

Appendix B:

Section 106 Programmatic Agreement

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL RAILROAD ADMINISTRATION,
THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE,
THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES,
THE NATIONAL PARK SERVICE,
NATIONAL CAPITAL PLANNING COMMISSION,

AND

THE VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION REGARDING

THE LONG BRIDGE PROJECT

IN

WASHINGTON, D.C. AND ARLINGTON COUNTY, VIRGINIA

WHEREAS, the Federal Railroad Administration (FRA) and the District Department of Transportation (DDOT) are proposing potential improvements to railroad infrastructure located between the RO Interlocking near Long Bridge Park in Arlington, Virginia, and the L'Enfant (LE) Interlocking near 10th Street SW in the District of Columbia (Long Bridge Corridor)¹ to address insufficient capacity, resiliency, and redundancy to accommodate the projected demand in future rail services; and

WHEREAS, the Long Bridge Project (Project) consists of the construction of a new two-track bridge upstream of the existing two-track Long Bridge to create a four-track crossing over the Potomac River (Appendix A, Figure 1), and construction of a new two-track railroad bridge over the George Washington Memorial Parkway (GWMP), Mount Vernon Trail, and Ohio Drive SW. After crossing the Potomac River and Ohio Drive SW, the Long Bridge Corridor would continue through East and West Potomac Parks. The Project includes improvements to related railroad infrastructure but proposes no alterations to the existing Long Bridge, a two-track railroad bridge constructed in 1904, that is currently owned and operated by CSX Transportation (CSXT), a Class I freight railroad; and

WHEREAS, the Project includes all associated mitigations triggered by applicable laws, such as the National Historic Preservation Act (NHPA) as amended (54 U.S.C. § 306108); the National Environmental Policy Act (NEPA) (42 U.S.C. § 4231 et seq.); and Section 4(f) of the United States Department of Transportation Act of 1966, 49 U.S.C. § 303 (Section 4(f)); and

WHEREAS, the Project is needed to ensure the Long Bridge Corridor continues to serve as a critical link connecting the local, regional, and national railroad network; and

WHEREAS, FRA provided Fiscal Year 2014 grant funding (Grant # FR-TII-0036) to DDOT to conduct nondestructive project planning activities that have no potential to cause effects on historic properties, including engineering and environmental analysis of the Project; and

WHEREAS, if FRA provides funding for future construction of the Project, the FRA funding, along with Project implementation and related federal authorizations, which are the subject of this Programmatic Agreement (PA), will constitute an "Undertaking" subject to review under Section 106 of the NHPA (Section 106), and FRA will be the Federal agency responsible for compliance with Section 106; and

¹ An interlocking is a segment of railroad infrastructure comprised of track, turnouts, and signals linked (interlocked) in a way that allows trains to safely move from one track to another, or across tracks, preventing conflicting train movements. Note that the proper name of RO Interlocking is "RO." It is not an acronym.

WHEREAS, this PA was developed pursuant to Section 106 of the NHPA and its implementing regulations, 36 CFR Part 800; and

WHEREAS, the Virginia Department of Rail and Public Transportation (DRPT) is the final design and construction sponsor for the Project (Construction Project Sponsor) who will be responsible for implementing the Project through final design and construction, including compliance with identified mitigation measures; and

WHEREAS, in accordance with NEPA, FRA and DDOT prepared an Environmental Impact Statement (EIS) for the Project; and

WHEREAS, the Project will involve the use of lands managed by the National Park Service (NPS) within the GWMP and National Mall and Memorial Parks (NAMA); and

WHEREAS, the Project would impact NPS park properties protected under Section 4(f), and FRA and DDOT determined that impacts will be mitigated through construction of a bicycle-pedestrian crossing over the Potomac River on a structure located upstream of the new railroad bridge (<u>Appendix A, Figure 2</u>) and the effects of the bicycle-pedestrian crossing on historic properties have been considered under Section 106 as described below; and

WHEREAS, NPS is charged in its administration of the units of the National Park System to meet the directives of other laws, regulations, and policies including the NPS Organic Act as codified in Title 54 U.S.C. § 100101(a) to "conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations"; and

