



FINDING OF NO SIGNIFICANT IMPACT

National Mall Turf and Soil Reconstruction

National Mall and Memorial Parks

The National Park Service (NPS) proposes to reconstruct the turf and soil within the area of the National Mall in Washington, D.C., between the Washington Monument to the west and the U.S. Capitol Grounds to the east. The goal of the project is to achieve a more sustainable civic space by implementing strategies to alleviate the current compaction of soil and worn turf, to minimize future compaction, and to ensure proper drainage and stormwater management in a manner that respects the character of the National Mall.

The project area includes some of the oldest parkland in the national park system and is surrounded by prominent buildings, museums, and monuments, including the Washington Monument, Smithsonian Institution museums, and the U.S. Capitol. As a popular national tourist destination and one of the most used public areas in the District of Columbia, it hosts national celebrations, First Amendment demonstrations, special events, and recreation, with nearly 25 million visits annually. Because of intense use, the project area has deteriorated: the soil is heavily compacted, the turf is worn away, the irrigation systems are compromised, and the drainage is inadequate. Action is needed to alleviate the intense soil compaction and enable proper air, water, and nutrient infiltration into the soil. Reducing soil compaction will also improve site drainage, stormwater management, and the growing conditions for the new turf. To support the new turf system, the current irrigation system needs to be replaced with a more durable system that can withstand the heavy use.

As part of this effort, the NPS completed an environmental assessment (EA) that analyzed the impacts, or environmental consequences, of two alternatives on a variety of resources areas. The two alternatives presented in the EA include the action and no action alternatives. The action alternative described proposes improvements to redefine the turf panel edges, reconstruct the soil profile, and provide a comprehensive irrigation system for the turf panels in the project area. Within the action alternative, three curb and gutter options are presented that explore optional edge conditions for the turf panels and the transition between the walkways and turf; three options are proposed for reconstruction of the soil that explore different materials and design; and several irrigation systems are proposed that address water distribution, water supply, and water storage. In each of the irrigation options, subsurface drainage lines would be installed to collect water from potential sources into a subsurface storage system with and a subsurface pumping station employed for water distribution. In conjunction with the action alternative, the NPS will develop an operations and maintenance manual which will detail the care of the turf and the impact levels at which the turf system can be maintained. The operations and maintenance manual will be based on the design limitations of the turf system.

This EA was prepared in accordance with National Environmental Policy Act of 1969, as amended (NEPA), its implementing regulations by the Council on Environmental Quality (40 CFR 1500-1508), and Director's Order #12, Conservation Planning, Environmental Impact Analysis and Decision-Making, and accompanying Handbook (DO-12). It was published on November 2, 2010 and the associated public comment period extended from that date through

December 7, 2010. In coordination with this EA, NPS conducted consultation under Section 106 of the National Historic Preservation Act (NHPA) and determined that the project would have no adverse effect on historic properties. The District of Columbia State Historic Preservation Office (DC SHPO) concurred with this determination in its letter dated December 22, 2010.

Selected Alternative

The selected alternative is composed of multiple proposed improvements to rehabilitate the turf, alleviate soil compaction, and provide a comprehensive irrigation system for the turf panels in the project area. Based on the analysis presented in the EA, the NPS has selected Alternative 2 (Option A2, Option B2, Option C4, Option D1, and Option E2) for implementation. The selected alternative includes the following components:

CURB AND GUTTER OPTION A2

In order to protect the new turf, soil, and irrigation systems, a curb will be installed around the perimeter of the lawn panels. Option A2 incorporates a 15-foot radius at the corners in order to protect the turf from the turning movements of pedestrians and maintenance vehicles. The width and profile of the curb and gutter in this option represent the minimum dimensions (18 inches wide and 2 inches tall) required to collect water effectively and keep gravel from the adjacent walks from migrating into the turf. This design will also provide the best spatial definition around the turf panels while maintaining universal accessibility to the lawn panels without the need for the ramps that would be required in Option A1. In addition, Option A2 is the easiest option to maintain and provides the most flexibility for implementation of sidewalk improvements as part of the National Mall Plan.

SOIL PROFILE OPTION B2

This option includes the removal of up to 12 inches of existing soil which will be replaced with a 6" layer of coarse concrete sand and topsoil mix graded to achieve a cross slope to encourage positive drainage. The incorporation of sand into the soil profile will have better compaction resistance and greater moisture permeability than Option B1, and will require less engineering and maintenance than Option B3. In addition, this profile will allow the turf to recover from short-term impacts more easily and will be able to accommodate tent stakes during special events.

IRRIGATION SYSTEM – WATER DISTRIBUTION OPTION C4

Option C4 will include an automatic irrigation system with deeply installed horizontal piping running in three rows along the east-west edges and center axis of the turf panels. This Option was selected because it provides the most efficient coverage while minimizing the risks to public safety and the irrigation system itself.

IRRIGATION SYSTEM – WATER SUPPLY OPTION D1

Option D1, on-site drainage capture, was chosen because it utilizes a well-known standard practice for water collection, though the system could be expanded at a later date to incorporate off-site drainage capture as shown in Option D2 should that become desirable. This option will integrate relatively minor topographical changes within each turf panel to crown the panels about the east-west centerline in order to achieve positive drainage and prevent ponding. The curbs of each turf panel will be designed to collect stormwater in catchment basins connected by underground pipes to the underground storage system. The storage system is compatible with the turf, soil, and irrigation systems and does not require the construction of additional off-site pipes or other infrastructure. In addition, since Option D1 is essentially self-contained, it will not require the complex agreements with adjacent property owners or other agencies that are necessary with Option D2.

IRRIGATION SYSTEM – WATER STORAGE OPTION E2

A compact box cistern configuration was selected as the preferred water storage system because it is a concentrated system with the flexibility to grow, easily scaled to a variety of sizes and shapes, with the option of increasing its size at a later date. The cistern will be made of concrete since it is durable over time and is a cost-effective material. The use of precast, off-the-shelf materials, such as precast box culverts, will be used as much as possible since they are more cost-effective than custom cast-in-place construction.

Other Alternatives Considered

The EA also analyzed the no action alternative and several other options to rehabilitate the turf, alleviate soil compaction, and provide a comprehensive irrigation system for the turf panels in the project area.

