

ASSESSMENT OF ACTIONS HAVING AN EFFECT ON HISTORIC PROPERTIES

Draft: Unsigned Pending Outcome of Review and Comment by Consulting- and Signatory Parties to Programmatic Agreement, and by the Public

A. DESCRIPTION OF UNDERTAKING

1. Park: Fredericksburg and Spotsylvania County Battlefields Memorial

2. Project Description:

Project Name: George Washington's Boyhood Home National Historic Landmark Landscape

Rehabilitation

Prepared by: Noel G. Harrison, National Park Service (draft by David Muraca, George Washington

Foundation)

Date Prepared: August 28, 2015 (Harrison latest draft), February 25, 2015 (Muraca initial draft)

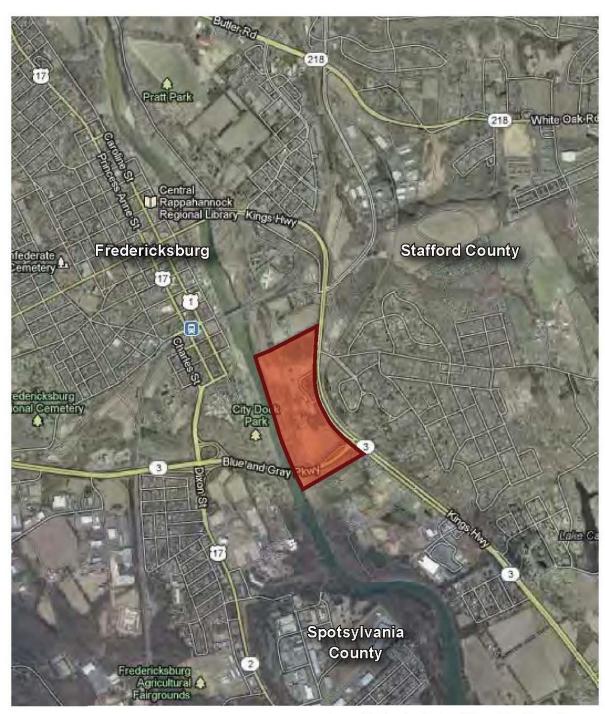
Telephone: 540-693-3200 x1020 (Noel G. Harrison)

PEPC Project Number: 56459

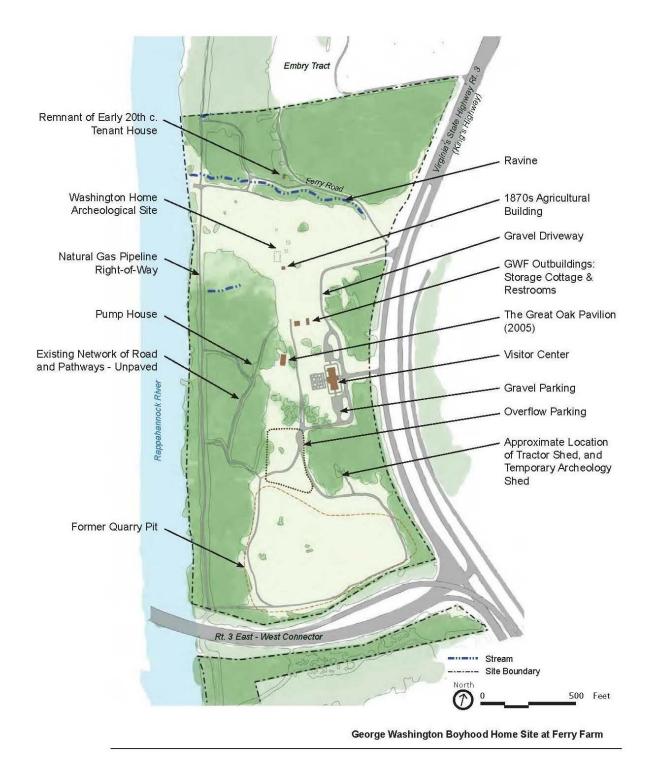
Locations: Ferry Farm

Describe project:

First see orientation-illustrations immediately below: location-map; current-conditions map; 2 photographs of overall, current conditions at central/northern- and southern grounds.



George Washington Boyhood Home Site at Ferry Farm



Current conditions, George Washington Boyhood Home ("Ferry Farm") National Historic Landmark: property/easement boundaries, ground-cover, buildings, and interior- and adjacent roads.



Current conditions, central and northern portions of George Washington Boyhood Home National Historic Landmark ("Ferry Farm"), looking northwest from current visitor-center to George Washington's Boyhood Home archeological site (immediately beyond small white building in middleground) and across Rappahannock River to City of Fredericksburg (background). Proposed Interpretive Building and Core Interpretive-Landscape would be located immediately beyond small white building; proposed buried utility corridor would extend from area of white building to proposed Mechanical Shed (beyond trees in middleground); and proposed, replacement access-road and parallel trunk-corridor of buried utility lines would extend straight into background, through trees at far right edge.



Current conditions, southern portion of George Washington Boyhood Home National Historic Landmark ("Ferry Farm") looking northeast, across area disturbed by gravel pit, from site of proposed Maintenance and Operations building—right third of view—towards Va. Route 3 (behind trees in background).

(See appendix below signature-lines, at end of this form, for additional photographs of property.)

Since 2000, the National Park Service ("NPS," below), on behalf of the United States of America, has administered a conservation easement over the 76-acre George Washington's Boyhood Home National Historic Landmark ("Ferry Farm"), owned by the George Washington Foundation ("the Foundation"). In the wake of signing in 2014 a Finding of No Significant Impact ("FONSI") for the Preferred Alternative (Alternative D) of an Environmental Assessment for the Foundation's proposed Site Treatment Plan for Ferry Farm, and in accordance with a 2011 Programmatic Agreement for that property's management, the NPS now proposes a No Adverse Effect determination for the Foundation's plans and proposals to implement a Phase One of that Preferred Alternative.

The preamble of the 2000 easement acknowledges the following among the purposes of the easement: "to restore and perpetuate the historic scene and the historic archeological resources." The preamble of the 2011 programmatic agreement includes the same goal, specified as: "investigating, rehabilitating, and, where possible restoring the Washington-era landscape, developing public access and facilities, and installing interpretive media and other improvements for the benefit of the public."

The FONSI describes the Preferred Alternative as "a rehabilitated landscape" that includes new buildings and access infrastructure such as walkways and a road, and also "a core interpretive landscape" containing Assessment of Effect Form - George Washington's Boyhood Home National Historic Landmark Landscape Rehabilitation - PEPC ID: 56459

"structures to demonstrate the 18th century plantation setting as authentically as possible...." This rehabilitated-landscape concept is derived from the Secretary of Interior's *Guidelines* for rehabilitating cultural landscapes, guidelines that include the concept of replacing missing landscape features with those of "compatible" or "reproduced" designs, as well as of adding infrastructure for new use, i.e. education and historical interpretation.

Although the FONSI, as the culmination of a National Environmental Policy Act (NEPA) review, conveyed NPS approval for a Preferred Alternative and its general concept of a landscape rehabilitation, the FONSI was *not* the product of a Section 106 review. The NEPA-review documentation for the Preferred Alternative and the FONSI lacked much of the detail that is now supplied below for the Section 106-review of the Foundation's proposed Phase One. This Assessment of Actions initiates the Section 106 process for reviewing Phase One of the Preferred Alternative, now with expanded plans and documentation. The NPS' proposal of a No Adverse Effect determination for the Foundation's Phase One implementation of the Preferred Alternative is the proposed federal action under Section 106 review.

