



Environmental Assessment

The John F. Kennedy Center for the Performing Arts Expansion Connection Project

March 2016



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ENVIRONMENTAL ASSESSMENT

**THE JOHN F. KENNEDY CENTER
FOR THE PERFORMING ARTS
EXPANSION CONNECTION PROJECT**

March 2016

The Kennedy Center for the Performing Arts
Washington, DC

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NOTE TO REVIEWERS AND RESPONDENTS

Comments on this EA may be submitted electronically at the NPS Planning, Environment and Public Comment (PEPC) website (<http://parkplanning.nps.gov/KennedyCenterConnection>) or you may mail written comments by April 25, 2016 to the address listed below. Before including personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Attn: Kennedy Center Connection Bridge EA Comments
Office of the Superintendent
National Mall and Memorial Parks
900 Ohio Drive, SW
Washington, DC 20024

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CHAPTER 1: PURPOSE AND NEED

INTRODUCTION

The John F. Kennedy Center for the Performing Arts (Kennedy Center) is proposing a direct pedestrian and bicycle connection between the Kennedy Center expansion and the Rock Creek Paved Recreation Trail. The project falls within the Rock Creek and Potomac Parkway (RCPP), which is under the jurisdiction of National Mall and Memorial Parks (NAMA), a unit of the National Park System administered by the National Park Service (NPS) (see Figure 1). The National Capital Planning Commission (NCPC) is reviewing the project under its authorities specified in the National Capital Planning Act (40 USC § 8722 (b)(1), (d)). Therefore, in accordance with the National Environmental Policy Act (NEPA) of 1969, the NPS and NCPC acting as co-lead federal agencies have prepared this EA in cooperation with the Kennedy Center to identify alternatives and assess the potential impacts of the proposed action. Concurrently, the agencies have been conducting consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA).

This EA analyzes the potential environmental impacts resulting from the implementation of the No Action Alternative along with action alternatives for a direct pedestrian and bicycle connection from the Kennedy Center to the Rock Creek Paved Recreation Trail in accordance with the NEPA of 1969; the Council on Environmental Quality's Regulations of Implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508); Department of the Interior implementing regulations (43 CFR 46.100); NCPC's implementing regulations (69 CFR 41299); and NPS Director's Order 12 (DO-12): *Conservation Planning, Environmental Impacts Analysis and Decision-Making* (NPS 2001); and the National Capital Planning Act (40 USC § 8722 (b)(1), (d)).

PURPOSE OF AND NEED FOR ACTION

The purpose of the proposed project is to provide a safe pedestrian and bicycle connection between the Kennedy Center and the Rock Creek Paved Recreation Trail and to improve access and create a public waterfront link to and from the Kennedy Center from the new expansion area on the south, the Potomac River waterfront, NAMA, and the surrounding vicinity. Under this proposal the NPS would transfer jurisdiction of a portion of NPS administered property and certain air rights to the Kennedy Center.

The project is needed because there is no direct access to and from the Kennedy Center to the east, or southeastward to Rock Creek Paved Recreation Trail, NAMA, and the Potomac River. The only pedestrian/bicycle access from the Potomac riverfront to the Kennedy Center is provided by a series of crosswalks across F Street NW and the RCPP, approximately 0.25 miles north of the south parking garage. This lack of a direct and convenient path not only limits visitors' access to both NPS and Kennedy Center amenities, but also creates a disconnect between the Kennedy Center, which is the United States' living memorial to President John F. Kennedy, and those other presidential memorials found within the National Mall. These include: the Washington Monument; Thomas Jefferson Memorial; Lincoln Memorial; and Franklin Delano Roosevelt Memorial. In addition, Theodore Roosevelt Island, which is also the Presidential Memorial to Theodore Roosevelt and administered by the George Washington Memorial Parkway, is located directly across from the Kennedy Center on the western edge of the Potomac River. Theodore Roosevelt Island is accessible

via the Theodore Roosevelt Memorial Bridge (I-66). Creating a more direct and convenient link would benefit visitors to the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront by providing a convenient and logical pedestrian/bicycle connection and expanded interpretation opportunities of the area's presidential memorials.



Figure 1. Project Area Map

OBJECTIVES

Objectives are “what must be achieved to a large degree for the action to be considered a success: (NPS 2001) and represent more specific statements of purpose and need. All alternatives identified for detailed analysis must meet all objectives to a large degree and must resolve the purpose of and need for the action. The following objectives were identified by the planning team for this project:

- Create a connection that is a fully integrated part of the Kennedy Center with convenient connections between the existing facilities, the expansion project, the Rock Creek Paved Recreation Trail, and the surrounding vicinity.
- Provide a direct, Americans with Disabilities Act (ADA) accessible, pedestrian and bicycle route between the Kennedy Center and the Potomac riverfront.
- Enhance the visitor experience by encouraging interaction with the Potomac riverfront and promoting walk-ability to and from surrounding neighborhoods, including Georgetown and Foggy Bottom, and their amenities.

PROJECT LOCATION

The Kennedy Center is located at 2700 F Street NW in Washington, DC at the intersection of New Hampshire Avenue NW and the RCPP. The Kennedy Center is bounded to the north by F Street NW and to the south by the former above-grade parking area, which serves as a buffer between the Kennedy Center, the Potomac Expressway and Interstate 66 (Theodore Roosevelt Memorial Bridge). The project area is defined as the area between the existing Edward Durell Stone building, Interstate 66/U.S. Route 50, Rock Creek Paved Recreation Trail, and F Street NW (Figure 2). The existing site layout and the existing conditions are shown in Figure 2 and Figure 3.

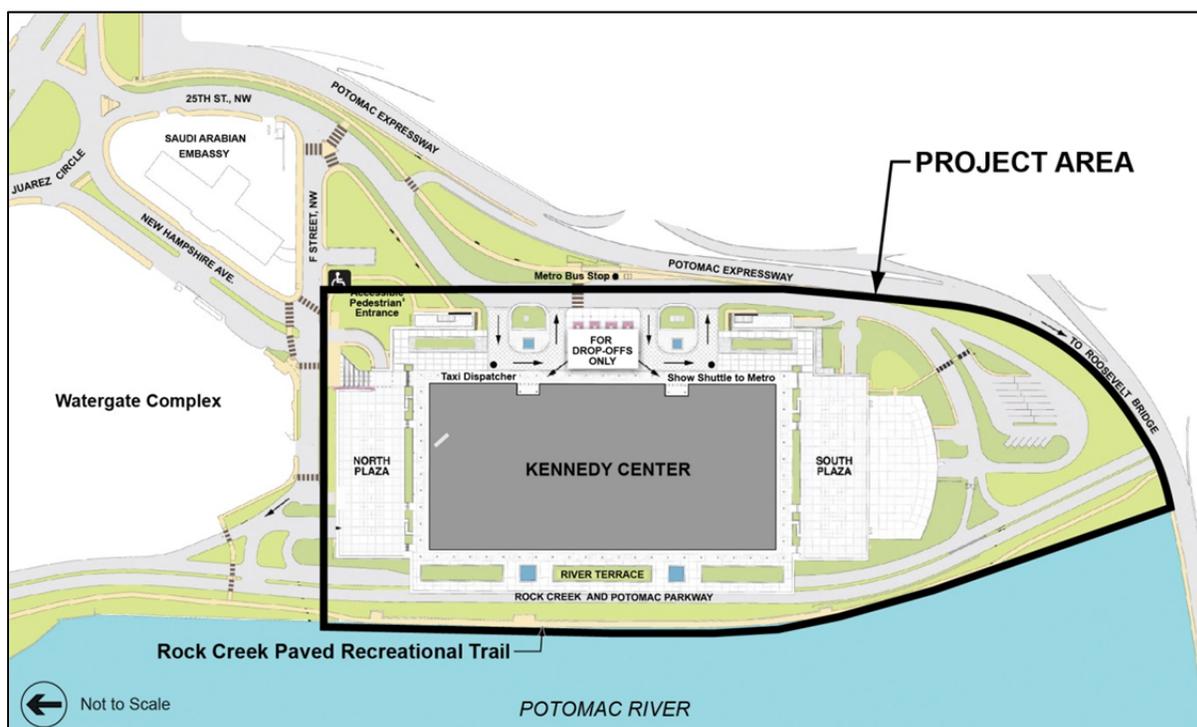


Figure 2. Existing Site Layout



Figure 3. Existing Conditions looking south and north along RCPP

PROJECT BACKGROUND

The Kennedy Center is a Congressionally-designated national showcase for the performing arts and a living memorial to President Kennedy. To service its existing and future programming, the Kennedy Center is currently expanding its facilities through the construction of a new building featuring three land-based pavilions located south of the existing Edward Durell Stone building on a site that was formerly used for parking (Figure 4). The Kennedy Center, NCPC and the NPS completed an EA for the expansion in October 2014. NCPC gave preliminary approval on the two land-based pavilions (Entry and Event Pavilions) on December 4, 2014, but did not approve the previously proposed River Pavilion that would have been located on the Potomac River. At that time, NCPC requested the Kennedy Center conduct additional analysis on the impacts of a River Pavilion and submit the results to the Commission prior to final review. The Kennedy Center took this opportunity to completely revisit the concept of the third pavilion, including its programming, functionality and serviceability. As a result of this effort, a new land-based River Pavilion was developed that better integrated the rest of the Expansion Project. The Kennedy Center presented NCPC with a proposed design revision that included the three land-based pavilions, which has been analyzed in the Expansion Project EA and the 2014 Assessment of Effects (AOE) as Alternative B. NCPC approved the final design in July 2015 and the project was approved by the U.S. Commission of Fine Arts in September 2015. Construction on the expansion began in the fall of 2015. Since final approval of the expansion, the Kennedy Center has been developing concept level designs for a connection between the new expansion occurring at the Kennedy Center and the Rock Creek Paved Recreation Trail.



Figure 4. Site of the Kennedy Center Expansion

PLANNING ISSUES AND CONCERNS IDENTIFIED DURING SCOPING

The Kennedy Center, NCPCC, NPS, participating agencies and stakeholders, and members of the public identified specific issues and concerns during scoping. Some of these issues and concerns were considered by the Kennedy Center, NCPCC, and NPS, but were ultimately dismissed from detailed analysis because they were determined not central to the proposal or of critical importance. Other issues and concerns were retained for detailed analysis and are included in the impact topics that are discussed in the “Affected Environment and Environmental Consequences” section of the EA.

PLANNING ISSUES AND CONCERNS RETAINED FOR DETAILED ANALYSIS

The proposed project would add new elements to the Kennedy Center and the RCPP.

The Kennedy Center, the RCPP, and other properties in the vicinity are listed or are eligible for listing in the National Register of Historic Places. There is potential for the proposed project to have adverse impacts on the property and to affect views to and from historic properties in the vicinity. Relevant laws, policies, and plans including the National Historic Preservation Act of 1966 will inform the discussion of this issue. Potential impacts of the alternatives to historic resources and cultural landscapes will be analyzed in detail under “Cultural Resources” within the “Affected Environment and Environmental Consequences” chapter of the EA.

The Kennedy Center does not provide a direct pedestrian connection and does not provide adequate connectivity to local bicycle trails on the southern end of the Kennedy Center. Currently, there is no adequate pedestrian and bicycle access to and from the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the waterfront. Relevant laws, policies, and plans including the 2005 DC Bicycle Master Plan and the National Mall Plan of 2010 will inform the discussion of this issue. Potential impacts of the alternatives will be analyzed in detail under “Visitor Use and Experience” within the “Affected Environment and Environmental Consequences” chapter of the EA.

The proposed stairway and ramp would result in a change in access to the Kennedy Center from the RCPP and the Rock Creek Paved Recreation Trail. Construction of the pedestrian and bicycle connection would potentially provide a direct access via an at-grade crosswalk or by stairway/ramp from the vehicle entrance to the Kennedy Center along the RCPP and the Rock Creek Paved Recreation Trail. This would result in potential conflicts between pedestrian, bicyclists and vehicles. Potential impacts of the alternatives will be analyzed in detail under “Traffic and Transportation” within the “Affected Environment and Environmental Consequences” of the EA.

PLANNING ISSUES AND CONCERNS DISMISSED FROM FURTHER ANALYSIS

Construction of a pedestrian/bicycle connection would be within the 100-year floodplain. A Statement of Findings (SOF) for impacts to floodplains was completed to take into consideration Executive Order 11988 and Executive Order 13690, issued on January 30, 2015. The SOF is provided in Appendix B. Based upon the findings in the SOF, the base flood elevation is +15 feet. The bridge as proposed for the connection project would span the RCPP and would be located at an elevation of approximately 29 feet msl, above the highest flood elevation. The Potomac River is expected to rise by 13 inches by the year 2050, projecting an increase to the 100-year flood elevation to 16.08 feet (Climate Seas 2012). Therefore, the bridge would be located outside the 100-year floodplain. Because the design of the bridge uses both the freeboard value approach and a climate-informed approach, the bridge would be protected from floodwaters and would not have short- or long-term impacts on the floodplain, even with climate change. Up to six bridge/ramp supports would be constructed and would be located within the 100-year floodplain. Construction of the bridge/ramp supports would result in the clearing of one tree and would convert a small area of existing grass for trail spurs. Removal of this vegetation would not affect flood flows or flood levels. The supports would decrease the flood storage capacity by a negligible amount and would not impede the flow of flood water through the area. In its current condition, the floodplain within the project area provides little flood storage as it is already covered with impervious areas. The supports would be subject to flood flow during flood events, but would be designed to withstand the forces of the 100-year flood event. A minor disturbance to the floodplain would occur as a result of the construction of the ramp, stairs, and trail spurs. The proposed project would not measurably affect the ability of the floodplain to convey floodwaters or affect its values and functions. Based upon the relative magnitude of the Potomac River, the proposed actions would not have appreciable effects, which would increase the risk of flooding or hazards to human life or property. Therefore, floodplains have been dismissed from further analysis in this EA.

Construction of the pedestrian/bicycle connection would increase impervious surface area. Construction of the pedestrian/bicycle connection would remove some vegetation; slightly increase impervious surface area that would increase the risk of stormwater runoff and erosion. Erosion and sediment controls devices would be employed as needed during construction to minimize soil erosion in accordance with the District’s Department of Energy and Environment’s (DOEE) 2013 Rule on Stormwater Management and Soil Erosion and Sediment Control. Under Alternative E, approximately 14,100 square feet (0.32 acres) of impervious surface would be created. The increase in impervious surface would have an effect on water quality; however, the effect would be too small to measure. Due to the relative magnitude of the Potomac River and its watershed (approximately 14,670 square miles), impacts to 14,100 square feet of area would not be perceptible. If this alternative was implemented, an approved Stormwater Management Plan would be

implemented in accordance with the DOEE's 2013 Rule on Stormwater Management and Soil Erosion and Sediment Control.

Ground disturbance during construction may potentially impact archeological resources. In 2014, Phase 1A archaeological investigations were conducted for the Kennedy Center Expansion Project (Stantec 2014). Based on those investigations, as currently proposed, all excavations associated with connection project would be limited to fill deposits and are not expected to impact archaeological resources. If construction excavations continue to the depth of fill or below, geoarchaeological investigations would be conducted to determine whether intact land surfaces are present below fill. If such land surfaces are present and would be impacted by construction of the connection project, a program of archaeological investigations to identify, evaluate, and mitigate any adverse effects to archaeological resources present should be implemented. Therefore, the connection project is not expected to affect archaeological resources; therefore, this issue will not be carried for further study in the EA.

The operation and management responsibilities for the RCPP and the Rock Creek Paved Recreation Trail may be increased. The Kennedy Center would be responsible for the connection between the Kennedy Center and the Rock Creek Paved Recreation Trail. For the management of this area, the NPS would transfer jurisdiction of a minimal amount of NPS-administered property and certain air rights to the Kennedy Center. The NPS would continue its current responsibilities for operations and management of the RCPP and the Rock Creek Paved Recreation Trail. The Kennedy Center is expected to see only a slight increase in the operations and management of their facilities. NPS involvement in the area of the bridge or river terrace would generally be limited to US Park Police response to minor conflicts. This increase in conflicts is expected to be slight. Therefore, the connection project is not expected to impact the operations and management of NPS-administered properties. This issue will not be carried for further study in the EA.

Potential for minority and/or low-income populations to be impacted by the project. Executive Order 12898, *General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high and / or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the EPA, environmental justice is the:

...fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies (EPA 2015).

The goal of 'fair treatment' is not to shift risks among populations, but to identify potentially disproportionately high and adverse effects and identify alternatives that may mitigate these impacts. Minority populations are present in Washington, DC; however there are no minorities or low-income populations that would be disproportionately affected by the proposed action. In addition, the implementation of the proposed alternative would not result in any identifiable adverse

human health effects. The implementation of the proposed alternative would have a positive impact on minority and low-income populations by increasing pedestrian and bicycle activity in the area. Therefore, there would be no direct or indirect adverse effects on any minority or low-income population.

Potential for project to impact Indian Trust Resources. Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed project or action by Department of Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

Section 106 requires coordination with federally recognized Indian tribes who may have potential religious or cultural interests in the project area and acknowledges that tribes may have interest in geographic locations other than their seat of government. As such, on October 28, 2013, the Delaware Nation was invited to participate in the Section 106 consultation for the Kennedy Center Expansion Project, and the NPS, NCPC, and Kennedy Center met with the Delaware Nation on November 25, 2013, to discuss the project. Subsequently, the Phase 1A archaeological investigations for the same project determined that no known American Indian traditional cultural properties exist within the study area. A copy of the Phase 1A archaeological report was submitted to the Delaware Nation on May 7, 2014. The Delaware Nation responded on October 24, 2014 that this area is not in the “area of interest” for the Delaware Nation. The connection project is in the same area as the Kennedy Center Expansion Project; therefore it has been determined that there are no Indian trust resources in the vicinity of the Kennedy Center and no lands are held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore, concerns related to Indian trust resources have been dismissed from further study in this EA.

Potential for project to impact climate change or sustainability. Impacts of the proposed actions on climate change would be mainly due to emissions of nitrous oxides and carbon dioxide from the burning of fuel in vehicles and equipment during construction. These emissions could result in incremental increases in greenhouse gases that contribute to global climate change. However, the emissions from the proposed project would be negligible and temporary in comparison to other local and regional sources of greenhouse gas emissions. Therefore, climate change and sustainability were dismissed from further analysis in this document.

CHAPTER 2: ALTERNATIVES

INTRODUCTION

This EA analyzes a no action alternative and four action alternatives for the proposed connection between the Kennedy Center and the Rock Creek Paved Recreation Trail. The elements of these alternatives are described in detail in this section. Impacts associated with the actions proposed under each alternative are outlined in the “Affected Environment and Environmental Consequences” section of this EA.

ALTERNATIVE A – NO ACTION

Under the No Action Alternative, the Kennedy Center Connection Project would not be implemented. This alternative would include the continuation of the existing conditions, operations, and maintenance of the Kennedy Center, including construction of the planned and NCPC-approved Kennedy Center expansion project, which includes three land-based pavilions located south of the existing facility. This alternative also includes the continuation of the existing conditions, operations, and maintenance of the Rock Creek and Potomac Parkway and the Rock Creek Paved Recreation Trail.

Under Alternative A, no connection between the Kennedy Center and the Rock Creek Paved Recreation Trail would be constructed. Pedestrians and bicyclists would continue to utilize the series of crosswalks across F Street NW and the RCPP to access the Rock Creek Paved Recreation Trail (see Figure 5 and Figure 6).

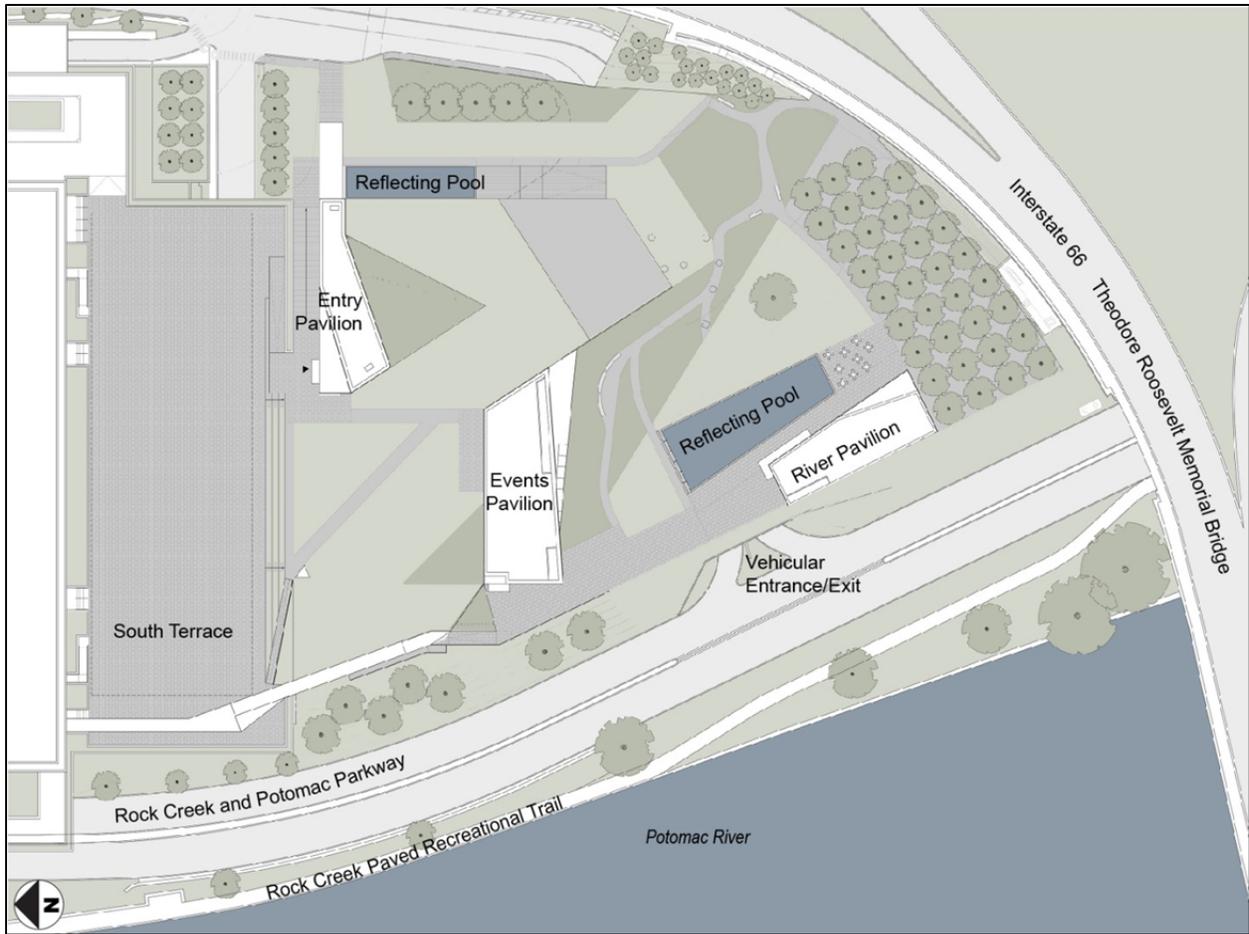


Figure 5. Alternative A: No Action Alternative



Figure 6. Alternative A: No Action Alternative (Oblique View)

ALTERNATIVE B – AT-GRADE CROSSING ACCESS

Alternative B (see Figure 7 and Figure 8) would provide an at-grade street crossing of RCPP from the Kennedy Center to the Rock Creek Paved Recreation Trail (pursuant to Public Law 107-224) that would traverse the northbound and southbound lanes of the RCPP. A crosswalk would be provided that would allow pedestrians and bicycles to cross the RCPP safely. Under this alternative, the Rock Creek Paved Recreation Trail would remain in its current location, and no trees would be removed or relocated. Two trail spurs would be added to connect the at-grade crossing with the Rock Creek Paved Recreation Trail. Small-scale features, including a bench and a bicycle rack, would be added along the trail in the vicinity of the crossing. Because the slope of the land between the RCPP and the Kennedy Center expansion area is too steep and too narrow to accommodate an accessible ramp on the east side of the RCPP, bicyclists would be required to go through the Kennedy Center parking garage to make the connection to the Rock Creek Paved Recreation Trail. Bicyclists would enter the parking garage along the east side of the Kennedy Center either from the existing pedestrian/bicycle route that parallels 25th Street NW or from the expansion area. Once entering the garage, bicyclists would continue through the garage to connect with the at-grade crossing at the RCPP. Under this alternative there would be no dedicated bicycle route through the garage due to space limitations. Appropriate signage, including painted markings on floor of the garage, would be used to inform

motorists of the shared use of the garage with bicyclists. The portion of the parking garage that would be utilized by bicyclists would be open 24 hours a day, seven days a week. Pedestrians would be able to use the elevator in the River Pavilion during performances to access the at-grade crossing. At other times pedestrians would utilize the parking garage to gain access to the at-grade connection

Under this alternative, the NPS would need to transfer approximately 653 square feet of NPS administered property to the Kennedy Center, which would require a jurisdictional transfer (see Figure 9Figure 8).