WHEREAS, the GWMP, a unit of the National Park System, with portions located in Fairfax and Arlington Counties and the City of Alexandria, Virginia, was established pursuant to what is known as the Capper-Cramton Act, Public Law 71-284, 46 Statute 482 (1930), for purposes "to include the shores of the Potomac and adjacent lands, from Mount Vernon to a point above the Great Falls on the Virginia side, including the protection and preservation of the natural scenery of the Gorge and Great Falls of the Potomac," and came to be administered by NPS pursuant to Executive Order 6166 of June 10, 1933; and

WHEREAS, NAMA, which administers more than 1,000 acres of park land within the District of Columbia, including fourteen units of the National Park System, as well as more than 150 reservations, circles, fountains, squares, triangles, and park spaces, also came to be administered by NPS under Executive Order 6166; and

WHEREAS, phased identification and evaluation will occur for archaeological resources consistent with the *Long Bridge Project Phase IA Archaeological Assessment Report* dated July 24, 2018, therefore FRA will comply with Section 106 through the execution and implementation of this PA pursuant to 36 CFR § 800.14(b); and

WHEREAS, in accordance with 36 CFR § 800.2(a)(4), FRA invited individuals and organizations with a demonstrated interest in the Project to participate as Consulting Parties in the Section 106 process. The full list of Consulting Parties is provided in Appendix B; and

WHEREAS, FRA in consultation with the DC State Historic Preservation Office (DC SHPO), the Virginia Department of Historic Resources (DHR) (which is the Virginia SHPO), and the Consulting Parties, established the Project's Area of Potential Effects (APE), as defined under 36 CFR §800.16(d)

and DC SHPO and DHR concurred with the APE on July 12, 2017. The APE is illustrated in Appendix C; and

WHEREAS, FRA identified forty-two (42) historic properties within the APE, including the East and West Potomac Parks Historic District (listed in the National Register of Historic Places (NRHP) on November 30, 1973 (revised November 11, 2001)), the GWMP (listed in the NRHP on June 2, 1995), and the Mount Vernon Memorial Highway (MVMH) (listed in the NRHP on May 18, 1981). The Long Bridge is a contributing element to all three historic districts. DC SHPO and DHR concurred with the *Identification of Historic Properties Technical Report* on March 23, 2018; both letters and the full report can be found in Appendix C, along with a complete list of historic properties in the APE; and

WHEREAS, FRA determined the Project will have an adverse effect on the GWMP, MVMH, and East and West Potomac Parks Historic Districts due to the introduction of new structures that would have visual effects, direct effects resulting from the alteration of historic fabric within those districts, as well as temporary adverse effects due to construction-related activities on the above mentioned districts and the National Mall Historic District (listed in the NRHP on October 15, 1966 (revised December 8, 2016)); and

WHEREAS, DC SHPO concurred with FRA's *Assessment of Effects Report* and the subsequent *Determination of Effect* in a letter dated November 8, 2018, and DHR concurred with both in a letter dated November 9, 2018. Both letters can be found in Appendix D; and

WHEREAS, FRA considered avoidance measures during concept screening, and dismissed any alternatives that considered the construction of a new railroad bridge and associated railroad infrastructure outside of the existing Long Bridge Corridor, thus avoiding potential effects on historic properties generated by expanding the Project Area. Additionally, the new railroad bridge will be designed with a vertical clearance, visual appearance of the structural system, and alignment that closely references that of the existing Long Bridge, thus avoiding potential adverse visual effects caused by a less compatible type of new bridge structure; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), FRA notified the Advisory Council on Historic Preservation (ACHP) of the adverse effects determination and provided the documentation specified in 36 CFR § 800.11(e). ACHP declined to participate in consultation pursuant to 36 CFR § 800.6(a)(1)(iv) in a letter dated December 21, 2018, which can be found in <u>Appendix E</u>; and

WHEREAS, NPS is a Consulting Party in the Section 106 process pursuant to 36 CFR § 800.3(f)(1), manages the Federal park property on either side of the Potomac River within the Project's APE (see Appendix C), and has permitting authority over the Potomac River bottom which includes the Washington Channel (41 Fed. Reg, 34,801). As part of the Project, when an appropriate legal mechanism is identified for permanent use of the affected Federal park property for the Project, NPS would issue a permit for temporary use of land under its administration for construction-related activities. NPS also will issue a permit for permanent use of river bottom land. These permits constitute an Undertaking as defined at 36 CFR § 800.16(y). Therefore, NPS has elected to fulfill its Section 106 responsibilities by participating in this consultation, and is an Invited Signatory to this PA pursuant to 36 CFR § 800.6(c)(2); and

