

STAFF RECOMMENDATION



K. Walton
NCPC File No. 6331

THE SMITHSONIAN INSTITUTION NATIONAL MUSEUM OF AFRICAN AMERICAN HISTORY AND CULTURE

Constitution Avenue and Madison Drive between 14th and 15th Streets, NW
Washington, DC

Submitted by the Smithsonian Institution

October 31, 2011

Abstract

The Smithsonian has submitted a preliminary design, final utility plans, and final support of excavation plans for a new museum building to house the National Museum of African American History and Culture on the former grounds of the Washington Monument between Constitution Avenue and Madison Drive, NW and 14th and 15th Streets, NW. The 373,798 SF museum will contain state-of-the-art galleries, offices for program and administrative staff, and an education center. The Support of Excavation (SOE) wall surrounds a 150,260 square-foot area and precedes construction of the basement foundation walls so that the museum basement area is isolated to avoid disturbance to the water table and geotechnical conditions of neighboring structures, including the Washington Monument. Since the revised concept submission, the Smithsonian has completed the National Environmental Policy Act, Final Environmental Impact Statement, finalized the National Historic Preservation Act Section 106 Programmatic Agreement, and has collaborated with Washington Gas in relocating a 24" gas main to the perimeter of the site. The Smithsonian has also addressed the comments raised by the Commission at its review of the revised concept in April 2011.

Commission Action Requested by Applicant

Adoption of the Record of Decision under the National Environmental Policy Act (42 U.S.C. 4321-4347, as amended) for the Tier I and Tier II Smithsonian National Museum of African American History and Culture Washington DC Final Environmental Impact Statements, and approval of preliminary site and building plans, final site utility plans, and final Support of Excavation, Excavation, and Dewatering plans pursuant to Public Law 108-184 and 40 U.S.C. § 8722(b)(1) and (d)

Executive Director's Recommendation

The Commission:

Notes that the Smithsonian, in the development of the Final Environmental Impact Statement for the NMAAHC, has responded to the Commission's comments and recommendations on the museum's design.

Notes that the preliminary site and building plans for the NMAAHC are based on the Preferred Alternative (Refined Pavilion 2) presented and analyzed in the joint National Capital Planning Commission and Smithsonian Tier II Final Environmental Impact Statement.

Notes that while all practicable means to avoid or minimize environmental harm have been adopted by the Smithsonian in the Tier II FEIS, adequate mitigation measures for certain unavoidable impacts are set forth in the Tier II ROD. The Tier II ROD obligates the Smithsonian and NCPC to monitor implementation of these mitigation measures to ensure compliance and requires the Smithsonian to submit an annual progress report to the NCPC, among others.

Notes that as a requirement of the Section 106 consultation and Programmatic Agreement the Smithsonian will consult with the District of Columbia State Historic Preservation Officer, National Capital Planning Commission, National Park Service, and the Advisory Council on Historic Preservation as well as other Consulting Parties as the design of the NMAAHC is refined in order to avoid, minimize, and mitigate adverse effects to historic properties.

Adopts the Record of Decision (ROD) for the NMAAHC Tier I and Tier II Final Environmental Impact Statements; signed by the Smithsonian on April 5, 2008 and October 19, 2011 respectively.

Approves the preliminary design, final Site Utility, and Support of Excavation, Excavation, and Dewatering plans for the National Museum of African American History and Culture (NMAAHC), at the corner of 15th Street and Constitution Avenue, Northwest Washington, DC as shown on NCPC Map File No 1.42(38.00)43445.

Commends the Smithsonian for addressing the Commission's concerns that have resulted in:

- Reductions in the size of the building, south entry porch, the north side water feature design, and the elimination of the west skylight.
- Conducting extensive public outreach and consultation during the development of the museum design.

Recommends that in the continued development of the site and building designs, the applicant consider the following:

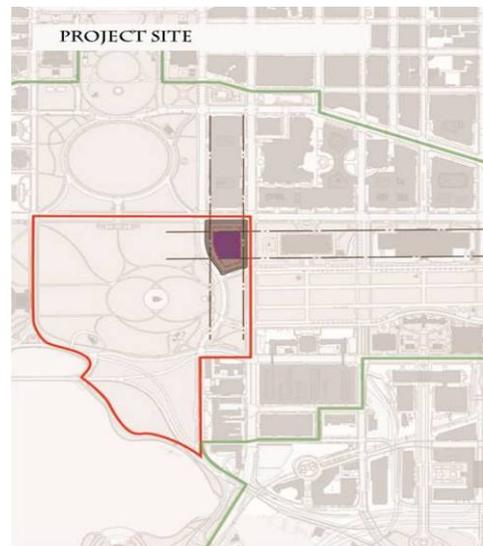
- **Refine** the food cart shelter and guard booth design in coordination with NCPC staff and other federal review agencies; and
- **Continue** coordination with the District Department of Transportation (DDOT) and the National Park Service (NPS) to assure that the 14th Street and 15th Street sidewalks are reopened to the public as soon as construction safety permits, and continue coordination on all other outstanding construction issues.

* * *

PROJECT DESCRIPTION

Site

The site is located on the National Mall at the end of a row of museums along Constitution Avenue NW and Madison Drive, NW between 14th and 15th Streets, NW. The specific site involves the northeastern corner of what was formerly the Washington Monument Grounds at Constitution Avenue and 15th Street NW. The site area is approximately 5.0 acres of property that currently serves as open space on the National Mall. The National Park Service transferred administrative jurisdiction of the property to the Smithsonian, effective June 1, 2007. Operation and maintenance of the site was transferred to the Smithsonian in September of 2011. The site will continue to serve as parkland until construction of the NMAAHC commences.



Background

Public Law 108-184 (December 2003) created the NMAAHC, and authorized the Smithsonian Institution Board of Regents to designate a museum site from four potential sites (narrowed from an initial twelve. After a site selection process that included recommendations from the Chairman of the National Capital Planning Commission and the Commission of Fine Arts, the Smithsonian's Board of Regents selected the Washington Monument site. Congress authorized the National Park Service to transfer land to the Smithsonian for the purpose of establishing a new NMAAHC. The Tier I Environmental Impact Statement states that based on "*The Time Has Come: Report to the President and Congress*" in 2003, the project is needed to "provide a national meeting place for all Americans to learn about the history and culture of African Americans; establish an Institution that can respond to the interests and needs of diverse racial

constituencies; and build a national venue that can serve as an educational healing space to further racial reconciliation.”

The museum will be dedicated to the collection, preservation, research, and exhibition of African American historical and cultural materials reflecting the breadth and depth of the experience of individuals of African descent living in the United States.

At its April 4, 2011 meeting, the Commission commented favorably on the revised concept design for the museum. At that time, the Smithsonian presented an updated version of the Refined Pavilion (now titled “Refined Pavilion 2”) as a favored alternative concept for the museum. This scheme showed a Corona of 220 feet total width, with a penthouse height of 129.5 feet above mean sea level, and overruns for mechanical and photovoltaic panels at 132 feet (msl). The Corona was set on a mounded landscape with the primary entrance and a projecting porch element on the south. The design also featured a skylight along the site’s western edge. Comments from the Commission encouraged the Smithsonian to study the porch, and how it would be viewed along the Mall. Commissioners asked that the scale of the porch be studied and possibly reduced. The Smithsonian was asked to consider ways of minimizing the size of the western skylight. NCPC also requested that the Smithsonian maintain or minimize the Corona width of 220 feet. In addition, the Smithsonian was asked to further study the geotechnical impacts of excavation on surrounding buildings and monuments, and for more detailed night lighting studies.

