as yet unidentified archaeological resources, including the remains of Moorefield Plantation, a site predicted to exist within the project’s Area of Potential Effects (APE) based on documentary sources; and

WHEREAS, this Agreement does not apply to the listed NHLs covered under an existing agreement among the *National Aeronautics and Space Administration, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation*, dated October 1989, regarding NASA’s designated NHLs (Appendix A); and

WHEREAS, when a new facility, structure, district or archaeological site is listed or determined eligible for listing in the NRHP this Agreement will be applicable and the review process established herein will be implemented; and

WHEREAS, the purpose of this Agreement is to set forth a streamlined process for compliance with Section 106 of the NHPA, for NASA LaRC when agreed upon criteria are met and procedures contained in this Agreement are followed; and

WHEREAS, NASA LaRC in consultation with the SHPO has conducted a Phase I reconnaissance survey of all buildings structures, and districts titled *Phase I Reconnaissance Survey of Architectural Resources at the National Aeronautics and Space Administration, Langley Research Center* (Dutton + Associates 2008) and *Phase I Reconnaissance Survey of Architectural Resources at the National Aeronautics and Space Administration, Langley Research Center, Addendum* (Dutton + Associates 2009); and

WHEREAS, NASA has completed a survey at thirteen NASA Centers and field installations located throughout the United States titled *NASA-Wide Survey and Evaluation of Historic Facilities in the Context of the U.S. Space Shuttle Program: Roll-Up Report* (Deming et al: 2008) to determine the NRHP eligibility of NASA resources and properties associated with the U.S. Space Shuttle Program and the SHPO concurred with the results of survey for NASA LaRC’s eligible properties in a letter dated October 30, 2009; and

WHEREAS, Appendix B to this Agreement includes all buildings and structures surveyed at NASA LaRC listed by their eligibility for listing in the NRHP and their Historic Preservation Priority Category, together with a map identifying each building or structure by its facility number and Inventory Number in the SHPO's Data Sharing System (DSS); and

WHEREAS, NASA LaRC in consultation with the SHPO has conducted certain Phase I identification and Phase II evaluation surveys for archaeological resources and Appendix C to this Agreement includes a list of all previously identified archaeological resources at NASA LaRC and their NRHP eligibility status and a locational map identifying the areas surveyed and each site by its trinomial number; and

WHEREAS, NASA LaRC has invited the Virginia Air & Space Center (VASC), located in Hampton Virginia, which serves as NASA LaRC's official Visitor's Center and, through a cooperative agreement, works together with NASA LaRC to promote the rich history and mission of NASA through a variety of interpretive media and programs, to participate in the development of this Agreement and sign the Agreement as a concurring party pursuant to 36 CFR Part 800.6(c)(3), and the VASC has elected to participate; and

WHEREAS, NASA LaRC contacted the United Keetoowah Band of the Cherokee Indians in Oklahoma (Band) and the Catawba Indian Nation (Catawba), based on their previous interest in Federal undertakings in Hampton Roads, to determine if they might attach religious and cultural significance to historic properties subject to this Agreement, and the Band and the Catawba responded that they do wish to participate in the development of this Agreement and sign the Agreement as a concurring party pursuant to 36 CFR Part 800.6(c)(3); and

WHEREAS, NASA LaRC has consulted on a government-to-government basis with the Band and the Catawba and has coordinated consultation on this Agreement with other provisions of the NHPA; the Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. Part 3001 et seq.; the American Indian Religious Freedom Act (AIRFA) as amended, 42 U.S.C. Part 1996 and 1996a; Executive Order 13007, *Indian Sacred Sites* (Federal Register/Vol. 61, No. 104/Wednesday, May 29, 1996); and 36 CFR Part 79, *Curation of Federally-Owned and Administered Archeological Collections*; and

WHEREAS, NASA LaRC has invited the Virginia Council on Indians (VCI) to participate in development of this Agreement and sign the Agreement as a concurring party pursuant to 36 CFR Part 800.6(c)(3), and the VCI has elected to participate; and

WHEREAS, NASA LaRC has invited the City of Hampton (City) to participate in the development of this Agreement and sign the Agreement as a concurring party pursuant to 36 CFR Part 800.2(c)(3), and the City has declined to participate; and

WHEREAS, NASA LaRC has invited the Hampton History Museum to participate in the development of this Agreement and sign the Agreement as a concurring party pursuant to 36 CFR Part 800.6(c)(3), and the Hampton History Museum has declined to participate; and

WHEREAS, NASA LaRC has provided the public an opportunity to express their views on this Agreement by means of a notice appearing in the *Daily Press* and postings at local libraries and on the NASA LaRC website and no comments were received; and

WHEREAS, NASA LaRC, the ACHP, SHPO and other consulting parties agree to consider options for alternate mitigation approaches to achieve a better preservation outcome than documentation alone when historic properties that are directly associated with aeronautics and space exploration and/or possess architectural, engineering or aesthetic value and/or are rare examples of distinctive property types functionally related to the history of aeronautics and space exploration are affected; and

WHEREAS, NASA has an existing Memorandum of Understanding (MOU) with the Smithsonian Institution (Smithsonian) regarding the transfer and management of artifacts having such historical and educational or other value which have emerged and will emerge from the aeronautical and space programs administered by NASA (Appendix D); and

WHEREAS, the terms defined in Appendix E are applicable throughout this Agreement; and

NOW THEREFORE, the Signatories to this Agreement agree that NASA LaRC can proceed with undertakings in accordance with the following stipulations in order to take into account the effects of its undertakings on historic properties, including historic buildings, structures, facilities, and archaeological sites, and that these stipulations shall satisfy NASA LaRC's Section 106 responsibilities for all individual undertakings, until this Agreement expires or is terminated.

STIPULATIONS

NASA LaRC shall ensure that the following stipulations are implemented:

I. ROLES AND RESPONSIBILITIES

A. NASA's overall Cultural Resource Management (CRM) Program is managed by the agency's Federal Preservation Officer (FPO), Environmental Management Division, NASA Headquarters. The FPO provides guidance to the Historic Preservation Officer (HPO) at each NASA Center. For the purposes of this Agreement, the NASA LaRC HPO's responsibilities include, but are not limited to:

1. Serving as the point of contact with the ACHP and SHPO;

2. Coordinating the internal review of projects and activities that may affect historic properties and consulting with external agencies regarding the identification, evaluation and treatment of NASA LaRC's historic properties;
3. Performing reviews, making determinations, and issuing approvals per the terms of this Agreement; and
4. Ensuring that the NASA LaRC Director and senior management are included, as appropriate, in project planning and decision-making regarding NASA LaRC's historic properties; and
5. Reviewing the Area of Potential Effect (APE) to ensure that all types of historic properties are identified for each proposed undertaking.

B. The NASA LaRC HPO shall ensure that all identification and evaluation survey documentation and all resource treatment documentation carried out pursuant to the terms of this Agreement will be completed by or under the direct supervision of an individual or individuals who meet the Secretary of the Interior's *Professional Qualification Standards* in their appropriate discipline (48 FR 44716-44742, September 29, 1983).

C. The NASA LaRC HPO shall distribute a copy of this Agreement and a copy of the Secretary's Standards for the *Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Weeks and Grimmer: 1995) to all appropriate NASA LaRC personnel involved with carrying out actions under this Agreement.

D. Within one (1) year of the last Signatories signature on this Agreement, the NASA LaRC HPO shall revise and update the NASA LaRC CRMP.

1. The terms, provisions, processes, and timetables contained in the CRMP shall be consistent with the terms and provisions contained in this Agreement as well as the guidelines prescribed by NASA HQ for development of CRMPs.
2. The draft CRMP shall be submitted to the SHPO and the ACHP for review and comment. NASA LaRC shall take into account any SHPO or ACHP comments received within thirty (30) days of confirmed receipt in its final revision of the CRMP. Copies of the final CRMP shall be provided to the ACHP, SHPO, the Band, the Catawba, and other consulting parties as appropriate in accordance with Stipulation XIA of this Agreement.
3. Once the CRMP has been revised, NASA LaRC shall implement it and comply with this Programmatic Agreement as the Section 106 compliance

vehicles for NASA LaRC. Adherence to the terms of the CRMP and this Agreement shall evidence that NASA LaRC is meeting its responsibilities under the NHPA.

E. Within six (6) months of the last Signatory's signature on this Agreement the NASA LaRC HPO shall ensure that the surveys titled *Phase I Reconnaissance Survey of Architectural Resources at the National Aeronautics and Space Administration, Langley Research Center* (Dutton + Associates 2008) and *Phase I Reconnaissance Survey of Architectural Resources at the National Aeronautics and Space Administration, Langley Research Center, Addendum* (Dutton + Associates 2009) are combined into a single final document which takes into account all SHPO and other consulting parties comments made in a timely manner. NASA LaRC shall and provide two (2) copies of the final survey document, approved by the NASA LaRC HPO, including DSS records and supporting materials, to the SHPO and other consulting parties, as appropriate.

II. CATEGORIZATION OF ARCHITECTURALLY SIGNIFICANT PROPERTIES

A. Historic Preservation Priority Category definitions applicable to the buildings and structures listed in Appendix B are:

1. *Category 1:* A building or structure that is either individually listed or considered individually eligible for listing in the National Register and possesses high integrity of (as applicable) location, design, setting, materials, workmanship, feeling, and association.
2. *Category 2:* A building or structure that is either listed or considered eligible for listing in the National Register as a contributing resource to the NASA LaRC historic district. In addition to retaining physical integrity, Category 2 resources are directly associated with aeronautics and space exploration and/or possess architectural, engineering or aesthetic value and/or are rare examples of distinctive property types functionally related to the history of aeronautics and space exploration.
3. *Category 3:* A building or structure that is either listed or considered eligible for listing in the National Register as a contributing resource to the NASA LaRC historic district. Though contributing to the district, their removal or alteration will not compromise the significance or character of the NASA LaRC historic district as a whole. Resources in this category are of lesser significance due to diminished physical integrity, lack architectural, engineering or aesthetic distinction and/or due to their ancillary relationship to projects directly associated with NASA's significance related to aeronautics and space exploration.
4. *Category 4:* A building or structure that has been evaluated in accordance with National Register criteria for evaluation (36 CFR Part 60) as set forth

in the ACHP's regulations (36 CFR Part 800.4) and found to be not eligible for inclusion in the National Register either individually or as a contributing resource to the NASA LaRC historic district, or that is less than forty-five years old at the time of evaluation; or is not included in the National Register.

B. NASA LaRC, in consultation with the SHPO, will reevaluate Appendix B and its findings between the eight (8th) and tenth (10th) year after the date of the last Signatory's signature on the Agreement. Updated Inventories shall be included as Appendices B1, B2, et cetera as they are completed. The results of the reevaluations shall not be incorporated into the inventory until NASA LaRC has received concurrence from the SHPO with regard to its findings.

III. IDENTIFICATION AND CATEGORIZATION OF HISTORIC TECHNOLOGICAL OR SCIENTIFIC FACILITIES

A. Within one year of execution of this Agreement NASA LaRC shall compile an inventory list of those highly technological or scientific facilities that are listed in or that it believes meet the criteria for listing in the NRHP (including future listed NHLs). This inventory list shall be provided to the signatories to this Agreement.

B. The inventory list shall include existing information and documentation on the facilities or equipment, including use, age, and contributions to NASA LaRC's mission. Upon completion, the inventory list shall be added as Appendix I to this Agreement.

C. Modification, deactivation, or removal of NASA LaRC's historic highly technological or scientific facilities to meet mission needs shall not require any further consultation with the SHPO, ACHP, or other consulting parties once the inventory list specified in stipulation III B above is completed.

IV ACTIVITIES NOT REQUIRING REVIEW UNDER THIS AGREEMENT

A. The activities identified in Appendix F have limited potential to affect historic properties and do not require review under this Agreement. The HPO shall determine whether the proposed undertaking requires review under this Agreement. If the HPO approves the undertaking as not requiring review, the undertaking may be executed by NASA LARC without further consultation with the SHPO, the ACHP, or other consulting parties as appropriate. If not approved by the HPO, the undertaking will follow the Standard Review Process as outlined in Stipulation V below.

B. NASA LaRC may propose additions or revisions to the list of activities not requiring review under this agreement by doing so in writing to the SHPO, ACHP and other consulting parties as appropriate. These undertakings will be added as a revised Appendix F upon receipt of written concurrence from SHPO and other

consulting parties as appropriate.

C. NASA LaRC, in consultation with the SHPO, the ACHP and other consulting parties as appropriate, has determined that proposed undertakings comprising only those activities covered in Appendix F shall not be reviewed under this Agreement. It shall not be necessary to forward project documentation on any activity not requiring review under this Agreement to the SHPO, ACHP or any other consulting party as appropriate. Any rehabilitation of an historic property that includes activities other than those listed in Appendix F shall be reviewed in accordance with the provisions of the Standard Review Process outlined in Stipulation V below. NASA LaRC shall maintain appropriate files on all undertakings not reviewed under this Agreement. Such files may include, at a minimum: the facility inventory number, the DHR ID#, photographs of the property, a site map of the property, a description of the proposed undertaking, and a determination that the project does not require review under this Agreement. The level and type of documentation maintained by NASA LaRC for non-review activities shall be appropriate to the nature of the undertaking and its potential to affect an historic property.

V. STANDARD REVIEW PROCESS

All undertakings that are not non-review activities under this Agreement will be reviewed according to the procedures outlined below.

A. Treatment of Architecturally Significant Historic or Contributing Properties

Buildings and structures identified in Appendix B will be treated in accordance with the following Historic Preservation Treatment Categories:

1. *Category 1* buildings and structures shall to the greatest extent possible, be treated in accordance with the Secretary's Standards for Rehabilitation; provided, however, that nothing contained in this Agreement shall require NASA LaRC to restore rather than rehabilitate Category 1 buildings and structures. Mitigation measures for adverse effects to Category 1 buildings and structures shall include but are not limited to, the standard documentation measures identified in Appendix G.
2. *Category 2* buildings and structures shall to the greatest extent possible be treated in accordance with the Secretary's Standards; provided, however, that nothing contained in this Agreement shall require NASA LaRC to restore rather than rehabilitate Category 2 properties. Mitigation measures for adverse effects to Category 2 buildings and structures shall include, but not be limited to the standard documentation measures identified in Appendix G.
3. *Category 3* the exteriors of buildings and structures shall be treated in accordance with the recommended procedures in the Secretary's Standards

to the extent they are consistent with needs of NASA LaRC’s mission and availability of resources. Treatment of Category 3 buildings and structures shall not require review by the SHPO, ACHP or other consulting parties, provided there is no potential for effects on other historic properties.

4. *Category 4* buildings and structures do not have to be maintained by NASA LaRC to preserve any historic, architectural, or cultural qualities, nor does NASA LaRC have to document such properties prior to their destruction, alteration or disposal. No review by the SHPO, ACHP or other consulting party is required for undertakings that will affect only Category 4 buildings or structures provided there is no potential for effects on other historic properties (e.g. archaeological resources).

Additional guidance regarding the Standard Review process for specific actions and their associated treatments is provided below.

B. Adaptive Reuse

Where feasible, NASA LaRC shall seek to reuse all Historic Preservation Priority Category 1 and 2 buildings and structures in a manner that supports NASA’s on-going programs and mission.

C. Rehabilitation

Rehabilitation of Historic Preservation Priority Category 1 and 2 buildings and structures shall be completed in accordance with the Secretary of the Interior’s *Standards for the Treatment of Historic Properties* (Secretary’s Standards) that are in effect at the time the plans are approved. To the extent practicable and consistent with the available resources and schedule, rehabilitation of Historic Preservation Priority Category 3 buildings and structures shall be completed in accordance with the Secretary’s Standards that are in effect at the time the plans are approved.

1. Pre-project documentation, which may include work write-ups, bid documents, architectural plans and photographs, shall be prepared by NASA LaRC staff with the responsibility for the project, and in consultation with the HPO and other qualified consultants.
2. The HPO shall review the rehabilitation plans for all buildings and structures. For Historic Preservation Priority Category 1 and 2 buildings and structures, if the HPO determines that the proposed rehabilitation will have no adverse effect, the NASA LaRC HPO shall submit a completed SHPO Project Review Application (Application), which is the information required in the ACHP regulations at 36 CFR Part 800.11(e), and as appropriate includes current photographs, maps, and project plans to the SHPO for review and comment. The SHPO and other consulting parties as appropriate agree to

provide comments within thirty (30) calendar days of receipt of a complete Application. If the SHPO concurs with the determination of No Adverse Effect, the HPO will issue approval and work may proceed. Work may not begin until approval has been issued by the HPO.

3. All work shall conform to the approved proposal and to the conditions stated in the HPO's approval. Rehabilitation of Historic Preservation Priority Category 1 and 2 buildings and structures accomplished in this manner will have no adverse effect on historic properties and no further compliance with the ACHP's regulations will be necessary with regard to the subject undertaking. For Historic Preservation Priority Category 3 buildings and structures, if the HPO determines that the proposed rehabilitation will have no adverse effect on historic properties, no review by the SHPO or other consulting parties is required. Upon receiving approval from the HPO, the project may proceed and no further compliance with the ACHP's regulations will be necessary with regard to the subject undertaking

4. If the SHPO does not concur with NASA LaRC's determination of effect, or the HPO concludes that the Secretary's Standards cannot be met for Historic Preservation Priority Category 1 and 2 buildings and structures or that the contemplated action is likely to have an adverse effect on Historic Preservation Priority Category 1 and 2 buildings and structures, then NASA LaRC shall forward proposed mitigation measures consistent with the Standard Documentation Measures outlined in Appendix G to this Agreement and the information required in the ACHP regulations at 36 CFR Part 800.11(e) to the SHPO.

