Hirshhorn Museum and Sculpture Garden Revitalize Building and Plaza

U.S. Commission of Fine Arts Informational Briefing June 6, 2024

# HIRSHHORN MUSEUM

Smithsonian

SOM | Selldorf Architects



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## **Project Data**

## **Project Name**

Hirshhorn Museum and Sculpture Garden (HMSG) **Revitalize Building and Plaza project** 

## **Agency and Contact**

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## **Vicinity Map**





Project Location, Hirshhorn Revitalize Building and Plaza project Hirshhorn Museum and Sculpture Garden

- **Smithsonian Institution South Mall Campus**
- **National Mall Historic District**

## **Project Location and Site**

**Smithsonian Institution Hirshhorn Museum and Sculpture Garden** Independence Ave SW and 7th Street SW Washington, DC 20560

The Hirshhorn Museum and Sculpture Garden is located on the south side of the National Mall, between the Smithsonian Arts and Industries Building and the National Air and Space Museum. This project is the third, and final, phase of a series of improvements to the campus. The project area for this phase is the southern portion of the campus, bounded by Jefferson Drive SW to the north, Independence Avenue SW to the south, 7th Street SW to the east, and Smithsonian's Mary Livingston Ripley Garden to the west.

## **Proposed Development and Alternatives**

The Hirshhorn, designed by architect Gordon Bunshaft, FAIA, of Skidmore, Owings and Merrill, opened to the public in 1974. To support diverse modern and contemporary art programming for the next 50 years, revitalization of the museum's building and plaza is needed to respond to emerging innovations in art exhibition, increased visitorship, and aging infrastructure.

The project proposes to renovate the existing building, plaza, and streetscape. It also proposes to expand the existing building (167,000 sf) to approximately 234,000 sf.

The Hirshhorn Revitalize Building and Plaza project includes a set of strategic improvements for the building and plaza. The following interventions are under consideration are being presented in this submission for input and review. Preferred options are illustrated as proposed and alternatives are included in the Appendix.

Streetscape Revitalization Plaza Revitalization Lobby Expansion Fountain Design Lower Level Expansion New Entry from Sculpture Garden Mechanical Rooftop **Envelope Improvements** 

## Smithsonian Institution South Mall Campus Master Plan

The Hirshhorn Revitalize Building and Plaza project is within the Smithsonian Institution South Mall Campus Master Plan and is subject to the 2018 Programmatic Agreement and the approved South Mall Campus Master Plan in 2018.

## **National Mall Historic District Boundary**

The Hirshhorn is within the National Mall Historic District, which is listed in the National Register of Historic Places. The Hirshhorn Museum and Sculpture Garden is considered a contributing resource.

## **Design Schedule**

Design start date: 2023 Design finish date: 2027

## **Hirshhorn Museum Mission and Revitalization Objectives**

"Art making has changed dramatically since our opening in 1974, and the Hirshhorn's annual attendance has increased 40% in the past five years. In response to these developments, the revitalization of our museum campus will prepare us for the 21st century."

– Melissa Chiu, Director, Hirshhorn Museum and Sculpture Garden

### **ART + IDEAS + PEOPLE**

The Hirshhorn is a leading voice for contemporary art and culture and provides a national platform for the art and artists of our time.

As one of the most visited modern art museums in the United States, we seek to share the transformative power of modern and contemporary art with audiences at all levels of awareness and understanding by creating meaningful, personal experiences in which art, artists, audiences, and ideas converge. Through groundbreaking exhibitions, events, research, and acquisitions, we create the space where people encounter the most important artists of the 21st century.

The Hirshhorn's holdings encompass one of the most important collections of postwar art in the world, and we are committed to providing artists of today a global platform to explore new ways to create, with performance, digital media, video, and technology. (Source: https://hirshhorn.si.edu/)

#### REVITALIZE THE NATION'S MUSEUM OF MODERN AND CONTEMPORARY ART

2024 marks the 50th anniversary of the Hirshhorn Museum and Sculpture Garden. Over the last half century, the museum has navigated the evolving landscape of contemporary art and the ways in which it is created, communicated, and experienced. The building and Plaza have stretched to support new curatorial and programming objectives. Spatial, structural, and technological limitations have restricted the size and types of art and events that can be hosted, specifically large scale works, new media, and performance art. The revitalization of the Hirshhorn Museum and Plaza is critical to meet the needs to exhibit art at the forefront of the field, and to unlock opportunities for the exhibition of unique pieces in the Museum's collection. The revitalization's goal is to maximize the public's access to the most varied and original exhibits, and to plan for the next 50 and more years of art yet to be created.

#### **MEET VISITORSHIP AND ACCESS NEEDS**

The National Mall, its monuments and Smithsonian museums, collectively an international destination, welcomes over 25 million visitors annually. Visitorship to the Hirshhorn has rebounded to its pre-pandemic levels. It projected to double to 1.5 million annual visitors in the next ten years, with the Hirshhorn's plans to expand exhibition space and public programming. The project will address this by expanding public space from 45% to 62% of the total building area, adding adequate visitor amenities, and making the building and site universally accessible.

### **MISSION CRITICAL MODERNIZATION**

Since the museum's opening to the public in 1974, the building has not undergone a major revitalization. To safeguard the museum, collections and occupants, mission critical improvements are required. The building systems, including mechanical, electrical, IT, AV, and plumbing infrastructure have exceeded their life expectancies, which is impacting day-to-day museum operations. The courtyard and lobby facades and plaza are inadequately insulated. The plaza needs new waterproofing. The museum houses the most valuable collection in the Smithsonian, and building deficiencies put collection and programs at risk. The building needs to be modernized to meet current code, accessibility, life safety, security, and sustainability standards.



Doug Aitken, SONG 1, 2012

## **Hirshhorn Revitalize Building and Plaza Goals**



## **Project Goals**

- 1. Fulfill the Hirshhorn's mandate to provide visitors with transformative art experiences by expanding gallery spaces and improving technological capacities to support current and future needs of the artists of our time.
- **2. Improve accessibility and circulation** for all users throughout the campus, entry sequences, and vertical transportation.
- 3. Expand and improve amenities, operational, and programming of projected significant increases in visitation and to ensure the
- 4. Ensure the Hirshhorn campus' **code compliance** and significantly improve its energy efficiency, sustainability, and resiliency to maximize protection of collections, occupant comfort and safety, operations, and performance.
- 5. Unify the Hirshhorn Building, Plaza, and Sculpture Garden as a **campus** that responds to the National Mall and larger Smithsonian context including landscape and the built environment.
- 6. Strengthen the physical security of the site perimeter and entrances appropriate to the Hirshhorn's public prominence and location on the National Mall.
- 7. Respect the integral relationship between the Hirshhorn building and outdoor gallery spaces as an evolving platform for the presentation of modern and contemporary art.

space to enhance the visitor experience and to meet the needs highest standards in collection stewardship and museum operations.

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## **Project Location and Area**

The Hirshhorn Museum and Sculpture Garden is one of the Smithsonian Institution museums located on the National Mall in Washington D.C. It is located between the National Air and Space Museum and the Smithsonian Arts and Industries Building. The campus is bound by Independence Avenue SW to the south, the National Mall to the north, 7th Street SW to the east, and Smithsonian's Mary Livingston Ripley Garden to the west. Jefferson Drive SW runs through the Hirshhorn campus and organizes it into two parts. The Building and Plaza, the project area for this phase, is to the south of Jefferson. The Sculpture Garden Revitalization, a separate phase currently under construction, is to the north of Jefferson Drive, sunken below street level.

An underground passage and stair below Jefferson Drive originally connected the Sculpture Garden to the Museum's Plaza Level and Inner Courtyard. It was closed to the public in 1993, and later infilled for use as an education space. The Sculpture Garden Revitalization project is restoring this connection.



Cross-section of the building and Sculpture Garden, connected by the original underground passage below Jefferson Dr, 1974







National Mall Aerial

## **Related Projects and Project Scope**



Phase 1: Construction photograph from the Envelope Repair Project,

#### **HMSG Revitalization - Phase 1 Building Envelope Repair**

The HMSG Building Envelope Repair project was completed in 2023. The primary goals of this project were:

- Improve building envelope performance to reduce energy consumption and protect museum collections with a stable environment
- Improve envelope against water infiltration and condensation at outer drum and roof
- Improve balcony fenestration to improve thermal and accessibility requirements
- Improve safety with upgraded precast and glazing attachments to meet blast requirements

#### **RELATED PROJECTS**

The Hirshhorn Revitalize Building and Plaza project is the last of a three-phase campus improvement program that began with the Building Envelope Repair Project and continues with the revitalization of the Sculpture Garden.

The first project was the Building Envelope Repair Project completed in 2023. It replaced the museums' roof and outer drum precast concrete panels in-kind to protect the building against water infiltration, improve the building envelope's thermal performance and provide blast resistance. This project proceeded first to address safety concerns regarding the panel attachments.

The second project is the Hirshhorn Sculpture Garden Revitalization, currently under construction to replace failed infrastructure, increase sculpture display area, and to create flexible spaces for the presentation of contemporary art. The Sculpture Garden project will reopen the underground passage designed by Gordon Bunshaft and reconnect with the Plaza across Jefferson



Phase 2: Rendering of Sculpture Garden Revitalization

#### **HMSG Revitalization - Phase 2** Sculpture Garden Revitalization

The HMSG Sculpture Garden Revitalization Project construction began in October 2023. The primary goals of this project are:

- Replace failed infrastructure to curb flooding and protect current and future artwork, and plantings
- Reestablish the original underground passage and stairs to the Museum Plaza Increase the Hirshhorn's display of its modern sculpture collection by almost 50%
- Create flexible spaces for the presentation of time-based artwork, large-format sculpture, site-specific installations, and events



Diagram of the three campus improvement phases.

Drive. Completion of the Sculpture Garden Revitalization was planned so that it will remain open during the construction of this third phase to maintain continued public access to the Hirshhorn collection and programs.

### **PROJECT SCOPE**

The Hirshhorn Revitalize Building and Plaza project is the final phase of work. The scope includes the Museum building, Plaza, and streetscape including:

- 1. Lower Level Expansion and Sculpture Garden Connection
- 2. Plaza and Perimeter Revitalization
- З. Lobby Expansion
- 4. Conversion of Fourth Floor for Gallery Expansion
- 5. Mechanical Rooftop
- 6. Envelope Improvements

## **Project Site** Existing Site with Revitalized Sculpture Garden

#### EXISTING HIRSHHORN CAMPUS

The Hirshhorn Building and Plaza, the project area of this phase, is at the intersection of 7th Street SW and Independence Avenue SW. The Sculpture Garden will be complete before the construction of this phase and as such is represented as the existing conditions of site plan.

