

**MEMORANDUM OF AGREEMENT  
AMONG  
THE NATIONAL PARK SERVICE,  
THE TRUST FOR THE NATIONAL MALL,  
THE NATIONAL CAPITAL PLANNING COMMISSION,  
AND  
THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICER  
REGARDING  
THE REHABILITATION OF CONSTITUTION GARDENS PROJECT,  
WASHINGTON, D.C.**

This Memorandum of Agreement (“MOA”) is made as of this 26th day of August, 2015, by and among the National Park Service (“NPS”), the National Capital Planning Commission (“NCPC”), and the District of Columbia State Historic Preservation Officer (“DCSHPO”) (referred to collectively herein as the “Parties” or “Signatories” or individually as a “Party” or “Signatory”), and the Trust for the National Mall (Trust) (referred to herein as an “Invited Signatory”) pursuant to Section 106 of the National Historic Preservation Act (“NHPA”), 54 U.S.C. §§ 306108, and its implementing regulations at 36 CFR Part 800 regarding the rehabilitation of Constitution Gardens in Washington, DC (“Undertaking”); and

**WHEREAS**, Constitution Gardens is owned by the United States government and under the administrative jurisdiction of the NPS and occupies approximately 43 acres on the National Mall bounded by Constitution Avenue on the north, 17th Street NW to the east, and the Lincoln Memorial Reflecting Pool to the south, and includes the Vietnam Veterans Memorial at the west end. The park was identified in the West Potomac Park legislation (29 Stat 624 March 3, 1897) and the 1902 McMillan Plan. It was later named and designed by Skidmore, Owings, and Merrill (SOM) in the early 1970s (NPS 2008, rev. 2014) and was completed in 1976. In 1982, the 56 Signers of the Declaration of Independence Memorial was dedicated on the small island in the lake. Constitution Gardens was designed to commemorate the American Bicentennial, providing a landscape with a naturalistic-appearing man-made lake creating a quiet oasis removed from the bustle of the capital; and

**WHEREAS**, Constitution Gardens is a contributing site within the L’Enfant Plan of the City of Washington, and East-West Potomac Parks Historic Districts, both listed on the National Register of Historic Places (“National Register”). The Constitution Gardens contributing landscape features; vegetation, circulation paths, water features, small-scale features, views and vistas, and two contributing buildings, were documented through the 2008 Cultural Landscape Inventory prepared by NPS (Exhibit 1 - Cultural Landscape Inventory Summary), with concurrence from the DCSHPO on September 29, 2008, and;

**WHEREAS**, the Lockkeeper’s House is located within Constitution Gardens and is the oldest structure on the National Mall. In 1915, the building was relocated forty-nine feet west and six feet north of its original location for the construction of Constitution Avenue. The Lockkeeper’s House contributes to both National Register Historic Districts and was also individually listed on the National Register in 1973. A Historic Structure Report was completed for the Lockkeeper’s House in 2011 and there is an archeological site (51NW233) associated with the House’s original location; and

**WHEREAS**, the purpose of the rehabilitation of Constitution Gardens is to improve the functionality, ecology, sustainability, visitor services, and accessibility of the area, as envisioned in the 2010 National Mall Plan. The NPS recognizes that the project is needed to address these deficiencies, such as poor soil conditions and drainage that affect the site’s vegetation, walkways that are in poor condition and not universally accessible, the water quality in the lake that is poor and does not meet the original design intent and to revitalize Constitution Gardens so that it attracts and serves all visitors; and

**WHEREAS**, the rehabilitation of Constitution Gardens includes planting a greater diversity and mix of vegetation; re-grading the topography and installing a low retaining wall along Constitution Avenue and 17<sup>th</sup> Street; deepening the existing lake; relocating the Lockkeeper's House; removing the Overlook Terrace and constructing a pavilion and plaza; constructing a below grade access road; improving and minor reconfiguring of the existing pedestrian walks (Exhibit 2). These efforts will be collectively referred to herein as the Undertaking ("Undertaking"); and

**WHEREAS**, NCPC will review the Undertaking pursuant to its authorities in the National Capital Planning Act of 1952; and

**WHEREAS**, the approval action by NCPC is also an undertaking subject to Section 106 of the NHPA and by entering into this MOA, NCPC designates the NPS as the lead agency pursuant to 36 CFR 800.2(a)(2); and

**WHEREAS**, the Trust for the National Mall ("Trust"), the official nonprofit partner of the National Park Service dedicated to improving, preserving, and restoring the National Mall who is providing funding for the project and any associated mitigation, has participated in the consultation and has been invited to sign this MOA as an Invited Signatory pursuant to 36 CFR 800.6(c) (2); and

**WHEREAS**, the NPS, NCPC, DCSHPO and the Trust are the Signatories and Invited Signatory, respectively, to this MOA; and

**WHEREAS**, the Undertaking will be a phased implementation in order to prepare for the NPS centennial celebration. The NPS has developed Concept Drawings ("Concept Drawings") for Phases 1 and 2 (Exhibit 2), and Design and Development Drawings ("DD Drawings") for Phase 1 (Exhibit 3); and

**WHEREAS**, the NPS, issued letters dated May 6, 2014, initiating consultation with the DCSHPO and inviting the Advisory Council on Historic Preservation (ACHP) to participate in the consultation but the ACHP elected not to participate in the consultation; and

**WHEREAS**, the April 20, 2009, Levee Improvement Project Programmatic Agreement among the NPS, U. S. Army Corps of Engineers, The Government of the District of Columbia (DC), NCPC, DCSHPO, and ACHP, provided mitigation for adverse effects to be carried out by the NPS that included the following stipulations related to Constitution Gardens: preparation of an exterior stabilization plan for the Lockkeeper's House and development of public interpretation and educational materials that address the historical development of the flood control system and its importance within the cultural landscape. The measures stipulated in the 2009 Levee Improvement Project Programmatic Agreement will be implemented as part of this MOA; and

**WHEREAS**, the NPS identified and consulted with consulting parties identified in Exhibit 4; and

**WHEREAS**, the NPS, pursuant to 36 CFR 800.8(a), has coordinated its Section 106 and National Environmental Policy Act (NEPA) reviews and has provided opportunities for review and comment on the Undertaking, as its planning and design proceeded, at public meetings, consulting parties meetings; and

**WHEREAS**, the NPS, in consultation with DCSHPO and the consulting parties, defined both a primary and secondary Area of Potential Effect (APE) for the Undertaking (Exhibit 5); and

**WHEREAS**, in June 2015 the NPS released the Rehabilitation of Constitution Gardens Environmental Assessment (EA) for a 30-day public comment period pursuant to the National Environmental Policy Act (NEPA). The EA analyzed a range of alternatives for the Undertaking and identified the Regenerative Garden as the NPS preferred alternative (Exhibit 6); and

**WHEREAS**, as identified in the Phase IA archeological report (Exhibit 7 – public summary only), there are seven archeological sites within the primary APE. These sites include the former location of Lock B of the Washington City Canal (51NW235), remnants of the 17th Street Wharf (51NW232), the Lockkeeper’s House deposits (51NW233), the outlet of the Tiber Creek Sewer (51NW234), potential deposits associated with the foundations of the Navy Administration Buildings, potential remains of the Washington City Canal prism and towpath, and potential remains of the Washington Brewery (Coningham and Company); and

**WHEREAS**, the NPS, in consultation with DCSHPO, NCPC, and the consulting parties, determined in June 2015, that the Undertaking will have adverse effects upon the Constitution Gardens Cultural Landscape and the Lockkeeper’s House. DCSHPO was notified of the determination of adverse effect on July 15, 2015 and concurred with the determination; and

**WHEREAS**, such adverse effects include, but are not limited to, potential damage to the seven archeological sites within the primary APE, the relocation of the Lockkeeper’s House 18 feet south and 5 feet west of its current location; removal of the Overlook Terrace (including honey locust trees); removal of trees in poor condition, particularly honey locust trees in paved areas; construction of a new pavilion; construction of a ring on the east end of the lake; resurfacing and slight reconfigurations to existing pedestrian walks; construction of a below grade access road off of 17<sup>th</sup> Street, NW; installation of an 18-inch stone perimeter wall along Constitution Avenue and 17<sup>th</sup> Street; and alterations of views and vistas, including views from the park to the Washington Monument, views from the location of the overlook terrace, and views along 17<sup>th</sup> Street 9 (Exhibit 8).

**WHEREAS**, the NPS made significant progress in avoiding and minimizing some adverse effects by means of the Section 106 consultation and National Environmental Policy Act (NEPA) review through an EA that was issued for public comment in June 2015 with a 30- day public comment period. Such measures include retaining the shape of Constitution Gardens Lake; retaining the refreshment kiosk; reducing the number of trees to be removed; limiting topographical changes to re-grading; retaining the majority of the existing walkway configuration; and preserving the majority of internal and external views and vistas.

**WHEREAS**, since NCPC and CFA are empowered to request design modifications after NHPA and NEPA compliance has been completed, this MOA provides a process to address any new or intensified adverse effects that may result from subsequent design changes;

**NOW, THEREFORE**, the NPS, DCSHPO, and NCPC agree that the Undertaking will be carried out in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties.

## STIPULATIONS

The NPS shall ensure that the following measures are carried out:

### I. PHASING

This project will be implemented in two (2) phases.

Phase I will be substantially completed by August 2016. Phase 1 will occur on the northeast corner of Constitution Gardens and includes the relocation and rehabilitation of the Lockkeeper's House and related landscape and walk improvements. The Lockkeeper's House will be relocated approximately 18 feet south and 5 feet west from its current location and rehabilitated. Rehabilitation of the Lockkeeper's house includes repair of masonry walls, repair or replacement of wooden elements, removal of non-historic interior features, and mechanical system upgrades (Exhibit 3).

Phase 2 will take approximately 36 to 48 months to complete after Phase 1 and will include planting a greater diversity and mix of lawns, meadows, and deciduous canopy and understory trees; re-grading the topography; creating a deeper, artificial lake within the existing footprint; improving access to the 56 Signers of the Declaration of Independence Memorial; removing the Overlook Terrace and constructing a multi-purpose visitor services pavilion with an adjacent event plaza; constructing an 18-inch retaining wall along the sidewalk on Constitution Avenue and 17<sup>th</sup> Street; resurfacing and minor reconfigurations to existing pedestrian walks to improve accessibility; and constructing a below grade access road off of 17<sup>th</sup> Street, NW, for operational and service related use (Exhibit 2). These efforts will be collectively referred to herein as the Undertaking ("Undertaking"); and

### II. MITIGATION MEASURES

#### 1. PHASE 1

- a. Heritage Documentation: The NPS will seek funding to update 1994 HABS documentation for the Lockkeeper's House. The HABS documentation will be carried out prior to work being initiated on the building. The existing site will be documented with a site plan, additional photos and improved drawings. Following the relocation and rehabilitation of the Lockkeeper's House, as-built drawings will supplement the HABS documentation for the park record. The documents will be submitted to HABS for accessioning to the Library of Congress.
- b. The Lockkeeper's House and its new immediate surroundings will be rehabilitated in accordance with the *Secretary of the Interior Standards for Historic Properties*.
- c. The NPS will seek funding for interpretive media that may include wayside exhibits and will provide information on topics, such as the history of the Washington City canal and the Lockkeeper's House, the 17th Street Wharf, Tiber Creek Sewer outlet along 17<sup>th</sup> Street, and the Potomac Park Levee. Waysides will follow the NPS standard. The NPS will also incorporate the keystone from the headwall of the historic Tiber Creek Sewer Outlet on-site. The keystone is currently located at the National Park Service Brandywine Storage Facility. Information on the Tiber Creek Sewer Outlet is included in Exhibit 9.
- d. The NPS will delineate the former locations of the Lockkeeper's house through pavement treatments.

- e. The NPS will seek funding to update the National Register Nomination for the Lockkeeper's House.

2. PHASE 2

- a. Historic American Landscape Survey (HALS): The NPS will seek funding to complete HALS Standard Format documentation for Constitution Gardens. The HALS documentation will be carried out prior to work being initiated on the park. The site history and measured drawing will be submitted to HABS for accessioning to the Library of Congress.
- b. Tree and Vegetation Planting Plan: Because the canopy density is a contributing feature to Constitution Gardens, the NPS will develop and implement a tree maintenance plan that includes procedures for the removal of trees in poor health, supports the health of trees in fair to good health, and plans for the addition of new trees with the purpose of maintaining a healthy canopy.
- c. Vegetation Design: The NPS will plant trees, shrubs, and other plantings that acknowledge the general location and species of plantings historically located in the park, as noted in the original Skidmore, Owings, and Merrill (SOM) plans. Favor will be given to the selection of species that reflect and respect the design and horticultural character of these previous plans. The design will also take into consideration native species, maintenance, and storm water management strategy.
- d. The NPS will install interpretative exhibits that may include information about the history and archeology of the park, beginning with its creation as reclamation land, through its use by the United States Navy and Munitions Department as the location for temporary office structures, and ending with the development of Constitution Gardens by SOM. If included, waysides will follow the NPS standard.
- e. When additional design details of Phase 2 are known and prior to CFA and NCPC reviews of Phase 2, the Signatories, Invited Signatory and Consulting Parties will consult to identify ways to avoid or minimize adverse effects. Topics to be consulted upon include, but are not limited to the pavilion design and construction, lighting design, below grade access road off of 17th Street, and potential changes to the radius at the intersection of Constitution Avenue and 17<sup>th</sup> Street. If any new or intensified adverse effects are identified as a result of this consultation, additional mitigation may be required.
- f. Prior to CFA and NCPC reviews of Phase 2, the Signatories will evaluate the final design and make a determination regarding whether any design modifications required by CFA or NCPC have resulted in any new or intensified adverse effects. The NPS will forward the final designs and its determination to the DC SHPO for a thirty day review. If the NPS and DC SHPO concur that no new or intensified adverse effects result, no further action will be required. If either the NPS or DC SHPO determine that a new or intensified adverse effect will result, the Signatories will consult further to determine whether an amendment to this MOA will be necessary. Any such amendment will be addressed in accordance with the Administration Stipulation VIII-3, Amendments.]

### III. CURRENT PROJECT PLANS

The most recent plans for the Rehabilitation for Constitution Gardens are attached for reference in Exhibits 2 and 3.

### IV. DESIGN REVIEW

In order to ensure that the mitigation measures specified in Stipulation I are carried out in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, the NPS shall provide the DC SHPO with plans, drawings, renderings, narratives, and any other information necessary to fully describe the manner in which each mitigation measure is proposed for implementation of both phases at the 30%, 60% and 90% design levels. The DC SHPO shall review submittals for each phase and provide the NPS with comments within thirty (30) days of receipt which the NPS shall incorporate into the designs to the maximum extent possible. The NPS may continue with the designs as proposed if the DC SHPO fails to provide comments within the thirty day comment period.

### V. ARCHEOLOGICAL RESOURCES

#### 1. Archeological Sites

The NPS will include the following provisions to this effect in the design and construction of both phases of the project for the treatment of known archeological sites within the primary Area of Potential Effect.

- a. The NPS will make every effort to avoid and protect the seven archeological site localities, which include the former location of Lock B of the Washington City Canal (51NW235), remnants of the 17th Street Wharf (51NW232), the Lockkeeper's House deposits (51NW233), the outlet of the Tiber Creek Sewer (51NW234), potential deposits associated with the foundations of the Navy Administration Buildings, potential remains of the Washington City Canal prism and towpath, and potential remains of the Washington Brewery.
- b. If the potential for adverse effects to a known archeological resource are unavoidable, the NPS will consult with DC SHPO to determine the need for archeological investigation and/or mitigation. All investigations will follow the *Guidelines for Archaeological Investigations in the District of Columbia* (1998, as amended), the *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* (as amended and annotated), and be conducted under the direct supervision of an archeologist that meets or exceeds the *Secretary of the Interior's Professional Qualification Standards* (48 FR 44738-44739).

