

# **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.



National Park Service, National Mall Historic District

**DC STATE HISTORIC PRESERVATION OFFICE  
DETERMINATION OF ELIGIBILITY FORM**

**PROPERTY INFORMATION**

Property Name(s): Hirshhorn Museum and Sculpture Garden  
 Street Address(es): Independence Avenue at Seventh Street, SW  
 Square(s) and Lot(s): Reservation 1A  
 Property Owner(s): Smithsonian Institution  
 Please include a current map(s) to indicate the location of the property/properties.

The property/properties is/are being evaluated for potential historical significance as for:

An individual building or structure.  
 A contributing element of a historic district (specify): National Mall Historic District  
 A possible expansion of a historic district (specify):  
 A previously uninvolved historic district to be known as (specify):  
 An archaeological resource with site number(s) (specify):  
 An object (e.g. statue, stone marker etc.) (specify):  
 A new multiple property (thematic study regarding (specify):  
 Association with a multiple property/thematic study (specify):  
 Other (specify):

Description, rationale for determination, photos & other pertinent information (see below):

Hirshhorn Museum and Sculpture Garden, facing south from Mall entrance.

We Are Here



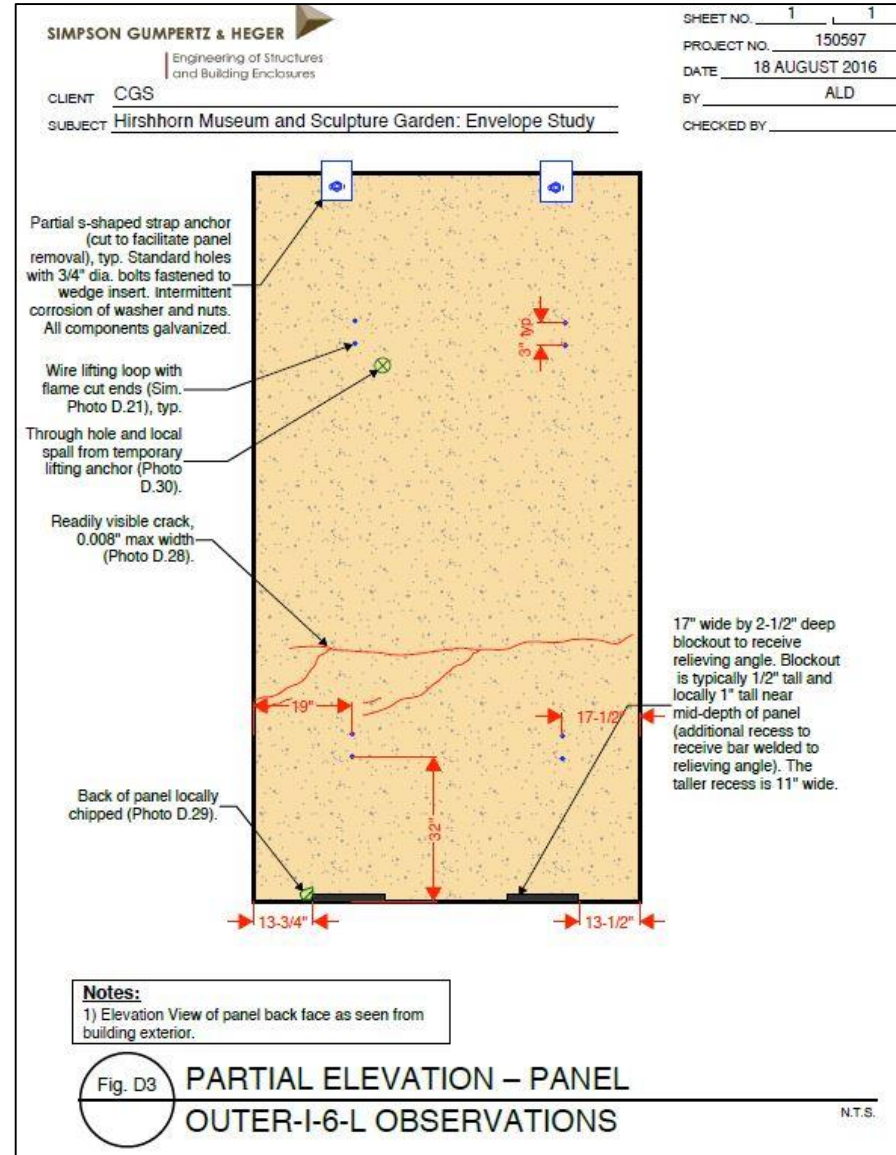
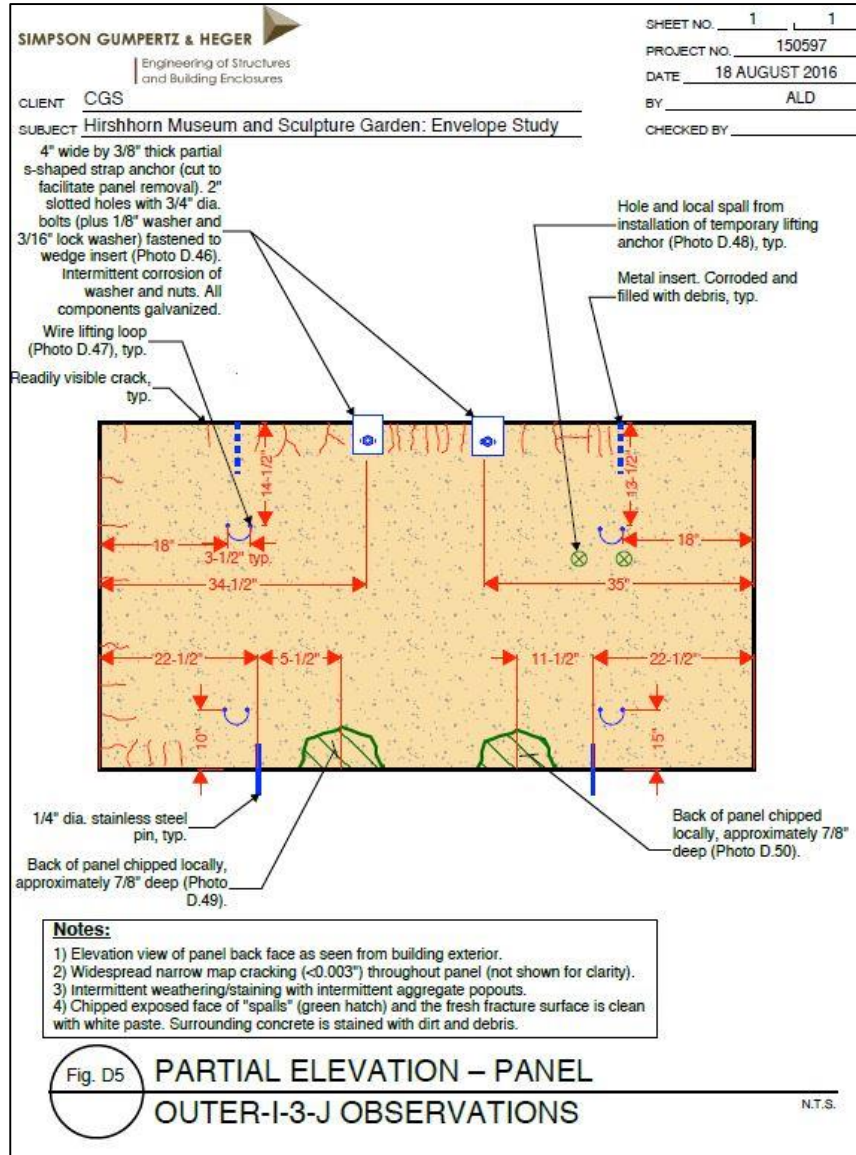
# **Building Envelope Repair**

**Carly Bond, Smithsonian Facilities**

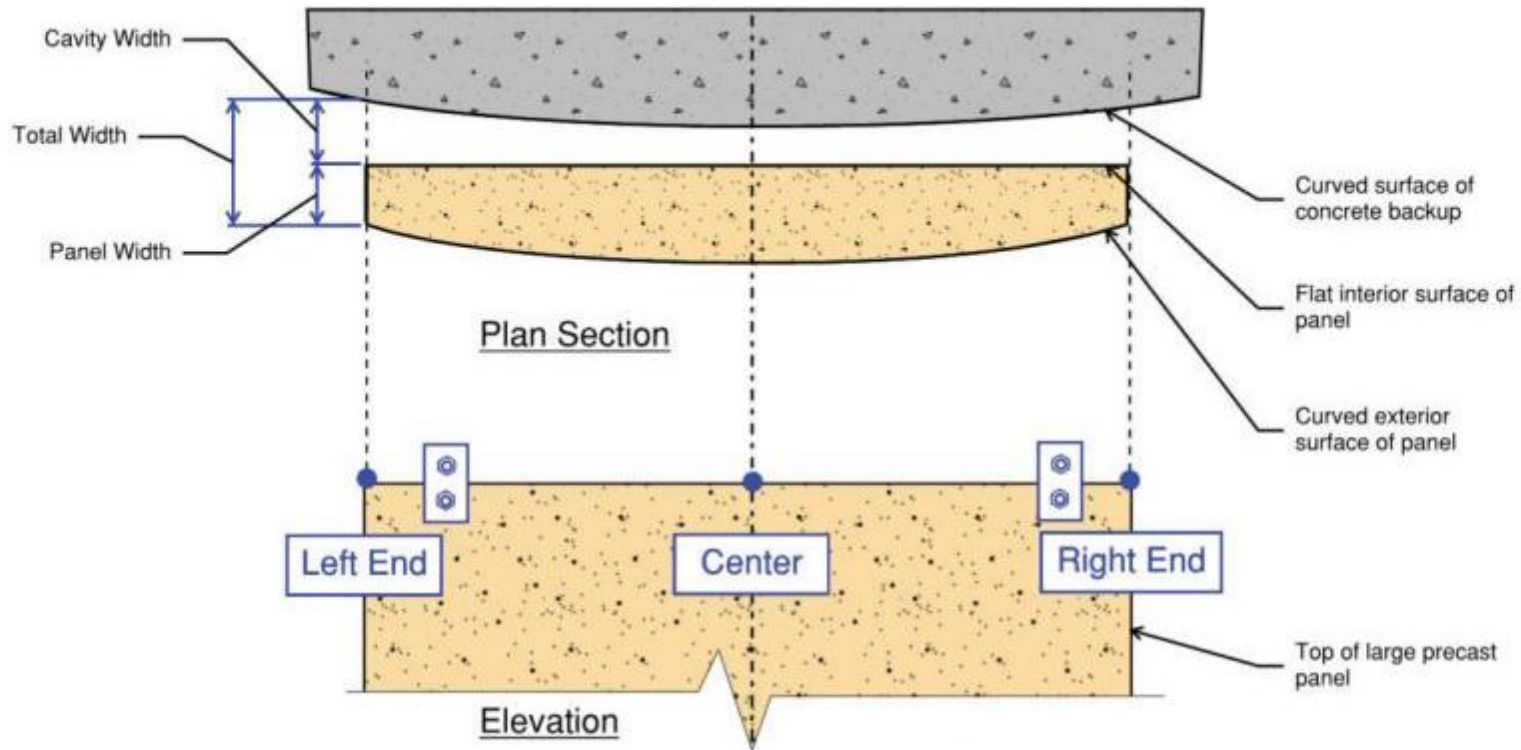
# Existing Conditions



# Conditions Study – 2016-2019



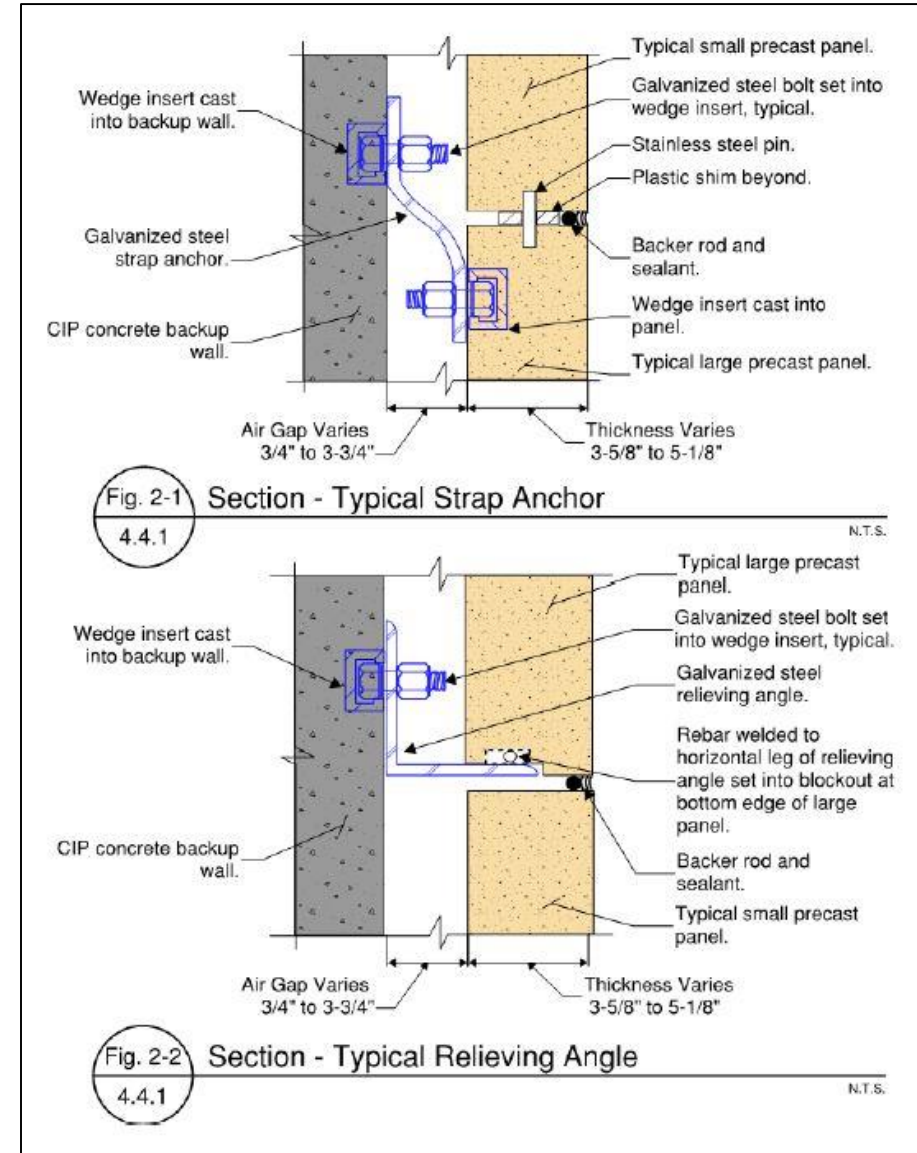
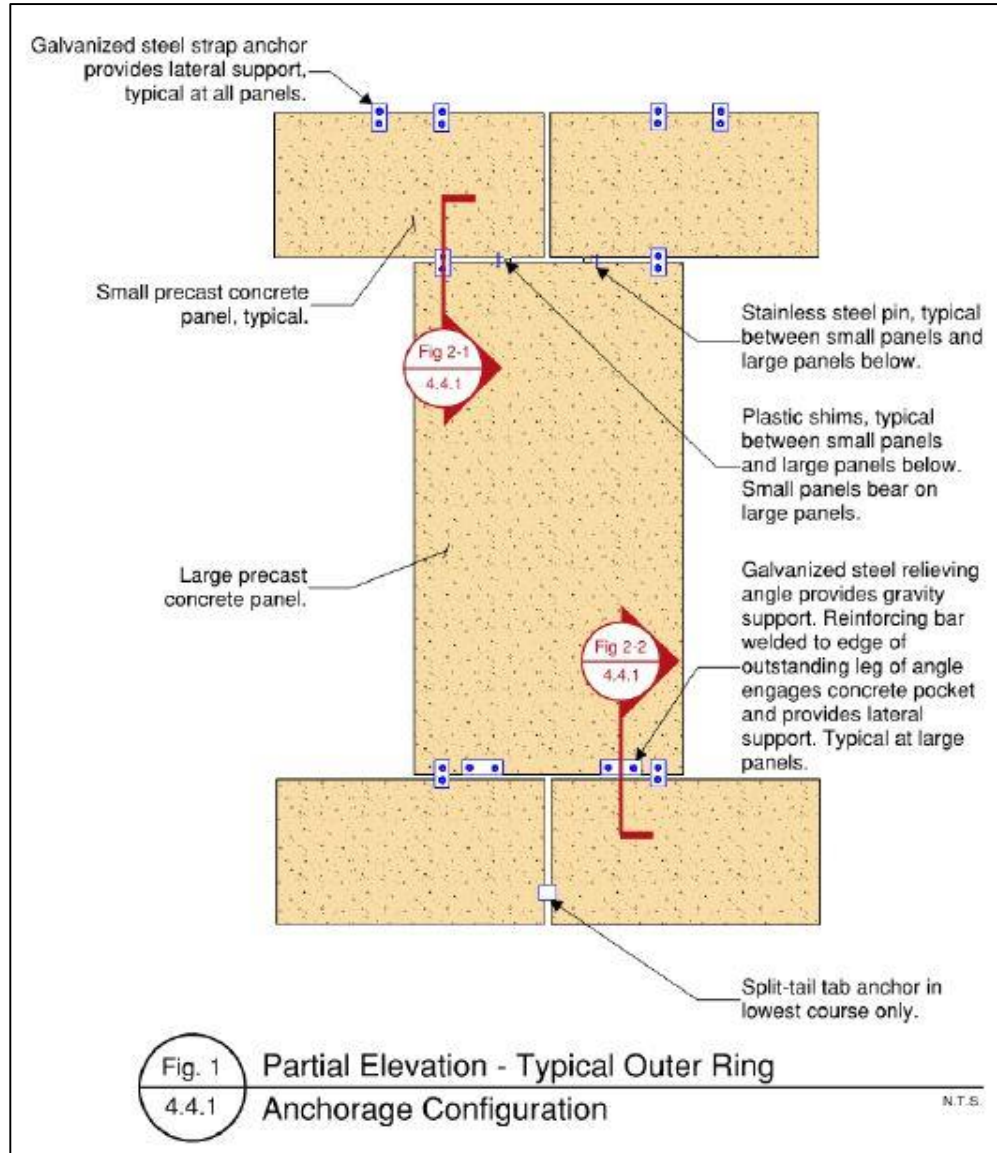
# Existing Precast Panels



	Panel Width		Cavity Width		Total Width	
	<i>Center</i>	<i>Ends</i>	<i>Center</i>	<i>Ends</i>	<i>Center</i>	<i>Ends</i>
Minimum	3.5"	3.5"	1.25"	1"	5.5"	5.25"
Maximum	5"	4.75"	3.25"	3.75"	7.75"	7.75"
<b>Average</b>	<b>4.5"</b>	<b>4"</b>	<b>2"</b>	<b>2.5"</b>	<b>6.5"</b>	<b>6.5"</b>

**Maximum reasonable insulation thickness based on measurements: 2"**

# Existing Precast Panel Attachments





# 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

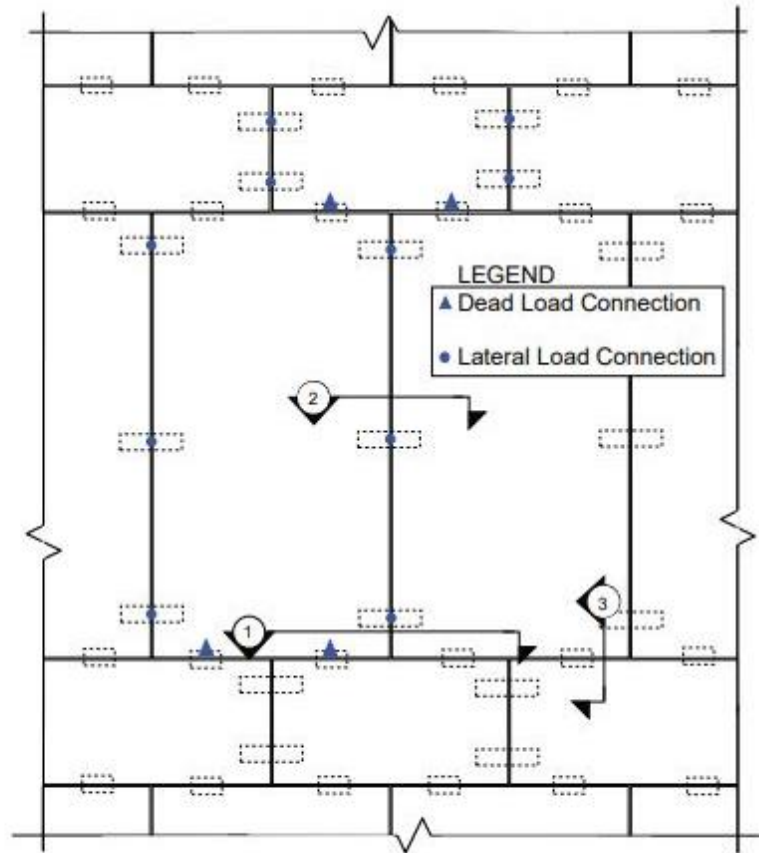


Uneven spacing between panels

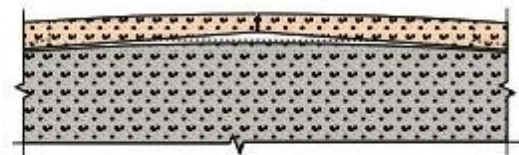


Concrete spalling adjacent to relieving angle bearing surface

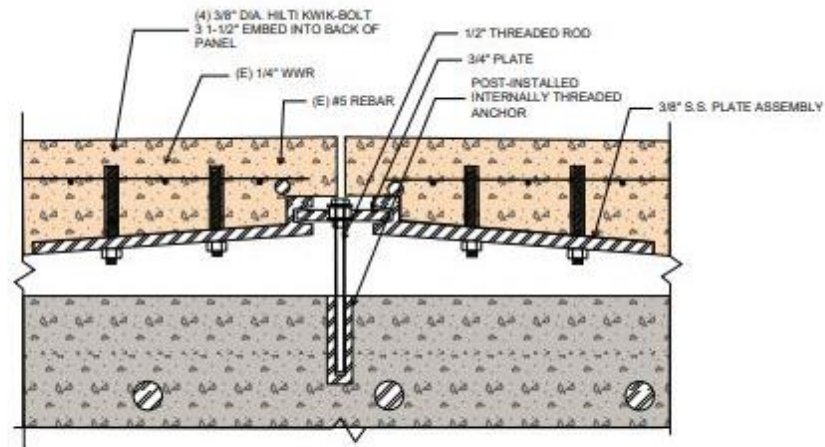
# Precast Panels – Reattachment



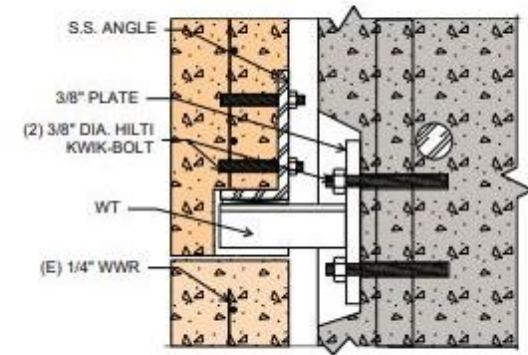
Elevation



Horizontal Section (1)



Horizontal Section (2)

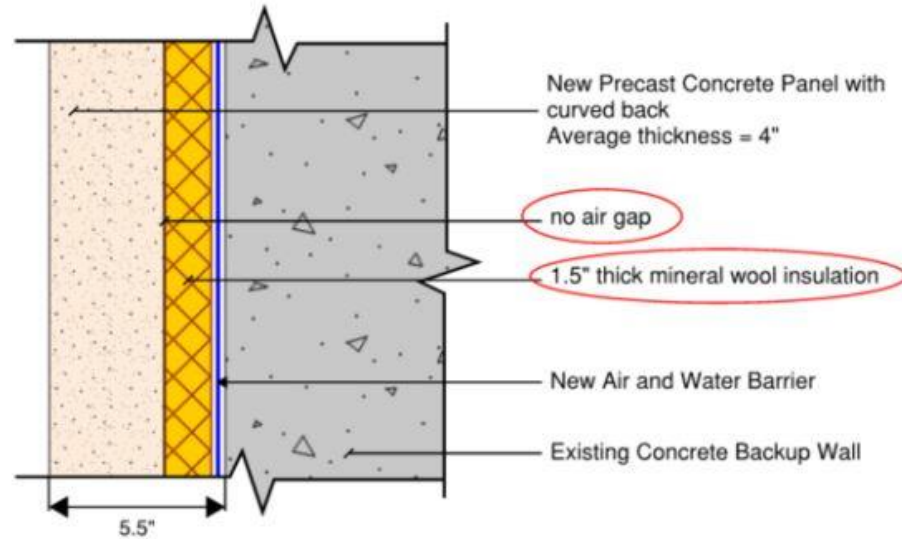


Vertical Section (3)

## COMMENTS/CONCLUSIONS

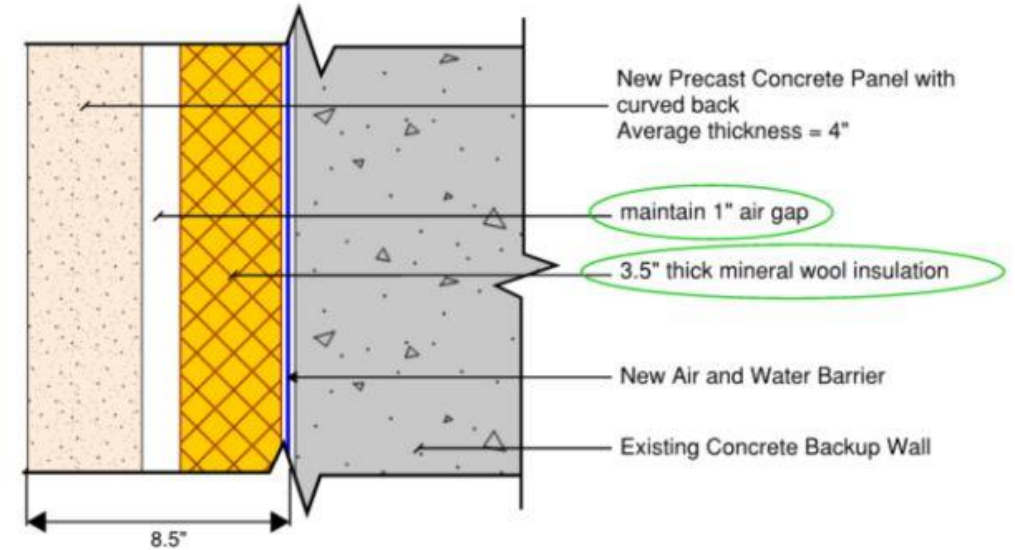
- Mid-height lateral connection shown but may not be required.
- Base connection requires plate to be recessed into existing panel.
- Base connection may require recessing into the concrete back-up wall depending on as-built conditions.
- Lateral connection may require recessing into the panel based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

# Replace with Traditional Precast Panels



**Minimum Existing Wall Thickness**

Fitting into existing condition will not meet prescriptive energy code requirements



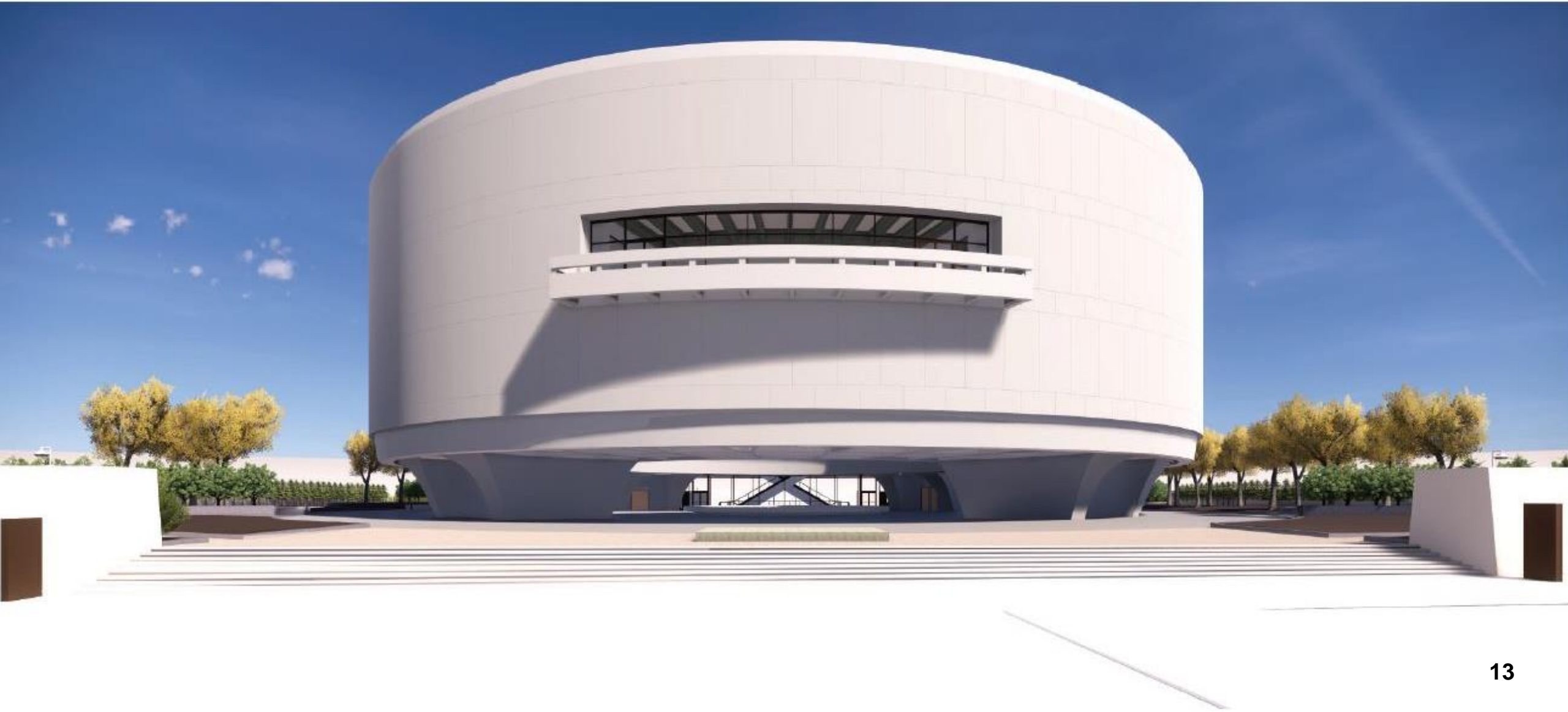
**Proposed Condition with 3" Offset**

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"



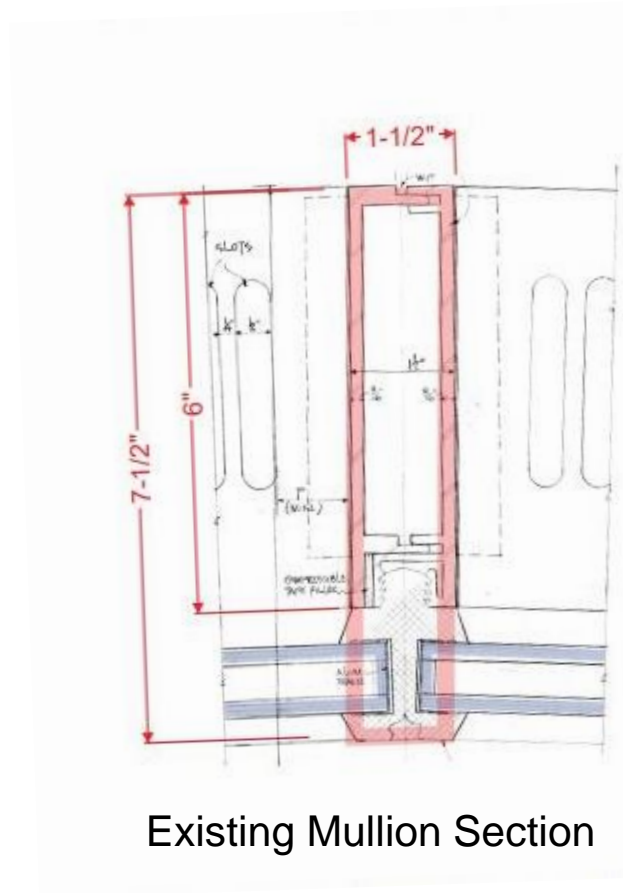
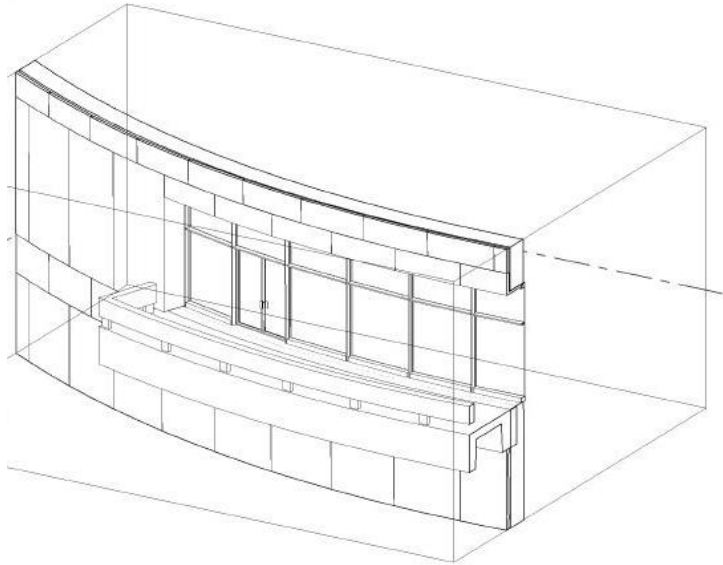
# Granite Aggregate



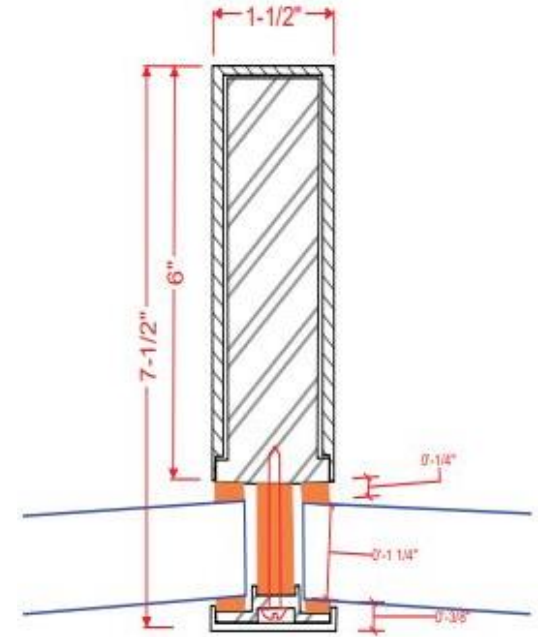
- Original Swenson Pink granite now quarried under the name “Salisbury Pink”
- Vendor supplies Salisbury Pink as blocks or slabs; separate vendor would have to be retained to crush to aggregate
- Additional granite options under consideration
- Original aggregate size varies from 1/2” to 3/8” in size