The no action alternative represents a continuation of the existing conditions, operations, and maintenance of the turf and soil and a continuation of current practices regulating visitor use within the project area. Under the no action alternative, the turf panels would continue to have no physical or visual separation between the turf and walkways and would continue to be subject to substantial wear at the corners. The current soil profile of sand and silt would remain unchanged in its current condition, compacted from intense visitor use to a density comparable to an impervious surface, resulting in a worn and distressed appearance of the turf panels.

The existing irrigation system would also remain inoperable, consisting of gear-driven sprinklers that draw water from potable water sources located throughout the project area via shallow subsurface water supply lines that have been compromised by the weight of vehicles and punctured by tent stakes used for special events. The NPS would continue to irrigate manually as needed and when feasible. The turf panels would continue to be maintained seasonally according to the current schedule for aeration, fertilization, and overseeding. From mid-September to end of March, the NPS would continue to close half the project area at a time (east and west of 7th Street NW) to maintain and regenerate the turf. As needed, depressions and humps would be filled with topsoil.

The no action alternative was dismissed from consideration because it would not fulfill the purpose and need of the project, nor would it meet any of the project objectives including improving the visual quality of the Mall, accommodating high levels of use in a manner that sustains the character and integrity of the Mall, resulting in a more sustainable and healthier urban ecosystem that implements best management practices, maximizes the sites potential for stormwater management, minimizes reliance on public water sources, and addresses the various soil and landscape treatment conditions in a manner that is integrated and complementary to anticipated types and levels of Park use.

CURB OPTIONS

These options utilize generally the same approach as the selected alternative, installing a distinct curb around each turf panel to ensure proper drainage, prevent ponding, and capture water for reuse within the project area. All options would also create a clear visual distinction between the turf panels and the adjacent sidewalks and would better protect the soils and subsurface irrigation system. Where the options differ from the selected alternative is principally with the profile of the curbing and the configuration of the panel corners.

Option A1 – This option would restore the current condition of a 90-degree corner to the turf panels which was first introduced in the 1970’s Skidmore, Owings, & Merrill Plan for the National Mall. An 18-inch-wide “block” profile granite curb and gutter system would be installed around each turf panel and the curb would be raised by 6 inches, as shown in Figure 2.1 of the

EA. In order to comply with the Americans with Disabilities Act (ADA) and the Architectural Barriers and Accessibility Standards (ABAAS), there would be several hard surface ramps between the walkways and the turf panels at the accessibility points. These ramps would be 6 feet long and spaced approximately 50 feet to 100 feet apart.

This option was not selected because the ramps necessary to maintain accessibility would impact the visual character of the turf panels. The raised curbs in this option would also cause a greater tripping hazard and public safety concern than the selected alternative. In addition, the 90-degree corners would not align with current use patterns and would result social trails.

Option A3 – This option would introduce 25-foot radius corners on each of the turf panel corners to protect and reduce the heavily worn edges. An 18-inch-wide “V”-shaped granite curb and gutter system would be installed around each turf panel that would collect and conduct water to drain inlets, as shown in Figure 2.3 of the EA. The turf panels would not be raised so accessibility and maintenance access would be continual around the turf panels. This option was not selected because of the visual impact such a corner configuration would have.

SOIL PROFILE OPTIONS

Option B1 – In this option, illustrated in Figure 2.4 of the EA, the top 12 inches of existing soil would be re-engineered and the soil below would be fractured to a depth of 18 to 24 inches. Stable compost would be added to the existing soil. The grade would be reset to achieve a cross slope on the turf panels to encourage positive drainage. Option B1 was not selected, however, because the selected alternative would have better soil compaction resistance and greater permeability of soil relative to this option.

Option B3 – In this option, illustrated in Figure 2.6 of the EA, up to 20 to 26 inches of soil would be removed from the site. The new cross section of soil would consist of sand soil which is used for professional sport fields (with a mix of clay/silt content and organic matter) installed to a depth of 12 to 18 inches. An impervious tray of bentonite clay topped with an aggregate that houses the drain lines would facilitate moisture retention, distribute water storage, and create soil that would support turf panels most similar to professional sports fields or golf course greens. The grade would be reset to achieve a cross slope on the turf panels to encourage positive drainage. This option was not selected because it would require more maintenance than the selected alternative.

IRRIGATION SYSTEM OPTIONS

Irrigation describes the application of water to soil to assist the vegetative health of turf and trees in conditions with disturbed soils and during periods of inadequate rainfall. Irrigation systems rely on several components to work in tandem such as drainage, water supply, and water storage to achieve successful water distribution across a given area.

Within this project, several irrigation systems are proposed that address water distribution (Options C1 through C4), water supply (Options D1 and D2), and water storage (Options E1 and E2). In each option, 4-inch-diameter perforated subsurface drainage lines would be installed in the new soil profiles to transport water that infiltrates through the turf panels into a subsurface water storage system. A subsurface pump station would enable the water to be discharged out of the storage system for distribution when irrigation is needed. The subsurface pump would be built beneath an existing sidewalk, located and designed in such a manner as to minimize any visual impacts associated with the associated access hatch.

WATER DISTRIBUTION

Several options are proposed that rely on either manual or automatic water distribution systems, or a combination of both. Figure 2.7 of the EA delineates the water distribution options.

Option C1 – In this manual irrigation system, a single row of quick couplers would be installed at grade down the center of the turf panels along the east-west axis. This would be a pressurized piping system. Option C1 was dismissed because its layout does not effectively or efficiently cover the entire turf panel.

Option C2 – An automatic, high-pressure sprinkler system would be installed at the edges of the turf panels along the east-west axis. These gear-driven rotary sprinklers would be set at grade, emerge out of the ground, spray a distance of approximately 80 to 90 feet, and then retract into the ground. These sprinklers would operate at high pressures and would operate almost exclusively at night. Option C2 was dismissed because the high-pressure and large-volume spray would pose a risk to public safety and maintenance staff.

Option C3 – A combination of a manual and automatic irrigation system would be used that includes automatic sprinklers down the edges of the turf panels along the east-west axis and a manual arrangement of quick couplers down the center of the turf panels at grade. Option C3 was dismissed because its layout does not effectively or efficiently cover the entire turf panel.