Given the 60-day, expeditious response required by the conservation easement of the NPS, this Assessment of Actions proposes combining the steps of identification and assessment, with Identification addressed in Section 4 below.

This Assessment of Actions references the following plans and other documents, many prepared by the Foundation and its consultants as per the documentation-requirement of the 2011 Programmatic Agreement, then revised in consultation with the NPS for this stage of the Section 106-review:

- -Programmatic Agreement between the United States Department of the Interior National Park Service, the George Washington Foundation, and the Virginia Department of Historic Resources for Treatment of the Site of George Washington's Boyhood Home ("Ferry Farm") National Historic Landmark Stafford County, Virginia, January 2011 ("Programmatic Agreement, 2011" below)
- -Jack D. Warren, Jr., National Historic Landmark Nomination, Washington, George, Boyhood Home Site, 1999, pp. 1-48 ("*Landmark Nomination*" below)
- -Quinn Evans Architects, AECOM Landscape Architect, et al, Site Plans: Ferry Farm Phase 1 Improvements, December 19, 2014, ("Site Plans" below)
- -Mesick, Cohen, Wilson, Baker Architects, *Interpretive Structure at George Washington's Ferry Farm*, March 18, 2015 (revised June, July 2015). Supplemented by the following 2 unbound documents at request of NPS: (a) Keast & Hood, Architectural Engineers, Memo re: helical piles foundation system, January 31, 2015; (b) Keast & Hood, Architectural Engineers, Memo re: loadbearing capacity of original Washington House foundation" ("*Interpretive Structure*" below)
- -Mesick, Cohen, Wilson, Baker Architects, *The Washington House at Ferry Farm: An Architectural Study*, rev. July 2015 ("Architectural Study" below)
- -Mesick, Cohen, Wilson, Baker Architects, *Mechanical Shed Plans, Elevations, Sections*, single sheet A1, March 2015 ("*Mechanical Shed*" below)
- -Quinn Evans Architects, Ferry Farm Phase 1 Improvements: M&O Building [Maintenance and Operations Building], June 2015 ("M&O Building" below)

- -George Washington Foundation and National Park Service, George Washington Boyhood Home at Ferry Farm Site Treatment Plan: Environmental Assessment Public Review, October 2013 ("Environmental Assessment" below)
- -George Washington Foundation, Destructive Prior Ground Disturbance, George Washington Boyhood Home National Historic Landmark, July 6, 2016 ("Ground Disturbance" below)
- -George Washington Foundation, Description and Documentation: Proposed Core Interpretive-Landscape Adjacent to Washington House Interpretive Building, George Washington Boyhood Home National Historic Landmark ("Ferry Farm"), August 2015 ("Interpretive Landscape" below)
- -National Park Service, "Finding of No Significant Impact, George Washington Boyhood Home at Ferry Farm Site Treatment Plan: Environmental Assessment," 2014 ("Finding of No Significant Impact" below)
- -Stantec Consulting Services, Inc., Phase I Archaeological Survey, Metal Detector Survey, and Archaeological Evaluation of Two Sites at Ferry Farm, A National Historic Landmark in Stafford County, Virginia, 2015 ("Stantec" below)
- -George Washington Foundation, Report on the Excavation of the Washington Farm: The 2006 and 2007 Field Seasons, 2010 (2006 and 2007 Field Seasons below)

The Foundation's proposed Phase One work for implementing Alternative D consists of adding the following new components to Ferry Farm. (See Site Plans, Sheet C-300, for detailed overview of proposed work-components.)

- a. an Interpretive Building representing the known and extrapolated appearance of George Washington's Boyhood Home during his occupancy of that building in 1738-1753
- b. features composing a Core Interpretive Landscape
- c. a Mechanical Shed
- d. a Maintenance and Operations Building
- e. a system of stone-dust surfaced walks
- f. an asphalt-surfaced connector road
- g. an asphalt-covered parking lot
- h. an asphalt-covered emergency-exit road
- i. a turf-surfaced road extending west from the Connector Road
- j. a turf-surfaced road extending east from the Connector Road

- k. a gravel-surfaced, temporary construction-yard and temporary yard access-road
- 1. a gravel-surfaced, temporary connector-road
- m. 3 gravel-surfaced temporary parking-lot entrances
- n. a trunk-corridor of buried utility lines
- o. a corridor of buried utility lines extending to the interpretive structure
- p. a buried sewer pipe
- q. a gravel-surfaced sewer line access road
- r. two sediment traps
- s. three bioretention areas

A Note on Future Proposals and Future Planning-Phases: the broad scope of the Preferred Alternative and the need to stage its implementation, for budgetary and other reasons, necessitated for these Phase One plans and supporting documents some understanding (although not the assumption, pending future Section 106 review) that certain future landscape-components proposed generally as part of the Preferred Alternative's NEPA-review—but not proposed specifically as part of the Phase One proposals summarized in this Section-106 Assessment of Actions—might indeed be approved during future 106 reviews, as part of future proposals. The possible, future landscape-components therefore appearing, as general landmarks in some of the plans and supporting documents below, but that are not themselves part of the Phase One proposal now under review, include: a visitor center; an administration building; a greenhouse; and interpretive buildings representing an eighteenth-century kitchen, slave quarters, and storehouse. Likewise, vegetative plantings to create visual buffers or as part of exotic-species removal will be proposed during future reviews.

A Note on Related Planning and Review by the Virginia Department of Highways and Transportation: The Foundation has requested that the Virginia Department of Highways and Transportation (VDOT), which manages state-owned land along Virginia Route 3 and adjoining Ferry Farm on the east and south, and is engaged in ongoing planning for intersection-safety and other improvements along that segment of Route 3, incorporate into such planning the grading, landscaping, and/or utilities-work needed for creation, on VDOT land adjoining the Foundation's land at Ferry Farm, of four new landscape elements: (a) a new entrance to Ferry Farm at an existing intersection on Virginia Route 3, (b) a new exit from Ferry Farm on Virginia Route 3, (c) closure of the current, south entrance/exit to Ferry Farm on Virginia Route 3, (d) rehabilitation of the current vegetative buffer along Virginia Route 3 to improve effectiveness as a visual barrier and remove invasive species. In accordance with the requirement of Section 106 to consider related proposals and planning, and of Section 110 to maximize planning to avoid harm to National Historic Landmarks, the NPS has asked VDOT to be a consulting party in VDOT's own Section 106 review of the proposed work on VDOT land, and also invite VDOT to be a consulting party on the NPS' Section 106 review for the proposed Phase One work on the Foundation's adjoining land.

