Hirshhorn Campus Revitalization – Project Phase Narrative

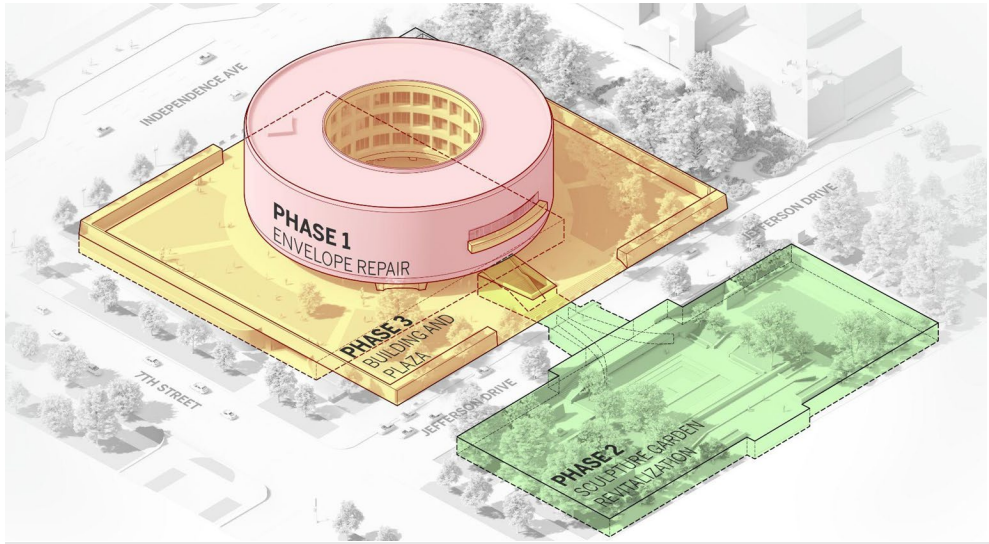
The Smithsonian Institution (SI) is engaged in Section 106 consultation for a project called Hirshhorn Revitalize Building and Plaza project. This is the third phase of a campus revitalization of the Hirshhorn Museum and Sculpture Garden (HMSG). At the request of Consulting Parties, the SI has prepared this comprehensive narrative of all project phases to assist consideration of the cumulative impact to this historic resource.

HMSG was designed by the architect Gordon Bunshaft of the firm Skidmore, Owings & Merrill. Construction began in 1969, and the Museum opened to the public in 1974. The HMSG is a contributing element of the National Mall Historic District listed in the National Register of Historic Places. It is also individually eligible for listing for its minimalist museum and landscape design that represent the latter phase of Bunshaft's career and as an outstanding example of late Modernist design in the District of Columbia. The period of significance has been set at 1974, 1981.

The HMSG has never been comprehensively renovated. In its sixth decade, the HMSG is faced with infrastructure deficiencies that negatively impact the HMSG's building envelope, capacity to care for its collection, and flexibility for the exhibition of modern and contemporary art.

Visitors standing in the Sculpture Garden looking toward the Museum prior to the closure of the underground passage in the 1980s. SI Archives, 1974.

Aerial photograph of the HMSG campus. SI Archives, 1974.



Phase 1 – Envelope Repair
Design: 2017- 2020 - Construction: 2020-2023

Phase 2 – Sculpture Garden Revitalization
Design: 2018-2023 - Construction: 2023-2026

Phase 3 – Revitalize Building and Plaza
Design: 2023-2027 - Construction: To be Determined

Phases 2 and 3 require complete closure of the Sculpture Garden and the Museum/Plaza, respectively. These projects were structured with subsequent design and construction timelines to permit the HMSG to maintain an active presence on the National Mall. Phase 1 addressed an emergency condition. The following pages provide a comprehensive narrative of the projects.

