



FINDING OF NO SIGNIFICANT IMPACT

Millennium Area Headstone Removal Project – Special Use Permit

Arlington House, the Robert E. Lee Memorial George Washington Memorial Parkway, Virginia

As part of the proposed Millennium Area Headstone Removal Project, Arlington National Cemetery (ANC), a unit of the Arlington National Military Cemeteries (ANMC), with coordination from the United States Army Corps of Engineers (USACE), is seeking a Special Use Permit from the National Park Service (NPS) for the removal of headstones and subsequent stabilization of stream channels. Currently, there are approximately 1,200 headstones being used as stream stabilization within ANC and NPS-administered property. The project consists of headstone removal within approximately 1,400 linear feet (LF) of the stream in an eight-acre forested stream valley within ANC and NPS properties in Arlington, Virginia. In addition, after the headstones are removed, the stream banks will be stabilized in a manner that returns the stream into a more natural system. The project area extends from Ord and Weitzel Drive to the north and to Humphreys Drive to the southwest. Surrounding the area is the ANC maintenance facility and deciduous forest to the west; maintained cemetery to the north beyond Ord and Weitzel Drive; deciduous forest to the east and south; and the ANC Superintendent's House to the southwest. The project area includes one perennial stream (North Branch) and two intermittent tributary streams (Middle Branch and South Branch) that convey water flow generally north through the area.

The urgency for the removal is referenced in Army Direction 2010-04, *Enhancing the Operations and Oversight of the Army National Cemeteries Program*, which states that the newly appointed Executive Director's responsibilities include "...exercising authority, direction and control over all aspects of the Army National Military Cemeteries, and over the long-term development and the day-to-day administration and operations of ANC and the Soldiers' and Airmen's Home National Cemetery, including the immediate establishment of an accountability baseline for all gravesites and inurnment niches within the Army National Cemeteries and the promulgation of standards, policies and procedures that will maintain this baseline...". Although no gravesites are within the project area, it is a priority to also ensure accountability of all headstones; therefore, once they are removed from the site, ANC will ensure that all headstones are documented.

The NPS portion of the property, completely within ANC, is part of Arlington House, the Robert E. Lee Memorial, which is administered by the George Washington Memorial Parkway. The project takes place within what historically was part of the preserved old-growth forest or woodlands maintained by George Washington Parke Custis and son-in-law Robert E. Lee as part of the Arlington House plantation. The headstones from ANC to be removed were used for stream bank stabilization over approximately the past eighty years. The project area is split between the NPS, as a preserved portion of the Arlington Woods, and ANC Section 29, which will be the future site of the Millennium Expansion Project (Millennium Project).

The North Branch contains steep channel bed slopes with high banks in the upstream reach and low bank heights in the downstream reach. Areas of exposed and eroding banks exist in various locations with sediment deposition and constant channel migration. Concrete debris and about 164 headstones are found intermittently throughout the channel.

The Middle Branch contains extreme slopes in the upper portion of the channel and drains from the superintendent's house. A large portion of the Middle Branch channel is lined with concrete blocks and approximately 932 headstones that are currently stabilizing the channel throughout that reach. In addition, a downstream portion of the Middle Branch is covered by sediment. This portion will need to be excavated to remove the headstones that are buried beneath the channel. The project proposes to remove the headstones within the Middle Branch in a manner that minimizes the potential for erosion within the stream channel and

minimizes sediment loss from the project site. The South Branch is essentially intact and functional, but it does contain about 40 headstones that need to be removed.

The ANC is the lead Federal agency for this action. USACE Norfolk District provides project support to ANC on the project design and construction as well as the NEPA process. The NPS is a cooperating agency and has provided extensive support during the formulation of alternatives and plan selection. As administrators of the land within the cemetery, ANC and NPS will continue to work together on this and other projects to protect and restore the important natural and cultural resources of Arlington National Cemetery and NPS property within Section 29. The ANC Millennium Project is one such identified project and will be undertaken within proximity to the action with beneficial cumulative impacts, as described in the EA. In a letter dated October 3, 2012, NPS detailed the understood commitment by ANC as part of the Millennium Project to collaborate with NPS to ensure long-term protection of natural and cultural resources associated with stream channels in Section 29, particularly the control of storm water runoff from the ANC parking lot behind the NPS Old Administration Building. ANC provided written concurrence in a letter dated October 25, 2012 confirming this commitment to a continued collaborative approach with NPS.

Coordination has occurred with the following agencies: Arlington County, Virginia Department of Historic Resources (VDHR), NPS, U.S. Fish and Wildlife Service (USFWS), Virginia Department of Conservation and Recreation (VDCR), and Virginia Department of Game and Inland Fisheries (VDGIF).