If the SHPO concurs with NASA LaRC's course of action and proposed mitigation measures, then they shall notify NASA LaRC in writing of their concurrence, after which NASA LaRC shall proceed with the proposed undertaking once the mitigation measures have been implemented. If the SHPO objects to the proposed mitigation measures within the timeframes established in stipulation XII(C) of this Agreement, then NASA LaRC shall consult with the SHPO and ACHP in accordance with the procedures set for in 36 CFR Part 800.5 and 6.

5. If the HPO determines that the Secretary's Standards cannot be met for Historic Preservation Priority Category 3 buildings and structures or that the contemplated action is likely to have an adverse effect on Historic Preservation Priority Category 3 buildings and structures only, then NASA LaRC shall, at a minimum, implement the Standard Documentation Measures for Historic Preservation Priority Category 3 buildings and structures outlined in Appendix G. Following implementation of the Standard Documentation Measures and acceptance by the HPO, NASA LaRC shall proceed with the undertaking. No further review with the SHPO, ACHP, or other consulting parties is required. NASA LaRC shall include documentation on all adverse effect actions to Historic Preservation Priority Category 3 buildings and

structures in its annual report pursuant to Stipulation XVII of this Agreement.

D. New Construction and Additions

1. New construction within or immediately adjacent to the NASA LaRC Historic District (DHR ID# 114-5313), shall be designed to take into account the Secretary's Standards and be responsive to the overall character of the historic district in terms of height, scale, massing, set-backs, color, materials, and detailing. Preliminary plans shall be sent to the HPO for review and approval. If the HPO determines that the plans are compatible with the NASA LaRC Historic District (DHR ID# 114-5313), the HPO shall submit a completed Application, which is the information required in the ACHP regulations at 36 CFR Part 800.11(e), and as appropriate include current photographs and project plans, to the SHPO for review and comment. The SHPO and other consulting parties agree to provide comments within thirty (30) calendar days of receipt of a complete Application. If the SHPO concurs with NASA LaRC's determination of effect the HPO will approve the project and work may proceed. Work may not begin until approval has been issued by the HPO. All work shall conform to the approved proposal and to the conditions stated in the approval. New construction and additions accomplished in this manner shall have no adverse effect on historic properties and no further compliance with the ACHP's regulations will be necessary with regard to the subject undertaking.

2. If the SHPO does not concur with NASA LaRC's determination of effect or the HPO concludes that the Secretary's Standards cannot be met, or the proposed action is likely to have an adverse effect on Historic Preservation Priority Category 1 or 2 buildings and structures, then prior to taking any action, NASA LaRC shall forward proposed mitigation measures consistent with the Standard Documentation Measures outlined in Appendix G to this Agreement and the information required in the ACHP regulations at 36 CFR Part 800.11(e) to the SHPO.

3. If the SHPO concurs with NASA LaRC's course of action and proposed mitigation measures, then they shall notify NASA LaRC in writing of their concurrence, after which NASA LaRC shall proceed with the proposed undertaking once the mitigation measures have been implemented. If the SHPO objects to the proposed mitigation measures within the timeframes established in stipulation XII(C) of this Agreement, then NASA LaRC shall consult with the SHPO and ACHP in accordance with the procedures set for in 36 CFR Part 800.5 and 6.

4. Additions to Historic Preservation Priority Category 1 and 2 buildings and structures shall adhere to the Secretary's Standards and be consistent with guidelines in National Park Service Brief #14, "New Exterior Additions to Historic Buildings: Preservation Concerns," in effect at the time the plans are reviewed. Additions to Historic Preservation Priority Category 3 buildings

and structures require review by the HPO only to establish that the undertaking does not require review under this Agreement.

5. If the HPO determines that the Secretary's Standards cannot be met for Historic Preservation Priority Category 3 buildings and structures or that the contemplated action is likely to have an adverse effect on Historic Preservation Priority Category 3 buildings and structures, then NASA LaRC shall, at a minimum, implement the Standard Documentation Measures for Historic Preservation Priority Category 3 buildings and structures outlined in Appendix G. Following implementation of the Standard Documentation Measures and acceptance by the HPO, NASA LaRC shall proceed with the undertaking. No further review with the SHPO, ACHP, or other consulting parties is required. NASA LaRC shall include documentation on all adverse effect actions to Historic Preservation Priority Category 3 buildings and structures in its annual report pursuant to Stipulation XVII of this Agreement.

E. Disabled Accessibility

Disabled accessibility projects undertaken by NASA LaRC to comply with the Americans with Disabilities Act (ADA) and other local and federal requirements shall follow these guidelines:

1. NASA LaRC shall explore all alternative methods to provide disabled accessibility to Historic Preservation Priority Category 1 and 2 buildings and structures consistent with the Secretary's Standards, the National Park Service's Preservation Brief # 32 *Making Historic Properties Accessible*, and the Department of the Interior's report *Access to Historic Buildings for the Disabled: Suggestions for Planning and Implementation*, in effect at the time the plans are reviewed.
2. To the extent feasible, disabled accessibility features (e.g. ramps, elevators, etc.) shall not result in the removal of significant historic or architectural features or materials.
3. The HPO shall review preliminary plans for disabled accessibility projects for Historic Preservation Priority Category 1 and 2 buildings and structures. If the HPO determines that the plans do not fall under the activities listed in Appendix F, then the HPO shall submit a completed Application, which is the information required in the ACHP regulations at 36 CFR Part 800.11(e), and as appropriate include current photographs and project plans, to the SHPO for review and comment. The SHPO and other consulting parties as appropriate agree to provide comments within thirty (30) calendar days of receipt of a complete Application. If the SHPO concurs with NASA LaRC's determination of effect, the HPO will approve the project and work may proceed. Work may not begin until approval has been issued by the HPO. All work shall conform to the approved proposal and to the conditions stated in the approval. Disabled accessibility projects on Historic Preservation Priority

Category 1 and 2 buildings and structures accomplished in this manner shall have no adverse effect on historic properties and no further compliance with the ACHP's regulations will be necessary with regard to the subject project. Disabled accessibility projects on Historic Preservation Priority Category 3 buildings and structures do not need to be submitted to the SHPO for review and comment and no further compliance with the ACHP's regulations will be necessary with regard to the subject undertaking.

4. If the SHPO does not concur with NASA LaRC's determination of effect as submitted or the HPO concludes that the Secretary's Standards cannot be met, or the proposed action is likely to have an adverse effect on Historic Preservation Priority Category 1 or 2 buildings or structures, then prior to taking any action, NASA LaRC shall forward proposed mitigation measures consistent with the Standard Documentation Measures outlined in Appendix G to this Agreement and the information required in the ACHP regulations at 36 CFR Part 800.11(e) to the SHPO.

If the SHPO concurs with NASA LaRC's course of action and the proposed mitigation measures, then they shall notify NASA LaRC in writing of their concurrence, after which NASA LaRC shall proceed with the proposed undertaking once the mitigation measures have been implemented. If the SHPO objects to the proposed mitigation measures within the timeframes established in stipulation XII(C) of this Agreement, then NASA LaRC shall consult with the SHPO and ACHP in accordance with the procedures set for in 36 CFR Part 800.5 and 6.

F. Sale, Transfer, or Lease of Property to a Non-Federal Agency

1. Prior to the sale, transfer or lease of Historic Preservation Priority Category 1, 2, and 3 buildings and structures included in Appendix B and potentially eligible property included in Appendix C out of federal ownership or control, NASA LaRC shall develop appropriate and enforceable historic preservation covenants to be attached to the deed or lease document.

2. NASA LaRC shall provide a copy of the draft covenant or easement language to the SHPO and other consulting parties as appropriate, for review and comment. The SHPO and other consulting parties as appropriate shall provide comments within thirty (30) calendar days of receipt of a complete Application.

3. Upon receipt of comments from the SHPO and other consulting parties if applicable, NASA LaRC shall attach the covenant or easement to the deed or lease agreement prior to the sale, transfer, or lease of property.

G. Demolition

Demolition of Historic Preservation Priority Category 1, 2, and 3 buildings and

structures:

1. Prior to the demolition of Historic Preservation Priority Category 1 and 2 buildings and structures not covered under stipulation VIII of this agreement, the HPO shall forward proposed mitigation measures consistent with the Standard Documentation Measures outlined in Appendix G to this Agreement and the information required in the ACHP regulations at 36 CFR Part 800.11(e) to the SHPO.
2. If the SHPO concurs with NASA LaRC's course of action and that the proposed mitigation measures, then they shall notify NASA LaRC in writing of their concurrence, after which NASA LaRC shall proceed with the proposed demolition once the mitigation measures have been implemented. If the SHPO objects to the demolition and the proposed standard documentation measures within the timeframes established in stipulation XII(C) of this Agreement, then NASA LaRC shall consult with the SHPO and ACHP in accordance with the procedures set for in 36 CFR Part 800.5 and 6.
3. For demolition of only Historic Preservation Priority Category 3 buildings and structures NASA LaRC shall, at a minimum, implement the Standard Documentation Measures for Historic Preservation Priority Category 3 buildings and structures outlined in Appendix G. Following implementation of the Standard Documentation Measures and acceptance by the HPO, NASA LaRC shall proceed with demolition. No further review with the SHPO, ACHP, or other consulting parties is required. NASA LaRC shall include documentation on all demolitions of Historic Preservation Priority Category 3 buildings and structures in its annual report pursuant to Stipulation XVII of this Agreement.

VI. ARCHAEOLOGY

- A. In the event NASA LaRC plans ground disturbance as part of a rehabilitation, new construction, site improvement, or other project in an area with a previously identified archaeological property listed in Appendix C, and if the resource is eligible for or listed in the NRHP, NASA LaRC shall consult with the SHPO on ways to avoid, minimize, or mitigate potential effects to the identified property. All work in areas previously surveyed and where no resources are identified, may proceed following approval by the HPO and without further consultation with the SHPO.
- B. For land disturbing activities in areas where no previous survey has occurred, NASA LaRC shall consult with the SHPO and determine whether further archaeological survey is warranted. If after consultation with the SHPO, NASA LaRC determines that further efforts are needed to identify archaeological sites, NASA LaRC shall ensure that an archaeological testing program is developed in consultation with the SHPO and implemented. The testing program shall be sufficient to identify any potentially eligible sites present within the APE and

determine conclusively their eligibility for listing in the NRHP.

C. If NASA LaRC determines that it is not feasible to preserve or avoid a NRHP eligible or listed archaeological property, NASA LaRC shall consult with the SHPO to develop a data recovery plan. The data recovery plan shall be consistent with the Secretary of the Interior's *Standards and Guidelines for Archaeological Documentation* (48 FR 44734-37, September 29, 1983) and the SHPO's *Guidelines for Conducting Cultural Resource Survey in Virginia: Additional Guidance for the Implementation of the Federal Standards Entitled Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44742, September 29, 1983), and shall take into account the ACHP's publications, *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* (1999; rev. 2003) or subsequent revisions or replacements to these documents and *Section 106 Archaeology Guidance* (June 2007). Any data recovery plan shall specify at a minimum, the following:

1. The property, properties, or portions of properties where site specific data recovery plans shall be carried out;
2. The portion(s) of the site(s) to be preserved in place, if any, as well as the measures to be taken to ensure continued preservation;
3. Any property, properties, or portions of properties that will be destroyed or altered without data recovery;
4. The research questions to be addressed through data recovery, with an explanation of their relevance and importance;
5. The methods to be used with an explanation of their relevance to the research questions;
6. The methods to be used in analysis, data management, and dissemination of data, including a schedule;
7. The proposed disposition of recovered materials and records;
8. proposed methods of disseminating the results of the work to the interested public and/or organizations who have expressed an interest in the data recovery subject to revision based on the results of the data recovery proceeds; and
9. A schedule for the submission of progress reports to NASA LaRC, the SHPO and other consulting parties.

D. NASA LaRC shall submit the data recovery plan to the SHPO and the other consulting parties as appropriate for review and comment. The SHPO and other

consulting parties as appropriate agree to provide comments with thirty (30) days of confirmed receipt of the plan. NASA LaRC shall take any comments received into account and implement the data recovery plan.

E. If the SHPO or other consulting party objects to the proposed data recovery plan or its manner of implementation, NASA LaRC shall request the comments of the ACHP in accordance with 36 CFR Part 800.6(b)(1)(v).

VII. REVIEW AND COORDINATION

A. The HPO shall make the appropriate staff at NASA LaRC aware of this Agreement and its associated written guidance.

B. NASA LaRC staff with construction project planning responsibility shall consult with the HPO in accordance with Stipulations IV, V and VI.

1. The HPO shall review the project documentation as required by this Agreement and when appropriate in accordance with the terms of this Agreement issue approval for each undertaking. No work that precludes the requirements of this Agreement regarding consultation with the SHPO and other consulting parties as appropriate may begin until such approval has been issued.

2. If the HPO determines that the project does not meet the Secretary's Standards or will have an adverse effect on historic properties, the HPO shall proceed in accordance with the terms of this Agreement and as required consult with SHPO and the other consulting parties as appropriate, and, if necessary, the ACHP in accordance with 36 CFR Part 800.6. Mitigation measures may include, but are not limited to, standard treatments such as documentation and data recovery. Dependent on the nature and extent of the project's effects and the importance of the properties affected, mitigation measures may also include alternate mitigation approaches, such as the public benefit and education approaches in accordance with Stipulation X. .

3. The project description for consultation with SHPO and ACHP shall include the information required in the ACHP regulations at 36 CFR Part 800.11(e), including a detailed description of all proposed activities, including those that may be implemented in phases, later in time or as funds become available, and all affected properties regardless of their historic preservation priority categorization.

4. Modification to undertakings that have already received approval by the HPO shall be provided to the HPO for review when appropriate under the terms of this Agreement. The HPO shall determine the need to

continue consultation with the SHPO and other consulting parties as appropriate per Stipulation IV above.

C. To the greatest extent practicable, project review documentation prepared for SHPO review under this Agreement shall be submitted to the SHPO in hard copy (paper) format and an electronic format such as a .pdf file. This shall include photographs, maps, text, plans, and other data as required under this Agreement.

VIII. EMERGENCY ACTIONS

A. Emergency actions are those actions deemed necessary by NASA LaRC as an immediate and direct response to an emergency situation, which is a disaster or emergency declared by the President or the Governor of the Commonwealth of Virginia, or other immediate threats to life or property. Emergency actions under this Agreement are only those implemented within thirty (30) calendar days from the initiation of the emergency situation.

B. If the emergency action has the potential to affect Historic Preservation Priority Category 1, 2, or 3 buildings and structures, NASA LaRC shall notify the SHPO and other consulting parties as appropriate prior to undertaking the action, when feasible. As part of the notification, NASA LaRC shall provide a plan to address the emergency. The plan shall include the basis for the proposed action and photographs of the current building, facility, or area under consideration. The SHPO shall have seven (7) calendar days to review and comment on the plan to address the emergency. If the SHPO or other consulting parties fail to provide comments within the seven (7) calendar day review period, NASA LaRC may assume that the non-responding party has no comments. NASA LaRC shall take all comments received into consideration when preparing the final plan and then implement the plan.

C. If NASA LaRC is unable to consult with the SHPO prior to carrying out emergency actions NASA LaRC shall notify the SHPO and other parties as appropriate within five (5) calendar days after the initiation of the emergency action. This notification shall include a description of the emergency action taken, the effects of the action(s) to historic properties, and, where appropriate, any further proposed measures to avoid, minimize, or mitigate potential adverse effects to Historic Preservation Priority Category 1, 2, and 3 buildings and structures and archaeological sites listed or considered eligible for listing in the NRHP.

D. Where possible, such emergency actions shall be undertaken in a manner that does not foreclose future preservation or restoration of historic properties. Where possible, and where such emergency actions may affect Historic Preservation Priority Category 1, 2, and 3 buildings or structures, they shall be undertaken in a manner that is consistent with the Secretary's Standards to the greatest extent practicable. In addition, where possible, such actions will be done with on-site monitoring by the appropriate preservation professional who meets, at a

minimum, the *Professional Qualifications Standards* in his or her field or discipline.

E. Immediate rescue and salvage operations conducted to preserve life or property are exempt from these and all other provisions of this Agreement.

IX. PUBLIC BENEFIT AND EDUCATION

A. A variety of public interpretation initiatives may be undertaken by NASA LaRC for the purpose of historic preservation and as alternative mitigation measures. Such initiatives may include, but are not limited to:

1. Web-based products for children and adults featuring historic properties as part of the heritage of the National Advisory Committee for Aeronautics (NACA) and NASA LaRC. This product shall be accessed via NASA LaRC's website for the public to experience;
2. Reports and pamphlets suitable for the general public describing the history of NASA LaRC and its role in aeronautics and space research;
3. Collection and assembling of documents including technical reports, public relations materials, historic photographs, maps, etc;
4. Identification, collection, preservation, and display of significant objects relating to the history of NASA LaRC, including tools, instruments, scale models, etc;
5. Collection of oral histories from long-term NASA LaRC employees, providing information on worker life and social history.

B. In keeping with the National Aeronautics and Space Act of 1958 which charges NASA with the widest practicable and appropriate dissemination of information concerning NASA's activities and the results thereof, NASA LaRC may undertake its public interpretation initiatives through its cooperative agreement with the VASC, as well as other established partnerships.

C. NASA LaRC will provide a report summarizing public interpretation initiatives completed in the previous years and planned for the upcoming years to the SHPO for review and comment on a biennial basis in conjunction with the annual report provided for in Stipulation XVI of this Agreement.