# North Balcony Glazing

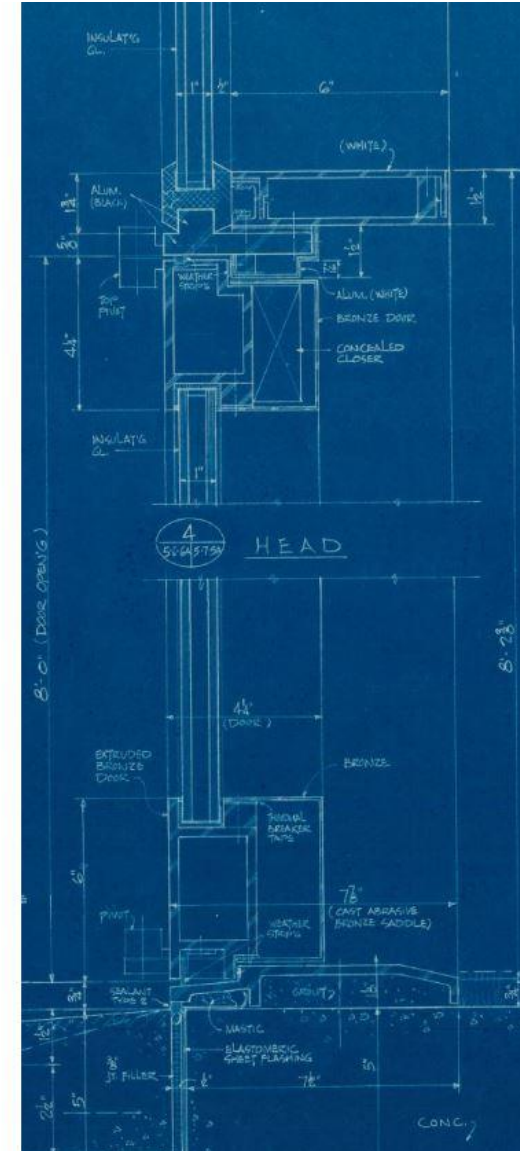
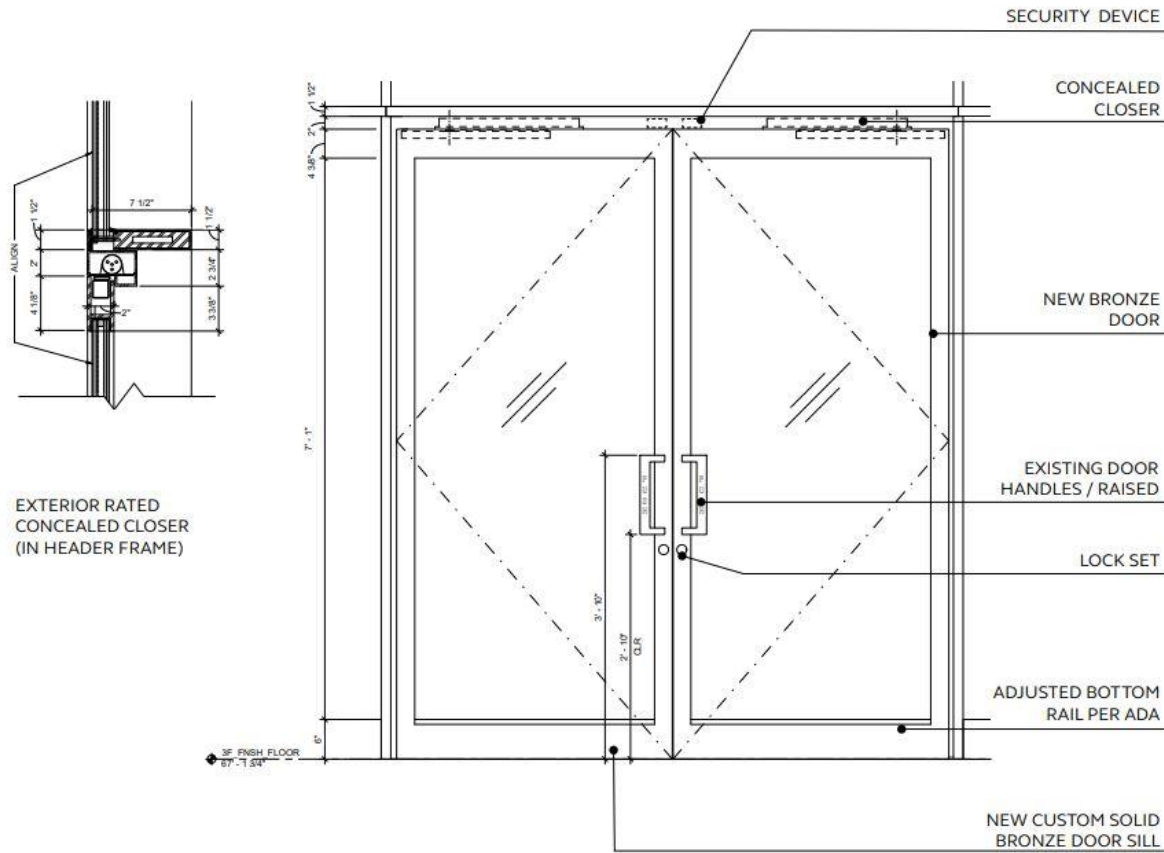


Existing Mullion Section

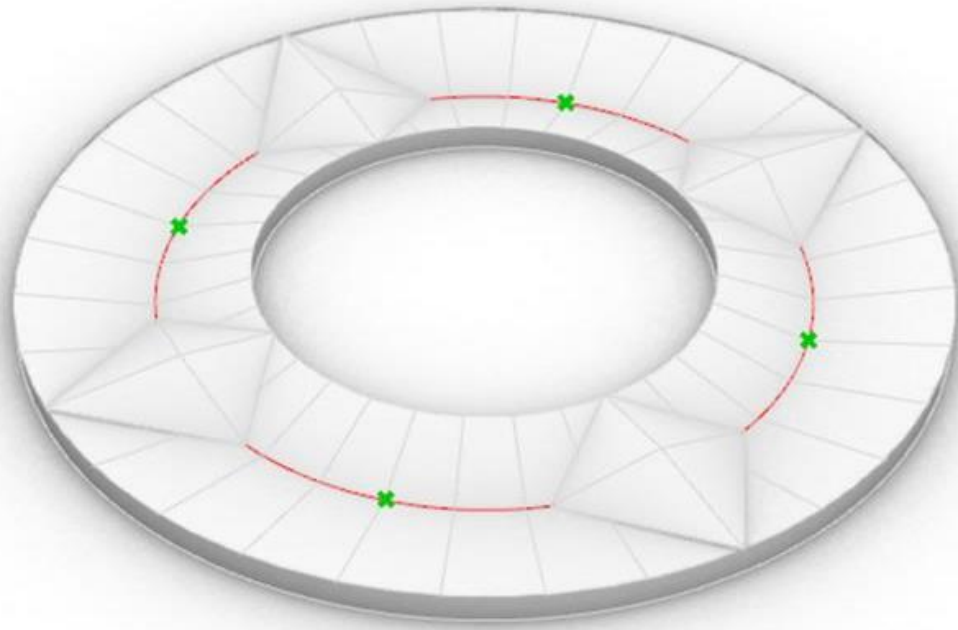


Proposed Mullion Section

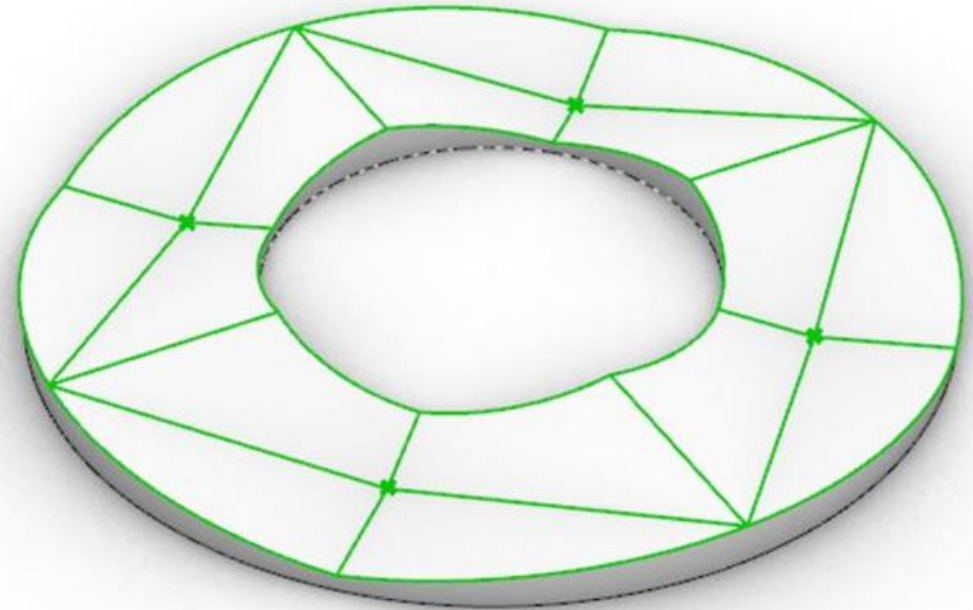
# Balcony Door



# Roof Drainage

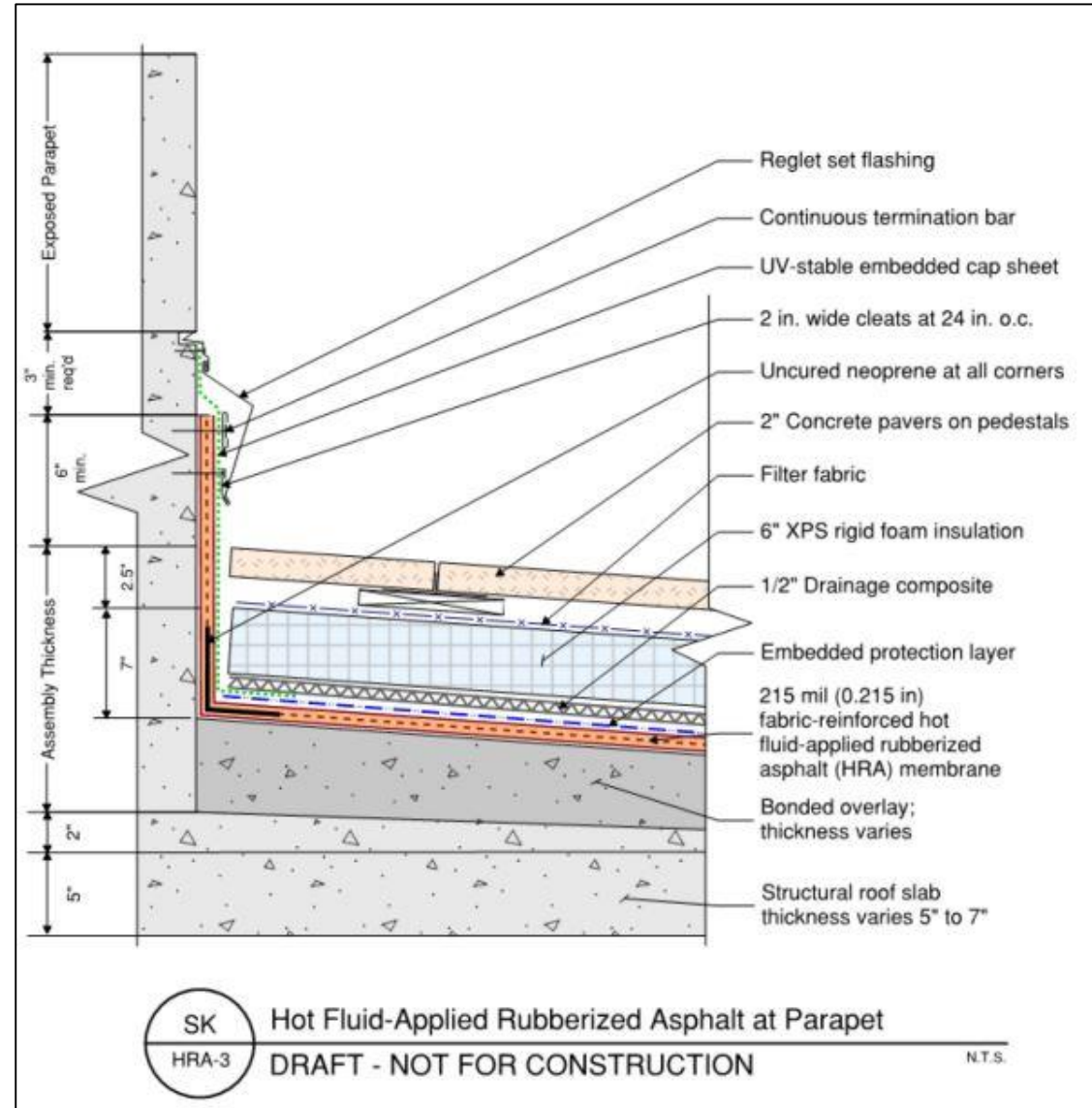
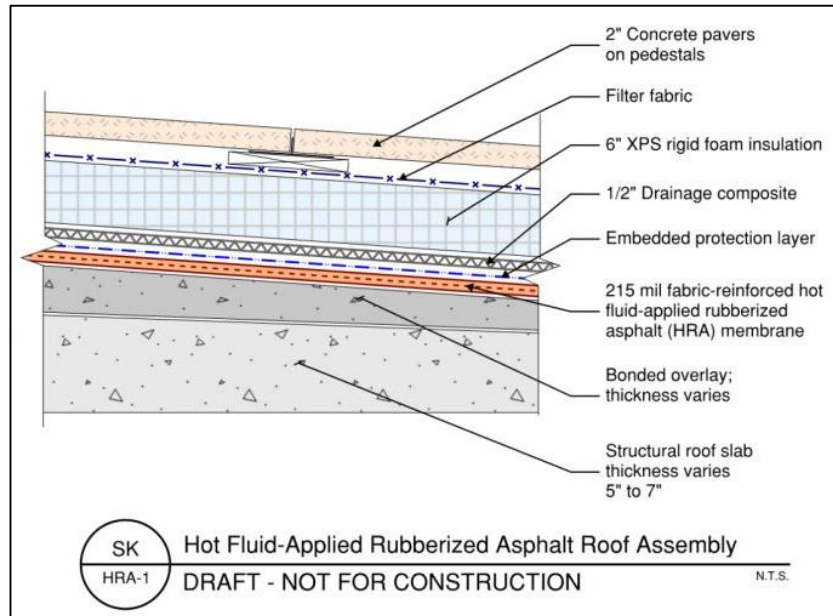


EXISTING



PROPOSED

# Roof Details



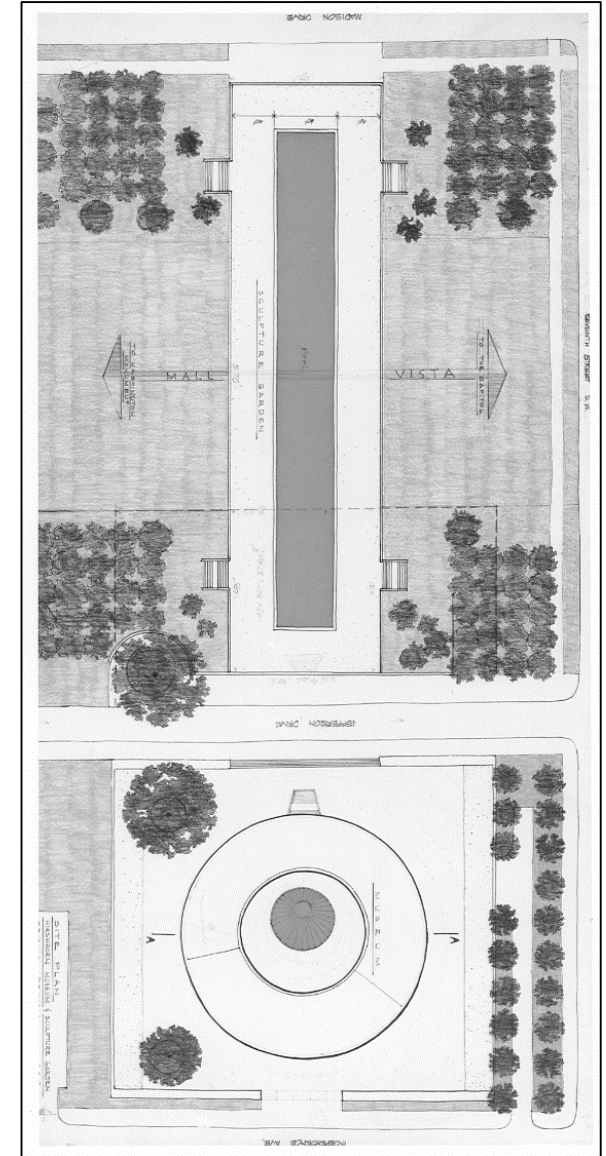
# Comments or Questions

# **Hirshhorn Museum and Sculpture Garden Architectural History**

**Carly Bond, Smithsonian Facilities**

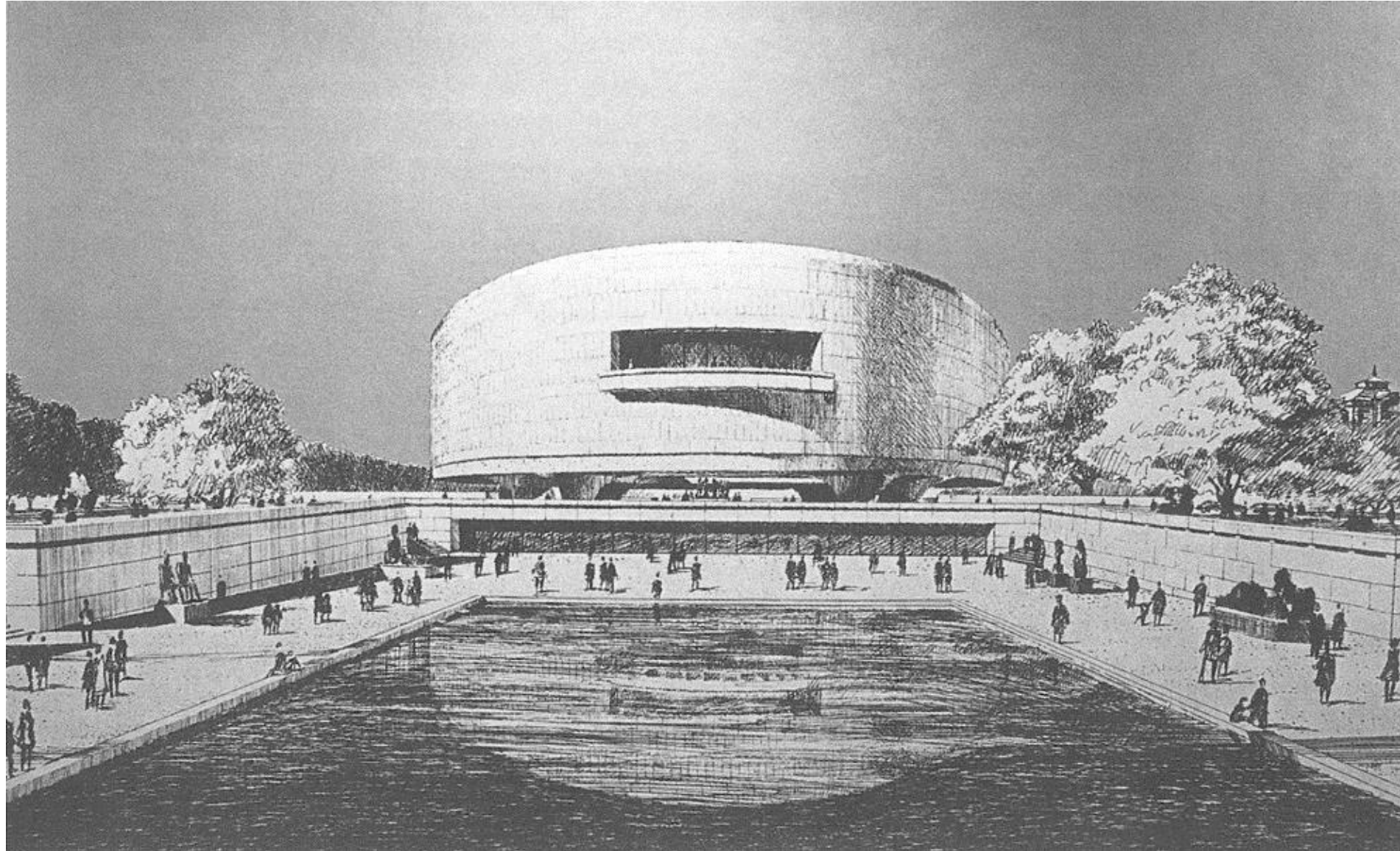


# Unrealized Design Concept - Expansive Reflecting Pool



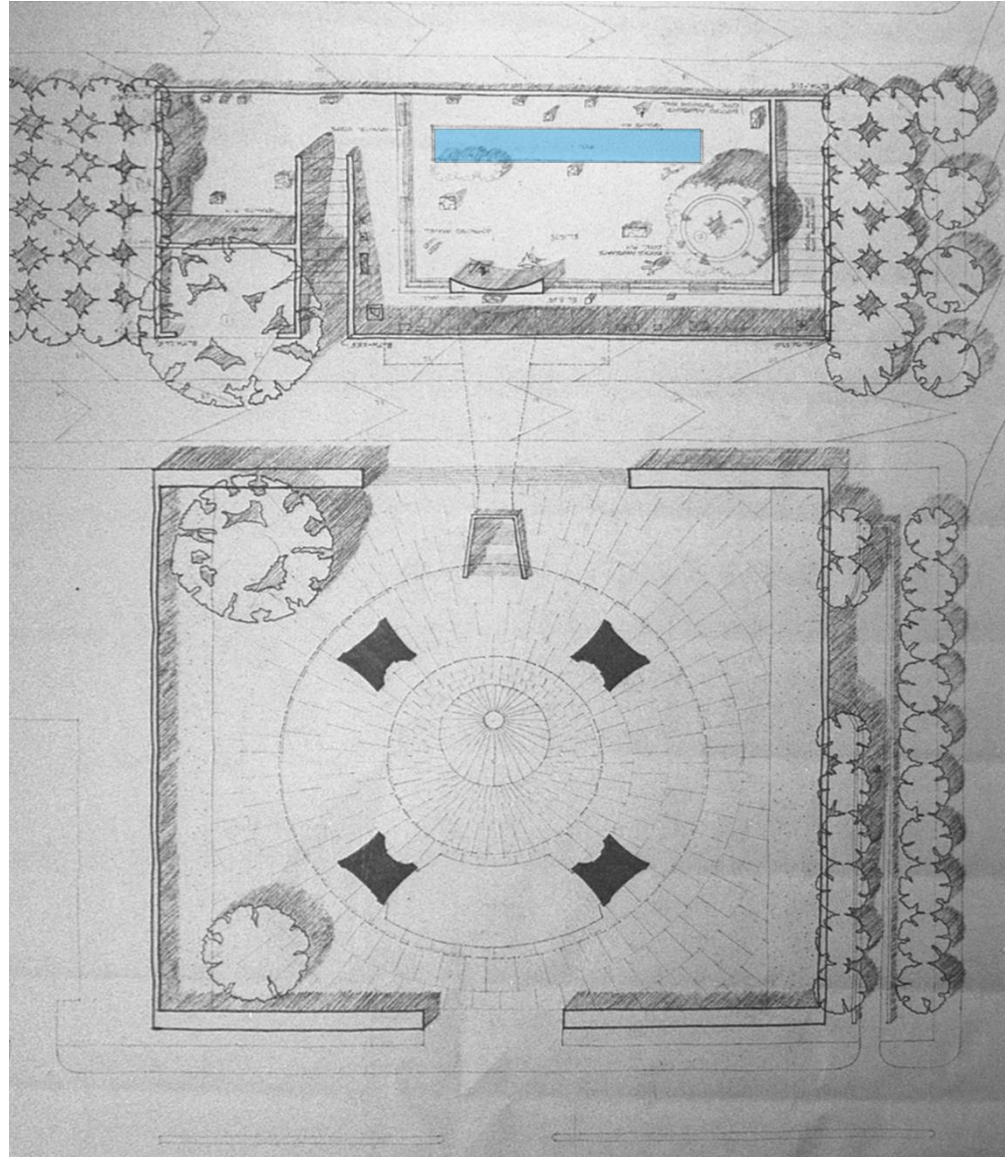
Skidmore, Owings & Merrill (SOM), 1967

# Unrealized Design Concept - Expansive Reflecting Pool



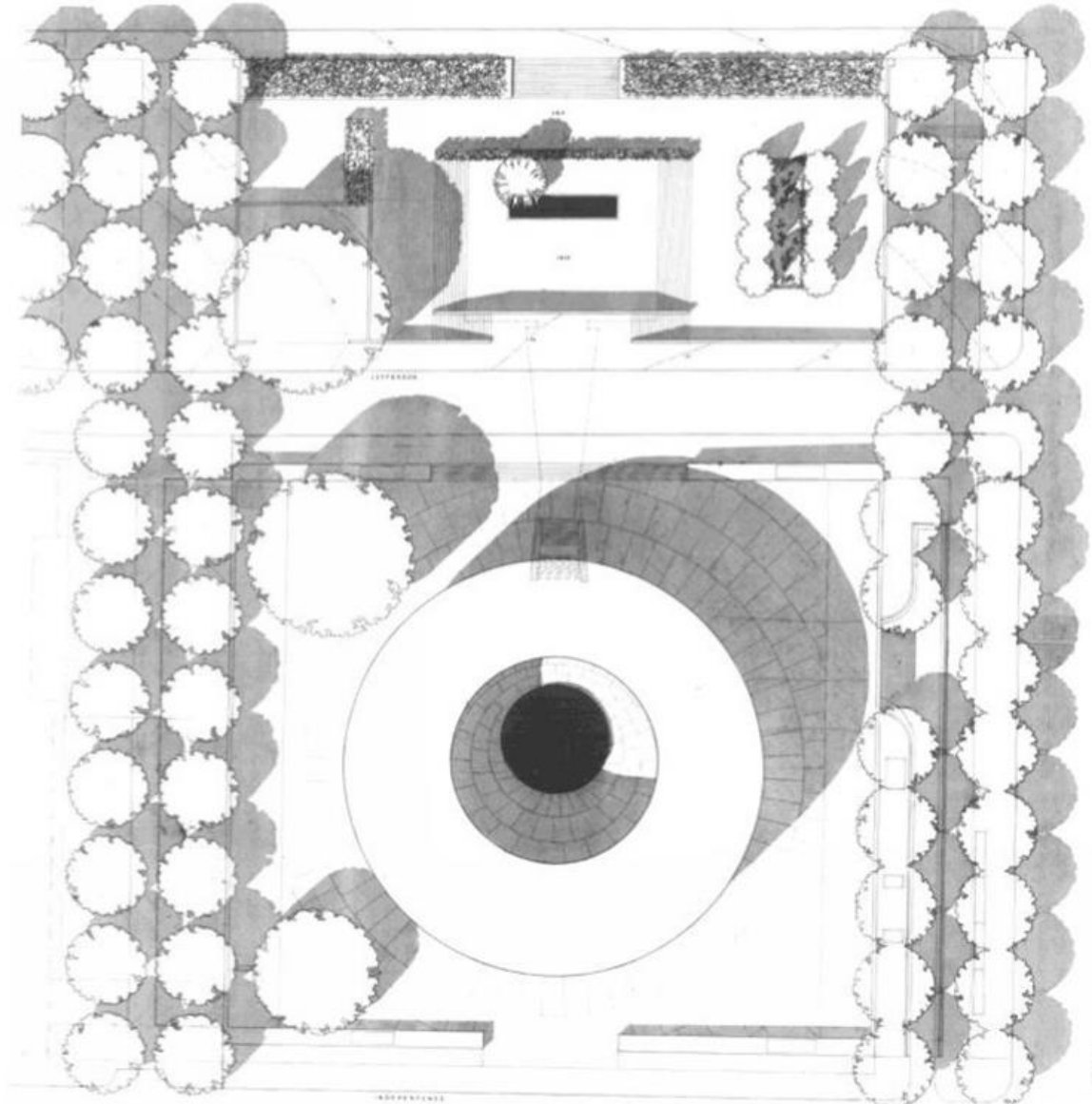
Gordon Bunshaft, Skidmore, Owings & Merrill, 1967

# Unrealized Design Concept – Enlarged Pool



Skidmore, Owings & Merrill, 1969

# Realized Design



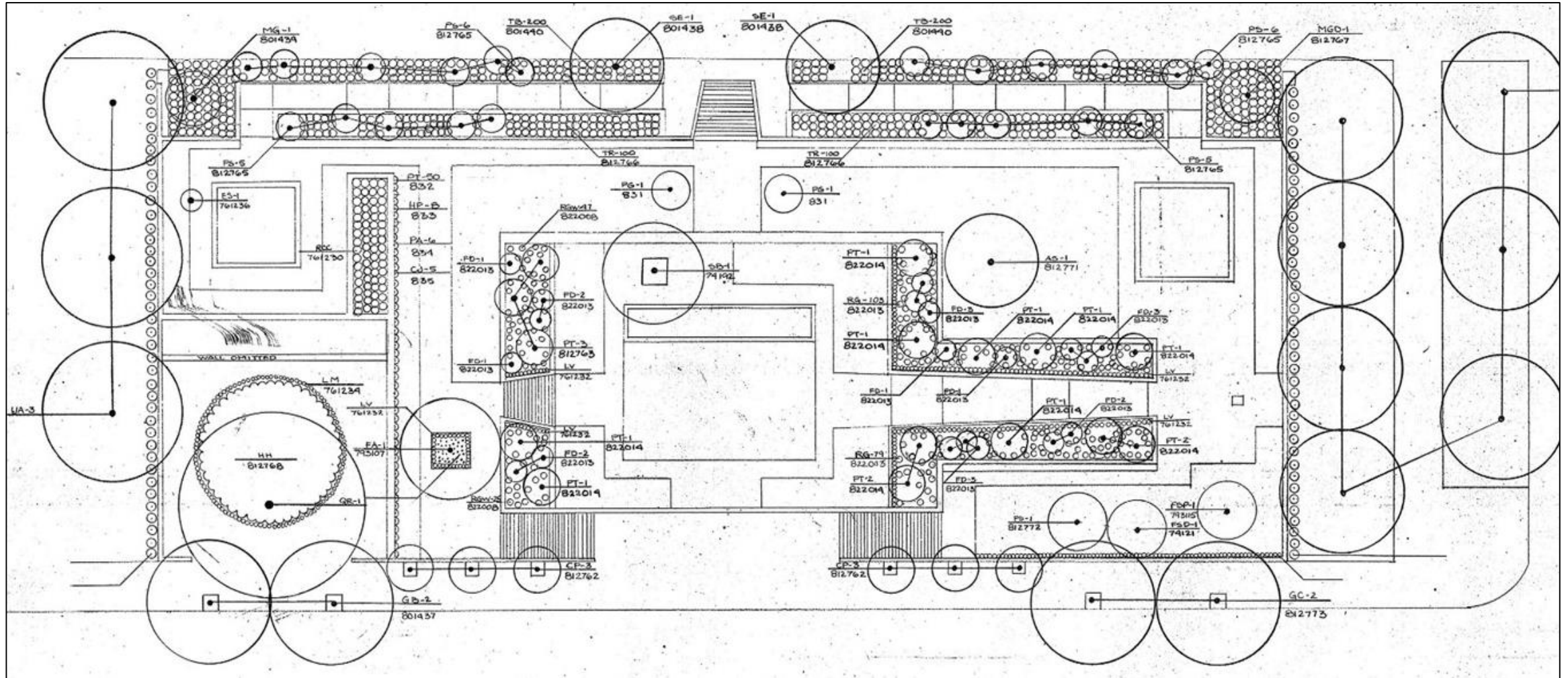
Final Approved Design, SOM, 1971

# 1974 Opening



As-built conditions, 1974

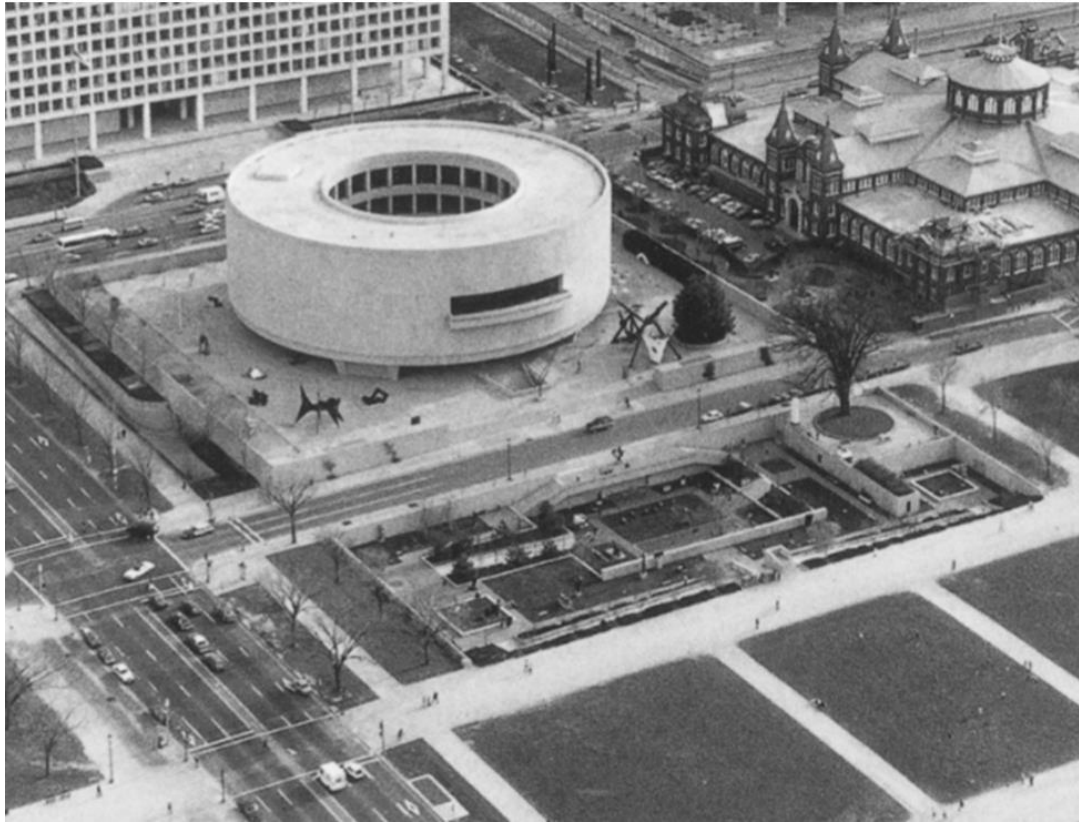
# Sculpture Garden Modifications – 1977-1981



Lester Collins, 1977

- National Register documentation proposes 1974 as the period of significance

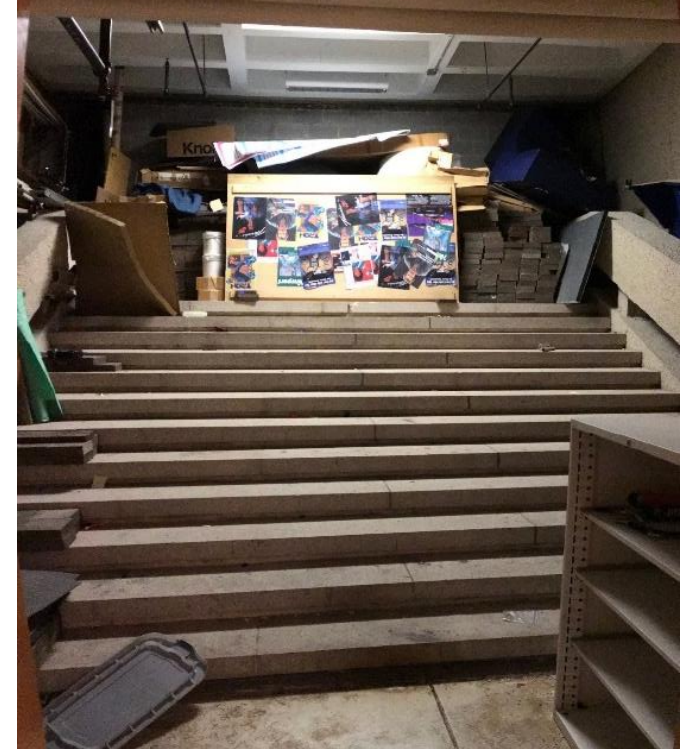
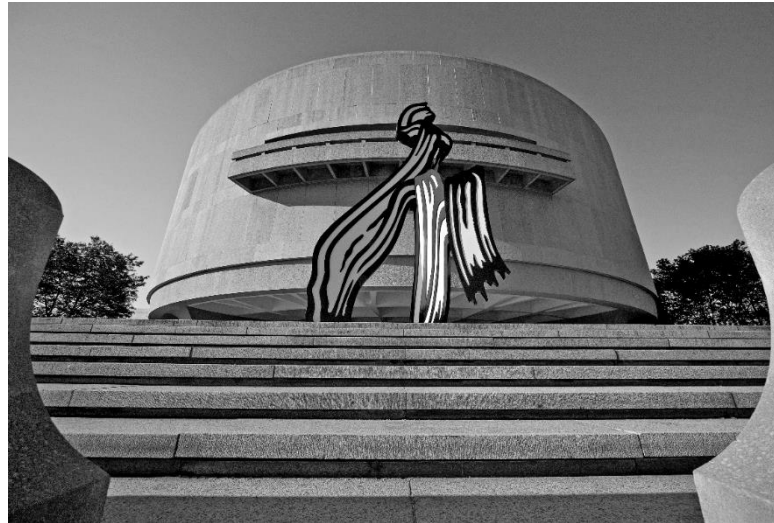
# 1981 Garden Modifications



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



Hirshhorn Museum and Sculpture Garden, 1974

# 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



Ragnar Kjartansson, *Woman in E*, Hirshhorn Museum, 2016/2017



Jen Rosenblit, *I'm Gonna Need Another One, Does the Body Rule the Mind, Or Does the Mind Rule the Body?*, Hirshhorn Museum, 2018