WHEREAS, National Capital Planning Commission (NCPC) is a Consulting Party in the Section 106 process pursuant to 36 CFR § 800.3(f)(1), has approval authority over Federal projects located within the District of Columbia and has approval authority over all land transfers and physical alterations to Federal property pursuant to the National Capital Planning Act (40 U.S.C. § 8722(b)(1) and (d)), and this

approval would constitute an Undertaking as defined at 36 CFR § 800.16(y). NCPC has elected to fulfill its Section 106 responsibilities by participating in this consultation and is an Invited Signatory to this PA pursuant to 36 CFR § 800.6(c)(2); and

WHEREAS, DRPT is a Consulting Party in the Section 106 process pursuant to 36 CFR § 800.3(f)(1), is the Construction Project Sponsor, and will have roles and responsibilities in the implementation of this PA and is an Invited Signatory to this PA pursuant to 36 CFR § 800.6(c)(2); and

WHEREAS, the U.S. Commission of Fine Arts (CFA) has a statutory obligation under the Shipstead-Luce Act of 1930 (Public Law 71-231) to regulate height, exterior design, and construction of private and semiprivate buildings in certain areas of the National Capitol within which the Project falls. CFA has design review authority over new structures erected in the District under the direction of the Federal government (Executive Order 1862) and plans for parks which "in any essential way affect the appearance of the City of Washington, or the District of Columbia" (Executive Order 3524). CFA is a Consulting Party in the Section 106 process pursuant to 36 CFR § 800.3(f)(1) and is invited to concur with this PA pursuant to 36 CFR § 800.6(c)(3); and

WHEREAS, U.S. Army Corps of Engineers (USACE), acting through its Norfolk and Baltimore Districts, is the Federal agency responsible for permitting under Section 10 of the Rivers and Harbors Act of 1899 and Sections 401 and 404 of the Clean Water Act of 1972 which would constitute an Undertaking as defined at 36 CFR § 800.16(y). USACE designated FRA to act as the lead Federal agency to fulfill their collective Section 106 responsibilities pursuant to 36 CFR § 800.2(a)(2) via letters on October 14, 2016 (Norfolk District) and November 15, 2018 (Baltimore District), and is invited to concur with this PA pursuant to 36 CFR § 800.6(c)(3); and

WHEREAS, U.S. Coast Guard (USCG), acting through its Fifth Coast Guard District, is the Federal agency responsible for bridge permitting over a navigable waterway under Section 9 of the Rivers and Harbors Act of 1899 and the General Bridge Act of 1946 which would constitute an Undertaking as defined at 36 CFR §800.16(y). USCG designated FRA to act as the lead Federal agency to fulfill its Section 106 responsibilities pursuant to 36 CFR § 800.2(a)(2) via a letter dated November 18, 2019, and is invited to concur with the PA pursuant to 36 CFR § 800.6(c)(3); and

WHEREAS, DDOT, as the Planning Project Sponsor, is a Consulting Party in the Section 106 process pursuant to 36 CFR § 800.2(c)(4). However, DDOT will not have a role or responsibility in implementing the terms of the PA and is invited to concur with this PA pursuant to 36 CFR § 800.6(c)(3); and

WHEREAS, in letters dated March 31, 2017 (<u>Appendix F</u>), FRA contacted the Catawba Indian Nation, the Delaware Nation, and the Delaware Tribe of Indians (collectively referred to as "Native American tribes" in this PA), Federally recognized sovereign Indian Nations that have a government-to-government relationship with the United States and an interest in the area affected by the Project pursuant to 36 CFR § 800.2(c)(2). FRA invited each of these Native American tribes to be a Consulting Party and they are invited to concur with this PA pursuant to 36 CFR § 800.6(c)(3); and

WHEREAS, the Delaware Nation accepted FRA's invitation to consult in the Section 106 process by electronic mail on May 11, 2017; the Delaware Tribe of Indians declined to participate on June 15, 2017; and the Catawba Indian Nation declined to participate on July 29, 2019; and

WHEREAS, FRA will notify the Native American tribes in the event that pre-historic resources are discovered through the phased identification and evaluation of archaeological resources or in a Post Review Discovery; and

