3.4 VISUAL RESOURCES

3.4.1 What are the visual characteristics of the Project Site and how does it relate to the surrounding area?

The visual character of the site and its surrounding urban context were documented within the Tier I Final EIS (Smithsonian Institution, 2008a). The following discussion both summarizes and supplements that analysis.

Visual Character of the Site

The NMAAHC site is located on the northeast corner of the Washington Monument Grounds and within the National Mall, just west of the NMAH. It is bordered on four sides by streets: Constitution Avenue to the north and 14th Street to the east are major urban thoroughfares that follow the rectilinear city grid; 15th Street to the west and Madison Drive to the south carry lighter volumes and deviate from the grid, with Madison Drive angling slightly to the south, and 15th Street curving to the east. Sidewalks visually divide the vehicular rights-of-way from the open space, and two gently curving paths bisect the northern portion of the site. A double row of elm trees runs along the northern edge of the site and another grove of trees fills the northeast corner. The balance of the site is grassy lawn. A temporary concessionaire's trailer is located at the south end of the site along Madison Drive.

Urban Design/Architectural Context

The NMAAHC site is positioned at the convergence of three distinct urban districts: the Washington Monument Grounds, the National Mall, and the Federal Triangle. The Washington Monument Grounds, which encompass the project site and parcels to the south, southwest, and west, is an expanse of rolling lawn that rises slightly, culminating in the Washington Monument. The Grounds are bordered on the north, west, and south sides by mature trees, and the lawns are bisected by a series of curving paths that lead towards or encircle the Washington Monument.

Envisioned by L'Enfant, and then reinforced and extended by the McMillan Commission, the National Mall and adjacent open spaces visually stretch west from the U.S. Capitol Building to the Potomac River, and north from the Jefferson Memorial to the White House. Its strong east-west axial alignment provides a formal landscaped setting for many of the city's memorials and museums. The central lawn is defined by rows of American elms and a series of museums that line its north and south sides between 2nd and 14th Streets.

The Federal Triangle, located north and northeast of the site, is an area of monumental, classically inspired federal buildings on tightly defined urban parcels. The NMAAHC site can be considered a "hinge" between these three districts.
The NMAAHC site is defined in part by the setback and alignments of the buildings that surround it. NMAH sits back 160 feet from the curblines on Constitution Avenue and on Madison Drive, and the south face of the building is set back approximately 505 feet from the centerline of the National Mall. The NMNH, National Gallery, and the East Wing of the National Gallery share a common setback on their south sides, each being located 445 feet from the centerline of the National Mall. As a result, the viewshed looking west along the National Mall widens as one approaches the Washington Monument Grounds. The Herbert C. Hoover building sits back 160 feet from the curbline on Constitution Avenue, 85 feet on 14th Street, and 35 feet on 15th Street (Google, Inc., 2010). The structures surrounding the NMAAHC site are unified through a common centerline that runs east-west through the buildings on the north side of the National Mall, a minimum setback of 445’ from the centerline of the National Mall, and reciprocal physical relationships between the museums on the north side of the National Mall, and their counterparts on the National Mall’s south side.

The buildings and structures surrounding the NMAAHC site vary somewhat in massing, height, materials, and style. While the form of the NMAH east of the site is rectangular and “blocky,” the Smithsonian Institution Building to the southeast is irregular in form with strong vertical elements. The building materials employed in the immediate vicinity of the site are diverse, but are uniformly light colored, non-reflective natural stones. Architectural styles vary from Classical Revival forms within the Federal Triangle, to the classically inspired, modern form of NMAH. Finally, adjacent building elevations measured from sea level to the peak of roofs vary from 108 feet at the U.S. Treasury building, to 152 feet at the Herbert C. Hoover building (see Figure 3.4.1).

**Key Urban Viewsheds**

Views and vistas are defining elements of the L’Enfant and McMillan plans for the city of Washington. Designed views are afforded along north-south and east-west rights-of-way, diagonal avenues, and the major cross axes of the National Mall. While the views along rights-of-way are tightly defined, those along the open space of the National Mall are expansive. In addition to the designed axial views, there are non-cardinal views between buildings, monuments, and open spaces within the monumental core.

**Night Illumination**

While there is no established hierarchy for lighting the monumental core, the U.S. Capitol Building, Washington Monument, Lincoln Memorial, White House, and Jefferson Memorial visually dominate the city at night (NPS, 2010). The Washington Monument is lit from its base, while each of the other four structures has both internal and external lighting. Directly north of the NMAAHC site, the south façade of the Herbert C. Hoover building is evenly lit by lights placed near the base of the building angled up. In addition, streetlights line Constitution Avenue. East of the site, NMAH is lit with a gentle yellow-white light within the vertical window wells on 14th Street and Constitution Avenue, at the pedestrian ramps, and at the glass entrance. Northeast of the site, the building that houses the EPA Headquarters and Mellon Auditorium is lit by a series of large lanterns along its south face. South from the NMAAHC site across the National Mall, the light from the U.S. Department of Agriculture building is similar in intensity to the Herbert C. Hoover building. Currently, the NMAAHC site is generally dark, with gentle lighting at the edges of the site. Views west along the axis of the National Mall culminate at the dramatically lit Washington Monument.
Building Heights

Building height information collected from Google Earth, May 2010.

EXISTING

Source: AECOM, 2010
3.4.2 How are impacts to Visual Resources assessed?

As documented in the NMAAHC Tier I EIS, the impacts of the proposed action on visual resources include both short-term and long-term impacts. Short-term impacts would result from visual disruptions due to construction activities. Long-term impacts would result from obstructed or altered views to and from the NMAAHC site; the visual compatibility of the proposed action with its existing visual environment and other proposed projects; and the loss or creation of unique visual or aesthetic elements (Smithsonian Institution, 2008a).

The thresholds used for assessing the intensity of impacts in this Tier II analysis are as follows:

**No Effect:** The proposed action would not impact the visual environment or surrounding urban context.

**No Significant Effect or Minor Effects:** The effects would not be significant if the proposed action would not substantially change the viewshed; would not substantially change the existing visual character or quality of the site and its surroundings; would not create substantial light or glare that would affect day or nighttime views in the area; and would not be inconsistent with the surrounding urban context. The adverse (or beneficial) effect is detectable, but slight, and would minimally diminish (or enhance) overall integrity of the viewshed or urban context.

**Moderate/Significant Effect:** The effects would be moderate/significant if the proposed action would result in a effect on a key viewshed; would alter the existing visual character of quality of the site and its surroundings; would create a new source of light or glare that would affect day or nighttime views in the area; or would be inconsistent with the surrounding urban context. Most of the moderate/significant effects would somewhat diminish the overall integrity of the viewshed or urban context and thus would be, by nature, adverse. However, in some instances, there may also be beneficial effects, or a combination of adverse and beneficial effects.