#### 2. Unanticipated Discoveries

The NPS will include the following provisions to this effect in the construction permits for the treatment of unanticipated archeological discoveries, including human remains, during excavation, construction, or other ground-disturbing activity resulting from improvements made to Constitution Gardens.

- a. In the event that a previously unidentified archeological resource is discovered during project activities, the NPS will immediately halt all ground-disturbing activities in the area of the resources and in the surrounding area where further subsurface remains can reasonably be expected to occur.

- b. The NPS will notify the DC SHPO immediately upon discovery of previously unidentified archeological resources. The NPS and the SHPO will visit the site within 48 hours of such notification, inspect the work site, and determine the nature and extent of the affected archeological property and establish a resource area. Construction may then continue in the project area outside the established boundaries of the resource area.
- c. Within three (3) working days of the original notification of discovery, the NPS, in consultation with the SHPO, will determine the National Register eligibility of the resources.
- d. The NPS, in consultation with the DC SHPO, will ensure compliance with 36 CFR §800.13. Work in the resource area shall not proceed until either a) the development and implementation of an appropriate data recovery or other recommended mitigation procedures; or b) the determination is made that the located archeological remains are not eligible for including in the National Register of Historic Places.
- e. If human remains are discovered during construction, NPS shall immediately notify the US Park Police (USPP) and shall ensure that all ground-disturbing activities in the immediate area of the discovery ceases immediately and stays halted in accordance with the protocols established by the USPP and the District of Columbia Metropolitan Police Department. The NPS shall also ensure that the Secretary of Interior's guidelines on human remains are followed. If the remains are assumed to be Native American, the Native American Graves Protection and Repatriation Act of 1990 through the implementing regulations at 43 CFR Part 10 will govern the NPS procedures and outcomes, including consultation with appropriate tribal representatives.

## **VI. PROJECT FUNDING**

The NPS shall seek funding to ensure that the stipulations of this MOA are carried out. If funding identified for this proposed Undertaking is a result of a partnership between NPS and an entity, other than the Trust for the National Mall, this MOA shall be amended to reflect the roles and responsibilities of the financial partner(s) in implementing the terms of the MOA.

## **VII. ELECTRONIC COPIES**

Within one week of the last signature on this MOA, the NPS shall provide each Signatory and Invited Signatory with one legible, color, electronic copy of this fully-executed MOA and all of its attachments. If the electronic copy is too large to send by e-mail, the NPS shall provide each signatory with a copy of this MOA on a compact disc.

## **VIII. ADMINISTRATION**

### **1. Dispute Resolution**

Should any Signatory or Invited Signatory to this MOA object in writing to the NPS regarding any action carried out in accordance with this MOA, the signatories shall consult to resolve the objection as expeditiously as possible. Should the signatories be unable to resolve the disagreement, the NPS shall forward its proposed resolution of the dispute and any other documentation relevant to the dispute to the ACHP. Within thirty (30) days after receipt of all pertinent documentation, the ACHP will either:

- a. Provide the NPS with recommendations, which the NPS will take into account in reaching a final decision regarding the dispute; or
- b. Notify the NPS that it will comment pursuant to 36 CFR 800.7(c), and proceed to comment. Any ACHP comment provided in response to such a request shall be taken into account by the NPS in accordance with 36 CFR 800.7(c) (4) with reference to the subject of the dispute. Any ACHP recommendation or comment will be understood to pertain only to the subject of the dispute; NPS's responsibility to carry out all actions under this MOA that are not subjects of the dispute will remain unchanged.

## 2. Duration

This MOA shall be valid for a period of ten (10) years from the date of the last signature.

## 3. Amendments

This MOA may be amended when an amendment is agreed to in writing by all signatories. The amendment shall be effective on the date a copy signed by all of the signatories. At any time in the six-month period prior to expiration of the MOA, the signatories may mutually agree to extend the MOA with or without amendments.

## 4. Termination

If any Signatory or Invited Signatory to this MOA determines that the terms of the MOA cannot or are not being carried out, that objecting party shall so notify the other signatories in writing and consult with them to seek amendment of the MOA. If within fourteen (14) days an amendment cannot be reached, any Signatory or Invited Signatory may terminate the MOA upon written notification to the other signatories. Once the MOA is terminated, and prior to work continuing on the Undertaking, the NPS must (a) either execute a new MOA or (b) request, take into account, and respond to the comments of the ACHP per 36 CFR Section 800.7. The NPS will notify the signatories as to the course of action it will pursue.

## **IX. ANTI-DEFICIENCY ACT**

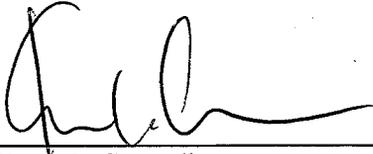
This MOA is subject to applicable laws and regulations. As to the Signatories only, fulfillment of this MOA and all of the provisions herein are subject, pursuant to the Anti-Deficiency Act, 31 U.S.C. § 1341 et seq., to the availability of funds. This MOA is not an obligation of funds in advance of an appropriation of such funds, and it does not constitute authority for the expenditure of funds. If a Signatory or Invited Signatory does not have sufficient funds available to fulfill the Stipulations of this MOA, such Signatory or Invited Signatory shall so notify the other Signatories and shall take such actions as are necessary to otherwise comply with 36 C.F.R. Part 800. NPS shall make reasonable and good faith efforts to seek funding for implementing this MOA.

**X. SIGNATURES**

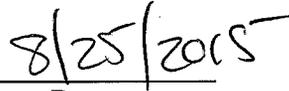
Execution of this MOA and implementation of its terms, evidences that NPS and the Signatories or Invited Signatory with Section 106 responsibilities have afforded the ACHP an opportunity to comment on the Undertaking and taken into account the effects of the Undertaking on historic properties.

[Signatures Follow On Separate Pages]

**SIGNATURE PAGE  
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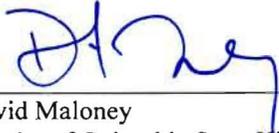


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Karen L. Cucurullo  
Acting Superintendent  
National Mall and Memorial Parks  
National Park Service

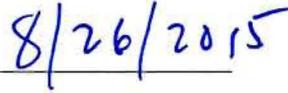


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David Maloney  
District of Columbia State Historic Preservation Officer

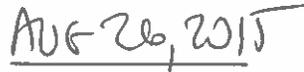


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\_\_\_\_\_  
Marcel C. Acosta  
Executive Director  
National Capital Planning Commission



\_\_\_\_\_  
Date

**INVITED SIGNATORY PAGE  
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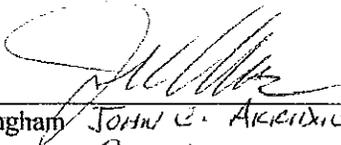
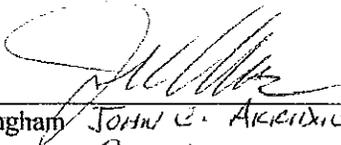
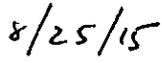
 _____ John E. Arcidice, Jr. Chairman The Trust for the National Mall	 _____ Caroline Cunningham President The Trust for the National Mall	 _____ Date
 T. Dunham Sr. Project Director		 8/25/15

EXHIBIT LIST

- Exhibit 1 2008 Cultural Landscape Inventory Summary Document (updates in 2014)  
<http://parkplanning.nps.gov/document.cfm?parkID=427&projectID=50222&documentID=59140>
- Exhibit 2 Concept Drawings for Preferred Alternative—Regenerative Garden
- Exhibit 3 Design and Development Drawings for Phase I
- Exhibit 4 List of Consulting Parties
- Exhibit 5 Rehabilitation of Constitution Gardens APE
- Exhibit 6 June 2015 Rehabilitation of Constitution Gardens Environmental Assessment: Executive Summary: Full document available at <http://parkplanning.nps.gov/COGA>
- Exhibit 7 Summary of Geoarchaeological Interpretations of Soil Coring Borings in Constitution Gardens. Washington, DC. Geo-Sci Consultants, LLC, University Park, Maryland.
- Exhibit 8 Assessment of Effects Matrix
- Exhibit 9 Tiber Creek Sewer Outfall

National Park Service  
Cultural Landscapes Inventory  
2008



Constitution Gardens  
National Mall & Memorial Parks - West Potomac Park

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## **Inventory Unit Summary & Site Plan**

### **Inventory Summary**

#### **The Cultural Landscapes Inventory Overview:**

##### **CLI General Information:**

Cultural Landscapes Inventory – General Information

The Cultural Landscapes Inventory (CLI) is a database containing information on the historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape's location, size, physical development, condition, landscape characteristics, character-defining features, as well as other valuable information useful to park management. Cultural landscapes become approved inventory records when all required data fields are entered, the park superintendent concurs with the information, and the landscape is determined eligible for the National Register of Historic Places through a consultation process or is otherwise managed as a cultural resource through a public planning process.

The CLI, like the List of Classified Structures (LCS), assists the National Park Service (NPS) in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, National Park Service Management Policies (2001), and Director's Order #28: Cultural Resource Management. Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report information that respond to NPS strategic plan accomplishments. Two goals are associated with the CLI: 1) increasing the number of certified cultural landscapes (1b2B); and 2) bringing certified cultural landscapes into good condition (1a7). The CLI maintained by Park Historic Structures and Cultural Landscapes Program, WASO, is the official source of cultural landscape information.

Implementation of the CLI is coordinated and approved at the regional level. Each region annually updates a strategic plan that prioritizes work based on a variety of park and regional needs that include planning and construction projects or associated compliance requirements that lack cultural landscape documentation. When the inventory unit record is complete and concurrence with the findings is obtained from the superintendent and the State Historic Preservation Office, the regional CLI coordinator certifies the record and transmits it to the national CLI Coordinator for approval. Only records approved by the national CLI coordinator are included on the CLI for official reporting purposes.

#### **Relationship between the CLI and a Cultural Landscape Report (CLR)**

The CLI and the CLR are related efforts in the sense that both document the history,

significance, and integrity of park cultural landscapes. However, the scope of the CLI is limited by the need to achieve concurrence with the park superintendent resolve eligibility questions when a National Register nomination does not exist or the nomination inadequately addresses the eligibility of the landscape characteristics. Ideally, a park's CLI work (which many include multiple inventory units) precedes a CLR because the baseline information in the CLI not only assists with priority setting when more than one CLR is needed it also assists with determining more accurate scopes of work.

In contrast, the CLR is the primary treatment document for significant park landscapes. It, therefore, requires an additional level of research and documentation both to evaluate the historic and the existing condition of the landscape in order to recommend preservation treatment that meets the Secretary of Interior's Standards for the treatment of historic properties.

The scope of work for a CLR, when the CLI has not been done, should include production of the CLI record. Depending on its age and scope, existing CLR's are considered the primary source for the history, statement of significance, and descriptions of contributing resources that are necessary to complete a CLI record.

**Inventory Unit Description:**

Designed by the Washington office of the architectural firm Skidmore, Owings and Merrill in the early 1970s, Constitution Gardens is the firm's interpretation of the barely sketched design for this area offered by the 1902 McMillan Plan. The 43.1-acre park occupies a prominent position in West Potomac Park, northeast of the Lincoln Memorial Grounds. Constitution Gardens is considered part of the National Mall area, yet is somewhat hidden from view by grade changes: the 1930s/1940s flood control levee that runs along its south boundary, a low berm along Constitution Avenue on the north, and raised elevations at the east and west. Six years after the park was completed in 1976, the Vietnam Veterans Memorial was built in a meadow at its west end, requiring modification of the grade and planting design. Later, two sculpture groups with additional landscaping were added south of the memorial: the Three Servicemen in 1984, which includes a flagpole as part of its design, and the Vietnam Women's Memorial in 1993. The "In Memory" plaque was added adjacent to the Three Servicemen in 2004.

Constitution Gardens is a constructed park. East and West Potomac Parks were created in the late-nineteenth and early-twentieth centuries from material that had been dredged from the Potomac River and deposited along its banks to improve navigation. The reclaimed lands were graded, covered with top soil, seeded with grass, planted with trees, and developed into recreational areas. In 1918, on the future Constitution Gardens site, two enormous temporary office buildings for the Navy Department were built (these were removed in 1971). In the 1930s, an earth-and-concrete flood control levee was erected along the south side of the area, also extending some distance up 17th Street. The levee was rebuilt in the 1940s, and again in the mid-1970s as part of the park's construction. It forms part of a larger legislated flood control project that is still maintained by the U.S. Army Corps of Engineers and the National Park Service, and protects a large section of Washington from flooding. Under the Flood Control Act of June 22, 1930, the NPS has to maintain the height of this levee.

Constitution Gardens  
National Mall & Memorial Parks - West Potomac Park

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Constitution Gardens comprises a roughly rectangular site, the eastern half of which gently slopes down to a 6.75-acre lake that has a continuously curving shoreline, oriented with its long axis east-west. Near the north shore of the lake lies a half-acre island. A wooden pedestrian bridge provides access to the island, a memorial landscape dedicated to the 56 Signers of the Declaration of Independence that was designed by landscape architects from EDAW's Alexandria office. From the bridge, a granite walk leads to a paved semicircular plaza that opens to the south shore, lined on the north side by fifty-six granite blocks organized into thirteen groups representing each of the original states. Carved into the slanted top face of each block is the signature, name, hometown, and occupation of a signer. Behind both quarter-circles of granite stones is a triangular planting bed, and another planting bed lines the island's sloping north shore. The beds hold remnants of the original plantings, which were dense, linear arrangements of perennials, shrubs such as azaleas and junipers, and trees including weeping willows and saucer magnolias. A curving line of saucer magnolias is planted in the lawn along the island's east-west center line.

Almost two thousand trees grow in Constitution Gardens. Over two thousand (2654) trees were planted at the time the park was built, in 1975-76, but a large percentage of these soon died because of poor soil conditions and, possibly, because of heavy rains; many of the existing trees are replacements (Hodge WP 5/28/76:C7). Trees are planted regularly around the park's perimeter, effecting a gradual transition from the formal lines of trees surrounding the park – the European elms along the Reflecting Pool on the south, and the American elms lining the streets on the north and east. Trees within the park are primarily a mixture of native deciduous species and flowering upland understory species. Because of replacements, the original species composition has been altered and is now more complex; also, some planting locations have been altered. Several existing trees were incorporated into the design, mostly at the west end near the Vietnam Veterans Memorial, and at the east end near the Lockkeeper's House are several trees that pre-date the establishment of Constitution Gardens.

Running through the park are about two miles of meandering walks designed for use by pedestrians and cyclists. These are laid out in two large peanut-shaped loops that are aligned east to west; one follows the shoreline of the lake, the other curves around the large western knoll and the Vietnam Veterans Memorial. Secondary walks branch off from and connect back with the main loops. Nearly all walks are paved with gravel-topped asphalt, an asphaltic material in which gravel is rolled into the surface of the asphalt while it is still warm; however, the walk in front of the Vietnam Veterans Memorial has two types of granite pavers. At first, hundreds of Norway maples were planted in circular openings in the asphalt, along one side of the loop walks, to create a linear wall of trees shading and emphasizing the curving pedestrian routes. Most of these trees have died and been replaced by red maples, placed adjacent to the walks rather than within them, though in some places maples have been planted in the original tree holes.