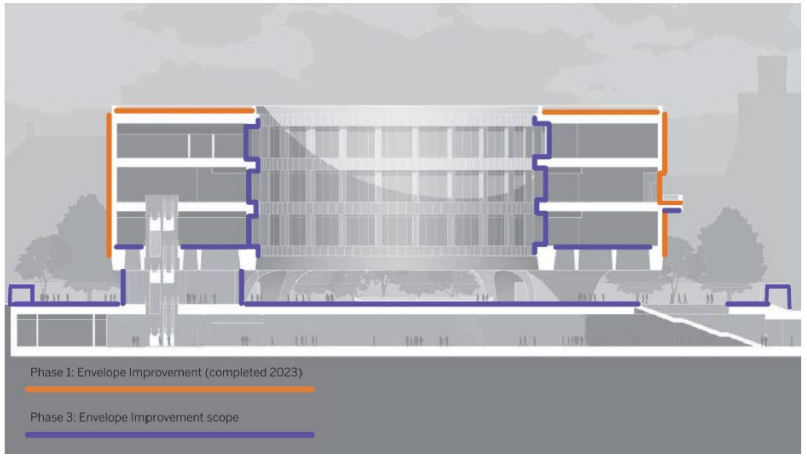
Phase 1 – Envelope Repair Project

The Hirshhorn Museum drum is raised 14’ above the ground on cast-in-place concrete piers. The Museum building sits on a square Plaza enclosed by perimeter concrete walls. The Sculpture Garden is recessed below grade and is located north of the Museum and Plaza. An underground passage historically connected the Garden and Plaza, closed in the 1980s. This connection will be restored in Phase 2.

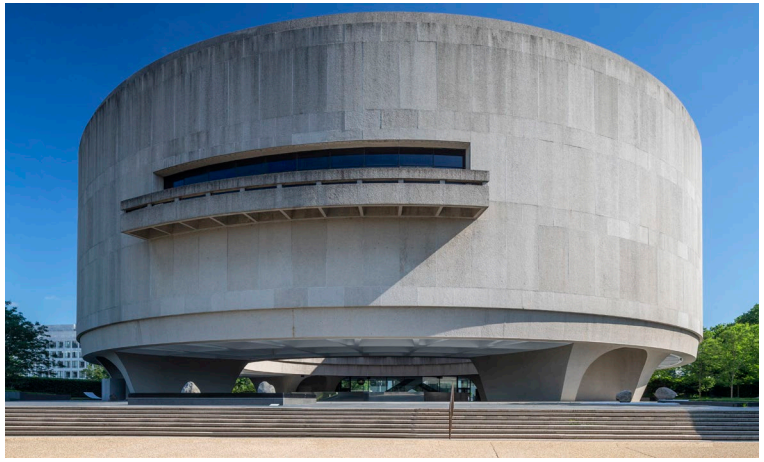
The Museum building is largely a cast-in-place concrete structure, the walls measure up to 2’-8” thick. The are 675 precast aggregate concrete cladding panels of two standard sizes arranged in alternating large and small bands, anchored to the cast-in-place concrete drum. Beginning in 2014, the SI observed shifting and displacement of the precast aggregate concrete panels and undertook a careful study of the building envelope deficiencies. The original panel attachments comprised a series of relieving angles supporting the bottom of the large panels for gravity support and strap anchors and pins interlocking the panels together.

During the panel investigation, compromised structural attachments were discovered including spalled concrete, shimming, intentional chipping at attachment installation points, and completely failed attachments. It was determined the panels were a fall risk, with each of the large panels weighing almost 6,000 pounds, affecting life safety and building operations. This required advancing the scope for Phase 1 Envelope Repair ahead of the Phase 3 Revitalize Building and Plaza.

The Museum building also lacked an air barrier, waterproofing, and insulation, resulting in poor envelope performance and interior condensation. There was insufficient and inconsistent cavity space between the panels and the concrete back-up drum to accommodate blast resistant panel anchorages, which is a SI requirement. To accommodate energy improvements and a blast resistant panel attachment system, the precast concrete panels were replaced in-kind and offset by three inches from the original location, growing the diameter of the building by six inches.