After consultation with ANC and USACE, review of the EA and receipt of written concurrence on details of the Millennium Project, the NPS, in accordance with 43 CFR 46.320, is adopting this EA and making its decision to issue a Special Use Permit for removal of approximately 1,200 headstones being currently used as stream stabilization within ANC and NPS-administered property while providing stabilization measures detailed in the EA. This EA fulfills the requirements of NEPA, the applicable regulations, and it meets the policies set forth in the NPS's Director's Order 12, *Conservation Planning, Environmental Impact Analysis and Decision-Making*, and accompanying Handbook.

SELECTED ALTERNATIVE

The NPS accepts ANC's preferred alternative (Alternative D) as its selected alternative for implementation. This alternative was developed in close consultation with NPS. The selected alternative will allow the NPS to grant ANC a Special Use Permit to remove headstones while providing channel stabilization. Under the selected alternative, the entire channel will be lined with biodegradable soil erosion control matting and the cross-vane structures will be placed on top of the matting. At certain intervals, these cross-vane structures will be constructed of rounded river cobble to form a V-shaped "dam" within the stream to slow water velocities, help trap sediment and direct flows to the middle of the stream. Cross-vane rock structures were chosen instead of check dams or gabions because it avoids the need to cut into the bank and minimizes soil disturbance. This alternative will also minimize grading (graded area not to exceed two feet back from top of stream banks) in the project area, reducing impacts to both cultural and natural resources.

The staging and storage area for the project will primarily be in the existing ANC maintenance yard, entirely on ANC-administered property, in order to minimize impacts to the woodland environment of the project area. Equipment to be used includes two-wheeled skid steers, one small-wheeled crane, and/or one small-wheeled forklift. This equipment will stay within designated Limits of Disturbance (LOD). The total potential temporary impact within the LOD is approximately 40,100 square feet (0.94 acres). The LOD will be 15-feet on either side of the stream centerline. However, it is anticipated a much smaller area will be disturbed. Many portions of the North Branch and South Branch are anticipated to have the headstones removed manually with a wheelbarrow. Two ingress/egress paths located adjacent to the maintenance yard were identified in the EA. In order to minimize impacts, construction equipment will avoid stream banks and vegetation where possible as well as use protective matting to protect sensitive habitat.

The South Branch contains the least number of headstones. These headstones will be removed both by hand and hand-carried from the brick-lined drain headwaters located near the NPS Administrative buildings and parking area to the appropriate storage and disposal area. A wheelbarrow will be used to haul the headstones

from the brick drain to the NPS parking area, where they can be loaded into a utility vehicle and taken to the ANC maintenance yard. The use of the wheelbarrows will minimize impacts to the wooded area as well as the culturally significant area east of the South Branch. The headstones in the North Branch will be removed by both hand (for those intermittent scattered headstones) and small equipment to pick up and load the headstones as necessary.

Demolition of some erosion control structures in the Middle Branch, which employ both headstones and concrete slabs, will require the use of small construction equipment as described above. In order to replace the depth of stone removed and help stabilize the streambed, a sand/cobble mixture will be placed at the bottom of the channel in those areas that currently have concrete slabs lining the bottom. Sedimentation has buried a portion of the channel in the Middle Branch. This channel will need to be excavated in order to remove the headstones buried beneath the sediment. Extra material (i.e., previously excavated soils and/or approved imported river cobblestones) may be needed to bring the bed level to preexisting conditions. Any dead trees fallen across the stream channel will be removed but only to the extent needed to remove the headstones. Portions of trees that need to be removed will be cut out and placed in the surrounding woods for ecological purposes. All other portions of any downed trees will remain in place.

OTHER ALTERNATIVES CONSIDERED

In addition to the NPS selected alternative, the EA also analyzed a no action alternative. Inclusion of the no action alternative is prescribed by applicable implementing regulations as the benchmark against which federal actions are evaluated. Under the no action alternative, no Special Use Permit would be issued to ANC and the headstones would stay in place.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

As was done in the ANC EA, the NPS is required to identify the Environmentally Preferable Alternative in their NEPA documents. The NPS, in accordance with DOI and NPS policies and guidance and CEQ's *NEPA's Forty Most Asked Questions*, defines it as the one that "causes the least damage to biological and physical environment." It is the alternative "which best protects, preserves, and enhances historic, cultural and natural resources" (Q6a). After a thorough review of the EA, the NPS identified the No Action Alternative (Alternative A) to be the Environmentally Preferable Alternative. Alternative A is environmentally preferable because there would be no new impacts, and therefore, would best protect park resources and values. However, the no action alternative does not meet the overall purpose and need of the project since it would not allow for the removal of headstones on NPS property. While the selected alternative is not the environmentally preferable alternative, it was chosen because it meets the purpose and need of the project while avoiding and mitigating environmental impacts to the greatest extent possible. In addition, the selected alternative will have long-term beneficial impacts as it returns the stream channel to a more natural condition.