Overlooking the lake at its east end is a large paved platform, planned as the site for a visitors facility with a restaurant that was never built because of a lack of funds (Hodge WP 5/28/76:C7). Three stone-walled terraces, designed for outdoor seating, descend the slope from the plaza to the lake (the first terrace is at the same level as the paved platform). Honey locust trees are planted in lines along the terraces. At the northeast corner of the site stands the historic Lockkeeper's House, built when the

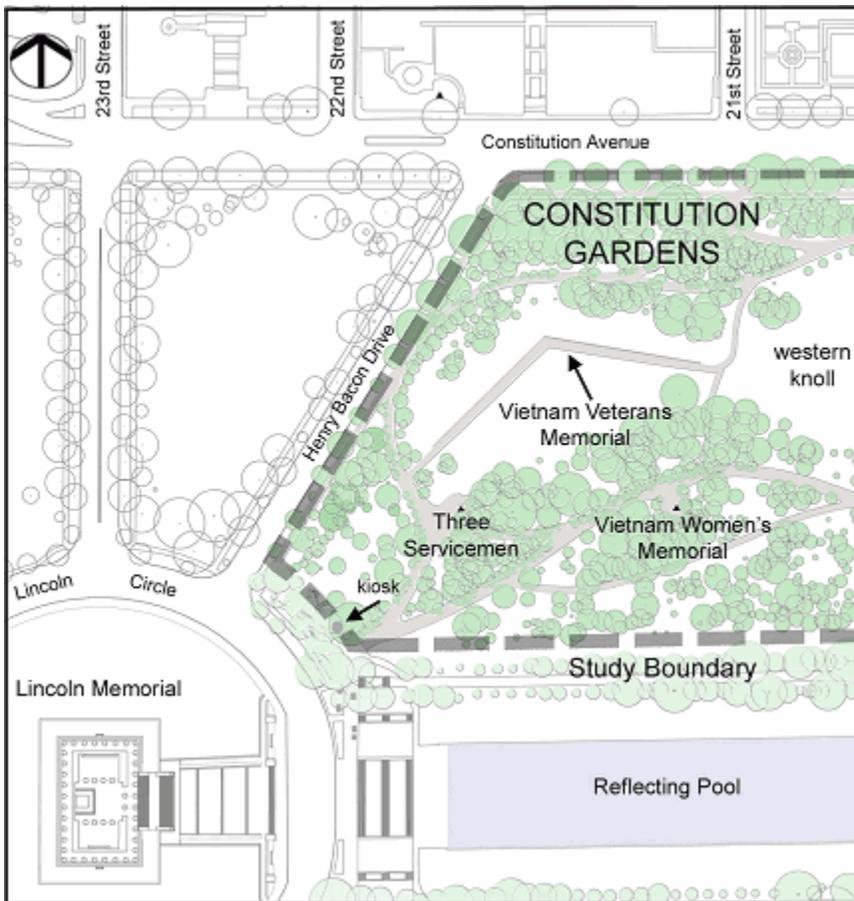
Constitution Gardens  
National Mall & Memorial Parks - West Potomac Park

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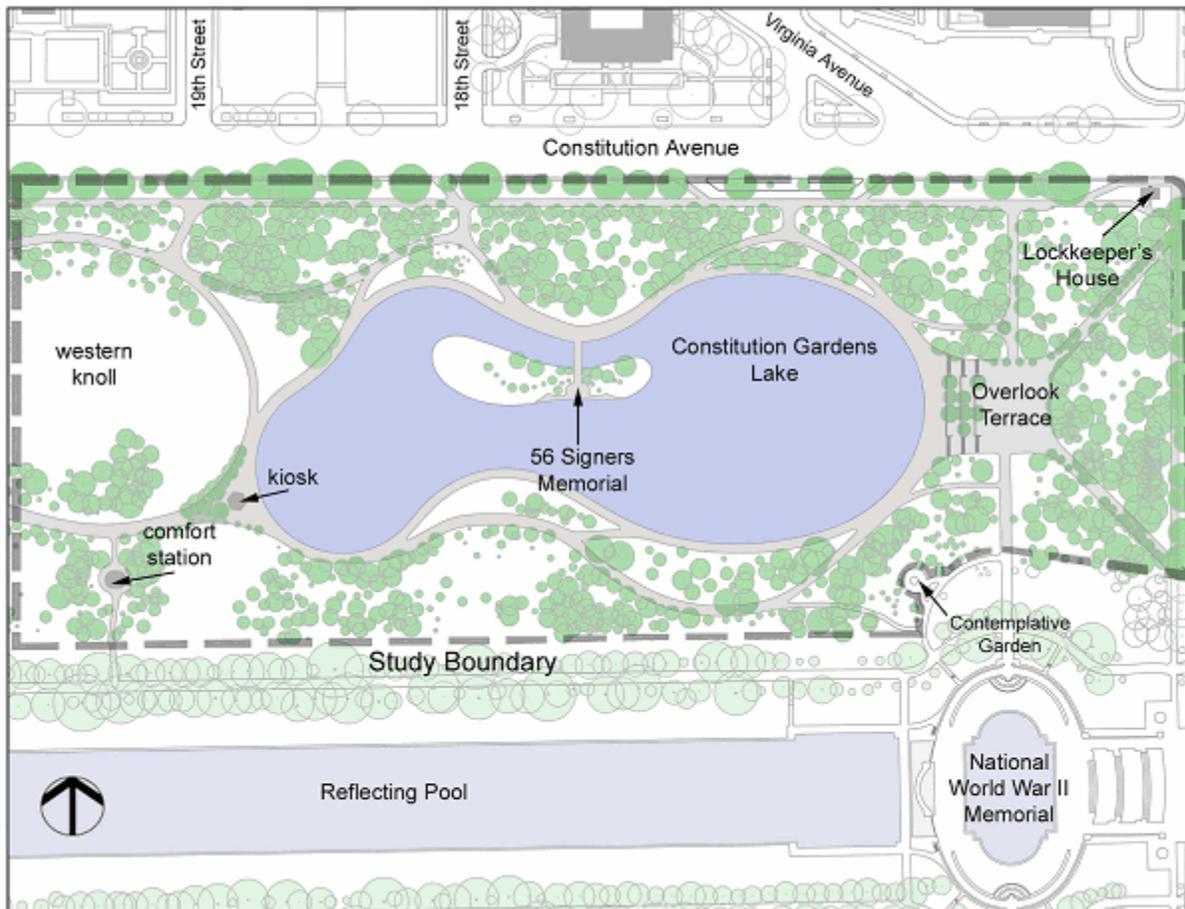
Washington City Canal was joined to the Chesapeake & Ohio Canal in the 1830s. The Lockkeeper's House was relocated forty-nine feet west and six feet north from its original to its present location in 1915 to accommodate the extension of 17th Street.

Though secluded from the highly public grounds of the Lincoln Memorial and Washington Monument, and the busy arterial road of Constitution Avenue, Constitution Gardens is tied to these other areas through circulation and views. Walks connect with nearby memorials and streets. Views of the Washington Monument, in particular, are prominent throughout the park, and other structures, including the Lincoln Memorial, the Old Post Office tower, the Thomas Jefferson Memorial, the U.S. Capitol dome, and the buildings of Federal Triangle, are visible. The statues of the Three Servicemen and the Vietnam Women's Memorial were placed to provide views from specific locations of the Vietnam Veterans Memorial.

**Site Plan**



*Site plan 1 of 2. This plan depicts the western third of Constitution Gardens, the area where the Vietnam Veterans Memorial is located. (Sept. 2007, CLP file "COGA west side site plan.jpg.")*



*Site plan 2 of 2. This graphic depicts the major features and current condition of the eastern two-thirds of Constitution Gardens. (Sept. 2007; CLP file "COGA east side site plan.jpg.")*

**Property Level and CLI Numbers**

<b>Inventory Unit Name:</b>	Constitution Gardens
<b>Property Level:</b>	Component Landscape
<b>CLI Identification Number:</b>	600012
<b>Parent Landscape:</b>	600007

**Park Information**

<b>Park Name and Alpha Code:</b>	National Mall & Memorial Parks - West Potomac Park -NAMA
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Constitution Gardens  
National Mall & Memorial Parks - West Potomac Park

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**Park Organization Code:** 3495  
**Subunit/District Name Alpha Code:** National Mall & Memorial Parks - West Potomac Park  
- NAMA  
**Park Administrative Unit:** National Capital Parks-Central

## Concurrence Status

**Inventory Status:** Incomplete

**Completion Status Explanatory Narrative:**

The Constitution Gardens Cultural Landscape Inventory was written by Kay Fanning, Ph.D., Landscape Historian with the Cultural Landscapes Program of the National Capital Region. She began work in September 2006 and completed the inventory in April 2008. Research material was gathered from the following repositories: Cultural Resource Files, National Mall & Memorial Parks (NAMA), National Capital Region (NCR); Beautification Files, Cultural Landscapes Program (CLP) files, NCR; maps and plans from the Technical Information Center (TIC) and Land Resources Program Center (LRPC), NCR; Constitution Gardens and Lincoln Memorial grounds photos, NCR Museum Resource Center (MRCE); Commission of Fine Arts (CFA) minutes from National Archives & Records Center (NARA); and Washington Post archives, ProQuest Newspaper Database. Interviews were conducted with David Childs, Consulting Partner, SOM and Chairman, Commission of Fine Arts and with John Parsons, Associate Regional Director for Lands, Resources and Planning, NCR concerning the design development of Constitution Gardens in the 1970s. Other NPS professionals provided their insights on the various issues related to the flood levee, vegetation and water quality: Glenn DeMarr, Project Manager, NCR; Robert Defeo, Regional Horticulturist, NCR; Dr. James Sherald, Chief of Natural Resources and Science, NCR; and Mary Willeford Bair, Natural Resources Specialist, NAMA. Many other professionals within the NPS (National Capital Region and National Mall and Memorial Parks) reviewed the document and provided information and corrections.

**Concurrence Status:**

<b>Park Superintendent Concurrence:</b>	Yes
<b>Park Superintendent Date of Concurrence:</b>	08/12/2008
<b>National Register Concurrence:</b>	Eligible -- SHPO Consensus Determination
<b>Date of Concurrence Determination:</b>	09/29/2008

**National Register Concurrence Narrative:**

The State Historic Preservation Officer for the District of Columbia concurred with the findings of the Constitution Garden Cultural Landscape Inventory on September 29, 2008, in accordance with Section 110 of the National Historic Preservation Act. It should be noted that the "National Register Eligibility Concurrence Date" refers to this Section 110 Concurrence and not the date of listing on the National Register.

## Geographic Information & Location Map

**Inventory Unit Boundary Description:**

Constitution Gardens  
National Mall & Memorial Parks - West Potomac Park

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Constitution Gardens is a 43.1-acre park unit in West Potomac Park, part of the National Mall, bounded by Henry Bacon Drive on the west, Constitution Avenue on the north, 17th Street on the east, and, on the south, the toe of the slope that runs down to the elm walks along the Reflecting Pool. This slope follows the flood control levee. The Vietnam Veterans Memorial, along with the Three Servicemen statue and the Vietnam Women's Memorial, occupies a site legislated as two acres at the west end of Constitution Gardens.

**State and County:**

**State:** DC

**County:** District of Columbia

**Size (Acres):** 43.10

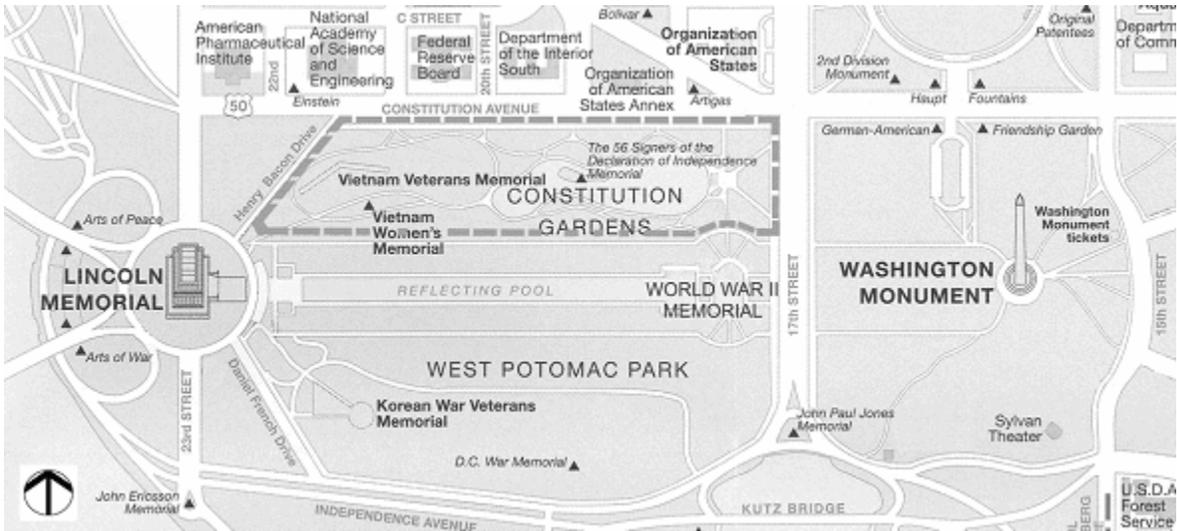
**Boundary UTMS:**

<u>Source</u>	<u>Type of Point</u>	<u>Datum</u>	<u>UTM Zone</u>	<u>UTM Easting</u>	<u>UTM Northing</u>
GPS-Differentially Corrected	Point	NAD 83	18	322,390	4,306,781
GPS-Differentially Corrected	Point	NAD 83	18	322,313	43,065,559
GPS-Differentially Corrected	Point	NAD 83	18	323,111	4,306,555
GPS-Differentially Corrected	Point	NAD 83	18	323,113	4,306,765

Constitution Gardens  
National Mall & Memorial Parks - West Potomac Park

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**Location Map:**



Map showing location of Constitution Gardens within West Potomac Park. (Sept. 2007; CLP file "COGA location map.")

**Management Unit:** Constitution Gardens

**Track Numbers:** Reservation 332

Exhibit 2 - Concept Drawings for Preferred Alternative—Regenerative Garden

Figure 2.2- Preferred Alternative-Regenerative Garden



REHABILITATE CONSTITUTION GARDENS  
 FIGURE 2.2- PREFERRED ALTERNATIVE - REGENERATIVE GARDEN

NATIONAL MALL AND MEMORIAL PARKS  
 WASHINGTON, D.C.