The museum building is a cylindrical drum elevated on four concrete piers above a plaza and framed by battered perimeter walls on all four sides. Within the drum is an inner courtyard with a large brass fountain with a plume.

Both the perimeter walls and building facades are concrete with "Swenson Pink" crushed aggregate. The minimally articulated solid outer facade contrasts with the walls of the inner courtyard, composed of windows that light the interior galleries. The museum building has four above-grade stories as well as a below-grade Lower Level that extends below the plaza that surrounds the building.

The paved Plaza, originally designed by Gordon Bunshaft was renovated by James Urban and opened to the public in 1993. See Chapter 3, Historic Context, for a comparison of the designs.

#### SITE AND BUILDING ACCESS

The site is accessible by Metro, bus lines, and a Southwest Shuttle. The closest Metro station is L'Enfant Plaza, with an exit at 7th Street SW and Maryland Ave SW just two blocks south of the site. Bus lines 33, 70, 74, 943, 953, and S2 stop along 7th Street SW next to the site. There also is a DC Circulator bus stop on Jefferson Drive SW next to the Hirshhorn Plaza. The Southwest Shuttle stops on Independence Avenue SW just south of the site.

The Plaza is accessed by visitors from Independence Avenue at grade. Owing to the grade change along Jefferson Drive, a set of monumental stairs aligned with the perimeter wall negotiate the difference in elevation between the Plaza and Jefferson Drive sidewalk. A ramp at the northwest corner adjacent Ripley Garden provides the only accessible entry along Jefferson Drive.

When the Sculpture Garden Revitalization is complete, the Plaza connection to the Sculpture Garden will be reinstated. The historic stairs will be restored and reconnected to the revitalized underground passage with an art installation by Hiroshi Sugimoto.

The original lobby was accessed from Independence Avenue through revolving doors. In 2001 only the east revolving doors remained in use to minimize the number of security points and in 2017 this was switched to the west when the Hiroshi Sugimoto designed coffee shop was constructed. With the recent Building Envelope Repair project, public entry public entry and exit have been re-routed to temporary accessible vestibules on the north side of the lobby. The southeast revolving door has been maintained as a staff entry only.

Site access for deliveries, loading, and trash occur from the loading dock along the east side of the site. It is accessed from an open-air ramp off of Independence Avenue SW. Forklift access to the Plaza to install artwork and events staging occurs off of Independence Avenue.

#### Key

- 1. At-grade entrance to Plaza
- 2. Stair Access to Plaza
- 3. ADA Ramp to Plaza
- Stair down to Sculpture Garden connection 4.
- 5. Revolving doors
- 6. Freight elevator access to Plaza Level
- 7. Loading Ramp and Dock
- **Existing Egress Points**



**Existing Site Plan** 

## **Environmental Considerations** National Environmental Policy Act (NEPA)

#### **OVERVIEW**

The National Environmental Policy Act of 1969 (NEPA) is legislation that requires Federal agencies to:

- Consider effects of their proposed actions on the natural and human environment
- Consider alternative ways of meeting objectives
- Apply a systematic planning, analysis, and decisionmaking process
- Factor environmental considerations into decisions
- Involve the public

An environmental assessment, or EA, looks at the potential impacts from the proposed action.

NCPC will serve as the lead and responsible federal agency and work with SI as project owner to comply with NEPA. NCPC and SI will prepare an EA to analyze the environmental impacts of a range of alternatives for this project, in accordance with NEPA. NCPC will invite cooperating agencies to participate in the preparation of the EA. Concurrently, SI will conduct consultation under Section 106 of the National Historic Preservation Act.

#### **PURPOSE AND NEED**

The purpose of the proposed project is to revitalize the building and Plaza of the Hirshhorn Museum and Sculpture Garden (HMSG). This project is the third of three sequential campus revitalization projects that includes the Building Envelope Repair project (completed 2023) and the Sculpture Garden Revitalization project (under construction).

The project is needed to address critical infrastructure and programmatic deficiencies including:

- Replacement of building systems that have reached the end of their useful life Entry and circulation accessibility and wayfinding
- Perimeter security and visitor screening
- · Rehabilitate the museum building envelope and Plaza
- · Below grade expansion to support public and back of house spaces

#### **PRIMARY ISSUE AND IMPACT TOPICS**

During the scoping process SI and NCPC will review the potential impacts and determine which resources could be impacted. These topics will be fully analyzed in the EA.

Preliminarily, SI and NCPC have identified the following resources for full analysis or dismissal in the EA during the public scoping period from May 19-31, 2024.

#### **Preliminary Resources for EA Analysis:**

- Cultural Resources
- Aesthetics and Visual Resources
- Visitor Use and Experience
- Air Quality
- Climate Change
- Mechanical, Engineering, and Plumbing Systems
- Soils
- Traffic and Transportation
- Noise
- Human Health and Safety
- Water Resources

#### **Resources preliminarily dismissed:**

- Wildlife
- Vegetation
- Floodplains
- Environmental Justice



Site Photo during Phase 1 Building Envelope Repair Scaffolding Installation by artist Nicolas Party, Draw the Curtain, 2021

#### **Initiate Process**

# Section 106 Determine undertaking · Identify area of potential effect and historic properties · Identify consulting parties and other stakeholders Refine area of potential effect and/or historic properties as needed. Revise adverse effects as needed **Proceed with Action**

**NEPA Process** 



## **Environmental Considerations** Flooding and Stormwater Management

#### **FLOOD RISKS**

Per the FEMA Flood Insurance Rate Map shown on this page, the Hirshhorn Museum and Sculpture Garden is not located in the 100-year floodplain, but the Sculpture Garden site does lie in the 500-year floodplain. The Sculpture Garden is vulnerable at the northeast corner where the top of the perimeter wall sits at an elevation lower than the 500-year flood elevation.

Stormwater management of the Plaza is currently inadequate. Flooding and ponding due to inadequate drainage have plagued the Plaza and put collections in the Lower Level at risk.

The Museum's existing drainage systems as well as the District's public storm drainage system can be overwhelmed during an intense precipitation event. When the public storm drainage system is overwhelmed, and runoff rates exceed the design capacity of the system there is a risk for stormwater to inundate streets and buildings within the area.

There are several locations at the Hirshhorn Museum and Plaza that are susceptible to flooding from high-intensity rainfall. These include the ramp down to the Museum's loading dock and the Plaza Stair. The future entry to the Lower Level of the museum would also be susceptible to flooding. The loading dock is a concern because it is in a low-lying area that is open above and subjected to precipitation.

# National Flood Hazard Layer FIRMette





#### **FEMA**

#### Legend

	Without Base Flood Elevation (BFE) Zone A, V, A99
SPECIAL FLOOD	With BFE or Depth Zone AE, AO, AH, VE, AR
HAZARD AREAS	Regulatory Floodway
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes. Zone X
FLOOD HAZARD	Area with Flood Risk due to Levee Zone D
	NO SCREEN Area of Minimal Flood Hazard Zone X
	Effective LOMRs
OTHER AREAS	Area of Undetermined Flood Hazard Zone D
GENERAL	Channel, Culvert, or Storm Sewer
STRUCTURES	LILLI Levee, Dike, or Floodwall
	E 20.2 Cross Sections with 1% Annual Chance <u>17.5</u> Water Surface Elevation
	8 – – – Coastal Transect
	Base Flood Elevation Line (BFE)
	Limit of Study
	Constal Transact Pasalina
OTHER	Profile Baseline
FEATURES	Hydrographic Feature
:	Digital Data Available
	No Digital Data Available

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

an authoritative property location

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/10/2024 at 6:42 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

## **Environmental Considerations**

Flooding and Stormwater Management, cont.

## **FLOOD MITIGATION**

The Sculpture Garden Revitalization project will construct new perimeter walls extending above the 500-year flood elevation (16.3'), reducing the risk of inundation due to riverine and coastal flood events. The Sculpture Garden Revitalization project includes the use of both active and passive flood protection measures.

The active measures proposed include the placement of flood barriers at the Sculpture Garden perimeter. The passive measures to be installed include a new storm drain on the north side of the Garden, a new backwater valve on the outfall pipe to 7th Street to prevent the public storm sewer from surcharging into the Sculpture Garden, and interior trench drains in the Sculpture Garden Tunnel.

In addition to the improvements made by the Sculpture Garden Revitalization project, this project recommends both passive and actives measures. Active flood barriers would be installed at the Museum end of the Sculpture Garden Tunnel during potential flood events. Passive measures include interior trench drains at the new entry to the Lower Level. A trench drain will be installed halfway down the ramp to the Museum loading dock to reduce the volume of runoff directed to a new sump pump at the bottom of the ramp. The final passive measure proposed is the installation of backwater valves at the Plaza storm drain inlets to prevent surcharging of both roof runoff and public storm sewer flows onto the Plaza.

#### STORMWATER MANAGEMENT

The Hirshhorn Revitalize Building and Plaza project will be subject to both local and federal stormwater management (SWM) regulations. The District Department of Energy and Environment (DOEE), the local stormwater regulatory agency, and the Energy Independence and Security Act of 2007 (EISA 438) federal mandate share similar mission statements: to reduce stormwater runoff from leaving developed sites. A SWM study was performed and at this stage of design it appears the use of a below grade rainwater harvesting cistern will be necessary for the project to meet DOEE and EISA 438 mandates.

The SWM study performed high level analyses of four SWM concepts. All four concepts relied on the use of a rainwater harvesting cistern to capture and store runoff for reuse in toilet flushing and irrigation, after being appropriately treated. Each concept assumed the rainwater harvesting cistern would be located below the ramp down from Independence Avenue to the HSMG loading dock. The required size of the rainwater harvesting cistern varied between the different concepts and ranged in volume between 55,800 gallons to 106,000 gallons. The stormwater management scheme and sizing of best management practices will be developed further as the project design is advanced.



Independence Ave SW

**Proposed Stormwater Management Strategies** 

Active Measure: Deploy flood barriers at Sculpture Garden perimeter

**500 Year Flood Zone** Approximate

**100 Year Flood Zone + Storm Surge + 5.6 ft Sea Level Rise** Approximate area with elevations less than 17.9', a recent estimate of 2090s Cat. 2 hurricane storm surge (Current 100-year flood stage + 5.6' sea level rise)

- **Passive Measure:** Drains within Sculpture Garden tunnel and within new Lower Level Entry
- Active Measure: Deploy flood barriers at Museum end of Sculpture Garden Tunnel

**Passive Measure:** Trench drains at loading dock ramp (mid-way and bottom) connected to sump pump at loading dock.

**Passive Measure:** Connect roof and plaza stormwater drains to backwater valves.

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## **Site History**

The Hirshhorn Museum and Sculpture Garden site has a layered planning history that has informed its current design and siting.