D. NASA LaRC will provide the Band, the Catawba, and the SHPO an opportunity to comment on any archaeological displays or exhibits developed as a result of this Agreement prior to public display. All comments received within 30 days of the request will be taken into account in finalizing the archaeological display or exhibit.

X. MITIGATION MEASURES FOR THE NEW TOWN PROJECT

A. NASA LaRC shall prepare a history of the NASA LaRC Historic District conveying an historical perspective of the scientific accomplishments of the NASA activities there as well as the look and feel of the existing campus in a popular format. In addition to appropriate historic photographs and illustrations, the narrative description shall incorporate the results of oral history interviews.

B. The document will shall be disseminated to the public both in an electronic format on the NASA LaRC CRM Public Interpretation Website web and in a popular publication. NASA LaRC shall provide copies of the history to the VASC as well as to the public library systems on the Virginia Peninsula in an Adobe Acrobat .pdf format as well as hard copies. Two copies will be provided to the SHPO for its archives. Copies of the document shall also be provided to all NASA History Center and all NASA research facilities.

C. The publication will be completed and available to the public within three (3) years of the date of the last signatory party's signature on this Agreement.

XI. PROFESSIONAL QUALIFICATIONS

All historical, architectural and/or archaeological work carried out pursuant to this Agreement shall be conducted by or under the direct supervision of an individual or individuals who meet, at a minimum, the qualifications set forth in the Secretary of Interior's *Professional Qualifications Standards* (62 FR 33707, June 20, 1997) (or Secretary's Standards in effect at the time work is carried out) in the appropriate discipline.

XII. PREPARATION AND REVIEW OF DOCUMENTS

A. A draft of all final technical reports shall be submitted to the SHPO, the Band, the Catawba, and other consulting parties as appropriate for review and comment. NASA LaRC shall ensure that all comments received within thirty (30) days of report receipt shall be taken into account in the final technical report. Two (2) copies of all final reports bound and on acid-free paper, and one electronic copy on CD, shall be provided to the SHPO, and one (1) copy to other consulting parties as appropriate.

B. All technical reports prepared pursuant to this Agreement shall be consistent with the federal standards entitled *Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-44742, September 29, 1983) and SHPO's *Guidelines for Conducting Cultural Resource Survey in Virginia* (rev. 2003) or subsequent revisions or replacements to these documents.

C. The SHPO and other consulting parties agree to provide comments on all technical reports, treatment plans, and other documentation arising from this

Agreement within thirty (30) days of receipt unless otherwise specified in this Agreement. If no comments are received from the SHPO or other consulting parties, NASA LaRC may assume the non-responding party's has no comments.

XIII. CURATION

NASA LaRC shall deposit archaeological materials and appropriate field and research notes, maps, drawing and photographic records collected as part of projects carried out under this Agreement) (with the exception of human skeletal remains and associated funerary objects which shall be treated in accordance with Stipulation XV) with a repository which meets the requirements in 36 CFR 79, *Curation of Federally Owned and Administered Archeological Collections*.

XIV. POST REVIEW DISCOVERIES

NASA LaRC shall ensure that all construction contractors involved in ground disturbing activities are aware of the provisions in Stipulation XIV A to E.

A. If previously unidentified historic properties or unanticipated effects to historic properties are discovered during construction, the construction contractor shall immediately halt all activity within a one hundred (100) foot radius of the discovery, notify NASA LaRC of the discovery, and implement interim measures to protect the discovery from looting and vandalism.

B. Immediately upon receipt of the notification required in Stipulation XIII. A., NASA LaRC shall

1. Inspect the construction site to determine the extent of the discovery and ensure that construction activities have halted;
2. Clearly mark the area of discovery;
3. Implement additional measures, as appropriate, to protect the discovery from looting and vandalism;
4. Have a professional archaeologist inspect the construction site to determine the extent of the discovery and provide recommendations regarding its NRHP eligibility and treatment; and
5. Notify the SHPO and other consulting parties, as appropriate, of the discovery describing the measures that have been implemented.

C. Within forty-eight (48) hours of receipt of the notification described in Stipulation XIV. B. 5. NASA LaRC shall provide the SHPO and other consulting parties, as appropriate, with its assessment of the NRHP eligibility of the discovery and the measures it proposes to take to resolve adverse effects. In making its official evaluation, NASA LaRC, in consultation with the SHPO, may

assume the discovery to be NRHP eligible for the purposes of Section 106 pursuant to 36 CFR 800.13(c). NASA LaRC, SHPO, and other consulting parties, as appropriate, shall respond within forty-eight (48) hours of receipt

D. NASA LaRC, shall take into account SHPO recommendations on eligibility and treatment of the discovery, shall ensure that appropriate actions are carried out, and provide the SHPO and other consulting parties, as appropriate with a report on these actions when they have been implemented.

E. Construction activities may proceed in the area of the discovery, when NASA LaRC has determined that implementation of the actions undertaken to address the discovery pursuant to Stipulation XIV are complete.

F. Any disputes over the evaluation or treatment of previously unidentified resources will be resolved in accordance with Stipulation XVI (“Dispute Resolution”) of this Agreement.

XV. HUMAN REMAINS

NASA LaRC shall make all reasonable efforts to avoid disturbing gravesites, including those containing Native American human remains and associated funerary artifacts. NASA LaRC shall treat all human remains in a manner consistent with the ACHP “Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects” (February 23, 2007; <http://www.achp.gov/docs/hrpolicy0207.pdf>) or ACHP policy in effect at the time remains and funerary artifacts are handled.

1. If the remains are determined to be of Native American origin, NASA LaRC shall comply with the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. Sec 3001 et seq.). If the remains are determined not to be of American Indian origin, NASA LaRC shall comply with the Virginia Antiquities Act, Section 10.1-2305 of the Code of Virginia, final regulations adopted by the Virginia Board of Historic Resources and published in the Virginia Register on July 15, 1991, or subsequent revisions.

2. NASA LaRC shall use reasonable efforts to ensure that the general public is excluded from viewing any burial site or associated funerary artifacts. The consulting parties to this agreement shall release no photographs of any burial site or associated funerary artifacts to the press or general public. NASA LaRC shall notify the appropriate Federally-recognized Tribe(s), Virginia Council on Indians, and/or individual Virginia tribes when burials, human skeletal remains, or funerary artifacts are encountered on the project, prior to any analysis or recovery. NASA LaRC shall deliver any Native American human skeletal remains and associated funerary artifacts recovered pursuant to this agreement to the appropriate tribe to be reinterred. The disposition of

any other human skeletal remains and associated funerary artifacts shall be governed as specified in any permit issued by the SHPO or any order of the local court authorizing their removal.

XVI. DISPUTE RESOLUTION

A. Should any Signatory to this Agreement object to any action carried out or proposed by NASA LaRC with respect to implementation of this Agreement, the objecting signatory shall consult with NASA LaRC to resolve the objection.

B. If after initiating such consultation NASA LaRC determines that the objection cannot be resolved through consultation, NASA LaRC shall forward all documentation relevant to the objection to the ACHP, including the proposed response to the objection.

C. Within forty-five (45) calendar days after receipt of all pertinent documentation, the ACHP shall exercise one of the following options:

1. Advise NASA LaRC that the ACHP concurs in the proposed response to the objection, whereupon NASA LaRC shall respond to the objection accordingly;

2. Provide NASA LaRC with recommendations, which NASA LaRC shall take into account in reaching a final decision regarding its response to the objections; or

3. Notify NASA LaRC that the objection will be referred for ACHP comment pursuant to 36 CFR Part 800.7(c), and proceed to refer the objection for comment. NASA LaRC shall take the resulting comment into account in accordance with 36 CFR 800.7(c)(4) and Section 110(l) of the NHPA.

D. Should the ACHP not exercise one of the above options within forty-five (45) calendar days after receipt of all pertinent documentation, NASA LaRC may assume the ACHP's concurrence in its proposed response to the objection.

E. At any time during implementation of the measures stipulated in this Agreement, should an objection pertaining to this Agreement be raised by a member of the public, the party to this Agreement receiving the objection shall notify the other parties to this Agreement and NASA LaRC will take the objection into account, consulting with the objector and, should the objector so request, with any of the parties to this Agreement to resolve the objection.

XVII. ANNUAL REPORTING

A. NASA LaRC shall provide an annual status report on July 1st, to the SHPO and other Signatories to this Agreement to review implementation of the terms of

this Agreement and to determine whether amendments are needed. The annual status report shall address the following:

1. Problems with implementation of this Agreement or issues encountered during the year;
2. Changes NASA LaRC believes should be made in implementation of this Agreement;
3. A list of properties treated under this Agreement during the reporting period including activities not requiring review and activities resulting in no adverse and adverse effects to Historic Preservation Priority Category 3 buildings and structures; and
4. A list of all NASA LaRC professional training opportunities relative to this Agreement provided during the reporting period and number of participants and organizations.

B. The ACHP and the SHPO may monitor and review the activities carried out pursuant to this Agreement. NASA LaRC shall cooperate with the SHPO and the ACHP in their monitoring and review responsibilities.

XVIII. AMENDMENT AND TERMINATION

A. Any Signatory to the Agreement may request that this Agreement be amended, whereby the Signatory Parties shall consult to consider whether such amendment is necessary. All Signatories to the Agreement must agree to the proposed amendment in accordance with 36 CFR Part 800.6(c)(7).

B. If NASA LaRC determines that it cannot implement the terms of this Agreement, or if the ACHP or SHPO determines that the Agreement is not being properly implemented, NASA LaRC, the ACHP, or the SHPO may propose to the other parties to this Agreement that the Agreement be amended or terminated.

C. This Agreement may be terminated by any Signatory to the Agreement in accordance with the procedures described in 36 CFR Part 800.6(c)(8). During the period after notification and prior to termination of the Agreement, NASA LaRC and the other signatories shall consult to seek agreement on amendments or other actions that would avoid termination of the Agreement. In the event of termination of the Agreement, NASA LaRC shall negotiate a new Agreement per 36 CFR Part 800.14(b), or request, consider, and respond to ACHP formal comments per 36 CFR Part 800.7. Termination of the Agreement shall include the submission of any documentation or technical reports by NASA LaRC on any work done up to and including the date of termination.

XIX. ANTI-DEFICIENCY ACT

NASA LaRC's future efforts to execute requirements arising from the stipulations of this Agreement are subject to the provisions of the Anti-Deficiency Act. If compliance with the Anti-Deficiency Act alters or impairs NASA LaRC's ability to implement the stipulations of this Agreement, NASA LaRC shall consult in accordance with the amendment and termination procedures found at Stipulations XV of this Agreement. No provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, Title 31 U.S.C. Part 1341.

XX. HANDLING OF SENSITIVE BUT UNCLASSIFIED DATA

A. In the performance of this Agreement, the non-NASA Parties may have access to, be furnished with, or use U.S. Government data, the use and dissemination of which, the Government intends to control. With respect to data specifically marked with a restrictive notice, including but not limited to "Sensitive But Unclassified, (SBU)", the non-NASA Parties agree to:

1. Use, disclose, or reproduce such data only to the extent necessary to perform the work required under this Agreement;
2. Safeguard such data from unauthorized use or disclosure;
3. Allow access to such data only to its employees, contractors, or subcontractors that require access for their performance under this Agreement;
4. Except as provided in 1(c) above, preclude access and disclosure of such data outside the Parties' organizations;
5. Notify its employees who may require access to such data about the obligations under this clause and ensure that such employees comply with such obligations, and notify its contractors or subcontractors that may require access to such data about their obligations under this clause; and
6. Return or dispose of such data, as NASA may direct, when the data is no longer needed for performance under this Agreement.

B. In the event that data exchanged between NASA and the Parties include a legend that the non-NASA Parties deem to be ambiguous or unauthorized, the non-NASA Parties may inform NASA of such condition. Notwithstanding such a legend, as long as such legend provides an indication that a restriction on use or disclosure was intended the Party receiving such data shall treat such data pursuant to the requirements of this clause unless otherwise directed, in writing, by NASA.

C. Notwithstanding any restrictions on use, disclosure, or reproduction of data provided in this clause, the Parties will not be restricted in the use, disclosure, and reproduction of any data that: (a) is publicly available at the time of disclosure or becomes publicly available without breach of this Agreement; (b) is known to, in the possession of, or developed by the receiving Party independent of carrying out the receiving Party's responsibilities under this Agreement and independent of any disclosure of, or without reference to, proprietary data or otherwise protectable data hereunder; (c) is received from a third Party having the right to disclose such information without restriction; or (d) is required to be produced by the receiving Party pursuant to a court order or other legal requirement. If a non-NASA Party believes that any of the events or conditions that remove restriction on the use, disclosure, and reproduction of the data apply the non-NASA Party will promptly notify NASA of such belief prior to acting on such belief, and, in any event, will notify NASA prior to an unrestricted use, disclosure, or reproduction of such data.

XXI. DURATION OF AGREEMENT

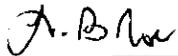
A. This Agreement shall remain in full force and effect for three (3) years after the date of the last Signatory's signature, after which the Agreement will automatically renew for a period of seven (7) years unless a Signatory to this Agreement objects in writing to its renewal sixty (60) calendar days prior to the date this Agreement would otherwise expire. If an objection is received, NASA LaRC will consult with the Signatories to determine whether the Agreement needs to be extended, amended, or terminated and take such actions as appropriate.

B. If at the end of the ten (10) year period the Signatories agree to consult on an extension of this Agreement, the Signatories will execute a written modification, based on the template at Appendix H, extending the Agreement for an agreed upon period from the date the original Agreement would have expired absent the extension.

Execution of this Agreement by NASA LaRC, the SHPO and the ACHP, and implementation of its terms evidence that NASA LaRC has afforded the ACHP a reasonable opportunity to comment on NASA LaRC's management of the facility and that NASA LaRC has taken into account the effects of its on-going management on historic properties and fully satisfies its Section 106 responsibilities for all individual undertakings subject to review under this Agreement.

SIGNATORIES TO THIS AGREEMENT:

**National Aeronautics and Space Administration,
Langley Research Center**



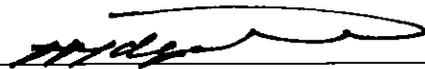
Date: 1/11/10
Lesa B. Roe, Director

Advisory Council on Historic Preservation



Date: 1/15/10
John M. Fowler, Executive Director

Virginia State Historic Preservation Officer



Date: 1/22/10
Kathleen S. Kilpatrick, Director

PARTIES CONCURRING IN THIS AGREEMENT:

Virginia Air and Space Center

_____ Date: _____
Todd Bridgford, Director

United Keetoowah Band of the Cherokee Indians in Oklahoma

_____ Date: _____
George G. Wickliffe, Chief

Catawba Indian Nation

_____ Date: _____
Donald Rodgers, Chief

Virginia Council on Indians

_____ Date: _____
Deanna Beacham, Program Director

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Appendix A – Programmatic Agreement among NASA, the ACHP and NCSHPO for Management of NASA’s NHL Properties (to be inserted)

Appendix B – Inventory of NASA LaRC’s Architectural Resources with Historic Preservation Priority Category status and a Map (to be inserted upon concurrence from SHPO)

Appendix C – Inventory of NASA LaRC’s Archaeological Resources with Eligibility Status and a Map (to be inserted)

Appendix D – MOU between NASA and the Smithsonian for Identification and Disposition of NASA’s Historic Artifacts (to be inserted)

Appendix E – List of Terms and Definitions

Appendix F – Activities Not Requiring Review under this Agreement

Appendix G – Standard Documentation Measures

Appendix H – Agreement Extension Template

Appendix I – List of Highly Scientific and Technological Buildings and Structures

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Appendix A
Programmatic Agreement among NASA, the ACHP and NCSHPO
for Management of NASA’s NHL Properties

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PROGRAMMATIC AGREEMENT
AMONG THE
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
THE NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS,
AND THE
ADVISORY COUNCIL ON HISTORIC PRESERVATION

WHEREAS, the National Aeronautics and Space Administration (NASA) undertakes research, development, space mission operations, and management use of its facilities which have been designated as National Historic Landmarks (Landmarks) (Attachment 1); and

WHEREAS, such facilities require frequent modification over the life of agency missions to adapt them to meet the requirements of ongoing NASA programs; and

WHEREAS, NASA has determined that such modifications may have an effect on those Landmarks, and has consulted with the National Conference of State Historic Preservation Officers (NCSHPO) and the Advisory Council on Historic Preservation (Council) pursuant to the regulations (36 CFR Part 800) implementing Sections 106 and 110(f) of the National Historic Preservation Act, as amended (16 U.S.C. 470f and 470h-2(f)); and

WHEREAS, the Department of the Interior, National Park Service (NPS) was invited and participated in the consultation;

NOW, THEREFORE, NASA, the NCSHPO, and the Council agree that the programs shall be implemented in accordance with the following stipulations in order to take into account the effect of the programs and specific undertakings on the Landmarks.

Stipulations

NASA will ensure that the following measures are carried out.

I. Categories of Activities

A. When the proposed undertaking involves any of the following activities, NASA shall consult with the appropriate SHPO and, as necessary, the Council in accordance with Stip. II:

- 1. Demolition, dismantling, or relocation of original engineering structures, or of buildings housing facilities;
- 2. Removal or excessing of significant elements of the Landmarks specifically named on the National Register nomination forms;
- 3. New construction not compatible with major portions of the original structure or which alter the characteristics of the

facility which were specified as the reason for its Landmark designation; or

4. Changes in function, purpose, or use of a facility.

B. When the proposed undertaking is limited to the following activities that will not alter the characteristics of the facility which were specified as the reason for its landmark designation, NASA shall develop and implement mitigation measures in accordance with Stipulation III:

1. Replacement of historic hardware or components;
2. Modification of the original structure or equipment used in engineering structures, or buildings housing facilities; or
3. New construction compatible with existing structure, purpose, and operation of the facility.