MITIGATION MEASURES

The NPS has collaborated with ANC and USACE to develop environmental commitments that avoid, minimize, or mitigate impacts associated with the implementation of the selected alternative. Prior to NPS issuance of the Special Use Permit, mitigations will be refined and incorporated into a work plan for the removal of headstones and channel stabilization to be approved by NPS. Required mitigation elements to be included in the Special Use Permit and work plan include:

Soils and Hydrology

- Sedimentation has buried a portion of the channel in the Middle Branch that will need to be excavated in order to remove the headstones buried beneath the sediment. If all the digging and headstone removal lowers the bed from what it was before the project, river cobble may be used as additional fill to bring the bed level to preexisting conditions.
- All areas where headstones are removed will receive either biodegradable soil erosion control matting or native seeding (as appropriate).
- Excavation or construction will not occur during precipitation events.

- Any soil removed from the stream banks will be stored in close proximity to the project site (on ANC property).
- Native seed mix (NPS approved list) will be used to revegetate any impacted areas not within the stream.
- Biodegradable soil erosion control matting will be used within the stream in all impacted areas.
- Silt barriers will be installed on park land in a manner directed by NPS to minimize associated impacts.
- Detailed plans for equipment types and construction methods to be used delineated by stream section, working to the largest extent possible to minimize use of heavy machinery.

Wildlife Resources

- Construction personnel will be mindful of all wildlife and take practical measures to avoid impacts to any wildlife in the project area as specified in the NPS Special Use Permit. The permit will include language and instructions for the preservation of Northern Two-lined Salamanders (*Eurycea bislineata*) encountered during construction.
- In order to preserve habitat benefits of fallen trees, those that have fallen across the stream will be left in place and moved only to the degree necessary to access the headstones in the channel. The rest of the tree will be left in place and the portion that is cut out will be left in the wooded area for ecological benefits.

Vegetation

- Trees over six inches in diameter that will be either removed or trimmed will be identified prior to construction, with a replacement plan developed per NPS standards.
- All construction equipment will be power-washed and inspected for invasive plant material and seed before being transported to the work site to reduce the introduction of invasive species.
- Disturbed areas will be re-seeded with an NPS approved native seed mix.

Cultural Resources

- The contractor must provide clear delineation of paths of ingress and egress to minimize impacts to both cultural and natural resources, adhering to particular areas of avoidance identified by NPS staff.
- Grading will be minimized and not exceed two feet back from the top of stream banks in the project area, reducing impacts to both cultural and natural resources.
- On NPS land, access, removal and stabilization activities should be confined to the streambed, and where necessary, to the maximum of two feet from the top of stream banks. Equipment for use in removal and stabilization activities shall be limited in size in order to operate within these defined boundaries.
- The contractor will be made aware of the cultural significance of the surrounding area. If during construction archeological resources are discovered, all work in the immediate vicinity of the discovery will be halted until the resources can be identified and documented and an appropriate mitigation strategy developed. Consultation with the NPS, the NPS Regional Archeologist, and the Virginia SHPO will be conducted to ensure that the protection of resources is addressed.

The NPS will include other conditions in the Special Use Permit as needed and the NPS will implement an appropriate level of monitoring throughout the construction process to help ensure that protective measures are being properly carried out and are achieving their intended results. The Special Use Permit will also outline ANC's future responsibilities concerning overall maintenance of the site and sediment removal as needed.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

The NPS has determined through consultation with ANC, the NHPA Section 106 process, and review of the EA, that the selected alternative can be implemented without significant adverse effects. As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS: As described in the EA, several resource areas will experience both beneficial and adverse impacts from the proposed actions; however, on balance, no significant impacts were identified that would require analysis in an EIS.

Soils - Construction activities will use best management practices (BMPs) in order to reduce to a minor level or eliminate adverse effects on soils. The limits of disturbance have been set to reasonable levels and any disturbance will be repaired, thus limiting adverse impacts to short-term. Removal of soil within a portion of the Middle Branch is needed to improve long-term functioning of the channel by decreasing the velocity of the water flow through the channel. This action will, however, result in long-term beneficial impacts to soils due to decreased erosion within the stream channel.

Topography and Floodplains - The selected alternative will have long-term beneficial impacts to topography and floodplains because the stream channels will be engineered in a manner that reduces sedimentation and erosion of stream banks. This action will preserve surrounding topography for the long-term and will improve the condition and functioning of the main branch floodplain to which the Middle, South, and North Branches feed by controlling sedimentation.

Hydrology and Water Quality - The selected alternative will have short-term adverse impacts to hydrology and water quality; however, the long-term impacts are beneficial to these topics. Shaping and stabilization of the channels and insertion of cross-vane structures will slow the velocity of water, allow removal of sediment, and result in reduced channel scouring.