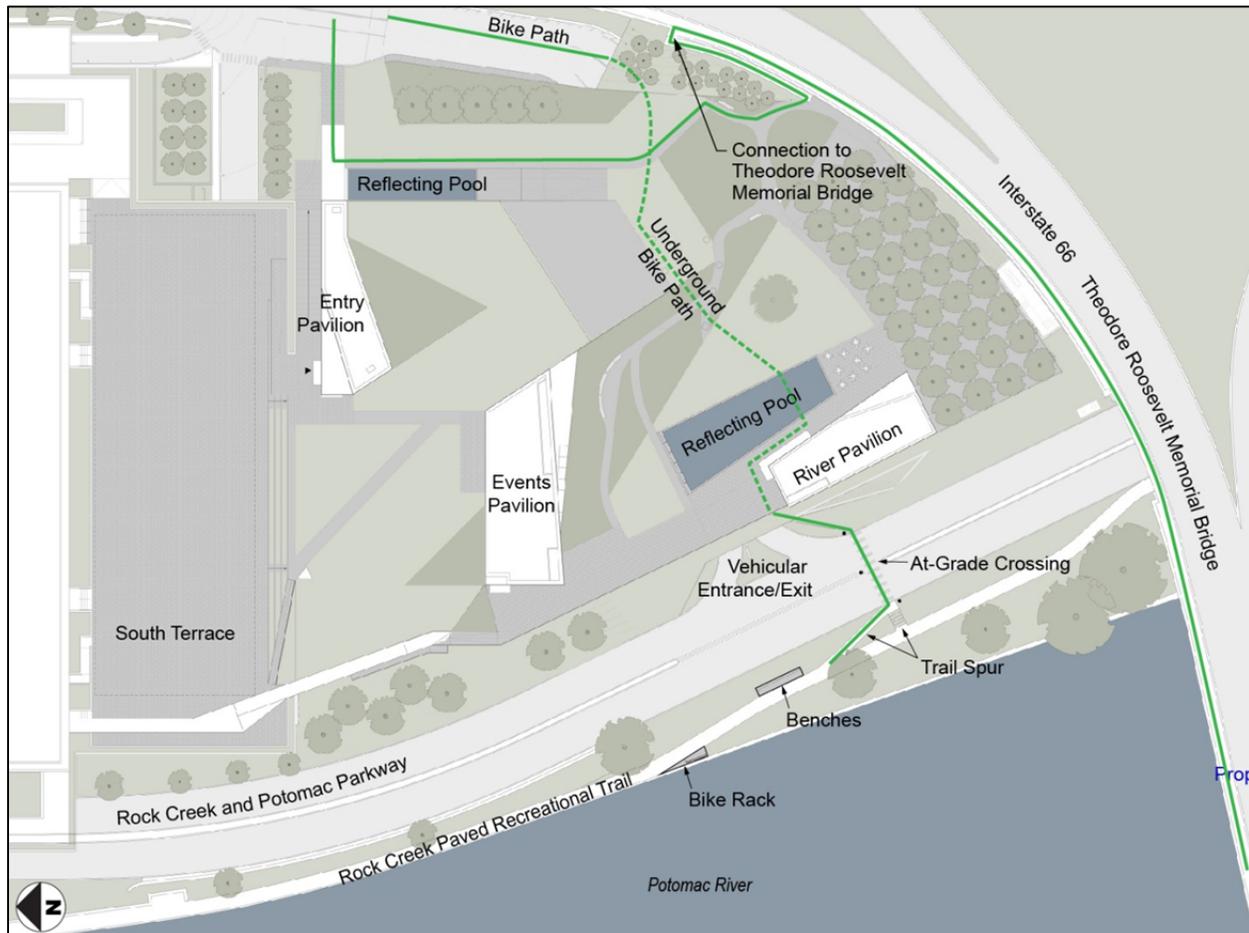


Figure 7. Alternative B: At-Grade Crossing



Figure 8. Alternative B: At-Grade Crossing Access, Oblique View

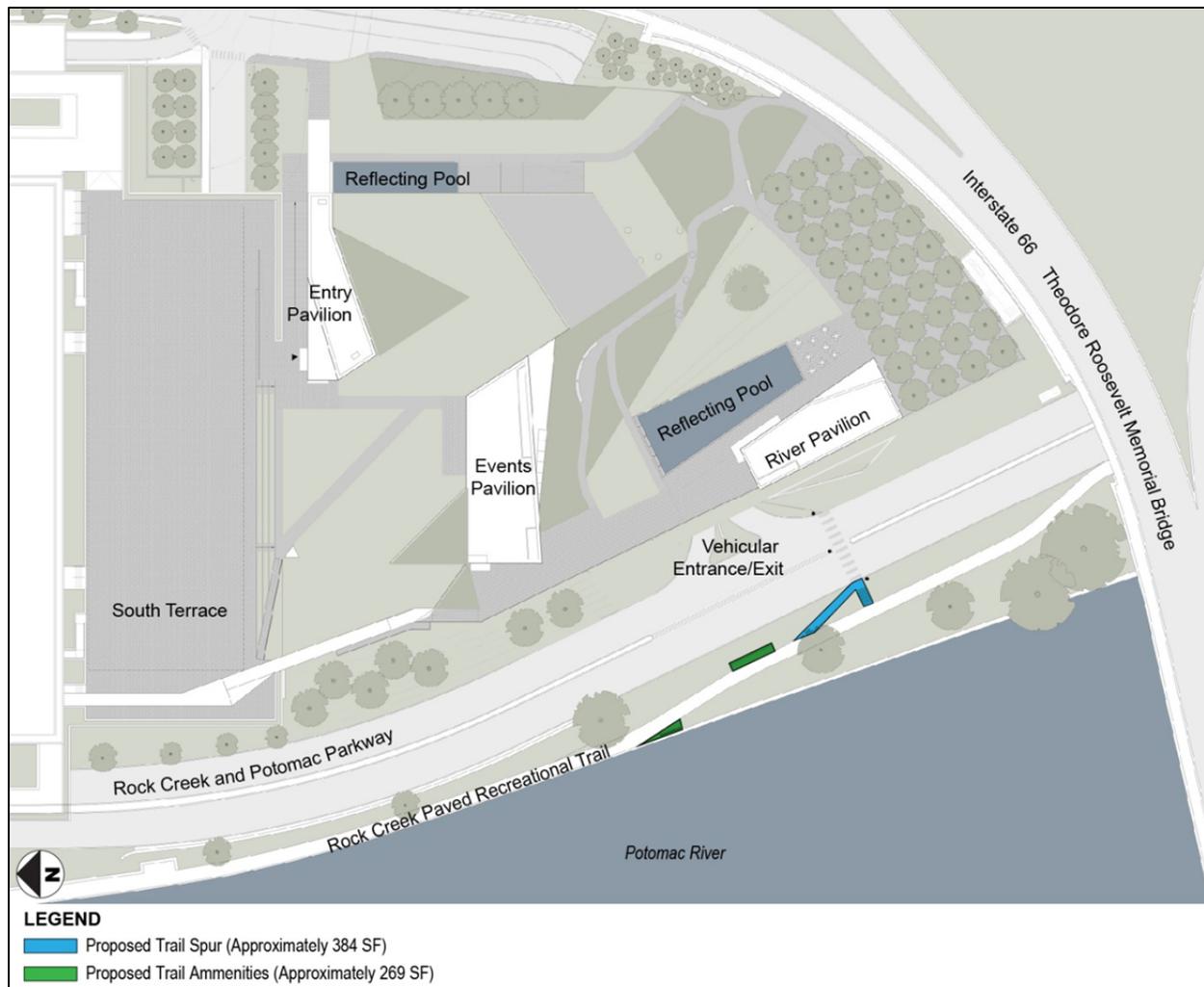


Figure 9. Area of Design Elements for Alternative B Requiring Transfer of Jurisdiction

ALTERNATIVE C – BRIDGE ACCESS WITH RAMP AND STAIRS

The Bridge Access with Ramp and Stairs Alternative (Figure 10 and Figure 11) proposes to connect the Kennedy Center Expansion Project and the Rock Creek Paved Recreation Trail via a bridge that would span the northbound and southbound lanes of the RCPP and would be accessed from the Rock Creek Paved Recreation Trail by both a ramp and stairs. The connection would be a steel structure, and the bridge component would measure approximately 11-feet wide and be ADA-compliant for use by pedestrians, including persons with disabilities, and also by bicyclists. The Kennedy Center would develop policies for bicycle usage on the bridge and ramps, which would include dismounting and walking bicycles on the bridge and ramp. The Kennedy Center is also considering the installation of a bicycle trough for the stairs that would allow bicyclists to walk their bicycles up and down the stairs. Under this alternative, a section of the Rock Creek Paved Recreation Trail would be rerouted and three trail spurs would be added to connect the trail with the landing of the stair at the south end of the ramp, the ramp landing, and the landing of the north stair. The trail spurs would provide a transition area where the stairs and ramp meet to provide sufficient space to minimize user conflicts. Small-scale features, including a bench and a bicycle rack, would be added along the trail in the

vicinity of the bridge. One tree would be removed for the construction of the ramp, and a replacement tree would be planted near the location of the original.

Pathways are currently under construction for the Kennedy Center Expansion that would connect the Kennedy Center to the I-66/Theodore Roosevelt Memorial Bridge path on the east side of the Kennedy Center and the proposed bridge on the west side of the Kennedy Center. Signage may be incorporated to define the route through the expansion area. The Kennedy Center would develop policies for bicycle usage while pedestrians are present.

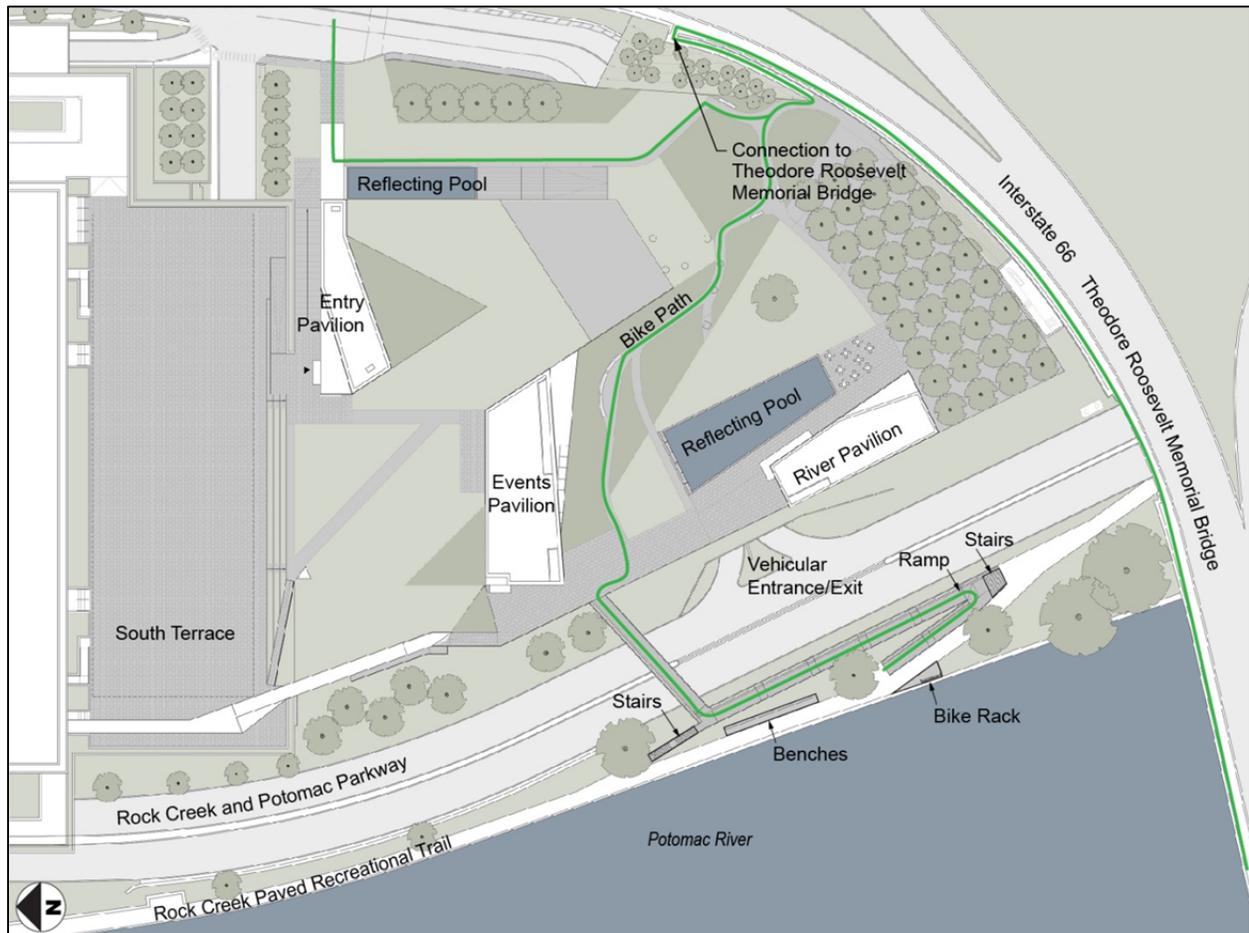


Figure 10. Alternative C: Bridge Access with Ramp and Stairs

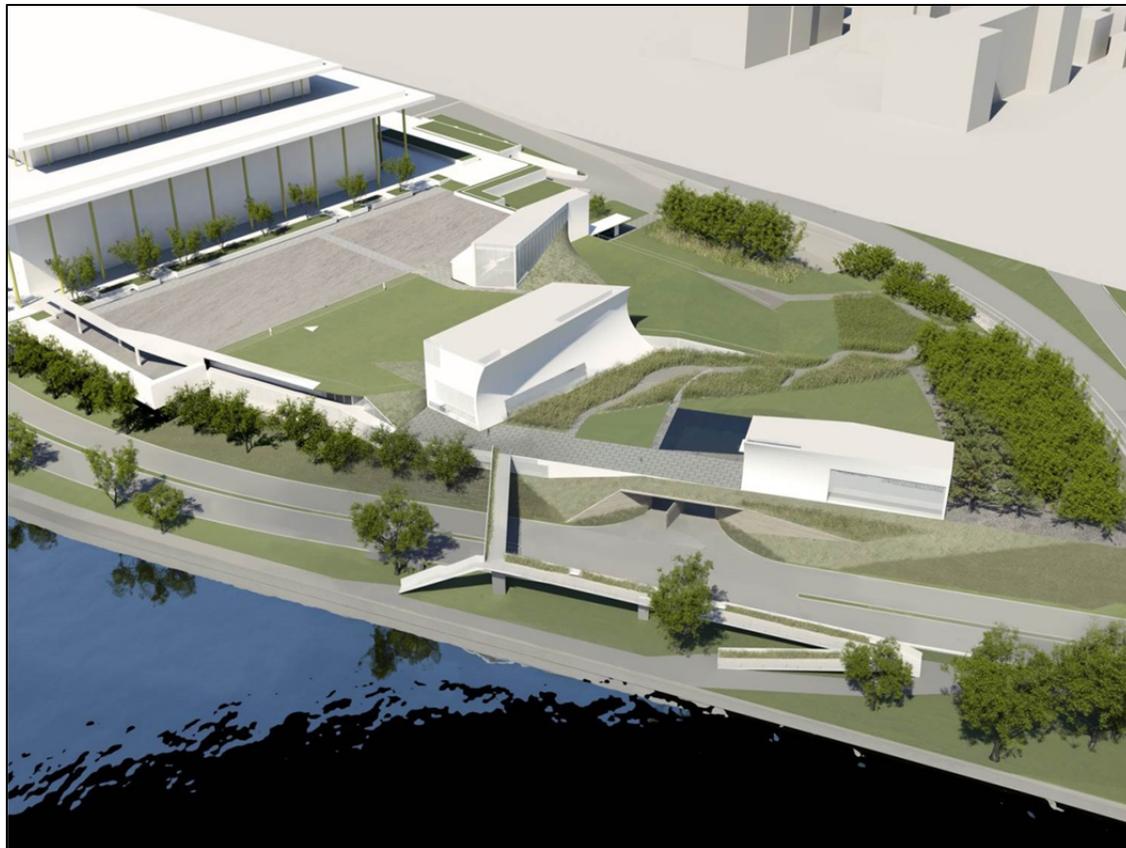


Figure 11. Alternative C: Bridge Access with Ramp and Stairs, Aerial View

Under this alternative, the NPS would need to transfer jurisdiction of a portion of NPS administered property and certain air rights to the Kennedy Center (see Figure 12). The air rights over the RCPP (approximately 4,100 square feet) would be needed for the bridge connection and ramp. In addition, a jurisdictional transfer would be needed for the two support piers for the bridge and ramp on NPS property (approximately 20 square feet) and the three connections for the trail spurs to the Rock Creek Paved Recreation Trail (approximately 667 square feet).

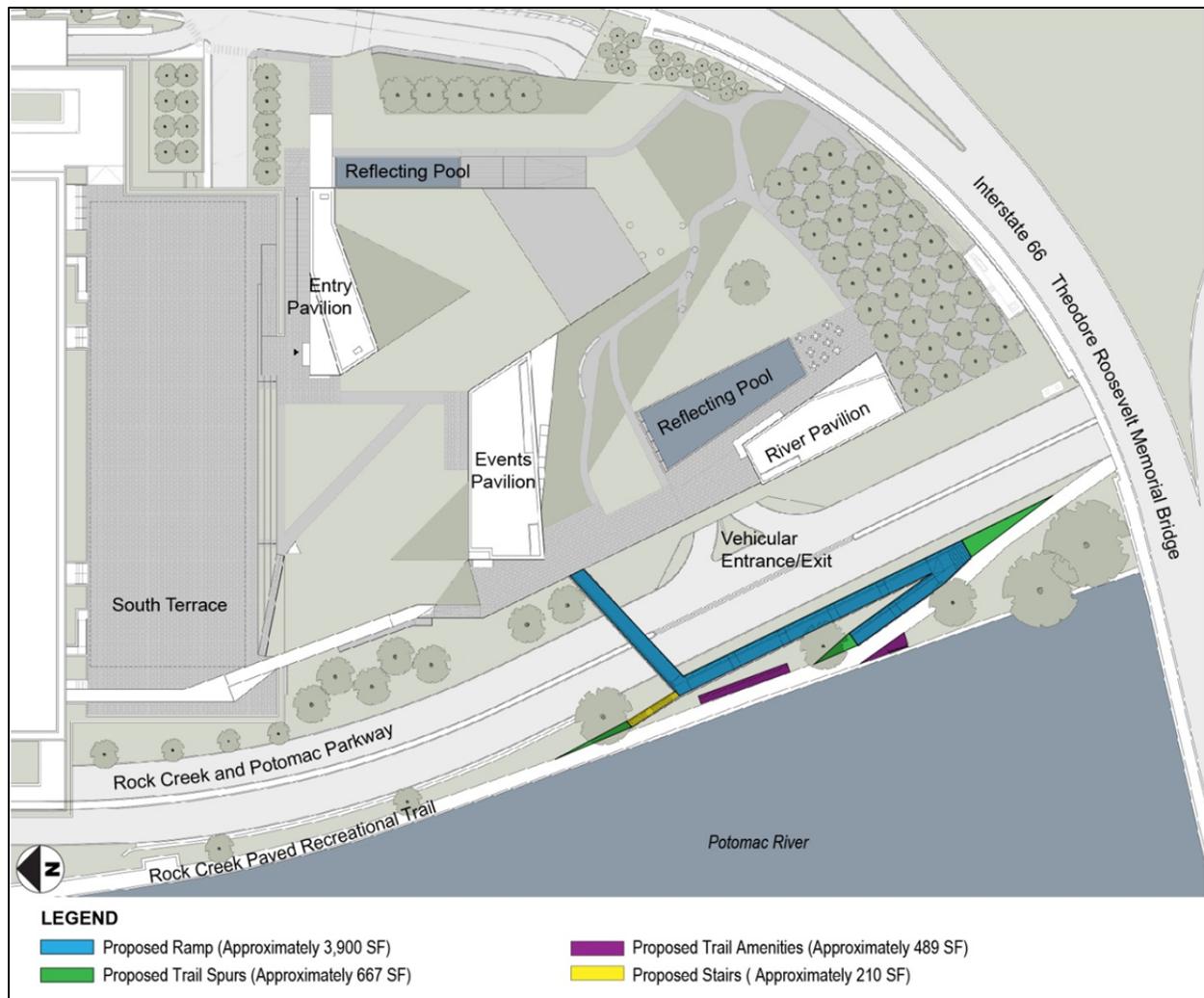


Figure 12. Area of Design Elements under Alternative C Requiring a Transfer of Jurisdiction

ALTERNATIVE D – BRIDGE ACCESS WITH RAMP AND ELEVATOR

The Bridge Access with Ramp and Elevator Alternative (Figure 13 and Figure 14) proposes to connect the Kennedy Center Expansion Project and the Rock Creek Paved Recreation Trail via a bridge that would span the northbound and southbound lanes of the RCPP and would be accessed from the Rock Creek Paved Recreation Trail by both a ramp and an elevator. The connection would be a steel structure, and the bridge component would measure approximately 11-feet wide and be ADA-compliant for use by pedestrians, including persons with disabilities, and also by bicyclists. Under this alternative, a section of the Rock Creek Paved Recreation Trail would be rerouted and three trail spurs would be added to connect the trail with the landing of the stair at the south end of the ramp, the ramp landing, and the elevator threshold. The trail spurs would provide a transition area where the stairs and ramp meet to provide sufficient space to minimize user conflicts. The Kennedy Center would develop policies for bicycle usage on the bridge and ramps, which would include dismounting and walking bicycles on the bridge and ramp. The Kennedy Center is also considering the

installation of a bicycle trough for the stairs that would allow bicyclists to walk their bicycles up and down the stairs. Small-scale features, including a bench and a bicycle rack, would be added along the trail in the vicinity of the bridge. One tree would be removed for the construction of the ramp, and a replacement tree would be planted near the location of the original.