# Hirshhorn Digital Projections



Doug Aitken, *Song 1*, Hirshhorn Museum, 2012

# Hirshhorn Music Performances



Kim Gordon, *Concert for Yoko Ono*, Hirshhorn Museum, 2017



# Yayoi Kusama: Infinity Mirrors, 2017

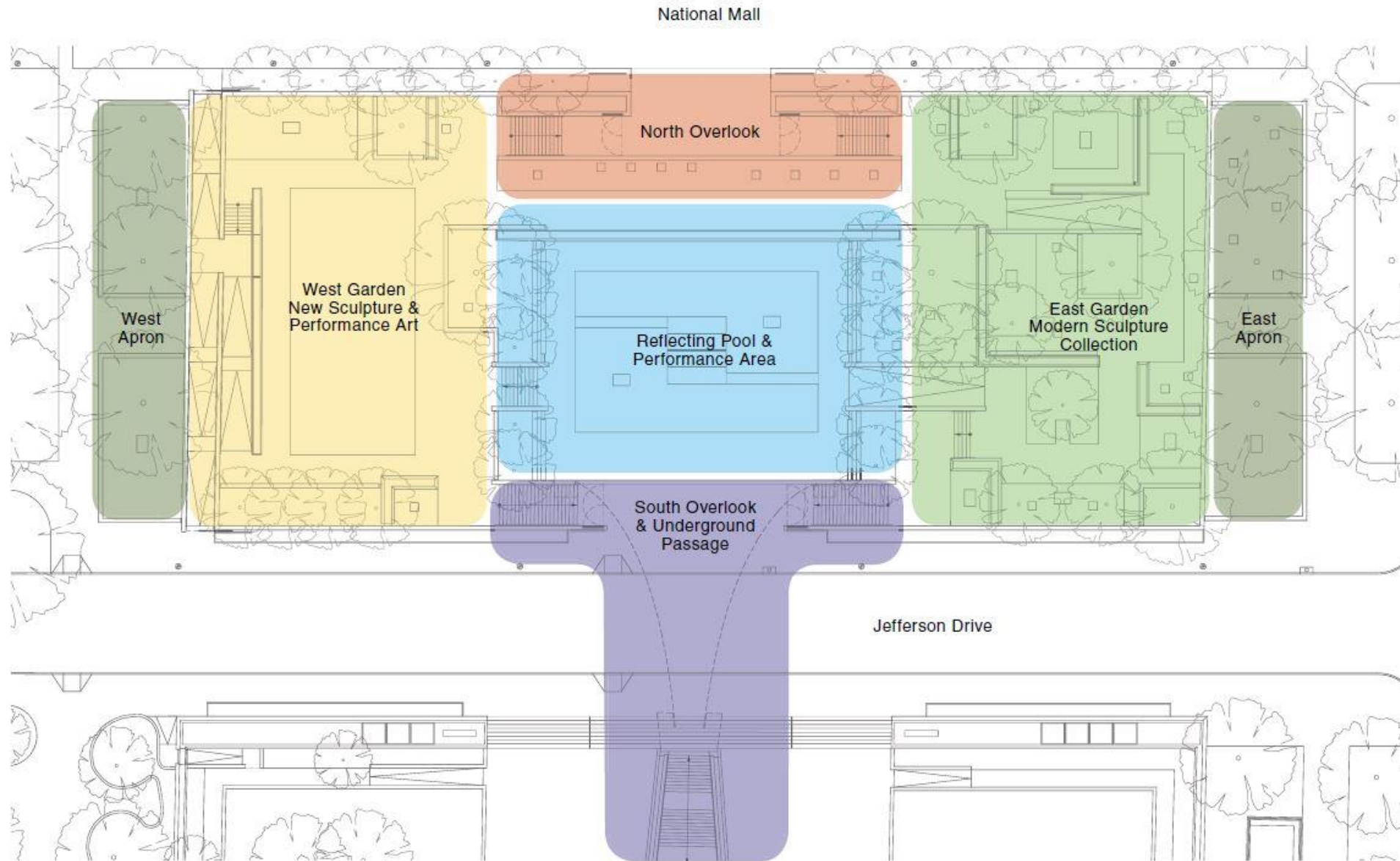


## Existing Sculpture Setting



Henry Moore, *King and Queen*, Hirshhorn Museum and Sculpture Garden

# Garden Programming

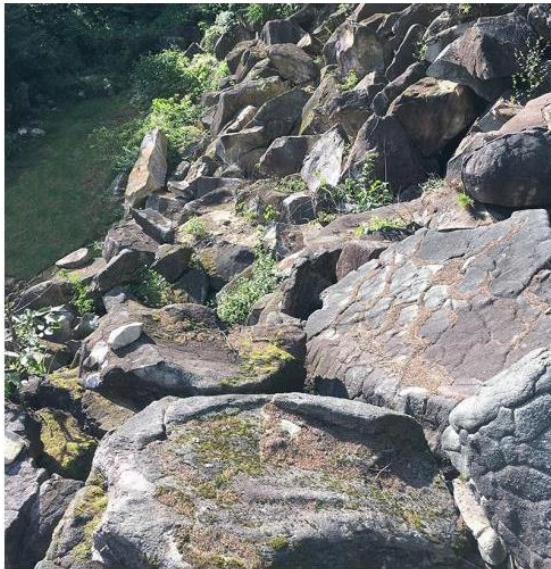


# Hiroshi Sugimoto



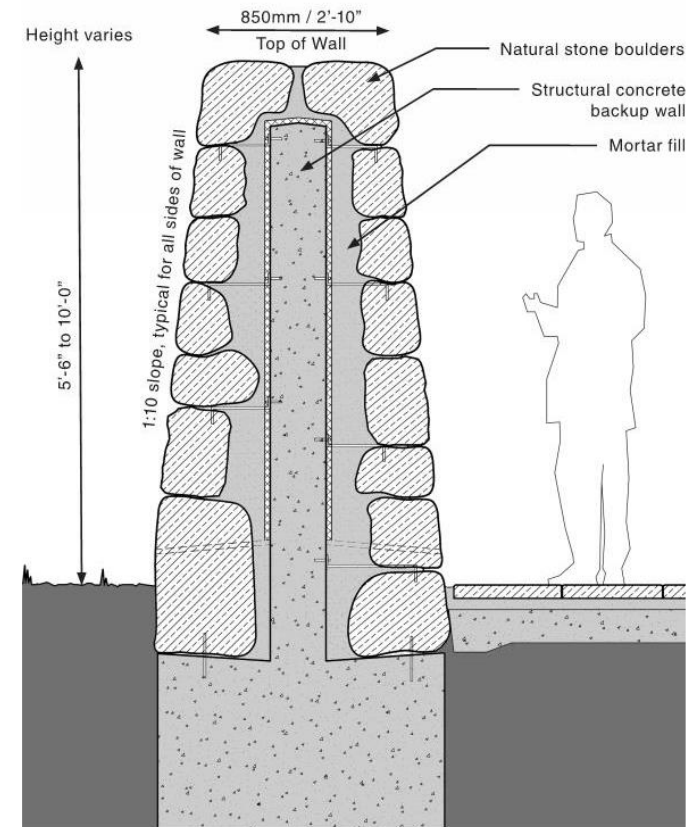
Hiroshi Sugimoto, *Hiroshi Sugimoto*, Hirshhorn Museum, 2006

# Stacked Stone Walls



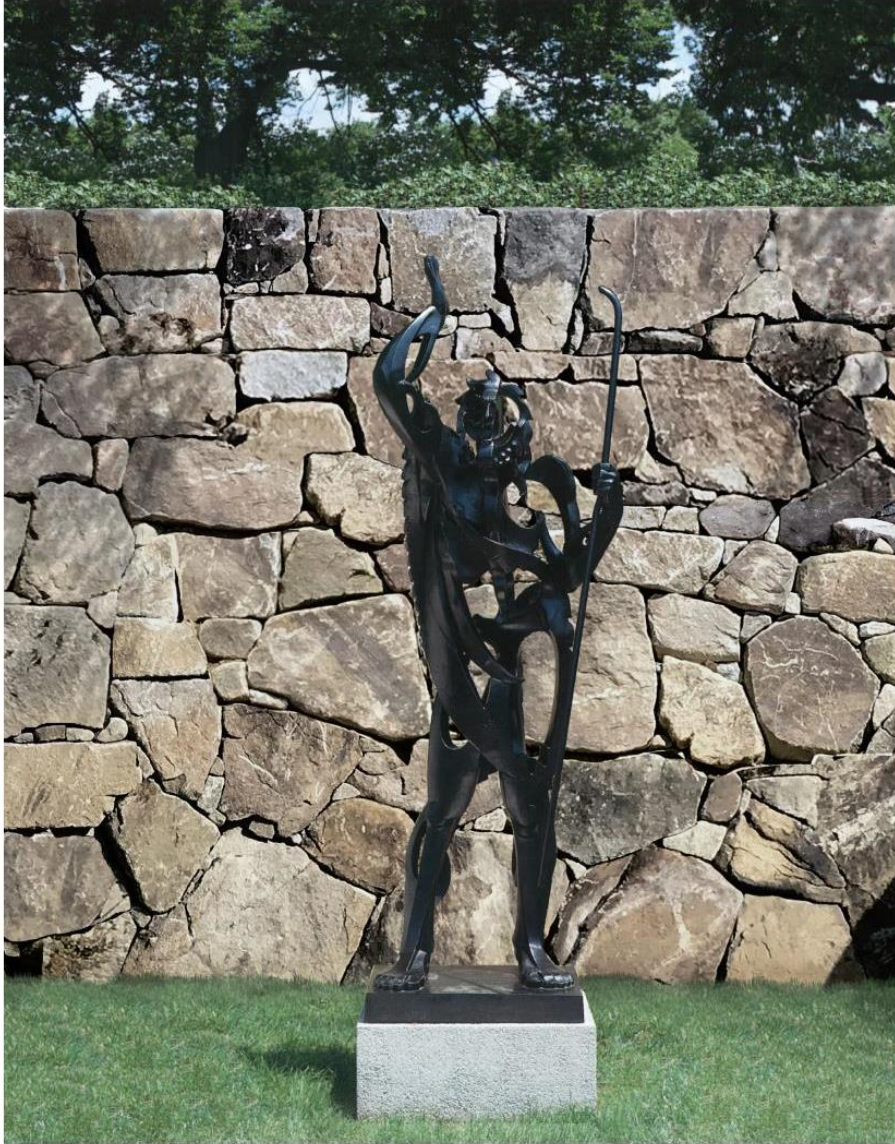
Proposed type of stone wall  
(Shown here: Landscape walls at guest house in Kiyoharu, Japan by NMRL)

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



Proposed stone wall section 1:25

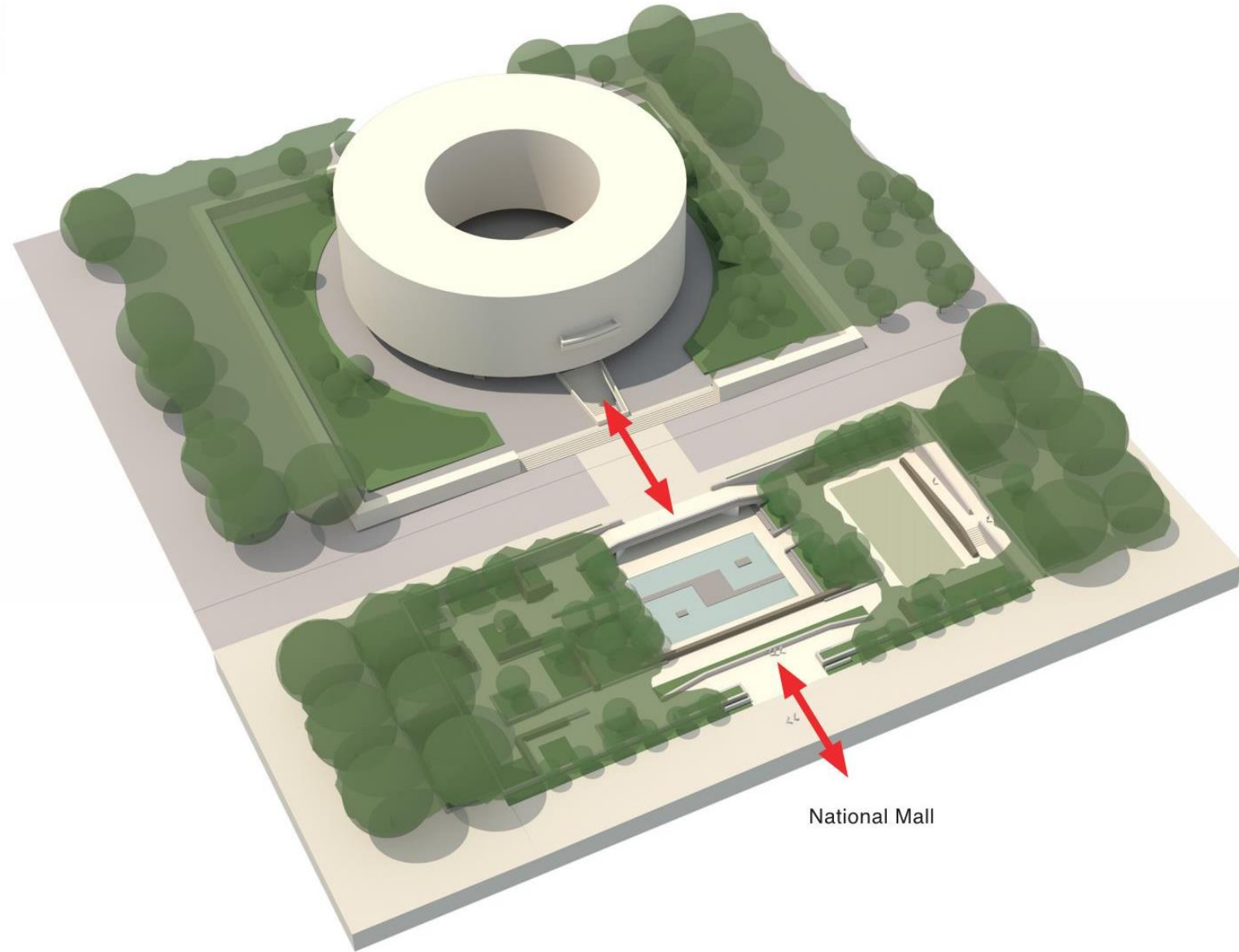
## Stacked Stone Wall Renderings



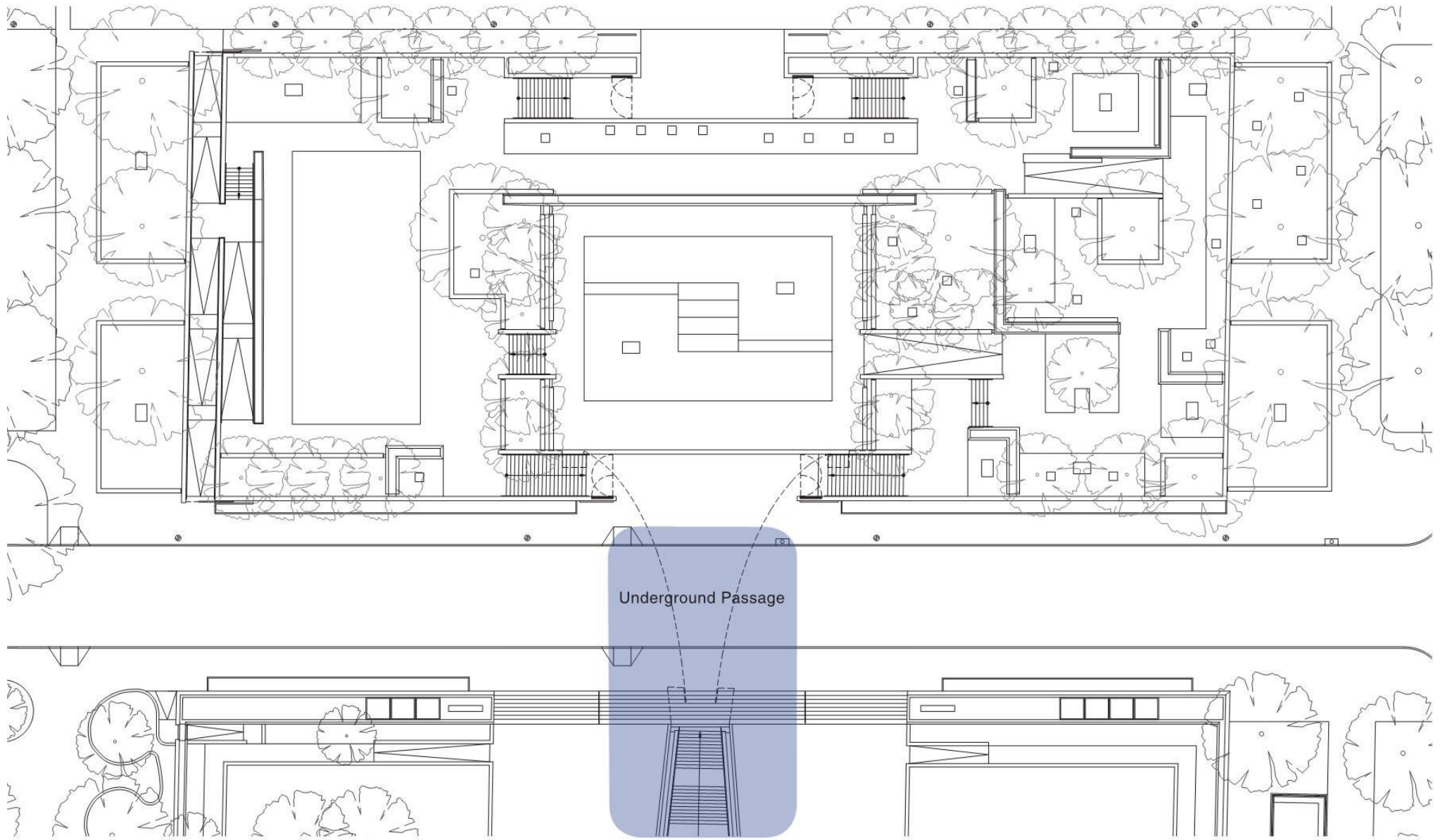
Renderings of bronze sculptures in front of stone walls



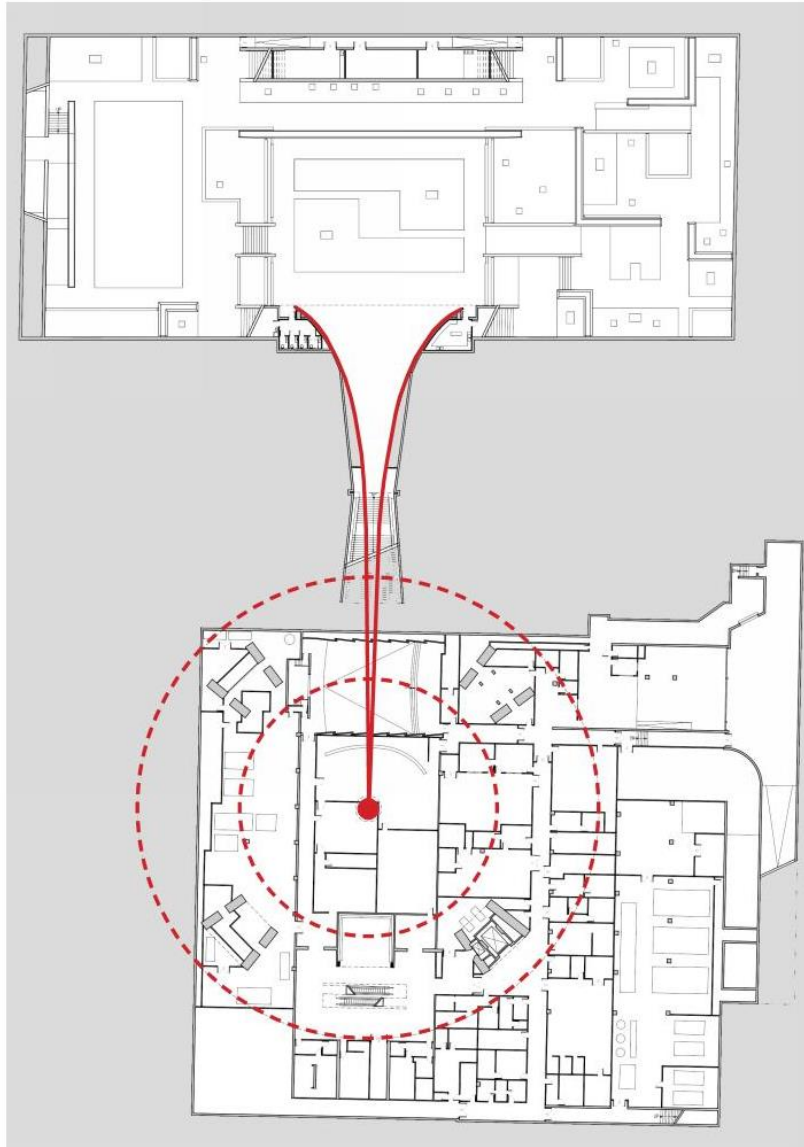
# Reestablishing Relationship of National Mall, Garden and Museum