Each of the proposed construction-components in the implementation of Phase One of the Foundation's Preferred Alternative would entail the following work. For each, those further measures intended to prevent or minimize impairment of historic/prehistoric properties are described in Sections 4 and 5, futher below, of this

- a. an Interpretive Building (see Architectural Study; Interpretive Structure; Site Plans, C303): The interpretive building will represent the known and extrapolated appearance of George Washington's Boyhood Home during his occupancy of that house in 1738-1753. The building will be one and one-half stories in height, and measure 53 feet by 29 feet in plan. It will feature a shed roof on the rear (east) facade. The structure will rest upon a sandstone foundation, with framed walls above, the latter covered by beaded weatherboards painted Spanish brown. The chimneys will have sandstone bases, and red brick structures. The building will require dry wells, excavated to a depth of 3' 10" below existing grade, and French drains with a bottom depth of 10"-14" on the east side of the building, and 10" to 30" on the west side. The roof will feature round-butt shingles painted the same color as the rest of the house. The upper story will feature three dormer windows on the front (west) façade. The house will be situated atop a sandstone cellar measuring 10 feet by 15 feet, and incorporating portions of the original stone walls. The cellar will feature a full-size exterior doorway on the river side, based on direct physical evidence supplied by the remaining stones. Because the archaeological remains of Washington's house are fragmentary, it will be possible to auger down with "helical" pilings in the excavated and vacant parts of the site. These vertical supports, each resembling a giant screw, will carry a system of concrete beams, all hovering just above the archaeological surface. Completely concealed from view, this system will carry the house, the chimneys, and the stone foundations. The only place the interpretive structure will touch the archaeological foundations is the stone-lined cellar, where stone masons will use modern Aquia sandstone blocks to bring the cellar up to the interpretive structure.
- b. features composing a Core Interpretive Landscape (*Interpretive Landscape*; *Site Plans*, L103-L104 and L501-L503): A Core Interpretive Landscape (labelled "Home Farm" on the *Site Plans*) will surround the Interpretive Building. New features will include a Midden Yard, a Work Yard, and a Hen Yard, along with fences and paths, as described and documented in *Interpretive Landscape*.
- c. a Mechanical Shed (*Mechanical Shed*; Site Plans, C300, C305, L105; Interpretive Structure, SP1.1): The Mechanical Shed will house utilities for the Interpretive Building: fire protection equipment, water service equipment, hydronic equipment for the HVAC system and electrical panels and transformer. The utility shed will be situated at the edge of a wooded area, 484 feet east from of the Interpretive Building and on the east side of the proposed connector-road. The Mechanical Shed will measure 32 '3" in length (including an enclosed service yard for exterior equipment), and 13 '3" in width, and 9 '6" in height. The roof will be nearly flat—pitching slightly downward towards the rear. The utility shed will be clad in rough-sawn vertical boards and battens stained "tree bark" (a gray-brown). The north end of the Mechanical Shed will be underpinned, on 3 sides, by 3 foundations necessitating the excavation of 3 footer-trenches: all at 2 feet in depth, 2 at 21 feet in length, and 1 at 10 feet in length.
- **d.** a Maintenance and Operations Building (*M&O Building*; *Site Plans*, C307): The new Maintenance and Operations Building will be one-story: 23 feet in height, 120 feet in length, and 48 feet in width. It will be clad in metal, and have a standing-seam metal roof with gable ends. The exterior will be gray in color, and the roof brick-red. A sloping, concrete-surfaced loading dock—slightly flared in plan--will extend from the west end of the building and cover an area of about 48 feet by 50 feet. A concrete sidewalk will border the north side. The new building will necessitate the excavation of 18 footers to a depth of 1 foot each.
- e. a system of stone-dust surfaced walks (Site Plans, C303-C304, L103-L104, L201, L501; Interpretive Landscape): A system of stone-dust surfaced walks, resembling a sideways figure "8" in plan and measuring 560 feet in total length, will provide all-weather pedestrian access to the Interpretive Building and the Core Interpretive Landscape surrounding it. The walks will be brown in color and measure 6 feet in width except Assessment of Effect Form George Washington's Boyhood Home National Historic Landmark Landscape Rehabilitation PEPC ID: 56459

for a short stretch along the southernmost curve of the figure "8", where the walks will measure 8 feet in width. The walks will be underlain (*Site Plans*, L501) by aggregate and necessitate excavation to a depth of 7 inches. A pair of conduits—1 for power and 1 for signal—will be buried in the aggregate base.

f. an asphalt-surfaced connector road (*Site Plans*, C302-C307, C400-402, C405-C407): A new, asphalt-surfaced connector road measuring 2,000 feet (.38 mile) will be built to connect a new entrance to Ferry Farm on State Rt. 3—an entrance at an intersection (shown on *Site Plans* C401, with state-owned property situated below—east of—the diagonal, solid line), on state-owned land, now being reconfigured as part of the VDOT improvements referenced above—with the new Maintenance and Operations Building. The connector-road will be covered with asphalt and measure 40 feet in width on its paved surface. The road's installation will necessitate excavation to an average depth of 2 feet. It will also necessitate grading and berming to the extent shown on C405-C407. As shown on C401-C402 and L101-L102, the road will pass around three turf-covered islands at its entrance on State Route Three. A drainage swale, or ditch, necessitating excavation to 3 feet in width and 2 feet in depth, will parallel the road on its west side. The new connector road will replace an existing gravel drive installed in the 1960's. (See "s" below for two new bioretention areas that will border the road.)

g. an asphalt-covered parking lot (*Site Plans*, C307): A asphalt covered parking lot—an irregularly shaped rectangle in plan measuring about 150 feet on each of its short sides and 250 feet on each of its long sides—will serve the new Maintenance and Operations Building, at the southern terminus of the new connector-road. The parking lot will require excavation to a depth of up to 12 inches. The parking lot will surround a gravel island.

h. an asphalt-covered emergency-exit road (*Site Plans*, C406, C306): An emergency exit road, 20 feet in width, will extend east 160 feet from the new connector road to an exit on State Route Three. The first 100 feet of this distance will be on Ferry Farm land (i.e., covered by the easement); the remaining 60 feet, approaching State Route Three, will be on VDOT land. This road will necessitate excavation to create cuts of the dimensions shown on C406, and vegetation removal to the extent also shown on that sheet.

i. a turf-surfaced road extending west from the Connector Road (*Site Plans*, C302): To improve emergency access to the interpretive building and surrounding core-landscape, a new turf-covered road will extend west from the new connector road to merge into an existing road. The new road will measure about 100 feet long; it's width 10 feet wide. It will require excavation to about 4 inches in depth. The road will be made up of filter fabric sealing original grade, and plastic mats which are rolled out and covered with dirt or sod.

j. a turf-surfaced road extending east from the Connector Road (*Site Plans*, C305): A new turf-covered road will curve east and north from the new connector road to provide access to the Mechanical Shed. The new road will measure about 80 feet long; it's width 12 feet wide. The road will require excavation to about 4 inches in depth. The road will be made up of filter fabric sealing original grade, and plastic mats which are rolled out and covered with dirt or sod.

k. a gravel-surfaced, temporary construction-yard and temporary yard access-road (*Interpretive Structure*, SP1.1): A temporary construction-yard will surround the interpretive building on the north, south, and east sides and in plan take the configuration of a square, measuring about 100 feet each its sides. The surfacing will require no excavation, and will consist of compacted stone dust to a thickness of about 12 inches, laid atop the original grade and separated from it by geo-textile filter fabric. A temporary access-road, measuring 18 feet in width and about 250 feet in length, and composed of the same material and structure as the construction yard, will connect the yard to an existing gravel road. The temporary construction-yard and access-road will be removed after about two years. The yard will be surrounded by a temporary, green-colored

construction fence. (The height of the fence, like the composition of the yard- and road surfacing, is shown on *Interpretive Structure*, SP1.3)