Pathways are currently under construction for the Kennedy Center Expansion that would connect the Kennedy Center to the I-66/Theodore Roosevelt Memorial Bridge path on the east side of the Kennedy Center and the proposed bridge on the west side of the Kennedy Center. Signage may be incorporated to define the route through the expansion area. The Kennedy Center would develop policies for bicycle usage while pedestrians are present.

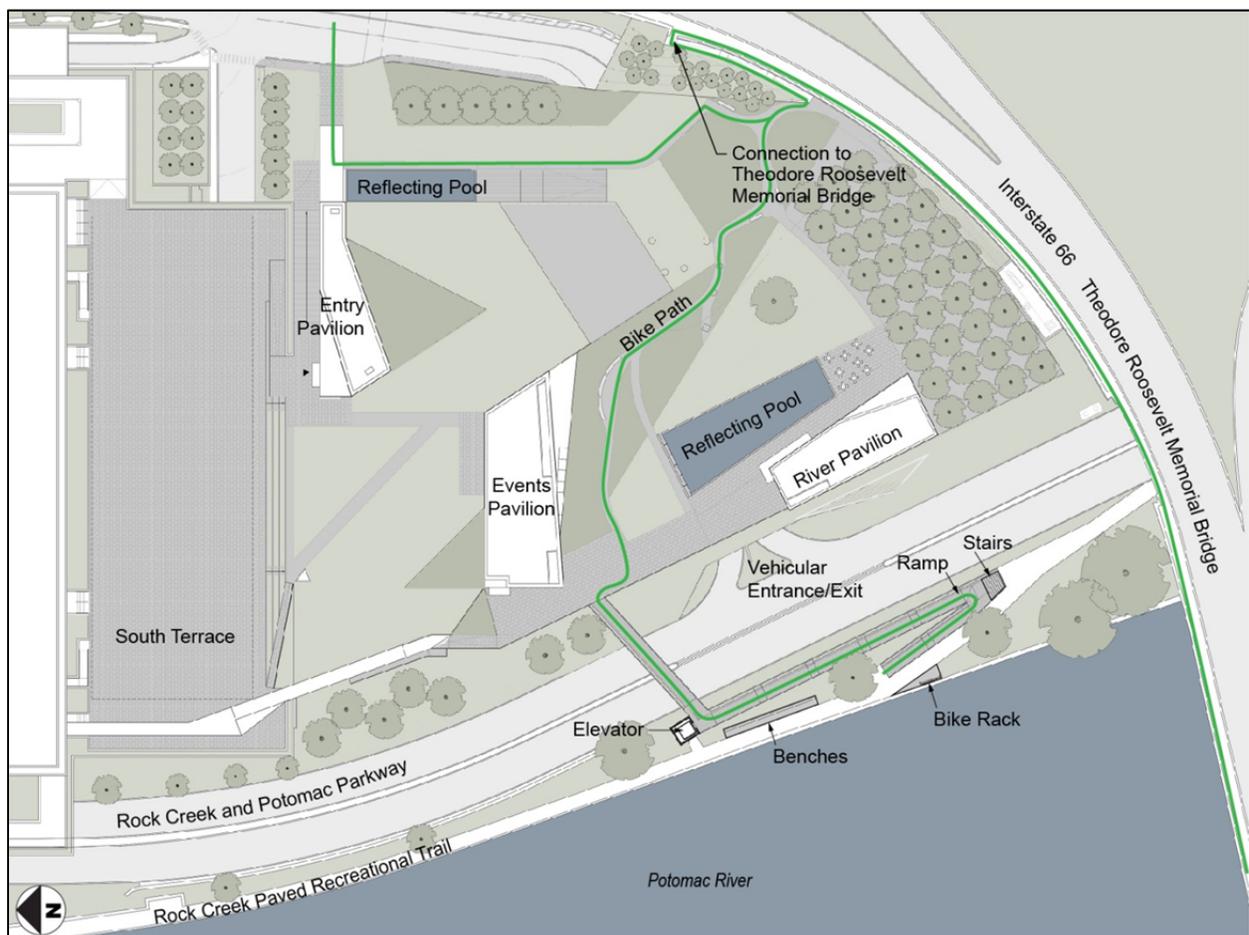


Figure 13. Alternative D: Bridge Access with Elevator and Ramp



Figure 14. Alternative D: Bridge Access with Ramp and Elevator, Aerial View

Under this alternative, the NPS would need to transfer jurisdiction of a portion of NPS administered property and certain air rights to the Kennedy Center (see Figure 15). The air rights over the RCPP (approximately 4,074 square feet) would be needed for the bridge connection and ramp. In addition, a jurisdictional transfer would be needed for the two support piers for the bridge/elevator and ramp on NPS property (approximately 194 square feet) and the three connections for the trail spurs to the Rock Creek Paved Recreation Trail (approximately 667 square feet).

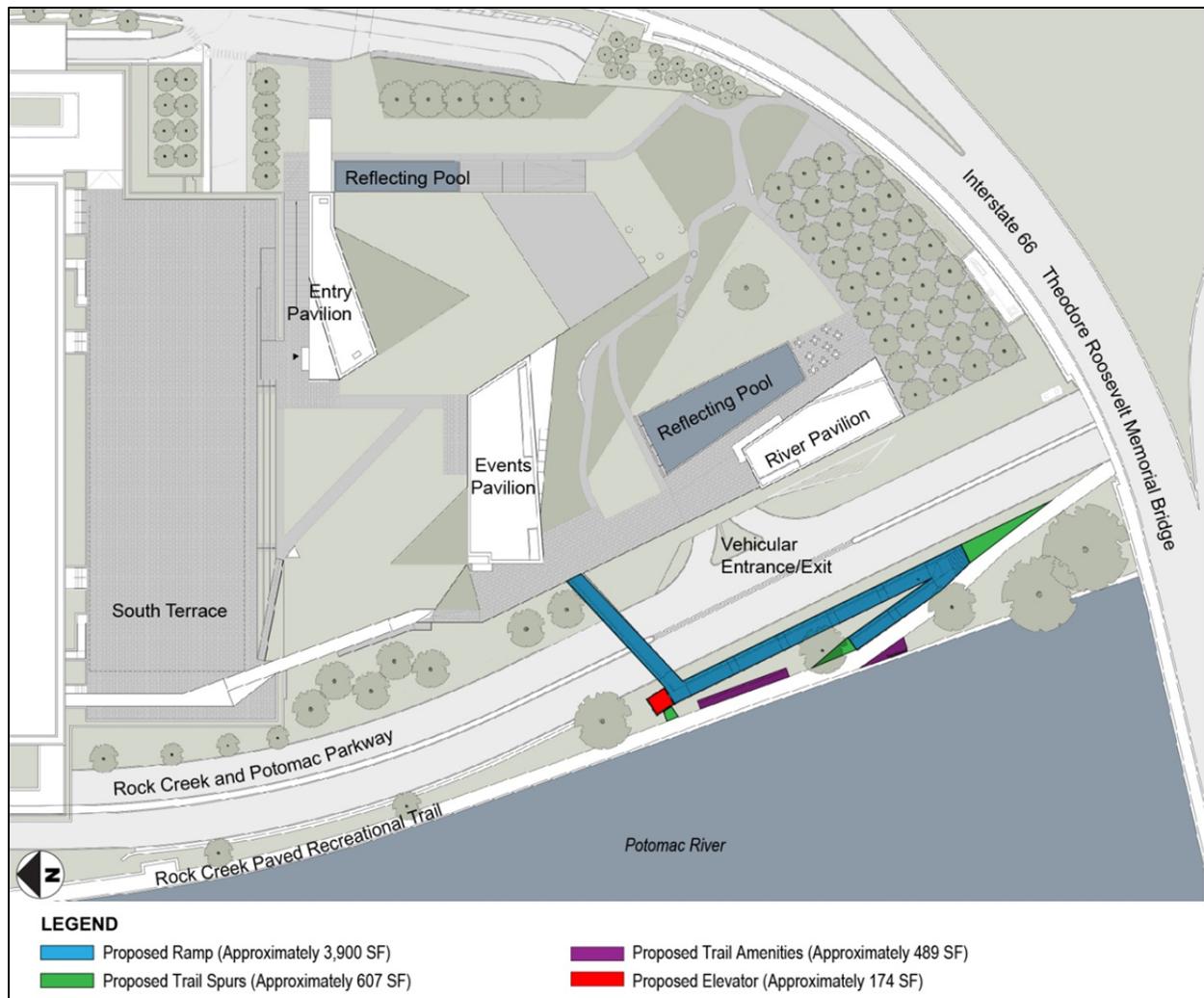


Figure 15. Area of Design Elements under Alternative D Requiring a Transfer of Jurisdiction

ALTERNATIVE E – RIVER TERRACE ACCESS ALTERNATIVE

Alternative E includes a pair of curved staircases with integrated elevators that would provide pedestrian and bicycle access from the Kennedy Center to the Potomac riverfront. Portions of the existing terrace wall and planter structure would be removed and 20-foot wide platforms would be constructed to extend approximately 16 feet over the southbound lanes of the RCPP. Each platform would be centered on the existing terrace fountains and the entrances to the Hall of Nations and the Hall of States and connect to a staircase and hydraulic elevator (Figure 16). At the bottom of the stairs and elevator structures, a landscaped plaza of approximately 13,100 square feet would be constructed of asphalt, concrete, or pavers. The plaza would provide unimpeded accessibility to the Rock Creek Paved Recreation Trail and the Potomac riverfront (Figure 17). In order to alert Rock Creek Paved Recreation Trail users to the plaza approach, the segment of trail in front of the Kennedy Center would be resurfaced with a material unique from the surrounding trail and the new plaza. Alternative E would not provide dedicated bicycle access through the Kennedy Center, but a pedestrian/bicycle path would be created through the expansion area on the south end of the

Kennedy Center and would connect with the terrace. The Kennedy Center would develop policies for bicycle usage on the terrace, which would include dismounting and walking bicycles across the terrace. The Kennedy Center is also considering the installation of a bicycle trough that would allow bicyclists to walk their bicycles up and down the stairs. Bicyclists could also utilize the proposed elevator in order to access the Rock Creek Paved Recreation Trail.

Under this alternative the NPS would need to transfer jurisdiction of a portion of NPS administered property and certain air rights to the Kennedy Center (see Figure 18). The air rights over the RCPP (approximately 1,600 square feet) would be needed for two terrace connections. In addition, a jurisdictional transfer would be needed for the pedestrian plaza (approximately 14,100 square feet).

Signage may also be incorporated to further alert trail users to the approaching plaza. A new landscape design of the area would include plantings that would enhance the appearance of the plaza and blend in with surrounding vegetation. With the implementation of Alternative E, the majority of construction activities and the location of permanent structures would be within the 32-foot clear space between the RCPP and the Rock Creek Paved Recreation Trail.

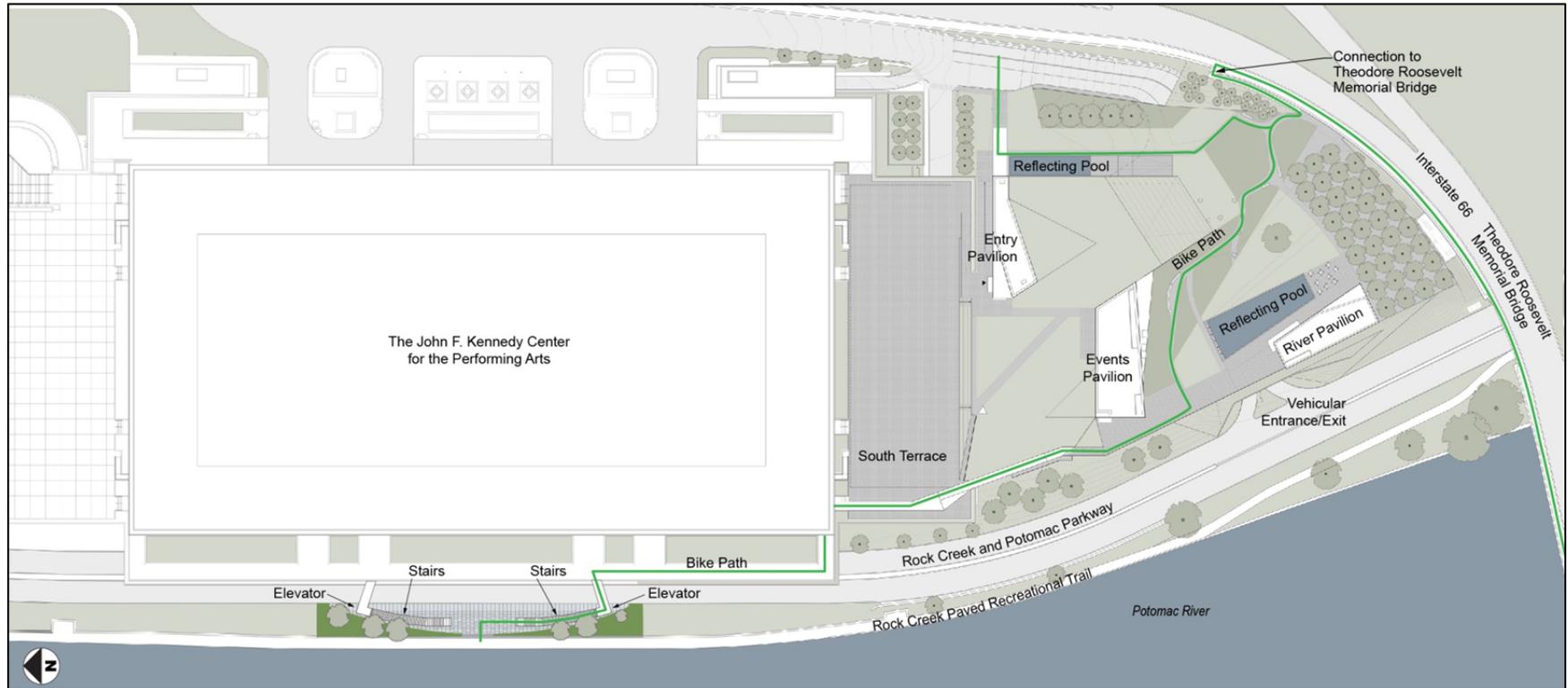
CONSTRUCTION AND STAGING

Construction staging for the alternatives will be accommodated onsite at the south end of the Kennedy Center. Components of the bridge will be delivered by truck to the site along the RCPP. For Alternatives B, C, and D, the immediate area surrounding the new connection along the Rock Creek Paved Recreation Trail would be temporarily disturbed and used to construct the at-grade crossing or the bridge and bridge landing (Figure 19). For Alternative E, a temporary construction area of approximately 24,800 square feet of NPS land would be required for construction activities (Figure 20). Upon the conclusion of construction, temporary use areas would be landscaped and returned to open-space areas, befitting the overall aesthetic of the Rock Creek Paved Recreation Trail.

Public access to the Rock Creek Paved Recreation Trail would be maintained throughout construction and the Kennedy Center would minimize impacts to trail users by developing an NPS approved mitigation plan aimed at minimizing impacts to both trail users and those driving on the RCPP. The plan would define how the trail would be modified to maintain bicycle and pedestrian flow during construction of the connection from the Kennedy Center and Rock Creek Paved Recreation Trail. Under Alternatives C, D, and E, the Rock Creek Paved Recreation Trail would be re-routed to provide space for the construction staging area and to connect the new bridge/terrace with the Rock Creek Paved Recreation Trail. The re-routing of the trail would be expected to last approximately six months and would not be concurrent with any additional closures of the trail or the RCPP. Trail users would be notified of any changes during construction by appropriate signage and/or other public notices in accordance with NPS procedures.

During construction for the bridge under Alternatives C, D, and E, temporary closures to RCPP would occur. The westernmost southbound lane of the RCPP would be closed intermittently for 20 weeks during construction of the pedestrian connection piers and support. The RCPP would be closed over night or on weekends between F Street NW and Ohio Drive NW. Traffic would be routed around the site using Interstate 66 and the Potomac River Freeway. It is expected that there would be six overnight or weekend closures.

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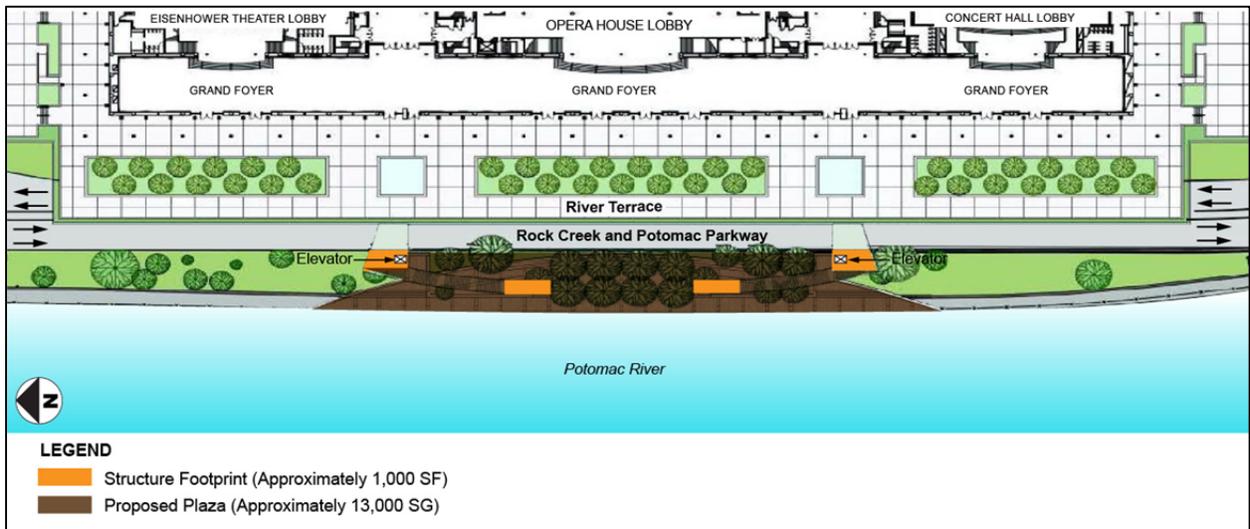
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Figure 16. Alternative E: River Terrace Access



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Figure 17. Alternative E: River Terrace Access, Aerial View



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Figure 18. Area of Design Elements under Alternative E Requiring a Transfer of Jurisdiction from the NPS

1 The Kennedy Center would provide advanced notification and appropriate signs to inform parkway
 2 users of closures and detours. Temporary lane closures would abide by the specifications of an
 3 approved Maintenance of Traffic (MOT) plan in order to provide a safe working environment and
 4 safe passage for motorists during construction. The use of NPS land and/or rerouting of traffic along
 5 RCPP would be done with the appropriate permits from the NPS. Construction noise would be
 6 controlled to comply with District of Columbia noise ordinances and regulations. Additionally,
 7 consideration would be made for performances and events staged in and around the Kennedy Center
 8 and National Mall during construction to minimize disruptions of these events.