**Major/Significant Effect:** The effects would be major/significant if the proposed action would result in a substantial effect on a key viewshed; would substantially alter the existing visual character of quality of the site and its surroundings; would create a new source of light or glare that would substantially affect day or nighttime views in the area; or would be substantially inconsistent with the surrounding urban context. Most of the major/significant effects would significantly diminish the overall integrity of the viewshed or urban context and thus would be, by nature, adverse. However, in some instances, there may also be a combination of adverse and beneficial effects.

The analysis that follows addresses effects on the surrounding urban context, key urban view corridors, and night lighting. Note that setback measurements are derived utilizing the maximum building coverage area, including overhangs. Also note that building heights are generally measured from sea level in order to make the most accurate visual comparisons between existing buildings and the proposed structure or structures.
3.4.3 How would the Proposed Action relate to the surrounding urban context?

No Action Alternative

With the No Action Alternative, the NMAAHC would not be constructed on the project site, and the current visual condition of the site would continue. Thus, there would be no impacts on the surrounding urban context.

Action Alternative 1: Plinth Concept

With the Plinth Alternative, the proposed building would generally be consistent with adjacent structures. The top of the Corona would be approximately 105 feet above grade, and 118 feet above sea level. A penthouse would extend an additional 16 feet 6 inches above the roof on a portion of the building. Thus, the top of the penthouse would be located 134 feet 6 inches above sea level.

Measuring their relative elevations at the highest point on their roofs, the Plinth Alternative would be approximately 6.5 feet higher than NMAH, 17 feet six inches lower than the Herbert C. Hoover building, and 5 feet six inches lower than the EPA Headquarters and Mellon Auditorium building. Similarly, the height of the Corona would be slightly taller than the cornices of the adjacent NMAH, EPA Headquarters and Mellon Auditorium, and 24 feet lower than the cornice line at the Herbert C. Hoover Building. The relationship between the Plinth Alternative and the existing buildings is illustrated in Figure 3.4.2.

While the Plinth Alternative would generally be consistent in height with surrounding structures, it would differ somewhat in its massing, alignment, and setbacks. The facades of the EPA Headquarters and Mellon Auditorium building and the Herbert C. Hoover building have strong vertical design elements like the Corona. However, these buildings, as well as NMAH, have simple bases that follow the lines and support the main bodies of the buildings. With the Plinth Alternative, by contrast, the Corona would rest on a plinth which would project beyond the main building mass to the north and south. In addition, the penthouse of the Plinth Alternative would not be centered on the Corona, but would be pushed to the north side of the roof. This alignment of the penthouse would differ from other museums on the north side of the National Mall.

With the Plinth Alternative, the Corona would be set back approximately 74 feet from 14th Street and approximately 49 feet from 15th Street. This building placement would respect the eastern and western setbacks of the Herbert C. Hoover building to the north (see Figure 3.4.3). On Constitution Avenue, however, the plinth would be set back approximately 107 feet from the curbline and would project approximately 36 feet beyond the northern face of NMNH. While the base of the plinth would not extend beyond the 445’ setback line to the south, the overhang of the plinth would extend approximately 6 feet beyond this line. This could be exaggerated by the water feature at the south end of the site, as due to its formality, it could read as an extension of the building rather than as a landscape element. Roughly centered on the site, the proposed Corona in the Plinth Alternative would generally respect the common centerline that runs east-west through the buildings on the north side of the National Mall.

The NMAAHC site is located within the Washington Monument Grounds, immediately west of the westernmost museums that line...
the north side of the National Mall. The site, and what is constructed on it, would be interrelated with the National Mall, the Washington Monument, and the Washington Monument Grounds. As discussed above, the overhang of the plinth would extend beyond the existing established setback lines on the north and south. The Plinth Alternative would thus be set apart from the museums on the north side of the National Mall. The formal design of both the building and the landscape on the north side of the site would be consistent with the Herbert C. Hoover building, and the irregularly spaced clumps of trees and curving path on the west side of the site would relate to the informal Grounds of the Washington Monument. The formal nature of the landscape on the south side of the site, including the expansive reflecting pool, would stand in sharp contrast to the picturesque nature of the Grounds. As such, the southwest side of the Plinth Alternative would not relate physically and visually to its context to the south.

As documented within the discussion of the site’s architectural context, the buildings on the National Mall and within the Federal Triangle represent a wide range of architectural styles and materials. While the building materials differ, from Tennessee Pink marble to limestone to sandstone, they are uniformly light-colored and primarily natural, non-reflective stone. The exterior material proposed at the NMAAHC would contrast with the surrounding building materials not only in its darker color but also potentially in its finish. This has the potential to make the building stand out visually within the surrounding urban context as a distinctive feature relative to the white marble of the Washington Monument.

The form of the proposed NMAAHC, with its base, main building, and penthouse, would respond to similar architectural components of the surrounding buildings. However, the projection of the plinth beyond the mass of the Corona, as well as the angled sides of the Corona, would represent a departure from the classical aesthetic that dominates the buildings in the vicinity of the Washington Monument.

Overall, the Plinth Alternative would result in major/significant adverse effects on the urban context, due primarily to the projection of the overhang of the plinth beyond the established setback to the north, the slight overhang of the plinth beyond the 445’ setback line on the south, and the slight misalignment with the common centerline established by museums on the north side of the National Mall, the lack of symmetry of the penthouse, the potential contrast between the tone of the exterior material on the Corona and the surrounding structures, and the inconsistency of the design of the southern portion of the landscape with the picturesque character of the Washington Monument Grounds.
Figure 3.4.2 Plinth Alternative: Elevation showing relative building heights in the vicinity of the project site

*Source: AECOM, 2010*
Figure 3.4.3 Plinth Alternative 1: Building Alignment

Source: AECOM, 2010
Action Alternative 2: Plaza Concept

With the Plaza Alternative, the height of the proposed buildings would generally be consistent with adjacent structures. The top of the Corona would be approximately 105 feet above grade, and 118 feet above sea level. A penthouse would extend an additional 14 feet 6 inches above the roof on a portion of the building. Thus, the top of the penthouse would be located 132 feet 6 inches above sea level. Measuring their relative elevations at the highest point on the roofs, the Plaza Alternative would be approximately 4 feet six inches taller than NMAH, 19 feet six inches shorter than the Herbert C. Hoover building, and 7 feet six inches shorter than the EPA Headquarters and Mellon Auditorium building. Similarly, the height of the Corona would be taller than the cornice of the adjacent NMAH, EPA Headquarters and Mellon Auditorium building, and 24 feet lower than the cornice line at the Herbert C. Hoover Building. The relationship between the proposed building and the existing buildings is illustrated in Figure 3.4.4.