WATER SUPPLY

Option D2 (Off-Site Capture) – Water would be collected in buildings adjacent to the project area from either runoff from the roofs of large buildings (such as the Department of Agriculture, Smithsonian Institution, and the National Gallery of Art East and West Buildings) or from deep basements of certain buildings or tunnels surrounding the Mall. The latter method, known as “dewatering,” is possible because the Mall is located at a low level in an area that was originally marshland and the water table is high enough that in a number of locations continuous pumping and discharge into storm drains/sewers must occur in order to use these areas for other purposes. In all of the off-site capture scenarios, new stormwater drain lines would need to be installed in the project area. Option D2 was not selected because it would require additional off-site construction of pipes or other infrastructure outside of the project area as well as complex agreements with adjacent property owners or other agencies regarding the capture of their water.

WATER STORAGE

Each water storage option would accommodate one million gallons (1MG); a volume that project engineers have determined would adequately serve the project area. Both options would provide an underground pump station and large-capacity subsurface storage areas constructed beneath the walkways next to the lawn panels at 4th Street and 7th Street as illustrated in Figure 2.8 of the EA.

Option E1 – The subsurface water storage system would be laid out end-to-end and installed in a linear configuration using pre-fabricated concrete pipes as cisterns beneath the north-south walkways. This option was not selected because it has less flexibility and is less cost effective than the selected alternative.

ALTERNATIVES CONSIDERED BUT DISMISSED

There were several other alternatives and options of alternatives considered but rejected and therefore not carried forward for further analysis because they were determined to be unreasonable, had technical or logistic problems, or greater environmental impacts than similar options included in the analysis. Several water supply options were considered, such as the use of on-site wells and the Potomac River, but were dismissed because of the capacity and feasibility of using these sources. Various water storage options were considered but dismissed due to cost or concern about visual impacts. Water distribution systems that were not located deeper than four feet below ground surface were dismissed due to the likely damage that would occur from tent stakes used during special events.

The Environmentally Preferable Alternative

The NPS is required to identify the environmentally preferred alternative in its NEPA document for public review and comment. The NPS, in accordance with the Department of the Interior policies contained in the Departmental Manual (516 DM4.10) and the Council on Environmental Quality's (CEQ) NEPA's Forty Most Asked Questions, defines the environmentally preferred alternative 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). The NPS has evaluated the impacts resulting from the different alternatives and has determined that the selected alternative best meets the conditions that will qualify it as the environmentally preferable alternative.

Under the selected alternative, curb and gutter Option A2 would best minimize compaction of soil and degradation of turf by providing an effective border around the turf panels that greatly reduces gravel migration and social trails on the turf panels. This option is also the most visually compatible with the project area.

The soil profile Option B2 and water distribution Option C4 are the environmentally preferable options because they are the most efficient options that require the least maintenance. In addition, the soil profile option provides the best soil compaction resistance and the greatest soil permeability and the water distribution option poses the fewest risks to public safety.

Water supply Options D1 and D2 both utilize non-potable water sources which are equally sustainable. However, D1 uses on-site groundwater capture which is more environmentally preferable because it would not require pumping or the installation of a conveyance infrastructure from adjacent buildings. Water storage Options E1 and E2 are equally preferable from an environmental perspective because both require a large underground area for installation and can be adapted to a variety of sizes. Both can be expanded over time and are durable and cost effective.

Implementation of these options is preferable over the no action alternative because the options discussed here best preserve the existing natural and cultural features in the project area and enhance visitor use and experience, visual resources, soils, vegetation, and stormwater management. The environmentally preferable option is also the NPS selected alternative.

Mitigation Measures

The NPS places a strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the following protective measures will be implemented as part of the selected action alternative. The NPS will implement an appropriate level of monitoring throughout the construction process to help ensure that protective measures are being properly implemented and to achieve their intended results. The following table outlines appropriate mitigations that will be employed to minimize impacts to park resources.

Mitigation Measures of the Selected Alternative	
Resource Area	Mitigation Measures
Visitor Use and Experience	Public information will be made available on the Park website and on signs in the Park to inform visitors of temporary closures of portions of resources within the project area.
	Every attempt will be made to time construction activity so it does not coincide with major events that occur on the National Mall or in the project area.
	Interpretation and education information will be added on site to notify visitors of the project and the effects on natural resources and the NPS tenets of sustainability.
	Construction will be phased so that approximately half of the project area will be continuously available.
Public Safety	Construction workers and employees will follow an approved health and safety plan which incorporates all applicable regulations; as a precaution, NPS will test the soil for contaminants prior to removal and reuse, and/or disposal.
	Barriers and signs will be used around construction sites to divert the public away from potentially dangerous situations.
	Public announcements will be made on the Park website and in the media to alert the public to the construction schedule and locations.
Park Operations and Event Management	An operations and maintenance manual will be created that details the care of the turf and the impact levels at which the turf system can be maintained. This manual will be based on the design limitations of the turf system.
Cultural Resources	NPS will complete the recommended additional geoarcheological investigations and continue to consult with the DC SHPO regarding the results of those investigations.
	Ongoing review with regulatory agencies within the Monumental Core (DC SHPO, NCPC, and CFA) within the design development and Section 106 process will ensure that the proposed actions blend as harmoniously as possible with the existing scale, context, and landscape in the project area. In particular, consultation will continue with the DC SHPO regarding the appropriate treatment of the smaller sidewalks associated with the SOM plan.
Visual/Aesthetic Resources	Every attempt will be made to time construction activity so it does not coincide with major events that occur on the National Mall or in the project area, thus reducing visual impacts associated with closures of portions of the project area or character-defining resources within it.
	During construction, visual screening may be used to shield equipment where appropriate and possible.
Soils	During construction, exposed soils will be covered with plastic sheeting, jute matting, erosion netting, straw, or other suitable cover material to prevent soil erosion and movement during rain or wind events.
	Erosion containment controls such as silt fencing and sediment traps (e.g., hay bales) will be used to contain sediment onsite.
	Best management practices for erosion and sediment control will be employed during and after construction, including stabilization and revegetation after construction is completed.
	Replacement soil would be brought in from outside of the Park, in accordance with NPS policy.
	Existing soil would need to be removed from the National Mall site and disposed of in an environmentally sympathetic fashion with the potential for reuse.

Why the Selected Alternative will not have a Significant Effect on the Human Environment

The NPS has determined that the action alternative with selected options can be implemented with no 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: Visitor use and experience, public health and safety, park management and operations, utilities and infrastructure, soils, vegetation, visual resources, and cultural resources will experience both beneficial and adverse impacts as a result of implementing the selected alternative; however, no significant impacts were identified that will require analysis in an EIS.