# Underground Passage



# Underground Passage Concept

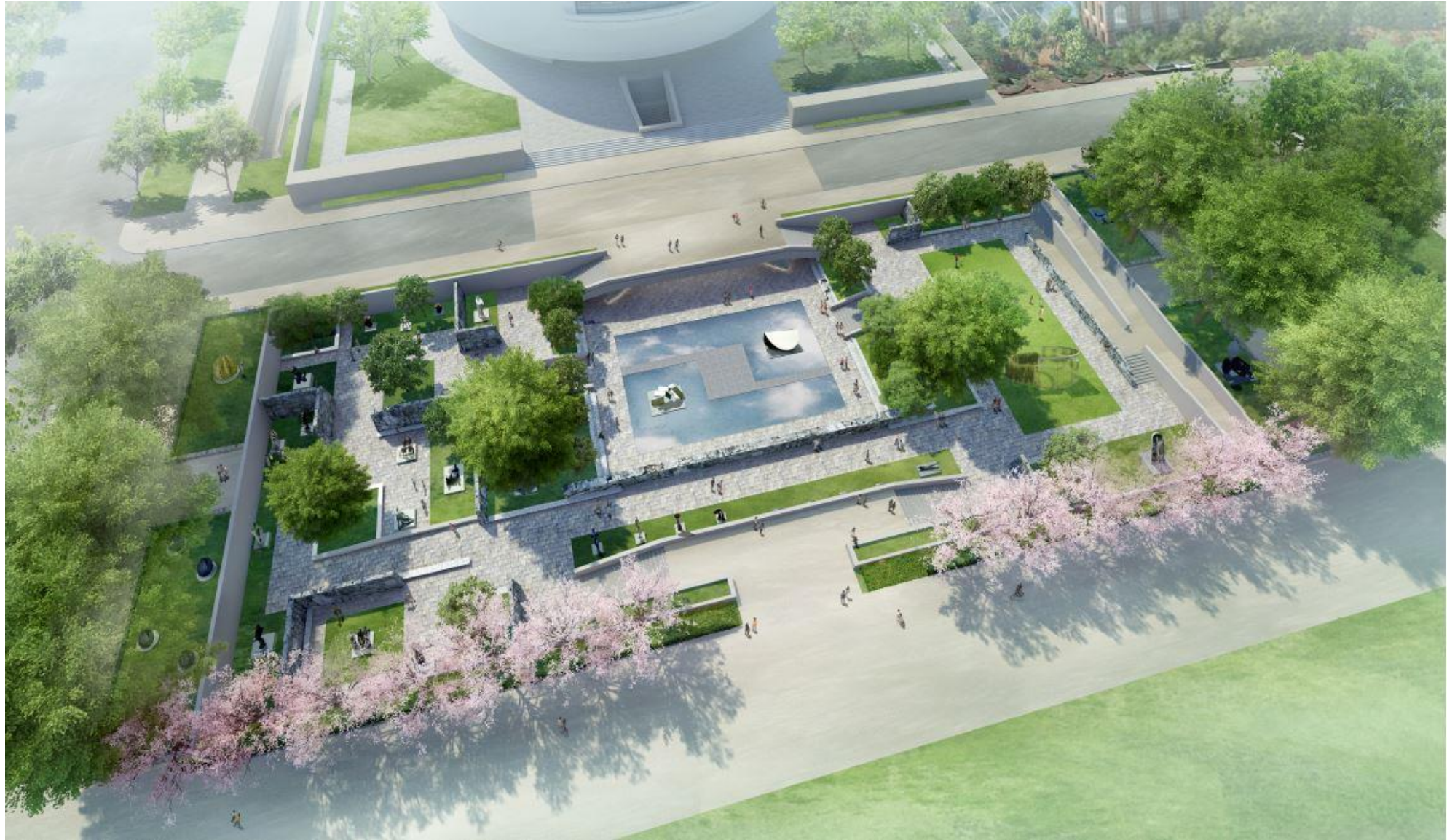


Garden and Museum Lower Level



Hiroshi Sugimoto Sculpture at Otemachi, Tokyo

# Concept Design



# Comments or Questions

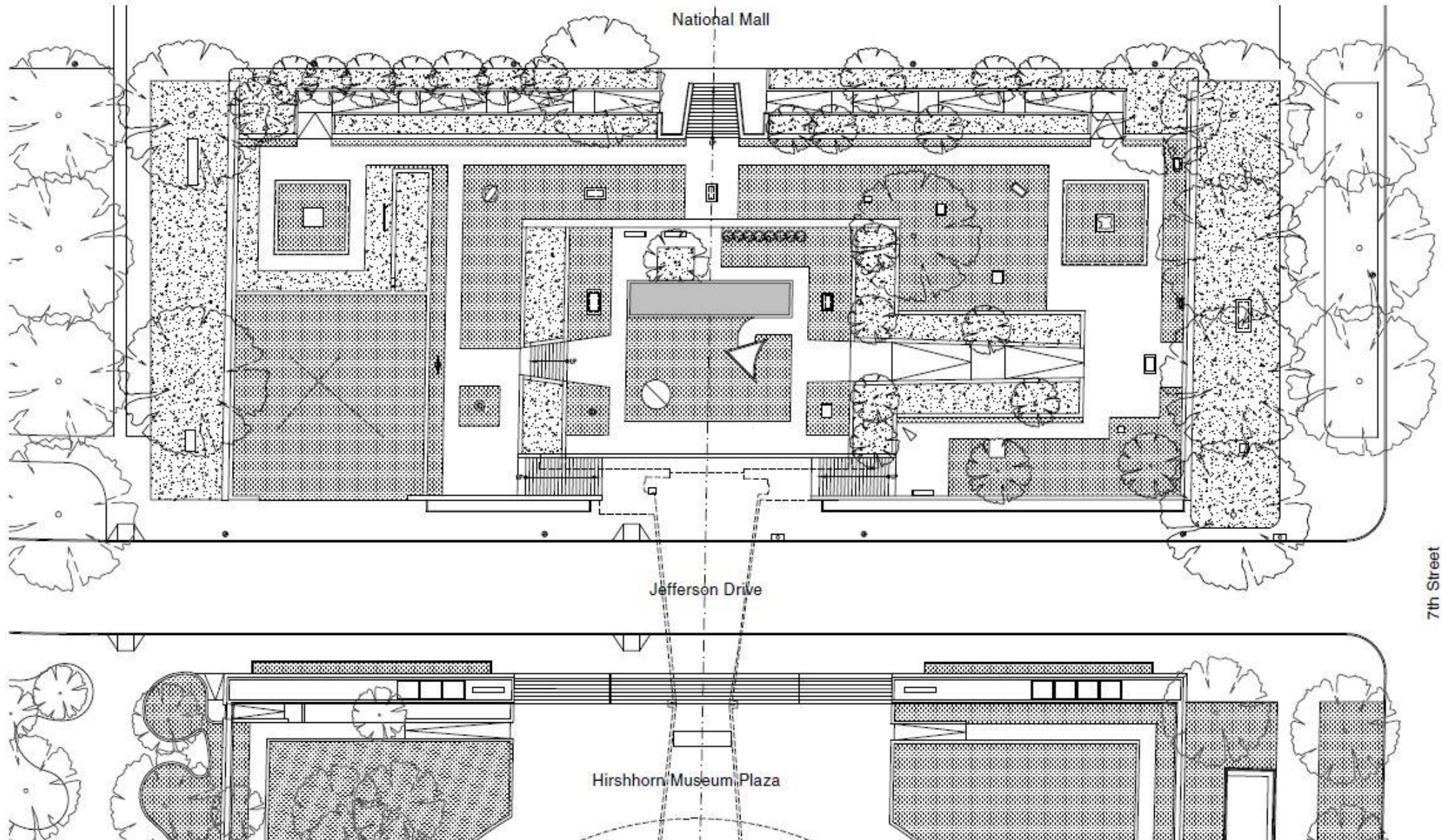
# **Sculpture Garden Revitalization**

**Al Masino, Hirshhorn**

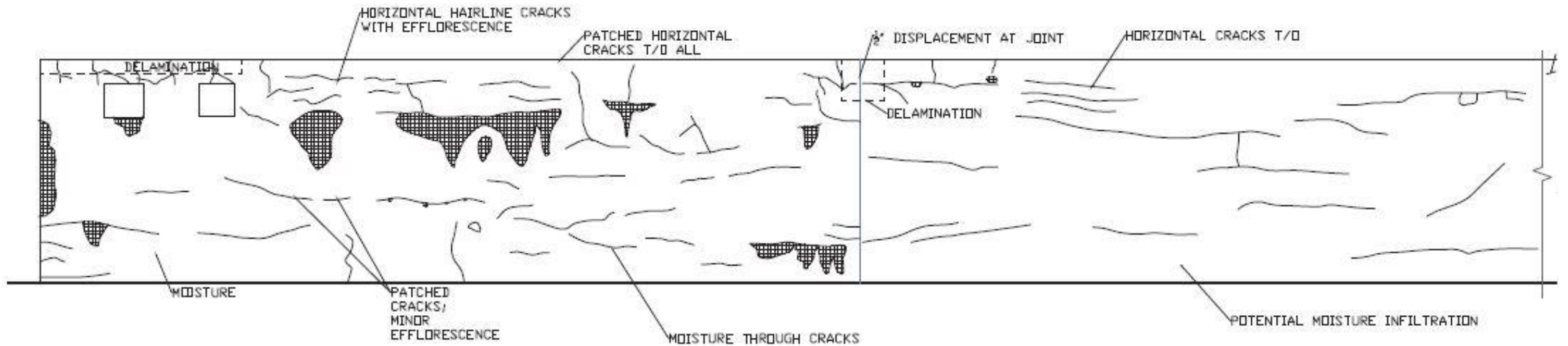
**Carly Bond, Smithsonian Facilities**

**Faye Harwell, Rhodeside & Harwell**

# Current Sculpture Garden Site Plan



# Sculpture Garden Wall Deterioration – Study 2016-2019



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

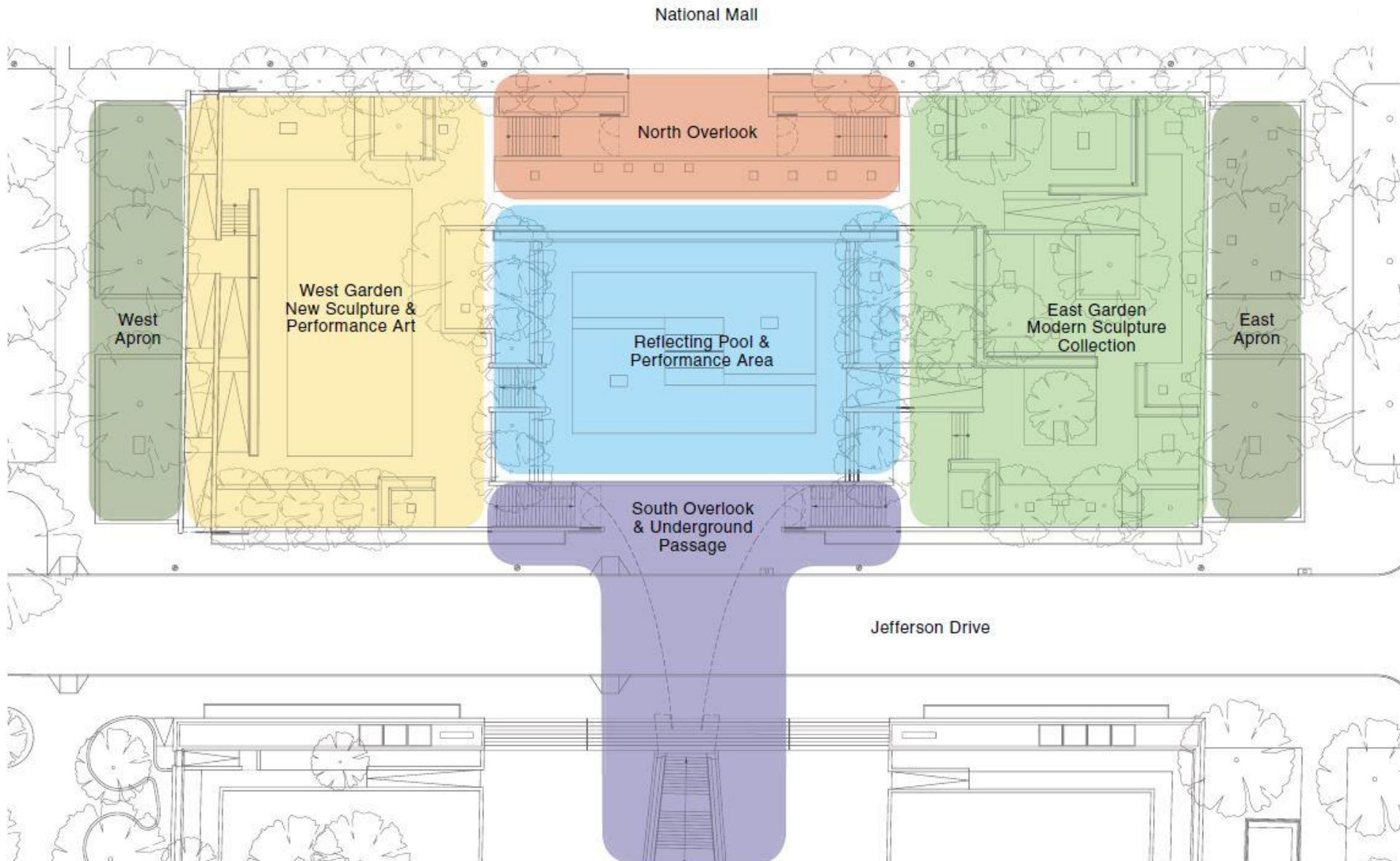


West Apron

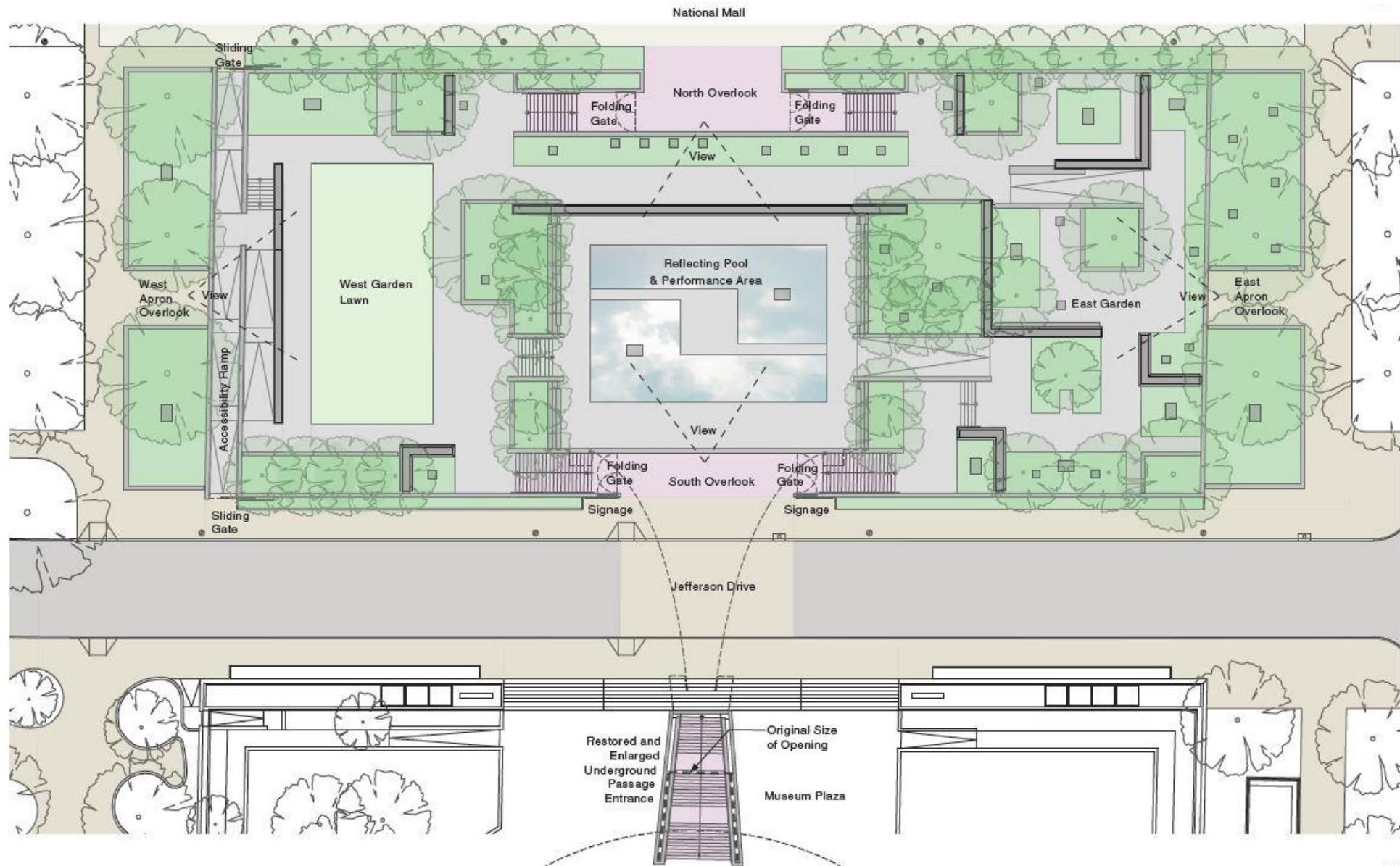


National Mall Path

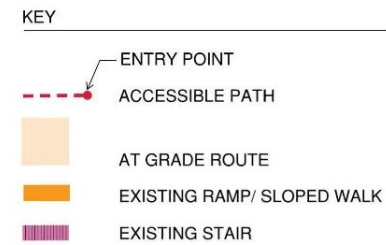
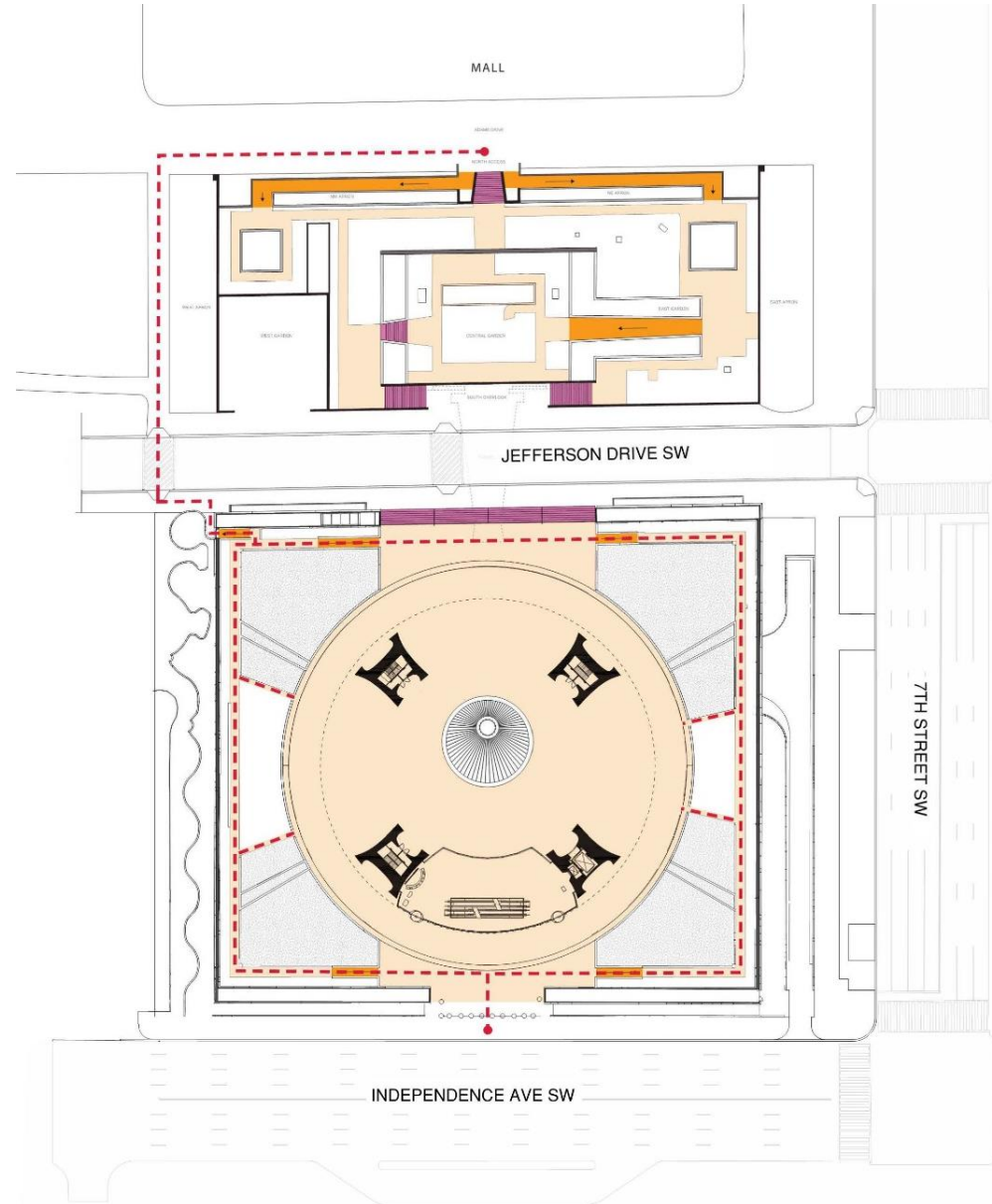
# Garden Organization



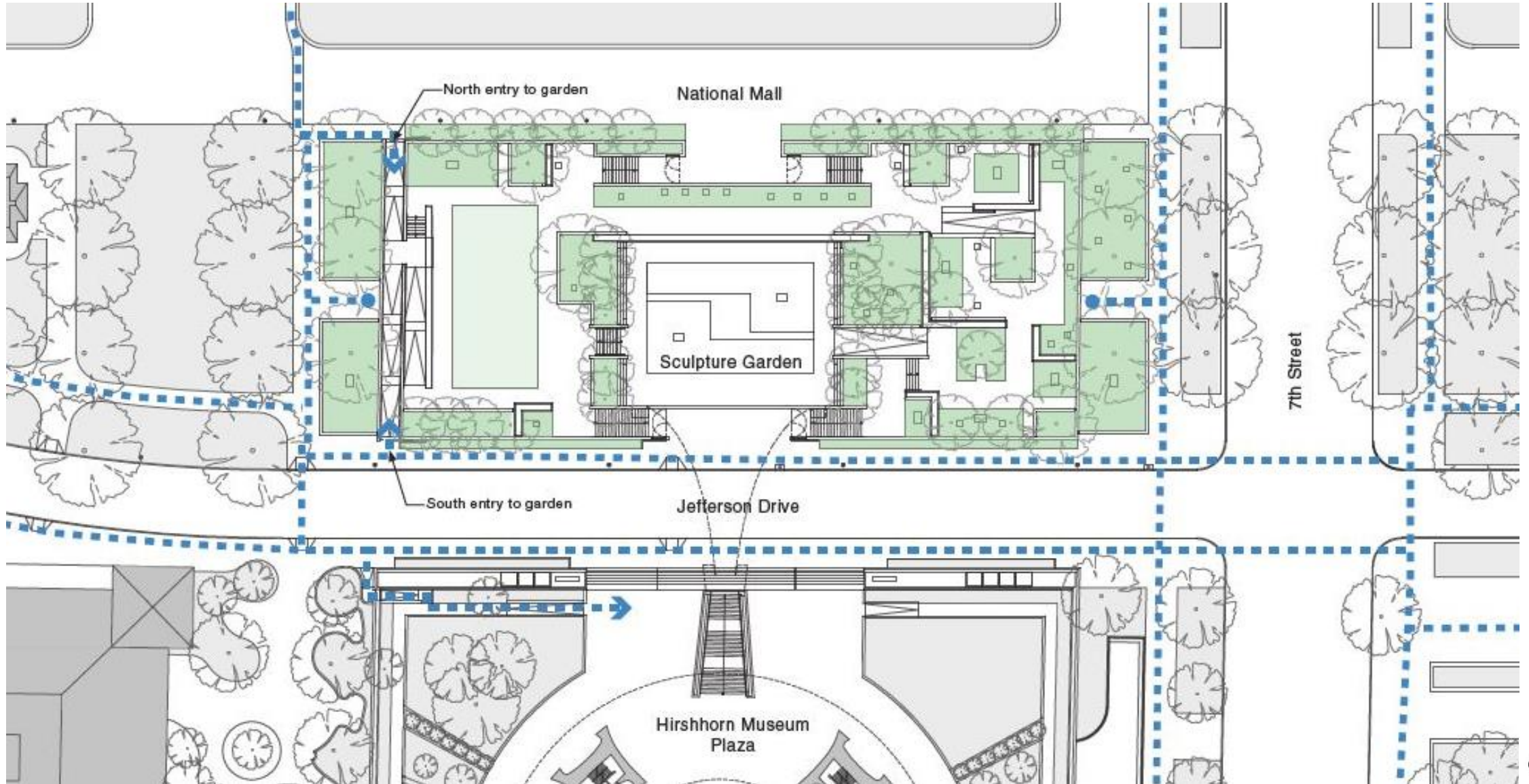
# Garden Plan



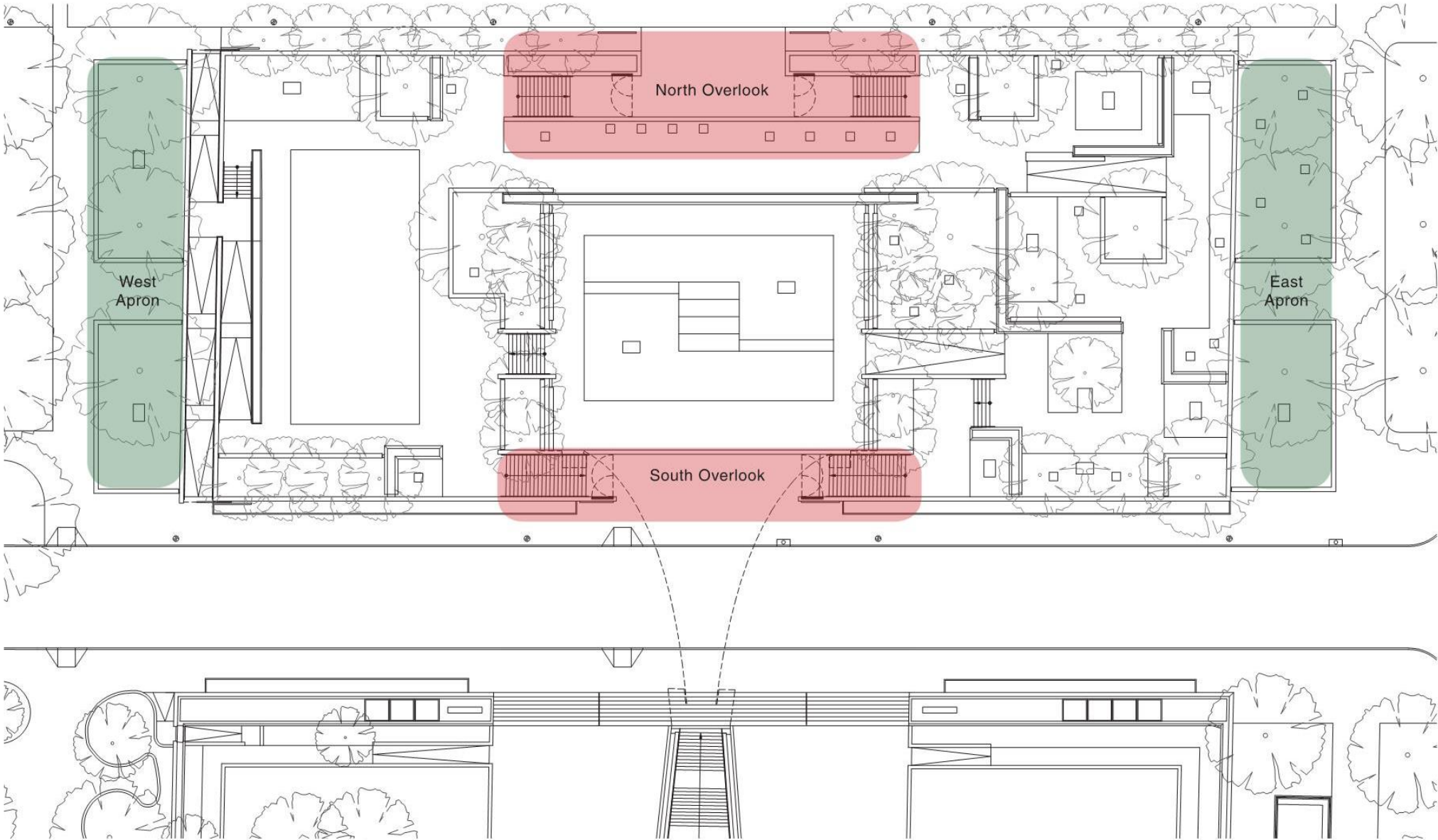
# Existing Accessible Route



# Improved Accessibility

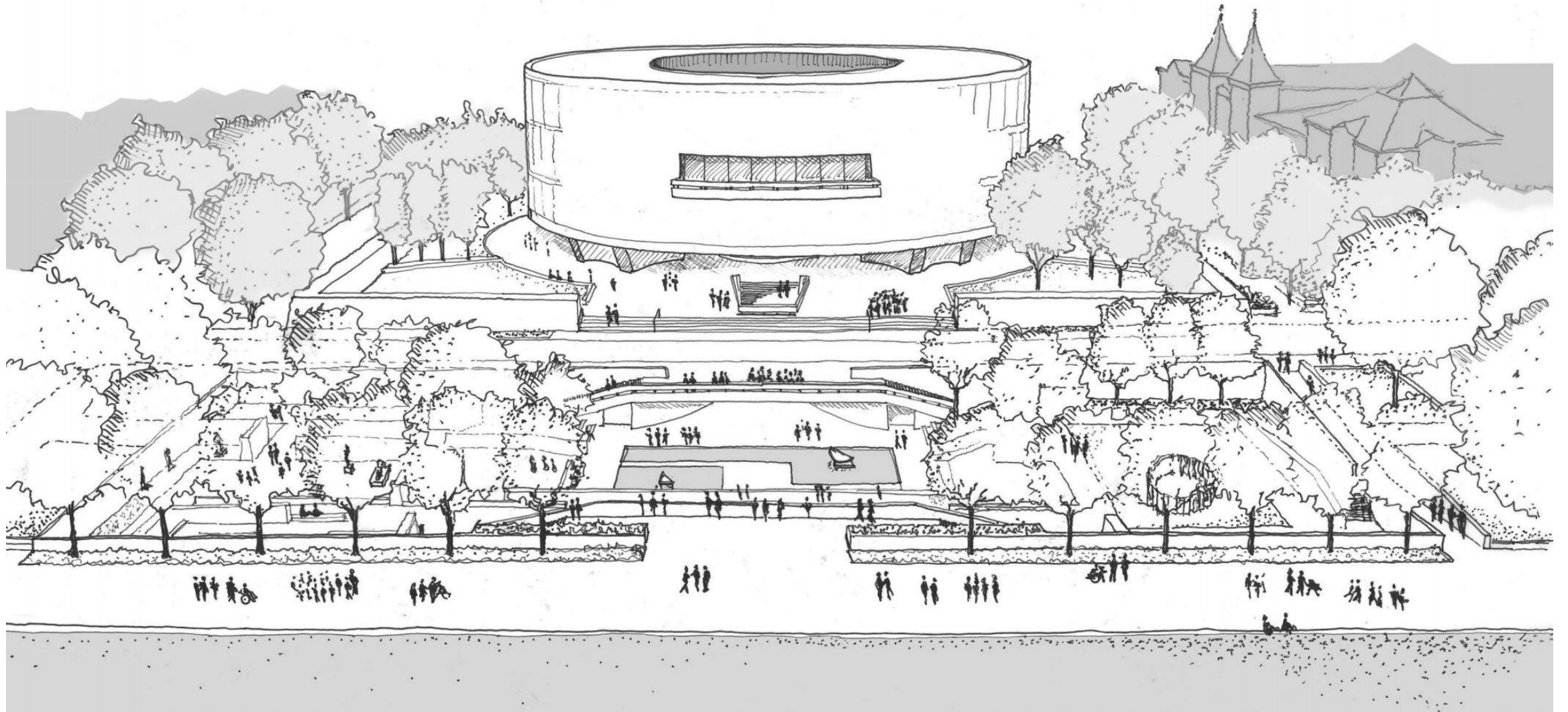


# Garden Overlooks



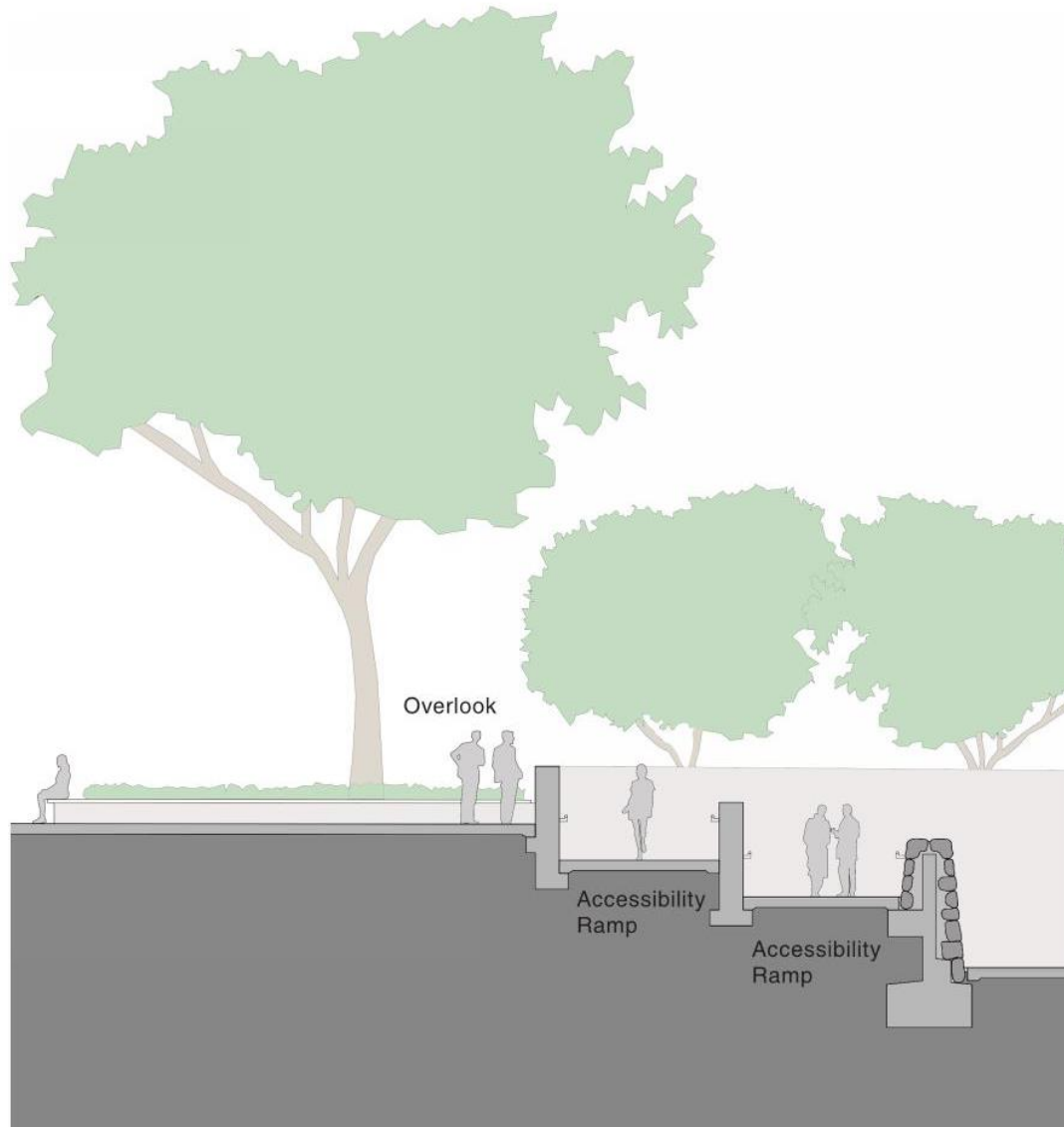
# North Overlook

Concept Sketch Looking South

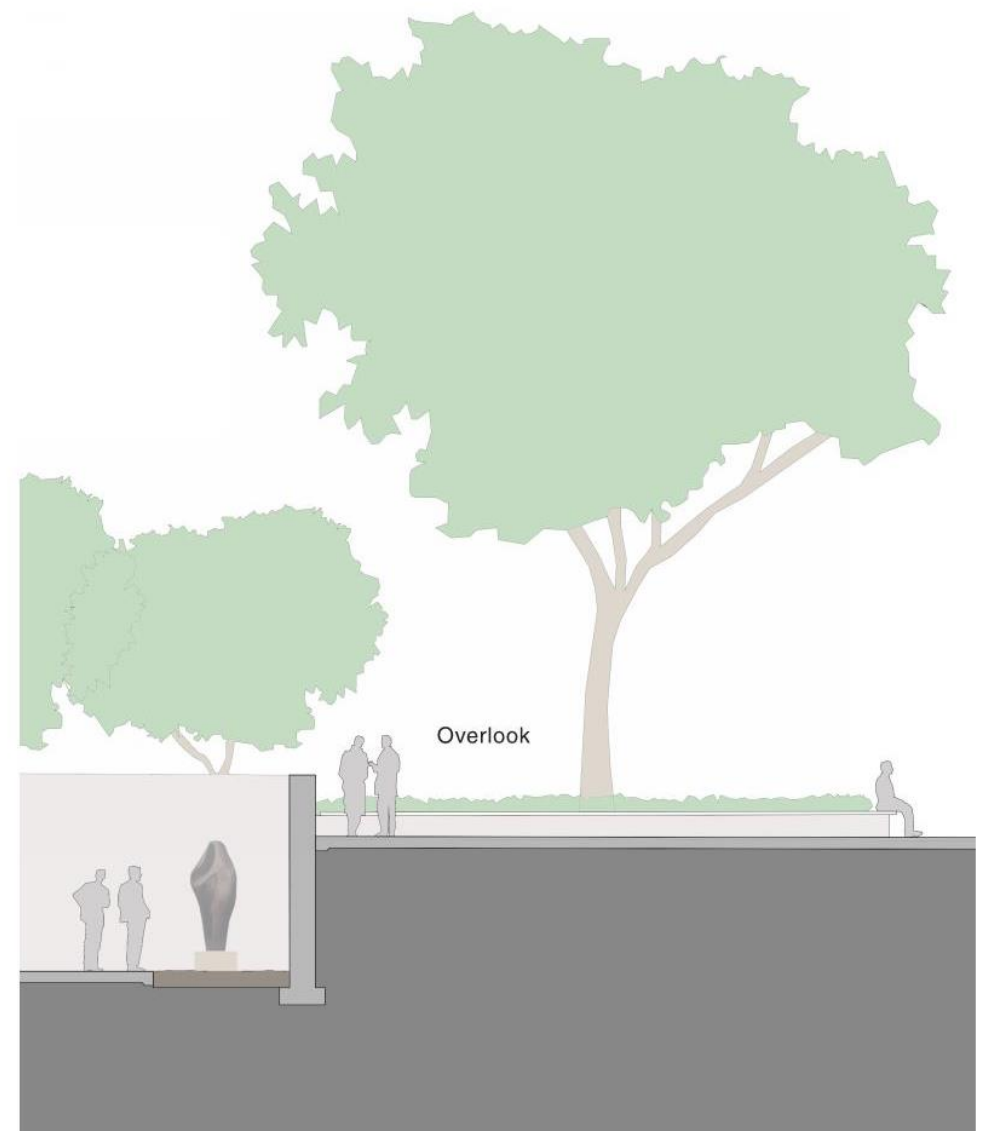




# East and West Overlooks

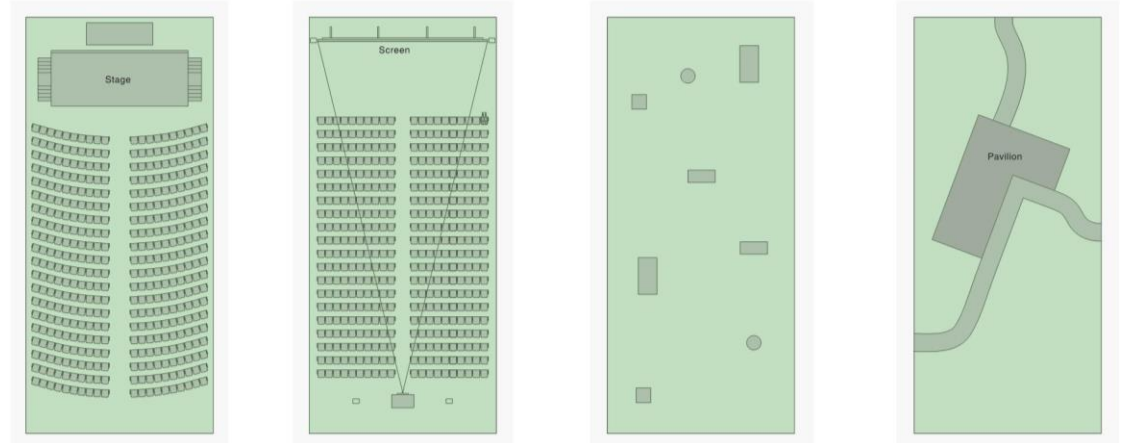
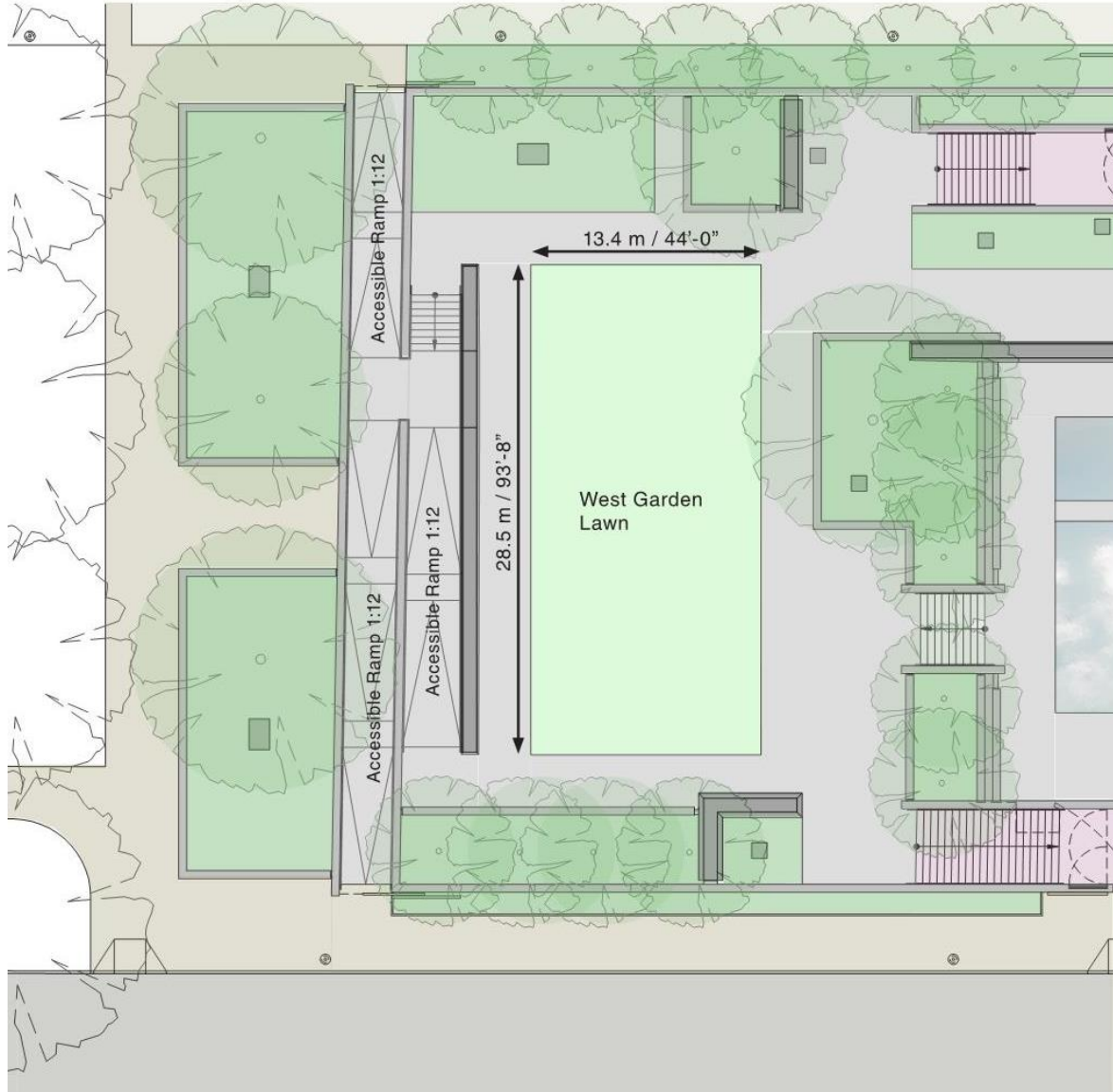