The form of the Plaza Alternative would be somewhat consistent with its surrounding context. The facades of the EPA Headquarters and Mellon Auditorium building and the Herbert C. Hoover building have strong vertical design elements like the Corona. In addition, like the surrounding buildings, the Corona in the Plaza Alternative would rest on a simple base that would follow the lines and visually support the main body of the building. In addition, the penthouse of the Plaza Alternative would not be centered on the Corona, but would be pushed to the north side of the roof. This alignment would be different than other museums on the north side of the National Mall. However, the placement of two buildings on a single site is different than the National Mall museums to the east.

As part of the Plaza Alternative, portions of both the Corona and northern buildings would be located outside the common setback lines. The Corona would be set back approximately 46 feet from 14th Street and would thus respect the eastern setback established by the Herbert C. Hoover building (see Figure 3.4.5). The northern building would be set back approximately 53 feet from 15th Street and would also respect the western setback established by the Herbert C. Hoover building. However, on Constitution Avenue the building would be set back approximately 90 feet from the curbline, extending 57 feet beyond the setback established by the north face of the NMNH to the east. The south face of the Corona would also extend 44 feet beyond the 445’ setback established by the McMillan Plan. Further, by creating the open plaza, the Plaza Alternative would not respect the common centerline established by the buildings on the north side of the National Mall, as the Corona would be shifted to the south and the northern building would be shifted to the north. This alignment, together with the siting of two buildings on a single parcel, would make the NMAAHC stand out from the buildings on the north side of the National Mall.
Figure 3.4.4 Plaza Alternative: Elevation showing relative building heights in the vicinity of the project site
Source: AECOM, 2010
Figure 3.4.5 Plaza Alternative 2: Building Alignment
Source: AECOM, 2010
With the Plaza Alternative, the large central plaza would not relate to the informal, green space present at the grounds of the Washington Monument. However, the plaza would allow for similar pedestrian movement through the site and preserve some views of the Washington Monument and Grounds. The more formal nature of the landscape on the north side of the site would relate to the formality of the Herbert C. Hoover building. However, the formal nature of the landscape on the south side of the site, including the reflecting pool, would stand in sharp contrast to the picturesque nature of the Washington Monument Grounds.

As documented within the discussion of the site's architectural context, the buildings on the National Mall and within the Federal Triangle represent a wide range of architectural styles and materials. The Corona building, with its main building and penthouse, would respond to similar architectural components of the surrounding classically-inspired buildings. Conversely, the northern building would stand in contrast to the surrounding structures.

While the building materials on the National Mall and within the Federal Triangle differ, from Tennessee Pink marble to limestone to sandstone, they are uniformly light-colored and primarily natural, non-reflective stone. The exterior materials, both a bronze metal and expansive glass, would contrast with the surrounding building materials in color and finish. This has the potential to make the buildings stand out visually within the surrounding urban context as distinctive features relative to the white marble of the Washington Monument.

Overall, the Plaza Alternative would result in major/significant adverse effects on the urban context due primarily to the placement of the buildings beyond the common setback lines, including the 445’ setback from the centerline of the National Mall, the inconsistency of the design of the south side of the site with the picturesque character of the Washington Monument Grounds, the lack of symmetry of the penthouse, the potential contrast between the tone of the exterior material of the Corona and the surrounding structures, and the misalignment with the common centerlines established by the museums on the north side of the National Mall.
**Action Alternative 3: Pavilion Concept**

With the Pavilion Alternative, the height of the proposed building would generally be consistent with adjacent structures. The top of the Corona would be approximately 105 feet above grade, and 118 feet above sea level. A penthouse would extend an additional 14 feet 6 inches above the roof on a portion of the building. Thus, the top of the penthouse would be located 132 feet 6 inches above sea level. Measuring their relative elevations at the highest point on the roofs, the Pavilion Alternative would be approximately 4 feet six inches taller than NMAH, 19 feet six inches shorter than the Herbert C. Hoover building, and 7 feet six inches shorter than the EPA Headquarters and Mellon Auditorium building.

Similarly, the height of the Corona would be taller than the cornice of the adjacent NMAH, EPA Headquarters, and Mellon Auditorium building, and 24 feet lower than the cornice line at the Herbert C. Hoover Building. The relationship between the proposed building and the existing buildings is illustrated in Figure 3.4.6.

The Pavilion Alternative would also be somewhat consistent in its form and alignment. The facades of the EPA Headquarters and Mellon Auditorium building, and the Herbert C. Hoover building, have strong vertical design elements like the Corona. In addition, like the surrounding buildings, the Pavilion Alternative would rest on a simple base that would follow the lines and visually support the main body of the building. However, the penthouse of the Pavilion Alternative would not be centered on the Corona, but would be pushed to the north side of the roof. This alignment would be different than other museums on the north side of the National Mall.

With the Pavilion Alternative, the Corona would be generally located within common setbacks established by adjacent structures. It would be set back approximately 72 feet from 14th Street and approximately 115 feet from 15th Street would thus respect the eastern and western setbacks established by the Herbert C. Hoover building (see Figure 3.4.7). Similarly, on Constitution Avenue the Corona would be set back approximately 159 feet from the curbline, which is a greater setback than the façade of NMNH. The south face of the NMAAHIC would respect the 445 foot setback from the center line of the National Mall. Further, the mass of the building would be centered on the site, such that it would generally respect the common centerline of the northern National Mall museums.
Figure 3.4.6 Pavilion Alternative: Elevation showing relative building heights in the vicinity of the project site
Source: AECOM, 2010
Figure 3.4.7 Pavilion Alternative 3: Building Alignment

Source: AECOM, 2010
With the Pavilion Alternative, the irregularly spaced clumps of trees and curving path on the west side of the site would relate to the informal Grounds of the Washington Monument. However, the more informal nature of the landscape on the north side of the site would not relate to the formality of the Herbert C. Hoover building. In addition, the formal nature of the landscape on the south side of the site, including the reflecting pool, would stand in sharp contrast to the picturesque nature of the Washington Monument Grounds. As such, both the landscapes on the north and south sides of the Pavilion Alternative would not relate physically and visually to their urban contexts.

As documented within the discussion of the site’s architectural context, the buildings on the National Mall and within the Federal Triangle represent a wide range of architectural styles and materials. The Pavilion Alternative, with its main building, and penthouse, would respond to similar architectural components of the surrounding classically inspired buildings. Thus, while it would not be constructed in a similar style to the surrounding buildings, it would not be visually inconsistent in its essential massing. Further, while the building materials on the National Mall and within the Federal Triangle differ, from Tennessee Pink marble to limestone to sandstone, they are uniformly light-colored and primarily natural, non-reflective stone. The exterior material proposed in the Pavilion Alternative would contrast with the surrounding buildings not only in color, but also potentially in finish. This has the potential to make the building stand out visually within the surrounding urban context as a distinctive feature relative to the white marble of the Washington Monument.