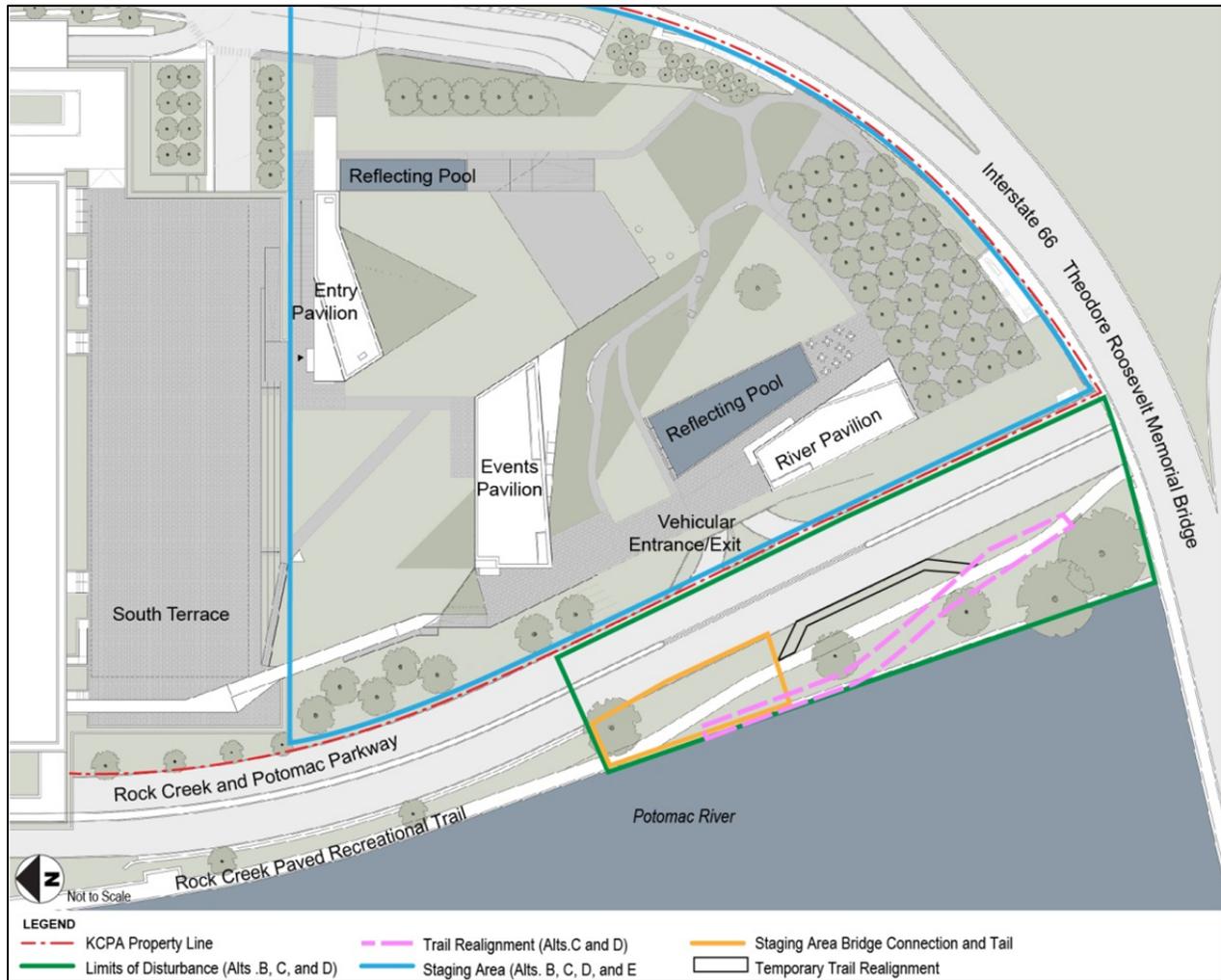
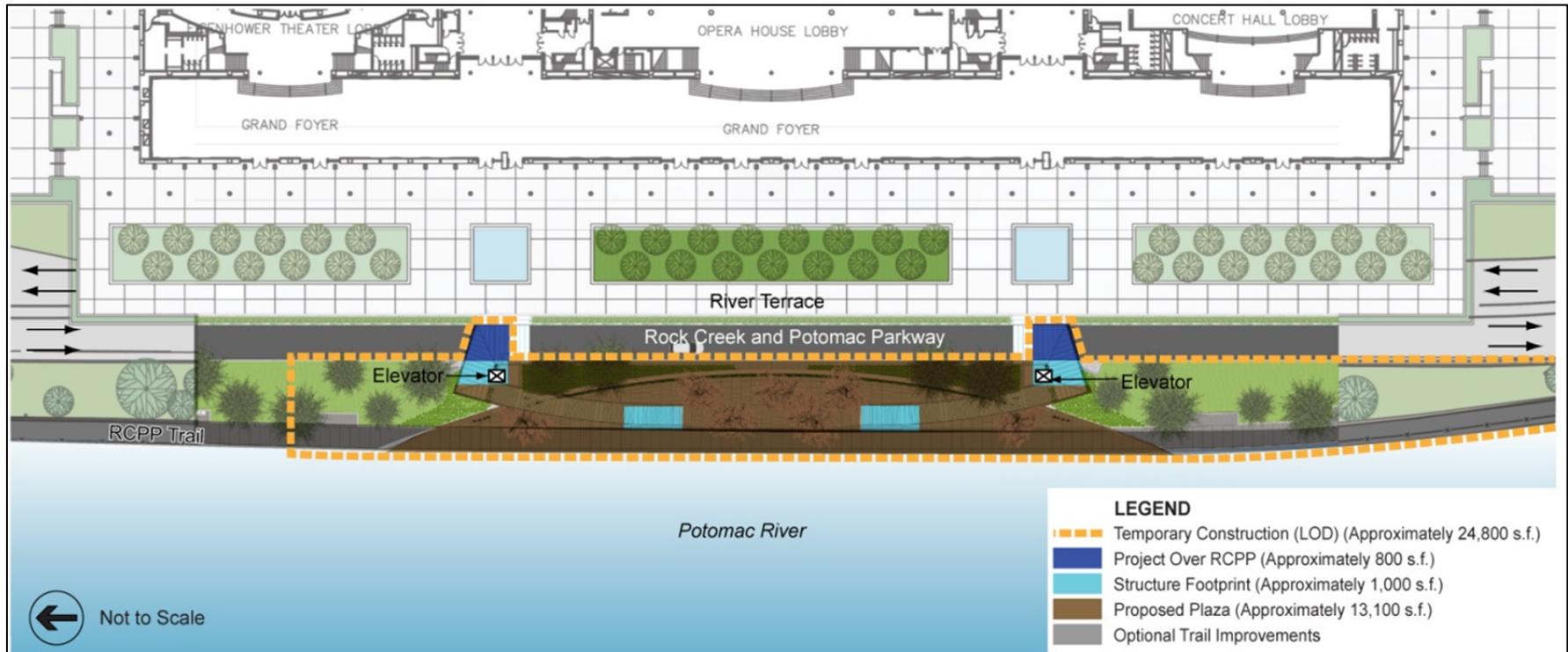


Figure 19. Proposed Construction Staging Area for Alternatives B, C, and D

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CHAPTER 3: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section includes descriptions of the affected environment, which documents the existing conditions of the Kennedy Center, the RCPP, the Rock Creek Paved Recreation Trail, and the surrounding area. These descriptions serve as a baseline for understanding the resources that could be impacted by implementation of the proposed project. This section also includes an analysis of the environmental consequences or “impacts” of four action alternatives and the No action alternative and immediately follows the affected environment descriptions for each resource topic. The resource topics presented in this section correspond to the planning issues and concerns described in the “Purpose and Need” section of this EA.

In accordance with the Council on Environmental Quality regulations, the environmental consequences analysis includes the direct, indirect, and cumulative impacts (40 CFR 1502.16). The intensity of the impacts is assessed in the context of the park’s purpose and significance, and any resource-specific context that may be applicable (40 CFR 1508.27). Where appropriate, mitigating measures for adverse impacts are described and their effect on the severity of the impact is noted. The methods used to assess impacts vary depending on the resource being considered, but are generally based on a review of pertinent literature and park studies, information provided by on-site experts and other agencies, professional judgment, and park staff knowledge and insight.

As required by the Council on Environmental Quality regulations on implementing NEPA, a summary of the environmental consequences for each alternative is provided in Table 1, which can be found at the end of this section.

Impacts are categorized by type, as follows:

Direct: Impacts that would occur as a direct result of the proposed action at the same time and place of implementation.

Indirect: Impacts that would occur as a result of the proposed action but would occur later in time or further in distance from the action.

Adverse: A change that degrades the resource, or moves the resource away from a desired condition, or detracts from its appearance or condition.

Beneficial: A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.

Cumulative Impacts Methodology – This EA also considers cumulative impacts, namely “the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts have been addressed in this EA by resource, and are considered for the no action alternative and the action alternatives. Because some of these actions are in the early planning stages, the evaluation of the cumulative impact is based on a general description of the projects. The projects considered in the cumulative impact analysis are as follows:

Kennedy Center Expansion Project. The Kennedy Center is proposing to expand their facilities to add approximately 60,000 square feet of space for classrooms, rehearsal rooms, event space and offices. The expansion will also include landscaped gardens that will provide gathering spaces and a lawn area to view performances simulcast from within the Kennedy Center or from other locations. The new expansion is currently being built on the south end of the Kennedy Center and will be finished in 2018. Resources impacted include cultural resources, visitor use and experience, and traffic and transportation.

Monumental Core Framework Plan (2009). NCPC developed the Monumental Core Framework Plan with the Commission of Fine Arts (CFA) as a comprehensive planning for the areas surrounding the National Mall and to make better connections to these neighborhoods. Resources impacted by Monumental Core Framework Plan include visitor use and experience and traffic and transportation.

Extending the Legacy (1997) and the Washington Waterfronts Plan (1999). The Extending the Legacy Plan, as well as, the Washington Waterfronts Plan, address the Kennedy Center's access problems and provide a vision of the Kennedy Center's connection to the Rock Creek Paved Recreation Trail and the Potomac River waterfront. Resources impacted include cultural resources and visitor use and experience.

Potomac Hill Master Plan. The U.S. General Services Administration (GSA), in cooperation with the U.S. Department of State (DOS) is preparing a master plan for Potomac Hill to guide the development of an 11.8-acre campus immediately west of the DOS headquarters (the Harry S. Truman Building, 2201 C Street NW) in Washington, DC. Potomac Hill is located east of the Kennedy Center on the east side of the E Street Expressway. Resources impacted include cultural resources and traffic and transportation.

Georgetown Waterfront Park Improvements. Construction of improvements to the Georgetown Waterfront Park began in 2008 and finished for this multi-phased project in 2011. The park improvements consisted of the redevelopment of the waterfront in Georgetown, making the Potomac River Accessible to citizens for recreation and educational uses. The park links 225 miles of parkland along the Potomac River stretching from Cumberland, Maryland to Mount Vernon, Virginia. Resources impacted included cultural resources and visitor use and experience.

Arlington Memorial Bridge Repair and Rehabilitation. The NPS, in cooperation with the Federal Highway Administration (FHWA), is proposing to rehabilitate the Arlington Memorial Bridge, which represents an important element of the George Washington Memorial Parkway (GWMP) in the Washington, DC metropolitan area. This project is being undertaken in order to restore the structural integrity of the bridge while protecting and preserving, to the greatest extent feasible, the historic bridge design characteristics that contribute to the cultural landscape of the GWMP and surrounding area. Resources impacted include cultural resources, visitor use and experience, and traffic and transportation.

DC Clean Rivers Project – Potomac River Tunnel. The NPS and the DC Water and Sewer Authority (DC Water) are preparing an Environmental Impact Statement for the Potomac River Tunnel. The purpose of the project is to construct a tunnel and supporting infrastructure for control of combined sewer overflows (CSOs) when the existing combined sewer system's capacity is

exceeded. A diversion chamber and drop shaft will be built on Kennedy Center property. Resources impacted include cultural resources, visitor use and experience, and traffic and transportation.

An assessment of the potential significance of the impacts according to context and intensity is provided for each impact topic in the “Conclusion” section under alternative. Resource-specific context is presented in the “About the Analysis” section under each impact topic and applies across all alternatives. Intensity of the impacts is presented in the “Conclusion” section using relevant factors that address the severity of the impact.

CULTURAL RESOURCES

Affected Environment. This section describes the cultural resources, including cultural landscapes, present at the site and in the surrounding area. This information is derived from the National Register, the DC Inventory, NPS Cultural Landscape Inventories, determinations of eligibility, historic structures reports, historic photographs, maps, and other documentation, and site reconnaissance and observation.

Section 106 of the National Historic Preservation Act (NHPA) requires that federal agencies consider the effects of their actions on properties listed, or eligible for listing, in the National Register. After initiating the Section 106 compliance process, the NPS, in consultation with the DC State Historic Preservation Office (DC SHPO), identified any historic properties within the project’s Area of Potential Effect (APE). As defined by 36 CFR 800.16(d), the APE represents “the geographic area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist.” For the purposes of this project, the APE boundaries are roughly the Whitehurst Freeway and Virginia Avenue NW, the east façade of the Kennedy Center, the terminus of RCPP and Ohio Drive on the east; the Arlington Memorial Bridge and Memorial Avenue on the south, and the George Washington Memorial Parkway and Francis Scott Key Bridge on the west (Figure 21). The APE includes 11 eligible or listed resources in the National Register and/or the DC Inventory, including the Kennedy Center itself. The ten other resources are: the Watergate Complex, the Arlington Memorial Bridge, the George Washington Memorial Parkway, the Rock Creek and Potomac Parkway, East & West Potomac Parks Historic District, the Georgetown Historic District, Lady Bird Johnson Park, Lincoln Memorial Grounds, Memorial Avenue Corridor, and Theodore Roosevelt Island. Each of these properties is described in the text below and their locations are provided in Figure 21.

HISTORIC RESOURCES

Arlington Memorial Bridge and Related Features. Spanning the Potomac River at the western terminus of the National Mall, the Arlington Memorial Bridge was authorized by Congress in 1916 and constructed between 1926 and 1932. The reinforced concrete bridge is faced with granite and includes a steel bascule span at the center of the bridge. The bridge complex was designed by McKim, Mead & White in the Neoclassical style and features sculptural elements by artists Alexander P. Proctor, Carl Paul Jennewein, and Leo Friedlander. The southern terminus of the RCPP was constructed concurrently with the bridge and enters the Lincoln Memorial Circle at the northwest. The area between the parkway terminus and the bridge is the Watergate, a broad flight of steps leading to the water that serves as a ceremonial river entrance to the city. At its western end, the Arlington Memorial Bridge complex includes Memorial Circle, the circular plaza on Columbia Island; the Boundary Channel Bridge, which connects Columbia Island with the Virginia shore; and

Memorial Avenue and Hemicycle, the ceremonial entrance to Arlington Cemetery. By connecting the Lincoln Memorial with the Arlington House, The Robert E. Lee Memorial, the Arlington Memorial Bridge represents a symbolic link between the North and the South. The bridge and its associated architectural, engineering, sculptural, and landscape features are significant as important elements in the early 20th-century Beaux Arts urban design of the National Capital. The Arlington Memorial Bridge and Related Features (including the Watergate stairs, RCPP terminus, Memorial Circle, Boundary Channel Bridge, and Memorial Avenue and Hemicycle) were listed in the DC Inventory of Historic Sites on November 8, 1964, and in the NRHP on April 4, 1980.

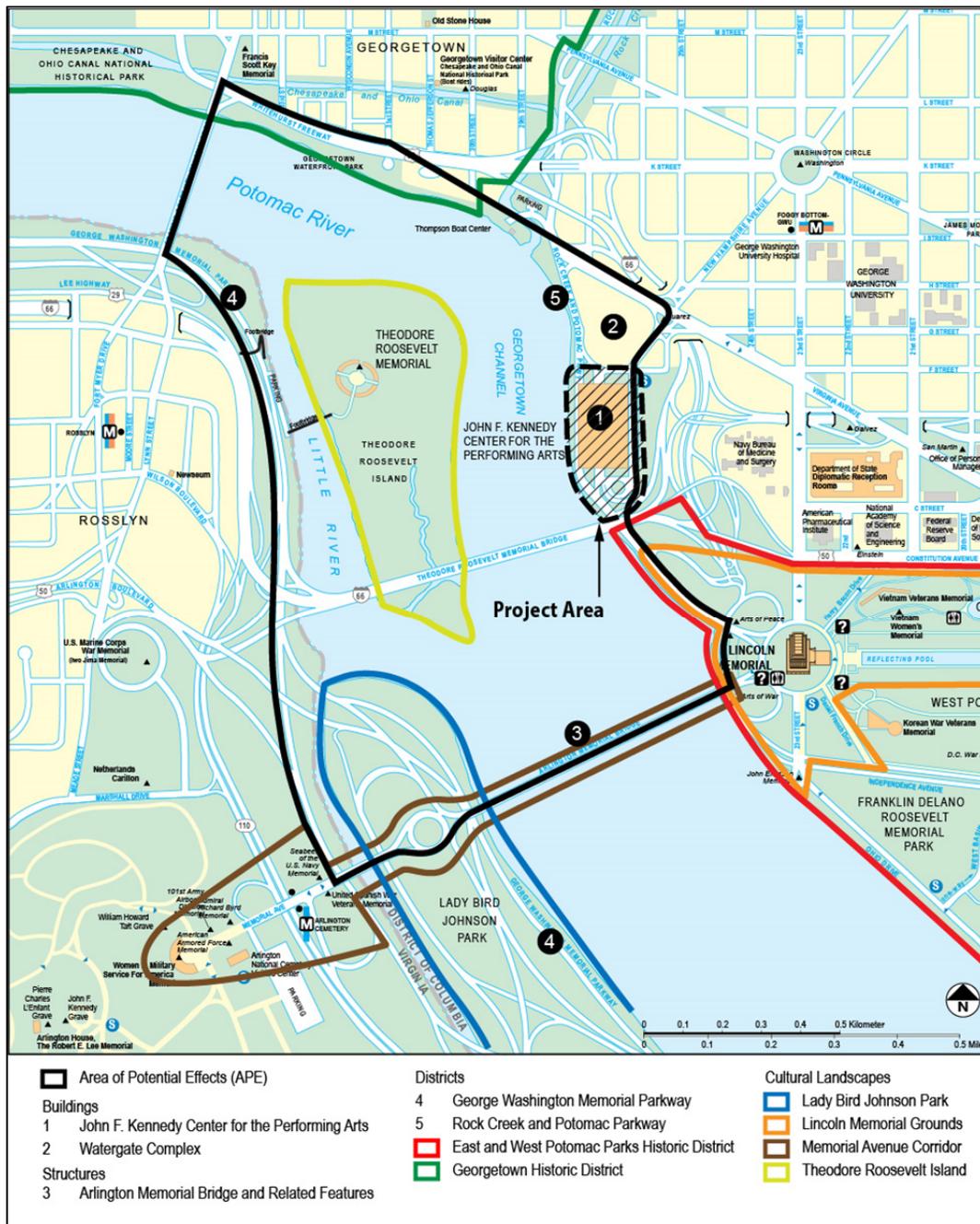


Figure 21: Cultural Resources and Area of Potential Effects

East and West Potomac Parks Historic District. The East and West Potomac Parks Historic District encompasses approximately 730 acres of parkland, including a large portion of the District's monumental core. Situated roughly between the Potomac River and the grounds of the Washington Monument, the East and West Potomac Parks Historic District is characterized by broad expanses of open space framed by mature landscape plantings and views of major memorials that have become part of the American collective memory. The parks provide the setting for nationally recognized memorials such as the Lincoln Memorial and Reflecting Pool, the Jefferson Memorial, the Franklin Delano Roosevelt Memorial, and the Vietnam Veterans and Women's Memorials, among others. The large land masses that are today East and West Potomac Parks were sculpted from tidal flats by the US Army Corps of Engineers (USACE) in an ambitious reclamation project that lasted over 30 years. The reclaimed land became parkland that has been shaped by a number of development plans – most notably the Senate Park Commission (McMillan) Plan of 1901-02, the nation's first major manifestation of the City Beautiful movement. The East and West Potomac Parks Historic District includes three contributing buildings, 11 contributing sites, 11 contributing structures, and 10 contributing objects. The East and West Potomac Parks Historic District was listed in the DC Inventory of Historic Sites on November 8, 1964, and in the NRHP on November 30, 1973 (revised 2001).

George Washington Memorial Parkway. The GWMP is a national parkway of over 7,000 acres traversed by a planned and landscaped roadway system that extends 38.3 miles along the Potomac River through the District of Columbia, Virginia, and Maryland. Initially conceived as a memorial to George Washington, the parkway was authorized by Congress in 1928, with construction starting in 1929. The parkway serves as a grand entryway to the nation's capital and preserves the Potomac River and its watersheds. The parkway comprises 27 sites replete with natural and cultural resources. While some of these sites were included in the original parkway authorization, others such as Theodore Roosevelt Island and the Arlington House, The Robert E. Lee Memorial were separately legislated and incorporated. Approximately 9 million visitors use the parks of the GWMP annually, including the national and international monuments and memorials, natural and recreational areas, trails, a living history farm, historic homes, and an arts and crafts park. These sites, while each possessing a distinct history and individual merits, are united by the parkway and together represent broad themes in the nation's history. The GWMP was listed in the Virginia Landmarks Register on October 8, 1981, and in the NRHP on June 2, 1995.

Georgetown Historic District. Established by the Old Georgetown Act of September 22, 1950, the Georgetown Historic District represents a remarkably intact example of a complete historic town. The historic district encompasses approximately 340 contributing buildings dating from the period of significance, which extends nearly 200 years from 1751 to 1950. Building stock dates from several historical periods, including Early Georgetown (1751-1829), when the area flourished as a tobacco port town and shipping center; Early to Mid-Victorian Georgetown (1830-1869), when extensive industrial and commercial growth occurred along the waterfront; Late Victorian Georgetown (1870-1899), the period following the consolidation of Georgetown into the city of Washington when vast infrastructure improvements were made; and Early 20th Century Georgetown (1900-1949), which saw the first housing restoration efforts and culminated in the passage of the Old Georgetown Act. The district includes representative samples of residential, commercial, institutional, and industrial buildings from all periods and contains many of the city's oldest buildings. The Georgetown Historic District was listed in the DC Inventory of Historic Sites on November 8, 1964, and designated a National Historic Landmark and listed in the NRHP on May 28, 1967 (amended 2003).

John F. Kennedy Center for the Performing Arts. The Kennedy Center has the unique distinction of serving as both a national performing arts center and as the only presidential memorial to John F. Kennedy in the Nation's Capital. It is situated on an eminent site overlooking the Potomac River at the western edge of the District's monumental core. The Kennedy Center is one of the nation's busiest arts facilities, producing, and presenting a wide variety of performances and leading the nation in arts education and accessibility. The Center was designed by 20th-century master architect Edward Durell Stone and was constructed between 1964 and 1971. The Kennedy Center possesses exceptional significance as the sole national memorial to President John F. Kennedy within the National Capital and its environs. The Kennedy Center also possesses exceptional significance as an important example of the work of Edward Durell Stone, a nationally recognized architect of the Modern Movement, and as a public monument to President John F. Kennedy that is immediately recognizable as one of the nation's most iconic memorials.

Character-defining features of the Kennedy Center include intangible attributes of the building's aesthetic composition such as its bilateral symmetry; long, low horizontality; hierarchical facades; and clear, geometric form. Exterior contributing features include the thin-clad marble curtain walls; the size and location of the glass curtain walls; the roof overhang and marble-paneled fascia; the exterior columns (including penthouse columns); the stage access doors; the bronze wall signage; the engraved quotations on the west facade; the West Terrace footprint and cantilevered structure; the marble panels of the north, west, and south fascia of the West Terrace; the shape and location of the planting boxes and water features of the West Terrace; the West Terrace perimeter wall plantings; the vertical paired openings on the north, south, and center bays of the east facade; the size and location of the Entrance Plaza water features; the Entrance Plaza public art; and the louvered vents, penthouse roof overhang, and marble-paneled fascia of the Roof Terrace. Because the building was completed in 1971 and is a congressionally designated presidential memorial, National Register Criterion Consideration F, for commemorative properties, and National Register Criterion Consideration G, for properties less than 50 years old, were applied in evaluating the building. The focus of this determination of eligibility is the building exterior. Thus, the evaluation of integrity and list of character-defining features address only exterior elements. The Kennedy Center was determined eligible for the NRHP by the DC HPO on February 13, 2012.

Rock Creek and Potomac Parkway. Rock Creek and Potomac Parkway Historic District, also known as U.S. Reservation 360, occupies the gorge and rim of the lower Rock Creek Valley and a stretch of land along the Potomac River waterfront. The district comprises approximately 173 acres in the northwest quadrant of Washington, DC. Plans for the parkway were initiated as early as 1867, but did not gain momentum until the Senate Park Commission included the reservation in its 1901 plans for the National Mall and surrounding environs. In 1913, the parkway was officially authorized to provide a landscaped connection between the Mall and Potomac Park (later renamed East and West Potomac Parks) and the already established Rock Creek Park and National Zoo. The parkway comprises a major component of the District's comprehensive park system developed following City Beautiful ideals during the early 20th century. Originally built for horse-drawn carriages, horseback riders, pedestrians, and the occasional automobile, the Rock Creek and Potomac Parkway was one of the earliest parkways in the nation and the first federally funded road. The parkway experienced numerous design changes to facilitate growing automobile use during the early 1900s. The Rock Creek and Potomac Parkway is listed in the NRHP as a historic district under the multiple property listing "Parkways of the National Capital Region, 1913-1965." The parkway is significant under

Criteria A and C in the areas of community planning and development, landscape architecture, architecture, and recreation during the period 1791 to 1951.

The circulation network, comprising the historic roads and trails built between 1831 and 1941, is a contributing resource to both the Rock Creek Park Historic District and the Rock Creek and Potomac Parkway Historic District. Although the NRHP documentation cites the trail network as significant, it does not specifically determine which trails are contributing resources. According to NRHP documentation, the spine of the circulation system, the Rock Creek Paved Recreation Trail, extends along the western side of the Rock Creek and Potomac Parkway, following the path of the primary historic bridle trail. In addition to the existing alignment, this study has identified at least eleven other known footpaths and bridle paths that traverse this area. The Rock Creek Park and Potomac Parkway Historic District was listed in the DC Inventory of Historic Sites on November 8, 1964, and in the NRHP on May 4, 2005.