Section of West Overlook



Section of East Overlook

# West Garden and Flexible Program

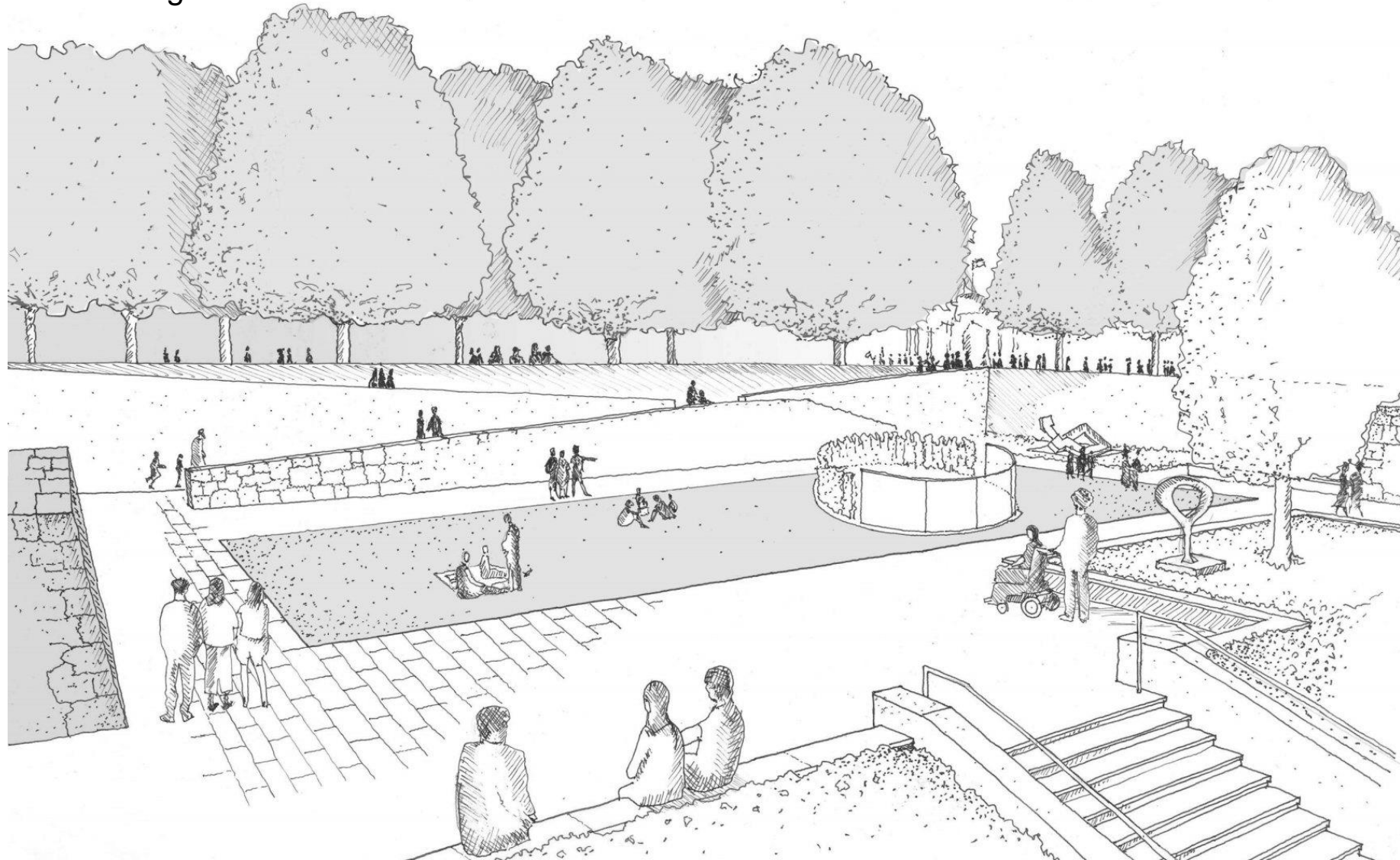


Potential Garden Uses

Enlarged Plan of West Garden

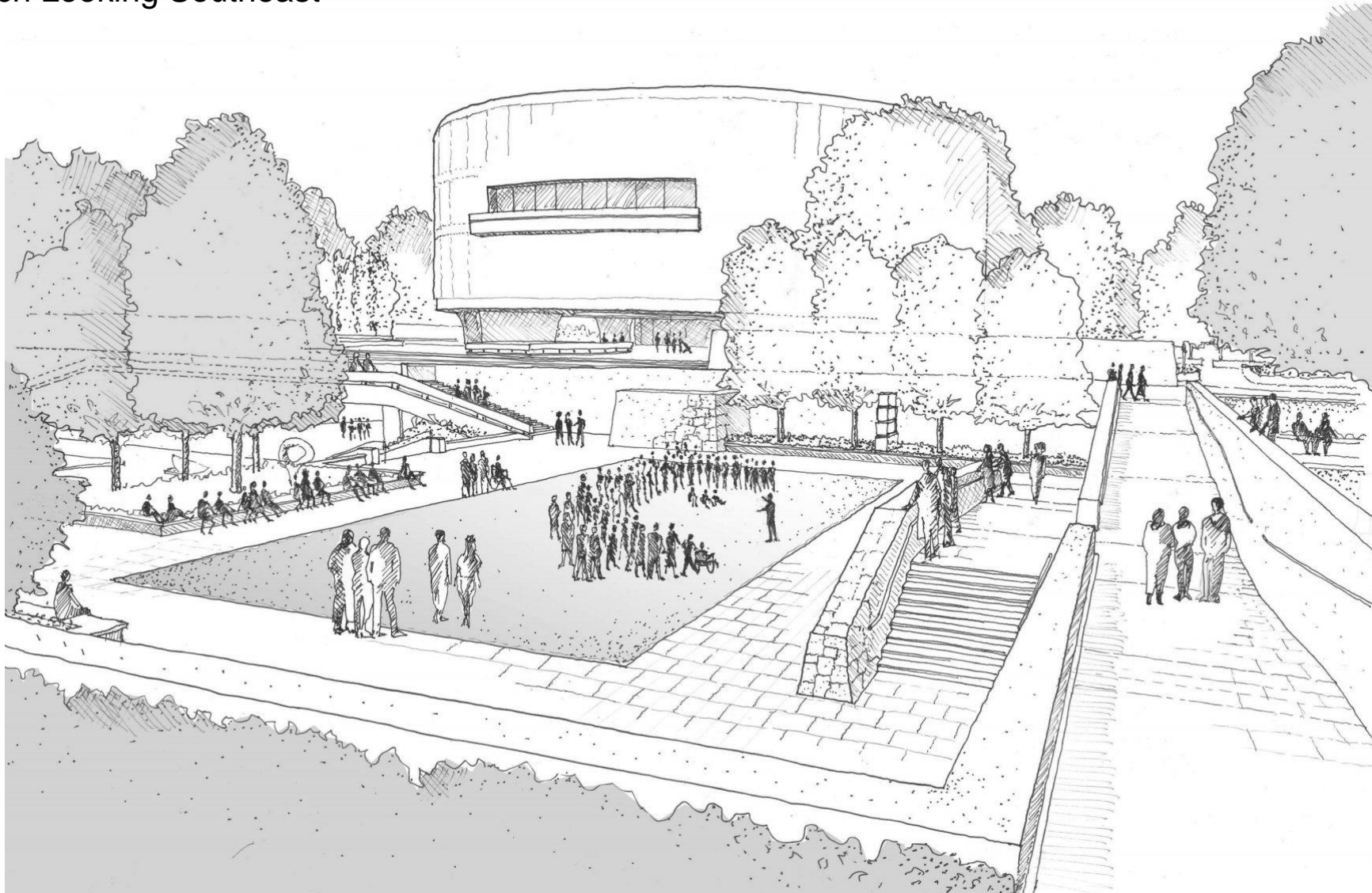
# West Garden

Concept Sketch Looking West

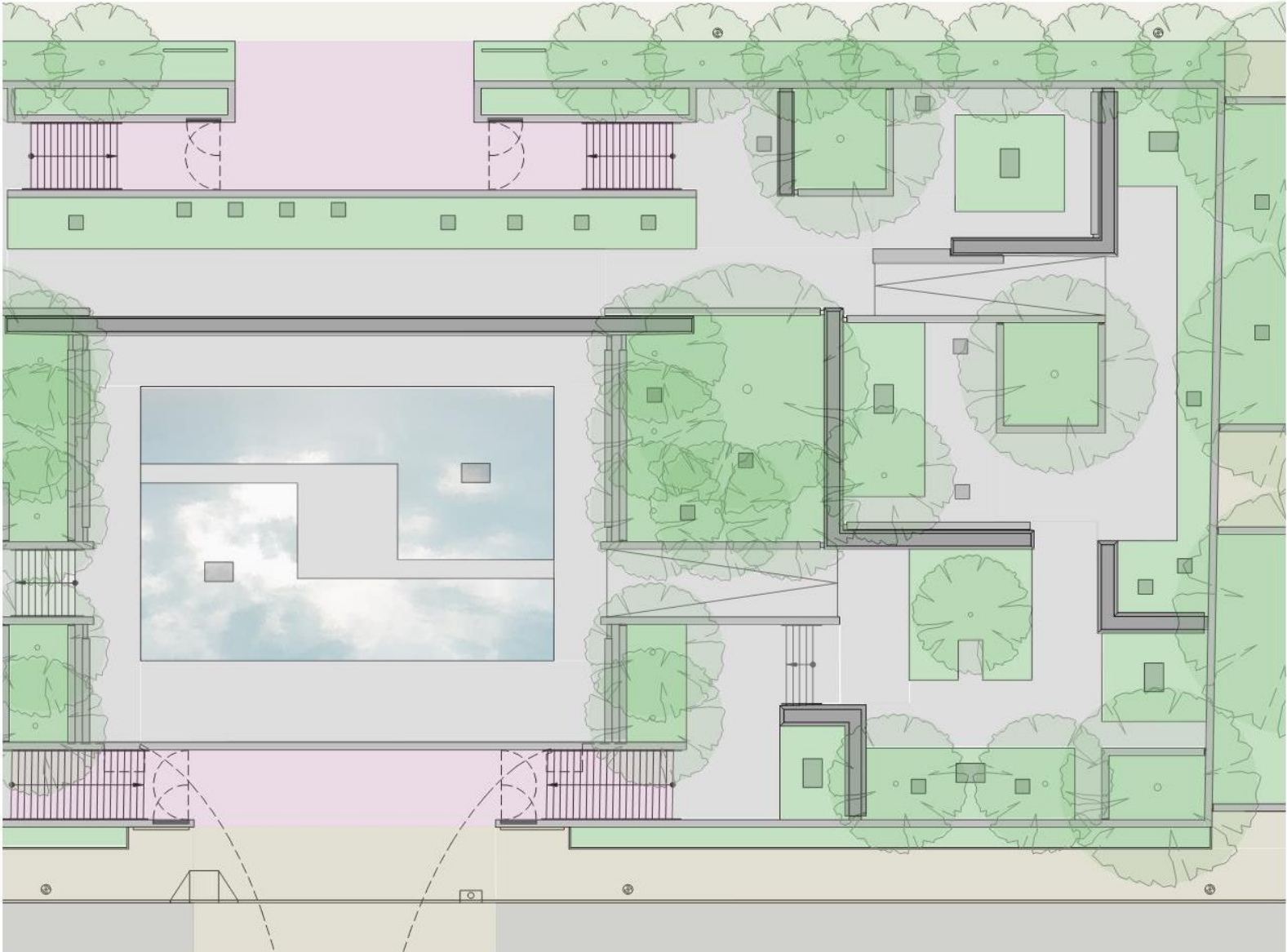


# West Garden

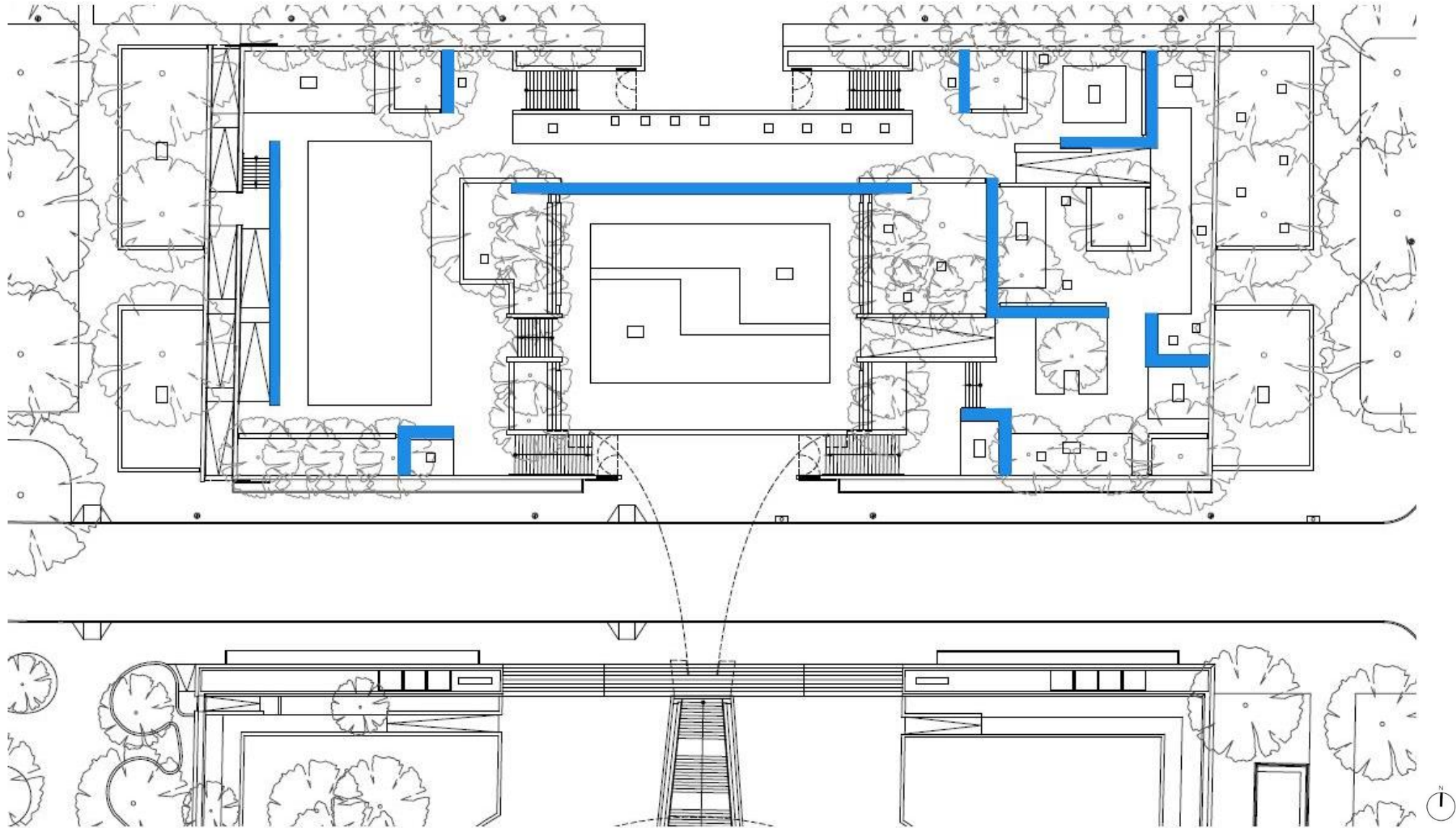
Concept Sketch Looking Southeast



# East Garden Plan – Modern Bronze Collection



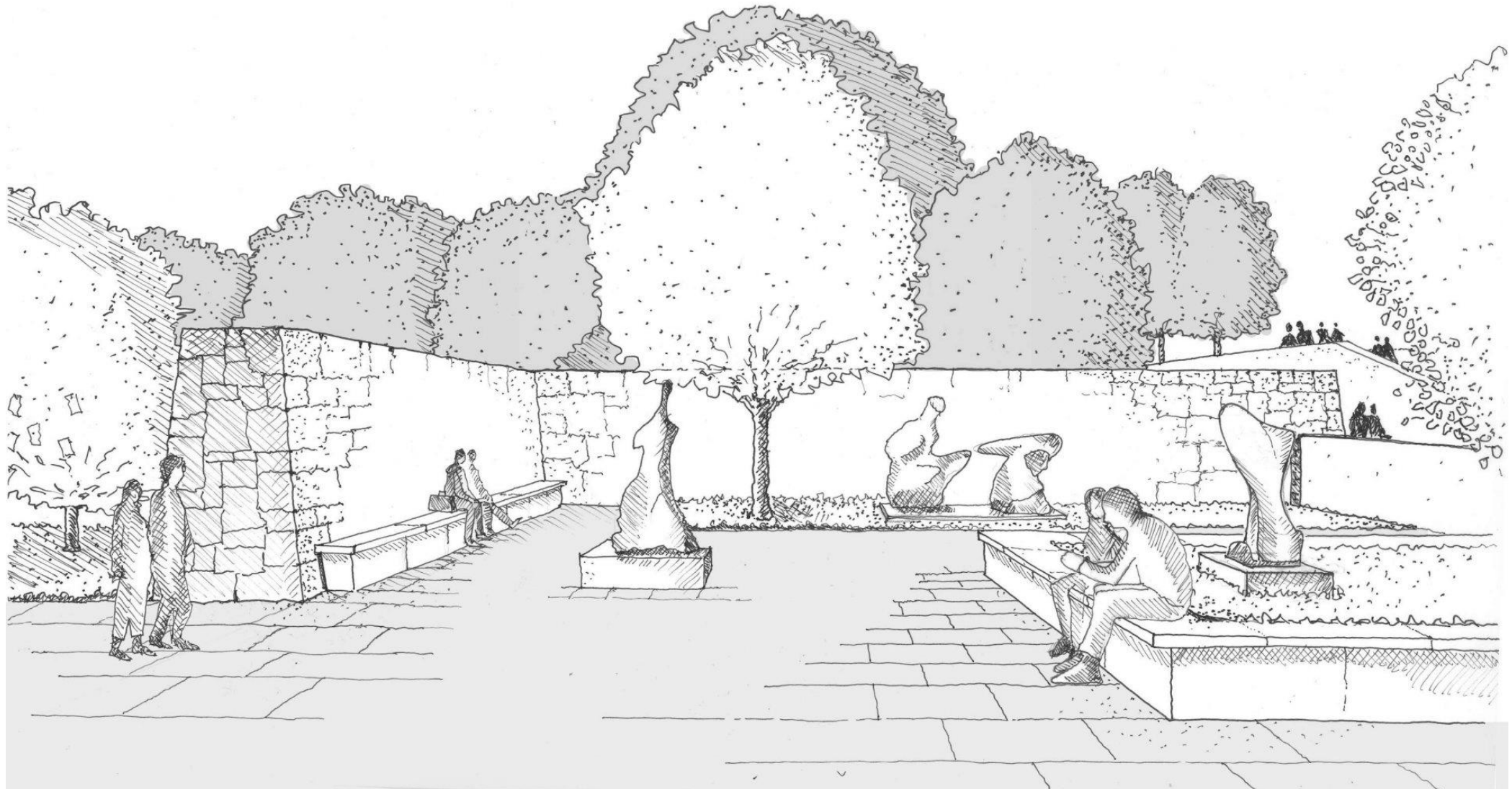
# Stacked Stone Walls



■ New "Pre-Modern" Stone Walls

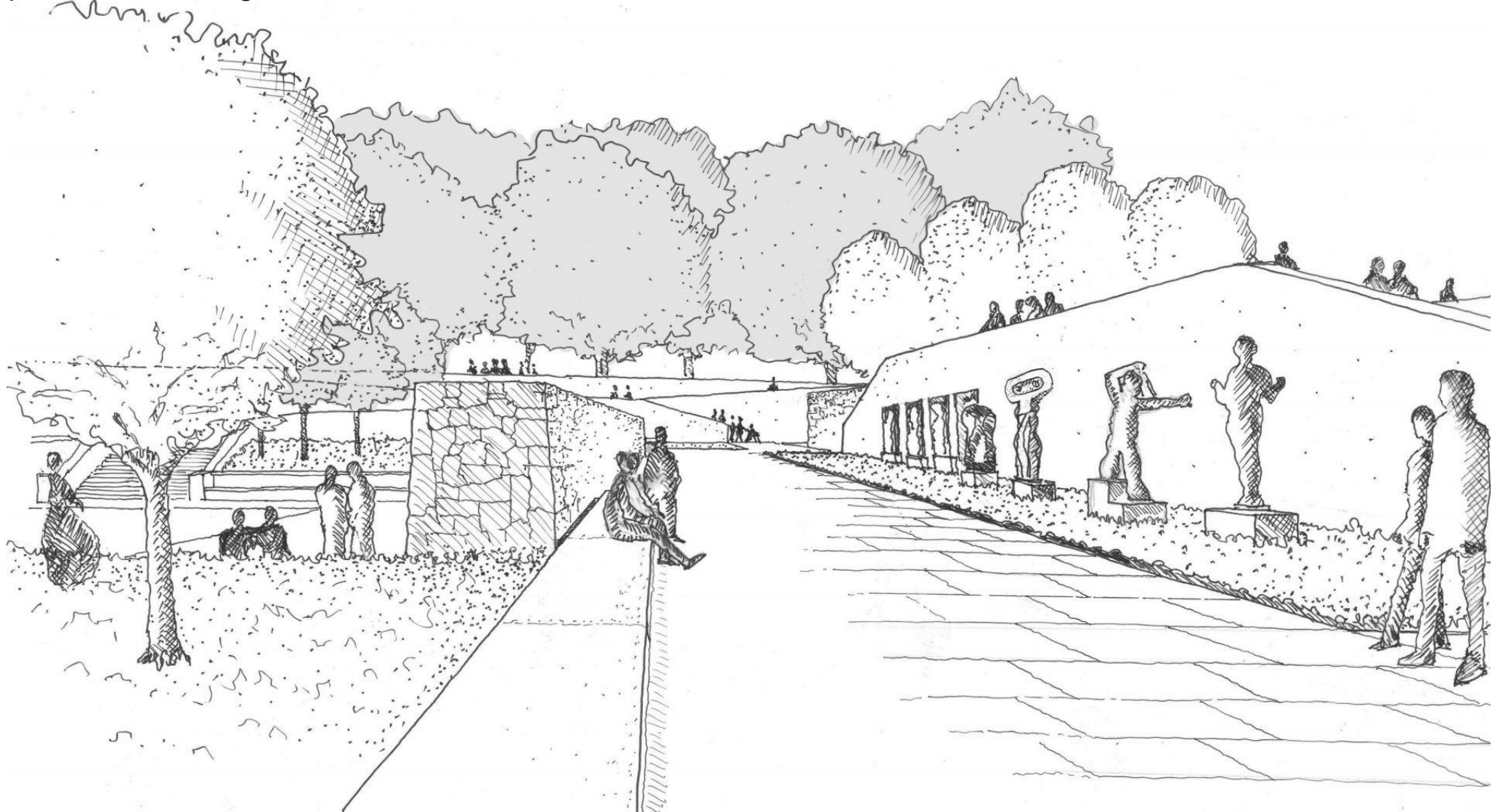
# East Garden

Concept Sketch Looking West



# East Garden

Concept Sketch Looking West

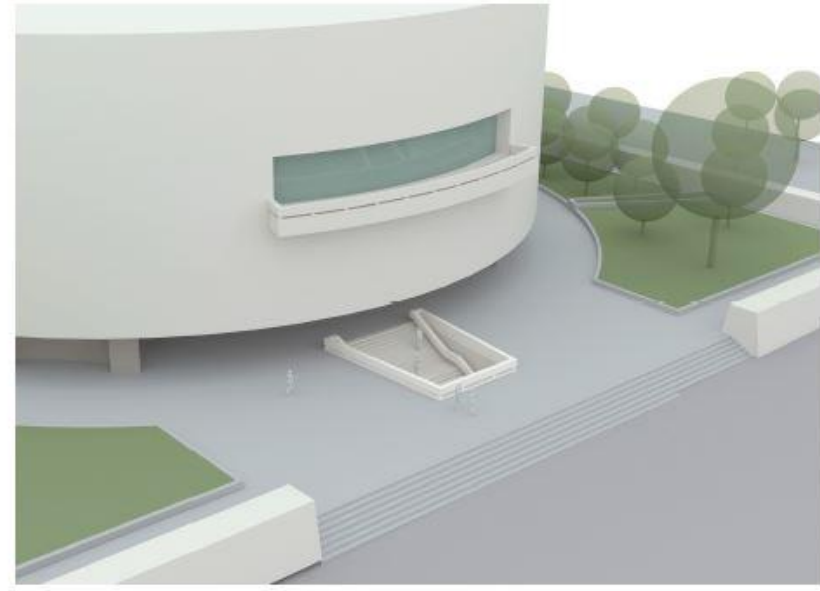
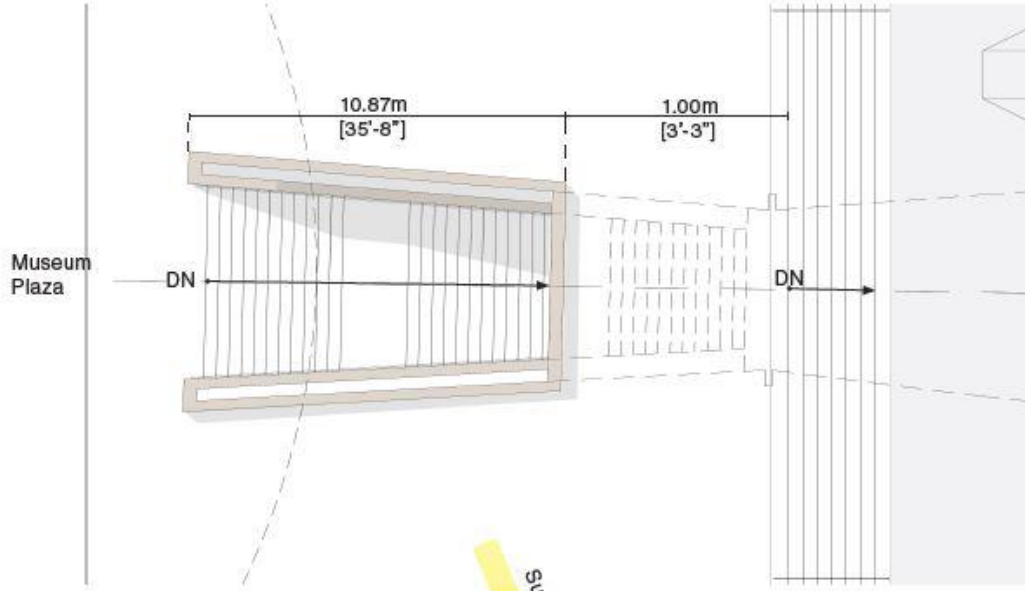




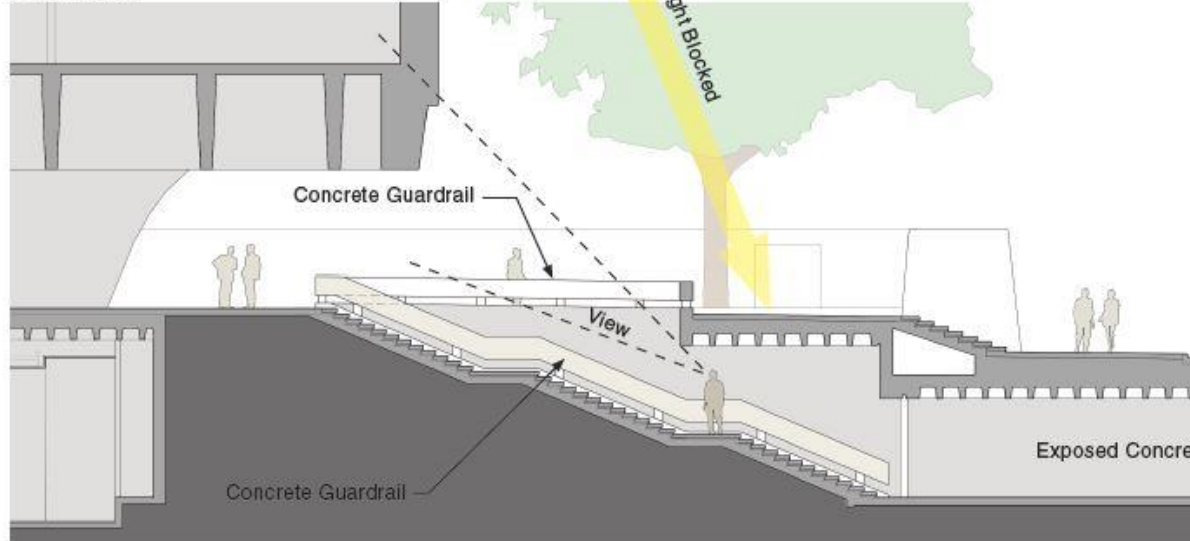
# Original Entrance to Underground Passage

Original Bunshaft Design

Plan 1:150



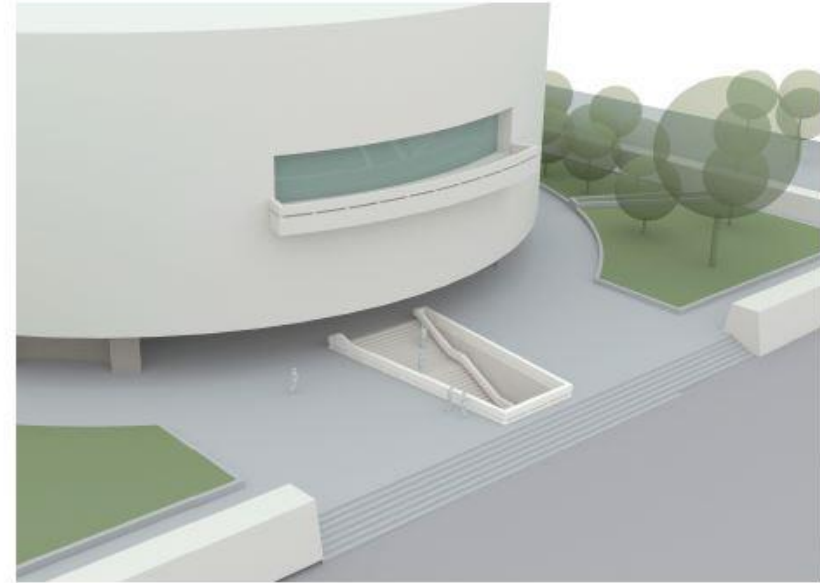
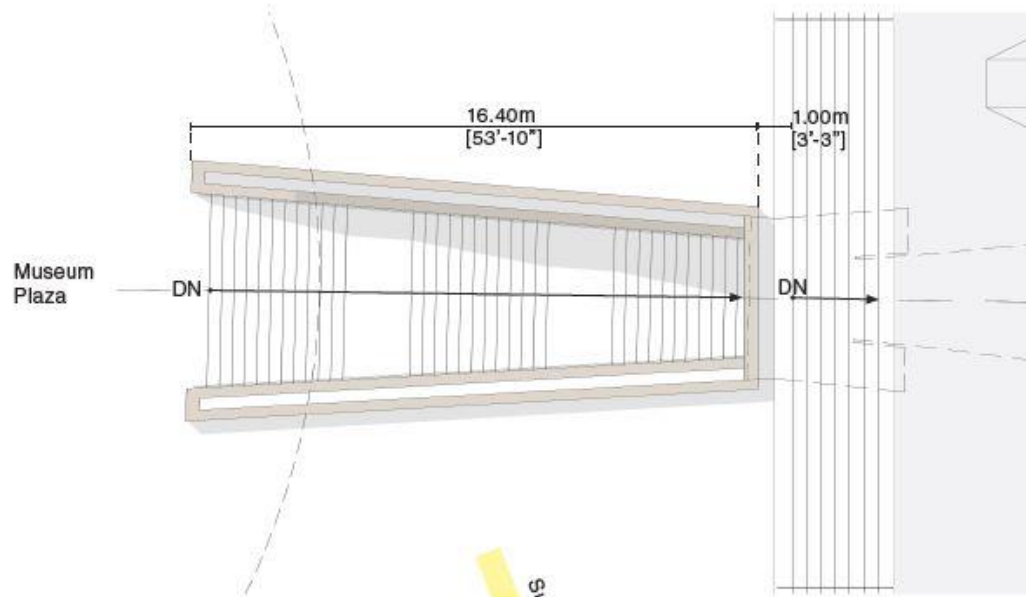
Section 1:150



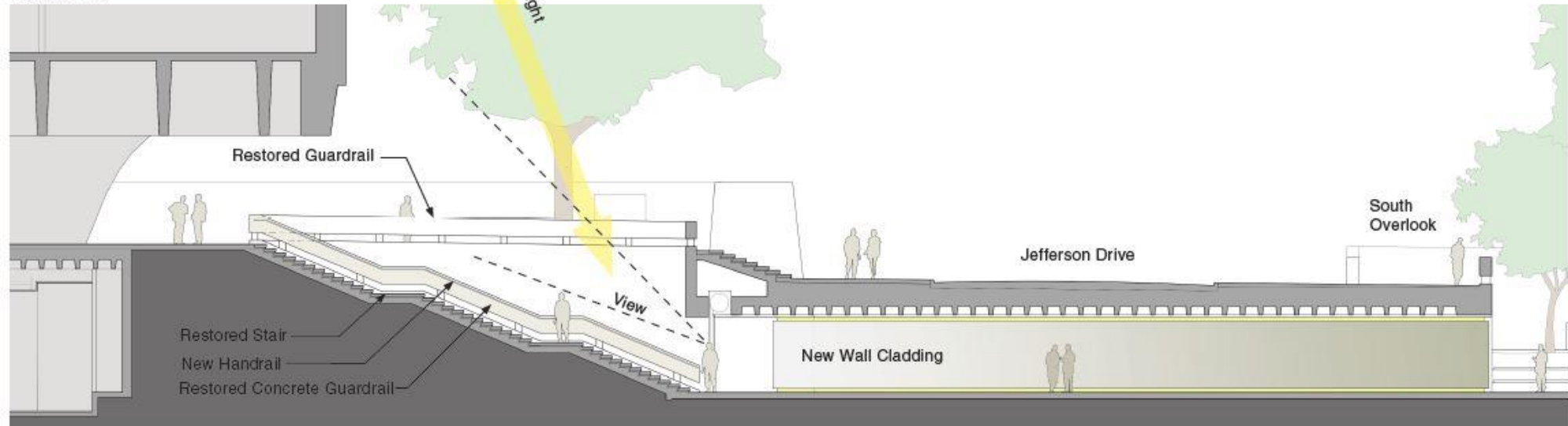
# Preferred Alternative - Entrance to Underground Passage

Enlarged Opening

Plan 1:150



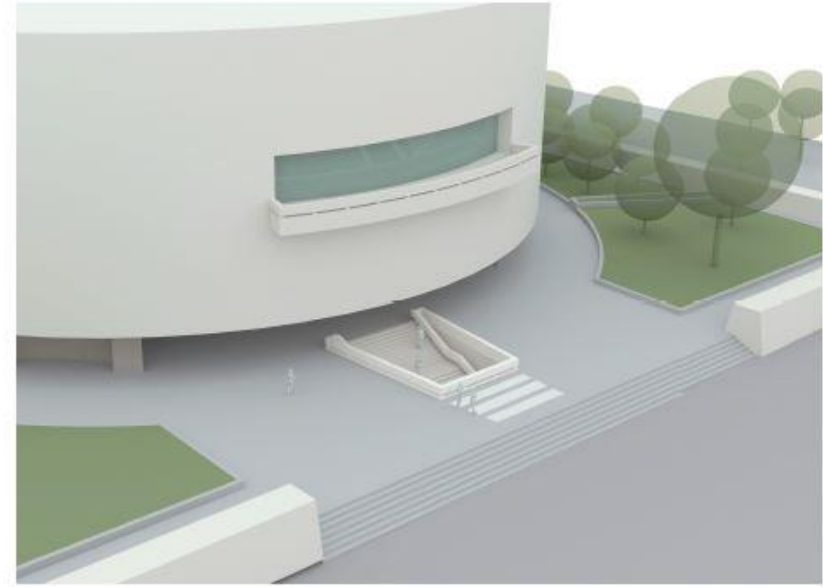
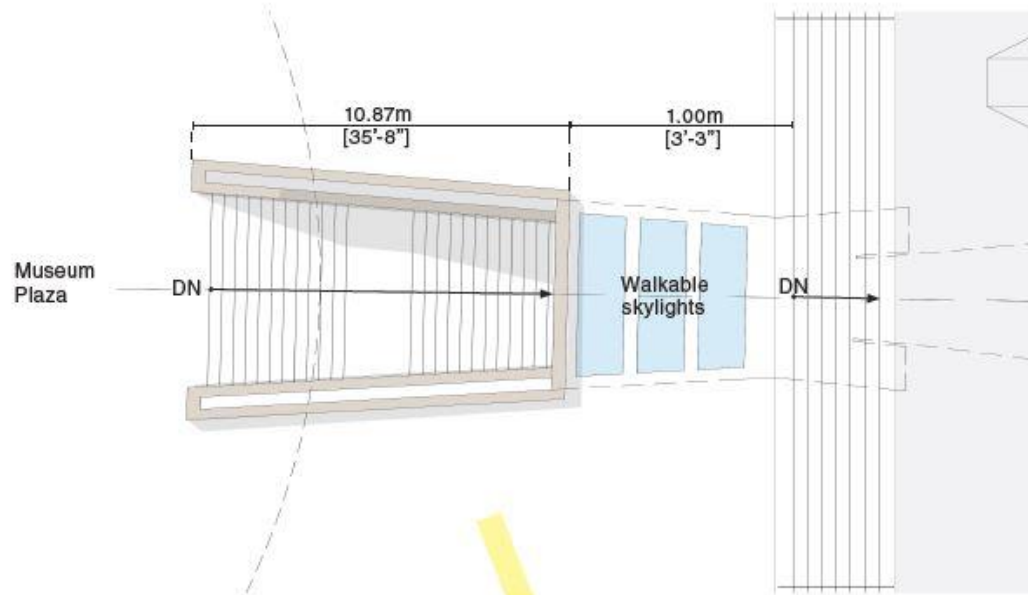
Section 1:150



# Alternative 1 - Entrance to Underground Passage

Original Opening with Skylights

Plan 1:150



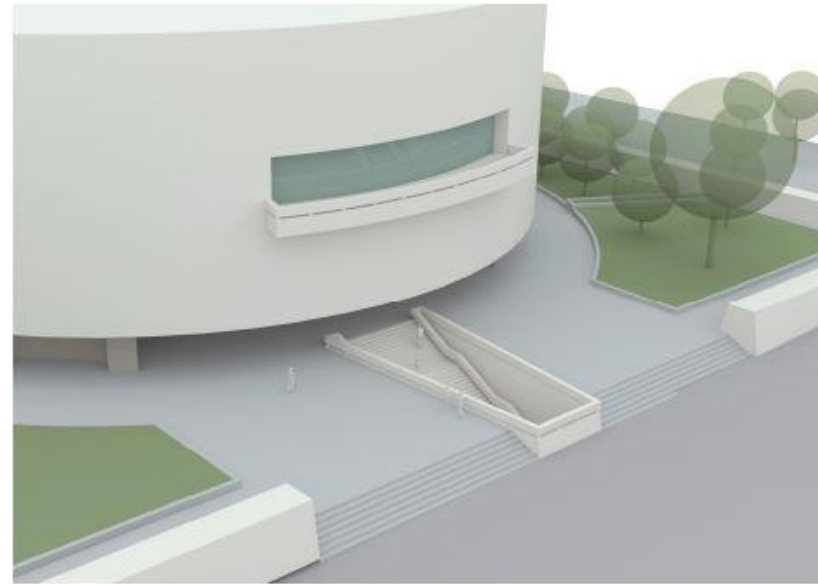
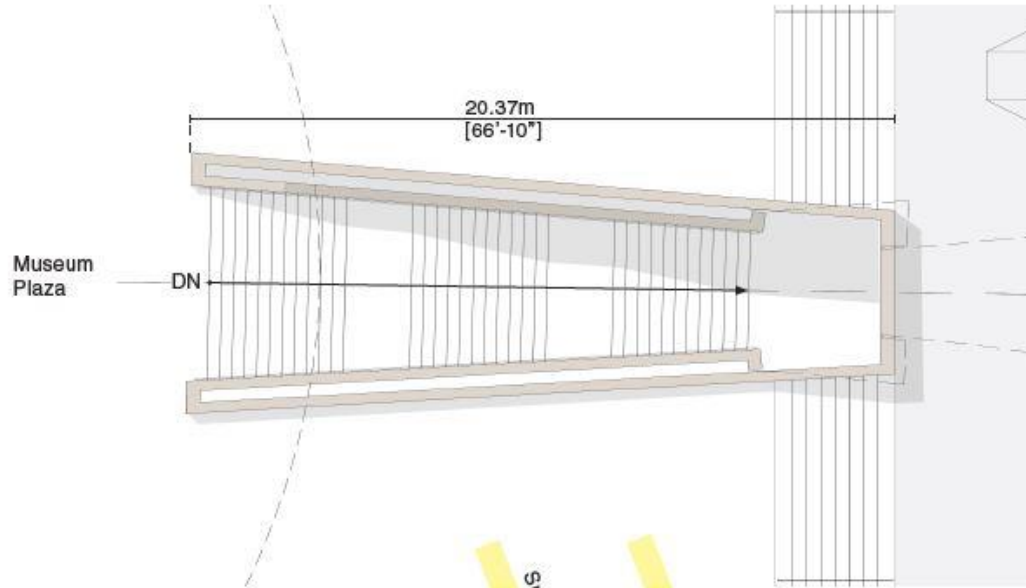
Section 1:150



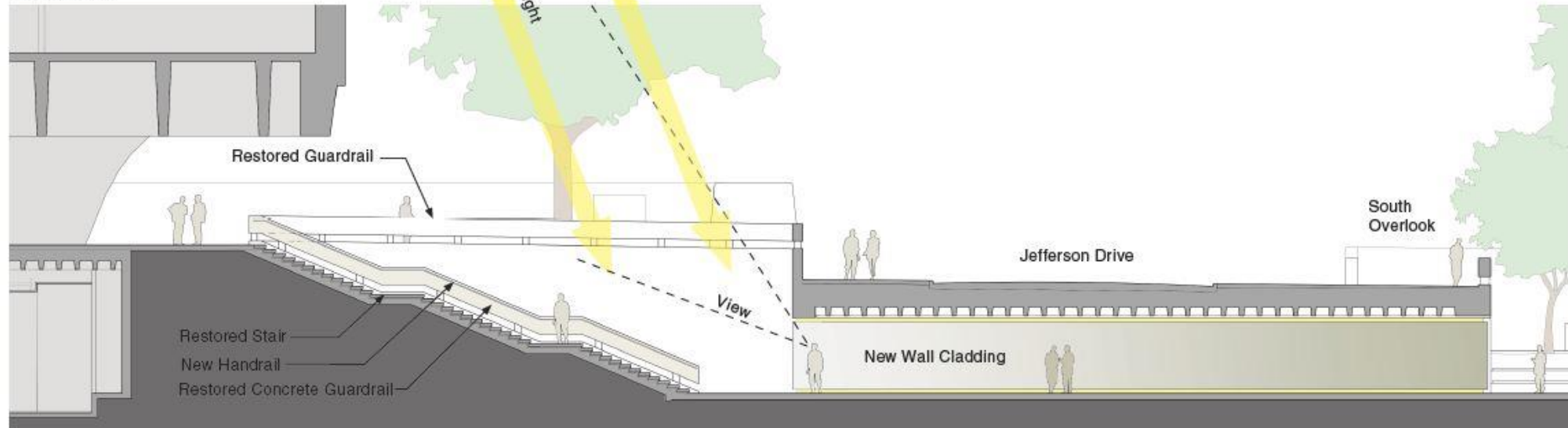
# Alternative 2 - Entrance to Underground Passage