#### **MCMILLAN COMMISSION PLAN**

The McMillan Commission was formed in 1901 to inform the development of Washington's Monumental Core, and it resulted in a dramatic change to the Mall and the dissolution of the Smithsonian grounds. Its plan for the Mall between the Capitol and the Washington Monument proposed to open up a linear vista.

#### **McMillan Line**

To enforce the linear vista between the Capitol and the Washington Monument, the McMillan Plan prescribed a 445' setback from the centerline of the National Mall. Three historic structures encroach into this line - the Smithsonian Castle, the Smithsonian Arts and Industries Building, and the Hirshhorn Museum and Sculpture Garden. The new entry under construction for the National Air and Space Museum also encroaches into this line.

#### **Eighth Street Axis**

Most relevant to the design and planning of the original Hirshhorn site, the McMillan Commission Plan reinforced the L'Enfant plan's emphasis of the Eighth Street Axis. The McMillan Commission Plan located two open squares bookended by large public buildings along this axis. The north square would become the site of the National Gallery Sculpture Garden, facing the National Archives building. The southern end of the axis would later terminate at the Hirshhorn Museum. The McMillan Plan's Eighth Street was not fully realized at the south end.

The Eighth Street Axis in the McMillan Plan was well understood by SOM, who authored the National Mall Master Plan in the late 1960s/early 70s. SOM drawings show Bunshaft's early design for the Sculpture Garden that stretched across the National Mall along the axis.

While the Sculpture Garden was ultimately pulled back to the south of the Mall, the strong symmetry and organizational principles of the building and site along the axis remained and continue to enforce the 8th Street vista between the National Archives and the Hirshhorn Museum to this day.



National Mall Master Plan with Early Design of the Hirshhorn Museum, SOM, 1960s



Hirshhorn Museum and Sculpture Garden on the 8th street Axis

## **Building History**



Gordon Bunshaft, 1972



Hirshhorn Museum and Sculpture Garden, 1974

#### **BUILDING HISTORY**

The Hirshhorn Museum and Sculpture Garden was founded by the endowment of Joseph H. Hirshhorn's comprehensive modern art collection to the Smithsonian Institution. In 1966, an Act of Congress established the Hirshhorn Museum and Sculpture Garden with a designated site along the National Mall.

Initial concepts for the Hirshhorn began in 1965 under Edward Charles Basset (a design partner in SOM's San Francisco office), with a subterranean Museum located on the North side of The Mall that emphasized the Eighth Street axis. But Joseph Hirshhorn resisted the subterranean configuration. The site was moved to the south, and Gordon Bunshaft of SOM, was designated to design the new Museum. Designs were presented in May 1967, and the 1974 building bears a remarkable consistency to this original design.

While the circular building and the Plaza beneath did not diverge from that original sketch, the design of the Sculpture Garden evolved more dramatically. Bunshaft's original design, in alignment with the McMillan Commission and with the SOM Master Plans, emphasized the Eighth Street axis by creating a dramatic linear Sculpture Garden that spanned the entire width of the Mall, directly accessible from the Museum's lower level. After public opposition following its initial approval, Bunshaft revised the design and significantly reduced the footprint of the Sculpture Garden to its current size. Further, cost-cutting measures forced Bunshaft to reduce the amount of excavation below Jefferson Drive, preventing a direct connection between the Sculpture Garden and the Museum's Garden Level. The final design, completed in 1974, acknowledges the primacy of the Eighth Street Axis by placing all the significant compositional elements along it such as the fountain, the balcony, the lobby, and the Plaza stair leading to the Sculpture Garden.

### **MODIFICATIONS SINCE 1974**

**Building Alterations:** The Hirshhorn Museum and Sculpture Garden opened to the public in 1974 and since then, other than the recent Envelope Repair Project, the building itself has not undergone a major revitalization. Limited alterations to the building include revisions to the gift shop in 1986 and 2010, an expansion to the loading dock in 2008, conversion of the underground passage beneath Jefferson Drive to education space in 2010, and a new Conservation Lab added to the fourth level in 2019. Other, smaller alterations include black box spaces in the basement that allow for exhibitions of video and other new media art and a lobby café designed by artist-architect Hiroshi Sugimoto.



Hirshhorn Museum and Sculpture Garden, 1974



Hirshhorn Sculpture Garden, 1981 modification



Hirshhorn Plaza, 1993 modification Source: https://www.jamesurban.net/hirshhorn-museum

**Sculpture Garden and Plaza Challenges**: The original designs for the Plaza and Sculpture Garden proved challenging for the display of art due to the austere settings, visitor comfort with a lack of shade and planting, and inaccessibility due to gravel paths and lack of ramps.

**Sculpture Garden Modifications:** In 1981, landscape architect Lester Collins designed modifications to the Sculpture Garden to address these needs. Ramps, gallery rooms, and more plantings were added,

Currently the Sculpture Garden Revitalization designed by Hiroshi Sugimoto is under construction to be modernized for contemporary forms of art, expand public access and education programs, address infrastructural deficiencies, and upgrade technological capabilities for art and events.

As part of the final approval by the Commission of Fine Arts for the Sculpture Garden Revitalization project, the Smithsonian committed to creating an accessible connection from the Sculpture Garden to the Lower Level of the museum building. This connection will help meet accessibility goals and further unify the Hirshhorn campus.

**Plaza Modifications**: The Plaza underwent a major redesign in 1993 by Urban and Associates. Outdoor gallery settings, additional planting to provide shade, and an accessible ramp at a new opening located at the NW corner of the plaza perimeter walls were added.



Hirshhorn Sculpture Garden Revitalization under construction

## Hirshhorn Museum and Plaza Period of Significance and Character Defining Fea-

#### **PERIOD OF SIGNIFICANCE**

The Hirshhorn Museum and Sculpture Garden (HMSG) is a contributing resource of the National Mall Historic District and has been determined to be Individually Eligible for listing on the National Register of Historic Places under Criteria A and C and Criteria Consideration G. Under Criterion A, it is historic for its association with the development of the National Mall and contributes to the Mall's shift towards Modernism in the mid-twentieth century. Under Criterion C, HMSG is considered an outstanding example of Modernist architecture by master architect Gordon Bunshaft of Skidmore, Owings, and Merrill. The period of significance is defined as 1974, 1981. The 2015 Determination of Eligibility identifies the character-defining features of the building which contribute to its integrity as a historic resource.

#### **CHARACTER DEFINING FEATURES**

#### Included in the Determination of Eligibility

- Drum-like form, central courtyard, and circular fountain
- Battered perimeter walls
- Sculptural, cast-in-place concrete piers
- Painted, coffered concrete ceiling structure
- Setting for the display of sculpture on the Plaza
- Glazed entrance lobby and revolving doors
- First-floor lobby interior, escalators, and terrazzo floors
- Magnolia trees at the northwest corner of the Plaza
- · Loading dock ramp, retaining walls, and fence
- Precast concrete cladding panels
- Third-story balcony and fenestration

#### Other Significant Features (not included in DOE)

- Underground Passage
- Views under the drum
- Pure geometric forms



Drum-like form, central courtyard, and circular fountain



Setting for the display of sculpture



Magnolia trees at the northwest corner of the Plaza



Battered perimeter walls



Glazed entrance lobby and revolving doors



Loading dock ramp, retaining walls, and fence



Sculptural, cast-in-place concrete piers and Coffered concrete ceiling



First-floor lobby interior, escalators, and terrazzo floors



Precast concrete cladding panels and Third-story balcony and fenestration

## Historic Preservation and Public Outreach

#### SOUTH MALL MASTER PLAN AND **PROGRAMMATIC AGREEMENT**

This project is associated with the South Mall Campus Master Plan, and is in compliance with its Programmatic Agreement which outlines process and procedures for Section 106 consultation associated with the overall revitalization program for the Hirshhorn Revitalize Building and Plaza project.

The South Mall Campus Master Plan proposed an opening in the Hirshhorn Plaza's west perimeter wall to access the Ripley Garden and the Arts and Industries Building. The Programmatic Agreement stipulated that this opening be limited to correspond to the east-west circulation path planned. This opening is no longer pursued. This is due to a large elevation change between the Ripley Garden and the Hirshhorn Plaza.

#### **HISTORIC PRESERVATION PROCESS OVERVIEW**

In accordance with Section 106 of the National Historic Preservation Act, the Hirshhorn Revitalize Building and Plaza project is subject to the review of the National Capital Planning Commission under the National Capital Planning Act.

Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their projects on historic properties and seek ways to avoid, minimize, or mitigate adverse effects. It requires consultation to seek input from the public who are invited to participate in the process.

The Hirshhorn Revitalize Building and Plaza project initiated the Section 106 Consultation Process on August 8, 2023. Three Consulting Parties Meetings have been held since and the next is planned for this Fall. During these meetings, design progress is reviewed, and the meetings provide opportunities for discussion and comment on the development and potential impacts.



South Mall Campus Master Plan proposed an east-west connection between the Hirshhorn Plaza and Ripley Garden. Bjarke Ingels Group, 2019

Through public consultation process, NCPC determined the need to include a supplemental National Environmental Policy Act (NEPA) process with an environmental assessment (EA). NCPC will serve as the lead and responsible federal agency and work with the Smithsonian as project owner to comply with NEPA and prepare the EA. NEPA Scoping has been initiated for public input. The draft assessment will be available for public review and comment in the Spring of 2025.



Elevation change between Hirshhorn plaza and the Ripley Garden grade would require stairs and ramp and take up an undesirable amount of garden and programming area for both the Hirshhorn Plaza and Ripley Garden. Opening no longer pursued.