Groundwater - Groundwater is not used as a drinking water supply in the Arlington area, yet the selected alternative should improve the quality and timing of groundwater recharge in the long-term. Less sedimentation, slower stream velocity and the removal of the impervious headstone material will allow for longer recharge times over a broader area.

Wetlands - The project will have short-term minor adverse impacts to the riverine wetlands associated with the creek from the disturbance caused by the activity. However, with the removal of the headstones and treatment in this project, as well as the cumulative benefits of future projects, the impacts will be beneficial as the ecological functions and values will be returned to a more natural condition. Long-term impacts will be beneficial as ecological functions and values will be returned to a more natural condition.

Vegetation - Removal of woody species as part of the selected alternative will be mitigated by replacement of all basal area for trees above six inches diameter at breast height (DBH). BMPs in the project area are going to limit damage of vegetation. Overland movement of machinery will be on matting where practicable and wheelbarrows will be used where machinery is unnecessary. The actions associated with this project will result in short-term and long-term minor adverse impacts.

Wildlife - The selected alternative includes activities within the forested study area that will temporarily disturb any wildlife present. Construction activities will lead to short-term increased human presence and noise, which will most likely cause wildlife to temporarily move out of the project area. Construction personnel will be mindful of all wildlife, take practical measures to avoid impacts to any wildlife in the project area. Short-term minor adverse impacts to wildlife are expected from the selected alternative.

Archeological Resources - Overall, the selected alternative will not result in significant impacts to archeological resources. Phase I and II testing was conducted in 1998 throughout Section 29, which identified an archeological complex (designated site 44AR0032) made up of six distinct loci and a number of non-sites finds in the immediate vicinity of the project area. Plans for removal of headstones and subsequent stream

stabilization have been developed with the goal of minimizing impacts to identified archeological resources as a primary consideration. The majority of the proposed project will occur in areas previously disturbed during the installation of the headstone-drain features with slight grading where necessary for stabilization that will not exceed two feet into the slope of the stream bank. Access to the areas where headstone removal will take place will be restricted to the streambed to further reduce the potential to impact intact archeological resources. Archeological monitoring may also be implemented during construction. Any impacts that may occur to archeological resources will likely be negligible and will not impact the overall integrity of the archeological resources of the park.

Historic Structures and Districts - The headstones and concrete debris present in the streambeds have been determined ineligible for listing in the National Register of Historic Places in consultation with the VDHR (letter of June 2012), although NPS has required that the current positioning and original installation techniques of the stones be documented before they are removed.

Cultural Landscapes – As stated above, in consultation with the Virginia VDHR, the headstones and concrete debris present in the streambeds have been determined ineligible for listing in the National Register of Historic Places and thus, do not contribute to the cultural landscape of Arlington House. However, because of the presence of construction equipment and personnel, there will be minor to negligible short-term adverse impacts to cultural landscapes as a result of implementing the selected alternative.

Aesthetics - The selected alternative will result in long-term beneficial impacts to the visual and aesthetic environment of the project area by improving the channels to a more stable flow and natural appearance. There will also be minor long-term beneficial impacts to the aesthetics of the area as a result of removing the headstones that have been placed in the stream channel and along the banks.

Degree of effect on public health and safety: Implementation of the selected alternative will not adversely affect public health and safety. During the construction phase, park visitor safety will not be impacted. The project area is a small area that is rarely, if ever, frequented by visitors. Any location where construction-related activities take place will be closed to the public and a safe detour will be provided.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas: No prime farmlands, wild and scenic rivers, ecologically critical areas, sites sacred to American Indians, or other significant ethnographic resources occur within or adjacent to the Project Area, and none will be impacted by the actions associated with this alternative. The project will take place in proximity to Arlington House, the Robert E. Lee Memorial, which is listed on the National Register of Historic Places, but the removal of the headstones and subsequent stream stabilization will not impact the historic property or its associated landscape. The headstones and associated debris were determined, in consultation with the Virginia Department of Historic Resources, to be non-contributing elements, the removal of which will have no adverse effect on these or any historic properties.

As described in the EA, the project will have short-term minor adverse impacts to the riverine wetlands associated with the creek from the disturbance caused by the activity. However, with the removal of the headstones and treatment in this project, as well as the cumulative benefits of future projects, the impacts will be beneficial as the ecological functions and values will be returned to a more natural condition. In accordance with NPS DO-77-1, a NPS Wetlands Statement of Findings was determined to not be required based on an exemption detailed in Section 4.2.1h, as actions are designed to restore degraded wetland and stream habitats and less than .25 acres of natural wetlands will be affected. Consultation has been made with the NPS Water Resource Division and they concur on this determination.