Watergate Complex. The Watergate consists of a complex of six interconnected buildings designed by Modernist architect Luigi Moretti and constructed between 1964 and 1971 on land adjacent to the RCPP overlooking the Potomac River. The Watergate was the site of one of the biggest scandals in modern United States history, which forced the resignation of President Nixon on August 9, 1974. The Watergate also possesses exceptional architectural significance as an outstanding and innovative example of the Modern Movement in Washington, DC. The landscape design by Boris Timchenko accentuates the Modernist building with plantings, fountains, and pools on terraces with unimpeded views of the river. The periods of significance include 1964 to 1971, the period in which the complex was constructed, and 1972, the year of the Watergate break-in. The Watergate was listed in the DC Inventory of Historic Sites on February 24, 2005, and in the NRHP on October 12, 2005.

CULTURAL LANDSCAPES

Lady Bird Johnson Park

Lady Bird Johnson Park is a 157-acre island located along the Virginia shore of the Potomac River, directly across from West Potomac Park in Washington, DC. The park, originally known as Columbia Island, was created from material dredged from the Potomac River to fulfill the construction needs of the Arlington Memorial Bridge and Mount Vernon Memorial Highway. Columbia Island was added to the capital's park system in 1922, and early landscaping plans proposed combining the formal, ceremonial elements of the Arlington Memorial Bridge composition with naturalistic park-like treatment in the surrounding areas and the shoreline. Later, a revised landscape plan was conceived under the Johnson administration's Beautification Program. The plan was developed by landscape architect Edward D. Stone, Jr., and followed a simple, modern design based on picturesque landscape aesthetics. Today the park is traversed by a complex system of roadways, and two monuments are located at the park's southern end – the Navy-Marine Memorial and the Lyndon Baines Johnson Memorial Grove. Lady Bird Johnson Park has a period of significance from 1915 to 1979. The DCHPO concurred with the findings of the Lady Bird Johnson Cultural Landscapes Inventory on March 24, 2005, in accordance with Section 110 of the NHPA.

Contributing circulation features of Lady Bird Johnson Park within the APE include Memorial Circle and the GWMP. Contributing vegetation features include: all of the Stone planting plan; cottonwoods; crabapple, pear and elm trees remaining from the 1932 planting; daffodils; dogwoods;

and the large white pines near the pylons. Contributing buildings and structures within the APE include: Arlington Memorial Bridge; Arlington Memorial Bridge Boundary Channel Extension; Little River Inlet Bridge; the four pylons of Memorial Circle; the westbound U.S. Route 50 overpass; and the Mount Vernon Bike Trail Bridge. Contributing views and vistas include: views from GWMP and Washington/Arlington Boulevard to daffodil beds and flowering dogwoods; views from Memorial Circle east to the Lincoln Memorial, west to Arlington House, the Robert E. Lee Memorial and Arlington National Cemetery, north up the island, and south down the island; and views along the Mount Vernon Trail near the Potomac River shore and corresponding views from northbound and southbound GWMP. The following views from GWMP northbound are contributing: views north along the Virginia Shore and the Virginia corridor of the GWMP; views north of Arlington Memorial Bridge to Roosevelt Island, the DC shoreline, and the Kennedy Center; and views to the Washington shoreline and the National Mall. The following views from GWMP southbound are contributing: views to the island's shoreline and river and views of the Washington shoreline. The following Small-Scale Features within the APE are contributing: the GWMP wooden guardrails and the Mount Vernon Trail NPS benches. Contributing constructed water features within the APE include Boundary Channel.

Lincoln Memorial Grounds. The Lincoln Memorial grounds encompass 94 acres of West Potomac Park and are a major element of the system of public buildings, parks, memorials, bridges, and drives that constitutes the monumental core of Washington, DC. The Senate Park Commission (McMillan) Plan of 1901-02 defined a vision for the area that included parks and memorials to great men and important events in American history. The Lincoln Memorial was the first such memorial to be constructed. It was sited along the major east-west axis that extends from the Capitol to the Washington Monument as laid out in the L'Enfant Plan. The park-like grounds of the commemorative landscape surrounding the Lincoln Memorial were mostly designed to be used for passive recreation. The Lincoln Memorial grounds have national significance as an essential part of the Senate Park Commission (McMillan) Plan, one of the most successful implementations of the City Beautiful movement. The Lincoln Memorial is significant for its association with Abraham Lincoln and Martin Luther King, Jr., and as an important example of the classicism of the Beaux Arts style.

Contributing views and vistas of the Lincoln Memorial grounds within the APE include: the reciprocal vista between the Lincoln Memorial and Arlington House, The Robert E. Lee Memorial across the Arlington Memorial Bridge; the vista from and to Parkway Drive; and the fan-shaped vista from the Lincoln Memorial west to the Virginia shoreline and the opposite view from the shoreline to the Lincoln Memorial. Contributing vegetation features include: Watergate area planting on both sides of each approach road; the row of American elms on the northeast side of Parkway Drive; the intact planting bed at the Constitution Avenue terminus; the riparian planting along the Potomac River shoreline; and the grass strip along the Potomac River shoreline. Contributing circulation features include: Lincoln Circle, the Arlington Memorial Bridge; Parkway Drive; Ohio Drive; the remnant Constitution Avenue terminus; the sidewalks on both sides of Arlington Memorial Bridge and Parkway Drive; the sidewalk at top of Watergate steps; and the paths on both sides of Ohio Drive at base of Watergate steps. Contributing structures of the Lincoln Memorial grounds within the APE include: the Arlington Memorial Bridge abutment; the Watergate Steps; the Parkway Drive abutment; the statuary on the approach pedestals (Valor, Sacrifice, Music and Harvest, and Aspiration and Literature); and the Watergate plaza wing walls. Contributing small-scale features

include: the Washington Globe lamp posts on Arlington Memorial Bridge, Parkway Drive, and Ohio Drive; the granite Watergate steps; and the granite block pavers at the base of the Watergate steps.

Memorial Avenue Corridor. The Memorial Avenue corridor is a mile-long axial landscape that includes the Arlington Memorial Bridge, Memorial Circle, Memorial Avenue Bridge (over Boundary Channel), Memorial Avenue, and the entrance to Arlington National Cemetery. Basic elements of the Memorial Avenue corridor were first articulated in the 1901 Senate Park Commission (McMillan) Plan of 1901-02. With the exception of Memorial Circle, the work of parkway designer Gilmore D. Clarke, the corridor was designed by McKim, Mead & White under project architect William Mitchell Kendall. Conceived as a grand entryway to Arlington Cemetery, it is a major element of the system of public buildings, parks, memorials, bridges, and drives that constitutes the monumental core of Washington, DC. The composition is Neoclassical in design, and landscape features are, for the most part, formal in style. The corridor is significant for its embodiment of the ideals of the City Beautiful movement. The bridge and its features also represent the work of several masters, particularly the architects William Mitchell Kendall and Charles Follen McKim. The Virginia State Historic Preservation Office (VASHPO) concurred with the findings of the Memorial Avenue Corridor Cultural Landscapes Inventory on July 19, 2004, in accordance with Section 110 of the NHPA. The DC HPO concurred with the findings on August 16, 2004.

Contributing buildings and structures of the Memorial Avenue corridor within the APE include: the Arlington Memorial Bridge; the Arts of War (Sacrifice) and the Arts of War (Valor); the Memorial Avenue (Boundary Channel) Bridge; and the Memorial Circle Pylons. Contributing circulation features within the APE include: Memorial Circle; the pedestrian system on the two bridges and avenue; and the pedestrian walks around Memorial Circle. Contributing small-scale features within the APE include: the “Durax” centerline of Memorial Avenue and both bridges; the original cast-iron inlet grates along both bridges and Memorial Avenue; the granite block “Durax” surface of the Memorial Avenue Bridge; the granite curbstones; the granite header stones at the ends of bridges; the granite lamp post bases, the sidewalk paving on the two bridges and avenue, the triangular “islands” of granite blocks at the east and west ends of Memorial Circle; and the Washington standard lamp posts. Contributing vegetation features within the APE include the white pines at the four pylons near Memorial Circle. Contributing views and vistas include: views of the green parkland along both sides of the Potomac from Arlington Memorial Bridge and views to the river, Capitol dome, and other landmarks of the Capital from Memorial Circle. Contributing constructed water features within the APE include Boundary Channel.

Theodore Roosevelt Island. Historically, Theodore Roosevelt Island was a natural passage across the Potomac River and a locus of commercial and transportation activity. In 1932 the island, which measures approximately 90 acres, was transferred to the federal government to serve as a national memorial to President Theodore Roosevelt. Landscape architect Frederick Law Olmsted, Jr., along with architect John Russell Pope prepared plans for the memorial. The overall goal of the plan was to establish a native woodland community which would memorialize Theodore Roosevelt for his achievements as a leader in conservation policy and commemorate the primeval forest of the Potomac River valley. In 1967, a large open-air architectural monument commemorating Roosevelt was completed on the northern end of the island. Roosevelt Island is unique among presidential memorials in its commemoration of a specific area of presidential achievement and in its development primarily as a living landscape memorial. The island has multiple periods of significance (1749-1833, 1861-1865, and 1931-present) and is important as a cultural landscape design of famed landscape architect Frederick Law Olmsted, Jr., as an integral part of the Senate

Park Commission (McMillan) Plan of 1901-02, and as an important addition to the landscape setting of the National Mall. Theodore Roosevelt Island was listed in the DC Inventory of Historic Sites on November 8, 1964, and in the NRHP on October 15, 1966. In addition, the DCHPO concurred with the findings of the Theodore Roosevelt Cultural Landscapes Inventory on September 16, 2012, in accordance with Section 110 of the NHPA.

Contributing circulation features of Theodore Roosevelt Island include the Woods Trail, the Upland Trail, the Swamp Trail, the North Transverse Trail, and Remnants of the Causeway. Contributing buildings and structures include the Theodore Roosevelt Memorial, including the monoliths “Youth,” “Manhood,” “The State,” and “Nature,” the benches, pools, and plaza; the Theodore Roosevelt Island bridges; the Theodore Roosevelt Island fountains; the Mason House and Mason Ice House ruins; the wharf ruins on the north shore; and the ruin of the boat or scow on the east side of the island. Contributing small-scale features include two low stone retaining walls and the benches in memorial plaza. Contributing vegetation features include the plans associated with the Olmsted Jr. plan and the plants associated with the original plaza. Contributing land use features include the use of the site as a presidential memorial and the use of the site to experience nature. Contributing topographic features include the topography dating back to Olmsted, Jr. Contributing views and vistas include views within and across the plaza. Contributing constructed water features include the large moats and pools adjacent to the plaza.

About the Analysis. Potential impacts to DC Inventory and National Register-listed or eligible resources were analyzed in consideration of regulations implementing Section 106 of the NHPA and guidelines stated within the *Secretary of Interior’s Standards for the Treatment of Historic Properties* (NPS 1995). The analysis of the potential impacts of the project on historic structures focused on whether the proposed undertaking would “...alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” (36 CFR 800.5(a)(1)).

Cultural landscapes consist of “a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values (NPS 1992).” Potential impacts, direct or indirect, to the cultural landscape, were analyzed in consideration of regulations implementing Section 106 of the NHPA and guidelines stated within *The Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (NPS 1992).

Impacts of Alternative A: No Action. With the No Action Alternative, the existing conditions, operations, and maintenance of the Kennedy Center, the RCPP, and the Rock Creek Paved Recreation Trail and the resources within the APE would continue. This alternative would not result in any changes to the overall integrity or the character-defining features of the cultural resources within the APE as they currently exist.

Cumulative Impacts. Because the No Action Alternative would have no impact on historic resources or cultural landscapes, the No Action Alternative would not contribute to cumulative impacts to these resources.

Conclusion. Under the No Action Alternative there would be no direct connection between the Kennedy Center, RCPP, and the Rock Creek Paved Recreation Trail. There would be no adverse

effect on the overall integrity or on the character-defining features of cultural resources within the APE. No cumulative impacts would occur.

Impacts of Alternative B: At-Grade Crossing Access. Alternative B would not interrupt the 360-degree panoramic view from the Kennedy Center Roof Terrace or the contributing views from the River Terrace of the Potomac River, Theodore Roosevelt Island, and Virginia shoreline. The trail spur would not substantially alter the Network of Trails, a contributing element of the RCPP. It would not impact views from the RCPP, which can be seen in Figure 22 and Figure 23. These figures illustrate views of the at-grade crossing under Alternative B. Due to distances and sightlines, this alternative would not alter the views of the following resources: the Watergate Complex, the GWMP, East and West Potomac Parks Historic District, the Georgetown Historic District, Lady Bird Johnson Park, Lincoln Memorial Grounds, the Memorial Avenue Corridor, and Theodore Roosevelt Island.

Cumulative Impacts. Because Alternative B would not substantially alter historic resources or cultural landscapes, Alternative B would not result in cumulative impacts to these resources.

Conclusion. Alternative B would have no adverse effect on the overall integrity or the character defining features of the Kennedy Center or the RCPP. The at-grade crossing under Alternative B would have no adverse effect on the character-defining features of cultural resources within the APE. No cumulative impacts would occur.



Figure 22. View looking north along the RCPP under Alternative B



Figure 23. View looking south from the RCPP under Alternative B

Impacts of Alternative C: Bridge Access with Ramp and Stairs.

A bridge with ramp and stairs connecting the Kennedy Center and the Rock Creek Paved Recreation Trail would minimally interrupt the 360-degree panoramic view from the Kennedy Center's Roof Terrace (see Figure 24).

Contributing views of the Potomac River from the River Terrace, Theodore Roosevelt Island and the Virginia shoreline would not be impacted (see Figure 25).



Figure 24. View from the Kennedy Center Roof Terrace looking southwest (Alternatives C and D)



Figure 25. View looking south from the Kennedy Center River Terrace (Alternatives C and D)

Under this alternative, a section of the Rock Creek Paved Recreation Trail would be re-routed and three trail spurs added, which would change the Network of Trails, a contributing element of the RCPP. In addition, the connection structure would interrupt and be a visual distraction from existing views of the Potomac River and Theodore Roosevelt Island from the RCPP and Rock Creek Paved Recreation Trail. Figure 26 shows the view looking north along the RCPP showing the bridge with the ramp and stairs and Figure 27 shows the view looking south along the RCPP. Because of the location of the connection structure, Alternative C would have no impact on the following contributing resources of the RCPP: *The Arts of Peace*, Millet Lamp posts, Stone Seawalls, Rock Creek, and the Chesapeake and Ohio Canal, and the Sycamore Allée.¹ Alternative C would have an adverse effect on the RCPP.

¹ A row of trees, including the Sycamore Allée called out as a contributing resource of the Rock Creek and Potomac Parkway, lines the parkway as it courses along the river from the Roosevelt Bridge to the intersection with Virginia Avenue. The Sycamore Allée is only present in the section of the tree line in front of the Watergate building; therefore, the design of the Bridge Access with Ramp and Stairs Alternative would not impact trees within the allée.



Figure 26. View looking north along the RCPP showing the bridge with ramp and stairs under Alternative C



Figure 27. View looking south along the RCPP showing the bridge access ramp and stairs under Alternative C

Although not visible from the entire length of the Arlington Memorial Bridge, the bridge, ramp, and stairs that would be constructed under this alternative would be minimally visible from the west end of the bridge. However, the primary vista of the bridge along the east-west axis of the National Mall would not be altered. Based upon analysis in the AOE, due to distances and sightlines, this alternative would not alter the views of the following resources: the Watergate Complex, the GWMP,

East and West Potomac Parks Historic District, the Georgetown Historic District, Lady Bird Johnson Park, Lincoln Memorial Grounds, the Memorial Avenue Corridor, and Theodore Roosevelt Island.

Cumulative Impacts. Construction activities during present and future projects including the Kennedy Center Expansion Project, Arlington Memorial Bridge Repair and Rehabilitation, and DC Clean Rivers Potomac River Tunnel, and Potomac Hill Master Plan, have short-term impacts to the views and vistas of cultural resources. It is anticipated that the connection project would be completed prior to construction activities for DC Water Clean Rivers Project, the Arlington Memorial Bridge Repair and Rehabilitation and the Potomac Hill Master Plan. Therefore, Alternative C would not contribute to the short-term cumulative impacts from these projects.

Past, present, and future projects such as the Kennedy Center Expansion Project, Potomac Hill Master Plan, the Georgetown Waterfront Improvements, and the Extending the Legacy and Washington Waterfront Plans would continue to have minor to moderate impacts on cultural resources from permanent changes to individual resources as well as permanent changes to views and vistas. When the adverse incremental impact of Alternative C is combined with the adverse impacts of other projects, an overall adverse cumulative impact would result. However, consultation with the DC SHPO would occur under each of these projects to ensure the impacts to cultural resources are minimized to the greatest extent possible.

Conclusion. Alternative C would visually interrupt views and vistas of some of the historic properties. Alternative C would visually interrupt the 360-degree panoramic view from the Kennedy Center's Roof Terrace. The bridge and ramp would interrupt and be a visual distraction from existing views of the Potomac River and Theodore Roosevelt Island from the RCPP and the Rock Creek Paved Recreation Trail. The bridge and ramp would also be minimally visible from the west end of the Arlington Memorial Bridge. The trail spurs and re-routing of the Rock Creek Paved Recreation Trail would change the Network of Trails, which is a contributing element of the RCPP. An overall adverse cumulative impact would occur when you combine the impacts of Alternative C with the adverse impacts of other projects.

Impacts of Alternative D: Bridge Access with Ramp and Elevator. Alternative D would minimally interrupt the 360-degree panoramic view from the Kennedy Center's Roof Terrace. Contributing views from the River Terrace of the Potomac River, Theodore Roosevelt Island and the Virginia shoreline would not be impacted (see Figure 25.)

Under this alternative, a section of the Rock Creek Paved Recreation Trail would be re-routed and three trail spurs added, which would change the Network of Trails, a contributing element of the RCPP. In addition, the elevator and connection structure would interrupt and be a visual distraction from existing views of the Potomac River and Theodore Roosevelt Island from the RCPP and Rock Creek Paved Recreation Trail (see Figure 28 and Figure 29). Because of the location of the connection structure under Alternative D would have no impact on the following contributing resources of the RCPP: *The Arts of Peace*, Millet Lamp posts, Stone Seawalls, Rock Creek, and the Chesapeake and Ohio Canal, and the Sycamore Allee.) Due to the changes in views and the change to the Rock Creek Paved Recreation Trail, Alternative D would have an adverse effect on the RCPP.

Although not visible from the entire length of the Arlington Memorial Bridge, the introduction of a bridge, ramp, and elevator would be minimally visible from the west end of the structure. However, the primary vista of the bridge along the east-west axis of the National Mall would not be altered.

Based upon the analysis conducted for the AOE, due to distances and sightlines, this alternative would not alter the views of the following resources: the Watergate Complex, the GWMP, East and West Potomac Parks Historic District, the Georgetown Historic District, Lady Bird Johnson Park, Lincoln Memorial Grounds, the Memorial Avenue Corridor, and Theodore Roosevelt Island.



Figure 28. View looking north along the RCPP showing the bridge with ramp and elevator under Alternative D



Figure 29. View looking south along the RCPP showing the bridge access with ramp and elevator under Alternative D

Cumulative Impacts. The cumulative impacts of Alternative D would be the same as those under Alternative C because both alternatives would result in an adverse impact to cultural resources.

Conclusion. As with Alternative C, Alternative D would visually interrupt views and vistas of some of the historic properties found within the APE. However, while Alternative D would also visually interrupt the 360-degree panoramic view from the Kennedy Center's Roof Terrace, be a visual distraction from existing views of the Potomac River and Theodore Roosevelt Island from the RCPP and the Rock Creek Paved Recreation Trail, and would be minimally visible from the west end of the Arlington Memorial Bridge, the elevator proposed under Alternative D would further detract from these views. The trail spurs and re-routing of the Rock Creek Paved Recreation Trail would change the Network of Trails, which is a contributing element of the RCPP. An overall adverse cumulative impact would occur when you combine the impacts of Alternative D with the adverse impacts of other projects.

Impacts of Alternative E: River Terrace Access. Under this alternative there would be an adverse effect on the Kennedy Center. The construction of the staircase platforms would require the removal of two 20-foot wide portions of the existing River Terrace perimeter wall and would alter the original footprint of the River Terrace by extending portions of the terrace to the west. This alternative would also diminish the cantilevered quality of the River Terrace, interrupt the overall horizontality of the building's original design, and detract from the building's free-standing character (see Figure 30). Lastly, the stair and elevator structure proposed for this alternative would interrupt views from the River Terrace (see Figure 30). The 360-degree panoramic view from the Roof Terrace would not be altered.

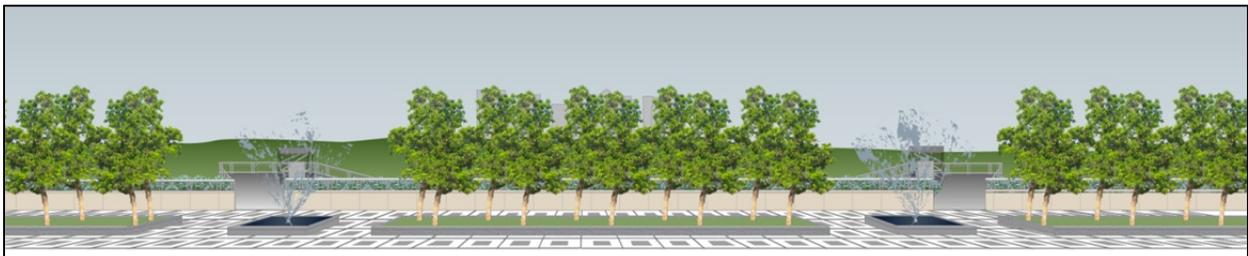


Figure 30. View looking west from the River Terrace under Alternative E

Two staircase platforms would extend over the two southbound lanes of the RCPP. This would visually interrupt the tunnel effect of passing under the Kennedy Center River Terrace (see Figure 31). In addition, the stair and elevator structures would interrupt and be a visual distraction from existing views of the Potomac River from the RCPP Roadway. This alternative would add a landscaped plaza at the base of the stair and elevators structures, which would visually intrude on the Network of Trails, a contributing element of the RCPP and add a hardscape element along what is considered a natural pathway to the river (see Figure 32).

The staircase platforms proposed under this alternative would project out over the southbound lanes of the RCPP. However, the platforms would be set back from the northern and southern edges of the River Terrace and would only slightly alter existing views along the Potomac from the Watergate. While the proposed River Terrace would be visible from the Georgetown Historic District, the alternative would not alter any of the characteristics of the district that qualify it for inclusion in the National Register or diminish the integrity of the resource. Although not visible from the entire

length of the Arlington Memorial Bridge, this alternative would be minimally visible from the west end of the structure. However, the primary vista of the bridge along the east-west axis of the National Mall would not be altered. While there are no historical views looking east towards the Kennedy Center from Theodore Roosevelt Island, the River Terrace would be slightly visible from the island. However, the view of the River Terrace would not dominate or substantially change the setting of Theodore Roosevelt Island. Due to distances and sightlines, this alternative would not alter the views of the following resources: the GWMP, East and West Potomac Parks Historic District, Lady Bird Johnson Park, Lincoln Memorial Grounds, the Memorial Avenue Corridor, and the Theodore Roosevelt Island.