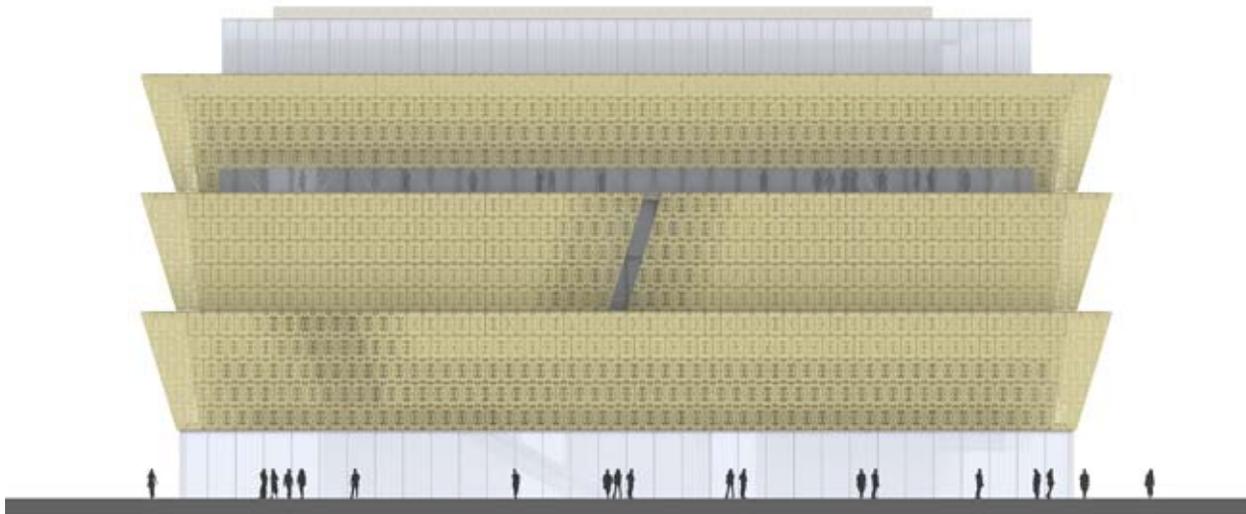
Proposal

The Preferred Alternative that has emerged since the April submission reflects comments and suggested direction provided by the Commission as well as the Agency staff and Consulting Parties. Studies of the materiality and light permeability of the corona skin are ongoing. Openings, or ‘Lens’, in the corona have been adjusted to frame selected views from the museum out to the landscape and beyond. The Corona is the building element which controls and filters light into the museum. Both visually and structurally, the Corona hovers above the ground floor.



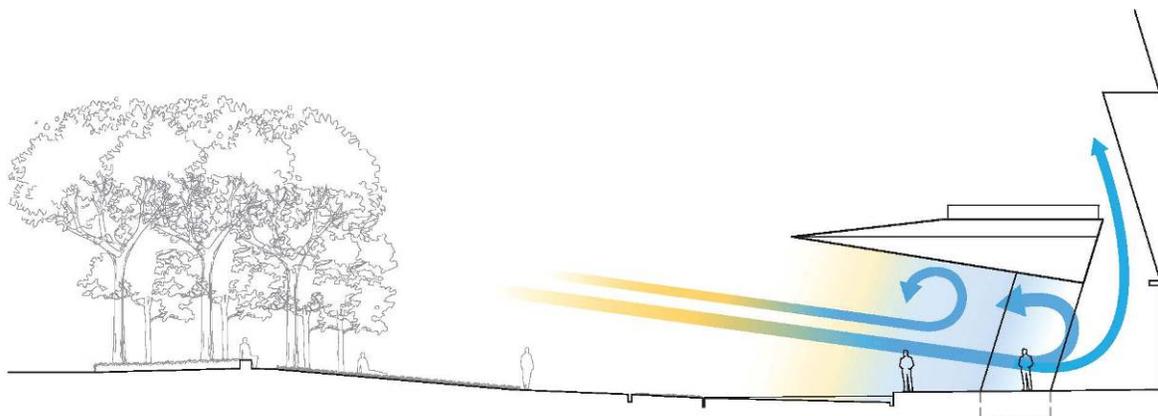
Preferred Alternative

The overall height of the building has been reduced in the Preferred Alternative to align with key elements of the Commerce Building to the north. The roof design has been modified to conceal the sawtooth skylight from ground level view. A parapet surrounds the sawtooth and roof top mechanical elements which will also be covered with an architectural louver.



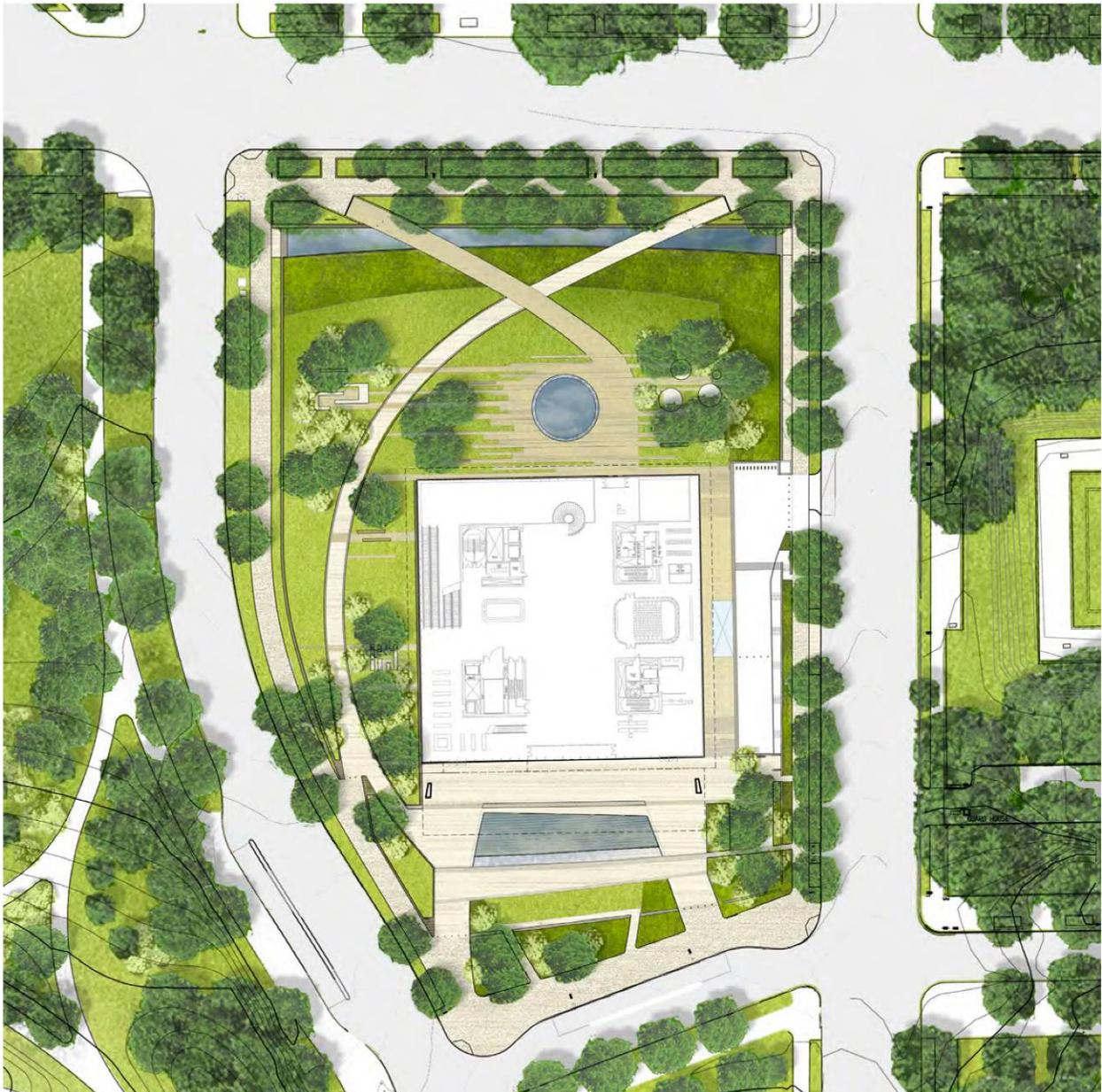
Preferred Alternative West Elevation

The design of the porch has been refined and strengthened, reinforcing the importance of this iconic building form. The footprint and massing of the two supporting legs of the porch have been minimized, allowing for clear, unobstructed views into and out of the building. The covered area continues to create a microclimate where breezes combine with the cooling waters to generate a place of refuge from the hot summer sun.



Preferred Alternative Microclimate Diagram

The landscape design situates the site within the larger context of the Mall as part of a composition that frames the Washington Monument. The building is well-integrated into the landscape with a series of curved walks and entrance plazas influenced by the landscape of the Washington Monument Grounds. Perimeter security continues to be well integrated into the landscape, and is being further refined to be as discreet as possible and blended into designed walls and seating areas.