Overall, the Pavilion Alternative would result in minor/not significant adverse effects on the urban context due primarily to the inconsistency of the design of the southern portion of the site with the picturesque character of the Washington Monument Grounds, the lack of symmetry of the penthouse, and the potential contrast between the tone of the exterior material on the Corona and surrounding structures.
Action Alternative 4: Refined Pavilion Concept

With the Refined Pavilion Alternative, the height of the proposed building would generally be consistent with adjacent structures. The top of the Corona would be approximately 99 feet 6 inches above grade, and 112 feet 6 inches above sea level. A penthouse would extend an additional 10 feet above the roof on a portion of the building. Thus, the top of the penthouse would be located 122 feet 6 inches above sea level. Measuring their relative elevations at the highest point on the roofs, the Pavilion Alternative would be approximately 8 feet six inches shorter than NMAH, 29 feet six inches shorter than the Herbert C. Hoover building, and 17 feet six inches lower than the EPA Headquarters and Mellon Auditorium building. Similarly, the height of the Corona would be approximately 12 feet six inches taller than the cornice of the adjacent NMAH, approximately the 8 feet six inches taller than the cornice at the EPA Headquarters and Mellon Auditorium, and 29 feet six inches shorter than the cornice line at the Herbert C. Hoover Building. The relationship between the proposed building and the existing buildings is illustrated in Figure 3.4.8.

The Refined Pavilion Alternative would also be somewhat consistent in its form and alignment. The facades of the EPA Headquarters and Mellon Auditorium building, and the Herbert C. Hoover building, have strong vertical design elements like the Corona. In addition, like the surrounding buildings, the Refined Pavilion Alternative would rest on a simple base that would follow the lines and visually support the main body of the building. Further, the penthouse of the Refined Pavilion Alternative would be centered on the Corona. This would be consistent with the other museums on the north side of the National Mall.

With the Refined Pavilion Alternative, the Corona would be set back approximately 72 feet from 14th Street and 137 feet from 15th Street, and would thus respect the eastern and western setbacks established by the Herbert C. Hoover building (see Figure 3.4.9). On Constitution Avenue, the Pavilion Alternative would be set back approximately 226 feet from the curbline, which is a substantially greater setback than the façade of NMNH and NMAH. While the edge of the Corona would not extend south beyond the McMillian Plan 445’ setback line from the National Mall, the overhang of the porch would extend south beyond this line by approximately 28 feet. Its placement on the site, slightly south of center, locates it such that it would be out of alignment with the common centerline of the museum buildings on the north side of the National Mall. While inconsistent, the building’s placement could be viewed as reinforcing the site as a hinge between the Washington Monument Grounds and the National Mall.
Figure 3.4.8 Refined Pavilion Alternative: Elevation showing relative building heights in the vicinity of the project site

Source: AECOM, 2010
Figure 3.4.9 Refined Pavilion Alternative 4: Building Alignment
Source: AECOM, 2010
As proposed, the rolling landscape and curving paths of the Refined Pavilion Alternative would relate to the informal Grounds of the Washington Monument and correspond to the pathways at the Ellipse. However, the more informal nature of the landscape on the north side of the site would not relate to the formality of the Herbert C. Hoover building.

As documented within the discussion of the site’s architectural context, the buildings on the National Mall and within the Federal Triangle represent a wide range of architectural styles and materials. The Refined Pavilion Alternative, with its main building, and penthouse, would respond to similar architectural components of the surrounding classically inspired buildings. Thus, while it would not be constructed in a similar style to the surrounding buildings, it would not be visually inconsistent in its essential massing.

Further, while the building materials on the National Mall and within the Federal Triangle differ, from Tennessee Pink marble to limestone to sandstone, they are uniformly light-colored and primarily natural, non-reflective stone. The exterior material proposed in the Refined Pavilion Alternative would contrast with the surrounding building materials in both its darker color and finish. This has the potential to make the building stand out visually within the surrounding urban context as a distinctive feature relative to the white marble of the Washington Monument.

Overall, the Refined Pavilion Alternative would result in minor/not significant adverse effects on the urban context due primarily to the extension of the porch overhang south beyond the 445’ setback line, the slight misalignment with the common centerline established by the museums on the north side of the National Mall, and the potential contrast between the tone of the exterior material on the Corona and the surrounding structures.
3.4.4 How would the Proposed Action impact key urban viewsheds?

Six key viewsheds and view corridors were identified for analysis (see Figure 3.4.10). These include: a view west from the lower terrace of the U.S. Capitol Building, a view east from the steps of the Lincoln Memorial, a view from the steps of the Thomas Jefferson Memorial looking north along the 16th Street axis, a view west on the Constitution Avenue corridor from east of 14th Street, a view north along the 14th Street corridor from Independence Avenue, and a view south along the 15th Street corridor from north of Constitution Avenue. The views represent long vistas along major axes and they are intended to assess how the action alternatives would fit within the established urban context. For each of these corridor and axial views, simulations have been created to assist in the analysis. These views differ from those analyzed within the previous historic resources discussion. Those views focus on both direct and non-cardinal views of the proposed facility from identified historic properties within close proximity of the site, whereas this section of the Tier II EIS focuses on effects to existing major urban view corridors and visual axes.

No Action Alternative

With the No Action Alternative, the NMAAHC would not be constructed on the project site. Thus, there would be no impacts on key urban viewsheds.
Figure 3.4.10 Locations of Key Views
Source: AECOM, 2010
**Action Alternative 1: Plinth Concept**

**U.S. Capitol-East/West Cross Axis**

The Washington Monument is the focal point of the axial view looking west from the lower terrace at the U.S. Capitol Building (see Figure 3.4.11). The grassy lawn of the Capitol Grounds and the Capitol Reflecting Pool appear in the foreground, while the greensward of the National Mall stretches west to the Washington Monument. This central grassy panel is bordered on both sides by pedestrian paths and lined by large elm trees. The dome of NMNH and the turrets of the Smithsonian Institution Building are visible above the treeline. With the Plinth Alternative, the proposed NMAAHC would be slightly visible from this viewpoint as the top of the penthouse may be seen over the treecover, as illustrated in Figure 3.4.11. Due to the visibility of the roof elements and the sensitivity of the viewshed, effects would be moderate/significant.