NASA shall include a description of such activities and mitigation measures in the annual summary of its activities prepared pursuant to Stipulation IV.A.

C. When the proposed undertaking involves none of the activities specified above, NASA may proceed without consultation or the implementation of mitigation measures.

II. Consultation Process

A. Consultation required under Stip. I.A. shall be conducted as follows:

1. NASA shall provide the following documentation to the SHPO for review:
 - a. a description of the undertaking, with photos, maps, and drawings;
 - b. a description of the affected Landmark;
 - c. a description of the effects of the undertaking on the affected Landmark;
 - d. a description of alternatives to the proposed action, which were considered if any, and reasons not chosen;
 - e. a description of any mitigation measures proposed;
 - f. a description of NASA's effort, if appropriate, to obtain and consider views of affected interested persons on the proposed undertaking, including a copy of any comments received; and
 - g. the planning and approval schedule for the proposed undertaking.

Whenever feasible, NASA shall give the SHPO advance notice that such documentation is under preparation, and advise the SHPO of a date certain that it intends to submit the documentation to the SHPO.

2. The SHPO shall respond to a written request for consultation (accompanied by the documentation specified in Stip. II.A.1) within 20 working days, and agree, conditionally agree, or disagree with NASA's proposal.

3. If NASA does not accept the SHPO's conditions, or if NASA and the SHPO disagree, NASA shall notify the Council and forward copies of the documentation specified in Stip. II.A.1, above, along with other information relevant to the dispute.

4. Within 20 working days, the Council shall either: (1) attempt to resolve the dispute; (2) provide NASA with recommendations to be taken into account in implementing the activity; or (3) decide to comment, and comment within 45 working days of that decision. At NASA's request, the time periods in Stips. II.A.2. and II.A.4. will run concurrently. In exceptional circumstances NASA may request accelerated consideration under Stip. II.A.4. and the Council will make a good faith effort to accommodate such requests. The Council may consult with the National Park Service of the Department of the Interior during its review period.

B. The Council and the NCSHPO recognize that operational emergency situations may arise where NASA must take immediate action without prior consultation with the appropriate SHPO or the Council. In such situations, NASA shall notify the Council and the SHPO of such actions as soon as practicable.

III. Mitigation

Mitigation measures shall be carried out prior to undertaking actions specified in Stips. I.A. and I.B.

A. Recordation

1. Recordation shall be done in accordance with the Secretary of the Interior's "Standards for Architectural and engineering Documentation" (Standards) (Federal Register, 48 FR 190, pp. 44730-44734, September 29, 1983).

2. Because original "as-built" drawings and other records are on file at the installations containing Landmark facilities, documentation will normally include the following: (1) reproduction of existing "as-built" drawings and site plans modified on standard size (19 x 24 or 24 x 36) mylar; and (2) provision of black and white archival quality photos with large format negatives of exterior and interior views, as appropriate, as well as special technological features or engineering details.

3. Original copies of all documentation shall be provided to the Secretary of the Interior in accordance with the Standards for incorporation into the National Architectural and Engineering Records in the Library of Congress as provided in Section 101 of the National Historic Preservation Act and implementing procedures. Copies of the documentation shall also be provided to the appropriate SHPO.

B. Salvage

NASA will apply its agreement with the Smithsonian Institution (NASA Management Instruction 4310.4) to determine appropriate retention and curation activities with respect to significant artifacts.

IV. Continuing Coordination

A. On or about December 1, 1990, and annually thereafter, NASA will provide a summary of its activities under this Agreement to the Council and to the NCSHPO.

B. In consultation with the appropriate SHPO, the Council may review and comment upon individual undertakings when it determines that historic preservation issues warrant such action.

C. NASA will provide appropriate public information about activities under Stip.I.A. to interested parties upon request.

D. Any party to this Agreement may terminate it by providing 60 days notice to the other parties, provided that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination.

Execution of this Programmatic Agreement and carrying out its terms evidences that NASA has afforded the Council and the NCSHPO a reasonable opportunity to comment on its programs affecting Landmarks under Sections 106 and 110(f) of the National Historic Preservation Act, and that NASA has taken into account the effects of its programs on these Landmarks.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

By: [Signature] 9/20/89
Associate Administrator for Management Date

NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS

By: [Signature] 10/6/89
President Date

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: [Signature] September 18, 1989
Chairman Date

NASA'S NATIONAL HISTORIC LANDMARKS

(as of 2/24/89)

1. Variable Density Tunnel (Langley Research Center, Hampton, VA)
2. Full Scale Tunnel (Langley Research Center, Hampton, VA)
3. Eight-Foot High Speed Tunnel (Langley Research Center, Hampton, VA)
4. Unitary Plan Wind Tunnel (Ames Research Center, Moffett Field, CA)
5. Rocket Engine Test Facility (Lewis Research Center, Cleveland, OH)
6. Zero-Gravity Research Facility (Lewis Research Center, Cleveland, OH)
7. Spacecraft Propulsion Research Facility (Lewis Plum Brook Operations Facility)
8. Redstone Test Stand (George C. Marshall Space Flight Center, AL)
9. Propulsion and Structural Test Facility (George C. Marshall Space Flight Center, AL)
10. Rocket Propulsion Test Complex (Stennis Space Center, MS)
11. Saturn V Dynamic Test Stand (George C. Marshall Space Flight Center, AL)
12. Lunar Landing Research Facility (Langley Research Center, Hampton, VA)
13. Rendezvous Docking Simulator (Langley Research Center, Hampton, VA)
14. Neutral Buoyancy Space Simulator (George C. Marshall Space Flight Center, AL)
15. Space Environment Simulation Laboratory (Lyndon B. Johnson Space Center, Houston, TX)
16. Spacecraft Magnetic Test Facility (Goddard Space Flight Center, Greenbelt, MD)
17. Twenty-Five-Foot Space Simulator (Jet Propulsion Laboratory, Pasadena, CA)
18. Pioneer Deep Space Station (Goldstone Deep Communications Complex, CA)
19. Space Flight Operations Facility (Jet Propulsion Laboratory, Pasadena, CA)
20. Apollo Mission Control Center (Lyndon B. Johnson Space Center, Houston, TX)

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Appendix B
Inventory of NASA LaRC's Architectural Resources with
Historic Preservation Priority Category status and a Map

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NASA Langley Research Center Phase I Survey of Architectural Resources

NASA Building #	DHR ID#	Building Name	Year Built	NRHP-Eligibility	Criteria	Historic Preservation Priority Category
581	114-5313-0392	Thornell Avenue Substation	1940	Non-Contributing	NC	4
582	114-5313-0393	East Compressor Building	1921	Individually and contributing	A	1
582A	114-5313-0394	Low-Turbulence Pressure Tunnel	1940	Individually and contributing	A	1
583	114-5313-0395	16 In & 6x28 Transonic Wind Tunnel	1938	Contributing	A, C	2
583A	114-5313-0396	16 In & 6x28 Transonic Wind Tunnel Storage	1929	Contributing	A, C	2
585	114-5313-0397	LTPT Complex	1934	Contributing	A	2
636A	114-5313-0398	Satellite Dish	1980	Demo'd	Demo'd	Demo'd
640	114-5313-0399	8-Foot Transonic Pressure Tunnel	1953	Individually and contributing	A, C	1
641	114-0139 (114-5313-0002)	8-Foot High Speed Tunnel	1936	NHL	A, C	
641A	114-5313-0401	Storage Building	1970	Non-Contributing	NC	4
641B	114-5313-0402	Cooling Tower	1970	Non-Contributing	NC	4
642	114-5313-0403	Back River Substation	1941	Non-Contributing	NC	4
643	114-0142 (114-5313-0005)	30 by 60 Foot Full Scale Tunnel	1931	NHL	A, C	
644	114-5313-0405	12-Foot Low-Speed Tunnel	1939	Individually and contributing	A, C	1
645	114-5313-0406	20-Foot Free Spinning Tunnel	1941	Individually and contributing	A, C	1
645A	114-5313-0407	Spin Tunnel Support Building	1979	Non-Contributing	NC	4
646	114-5313-0408	Engineer Technology Laboratory	1934	Individually and contributing	A	1
647	114-5313-0409	Rotor Aeroelastic Laboratory	1939	Individually and contributing	A, C	1
648	114-5313-0410	Transonic Dynamics Tunnel	1938	Individually and contributing	A, C	1
648A	114-5313-0411	Transonic Dynamics Tunnel Complex	1979	Non-Contributing	NC	4
648B	114-5313-0412	Transonic Dynamics Tunnel Complex	1979	Non-Contributing	NC	4
650	114-5313-0413	Mathis Road Substation	1938	Non-Contributing	NC	4
1101	114-5313-0134	Wythe Creek Guardhouse	1979	Non-Contributing	NC	4
1121	114-5313-0238	NTF Model Storage	1994	Non-Contributing	NC	4
1122	114-5313-0275	Storage Facility	1995	Non-Contributing	NC	4
1133B	114-5313-0148	Satellite Dish	1983	Non-Contributing	NC	4
1145	114-5313-0295	Visual Imaging Studio	1992	Non-Contributing	NC	4
1146	114-5313-0010	16-Foot Transonic Tunnel	1941	Individually and contributing	A, C	1
1146A	114-5313-0078	16-Foot Transonic Tunnel Complex	1958	Contributing	A	3
1146B	114-5313-0079	16-Foot Transonic Tunnel Complex	1959	Non-Contributing	NC	4

NASA Building #	DHR ID#	Building Name	Year Built	NRHP-Eligibility	Criteria	Historic Preservation Priority Category
1146C	114-5313-0080	16-Foot Transonic Tunnel Complex	1941	Non-Contributing	NC	4
1146D	114-5313-0081	16-Foot Transonic Tunnel Complex	1970	Non-Contributing	NC	4
1146E	114-5313-0082	Newport News Waterworks	1941	Non-Contributing	NC	4
1146F	114-5313-0083	Big Bethel Reservoir	1941	Non-Contributing	NC	4
1146G	114-5313-0084	16-Foot Transonic Tunnel Complex	1941	Non-Contributing	NC	4
1146H	114-5313-0085	16-Foot Transonic Tunnel Complex	1941	Individually and contributing	A, C	1
1146I	114-5313-0086	16-Foot Transonic Tunnel Complex	1941	Individually and contributing	A, C	1
1146J	114-5313-0087	16-Foot Transonic Tunnel Complex	1941	Non-Contributing	NC	4
1146K	114-5313-0088	16-Foot Transonic Tunnel Complex	1941	Individually and contributing	A	1
1146L	114-5313-0089	16-Foot Transonic Tunnel Complex	1941	Non-Contributing	NC	4
1146M	114-5313-0090	16-Foot Transonic Tunnel Complex	1941	Contributing	A	3
1147	114-5313-0011	Taylor Road North Substation	1940	Non-Contributing	NC	4
1148	114-5313-0012	Structures & Materials Research Lab	1940	Individually and contributing	A	1
1149	114-5313-0013	Dispensary Office of Patent Counsel	1941	Contributing	A	2
1151	114-5313-0150	Management Support	1971	Non-Contributing	NC	4
1152	114-5313-0014	Publications Editorial Office	1941	Contributing	A	2
1153	114-5313-0015	External Affairs	1941	Contributing	A	2
1154	114-5313-0296	Steam to Hot Water Exchange/Pump House	1968	Contributing	A	3
1155	114-5313-0187	Imaging and Photographic Lab	1968	Demo'd	Demo'd	Demo'd
1156	114-5313-0297	General Equipment Storage	1968	Contributing	A	3
1158	114-5313-0298	Pyrotechnics Storage	1968	Contributing	A	3
1158A	114-5313-0299	Pyrotechnics Storage	1968	Contributing	A	3
1159	114-5313-0300	Pyrotechnics Test Facility	1968	Contributing	A	3
1162	114-5313-0301	1162 Office Complex	1976	Non-Contributing	NC	4
1162A	114-5313-0302	1162 Office Complex	1978	Non-Contributing	NC	4
1163	114-5313-0303	Office Facility	1981	Non-Contributing	NC	4
1164	114-5313-0304	Office Facility	1968	Contributing	A	3
1165	114-5313-0305	Storage Facility	1979	Non-Contributing	NC	4
1166	114-5313-0306	Hazardous Waste Pre-Ship Facility	1991	Non-Contributing	NC	4
1167	114-5313-0307	PCB Storage Facility	1991	Non-Contributing	NC	4
1168	114-5313-0170	Flight Control Research Building	1976	Demo'd	Demo'd	Demo'd
1169	114-5313-0308	Office Facility	1978	Non-Contributing	NC	4
1170	114-5313-0309	Storage and Issue Facility	1974	Non-Contributing	NC	4
1171	114-5313-0310	Storage and Issue Facility	1974	Non-Contributing	NC	4
1172	114-5313-0311	Storage and Issue Facility	1974	Non-Contributing	NC	4
1173	114-5313-0312	Chemical Storage Warehouse	1974	Non-Contributing	NC	4
1174	114-5313-0313	Storage and Issue Facility	1979	Non-Contributing	NC	4
1175	114-5313-0314	Storage Facility	1988	Non-Contributing	NC	4

NASA Building #	DHR ID#	Building Name	Year Built	NRHP-Eligibility	Criteria	Historic Preservation Priority Category
1176	114-5313-0315	Storage and Issue Facility	1991	Non-Contributing	NC	4
1177	114-5313-0316	Mail Handling Facility	1992	Non-Contributing	NC	4
1181	114-5313-0317	Reclamation and Recycling Facility	1995	Non-Contributing	NC	4
1186	114-5313-0318	Water Spheroid (500K Gallon)	1994	Non-Contributing	NC	4
1187	114-5313-0319	Storage and Issue Facility	1992	Non-Contributing	NC	4
1188	114-5313-0320	Component Cleaning Facility	1993	Non-Contributing	NC	4
1189	114-5313-0321	Offload Temp Housing Support	1993	Non-Contributing	NC	4
1190	114-5313-0322	Offload Temp Housing Support	1993	Non-Contributing	NC	4
1191	114-5313-0191	Support Offices	1993	Non-Contributing	NC	4
1192	114-5313-0016	Financial Management Division	1942	Contributing	A	2
1192C	114-5313-0188	Impact Basin Office Building	1942	Non-Contributing	NC	4
1192D	114-5313-0189	Projects Directorate	1966	Contributing	A	3
1192E	114-5313-0190	Scout Project Office	1966	Contributing	A	3
1194	114-5313-0017	Library	1942	Contributing	A	2
1194A	114-5313-0217	West Area Training Facility	1977	Non-Contributing	NC	4
1195	114-5313-0192	Financial Management and Procurement Building	1966	Contributing	A	3
1195A	114-5313-0193	Fiscal & Procurement Building Annex	1966	Contributing	A	3
1195B	114-5313-0194	Fin. Management Division, U.S. Army Lab	1972	Contributing	A	3
1195C	114-5313-0195	Administrative Management Building	1977	Non-Contributing	NC	4
1196	114-5313-0387	Tape Storage Facility	1991	Non-Contributing	NC	4
1197	114-5313-0197	Storage Building	1991	Non-Contributing	NC	4
1198	114-5313-0323	Air Conditioning Shop	1989	Non-Contributing	NC	4
1199	114-5313-0324	Plant and Vehicle Support Facility	1968	Contributing	A	3
1200	114-5313-0200	Laser Optics Laboratory	1965	Contributing	A	2
1200A	114-5313-0201	Research Support	1965	Contributing	A	3
1201	114-5313-0325	Communications Facility	1965	Contributing	A	2
1202	114-5313-0326	Research Lab	1965	Contributing	A,C	2
1202A	114-5313-0327	Pearl Young Conference Center	1965	Contributing	A	3
1203	114-5313-0328	Storage Facility	1965	Contributing	A	3
1205	114-5313-0329	Research Lab	1967	Contributing	A,C	2
1206	114-5313-0330	Distribution Center	1966	Contributing	A	3
1208	114-5313-0331	Acoustics Research Facility	1972	Contributing	A, C	2
1208A	114-5313-0332	Acoustics Research Facility	1991	Non-Contributing	NC	4
1209	114-5313-0333	Office Facility	1976	Non-Contributing	NC	4
1211	114-5313-0334	Telephone Switching Facility	1989	Non-Contributing	NC	4
1212	114-5313-0018	Subsonic Tunnels Facility	1946	Contributing	A	2
1212B	114-5313-0091	High-Speed 7 x 10-Foot Tunnel	1946	Demo'd	Demo'd	Demo'd
1212C	114-5313-0335	14x22 Foot Subsonic Tunnel	1970	Contributing	A, C	2
1213	114-5313-0019	Cafeteria Telephone Exchange	1946	Contributing	A	2
1214	114-5313-0215	Basic Aerodynamics Research Tunnel	1970	Contributing	A	2
1215	114-5313-0020	Central Heating & Steam Generation	1946	Contributing	A	2
1216	114-5313-0336	Outreach Center	1992	Non-Contributing	NC	4

