Hirshhorn Museum and Sculpture Garden

Section 106 Consulting Parties Meeting #1
April 10, 2019
Meeting Agenda

• **Welcome and Introduction**  
  Jay Kaveeshwar, Deputy Director, Hirshhorn Museum and Sculpture Garden (HMSG)

• **Building Envelope Repair**  
  Carly Bond, Historic Preservation Specialist, Smithsonian Facilities

• **Hirshhorn Museum and Sculpture Garden Architectural History**  
  Carly Bond, Historic Preservation Specialist, Smithsonian Facilities

• **Sculpture Garden Goals and Programming**  
  Melissa Chiu, Director, HMSG

• **Sculpture Garden Revitalization**  
  Al Masino, Director of Exhibits and Special Projects, HMSG  
  Carly Bond, Historic Preservation Specialist, Smithsonian Facilities  
  Faye Harwell, Director and Landscape Architect, Rhodeside & Harwell

• **Next Steps**  
  Carly Bond, Historic Preservation Specialist, Smithsonian Facilities
Section 106 Process Overview

Hirshhorn Museum and Sculpture Garden is a contributing resource to the National Mall Historic District and determined individually eligible for the National Register of Historic Places.
Building Envelope Repair

Carly Bond, Smithsonian Facilities
Existing Conditions
Conditions Study – 2016-2019
Existing Precast Panels

Maximum reasonable insulation thickness based on measurements: 2”
Existing Precast Panel Attachments

**Fig. 1** Partial Elevation - Typical Outer Ring Anchorage Configuration

**Fig. 2-1** Section - Typical Strap Anchor

**Fig. 2-2** Section - Typical Relieving Angle
Existing Conditions

- Strap anchor. Shims filling gap, strap bent
- Relieving angle. Corrosion, spalling, and uneven panel bearing
- Concrete back-up wall, Water saturation
- Concrete panel intentionally chipped for anchorage installation
- Uneven spacing between panels
- Concrete spalling adjacent to relieving angle bearing surface
Precast Panels – Reattachment

Elevation

Horizontal Section (1)

Horizontal Section (2)

Vertical Section (3)

COMMENTS/CONCLUSIONS

- Mid-height lateral connection shown but may not be required.
- Base connection requires plate to be recessed into existing panel.
- Base connection may require recessing into the concrete back-up wall depending on as-built conditions.
- Lateral connection may require recessing into the panel based on as-built conditions.
Replace with Traditional Precast Panels

Fitting into existing condition will not meet prescriptive energy code requirements

Façade will need to “grow” to meet prescriptive energy code requirements
Existing Condition
Precast Panels - Offset +3”
Existing Condition
Precast Panels - Offset +3”
Existing Condition
Precast Panels - Offset +3”
Granite Aggregate

- Original Swenson Pink granite now quarried under the name “Salisbury Pink”
- Vendor supplies Salisbury Pink as blocks or slabs; separate vendor would have to be retained to crush to aggregate
- Additional granite options under consideration
- Original aggregate size varies from 1/2” to 3/8” in size
North Balcony Glazing

Existing Mullion Section

Proposed Mullion Section
Balcony Door
Roof Drainage
Roof Details

2" Concrete pavers on pedestals
Filter fabric
6" XPS rigid foam insulation
1/2" Drainage composite
Embedded protection layer
215 mil fabric-reinforced hot fluid-applied rubberized asphalt (HRA) membrane
Bonded overlay; thickness varies
Structural roof slab thickness varies 5" to 7"

Reglet set flashing
Continuous termination bar
UV-stable embedded cap sheet
2 in. wide cleats at 24 in. o.c.
Uncured neoprene at all corners
2" Concrete pavers on pedestals
Filter fabric
6" XPS rigid foam insulation
1/2" Drainage composite
Embedded protection layer
215 mil fabric-reinforced hot fluid-applied rubberized asphalt (HRA) membrane
Bonded overlay; thickness varies
Structural roof slab thickness varies 5" to 7"
Comments or Questions
Hirshhorn Museum and Sculpture Garden
Architectural History

Carly Bond, Smithsonian Facilities
Unrealized Design Concept - Expansive Reflecting Pool

Skidmore, Owings & Merrill (SOM), 1967
Unrealized Design Concept - Expansive Reflecting Pool

Gordon Bunshaft, Skidmore, Owings & Merrill, 1967
Unrealized Design Concept – Enlarged Pool

