

**THE NATIONAL MALL  
IRRIGATION, DRAINAGE, WATER COLLECTION, AND RE-LANDSCAPING THE  
MALL<sup>1</sup>**

Phases II and III

7th Street to 14<sup>th</sup> Street, NW  
Washington, DC

Finding of No Significant Impact

**MAR 25 2013**

Pursuant to Section 102(2)(C) of the National Environmental Policy Act, the Council on Environmental Quality Regulations (40 CFR, Parts 1500-1508), and the National Capital Planning Commission's Environmental and Historic Preservation Policies and Procedures, I have evaluated the preliminary and final site development plans for Phases II and III of the turf reconstruction of the center lawn panels of the National Mall, between 7<sup>th</sup> and 14<sup>th</sup> Streets, NW in Washington, DC, as shown on NCPC Map File No. 1.41(70.00)43749; the September 2010 environmental assessment (EA) prepared by the United States Department of the Interior, National Park Service; and the National Park Service's January 21, 2011 Finding of No Significant Impact (FONSI) with mitigation, and I have determined that the turf reconstruction of the center lawn panels between 7th and 14<sup>th</sup> Streets, NW, as proposed with the specified mitigation, will not have a significant impact on the human environment.<sup>2</sup>

Background

The National Mall is a popular national tourist destination and one of the most used public areas in the national capital; it hosts national celebrations, First Amendment demonstrations, special events, and recreation, with nearly 25 million visits annually. Due to the intense use, the center lawn panels of the National Mall have deteriorated in condition, the soil is heavily compacted, the turf is worn away, the irrigation systems are compromised, and the drainage is inadequate. The proposed improvements would alleviate the intense soil compaction and enable proper air, water, and nutrient infiltration into the soil; reduced soil compaction will also improve site drainage and stormwater management. To support the new turf system, the current irrigation system will be replaced with a more durable system to withstand heavy use.

In January 2011, I issued a Finding of No Significant Impact for Phase I of the turf reconstruction of the center lawn panels located between 3rd and 7th Street, NW. The design of Phase I preceded the adoption of the National Mall Plan, and therefore though it was generally consistent with the preferred alternative of the National Mall Plan, it did not include

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<sup>1</sup> Project was formerly titled "Turf and Soil Reconstruction on the National Mall".

<sup>2</sup> The National Mall Turf and Soil Reconstruction Environmental Assessment (September 2010) is incorporated by reference into this Finding of No Significant Impact. In this FONSI, the term "EA" refers to the September 2010 EA.

modifications to the non-turf areas as recommended in the National Mall Plan. Phases II and III of the turf reconstruction project incorporate recommendations from the National Mall Plan with respect to widening the walkways in order to improve accommodations for public events.

### Proposed Action

Phases II and III of the turf and soil reconstruction include modifications to the walkways along the Mall based on recommendations made in the National Mall Plan. The National Mall Plan did not specify the exact dimensions for the walkways or lawn panels, but rather recommended that non-turf areas be increased to protect the Mall turf and accommodate the number and types of tents and equipment placed on the Mall during large events. In developing a design to widen the walkways, NPS analyzed the requirements of the typical events held on the Mall annually to evaluate the size and layout of the structures and associated equipment typically required for these events. A variety of equipment and tent sizes are installed on the Mall during special events and therefore the space needs to be flexible to accommodate a wide range of activities. The goal was to allow for event functions to take place on the Mall without destroying the turf while also respecting the historical landscape of the Mall including the continuous greensward, or tapis vert, and the surrounding urban design context. The design includes the following:

1. The four segmented panels just west of 7<sup>th</sup> Street will be consolidated into a single lawn panel, re-establishing the historic design of the Mall that called for a total of eight lawn panels between 3<sup>rd</sup> and 14<sup>th</sup> Streets. Two narrow north-south walks will be removed.
2. Five north-south walkways west of 7<sup>th</sup> Street will be widened:
  - a. The 16-foot north-south walk immediately west of 7<sup>th</sup> Street will be increased to a width of 60 feet.
  - b. The two, 40-foot-wide north-south walks on either side of the 9<sup>th</sup> Street alignment will be replaced by a single, 105-foot-wide walk, aligned with 9<sup>th</sup> Street.
  - c. The 40-foot north-south walk aligned with 10<sup>th</sup> Street will be increased to a width of 60 feet.
  - d. At the 12<sup>th</sup> Street alignment, the two existing walks and the lawn in between them will be replaced with a single, 105-foot-wide walk.
  - e. At the 13<sup>th</sup> Street alignment, the existing walk width will be increased slightly to 60 feet.
  - f. The walk at 14<sup>th</sup> Street will remain 25-foot wide.
3. The new walkway aligned with 12<sup>th</sup> Street will extend between the tree panels to the north and to the south (adjacent to the Smithsonian Metro station), and replace the existing turf with pavement to a width of 146 feet.
4. All east-west walks remain 40-foot wide.