### **PUBLIC OUTREACH**

The following meetings, and associated topics of discussion, have been held:

#### Consulting Parties Meeting 1, Sept. 14, 2023

South Mall Campus Master Plan Character Defining Features and Historic Significance Project Purpose and Need Project Goals and Scope Plaza Historic Significance Evaluation

#### Consulting Parties Meeting 1 Site Visit, Sept. 22, 2023

#### Consulting Parties Meeting 2, Dec. 14, 2023

Introduction and Context Potential Scope of Improvements Lobby Expansion Plaza Revitalization Envelope Improvements Accessible Entry from Sculpture Garden Lower Level Expansion Conversion of Fourth Floor to Public Space Usable Rooftop



#### **Consulting Parties Meeting 3.1** and NEPA Scoping, May 21, 2024

National Environmental Policy Act - Public Scoping HMSG Mission and Program Aspirations Potential Scope of Improvements Rooftop Mechanical Envelope Improvements

#### Consulting Parties Meeting 3.2, May 22, 2024

Potential Scope of Improvements Perimeter Revitalization New Entry from Sculpture Garden Lower Level Expansion Lobby Expansion Plaza Revitalization Fountain Revitalization

#### **Consulting Parties Meeting 3** and NEPA Scoping Site Visit, May 29, 2024

#### **Project Webpage**

SI has developed a project webpage to facilitate the public's participation in the Section 106 and NEPA processes: https://ahhp.si.edu/hirshhorn.

## **Historic Drawings**





Elevation Looking South, 1974







Site Section, 1974

Plaza Level Plan, 1974

## Historic Photographs





View A, Plaza, 1970s



View C, National Mall, 1970s





HIRSHHORN REVITALIZE BUILDING AND PLAZA | JUNE 2024

View B, Independence Avenue, 1970s

View D, Courtyard Facade, 1970s

## **Plaza Historic Comparison** Landscape Elements

#### **GORDON BUNSHAFT PLAZA**

Gordon Bunshaft conceived of the Plaza as an open plane of grand proportions for the outdoor display of varied sculptural works surrounded by a battered concrete perimeter wall. Seeking to integrate landscape, art, and architecture, the Plaza and building were designed inseparably as a single composition. The Plaza's organization was both axial and non directional; its walls and massing aligned with the 8th Street axis and its ground plane expressed a centripetal and non-directional pattern. Near its center, Bunshaft designed a circular brass-clad fountain shifted slightly northwards of the center point of the building's interior courtyard. East of the Plaza outside the perimeter walls, Bunshaft designed a loading dock ramp to provide facility operations with access to the Lower Level beneath the Plaza.

Upon its opening in 1974, the Plaza was almost entirely paved by radial precast concrete pavers. The Plaza pitched toward drainage trenches filled with white marble chips that ran north-south alongside long the east and west perimeter walls on the Plaza's interior. The only planting in Bunshaft's heavily paved Plaza consisted of two raised circular planters in its northwest and southwest corners filled with mass planted pachysandra. Each planter contained a mature elm tree retained from a prior site condition, though the elm in the northwest corner failed during construction and was replaced by three southern magnolias. Outside the Plaza walls, the ground plane consisted of lawn. Along 7th Street and Independence Avenue, a double row and single row of elms were planted respectively as street trees.

For the exhibition of art, Bunshaft's Plaza with its open quality and neutral non-directional paving pattern, aimed to maximize flexibility for the placement of artworks. The battered perimeter walls were designed to create a welldefined visual and auditory enclosure for the display and contemplation of artworks.

#### **JAMES URBAN PLAZA**

James Urban's Plaza redesign for the Hirshhorn sought to introduce a planting strategy that simultaneously addressed issues of human comfort and overlapping viewsheds for art - issues inherent to Bunshaft's open, heavily paved Plaza. While Urban's design maintained the axiality, symmetry, and sense of enclosure integral to Bunshaft's scheme, the open plane was much reduced in order to introduce raised planter panels containing the soil volumes sufficient for plant growth. Organized radially around the building, the new planting areas changed the experience of the Plaza from an open, non-directional plane to a highly radial composition.

The paving strategy in James Urban's Plaza design shifted from precast concrete pavers to granite in order to address issues of maintenance and durability. The pattern of the granite pavers around the building echoed Bunshaft's original paving design, though the jointing pattern, paver size, and granite type is differentiated between the Plaza center, circular Plaza ring, Plaza entries, and perimeter walkways. In Urban's design, the paved area was reduced to introduce more planted area. James Urban's Plaza introduced a more diverse planting palette, with soil volumes making the planting of trees, groundcovers, lawn, and hedges possible.

For art, Urban's design introduced turf outdoor gallery spaces and raised gardens for the display of individual artworks. Hedges located along the perimeter walls and within in raised planters set between the turf lawn panels were designed to provide a neutral backdrop for viewing works and visual separation between the gallery spaces.



1974, Gordon Bunshaft Landscape Design



1993, James Urban Landscape Design

## **Plaza Historic Comparison** Accessibility

The Plaza as designed by Bunshaft was accessed by openings in the north and south along Jefferson Drive SW and Independence Ave SW respectively. While the south Plaza entry was designed flush with grade, the north entry was designed with steps due to a lower elevation along Jefferson, meaning access for those using mobility devices or strollers was only possible from the south.

In order to provide an accessible entry from Jefferson Drive, Urban's design introduced a discrete new opening and ramp in the northwest corner of the Plaza. This opening is both challenging for visitors to find and does not provide a common point of entry for all visitors.



1974, Gordon Bunshaft Landscape Design, Accessible Entry Point at Independence Avenue



1993, James Urban Landscape Design, Additional Accessible Entry Point Added at Jefferson Drive

## Plaza Historic Comparison Extant Bunshaft Elements



## **Plaza Historic Comparison** Extant Bunshaft Elements

As part of the Plaza revitalization in the 1990s, much of Gordon Bunshaft's Plaza design was removed. The only remaining components of the original Plaza and site are the Southern Magnolias in the northwest corner of the Plaza, the brass clad fountain in the Plaza's center, the perimeter walls, the Swenson Pink granite steps along Jefferson, the staircase from the Plaza to the Sculpture Garden's underground passage (paved over in the 1990s), the loading dock and its walls and guardrails, and the mature elm trees along both Independence Avenue and 7th Street.

The historic significance of the 1993 Plaza design was evaluated in 2023. It was determined that the 1993 design is non-contributing to the Hirshhorn's historic significance.



Southern Magnolias



Brass Clad Fountain



Granite Steps to Jefferson Drive



Loading Dock



Steps to Underground Passage



Loading Dock Walls and Guardrail



Cast-In-Place Exposed Aggregate Concrete Perimeter Walls



Mature Elms along 7th Street SW



Mature Elms along Independence Avenue SW

Hirshhorn Museum and Sculpture Garden Revitalize Building and Plaza

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# HIRSHHORN MUSEUM

Smithsonian

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## **Existing Conditions** Deficiencies and Challenges

To support diverse modern and contemporary art programming for the next 50 years, revitalization of the Museum's building and Plaza is needed to respond to emerging innovations in art exhibition, increased visitorship, and aging infrastructure. Comprehensive improvements are vital for the continued stewardship of the Hirshhorn Museum and



Entry and Lobby Deficiencies



Structural Deficiencies



Infrastructure Deficiencies



Vertical Circulation Deficiencies



**Envelope Deficiencies** 



Visitor Amenity Deficiencies

Sculpture Garden as a welcoming, sustainable, and accessible 21st century museum campus on the National Mall that preserves and shares art for visitor and scholarly engagement. The images below illustrate the deficiencies and challenges of the existing building and site which the Hirshhorn Revitalize Building and Plaza project will address.



Security Deficiencies



Waterproofing, Stormwater, and Flooding Deficiencies



Program Challenges



Mechanical Deficiencies



Fountain Deficiencies



**Collections Challenges** 

## **Existing Photographs**





View A, Plaza at Independence Avenue SW, 2023



View C, Courtyard, 2023





View B, Jefferson Drive SW, 2023

## **Existing Elevations**



## **Existing Sections**







North-South Section A

East-West Section B

## **Existing Plaza Level Plan**

## 361'-8" 2 Key 3 1. At-grade entrance to Plaza 2. Stair Access to Plaza 3. ADA Ramp to Plaza 4. Stair down to Sculpture Garden Reestablished by the Sculpture Garden Revitalization 5. Revolving doors (10)▲ ④ 6. Freight elevator access at Plaza Level 7. Loading Ramp and Dock 8. Fountain 9. Perimeter Walls 10. Magnolia Trees 11. Escalators 12. One Passenger Elevator 13. Sugimoto Coffee Shop and Furniture Existing Egress Points APLEY GARDEN 8 (6 13) Legend 5 5 Lawn . . Shrub and Perennial Beds Hedge $\cap$ . • • ٠ Paved Area (1)• Tree

INDEPENDENCE AVE SW





## **Existing Lower Level Plan**



## Existing Levels 2 and 3



Level 2

Level 3



## Existing Levels 4 and Roof





## Existing Landscape Landscape Ground Plane









Low Evergreen Groundcover and Ferns



Turf Area



Low Perennials and Shrubs





Low Evergreen Groundcover



Low Shade Perennials and Ferns



## Existing Landscape

Tree Canopy





#### Deciduous Trees

Ulmus x hollandica Ulmus americana Ulmus americana 'Princeton' Ulmus americana 'Delaware' Gleditsia triacanthos f. inermis 'Skycole' Gleditsia triacanthos f. inermis 'Shademaster'

**Evergreen Trees** 

Magnolia grandiflora

Dutch Elm American Elm 'Princeton' Elm 'Delaware' Elm 'Skyline' Honey Locust 'Shademaster' Honey Locust

Southern Magnolia



## **Understory Trees** Acer palmatum Hamamelis x intermedia 'Arnold's Promise'



Flowering Trees Malus sargentii 'Cotton Candy'

Japanese Maple 'Arnold's Promise' Witch Hazel

#### 'Cotton Candy' Crabapple
### **Existing Conditions** Landscape Materials Palette

The Hirshhorn landscape is comprised of a limited materials palette made up primarily of three granites: Ash Rose granite, Atlantic Black granite, and Swenson Pink granite. All extant Bunshaft Plaza and architectural elements are composed of the Swenson Pink granite or brass. Outside the perimeter walls, all curbs and curb ramps are of Mount Airy granite. The sidewalks are paved with an exposed aggregate concrete typical of DC sidewalks. The loading dock walls are concrete.