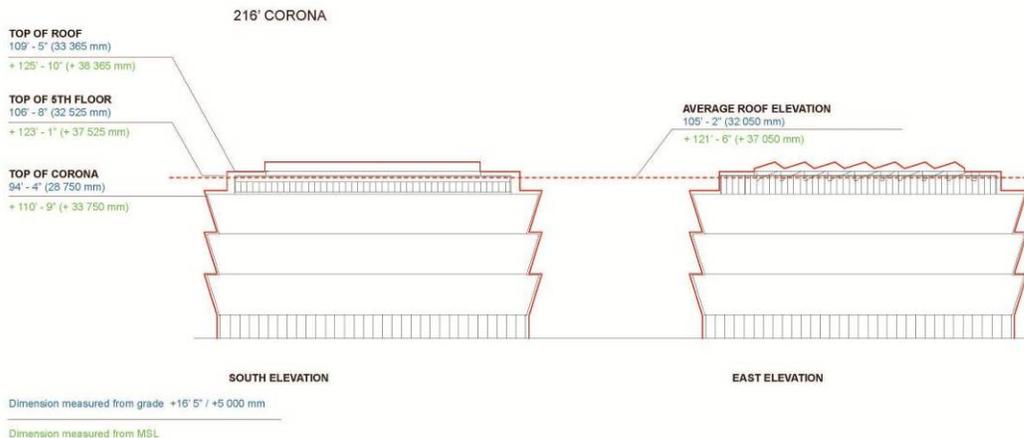
Preferred Alternative Landscape Design

Massing Development

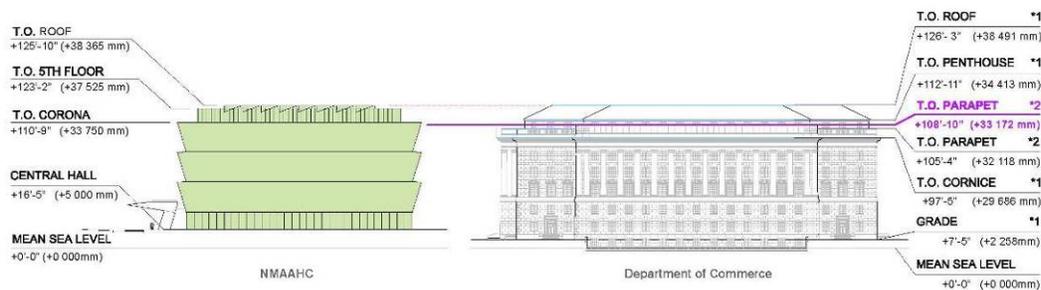
The building footprint has shifted only slightly in its location since the revised concept design, in response to subtle adjustments to the landscape, reductions to the Corona and porch dimensions, and to keep as open as possible a view from the Washington Monument Grounds towards the Federal Triangle. The mass of the Corona is set back an additional 19'-8" feet from the 445 foot setback established for building facades by the McMillan Commission in 1903. The size of the Corona is 216 feet on each side. This size is slightly smaller than the 220 feet submitted as part of the revised concept submission.

The height of the building has been limited to 125'-10" above mean sea level so as not to exceed the height of the Commerce Building at 126'-3"; across Constitution Avenue. The concept proposal of a sawtooth series of skylights to light the offices on the fifth floor has been modified to adjust to this height restriction. The roof of the fifth floor is designed as a simple patterned element of louvers that conceal elevator over-rides and mechanical equipment. This was achieved partly by using lower over-ride elevators servicing the fifth floor, terminating the taller elevators at the gallery floors, and suppressing the skylights into the roof so that they wouldn't be visible from major vistas.

The glass base of the Corona has been studied to pull the glass wall tighter into the composition to give the Corona a greater feeling of floating above a transparent base.



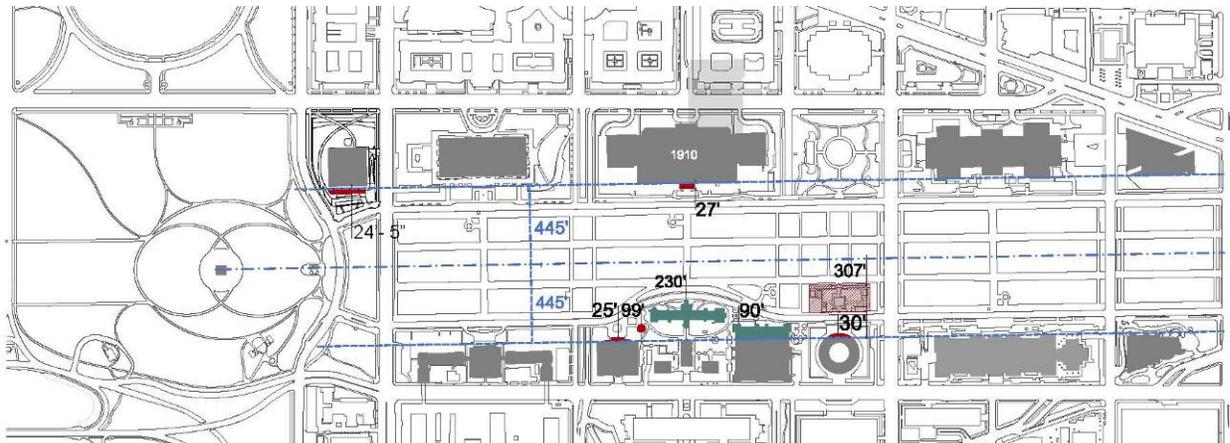
Massing Development



Massing Development with Context

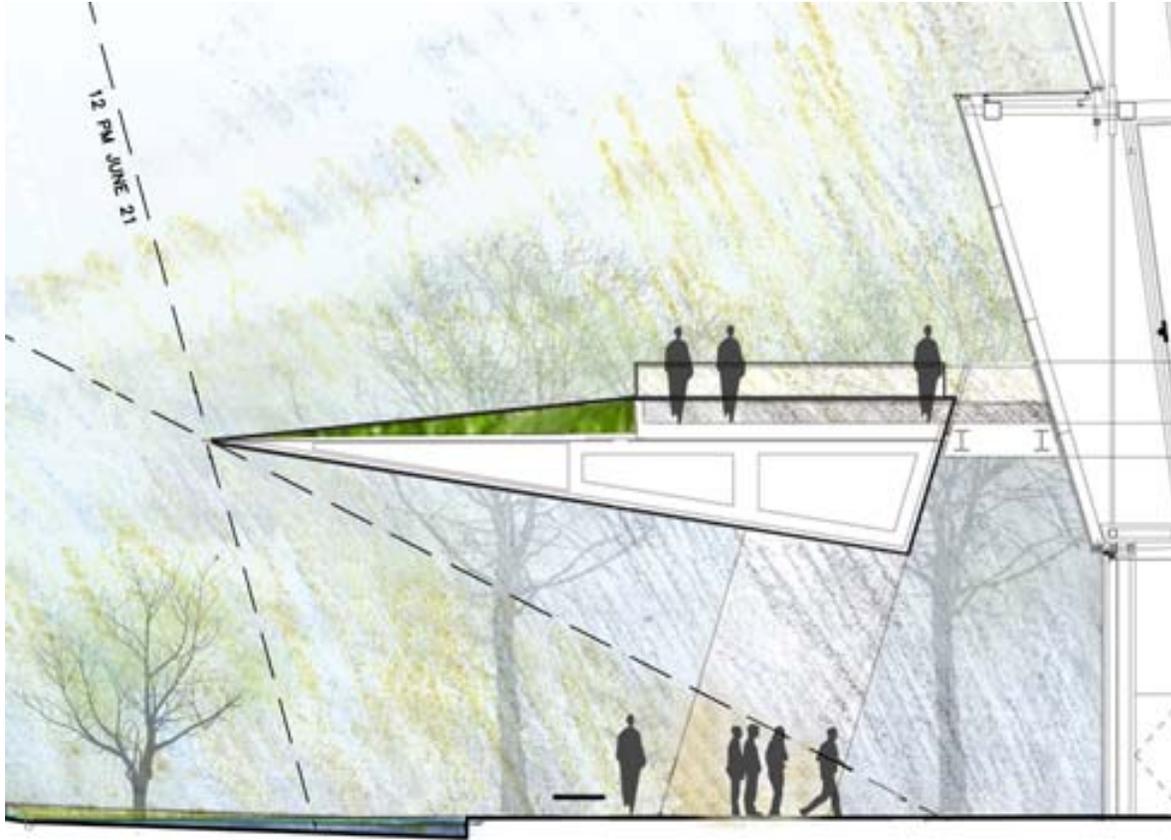
South Porch

The size of the south entrance canopy (porch) feature has been reduced over the last seven months in an effort to reduce the prominence of the feature and to pull it as far back from the 445 foot McMillan line as possible. The porch has been shortened by more than 20 feet in length so that it is not as wide as the Corona and reduced in depth by more than five feet for a dimension of approximately 200 feet by 44 feet. In March, this feature was 220 feet by 50 feet. This shortened depth also reduces the projection over the McMillan line to 24'-5", such that its outer edge is approximately two feet less than the projection of the National Museum of Natural History Portico beyond the setback line.