In addition to the proposed modifications to the walkways, Phases II and III incorporate modifications to the center lawn panels that are identical to alterations made to the lawn panels included in Phase I. Most of the improvements to the lawn panels are below grade and will be minimally visible. The NPS prepared and published an Environmental Assessment (EA) in September 2010 to evaluate the potential environmental impacts of an action alternative and a no action alternative for the treatment of the lawn panels. Within the action alternative, three curb and gutter options evaluated the edge conditions for the lawn panels and the transition between the walkways and the turf. Three options were also analyzed for the reconstruction of the soil to explore different materials and design. The EA also evaluated different systems of water

distribution, water supply, and water storage. Based on the analysis presented in the EA, the NPS selected: curb and gutter option A2, soil profile option B2, water distribution option C4, water supply option D1, and water storage option E2. The selected alternative includes the following components:

#### *Curb and Gutter Option A2*

The EA analyzed the installation of a curb around the lawn panels to protect the new turf, soil, and irrigation systems. 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 by 2 inches tall, required to collect water effectively and keep gravel from the adjacent walks from migrating into the turf. The Option A2 design will maintain universal accessibility to the lawn panels without the need for the ramps that would be required in Option A1.

#### *Soil Profile Option B2*

Option B2 includes the removal of up to 12 inches of existing soil that 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. The Option B2 will allow the turf to recover from short-term impacts more easily and will be able to accommodate tent stakes during special events.

#### *Water Distribution Option C4*

Option C4 will include an automatic irrigation system with 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.

#### *Water Supply Option D1*

Option D1 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.

#### *Water Storage Option E2*

Option E2 evaluated a compact box cistern configuration. The cistern will be made of concrete, a durable, cost-effective material.

#### Standard for evaluation

Under NEPA, the Council on Environmental Quality (CEQ) regulations, and NCPC Environmental and Historic Preservation Policies and Procedures, an EA is sufficient and an Environmental Impact Statement need not be prepared if the EA supports the finding that the

federal action will not significantly affect the human environment. The regulations of the Council on Environmental Quality define “significantly” as used in NEPA as requiring consideration of both context and intensity of impacts as noted by 40 CFR §1508.27. The EA for this project was prepared in accordance with these standards.

Potential Impacts

The EA evaluated potential impacts to visitor use and experience, public safety, parking management and operations, utilities and infrastructure, soils, vegetation, visual resources, and cultural resources. There will be no significant environmental impacts as a result of the proposed action. The proposed project will visually enhance the appearance of the lawn panels on the mall and therefore the EA found that the project will have long-term beneficial impacts on visitor use and experience, vegetation, visual resources, and cultural resources.

The EA did find that there would be short-term negative impacts to visitor use and experience, public safety, vegetation, visual resources, and cultural resources due to construction activities.

The NPS concluded the EA with a Finding of No Significant Impact (FONSI) with mitigation, signed on January 21, 2011. The FONSI outlines multiple mitigation measures for the selected alternative, and are described in the chart below. The NPS mitigation measures are required to be implemented.

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 geoarchaeological 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.

NPS also issued a Memo to File in March 2013 confirming that the EA adequately describes and analyzes Phases II and III of the project including the widened and reconfigured walkways. The Memo to File notes that there are no substantial changes to the project scope, impacts or site conditions since preparation of the EA. The Memo to File notes that there will be additional benefits to visitor use and experience as well as park management and operations with the widened walkways. The widened walkways will provide space for the tents and structures that visitors are accustomed to having at large events and additional hardscape will be available to assist NPS with managing events. Impacts to public safety and utilities and infrastructure would be the same as described in the EA. The Memo to File acknowledges that impacts to soil resources would be the same as described in the EA and that the curb and gutter system improve the long-term health of the soil. Though there would be an increase in the amount of stormwater run-off due to the increase in impervious surface, this increase would be offset by the turf panel soil's increased ability to receive and retain water and the addition of the water collection and storage system.

Impacts to vegetation and visual resources would also be the same as described in the EA. With the widened walkways, there would be a minor loss of turf, but this loss is needed in order to protect the greater turf panels from damage that results when tents and structures are placed directly on the turf. By reducing the number of north-south walkways, and creating turf panels of equal size, there will be long-term beneficial impacts to the visual appearance of the tapis vert. Impacts to cultural resources (historic districts and structures) would be the same as described in the EA and would create a long-term benefit to the L'Enfant Plan by aligning the walkways with 9<sup>th</sup> and 12<sup>th</sup> Streets, thereby improving their readability. In addition, impacts to cultural landscapes would be beneficial in the long-term as the character-defining tapis vert of the Mall would be preserved with minimal impacts on long-range vistas.

Consultation under Section 106 of the National Historic Preservation Act was completed for all phases of the project. Phase I resulted in a determination by NPS and the DC SHPO of no adverse effect on historic properties. During design development for Phases II and III, NPS conducted multiple meetings with NCPC staff, the Commission of Fine Arts (CFA) staff, and the District of Columbia State Historic Preservation Office (SHPO) regarding impacts to cultural resources. NPS determined, and I concur, that Phases II and III will not have an adverse effect on historic properties. The DC SHPO also concurred with the finding of no adverse effect on historic properties.




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Marcel C. Acosta  
Executive Director