Skidmore, Owings & Merrill, 1969
Realized Design

Final Approved Design, SOM, 1971
1974 Opening

As-built conditions, 1974

Lester Collins, 1977

- National Register documentation proposes 1974 as the period of significance
1981 Garden Modifications

As-built conditions, 1981
Tunnel Modifications
Comments or Questions
Sculpture Garden Project and Programming Goals

Melissa Chiu, Hirshhorn
Isamu Noguchi with Nina and Gordon Bunshaft, Ryoanji, Kyoto, Japan, 1960
Tunnel Connection – Past and Present

Original Tunnel Connecting the Garden and Plaza, 1974

Existing Condition, 2019
Programming Inspiration

Annual Contemporary Art Exhibition at Versailles – Lee Ufan, 2014
Programming Inspiration

Turbine Hall at Tate Modern, Rachel Whiteread (2005); Olafur Eliasson (2003)
Hirshhorn Performance Art Exhibitions


Jen Rosenblit, *I'm Gonna Need Another One*, Does the Body Rule the Mind, Or Does the Mind Rule the Body?, Hirshhorn Museum, 2018
Doug Aitken, *Song 1*, Hirshhorn Museum, 2012
Yayoi Kusama: Infinity Mirrors, 2017
Existing Sculpture Setting

Henry Moore, *King and Queen*, Hirshhorn Museum and Sculpture Garden
Garden Programming
Hiroshi Sugimoto

Stacked Stone Walls

Proposed type of stone wall
(Shown here: Landscape walls at guest house in Kiyoharu, Japan by NMRL)

Proposed stone source, Japanese quarry. Other US stone sources are under consideration.

Proposed stone wall section 1:25
Stacked Stone Wall Renderings

Renderings of bronze sculptures in front of stone walls
Reestablishing Relationship of National Mall, Garden and Museum
Underground Passage
Underground Passage Concept

Garden and Museum Lower Level

Hiroshi Sugimoto Sculpture at Otemachi, Tokyo
Concept Design
Comments or Questions
Sculpture Garden Revitalization

Al Masino, Hirshhorn
Carly Bond, Smithsonian Facilities
Faye Harwell, Rhodeside & Harwell
Current Sculpture Garden Site Plan
Visual examples of Alkali-Silica Reaction and internal sulfate attack, efflorescence, surface accumulation, 2018
Water Feature Deterioration

Pool perimeter condition, metal fin separates pool from perimeter gutter

Pool perimeter, deterioration of concrete and waterproofing
National Mall Views

East Apron

West Apron

National Mall Path
Garden Organization
Garden Plan
Existing Accessible Route
Improved Accessibility
North Overlook
Concept Sketch Looking South
East and West Overlooks

Section of West Overlook

Section of East Overlook
West Garden and Flexible Program

Potential Garden Uses

Enlarged Plan of West Garden
West Garden
Concept Sketch Looking West
West Garden
Concept Sketch Looking Southeast
East Garden Plan – Modern Bronze Collection
Stacked Stone Walls
East Garden
Concept Sketch Looking West
East Garden
Concept Sketch Looking West
Original Entrance to Underground Passage
Original Bunshaft Design
Preferred Alternative - Entrance to Underground Passage

Enlarged Opening
Alternative 1 - Entrance to Underground Passage

Original Opening with Skylights
Alternative 2 - Entrance to Underground Passage

Maximum Stair Opening
Entrance to Underground Passage
Concept Sketch of Reflecting Pool Looking South
Underground Passage Layout
Reflecting Pool and Performance Area
Preferred Alternative - Reflecting Pool Studies

Proposed Pool with Dimensions
Reflecting Pool and Performance Area

Preferred Plan of Reflecting Pool and Performance Area

Example of performance space with amphitheater seating

Example of Theater Performance
Reflecting Pool Detail – Seasonal Change
Alternative 1 - Reflecting Pool Studies
Bunshaft Pool Integration and Stage
Alternative 2 - Reflecting Pool Studies

Bunshaft Pool Integration - No Stage
Alternative 3 – Reflecting Pool Studies
Pool Sized to Balcony Window
Comparative Analysis of Garden Evolution

Bunshaft Plan 1974: Extant Original Elements

- Elm Trees on West Apron
- Raised Terrace in the West Garden
- Interior Walls
- Tree at Pool
- Overlook and Stairs
- Pool
- Perimeter Walls
- Tunnel
- Elm Trees on East Apron
Comparative Analysis of Garden Evolution
Collins Plan 1981: Extant Collins Elements
Comparative Analysis of Garden Evolution
Extant Bunshaft and Collins Elements Combined
Comparative Analysis of Garden Evolution
Overlay on Proposed Sugimoto Garden Design
Cumulative Planting and Paving Changes