WHEREAS, FRA conducted five Section 106 Consulting Party meetings to provide opportunities for the Consulting Parties to comment on the development of the Action Alternatives, delineation of the APE, identification of historic properties, methodology for assessing effects on historic properties, assessment of effects on historic properties, and potential resolution strategies. Summaries of each Consulting Party meeting can be found in <u>Appendix G</u>; and

WHEREAS, FRA made the draft PA available to the public for review and comment by appending it to the Draft EIS, and FRA considered comments received when finalizing this PA; and

NOW, THEREFORE, FRA, DC SHPO, DHR, NPS, NCPC, and DRPT (collectively referred to as the Signatories) agree that if the Project moves forward, it will be implemented in accordance with the following stipulations in order to take into account the effects of the Project on historic properties and that these stipulations will govern compliance with Section 106 of the NHPA.

STIPULATIONS

FRA will ensure that the following measures are carried out:

I. GENERAL

A. APPLICABILITY

- 1. FRA, NPS, NCPC, USCG, and USACE will use the terms and conditions of this PA to fulfill their Section 106 responsibilities, as well as any other Federal agencies that designate FRA as the lead Federal agency, pursuant to 36 CFR § 800.2(a)(2). Federal agencies that do not designate FRA as the lead Federal agency remain individually responsible for their compliance with Section 106.
- 2. In the event that a Federal agency or other agency issues Federal funding, permits, licenses, or approvals for the Undertakings associated with the Project and the Project remains unchanged, such Federal agency may become a Signatory to this PA as a means of satisfying its Section 106 compliance responsibilities, as outlined in Stipulation XI. Any necessary amendments will be considered in accordance with Stipulation XII of this PA.
- 3. This PA only binds FRA if it provides financial assistance, permits, licenses, or approvals for construction of the Project and, therefore, meets the definition of Undertaking found at 36 CFR § 800.16(y).
- 4. In the event that the Project does not become an FRA Undertaking and FRA withdraws its participation in the PA under Stipulation XIII.B, and another Federal agency or other agency continues to have an Undertaking and desires to continue to use this PA to satisfy its responsibilities under Section 106, this PA will be amended in accordance with the terms of Stipulation XII.B and that Federal agency or other agency acting as a Federal agency will assume lead agency responsibilities for Section 106.

B. TIMEFRAMES AND NOTIFICATIONS

1. All time designations are in calendar days unless otherwise stipulated. If a review period ends on a Saturday, Sunday, or Federal holiday, the review period will be extended until the next business day.

2. All communication and notifications required by this PA will be sent by email or other electronic means.

C. ROLES AND RESPONSIBLITIES

1. FRA

- a. Pursuant to 36 CFR §800.2(a)(2), FRA has the primary responsibility to ensure the provisions of this PA are carried out.
- b. FRA is responsible for all government-to-government consultation with federally-recognized Native American tribes.

2. DDOT

a. Pursuant to 36 CFR §800.2(c)(4), FRA authorized DDOT to initiate consultation and prepare any necessary analyses, documentation, and recommendations on its behalf, but FRA remains responsible for all findings and determinations, including determinations of eligibility, findings of effect as well as resolution to objections or dispute resolution.

3. NPS

- a. Although the legal mechanism for NPS's actions has not yet been determined, NPS currently expects that no further NPS Undertakings separate from those outlined in this PA would occur, therefore no additional Section 106 review by NPS is anticipated to be necessary. If any unexpected NPS Undertakings are required, NPS may suggest amending this PA in accordance with Stipulation XII to address the additional Section 106 reviews.
- b. NPS is responsible for implementing certain specified mitigation measures identified in Stipulation III and for any resulting curation of records and other cultural materials pursuant to 36 CFR §79.
- c. NPS will provide Signatories with annual updates on the completion of the specific mitigation measures that NPS has agreed to complete in Stipulation III pursuant to Stipulation IX.
- d. NPS is responsible for coordinating Federal Agencies' compliance with the Native American Graves Protection and Repatriation Act (NAGPRA) on National Park System lands.
- e. NPS is responsible for enforcing the applicable provisions of the Archaeological Resources Protection Act (ARPA 16 U.S.C. 470aa et seq.), including but not limited to the issuance of permits, and investigation of any damages resulting from prohibited activities on National Park System lands.