There will be long-term overall beneficial impacts to visitor use and experience resulting from the proposed actions. The new curbing would enhance the overall appearance of the lawn in the project area by creating a clear visual separation between the lawn panels and the adjacent sidewalks thereby deterring the creation of social trails. As identified in the EA, the soil profile and irrigation options would improve the soils in the project area, alleviating compaction and contributing to the health of the turf, resulting in long-term beneficial impacts to visitor experience. Minor adverse impacts to visitor use and experience would cease after construction is complete.

Option A2 will have long-term negligible impacts to public safety. Since soil profile options and irrigation system components are located mainly underground, implementation of B2, D1, and E2 will have no effect on public safety. Although Option C4 would be above ground, the automatic sprinklers will not be strong enough to inflict injury and will only be utilized on an as needed basis at night resulting in no effect on public safety.

The proposed actions will introduce new curbs, soil profiles, and a new irrigation system resulting in increases in Park maintenance responsibilities and operating costs to maintain the new components. However, increases in Park operating costs would be offset by using captured water instead of potable water for site irrigation. The implementation of water supply or water storage options D1 and E2 will have beneficial impacts on Park management and operations. Implementation of curb option A2, soil profile option B2, or water distribution option C4 will have a long-term minor adverse impact. The implementation of the operations and maintenance manual will result in long-term beneficial impacts due to a reduction in the intensity of Park maintenance required following special events for the restoration of the project area.

All options will result in a long-term beneficial impact on the city's stormwater/combined sewer system and would be in keeping with the long-term control plan for reducing overflows of the combined sewer system into the river. Overall, there will be net long-term beneficial impacts to utilities and infrastructure as a result of the proposed actions.

The proposed curb and gutter, water supply, and water storage options will all result in short-term minor adverse impacts to soils in the areas where construction occurs. However, these options in combination with the proposed soil profile option will ultimately result in long-term benefits to soil resources by reversing compaction, amending the soils to better support the turf grass and infiltrate stormwater, and helping to deter the creation of new social trails.

The proposed curb and gutter, soil profile, and irrigation system actions will have short-term adverse impacts to vegetation during the construction period. However, there will be long-term beneficial impacts to vegetation as a result of improved soil conditions and irrigation system.

The proposed actions will introduce curb and gutter profiles that will more clearly differentiate the turf panels and walkways. In addition, there will be long-term beneficial impacts to visual resources within the project area as a result of the implementation of the proposed soil profile reconstruction as it will alleviate the effects of soil compaction to support a healthier, more visually appealing turf panel.

The proposed curb and gutter, soil profile, and irrigation system will all have long-term beneficial impacts to the Mall as a cultural landscape and to the historic resources surrounding it. The fundamental cultural and symbolic value of the Mall is its character as a greensward bordered by monumental buildings lying on the great axis between the U.S. Capitol and Lincoln Memorial. Although the configuration of the curbs and gutters, the soil profile, and the (hidden) irrigation system is not determined by historic precedent, the overall impact that these features will have in "greening" the Mall and improving the visual definition of its basic design layout will result in a significant impact.

A range of ground-disturbing activities associated with the selected alternative could result in adverse impacts to archeological resources; however, the presence of archeological resources is speculative at this time. Should such resources be discovered, the NPS will mitigate any impacts to archeological resources through completion of a detailed geoarcheological study and through on-going Section 106 consultation with the DC SHPO.

The degree to which the proposed action affects public health or safety: Although the installation of a new irrigation system including automatic sprinklers throughout the project area could pose a potential tripping hazard, the irrigation system would only be used on an as needed basis and at night when it is less likely that there will be visitors, resulting in long-term negligible adverse impacts to public safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, wetlands, prime farmlands, wild and scenic rivers, or ecologically critical areas: No wetlands, 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 area is within the 100-year floodplain. However, a floodplain statement of finding, as mandated by DO-77-2, is not necessary for this project because the proposed actions would not affect floodplain functions or values, flood water flows, or involve construction of structures that could be affected by flooding. Consequently, floodplains were dismissed as an impact topic.

Historic or Cultural Resources

A multitude of cultural resources are located within the project area or adjacent to it and have been included in the defined Area of Potential Effect (APE)¹, ranging from cultural landscapes, individually listed historic properties, monuments and memorials, historic districts, and statues. They are enumerated in chapter three of the EA. Of major concern is the Mall itself, which has been documented both as a historic site and a contributing element of a historic structure (the L'Enfant Plan) for the National Register of Historic Places, and as a cultural landscape. However, the proposed actions will have long-term beneficial impacts on these resources and through consultation with the DC SHPO, in accordance with Section 106 of the National Historic Preservation Act; the selected alternative will have no adverse effect for the first phase of project implementation.

Degree to which effects on the quality of the human environment are likely to be highly controversial: No highly controversial effects in terms of scientific uncertainties as a result of reconstruction of the turf and soil on the National Mall were identified during the preparation of the EA or the public comment period. In addition, adverse impacts to historic resources, views, and vistas have been thoroughly discussed during numerous agency and public meetings, and mitigations provided to minimize adverse effects related to the perception of those effects have been articulated in the EA.

¹ The APE that has been proposed is larger than the limits of construction, i.e. the turf panels of the Mall. It corresponds to the Mall, which is defined as an open space surrounded and defined by adjacent buildings and associated views and vistas. The boundaries of the APE have been drawn at the line of 16th Street NW across the Washington Monument grounds on the west, the western terrace of the U.S. Capitol on the east, Independence Avenue SW and Maryland Avenue SW plus the line of its continuation northeast toward the Capitol on the south, and Constitution Avenue NW and Pennsylvania Avenue NW plus the line of its continuation to the southeast toward the Capitol on the north. Figure 3.10 in the EA shows the APE.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: No highly uncertain, unique, or unknown risks were identified during either preparation of the EA or the public comment 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. While the selected alternative does require new construction on the National Mall, this project was borne out of the necessity to alleviate the compaction of soil and worn turf and to improve site drainage, stormwater management, and the overall condition of the turf in a manner that respects the character of the National Mall. The proposed reconstruction does not come from the desire to introduce new structures on the National Mall. In addition, the selected alternative was designed in a way to minimize adverse effects to the maximum extent possible which is consistent with other planned or ongoing projects in the study area.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: Implementation of the selected alternative will have no significant cumulative impacts. As described in the EA, future projects within the project area that could affect these resource areas include: perimeter security upgrades; implementation of the National Mall Plan; the construction of new museums and memorials such as the National Museum of African American History and Culture, the Martin Luther King, Jr., Memorial, the Dwight D. Eisenhower Memorial, and the American Veterans Disabled for Life Memorial; and civil works projects such as the Potomac Park Levee Project, the Lincoln Memorial Reflecting Pool Rehabilitation, Constitution Avenue Street Improvements, Madison Drive Streetscape Improvements, and the Jefferson Memorial Seawall Rehabilitation.