Degree to which effects on the quality of the human environment are likely to be highly controversial: There were no highly controversial effects identified during either preparation of the EA or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain, or involve unique or unknown risks: There were no highly uncertain or unique or unknown risks identified during preparation of the EA or the public review period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The selected alternative neither establishes a NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually but cumulatively significant impacts: The Implementation of the selected alternative will have no significant cumulative impacts. As described in the EA, past, present and future actions and projects within the project area that could affect soils, topography and drainage, surface water, vegetation, wildlife resources, cultural resources, transportation, stormwater systems, noise and aesthetics include, the ANC Millennium Project and the Joint Base Myer-Henderson Hall Stormwater Retention System (JGM-HH Stormwater) project.

Impacts to soils in or around the project area from the implementation of the Millennium Project and JBM-HH Stormwater project would likely result in short-term minor adverse impacts and long-term beneficial impacts. When combined with the beneficial long-term impacts of the selected alternative, cumulative impacts on soils will be short-term minor adverse and long-term beneficial.

Impacts on topography and drainage from these cumulative actions will result in long-term beneficial impacts to the area from stream restoration and improved stormwater management. When combined with long-term beneficial impacts of the selected alternative due to decreased velocity in the stormwater drainage channel, cumulative impacts on topography and drainage will be long-term beneficial.

Projects that could affect surface water resources include the implementation of the Millennium Project and JBM-HH Stormwater project. Impacts on surface water resources from these cumulative actions will result in long-term beneficial impacts to the area due to stream restoration and decreased overland stormwater drainage. When combined with long-term beneficial impacts of the selected alternative due to decreased sedimentation, cumulative impacts on surface water resources will be long-term beneficial.

Impacts on wetlands from the implementation of the Millennium Project will result in beneficial impacts as a result of improved stormwater controls. When combined with the short-term minor impacts and long-term beneficial impacts of the selected alternative, cumulative impacts on wetlands will be long-term and beneficial.

The only other project that could affect vegetation is the implementation of the Millennium Project, which will result in minor adverse impacts to vegetation immediately upstream from project area. These impacts are to be minimized as much as possible with design techniques that minimize loss of large trees and constrain disturbance to the stream channel, as well as by additional plantings of new trees in the final design. When combined with short-term minor impacts of the selected alternative that will be mitigated by seeding and minimized construction impacts, there will be long-term minor cumulative impacts on vegetation.

Projects that could affect wildlife resources include the implementation of the Millennium Project and JBM-HH Stormwater project, including minor short-term impacts during construction of each project. When combined with short-term minor impacts of the selected alternative, cumulative impacts on wildlife resources will be short-term and minor.

Projects that could affect cultural resources include the implementation of the Millennium Project and JBM-HH Stormwater project. Impacts on cultural resources from these cumulative actions should only result in negligible impacts, with effects of the Millennium Project still under consideration. When combined with negligible impacts of the selected alternative due to mitigations restricting area of disturbance, there will be no adverse cumulative impacts on cultural resources.

Aesthetics could be affected beneficially through the implementation of the Millennium Project as a result of stream restoration and improved area for burials and inurnments. When combined with the beneficial impacts of the selected alternative due to headstone removal, cumulative impacts on aesthetics will be long-term beneficial.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or

historical resources: The selected alternative will result in short-term minor adverse impacts to cultural resources as a result of presence of construction like activity and the temporary disturbance of the stream corridor. These impacts, however, are temporary and once finished, this wooded area and stream corridor will return to its natural state. In addition, it was determined under Section 106 of the National Historic Preservation Act that the selected alternative will result in a determination of “no adverse effect” to any historic property listed or eligible for listing in the National Register of Historic Places in accordance with Section 106 of the National Historic Preservation Act, a finding that was concurred by the Virginia Department of Historic Resources in the attached letter dated June 12, 2012. The project will take place in proximity to Arlington House, the Robert E. Lee Memorial, which is listed on the National Register of Historic Places, but the removal of the headstones and subsequent stream stabilization, will not impact the historic structure or its associated landscape since the headstones have been identified as non-contributing elements to the landscape in consultation with the VDHR. In addition, plans for removal of headstones and subsequent stream stabilization have been developed with the goal of minimizing impacts to archeological resources as a primary consideration, as the project will take place in the immediate vicinity of an identified archeological site determined eligible for listing on the NRHP. The undertaking has very limited potential to impact intact archeological resources. Although the selected alternative will occur in the vicinity of an identified NHPA eligible archeological site (44AR0032), implementation of avoidance strategies will ensure that the site or other intact archeological resources in the vicinity are not impacted. The majority of the proposed project will occur in areas largely previously disturbed during the installation of the headstone-drain features, with slight grading where necessary for stabilization that will not exceed two feet into the slope of the stream bank. Access to the areas where headstone removal will take place will be restricted to the streambed to further reduce the potential to impact intact archeological resources. The contractor undertaking the project will be made aware of the cultural significance of the surrounding area, and if any archaeological items are found during construction, a certified professional archaeologist will be on-call to make a site visit to determine the appropriate path forward.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: No impacts to any state- or federally-listed species are anticipated. No state or federally recognized threatened or endangered species have been identified within the project area. The proposed activities will be located entirely within previously disturbed or maintained landscapes. ANC completed the Section 7 consultation for the Endangered Species Act (ESA) and the Bald and Golden Eagle Protection Act with the USFWS. A biological assessment was prepared which concluded that ANC Headstone Removal Project will have “no effect” on ESA listed species or critical habitat and a “Not Likely to Adversely Affect” determination for bald eagles in this area.