4. DRPT

a. Pursuant to 36 CFR §800.2(c)(4), FRA authorizes DRPT to initiate consultation and prepare any necessary analyses, documentation, and recommendations on its behalf, but FRA remains legally responsible for all findings and determinations, including

determinations of eligibility, findings of effect as well as resolution to objections or dispute resolution.

- b. DRPT will conduct investigations and produce analyses, documentation and recommendations in a timely manner to address archaeological resources within the APE not recorded in the field prior to the Record of Decision.
- c. DRPT will successfully complete any mitigation measures to minimize and resolve adverse effects on historic properties except for those for which NPS is responsible pursuant to Stipulation III.B.
- d. DRPT is responsible for funding the completion of all investigations and associated documentation, curation, and other mitigation necessitated as a result of adverse effects on historic properties in accordance with the terms prescribed in this PA. This includes those mitigation measures specified in Stipulation III.B which will be implemented by NPS.
- e. DRPT is responsible for costs incurred during any work stoppages in the event of a Post-Review Discovery.
- f. In the event the Virginia General Assembly creates a Virginia Rail Authority or other rail governing body, DRPT may assign this Agreement to that governing body without obtaining consent of the Signatories. This Agreement shall be binding upon and inure to the benefit of the Signatories hereto and their respective successors and permitted assigns. DRPT will notify FRA of the assignment when the agreement to assign is fully executed.

5. DC SHPO and DHR

a. DC SHPO and DHR will review Project submittals according to the timeframes defined within this PA, and participate in consultation, as requested by FRA.

6. NCPC and CFA

- a. NCPC and CFA will review Project submittals according to the timeframes defined within this PA, and participate in consultation, as requested by FRA.
- b. These reviews do not supersede the statutory or regulatory obligations these bodies have, and their Commissions or Boards will review and approve the project components as required.

II. PERSONNEL QUALIFICATIONS STANDARDS

FRA, NPS, and DRPT will ensure that all historic preservation work performed by the relevant agency pursuant to Stipulations III and IV will be accomplished by or under the direct supervision of a person or persons who meet(s) or exceed(s) the pertinent qualifications in the *Secretary of the Interior's Professional Standards* (48 Federal Register [F.R.] 44716).

III. RESOLUTION OF ADVERSE EFFECTS

A. DOCUMENT REVIEW FOR MINIMIZATION AND MITIGATION MEASURES

The Signatories will follow these Document Review procedures, when specified, in Stipulation III.B for Minimization and Mitigation Measures during the Project's Preliminary Engineering Phase as stipulated below. The Signatories will also follow these procedures for Stipulation IV.C, Archaeology.

- 1. DRPT will provide draft documentation regarding preliminary engineering and design elements of the Project and any Minimization and Mitigation Measures it is responsible for performing to FRA for review and approval. FRA will review the draft documentation within thirty (30) calendar days. Following receipt of FRA approval, DRPT will submit the documentation to the Signatories.
- 2. The Signatories will review the documentation and provide written comments to FRA and DRPT within thirty (30) calendar days. Any Signatory may request a meeting within that review period.
- 3. DRPT, in consultation with FRA, will ensure that written comments received are considered and incorporated, as appropriate, to the fullest reasonable extent into the documentation and that the Signatories are notified of the manner in which the comments have been incorporated.
- 4. If no Signatory provides written comments within the specified timeframe, DRPT may proceed with the portion of the Project subject to the documentation without taking additional steps to seek comment from the Signatories.
- 5. If FRA or DRPT receives an objection or extensive revision recommendations to the document, FRA and DRPT will work expeditiously with the Signatories to respond to the objection and/or resolve the dispute. If no agreement is reached within thirty (30) calendar days, FRA may request the ACHP review the dispute in accordance with Stipulation X. FRA will notify the Signatories of FRA's decision.
- 6. Should any substantive changes be made to the engineering and design elements of the Project after the Signatories' review, DRPT, in consultation with FRA, will submit changes to the Signatories and review shall follow the same timeline and process as outlined above.

B. MINIMIZATION AND MITIGATION MEASURES

FRA and DRPT will ensure the following measures to minimize and/or mitigate adverse effects on historic properties are carried out. DRPT may independently proceed with the Project while NPS completes assigned mitigation measures.