- **l.** a gravel-surfaced, temporary connector-road (*Site Plans*, C201): This road will connect pre-existing roads and measure 200 feet in length by 12 feet in width. The surfacing will require no excavation, and will consist of gravel spread atop the original grade and separated from it by geo-textile filter fabric. The road will be removed after about 2 years.
- **m.** 3 gravel-surfaced, temporary parking-lot entrances (*Site Plans*, C305-C306): These three entrance-lanes will link the east side of the new connector-road to the existing, gravel parking lots at three locations. Described from north to south, the three entrances will measure 50 feet in length by 12 feet in width; 20 feet in length by 19 feet in width; and 30 feet in length by 18 feet in width, respectively. The surfacing will require no excavation, and will consist of gravel spread atop the original grade and separated from it by geo-textile filter fabric. The road will be removed after about 2 years.
- n. a trunk-corridor of buried utility lines extending along east edge of new connector road (*Site Plans*, C500—dark line along road—C501-C502, C505-C507): A set of parallel, adjacent trenches, each measuring 1 foot in in width and 4 feet in depth, will together serve as a utility trunk-corridor and carry electric, gas, and water, and extend some 2,000 feet along the entire length of the new connector road, on its east side, from the entrance to the new Maintenance and Operations Building. A 35-foot branch of the trunk corridor will extend south into the new Utility Shed (C505). Also, fire hydrants will be situated along the trunk and road, as shown on the above-referenced sheets, and with profiles shown on C606.
- **o.** a corridor of buried utility lines to the interpretive structure (*Site Plans*, C503, C505, L103, L105): A single trench measuring six feet in width, and six feet in depth, and some 650 feet in length will connect the Mechanical Shed with the Interpretive Building. The trench will contain two HVAC pipes, and a conduit for a fire suppression system.
- p. a buried sewer pipe (*Site Plans*, lower-left corner C500, C507-C 508): A new sewer system will serve the new Maintenance and Operations Building and, eventually, buildings to be proposed in future phases, including a new visitor center. A new, buried sewer pipe will extend for approximately 1000 feet, with some 400 feet of that distance being on the Ferry Farm property covered by this easement. The pipe's trench will be 10 feet wide and of a depth that varies, but to a minimum of 3 ½ feet. Most of this line will be gravity fed, but a small grinder pump will be located south of the M and O building (C507.) The grinder pump will be buried. (Disregard the bore-jacking and bore-receiving pits shown on C508; those will not now be needed.)
- **q.** a gravel-surfaced sewer line access-road (*Site Plans*, C303): A new gravel-surfaced access-road will follow the route of the sewer pipe, "p" above, and measure 200 feet in length.
- **r. two sediment traps** (*Site Plans*, **C201-C202**): The project will require two sediment traps, one near the north end of the property, beside the entrance and new connector-road, and the other trap near the south end of the property, near the new Maintenance and Operations building and beside its new parking lot. Each of these will necessitate excavation of about 3 feet, and construction of a surrounding berm about 1 foot in height. The northern trap ("ST 1" on *Site Plans* C201) will cover an area of 54 ½ feet by 27 feet. The southern trap ("ST 2" on *Site Plans* C202) will cover an area of 106 feet by 26 feet.
- s. three bioretention areas (*Site Plans*, C402, C405, C407, C902): A total of three bioretention areas will be constructed alongside the new connector-road and its at terminus parking-area at the new Maintenance and

Operations Building. The northernmost of these (C402) will be rectangular in plan, border on its long side the west
edge of the road, and cover an area of 4,600 square feet. The second bioretention area will also be rectangular in
plan, border on its long side the west edge of the road, and likewise cover an area of 4,600 square feet. The two
rectangular bioretention areas each will consist of a outer (west side) berm, 2 feet wide and 18 inches high, that
adjoins and extends parallel to an inner (east side) ditch, 3 feet in width and 2 feet in depth. The third, southernmost
bioretention area will be surrounded by a berm 3 feet wide and 2 feet in height, have a depth of 2 feet, have a plan
shaped like an elongated oval in plan, be situated adjacent to the Maintenance and Operations Building parking lot,
and cover an area of 3,350 square feet. The bioretention areas will use the layering structure shown in the detail on
C902.

3. Has the area of potential effects been surveyed to identify historic properties?

No Yes

4. Potentially Affected Resource(s):

Resources (within yellow zone) on "Ferry Farm Area of Potential Impact [Affect]" map, below, including landscapes and 19 enumerated archeological and architectural resources identified in the following surveys and supporting documents, cited fully in Section 2 above:

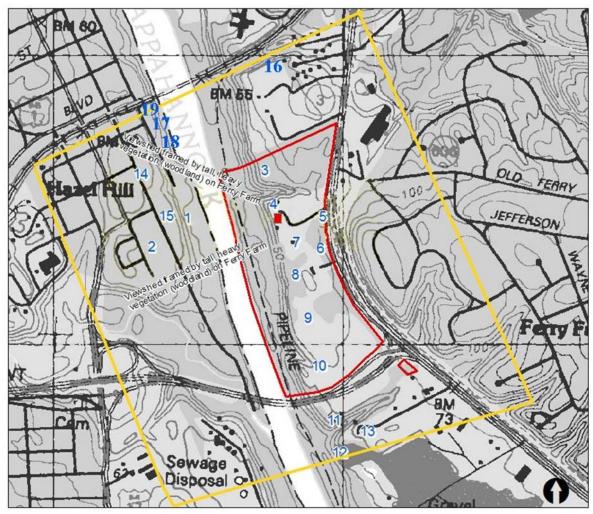
- -Landmark Nomination
- -Interpretive Structure (archeological resources on drawing/sheet S1.0)
- -Architectural Study
- -Environmental Assessment (resource inventories on pp. 80-87), and shown on
- -Ground Disturbance

- -Interpretive Landscape
- -Stantec (also includes summary of archeological inventories and surveys predating 2015)
- -2006 and 2007 Field Seasons (also includes summary of archeological inventories and surveys predating 2006)

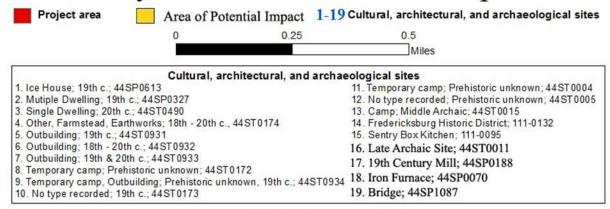
Resources include landscapes and 19 enumerated archeological and architectural resources; archeological resources were identified during surveys shown on "Site Investigation for Historic Resources" map further below (map from *Environmental Assessment*, p. 85); various components of 44ST0174 shown in detail on "Resources from the George Washington Period, 1738-1774" and "Resources from the Civil War Period, 1862-1864" maps shown further below (maps from Environmental Assessment, pp. 83-84). Landscapes shown on "Ferry Farm Viewshed Impact Map," below.

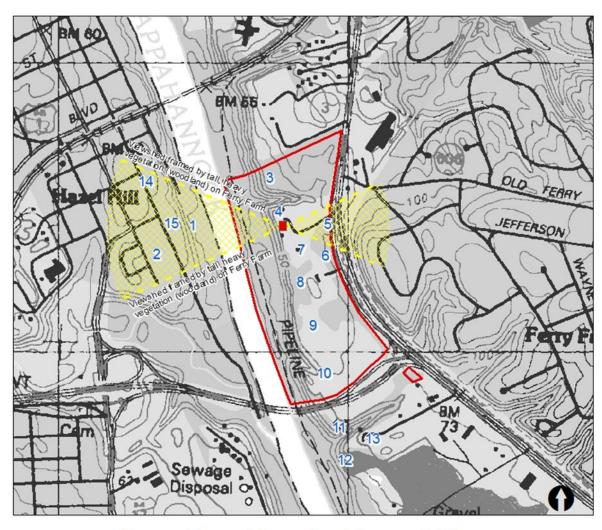
Additional archeological resources are identified in *Stantec*.