Whether the action threatens a violation of federal, state, or local environmental protection law: No federal, state, or local environmental protection laws will be violated.

PUBLIC INVOLVEMENT

The EA was made available for a 30-day public review and comment period from October 3, 2012 through November 2, 2012. The EA was announced on the ANC News and Updates page, with documents and more detail posted on the USACE of Engineers Norfolk website. Comments were received from Arlington County as well as the Commonwealth of Virginia. Those comments did not change the selected alternative nor the impacts associated with the proposed action. Relevant agency correspondences are attached.

CONCLUSION

The NPS has selected Alternative D for implementation. In light of the impacts described in the 2012 Millennium Area Headstone Removal Project EA and related documentation; the NHPA Section 106 process; consultation with USACE and ANC; in compliance with NPS and DOI laws, regulations and guidance; and in consideration of agency comments, we conclude the impacts that will result from the selected alternative will not have a significant effect on the human environment nor will impair park resources and values (see attached). Negative environmental impacts that will occur are negligible to minor in intensity. There are no significant impacts on and affected park resources. The proposed action will not cause highly uncertain or controversial impacts, unique or unknown risks, or significant cumulative effects. Implementation of the selected alternative will not violate any federal, state, or local environmental protection law.

The selected alternative does not constitute a major federal action that significantly affects the quality of the human environment. Based on the foregoing, an EIS is not required for this action, and thus will not be prepared. This is a finding of no significant impact.

Recommended: Adam Badowski for 1-8-13

Jon G. James
Acting Superintendent
George Washington Memorial Parkway

Date

Approved: Lisa A Mendelson-Telmuni 1-11-13

for Stephen Whitesell
Regional Director
National Capital Region

Date

APPENDIX A-

NON-IMPAIRMENT DETERMINATION

NPS Management Policies 2006, Section 1.7, explains the prohibition on impairment of park resources and values: “While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the National Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.”

According to NPS *Management Policies, 2006*, Section 1.4.5, *What Constitutes Impairment of Park Resources and Values*, impairment is “an impact that, in the professional judgment of the responsible National Park Service Manager, will harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values.” It also states that an impact to any park resource or value may, but does not necessarily, constitute impairment. An impact will be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the park’s establishing legislation;
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or,
- identified in the park’s management plan or other relevant NPS planning documents as being of significance.

An impact will be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated. Per section 1.4.6 of *Management Policies 2006*, park resources and values that may be impaired include:

- The park’s scenery, natural and historic objects, and wildlife, and the processes and condition that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structure, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park’s role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and,
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Section 1.4.7 of *Management Policies 2006* states, “[i]n making a determination of whether there will be an impairment, an NPS decision must make use of his or her professional judgment. This means that the decision-maker must consider any environmental assessments or environmental impact statements required by the National Environmental Policy Act of 1969 (NEPA); consultations required under Section 106 of the National Historic Preservation Act (NHPA); relevant scientific and scholarly studies; advice or insights offered by subject matter experts and others who have relevant knowledge or experience; and the results of civic engagement and public involvement activities relating to the decision.

NPS *Management Policies 2006* further define “professional judgment” as “a decision or opinion that is shaped by study and analysis and full consideration of all the relevant facts, and that takes into account the decision-maker’s education, training, and experience; advice or insights offered by subject matter experts and others who have relevant knowledge and experience; good science and scholarship; and, whenever appropriate, the results of civic engagement and public involvement activities relating to the decision.”

PURPOSE AND SIGNIFICANCE OF ARLINGTON HOUSE, THE ROBERT E. LEE MEMORIAL

Establishment - Arlington House, the Robert E. Lee Memorial (Arlington House), a unit of the National Park System administered by George Washington Memorial Parkway, was established for preserving the historic resources and cultural landscape associated with the unit. Arlington House was transferred by executive order from the War Department to the NPS under Executive Order No. 6166, dated June 10, 1933, as interpreted by Executive Order No. 6228 dated July 28, 1933, the Custis-Lee Mansion and about three acres of land were transferred from the War Department to the U.S. Department of the Interior on August 10, 1933. The NPS, an agency of the U.S. Department of the Interior has administered the site and exhibited Arlington House as a historic house and memorial to Robert E. Lee from August 10, 1933 to date.