1. <u>Design Review:</u> DRPT will design and aesthetically treat any elements of the Project, as illustrated in Appendix A, introduced into NPS-administered properties to be compatible with the character of existing resources and appropriate for the context of Washington DC's Monumental Core.

- a. <u>Minimization:</u> Design Review will minimize potential adverse effects of introducing new features into the historic districts.
- b. DRPT, in consultation with FRA, will consult with DC SHPO, DHR, NPS, NCPC and CFA pursuant to Stipulation III.A as the Preliminary Engineering Phase is progressed within the historic districts. Design Review will address the following design elements: a) structure type and visual appearance of the new railroad bridge and bike-pedestrian crossing; b) aesthetic treatment of new bridges or other structures; c) landscape design; and d) any additional signage or lighting necessitated by the Project, except for the Interpretative Signage Mitigation in Stipulation III.B.7 below.
- c. The Signatories agree that steel "through plate girders" should be used to construct the new bridge over the Potomac River because the "through plate girders" are similar to the Long Bridge's girders and will avoid and minimize adverse effects by establishing a common structural vocabulary and a better visual connection between the historic and new bridges than the steel "deck plate girders" which are similar to the adjacent Metro Bridge. If, through engineering and design development, DRPT determines that it is impracticable to construct the new bridge with "through plate girders," DRPT will forward the information that forms the basis of its decision to the other Signatories and consult in accordance with Stipulation V. Any unresolved dispute relating to the type of girders that will be used to construct the new bridge will be addressed pursuant to Stipulation X. If "deck plate girders" are ultimately used to construct the new bridge, the Signatories shall consult further pursuant to Stipulation V to identify additional measures that will be used to mitigate the adverse effects that "deck plate girders" will cause and this PA will be amended pursuant to Stipulation XII.
- 2. <u>Viewshed Protection Plan and Inventory/Assessment</u>. DRPT will contribute a monetary value, agreed upon with NPS, for NPS to use to prepare and implement a GWMP Viewshed Protection Plan and Inventory/Assessment.
 - a. DRPT and NPS agree that the contribution will be a value equal to the cost of preparing and implementing the GWMP Viewshed Protection Plan Inventory/Assessment for the portion of the GWMP from Alexandria to Columbia Island.
 - b. NPS will produce the GWMP Viewshed Protection Plan and Inventory/Assessment within two years of the receipt of funding.
- 3. <u>Cultural Landscape Inventory</u>. DRPT will contribute a monetary value, agreed upon with NPS, for NPS to use to prepare Cultural Landscape Inventories (CLIs).
 - a. Funding will be provided for NPS to complete CLIs for the MVMH (north of Alexandria to Columbia Island), and the East and West Potomac Parks Historic District (from the Golf Course to the railroad corridor and including the NPS National Capital Region Headquarters Campus). NPS will oversee the development and execution of the CLIs.
 - b. NPS will produce a draft of the CLIs within eight (8) months of the receipt of funding from DRPT and will produce the final CLIs within one (1) year of the receipt of funding from DRPT.

- <u>4. Vegetation Protection Plan</u>: A vegetation protection plan will be developed and implemented by DRPT, in coordination with NPS, within the areas defined as the limits of disturbance (LOD) in engineering plans to determine which vegetation is anticipated to be removed, impacted, or protected by the Project.
 - a. <u>Minimization:</u> Where feasible and appropriate, extant vegetation will be preserved *in situ* and protected during construction.
 - b. The *Vegetation Protection Plan* will include, at a minimum: documentation of the site's existing conditions; quantification and illustrations of vegetation that will be affected by the Project; and specifications for the protection of vegetation where necessary. This plan shall focus to protect mature and contributing trees within the GWMP, MVMH, and East and West Potomac Parks Historic Districts.
 - c. DRPT will complete the draft *Vegetation Protection Plan* during the Preliminary Engineering Phase of the Project. The plan will be reviewed pursuant to Stipulation III.A. FRA will ensure that DRPT will produce a final *Vegetation Protection Plan* and distribute the plan electronically to the Signatories for documentation purposes.
 - d. DPRT will implement the final *Vegetation Protection Plan* through the completion of the construction of the Project.
- 5. <u>Vegetation Restoration Plan:</u> DRPT will contribute a monetary value, agreed upon with NPS, for NPS' implementation of its portion of the *Vegetation Restoration Plan*, as described below in paragraph (a). The *Vegetation Restoration Plan* will utilize the draft and final CLIs, in the manner described in this Agreement, with the purpose of reestablishing the historic planting plans, with a focus from Columbia Island to Gravelly Point vicinity within GWMP and East and West Potomac Parks Historic Districts within NAMA.
 - a. Development & Implementation Responsibilities
 - i. DRPT shall develop a Vegetation Restoration Plan in collaboration with NPS, to the extent feasible under DRPT's Project schedule.
 - ii. NPS shall collaborate with DRPT to provide agency expert knowledge and any other available, relevant information for the development of the Vegetation Restoration Plan, including baseline documentation and other material to assist in the development of the restoration plan.
 - iii. DRPT shall implement the portion of the Vegetation Restoration Plan pertaining to the area within the LOD.
 - iv. NPS shall implement the Vegetation Restoration Plan for the non-LOD area.
 - v. DRPT will be responsible for vegetation monitoring and invasive plant removal within the LOD for five (5)-years after the date of construction completion, to ensure and support vegetation restoration within the LOD.
 - vi. Upon finalization, DRPT shall distribute the final Vegetation Restoration Plan to the Signatories. The plan will be reviewed pursuant to Stipulation III.A.