Large scale archaeology has been underway for 13 field seasons at Ferry Farm. Using Block Excavation techniques, archaeologists have excavated a considerable portion (approximately 15 %) of this very large archaeological site. For the most part the site has undergone light plowing, though small areas of unplowed portions survive. Archaeological structures relating to the five farmsteads that have occupied the site sequentially have been identified and recovered. Along with the excavation, researchers have collected copies of historic documents relating to the Washingtons and other occupants from several document repositories.

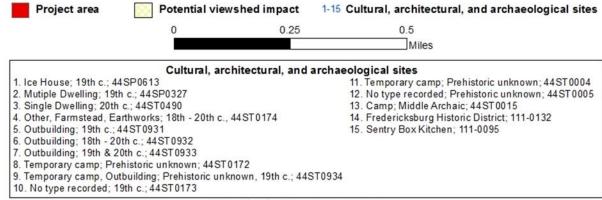


Ferry Farm Area of Potential Impact

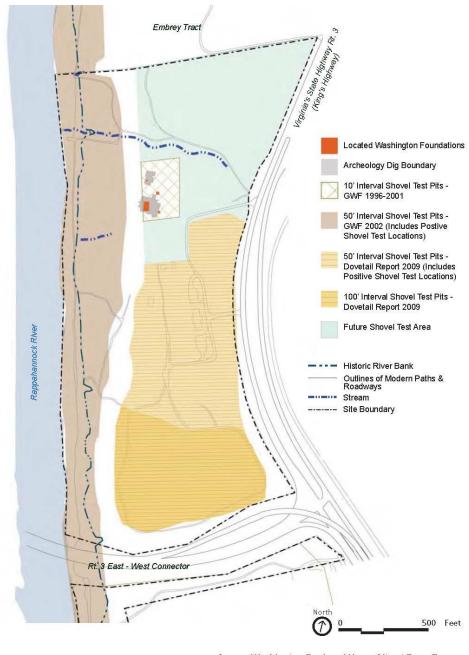


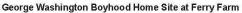


Ferry Farm Viewshed Impact Map



Note: Viewshed impacts are approximate

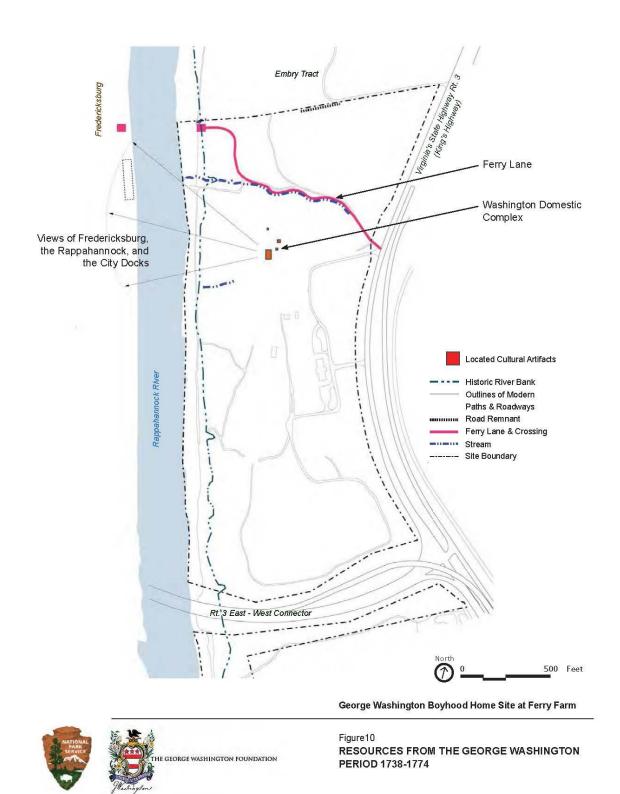








SITE INVESTIGATION FOR HISTORIC RESOURCES



Assessment of Effect Form - George Washington's Boyhood Home National Historic Landmark Landscape Rehabilitation - PEPC ID: 56459

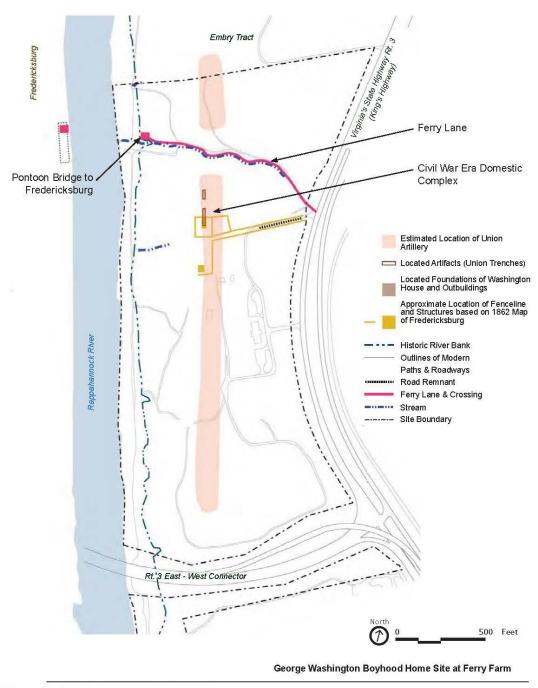






Figure 11
RESOURCES FROM THE CIVIL WAR PERIOD 1862-1864

5. The proposed action will: (check as many as apply)

	Destroy, remove, or alter features/elements from a historic structure
	Replace historic features/elements in kind
	Add non-historic features/elements to a historic structure
X	Alter or remove features/elements of a historic setting or environment (inc. terrain)
X	Add non-historic features/elements (inc. visual, audible, or atmospheric) to a historic setting or cultural landscape
	Disturb, destroy, or make archeological resources inaccessible
	Disturb, destroy, or make ethnographic resources inaccessible
X	Potentially affect presently unidentified cultural resources
	Begin or contribute to deterioration of historic features, terrain, setting, landscape elements, or archeological or ethnographic resources
	Involve a real property transaction (exchange, sale, or lease of land or structures)
	Other (please specify):

6. Supporting Study Data:

(Attach if feasible; if action is in a plan, EA or EIS, give name and project or page number.)

Studies in the list of documents cited fully in Section 2, above:

- -Environmental Assessment
- -Finding of No Significant Impact
- -National Historic Landmark Nomination
- -Architectural Study
- -Ground Disturbance
- -Interpretive Landscape

B. REVIEWS BY CULTURAL RESOURCE SPECIALISTS

The park 106 coordinator requested review by the park's cultural resource specialist/advisors as indicated by check-off boxes or as follows:

As per the *Programmatic Agreement, 2011* stipulation of 4 subject-areas, the following National Park Service Section-106 advisors have reviewed this document's proposed identifications and assessments:

- -James W. Kendrick, Archeologist; Director, Northeast Region Archeology Program, National Park Service
- -Cheryl Sams-O'Neill, Historical Landscape Architect, Northeast Region, National Park Service
- -Stephen Spaulding, Historical Architect; Director, Historic Architecture, Conservation & Engineering Center, Northeast Region, National Park Service

C. PARK SECTION 106 COORDINATOR'S REVIEW AND RECOMMENDATIONS

	No Potential to Cause Effects
	No Historic Properties Affected
X	No Adverse Effect
	Adverse Effect

[] B. STREAMLINED REVIEW UNDER THE 2008 SERVICEWIDE PROGRAMMATIC AGREEMENT (PA)

The above action meets all conditions for a streamlined review under section III of the 2008 Servicewide PA for Section 106 compliance.