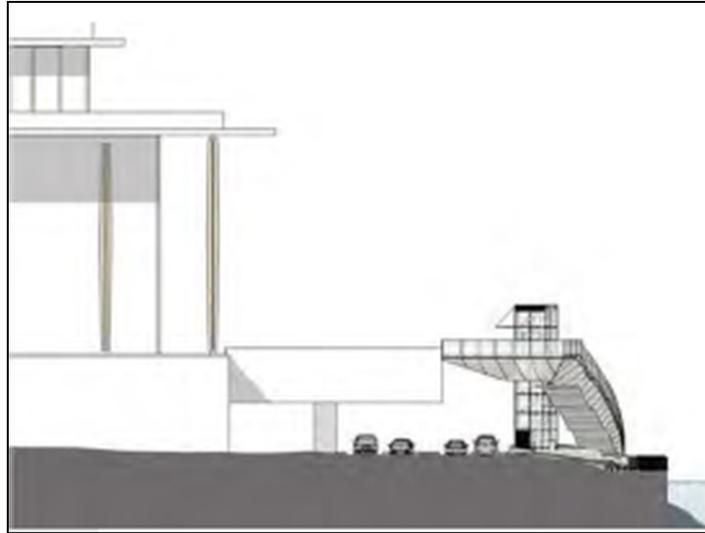


Figure 31. Section showing Alternative E



Figure 32. View looking south from the RCPP under the River Terrace Alternative

Cumulative Impacts. The cumulative impacts of Alternative E would be the same as those under Alternative C because both alternatives would result in an adverse impact to cultural resources.

Conclusion. The construction of the river terrace under Alternative E would have the greatest effect on historic properties including the Kennedy Center and the RCPP. As with Alternatives C and D, Alternative E would visually interrupt views and vistas of some of the historic properties, but size and massing of the river terrace proposed under Alternative E would be a greater visual intrusion on historic properties. Alternative E would visually interrupt the views from the River Terrace. The terrace would also be a visual distraction from existing views from the Watergate and Theodore Roosevelt Island to the Kennedy Center and of the Potomac River from the RCPP and the Rock Creek Paved Recreation Trail. Alternative E would also be visible from the west end of the Arlington Memorial Bridge and the Georgetown Historic District. An overall adverse cumulative impact would occur when you combine the impacts of Alternative E with the adverse impacts of other projects.

VISITOR USE AND EXPERIENCE

Affected Environment. The Kennedy Center was constructed in 1971 and is the nation's living memorial to President John F. Kennedy. The Kennedy Center is one of the nation's busiest arts facilities which attracts audiences and visitors totaling three million people and provides more than 2,000 performances annually. The Kennedy Center's touring productions and its television, radio, and Internet broadcasts reach more than 40 million people around the world each year (Kennedy Center 2014). The Performing Arts for Everyone program offers more than 400 free performances each year that feature international, national, and local artists. These performances include concerts on the Millennium Stage in the Grand Foyer of the Kennedy Center at 6:00 p.m., 365 days a year.

The Rock Creek Paved Recreation Trail provides paved recreation trails for non-motorized activities such as jogging, bicycling, inline skating, etc. While the trail is used heavily as a bicycle commuter route, it is most often used for recreational activities including walking/hiking/jogging (44 percent), bicycling (18 percent), in-line skating (6 percent), and dog walking (17 percent) (NPS, 2007)). The trail in the project area also provides direct access to many NPS amenities, including direct access to Rock Creek Park to the north, and the monuments and memorials found within NAMA to the south. Since this area of the trail is so heavily used, runners, walkers, skaters and bicyclists often compete for space along the trail system.

Access between the Kennedy Center and the Rock Creek Paved Recreation Trail is at F Street and the RCPP. This is a signalized intersection that allows pedestrians and bicyclists to cross the RCPP. From there, pedestrians and bicyclists follow F Street and connect to a pedestrian/bicycle route located on the eastern side of the Kennedy Center between 25th Street NW and Interstate 66 (I-66). This pedestrian/bicycle route becomes a concrete path paralleling 25th Street NW at the bust stop on the eastern side of the Kennedy Center. The route then connects with I-66 and crosses the Theodore Roosevelt Memorial Bridge. Once the Kennedy Center Expansion project is complete, pedestrians and bicyclists would be provided an additional direct connection to I-66 pedestrian/bicycle route at the southeastern end of the Kennedy Center.

About the Analysis. In order to analyze the impacts of each alternative on visitor use and experience, current use of the area was considered and temporary effects of construction were analyzed. Potential impacts to visitor's ability to experience the Kennedy Center, the RCPP, and the

Rock Creek Paved Recreation Trail were analyzed by examining existing resources. The reasons for visiting the Kennedy Center were considered as well as the reasons for visiting surrounding areas.

Analyses of potential impacts were derived from professional judgment and took into consideration visitation patterns and activities available to visitors. The potential change in visitor use and experience proposed by the alternatives was evaluated by identifying projected increases or decreases in recreational use, access to the site, and whether or how the projected changes would affect the desired visitor experience, to what degree, and for how long.

Impacts of Alternative A: No Action. The No Action Alternative represents a continuation of the existing visitor uses and experiences provided by the Kennedy Center, the RCPP, and the Rock Creek Paved Recreation Trail. The Kennedy Center would continue to provide patrons access to the performing arts. The RCPP and the Rock Creek Paved Recreation Trail would continue to provide drivers, joggers, walkers, in-line skaters, and bicyclists a scenic venue along the Potomac River to take in the scenery, commute to work, or exercise. However, there would be no dedicated southern access from RCPP and the Rock Creek Paved Recreation Trail to the Kennedy Center. Visitors would continue to utilize the at-grade crossing of the RCPP at F Street to access the Kennedy Center and trail along I-66/Theodore Roosevelt Memorial Bridge.

Cumulative Impacts. Construction activities from present and future projects, including the Kennedy Center Expansion Project, and the Arlington Memorial Bridge Repair and Rehabilitation, DC Clean Rivers Potomac River Tunnel would have short-term impacts to the visitor use and experience. There would be no construction activities under the No Action Alternative; therefore, the No Action Alternative would not add to the short-term adverse cumulative impacts of the other projects.

The Kennedy Center Expansion Project, Arlington Memorial Bridge Repair and Rehabilitation, DC Clean Rivers Potomac River Tunnel, the Extending the Legacy Plan, and the Georgetown Waterfront Park contribute cumulatively to the visitor experience by enhancing existing Park resources and adding new visitor destinations. However, additional visitation results in more intensive use within the project area. Despite the disruption from construction activities and the increase in visitation and more intensive use of these resources, the overall cumulative impact of these past, present, and reasonably foreseeable future actions would be long-term and beneficial. Alternative A would not add to these beneficial cumulative impacts.

Conclusion. Overall, visitor experience would remain the same for the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront. A direct connection between these resources would not be realized, which does not meet the purpose and need for the project. Cumulative impacts would be beneficial and long-term when the No Action Alternative is combined with past, present, and reasonably foreseeable future actions.

Impacts of Alternative B: At-Grade Crossing. Visitors would be affected by construction staging and construction activities. These short-term effects are discussed under Traffic and Transportation.

Once the at-grade crossing is complete, there would be a direct connection between the Rock Creek Paved Recreation Trail, the Kennedy Center, and I-66/Theodore Roosevelt Memorial Bridge, providing improved visitor access to and from the Kennedy Center. In addition, this improved connection would help connect the Kennedy Center, with those other Presidential Memorials found

within NAMA and the GWMP. This improved connection would help provide a more complete interpretation and appreciation of the area's Presidential Memorials. However, bicyclists would have to go through the Kennedy Center parking garage to use the at-grade crossing and there would be potential conflicts between pedestrians/bicyclists crossing the RCPP with vehicles traveling on the RCPP. Design features of the crossing would include pedestrian signals, road markings, and signage at the approaches of the crossing to assist pedestrians/bicyclists in safely crossing the RCPP. Regular users of the Rock Creek Paved Recreation Trail could experience additional pedestrian traffic on the portion of the trail adjacent to the Kennedy Center because of the new connection.

Cumulative Impacts. Construction activities from present and future projects, including the Kennedy Center Expansion, the Arlington Memorial Bridge Repair and Rehabilitation and the DC Clean Rivers Potomac River Tunnel, have and would continue to have short-term impacts to the visitor use and experience. The connection project would be coordinated with the Kennedy Center Expansion Project so the least disruption to visitors would occur. It is anticipated that the Kennedy Center bridge connection project would be completed prior to construction activities for the Potomac Hill Master Plan, the Arlington Memorial Bridge Rehabilitation, and the DC Water Clean Rivers Project. Therefore, Alternative B would not contribute to the short-term cumulative impacts from these projects.

The Kennedy Center Expansion Project, the Arlington Memorial Bridge Repair and Rehabilitation, DC Clean Rivers Potomac River Tunnel, Extending the Legacy Plan, Monumental Core Framework Plan, and Georgetown Waterfront Park, contribute cumulatively to the visitor experience by enhancing existing Park resources and adding new visitor destinations. However, additional visitation results in more intensive use within the project area. Despite the disruption from construction activities and the increase in visitation and more intensive use of these resources, the overall cumulative impact of these past, present, and reasonably foreseeable future actions on visitor use and experience would be beneficial. Alternative B would contribute to the beneficial cumulative impacts by enhancing the Kennedy Center's facilities and by providing a connection for visitors to access the Rock Creek Paved Recreation Trail from the Kennedy Center.

Conclusion. Overall, visitor experience would be enhanced because a new direct connection between the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront. These enhancements would outweigh the short-term adverse impacts that would occur to visitors during construction.

Impacts of Alternative C: Bridge Access with Ramp and Stairs. Visitors would be affected by construction staging and construction activities. These short-term effects are discussed under Traffic and Transportation.

Once construction is complete, a section of the Rock Creek Paved Recreation Trail would be rerouted and three trail spurs would be added to connect the trail with the landing of the stair at the south end of the ramp, the ramp landing, and the landing of the north stair. Once the bridge is complete, there would be an uninterrupted connection between the Rock Creek Paved Recreation Trail, the Kennedy Center, and I-66/Theodore Roosevelt Bridge, increasing the overall connectivity of the area. The direct connection would provide improved visitor access to and from the Kennedy Center and would help connect the Kennedy Center with those other Presidential Memorials found within NAMA and the GWMP. The bridge access with ramp and stairs would be slightly visible to users of other Presidential Memorials such as Theodore Roosevelt Island; however it would not impact visitor use

and experience because the view of the bridge access with ramp and stairs would not dominate or substantially change the setting of the island.

The proposed bridge would provide a safe direct crossing of the RCPP and would reduce pedestrian/vehicle conflicts associated with an at-grade crossing such as provided under Alternative B and the current at-grade crossing at F Street NW. A bicycle trough could be incorporated into the stairways to make access easier for bicyclists who prefer to walk their bicycles up or down the stairs. The bridge and ramps that are proposed under this alternative would be ADA accessible and provide the same direct accessibility to persons with strollers, disabled individuals, and others unable to utilize the proposed staircases. The bridge and ramp would be designed to a width that would safely accommodate persons with disabilities and bicyclists. However, users of the ramps would have a longer route to access the Rock Creek Paved Recreation Trail than would those who would utilize the stairs.

Regular users of the Rock Creek Paved Recreation Trail could experience additional pedestrian and bicycle traffic on the portion of the trail adjacent to the Kennedy Center because of the new connection. Sight lines on the trail leading up to this connection are very good and signage could be installed to notify pedestrians and bicyclists of this additional connection.

Cumulative Impacts. The cumulative impacts of Alternative C are the same for those of Alternative B because both alternatives would not contribute to the short-term cumulative impacts, but would contribute to the long-term beneficial cumulative impacts by enhancing the Kennedy Center's facilities and by providing a direct connection for visitors between the Rock Creek Paved Recreation Trail and the Kennedy Center.

Conclusion. As with Alternative B, the overall, visitor experience would be enhanced because a new direct connection between the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront would be created. Alternative C would provide a safer and enhanced visitor experience than would be provided under Alternative B because Alternative B would provide an at-grade crossing of the RCPP, which as discussed previously, could create conflicts between pedestrian/bicyclists and vehicles. Alternative C would not have these conflicts because a bridge over RCPP would be provided. These enhancements would outweigh the short-term adverse impacts that would occur to visitors during construction.

Impacts of Alternative D: Bridge Access with Ramp and Elevator. Impacts of Alternative D are similar to those of Alternative C. The addition of an elevator would allow all users to exit the bridge at the same point on the north end.

Impacts of Alternative E: River Terrace. Visitors would be affected by construction staging and construction activities. These short-term effects are discussed under Traffic and Transportation.

Once the River Terrace is complete, there would be an improved connection between the Rock Creek Paved Recreation Trail and the Kennedy Center, increasing the overall connectivity of the area. This connection would be safer than the existing RCPP and F Street at-grade crossings for pedestrians and bicyclists trying to access the Kennedy Center. In addition, this improved connection would help provide a more complete interpretation of the area's Presidential Memorials. The River Terrace would be slightly visible to users of other Presidential Memorials such as Theodore Roosevelt Island,

however it would not impact visitor use and experience because the view of the River Terrace would not dominate or substantially change the setting of the island.

The proposed elevators would provide the same direct accessibility to persons with strollers, disabled individuals, and others unable to utilize the proposed staircases as under Alternatives C and D. A bicycle trough could be incorporated into the stairways to make access easier for bicyclists who prefer to walk their bicycles up or down the stairs. The proposed plaza would provide a defined throughway for users of the Rock Creek Paved Recreation Trail through integration of different surface materials from those proposed for the remainder of the plaza area. The proposed plaza would also enhance aesthetics for Rock Creek Paved Recreation Trail users and Kennedy Center visitors with improved landscaped design, while, encouraging interaction with the Potomac riverfront and promoting walk-ability in and around neighborhoods. However, this alternative would not provide a dedicated bicycle access route between the Kennedy Center and the Rock Creek Paved Recreation Trail. Bicyclists would either have to utilize the elevators or carry their bicycles down the terrace stairs to access the Rock Creek Paved Recreation Trail.

Cumulative Impacts. The cumulative impacts of Alternative E are the same for those of Alternative B, C, and D because all of these alternatives would not contribute to the short-term cumulative impacts, but would contribute to the long-term beneficial cumulative impacts by enhancing the Kennedy Center's facilities and by providing a direct connection for visitors between the Rock Creek Paved Recreation Trail and the Kennedy Center.

Conclusion. As with Alternatives B, C, and D the overall, visitor experience would be enhanced because a new connection between the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront would be created. Alternative E would provide a safer visitor experience than would be provided under Alternative B because Alternative B would provide an at-grade crossing of the RCPP, which as discussed previously, could create conflicts between pedestrian/bicyclists and vehicles. Alternative E would not have these conflicts because a river terrace over RCPP would be constructed. However, Alternative E would not provide a dedicated bicycles access route between the Kennedy Center and the Rock Creek Paved Recreation Trail. These enhancements would outweigh the short-term adverse impacts that would occur to visitors during construction.

TRAFFIC AND TRANSPORTATION

Affected Environment. Transportation in Washington, DC is comprised of a complex network of pedestrian, bicycle, vehicle, and mass transit systems. Generally, the city's transportation systems are developed and maintained by the District Department of Transportation (DDOT).

The following roadways are primary access routes for private automobiles accessing the Kennedy Center (Figure 33):

- Theodore Roosevelt Bridge,
- RCPP,
- New Hampshire Avenue,
- Virginia Avenue, and
- Ohio Drive.

Coming into the District from Virginia, travelers can access the RCPP from the Roosevelt Bridge, and a segment of I-66, using Ohio Drive. The RCPP extends from the Lincoln Memorial north through Rock Creek Park. Between Ohio Drive and Virginia Avenue, the parkway is a four-lane, divided road with two 10-foot lanes heading north and south. The northbound lanes travel beneath the River Terrace of the Kennedy Center in this segment. The RCPP is heavily used by commuters during peak periods and is generally the most popular route to the Kennedy Center (FHWA 2003). During rush hour the RCPP is one-way heading south from 6:45 to 9:30 a.m. and one-way heading north from 3:45 to 6:30 p.m. All other times, the RCPP is open to both directions of travel. Southwest of Washington Circle in the District, New Hampshire Avenue also provides access to the Kennedy Center. Virginia Avenue provides a major route to the Kennedy Center from downtown Washington, DC, with connections to the RCPP and New Hampshire Avenue. Visitors to the Kennedy Center from points east, including Independence Avenue and I-395, gain access using Ohio Drive. The route is located south of the Kennedy Center, and also provides a link to National Mall monuments. Also, Ohio Drive provides a connection between the Roosevelt Bridge, the RCPP, and I-66. Lane use and traffic control are shown in Figure 33.

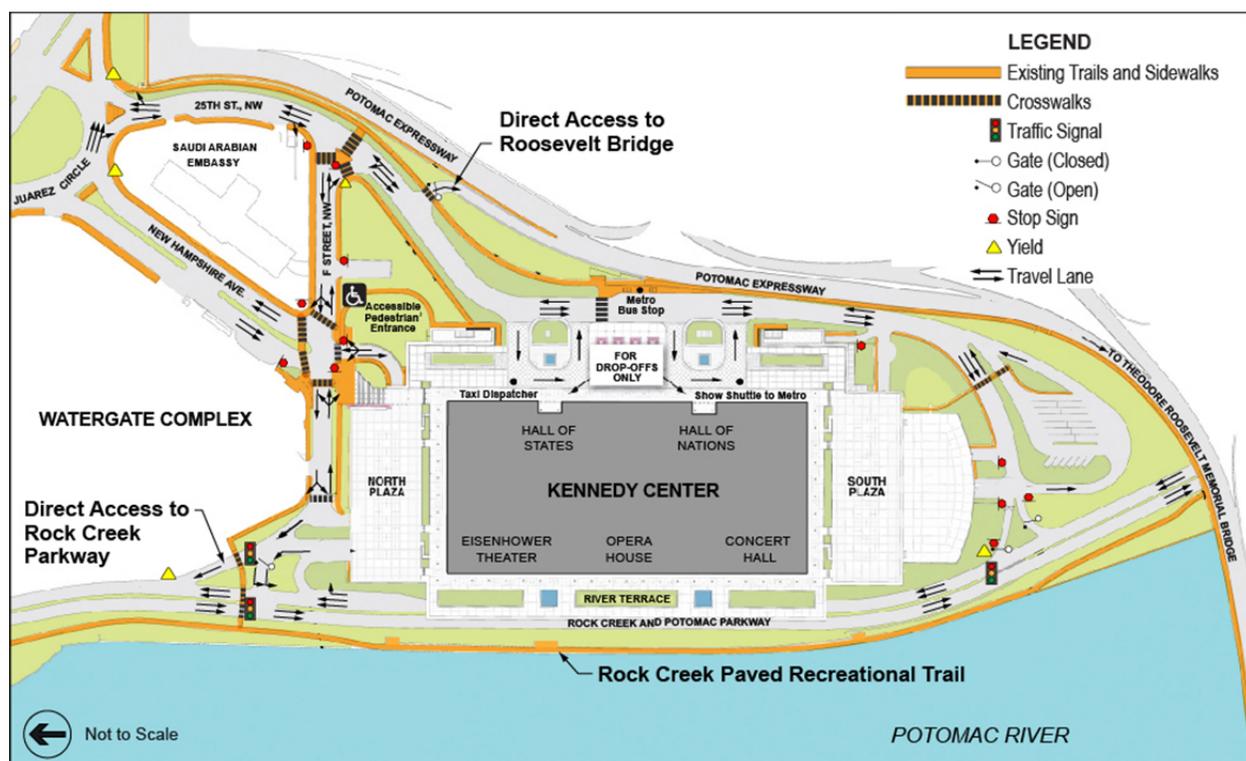


Figure 33. Lane Use and Traffic Control

From the National Mall, several pedestrian and bicycle routes to the RCPP and the Kennedy Center are possible. Visitors can approach the Kennedy Center from the south using the Rock Creek Paved Recreation Trail, crossing the RCPP at F Street. The Rock Creek Paved Recreation Trail can be reached from Lincoln Memorial Circle, but several features of the connection are undesirable. From Lincoln Memorial Circle, the width of the trail is narrow in certain areas, and signal controls are not provided at all crosswalks. Also, the path is not clearly marked and may not be a direct route to the Kennedy Center (FHWA 2003). Another option for access to the Kennedy Center is to use the

sidewalks of the existing street grid. Street sidewalks are generally the safest and most direct pedestrian route from the National Mall because there is adequate space and signal control.

The most pedestrian-friendly route to access the Kennedy Center from Virginia is across the Key Bridge. Once across the bridge, the path continues through park areas and connects with the aforementioned Georgetown waterfront. A less convenient route for pedestrians is across the Roosevelt Bridge; however, this bridge is not easily accessed on the Virginia side of the Potomac because it lacks a connection to trails. Access to the north side of the Roosevelt Bridge is possible, but only from Lee Highway and North Lynn Street in Rosslyn. From here, the path crosses the George Washington Memorial Parkway, travels alongside the Potomac, and continues beside a parking lot before reaching the bridge. Certain areas of this connection do not meet design standards for safety, and the trail is poorly marked (FHWA 2003). Once across the bridge, the path directs pedestrians to the entrance of the Kennedy Center on its east side.

In 2010, the DDOT released the 2010 Action Agenda to outline its transportation policies and corresponding plans of action. Pedestrian access is a focal point of the agenda presented in the report. In order to promote the sustainability of its transportation assets, DDOT wants to “make walking the mode of choice for trips of less than one mile, and biking the mode of choice of less than three miles” (DDOT 2010). The following are the most significant sources of pedestrian visitors to the Kennedy Center: Georgetown, the National Mall, northern Virginia, West End and Foggy Bottom neighborhoods, and the Foggy Bottom Metro station.

The Foggy Bottom Metro station is located at 23rd Street and I Street. Generally, New Hampshire Avenue is used to access the Kennedy Center from the station. The Kennedy Center is approximately 0.5 miles from the Foggy Bottom Metro station. The sidewalk along New Hampshire Avenue is narrow and overcrowded by trees. Also, multiple street crossings are necessary, including the crossing of Virginia Avenue, which is six-lanes wide (FHWA 2003). Visitors travelling via Metro that do not wish to walk can use the free Kennedy Center Shuttle which departs every 15 minutes from the Foggy Bottom Metro station. The Kennedy Center is also directly accessible by Metro Bus 80 with service operating approximately every 15 to 30 minutes during business hours. In addition to public transit, a large number of visitors arrive on private charter buses. The Kennedy Center has limited space designated for bus parking. Therefore, most charter buses drop off/pick up passengers in front of the building and find offsite parking options while guests tour the facilities.

Pedestrian access to the RCPP and the Kennedy Center from Georgetown is possible using the Rock Creek Paved Recreation Trail. This paved trail is accessible from the Georgetown Waterfront Park beginning south of 34th Street and M Street. The trail proceeds alongside the Potomac River, across a one-lane bridge at the confluence of Rock Creek and the Potomac. Past the bridge, pedestrians connect with the RCPP and head south to the Kennedy Center. At F Street, trail users wishing to connect to the Kennedy Center would use a signalized intersection to cross the RCPP. One block east, on F Street, there are stairs to enter the building. No direct access currently is available to the Kennedy Center from the Rock Creek Paved Recreation Trail.