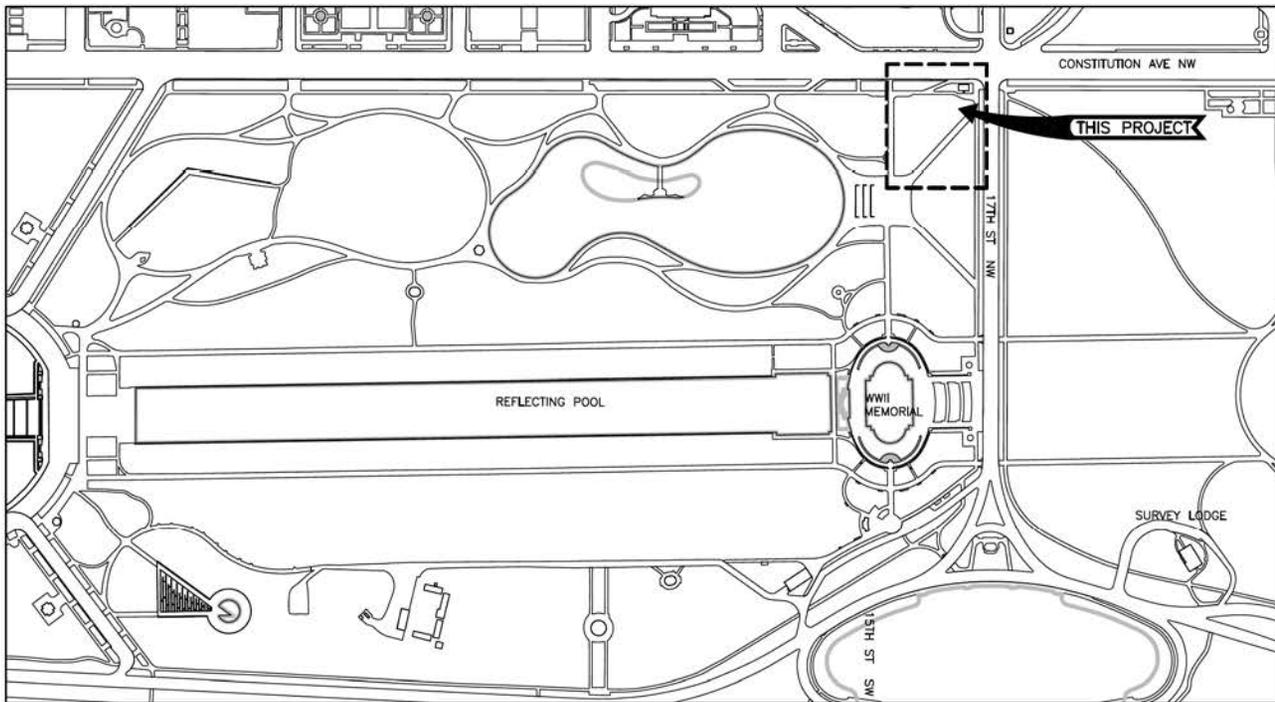
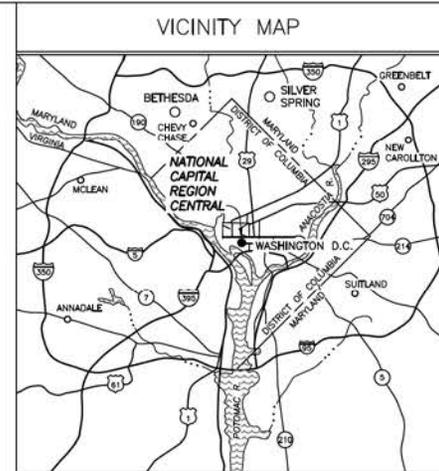
**Exhibit 3 – Selected Design and Development Drawings for Phase I**

UNITED STATES DEPARTMENT OF INTERIOR  
NATIONAL PARK SERVICE

# REHABILITATE CONSTITUTION GARDENS

NATIONAL MALL AND MEMORIAL PARKS  
WASHINGTON, DC.

NAMA 203983



PREPARED FOR: THE TRUST  
FOR THE NATIONAL MALL /  
NATIONAL PARK SERVICE

FOR COORDINATION ONLY  
NOT FOR CONSTRUCTION



RECOMMENDED	DATE
CHIEF OF PROFESSIONAL SERVICES	
SUPERINTENDENT, PARK	
APPROVES	
SUPERINTENDENT, NATIONAL CAPITAL REGION	

A/E FIRM

Mark	Sheet	REVISION	Date	Initial

COVER SHEET  
TITLE OF DRAWING

% SUBMISSION

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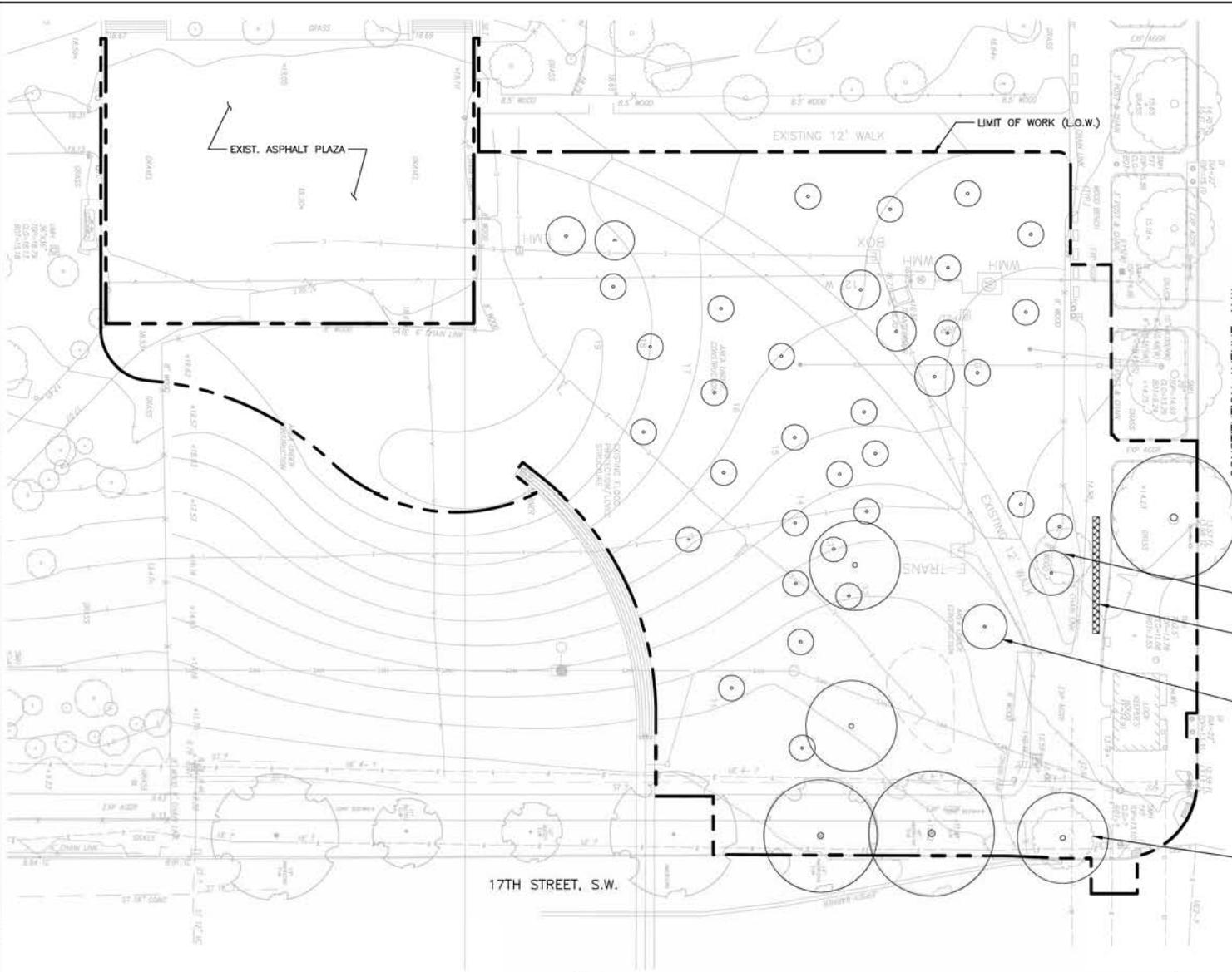
SUB SHEET NUMBER

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION BRANCH OF DESIGN AND CONSTRUCTION	AG EP CI R
REHABILITATE CONSTITUTION GARDENS TITLE OF PROJECT CONSTITUTION GARDENS LEASING WITHIN PARK NATIONAL MALL AND MEMORIAL PARKS NAME OF PARK	801 127016 08-07-15 1 #

15/115 10/17 THE EPA NATIONAL DESIGN CONSTRUCTION BRANCH NATIONAL CAPITAL REGION BRANCH OF DESIGN AND CONSTRUCTION

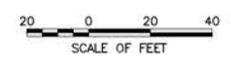


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- EXISTING CONDITIONS NOTES:**
1. SEE SHEET SERIES C01 FOR EXISTING CONDITIONS NOTES, SURVEY NOTES, AND LEGEND.

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PRESERVATION ARCHITECT: <b>DAVIS BUCKLEY ARCHITECTS AND PLANNERS</b> WASHINGTON D.C.	PRESERVATION STRUCTURAL ENGINEER: <b>1200 ARCHITECTURAL ENGINEERS PLLC</b> ALEXANDRIA, VA	

DESIGNED:	WAI
DATE:	8/7/2015

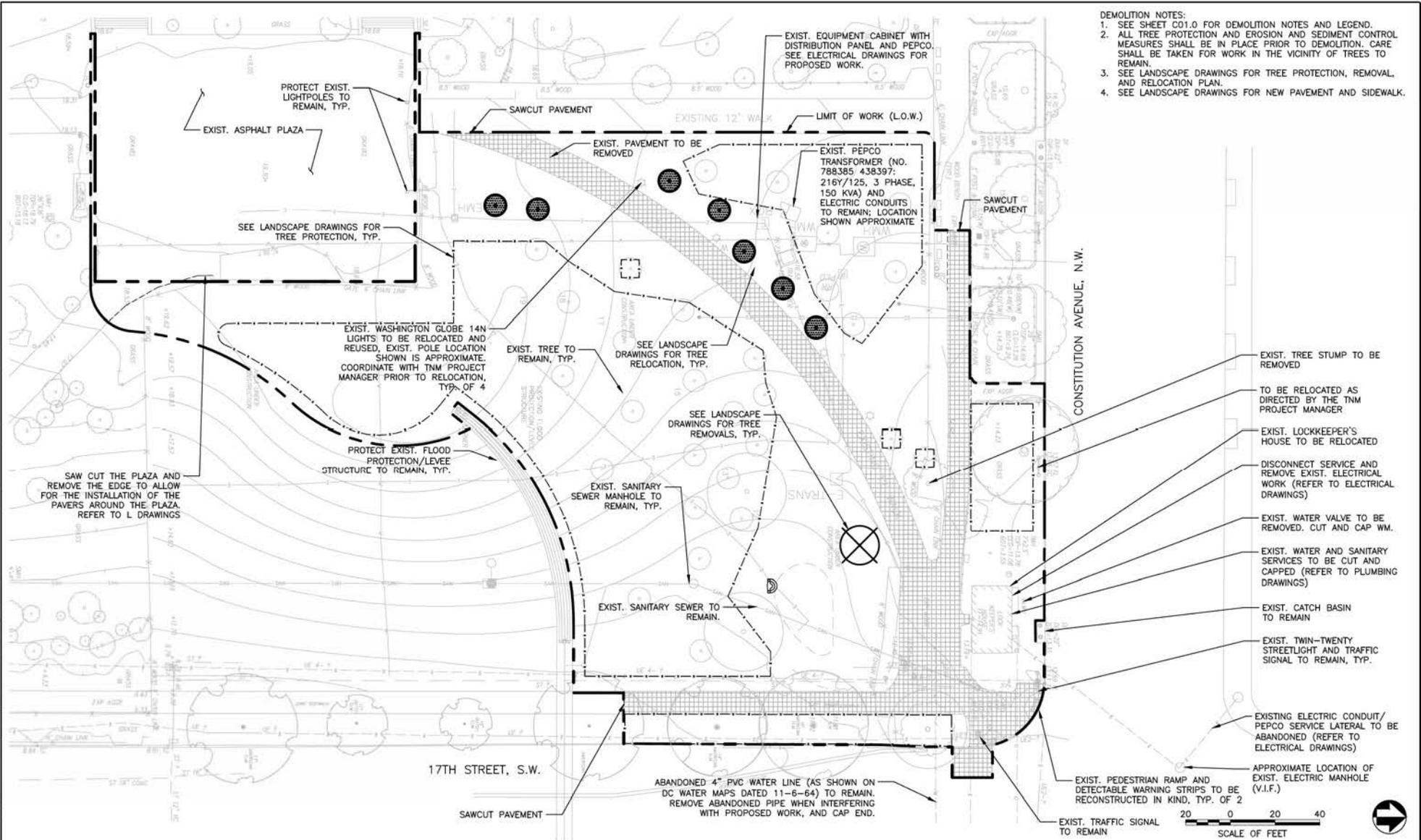
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**C02.0**

TITLE OF SHEET  
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REHABILITATE CONSTITUTION GARDENS  
NATIONAL MALL & MEMORIAL PARKS

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PMS/PKG NO.	<b>127016</b>
NAMA	<b>203983</b>
SHEET	<b>X of XX</b>

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FOR COORDINATION ONLY  
 NOT FOR CONSTRUCTION

A/E FIRM		CIVIL/SITE ELECTRICAL/SITE STRUCTURAL ENGINEER:		MEP/FIRE PROTECTION	
PRIME/LANDSCAPE ARCHITECT: PWP LANDSCAPE ARCHITECTURE BERKELEY, CA		WEIDLINGER ASSOCIATES NEW YORK, NY		HENRY ADAMS, LLC WASHINGTON, DC	
PRESERVATION ARCHITECTS: DAVIS BUCKLEY ARCHITECTS AND PLANNERS WASHINGTON D.C.		PRESERVATION STRUCTURAL ENGINEER: 1200 ARCHITECTURAL ENGINEERS PLLC ALEXANDRIA, VA			

DESIGNED:	WAI
TECH. REVIEW:	WAI
DATE:	8/7/2015

SUB SHEET NO.  
**C04.0**

TITLE OF SHEET  
**SITE DEMOLITION PLAN**  
 REHABILITATE CONSTITUTION GARDENS  
 NATIONAL MALL & MEMORIAL PARKS

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127016	
PMS/PKG NO.	NAMA 20398.3
SHEET	X of XX