APPLICABLE STREAMLINED REVIEW Criteria (Specify 1-16 of the list of streamlined review criteria.)

[X] C. PLAN-RELATED UNDERTAKING

Consultation and review of the proposed undertaking were completed in the context of a plan review process, in accordance with the 2008 Servicewide PA and 36 CFR Part 800. Specify plan/EA/EIS:

- -Programmatic Agreement between the United States Department of the Interior National Park Service, the George Washington Foundation, and the Virginia Department of Historic Resources for Treatment of the Site of George Washington's Boyhood Home ("Ferry Farm") National Historic Landmark Stafford County, Virginia, January 2011
- -George Washington Foundation and National Park Service, *George Washington Boyhood Home at Ferry Farm Site Treatment Plan: Environmental Assessment Public Review*, October 2013
- -National Park Service, "Finding of No Significant Impact, George Washington Boyhood Home at Ferry Farm Site Treatment Plan: Environmental Assessment," July 2014

[] D. UNDERTAKING RELATED TO ANOTHER AGREEMENT The proposed undertaking is covered for Section 106 purposes under another document such as a statewide agreement established in accord with 36 CFR 800.7 or counterpart regulations.
[] E. COMBINED NEPA/NHPA Document Documentation is required for the preparation of an EA/FONSI or an EIS/ROD has been developed and used so as also to meet the requirements of 36 CFR 800.3 through 800.6
[] G. Memo to SHPO/THPO
[] H. Memo to ACHP

3. Additional Consulting Parties Information:

Additional Consulting Parties:

- -City of Fredericksburg (per Programmatic Agreement, 2011)
- -Catawba Indian Nation (per Programmatic Agreement, 2011)
- -Pamunkey Indian Tribe of Virginia (per Federal recognition, 2015; Nat. Historic Preservation Act, Section 101d6B)
- -Virginia Dept. of Highways and Transportation
- -Stafford County Historical Society
- -Stafford County Historical Commission
- -University of Mary Washington, Dept. of Historic Preservation
- -Civil War Trust

4. Stipulations and Conditions:

Following are listed any stipulations or conditions necessary to ensure that the assessment of effect above is consistent with 36 CFR Part 800 criteria of effect or to avoid or reduce potential adverse effects.

The protocols given in the 2011 Programmatic Agreement for Ferry Farm (pp. 13-14), for avoidance of gravesites; and for Unanticipated Discoveries, including Native American human remains and associated funerary artifacts—and all human remains generally-shall be in force during all of the proposed work.

The four National Park Service Section-106 advisors have concurred with the identification of historic resources listed above, and recommended a determination of No Adverse Effect. Of the four advisors, two made their No Adverse Effect determinations conditional on the following stipulations, will apply additional to the measures listed in "5" below:

a. James W. Kendrick, archeology: The proposed actions described in Assessment Of Actions Having An Effect On Historic Properties for Phase I of the Landscape Rehabilitation Project at George Washington Boyhood Home National Historic Landmark in Stafford County, Virginia, have no potential to adversely affect identified archaeological resources given the following stipulations are met for each of the construction components. These stipulations are in addition to the mitigations identified in Section 5 of the Assessment of Actions document.

General Stipulations

- •Activities and construction of the components outlined below will require monitoring by archaeologists familiar with archaeological resources at the national historic landmark and who meet the Secretary of Interior's Professional Qualifications for Archeology.
- •Periodic updates from the archaeological monitor will be provided to the NPS and VDHR and will include photographs and other relevant information when necessary. A schedule for these updates should be set by GWF, the NPS, and VDHR prior to the beginning of construction activities.
- •The archaeological monitor(s) will keep a daily log.
- •A report meeting the Secretary of Interior's Standards and Guidelines for Archeological Documentation will be prepared for the NPS and VDHR by the GWF that summarizes all monitoring activities of Phase I construction activities. This report will include the following:
- o Introduction; Background and Purpose; Chapters for key archaeological resources or components of the rehabilitation that contain before and after conditions of archaeological resources; and a Summary. The report will also contain an appendix listing monitoring personnel and their qualifications. An appendix with updated VCRIS forms will also be included.
- •George Washington Foundation (GWF) archaeologists will brief contractors and sub-contractors on the archaeological sensitivity of the property, the stipulations herein as appropriate, and the importance of closely working with the monitor to ensure the protection of archaeological resources.
- •The archaeologist monitoring construction activities will halt construction activities in locations where archaeological features and/or significant archaeological material are observed. Appropriate treatments will be determined in consultation with the NPS and VDHR.
- •The archaeologist monitoring construction activities will halt construction if human remains or possible human remains are identified. Appropriate officials will be contacted, along with the NPS and VDHR, in order to determine appropriate treatment of the remains.
- •The archaeologist(s) will conduct all monitoring activities in a safe manner and will follow all applicable safety regulations while doing so.

Interpretive Building

Several archaeological features of George Washington's boyhood home were discovered during excavations at this nationally significant archaeological site, and they are still present and in situ. These include, but are not limited to, portions of chimneys, foundations, and cellars. The George Washington Foundation will ensure each archaeological feature still present at the site will be protected from construction activities. Minimally, the following will be conducted:

- •Monitoring of all construction activity by an archaeologist who meets the Secretary of Interior's Professional Qualifications for Archeology and who is familiar with the archaeological features at this site
- •The archaeological monitor will provide periodic updates to the NPS and VDHR during any construction activities at or around this archaeological site (a schedule for those updates should be determined by the GWF, NPS, and VDHR).
- •A separate chapter will be included in the monitoring report (as described in the general stipulations section above) for the Interpretive Building.

Core Interpretive Landscape

Fencing, grading, and other ground-disturbing activities will be monitored and these activities will be documented and reported in the final monitoring report.

Mechanical Shed

Archaeological Site 44-ST-931 will be directly affected by the installation of the Mechanical Shed and turf-covered access road. The NPS concurs with the Stantec report dated 2015 that this archaeological site is ineligible for listing in the National Register of Historic Places. The NPS prefers, however, the Mechanical Shed be located between sites 44-ST-931 and -932. If this cannot be accommodated, then archaeological monitoring during all ground- disturbing activities in this location will needed (such as excavation of footer trenches). [George Washington Foundation staff have consulted with their planning team but were unable to identify a practical alternative and thus that relocation cannot be accommodated. The the second option of this stipulation--monitoring the ground disturbance created by construction—will therefore apply.]

Maintenance and Operations Building (M&O Building)

The NPS acknowledges and appreciates the GWF's decision to move maintenance operations from the northeastern portion of the national historic landmark, as once planned, to the heavily disturbed southern portion, where a quarry was once active. Archaeological monitoring of this disturbed area should be conducted at the discretion of the GWF Archaeology Department. Areas near the edge of the former quarry should be monitored, however, if those areas were not as significantly disturbed as its deeper portions.

Stone-Dust Surface Walks

The southern portion of this path system is located in an area of prior disturbance. For the northern portion, the trail has been designed to stay within the plowzone. Archaeological monitoring will be required during construction of this northern portion of the path system where excavation below the existing grade will occur. Areas of the southern portion of the path system should be monitored at the beginning of construction, in order to determine the level of previous disturbance.