The Rock Creek Paved Recreation Trail is also a widely used bicycle route (NPS 1996). Another bicycle route is located on the eastern side of the Kennedy Center between 25th Street NW and Interstate 66. This bicycle route crosses the Theodore Roosevelt Memorial Bridge with Interstate 66 and then becomes a concrete path paralleling 25th Street NW at the bus stop on the eastern side of the Kennedy Center. Pedestrians and bicyclists are also able to access the Kennedy Center via an asphalt connection from Interstate 66 that was created when the parking garage was constructed.

Bicycle racks are installed around the Kennedy Center to provide bicycle parking for bicyclists. Two bicycle racks are located at the north and south parking entrances of the Kennedy Center. Bicycle racks are also located on F Street NW just to the east of the A North parking entrance and at the bus stop on 25th Street NW on the east side of the Kennedy Center, and also on F Street, west of the stairs by the North Plaza. There is also a Capital Bikeshare location on the eastern side of the building adjacent to the southern drop-off area.

Sidewalks are provided along all roadways around the Kennedy Center, including F Street NW, 25th Street NW, and New Hampshire Avenue NW. Crosswalks are provided at the intersection of New Hampshire Avenue NW and F Street NW, and F Street NW, and 25th Street NW. Crosswalks are provided on RCPP only at the intersection of F Street NW at the northern end of the Kennedy Center. Pedestrian and bicycle facilities are also shown in Figure 34.

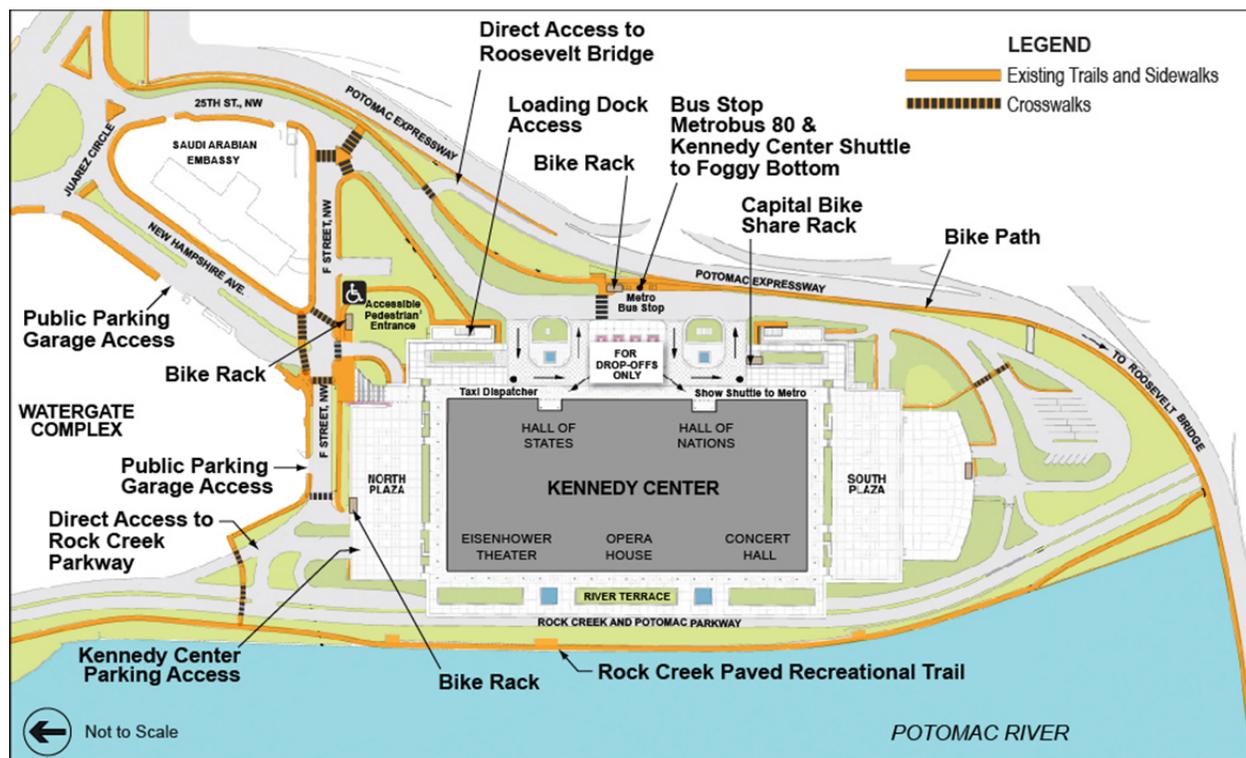


Figure 34. Public Transportation, Pedestrian and Bicycle Facilities

About the Analysis. In order to analyze the impacts of the project on the transportation network, current traffic conditions near the site were considered, in addition to an assessment of transportation options available to visitors of the Kennedy Center. The impacts resulting from short-term road closures due to construction and possible mitigation techniques to address these impacts were analyzed, as well as impacts during construction to users of the RCPP and the Rock Creek Paved Recreation Trail.

Impacts of Alternative A: No Action. The No Action Alternative represents a continuation of the existing visitor uses and experiences provided by the Kennedy Center, the RCPP, and the Rock Creek paved Recreation Trail. The RCPP and the Rock Creek Paved Recreation Trail would continue to provide drivers, joggers, walkers, in-line skaters, and bicyclists a scenic venue along the Potomac River to take in the scenery, commute to work and exercise. Motorized travel on the RCPP would be

uninterrupted and traffic would continue at current levels. However, accessing the Kennedy Center from the Rock Creek Paved Recreation Trail and the RCPP would continue to be difficult, as visitors would continue to have to utilize the at-grade crossing of the RCPP and F Street to access the Kennedy Center and the trail along I-66/Theodore Roosevelt Bridge.

Cumulative Impacts. Present and future projects including the Kennedy Center Expansion, the Arlington Memorial Bridge Repair and Rehabilitation, and the Potomac Hill Master Plan would result in short-term adverse impacts to traffic and transportation during construction activities and beneficial impacts to traffic and transportation once they are complete. The DC Clean Rivers Project may have adverse impacts to traffic and transportation during construction activities, but will not affect traffic once it is complete.

The Kennedy Center Expansion and the Arlington Memorial Bridge Repair and Rehabilitation contribute cumulatively to the traffic and transportation by changing traffic patterns as with the Arlington Memorial Bridge Repair and Rehabilitation and adding new visitor destinations. As area-wide projects are implemented and pedestrian access throughout DC and NAMA is enhanced, more intensive use within the project area could occur. The No Action Alternative would contribute to the long-term cumulative impacts.

Conclusion. Under the No Action Alternative, the at-grade crossing of the RCPP could create conflicts between pedestrian/bicyclists and vehicles. It would also increase the delay for vehicles when the at-grade crossing is in use. The No Action Alternative would contribute to long-term cumulative impacts.

Impacts of Alternative B: At-Grade Crossing. During construction of Alternative B, the staging area for the project would be on the grounds of the Kennedy Center and on parkland administered by NAMA. A stabilized construction entrance would provide vehicular access to these staging areas from the RCPP. The transport of materials for construction would result in increased truck traffic at the site. The construction entrance would be located on the east side of the RCPP north of the Roosevelt Bridge. The entrance would be operated for approximately three years, until the completion of the project in 2018; however during that time it will not be in continuous use. Because trucks and other heavy vehicles are generally not permitted on the RCPP, a permit from the NPS would be required to allow this use. Construction under Alternative B would require temporary closures of the road and the Rock Creek Paved Recreation Trail that would be relatively short. However, public access to the Rock Creek Paved Recreation Trail would be maintained throughout construction, and the Kennedy Center would minimize impacts to trail users with the implementation of an MOT plan. Parkway and trail users would be notified in advance of construction activities. Flagmen would be utilized during construction to allow safe passage on the trail when equipment is being used or materials being delivered. Any proposed closures of the RCPP would require permission from the NPS and would be subject to any conditions, such as night-time closures, stipulated by the NPS.

A transportation analysis was previously conducted for the Kennedy Center expansion project (Stantec 2013). The analysis showed that a pedestrian signal at an at-grade crossing would not interfere with adjacent intersections, but would increase the delay for vehicles, however, with acceptable levels of service. A special use permit from the NPS would be necessary to construct the cross walk and install a new signal on NPS land. FHWA would approve the signal.

Once construction is complete, visitors would have use of the at-grade crossing of RCPP to access the Rock Creek Paved Recreation Trail. However, bicyclists would have to go through the Kennedy Center parking garage to use the at-grade crossing. As seen under the No Action Alternative, there would be potential conflicts between pedestrians/bicyclists crossing the RCPP and vehicles traveling on the RCPP. Design features of the crossing to promote safety would include pedestrian signals, road markings, and signage at the approaches of the crossing. Regular users of the Rock Creek Paved Recreation Trail could experience additional pedestrian traffic on the portion of the trail adjacent to the Kennedy Center because of the new connection. Pedestrian and bicyclists access throughout DC and NAMA would be enhanced, which would increase the usage of the Rock Creek Paved Recreation Trail.

Cumulative Impacts. Present and future projects including the Kennedy Center Expansion, the Arlington Memorial Bridge Repair and Rehabilitation, and the Potomac Hill Master Plan would result in short-term adverse impacts to traffic and transportation during construction activities and beneficial impacts to traffic and transportation once they are complete. The DC Clean Rivers Project may have adverse impacts to traffic and transportation during construction activities, but will not affect traffic once it is complete.

It is anticipated that the Kennedy Center expansion connection project would be completed prior to construction activities for the Potomac Hill Master Plan, the Arlington Memorial Bridge Rehabilitation, and the DC Water Clean Rivers Project. The connection project would be coordinated with the Kennedy Center Expansion Project so that any road and trail closures would not occur at the same time. Therefore, Alternative B would not contribute to the short-term cumulative impacts from these projects.

Conclusion. Alternative B would provide a pedestrian and bicycle at-grade connection between the Kennedy Center and the Rock Creek Paved Recreation Trail. The at-grade crossing of the RCPP could create conflicts between pedestrian/bicyclists and vehicles. It would also increase the delay for vehicles when the at-grade crossing is in use. Alternative B would contribute to the long-term adverse cumulative impacts.

Impacts of Alternative C: Bridge Access with Ramp and Stairs. During construction of Alternative C, the staging area for the project would be on the grounds of the Kennedy Center and on parkland grounds administered by NAMA. A stabilized construction entrance would provide vehicular access to these staging areas from the RCPP. The transport of materials for construction would result in increased truck traffic to the project area. The construction entrance would be located on the east side of the RCPP north of the Roosevelt Bridge. The entrance would be operated for approximately three years, until the completion of the project in 2018, however during that time it will not be in continuous use. Because trucks and other heavy vehicles are generally not permitted on the RCPP, a permit from the NPS would be required to allow this use.

Construction under Alternative C would involve the temporary closure of the RCPP and re-routing of the Rock Creek Paved Recreation Trail in order to assemble the bridge components, but public access to the Rock Creek Paved Recreation Trail would be maintained throughout construction and the Kennedy Center would develop an NPS approved mitigation plan aimed at minimizing impacts to both trail users and those driving on the RCPP. The plan would define how the trail would be modified to maintain pedestrian and bicycle flow during construction. To mitigate temporary

impacts, flagmen would be utilized during construction to allow safe passage on the trail when equipment is being used or materials being delivered. Parkway and trail users would be notified of any changes during construction by appropriate signage and/or other public notices in accordance with NPS procedures. An MOT plan as described under Alternative B would be developed which would minimize impacts on RCPP motorists during temporary closures. Any proposed closures of the RCPP and rerouting of Rock Creek Paved Recreation Trail would require permission from the NPS and would be subject to any conditions, such as night-time lane closures, stipulated by the NPS. The RCPP would be closed during construction of the pedestrian bridge. It is expected that there would only be six overnight closures and they would be short in duration. The westernmost southbound lane of the RCPP would be closed intermittently for 20 weeks during construction of the pedestrian bridge. The RCPP would be closed over night or on weekends between F Street NW and Ohio Drive NW. Traffic would be routed around the site using Interstate 66 and the Potomac River Freeway. The Rock Creek Paved Recreation Trail would be re-routed to provide space for the construction staging area and to connect the new bridge with the Rock Creek Paved Recreation Trail. The re-routing of the trail would be expected to last approximately six months and would not be concurrent with any additional closures of the trail or the RCPP.

Once construction is complete, the bridge connection would provide a direct connection from the south side Kennedy Center to the Rock Creek Paved Recreation Trail. Pedestrian and bicyclists would be able to meander through the south side of the Kennedy Center and traverse over the RCPP to gain access Rock Creek Multi-Use Trail. The Rock Creek Multi-Use Trail would be permanently rerouted to connect the bridge landings with the trail. Sight lines on the trail leading up to this connection are very good and signage would be installed to notify cyclists of the new connection between the trail and the Kennedy Center. This alternative would increase long-term pedestrian and bicycle connectivity without impacting vehicular traffic on the RCPP. The bridge when compared to Alternatives A and B would eliminate the conflict between pedestrians/bicyclists and vehicles.

Cumulative Impacts. Present and future projects including the Kennedy Center Expansion, the Arlington Memorial Bridge Repair and Rehabilitation, and the Potomac Hill Master Plan would result in short-term adverse impacts to traffic and transportation during construction activities and beneficial impacts to traffic and transportation once they are complete. The DC Clean Rivers Project may have adverse impacts to traffic and transportation during construction activities, but will not affect traffic once it is complete.

It is anticipated that the Kennedy Center bridge connection project would be completed prior to construction activities for the Potomac Hill Master Plan, the Arlington Memorial Bridge Rehabilitation, and the DC Water Clean Rivers Project. The bridge connection project would be coordinated with the Kennedy Center Expansion Project so that any closures to the road and trail would not occur at the same time. Therefore, Alternative C would not contribute to the short-term cumulative impacts from these projects.

Alternative C would result in long-term beneficial impacts to traffic and transportation within the project area by enhancing the Kennedy Center's facilities and by providing a direct connection for visitors between the Rock Creek Paved Recreation Trail and the Kennedy Center. Therefore, Alternative C would contribute to the long-term-term beneficial cumulative impacts.

Conclusion. Alternative C would provide a direct pedestrian and bicycle connection between the Kennedy Center and the Rock Creek Paved Recreation Trail. The connection would be safer

connection than would be provided under Alternative B because under Alternative B an at-grade crossing of the RCPP would occur, which as discussed previously, could create conflicts between pedestrian/bicyclists and vehicles. It would also increase the delay for vehicles when the at-grade crossing is in use. Alternative C would not have these conflicts because a bridge over RCPP would be provided. These enhancements would outweigh the short-term adverse impacts that would occur to the transportation network during construction. Alternative C would contribute to the long-term beneficial cumulative impacts.

Impacts of Alternative D: Bridge Access with Ramp and Elevator. Impacts of Alternative D are similar to those of Alternative C. The addition of an elevator would not add additional impacts to traffic or the transportation network.

Impacts of Alternative E: River Terrace Access. The design proposed under Alternative E would minimize impacts to RCPP drivers and users of the Rock Creek Paved Recreation Trail. During construction, the staging area would be located on parkland that is administered by NAMA. A stabilized construction entrance would provide vehicular access to this staging area from the RCPP, resulting in increased truck traffic during construction. Because trucks and other heavy vehicles are generally not permitted on the RCPP, a special use permit would be required to allow this use. Components of the terrace would be delivered by truck to the site along the RCPP. Under Alternative E, a temporary construction area of approximately 0.5 acres of NPS land would be required for construction activities. An MOT plan would be implemented to ensure safe and continued flow of traffic during partial lane closures of the RCPP. This would include directional signage to inform travelers on the RCPP and the Rock Creek Multi-Use Trail of all construction zones and associated speed limits, lane closures, and trail detours. Additionally, a minimum width of the Rock Creek Paved Recreation Trail would be maintained during construction. Should the Rock Creek Paved Recreation Trail need to be completely closed to bicycle and pedestrian traffic during construction activities, this closure would be of limited duration, not to exceed one day. A temporary trail detour would be signed around the construction zone, providing continuous access.

Once construction is complete, there would be an additional connection between the Rock Creek Paved Recreation Trail and the Kennedy Center, increasing the overall connectivity of the area. The connection would be safer than the existing RCPP and F Street at-grade crossing for pedestrians and bicyclists trying to access the Kennedy Center. However, bicyclists would not be provided direct access between the Kennedy Center and the Rock Creek Paved Recreation Trail. Bicyclists would need to utilize the elevator or carry their bicycle down the stairs in order to access the Rock Creek Paved Recreation Trail.

Cumulative Impacts. Present and future projects including the Kennedy Center Expansion, the Arlington Memorial Bridge Repair and Rehabilitation, and the Potomac Hill Master Plan would result in short-term adverse impacts to traffic and transportation during construction activities and beneficial impacts to traffic and transportation once they are complete. The DC Clean Rivers Project may have adverse impacts to traffic and transportation during construction activities, but will not affect traffic once it is complete.

It is anticipated that the Kennedy Center bridge connection project would be completed prior to construction activities for the Potomac Hill Master Plan, the Arlington Memorial Bridge Rehabilitation, and the DC Water Clean Rivers Project. The bridge connection project would be

coordinated with the Kennedy Center Expansion Project so that any closures to the road and trail would not occur at the same time. Therefore, Alternative E would not contribute to the short-term cumulative impacts from these projects.

While Alternative E would result in long-term beneficial impacts to traffic and transportation within the project area by enhancing the Kennedy Center's facilities and by providing a second connection for visitors between the Rock Creek Paved Recreation Trail and the Kennedy Center, bicycles would not be provided with a direct access. Therefore, Alternative E would only slightly contribute to the long-term-term beneficial cumulative impacts.

Conclusion. As with Alternatives C and D, Alternative E would provide a pedestrian and bicycle connection between the Kennedy Center and the Rock Creek Paved Recreation Trail. The connection would be a safer connection than would be provided under Alternatives A and B because under Alternatives A and B at-grade crossings of the RCPP would occur, which as discussed previously, could create conflicts between pedestrian/bicyclists and vehicles. It would also increase the delay for vehicles when the at-grade crossing is in use. Alternative E would not have these conflicts because stairs over RCPP would be provided. However, bicyclists would not be provided direct access between the Kennedy Center and the Rock Creek Paved Recreation Trail. Bicyclists would need to utilize the elevator or carry their bicycles down the stairs in order to access the Rock Creek Paved Recreation Trail. These enhancements would outweigh the short-term adverse impacts that would occur to the transportation network during construction. Alternative E would only slightly contribute to the long-term beneficial cumulative impacts.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

A summary of the environmental consequences of each alternative is presented in Table 1. See the "Affected Environment and Environmental Consequences" section for detailed explanations of the impacts presented.

Table 1. Summary of Environmental Consequences

Impacted Resource	Alternative A No Action	Alternative B At-Grade Crossing	Alternative C Bridge Access with Ramp and Stairs	Alternative D Bridge Access with Ramp and Elevator	Alternative E River Terrace
Cultural Resources	<p>Under the No Action Alternative there would be no direct connection between the Kennedy Center, RCPP, and the Rock Creek Paved Recreation Trail. There would be no effect on the overall integrity or on the character-defining features of cultural resources within the APE. No cumulative impacts would occur.</p>	<p>Alternative B would have no adverse effect on the overall integrity or the character defining features of the Kennedy Center or the RCPP. No cumulative effects would occur.</p>	<p>Alternative C would visually interrupt views and vistas of some of the historic properties. Alternative C would visually interrupt the 360-degree panoramic view from the Kennedy Center's Roof Terrace. The bridge and ramp would interrupt and be a visual distraction from existing views of the Potomac River and Theodore Roosevelt Island from the RCPP and the Rock Creek Paved Recreation Trail. The bridge and ramp would also be minimally visible from the west end of the Arlington Memorial Bridge. The trail spurs and re-routing of the Rock Creek Paved Recreation Trail would change the Network of Trails, which is a contributing element of the RCPP. An overall adverse cumulative impact would occur when you combine the impacts of Alternative C with the adverse impacts of other projects.</p>	<p>As with Alternative C, Alternative D would visually interrupt views and vistas of some of the historic properties found within the APE. However, while Alternative D would also visually interrupt the 360-degree panoramic view from the Kennedy Center's Roof Terrace, be a visual distraction from existing views of the Potomac River and Theodore Roosevelt Island from the RCPP and the Rock Creek Paved Recreation Trail, and would be minimally visible from the west end of the Arlington Memorial Bridge, the elevator proposed under Alternative D would further detract from these views. The trail spurs and re-routing of the Rock Creek Paved Recreation Trail would change the Network of Trails, which is a contributing element of the RCPP. An overall adverse cumulative impact would occur when you combine the impacts of Alternative D with the adverse impacts of other projects.</p>	<p>The construction of the river terrace under Alternative E would have the greatest effect on historic properties including the Kennedy Center and the RCPP. As with Alternatives C and D, Alternative E would visually interrupt views and vistas of some of the historic properties, but size and massing of the river terrace proposed under Alternative E would be a greater visual intrusion on historic properties. Alternative E would visually interrupt the views from the River Terrace. The terrace would also be a visual distraction from existing views from the Watergate and Theodore Roosevelt Island to the Kennedy Center and of the Potomac River from the RCPP and the Rock Creek Paved Recreation Trail. Alternative E would also be visible from the west end of the Arlington Memorial Bridge and the Georgetown Historic District. An overall adverse cumulative impact would occur when you combine the impacts of Alternative E with the adverse impacts of other projects.</p>

Table 1. Summary of Environmental Consequences

Impacted Resource	Alternative A No Action	Alternative B At-Grade Crossing	Alternative C Bridge Access with Ramp and Stairs	Alternative D Bridge Access with Ramp and Elevator	Alternative E River Terrace
Visitor Use and Experience	<p>Overall, visitor experience would remain the same for the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront. A direct connection between these resources would not be realized, which does not meet the purpose and need for the project. Cumulative impacts would be beneficial and long-term when the No Action Alternative is combined with past, present, and reasonably foreseeable future actions.</p>	<p>Overall, visitor experience would be enhanced because a new direct connection between the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront. These enhancements would outweigh the short-term adverse impacts that would occur to visitors during construction.</p>	<p>As with Alternative B, the overall, visitor experience would be enhanced because a new direct connection between the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront would be created. Alternatives C and D would provide a safer and enhanced visitor experience than would be provided under Alternative B because Alternative B would provide an at-grade crossing of the RCPP, which as discussed previously, could create conflicts between pedestrian/bicyclists and vehicles. Alternatives C and D would not have these conflicts because a bridge over RCPP would be provided. These enhancements would outweigh the short-term adverse impacts that would occur to visitors during construction.</p>		<p>As with Alternatives B, C, and D the overall, visitor experience would be enhanced because a new connection between the Kennedy Center, NAMA, the Rock Creek Paved Recreation Trail, and the Potomac River waterfront would be created. Alternative E would provide a safer visitor experience than would be provided under Alternative B because Alternative B would provide an at-grade crossing of the RCPP, which as discussed previously, could create conflicts between pedestrian/bicyclists and vehicles. Alternative E would not have these conflicts because a river terrace over RCPP would be constructed. However, Alternative E would not provide a dedicated bicycles access route between the Kennedy Center and the Rock Creek Paved Recreation Trail. These enhancements would outweigh the short-term adverse impacts that would occur to visitors during construction.</p>

Table 1. Summary of Environmental Consequences

Impacted Resource	Alternative A No Action	Alternative B At-Grade Crossing	Alternative C Bridge Access with Ramp and Stairs	Alternative D Bridge Access with Ramp and Elevator	Alternative E River Terrace
Traffic and Transportation	<p>Under the No Action Alternative, the at-grade crossing of the RCPP could create conflicts between pedestrian/bicyclists and vehicles. It would also increase the delay for vehicles when the at-grade crossing is in use. The No Action Alternative would contribute to long-term cumulative impacts.</p>	<p>Alternative B would provide a pedestrian and bicycle at-grade connection between the Kennedy Center and the Rock Creek Paved Recreation Trail. The at-grade crossing of the RCPP could create conflicts between pedestrian/bicyclists and vehicles. It would also increase the delay for vehicles when the at-grade crossing is in use. Alternative B would contribute to the long-term adverse cumulative impacts.</p>	<p>Alternatives C and D would provide a direct pedestrian and bicycle connection between the Kennedy Center and the Rock Creek Paved Recreation Trail. The connection would be safer connection than would be provided under Alternative B because under Alternative B an at-grade crossing of the RCPP would occur, which as discussed previously, could create conflicts between pedestrian/bicyclists and vehicles. It would also increase the delay for vehicles when the at-grade crossing is in use. Alternatives C and D would not have these conflicts because a bridge over RCPP would be provided. These enhancements would outweigh the short-term adverse impacts that would occur to the transportation network during construction. Alternative C would contribute to the long-term beneficial cumulative impacts.</p>		<p>As with Alternatives C and D, Alternative E would provide a pedestrian and bicycle connection between the Kennedy Center and the Rock Creek Paved Recreation Trail. The connection would be a safer connection than would be provided under Alternatives A and B because under Alternatives A and B at-grade crossings of the RCPP would occur, which as discussed previously, could create conflicts between pedestrian/bicyclists and vehicles. It would also increase the delay for vehicles when the at-grade crossing is in use. Alternative E would not have these conflicts because stairs over RCPP would be provided. However, bicyclists would not be provided direct access between the Kennedy Center and the Rock Creek Paved Recreation Trail. Bicyclists would need to utilize the elevator or carry their bicycles down the stairs in order to access the Rock Creek Paved Recreation Trail. These enhancements would outweigh the short-term adverse impacts that would occur to the transportation network during construction. Alternative E would only slightly contribute to the long-term beneficial cumulative impacts.</p>

MINIMIZATION AND MITIGATION MEASURES FOR THE ACTION ALTERNATIVES

The NPS, NCPC, and the Kennedy Center place a strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. Mitigation measures would be implemented whenever feasible, to avoid and/or minimize environmental impacts under the action alternatives. The exact mitigation measures to be implemented would depend upon the final design and approval plans by relevant agencies. A summary of mitigation measures that would be considered are presented in Table 2.