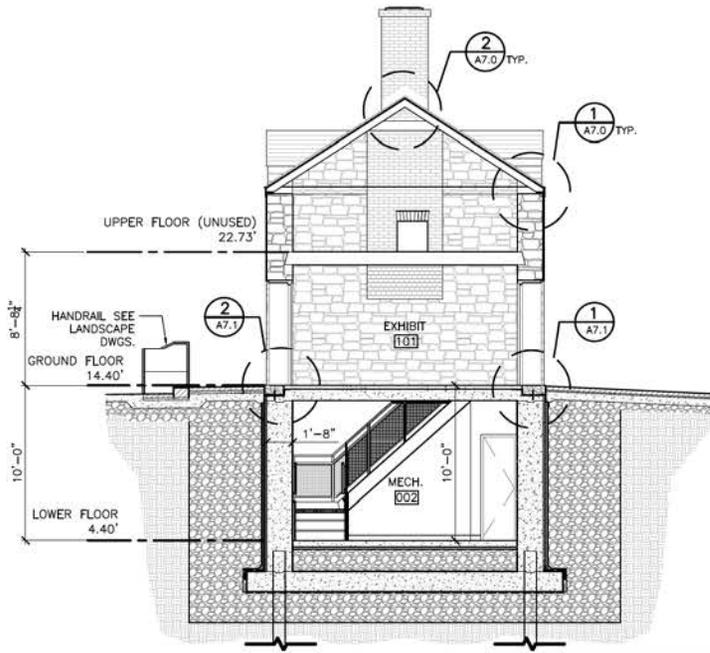




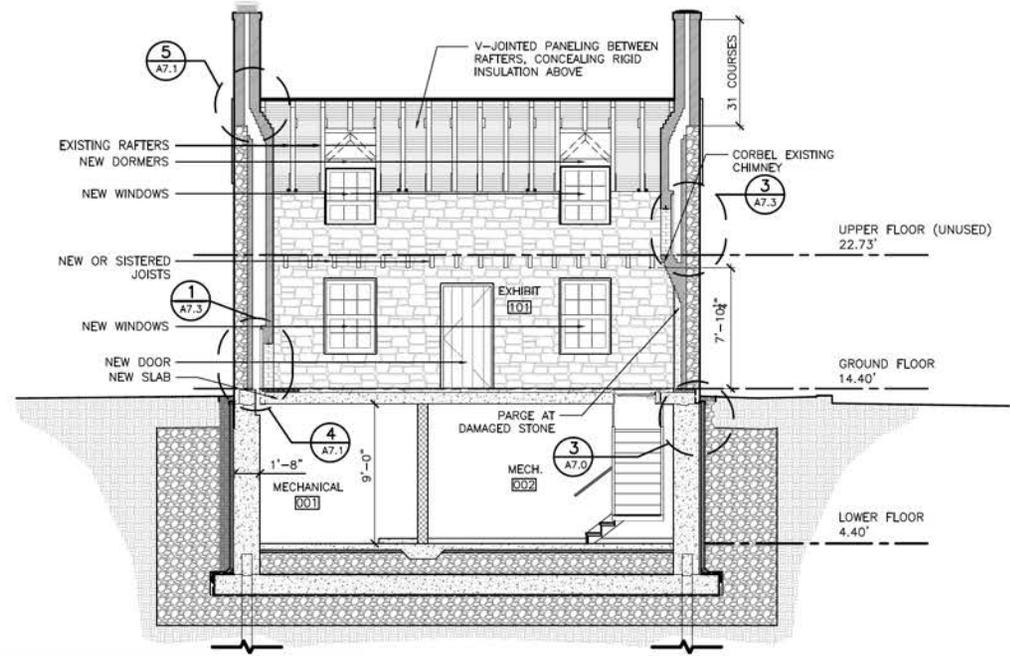




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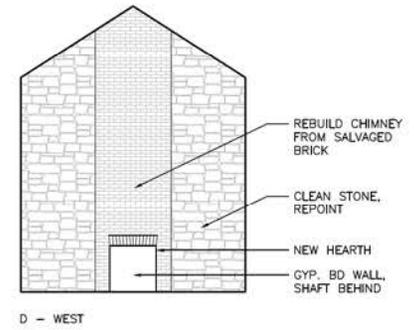
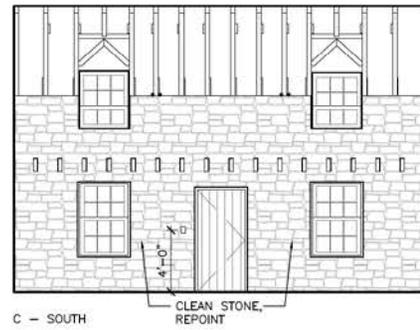
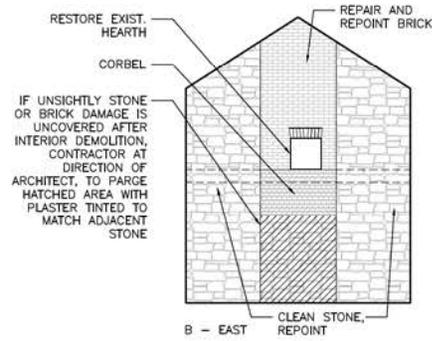
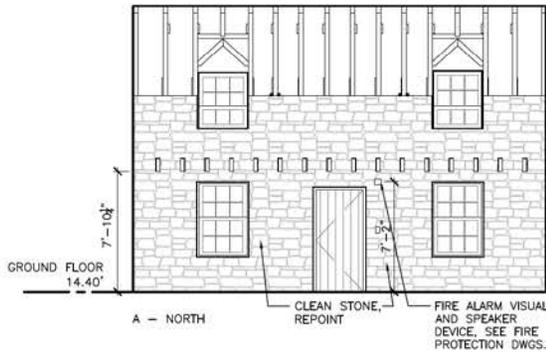


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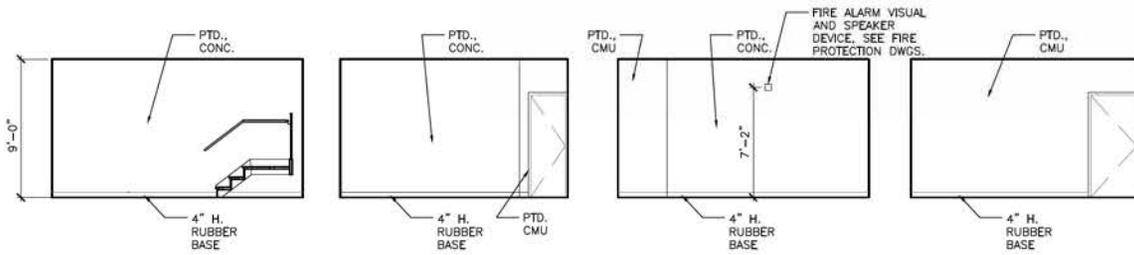


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**2** INTERIOR ELEVATIONS - EXHIBIT ROOM 101  
A5.0



**1** INTERIOR ELEVATIONS - STORAGE ROOM 002  
A5.0



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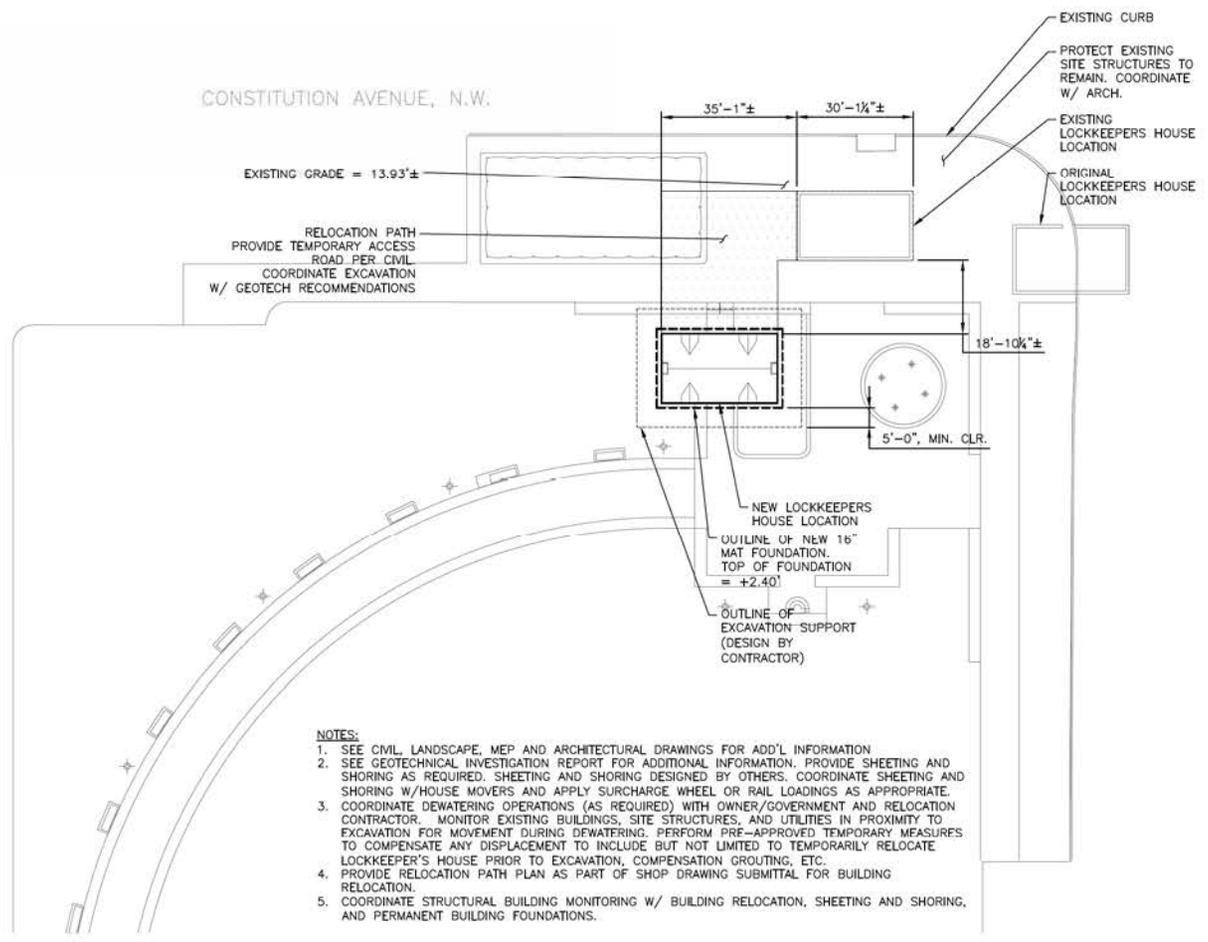
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<b>SUB SHEET NO.</b>  <b>A5.0</b>
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<b>TITLE OF SHEET</b> <b>POST RELOCATION INTERIOR ELEVATIONS</b>  REHABILITATE CONSTITUTION GARDENS NATIONAL MALL & MEMORIAL PARKS
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<b>DRAWING NO.</b> 801 127016 <b>PMS/PKG. NO.</b> NAMA 203983 <b>SHEET</b> X of XX
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CONSTITUTION AVENUE, N.W.

EXISTING GRADE = 13.93'±

RELOCATION PATH  
 PROVIDE TEMPORARY ACCESS  
 ROAD PER CIVIL  
 COORDINATE EXCAVATION  
 W/ GEOTECH RECOMMENDATIONS

35'-1"±

30'-1 1/2"±

18'-10 1/2"±

5'-0" MIN. CLR.

NEW LOCKKEEPERS  
 HOUSE LOCATION  
 OUTLINE OF NEW 16"  
 MAT FOUNDATION.  
 TOP OF FOUNDATION  
 = +2.40'  
 OUTLINE OF  
 EXCAVATION SUPPORT  
 (DESIGN BY  
 CONTRACTOR)

**NOTES:**

1. SEE CIVIL, LANDSCAPE, MEP AND ARCHITECTURAL DRAWINGS FOR ADD'L INFORMATION
2. SEE GEOTECHNICAL INVESTIGATION REPORT FOR ADDITIONAL INFORMATION. PROVIDE SHEETING AND SHORING AS REQUIRED. SHEETING AND SHORING DESIGNED BY OTHERS. COORDINATE SHEETING AND SHORING W/HOUSE MOVERS AND APPLY SURCHARGE WHEEL OR RAIL LOADINGS AS APPROPRIATE.
3. COORDINATE DEWATERING OPERATIONS (AS REQUIRED) WITH OWNER/GOVERNMENT AND RELOCATION CONTRACTOR. MONITOR EXISTING BUILDINGS, SITE STRUCTURES, AND UTILITIES IN PROXIMITY TO EXCAVATION FOR MOVEMENT DURING DEWATERING. PERFORM PRE-APPROVED TEMPORARY MEASURES TO COMPENSATE ANY DISPLACEMENT TO INCLUDE BUT NOT LIMITED TO TEMPORARILY RELOCATE LOCKKEEPER'S HOUSE PRIOR TO EXCAVATION, COMPENSATION GROUTING, ETC.
4. PROVIDE RELOCATION PATH PLAN AS PART OF SHOP DRAWING SUBMITTAL FOR BUILDING RELOCATION.
5. COORDINATE STRUCTURAL BUILDING MONITORING W/ BUILDING RELOCATION, SHEETING AND SHORING, AND PERMANENT BUILDING FOUNDATIONS.



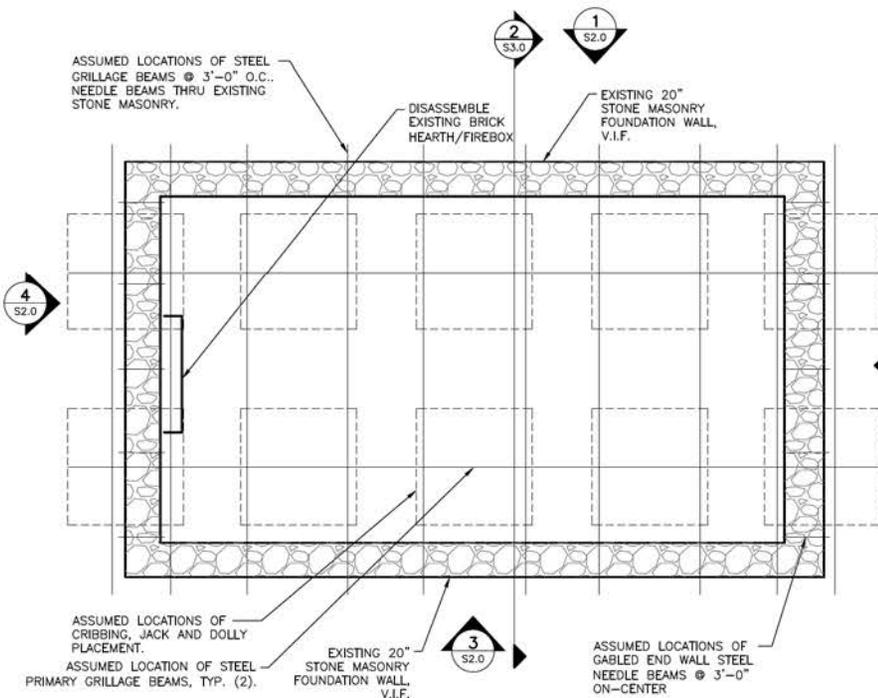
**RELOCATION PATH**



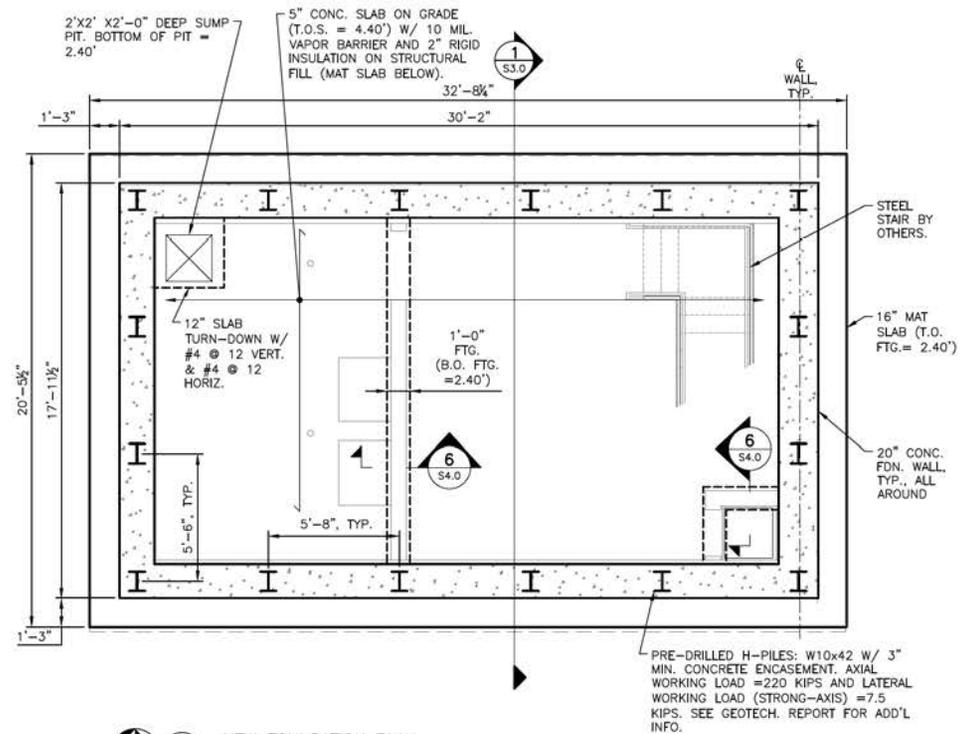
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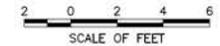
**NOTE:**  
THIS DRAWING SHOWS THE ASSUMED STEEL GRILLAGE, CRIBBING, JACK AND DOLLY LOCATIONS AND IS SHOWN FOR ILLUSTRATION ONLY. CONTRACTOR IS RESPONSIBLE FOR DESIGN, SIZE, NUMBER, PLACEMENT, INSTALLATION, MONITORING, ETC. BEFORE INSTALLATION SUBMIT PLANS, CALCULATIONS AND MEANS/METHODS SIGNED AND SEALED BY A LICENSED ENGINEER IN THE DISTRICT OF COLUMBIA TO OWNER/GOVERNMENT REVIEW AND APPROVAL.