There will be long-term beneficial cumulative impacts to visitor use and experience resulting from increased visitor opportunities. However, ongoing maintenance, construction, and closures of certain areas will have short-term minor and negligible impacts to visitor use. The proposed improvements and construction will result in short-term minor adverse impacts to public safety because of possible construction related incidents. The overall cumulative impacts to public safety from the proposed projects will be long-term beneficial because of security improvements and improved walking surfaces.

There will be long-term minor adverse impacts on park management and operations resulting from increased maintenance requirements associated with the subsurface pumping station. However, there will be long-term beneficial cumulative impacts to utilities and infrastructure as the proposed construction activities will utilize Leadership in Energy and Environmental Design (LEED) techniques. There will be long-term beneficial cumulative impacts to soil resources and vegetation as a result of the proposed actions improvements to soil irrigation, aeration, and resistance to compaction.

There will be long-term beneficial cumulative impacts to visual resources associated with the proposed actions. However, there will be short-term moderate adverse cumulative impacts to visual resources depending on the duration and extent of construction caused by the proposed actions. In addition, there will be long term beneficial impacts to cultural resources from the proposed projects some actions will benefit the cultural landscape. Because there is no anticipated impact to archeological resources, it would not contribute to the overall cumulative impact on archeological resources.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places (NRHP) or may cause loss or destruction of significant scientific, cultural, or historical resources: As articulated in the EA, the project area is itself a historic resource, and it is adjacent to a multitude of historic resources and objects that are listed on or eligible for the NRHP. As stated above, the impacts to these resources are predominantly long-term beneficial. All adverse impacts to historic properties, including NRHP resources, can be mitigated to the minor or negligible level. No destruction of significant scientific, cultural, or historical resources will be caused by the action. It is possible archeological sites may be exposed during construction, but any impacts to these as yet undiscovered resources will be mitigated by a program of archeological documentation during construction.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: As described in the EA, because of the urban nature of the site and the fact that the proposed activities will be located entirely within previously disturbed or maintained landscapes, no impacts to any state- or federally-listed species are expected from implementation of the selected alternative. On June 2, 2010, the NPS sent letters to both the U.S. Fish and Wildlife Service (FWS) and the District Department of the Environment (DDOE) regarding the potential for any state- or federally-listed species that could be affected by the proposal. In its letter dated October 12, 2010, DDOE responded that, according to data derived from the District's Wildlife Action Plan 2006 (WAP), no species of greatest conservation need inhabit, nor are likely to inhabit, the proposed project area. Additionally, according to the WAP, the project areas do not harbor any species listed under the federal Endangered Species Act, nor are any such species likely to occur on any of the sites described by the NPS due to lack of suitable habitats and insufficient nearby habitat preferences. In its letter dated December 29, 2010, FWS confirmed that, except for transient individuals, no proposed or federally listed endangered or threatened species are known to exist within the project impact area, and no further consultation with FWS is required.

Whether the action threatens a violation of federal, state, or local environmental protection law: The selected alternative violates no federal, state, or local environmental protection laws. The National Mall Turf and Soil Reconstruction will be consistent with all laws, regulations and requirements.

Public Involvement

In addition to internal and agency scoping, public scoping for the National Mall Turf and Soil Reconstruction EA began on March 9, 2010, and concluded on April 8, 2010. During this time, a public scoping meeting was held on March 9, 2010, at the NCR Headquarters at 1100 Ohio Drive SW, Washington, D.C., 20242. Notice of the public meeting was posted on the NPS Planning, Environment, and Public Comment website (PEPC). Approximately 22 people attended the meeting, including representatives from the National Coalition to Save Our Mall, the Smithsonian Institution, Advisory Council on Historic Preservation (ACHP), and the National Capital Planning Commission (NCPC). The purpose of this meeting was to solicit public input on the purpose, need, and objectives of the project, major issues, and potential alternatives. Public comments were solicited on this scoping effort by mail, email, and online via the PEPC website.

Throughout the Section 106 review process the NPS has consulted with the ACHP, the DC SHPO, and representatives of state and local governments, agencies, organizations, and the general public.

The National Mall Turf and Soil Reconstruction EA was made available for public review and comment on November 2, 2010. A notice was sent via e-mail to those who were on the original public scoping mailing list and to those that were added after the March 2010 public scoping

meeting to let them know of its availability. The NPS mailed copies of the EA to federal and District offices, to public members who requested copies, and hard copies of the EA were available for public review at the Martin Luther King Jr. Memorial Library, the Southwest Branch Library (900 Wesley Place SW, Washington, D.C. 20024) and the Southeast Branch Library (403 7th Street SE, Washington, D.C. 20003). A digital copy of the EA was also placed on the PEPC website at: <http://parkplanning.nps.gov/NAMA>.

The comment period on this EA concluded on December 7, 2010. During the public scoping comment period, the NPS received 11 pieces of correspondence by mail, e-mail and through the Planning, Environment, and Public Comment website (<http://parkplanning.nps.gov/>) from private citizens, members of the turf grass industry, university researchers, the National Turfgrass Federation, Inc. (NTF), NCPC, and the Environmental Protection Agency (EPA). This correspondence consisted of:

- five comments in support of the project or a particular NPS-preferred option (NCPC, NTF, industry, universities, and a private citizen);
- one endorsement of option B3, the re-engineered sand soil with clay profile, with acknowledgement that B2, the NPS preferred soil-sand mixed profile, would be viable with the appropriate amount and type of sand (NTF);
- one comment that was editorial and not relevant to this proposal (private citizen);
- fifteen recommendations regarding materials, design, or turf maintenance procedures (NTF, NCPC, EPA, industry, and researchers), which will be considered during the ongoing design process; and
- four comments that required minor additions or clarifications to the EA (EPA), which are addressed in the attached errata.

No changes to the selected alternative or the impact analysis were made as a result of public comments.