Table 2. Mitigation Measures for the Alternatives	
Impacted Resource	Mitigation Measures
Cultural Resources	<ul style="list-style-type: none"> The design of the connection bridge would be architecturally compatible with the Kennedy Center in accordance with the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Treatment of Cultural Landscapes</i> (NPS 1992). The proposed design would be reviewed and approved through consultation and coordination with CFA, NCPC, and interested parties. The NPS, NCPC, and the Kennedy Center would develop a Memorandum of Agreement (MOA) with stakeholders to further identify mitigation appropriate for the project.
Visitor Use and Experience	<ul style="list-style-type: none"> Visitors to the Kennedy Center, RCPP, and the Rock Creek Paved Recreation Trail would be notified in advance of construction activities. Potential notifications would include signage, postings to websites and social media webpages, and email blasts to interested parties identified during the planning process. Construction activities would be coordinated with the Kennedy Center in a manner that would minimize disruptions during planned events. The trail would be re-routed during construction of the connection bridge to maintain bicycle and pedestrian flow. Flagmen would be utilized during construction to allow safe passage on the trail when equipment is being used, materials being delivered, or the bridge is being installed over the trail and parkway. An MOT plan would be implemented to minimize impacts on RCPP motorists.

Table 2. Mitigation Measures for the Alternatives

Impacted Resource	Mitigation Measures
Traffic and Transportation	<ul style="list-style-type: none"> • An MOT plan would be implemented to ensure a safe and continued flow of traffic during partial lane closures. This plan would include directional signage to inform travelers on the RCPP and the Rock Creek Paved Recreation Trail of all construction zones, associated speed limits, lane closures, and trail detours. • Public notices of the construction schedule would be provided to local media outlets. • Temporary trail realignment would be used during construction to keep the trail open during construction. • Flagmen would be utilized during construction to allow safe passage on the trail when equipment is being used, materials are being delivered, or the bridge is being installed over the trail and parkway. • Construction vehicles would travel through the site to a staging area located on the south end of the Kennedy Center.

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CHAPTER 4: CONSULTATION AND COORDINATION

The Kennedy Center, NCPC, and NPS place a high priority on public involvement in the NEPA process and on giving the public an opportunity to comment on proposed actions. Consultation and coordination with federal and District agencies, American Indian tribes, and other interested parties was also conducted to identify issues and/or concerns related to natural and cultural resources. This section provides a brief summary of the public involvement and agency consultation and coordination that occurred during planning of the Kennedy Center Expansion Connection project.

Public Involvement. As part of the NEPA process, issues associated with the proposed action were identified during the internal scoping meeting held with the Kennedy Center, NCPC and NPS and have been communicated to other affected agencies and stakeholders. A scoping period was held from September 15, 2015 through October 15, 2015 to invite the public, agencies and stakeholders to submit comments regarding the proposed project. A public scoping meeting was held On September 29, 2015 at the Kennedy Center to introduce the public to the project and present alternatives concepts. A total of nine individuals signed in for the meeting. Three comments were received which expressed support of the project.

Agency Coordination. On September 15, 2015, NPS and NCPC notified federal and district agency representatives via email, NPS's PEPC website, on NCPC's website, and through a Press Release on the Kennedy Center's website of the project and invite participation by the agencies in the scoping process. The Kennedy Center has submitted for concept level approval to NCPC in April 2016. Preliminary and Final designs will be submitted to NCPC in June/July 2016 and to the CFA in May/June 2016.

Section 7 Consultation. In accordance with Section 7 of the Endangered Species Act, consultation was initiated with USFWS and the District Department of Energy and Environment (DOEE).

On November 23, 2015, the US Fish and Wildlife Service (USFWS) Information for Planning and Conservation system provided a preliminary list of threatened and endangered species that may be affected by the project. The preliminary list identified the Northern long-eared Bat as a threatened species with the potential to occur within the project area. A formal response from USFWS was requested at this time. Because there would be one tree removed during construction and replaced after construction is complete, the proposed project would not affect the Northern Long-Eared Bat.

On December 15, 2015 a consultation letter was emailed to DOEE requesting a review of the project site for the potential occurrence of any threatened, endangered, and proposed or candidate species or critical habitats. In a letter dated March 11, 2016 DOEE responded with a list of endangered, threatened or candidate species that are known to occur in or may occur in the District of Columbia. The proposed pedestrian/bicycle connection is unlikely to affect any of the species on the list provided by DOEE. The project area will be monitored for the presence of the species and DOEE will be notified immediately if one is identified.

Section 106 Consultation. Section 106 requires federal agencies to take into account the effects of their undertakings on historic properties. In accordance with NEPA, the Kennedy Center, NPS, and NCPC are conducting consultation under Section 106 of the NHPA, which was initiated with the DC HPO on November 9, 2015 and the Virginia Department of Historic Resources (VDHR) on February 17, 2016. A joint NEPA/Section 106 scoping meeting was held on September 29, 2015, during which the consulting parties were introduced to the project, presented with a draft APE, and invited to comment on the proposal. A public comment period was open from September 15 to October 15, 2015. A second consulting parties meeting occurred on December 10, 2015, to present the proposed alternatives to the public and to invite comment on the potential effects of the undertaking. A comment period was open from December 10, 2015 to December 22, 2015. The NPS's PEPC website was used as a tool to disseminate information on the project and collect public comment. A third consulting parties meeting was held February 23, 2016 at NCPC to discuss remaining concerns about the Assessment of Effect. Alternatives C, D, and E will have an adverse effect under Section 106. As a result, the project stakeholders will develop a Memorandum of Agreement to identify mitigation appropriate for the project.

Section 106 also requires coordination with federally recognized Indian tribes who may have potential religious or cultural interests in the project area. Prior consultation with Indian Tribes revealed no Indian trust resources in the vicinity of the Kennedy Center and no lands are held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Therefore, no Indian tribes were contacted for consultation on this project.

NPS Transfer of Jurisdiction and Permits. Prior to construction of the trail spurs under Alternative B (see Figure 35), the pedestrian bridge under Alternatives C and D (see Figure 36) and the river terrace under Alternative E (see Figure 37), pursuant to 40 USC § 8124, the NPS would need to transfer jurisdiction of a portion of NPS administered property and certain air rights to the Kennedy Center. Under Alternative B a jurisdictional transfer would be needed for the trail spur that would be constructed to connect the Rock Creek Paved Recreation Trail with the at-grade crossing (approximately 384 square feet). In addition, under Alternatives C and D, a jurisdictional transfer would be needed for three trail spurs that would be constructed to connect the Rock Creek Paved Recreation Trail with the landing of the stair at the south end of the ramp, the ramp landing, and the landing of the north stair (667 and 607 square feet, respectively) on NPS property. A jurisdictional transfer would be needed for the pedestrian plaza on NPS property (approximately 0.5 acre) under Alternative E. The transfer of jurisdiction of NPS property and certain air rights to the Kennedy Center would require approval of NCPC.

Under Alternatives C and D, the Rock Creek Paved Recreational Trail would be permanently rerouted around the ramp. This would require permitting and approval from NPS prior to construction. In addition, the at-grade crossing, the bridge connection and river terrace from the Kennedy Center to the existing Rock Creek Paved Recreation Trail would require a construction permit from NPS under all alternatives. The construction permit would also cover any temporary closures of the RCPP and temporary trail realignments. The Kennedy Center would abide by NPS, and local and state erosion and sediment control standards.

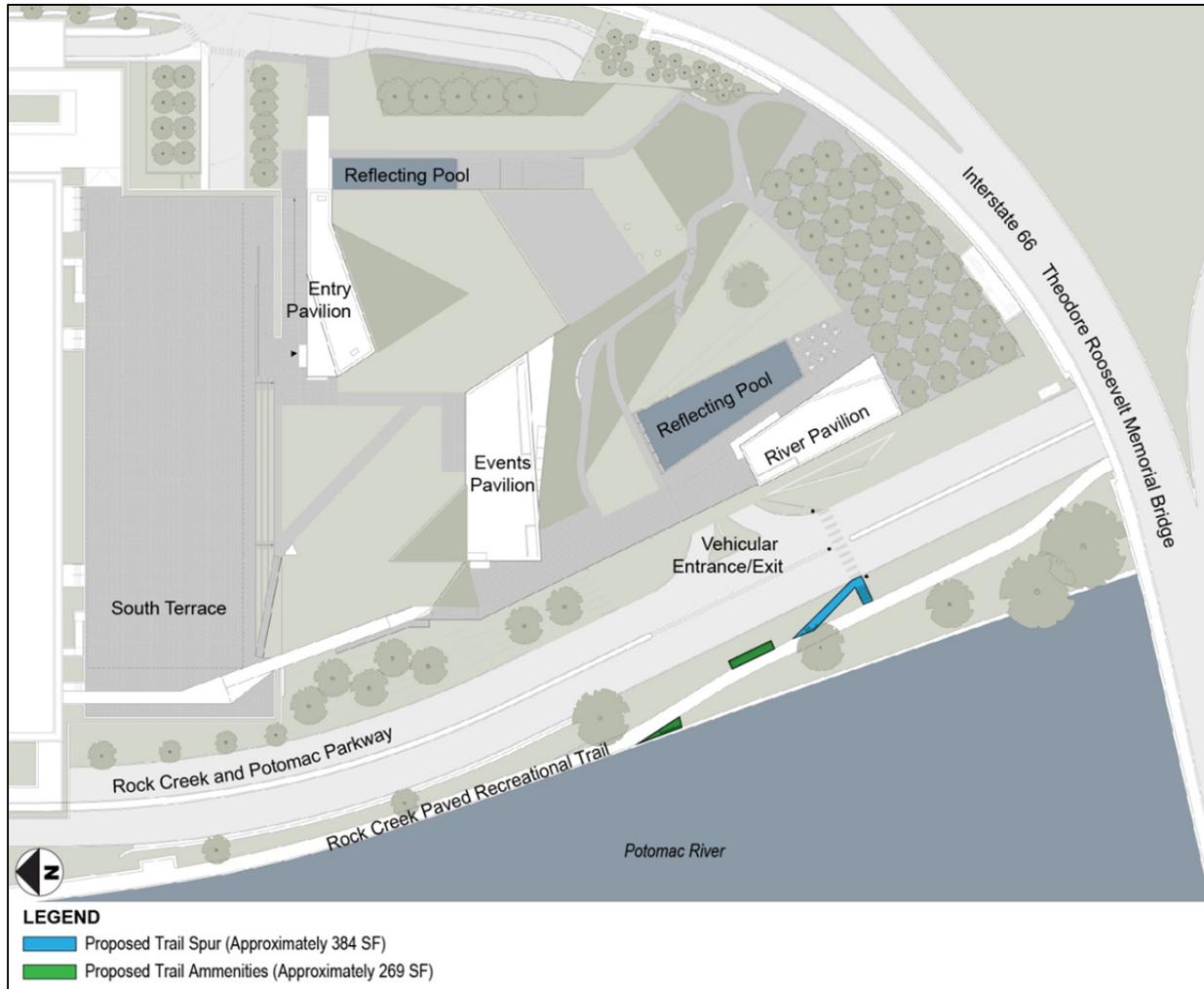


Figure 35. Area of Design Elements Requiring a Permit or Jurisdictional Land Transfer from the NPS under Alternative B.

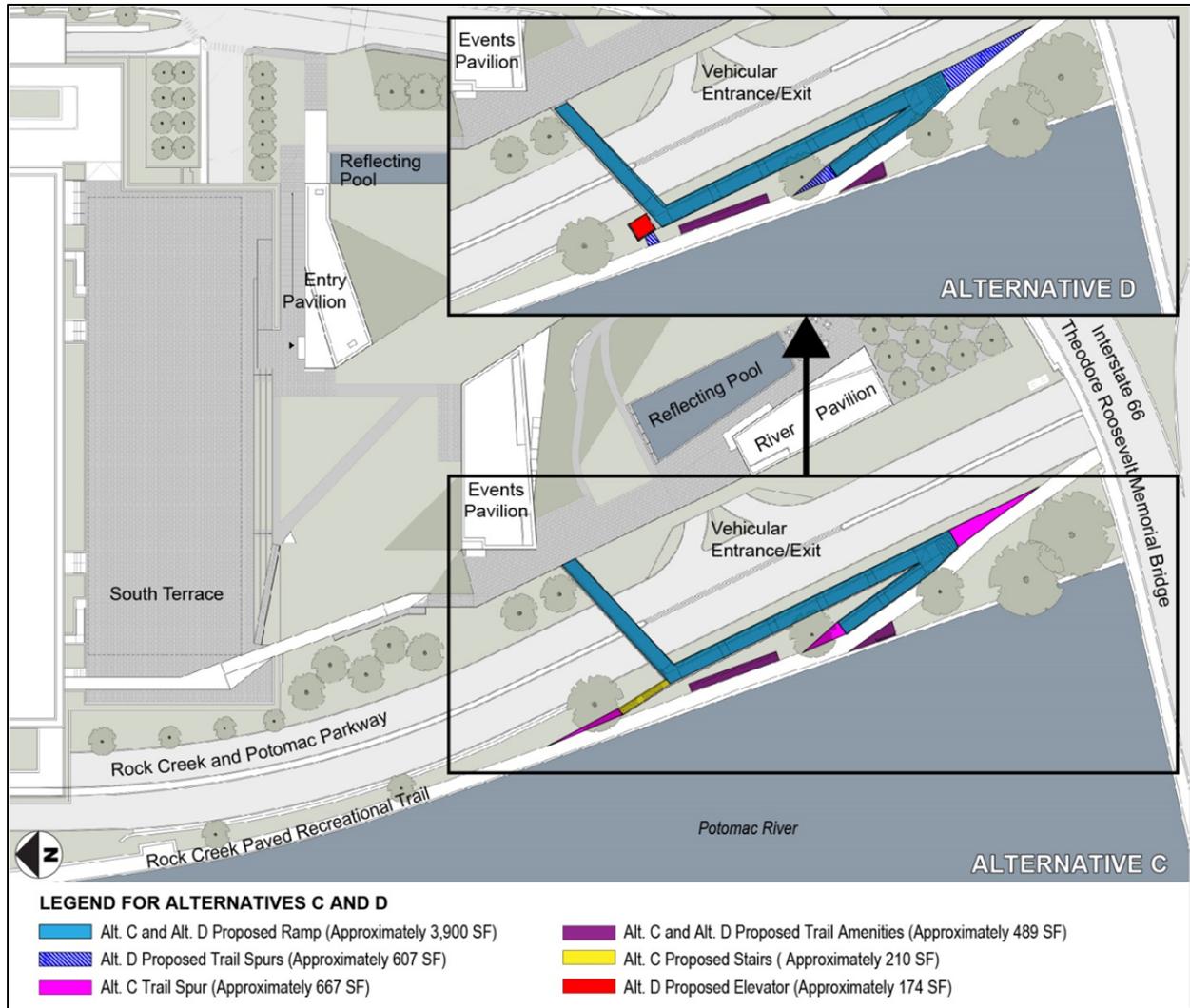


Figure 36. Area of Design Elements Requiring Permit of Jurisdictional Land Transfer from the NPS under Alternatives C and D

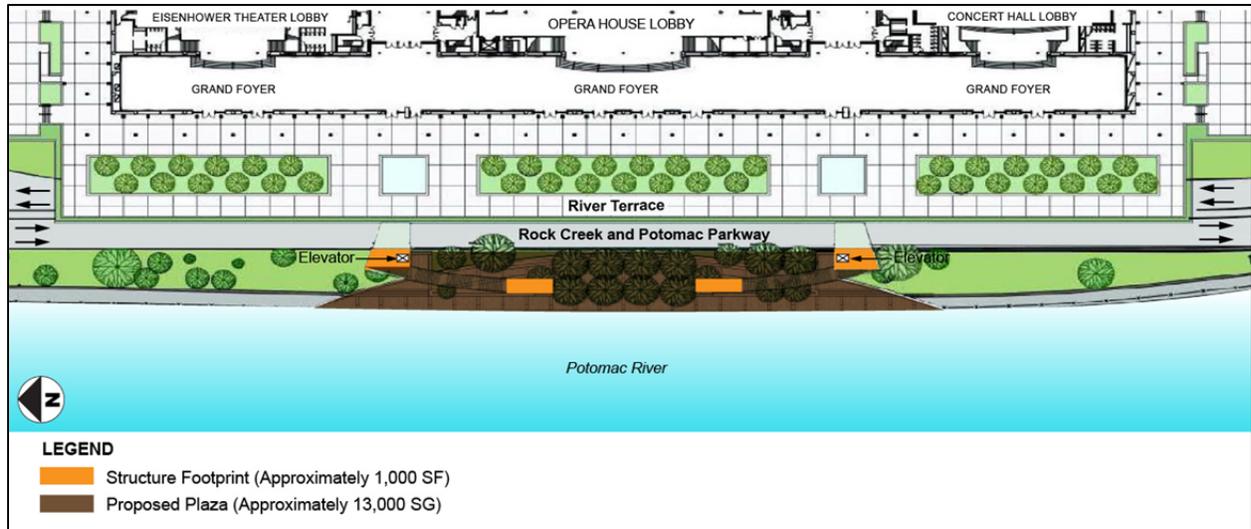


Figure 37. Area of Design Elements Requiring a Permit or Jurisdictional Land Transfer from the NPS under Alternative E.

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GLOSSARY AND ACRONYMS

GLOSSARY OF TERMS

Affected Environment — The existing environment to be affected by a proposed action and alternatives.

Contributing Resource — A building, site, structure, or object that adds to the historic significance of a property or district.

Council on Environmental Quality — Established by Congress within the Executive Office of the President with passage of the *National Environmental Policy Act of 1969*. CEQ coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.

Cultural Landscape — A geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with an historic event, activity, or person, or exhibiting other cultural or aesthetic value.

Cultural Resources — Prehistoric and historic districts, sites, buildings, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reason.

Cumulative Impacts — Under NEPA regulations, the incremental environmental impact or effect of an action together with the effects of past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions (40 CFR Part 1508.7).

Environmental Assessment — An environmental analysis prepared pursuant to the *National Environmental Policy Act* to determine whether a federal action would significantly affect the environment and thus require a more detailed environmental impact statement (EIS).

Executive Order — Official proclamation issued by the President that may set forth policy or direction or establish specific duties in connection with the execution of federal laws and programs.

Floodplain — The flat or nearly flat land along a river or stream or in a tidal area that is covered by water during a flood.

Scoping — Scoping, as part of NEPA, requires examining a proposed action and its possible effects; establishing the depth of environmental analysis needed; and determining analysis procedures, data needed, and task assignments. The public is encouraged to participate and submit comments on proposed projects during the scoping period.

ACRONYMS

ACHP	American Council for Historic Preservation
ADA	Americans with Disabilities Act
APE	Area of Potential Effect
CFA	Commission of Fine Arts
CFR	Code of Federal Regulations
CSOs	Combined Sewer Overflows
DC HPO	District of Columbia Historic Preservation Office
DDOT	District of Columbia Department of Transportation
DO	Director's Order
DOEE	District of Columbia Department of Energy and Environment
DOS	U.S. Department of State
EA	Environmental Assessment
FHWA	Federal Highway Administration
GSA	General Services Administration
GWMP	George Washington Memorial Parkway
MOA	Memorandum of Agreement
MOT	Maintenance of Traffic
msl	mean sea level
NAMA	National Mall and Memorial Parks
NCPC	National Capital Planning Commission
NCR	National Capital Region
NEPA	National Environmental Policy Act of 1969, as amended
NHPA	National Historic Preservation Act of 1966, as amended
NPS	National Park Service
NRHP	National Register of Historic Places
PEPC	Planning, Environment, and Public Comment
RCPP	Rock Creek and Potomac Parkway
SOF	Statement of Findings
USACE	United States Army Corps of Engineers
USC	United States Code
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VDHR	Virginia Department of Historic Resources
VASHPO	Virginia State Historic Preservation Office

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