Hirshhorn Museum Building under construction. SI Archives, 1973.

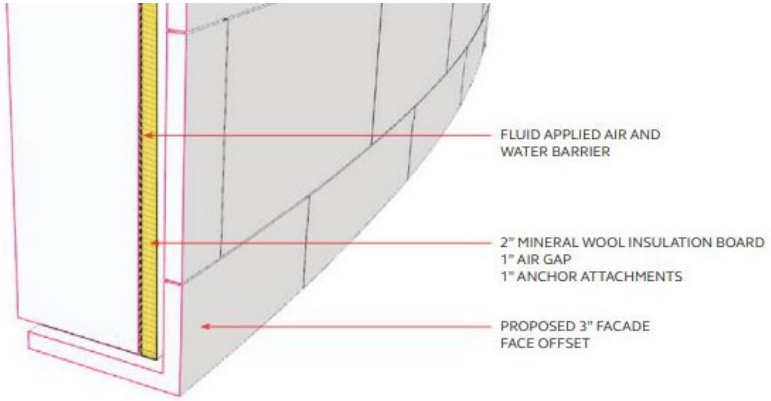


Hirshhorn Museum Building in 2019.

Phase 1 – Envelope Repair Project

It was determined through Section 106 consultation that the Phase 1 Envelope Repair project resulted in adverse effects to historic resources, due to the complete replacement of the historic fabric of the precast panels and changing the dimension of the Museum drum. This determination required the execution of a Memorandum of Agreement to resolve adverse effects.

The precast concrete panels were replaced in-kind to uphold the Hirshhorn's historic integrity of material across its campus. The historic Swenson Pink granite aggregate was sourced, and this project was successfully completed in March 2023. The Museum remained fully open to the public during this project. Other project scope included replacement of the roof and the third floor balcony storefront and doors.



New condition detail drawing with the 3" offset.

Sample of replacement aggregate concrete held against a historic precast panel, 2019.

Hirshhorn Museum at Phase 1 project completion, 2023.

Phase 2 – Sculpture Garden Revitalization

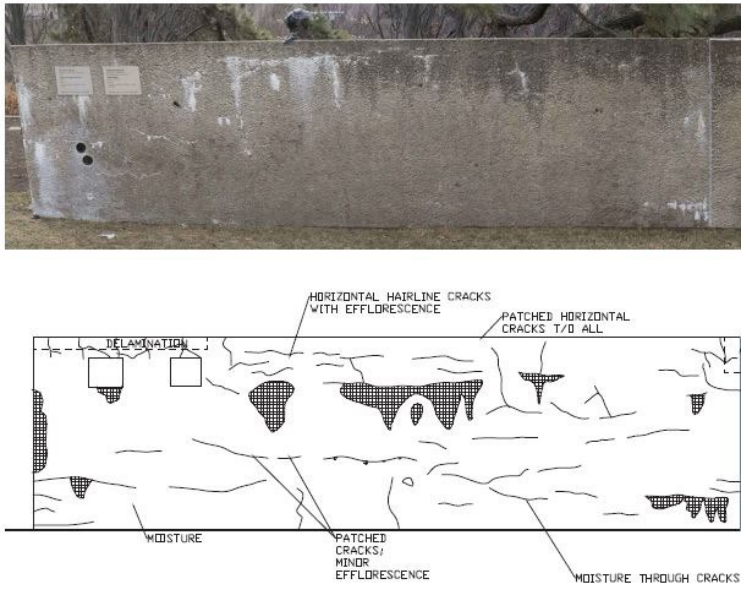
When the Sculpture Garden opened to the public in 1974, Bunshaft's original design created an austere environment with limited materials and plantings. Aggregate concrete perimeter and interior walls defined the recessed outdoor gallery space. There were challenges in using the Sculpture Garden including open circulation that created overlapping vistas for art exhibition, an extremely hot environment uncomfortable for visitors, and no accessible circulation due to loose gravel paving and a lack of ramps.