Porch Projection over the McMillan Line

The parapet edge of the public viewing area on the upper level of the porch is set at the line of the McMillan Plan, so when viewed from the Washington Monument, there is a distinction between the hard paved surface of the porch and the extended “green roof” of the overhang.



Extended "Green Roof" Overhang



Current Porch Perspective



Porch Development Comparison Perspectives

Landscape, Courtyards and Skylights

The landscape has been refined to remove the large skylight in the western edge of the site and to incorporate a number of reading groves and small group seating areas around the perimeter of the building. The removal of the skylight has necessitated some redistribution of space and the lower level cafeteria, which was to be lit by skylight, has been relocated to the east side of the building and will capture light from the eastern courtyard egress area.

The three water features have all been slightly modified. The rain garden element has been changed to an aquatic garden with the north side of the site redesigned to be more in keeping with formal aspects of Constitution Avenue. The vocabulary of the landscape now uses curbs and paving to define a year round water basin, in lieu of a marsh rain garden.



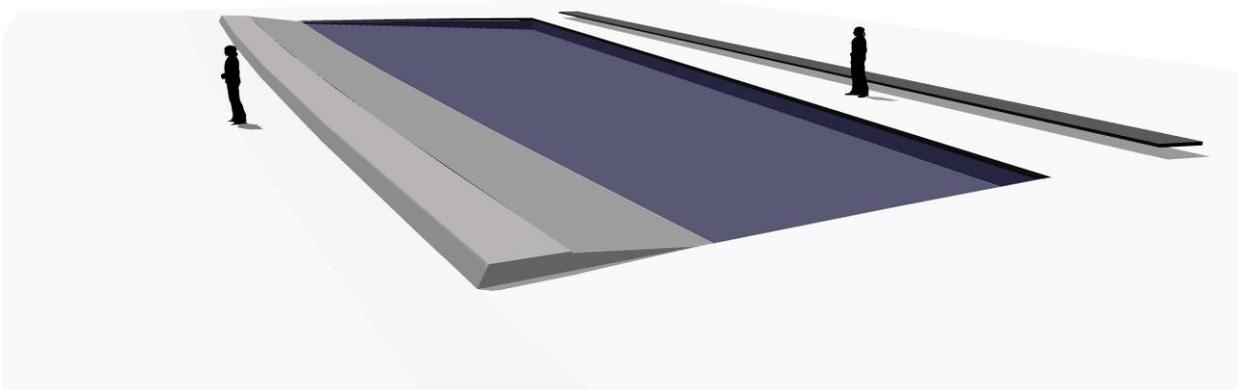
The North Landscape Aquatic Garden and Bridge

The oculus feature on the north side of the building has been pulled tighter to the entrance and serves as a welcoming feature to the museum from Constitution Avenue.



The North Landscape Oculus Feature

The south water feature now has raised edges which help with security as well as pedestrian safety. The south water feature will also contain references to African Americans in all walks of life. When the pool is drained in the winter, the base of the pool will contain excerpts from famous writers to add year around interest.



South Water Feature New Raised Edge



The South Landscape Water Feature

The cooling tower vault area on the east of the building may be removed entirely and could provide one of the areas for gathering and storytelling. The removal, or substantial reduction of this feature, is dependent upon the development of geothermal heating and/or shared systems from the National Museum of American History across 14th Street. This potential change is still in the feasibility study phase with appropriate agencies.

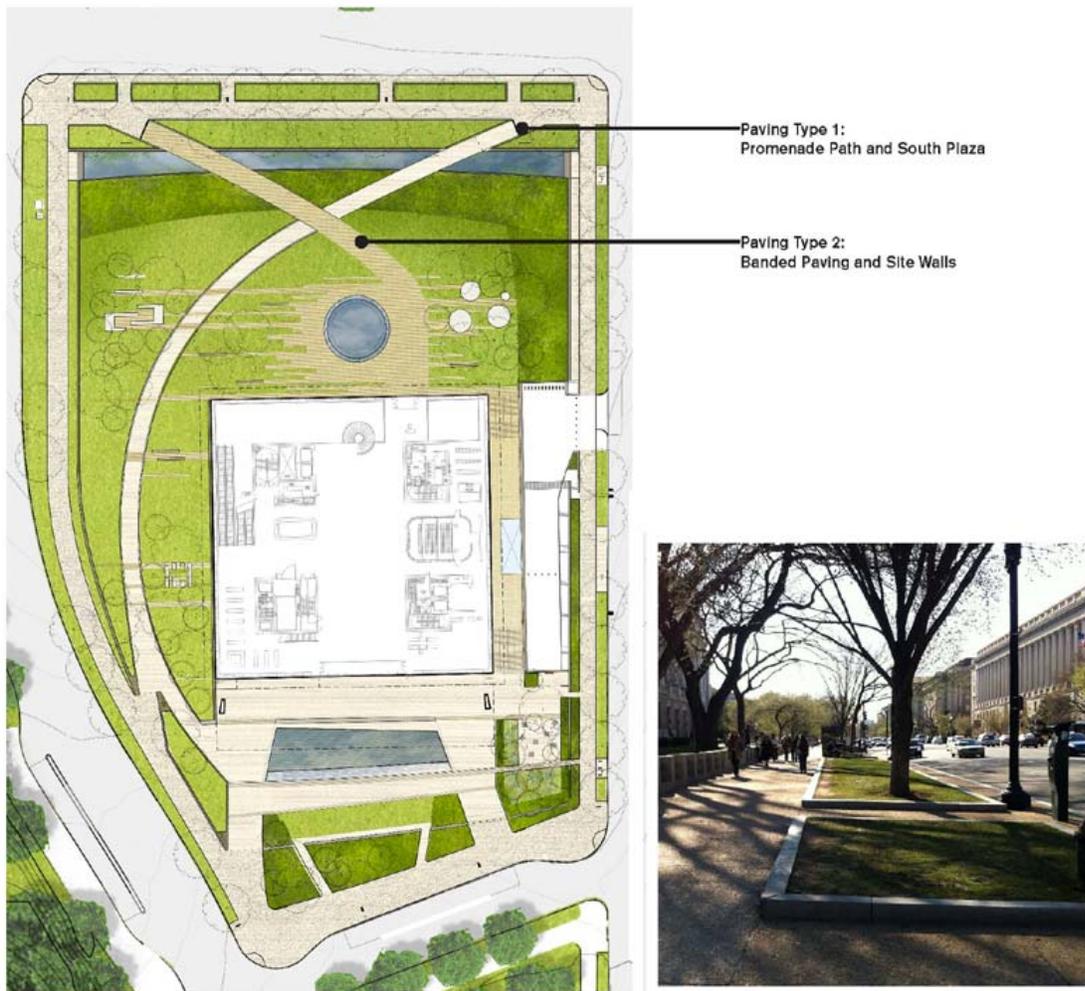
The paving and design at the south entrance, designed to accommodate the main flow of pedestrian traffic, will incorporate a visitor seating area to the east. The café concept introduced in earlier design alternatives has returned as perhaps a small seating area with a movable food cart, low scale planting, and small trees.



Seating Area and Movable Food Cart Shelter Concept

Designs are being developed that look at how the glass guard booth on the north end of the service drive and the security wall on the south end of the service drive might incorporate a small shelter to help house the café cart.

The paving materials for the site are being considered in the beige and brown pallet with recognition that bright materials under foot can also cause harsh glare. The material samples for the Corona are being considered in the golden bronze-colored family with research continuing on the feasibility of fabrication as die cut or laser cut for the detailed segments. The deeper the thickness of the panels, the richer the effect of light and shadow will be on the overall composition and design.