1972
Bunshaft Landscape Design 1972: 30% Landscape / 70% Paving & Gravel

1981
Lester Collins Design 1981: 55% Landscape / 41% Paving

39% Landscape / 61% Paving
Species Palette - Trees

Acer saccharum 'Green Mountain' - Sugar Maple
Chiouanthis retusus - Chinese Fringetree
Halesia carolina - Carolina Silverbell
Magnolia acuminata - Cucumber Magnolia

Prunus x yedoensis - Yoshino Cherry
Syrinx japonica 'Snow Cone' - Japanese Snowbell
Magnolia x soulangiana 'Alexandra' - Saucer Magnolia
Parrotia persica - Persian Ironwood
Shade Study at Installation
Shade Study at Maturity
Planting Plan – Ground Plane

<table>
<thead>
<tr>
<th>Key</th>
<th>Species</th>
<th>Common Name</th>
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<tbody>
<tr>
<td>AUU</td>
<td>Acer pseudoplatanus</td>
<td>Sugar Maple</td>
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<tr>
<td>PPR</td>
<td>Picea pungens</td>
<td>White Spruce</td>
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<td>DGN</td>
<td>Dicistroglycote 'Nikko'</td>
<td>Slender Deutzia</td>
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<td>HNS</td>
<td>Hydrangeas serrata 'Nikko'</td>
<td>White Wood Hydrangea</td>
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<td>SHO</td>
<td>Salix 'Nikko'</td>
<td>Fragrant Mountain Dogwood</td>
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<tr>
<td>CPR</td>
<td>Cotoneaster 'Little Dipper'</td>
<td>Cotoneaster 'Little Dipper'</td>
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<td>AML</td>
<td>Amlora pseudomugifolia 'Kose-ke-Kei'</td>
<td>Chinese Honeysuckle</td>
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<tr>
<td>LSP</td>
<td>Lilac 'Kanjiro'</td>
<td>Dwarf Isabella Lilac</td>
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<tr>
<td>MDE</td>
<td>Microbiorsa decussata</td>
<td>Siberian Cypress</td>
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<tr>
<td>MET</td>
<td>Malus 'Red Baron'</td>
<td>Osier 'Red Baron'</td>
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<tr>
<td>LIP</td>
<td>Lavandula angustifolia 'Phenomenal'</td>
<td>Lavender</td>
</tr>
<tr>
<td>SAU</td>
<td>Sedum autumnaliss</td>
<td>Autumn Moor Grass</td>
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<tr>
<td>CPE</td>
<td>Carex pensylvanica</td>
<td>Oak Sedge</td>
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* Indicates alternative recommended species
Species Palette – Ground Plane

**Evergreen**
- *Arctostaphylos uva-ursi* - Bear Berry
- *Sarcococca hookeriana* - Sarcococca
- *Liriope muscari* 'Isabella' - Fine Leaf Liriope

**Deciduous**
- *Carex pennisylvanica* - Oak Sedge
- *Aronia melanocarpa* 'Lowlace Mound'
- *Matteuccia struthiopteris* - Ostrich Fern

**Semi-Evergreen**
- *Macrophyla decussata* - Siberian Cypress
- *Deutzia gracilis* 'Nikko' - Slender Deutzia
- *Pachysandra procumbens* - Allegheny Spurge

**Ephemeral Bulbs**
- *Hyacinthoides non-scripta* 'Alba' - White Wood Hyacinth
Planters and Benches

Detail A: Amphitheater bench (at water feature) 1:25
Detail B: Bench at stone wall (at elevation transition) 1:25
Detail C: Bench at raised planter border 1:25
Paving Plan
Material Palette

Main Paving Area
Granite stone pavers. To be used for main garden paving and all stairs / ramps within main paver surface.

North and South Overlook Paving
Recycled “pink” granite stair treads, as salvaged from original Bunshaft garden (Currently stored at Smithsonian Institution warehouse). To be used for north and south overviews. Re-installation of existing stair treads combined with new matching “pink” granite.

East, West & South Perimeter Paving
Existing exposed aggregate concrete sidewalk (Jefferson Drive, 7th Street), to be restored. Some additions along the east and west apron. New cross walk on Jefferson Drive.

Existing concrete walls
Existing walls will be restored, incorporating similar stone aggregate color and surface texture to original Bunshaft walls.