- b. NPS would be responsible for any requirements associated with additional archaeology not subject to Stipulation IV for implementation of the plan outside the LOD. The Plan will include:
 - i. Specifications for the replacement of vegetation, and their caliper, where necessary. Restoration of vegetation at the same number and caliper inches of vegetation to be removed, unless the Project Sponsor and NPS agree to a lesser caliper and/or to a different tree type. NPS will be responsible for identification of appropriate replacement species alternatives, where in-kind replacement is not feasible, and the location of vegetation.
 - ii. A planting plan consisting of native trees and vegetation to screen new bridge structures and to minimize the visual effect of those structures to the extent feasible and appropriate.

6. <u>Construction Management Control Plan:</u>

- a. <u>Minimization</u>: DRPT will minimize temporary construction effects to historic properties from noise and vibration and visual effects using a variety of construction management techniques. Visual effects will be minimized to the extent practicable by providing appropriate screening between construction staging areas and cultural resources, limiting the size of construction staging areas, and/or locating them away from sensitive views and viewsheds.
- b. DRPT will develop and implement a construction noise and vibration control plan to ensure that both noise and vibrations are controlled throughout the estimated five (5)-year construction of the Project. The plan will be reviewed pursuant to Stipulation III.A.
- c. DRPT will develop and implement a plan for visual screening of construction areas throughout the estimated five (5)-year construction of the Project. The plan will be reviewed pursuant to Stipulation III.A.
- 7. <u>Interpretation Plan:</u> DRPT will prepare and implement the interpretation plan regarding the history and significance of the Long Bridge and related topics. In addition to the interpretation plan, DRPT will design, fabricate, and install physical wayside signs, and develop a website. DRPT will ensure that no less than four (4) physical wayside signs are installed along the bike-pedestrian crossing. DRPT will submit the *Interpretation Plan* and wayside drawings to the Signatories for their review, comment and approval prior to its completion. The plan will be reviewed pursuant to Stipulation III.A.

IV. ARCHAEOLOGY

For archaeological studies undertaken by DRPT, DRPT will continue identification and evaluation of archaeological historic properties in accordance with 36 CFR § 800.4 and 800.5 and following the findings and recommendations of the *Long Bridge Project Phase IA Archaeological Assessment Report*. DRPT, in consultation with FRA, will notify and consult, as appropriate, with Native American tribes in the event that pre-historic resources are identified.

A. DRPT will ensure additional identification and evaluation of archaeological resources is accomplished in accordance with the relevant performance and reporting standards in Stipulation

II, including the DC SHPO *Guidelines for Archaeological Investigations in the District of Columbia*, the DHR *Guidelines for Conducting Historic Resources Survey in Virginia*, applicable Secretary of the Interior's Standards, and appropriate ACHP guidance.