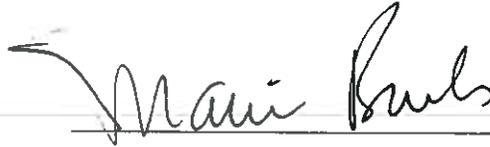
Conclusion

The NPS has selected Alternative 2 for implementation. The impacts that will result from the selected alternative will not impair any park resource or values necessary to the NPS.

The selected alternative does not constitute an action that normally requires preparation of an EIS. The selected alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible to moderate in intensity. There are no significant impacts on visitor use and experience, public safety, park management and operations, utilities and infrastructure, soils, vegetation, visual resources, cultural resources, historic structures and districts, cultural landscapes, and archaeology. 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:



Maria Burks
Acting Superintendent,
National Mall and Memorial Parks

1/7/11

Date

Approved:



Margaret O'Dell
Regional Director
National Capital Region

1/21/11

Date

**NATIONAL MALL TURF AND SOIL RECONSTRUCTION
NATIONAL MALL AND MEMORIAL PARKS
ENVIRONMENTAL ASSESSMENT – ERRATA**

The following changes have been made to the National Mall Turf and Soil Reconstruction Environmental Assessment (EA), released October 2010, based on ongoing project review and comments submitted to NPS during the public comment period. This errata, attached to the Finding of No Significant Impact (FONSI), provides clarification where needed and corrects minor statements of fact. Additions to the text are underlined and deletions are marked by strikeout.

CHAPTER 1: PURPOSE OF AND NEED FOR ACTION

1. PURPOSE OF AND NEED FOR ACTION, PAGE 1-1:

The first paragraph of this section is clarified to address NPS's intent to both alleviate the existing soil compaction and to minimize future soil compaction.

...The goal of the project is to achieve a more sustainable civic space by implementing strategies and guidelines to alleviate the current compaction of soil and worn turf, to minimize future compaction, and to ensure proper drainage and stormwater management in a manner that respects the character of the National Mall.

2. APPLICABLE FEDERAL LAWS AND REGULATIONS, PAGE 1-8:

Information pertaining to the Migratory Bird Treaty Act was omitted from the original EA. A description is provided below.

MIGRATORY BIRD TREATY ACT OF 1918, AS AMENDED 1989

The original 1918 Migratory Bird Treaty Act implemented a 1916 treaty between the U.S. and Great Britain (for Canada) for the protection of migratory birds. Later amendments implemented treaties between the U.S. and Mexico, the U.S. and Japan, and the U.S. and the Soviet Union (now Russia). Specific provisions in the statute include a Federal prohibition to “pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention... for the protection of migratory birds... or any part, nest, or egg of any such bird” (16 U.S.C. 703). This applies to birds included in international conventions between the U.S. and Great Britain, the U.S. and Mexico, the U.S. and Japan, and the U.S. and Russia.

The responsibilities of Federal agencies to protect migratory birds are set forth in Executive Order (EO) 13186. U.S. Fish and Wildlife Service (FWS) is the lead agency for migratory birds. The Directors of the NPS and the FWS signed a Memorandum of Understanding to Promote the

Conservation of Migratory Birds (MOU) on April 12, 2010, in order to meet the requirements under section 3 of Executive Order 13186 concerning the responsibilities of Federal agencies to protect migratory birds. The MOU specifies procedures that the superintendent of a NPS unit, or a designated representative of the superintendent, will conduct prior to starting any activity that is likely to result in unintentional take.

3. EXECUTIVE ORDERS AND DIRECTOR'S ORDERS AND MANUALS, PAGE 1-11:

The referenced guideline for natural resource management is no longer applicable. There is no replacement Director's Order at this time. The subheading is therefore revised to cite a reference manual that provides interim guidance.

~~NATURAL RESOURCES MANAGEMENT GUIDELINE, NPS 77~~

NATURAL RESOURCE MANAGEMENT REFERENCE MANUAL #77

4. IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS, PAGE 1-22:

Additional information is provided to address compliance with the Migratory Bird Treaty Act and the related MOU with FWS.

WILDLIFE

The project area is in a relatively urban setting, surrounded by manicured lawns and landscaping. It is adjacent to heavily used roads with attendant vehicle noise. As a result, wildlife in the project area is limited to adapted urban species, such as raccoons, waterfowl, squirrels, songbirds, and an occasional hawk using the larger trees to perch. No nesting of raptors is known or expected. Although construction-related activities may temporarily displace wildlife from the area, the proposed action would not result in greater than negligible effects on wildlife or wildlife habitat. Effects to nesting habitat are not anticipated, but should this change, NPS and its contractors would comply with the specifications of the MOU to Promote the Conservation of Migratory Birds. Due to the area's urban context, level of human activity, implementation of the MOU, and minimal habitat value, this topic was dismissed from detailed analysis.

CHAPTER 2: ALTERNATIVES

5. ALTERNATIVE 2, THE ACTION ALTERNATIVE, SOIL PROFILE OPTIONS, PAGE 2-5:

All three figures in this section are revised to eliminate the plastic soil stabilizing product, consistent with the text. This product, which was considered then dismissed as impractical and environmentally undesirable during internal review, was erroneously included in the figures.

Figures 2.4, 2.5, and 2.6

Figure 2.4 - Option B1 Soil Fracturing

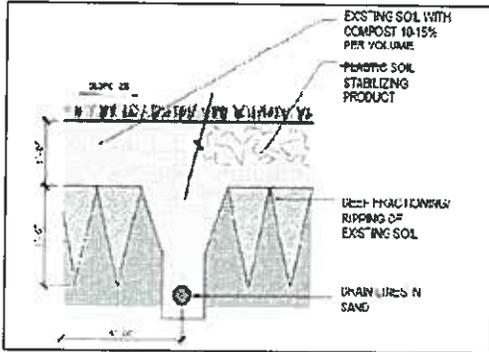


Figure 2.5 - Option B2 Existing Soil with Additional Sand

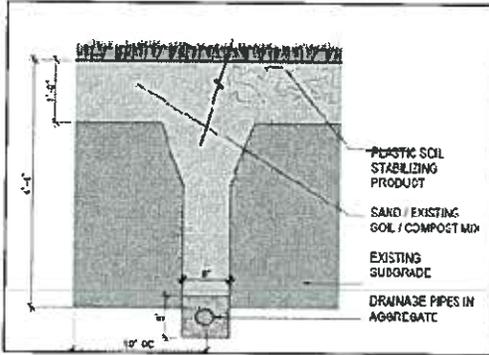
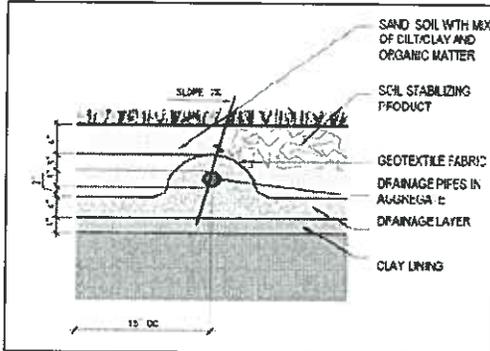


Figure 2.6 - Option B3 Send Soil Option



6. ALTERNATIVE 2, THE ACTION ALTERNATIVE, ELEMENTS COMMON TO ALL OPTIONS, PAGE 2-8:

The first sentence of this section is revised to note the possibility of changes to the turf panel maintenance schedule based on the needs of the reconstructed soils.