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**Figure 3.4.11 Plinth Alternative: View west from the U.S. Capital Building**  
*Source: AECOM, 2010*
Lincoln Memorial-East/West Cross Axis

The Washington Monument is the focal point of the axial view looking east from the steps of the Lincoln Memorial (see Figure 3.4.12). The plaza on the east side of the Lincoln Memorial appears in the foreground, and beyond this pedestrian paths and grassy lawns line either side of the Reflecting Pool, drawing the viewer’s eye east along the axis of the National Mall. The tower of the Old Post Office is visible just above the treeline on the left side of the view, and the U.S. Capitol Building is partially visible in the distance behind the Washington Monument. With the Plinth Alternative, the Corona and the penthouse would not be visible, as they would be shielded by trees. The approximate location of the building within the treecover is illustrated in Figure 3.4.12. Due to the fact that the building would not be visible, there would be no effects on this viewshed.

Figure 3.4.12 Plinth Alternative: View east from the Lincoln Memorial
Source: AECOM, 2010
Jefferson Memorial-North/South Cross Axis

The expansive view looking north from the steps of the Jefferson Memorial includes the Tidal Basin in the foreground (see Figure 3.4.13). The cherry trees that encircle the Tidal Basin are visible in the midground, with the larger trees of the National Mall behind them. There is a break in the treeline that reveals the White House in the distance along the 16th Street axis. Additional buildings are visible above the treeline and the Washington Monument is a focal point at the right side of the view. With the Plinth Alternative, a portion of the NMAAHC would be slightly visible through the trees. Due to the limited visibility of the NMAAHC, effects to this viewshed would be minor/not significant.

Figure 3.4.13 Plinth Alternative: View north from the Jefferson Memorial
Source: AECOM, 2010
Constitution Avenue View Corridor

The existing view looking west along the Constitution Avenue corridor is framed by street trees of various heights (see Figure 3.4.14). The upper stories and roofs of the mid-rise buildings in the Federal Triangle that front on the north side of the Avenue are generally visible above the tree canopies. The greenspace that comprises the National Mall and the Washington Monument Grounds is visible along the left side of the view. With the Plinth Alternative, although the proposed museum would be largely obscured by existing trees on the south side of Constitution Avenue during spring and summer months, resulting in minor/not significant effects, there would be moderate/significant effects during the fall and winter months when the leaves are off the trees.

Figure 3.4.14 Plinth Alternative: View west on Constitution Avenue
Source: AECOM, 2010
14th Street View Corridor

14th Street is a wide north-south thoroughfare that cuts through the National Mall and the center of downtown. The existing view looking north on 14th Street from Independence Avenue is framed by mature street trees on either side of the right-of-way (see Figure 3.4.15). No buildings are visible in the foreground or middle of the view; instead, this area reads as open space, corresponding to the greensward of the National Mall and the edge of the Washington Monument Grounds. Tall buildings line the view corridor north of Constitution Avenue. With the Plinth Alternative, the NMAAHC would extend the building line one block to the south on the west side of 14th Street. The proposed building would be highly visible, and would substantially alter the perception of the intersection of the National Mall and the Washington Monument Grounds from points south of the National Mall because the new building would be visible through the trees along the west side of the right-of-way. Long-term effects on this view corridor would thus be major/significant.

Figure 3.4.15 Plinth Alternative: View north on 14th Street
Source: AECOM, 2010
15th Street View Corridor

The existing view looking south on 15th Street from north of Constitution Avenue is framed by mature trees on either side of the right-of-way in the foreground (see Figure 3.4.16). At Constitution Avenue, the treeline breaks to reveal the Washington Monument Grounds. The greenspace of the Ellipse is visible on the right side of the view and the Washington Monument is partially visible through the trees. The Herbert C. Hoover building establishes the building line along the left side of the view. With the Plinth Alternative, the cafeteria and terrace above would project beyond the mass of the Corona towards 15th Street, restricting the left edge of the view and substantially altering the perception of the openness of the Washington Monument Grounds as viewed along 15th Street. Long-term effects to this view would be major/significant.

Figure 3.4.16 Plinth Alternative: View south on 15th Street
Source: AECOM, 2010
**Action Alternative 2: Plaza Concept**

*U.S. Capitol-East/West Cross Axis*

The Washington Monument is the focal point of the axial view looking west from the lower terrace at the U.S. Capitol Building (see Figure 3.4.17). The grassy lawn of the Capitol Grounds and the Capitol Reflecting Pool appear in the foreground, while the greensward of the National Mall stretches west to the Washington Monument. This central grassy panel is bordered on both sides by pedestrian paths lined by large elm trees. The dome of NMNH and the turrets of the Smithsonian Institution Building are visible above the treeline. Because of the southern placement of the Corona within the project site, the Plaza Alternative, the top of the penthouse and Corona would be clearly visible over the treecover, as illustrated in Figure 3.4.17. The introduction of these new elements to this key axial view would result in a moderate/significant effect.

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*Figure 3.4.17 Plaza Alternative: View west from the U.S. Capital Building*

*Source: AECOM, 2010*
Lincoln Memorial-East/West Cross Axis

The Washington Monument is the focal point of the axial view looking east from the steps of the Lincoln Memorial (see Figure 3.4.18). The plaza on the east side of memorial appears in the foreground, and beyond this pedestrian paths and grassy lawns line either side of the Reflecting Pool, drawing the viewer’s eye east along the axis of the National Mall. The tower of the Old Post Office is visible just above the treeline on the left side of the view, and the U.S. Capitol Building is partially visible in the distance behind the Washington Monument. With the Plaza Alternative, the NMAAHC buildings would not be visible, as they would be shielded by trees. The approximate location of the buildings within the treecover is illustrated in Figure 3.4.18. Due to the fact that the buildings would not be visible, there would be no effects to this viewshed.

Figure 3.4.18 Plaza Alternative: View east from the Lincoln Memorial
Source: AECOM, 2010
**Jefferson Memorial-North/South Cross Axis**

The expansive view looking north from the steps of the Jefferson Memorial includes the Tidal Basin in the foreground (see Figure 3.4.19). The cherry trees that encircle the Tidal Basin are visible in the midground, with the larger trees of the National Mall behind them. There is a break in the treeline that reveals the White House in the distance along the 16th Street axis. Additional buildings are visible above the treeline and the Washington Monument is a focal point at the right side of the view. With the Plaza Alternative, a portion of the NMAAHC would be slightly visible through the trees. Due to the limited visibility of NMAAHC, effects to this viewshed would be minor/not significant.