#### **Atlantic Black Granite**



Atlantic Black Granite Setts in Perimeter Walkways



Atlantic Black Granite Planter Walls, Curbs and Pavers



Atlantic Black Granite Seat Wall

#### Swenson Pink Granite



Swenson Pink Steps on Jefferson Drive



Exposed Swenson Pink Granite Aggregate Battered Perimeter Wall



Exposed Swenson Pink Granite Aggregate on Building Envelope and Piers

#### Ash Rose Granite



Ash Rose Granite Pavers in Plaza Interior

#### Brass



**Brass Clad Fountain** 





Exposed Aggregate Concrete Sidewalk

### **Mount Airy Granite**



Mount Airy Granite Planter Curbs at Streetscape



on Mount Airy Granite Roadway Curbs and Curb Ramps

#### Concrete



Concrete Retaining Walls at Loading Dock

### **Existing Conditions** Security Infrastructure

The security infrastructure for the Hirshhorn Plaza's north and south entrances is comprised of temporary solutions, not envisioned in the Bunshaft or Urban plans. Concrete jersey barriers prevent vehicle intrusion onto the Plaza from Jefferson Drive. Along Independence Avenue, a combination of round concrete planters and a jersey barrier, likewise prevent vehicular access to the Plaza. Along 7th Street and the loading dock, a sidewalk directly abuts the loading dock area, leaving facility operations highly exposed. This presents a security concern as passing pedestrians regularly drop trash and other items into the loading dock. Hirshhorn's loading dock is the only Smithsonian loading dock not currently secured by a guard booth.



Temporary concrete jersey barriers preventing vehicular intrusion onto Plaza from Jefferson Drive



Pedestrian sidewalk directly adjacent to loading dock area along 7th Street at the Hirshhorn



Temporary concrete planters and a jersey barrier preventing vehicular intrusion onto Plaza from Independence Avenue

Hirshhorn Museum and Sculpture Garden Revitalize Building and Plaza

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# HIRSHHORN MUSEUM

\* Smithsonian

SOM | Selldorf Architects



### **Design Approach**

Revitalization of the Hirshhorn Museum Building and Plaza will preserve the legacy of the Hirshhorn's iconic modern architecture in balance with sensitive changes to fulfill the Hirshhorn's mission as the nation's museum of modern and contemporary art. Guided by the originating design principles, a suite of methodical architectural interventions are proposed to meet the dynamic needs of the Museum in a future-ready facility.



Proposed View from the National Mall with the revitalized Sculpture Garden



Exploded Axonometric View

### **Views of Proposed Concept** With Rooftop Baseline Massing





View A, Proposed Lobby and Mechanical Rooftop viewed from Independence Avenue



View C, Proposed Revitalized Fountain



View B, Proposed Expanded Lobby



View D, Proposed Sculpture Garden Stair to Plaza

### **Proposed Elevations** With Rooftop Baseline Massing



# **Proposed Sections**

With Revitalized Sculpture Garden and Rooftop Baseline Massing







North-South Section A

East-West Section B

### **Proposed Ground Level** Site and Plaza Revitalization Lobby Expansion

**Site and Streetscape** The revitalization will improve visitor arrival sequence, access, perimeter security, and site connectivity. Streetscapes reenvisioned with landscaping and universal access points.

**Plaza** Galleries of varying shapes, scales, and settings are carved out of dense planting wrapping the Plaza's perimeter in order to create a spatially diverse range of settings for art and events.

**Lobby** The expanded lobby will accommodate increased visitorship, allow for visitor orientation and security screening, and provide for museum programing while honoring Bunshaft's original design.

### Key

- 1. At-grade entrance to Plaza from Independence Avenue, new perimeter security
- 2. Universal access: new ramp access colocated with monumental stair on Jefferson Drive
- 3. Opening to Ripley Garden maintained for egress (under consideration, to be further studied)
- 4. Plaza stair to Sculpture Garden and new Lower Level Museum entrance
- 5. New entry at expanded lobby area
- 6. Freight elevator access at Plaza Level
- 7. New loading ramp and dock, planting beds expanded above threshold
- 8. Revitalized fountain
- 9. Perimeter walls, reconstructed in kind, incorporating egress stairs from the Lower Level
- 10. Magnolia trees replaced with tree quantities that comply with NCPC Tree Replacement and Preservation Policy
- 11. New escalators
- 12. Two new passenger elevators
- 13. Relocated cafe
- 14. New guard booth
- 15. New perimeter security
- Egress Points



# **Proposed Lower Level** Major Expansion and Reconfiguration

Revitalizing and expanding the Lower Level will meet the Hirshhorn's goals to increase gallery space, educational programs, and visitor amenities. It will also include stateof-the art facilities for museum back-of-house functions and house new infrastructure supporting the museum's needs.

A new universally accessible entry into the Lower Level from the Underground Passage will unify the campus and provide visitors on the National Mall a direct entrance to the Museum building from the Sculpture Garden. Prior to this phase, the Sculpture Garden Revitalization will reestablish the historic underground passage and Plaza stair. This phase will provide access and daylight to the new Lower Level entry and adjoining public spaces with gallery and education programs.

A large central hall will be the hub of activity at the heart of the Lower Level. It provides direct views to the crossing escalators and new galleries beyond. The central hall will flex to support art, programming, events, and provide access to critical visitor amenities such as restrooms for both the museum and Sculpture Garden. It will be activated by a new multi-functional auditorium to the west and to the east, a cafe and/or museum store. Anchoring the opposite end of the hall are the expanded galleries where visitors can access the escalators and elevators to the Museum's upper levels.



### **Proposed Lower Level** East West Section Through Lower Level

To meet a variety of programming needs, strategic areas of the Lower Level floor slab are dropped to achieve a taller ceiling height. This will allow for large scale art exhibits. A multifunctional auditorium and flexible central hall will have ceiling heights appropriate to support large indoor programming and events. The floor slab of the new public space will be lowered 3' and the floor slab at the northeast corner of the site will be lowered 13' for a new mechanical subcellar that will accommodate required mechanical equipment.



Lower Level Existing Section



Lower Level Proposed Section

\*For the purpose of these sectional diagrams, Plaza Level is assumed as 0'-0".



Key Plan of Proposed Lower Level

# Proposed Levels 2 and 3

Modernization and Renovation



#### Level 2

Levels 2 and 3 are the Hirshhorn's most recognizable gallery floors and are defined by their unique coffered ceilings and continuous layouts. Architectural improvements and modernization of building systems on these levels will respect the radial character of the galleries while creating an efficient, flexible, and impactful space for art exhibition.



#### Level 3

The differentiation between Levels 2 and 3 is the Lerner Room and balcony on Level 3. This will be used for a variety of functions; as gallery, for museum programming, and for special events. This floor will also include additional restrooms currently not available on any of the upper public gallery levels.



### **Proposed Level 4** New Gallery Level



#### Level 4 Plan

With the goal of increasing space for art exhibition, the non-public functions and staff areas of Level 4 will be relocated and replaced with expansive new galleries.



Unlike Levels 2 and 3, which are characterized by the inner and outer rings, the new galleries on Level 4 could occupy the entire width of the drum without separation, creating a new type of exhibition space.



Level 4 provides a gallery floor undivided between a historic inner and outer ring. It gives the opportunity to display unique pieces of art in the collection. For example the Museum has not been able to display, in full, the Dan Flavin piece pictured above. This new gallery level will also benefit from natural daylight and views into the courtyard. There is an opportunity to expose the existing coffers and match the condition of the Outer Ring galleries on Levels 2 and 3.



Dan Flavin, Untitled (to Helga and Carlo, with respect and affection), 1974

### **Roof Level** Rooftop Baseline Massing



### Roof Plan

Modernization of the existing mechanical system to meet current codes and standards will require additional equipment to be located at the Roof Level. Refer to page 81 for mechanical equipment requirements and studies.





Study of the roof massing to understand impacts upon key sightlines is in progress. Refer to the roof subchapter for more detail.



Rendered view of the Museum from the Sculpture Garden Rooftop Baseline Massing. Refer to roof subchapter for studies.

Key

- 1. Elevator Overrun
- 2. Stair
- 3. Shaft/Hatch Location

### **Perimeter - Proposed Concept** Proposed Street Trees in Context

NCPC's Monumental Core Streetscape Guidelines encourage consistency in cadence, form, and placement of street trees across streetscapes. Furthermore, they encourage the maximization of tree canopy where space allows, expanded shade areas for pedestrian comfort, and maximized clear space for pedestrians.

Currently, the existing street trees along Hirshhorn's Independence Avenue frontage exhibit moderately consistent spacing with other street trees at neighboring institutions but not consistent placement. All street trees of neighboring blocks along Independence Avenue have street trees in tree boxes at the curb, whereas Hirshhorn's street trees are within the planters north of the sidewalk. The proposed concept replaces the failing existing elms in the planters with a new row of tree boxes along the curb. This improves the consistency of tree planting along Independence Avenue and provides greater shade coverage for pedestrians on the sidewalk from southern sun exposure.

Along 7th Street SW, Hirshhorn's street trees are in varying states of health and maturity. The soil along this frontage is highly compacted. This concept proposes the replacement of the existing street trees in order to realign the sidewalk, rehabilitate compacted, soils and introduce improved tree uniformity and spacing. In a new planted buffer against the loading dock west of the sidewalk, a second row of trees may be planted as a continuation of the existing double row east of the Sculpture Garden, which will improve shading for the sidewalk and security screening for the loading dock.

Along Jefferson Drive SW, no street trees are proposed in order to preserve the already narrow sidewalks and to conform with the Jefferson Drive streetscape to the west. Street trees are not warranted for pedestrian comfort due to the shade already cast by the Plaza's perimeter walls.

**Existing Street Tree** Possible Additional Street Tree 0 

Proposed Street Tree 



Existing Street Trees along Independence Ave SW



Proposed Street Trees along Independence Ave SW

### **Perimeter** Streetscape Areas

- (1) Jefferson Drive SW Streetscape
- 2 7th Street SW Streetscape and Loading Dock
- (3) Independence Ave SW Streetscape





### **Perimeter - Proposed Concept** Independence Avenue SW

Along Hirshhorn's Independence Avenue SW frontage, the existing elms in the planter bars adjacent to the perimeter walls are removed due to their declining health and root bound condition. The trees are replaced with tree boxes at the curb in keeping other street trees along Independence Avenue, repositioning shade on the sidewalk where it can be enjoyed by pedestrians. In order to minimize impacts to the pedestrian clear zone, the tree boxes are designed to accommodate pedestrian traffic via porous paving or a similar strategy. The precise width of the pedestrian clear zone will be studied in the next design phase.

Removable bollards at the Plaza entry replace the temporary concrete planters. These provide necessary Plaza security while also allowing vehicular access for events and operations. A new guard booth and barrier protects the entry of the loading dock ramp.