In addition, the Section 29 area of ANC includes 12.5 acres of NPS-administered land known as “Arlington Woods”, consisting of a wooded ravine that is the remaining portion of the historic estate’s forested grounds at Arlington House. This area was part of the historic forest of the Custis-Lee estate and was transferred from ANC to NPS in 1975 to maintain a historic setting in perpetuity for Arlington House.

Purpose - The purpose of Arlington House is to honor and pay tribute to Robert E. Lee and the Virginia family of which he was a part and recognize his military accomplishments, his personal character, and his contributions to reuniting the nation after the Civil War.

Significance - The principal significance of Arlington House, as defined by congressional legislation, is in its association with Robert E. Lee--hence its legislated designation “Arlington House, The Robert E. Lee Memorial.” It is also significant for its prior association with George Washington Parke Custis, step-grandson and adopted son of George Washington, and as an outstanding example of early Greek revival architecture.

Arlington House is a 15-acre site managed by the NPS that is located within Arlington National Cemetery, a 600-plus acre cemetery managed by the US Army and located in Arlington County Virginia directly across the Potomac River from Washington, D.C. The site is a memorial to Robert E. Lee, and serves as a museum exhibiting decorative arts; archives; music; gardens; manuscript collections; Civil War memorabilia; 18th and 19th century furnishings and relics of the Robert E. Lee and Custis families and the slaves who also lived on the property. These objects can be found throughout the site: on the grounds, in the house itself, in the potting shed/museum building and in the slave quarters.

Most relevant to the Millennium Area Headstone removal project is the 12.5-acre section of Arlington House known as Arlington Woods. Arlington Woods is described as having steep slopes, a high potential for archeological resources pertaining to Arlington House, and forest cover that dates to the Lee occupancy and contributes significantly to the historic setting of Arlington House. As a result of The Millennium Project in 2008, 12 acres (of the original 22.5 acres under NPS administration since 1975) of woods from the western edge of the woodland was transferred to Arlington Cemetery. With this transfer, NPS retained about half of the remaining woods adjacent to the central core of the property. Many of the oldest trees in Arlington Woods were identified by the 1998 Garrow and Associates Cultural Investigation. The report indicated that the mixed hardwood forest of the ravine between the house and administration building was where the oldest trees in the surrounding area were found. A fallen hickory tree was dated to approximately 1775. Some of these trees, considered “witness trees,” (trees that were standing and “witnessed” the historic time period) still stand today. The overall integrity of the woods from the Custis-Lee period decreased with Civil War occupation; however, what is left of the woods does retain integrity.

Implementation of the selected alternative will not result in impairment of park resources or values whose conservation is (1) necessary to fulfill specific purposes identified in the enabling legislation of the park, (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or (3) identified in the management plan of the park or other relevant NPS planning documents as being of significance. This determination on impairment has been prepared for the selected alternative described in Chapter 2 of this EA. An impairment determination is made for all resource impact topics analyzed for the selected alternative. An impairment determination is not made for visitor use and experience or Park management and operations because impairment findings relate back to park resources and values, and these impact areas are not generally

considered to be park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values.

The NPS has determined implementation of the selected alternative will not result in impairment of park resources and values of Arlington House, the Robert E. Lee Memorial. This determination is based on a thorough analysis of the environmental impacts described in this EA, the public comments received, and the application of the provisions of the NPS Management Policies 2006, the NPS concluded the implementation of the selected alternative will not result in impairment of any of the resources and values of Arlington House, the Robert E. Lee. While the selected alternative will result in short-term to long-term beneficial and negligible to moderate adverse impacts on some of the park's resources, these impacts are not key to the overall natural or cultural resources of the park, nor would these impacts hamper opportunities to enjoy the park. The impacts of this headstone removal and the surrounding landscape will be in keeping with the NPS management policies and goals, as well as with the purpose and significance of Arlington House. The following provides rationale why the proposed actions will not impair the following resources.

Soils - The selected alternative will not result in an impairment of soils. Construction activities will use Best Management Practices (BMPs) in order to reduce to a minor level or eliminate adverse effects on soils. The limits of disturbance have been set to reasonable levels and any disturbance would be repaired, thus limiting adverse impacts here to the short-term. The selected alternative will improve the stability and drainage of the stream, resulting in long-term beneficial impacts to soils. The selected alternative will satisfy the purpose of Arlington House and the integrity of Arlington Woods by avoiding impacts to soil, protecting the potential archeological resources of the area and the health of dependent vegetation.

Topography and Floodplains - The selected alternative will not result in an impairment of topography and floodplains. There will be long-term beneficial effects of the alternative because the stream channels will be engineered in a manner that reduces sedimentation and erosion of stream banks. The topography of Arlington Woods, including the steep slopes and stream channels, are significant components to the integrity of Arlington Woods and purpose of the site. They will not be harmed by the selected alternative. The selected alternative will preserve surrounding topography for the long-term and will improve the condition and functioning of the main branch floodplain to which the middle, south and north branches feed by controlling sedimentation.