Maximum Stair Opening

Plan 1:150

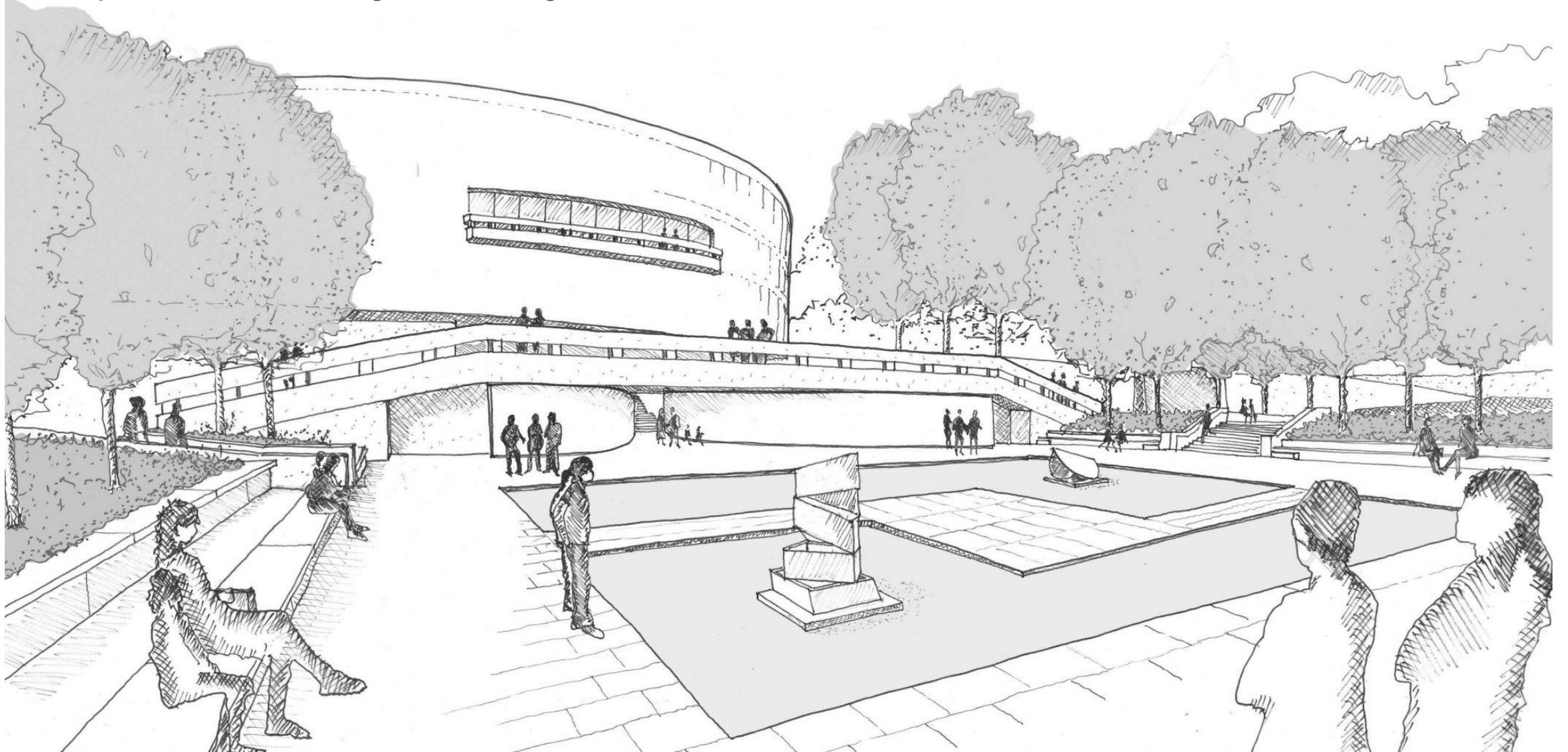


Section 1:150

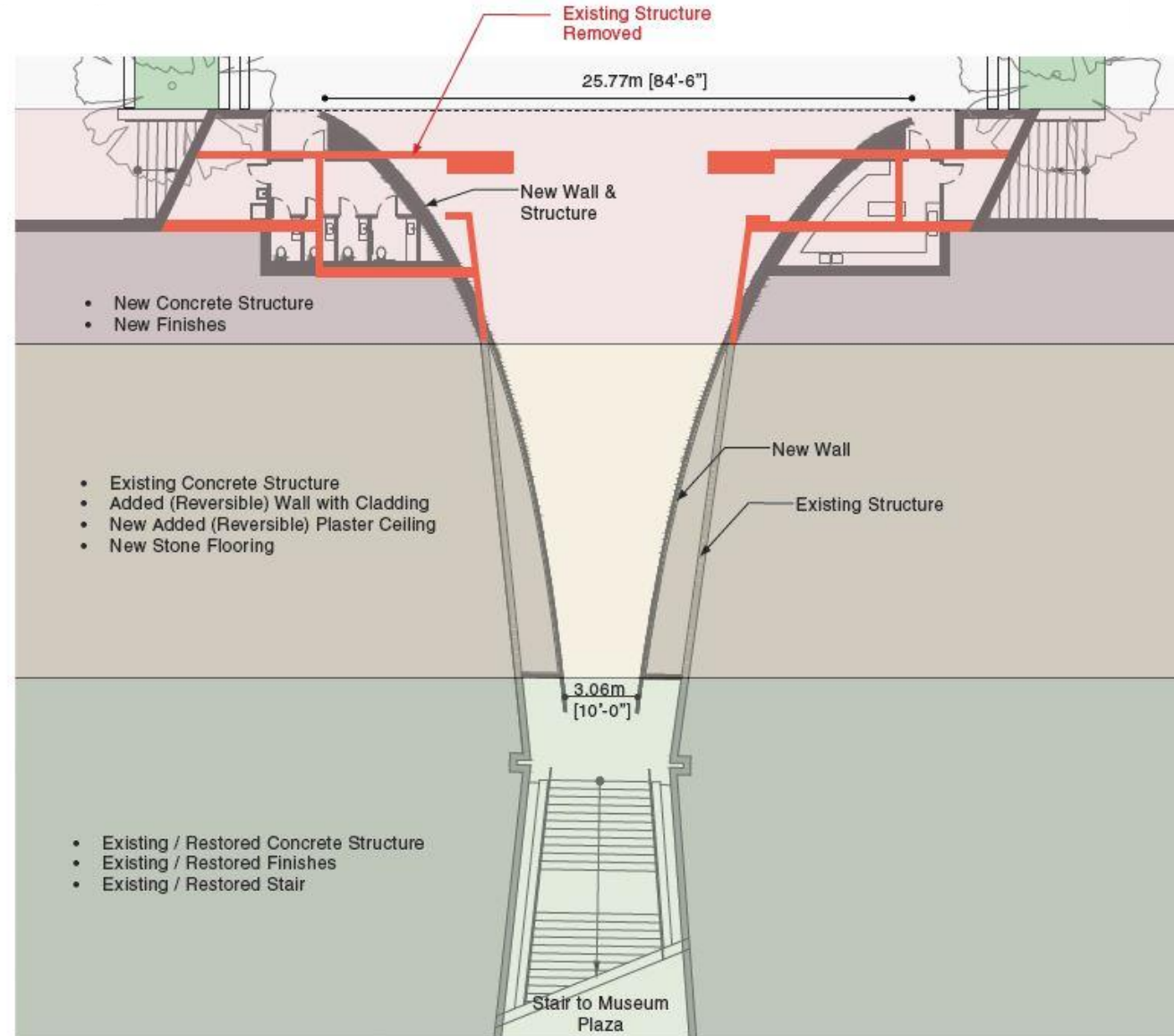


# Entrance to Underground Passage

Concept Sketch of Reflecting Pool Looking South

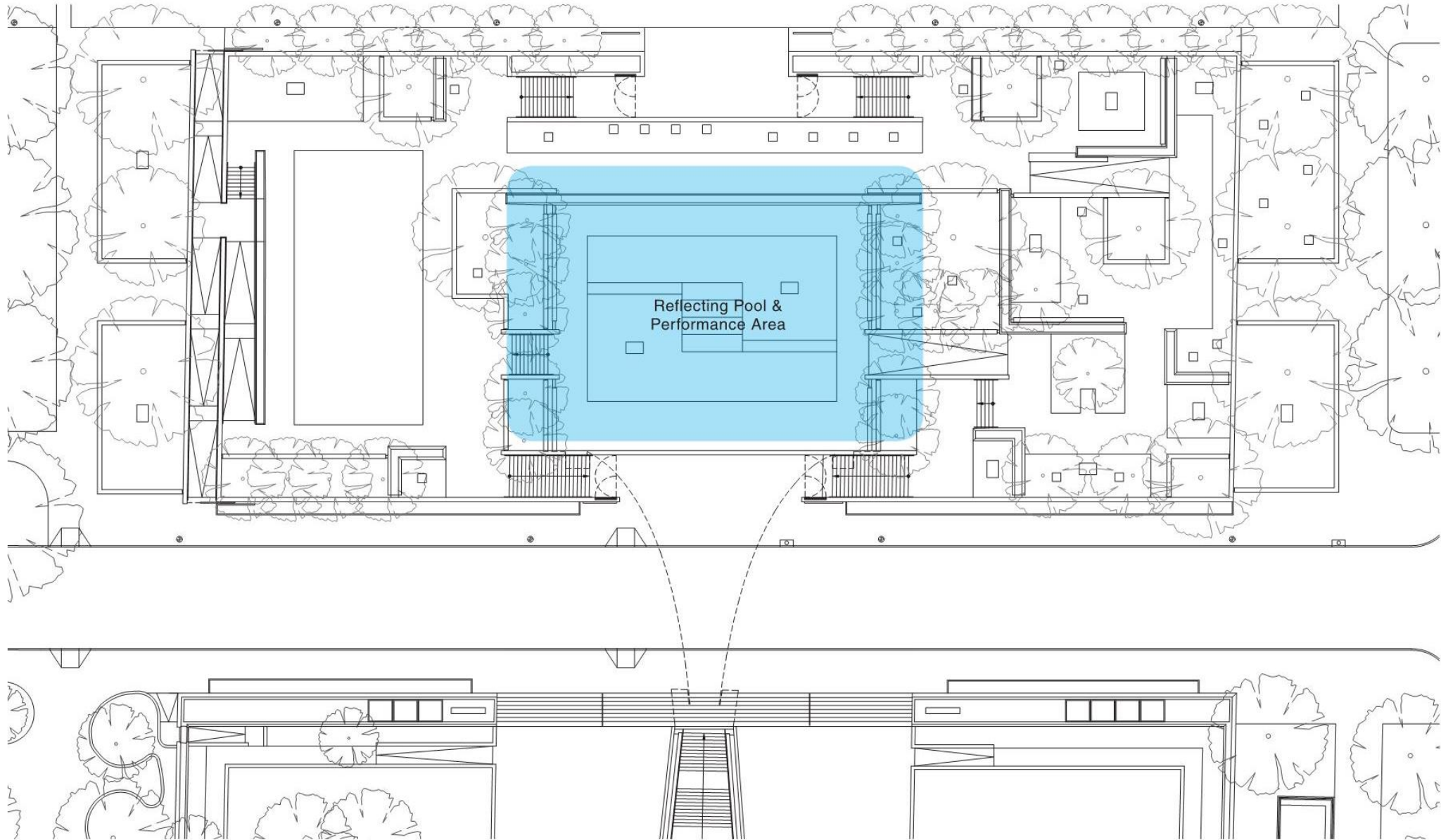


# Underground Passage Layout



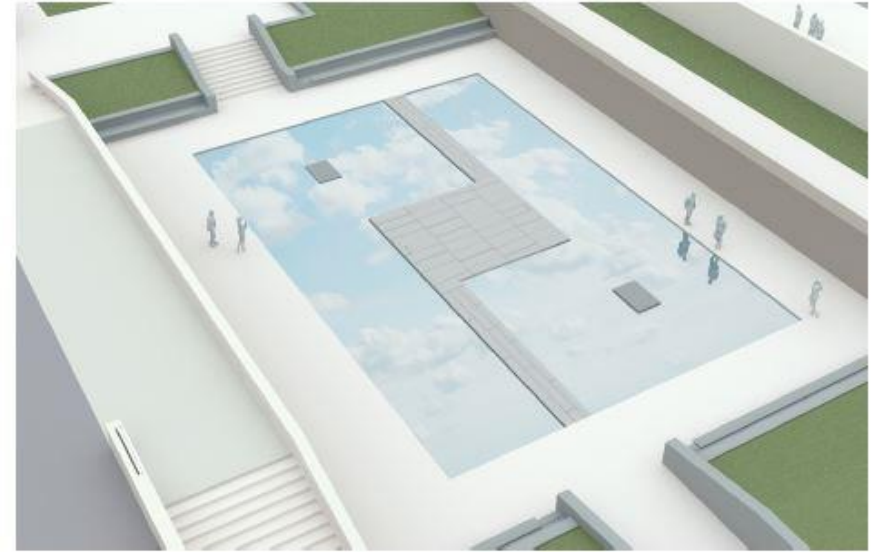
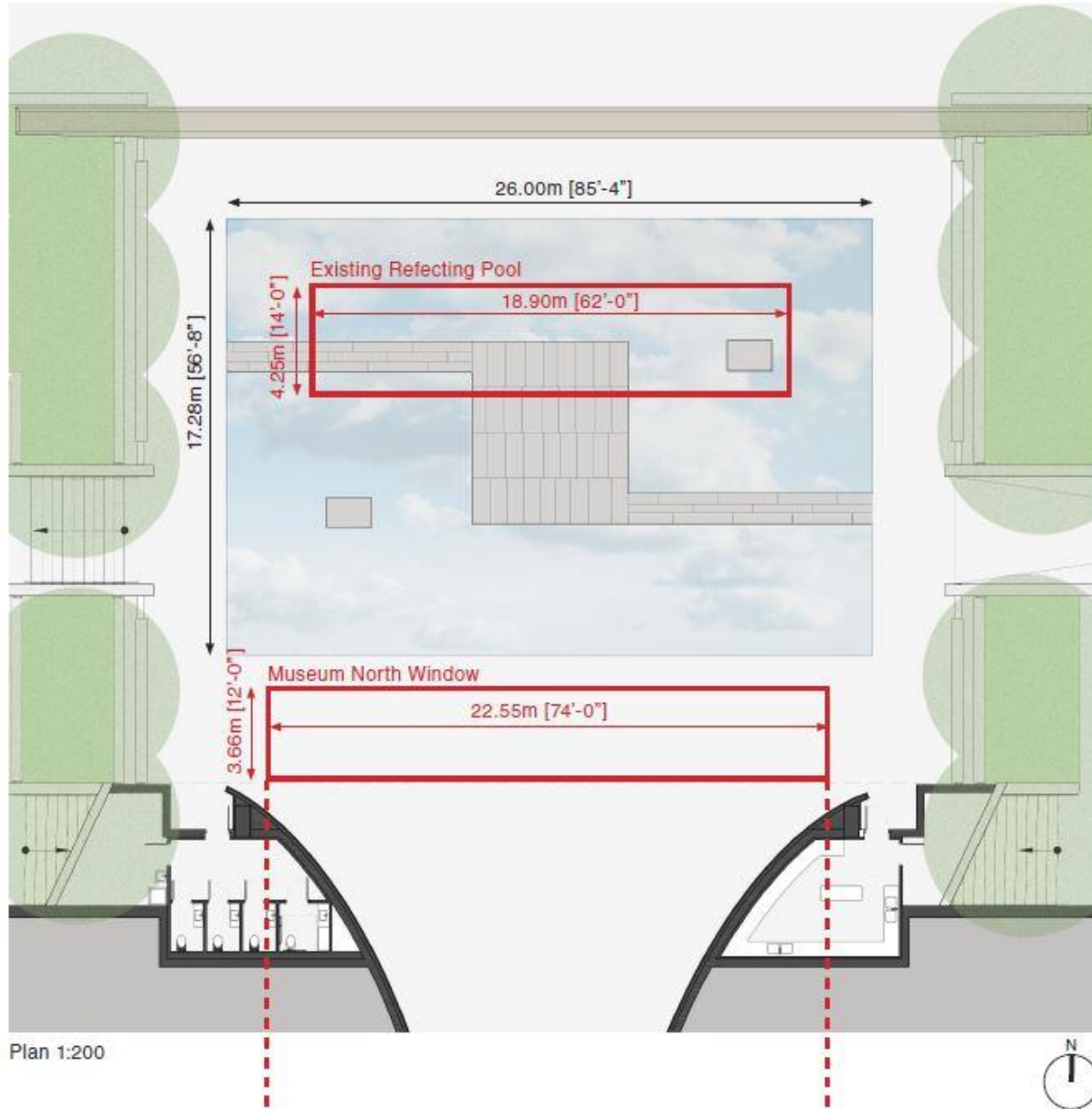
Underground Passage Plan, 1:200

# Reflecting Pool and Performance Area



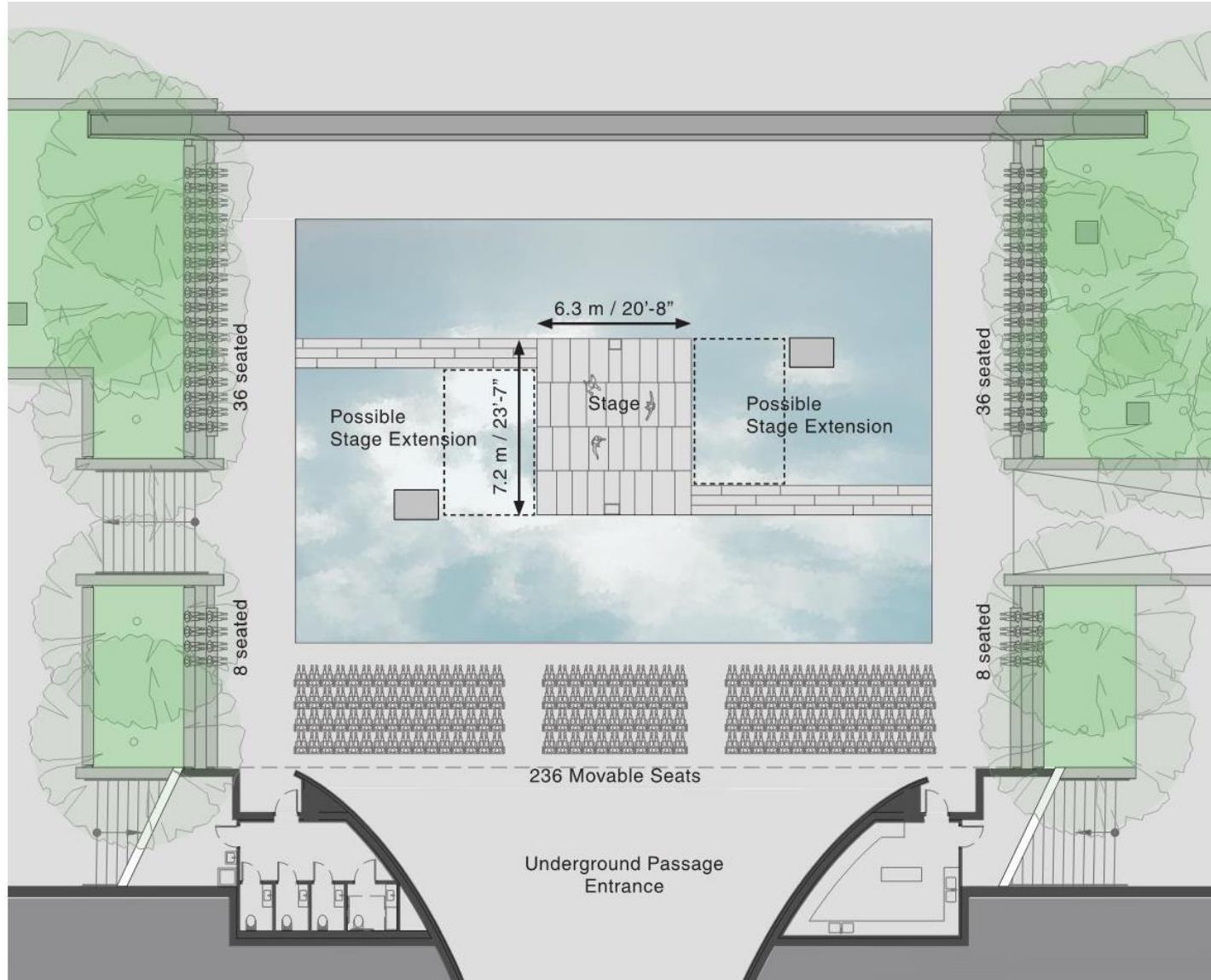
# Preferred Alternative - Reflecting Pool Studies

Proposed Pool with Dimensions





# Reflecting Pool and Performance Area



Preferred Plan of Reflecting Pool and Performance Area

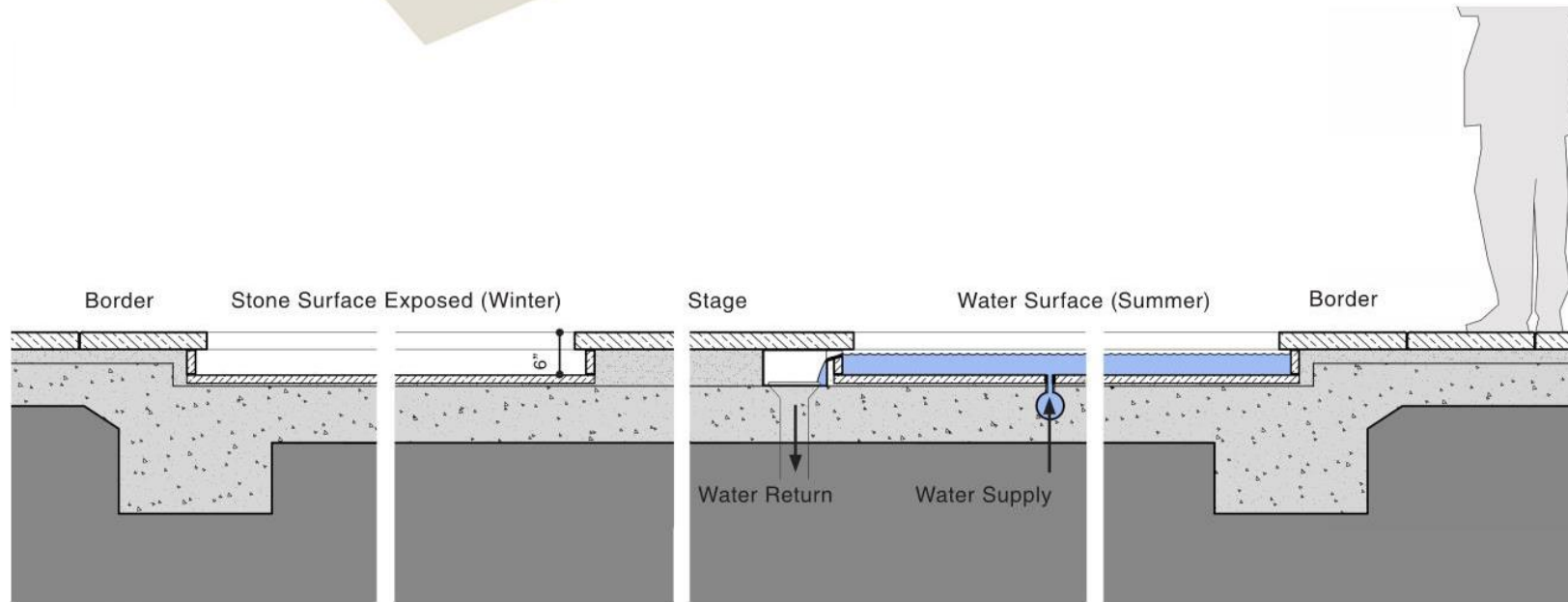
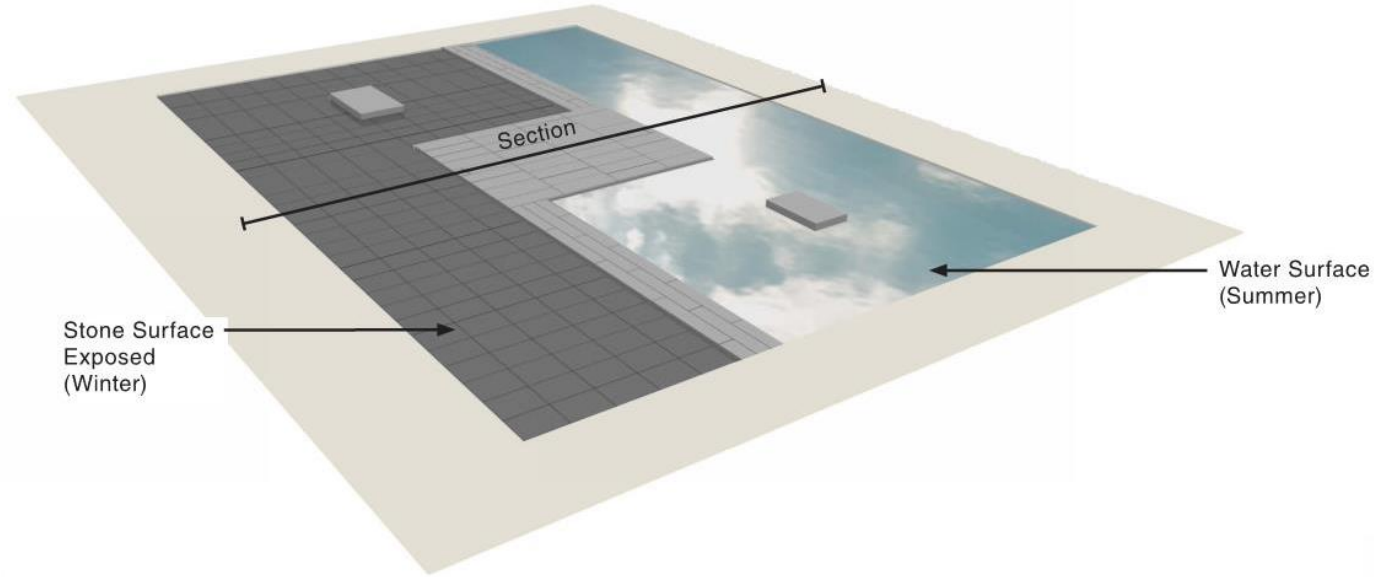


Example of performance space with amphitheater seating



Example of Theater Performance

# Reflecting Pool Detail – Seasonal Change



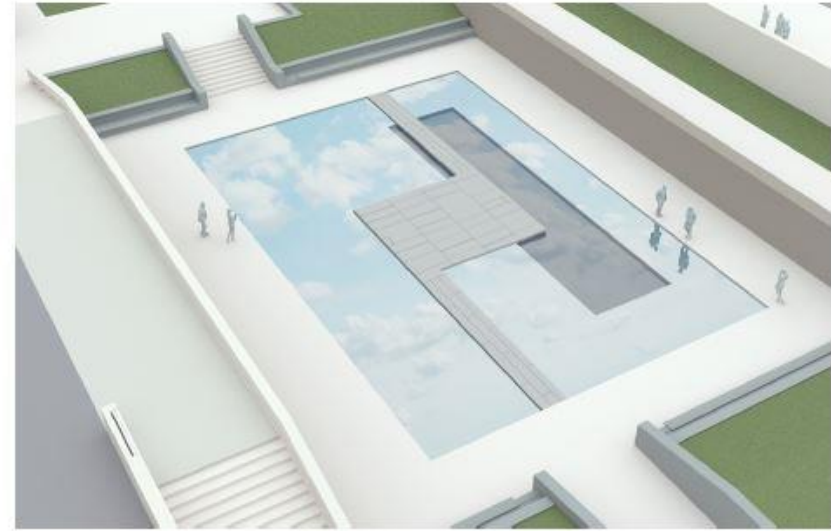
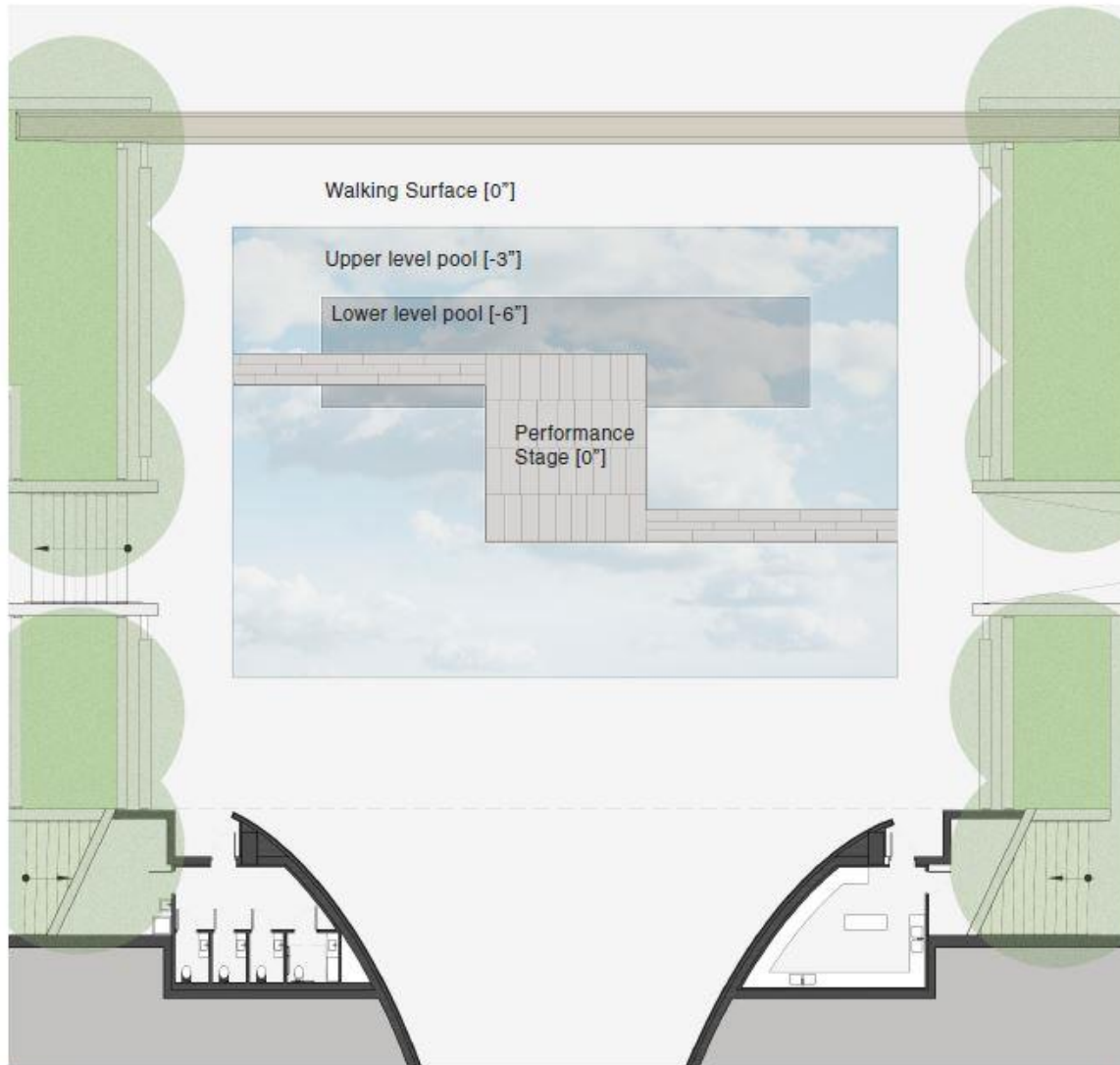
Section, 1:20

Water Feature Stone:  
Honed Black Granite



# Alternative 1 - Reflecting Pool Studies

Bunshaft Pool Integration and Stage

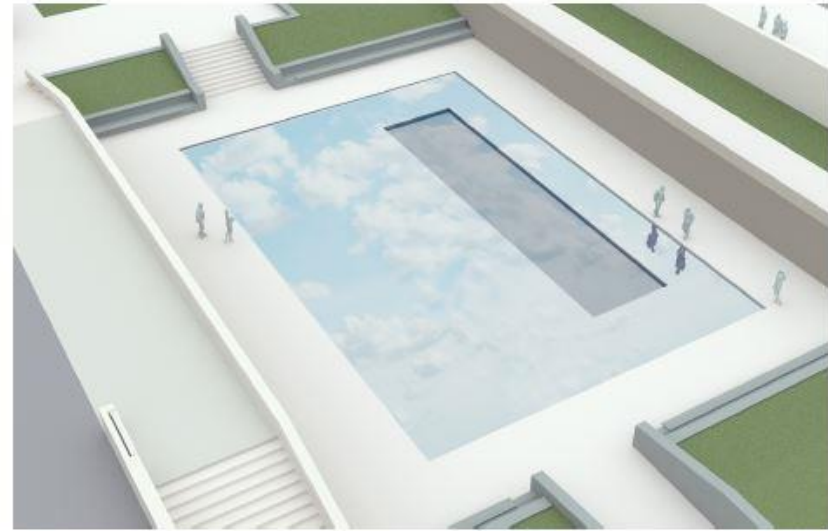
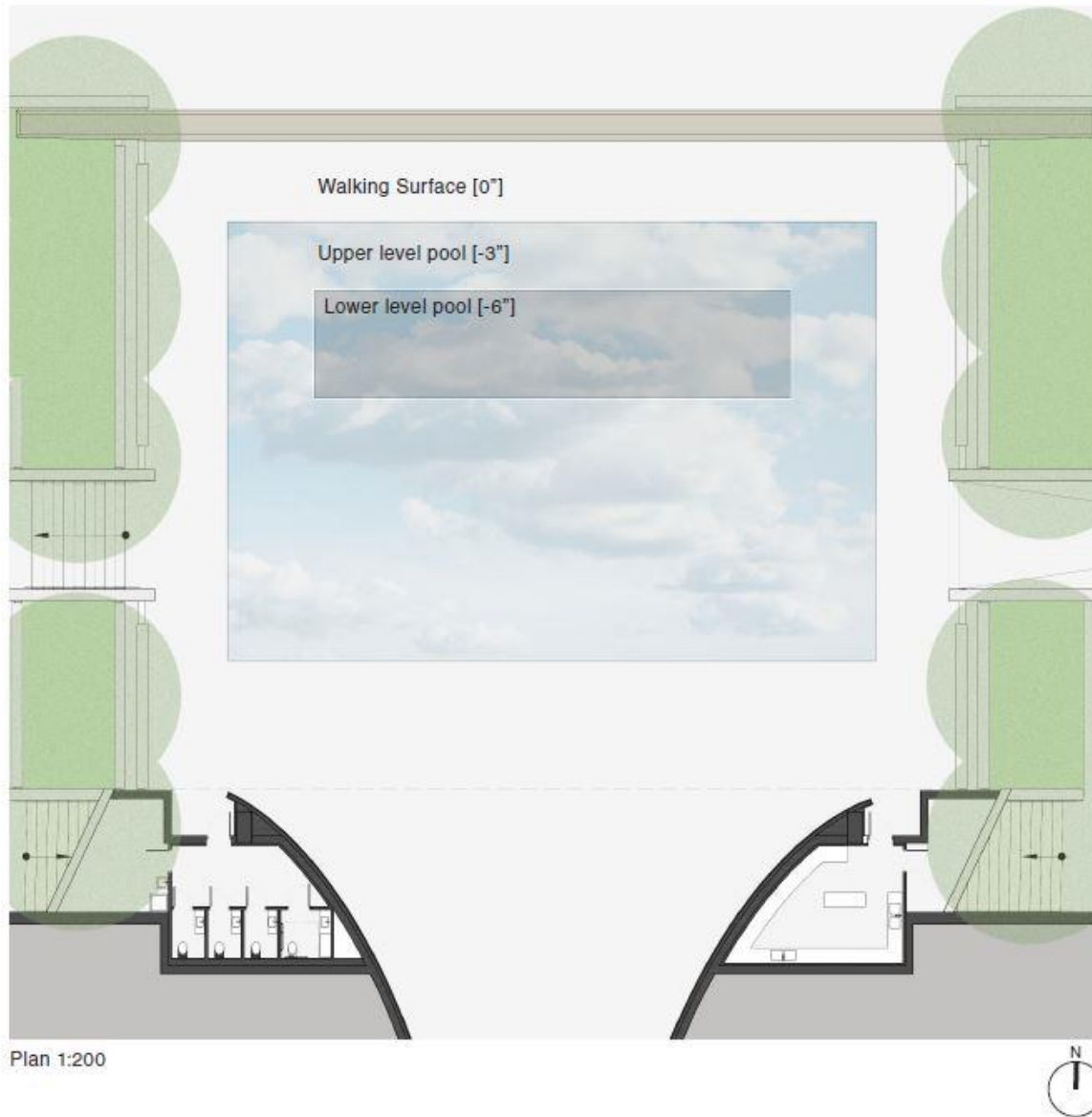