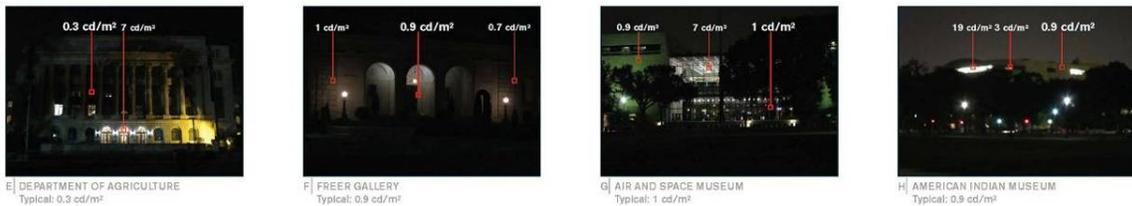
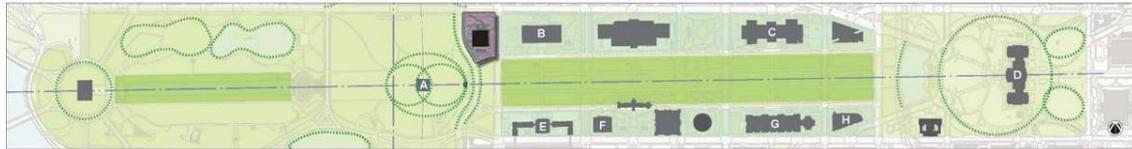


The sidewalks will match the exposed aggregate standard for the National Park Service. An experimental area of pervious pavement to match this standard will be tested in the temporary sidewalk to be maintained along Constitution Avenue during construction.

Night Lighting

Studies of comparative light levels along the Mall and how the building will appear during the evening and night time are currently underway with the intention to maintain a low level of lighting. This is being done not only to follow guidance on the lighting of buildings on the Mall to keep the Capitol, Washington Monument, and Lincoln Memorials as the primary iconic structures on the Mall, but also to meet LEED requirements for containing light on site. The studies will continue to look at ways to control office lighting with mechanical shades and timed lighting as well as to test for lighting levels glowing from the structure.

The Smithsonian performed a night survey of the Mall to record the applicable brightness levels and fully understand how the museum building would fit into this context. Luminance readings were made and concentrated on the typical and maximum brightness for each facade.



Mall Luminance Study

The lighting of the site will include lighting accented landscape features (benches, canopy underside and water features) as well as pedestrian scaled light poles to identify the promenade path. The lighted water features (Oculus, Aquatic Garden and South Plaza Reflecting Pool) are to be indirectly lighted with concealed light fixtures to provide destinations in the landscape.

The Porch underside is to be softly lighted with low brightness, architecturally integrated light fixtures to be well shielded for the visitor while highlighting the main building entry both directly and as a reflected feature in the pool. This continuously lighted surface will contrast nicely with the mottled façade of the building.



CORONA PANEL MOCK UP (Approx. 42% transmittance)

FACADE REFERENCE IMAGES



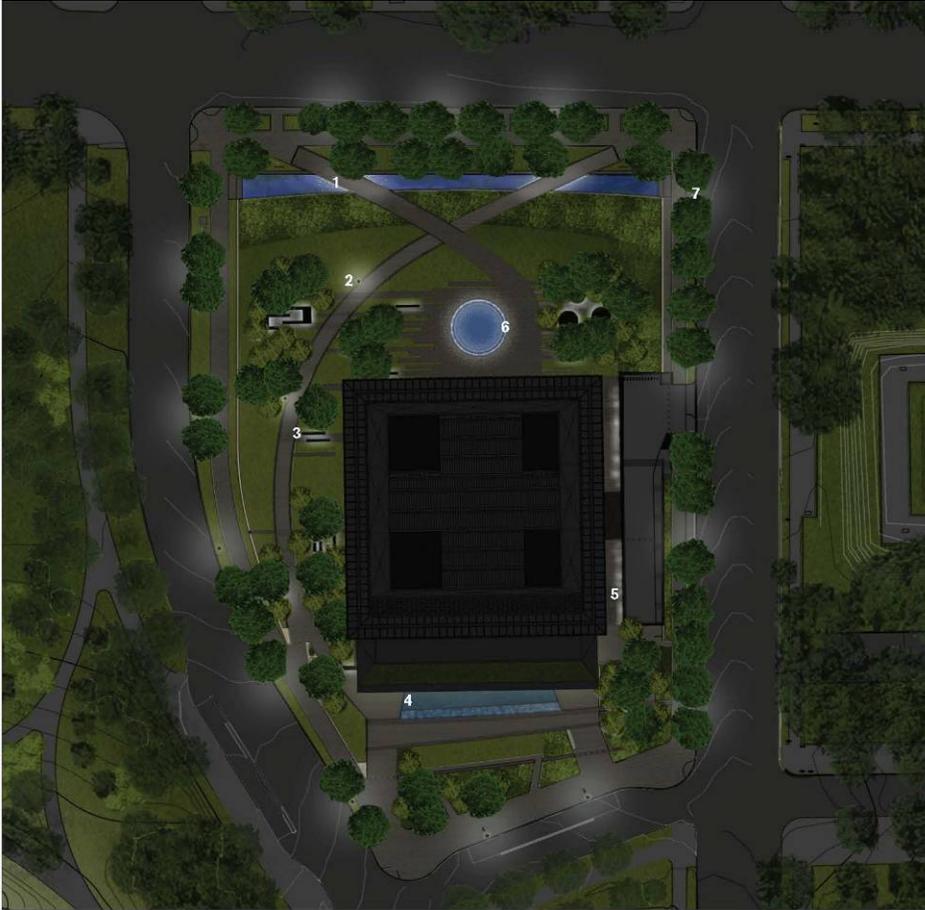
AMERICAN INDIAN MUSEUM



ENVIRONMENTAL PROTECTION AGENCY



Panel Detail Luminance Study

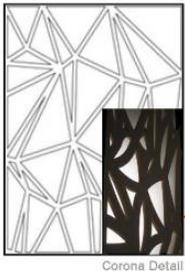


Lighted Water Features

All light fixtures take into consideration the sustainability and maintenance goals of the project. The building's night appearance is intended to achieve the following goals:

1. "Be a good neighbor", being consistent with other buildings on the Mall while not competing with major landmarks such as the Washington Monument.
2. Provide a link to, but contrast with, the museum's daytime appearance.
3. Support the building's role as a center of life and activity.
4. Meet the sustainability goals of the project.

Long life, high color rendering sources shall be maintenance friendly and promote greater appreciation of the museum's night time environment.

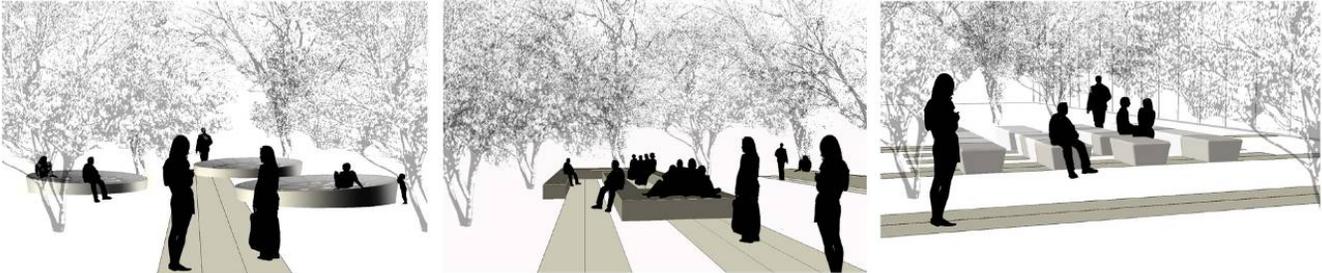


Lighting Intent and Character

Reading Areas

Landscape is the design element that has evolved the most since the April submission. Within the museum landscape there are several ‘Reading Groves’ that are spaces for small to medium groups to gather, and for the museum to use as spaces for teaching or storytelling.

The Reading Groves are comprised of sculpted stone benches that relate to themes that have been defined by the Museum: Spirituality, Hope and Optimism, and Resiliency.



Reading Areas Spirituality, Hope and Optimism, and Resiliency

East Courtyard- Egress / 14th Street Edge

The 14th Street edge of the site has been further developed to provide welcoming design elements on the east side of the site. Two elements anchor the north and south ends of the loading dock and integrate it into the overall site design. At the north end, a Guard House borders the edge of the loading dock. It is integrated into the landform and its back wall frames an area for bicycle racks at the top of the ramp.

The south end of the loading dock is flanked by a small pavilion which will house a food cart. Both elements are joined by the wall between the loading dock and the egress court so that they form a balanced composition and present a unified façade on 14th Street that is integrated with the perimeter security walls.