Asphalt-surfaced Connector Road

Construction of the Connector Road, including clearing of large trees and vegetation prior to its construction, must be monitored by an archaeologist. Redesigning the Connector Road to avoid archaeological site 44-ST-1197, identified during the recent Phase I survey, is to be commended. Given the depth and breadth of the disturbance, however, monitoring of construction activities will be needed. The Connector Road is one of the most prominent and extensive components of the proposed Phase I Landscape Rehabilitation project. A specific chapter of the monitoring report, then, will be needed for this component and the associated structures and other improvements that are proposed during its construction (two sediment traps, three bioretention areas, and utility trenches).

Asphalt-surfaced Parking Lot (for M&O Building)

This parking lot and the M&O Building are located in an area of significant prior disturbance. Archaeological monitoring is not needed.

Asphalt-surfaced Emergency Exit Road

Archaeological monitoring during excavations for this emergency exit is recommended.

Turf-surfaced Road extending west from Connector Road

Archaeological monitoring for this component should be at the discretion of the GWF. Turf-surfaced Road extending east from Connector Road to Mechanical Shed

Archaeological monitoring for this component should be at the discretion of the GWF. Gravel-surfaced Temporary Road for Construction and Temporary Yards

Gravel will be laid atop geo-textile fabric at original grade. No excavations will be needed for these temporary features and archaeological monitoring will not be needed.

Gravel-surfaced Temporary Connector Road

Gravel will be laid atop geo-textile fabric at original grade. No excavations will be needed for these temporary features and archaeological monitoring will not be needed.

Gravel-surfaced Temporary Parking Lot Entrances (3)

Gravel will be laid atop geo-textile fabric at original grade. No excavations will be needed for these temporary features and archaeological monitoring will not be needed.

Trunk-corridor of Buried Utilities along East Edge of Connector Road

Excavation of these parallel and adjacent trenches, along with the portion extending into the utility/mechanical shed, will need to be monitored by an archaeologist.

Buried Utility Corridor for Interpretive Structure

This is a large and deep corridor for utilities. A large farm complex covered portions of this area, but the extent of disturbance is unclear. Archaeological monitoring, then, will be needed during excavation of this utility corridor. Excavation of the corridor should be conducted in such a way as to allow the archaeological monitor to observe and document any cultural features that may still exist.

Buried Sewer Pipe

The trench for the buried sewer pipe will be the widest (10 feet) excavated during the proposed Phase I activities. Archaeological monitoring of trenching activities will be needed.

Gravel-surfaced Sewer Line Access Road

This gravel road is located within the previously disturbed quarry area. Archaeological monitoring, if needed, should be at the discretion of the GWF.

Sediment Traps (2)

These are located along the proposed Connector Road. The southern one is located in an area of previous disturbance and its construction does not need to be monitored by an archaeologist. The northern sediment trap is located in an area covered by the recent Phase I survey, which did not locate archaeological resources in this area. Given its rather large dimensions, however, (54.5' x 27'), archaeological monitoring is recommended during its construction.

Bioretention Areas (3)

Stepped excavations are needed to construct these bioretention areas. The southernmost one is located in an area of previous disturbance and does not need to be monitored. The two others are located along the western portion of the Connector Road. The NPS recommends the construction of these two bioretention areas be monitored by an archaeologist.

b. Stephen Spaulding, historic architecture: The Secretary of the Interior Standards provide clear guidance for the "reconstruction" of historic structures or substantial architectural features. Given the specific wording of the National Park Services' Conservation Easement, 2000, it is clear that the proposed building falls within the category of "landscape feature and interpretive device. Therefore I have restricted my review of the proposed undertaking to any impacts on the remaining foundation.

Recommendations: While most of the foundation has been lost or previously documented, the remaining is to be reused as a foundation or frost wall for the new structure. The exposure and preparation of the remaining foundation, prior and during rehabilitation should be accomplished with the technical support of and/or oversight of a stone mason experienced working with 18th materials, and with the support of an Historic Architect, to ensure the remaining foundation is not damaged.

5. Mitigations/Treatment Measures (in addition to measures stipulated in Section 4 above):

Measures to prevent or minimize loss or impairment of historic/prehistoric properties: (Remember that setting, location, and use may be relevant.)

(letters below correspond to those in Project Description, Section 2, above.)

a. an Interpretive Building (see Architectural Study; Interpretive Structure—including supplemental documents for Interpretive Structure listed above; Site Plans, C303): (1) Because the archaeological remains of Washington's house are fragmentary, it will be possible to auger down with "helical" pilings in the excavated and vacant parts of the site, and to also avoid (with the exception of one piling) the serpentine Civil War trench later dug through part of the house site. These vertical supports, each resembling a giant screw, will carry a system of concrete beams, all hovering just above the archaeological surface. Completely concealed from view, this system will carry the weight of the interpretive building, including its chimneys and new stone foundations where those do not touch the original, surviving foundations. (2) The interpretive structure's only contact with the original foundations is limited to the area of new stone courses in the stone-lined cellar, where masons will use modern sandstone blocks, of the same type, to bring the cellar walls up to the interpretive structure. The existing cellar walls will be preserved with minimal repointing (held well back from the surface of the stonework) as may be necessary for structural stability. (For consideration and consulting-engineer's conclusion that the original walls' are adequate for carrying the weight of the new stone above, see Interpretive Structure.) New stonework will be handdressed sandstone similar to the original. Mortar will be lime produced from oyster shells. (3) For the two proposed means of visual-access for those walls, while minimizing their exposure, see Architectural Study. Owing to a very dry soil, no ventilation is planned; however, a vapor-proof membrane will cover all the exposed grade in the north and south crawlspaces. In the cellar space, geo-textile fabric will be placed over the original floor level and about 12" of compacted soil placed on top. (4) To prevent inadvertent intrusion upon or damage to the 19th-century agricultural building, that structure will be surrounded by a temporary protection-fence for an estimated 2

years, (5) To protect archeological resources immediately surrounding the Washington house-site, and nearby—including the 19th-century icehouse foundation—during construction and ingress- and egress of equipment, layered buffers will be added in the form of a temporary work-yard and two temporary access-roads, as described in "j" and "k" below, (6) The new dry wells and French drains are all located in areas of previous archeological investigation.