Plan 1:200



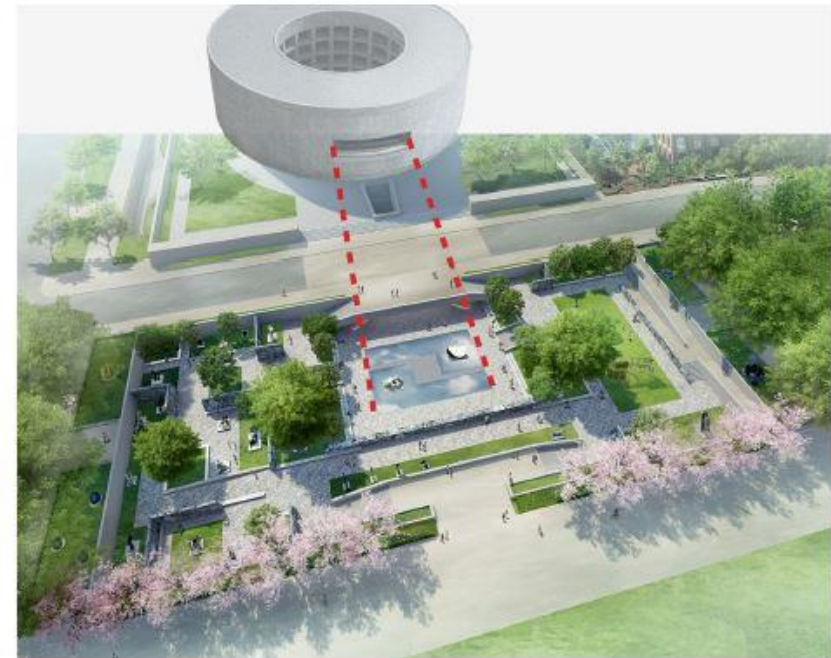
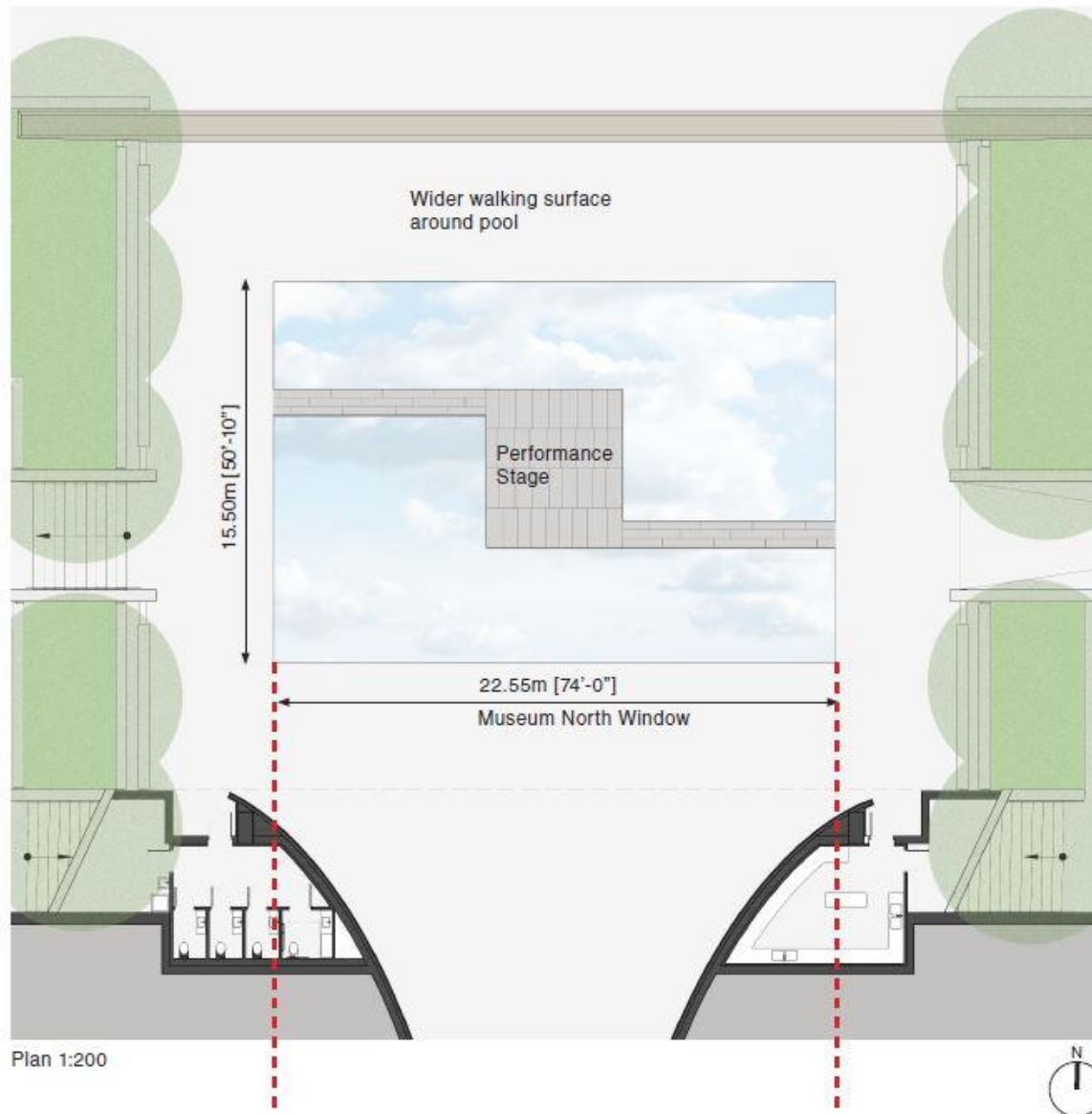
# Alternative 2 - Reflecting Pool Studies

Bunshaft Pool Integration - No Stage



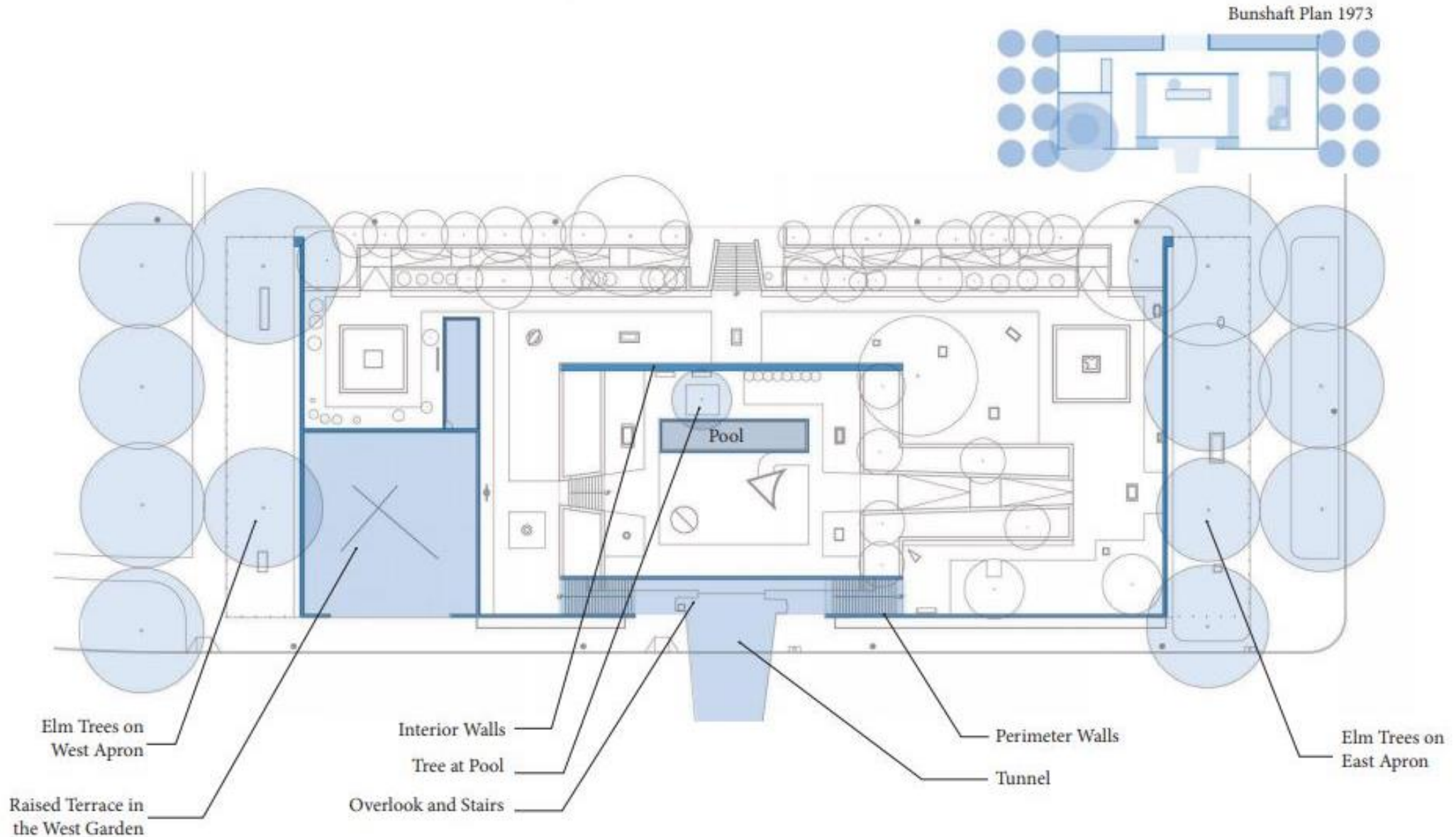
# Alternative 3 – Reflecting Pool Studies

Pool Sized to Balcony Window



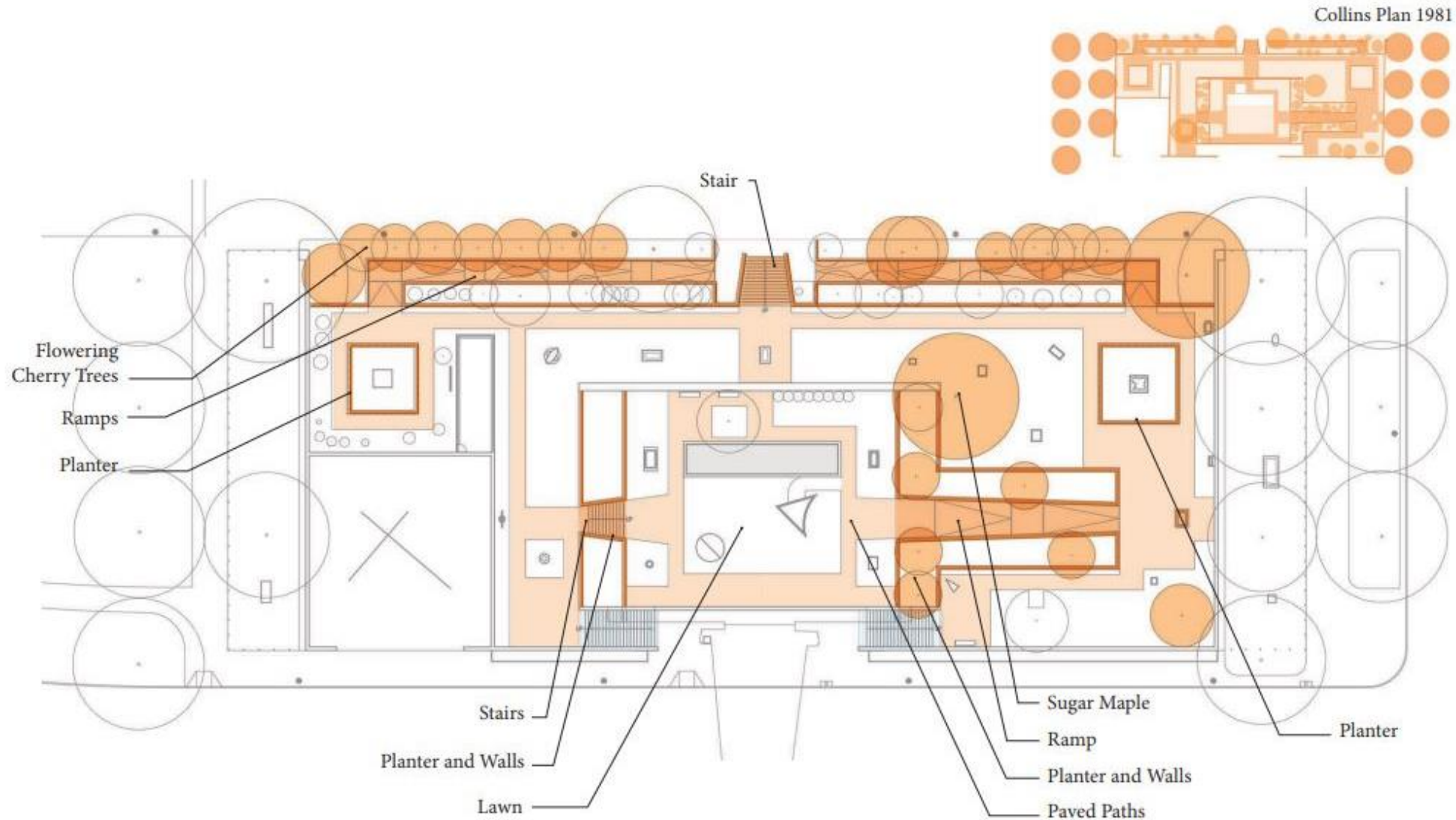
# Comparative Analysis of Garden Evolution

Bunshaft Plan 1974: Extant Original Elements



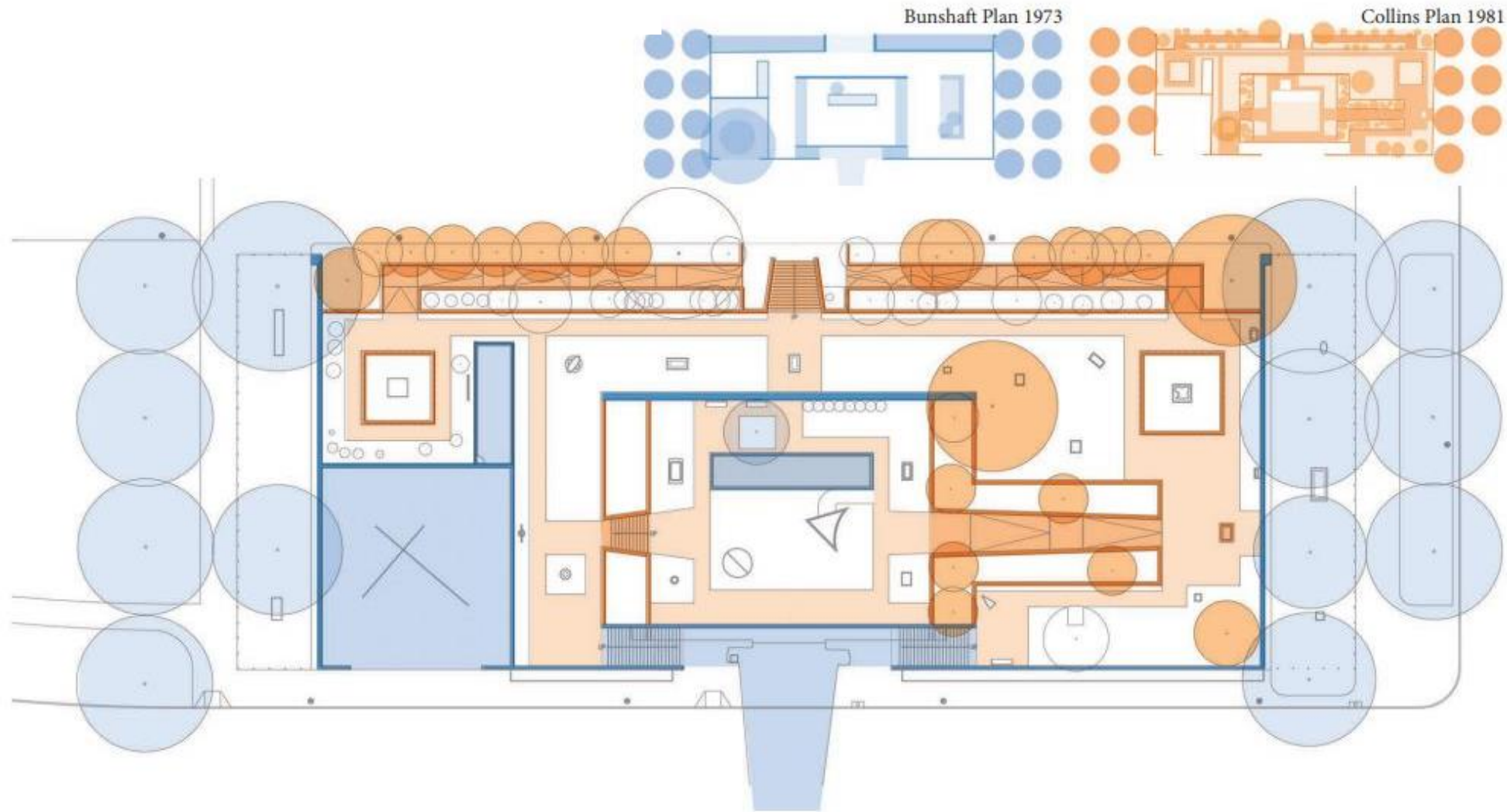
# Comparative Analysis of Garden Evolution

Collins Plan 1981: Extant Collins Elements



# Comparative Analysis of Garden Evolution

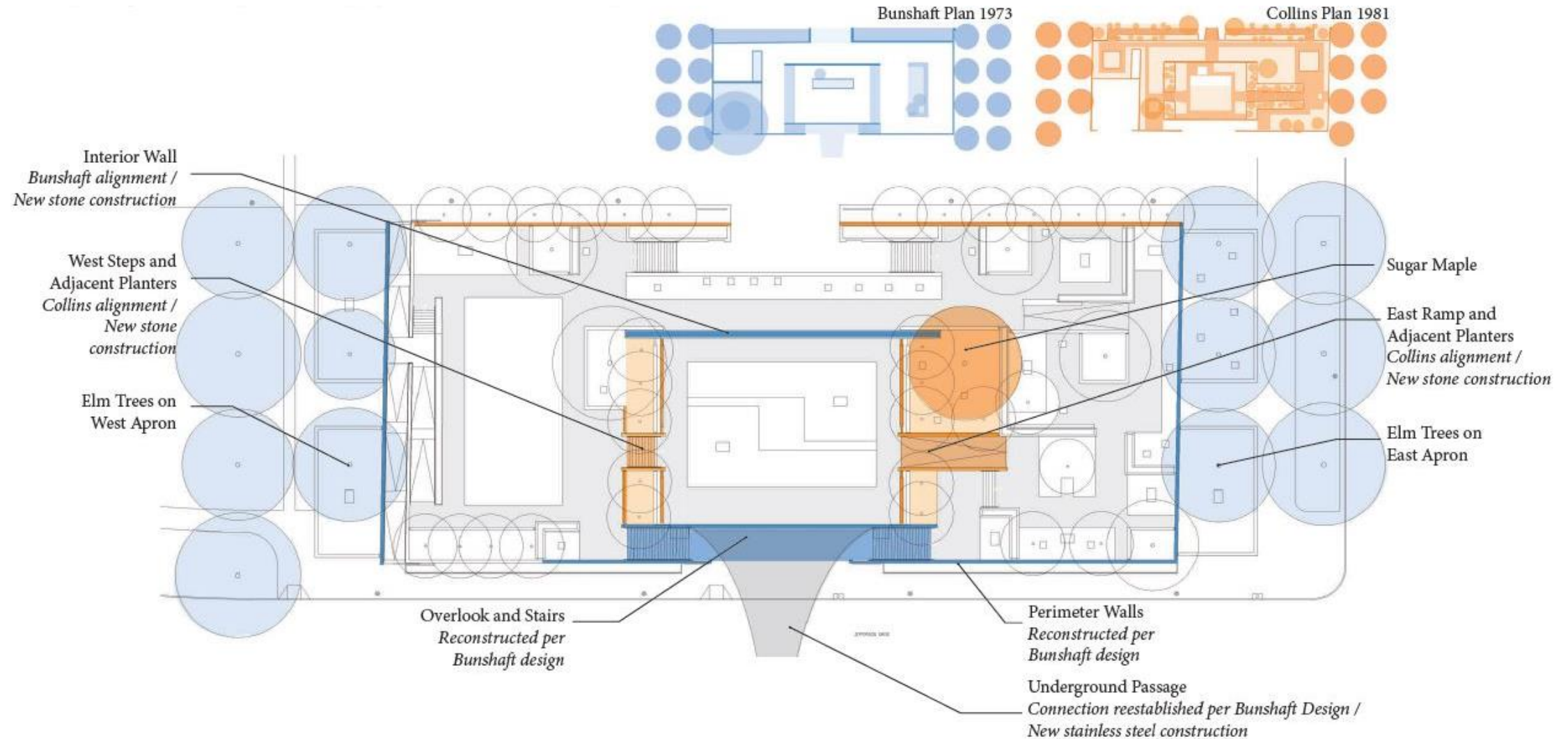
Extant Bunshaft and Collins Elements Combined



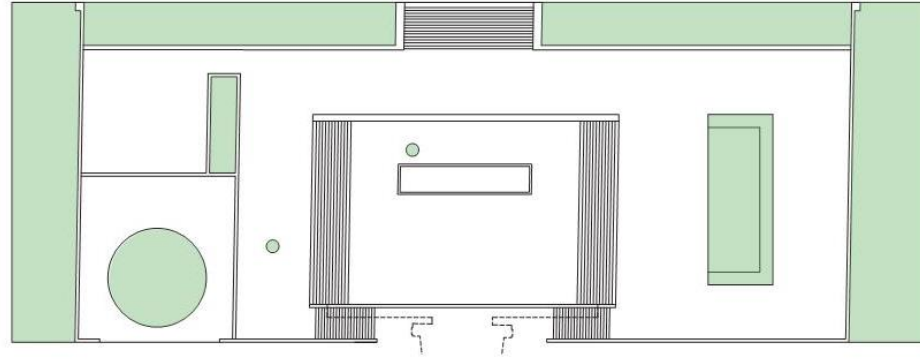


# Comparative Analysis of Garden Evolution

Overlay on Proposed Sugimoto Garden Design

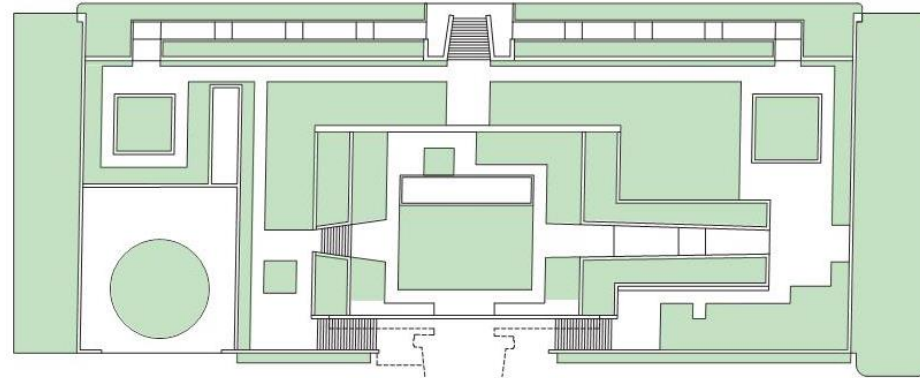


# Cumulative Planting and Paving Changes



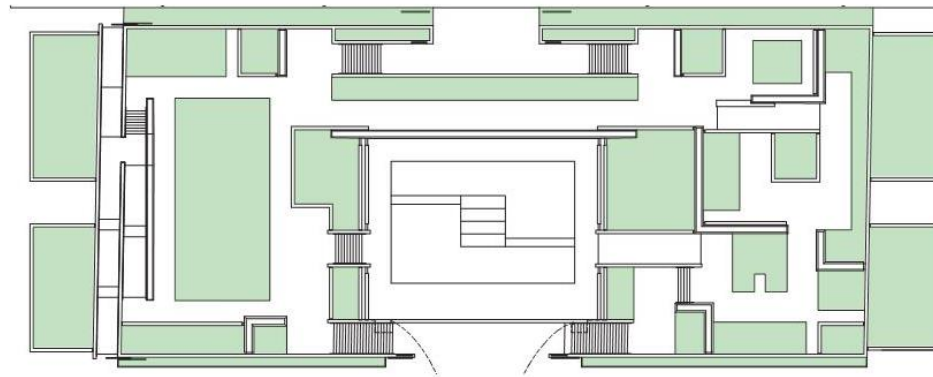
1972

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



1981

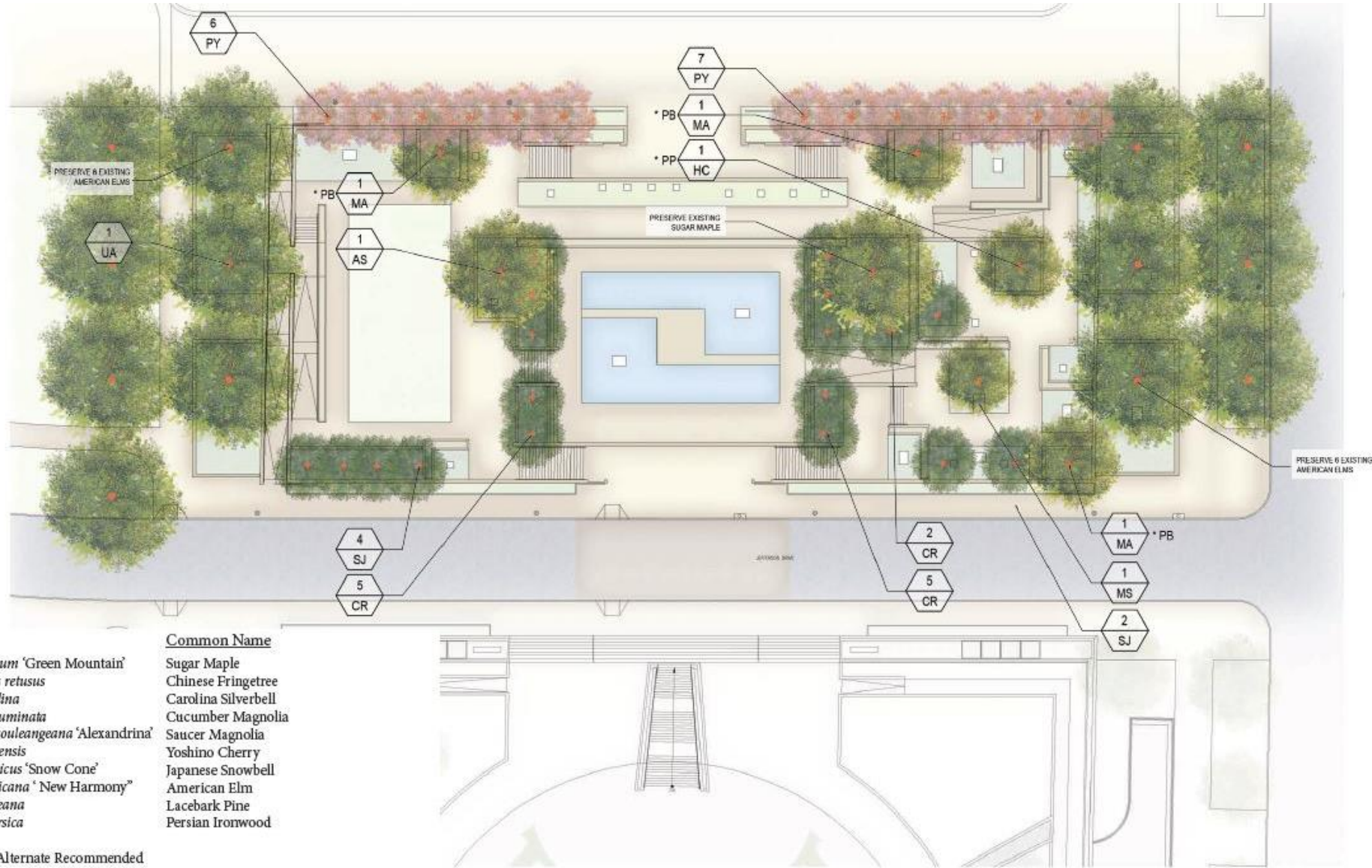
Lester Collins Design 1981:  
59% Landscape / 41% Paving



39% Landscape / 61% Paving



# Planting Plan - Trees



Key	Species	Common Name
AS	<i>Acer saccharum</i> 'Green Mountain'	Sugar Maple
CR	<i>Chionanthus retusus</i>	Chinese Fringetree
HC	<i>Halesia carolina</i>	Carolina Silverbell
MA	<i>Magnolia acuminata</i>	Cucumber Magnolia
MS	<i>Magnolia x souleangiana</i> 'Alexandrina'	Saucer Magnolia
PY	<i>Prunus yeodensis</i>	Yoshino Cherry
SJ	<i>Styrax japonicus</i> 'Snow Cone'	Japanese Snowbell
UA	<i>Ulmus americana</i> 'New Harmony'	American Elm
PB	* <i>Pinus bungeana</i>	Lacebark Pine
PP	* <i>Parrotia persica</i>	Persian Ironwood

\* Indicates Alternate Recommended Species

# Species Palette- Trees



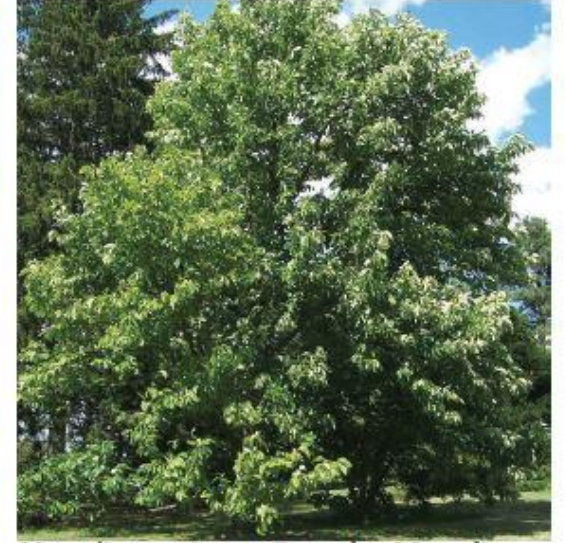
*Acer saccharum* 'Green Mountain' - Sugar Maple



*Chionanthus retusus* - Chinese Fringetree



*Halesia carolina* - Carolina Silverbell



*Magnolia acuminata* - Cucumber Magnolia



*Prunus yeodensis* - Yoshino Cherry



*Styrax japonicus* "Snow Cone"  
- Japanese Snowbell

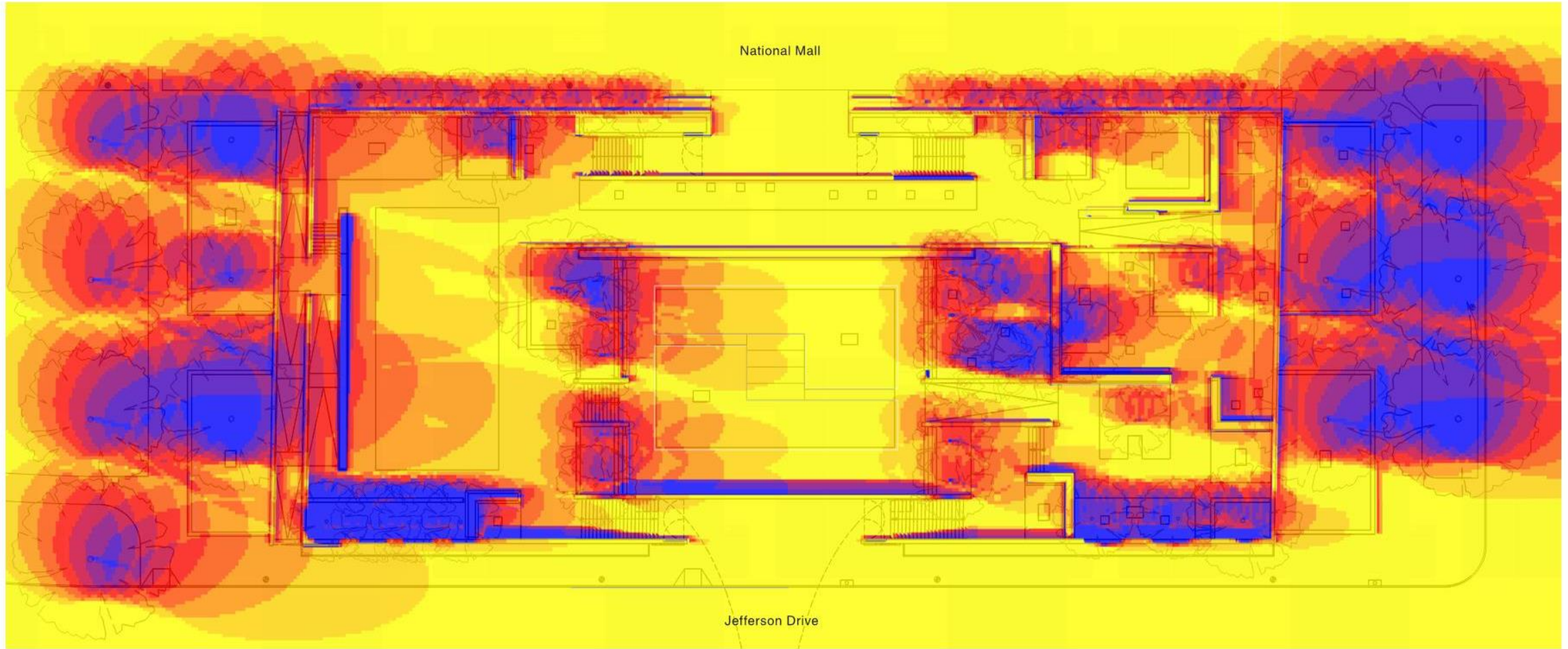


*Magnolia x soulangeana* 'Alexandrina'  
- Saucer Magnolia



*Parrotia persica* - Persian Ironwood

# Shade Study at Installation

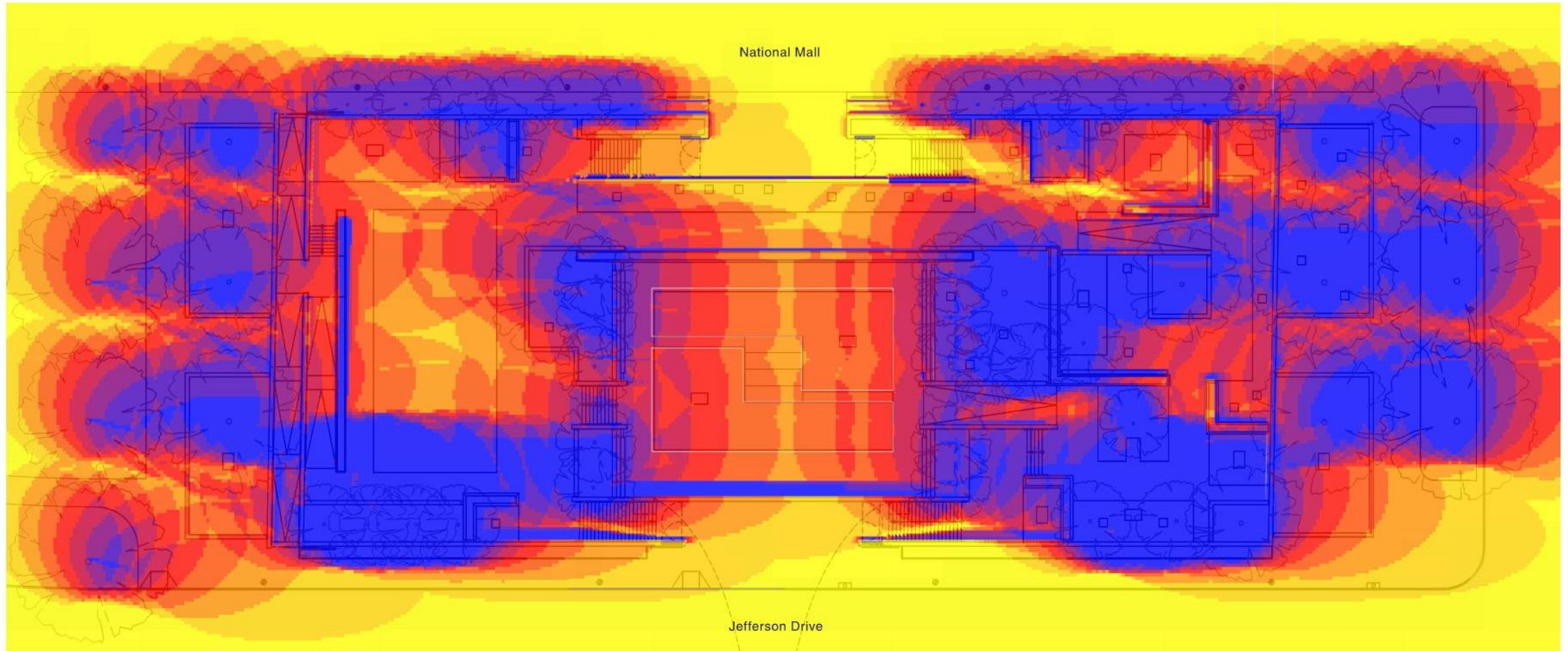


Area exposed to sun:

Never max. 1h max. 2h max. 3h max. 4h max. 5h max. 6h max. 7h Always



# Shade Study at Maturity

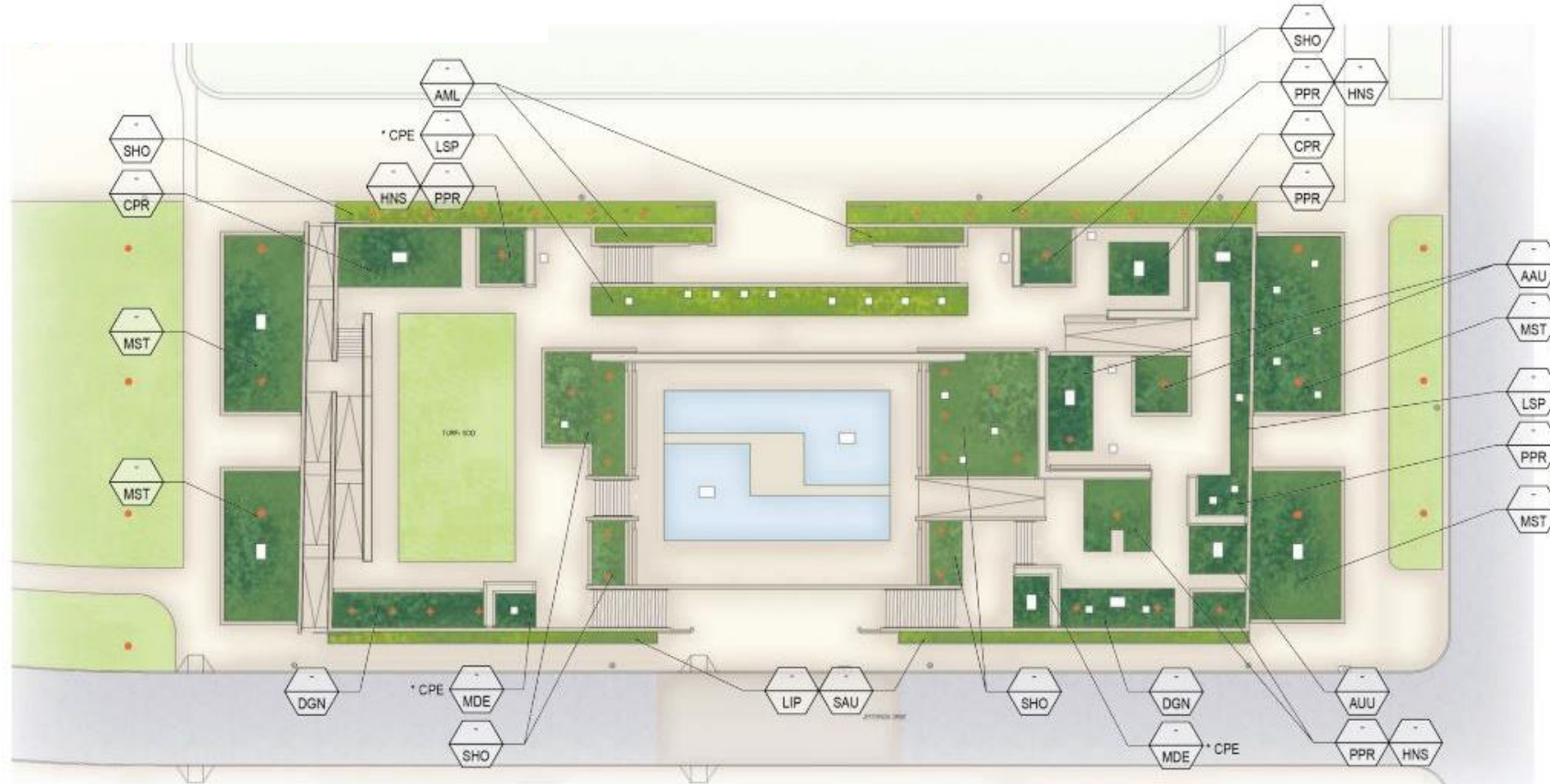


Area exposed to sun:

Never max. 1h max. 2h max. 3h max. 4h max. 5h max. 6h max. 7h Always



# Planting Plan – Ground Plane



Key	Species	Common Name
AUU	<i>Arctostaphylos uva-ursi</i>	Bear Berry
PPR	<i>Pachysandra procumbens</i>	Allegheny Spurge
DGN	<i>Deutzia gracilis</i> 'Nikko'	Slender Deutzia
HNS	<i>Hyacinthoides non-scripta</i> 'Alba'	White Wood Hyacinth
SHO	<i>Sarcococca hookeriana</i> var. <i>humilis</i> 'Sarsid2'	Fragrant Mountain Sweetbox
CPR	<i>Cotoneaster procumbens</i> 'Little Dipper'	Cotoneaster 'Little Dipper'
AML	<i>Aronia melanocarpa</i> 'Low-scape Mound'	Chokeberry
LSP	<i>Liriope muscari</i> 'Isabella'	Dwarf Isabella Liriope
MDE	<i>Macrobota decussata</i>	Syberian Cypress
MST	<i>Matteuccia struthiopteris</i>	Ostrich Fern
LIP	<i>Lavendula x intermedia</i> 'Phenomenal'	Lavender
SAU	<i>Sesleria autumnalis</i>	Autumn Moor Grass
CPE	* <i>Carex pennsylvanica</i>	Oak Sedge

\* Indicates alternative recommended species

# Species Palette – Ground Plane

Evergreen

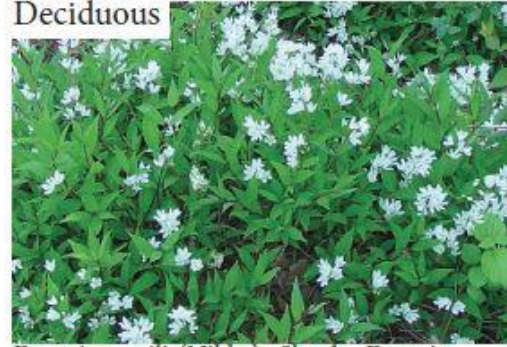


*Arctostaphylos uva-ursi* - Bear Berry



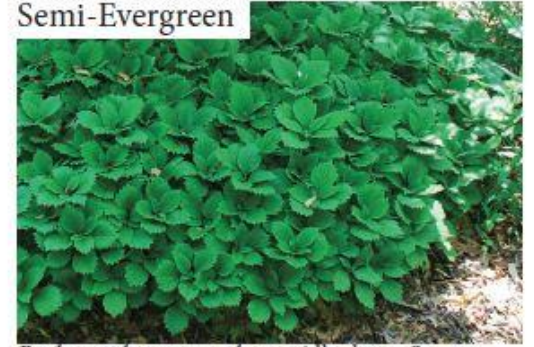
*Macrobiota decussata* - Siberian Cypress

Deciduous



*Deutzia gracilis* 'Nikko' - Slender Deutzia

Semi-Evergreen



*Pachysandra procumbens* - Allegheny Spurge



*Sarcococca hookeriana* - Sarcococca



*Carex pennsylvanica* - Oak Sedge



*Aronia melanocarpa* 'Low-scape Mound'



*Cotoneaster procumbens* 'Little Dipper'



*Liriope muscari* 'Isabella' - Fine Leaf Liriope



*Matteuccia struthiopteris* - Ostrich Fern

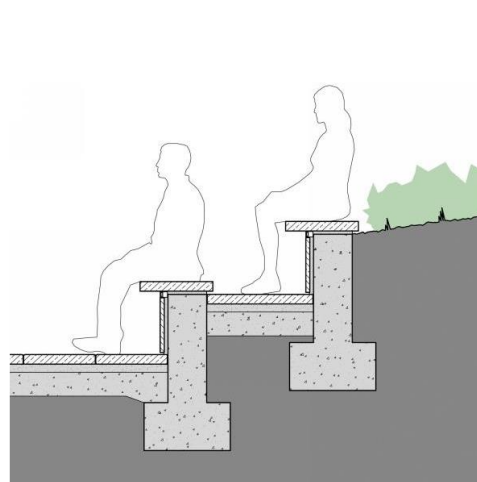
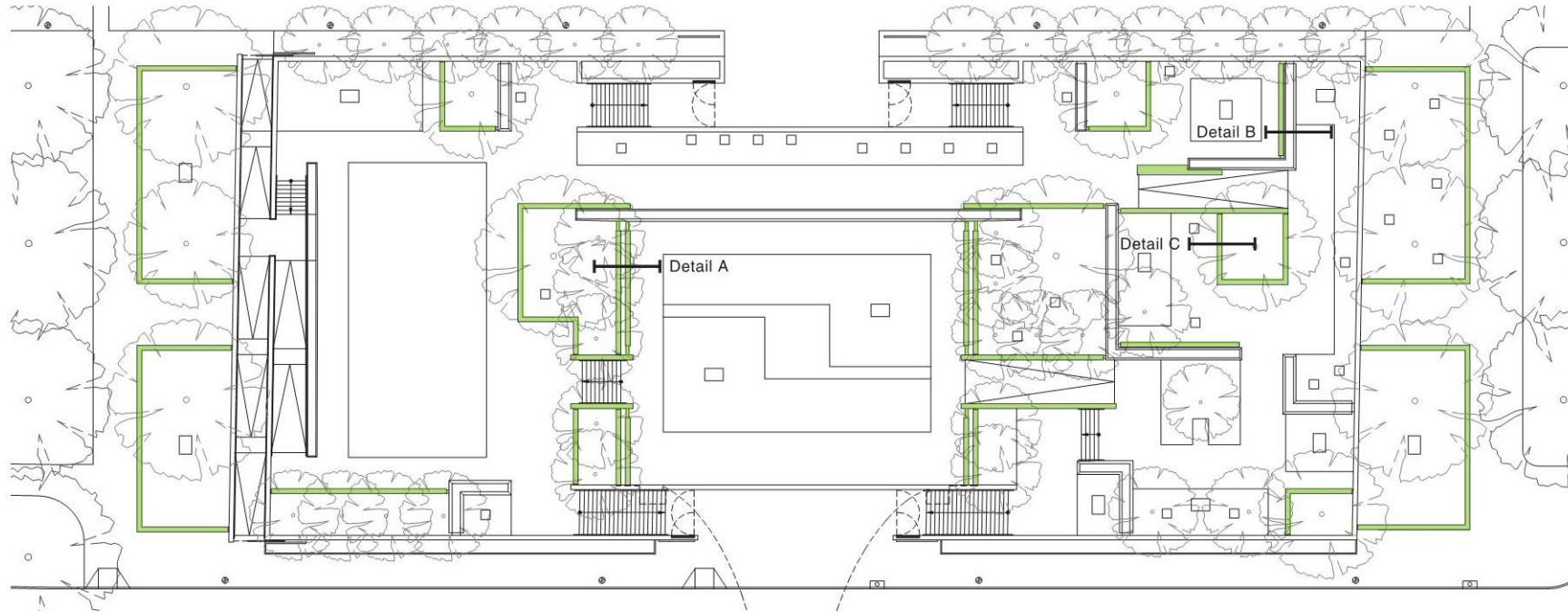
Ephemeral Bulbs



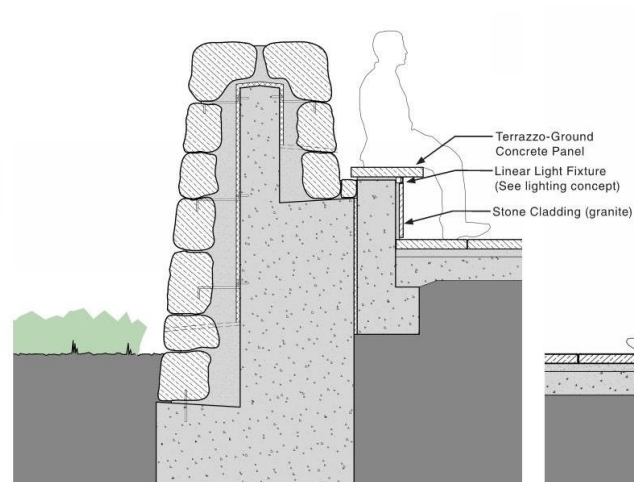
*Hyacinthoides non-scripta* 'Alba'  
- White Wood Hyacinth



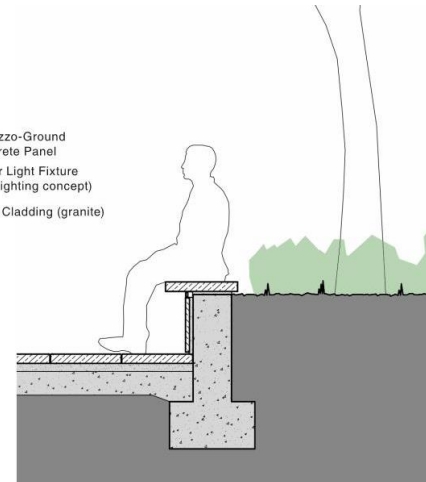
# Planters and Benches



Detail A: Amphitheater bench (at water feature) 1:25

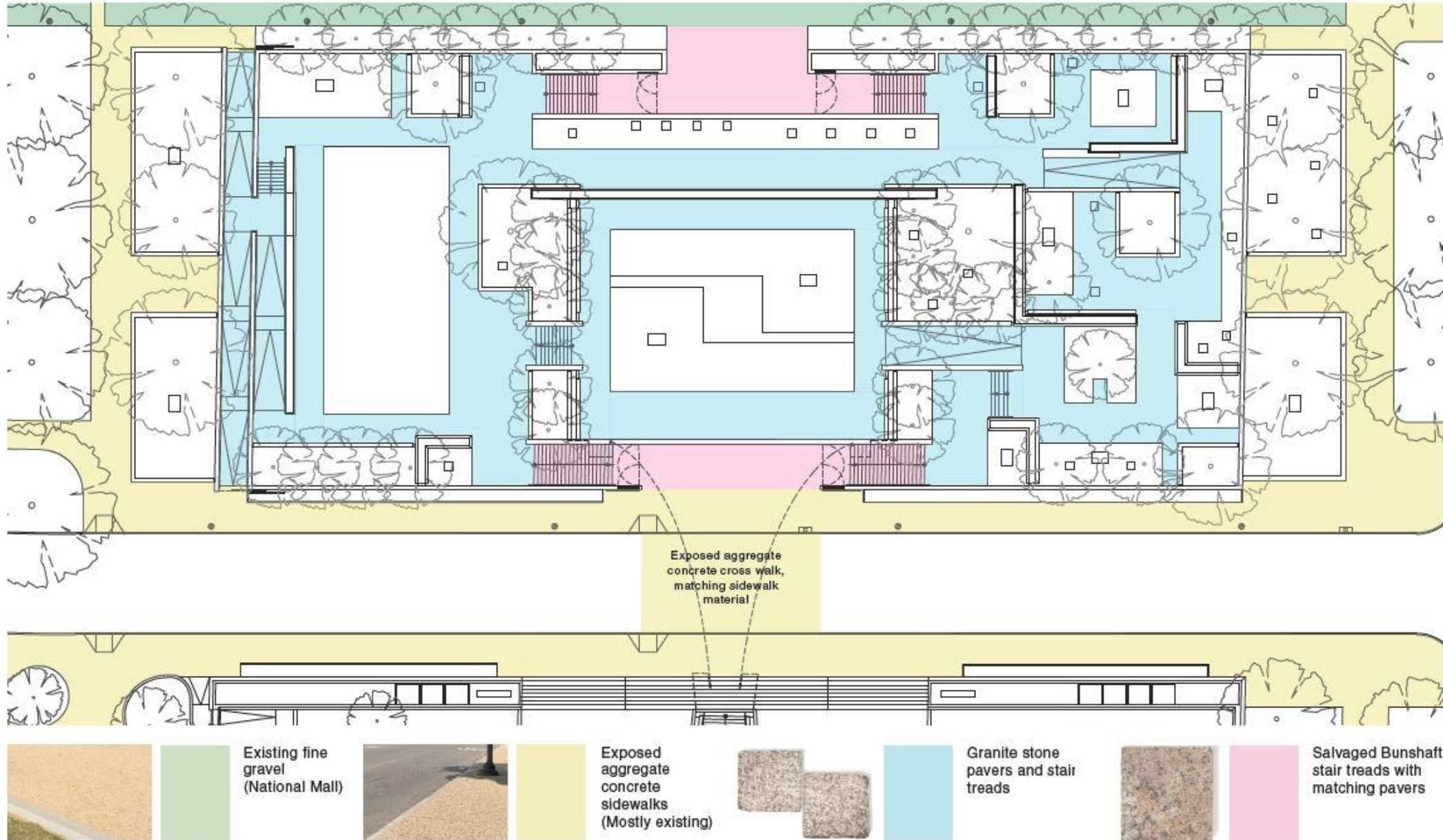


Detail B: Bench at stone wall (at elevation transition) 1:25



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  
overlooks. 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.



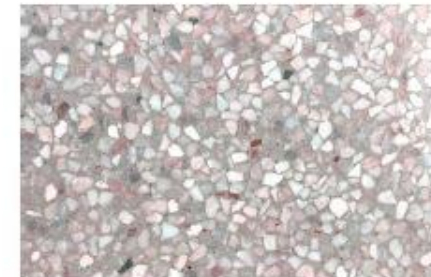
## New Stone Walls

Natural bolder-shaped granite stone.

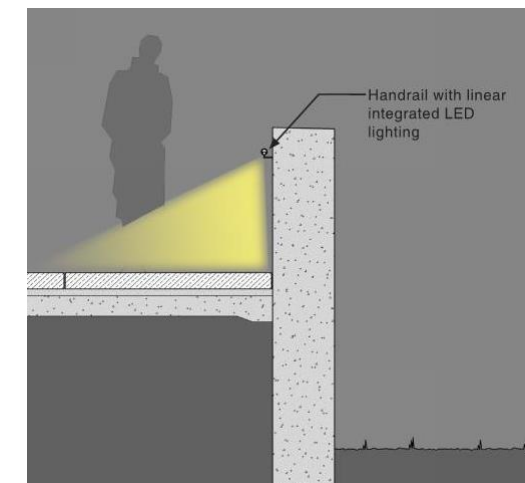
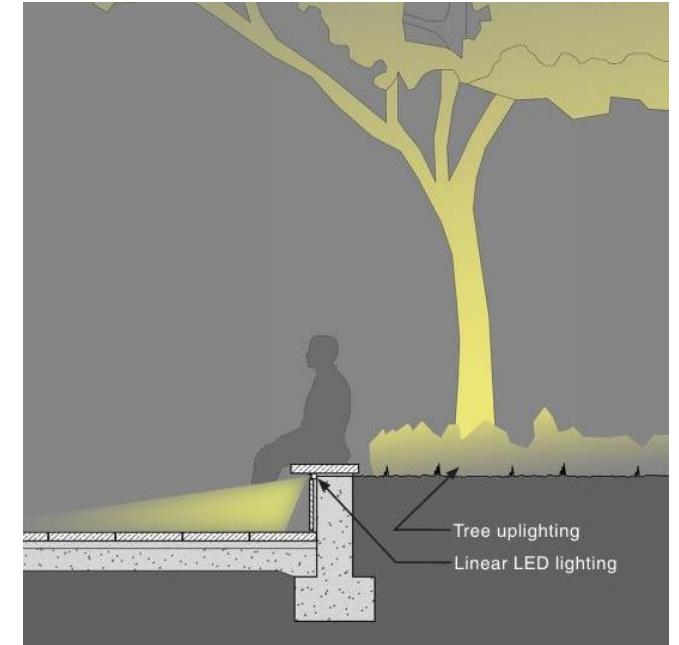
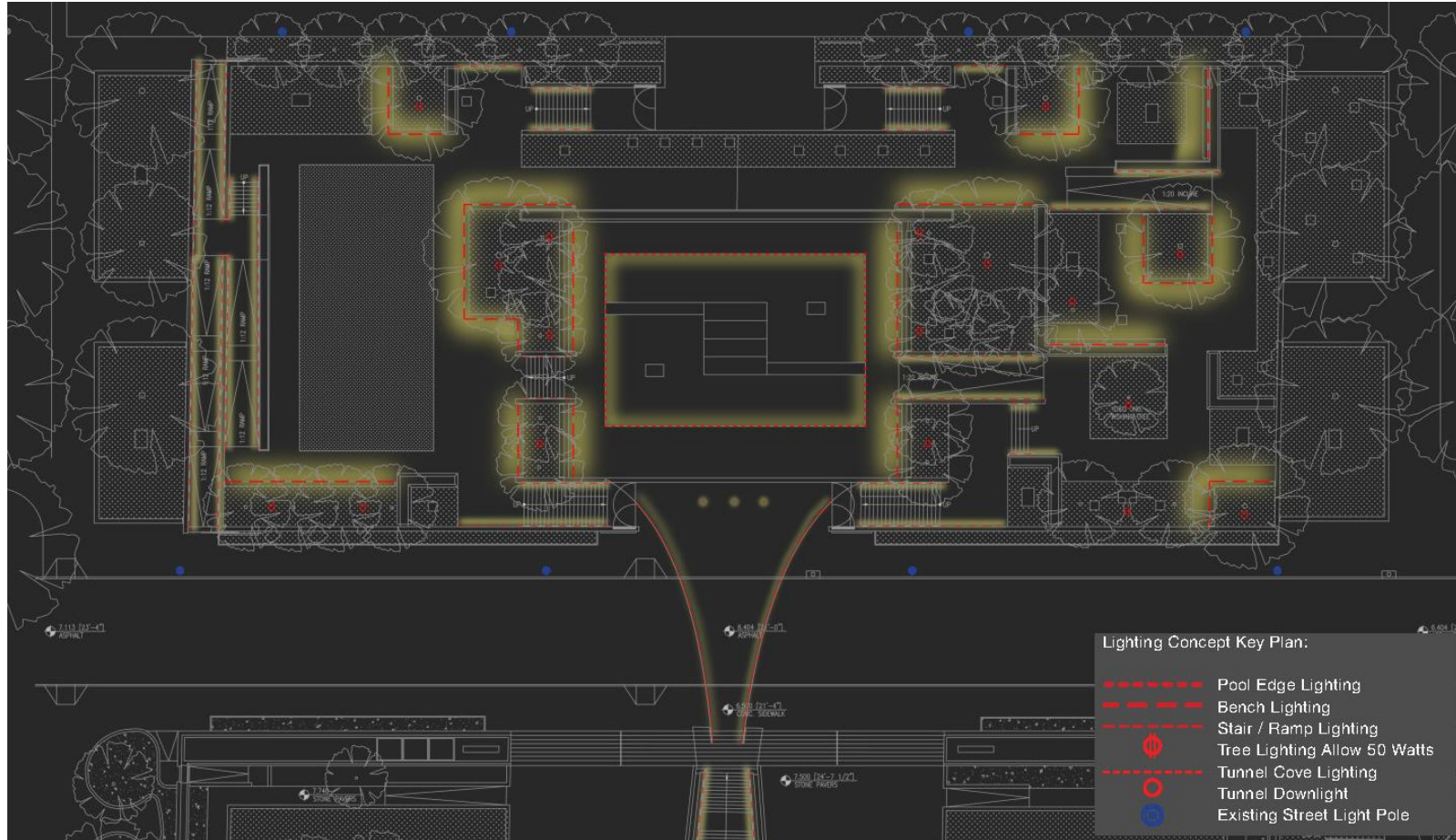


## Benches

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



# Lighting Concepts



# Concept Design

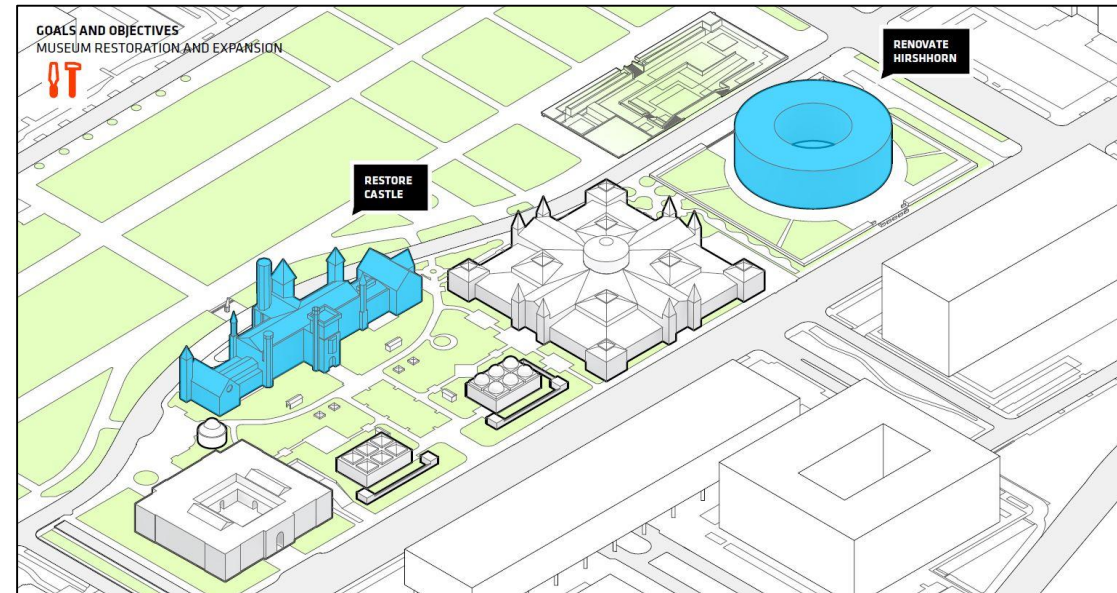
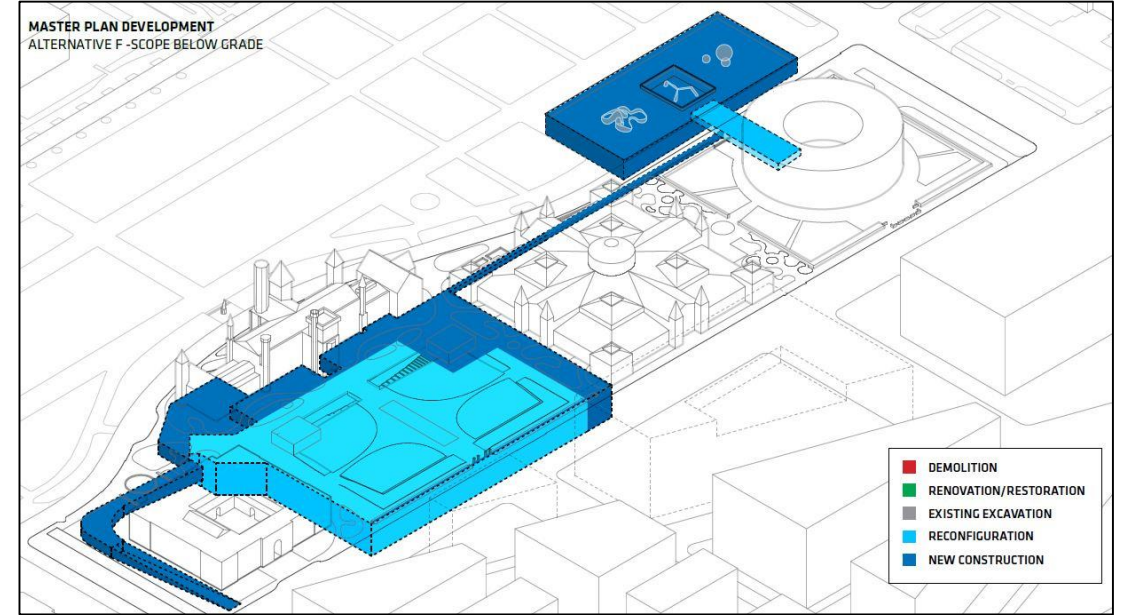
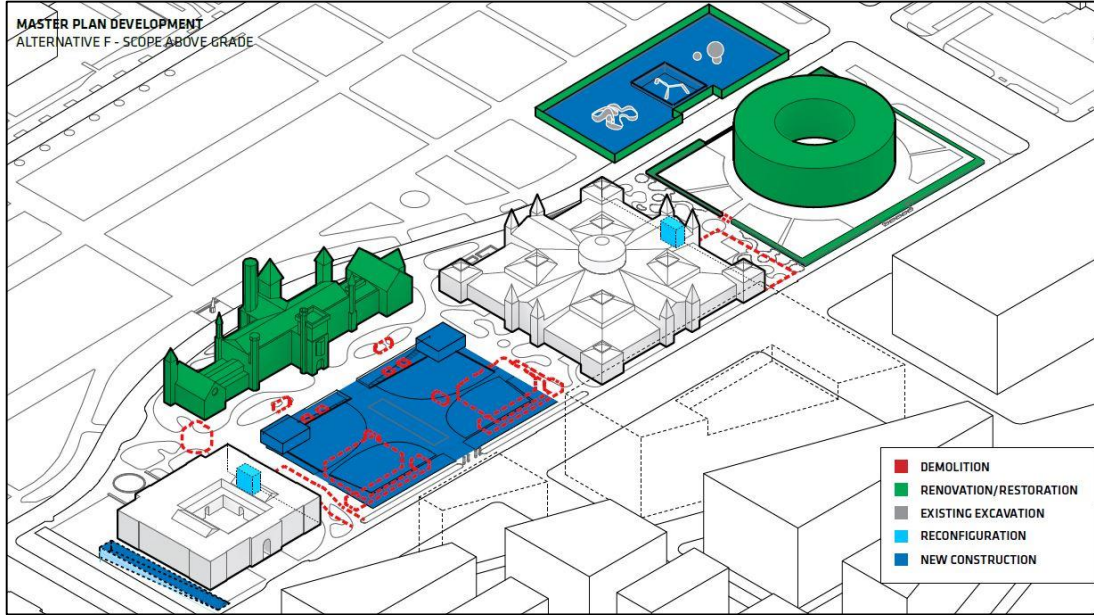


# Comments or Questions

# **Section 106 Consultation – Next Steps**

**Carly Bond, Smithsonian Facilities**

# South Mall Campus Master Plan Coordination





# South Mall Campus Master Plan Programmatic Agreement Compliance

PROGRAMMATIC AGREEMENT  
AMONG  
THE SMITHSONIAN INSTITUTION  
THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICER  
THE NATIONAL CAPITAL PLANNING COMMISSION  
THE NATIONAL PARK SERVICE  
AND  
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING  
THE SOUTH MALL CAMPUS MASTER PLAN

This Programmatic Agreement (PA) is made as of this 31 day of May, 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) (referred collectively herein 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. §§ 306108, and its implementing regulations 36 CFR 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 resolution of adverse effects from complex project situations or multiple undertakings, regarding the South Mall Campus Master Plan in Washington, DC (Undertaking); and

**WHEREAS**, for the purposes of this PA, the South Mall Campus is defined by Independence Avenue SW to the south; 12<sup>th</sup> 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 7<sup>th</sup> Street SW to the east; 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 (NMAfA). The Campus includes four designed gardens: the Enid A. Haupt Garden, the Mary Livingston Ripley Garden, the Kathrine Dulin Folger 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 1952, 40 U.S.C. § 8722(b)(1) and (d); and

Smithsonian

# HIRSHHORN



Visit

Exhibitions & Events

Art & Artists

Join & Give



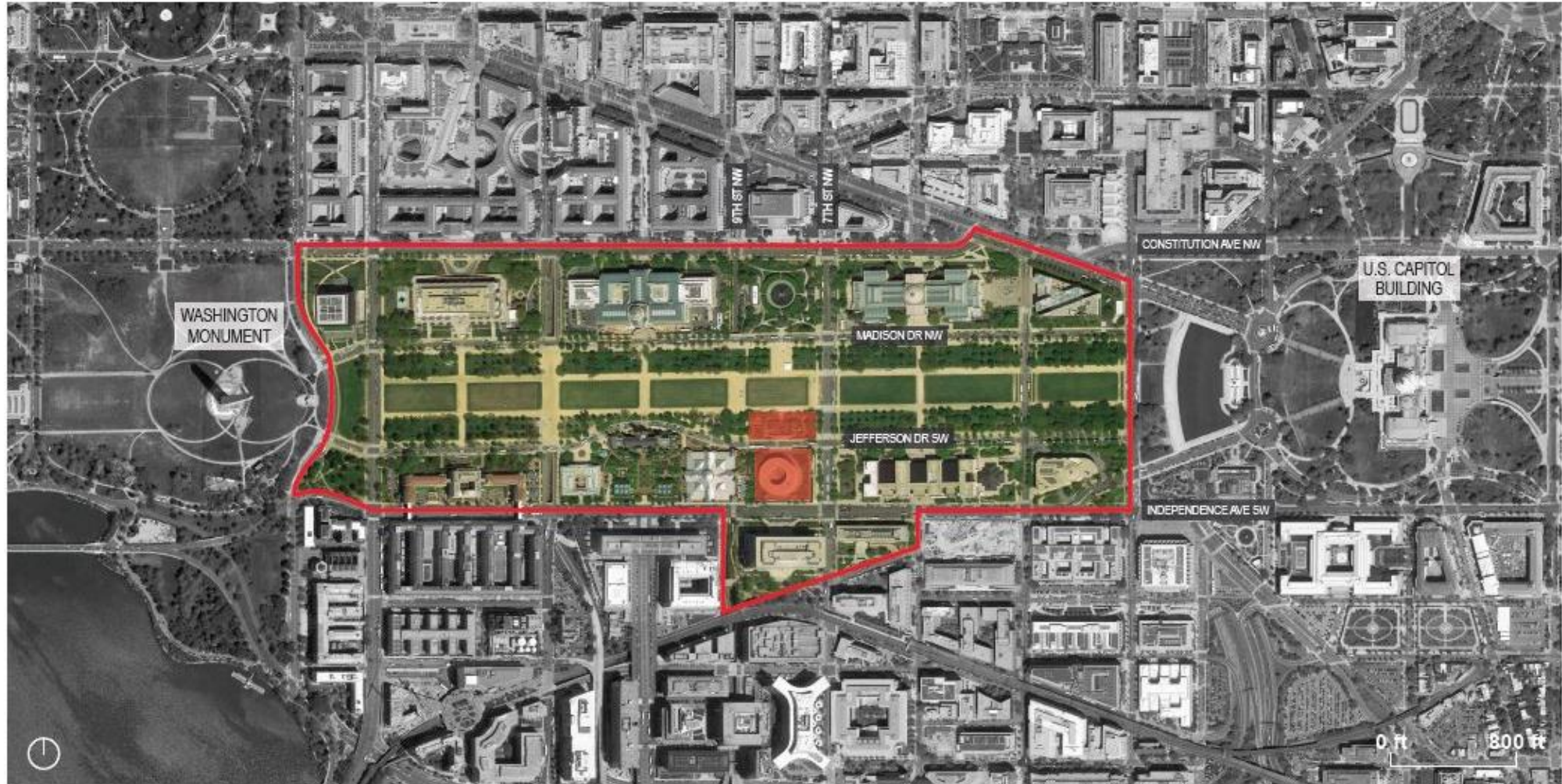
EXTENDED

CHARLINE VON HEYL  
SNAKE EYES

NOV 08, 2018–APR 21, 2019

HMSG website

# Draft Area of Potential Effects



— Area of Potential Effect

■ Project Location

Key Map  
District of Columbia



# Cleaning Tests



# Mock-ups



Swenson Pink/Salisbury Pink Granite



Stony Creek Granite

## Envelope Repair

Commission of Fine Arts Concept Review	June 2019
National Capital Planning Commission Concept Review	July 2019
Mock-ups – Precast aggregate concrete	TBD
Consulting Parties Meeting #2	TBD

## Sculpture Garden Revitalization

Commission of Fine Arts Concept Review	May 2019
National Capital Planning Commission Concept Review	June 2019
Mock-ups – Two stacked stone wall options	July 2019
Consulting Parties Meeting #2 (Mock-up review, Assessment of Effects – 30 days Consulting Parties advance review notice)	July/August 2019

**Please submit any written  
questions or comments on the  
content of this presentation  
to Carly Bond at  
[BondC@si.edu](mailto:BondC@si.edu)  
by May 3rd**