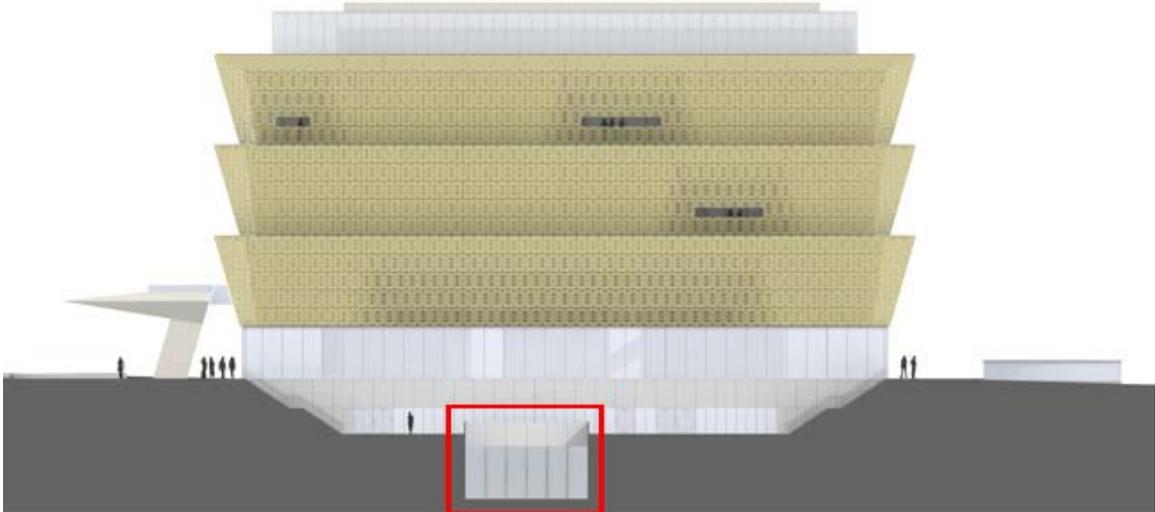
Adjacent to the small pavilion, a garden seating area has been integrated into the landscape to provide flexible seating for visitors. Movable chairs and tables will be located within a small shaded plaza that is framed by textured perennial plantings. Bands of paving connect this space to the main area of the South Plaza and to the 14th Street sidewalk.



14th Street Edge

Light Well

Light wells and skylights that were part of the landscape on the western side of the site have been eliminated. Now the landscape on the western side is compatible with the naturalistic and curvilinear characteristics of the Washington Monument Grounds. The functional requirements of an egress on the eastern side have been developed to provide natural light into the mezzanine level and cafeteria located on the concourse level. A secondary light well was introduced within the egress court. Glazed on three sides and open to the sky, it is a source of natural light for the restaurant space on the concourse level below.



Egress Court Light Wells

Materials

The material palette for the landscape will be made up of warm tones and complements the tone of the Corona and of the existing sidewalks. There will be two different types of stone for paving: a base stone color for the south plaza and promenade, and an accent color for the plaza around the oculus and related paving bands. The marble clad reading grove benches will contrast with the subdued pavers. Sidewalks will use the exposed aggregate paving or permeable paving that matches the standard National Park Service concrete sidewalks.



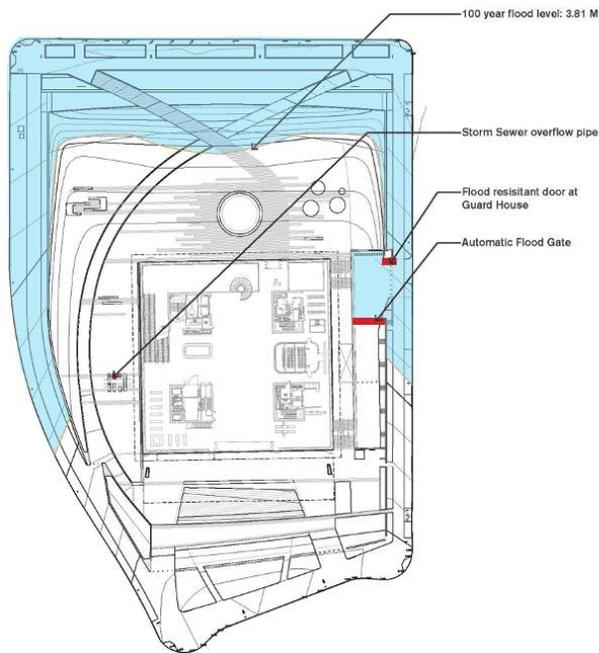
Material Sample Board

Flood Control

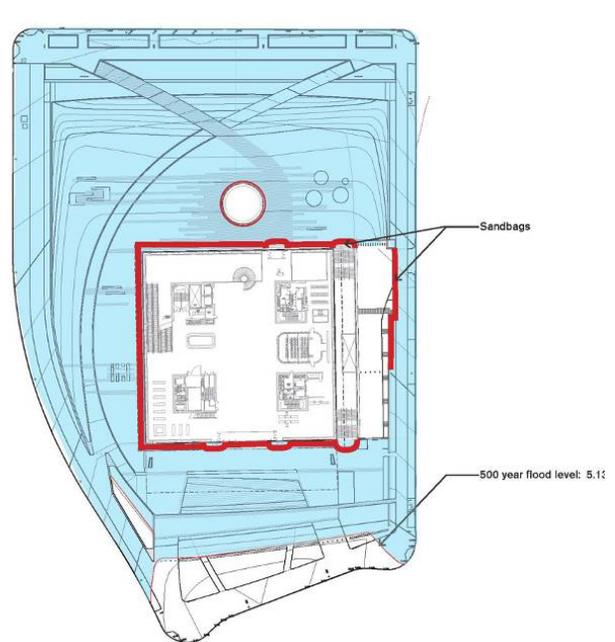
The site can be impacted by both the 100 year and 500 year floods. There are two different flood control measures for each storm event. For the 100 year flood there will be an automatic flood gate at the loading dock. The guard house will be designed to be flood resistant. For the 500 year flood, sandbags will be used around the base of the building and at the top of the egress court stairs. Manually-installed panels will be used along the edge of the loading dock. The oculus clerestory glazing will be designed to be waterproof against the 500 year flood event.



100 Year Flood Automatic Flood Gate



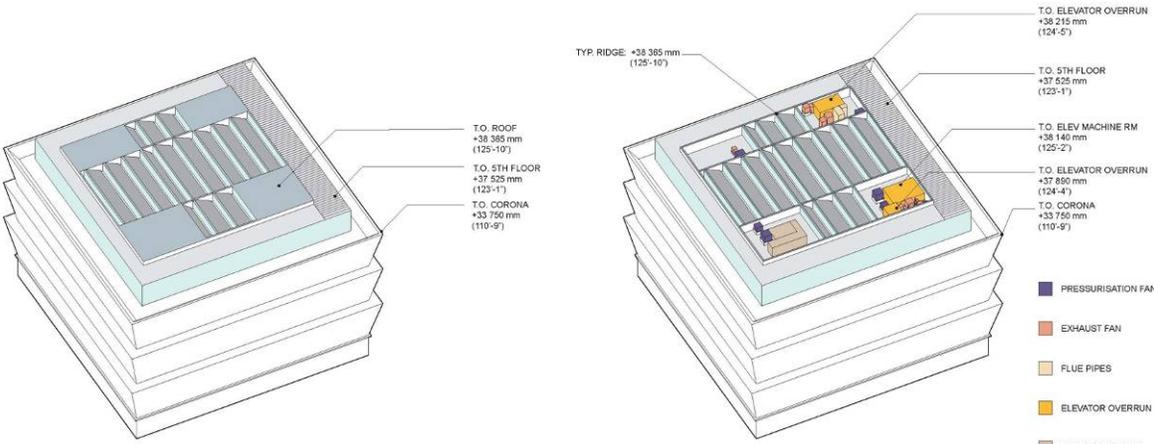
100 Year Flood Solution



500 Year Flood Solution

Roof Design

The overall height of the building has been reduced to align with key elements of the Commerce Building to the north. The top of NMAAHC is 125' - 10" above mean sea level, which is 5" below the height of the Commerce Building. The top of the corona is 110'-9"amsl, which is 1' - 11" above the Commerce Building parapet. The roof design has been modified to conceal the sawtooth skylight from ground level view. A parapet surrounds the sawtooth and roof top mechanical elements which will also be covered with an architectural louver.



Sawtooth Solar Panels and Mechanical Elements

South Water Feature Inscriptions

The south entry is composed of the Porch, a central water feature and a sloped lawn and hedge area that form the edge of the Madison Street sidewalk.