In 1981 the Sculpture Garden was redesigned by the landscape architect Lester Collins. Plantings created outdoor gallery spaces with seating and shade. New ramps and paving provided barrier-free access to the different levels of the Garden from the National Mall. This significant alteration is considered contributing to the HMSG's historic significance. The 1981 redesign retained the Bunshaft era concrete walls, underground passage, and reflecting pool.

While this space is a garden, it is foremost an outdoor gallery. Its basic infrastructure was in critical condition, lacking a stormwater management system and functional drain. This resulted in frequent flooding of the recessed gallery threatening collections. The historic concrete walls were in a highly deteriorated condition suffering from alkali silica reaction, commonly known as concrete disease, an irreparable and degenerative inherent condition. The Sculpture Garden was also no longer supporting the HMSG's mission for the presentation of modern and contemporary art, lacking flexibility of spaces, diversity of display settings, and infrastructure for modern technologies. To address these infrastructure and programmatic needs, a full revitalization of the Sculpture Garden was designed by the Japanese artist and architect Hiroshi Sugimoto.

Sculpture Garden, 1974. Smithsonian Gardens.

Typical flooding in the Garden, 2019.

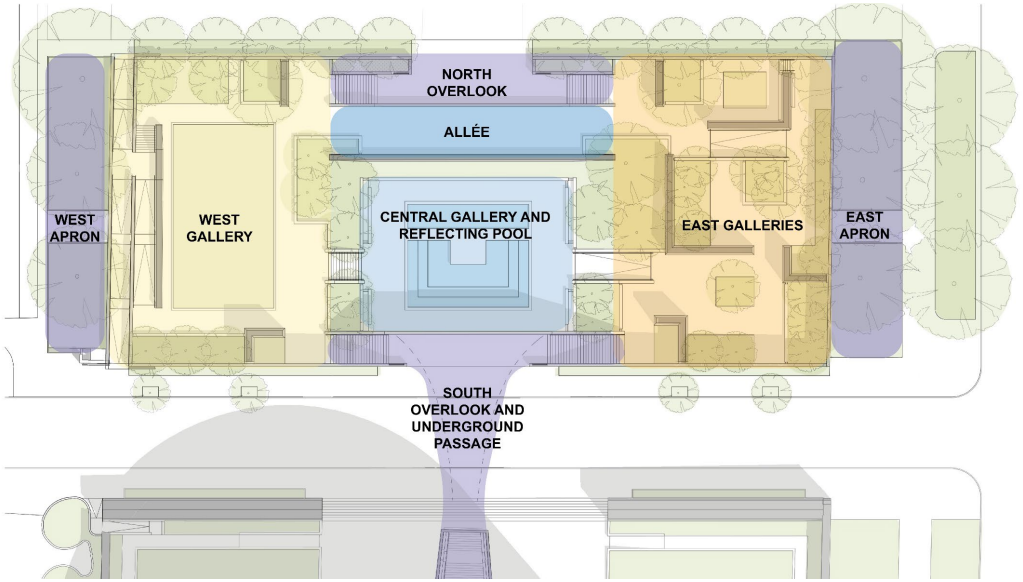


Typical concrete conditions of alkali silica reaction, efflorescence, surface accumulation, 2018.

Phase 2 – Sculpture Garden Revitalization

This project reorganizes the Garden in plan and section. The historic north and south overlooks/entries will be complemented by new east and west overlooks at the aprons to improve connection to the National Mall context. The southwest corner of the site will be depressed to the mid-level of the Garden and provide space for new accessible entry ramps that improve access over the 1981 condition. The West Gallery will house a flexible lawn space to support contemporary art and new commissions. The Central Gallery will exhibit performance art. The East Galleries will become a series of outdoor rooms which facilitate displaying 50% more of the HMSG's 19th and 20th century collection than what was possible in the 1981 condition.