- Tree boxes at curb
  Reduced pedestrian clear zone from 15'-1"
  Tree boxes designed to accommodate pedestrian traffic over root zones to alleviate narrowed clear zone
  Existing elms removed, planting and soils rehabilitated
  Loading dock gatehouse and gate
- 6 Removable bollards







# **Perimeter - Proposed Concept** Jefferson SW

Along Jefferson Drive, existing planting beds and sidewalks are reconstructed and no trees are introduced at the curb due to the already narrow pedestrian clear zone. In this way, views between the National Mall, Sculpture Garden, and Hirshhorn Museum remain open. Consistency is also maintained with the south side of Jefferson Drive SW toward the east, where there are no street trees. Hardened handrails are added to the stairs as a security barrier in order to replace the temporary concrete jersey barriers currently at the base of the steps protecting against vehicle intrusion onto the Plaza. The required number of handrails will be studied further in the next design phase. Accessible ramps are now co-located with the main stair to provide universal access. See the subsection on accessible entry for additional information.

- (1)Maintained pedestrian clear zone
- (2)Improved soils and plantings within garden beds
- 3 Street trees kept to north side of Jefferson Drive SW only
- (4)Hardened handrails
- (5) Art display opportunity







# **Perimeter - Proposed Concept** 7th Street SW

The existing sidewalk along 7th Street is realigned eastward to introduce a thickly planted 6' buffer between the loading dock guardrail and pedestrian zone. Due to this realignment, the existing street trees, which are in varying states of age and health, are replaced and the highly compacted soils rehabilitated. A potential second row of trees inboard of the realigned sidewalk creates an allée condition in order to maximize pedestrian thermal comfort, reduce urban heat, and enhance screening against operations in the loading dock. To further enhance screening and security at the loading dock, the loading dock door is sheltered by a planted deck. Replacement of existing turf with planting to the curb improves ecological performance, urban cooling, and street buffering along this frontage. Removal of the existing elm and realignment of the sidewalks at the NE corner of this streetscape creates an opportunity for the display of large scale artworks outside the Plaza walls.



(1)

2

3

(4)

5

6

 $\overline{\mathcal{O}}$ 

8

9

Step out zone

Art display opportunity

Existing parking meter station

Sidewalk realigned, pedestrian clear zone width maintained

Planted buffer introduced adjacent to loading dock guardrail

Plantings between loading dock and perimeter wall to conceal mechanical vents

Compacted soils rehabilitated, turf replaced with hardy plantings to buffer street

Existing street trees replaced due to sidewalk realignment

Possible second row of trees within planted buffer



### **Plaza** Accessible Entry

A new universal accessible entry is comprised of two symmetrical switchback ramps immediately inside the northern opening of the Plaza wall flanking the existing Plaza stairs. Shifting the ADA accessible entry from the northwest corner of the Plaza wall to the main Plaza stair improves the visibility of the ramps and offers users a more intuitive and universal arrival experience more in line with the intended arrival sequence of the original Plaza. With this universal solution, all visitors from Jefferson arrive at the same point atop the Plaza steps. Whether the existing ramp in the northwest corner of the site is maintained for egress or removed (with the wall restored) will be studied during the upcoming design phase.

Accessible Route



Site Accessibility Strategy



Flanking ramp concept providing universal arrival point for all site visitors



### **Plaza Level** Existing vs. Proposed







### **Plaza** Concept Summary

The preferred concept introduces organically-shaped, planted gallery spaces of differing scales arranged radially around the building. The ground plane of the galleries may be planted or paved to maximize diversity of settings for art and flexibility for program. Their sizing is calibrated to display differently-scaled artworks for varied art experiences across the Plaza. Planting is offset from the building and concentrated mostly toward the Plaza's perimeter to serve as a backdrop for art and visual separator for galleries.

Whether planting on the Plaza is flush with paving, on mounded landform, or contained in raised planter walls will be determined during Schematic Design. Plaza grading will be refined during upcoming design phases. As a guiding drainage concept, paved areas and galleries within the Plaza will pitch toward a ring of drains located at lowpoints consistently offset from the building envelope. Site grading beyond the perimeter walls will remain similar to existing conditions.

### **Key Concept Points**

- Galleries of different sizes, shapes, and groundplane treatments carved out of perimeter vegetation to provide diverse array of settings for art and programming
- Densest vegetation concentrated at Plaza perimeter, with stretches of low vegetation incorporated to maintain visibility of perimeter walls from interior
- Galleries arranged radially around Plaza with balanced asymmetry along 8th St axis
- Galleries fitted with infrastructure necessary to provide additional program and performance spaces
- Increased canopy cover to provide shading for green galleries and adjacent Plaza spaces
- Existing fountain reconstructed to support museum programs



### Plaza Program Concept

Hirshhorn's existing Plaza suffers from inflexible spaces, uniformity of sculpture settings, and a lack of spaces adequately equipped to support events, performances, and food service. In the preferred Hirshhorn Plaza concept, a much more diverse range of spaces is created while retaining the successful radial gallery logic of James Urban's Plaza design. Infrastructural access is provided across the Plaza and within perimeter galleries in order to support events and programs of varying scales. For artworks, the display areas are therefore delegated primarily to organically shaped perimeter galleries which offer a much greater spatial diversity than what exists on the Plaza today. The reconstructed fountain-stage will serve as a secondary setting for sculpture or performance. Food and beverage will be provided in an expanded lobby café and a seasonal food cart supported by permanent infrastructure on the Plaza. Movable seating will be provided under the drum. Events and pop-up programs will be hosted primarily within the paved areas of the Plaza, with the potential to expand into the perimeter galleries depending on the artworks and paving/planting condition in each.

#### Art Space

### **Casual Seating / Food Space**





#### People / Event Space



Primary Program Area

///// Potential Expanded Program

### Plaza

Sketch showing Aerial view of the Plaza from South



### Plaza Planting Plan - Groundcovers

In the proposed landscape concept for the Hirshhorn Museum Plaza and streetscapes, plantings will be selected to balance the goals and standards set by Smithsonian Gardens, Hirshhorn's curatorial team, and artists themselves. As a result, palettes for groundcovers, perennials, and shrubs will be curated to prioritize and balance the following:

- Capacity for species to provide diverse, engaging and flexible settings for art
- Ecological performance and ecosystem value
- Textural, formal, sensory and biological diversity •
- Adaptability and resilience to climate change and • installation-related disturbance
- All-season interest
- Ease of maintenance (minimal inputs) ٠
- Suitability to ecoregion

Due to its high maintenance requirements, turf is used sparingly in the proposed concept only in gallery areas where it is required for program or a particular artwork. Otherwise within the galleries, the groundplane is composed of a lush, dense, low evergreen groundcover. Outside the Plaza walls, turf is replaced by a diverse range of resilient, ecologically performative plantings suitable to streetscape environments.

In the garden areas behind and between the galleries, a diverse mix of shrubs, groundcovers, and perennials provide a lush, engaging, all-season backdrop for art as well as a visual separation between galleries, allowing for the contemplation of individual artworks. Plantings in the garden areas will be arranged to ensure that stretches of the perimeter wall will be visible at various locations in complement to the exhibition program.

#### **Groundcover Concept**



Background Planting for Art with Mix of Tall and Low Evergreen Background Plantings

Base Planting for Art (Turf, Low Groundcovers)

### **Plaza** Planting Plan - Trees

Arborist evaluations were conducted for the Hirshhorn Museum's Plaza and streetscapes in November 2023 and January of 2024. For each tree on site, recommendations were made and a replacement value was assigned based on NCPC's Tree Replacement and Preservation Policy. Given the current proposed scope of changes to the site, a total of 65 replacement trees would be required for the trees removed as part of the preferred perimeter and Plaza concepts. The preferred Plaza and perimeter concepts meet this requirement by introducing 8 trees along Independence Avenue SW, a minimum of 7 trees along 7th Street SW, and 50 trees in the Plaza. Opportunity for additional tree plantings to exceed requirements and meet further District canopy coverage goals will be explored in upcoming phases of design work.

Like groundcovers, tree plantings for the Hirshhorn Plaza's preferred concept will be selected to balance the goals and standards set by Smithsonian Gardens, Hirshhorn's curatorial team, and artists themselves. As a result, the tree palette will be curated to prioritize and balance the following:

- Capacity for species to provide diverse, engaging and flexible settings for art
- Ecological performance and ecosystem value
- Textural, formal, sensory and biological diversity
- Adaptability and resilience to climate change and installation-related disturbance
- All-season interest
- Ease of maintenance (minimal inputs)
- Suitability to ecoregion
- Consistency in height and form with adjacent blocks for street trees
- Ability to provide shade and cool Plaza

Trees species are concentrated in the garden areas to minimize conflicts with exhibition. Their placement enhances a sense of framing and enclosure for the outdoor galleries and provides shade for the Plaza. Evergreen trees are located at the Plaza corners and in strategic locations against the perimeter walls where artworks are most likely in need of an all-season planted backdrop. Conversely, deciduous canopy and understory trees are provided in interior-facing planted areas and between galleries where preservation of sightlines and pedestrian comfort are highly considered. The qualities of these trees (form, number of stems, etc.) will be studied during upcoming phases of design work with the intention of balancing the needs of artworks with Smithsonian Gardens' goal of maximizing the diversity of its tree collection. The placement of the trees will also be refined to minimize impacts to sightlines across plaza.

Street trees are placed in conformance with NCPC Streetscape Guidelines to provide additional shade for pedestrians, conform to adjacent blocks (spacing, species, form), and provide a planted buffer against Hirshhorn's loading dock.



Deciduous Understory Tree

Tree Concept



### **Plaza** Paving Plan

The preferred Plaza concept maintains the existing paving extents beneath and offset from the drum while adding paved extensions into some perimeter galleries for art and program. All paved surfaces, steps, ramps, curbs, and planter walls within the Plaza will be of a durable granite. Pavers on the Plaza will be vehicular rated to accommodate vehicles for event set-up, site maintenance, food service, and art installation. Site drainage will be further studied in future design phases to employ stormwater management best practices.

### Plaza Grading and Drainage Concept

#### **Plaza Paving Concept**



- Stone Curb or Low Planter Wall
- --- Drainage Ring (Low Point)
- $\rightarrow$  Plaza Pitch (Direction of Flow)

Granite Pavers Salvaged Granite Treads Exposed Aggregate Concrete Sidewalks to Match Existing



5 **PROPOSED CONCEPT** 

### **Expanded Lobby**

The lobby expansion will provide necessary security upgrades, universal access, visitor orientation, and accommodate increased visitorship and museum programming while honoring Gordon Bunshaft's original design.