Overlaid onto this entry sequence will be inscriptions that establish a stronger connection to the content of the museum. While the exact content and layout of these inscriptions still needs to be worked out, the design of the water feature has been modified to accommodate them into the basin. The south edge of the water feature has been lifted to provide a tilted surface facing the museum, where the text will be easily legible from the porch. This change also has the added benefit of providing a seating edge along the south side of the water feature.



Inscriptions Concept

Final Site Utilities

The Smithsonian is requesting final approval for the site utility package. Early site utility work has already begun for the museum project. Washington Gas in cooperation with the Smithsonian completed a gas line relocation over the summer. The Smithsonian has also completed test pile driving with positive results, which are needed to monitor impacts of pile driving on surrounding structures and to finalize the project's foundation design. A monitoring plan has been included as a part of this submission. Facility representatives of adjacent buildings including the Department of Commerce, the EPA, the Washington Monument and the National Museum of American History have participated in developing the monitoring plan.

The site utility work includes direct borings under 14th street related to condenser water, internal data, and telecommunications from the NMAAHC project site to the National Museum of American History (NMAH). No excavation or closing of streets will be required for that work. There is also an 1890's water main within the 14th Street right-of-way that will be replaced. This work is scheduled to occur only at night hours. The parking lane of south bound 14th Street will be closed after the evening rush hour and opened again before the morning rush hour. Steel plates will be placed over the trench each morning to allow traffic to flow normally.

Additionally, there will be work at the intersections of 14th and 15th Streets with Constitution Avenue that will also be performed only during night hours, and plated over for the morning rush hour. All other utility work will be performed within the curb lines of the site and protected by the site fence.

Utility work is scheduled to begin immediately following the November 2011 NCPC commission meeting, contingent upon approval by the Commission.

Final Support of Excavation, Excavation, and Dewatering

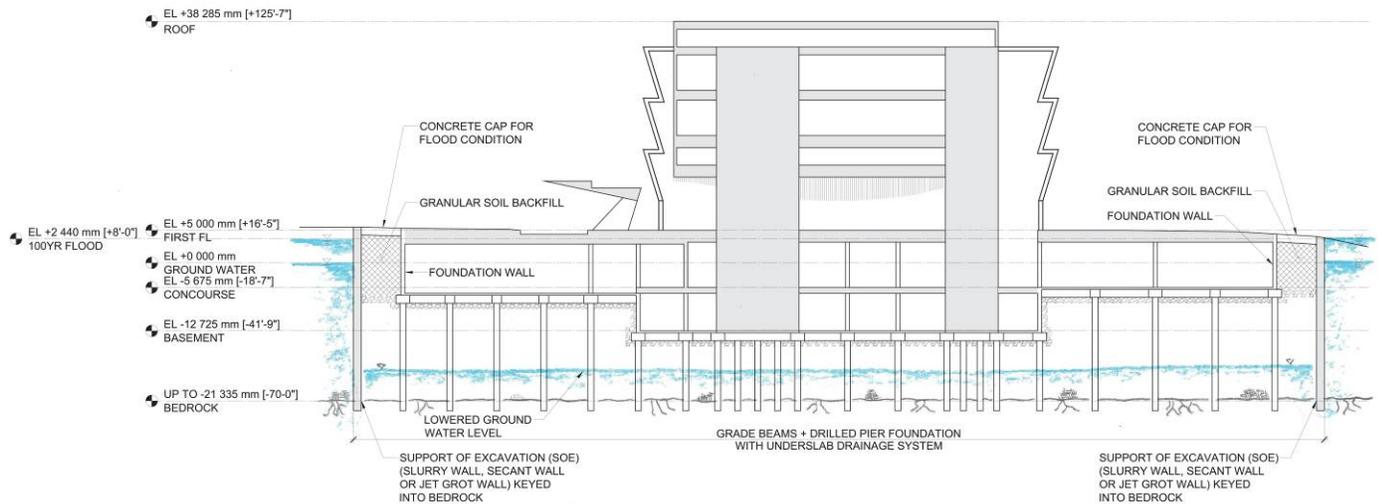
The Smithsonian is also seeking the Commission’s final approval for Support of Excavation (SOE), Excavation, and Dewatering plans. This work will include construction of a slurry wall along the perimeter of the site. The work for the SOE is currently scheduled to start in mid-February, and run for approximately one year. The schedule and completion of this activity is affected by weather conditions, and could go on longer.

The SOE would be a six foot wide 100 foot deep trench that would be filled with concrete, and wrap the perimeter of the site. The SOE will serve as a dam during the excavation. The Tier I EIS describes the depth of excavation not exceeding 45'. The ROD now describes excavation below that level; however there would not be an effect due to the isolation of the excavation by the SOE wall.

Because the SOE is located along the perimeter, its construction will not preclude further design development. As identified in the diagrams below the foundation wall will be between 5 and 8 feet from the slurry wall.



Support of Excavation and Foundation Wall Relationship



Support of Excavation and Foundation Section

PROJECT ANALYSIS

The staff recommends that the preliminary design, final site utilities, and final SOE be approved by the Commission, with recommendations. Staff finds that the building massing elements that have emerged reflect the comments and suggested direction provided by the Commission as well as the agency staff. Night lighting studies follow the guidance on the lighting of buildings on the National Mall to keep the Capitol, Washington Monument, and Lincoln Memorial as the primary iconic structures on the Mall.

Since the previous submission of the Refined Pavilion Alternative 2, the design has been further developed and refined. The floor plans include a higher level of detail and reinforce the original design intent. The vertical core elements have been sized and configured to reinforce the original idea of the 'four pillars' of the museum, developed by the museum staff. The cores are now uniform in size and are positioned in plan to enhance and frame views outward from the great hall on the ground level.

Structurally, the cores also provide the primary load-bearing support for the gallery floors and roof above. This approach also allows for clear spans in the primary galleries, unobstructed by a grid of columns. The cores house the museum elevators, exit stairs, restrooms, mechanical shafts, and other support spaces.

With over 60% of the building placed underground, the Smithsonian has continued to develop strategies to incorporate natural light into the lower levels of the museum.

Above grade, the Corona itself becomes the building element which controls and filters light into the museum. Both visually and structurally, the Corona hovers above the ground floor. This is accomplished by a system of trusses at the fifth level which support a series of vertical hangers

and steel mullions holding the glazing and Corona cladding in place from above. The result is a clear glass wall at the ground level which affords open views and light in and around the great hall. The glass base is setback from the vertical plane of the Corona by 7". This offset reinforces the Corona as the primary building element.

The Corona proper begins 18 feet above the ground as the angled bronze panels reach upward. A sophisticated pattern of pre-formed openings provide a range of light permeability that controls both heat gain and views into and from the building. The varying porosity of the Corona skin generates filigree which filters views while creating a luminosity that changes during the day and into the evening hours.

Most recently, openings or 'windows' in the Corona have been incorporated. From the early concept stage, 'lenses' or framed openings have been contemplated as a vehicle for privileging critical views from the museum out into the Washington, DC landscape. By strategically locating and sizing openings in the Corona skin, the museum responds to its historic surroundings and the building is enhanced by these new elements in the façade.

The porch is another facet of the building which has evolved since the prior submittal. While the design of the porch element still projects into the historic McMillan setback, the occupiable area has been reduced to respect the historic setback; this reduction is an acceptable solution. The remaining area of porch roof will be planted with indigenous drought resistant plants to mimic the lawn of the Mall. The overall size of the porch has been reduced close to 20% in area to 44 feet by 200 feet and the porch is now aligned with the glass base of the corona. The streamlined proportions are a marked improvement over the prior scheme.

Other elements on the south and east sides of the site have been added. The food cart shelter and guard booth design require continued coordination with NCPC. The Smithsonian should also continue coordination with DDOT and the (NPS) to assure that the 14th Street and 15th Street sidewalks are reopened as soon as safety permits.

CONFORMANCE

Comprehensive Plan for the National Capital

The project is in conformance with the Comprehensive Plan, in particular the Visitors Element. Visitors often come to the National Capital Region to enjoy the many national symbols and memorials and to educate them about American culture. They come to commemorate important public events, to petition their elected government officials, to conduct business and to do research. The nation's capital averages almost 20 million domestic and international visitors each year and consistently rates as one of the nation's most popular tourist destinations. Visitors to the region are particularly interested in the major federal visitor attractions located along the National Mall that tell the story of American history, hold invaluable artifacts and display the artistic, technological, and scientific achievements of our society. In 2002, the Smithsonian recorded 24 million visits which included visitors who live in the area and from outside the region.