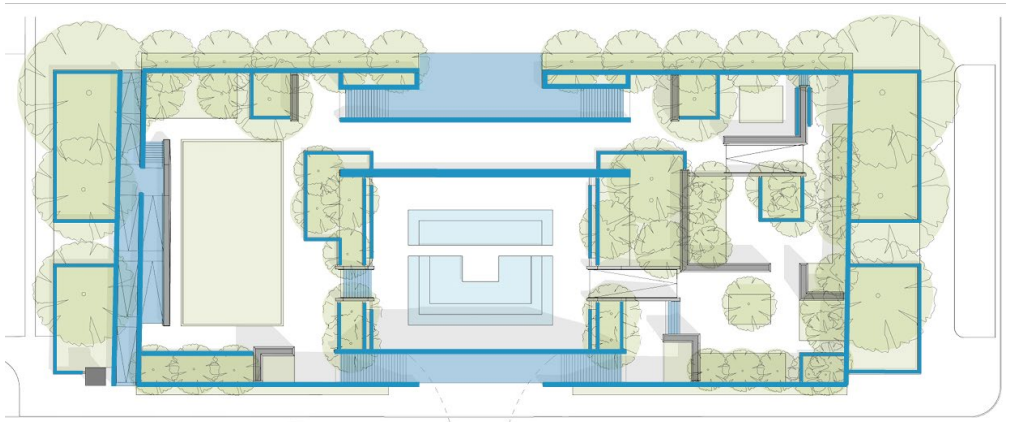
This new plan allows the Sculpture Garden to support many of its programmatic goals – all within the historic framework of the cast-in-place concrete perimeter walls. These will be rebuilt in-kind, similar to the Envelope Repair project, with minor height increases to meet code requirements. Swenson Pink stair treads salvaged during the 1981 modifications will be reinstalled and additional Swenson Pink will be used in pavers, benches, and seat walls. Secondary stacked stone gallery walls address curatorial needs, complementary to the sculptures and aggregate concrete, while also introducing a new language for this intervention.



Sculpture Garden Revitalization plan.

This project brings sustainability to the Garden. Stormwater management infrastructure will be provided for the first time in the Garden's history, including below-grade cisterns. Plantings will be native species that recall characteristics of the 1981 plantings, better suited for the Garden's microclimate.

Rendering of the East Galleries.

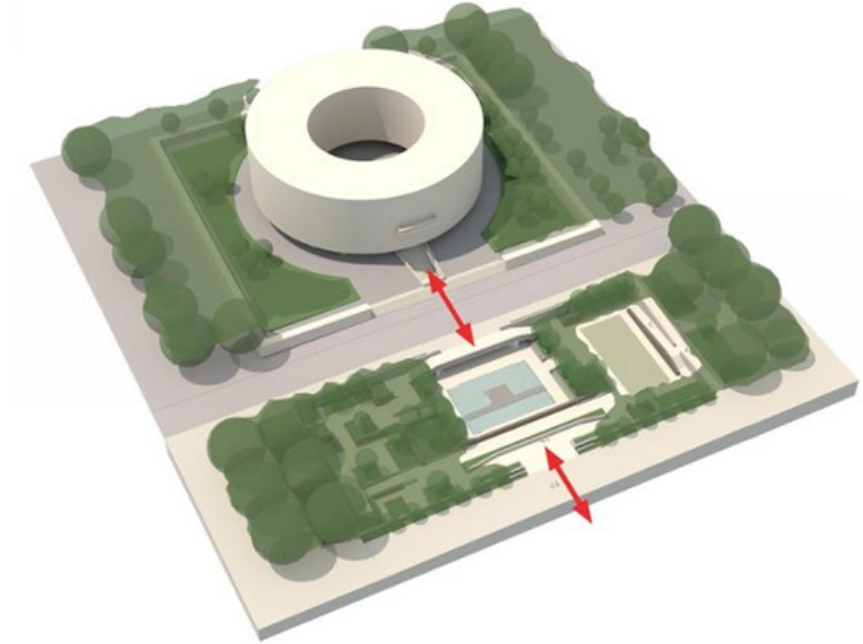


Site plan noting the aggregate concrete walls replaced in-kind with blue, installation of Swenson Pink with blue shading, and new stacked stone walls in gray.