*Figure 3.4.19 Plaza Alternative: View north from the Jefferson Memorial*

*Source: AECOM, 2010*
Constitution Avenue View Corridor

The existing view looking west along the Constitution Avenue corridor is framed by street trees of various heights (see Figure 3.4.20). The upper stories and roofs of the mid-rise buildings in the Federal Triangle that front on the north side of the Avenue are generally visible above the tree canopies. The greenspace that comprises the National Mall and the Washington Monument Grounds is visible along the left side of the view. With the Plaza Alternative, although the proposed museum would be largely obscured by existing trees on the south side of Constitution Avenue during spring and summer months, resulting in minor/not significant effects, there would be moderate/significant effects during the fall and winter months when the leaves are off the trees.
14th Street View Corridor

14th Street is a wide north-south thoroughfare that cuts through the National Mall and the center of downtown. The existing view looking north on 14th Street from Independence Avenue is framed by mature street trees on either side of the right-of-way (see Figure 3.4.21). No buildings are visible in the foreground or middle of the view; instead, this area reads as open space, corresponding to the greensward of the National Mall and the edge of the Washington Monument Grounds. Tall buildings line the view corridor north of Constitution Avenue. With the Plaza Alternative, the NMAAHC would extend the building line one block to the south on the west side of 14th Street. The proposed buildings would be highly visible and would substantially alter the perception of the intersection of the National Mall and the Washington Monument Grounds from points south of the National Mall because the new buildings would be visible through the trees along the west side of the right-of-way. Long-term effects to this view would thus be major/significant.

Figure 3.4.21 Plaza Alternative: View north on 14th Street
Source: AECOM, 2010
15th Street View Corridor

The existing view looking south on 15th Street from north of Constitution Avenue is framed by mature trees on either side of the right-of-way in the foreground (see Figure 3.4.22). At Constitution Avenue, the treeline breaks to reveal the Washington Monument Grounds. The greenspace of the Ellipse is visible on the right side of the view and the Washington Monument is partially visible through the trees. The Herbert C. Hoover building establishes the building line along the left side of the view. With the Plaza Alternative, the northern building would be located beyond the mass of the Corona towards 15th Street, restricting the left edge of the view and substantially altering the perception of the openness of the Washington Monument Grounds as viewed along 15th Street. Long-term effects to this view would be major/significant.

Figure 3.4.22 Plaza Alternative: View south on 15th Street
Source: AECOM, 2010
**Action Alternative 3: Pavilion Concept**

**U.S. Capitol-East/West Cross Axis**

The Washington Monument is the focal point of the axial view looking west from the lower terrace at the U.S. Capitol Building. The grassy lawn of the Capitol Grounds and the Capitol Reflecting Pool appear in the foreground, while the greensward of the National Mall stretches west to the Washington Monument. This central grassy panel is bordered on both sides by pedestrian paths and lined by large elm trees. The dome of NMNH and the turrets of the Smithsonian Institution Building are visible above the treeline. With the Pavilion Alternative, the proposed NMAAHC would be slightly visible from this viewpoint over the treecover, as illustrated in Figure 3.4.23. Due to the limited visibility of the roof elements, the effects would be minor/ not significant.
Lincoln Memorial-East/West Cross Axis

The Washington Monument is the focal point of the axial view looking east from the steps of the Lincoln Memorial. The plaza on the east side of Lincoln Memorial appears in the foreground, and beyond this pedestrian paths and grassy lawns line either side of the Reflecting Pool, drawing the viewer’s eye east along the axis of the National Mall. The Old Post Office tower is visible just above the treeline on the left side of the view, and the U.S. Capitol Building is partially visible in the distance behind the Washington Monument. With the Pavilion Alternative, the NMAAHC would not be visible due to dense treecover, and thus, there would be no effects to this viewshed. As a reference, the location of the building within the trees is illustrated in Figure 3.4.24.

Figure 3.4.24 Pavilion Alternative: View east from the Lincoln Memorial
Source: AECOM, 2010
Jefferson Memorial-North/South Cross Axis

The expansive view looking north from the steps of the Jefferson Memorial includes the Tidal Basin in the foreground (see Figure 3.4.25). The cherry trees that encircle the Tidal Basin are visible in the midground, with the larger trees of the National Mall behind them. There is a break in the treeline that reveals the White House in the distance along the 16th Street axis. Additional buildings are visible above the treeline and the Washington Monument is a focal point at the right side of the view. With the Pavilion Alternative, a slight portion of the NMAAHC would be visible through the trees. Due to the limited visibility of these elements, effects would be minor/not significant.

Figure 3.4.25 Pavilion Alternative: View north from the Jefferson Memorial
Source: AECOM, 2010
Constitution Avenue View Corridor

The existing view looking west along the Constitution Avenue corridor is framed by street trees of various heights (see Figure 3.4.26). The upper stories and roofs of the mid-rise buildings in the Federal Triangle that front on the north side of the Avenue are generally visible above the tree canopies. The greenspace that comprises the National Mall and the Washington Monument Grounds is visible along the left side of the view. Due to the southern placement of the Pavilion Alternative within the project site, the proposed museum would be largely obscured by existing trees on the south side of Constitution Avenue during spring and summer months, resulting in minor effects; however, there would be moderate/not significant effects during the fall and winter months when the leaves are off the trees.

Figure 3.4.26 Pavilion Alternative: View west on Constitution Avenue
Source: AECOM, 2010
14th Street View Corridor

14th Street is a wide north-south thoroughfare that cuts through the National Mall and the center of downtown. The existing view looking north on 14th Street from Independence Avenue is framed by mature street trees on either side of the right-of-way (see Figure 3.4.27). No buildings are visible in the foreground or middle of the view; instead, this area reads as open space, corresponding to the greensward of the National Mall and the edge of the Washington Monument Grounds. Tall buildings line the view corridor north of Constitution Avenue. With the Pavilion Alternative, the NMAAHC would extend the building line one block to the south on the west side of 14th Street. The proposed building would be highly visible and would substantially alter the perception of the intersection of the National Mall and the Washington Monument Grounds from points south of the National Mall because the new building would be visible through the trees along the west side of the right-of-way. Long-term effects to this view would thus be major/significant.

Figure 3.4.27 Pavilion Alternative: View north on 14th Street
Source: AECOM, 2010
15th Street View Corridor

The existing view looking south on 15th Street from north of Constitution Avenue is framed by mature trees on either side of the right-of-way in the foreground (see Figure 3.4.28). At Constitution Avenue, the treeline breaks to reveal the Washington Monument Grounds. The greenspace of the Ellipse is visible on the right side of the view and the Washington Monument is partially visible through the trees. The Herbert C. Hoover building establishes the building line along the left side of the view. With the Pavilion Alternative, the proposed building would continue the established building line to the south on the east side of the right-of-way. While it would not obstruct the view, it would substantially alter the perception of the openness of the Washington Monument Grounds as viewed along 15th Street. Long-term effects on this view would be major/significant.