The federal government recognizes the importance of the monumental core and the National Mall as the center of national government and a symbol of national pride whose historic open space and urban design qualities should be protected for future generations.

The NMAAHC seeks to recognize this important site by creating an efficient building helping the Smithsonian to reduce the size and visual impact of the new museum and adding a new symbol of national pride to the National Mall.

Federal Capital Improvements Plan (FCIP)

The applicant's submitted project is identified in the Commission's FCIP report, Fiscal Years 2010-2015. Funding for the total project cost of \$500 million will be shared equally as a public/private partnership. Through FY11, Congress has provided \$45 million.

National Environmental Policy Act (NEPA)

NCPC's Environmental and Historic Preservation Policies and Procedures require completion of the NEPA process at the preliminary design stage. In compliance with this requirement, NCPC and the Smithsonian have completed a two-tiered Environmental Impact Statement (EIS). The tiered EIS complies with the requirements of NEPA and the Council on Environmental Quality (CEQ) regulations implementing NEPA. NCPC served as the responsible federal agency and joint lead with the Smithsonian in the preparation of the EIS, and the National Park Service (NPS) served as a cooperating agency.

Following consultation with the CEQ, the NCPC and the Smithsonian decided to tier the EIS process (40 CFR parts 1502.20 and 1508.28) to address initial programmatic issues and specific design issues, respectively. The Tier I EIS was completed with a Tier I Final EIS (FEIS) issued on June 27, 2008 and a Smithsonian Record of decision (ROD) issued on August 8, 2008.

The Tier I FEIS analyzed a "no build" alternative along with six diagrammatic massing alternatives on the site. These alternatives represented a variety of potential design approaches and were developed prior to the Smithsonian's design competition leading to the selection of an architect for the project in April 2009. These conceptual alternatives addressed context, siting and mass, orientation, form, exterior spaces, and profiles. The Tier I FEIS concluded that the Build Alternatives all had comparable effects on the majority of resources analyzed.

This highlighted the need to develop more detailed architectural designs in order to fully assess the impacts of the NMAAHC on cultural and visual/aesthetic resources as part of the second tier of the NEPA process. Therefore, the Smithsonian chose to express the Tier I Preferred Alternative as a set of physical parameters related to heights, setbacks, and configuration. The physical parameters recommended a Smithsonian Preferred Alternative of about 350,000 – 450,000 gross square feet (GSF) that was bounded between 60 and 105 feet in height (above grade), a minimum 50 foot setback from the inside face of the sidewalk of the surrounding streets; and a subsurface volume not lower than 45 feet. The massing parameters ranged from orthogonal and contextual, to free-form and non-contextual.

In addition to the physical parameters, the Smithsonian developed a set of design principles to help the design architects minimize adverse effects on historic resources. The principles spoke to the importance of relating to and respecting the character, views, and spatial arrangements of the National Mall; the character, scale, and historic context of the Washington Monument Grounds; and the relationship of the NMAAHC to adjacent architectural and urban contexts. The Smithsonian has worked closely with NCPC, CFA, NPS, DC HPO, and DC Office of Planning to adhere to the design principles throughout the NEPA process.

The Tier II FEIS focused on and refined the Preferred Alternative known as the Refined Pavilion 2. It addressed the short-term construction-related impacts, long-term operational impacts, and cumulative impacts that would result from the Smithsonian's implementation of the Refined Pavilion 2 concept. The Tier II FEIS was made available for public comment for a 30 day period on August 18, 2011.

The Refined Pavilion 2 evolved from a refinement of the Pavilion and Refined Pavilion alternatives. The Refined Pavilion 2 incorporates a more refined design of the Corona, including the pattern of the openings in its exterior enclosure to relate to both the internal public spaces as well as to views of the Washington Monument.

The museum landscape has similarly evolved from that of the Pavilion, and Refined Pavilion alternatives. On the north and west, its rolling topography is more subtle, relating better to that of the Washington Monument Grounds and improving views of the monument for those approaching from the northeast. Along the south side, the landscape design has been simplified in keeping with its location within the larger National Mall landscape.

The Tier II ROD documents the decision by NCPC and the Smithsonian to implement the Refined Pavilion 2. Within this decision all practicable means to avoid or minimize environmental harm have been adopted; however, certain impacts remain unavoidable. The ROD incorporates more than 50 mitigation measures for identified impacts relating to the full range of man-made and natural resources. The Smithsonian will monitor the implementation of these mitigation measures to ensure they are carried out via an annual mitigation progress report that will be prepared and submitted to appropriate parties, including NCPC, NPS, and other agencies.

The findings in the NMAAHC Tier II FEIS and the decisions of the ROD are based in part upon the extensive Section 106 consultation process, an open and collaborative public engagement process, and consultation with commissions and other agencies including the NCPC, CFA, NPS, DC HPO, DC Planning and DC DOT.

National Historic Preservation Act (NHPA)

The Smithsonian led the Section 106 consultation process under NHPA for the design and construction of NMAAHC. Through this consultation with the District of Columbia State Historic Preservation Officer and other consulting parties the Smithsonian determined that the construction of the NMAAHC would have an adverse effect on historic properties, most notably on the view to and from the Washington Monument and Federal Triangle. Consulting parties included: NCPC, CFA, NPS, General Services Administration, Advisory Council on Historic

Preservation, National Trust for Historic Preservation, DC Preservation League, National Coalition to Save Our Mall, Committee of 100 on the Federal City, U.S. Capitol Historical Society, Afro American Historical and Genealogical Society, and Association for the Study of African American Life and History. NCPC fulfilled its Section 106 responsibilities by participating in the Section 106 consultation and has taken into account the effects of its approval action on historic properties.

Through the Section 106 consultation, the Smithsonian defined an Area of Potential Effect which included the National Mall, the Washington Monument Grounds, the White House and Ellipse, West Potomac Park, the Federal Triangle, views and vistas associated with the L'Enfant Plan, and properties individually listed in the National Register of Historic Places and as National Historic Landmarks. As part of the Section 106 process, the Smithsonian considered the comments of Consulting Parties and the public in order to avoid, minimize, and mitigate adverse effects on historic properties.

As a result of the Section 106 review process, the Smithsonian executed a Programmatic Agreement (PA) with the DC SHPO, NCPC, NPS, and the Advisory Council on Historic Preservation. The PA described the minimization efforts undertaken to reduce the adverse effects of the design and construction of NMAAHC and to enhance views to and from the Washington Monument and Federal Triangle. Mitigation measures included the monitoring of adjacent historic properties during construction of the building, tree planting on the Washington Monument Grounds, additional National Register documentation on the Washington Monument Grounds as well as the Bulfinch gate posts and National Mall, Historic American Building Survey/Historic American Landscape Survey of the site prior to construction, and a National Register nomination for the Horatio Greenough statue of George Washington.

The PA also outlines the process by which Section 106 consultation will continue as the design is refined. Topics to be addressed in on-going consultation include the design of the porch element, the design of the rain garden, possible ways to reduce the massing and footprint of the building, the effects of extending any museum element beyond the 445-foot setback line, the design of proposed skylights, the review of site furnishings associated with regularly programmed outdoor spaces, the selection of building and landscape materials, the installation of exterior artwork, the design of the exterior guard booth and outdoor food service area, installation of exterior lighting and effects of night lighting, and other construction related activities or other alterations that may have the potential to constitute a previously unidentified adverse effect or intensify a previously identified adverse effect. The Smithsonian will also convene annual or biannual meetings to update the Signatories of the PA and Consulting Parties on the status of the design and construction of NMAAHC and compliance with the PA.

CONSULTATION

Coordinating Committee

The Coordinating Committee reviewed the proposal at its October 12, 2011 meeting, and forwarded the proposal to the Commission with the statement that the proposal has been

coordinated with all participating agencies except NCPC and the District of Columbia Office of Planning. The representative for NCPC withheld coordination pending the outcome of a meeting with the District Department of Transportation. The representative for the District of Columbia Office of Planning noted an unresolved land transfer issue. The participating agencies were the General Services Administration, the National Park Service, and the Washington Metropolitan Area Transit Authority.

Note: Subsequent to the October 12, 2011 Coordinating Committee meeting; representatives for NCPC have met with the District Department of Transportation and the Smithsonian to resolve the outstanding land transfer issue.

Commission of Fine Arts

The Commission of Fine Arts favorably reviewed the Smithsonian NMAAHC revised concept design at its meeting on October 20, 2011.