#### Visitor Needs & Services

- Visitorship to the Hirshhorn Museum is estimated to increase up to 1.5 million per year. The existing lobby already has congestion challenges and an increase would further exacerbate this problem.
- The lobby needs to expand to accommodate more visitors and standard amenities on par with peer museums.
- Visitor orientation is insufficient. There is inadequate space to welcome individual visitors, including families, and groups.
- There is not enough space for visiting groups to circulate, gather, and queue.
- Existing visitor amenities are strained. There is not enough seating area for the coffee shop in the lobby. Museum programming in the lobby is severely restricted.

#### Entry, Wayfinding, and Circulation Deficiencies

- Wayfinding for the original lobby, from the National Mall, is poor.
- Revolving doors off of Independence Avenue are not accessible. Two symmetrically placed revolving doors served as the original entries for the lobby off of Independence Avenue SW. Revolving doors do not meet current standards for universal accessibility. Since 2001, only one revolving door was used to reduce security staffing needs and lobby congestion.

- During the Building Envelope Repair project, temporary vestibules were added to the north of the lobby, accommodating accessible entry and interim security screening. During this time, the revolving doors, which are visual cues along Independence Avenue, confused approaching visitors who expect these to be entries.
- The single passenger elevator is shared between visitors and staff. It is not accessible and elevator wait times are excessive. There also is no passenger elevator redundancy resulting in long queuing lines and congestion.
- Escalators are nearing the end of their service life and require frequent maintenance. Steps are narrow and do not meet code requirements.

#### **Security Deficiencies**

- Security screening area does not meet SI requirements both in the original and temporary vestibule configurations.
- The lobby facade does not meet the Smithsonian Institution's security blast requirements.

#### **Envelope & Infrastructure**

 Storefront systems and glazing perform poorly and result in condensation. Poor envelope performance conditions require new vestibules and glass enclosure.







### **Original Lobby Footprint Deficiencies & Security Screening Challenges**

The original lobby footprint faces compounding challenges that cannot be addressed without an expansion. The diagram above illustrates how constricted the existing footprint is. Much of the area is overburdened with circulation and queuing - be it at the entrance, exit, visitor services, escalators, or elevators. Even the integration of accessible vestibules and security screening shown above leave insufficient area for circulation within the existing lobby. Furthermore, there would be no room to accommodate any other programmatic needs.



Crowded Lobby Event, Yoko Ono, My Mommy is Beautiful, 2017

### **Expanded Lobby**

Original, Temporary, and Proposed



#### Plaza and Lobby: Original Conditions

The original Plaza did not have an accessible entry along Jefferson Drive. Entry from Independence Ave is at grade.

The original lobby was designed to be entered from two revolving doors to the south. Revolving doors do not meet current standards for universal accessibility. The accessible entry was from the northeast emergency egress doors requiring assistance from building security to use. Entry was challenging for visitors approaching from the north who mistook the emergency access as the main entrance. Since 2001, only one revolving door was used to reduce requirements for security staffing and limit associated congestion in the lobby.



James Urban's design for the Plaza in 1993 added an opening in the perimeter wall and ramp at the northwest corner of the Plaza to provide an accessessible entry from Jefferson Drive. It is accessed via the Ripley Garden and difficult to locate for visitors.

The temporary vestibules were installed to manage the visitor entrance and exit during the Envelope Repair and elevator modernization projects. The vestibules solve some of the congestion challenges of the lobby by removing security screening from the historic lobby footprint. They also provide a universally accessible entry and exit. The existing revolving doors are confusing for visitors entering from Independence Avenue as they signal entry but are not used for visitor entrances.

The revolving doors are removed to improve wayfinding. The lobby, landscape, signage, and curatorial strategy will continue to be developed comprehensively to further choreograph a clear entry sequence for visitors.

The proposed Plaza entry sequence and expanded lobby provide universal access from Jefferson Drive. Two ramps are co-located with the main stair at Jefferson Drive and the new lobby entry is accessible. This provides an intuitive and equitable arrival experience for visitors.

### **Expanded Lobby**

The proposed expanded lobby will renovate the lobby and expand its footprint symmetrically by two coffer bays to the east and west of the southern piers. The proposed symmetrical lobby expansion was identified as preferred for meeting the museum's program needs and through Section 106 consultation.

The expanded areas are separated from the main lobby and serve as vestibules to thermally buffer the galleries from temperature and humidity swings. The western expansion contains the security screening area and the larger footprint offers flexibility to accommodate group entry, art, or pop-up retail. The eastern expansion serves as a new cafe area with dedicated seating.

### **IMPROVEMENTS**

- Wayfinding and Visitorship: Entry and lobby are larger to serve increased visitorship. Revolving doors are removed to improve wayfinding.
- Security Screening: meets Smithsonian space requirements for screening equipment
- Visitor Services, Amenities, and Programming: Increased area for visitor orientation, group entry, and queuing in the original lobby footprint. More of the central lobby area is available to dedicate to visitor services, art, and events. East expansion provides the new cafe with dedicated seating.

### **NEXT STEPS**

- Program and Visitor Flow: Lobby program and visitor entry and exit will be further studied to refine visitor flow and door locations.
- Lobby Articulation: The lobby articulation will be studied to find opportunities to architecturally signal entry and take queues from the original revolving doors.
- Site & Wayfinding: The lobby, landscape, signage, and curatorial strategy will continue to be developed comprehensively to further choreograph a clear entry sequence for visitors.



Key

1 New Facade

2 Entry/Exit Vestibule With Security Screening

Expanded Lobby Program

Expanded Lobby Circulation

### 3 Emergency Egress and Freight Elevator Access

in Kind

4 New Escalators to Replace Existing

6 New Cafe

(5) 1 New Freight and 2 New Passenger Elevators

# **Existing Lobby**









# **Existing Lobby**













### Fountain

The circular fountain within the inner courtyard is a character defining feature of the building, and serves as an anchoring element of the campus. The offset geometry of the fountain is also significant. It is part of a series of circular elements aligned to the Eighth Street axis, with centerpoints offset north south. This includes the building's inner and outer facades, the fountain, and the plume.

The fountain has experienced ongoing water infiltration problems since its construction. It needs a complete reconstruction with enhanced detailing to prevent future damage to the building's infrastructure and collections. The Museum has extensive programming aspirations for the Plaza and courtyard, and currently the inactive fountain takes up a significant portion of the courtyard. There is a desire to transform the fountain to support museum programming, maximize flexibility, and activate the courtyard.



Photo of event on the existing Plaza. The inactive fountain takes up a significant portion of the courtyard.



Photograph of existing fountain in the inner courtyard



Fountain geometry analysis diagram
## **Fountain** Hybrid Concept

The proposed concept for the fountain is influenced by the existing design, employing the original form, size, location, finishes, and use of water. There is an intention to make the fountain a multifunctional element for performances and to use it to bring daylight to the public spaces below.

The perimeter of the fountain will be clad in brass and have a geometry much like the original. A new granite basin is positioned 2" below the water level for an alternative function as a stage when the pool is drained. The recessed granite surface will employ brass inlays to reference the original fountain's radial fin design. At the location of the original plume weir, a circular skylight has been conceived to bring light to the Lower Level in a way that pays homage to the original design, while activating the space below with daylight. New equipment, piping, conduit, and robust waterproofing will support the fountain operation. The ring of jets are offset from their original position to make room for the skylight. In the next phase structural and mechanical requirements will be studied further to inform the extent of the skylight aperture, the geometry, and the impact on the plaza slab and supporting structure.

Other alternatives were considered for the fountain and included in Section 106 consultation. Please see the Appendix for more information.



Conceptual enlarged section through fountain skylight



Example plan for fountain as stage; 68 piece orchestra



Conceptual building section perspective

## **Fountain** Hybrid Concept





## **Fountain** Hybrid Concept





#### **New Entry from Sculpture Garden** Removal of Flanking Concrete Walls

The restoration of the original Plaza stairs connecting the underground passage to the Museum Plaza will be completed as part of the Sculpture Garden Revitalization project. As part of the Museum Building and Plaza Revitalization project an accessible connection between the revitalized Sculpture Garden and the proposed expanded Lower Level of the revitalized Museum will be made. This will create a new Museum entrance directly from the National Mall and the Sculpture Garden.

The design approach for the new entrance suggests the removal of existing concrete walls that flank the original Plaza Stair to create a naturally lit space that allows for visual connection to public spaces within the Lower Level. New accessible ramps on either side of the Plaza Stair slope down from the Sculpture Garden to the lowered elevation of the expanded Lower Level.

Another alternative was developed and considered in Section 106 consultation that maintains more of the historic concrete walls. Please refer to the Appendix to reference this alternative.



Diagram indicating accessible connection between the Sculpture Garden and Museum Building's elevator



Section perspective through Plaza Stair

Enlarged plan of Sculpture Garden entrance



5 PROPOSED CONCEPT

## New Entry from Sculpture Garden

Plaza Stair and Entrance Ramps To Expanded Lower Level



Perspective view of proposed Sculpture Garden entrance and Plaza Stair

#### **Mechanical Rooftop**

Modernization of the existing mechanical system to meet current codes and standards will require additional equipment to be located at the roof level. Visibility of the addition must be carefully considered.

#### **NEEDS & CONSIDERATIONS**

#### **Increased Mechanical Equipment Footprint**

The footprint of mechanical equipment and associated spaces required for the Hirshhorn needs to be increased by 18,000 square feet, as a result of several very important drivers, including:

- Energy Code compliance
- Mechanical Code requirements
- Increased visitorship
- Increased building area

#### **NEW MECHANICAL SYSTEM DISTRIBUTION**

The four sculptural piers that support the floating appearance of the drum are the only point of connection between the drum and the Lower Level of the building below the Plaza. The piers are currently used for egress stairs, passenger elevators, and the freight elevator. The total amount of remaining shaft space for any and all mechanical, electrical, and plumbing connections is approximately 285 square feet.

If all the mechanical equipment is placed on the Lower Level, the shaft space in the Plaza Level piers would need to increase from 285 square feet to approximately 1,100 square feet. This change would significantly impact the perception of the drum and the Plaza.

Also, to comply with Interagency Security Committee (ISC) Chemical Biological Radiation (CBR) guidelines, fresh air intake for the building must come from a minimum of 100' from areas where vehicles may be stopped with their engine running and 40' above finish grade. To ensure compliance with ISC guidelines and minimize impact to historic facade, the air intakes need to be relocated from the Lower Level to the exiting rooftop.