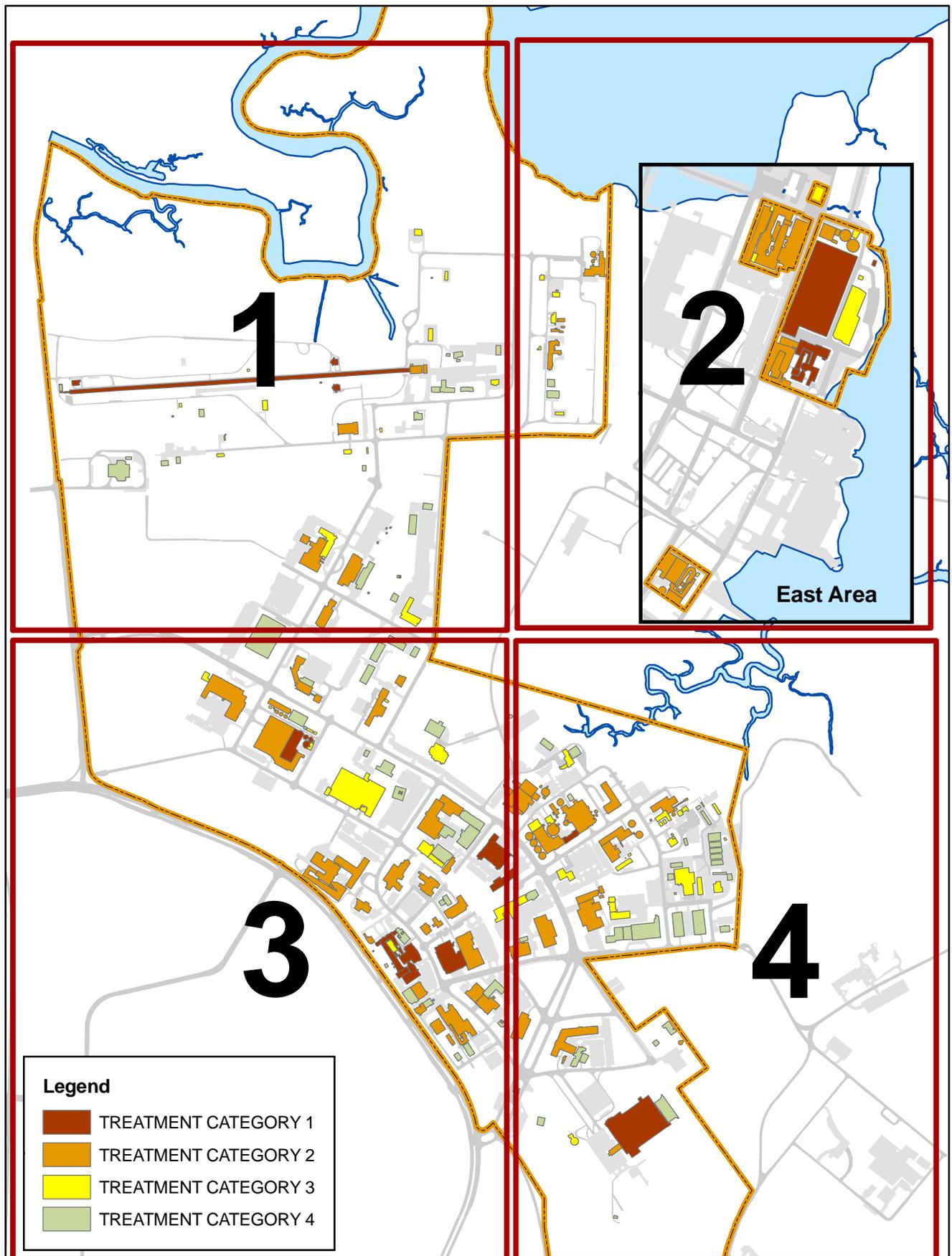
NASA Building #	DHR ID#	Building Name	Year Built	NRHP-Eligibility	Criteria	Historic Preservation Priority Category
1218	114-5313-0021	Psychoacoustics & Anechoic Noise Facility	1945	Demo'd	Demo'd	Demo'd
1218A	114-5313-0092	Anechoic Noise Facility	1945	Demo'd	Demo'd	Demo'd
1219	114-5313-0022	Langley Research Center Headquarters	1945	Individually and contributing	A	1
1220	114-5313-0023	Management Information Systems Simulation	1945	Individually and contributing	A	1
1221	114-5313-0024	High-Intensity Noise Research Facility	1946	Contributing	A	2
1221A	114-5313-0337	1221 Research Complex	1965	Contributing	A, C	2
1221B	114-5313-0093	High-Intensity Noise Research Facility	1945	Contributing	A	2
1221C	114-5313-0094	High-Intensity Noise Research Facility	1946	Contributing	A	2
1221D	114-5313-0095	High-Intensity Noise Research Facility	1946	Contributing	A	2
1221E	114-5313-0096	High-Intensity Noise Research Facility	1946	Contributing	A	2
1222	114-5313-0025	Employee Activities Conference Center	1946	Contributing	A	3
1222B	114-5313-0338	Gymnasium and Fitness Center	1986	Non-Contributing	NC	4
1223	114-5313-0026	Pollution Control	1943	Demo'd	Demo'd	Demo'd
1223A	114-5313-0219	Pollution Control Plant	1975	Demo'd	Demo'd	Demo'd
1225	114-5313-0027	Experimental Machine Shop	1945	Contributing	A	2
1226	114-143 (114-5313-006)	Variable Density Tunnel	1921	NHL	A, C	
1227	114-5313-0339	Substation-DL	1967	Non-Contributing	NC	4
1228	114-5313-0028	Main Gate House	1948	Contributing	A	3
1229	114-5313-0029	Loads, Structures, & Dynamics Research	1945	Contributing	A	2
1229A	114-5313-0097	Chemical Storage	1945	Demo'd	Demo'd	Demo'd
1229B	114-5313-0098	High Speed Research Facility Storage	2000	Non-Contributing	NC	4
1230	114-5313-0030	Instrumentation Research	1945	Contributing	A	2
1230A	114-5313-0099	Gas Flow Calibration Lab	1946	Contributing	A	2
1230B	114-5313-0225	Gas Flow Calibration Lab	1988	Non-Contributing	NC	4
1231	114-5313-0031	Child Development Center	1946	Non-Contributing	NC	4
1231A	114-5313-0100	Astronomy Club Facility	1946	Contributing	A	2
1231B	114-5313-0340	Child Development Center	1992	Non-Contributing	NC	4
1231C	114-5313-0341	Child Development Center	1991	Non-Contributing	NC	4
1232	114-5313-0032	Space Technology	1946	Contributing	A	2
1232A	114-5313-0101	Structural Fabrication Support Administration Offices	1946	Contributing	A	2
1232B	114-5313-0227	Glass Blowing Shop	1956	Contributing	A	2
1233	114-5313-0033	Stratton Road Substation	1946	Contributing	A	3
1234	114-5313-0034	Jet Exit Test Facility	1945	Contributing	A	2
1235	114-5313-0035	Frequency Converter Building	1947	Contributing	A	2
1236	114-5313-0036	National Transonic Facility (NTF)	1947	Contributing	A	2
1236A	114-5313-0103	National Transonic Facility (NTF)	1947	Contributing	A	2
1236B	114-5313-0342	NTF Complex	1979	Non-Contributing	NC	4
1236C	114-5313-0343	NTF Complex	1981	Non-Contributing	NC	4
1236D	114-5313-0344	NTF Complex	1997	Non-Contributing	NC	4

NASA Building #	DHR ID#	Building Name	Year Built	NRHP-Eligibility	Criteria	Historic Preservation Priority Category
1237A	114-5313-0231	Foundry	1971	Contributing	A	3
1237B	114-5313-0232	Foundry	1971	Contributing	A	3
1237C	114-5313-0233	Foundry	1971	Contributing	A	3
1238	114-5313-0234	Laser/Optics Lab	1975	Non-Contributing	NC	4
1238A	114-5313-0235	Composite Model & Metal Finishing Shop	1978	Non-Contributing	NC	4
1238B	114-5313-0345	1238 Complex	1978	Non-Contributing	NC	4
1239	114-5313-0037	Taylor Road Substation	1945	Non-Contributing	NC	4
1240	114-5313-0038	Ready Issue Stores Building	1951	Contributing	A	3
1241	114-5313-0039	Tunnel Power Control	1951	Contributing	A	2
1242	114-5313-0040	0.3-Meter Transonic Cryogenic Tunnel	1945	Contributing	A	2
1242A	114-5313-0346	Cryogenic Tunnel Complex	1974	Non-Contributing	NC	4
1243	114-5313-0041	Yorktown Road Substation	1950	Non-Contributing	NC	4
1244	114-5313-0042	Research Aircraft Operations	1951	Individually and contributing	A	1
1244A	114-5313-0104	Water Tank No. 2	1951	Contributing	A	3
1244B	114-5313-0105	Viking Lander Impact Test Facility	1955	Non-Contributing	NC	4
1244C	114-5313-0388	Flight Operations Support Building	1968	Contributing	A	2
1244D	114-5313-0347	Hangar Complex	1974	Non-Contributing	NC	4
1245	114-5313-0043	General Storage Building No. 1	1952	Non-Contributing	NC	4
1246	114-5313-0044	General Storage Building No. 2	1952	Non-Contributing	NC	4
1247A	114-5313-0106	High Speed Aerodynamics Division Lab Offices	1952	Individually and contributing	A	1
1247B	114-5313-0107	High Speed Aerodynamics Div. Complex West Wing	1952	Contributing	A	2
1247C	114-5313-0108	Gas Dynamics Cooling Tower	1952	Contributing	A	2
1247D	114-5313-0109	Aero-Physics Laboratory	1952	Contributing	A	2
1247E	114-5313-0110	Gas Dynamics Compression Building	1952	Contributing	A	2
1247F	114-5313-0111	Ames Road Substation	1952	Contributing	A	3
1247H	114-5313-0348	1247 Complex	1967	Contributing	A	3
1247J	114-5313-0349	1247 Complex	1991	Non-Contributing	NC	4
1248	114-5313-0350	NASA Fire Station	1967	Contributing	A	3
1250	114-5313-0136	Environmental and Space Sciences	1968	Contributing	A	2
1250A	114-5313-0137	Environmental and Space Sciences	1967	Contributing	A	3
1250CTI	114-5313-0138	Substation	1979	Non-Contributing	NC	4
1251	114-5313-0045	Unitary Plan Wind Tunnel	1952	Contributing	A	2
1251A	114-5313-0112	Continuous Flow Hypersonic Tunnel	1952	Individually and contributing	A	1
1251B	114-5313-0113	Chemical Treatment Facility	1952	Contributing	A	2
1251C	114-5313-0114	Sprinkler House	1952	Contributing	A	3
1251D	114-5313-0115	Hypersonic Flow Apparatus	1952	Contributing	A	3
1251E	114-5313-0116	Hypersonic Flow Apparatus	1952	Contributing	A	3
1253	114-5313-0351	Substation-S2DM	1967	Contributing	A	3
1253A	114-5313-0352	Substation-S2DM	1970	Contributing	A	3

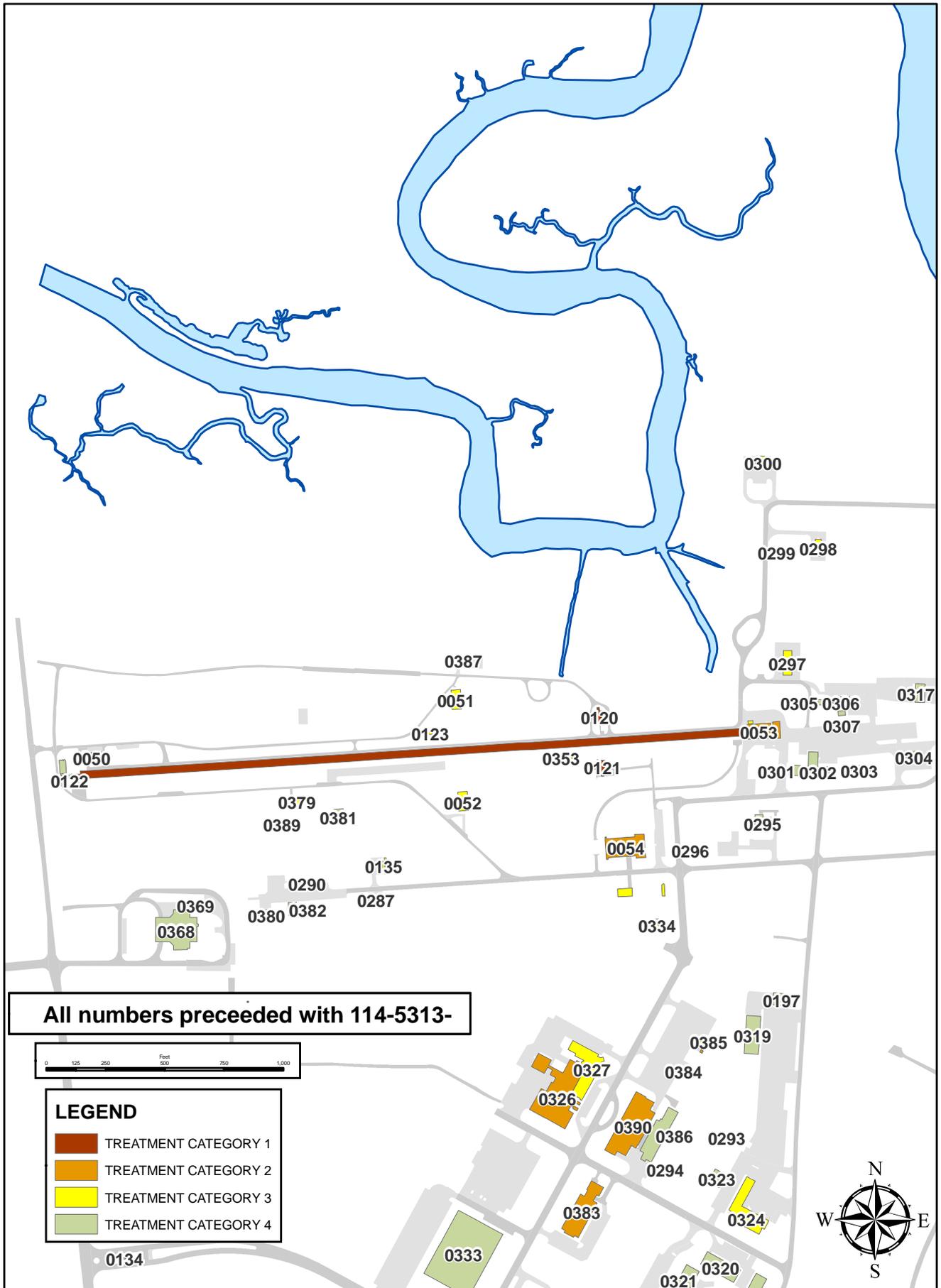
NASA Building #	DHR ID#	Building Name	Year Built	NRHP-Eligibility	Criteria	Historic Preservation Priority Category	
1254	114-5313-0046	Radiation Waste Storage	1954	Contributing	A	3	
1255	114-5313-0047	General Storage Building No. 3	1955	Contributing	A	3	
1256	114-5313-0048	Engineering Drawing Files Building	1958	Contributing	A	3	
1256A	114-5313-0117	Combined Loads Testing Facility	1958	Contributing	A	3	
1256B	114-5313-0118	Combined Loads Testing Facility	1999	Non-Contributing	NC	4	
1256C	114-5313-0119	Integrated Test Facility	2003	Non-Contributing	NC	4	
1257	114-5313-0049	Aircraft Landing Loads & Traction Facility	1956	Individually and contributing	A, C	1	SSP Survey Individually Eligible
1257N	114-5313-0120	ALDF Complex	1956	Individually and contributing	A, C	1	SSP Survey Individually Eligible
1257S	114-5313-0121	ALDF Complex	1956	Individually and contributing	A, C	1	SSP Survey Individually Eligible
1258	114-5313-0050	Landing Loads Track Compressor Building	1953	Individually and contributing	A, C	1	SSP Survey Individually Eligible
1258A	114-5313-0122	Outdoor Anechoic Gear Building	1976	Non-Contributing	NC	4	SSP Survey Individually Eligible
1259	114-5313-0051	North Arresting Gear Housing	1953	Contributing	A	3	
1259A	114-5313-0123	Refrigeration Building	1956	Contributing	A	3	
1260	114-5313-0052	South Arresting Gear Housing	1953	Contributing	A	3	
1261	114-5313-0053	Landing Loads Track Shop	1953	Contributing	A	2	SSP Survey Individually Eligible
1261A	114-5313-0353	ALDF Complex	1964	Contributing	A	3	
1261B	114-5313-0354	ALDF Complex	1953	Contributing	A	3	
1262	114-5313-0054	High Speed Hydrodynamics Office and Shop	1956	Contributing	A	2	SSP Survey Individually Eligible
1265	114-5313-0057	8' High-Temperature Structures Tunnel	1960	Contributing	A, C	2	
1265A	114-5313-0124	Bottle Storage Building	1960	Contributing	A	3	
1265B	114-5313-0125	Combuster Building	1960	Contributing	A	3	
1265C	114-5313-0126	Cooling Tower and Equipment Building	1960	Contributing	A	3	
1265D	114-5313-0127	Fuel Comp. Equipment Building	1960	Contributing	A	3	
1265E	114-5313-0128	Storage Buildings	1960	Contributing	A	3	
1265F	114-5313-0129	Thermal Protection Systems Test Facility	1960	Contributing	A	3	
1265G	114-5313-0130	Gas Bottle Storage	1960	Contributing	A	3	
1265H	114-5313-0131	Storage Building	1975	Non-Contributing	NC	4	
1266	114-5313-0058	Moffett Road Substation	1960	Contributing	A	3	
1267	114-5313-0059	Thermal Protection Research Lab	1960	Contributing	A	2	
1267A	114-5313-0132	Materials Development Shop	1960	Contributing	A	2	
1268	114-5313-0060	Data Reduction Center	1960	Contributing	A	2	
1268A	114-5313-0355	1268 Research Complex	1968	Contributing	A,C	2	
1268B	114-5313-0356	1268 Research Complex	1979	Non-Contributing	NC	4	
1268C	114-5313-0357	1268 Research Complex	1994	Non-Contributing	NC	4	