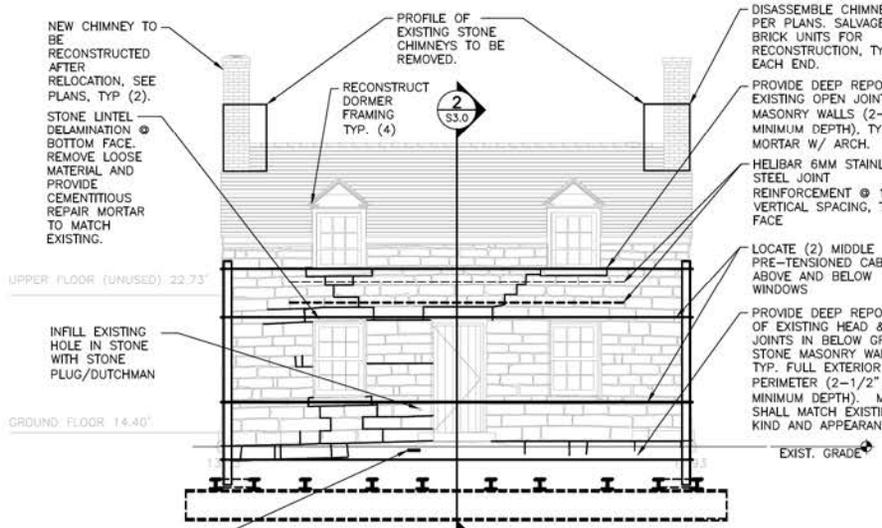
**1 2**  
**S1.1** BUILDING PREPARATION FOUNDATION PLAN



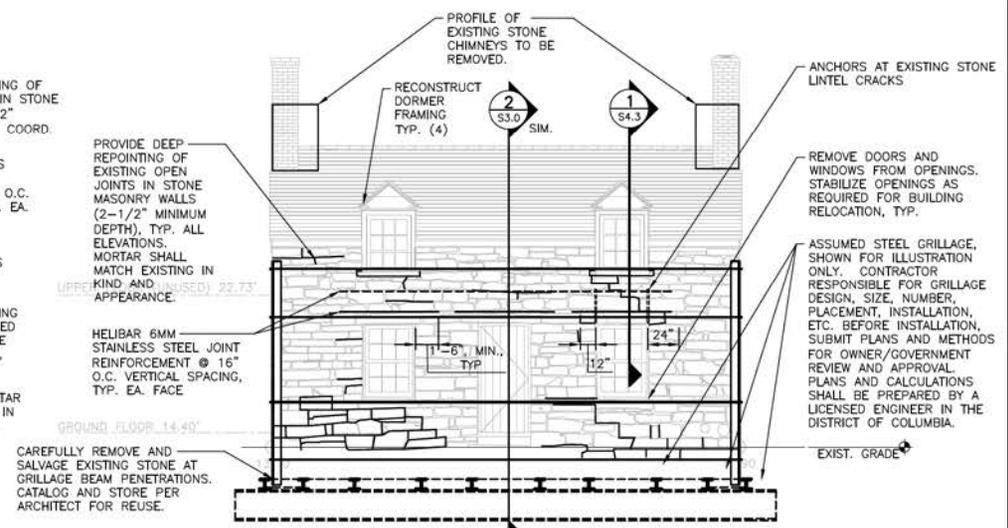
**1**  
**S1.1** NEW FOUNDATION PLAN



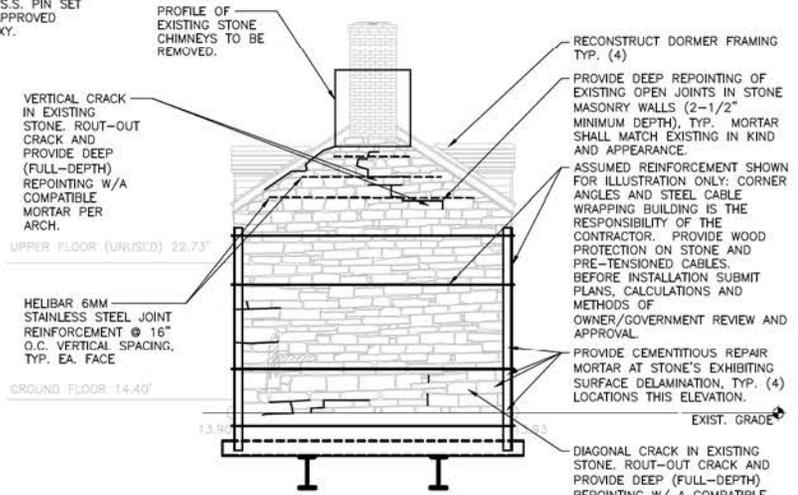
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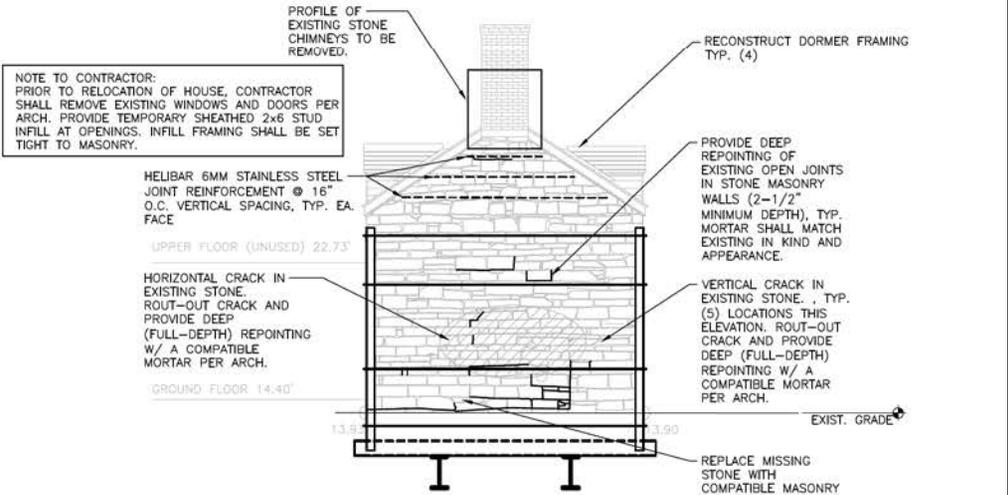
**1 NORTH ELEVATION**  
S2.0



**3 SOUTH ELEVATION**  
S2.0

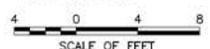


**2 EAST ELEVATION**  
S2.0



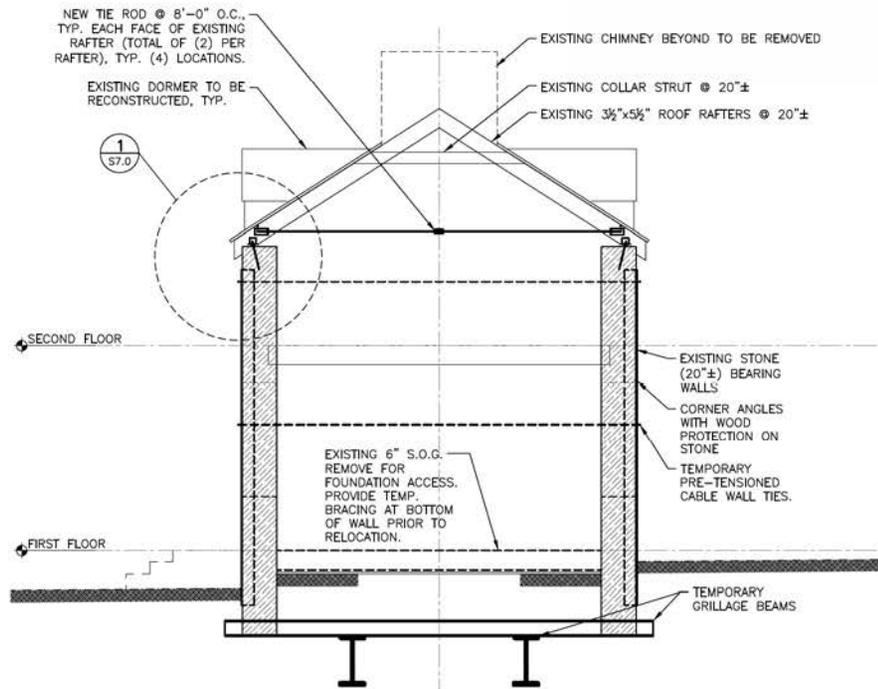
**4 WEST ELEVATION**  
S2.0

**NOTE TO CONTRACTOR:**  
PRIOR TO RELOCATION OF HOUSE, CONTRACTOR SHALL REMOVE EXISTING WINDOWS AND DOORS PER ARCH. PROVIDE TEMPORARY SHEATHED 2x6 STUD INFILL AT OPENINGS. INFILL FRAMING SHALL BE SET TIGHT TO MASONRY.

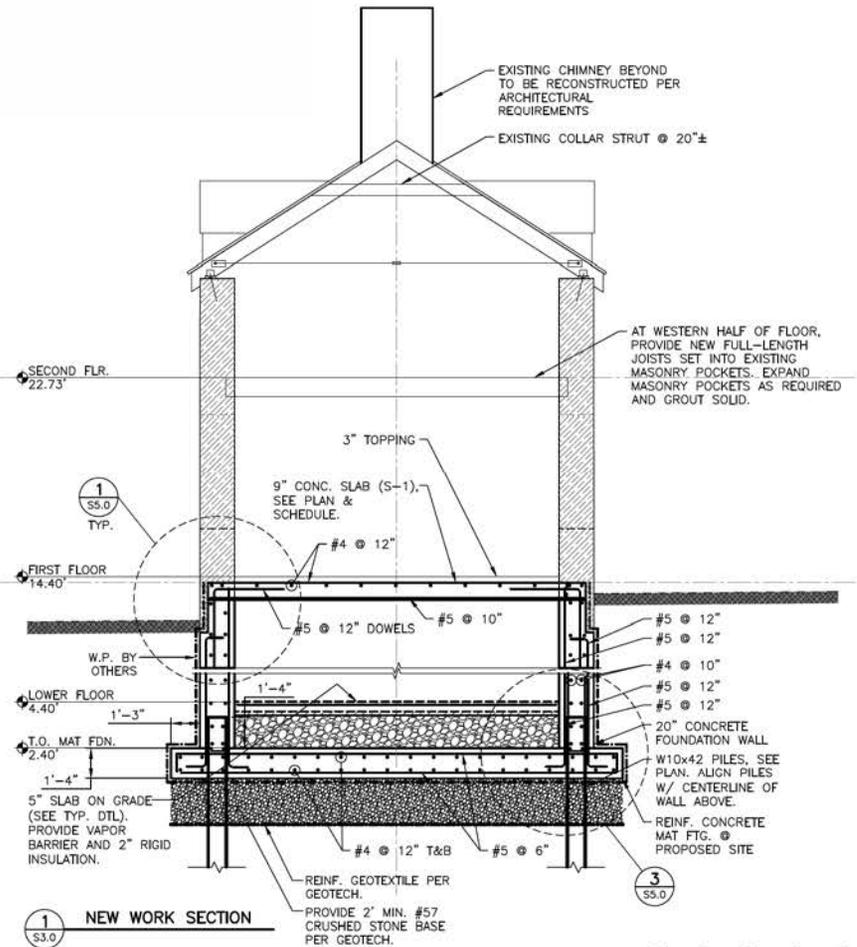


<b>A/E FIRM</b> PRIME/LANDSCAPE ARCHITECT: PWP LANDSCAPE ARCHITECTURE BERKELEY, CA  PRESERVATION ARCHITECT: DAVIS BUCKLEY ARCHITECTS AND PLANNERS WASHINGTON D.C.		<b>CIVIL/SITE ELECTRICAL/SITE STRUCTURAL ENGINEER:</b> WEIDLINGER ASSOCIATES NEW YORK, NY  <b>PRESERVATION STRUCTURAL ENGINEER:</b> 1200 ARCHITECTURAL ENGINEERS PLLC ALEXANDRIA, VA		<b>MEP/FIRE PROTECTION</b> HENRY ADAMS, LLC WASHINGTON, DC		DESIGNED: JD @PWP EPS  TECH. REVIEW: JM  DATE: 8/7/2015	SUB SHEET NO.  <b>S2.0</b>	TITLE OF SHEET  <b>BUILDING PREPARATION ELEVATIONS</b>  REHABILITATE CONSTITUTION GARDENS NATIONAL MALL & MEMORIAL PARKS	DRAWING NO. <b>801</b> <b>127016</b>  PMS/PKG NO. NAMA 203983  SHEET OF
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**2** BUILDING PREPARATION SECTION  
S3.0