Hydrology, Water Quality and Groundwater - The selected alternative will not result in an impairment of hydrology, water quality or groundwater. Though short-term adverse impacts to hydrology and water quality are expected, the long-term impacts are beneficial to these topics. Shaping and stabilizing the channels and the insertion of cross-vane structures will slow the velocity of water, increase removal of sediment, and result in less channel scouring. Groundwater is not used as a drinking water supply in the Arlington area, yet the project should improve the long-term quality and timing of groundwater. Less sedimentation, slower velocity, and the removal of the impervious headstone material will allow for longer recharge times over a broader area. Overall, the selected alternative will restore hydrologic functions of Arlington Woods to a more natural condition and protect the integrity of the landscape, therefore helping to achieve the purpose and significance of the park.

Wetlands - The selected alternative will not result in an impairment of wetlands. There will be short term adverse impacts to less than 0.1 acre of wetlands associated with the Middle Branch channel. Long-term impacts will be avoided by the implementation of BMPs and the rehabilitation of the temporarily impacted wetland. Over the long-term, there will be no loss of wetland area or functions.

Vegetation - The selected alternative will not result in an impairment of vegetation. Removal of woody species will be mitigated by replacement of all basal area for trees above six inches diameter at breast height (DBH). BMPs in the project area are going to limit damage of vegetation. Overland movement of machinery will be on matting where practicable, and wheelbarrows will be used where machinery is unnecessary. As vegetation in Arlington Woods contributes significantly to the historic setting of Arlington House, it is a resource necessary to fulfill the purposes of the park. The selected alternative will result in some impacts to

existing vegetation, but these impacts will be short-term and will not harm the long-term viability of vegetation in the project area.

Archeological Resources - Overall, the selected alternative will not result in impairment to any archeological resources. Phase I and II testing was conducted in 1998 throughout Section 29, which identified an archeological complex (designated site 44AR0032) made up of six distinct loci and a number of non-sites finds in the immediate vicinity of the project area. Plans for removal of headstones and subsequent stream stabilization have been developed with the goal of minimizing impacts to identified archeological resources as a primary consideration. The majority of the proposed project will occur in areas largely previously disturbed during the installation of the headstone-drain features, with slight grading where necessary for stabilization that will not exceed two feet into the slope of the stream bank. Access to the areas where headstone removal will take place will be restricted to the streambed to further reduce the potential to impact intact archeological resources. Archeological monitoring may also be implemented during construction. Any impacts that may occur to archeological resources will be negligible, and will not impact the overall integrity of the archeological resources of the park, and the park will continue to be able to fulfill the specific purposes for which it was created.

Historic Structures and Districts - There will be no impairment to any historic structures or districts as a result of implementing the selected alternative. The headstones and concrete debris present in the streambeds have been determined ineligible for listing in the National Register of Historic Places in consultation with the Virginia Department of Historic Resources (letter of June 2012), although NPS has required that the current positioning and original installation techniques of the stones be documented before they are removed. The elements to be removed are not necessary to fulfill specific purposes identified in the enabling legislation of the park, nor are they key to the natural or cultural integrity of the park. This undertaking will not inhibit opportunities for enjoyment of the park.

Cultural Landscapes - There will be no impairment to any cultural landscapes as a result of implementing the selected alternative. Enabling legislation for the Arlington House site directed the mansion be restored "...to the condition in which it existed immediately prior to the Civil War..." (Public Resolution 74, 68th Congress). The wooded area behind Arlington House has been identified (Arlington House CLR 2001) as a contributing feature to the identified period of significance of the portion of Section 29 that was transferred from the U.S. Army to the NPS to provide, in part, an "appropriate setting" for the mansion. The headstones and concrete debris present in the streambeds have been determined ineligible for listing in the National Register of Historic Places in consultation with the Virginia Department of Historic Resources and do not contribute to the cultural landscape of Arlington House. The elements to be removed are not necessary to fulfill specific purposes identified in the enabling legislation of the park, nor are they key to the natural or cultural integrity of the park. This undertaking will not inhibit opportunities for enjoyment of the park.

Aesthetics - The selected alternative will not result in an impairment of aesthetics. As a visual backdrop for Arlington House, the aesthetics of Arlington Woods contributes significantly to the park's historic setting and is necessary to fulfill the purposes of the park. The project will improve the visual and aesthetic environment of the project area by improving the channels to a more stable flow and appearance. There will be a long-term beneficial impact on the visual and aesthetic value of the area by removing the headstones that have been placed in the stream channel and along the banks. Impacts to aesthetics would be minor, long-term, and beneficial.