NASA Building #	DHR ID#	Building Name	Year Built	NRHP-Eligibility	Criteria	Historic Preservation Priority Category
1268D	114-5313-0358	1268 Research Complex	1993	Non-Contributing	NC	4
1273A	114-5313-0359	Substation No. 1	1968	Non-Contributing	NC	4
1274B	114-5313-0360	Cooling Water Storage (60,000 Gallon)	1969	Contributing	A	3
1275	114-5313-0361	CF4 Tunnel Complex	1969	Contributing	A,C	2
1277	114-5313-0362	Nitrogen Pumping Facility (70,000 lb. Cap)	1974	Non-Contributing	NC	4
1283	114-5313-0363	Fabrication Facility	1958	Contributing	A, C	2
1283D	114-5313-0364	Substation No. 2	1968	Contributing	A	3
1284A	114-5313-0133	Systems Safety Quality Rehabilitation	1960	Contributing	A	3
1284B	114-5313-0365	1284 Research Lab	1966	Contributing	A	2
1284C	114-5313-0366	1284 Research Lab	1966	Contributing	A	2
1285	114-5313-0367	Ground Maintenance Repair	1972	Contributing	A	3
1286	114-5313-0068	Rocket Assembly & Propellant Alteration Bldg	1960	Contributing	A	3
1287	114-5313-0069	41-Foot Vacuum Sphere Shop	1961	Contributing	A	3
1288	114-5313-0368	Refuse-Fired Steam Generating Facility	1980	Non-Contributing	NC	4
1288A	114-5313-0369	Refuse-Fired Steam Generating Facility	1984	Non-Contributing	NC	4
1289	114-5313-0070	Maintenance Shop-Coatings Contractor	1957	Contributing	A	3
1290	114-5313-0071	Substation Unitary Plan Wind Tunnel	1961	Non-Contributing	NC	4
1291	114-5313-0072	Pump Station (Sewage)	1961	Non-Contributing	NC	4
1292	114-5313-0073	Construction and Repair Shop	1960	Contributing	A	3
1292A	114-5313-0274	Construction Storage	1975	Non-Contributing	NC	4
1292B	114-5313-0370	Building Trades Shop	1975	Non-Contributing	A	4
1293A	114-5313-0371	1293 Research Complex	1963	Contributing	A, C	2
1293B	114-5313-0372	1293 Research Complex	1963	Contributing	A, C	2
1293C	114-5313-0373	1293 Research Complex	1986	Non-Contributing	NC	4
1293D	114-5313-0374	1293 Research Complex	1963	Contributing	A, C	2
1295	114-5313-0075	Shop & Instrumentation for 60' sphere	1963	Contributing	A	3
1295A	114-5313-0375	Vacuum Sphere Facility	1965	Contributing	A	3
1295B	114-5313-0376	Vacuum Sphere Facility	1970	Contributing	A	3
1295C	114-5313-0377	Vacuum Sphere Facility	1970	Contributing	A	3
1295D	114-5313-0284	Storage Building	1975	Non-Contributing	NC	4
1295E	114-5313-0378	Vacuum Sphere Facility	1975	Non-Contributing	NC	4
1296	114-5313-0077	Ceramic Spray Shop	1963	Contributing	A	3
1297	114-140 (114-5313-0290)	Lunar Landing Facility (Gantry)	1965	NHL	A, C	
1297A	114-5313-0379	Impact Dynamics Facility	1972	Contributing	A	3
1297B	114-5313-0287	Impact Dynamics Cable Storage	1969	Contributing	A	3
1297C	114-5313-0380	Impact Dynamics Facility	1978	Non-Contributing	NC	4
1297D	114-5313-0381	Impact Dynamics Facility	1977	Non-Contributing	NC	4
1297E	114-5313-0382	Impact Dynamics Facility	1991	Non-Contributing	NC	4
1297F	114-5313-0389	Impact Dynamics Facility	1966	Contributing	A	3
1297G	114-5313-0135	Impact Dynamics Research Facility	1965	Contributing	A	3
1298	114-5313-0383	Office Facility	1965	Contributing	A	2
1299	114-5313-0390	Flight Electronics/Electromagnetic Laboratories	1965	Contributing	A, C	2
1299A	114-5313-0292	Storage Building	1965	Contributing	A	3

NASA Building #	DHR ID#	Building Name	Year Built	NRHP-Eligibility	Criteria	Historic Preservation Priority Category
1299B	114-5313-0293	Storage Building	1965	Contributing	A	3
1299C	114-5313-0294	Storage Building	1965	Contributing	A	3
1299D	114-5313-0384	1299 Research Complex	1965	Contributing	A	2
1299E	114-5313-0385	1299 Research Complex	1972	Contributing	A	2
1299F	114-5313-0386	1299 Research Complex	1990	Non-Contributing	NC	4
1308	114-5313-0391	Badge and Pass Office	2005	Non-Contributing	NC	4



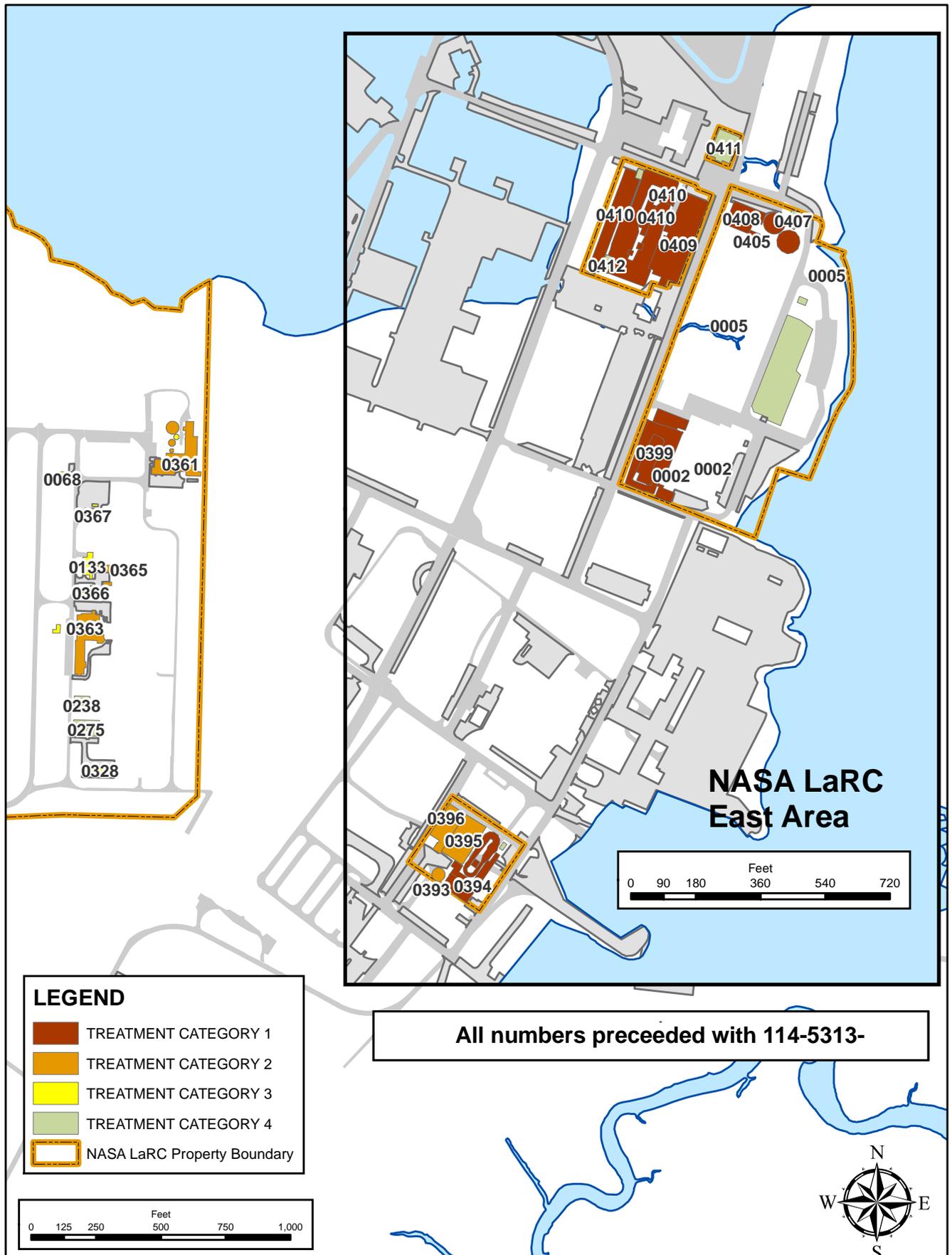
**Appendix B: NASA Langley Research Center Architectural Resources
QUADRANT KEY**



Appendix B: NASA Langley Research Center Architectural Resources

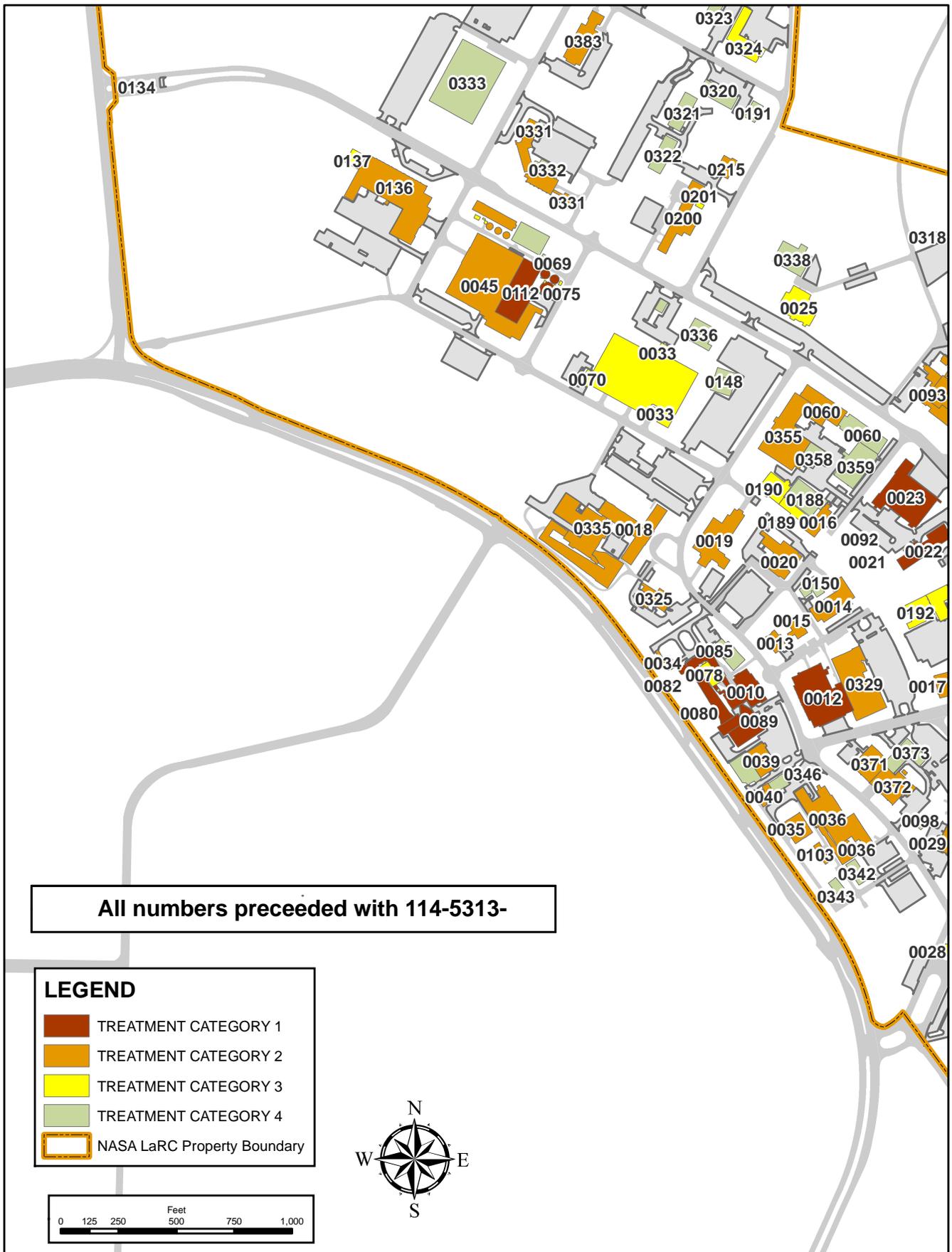
QUADRANT 1

QUADRANT 2



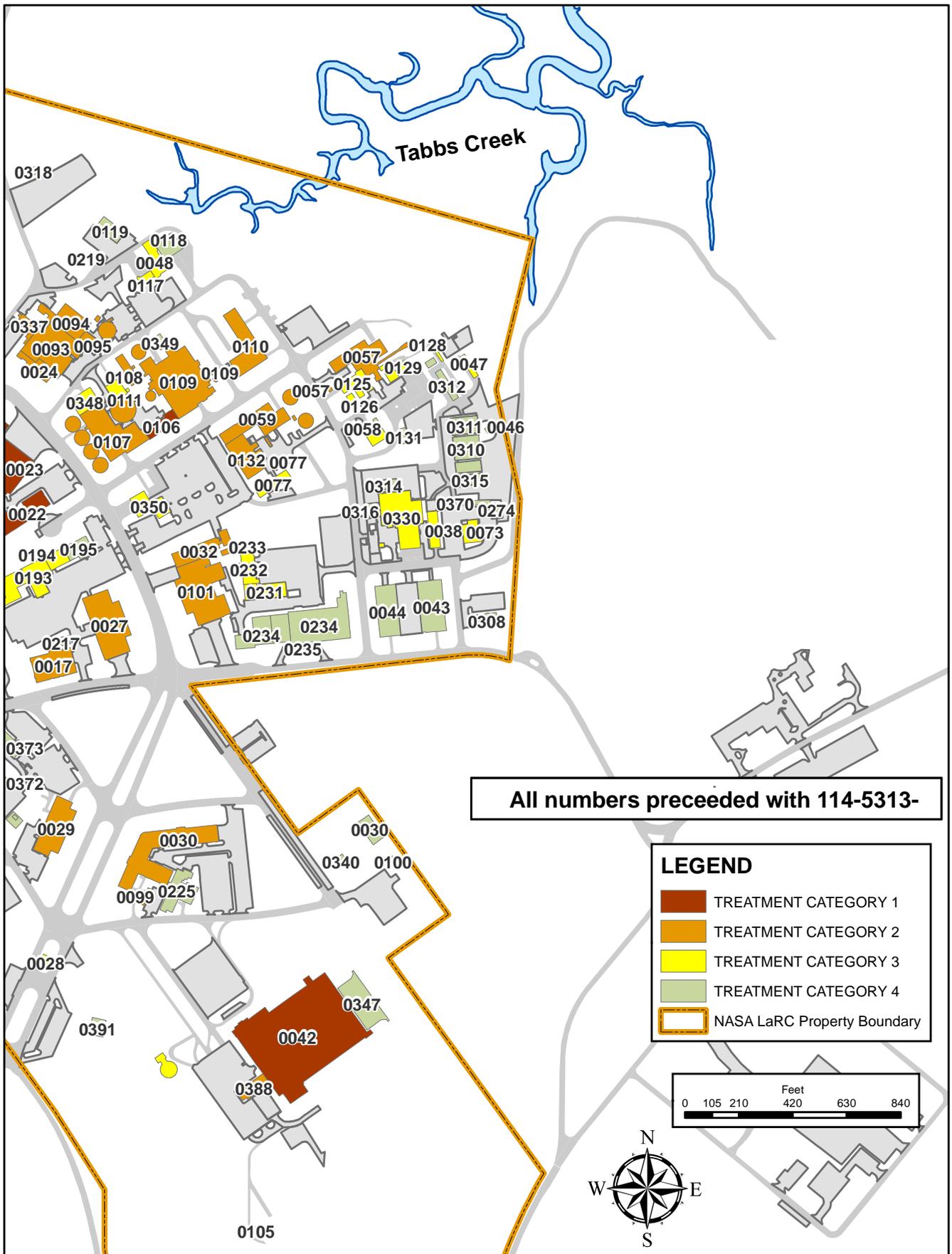
Appendix B: NASA Langley Research Center Architectural Resources

QUADRANT 2



Appendix B: NASA Langley Research Center Architectural Resources

QUADRANT 3



Appendix B: NASA Langley Research Center Architectural Resources

QUADRANT 4

Appendix C
Inventory of NASA LaRC's Archaeological Resources
with Eligibility Status and a Map

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Archaeological Resources at NASA Langley Research Center