**1** NEW WORK SECTION  
S3.0

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SCALE OF FEET

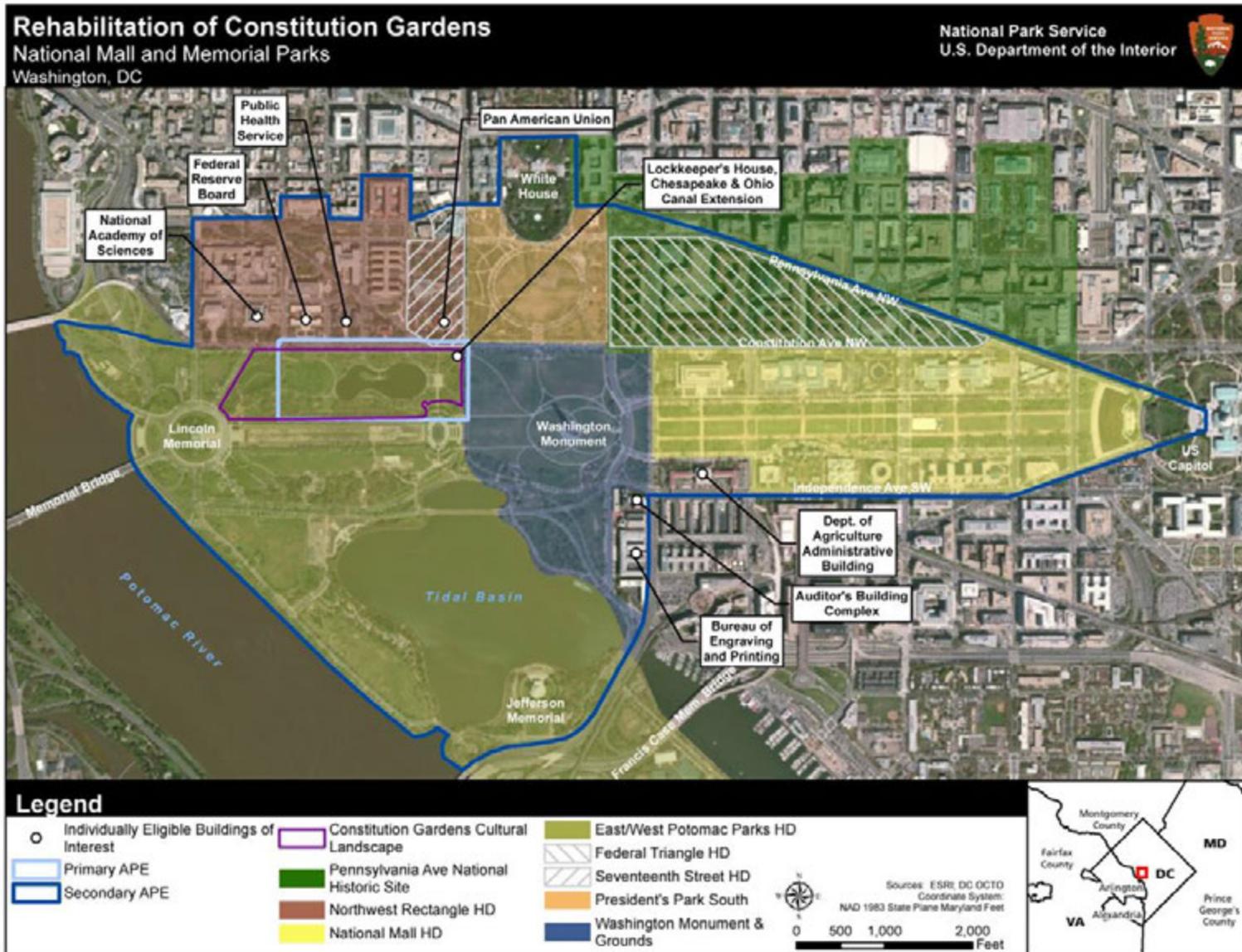
A/E FIRM		CIVIL/SITE ELECTRICAL/SITE STRUCTURAL ENGINEER:	MEP/FIRE PROTECTION	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
PRIME/LANDSCAPE ARCHITECT: PWP LANDSCAPE ARCHITECTURE BERKELEY, CA		WEIDLINGER ASSOCIATES NEW YORK, NY	HENRY ADAMS, LLC WASHINGTON, DC	JD	<b>S3.0</b>	<b>SECTIONS</b>	<b>801</b>
PRESERVATION ARCHITECT: DAVIS BUCKLEY ARCHITECTS AND PLANNERS WASHINGTON D.C.		PRESERVATION STRUCTURAL ENGINEER: 1200 ARCHITECTURAL ENGINEERS PLLC ALEXANDRIA, VA		EPS			
				TECH. REVIEW: JM			
				DATE: 8/7/2015			
						REHABILITATE CONSTITUTION GARDENS NATIONAL MALL & MEMORIAL PARKS	PMS/PKG NO. NAMA 203983
							SHEET OF

**Exhibit 4 - List of Consulting Parties**

National Capital Planning Commission  
Advisory Council on Historic Preservation  
Friends of the World War II Memorial  
Organization of American States  
Commission of Fine Arts  
Committee of 100 on the Federal City  
District of Columbia State Historic Preservation Office  
DC Preservation League  
National Coalition to Save Our Mall  
National Parks Conservation Association  
National Trust for Historic Preservation  
Washington, DC, Guild of Professional Tour Guides  
Trust for the National Mall  
Vietnam Veterans Memorial Foundation

DRAFT

Exhibit 5 - Area of Potential Effect



**Exhibit 6 - June 2015 Rehabilitation of Constitution Gardens Environmental Assessment:  
Executive Summary**

Constitution Gardens  
National Mall and Memorial Parks  
Washington, D.C.

U.S. Department of the Interior  
National Park Service

# REHABILITATION OF CONSTITUTION GARDENS

*ENVIRONMENTAL ASSESSMENT*



**JUNE 2015**

# PROJECT SUMMARY

## Introduction

The National Park Service, National Mall and Memorial Parks proposes to allow its partner, the Trust for the National Mall, to undertake rehabilitation efforts of Constitution Gardens located between the Vietnam Veterans Memorial and 17<sup>th</sup> Street NW on the National Mall in Washington, DC. The proposed efforts are the subject of this environmental assessment. This environmental assessment was prepared in compliance with the National Environmental Policy Act of 1969, as amended to (1) analyze a reasonable range of alternatives to meet objectives of the proposal, (2) evaluate potential impacts on resources and values, and (3) identify mitigation measures to lessen the degree or extent of such impacts.

## Purpose of and Need for the Action

The purpose of the project is to rehabilitate Constitution Gardens to improve the functionality, ecology, visitor services, and accessibility of the area, as envisioned in the 2010 National Mall Plan.

The action is needed because Constitution Gardens, in its present condition, has poor soil conditions, and poor drainage is affecting the site's vegetation. Current walkways are in fair to poor condition. Pedestrian circulation can be confusing and does not meet capacity in some places, and some areas do not meet Architectural Barriers Act Accessibility Standard of 1968 standards for universal accessibility. In addition, vehicular turning movements at the intersection of Constitution and 17<sup>th</sup> Street NW are difficult. Lastly, the area is underused by park visitors due to lack of public amenities and limited recreational opportunities.

## Overview of the Alternatives

The National Park Service explored and objectively evaluated a range of alternatives. The Regenerative Garden is the NPS Preferred Alternative and also the environmentally Preferred Alternative. The alternatives listed below are described in Chapter 2, which also describes mitigation measures and summarizes impacts. Four alternatives were carried forward for further analysis:

- No-action Alternative
- Preferred Alternative – Regenerative Garden
- Alternative 1 – Sustainable Garden
- Alternative 2 – Social Garden

Impacts of the alternatives were assessed in accordance with the National Environmental Policy Act, the National Park Service's Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision Making*, and the National Historic Preservation Act. Several impact topics were dismissed from further analysis because the action alternatives would result in no impacts or negligible to minor and/or short-term impacts on those resources. The Preferred Alternative would result in minor to moderate, short- and long-term impacts and long-term beneficial impacts.

## How to Comment

Agencies and the public are encouraged to review and comment on the contents of this environmental assessment during a 30-day public review and comment period. We invite you to comment on this document, and you may do so by any one of two methods. The preferred method of providing comments is on the NPS Planning, Environment, and Public Comment website at <http://parkplanning.nps.gov/COGA>. You may also submit written comments to:

**Superintendent**

National Mall and Memorial Parks

RE: Constitution Gardens Rehabilitation Project

900 Ohio Drive, SW

Washington, DC 20024

Only written comments will be accepted. Please submit your comments within 30 days of the posting of the notice of availability of this environmental assessment on the Planning, Environment, and Public Comment website. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including personal identifying information—may be made publicly available at any time. Although you can request in your comment to withhold your personal identifying information from public review, NPS cannot guarantee that it will be able to do so.

# PHASE I ARCHEOLOGICAL INVESTIGATION FOR CONSTITUTION GARDENS NATIONAL MALL AND MEMORIAL PARKS WASHINGTON, D.C.



**THIS REPORT CONTAINS CONFIDENTIAL INFORMATION  
NOT FOR PUBLIC DISTRIBUTION**

*Prepared for:*



National Park Service  
Denver Service Center  
12796 W. Alameda Parkway  
Denver, Colorado 80225

*Prepared by:*



**Louis Berger**

Louis Berger  
1250 23rd Street, NW, Suite 400  
Washington, D.C. 20037

*Final Report  
June 12, 2015*

## **PUBLIC SUMMARY**

The National Park Service (NPS), Denver Service Center sponsored a Phase IA archeological investigation of Constitution Gardens, part of the National Mall and Memorial Parks (NAMA) in Washington, D.C. The recreational area is owned by the NPS and is located in the monumental core area of Washington, D.C. The Phase IA study was conducted by The Louis Berger Group, Inc. (Louis Berger) of Washington, D.C. NPS is proposing to rehabilitate Constitution Gardens in partnership with the Trust for the National Mall. Plans have been developed to enhance the historical and recreational qualities of the park while transforming it into a more active, flexible, and sustainable park. The design alternatives are being evaluated in an Environmental Assessment under the National Environmental Policy Act (NEPA).

This Phase IA study was designed to comply with the NEPA and the National Historic Preservation Act (NHPA). It included background research and geoarcheological survey to evaluate the archeological potential of the project area.

The historic landscape of the Constitution Gardens area was dramatically different from that of today. In the colonial period this area was open water and marshes at the mouth of Tiber Creek. Tiber Creek is one of several streams in Washington that no longer exist, at least above ground. In 1807, shortly after the founding of the City of Washington, a wharf was built at the foot of 17th Street, extending into Tiber Creek. The 17th Street Wharf was a major shipping point for the early city, and remains of the wharf are located along the eastern edge of Constitution Gardens. In 1832 the Washington City Canal ran along the northern portion of the park property. This canal linked the city's ports to the nearby C&O Canal. In the 1870s Washington transformed its waterfront areas and created new lands. The canals fell into disuse, and the 17th Street Wharf ceased operations. The former canal path became a city sewer, and Tiber Creek was filled. At some point circa 1890, Constitution Avenue was constructed over part of the canal's length. In the twentieth century a gigantic set of interconnected structures known as the Navy War and Munitions Building (1918 to 1970) encompassed nearly the entirety of Constitution Gardens. This building had a shallow basement, and its construction did not eradicate the deeply buried older landscape features. Constitution Gardens is a designed landscape, intended to look naturalistic. It was built in 1976.

A series of soil cores was excavated along the northern portion of Constitution Gardens to gauge the preservation of the older landscape, and to see if evidence of the Washington City Canal or of Tiber Creek could be found. The soil cores found marshy soils below thick fill deposits, and it is thought that the canal and the creek are fairly intact underneath the park. Further archeological study of the park is recommended.

Exhibit 8 - Assessment of Effects Matrix

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
<b>CULTURAL LANDSCAPES</b>					
<b>Constitution Gardens Cultural Landscape</b>	<b>Spatial Organization</b>				
	Street trees and border of trees	<i>No effect</i>	Street trees would remain and the garden with its rolling terrain would be separated from the street by a 18-inch retaining wall. Border of lindens (south of the walk) could be removed since trees are not in good or fair condition. <i>No adverse effect.</i>	Street trees would remain and the garden with its rolling terrain would be separated from the street by a 30-inch retaining wall. Border of lindens (south of the walk) could be removed since trees are not in good or fair condition. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	Open central area	<i>No effect</i>	The open central area of the gardens would be retained. <i>No adverse effect.</i>	The open central area of the gardens would be retained. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	<b>Topography</b>				
	Flood control levee	<i>No effect</i>	No change from this project. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	Gentle slopes	<i>No effect</i>	The gently rolling topography would be retained to maintain a smooth rolling surface, but re-grading would occur to restore character. <i>No adverse effect.</i>	The gentle, rolling topography would be altered by amplifying the height and slopes with 8-10 feet of soil. <i>Adverse effect.</i>	The gently rolling topography would be retained to maintain a smooth rolling surface but the height would be increased by 4-6 feet. <i>Adverse effect.</i>
	Plateau at Overlook Terrace	<i>No effect</i>	The Plateau at Overlook Terrace would be removed and replaced with a pavilion. Overlook function would be retained with pavilion overlook deck and events terrace to the east. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Western knoll	<i>No effect</i>	The Western Knoll would be retained, but would be slightly re-graded to restore historic character. <i>No adverse effect.</i>	The Western Knoll would be removed and replaced with a number of amplified hills. <i>Adverse effect.</i>	Retained but height increased 4-6 feet. <i>Adverse effect.</i>
	North berm	<i>No effect</i>	The North berm would be retained, but would be slightly re-graded to restore historic character and accommodate proposed 18-inch retaining wall. <i>No adverse effect.</i>	The height of the Northern Berm would be increased 8-10 feet and the entrance widened. <i>Adverse effect.</i>	Retained but height increased 4-6 feet. <i>Adverse effect.</i>
	Low central area occupied by lake	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
Slope and cut at the Vietnam Veterans Memorial	<i>No effect</i>	No change <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
Constitution Gardens Cultural Landscape	<b>Land Use</b> ( <i>Note: Citizenship and other ceremonies will continue to occur throughout the National Mall</i> )				
	Passive recreation	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
	Visiting the memorials	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
	Ceremonies at the Vietnam Veterans Memorial	<i>No effect</i>	Increased visitation and changes in setting may have an effect on the memorial. <i>Potential for adverse effect.</i>	Same as preferred alternative. <i>Potential for adverse effect.</i>	Same as preferred alternative. <i>Potential for adverse effect.</i>
	Demonstrations	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
	Citizenship ceremony at the Overlook Terrace	<i>No effect</i>	Overlook Terrace would be replaced with the pavilion. This would require a change in the setting. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	<b>Circulation</b>				
	Overlook Terrace	<i>No effect</i>	Removed and replaced with a pavilion. <i>Adverse effect.</i>	Removed and replaced with a pavilion. <i>Adverse effect.</i>	Removed and replaced with a pavilion. <i>Adverse effect.</i>
	Loop walk around the lake	<i>No effect</i>	Path location would remain the same, but it would be streamlined and widened from 14 to 20 feet along entire path. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Loop walk around west end and the Vietnam Veterans Memorial	<i>No effect</i>	Path location would remain the same, but it would be streamlined and widened from 14 to 20 feet along entire path. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Secondary walks over slopes	<i>No effect</i>	These paths would be reconstructed and in some cases streamlined with improved connections at intersections. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Walks parallel to stairs	<i>No effect</i>	Alignment would be retained as part of pavilion design. <i>No adverse effect.</i>	Parallel walks would be revised as part of pavilion design. <i>Adverse effect.</i>	Parallel walks would be revised as part of pavilion design. <i>Adverse effect.</i>
	Diagonal walk, northeast corner of Overlook Terrace	<i>No effect</i>	Alignment would be retained. <i>No adverse effect.</i>	Diagonal walk would be revised. <i>Adverse effect.</i>	Diagonal walk would be revised. <i>Adverse effect.</i>
Walk south, Overlook Terrace to World War II Memorial	<i>No effect</i>	Alignment would be retained, but the path would be widened to 20 feet. <i>Adverse effect.</i>	Alignment would be retained, but the path would be widened to 20 feet. <i>Adverse effect.</i>	Alignment would be retained, but the path would be widened to 20 feet. <i>Adverse effect.</i>	

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
Constitution Gardens Cultural Landscape	Walk north, Overlook Terrace to Constitution Avenue	<i>No effect</i>	Alignment would be retained, but the path would be widened to 20 feet. <i>Adverse effect.</i>	Alignment would be retained, but the path would be widened to 20 feet. <i>Adverse effect.</i>	Alignment would be retained, but the path would be widened to 20 feet. <i>Adverse effect.</i>
	Two sidewalks along Constitution Avenue	<i>No effect</i>	Retained, entrance to park expanded to 75 feet wide with two paths entering the garden, each 15 feet wide, instead of one. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Sidewalk along 17 <sup>th</sup> Street	<i>No effect</i>	Alignment would be retained. <i>No adverse effect.</i>	Alignment would be retained. <i>No adverse effect.</i>	Alignment would be retained. <i>No adverse effect.</i>
	Service Drive	Does not exist. <i>No effect.</i>	Creation of new underground service access drive may result in adverse visual impacts from 17 <sup>th</sup> Street. <i>Adverse effect.</i>	Does not exist. <i>No adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	<b>Vegetation</b>				
	Deciduous trees	<i>No effect</i>	Wooded park with a mixed, mature canopy of shade trees; remove trees in poor condition and fewer trees in fair condition; close to or replicating today's massing and canopy. <i>Adverse effect.</i>	Wooded park, but primarily mixed canopy of young trees, not providing as much shade and altering the massing and canopy. Most mature trees would be removed or relocated to improve soils. Trees would replace or exceed current number. <i>Adverse effect.</i>	Wooded park with mixed mature canopy of shade trees, saving hundreds of trees that are in good to fair condition and removing trees in poor and some trees in fair condition, somewhat altering the massing and canopy. Remove or relocate mature trees affected by construction. Replace trees to approximate existing number. <i>Adverse effect.</i>
	Honey locust trees at Overlook Terrace	<i>No effect</i>	Removed and replaced with a pavilion. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Honey locust trees around refreshment terrace	<i>No effect</i>	Removed. Trees in asphalt areas would also be removed and not replaced. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Magnolias, Memorial to the 56 Signers of the Declaration of Independence	<i>No effect</i>	Preserved in place whenever possible. <i>No adverse effect.</i>	Removed and replace. <i>Adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	Remnant plantings, Memorial to the 56 Signers of the Declaration of Independence	<i>No effect</i>	Preserved in place whenever possible. <i>No adverse effect.</i>	Some removed and replaced with perimeter wall. <i>Adverse effect.</i>	Removed. <i>Adverse effect.</i>