TURF PANEL MAINTENANCE

It is anticipated that the turf panels would continue to be maintained seasonally according to the current schedule for aeration, fertilization, and reseeded; however, the maintenance schedule may require minor adjustments based on the characteristics of the reconstructed soils.

7. ALTERNATIVE 2, THE ACTION ALTERNATIVE, ELEMENTS COMMON TO ALL OPTIONS, PAGE 2-8:

The second paragraph of this section is revised to consider both large and small events and clarifies that turf management strategies relating to events would be informed by an operations and maintenance manual based the design limitations of the turf system.

TURF MANAGEMENT STRATEGIES

NPS would develop an operations and maintenance manual that details the care of the turf and the impact levels at which the turf system can be maintained. The manual would be based on the design limitations of the turf system. By following the guidelines in the manual, Therefore turf management strategies related to large and small events may also be adopted that seek to minimize turf damage and soil compaction. Potential strategies include by reducing the number and duration of large permitted events; lengthening the rest period for the turf between the events; and significantly reducing the numbers, types, and duration of temporary structures allowed during large events.

8. MITIGATION MEASURES FOR THE ACTION ALTERNATIVE, PAGE 2-9:

Development and use of the operations and maintenance manual for the turf system, described above, is added as a mitigation measure in order to protect the turf from the effects of events and other activities.

Park Management and Operations

An operations and maintenance manual with guidelines regarding care of the turf would be developed and implemented to protect the turf system from the effects of events and other activities.

9. MITIGATION MEASURES FOR THE ACTION ALTERNATIVE, PAGE 2-9:

Soil testing was added to the public safety mitigation measures.

PUBLIC SAFETY

Construction workers and employees will follow an approved health and safety plan which incorporates all applicable regulations; as a precaution, NPS will test the soil for contaminants prior to removal and reuse, and/or disposal.

CHAPTER 3: AFFECTED ENVIRONMENT

10. PARK MANAGEMENT AND OPERATIONS, PAGE 3-11:

The original EA did not address pesticide use because it is not used on the National Mall's turf. This is clarified below.

TURF PANEL MAINTENANCE

...During the closure, the areas are fenced off and the NPS conducts soil aeration, grading, soil replacement and amendment (filling areas with uneven grade), fertilization, reseeded, and irrigation. Turf maintenance consists of complete restoration when more than 50% of the turf is either destroyed or displaced by weeds or turf recover when damage is below this threshold. NPS does not routinely apply pesticides to the turf panels.

11. VISUAL RESOURCES, PAGE 3-18:

The last sentence of this section is modified to clarify a statement concerning the appearance of the street trees.

VISUAL CHARACTER

Street trees – ...The American elm trees located along the curb lines of Madison and Jefferson Drives define the street tree panel... Some of the poorest tree conditions on the Mall can be found here because of heavy pedestrian use, inadequate drainage, and compacted gravel and soil, and some of the interior trees are noticeably smaller and less robust than those within the tree panels.

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

12. PARK MANAGEMENT AND OPERATIONS, IMPACTS OF ALTERNATIVE 2, THE ACTION ALTERNATIVE, PAGE 4-18:

The second paragraph of this section is revised to note the possibility of changes to the turf panel maintenance schedule based on the needs of the reconstructed soils.

Under the action alternative, the turf panels would likely continue to be maintained seasonally according to the current schedule for aeration, fertilization, and reseeded; however, the maintenance schedule may require minor adjustments based on the characteristics of the reconstructed soils.

13. PARK MANAGEMENT AND OPERATIONS, IMPACTS OF ALTERNATIVE 2, THE ACTION ALTERNATIVE, PAGE 4-19:

The designation of the preferred soil profile option is corrected.

Soil Reconstruction Profiles

...Option B1 (~~preferred~~) and B2 (preferred) would require the same operating costs and level of maintenance following construction.

14. PARK MANAGEMENT AND OPERATIONS, IMPACTS OF ALTERNATIVE 2, THE ACTION ALTERNATIVE, PAGE 4-20:

This section is modified to address an operations and maintenance manual for the turf system.

Turf Management Related to Special Events

An operations and maintenance manual based on the design limitations of the turf system would provide guidelines regarding protection of the system from the effects of events and other activities. Turf management modifications related to special events, including which may include the reduction of large permitted events and the size and number of structures allowed during these events, as well as a carefully considered range of recover times for the turf between events, would result in long-term beneficial impacts of Park management and operations.

15. SOILS, IMPACTS OF ALTERNATIVE 2, THE ACTION ALTERNATIVE, PAGE 4-28:

The designation of the preferred soil profile option is corrected.

SOIL RECONSTRUCTION PROFILES

Option B1 (~~preferred~~): ...

Option B2 (preferred): ...

16. SOILS, IMPACTS OF ALTERNATIVE 2, THE ACTION ALTERNATIVE, PAGE 4-29:

This section is modified to address an operations and maintenance manual for the turf system.

Turf Management Related to Special Events

An operations and maintenance manual based on the design limitations of the turf system would provide guidelines regarding protection of the system from the effects of events and other activities. Modifications to turf management strategies – which could include reducing the number of large permitted events (particularly those events requiring erection of structures on the turf panels) and reducing the size and number of the structures allowed during these events– would reduce the frequency of compacting forces on turf panel soils and encourage continued soil permeability.

17. SOILS, IMPACTS OF ALTERNATIVE 2, THE ACTION ALTERNATIVE,
PAGE 4-30:

The third paragraph of this section is revised to address erroneous and unnecessary statements concerning the soil profile options.