SITE NUMBER/ NAME	HISTORIC AND THEMATIC CONTEXTS *	DESCRIPTION	REFERENCE	SHPO/MANAGEMENT RECOMMENDATIONS
44HT1	European Settlement to Society (1607-1750) through Reconstruction and Growth (1865-1917); Domestic	Plantation occupied beginning in 17 th Century and burned in 1911. Known as "Chesterville." Home of George Wythe, signer of the Declaration of Independence. Site includes remains of two dwellings (dating to 17 th and 18 th centuries), brick kiln, granary, and wharf. Archaeological surveys performed by LRCAHS in early 1970's resulted in NR nomination and listing.		Listed in National Register; site is preserved in place
44HT43	Prehistoric (unidentified); European Settlement to Society (1607-1750) through Early National Period (1789-1830); Domestic	Multicomponent site containing prehistoric and historic occupations. Prehistoric component consists of lithic scatter with no integrity. Historical occupation reflects 18 th Century subsistence farm associated with the Ross family. Phase II testing revealed evidence of features that reflect structures and other activities.	Traver and Hoffman (1992); Traver (1992)	Eligible for National Register; site is preserved in place
44HT45	Prehistoric (unidentified); Colony to Nation (1750-1789) through Reconstruction and Growth (1865-1917); Undetermined	Multicomponent site with prehistoric and historic occupations. Prehistoric occupation is represented by unidentified projectile points, lithic debitage, and FCR. The historic component consists of an 18 th - to 20 th Century dwelling known as "Cloverdale." Surveys produced ceramics, glass, architectural materials, clothing and furniture related objects, and pipe fragments.	Cassebeer et al. (1995), JRIA (2005) Circa (2007)	Eligible for National Register; site is preserved in place
44HT46	Prehistoric(unidentified); Domestic; Reconstruction and Growth (1865-1917); Undetermined	This site produced evidence of a prehistoric occupation and a possible 18 th - to 20 th - century domestic occupation. The prehistoric component appears to reflect a brief encampment. The historic component is reflected by ceramics, glass, architectural materials, miscellaneous items, bone and shell.	Cassebeer et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed

SITE NUMBER/ NAME	HISTORIC AND THEMATIC CONTEXTS *	DESCRIPTION	REFERENCE	SHPO/MANAGEMENT RECOMMENDATIONS
44HT47	Historic (unidentified); Unidentified function	Low density deposit of historic artifacts. Phase I survey did not produce any chronologically diagnostic items and the function of this site has not been determined.	Cassebeer et al. (1995)	Phase I completed, not eligible for the National Register
44HT48	Prehistoric (unidentified); Colony to Nation (1750-1789) through Reconstruction and Growth (1865-1917); Domestic	Multicomponent site represented by low density scatter of prehistoric artifacts and higher numbers of historic materials. Historic artifacts include ceramics, glass, architectural materials, and miscellaneous activity related items. These materials suggest a mid-18 th through 19 th century domestic site.	Cassebeer et al. (1995)	Phase II completed, not eligible for the National Register
44HT49	Colony to Nation (1750-1789) Through Reconstruction and Growth (1865-1917); Domestic	Historic site that probably dates between the 18 th and 20 th centuries. Phase I testing produced ceramics, glass, pipe fragments, brick, shell and bone. The site appears to represent a domestic occupation.	Cassebeer et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed
44HT50	Prehistoric (unidentified); Unidentified function	Low density scatter of prehistoric debitage and FCR. The site appears to reflect a brief encampment. The function and chronological/cultural period of the site are undetermined.	Cassebeer et al. (1995)	Phase II completed, not eligible for National Register
44HT70	Prehistoric (unidentified); Domestic; Reconstruction and Growth (1865-1917) Through New Dominion (1945-Present); Domestic	Multicomponent site represented by sparse scatters of prehistoric and historic artifacts. Prehistoric materials represent a briefly occupied limited activity camp. Historic artifacts include ceramics, brick, oyster, and bone. These materials suggest a 19 th - to 20 th - century domestic occupation.	Cassebeer et al. (1995)	Phase I completed, not eligible for the National register

SITE NUMBER/ NAME	HISTORIC AND THEMATIC CONTEXTS *	DESCRIPTION	REFERENCE	SHPO/MANAGEMENT RECOMMENDATIONS
44HT71	Prehistoric (unidentified); Domestic; Historic (unidentified); Undetermined function	Prehistoric and historic site. Phase I testing produced low numbers of prehistoric artifacts including a biface fragment and debitage. These probably reflect a limited activity camp. Historic items include one ceramic fragment. In addition, a low number of shell was found. This component appears to reflect casual discard rather than an occupation of the site.	Cassebeer et al. (1995)	Phase I completed, not eligible for the National Register
44HT72	Prehistoric (unidentified); Domestic	Prehistoric site represented by low density scatter of lithic artifacts including debitage and FCR. This site probably reflects a limited activity camp. Its chronological/cultural associations have not been identified.	Cassebeer et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed
44HT73	Prehistoric (unidentified); Unidentified function Historic (unidentified); Unidentified function	Multicomponent site reflected by a moderately dense scatter of prehistoric artifacts and a low numbers of historic items. The prehistoric occupation is represented by waste flakes and FCR. None of thee items suggest the site's chronological/cultural affiliations. This occupation appears to represent a limited activity site. A sparse scatter of primary architectural items represent the historic component. Ceramics and nails from the site suggest a 19 th - to 20 th - century occupation. The function of this component is undetermined	Cassebeer et al. (1995)	Phase I completed, not eligible for the National Register
44HT74	Woodland (1200 B.C.-A.D. 1600); Domestic Colony to Nation (1750-1789) Through Reconstruction and Growth (1865-1917) Domestic	Multicomponent site containing prehistoric and historic artifacts. Prehistoric materials include low numbers of debitage, FCR, and a pottery sherd. The site probably reflects a limited activity camp. At least a Woodland component is represented. The historical component includes moderate quantities of ceramics, glass, architectural materials, and shell. This component could reflect an 18 th to 20 th century habitation.	Cassebeer et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed

SITE NUMBER/ NAME	HISTORIC AND THEMATIC CONTEXTS *	DESCRIPTION	REFERENCE	SHPO/MANAGEMENT RECOMMENDATIONS
44HT75	Colony to Nation (1750-1789) Through Reconstruction and Growth (1865-1917) Unidentified function	Sparse scatter of historic artifacts dating to 19 th to 20 th century. The low numbers of artifacts suggest that the site could represent occasional discard rather than an occupation.	Cassebeer et al. (1995)	Phase I completed, not eligible for the National Register
44HT76	Prehistoric (unidentified); Domestic Early National (1789-1830) Through Reconstruction and Growth (1865-1917) Domestic	Site consists of a sparse scatter of prehistoric and historic artifacts. The prehistoric artifacts include a low number of lithic waste flakes, a core, and a biface. The historic occupation is also represented by a low density scatter of artifacts that include brick, nails, ceramics, and bottle fragments. These materials suggest that the site could date to the early 19 th - to early 20 th -century. The function of both components is not clear, although the prehistoric component probably reflects a camp, and the historic occupation likely indicates a residential occupation.	Clarke et al. (1995), JRIA (2005)	Phase II completed, not eligible for the National Register
44HT77	Prehistoric (unidentified); Domestic	Prehistoric site represented by a low density scatter of waste flakes and FCR. The site probably reflects a briefly occupied campsite. The chronological associations of the site are not evident.	Clarke et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed
44HT78	Early National (1789-1830) Through Reconstruction and Growth (1865-1917); Unidentified function	Low density scatter of historic and modern artifacts. The presence of pearlware, whiteware, and ironstone in the assemblage suggests that the site could date to the late 19 th century. The low number of artifacts and location of the site on a rise within a poorly drained setting do not strongly suggest a date or function for the site.	Clarke et al. (1995)	Phase I completed; not eligible for National Register

SITE NUMBER/ NAME	HISTORIC AND THEMATIC CONTEXTS *	DESCRIPTION	REFERENCE	SHPO/MANAGEMENT RECOMMENDATIONS
44HT79	Prehistoric (unidentified); Domestic Early National (1789-1830) Through Reconstruction and Growth (1865-1917) Unidentified function	Site represented by a single quartz flake and a low number of historic artifacts. The date and function of the prehistoric occupation cannot be evaluated. The historic component yielded 18 th and 19 th century ceramics, glass, and brick. The artifacts do not clearly indicate chronological or functional associations of this site.	Clarke et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed
44HT80	Prehistoric (unidentified); Domestic	Low density scatter of lithic waste flakes, a core, and an unidentified groundstone tool. The site probably represents a limited activity camp occupied to procure and/or process resources. The artifacts do not indicate a temporal affiliation for the site.	Clarke et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed
44HT81	European Settlement to Society (1607-1750) through New Dominion (1945-Present); Transportation	Historic road trace (“Chesterville Road”). Sources of historical information on this site are unclear. Phase I survey identified segments of the road in a traffic island adjacent to LaRC Building 1209 and in a wooded area in the western portion of the center.	LaRC (1994); Clarke et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed
44HT82	European Settlement to Society (1607-1750) through Colony to Nation (1750-1789); Transportation	Historic road trace (“King’s Highway”). Trenching at this site identified remains of a road way paved with shell and associated drainage ditches. Additional phase I testing located portions of the site in wooded areas within LaRC.	Parker (n.d.); Clarke et al. (1995)	Potentially eligible for National Register; further evaluation recommended, preserve until evaluation completed
“Moorefield Plantation House Site”	European Settlement to Society (1607-1750) Through Colony to Nation (1750-1789); Domestic	Site is map projected, included in older versions of the Center’s Master Plan. Site location is based on documents and/or surface features and collections. It has not been subjected to Phase I survey to confirm its location. Partially located under a parking lot	LaRC (1994)	Protect location; Phase I archaeological survey should site become threatened and Phase II evaluation if necessary

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Map of Archaeological Sites is available by contacting the LaRC Historic Preservation Officer at 757-864-3394

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Appendix D
MOU between NASA and the Smithsonian for Identification
and Disposition of NASA's Historic Artifacts

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**AGREEMENT BETWEEN THE
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AND THE
SMITHSONIAN INSTITUTION
CONCERNING THE TRANSFER AND MANAGEMENT OF
NASA HISTORICAL ARTIFACTS**

WHEREAS in the course of its programs the National Aeronautics and Space Administration produces a large number of artifacts, many with great historical value and others with great value for education, exhibition, and other purposes, relating to the development, demonstration, and application of aeronautical and astronautical science and technology of flight, and will continue to acquire such materials; and

WHEREAS such artifacts are unique specimens relating to the science and technology of aeronautics and astronautics, and of flight in the atmosphere and space, which may consist of aeronautical and astronautical objects including, but not limited to, aircraft, space launch vehicles, spacecraft (both manned and unmanned), subsystems of the above, such as rocket engines, pressure suits and personal equipment, instruments, significant recorded data, operating handbooks, drawings, photographs, motion picture film and related documents, audio and video tapes, training devices, simulators, and memorabilia; and

WHEREAS the Smithsonian Institution is charged with the responsibility to preserve for perpetuity artifacts representative of aviation and space flight; to collect, preserve, and display aeronautical and space flight equipment of historical and educational interest and significance; to serve as a repository for scientific equipment and data pertaining to the development of aviation and space flight; and to provide educational material for the historical study of aviation and space flight.

THEREFORE, under the authority set forth in Section 203(c)(6) of the National Aeronautics and Space Act of 1958, as amended (72 Stat. 430; 42 U.S.C. 2473(c)(6); Section 4 of the Act of August 30, 1961 (75 Stat. 415, 20 U.S.C. 80c); and Sections (4) and (8) of the National Air Museum Amendments Act of 1966 (80 Stat. 310, 311; 20 U.S.C. 77a, 77d), the National Aeronautics and Space Administration (hereafter called "NASA") and the Smithsonian Institution (hereafter called "Smithsonian") enter into this Agreement concerning the transfer and management of those artifacts having such historical and educational or other value which have emerged and will emerge from the aeronautical and space programs administered by NASA.

1. NASA shall offer to transfer to, and the Smithsonian may accept such artifacts under NASA control which become available, after programmatic utility to NASA or other government agencies has been exhausted, although, in extraordinary circumstances, exceptions or alternative dispositions can be made by NASA. Before the decision to make an exception or alternative disposition is made, the proposed action shall be referred to the Joint Artifacts Committee (established in paragraph 4, below) for consideration. In addition, the Smithsonian may, pursuant to the procedures contained in paragraph 4, call a special meeting of the Joint Committee to discuss the transfer or

preservation of items of unusual historical interest that NASA has not yet declared to be artifacts. In either instance, if no consensus can be achieved by the Joint Artifacts Committee, the issue shall, upon request of either NASA or the Smithsonian, be referred to the NASA Administrator and the Director of the Smithsonian's National Air and Space Museum (NASM) for consideration. In the event agreement still cannot be reached, the NASA Administrator will decide the issue. NASA undertakes no obligation to provide financial support to the Smithsonian for the storage, transport, preparation, and final transfer of space artifacts.

2. The Smithsonian Institution's National Air and Space Museum will accession into its National Collections and accept responsibility for the custody, control, protection, preservation, and display of such artifacts transferred by NASA both in the Museum itself and on loan to NASA and other appropriate organizations in a manner consistent with the prevailing collections policy of NASM. If NASM refuses a request from a NASA component or visitor center for a loan of a NASA artifact, or states its intention to terminate or not to renew an existing loan to NASA, NASA may call a meeting of the Joint Committee at which the reasons for and possible alternatives to the denial will be discussed. Loans of artifacts to NASA shall be made for periods of from three to five years, with the expectation that renewals will be granted. NASM may specify reasonable curatorial practices to be followed by NASA components or visitor centers with respect to loaned NASA artifacts, and NASA will implement these practices to the extent practicable.

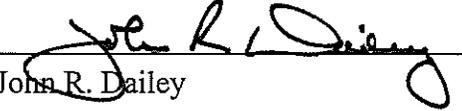
3. In connection with the NASA artifacts transferred to the Smithsonian, it is understood that in no instance shall a NASA artifact be finally disposed of to an agency other than the United States Government, or destroyed, before an opportunity is extended to NASA to reacquire, not on a basis of purchase but of reasonable defrayment of the costs involved, custody, and control of the artifacts. Further, in the event that NASA determines that an item declared an artifact and transferred to the Smithsonian has renewed technical utility with respect to NASA's programs, the NASA Chair of the Joint Artifacts Committee may request NASM to loan the item back to NASA. NASM will make a good faith effort to comply with the NASA request in light of NASA's stated need and the potential impacts on the NASM collection and/or operations. In utilization of this procedure, both NASA and the NASM will work promptly and closely to minimize any adverse impact that the loan could have on NASM operations. Cost of shipping and packaging the item for return to NASA will be borne or reimbursed by NASA.

4. The Smithsonian and NASA will establish a Joint Artifacts Committee to collect information on and consider issues relating to NASA artifacts and their transfer to the Smithsonian. This charter includes, but is not limited to, those issues identified for Committee consideration in paragraphs 1 and 2 above. It is anticipated that the Committee will meet at least two times per year, although either NASA or NASM may call a special meeting on 30 days notice.

5. The agreement shall be effective for five years from the date of the latest signature. Unless written notification is given by either party at least six months prior to expiration, it will be renewed automatically for an additional five years.



Michael D. Griffin
Administrator
National Aeronautics and Space
Administration



John R. Dailey
Director
National Air and Space Museum
Smithsonian Institution

Date 8 Aug 2008

Date 8.20.08

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Appendix E
List of Terms and Definitions

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APPENDIX E LIST OF TERMS AND DEFINITIONS

Adverse Effect: Harm to those qualities or characteristics that qualify the property listing in the NRHP, either directly or indirectly caused by a federal agency's action. The adverse effect may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. The criteria of adverse effect are identified in 36 CFR 800.5(a)(1); examples of adverse effects are given in 36 CFR 800.5(a)(2).

Area of Potential Effect (APE): "The geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking." [36 CFR Part 800, Protection of Historic Properties, Section 800.16(d)].

Archaeological Site: A location that contains the physical evidence of past human behavior that allows for its interpretation, that is at least 50 years of age, and for which a boundary can be established.

Artifact: An object made or modified by humans.

Avoidance: Modification of a project or other undertaking so that effects on cultural resources that would have resulted from the originally proposed actions do not occur.

Building: "A structure created to shelter any form of human activity, such as a house, barn, church, hotel, or similar structure. Building may refer to a historically related complex such as a courthouse and jail or a house and barn." [36 CFR Part 60, NRHP, Section 60.3(a)]

Consultation: "The process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process." The Secretary's 'Standards and Guidelines for Federal Agency Preservation Programs pursuant to the National Historic Preservation Act' provide further guidance on consultation." [36 CFR Part 800, Protection of Historic Properties, Section 800.16(f)]

Consulting parties: For the purposes of this Agreement, Consulting parties mean the Virginia Air and Space Center, the United Keetoowah Band of the Cherokee Indians in Oklahoma, Catawba Indian Nation, and the Virginia Council on Indians.

Contributing: A building, site, structure, or object within a historic district which adds to the values or qualities of the district because it was present during the period of significance, relates to the documented significance of the district, and possesses historic integrity. A contributing resource may also meet NRHP criteria independently.

Cultural Resources: Cultural resources include, but are not limited to, the following broad range of items and locations: (1) archeological materials (artifacts) and sites dating to the prehistoric, historic, and ethnohistoric periods that are currently located on the ground surface or are buried beneath it; (2) standing structures that are over 50 years of age or are important because they represent a major historical theme or era; (3) cultural and natural places, select natural resources, and sacred objects that have importance for [Native Americans and ethnic groups]; and (4) American folk-life traditions and arts.