Figure 3.4.28 Pavilion Alternative: View south on 15th Street
Source: AECOM, 2010
**Action Alternative 4: Refined Pavilion Concept**

**U.S. Capitol-East/West Cross Axis**

The Washington Monument is the focal point of the axial view looking west from the lower terrace at the U.S. Capitol Building (see Figure 3.4.29). The grassy lawn of the Capitol Grounds and the Capitol Reflecting Pool appear in the foreground, while the greensward of the National Mall stretches west to the Washington Monument. This central grassy panel is bordered on both sides by pedestrian paths and lined by large elm trees. The dome of NMNH and the turrets of the Smithsonian Institution Building are visible above the treeline. With the Refined Pavilion Alternative, the proposed NMAAHC would be slightly visible over the treecover, as illustrated in Figure 3.4.29. Due to the limited visibility of the roof elements, the effects would be minor/not significant.

*Figure 3.4.29 Refined Pavilion Alternative: View west from the U.S. Capitol Building
Source: AECOM, 2010*
**Lincoln Memorial-East/West Cross Axis**

The Washington Monument is the focal point of the axial view looking east from the steps of the Lincoln Memorial (see Figure 3.4.30). The plaza on the east side of the Lincoln Memorial appears in the foreground, and beyond this pedestrian paths and grassy lawns line either side of the Reflecting Pool, drawing the viewer's eye east along the axis of the National Mall. The Old Post Office tower is visible just above the treeline on the left side of the view, and the U.S. Capitol Building is partially visible in the distance behind the Washington Monument. With the Refined Pavilion Alternative, the NMAAHC would not be visible due to dense treecover, and thus, there would be no effects to this viewshed. As a reference, the location of the building within the trees is illustrated in Figure 3.4.30.

*Figure 3.4.30 Refined Pavilion Alternative: View east from the Lincoln Memorial*

*Source: AECOM, 2010*
Jefferson Memorial-North/South Cross Axis

The expansive view looking north from the steps of the Jefferson Memorial includes the Tidal Basin in the foreground (see Figure 3.4.31). The cherry trees that encircle the Tidal Basin are visible in the midground, with the larger trees of the National Mall behind them. There is a break in the treeline that reveals the White House in the distance along the 16th Street axis. Additional buildings are visible above the treeline and the Washington Monument is a focal point at the right side of the view. With the Refined Pavilion Alternative, a portion of the NMAAHC would be slightly visible through the trees. Due to the limited visibility of the proposed museum, effects to this viewshed would be minor/not significant.

Figure 3.4.31 Refined Pavilion Alternative: View north from the Jefferson Memorial
Source: AECOM, 2010
Constitution Avenue View Corridor

The existing view looking west along the Constitution Avenue corridor is framed by street trees of various heights (see Figure 3.4.32). The upper stories and roofs of the mid-rise buildings in Federal Triangle that front on the north side of the Avenue are generally visible above the tree canopies. The greenspace that comprises the National Mall and the Washington Monument Grounds is visible along the left side of the view. With the Refined Pavilion Alternative, the proposed museum would be largely obscured by existing trees on the south side of Constitution Avenue during spring and summer months, resulting in negligible effects; however, there would be minor/not significant effects during the fall and winter months when the leaves are off the trees.

Figure 3.4.32 Refined Pavilion Alternative: View west on Constitution Avenue
Source: AECOM, 2010
14th Street View Corridor

14th Street is a wide north-south thoroughfare that cuts through the National Mall and the center of downtown. The existing view looking north on 14th Street from Independence Avenue is framed by mature street trees on either side of the right-of-way (see Figure 3.4.33). No buildings are visible in the foreground or middle of the view; instead, this area reads as open space, corresponding to the greensward of the National Mall and the edge of the Washington Monument Grounds. Tall buildings line the view corridor north of Constitution Avenue. With the Refined Pavilion Alternative, the NMAAHC would extend the building line one block to the south on the west side of 14th Street. This would alter the perception of the intersection of the National Mall and the Washington Monument Grounds from points south of the National Mall because the new building would be visible through the trees along the west side of the right-of-way. Long-term effects to this view would thus be major/significant.

Figure 3.4.33 Refined Pavilion Alternative: View north on 14th Street
Source: AECOM, 2010
15th Street View Corridor

The existing view looking south on 15th Street from north of Constitution Avenue is framed by mature trees on either side of the right-of-way in the foreground (see Figure 3.4.34). At Constitution Avenue, the treeline breaks to reveal the Washington Monument Grounds. The greenspace of the Ellipse is visible on the right side of the view and the Washington Monument is partially visible through the trees. The Herbert C. Hoover building establishes the building line along the left side of the view. With the Refined Pavilion Alternative, the proposed building would continue the established building line to the south on the east side of the right-of-way. While it would not obstruct the view, it would substantially alter the perception of the openness of the Washington Monument Grounds as viewed along 15th Street. Long-term effects on this view would be major/significant.

Figure 3.4.34 Refined Pavilion Alternative: View south on 15th Street
Source: AECOM, 2010
3.4.5 **How would the Proposed Action affect night lighting in the area?**

**No Action Alternative**

With the No Action Alternative, the NMAAHC would not be constructed on the project site. Thus, there would be no effects on night lighting in the area.

**Action Alternatives 1: Plinth Concept**

With the Plinth Alternative, the museum building would be lit on the inside and there would be exterior lighting on its four facades, at the gathering spaces at the south end of the building, along its walkways, and within its water features at the north and south ends of the site. The interior architectural surfaces would be lit in a manner so that light would be visible from outside the building, but would not substantially contribute to light pollution or light trespass. Because of the bronze panels that would clad the building, the lighting of the outdoor gathering and circulation spaces would provide visibility for pedestrian safety, but would be partially shielded from view. Water features would be softly lit with underwater light fixtures to accentuate water movement and architectural features.

The overall intent would be that the Plinth Alternative would be visible as an important feature in the monumental core, but not compete with nearby landmarks including the Washington Monument and the White House. Dark sky initiatives would be employed to attain the Light Pollution Reduction credit under LEED v.3.0 (Park/Urban).

While the illumination of the Plinth Alternative would not be greater than the surrounding monuments and memorials, it would transform a largely dark site at the edge of the Washington Monument Grounds to one with substantial light at night. This would effectively continue the line of light that emanates from the museums on the north side of the National Mall one block to the west. As such, it has the potential to encroach upon the Washington Monument Grounds.