Phase 2 – Sculpture Garden Revitalization

It was determined through Section 106 consultation that the Phase 2 Sculpture Garden Revitalization resulted in adverse effects to historic resources, due to the removal, modification, or in-kind replacement of character defining features from 1974 and 1981. A Memorandum of Agreement was executed to document design decisions that minimize adverse effect such as the reopening of the underground passage, and reconstruction of the reflecting pool and its incorporation into a multifunctional water feature and venue for performance art and exhibitions. This project will use salvaged historic fabric and replace the aggregate concrete walls in-kind using Swenson Pink aggregate.

The Sculpture Garden construction will be complete in 2026 and is currently closed to the public. Other character defining features will be retained through the project including recessed grade, continuation of the Garden's primary historic use as a setting for the display of sculpture, and maintaining the aggregate concrete perimeter walls as the primary wall feature and visual material unifier across the HMSG campus.



Hirshhorn campus axononometric noting reestablishment of the underground passage connection between the Sculpture Garden and Museum Plaza.

Central Gallery and Reflecting Pool, 1974.

Central Gallery and Reflecting Pool, 1981.

Rendering of the Central Gallery and Reflecting Pool, 2021.

Phase 3 – Revitalize Building and Plaza

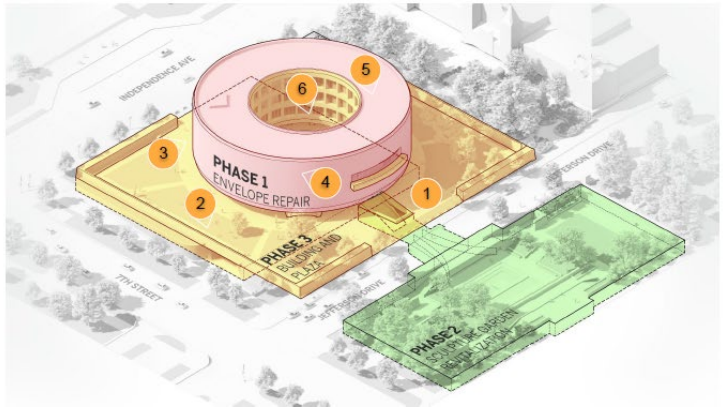
The Hirshhorn Museum building has not been comprehensively renovated since its opening in 1974. Its aging electrical, mechanical, water, waste management, and vertical transportation systems exceed their service life and require replacement. The Hirshhorn is charged to engage the public with modern and contemporary art 364 days a year. In the last year, the Museum has closed 7 times due to infrastructure failure including 6 instances of full closure to the public and numerous public program cancellations.

Bunshaft's original design for the Plaza had the same challenges as the Sculpture Garden; the open plan created overlapping vistas challenging for art exhibition, limited plantings and shade that emphasized the extremely hot environment, and lack of accessibility. In 1993, the Plaza was redesigned by landscape architect James Urban; this redesign added radial granite paving, outdoor gallery spaces created through plantings and trees, and an accessible entrance at the northwest corner. The Plaza modifications are considered non-contributing to the Hirshhorn's historic significance.