Cultural resources include anything that is an “historic property” as defined in 36 CFR Part 800, Protection of Historic Properties, Section 800.16(1)(1); an “archeological resource” as defined in Archeological Resources Protection Act, Section 3(1) and the Act’s Uniform Regulations, 43 CFR Part 7, Protection of Archaeological Resources, Section 7.3(a); a Native American “cultural item” as defined in Native American Graves Protection and Repatriation Act, Section 2(3); or part of a “collection” as defined in 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, Section 79.4(a).

Cultural Resources Management Plan (CRMP): A document that defines the procedures and outlines plans for managing cultural resources on federal installations. A CRMP integrates and is integrated into other land management and development plans, as possible. NASA centers update their plan every 5 years.

Curation: “The practice of documenting, managing, preserving, and interpreting museum collections according to professional museum and archival practices.” (62 Federal Register 33707, 6-20-97. Secretary of the Interior’s Historic Preservation Professional Qualification Standards: Curation).

Effect: The result produced by any federally sponsored activity, or undertaking, that has the potential to change or alter those qualities or characteristics that qualify a property listing in the NRHP.

Effective Date of the Agreement: The date of the last Signatory to sign the Agreement.

Federal Preservation Officer: “A qualified official [designated by the head of each Federal agency] who shall be responsible for coordinating that Agency’s activities under [the NHPA].” [National Historic Preservation Act, Section 110(c)]

Historic District: “A geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history.” [36 CFR Part 60, National Register of Historic Places, Section 60.3(d)] Historic resources that add to the district’s overall sense of time and place are classified as contributing elements. Severely altered historic properties and resources of more recent construction are classified as noncontributing elements.

Historic Preservation Officer (HPO): Designated person at each NASA Center responsible for ensuring Center activities comply with CRM regulations. Consults with the State Historic Preservation Office (SHPO) and the ACHP on historic preservation issues related to NASA LaRC's cultural resources. Provides support to the NASA FPO on Agency CRM reporting and data calls.

Human Remains and Associated Funerary Objects: The physical remains of the body of a person of Native American ancestry. The term does not include remains or portions of remains that may reasonably be determined to have been freely given or naturally shed by the individual from whose body they were obtained, such as hair made into ropes or nets. For the purposes of determining cultural affiliation, human remains incorporated into a funerary object, sacred object, or object of cultural patrimony must be considered as part of that item. [43 CFR 10.2 (d)(1)]. Funerary objects are those objects that, as a part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later

Historic Property or Historic Resource: "Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register, including artifacts, records, and material remains related to such property or resource." [36 CFR Part 800, Protection of Historic Properties, Section 800.16(l)(1)]

Inventory: The process of locating cultural resources and gathering information about them through archeological surveys, ethnographic fieldwork, or archival searches.

Mitigation: Measures carried out to avoid or reduce the effects of undertakings on cultural resources. These measures may include relocation or other modifications of the undertaking itself or recovery of materials and data from the cultural resource site to be affected.

National Historic Landmark (NHL): "A district, site, building, structure, or object, in public or private ownership, judged by the Secretary [of the Interior] to possess national significance in American history, archeology, architecture, engineering and culture, and so designated by him." [36 CFR Part 65, National Historic Landmarks Program, Section 65.3(i)] National Historic Landmarks are automatically listed in the National Register of Historic Places.

National Register of Historic Places (NRHP): A list "composed of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture." Also referred to as "the National Register," it is maintained by the NPS for the Secretary of the Interior [National Historic Preservation Act, Section 101(a)(1)(A)].

Native American: "Of, or relating to, a tribe, people, or culture that is indigenous to the United States." [Native American Graves Protection and Repatriation Act, Section 2(9)]

No Adverse Effect: The situation in which an undertaking by virtue of its presence has an effect on a property listed or eligible for listing in the NRHP but whose effects will not “alter, directly or indirectly, any of the characteristics of the historic property that qualify the property for inclusion in the National Register.” [36 CFR Part 800, Protection of Historic Properties, Section 800.5(a)(1)]

Noncontributing: A building, site, structure, or object within a historic district which does not add to the values or qualities of the district because it was not present during the period of significance, does not contribute to the documented significance of the district, or it no longer possesses historic integrity due to alterations, or it does not independently meet NRHP criteria.

Object: A material thing of functional, aesthetic, cultural, historical or scientific value that may be, by nature or design, movable yet related to a specific setting or environment [36 CFR Part 60, NRHP, Section 60.3 (j)]

Outreach: Activities designed to inform and educate the public about cultural resources and cultural resource management. These activities may be conducted at a NASA facility or at locations in the community.

Repository: “A facility such as a museum, archeological center, laboratory or storage facility managed by a university, college, museum, other educational or scientific institution, a Federal, State or local Government agency or Indian tribe that can provide professional, systematic and accountable curatorial services on a long term basis.” [36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, Section 79.4(j)]

Signatories: For the purposes of this Agreement, Signatories mean NASA LaRC, the ACHP, and the SHPO.

Site: The location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself maintains historical or archaeological value regardless of the value of any existing structure [36 CFR Part 60, NRHP, Section 60.3 (l)]

Structure: “A work made up of interdependent and interrelated parts in a definite pattern of organization. Constructed by man, it is often an engineering project large in scale.” [36 CFR Part 60, NRHP, Section 60.3(p)]

Tribal Historic Preservation Officer: “The tribal official appointed by the tribe’s chief governing authority or designated by a tribal ordinance or preservation program who has assumed the responsibilities of the SHPO for purposes of Section 106 compliance on tribal lands in accordance with Section 101(d)(2) of the [NHPA].” [36 CFR Part 800, Protection of Historic Properties, Section 800.16(w)]

Undertaking: “A project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency.” Undertakings include “those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.” [36 CFR Part 800, Protection of Historic Properties, Section 800.16(y)]

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Appendix F
NASA LaRC Activities Not Requiring
Review Under This Agreement

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APPENDIX F

NASA LaRC ACTIVITIES NOT REQUIRING REVIEW UNDER THIS AGREEMENT

The following NASA LaRC activities have limited potential to affect historic properties and therefore do not require review under this Agreement. If a proposed activity is not listed below, does not meet the Secretary's Standards, or will have an adverse affect on a historic property, then the undertaking must go through the Standard Review process outlined in Stipulation V prior to implementation.

1. Site maintenance and improvements

Building Removal:

- Demolition of Historic Preservation Priority Category 4 buildings and structures. NASA LaRC will update the DSS records for those buildings that have them.

Streets, driveways, alleys, and parking areas:

- Routine road maintenance, repair, and resurfacing where work is confined to previously maintained surfaces, ditches, culverts, and cut and fill slopes where there are no known historic properties or historic properties would not be affected because proposed work is clearly within disturbed context.
- Placing marl, gravel, or shell on dirt roads or lots where no new ground disturbance will occur.
- Repair of existing concrete or asphalt surfaces for curbs, gutters, and retaining walls.
- Maintenance, repair, and in-kind replacement of non-character-defining street lights, traffic signals, and traffic signs.

Landscaping:

- Mowing, trimming, and pruning of grass, shrubs, or trees.
- Routine vegetation control activities.
- Maintenance and repair of existing landscape features, including planting, walkways, and statuary.
- Repairs to, or in-kind replacement of walks and steps, provided it does not involve the removal of historic or character-defining materials.

Erosion Control:

- General erosion control activities such as gravel or riprap placement on slopes, where minimal grading or preparation is required and no archaeological sites are present (see Appendix C).
- Planting or seeding ground cover and cleanout of existing drainage ditches.

Fencing:

- Maintenance and in-kind repair of existing fencing and installation of a new chain link or post and rail fencing.

- Installation of new fencing provided no identified archaeological sites are present (see Appendix C).

Park and playground equipment:

- Repair or comparable replacement of existing park and playground equipment, but excluding buildings (see above).

Placement of temporary structures:

- Temporary parking or placement of mobile homes, tents, and portable structures on extant parking lots or other surfaces that does not require new ground disturbance or is not on a known archaeological site (see Appendix C).
- Installation of temporary construction-related structures (not to be in place for more than two years) including scaffolding, barriers, screening, fences, protective walkways, signage, office trailers or restrooms that will not require or cause new ground disturbance.

Water Systems:

- Changes to water systems including citing, installation, maintenance, repair, removal, and operation of plant water systems including, but not limited to, water wells, cooling water systems, potable water systems, storm sewers, waste water treatment systems, plant drainage, and plumbing.

2. New construction and Additions

New Building Construction and Additions:

- New construction and additions outside of a listed or eligible historic district, or not adjacent to an individual historic property, provided such new construction does not directly impact or alter contributing resources as called for in the Secretary of the Interior's Standards for Rehabilitation or does not directly impact or alter identified archaeological sites listed in Appendix C.

3. Exterior building maintenance and rehabilitation

Building Maintenance and Repair:

- General maintenance and repair of all Historic Preservation Priority Category 4 buildings and structures, which includes, but is not limited to, painting; siding; roofing; door, ceiling, wall, window, floor covering repair/replacement.
- Elevator repair; filter and light replacement.
- Repairs to existing equipment.
- Repair or in-kind replacement of existing signs or awnings.

Lighting:

- Changes to interior and exterior lighting systems including replacement of or modification to lighting systems in all buildings and facilities so long as no historic fabric is disturbed.

- Repair or in-kind replacement of existing significant, character-defining, or contributing exterior light fixtures.

Foundation repair:

- Below-grade repair of brick of all types of foundations so long as work is confined to previously disturbed areas and does not impact or otherwise alter previously identified archaeological sites (see Appendix C).

Windows and doors:

- Repair of windows and doors, including caulking and weather stripping of existing window or door frames, and installation of new glass in existing sashes or doors, including retrofitting for double and triple glazing, and replacement of glazing putty.
- Installation of exterior storm windows and doors on historic buildings or structures, provided they conform to the shape and size of the historic windows and doors, and that the meeting rails of storm windows coincide with that of existing sash, and that their installation will not permanently damage historic elements.
- Installation of door or window locks or electronic security apparatus.

Walls and Siding:

- Repair of wall or siding material or in-kind replacement of deteriorated siding or trim on historic buildings or structures.

Painting/lead paint abatement:

- Removal of exterior or interior paint by non-destructive means, limited to hand scraping, low pressure water wash (less than 200 p.s.i.), or paint-removal chemicals, provided that the removal method is consistent with the provisions of 24 C.F.R. Part 35, “*Lead-Based Poisoning Prevention in Certain Residential Structures*,” including Part 35.140, “*Prohibited methods of paint removal*.”
- All lead paint abatement done in accordance with *Preservation Brief #37: Appropriate Methods for Reducing Lead Paint Hazards in Historic Housing*.
- Application of exterior paint to previously painted surfaces.

Research Equipment and Systems

- Modification, repair, removal or addition of equipment and/or systems utilized to support specialized research (e.g., steam ejectors, vacuum spheres, combustion equipment, process gas reclamation systems, above ground fuel storage tanks, bottle fields, crane and wench systems, satellite dishes, high pressure air production, storage and distribution systems).

Roofing:

- Repair or in-kind replacement of roof cladding and sheeting, flashing, gutters, soffits, and downspouts on historic buildings or structures with no change in roof pitch or configuration.
- Repair or re-framing of structural roof elements as required to improve the drainage and durability of the roof as long as the appearance of the roof lines visible from the

front elevation and from other prominent, visible points (for example, the exposed side façade on a corner lot) is not affected.

- New installation of gutters and down spouts, as long as this does not damage historic materials or require removal of historic features.

Disabled Access:

- Repair or in-kind replacement of existing wheelchair ramps, unless the ramps are to be substantially modified.
- Installation of new wheelchair ramps, when the following considerations apply: 1) The ramp will not be a permanent addition to the property; 2) No historic fabric will be permanently damaged in the installation or use of the ramp; 3) Efforts will be made to construct and finish the ramp in a manner that will result in a minimal amount of visual and physical impact on the property, through design considerations, use of materials, and painting wooden ramps whenever possible.

Repointing:

- Repair or repointing of masonry features on historic buildings or structures with the design, size, shape, materials, and repointing to match the original in color, texture, and tooling, and, for historic properties, following the recommended approaches in *Preservation Brief No. 2 Repointing Mortar Joints in Historic Brick Buildings*.

Mothballing:

- Securing or mothballing an historic property by boarding over window and door openings, making temporary roof repairs, and/or ventilating the building.
- NOTE: For historic buildings, mothballing procedures should follow *Preservation Brief No. 31, Mothballing Historic Buildings*.

Hurricane Modifications:

- Modifications necessary to comply with hurricane codes provided the changes do not alter or detract from the qualities that contribute to the significance of the historic property (ies).

4. Interior maintenance and rehabilitation

Green Building Technologies:

- Incorporation of green building technologies to existing historic buildings or structures seeking certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design standards for environmentally sustainable construction provided such construction does not alter or detract from the qualities that contribute to the significance of the historic property (ies).
- Energy conservation measures including modifications to the heating, ventilation, and air condition (HVAC) control systems and conversions to alternative fuels (provided that these elements do not detract from the qualities that make the historic property listed or determined eligible).

Mechanical systems:

- Installation, replacement or repair of plumbing, HVAC systems and units, electrical wiring and fire protection systems, provided no structural alterations or damage to historic material are involved.
- Restroom improvements for disabled access provided the work is contained within the existing restroom walls.

Electrical:

- Maintenance, repair, removal, modification, upgrading or replacement of plant and building electrical systems (e.g., building conduit, wiring and lighting, emergency lighting, etc.) in all buildings and structures.
- Upgrading or additional new electrical lines between or among buildings and facilities.

Retrofitting:

- Citing, installation, maintenance, repair, removal or replacement of communications and computer systems, including public address systems, facsimile systems, microwave and radio systems, fiber-optic cables, and phone systems.

Fire Detection and Suppression:

- Changes to fire detection and suppression systems including routine upgrades and modifications to fire alarm systems, smoke detectors, and sprinkler systems.

Health and Safety:

- General clean-up, encapsulation, and removal and disposal of asbestos-containing materials from buildings and structures provided it does not involve removal or alteration of significant historic elements (for lead paint abatement, see above).

Interior spaces:

- Replacement of kitchen or bathroom facilities and fixtures – provided the work is contained within the existing bathroom and significant historic fabric will not be damaged, altered, or removed.
- If covering historic features, such as wood floors, then carpet or sheet goods (linoleum or vinyl) shall be installed in a reversible manner, either through tacking or with an underlayment so historic floors shall not be irreversibly damaged.

Basement:

- Installation or repair of concrete basement floor in an existing basement provided no historic materials are damaged.

5. General

Transfer of Real Estate:

- Transfer of ownership or management responsibilities of real property, including those listed or determined eligible, to another Federal agency with equal responsibility for complying with Sections 106 and 110 of the NHPA.

Antiterrorism and Force Protection Measures:

- Antiterrorism and force protection measures designed and constructed to prevent or mitigate hostile actions, including cyber threats, as well as to increase capacity and protection for access control provided such construction does not alter or detract from the qualities that contribute to the significance of the historic property and/or structure.

Wildlife habitat conservation:

- Maintenance and repair of existing property, wetlands and stream channels. Installation of nesting platforms and boxes. Installation of animal-secure fencing or barriers when consistent with fencing provision above.

Appendix G
Standard Documentation Measures

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APPENDIX G

STANDARD DOCUMENTATION MEASURES

The following standard documentation measures are outlined as a guide to the level of effort anticipated for resource documentation when adverse effects occur. Variations or additions to these documentation measures may occur on a case by case basis as agreed to by the consulting parties.

A. Historic Preservation Priority Category 1 Buildings and Structures.

1. Completion of documentation to include: photographs with large format negatives or photographically reproduced on Mylar in accordance with the U.S. Copyright Act, as amended, select existing drawings where available. Photographs with large-format negatives of exterior and interior views, or historic views where available, written data to include property history and description, and updates to the SHPO's DSS documentation for the building or structure.
2. Salvage of architectural or scientific/engineering elements from historic properties where appropriate. NASA LaRC will ensure that salvage will not be undertaken without prior documentation. Qualified professionals meeting the Secretary of the Interior's *Professional Qualifications Standards* in the appropriate discipline shall examine the historic property to identify if any artifacts or structural elements are worthy of salvage for preservation purposes. NASA LaRC shall ensure that the items selected are removed in a manner that minimizes damage. NASA LaRC will apply its agreement with the Smithsonian ("Agreement Between the National Aeronautics and Space Administration and the Smithsonian Institution Concerning the Transfer and Management of NASA Historical Artifacts, May 28, 1998" as set forth in NASA Procedural Requirement [NPR] 4310.1 dated March 16, 1999) – attached herein as Appendix D -- to determine appropriate retention and curation activities with respect to significant artifacts.

B. Historic Preservation Priority Category 2 Buildings and Structures.

Completion of documentation in accordance with the SHPO's DSS Intensive Level Survey requirements. Such documentation shall include a detailed architectural description of the property (exterior and interior), detailed floor plan, and photographs of exterior and interior views.

C. Historic Preservation Priority Category 3 Buildings and Structures.

Updating the existing SHPO DSS documentation following completion of the undertaking to include post undertaking photo documentation of the site, building or structure.

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Appendix H
Modification to Extend Agreement

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APPENDIX H

MODIFICATION TO EXTEND AGREEMENT

By executing this one paragraph modification, the below signatories hereby extend this Agreement for five (5) years from the date that it would have otherwise expired absent this extension.

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION,
LANGLEY RESEARCH CENTER**

_____ Date: _____
Director

ADVISORY COUNCIL ON HISTORIC PRESERVATION

_____ Date: _____
Executive Director

VIRGINIA STATE HISTORIC PRESERVATION OFFICER

_____ Date: _____
Director

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Appendix I
List of Highly Scientific and Technological
Buildings and Structures

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(To be inserted)