New Stone Walls
Natural bolder-shaped granite stone.

Benches
Terrazzo-ground concrete panels, using similar stone aggregate to the original Bunshaft perimeter walls.
Lighting Concepts

[Image: Diagram of lighting concepts with labels for different types of lighting, such as Pool Edge Lighting, Beach Lighting, Stair / Ramp Lighting, Tree Lighting, Walkway Lighting, Tunnel Downlight, and Existing Street Light Pole.]

[Image: Close-up of tree uplighting and linear LED lighting.]

[Image: Diagram showing a handrail with integrated LED lighting.]
Concept Design
Comments or Questions
Section 106 Consultation – Next Steps

Carly Bond, Smithsonian Facilities
South Mall Campus Master Plan Programmatic Agreement Compliance

This Programmatic Agreement (PA) is made as of May 31, 2018, by and among the Smithsonian Institution (SI), the National Capital Planning Commission (NCPC), the District of Columbia State Historic Preservation Officer (DC SHPO), the National Park Service (NPS), and the Advisory Council on Historic Preservation (ACHP) (together collectively known as the “Signatories” or individually as a “Party” or “Signatory”), pursuant to Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. § 300106, and its implementing regulations 36 PFR Part 800, and pursuant to 36 CFR § 800.14(b) authorizing the negotiation of a PA to govern the implementation of a particular program, and recitals of adverse effects from complex project situations or multiple undertakings, regarding the South Mall Campus Master Plan in Washington, DC (hereinafter referred to as the “Campus” or “Site”).

Whereas, for the purposes of this PA, the South Mall Campus is defined by Independence Avenue SW to the south; 12th Street SW to the west; Jefferson Drive SW to the north; and including the Joseph Henry statue and adjacent stair, and the Hirshhorn Museum’s Sculpture Garden both located north of Jefferson Drive; and

Whereas, the South Mall Campus includes five principal buildings: the Freer Gallery of Art (Freer), the Smithsonian Institution Building (Castle), the Arts and Industries Building (AIB), the Quadrangle Building (Quadrangle), and the Hirshhorn Museum and Sculpture Garden (HMSG); with the Quadrangle housing the Ripley Education Center, Arthur M. Sackler Gallery (Sackler Gallery) and the National Museum of African Art (MMAFA). The Campus includes four designed gardens: the East A. Haupt Garden, the Mary Livingston Ripley Garden, the Kathleen Duke Felger Rose Garden, and the Hirshhorn Museum Sculpture Garden. The Campus also includes subsidiary structures, interstitial landscape, paved circulation paths, and infrastructure, hereinafter referred to as the “Campus” or “Site” (Exhibit A), and

Whereas, pursuant to Section 106 of the NHPA federal agencies must take into account the effects of their undertakings on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register of Historic Places (NRHP) and afford the ACHP a reasonable opportunity to comment; and

Whereas, pursuant to Public Law 108-72, 117 Stat. 888 (August 15, 2003), for projects in the District of Columbia that are subject to review and approval by the NCPC, the SI is deemed to be a federal agency for purposes of compliance with the regulations pursuant to Section 106 of the NHPA; and

Whereas, the NCPC has certain review and approval authority over federal projects located within the District of Columbia pursuant to the National Capital Planning Act of 1965, 40 U.S.C. § 8722(b)(1), and (d); and

HMSG website
Draft Area of Potential Effects
Cleaning Tests

Mock-ups

Swenson Pink/Salisbury Pink Granite

Stony Creek Granite
**Envelope Repair**

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<tr>
<td>Commission of Fine Arts Concept Review</td>
<td>June 2019</td>
</tr>
<tr>
<td>National Capital Planning Commission Concept Review</td>
<td>July 2019</td>
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<tr>
<td>Mock-ups – Precast aggregate concrete</td>
<td>TBD</td>
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<tr>
<td>Consulting Parties Meeting #2</td>
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**Sculpture Garden Revitalization**

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<tr>
<td>National Capital Planning Commission Concept Review</td>
<td>June 2019</td>
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<tr>
<td>Mock-ups – Two stacked stone wall options</td>
<td>July 2019</td>
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<tr>
<td>Consulting Parties Meeting #2 (Mock-up review, Assessment of Effects – 30 days Consulting Parties advance review notice)</td>
<td>July/August 2019</td>
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Please submit any written questions or comments on the content of this presentation to Carly Bond at BondC@si.edu by May 3rd.