- c. a Mechanical Shed (*Mechanical Shed*; *Site Plans*, C300, C305, L105; *Interpretive Structure*, SP1.1): The Mechanical Shed will be clad in rough-sawn vertical boards and battens stained "tree bark" (a gray-brown) to minimize visual intrusions. Additionally, the Mechanical Shed will be screened by the vegetative buffer shown on Site Plans, L105 and earmarked for the overall planting-proposal earmarked for a future review.
- **d.** a Maintenance and Operations Building (*M&O Building*; *Site Plans*, C307): (1) To avoid archeological resources, the location of the Maintenance and Operations Building was selected for its being subject to documented substantial and prior ground-disturbance (*Ground Disturbance*, pp. 5-8), and shifted from initially proposed locations in the archeologically un-surveyed, northwest corner of the property (*Environmental Assessment*, pp. 40, 43). (2) To minimize visual intrusions, the site now proposed was selected for its remote location—at the southern extreme of the property—and presence of existing vegetative screening.
- **e.** a system of stone-dust surfaced walks (*Site Plans*, C303-C304, L103-L104, L201, L501): (1) The surfacing of the walks will be colored brown to minimize visual intrusions. (2) At its north end, where the walks-system descends into the upper reaches of a ravine, the walk will follow the contours to avoid excavation for cuts. (3) To avoid archeological resources, the southern half of the walk-system was located in an area subject to documented substantial and prior ground-disturbance (*Ground Disturbance*, pp. 9-11). (4) To avoid the 19th-century agricultural building, the nearest segment of the walks-system will curve.
- f. an asphalt-surfaced connector road (Site Plans, C302-C307, C400-402, C405-C407): (1) To reduce visual effects, this road is intended to replace the existing, gravel-surfaced connector road, with an asphalt-surfaced connector road, the centerline of which is 175 feet further distant from the Washington House site, proposed interpretive structure, historic river bank, and Civil War artillery position than is the centerline of the current connector-road. Overall, the new connector road would be further from the riverbank at distances of 50-175 feet. (2) To avoid effects to archeological resources, the route of the road and its drainage swale were subject to a Phase I archeological survey (Stantec) and realigned from their original configuration. The road intrudes upon archaeological loci labelled 44ST00931 and 44ST00932. Site 44ST0931 is a historic locus dating to the mid to late nineteenth century. The Phase I survey identified its dimensions as 130 ft. north south by 70 east west. A small collection of 49 artifacts were recovered, mostly container glass mixed in with a few architectural objects. The Phase I report indicates that this collection is probably associated with the late nineteenth/early twentieth century agricultural buildings that were situated throughout this area. A Phase II evaluation has been undertaken and determined the site is not eligible for NRHP inclusion. Site 44ST0932 is a historic loci dating to the late-eighteenth century through the mid-nineteenth century. The artifact concentration measures 158 ft. northsouth by 105 ft. east-west. Four shovel tests were positive resulting in the recovery of 2 window glass fragments, 3 machine cut nails, 3 indeterminate nails, and a single rosehead nail. This locus may be related to 44ST0932. A Phase II archaeological study has been undertaken and determined

that this site is not eligible for NRHP inclusion. Please see the included report "Phase I Archaeological Survey, Metal Detector Survey, and Archaeological Evaluation of Two sites at Ferry Farm: A National Historic Landmark in Stafford County, Virginia". The Phase I survey located an additional site (44ST1197) recommended for National Register eligibility; the route of the road was reconfigured to avoid this resource.

- **g.** an asphalt-covered parking lot (*Site Plans*, C307): To avoid archeological resources, the location of the parking lot was selected for being subject to documented substantial and prior ground-disturbance (*Ground Disturbance*, pp. 5-8). To minimize visual intrusions, the same site was also selected for its remote location—at the southern extreme of the property—and presence of existing vegetative screening.
- h. an asphalt-covered emergency-exit road (*Site Plans*, C406, C306): To avoid effects to archeological resources, the route of the utility lines trunk-corridor—like the connector road it parallels—was subject to a Phase I archeological survey (Stantec). No potentially National Registereligible resources were located.
- **h.** a turf-surfaced road extending west from the Connector Road (*Site Plans*, C302): To avoid effects to archeological resources, the road will be made up of filter fabric sealing original grade. To avoid visual impacts the road will be covered in turf.
- i. a turf-surfaced road extending east from the Connector Road (*Site Plans*, C305): (1) To avoid effects to archeological resources, the road will be made up of filter fabric sealing original grade. (2) To avoid visual impacts the road will be covered in turf.
- **j.** a gravel-surfaced, temporary construction-yard and temporary yard access-road (*Interpretive Structure*, SP1.1): (1) The purpose of this temporary construction-yard and connector road is to create a physical, layered buffer and thus avoid effects to archeological resources by construction equipment and activity. (2) The road, yard, and the yard's surrounding fence will have a limited lifespan (about 2 years) to minimize visual effects. (3) The yard and road will be laid atop the original grade and separated from it by geo-textile filter fabric to enhance removal.
- **k.** a gravel-surfaced, temporary connector-road (*Site Plans*, C201): (1) The purpose of this temporary connector-road is to create a physical, layered buffer and thus avoid effects to archeological resources along projected ingress- and egress routes for heavy equipment. (2) The road will have a limited lifespan (about 2 years) to minimize visual effects. (3) Both will be laid atop the original grade and separated from it by geo-textile filter fabric to enhance removal.
- I. a trunk-corridor of buried utility lines extending along east edge of new connector road (*Site Plans*, C500—dark line along road—C501-C502, C505-C507): To avoid effects to archeological resources, the route of the utility lines trunk-corridor—like the route of the connector road that it parallels—was subject to a Phase I archeological survey (Stantec), and the original, proposed configuration was realigned. The road intrudes upon archaeological loci labelled 44ST00931 and 44ST00932. Site 44ST0931 is a historic locus dating to the mid to late nineteenth century. The Phase I survey identified its dimensions as 130 ft. north south by 70 east west. A small collection of 49 artifacts were recovered, mostly container glass mixed in with a few architectural objects. The Phase I report indicates that this collection is probably associated with the late nineteenth/early

twentieth century agricultural buildings that were situated throughout this area. A Phase II evaluation has been undertaken and determined the site is not eligible for NRHP inclusion. Site 44ST0932 is a historic loci dating to the late-eighteenth century through the mid-nineteenth century. The artifact concentration measures 158 ft. north-south by 105 ft. east-west. Four shovel tests were positive resulting in the recovery of 2 window glass fragments, 3 machine cut nails, 3 indeterminate nails, and a single rosehead nail. This locus may be related to 44ST0932. A Phase II archaeological study has been undertaken and determined that this site is not eligible for NRHP inclusion. Please see the included report "Phase I Archaeological Survey, Metal Detector Survey, and Archaeological Evaluation of Two sites at Ferry Farm: A National Historic Landmark in Stafford County, Virginia". Lastly, the Phase I survey located an additional site (44ST1197) recommended for National Register eligibility; the route of the utility corridor was reconfigured to avoid this resource.

- o. a corridor of buried utility lines to the interpretive structure (*Site Plans*, C503, C505, L103, L105): To minimize effects to archeological resources, the various utility lines in this corridor will occupy the same trench. To avoid archeological resources, the western half of the corridor was located in an area subject to documented substantial and prior ground-disturbance (*Ground Disturbance*, pp. 9-11). The Ferry Farm Archaeology Department will monitor the machine stripping of the corridor of the trench to subsoil and record any significant features. If intact significant archaeological features are encountered the Foundation will consult with the VDHR and NPS to determine what treatment is necessary.
- **p.** a buried sewer pipe (*Site Plans*, lower-left corner C500, C507-C 508): To avoid archeological resources, the location of the Maintenance and Operations Building was selected for being subject to documented substantial and prior ground-disturbance (*Ground Disturbance*, pp. 5-8).
- **r. two sediment traps (***Site Plans, C201-C202***):** To avoid archeological resources, the location of the southern sediment trap was located in an area of documented substantial and prior ground-disturbance (*Ground Disturbance*, pp. 5-8).

D. RECOMMENDED BY PARK SECTION 106 COORDINATOR:

Compliance Specialist:	
NHPA Specialist	
Noel Harrison	Date:
E. SUPERINTENDENT'S APPROVAL	
The proposed work conforms to the NPS Manager Management Guideline, and I have reviewed and a conditions noted in Section C of this form.	
	Signature
Superintendent:	Date:
Lucy Lawliss	



Looking northeast from above Washington House site and along existing connector road to State Route Three.



Looking north from Washington House site.



Looking southeast across existing connector-road (bordered by fence) and along proposed route of new connector.



Looking west, across Rappahannock River and into Fredericksburg, from above Washington House site.



Former gravel quarry--site of proposed Maintenance and Operations building--looking north towards Washington House site.



Ferry Farm (lawn through trees), looking southeast from Fredericksburg.