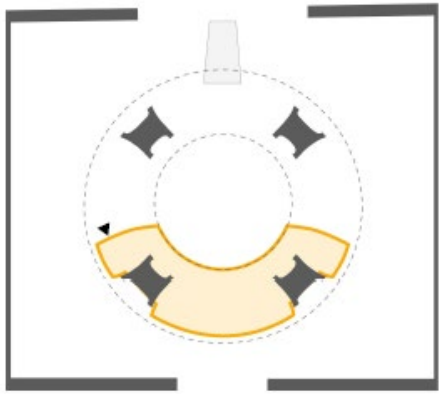
Phase 3 aspires to increase the amount of public programmable space inside and outside the Museum. The project goals are centered on providing visitors with transformative art experiences by:

- Improving accessibility and circulation for all users throughout the Hirshhorn campus
- Expanding and improving amenities, operational, and programming space to meet the needs of projected increases in visitation.
- Ensuring the Hirshhorn campus' code compliance and improving its energy efficiency, sustainability, and resiliency.
- Unifying the Hirshhorn Building, Plaza, and Sculpture Garden as a campus.
- Strengthening the physical security of the site perimeter and entrances.
- Respecting the integral relationship between the Hirshhorn building and outdoor gallery spaces as an evolving platform for the presentation of modern and contemporary art.

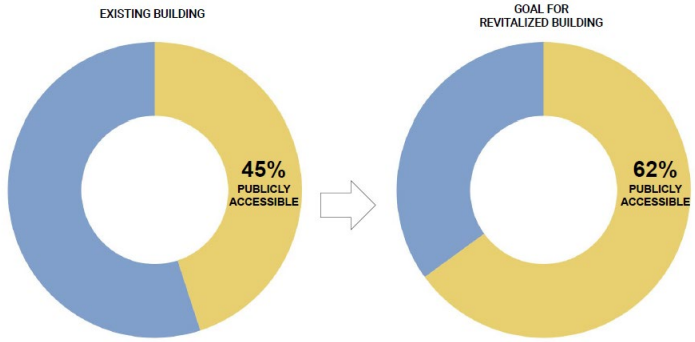
1. **Lower Level Expansion and Sculpture Garden Connection**
2. **Plaza Revitalization**
3. **Lobby Expansion**
4. **Conversion of 4th Floor for Gallery Expansion**
5. **Mechanical Rooftop**
6. **Envelope Improvements**



Phase 3 scope diagram.



Lobby Concept: Symmetrical Expansion.

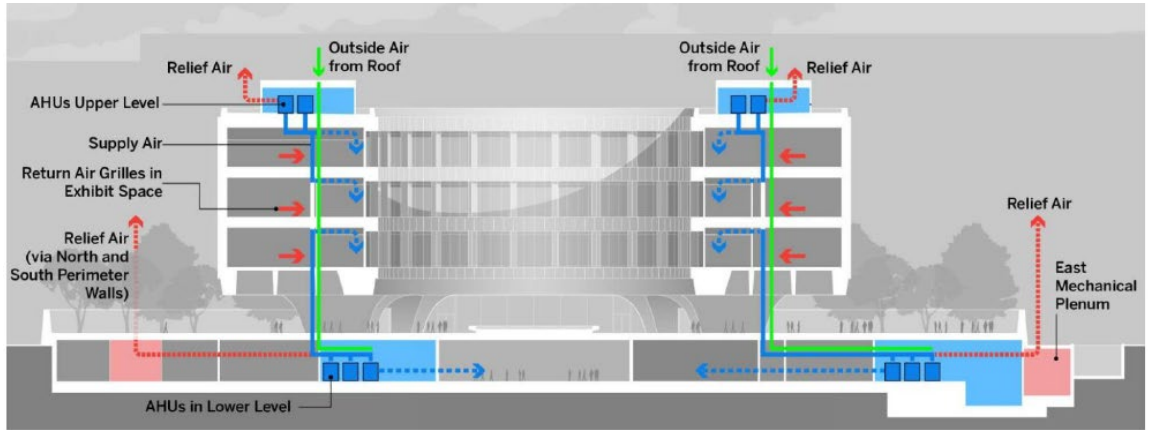


Existing and proposed public space inside the Museum.