Due to the projection of the plinth overhang and southern water feature beyond the 445’ setback line, night views west along the axis of the National Mall would narrow at the Washington Monument Grounds such that the current dark setting of the north side of the Monument would be partially lost. Similarly, night views south on 14th and 15th Streets would be altered dramatically, as the current dark foreground of the Washington Monument would be lit. If the exterior building materials have reflective qualities, there is the potential for night glare, creating adverse effects on night lighting. However, the intent of the design is to select materials and finishes that minimize such impacts. Overall, long-term effects would be moderate /significant.
**Action Alternative 2: Plaza Concept**

With the Plaza Alternative, the Corona building would be lit on the inside, on its four facades, at the gathering spaces at the south end of the building, along its walkways, and within its water features at the north and south ends of the site. The interior architectural surfaces would be lit in a manner so that the light would be visible from outside the building, but would not substantially contribute to light pollution or light trespass. The lighting of the outdoor gathering and circulation spaces would provide visibility for pedestrian safety, but would be partially shielded from view. Water features would be softly lit with underwater light fixtures to accentuate water movement and architectural features. It is anticipated that the northern building would not be lit at night outside of any necessary security lighting.

The overall intent would be that the Plaza Alternative would be visible as an important feature in the monumental core, but not compete with nearby landmarks including the Washington Monument and the White House. Dark sky initiatives would be employed to attain the Light Pollution Reduction credit under LEED v.3.0 (Park/Urban).

While the illumination of the Plaza Alternative would not be greater than the surrounding monuments and memorials, it would transform a largely dark site at the edge of the Washington Monument Grounds to one with substantial light at night. This would effectively continue the line of light that emanates from the museums on the north side of the National Mall one block to the west. Night views south on 14th and 15th Streets would be altered substantially, as the current dark foreground of the Washington Monument would be lit.

Since the southern face of the Corona building and water feature would project well beyond the 445’ common setback, night views west along the axis of the National Mall would narrow at the Washington Monument Grounds such that the current dark setting of the north side of the monument would be partially lost. If the exterior building materials have reflective qualities, there is the potential for night glare, further creating adverse effects on night lighting. However, the intent of the design is to select materials and finishes that minimize such impacts. Overall, there would be major/significant effects.

**Action Alternative 3: Pavilion Concept**

With the Pavilion Alternative, the building would be lit on the inside, on its four facades, at the gathering spaces at the south end of the building, along its walkways, and within its water features at the north and south ends of the site. The interior architectural surfaces would be lit in a manner so that the light would be visible from outside the building, but would not substantially contribute to light pollution or light trespass. The lighting of the outdoor gathering and circulation spaces would provide visibility for pedestrian safety, but would be partially shielded from view. Water features would be softly lit with underwater light fixtures to accentuate water movement and architectural features.

The overall intent would be that the Pavilion Alternative would be visible as an important feature in the monumental core, but not compete with nearby landmarks including the Washington Monument and the White House. Dark sky initiatives would be employed to attain the Light Pollution Reduction credit under LEED v.3.0 (Park/Urban).
While the illumination of the Pavilion Alternative would not be greater than the surrounding monuments and memorials, it would transform a largely dark site at the edge of the Washington Monument Grounds to one with substantial light at night. This would effectively continue the line of light that emanates from the museums on the north side of the National Mall one block to the west. Night views south on 14th and 15th Streets would be altered substantially, as the current dark foreground of the Washington Monument would be lit.

Since the building and the southern water feature would not project beyond the common 445’ setback line, night views west along the axis of the National Mall would not narrow at the Washington Monument Grounds. However, the design would introduce a new light source on the Washington Monument Grounds. If the exterior building materials have reflective qualities, there is the potential for night glare, creating adverse effects on night lighting. However, the intent of the design is to select materials and finishes that minimize such impacts. Overall, there would be moderate/significant effects.

**Action Alternative 4: Refined Pavilion Concept**

With the Refined Pavilion Alternative, the building would be lit on the inside, on its four facades, at the gathering spaces at the south end of the building, along its walkways, and within its water features at the north and south ends of the site. The interior architectural surfaces would be lit in a manner so that the light would be visible from outside the building, but would not substantially contribute to light pollution or light trespass. The lighting of the outdoor gathering and circulation spaces would provide visibility for pedestrian safety, but would be partially shielded from view. Water features would be softly lit with underwater light fixtures to accentuate water movement and architectural features.

The overall intent would be that the Refined Pavilion Alternative would be visible as an important feature in the monumental core, but not compete with nearby landmarks including the Washington Monument and the White House. Dark sky initiatives would be employed to attain the Light Pollution Reduction credit under LEED v3.0 (Park/Urban).

While the illumination of the Refined Pavilion Alternative would not be greater than the surrounding monuments and memorials, it would transform a largely dark site at the edge of the Washington Monument Grounds to one with substantial light at night. This would effectively continue the line of light that emanates from the museums on the north side of the National Mall one block to the west. Night views south on 14th and 15th Streets would be altered substantially, as the current dark foreground of the Washington Monument would be lit.

Since the overhang of the porch and southern water feature would project south beyond the 445’ historic setback line, night views along the west axis of the National Mall would narrow at the Washington Monument Grounds, altering the dark setting of the north side of the monument. Further, if the exterior building materials have reflective qualities, there is the potential for night glare, creating adverse effects on night lighting. However, the intent of the design is to select materials and finishes that minimize such impacts. Overall, there would be moderate/significant effects.
3.4.6 What efforts would be taken to minimize the effects on Visual Resources?

The following mitigation measures are recommended to minimize the effects of the action alternatives on the visual environment and surrounding urban context:

**Plinth Alternative**

- Options should be explored that would reduce or eliminate the slight overhang of the plinth beyond the historic 445' setback line at the south end of the site.
- The detailed design of the landscape on the south side of the site should relate to the informal, picturesque character of the Washington Monument Grounds.
- The exterior building materials should be non-reflective to minimize night glare.
- There should be multi-zone dimming of the building and site lighting in order to adjust lighting levels once the building is complete.
- The Smithsonian Institution should complete an illumination study as part of the final design to ensure that lighting levels are consistent with the other museums on the north side of the National Mall, and that lighting is deferential to the surrounding monuments and memorials.

**Plaza Alternative**

The mitigation measures for the Plaza Alternative would include all those identified for the Plinth Scheme, with the exception of the one pertaining to the overhang of the plinth. Instead, design measures should be explored that would minimize the extension of a built form south of the 445' setback line. In addition, the following mitigation measure would be required:

- Glazing associated with the northern building should be tinted in such a way to reduce the amount of glare from surrounding light sources.

**Pavilion Alternative**

The mitigation measures for the Pavilion Alternative would be identical to those identified for the Plinth Alternative. However, since the Pavilion would not extend south of the 445' McMillan setback line, that measure would not be necessary.

**Refined Pavilion Alternative**

The mitigation measures for the Refined Pavilion Alternative would be identical to those identified for the Plinth Alternative. However, instead of reducing the overhang of the plinth, options should be explored to reduce the overhang of the porch beyond the 445' setback line.