To avoid the impacts to the piers and to meet the mechanical code requirements, the MEP strategy will employ a hybrid system with equipment divided between the Roof Level and the Lower Level.





Proposed Air Intake Solution







Split System Strategy

The mechanical equipment is split between the Lower Level and Roof Level. This strategy preserves the footprint of the piers, brings in all the fresh air from the top, and maximizes public gallery space.



#### **BASELINE MASSING STRATEGY**

The proposed Roof Level will remain an unoccupied level. A new rooftop structure encloses mechanical equipment. Access to this level will be for maintenance purposes only. A continuous roof and wall will unify and shield the new mechanical equipment, the elevator overrun, and stair access for maintenance. Elevator access will end at the Museum's 4th floor. The massing of the roof addition is set back from the parapet and biased to the inner ring of the existing building to minimize visibility from the exterior.





Existing Building Section

Building Section with Rooftop Baseline Massing



## **Mechanical Rooftop**

Area of Potential Effects, Major Viewsheds, & McMillan Setback

#### SITE CONSIDERATIONS

The proposed mechanical rooftop is set biased to the inner ring of the building to minimize its visibility within the Hirshhorn's context. It acknowledges the primacy of the view corridor between the Capitol and the Washington Monument as established by the McMillan setback line by pulling the massing edge as far back from the National Mall as possible and giving priority to views from the National Mall and along the Eighth Street axis.





Lines of Sight - Area of Potential Effects View Corridor



Independence Ave.

Federal Aviation Administration

5 PROPOSED CONCEPT

## **Mechanical Rooftop**

Key Viewsheds | Baseline Mechanical Rooftop Massing - Biased to Inner Parapet



A | View from National Mall



C| View from Independence Avenue





D | View from Courtyard



#### **Mechanical Rooftop** Baseline Massing and Development

#### **BASELINE MASSING**

The baseline massing footprint and profile shown in red below represents reasonable assumptions for concept phase development. It will be refined with the development of the design and project requirements that will drive systems and equipment selections. The intent is to continue to identify opportunities to further reduce the footprint and height of the mechanical rooftop as the project advances.

#### FORM, ARTICULATION, SHADE STUDIES, & MATERIALITY

The rooftop will be an intentionally designed architectural element. It requires careful study of form, articulation, light and shadow studies, and materiality in forthcoming phases. A variety of visualization and mock-up strategies will be utilized to determine the most harmonious addition to the building. Color renderings shown in this submission include a warm semi-reflective material across a series of profile studies. Refer to the Appendix for additional massing alternatives.





**Baseline Roof Plan** 



HIRSHHORN REVITALIZE BUILDING AND PLAZA | JUNE 2024

## **Mechanical Rooftop** Initial Studies



Baseline Massing



Chamfered Study

Floating Edge Study



#### **Envelope Repairs** Waterproofing & Thermal Improvements

#### **ENVELOPE OVERVIEW**

The Hirshhorn's Building and Plaza exterior envelope has performed poorly with respect to moisture infiltration, exfiltration, and thermal performance, with problems increasing as the building has aged.

Phase 1 of the Building Envelope Repair project began to address longstanding exterior envelope issues. This phase of work entailed replacement of the exterior drum precast concrete panels, upgrading attachment anchors to comply with blast requirements, the addition of thermal and air barriers behind the precast skin, replacement of the third floor balcony storefront system and the replacement of the roofing system. This phase of the revitalization will continue the initiative started in Phase 1 and update the remainder of the envelope. It will protect the building by bringing it up to current security standards, improve performance, and meet energy standards.

These improvements will include providing insulation and an air and water barrier at the inner courtyard walls and replacing the glazing as well as the precast concrete panels, mitigating thermal bridges and leakage path throughout the building, insulating and waterproofing the Plaza to meet current energy codes, replacing the slab insulation at Level 2, and replacing the lobby glazing. Additionally, for the inner courtyard cladding, structural attachments will need to comply with blast requirements. This project will also repair the third floor balcony cast-in-place concrete structure.

Alkali silicate reaction(ASR) is pervasive on the north and east sides of the perimeter wall, and on the walls of the loading dock causing widespread cracking. Mitigation measures can slow the spread of ASR but will not arrest it completely. There is no long-term solution. Replacement of the walls in kind with cast-in-place concrete using Swenson Pink granite aggregate is required. The extent of perimeter wall replacement will be studied in the next design phase.



Phase 1: Envelope Improvement (completed 2023)

Phase 3: Envelope Improvement scope

Hirshhorn Envelope Improvements Scope by Phase Diagram



Hirshhorn Scaffolding During Phase 1 Envelope Improvements Nicolas Party, *Draw the Curtain*, 2021, Photo Ron Blunt



HMSG Major Revitalization Phasing Diagram



Precast Panels. Air Barrier, and Insulation Installation, Phase 1 Building Envelope Project, 2022



Interior Courtyard Facade Thermal Analysis Diagram, Excerpt from CGS 2017 Building Envelope Report Hirshhorn Museum and Sculpture Garden Revitalize Building and Plaza

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Project Overview
Project Context
Historic Context
Existing Conditions
Proposed Concept
Appendix

## HIRSHHORN MUSEUM

Smithsonian

SOM | Selldorf Architects



#### Plaza Alternative Organizational Concepts

Three organizational concepts were developed for the Plaza as part of the Concept Phase, each driven by the layout of planting which had implications on circulation and the experience of art. After receiving input from the Hirshhorn Museum's curatorial team, Smithsonian Gardens, and the public as part of the Section 106 process for this project, the Frame Concept was identified as the preferred concept due it its ability to meet curatorial needs for art, provide spatial flexibility for program, and adhere to Smithsonian Gardens' goals for maintaining green space maintaining green space.

#### **Corners Concept**



#### **Gradient Concept**

# MONUMENTAL ART MONUMENTAL ART

#### Frame Concept (Preferred)



#### Lower Planting

Taller Planting

## Fountain Alternative: Reconstruct in kind

This alternative fountain design calls for the replication of the original design's form, size, location, and water actions. New or refurbished brass cladding will be fastened over the fountain's waterproofed structure. The arrangement of radial fins, the off-center plume and its brass canister, valences and trims will be reconstructed as identically as possible.

Although the form of the fountain may be rebuilt very much like the original, many details under the skin will be constructed differently to improve fountain operationsand critically, to eliminate leaking troubles that have plagued the original design over many years. Other minor changes to the original design will be planned, including updating the lighting (which is obsolete), and possibly the methods for cladding the fountain such that the brass might be fixed as a demountable skin for maintenance purposes. New equipment, piping, conduit, and robust waterproofing will support the fountain operation.







Conceptual building section perspective

## Fountain Alternative: Multifunctional Fountain & Stage

This alternative fountain design calls for a new fountain, influenced by the original design, employing the original's form, size, location, finishes, and water actions. A new granite pool floor is positioned 2" below the water level for an alternative function as a stage when the pool is drained. The plume is reconstructed, possibly with a different core formation without the elaborate cavity.

The perimeter of the fountain will be clad in brass and formed much like the original. The recessed pool floor will employ brass inlays to reiterate the original fountain's radial fin design. At the off-center core, a similar multijet plume will provide the fountain's chief display. The development of the recess around the jets and lights might be different from the original design. A removable floor would be designed to cover weirs and plume jets to allow for a flexible stage





Example plan for fountain as stage; 68 piece orchestra



Conceptual building section perspective

## Fountain Alternative: Skylight

This alternative fountain design proposes removing the existing fountain and associated infrastructure and replacing it with a long-span skylight in its place to allow daylight to filter into the newly constructed Lower Level. This skylight matches the footprint and height of the existing fountain.







Conceptual plan of skylight design



Conceptual building section perspective

#### Fountain



-

Alternative: Reconstruct in kind



Alternative: Multifunctional Fountain & Stage







## New Entry from Sculpture Garden

Alternative: Minimal Removal of Historic Material

The restoration of the original Plaza stairs connecting the underground passage to the Museum Plaza will be completed as part of the Sculpture Garden Revitalization project. As part of the Museum and Plaza Revitalization project an accessible connection between the revitalized Sculpture Garden and the proposed expanded Lower Level of the revitalized Museum will be made. This will create a new Museum entrance directly from the National Mall and the Sculpture Garden.

The design of this alternative concept suggests minimal removal of existing historic material to achieve the necessary connection between the expanded Lower Level and the underground passage. New accessible ramps on either side of the Plaza Stair slope down from the Sculpture Garden to the lowered elevation of the expanded Lower Level.



Diagram indicating accessible connection between the Sculpture Garden and Museum Building's elevator



Section perspective through Plaza Stair



Enlarged plan of Sculpture Garden entrance

APPENDIX 6

**New Entry from Sculpture Garden** Alternative: Minimal Removal of Historic Material



Perspective view of alternative Sculpture Garden entrance and Plaza stair

## **Mechanical Rooftop Alternatives** Existing vs. Proposed Massing Alternatives

#### **MASSING STRATEGIES**

An alternative to the baseline roof massing proposed in this submission is to center the roof massing within the footprint of the drum with an equal offset from the outer and inner parapets. This reduces the visibility of the mechanical rooftop for the inner courtyard but at the expense of the exterior viewsheds. This is why the Baseline Massing, biased to the inner parapet, is preferred.



Biased to Inner Parapet (Preferred)



Key

1 Existing Roof

2 Elevator Overrun

(4) Shaft/ Hatch Location

Equal Offset from Parapet

## **Mechanical Rooftop** Existing Roof



A | View from National Mall



C| View from Independence Avenue





D | View from Courtyard



6 APPENDIX

## Mechanical Rooftop

Baseline Massing - Biased to Inner Parapet, Preferred



A | View from National Mall



Cl/Wiewofrondependence Avenue





D | View from Courtyard



6 APPENDIX

## **Mechanical Rooftop**

Alternative Massing - Equal Offset from Parapet



A | View from National Mall



C| View from Independence Avenue





D | View from Courtyard





REEDHILDERBRAND

HIRSHHORN MUSEUM & SCULPTURE GARDEN WASHINGTON, DC **EXISTING CONDITIONS** PLAZA SITE

XXX EXISTING CONTOUR - MAJOR --- EXTENT OF STRUCTURE BELOW HEDGE PERENNIAL, GROUNDCOVER, LOW SHRUB ----- 9TH STREET TUNNEL + + + LIMIT OF WORK BARE MULCH OR SOIL LAWN  $(\times \times \times \times \times \times)$ EXPERIMENTAL PLANTING BED ———— DDOT R.O.W.  $\left( \bullet \right)$ EXISTING TREE