Phase 3 – Revitalize Building and Plaza

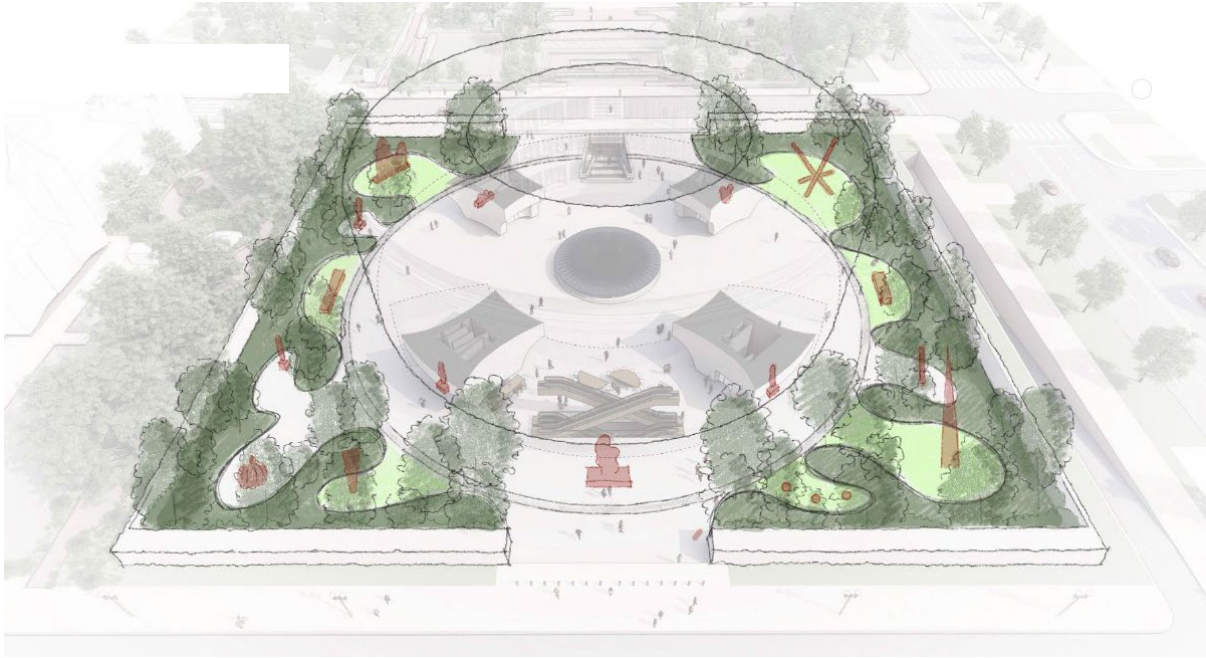
The Phase 1 Envelope Repair addressed a life safety emergency condition. Phase 3 will address the remainder of the Museum envelope and Plaza infrastructure including:

- Providing insulation and air barrier at the inner courtyard façade to meet code requirements and improve energy efficiency.
- Replacing precast concrete panels at the inner courtyard, including new structural attachments to meet blast requirements.
- Replacing Lobby and inner courtyard glazing to meet blast requirements, to improve thermal performance, and mitigate UV and heat gain.
- Repairing and restoring cast-in-place concrete piers, ring beam, parapet, and balcony.
- Repairing or replacing perimeter walls to address alkali silica reaction and Plaza waterproofing.
- Improving structural capacity and replacing waterproofing at the Plaza/Lower Level roof.
- Addressing visitor circulation, egress, and accessibility requirements.



Conceptual mechanical strategy, with equipment on the roof and in the Lower Level.

This project has the potential for adverse effects on the Hirshhorn Museum and the National Mall Historic District. Further analysis of adverse effects on historic resources will continue under Section 106 consultation. The Hirshhorn's site is fully programmed and constrained, requiring some mechanical equipment to be placed on the roof. Potential adverse effects are associated with. but not limited to, the replacement of historic fabric, Lobby expansion, addition of rooftop mechanical equipment, and fountain reconstruction.



Plaza concept design.