CONCLUSION

All the new soil profiles would ultimately result in long-term benefits to soil resources by ~~reversing compaction~~, amending the soils to better support the turf grass and infiltrate stormwater, ~~and adding products that would help the soil resist future compaction.~~ Of the three soil profile options, ~~the third option calls for replacement and use of clay trays and aggregate layers.~~ It is therefore the most engineered option, yielding the fewest benefits to the soil resources, ~~and the replacement of the soils could be considered an adverse impact to the existing soils.~~



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, Maryland 21401
<http://www.fws.gov/chesapeakebay>

December 29, 2010

Kristen Murphy
National Park Service
900 Ohio Drive, SW
Washington, DC 20024

RE: Washington Monument Grounds, National Mall Washington DC

Dear Kristen Murphy:

This responds to your letter, received, October 14, 2010, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened in the above referenced project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Except for occasional transient individuals, no proposed or federally listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or should additional information on the distribution of listed or proposed species become available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. Limited information is currently available regarding the distribution of other rare species in the District of Columbia. However, the Nature Conservancy and National Park Service (NPS) have initiated an inventory of rare species within the District. For further information on such rare species, you should contact Mary Pfaffko of the National Park Service at (202)-535-1739.

Effective August 8, 2007, under the authority of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (Service) removed (delist) the bald eagle in the lower 48 States of the United States from the Federal List of Endangered and Threatened Wildlife. However, the bald eagle will still be protected by the Bald and Golden Eagle Protection Act, Lacey Act and the Migratory Bird Treaty Act. As a result, starting on August 8, 2007, if your project may cause "disturbance" to the bald eagle, please consult the "National Bald Eagle Management Guidelines" dated May 2007.

**TAKE PRIDE[®]
IN AMERICA** 

If any planned or ongoing activities cannot be conducted in compliance with the National Bald Eagle Management Guidelines (Eagle Management Guidelines), please contact the Chesapeake Bay Ecological Services Field Office at 410-573-4573 for technical assistance. The Eagle Management Guidelines can be found at:

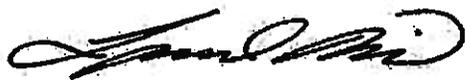
<http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuidelines.pdf>.

In the future, if your project can not avoid disturbance to the bald eagle by complying with the Eagle Management Guidelines, you will be able to apply for a permit that authorizes the take of bald and golden eagles under the Bald and Golden Eagle Protection Act, generally where the take to be authorized is associated with otherwise lawful activities. This proposed permit process will not be available until the Service issues a final rule for the issuance of these take permits under the Bald and Golden Eagle Protection Act.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if alterations of wetlands is proposed, the U.S. Army Corps of Engineers, Baltimore District, should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interests in these resources. If you have any questions or need further assistance, please contact Devin Ray at (410) 573-4531.

Sincerely,



Leopoldo Miranda
Field Supervisor

GOVERNMENT OF THE DISTRICT OF COLUMBIA
STATE HISTORIC PRESERVATION OFFICER

COPY



December 22, 2010

Ms. Maria Burks
Acting Superintendent
National Mall and Memorial Parks
National Park Service
900 Ohio Drive, SW
Washington, DC 20024-2000

RE: Proposed National Mall Turf and Soil Reconstruction Project

Dear Mr. Piltzecker:

Thank you for contacting the DC State Historic Preservation Office (DC SHPO) regarding the above-referenced undertaking. We have reviewed the project information in accordance with Section 106 of the National Historic Preservation Act and are writing to provide our comments regarding effects on historic properties.

We appreciate the opportunities that the National Park Service (NPS) has provided to comment on this critically important undertaking. Over the last year or so, the DC SHPO, other review agencies and various interested parties have consulted by taking part in informal discussions on the design concepts, participating in public meetings, reviewing information on the "PEPC" website and by commenting on the Environmental Assessment (EA). Throughout this consultation, it is our understanding that comments have been overwhelmingly favorable and in strong support of the project. We also endorse the project because it will dramatically improve the appearance and durability of the National Mall lawn panels.

With regard to effects on historic properties, we note that the introduction of the proposed granite curbs with rounded, 15-foot radius corners will alter the metal edged, rectangular lawn panels that were designed by Skidmore, Owings and Merrill (SOM) in the 1970s. As indicated in prior correspondence on other National Mall-related projects, the SOM plan for the National Mall may be eligible for listing in the National Register of Historic Places. Some elements of the SOM Plan (i.e. Constitution Gardens) have already been determined to be historically significant.

We understand that the first phase of the project will be limited to the three, eastern-most lawn panels and that the small, SOM-designed sidewalks which cross the Mall between 3rd and 7th Streets will be retained as is. To guide future phases of work, the NPS will conduct a study to evaluate a range of alternative treatments for the smaller SOM-designed sidewalks that cross the Mall further to the west.

Even if the SOM Plan is eligible, the corners of the lawn panels have been so eroded by "social paths" that the 90-degree angles no longer exist. And when considered in light of the National Mall's enormous scale, the introduction of rounded corners and granite curbs will only be slightly perceptible. All of the other visual intrusions associated with the project, such as the "crowning" of the panels to improve drainage, automatic sprinklers, underground cisterns and related equipment will also be only slightly perceptible or not noticeable at all.

Pages 4-55 and 4-57 of the EA commit NPS to conducting additional archaeological investigations, specifically a geoarchaeological or geomorphological study of the loess deposits near 4th St. These deposits were identified during an archaeological study by Berger (LeeDecker 2010). Given the limited window into the deeply buried deposits offered by the mechanical coring method used for the study, it is impossible to say with certainty that no archaeological resources are present in the project area. Completion of the recommended additional study is needed to ensure that resources are not adversely impacted but the project.

For the reasons outlined above, the DC SHPO concurs with the NPS determination of “no adverse effect” for the undertaking, conditioned upon further consultation regarding the appropriate treatment of the smaller sidewalks associated with the SOM Plan, and completion of the recommended additional geoarchaeological investigations.

If you should have any questions or comments regarding the historic built environment, please contact me at andrew.lewis@dc.gov or 202-442-8841. Questions relating to archaeology should be directed to Ruth Troccoli at ruth.troccoli@dc.gov or 202-442-8836. Otherwise, thank you again for providing this opportunity to review and comment on this important project.

Sincerely,



C. Andrew Lewis
Senior Historic Preservation Specialist
DC State Historic Preservation Office