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
<b>Constitution Gardens Cultural Landscape</b>	Street trees	<i>No effect</i>	Remain in place except for area that will include new service entrance. <i>Adverse effect.</i>	Street trees would remain and the gardens with its rolling terrain would be separated from the street by a 30-inch retaining wall; border of lindens (south of the walk) could be removed since trees are not in good or fair condition. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Lawns	<i>No effect</i>	Approximately 64% lawn, 12% meadow, and 24% woodland understory. <i>No adverse effect.</i>	Primarily meadow and woodland Understory planting approximately 24" maximum height. The meadows would be mowed to function as lawns. <i>Adverse effect.</i>	Understory vegetation will remain mowed lawn with some shrub and bulb planting. <i>No adverse effect.</i>
	<b>Buildings and Structures</b>				
	Refreshment Kiosk	<i>No effect</i>	Adaptively reused in place for operations or volunteers. Will comply with <i>Secretary of the Interior's Standards</i> . <i>No adverse effect.</i>	Removed. <i>Adverse effect</i>	Same as preferred alternative. <i>No adverse effect.</i>
	Comfort station	<i>No effect</i>	No change (outside of project scope). <i>No adverse effect.</i>	No change (outside of project scope). <i>No adverse effect.</i>	No change (outside of project scope). <i>No adverse effect.</i>
	Constitution Gardens Island	<i>No effect</i>	Shape would be retained; a perimeter path and second access path would be added; fishing would be allowed. <i>No adverse effect.</i>	Shape retained, a perimeter path would be added and fishing would be allowed. <i>No adverse effect.</i>	Shape would be retained; a perimeter path and second access path would be added; fishing would be allowed. <i>No adverse effect.</i>
	Memorial to the 56 Signers of the Declaration of Independence	<i>No effect</i>	Memorial would be rehabilitated, which would include resetting all the stonework and replacing vegetation where needed; accessibility would be improved by adding a perimeter path and second access path. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	Lockkeeper's House	Continued deterioration of the Lockkeeper's House in its current location would result in an adverse effect on the cultural landscape. <i>Adverse effect.</i>	The Lockkeeper's House would be relocated 18 feet to the south and 5 feet to the west and rehabilitated. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	The Lockkeeper's House would be relocated 500 feet to the southwest and rehabilitated. <i>Adverse effect.</i>
	Overlook Terrace and three terraces	<i>No effect</i>	Removed. <i>Adverse effect.</i>	Removed. <i>Adverse effect.</i>	Removed. <i>Adverse effect.</i>
	Vietnam Veterans Memorial	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
Three Servicemen Statue	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
Constitution Gardens Cultural Landscape	Vietnam Veterans Memorial	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
	Three Servicemen Statue	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
	Vietnam Women's Memorial	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
	<b>Views and vistas</b>				
	Vistas from park to Washington Monument	<i>No effect</i>	Altered by the inclusion of the pavilion. <i>Adverse effect.</i>	Altered by the inclusion of the pavilion. <i>Adverse effect.</i>	Altered by the inclusion of the pavilion. <i>Adverse effect.</i>
	Vista from Vietnam Veterans Memorial to Washington Monument	<i>No effect</i>	No change. <i>No adverse effect.</i>	Vista would be altered by amplifying the height and slopes with 8-10 feet of soil. <i>Adverse effect.</i>	Vista would be altered by amplifying the height and slopes with 4-6 feet of soil. <i>Adverse effect.</i>
	Views to reflecting pool area	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
	Vistas to Lincoln Memorial	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
	Vistas to buildings north of Constitution Avenue	<i>No effect</i>	No change. <i>No adverse effect.</i>	Vista would be altered by amplifying the height and slopes with 8-10 feet of soil. <i>Adverse effect.</i>	Vista would be altered by amplifying the height and slopes with 4-6 feet of soil. <i>Adverse effect.</i>
	View from Virginia Avenue to Washington Monument	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect.</i>
Vistas to the Vietnam Veterans Memorial	<i>No effect</i>	No change. <i>No adverse effect.</i>	Vista would be altered by amplifying the height and slopes with 8-10 feet of soil. <i>Adverse effect.</i>	Vista would be altered by amplifying the height and slopes with 4-6 feet of soil. <i>Adverse effect.</i>	
Views from Overlook Terrace	<i>No effect</i>	Views would be altered by the construction of the pavilion, which would alter the vantage point, and the addition of the ring in the lake; pavilion overlook deck and event terrace would provide similar views. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
Constitution Gardens Cultural Landscape	Internal views to lake	<i>No effect</i>	Internal views of the lake would be altered by the addition of the ring in the lake and the pavilion at the east end. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Internal views to island	<i>No effect</i>	Additional plantings may affect views. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	Views to buildings on or near the mall	<i>No effect</i>	Views to the east may be altered by the addition of the pavilion. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	<b>Constructed Water Features</b>				
	Constitution Gardens Lake	<i>No effect</i>	The shape of the island would be retained but a ring would be added to the east end. Lake would be excavated between 2 and 12 feet in depth and would have a non-concrete/natural bottom with a liner. Aquatic plants would be added along the shoreline. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
	<b>Small-Scale Features</b>				
	Cast iron and wood-slat benches	<i>No effect</i>	Site furnishing would be designed to complement the site context, be sustainable and easy to maintain. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	Lighting	<i>No effect</i>	Lighting would be designed to complement the site context, be sustainable and easy to maintain. <i>No adverse effect</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	Washington City Canal Memorial Stone, Plaque, and Mounting Block	<i>No effect</i>	These would be relocated along with the Lockkeeper's House and used for interpretative purposes. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
	Vietnam Veterans Memorial flagpole, "In Memory" Plaque, lighting fixtures and locations	<i>No effect</i>	No change. <i>No adverse effect.</i>	No change. <i>No adverse effect</i>	No change. <i>No adverse effect</i>

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
<b>BUILDINGS AND HISTORIC DISTRICTS</b>					
L'Enfant Plan Historic District		<i>No effect</i>	This alternative would not remove the park setting of Constitution Gardens, as specified for the area in the McMillan Plan. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
East West Potomac Parks Historic District		<i>No effect</i>	Two contributing features to the district would be altered: the 56 Signers Memorial and the Lockkeeper's House. The effects to the Lockkeeper's House are discussed below. The 56 Signers Memorial would be rehabilitated in-kind. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Lockkeeper's House		Continued deterioration of the Lockkeeper's House in its current location would result in an adverse effect on the cultural landscape. <i>Adverse effect.</i>	The Lockkeeper's House would be relocated 18 feet to the south and 5 feet to the west and rehabilitated. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	The Lockkeeper's House would be relocated 500 feet to the southwest and rehabilitated. <i>Adverse effect.</i>
Northwest Rectangle Historic District		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Seventeenth Street Historic District		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
The Washington Monument Grounds		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
National Mall Historic District		<i>No effect</i>	Two contributing features to the district would be altered: the 56 Signers Memorial and the Lockkeeper's House. The effects to the Lockkeeper's House are discussed below. The 56 Signers Memorial would be rehabilitated in-kind. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
President's Park South		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
The White House		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Federal Triangle and Pennsylvania Avenue National Historic Site		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Auditor's Building Complex		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Department of Agriculture (Administration Building)		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Bureau of Engraving and Printing		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Federal Reserve Board Building		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Public Health Service (Department of Interior South Building)		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
National Academy of Sciences Building		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
The Pan American Union (Organization of American States) Building		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
<b>ARCHEOLOGICAL RESOURCES</b>					
Lockkeeper's House deposits (51NW233)		<i>No effect</i>	The topsoil would not be removed under this alternative but would be remediated in place. Underground utilities would be installed, including water cisterns. A basement would be added to the Lockkeeper's House. <i>Adverse effect.</i>	The vast majority of the topsoil in Constitution Gardens would be removed. Underground utilities would be installed, including water cisterns. A basement would be added to the Lockkeeper's House. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
Washington City Canal (unevaluated)		<i>No effect</i>	The topsoil would not be removed under this alternative but would be remediated in place. Underground utilities would be installed, including water cisterns. A stormwater system would be constructed across Constitution Avenue and 17th Street. <i>Adverse effect.</i>	The vast majority of topsoil would be removed, which would not extent to depths sufficient to impact the resource. A stormwater system would be constructed across Constitution Avenue and 17th Street, which would directly impact sections of the resource. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
Lock B of the Washington City Canal (51NW235)		<i>No effect</i>	The topsoil would not be removed under this alternative but would be remediated in place. Underground utilities would be installed, including water cisterns. A stormwater system would be constructed across Constitution Avenue and 17th Street. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
17th Street Wharf (unevaluated) (51NW232)		<i>No effect</i>	A storm water system would be constructed across Constitution Avenue and 17th Street. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
WWI and WWII Temporary Buildings (unevaluated)		<i>No effect</i>	The foundations of the temporary buildings cover most of the primary APE and are buried by several feet of fill. Deep construction impacts, including the deepening of the lake, construction of a basement for the Lockkeeper's House, underground utility construction, and construction of a pavilion on the east end of the lake could all impact this resource. <i>Adverse effect.</i>	The foundations of the temporary buildings would be removed entirely. <i>Adverse effect..</i>	Same as preferred alternative. <i>Adverse effect.</i>

Resource	Features	No Action Alternative	Preferred Alternative: Regenerative Garden	Alternative 1: Ecological Garden	Alternative 2: Social Garden
Outlet of the Tiber Creek sewer (unevaluated) (51NW234)		<i>No effect</i>	This resource is found under several feet of fill on the west side of 17th Street and underneath 17th Street. Stormwater and water system improvements may directly impact the resource, as may construction of a driveway leading to east concession stand area. <i>Adverse effect.</i>	The vast majority of the topsoil in Constitution Gardens would be removed. The soil removal would not extend to depths sufficient to impact the resource. The outlet of the Tiber Creek sewer could be <i>adversely affected</i> however by the construction of stormwater systems in the park and under 17th Street. <i>Adverse effect.</i>	Same as alternative 1. <i>Adverse effect.</i>
Washington Brewery (Coningham and Company) (not located)		<i>No effect</i>	The brewery remains have not been identified but likely are found underneath several feet of fill. Deep construction impacts, including construction of a basement for the Lockkeeper's House and underground utility construction could impact this resource. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>	Same as preferred alternative. <i>Adverse effect.</i>
Monument Grounds Site (51NW035) (unevaluated)		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Commissioner's Wharf (H68) (not located)		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>
Washington City Gas Works (H69) (not located)		<i>No effect</i>	No change. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>	Same as preferred alternative. <i>No adverse effect.</i>

## Exhibit 9 - Tiber Creek Sewer Outfall

DC SHPO Archaeological Report # 557

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# ARCHEOLOGICAL MONITORING OF CONSTRUCTION POTOMAC PARK LEVEE NATIONAL MALL AND MEMORIAL PARKS DISTRICT OF COLUMBIA

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PREPARED FOR:



GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF TRANSPORTATION  
64 New York Avenue, NE  
Washington, D.C. 20002

PREPARED BY:



THE LOUIS BERGER GROUP, INC.  
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Washington, D.C. 20037

March 2013

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FIGURE 28: Close-up View of Keystone

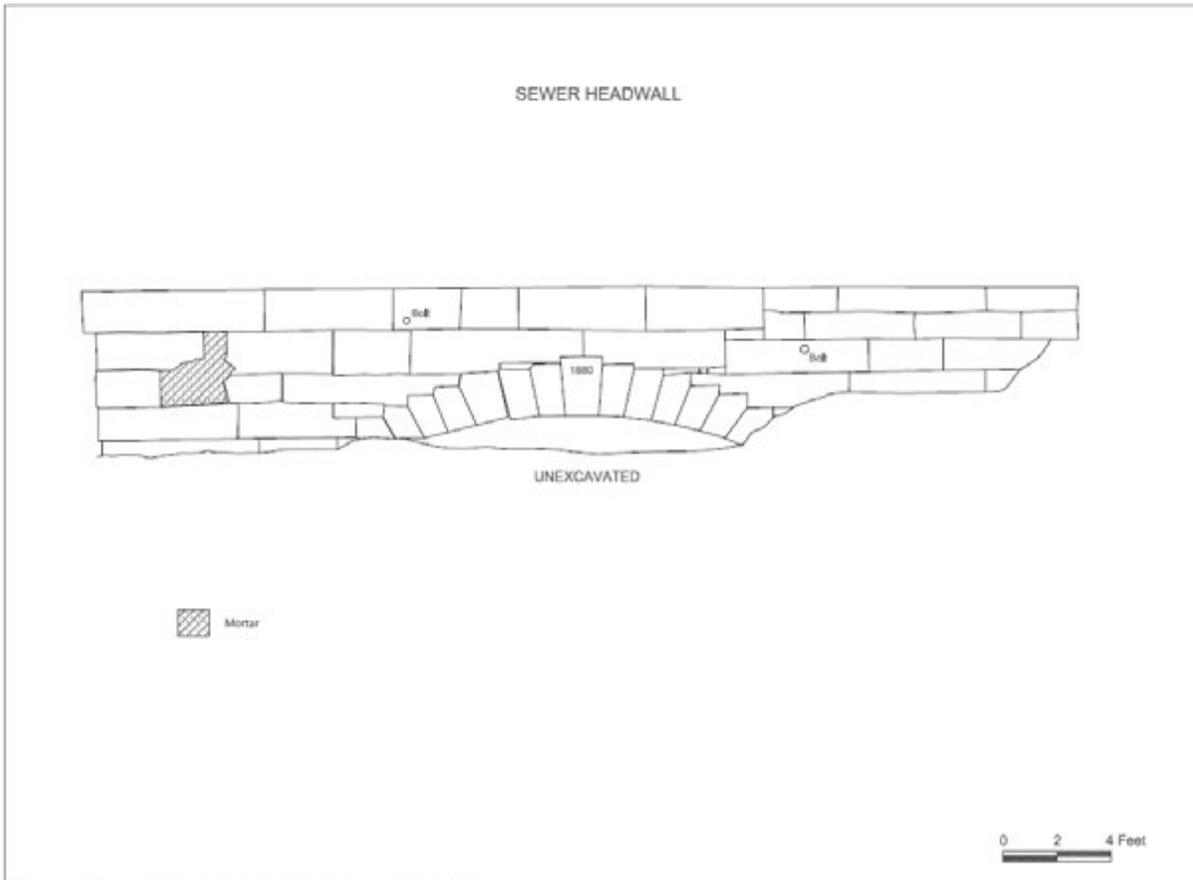


FIGURE 26: Elevation Drawing, Tiber Creek Sewer Headwall