- B. For archaeological studies undertaken by DRPT, DRPT will ensure payment for the permanent curation or arrange for long-term management and preservation of the archaeological collections, field records, images, digital data, maps, and associated records in accordance with 36 CFR § 79, *Curation of Federally-Owned and Administered Archaeological Collections*, and the relevant DC SHPO and DHR Guidelines. A digital copy of all field records, reports, and collections data will be supplied to DC SHPO, DHR, and NPS. All work will conform with *Director's Order #28A: Archaeology*, NPS's management policies, and the resource's archaeology program practices.
- C. If adverse effects to archaeological historic properties are identified, DRPT, in consultation with FRA, will do one of the following:
 - 1. Propose a minimization and data recovery plan; or
 - 2. Depending upon the significance of the resource(s) identified, propose a resource-specific Memorandum of Agreement (MOA) to resolve adverse effects. The MOA may address multiple historic properties.
- D. Document Review Procedures will be conducted pursuant to Stipulation III.A

V. POST-REVIEW CHANGES

If DRPT proposes changes to the Project that may result in additional or new effects on historic properties, DRPT will notify the Signatories of such changes. Before DRPT takes any action that may result in additional or new effects on historic properties, the Signatories, and other consulting parties, as appropriate, must consult to determine the appropriate course of action. This may include revision to the APE, identification and evaluation of historic properties, assessment of effects on historic properties, development and evaluation of alternatives or modifications to the Project that could avoid or minimize any adverse effects, or development of additional measures to mitigate any adverse effects. If required, the PA will be amended, as necessary, pursuant to Stipulation XII.

VI. POST-REVIEW DISCOVERIES

- A. If newly identified historic properties are discovered during Project construction or unanticipated effects on known historic properties are identified, FRA and DRPT will comply with 36 CFR § 800.13 by consulting with NPS, DC SHPO and/or DHR and, if applicable, Native American tribes that may attach religious and/or cultural significance to the affected property; and by developing and implementing avoidance, minimization, or mitigation measures with the concurrence of NPS, DC SHPO and/or DHR and, if applicable, Native American tribes.
 - 1. DRPT will immediately cease all ground disturbing and/or construction activities within a 50-foot radius of the discovery. DRPT will not resume ground disturbing and/or construction activities until the specified Section 106 process required by 36 CFR § 800.13 and this PA is complete.
 - 2. DRPT will notify FRA, NPS, DC SHPO, and DHR of any discovery within forty-eight (48) hours.

- 3. DRPT, in consultation with FRA, will notify the Signatories and Native American tribes, as appropriate, of the discovery by providing documentation related to the eligibility of the discovery or assumed eligibility, and if applicable, a proposal to resolve adverse effects, within fourteen (14) calendar days.
- 4. The Signatories will review the documents and provide written comments to FRA and DRPT within seven (7) calendar days or another agreed upon timeframe.
- 5. DRPT, in consultation with FRA, will consider the written comments to the fullest reasonable extent.
- 6. If DRPT receives an objection from a Signatory or Native American tribe, DRPT will notify FRA and then work in consultation with FRA to take the appropriate action and notify Signatories of FRA's decision. Should FRA, in consultation with DRPT, object to any of the comments received, FRA will provide a written explanation of its objection and will consult with the Signatories to resolve the objection. If no agreement is reached within thirty (30) calendar days following receipt of a written explanation, FRA will request the ACHP to review the dispute in accordance with Stipulation X.
- 7. If no Signatory provides written comments on the notification specified in Stipulation VI.A.3 within the agreed upon timeframe noted above, DRPT may proceed with the submitted plan.
- B. <u>Treatment of Human Remains</u>. In the event that human remains, burials, or funerary objects are discovered during construction of the Project or any action taken pursuant to this PA within the District of Columbia, DRPT will immediately halt subsurface construction disturbance in the area of the discovery and in the surrounding area where additional remains can reasonably be expected to occur and will immediately notify FRA, DC SHPO, NPS, and the District Chief Medical Examiner ("CME") of the discovery under DC Code Section 5-1406 and other applicable laws and regulations. Should the discovery occur in Virginia, the Virginia Antiquities Act, Section 10.0-2305 of the *Code of Virginia* and its implementing regulations, 17 VACS-20, adopted by the Virginia Board of Historic Resources and published in the Virginia Register on July 15, 1991, and the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et seq) and its implementing regulations, 36 CFR §10, should be followed.
 - 1. If the CME determines that the human remains are not subject to a criminal investigation by Federal or local authorities, FRA will ensure DRPT complies with the applicable Federal or local laws and regulations governing the discovery and disposition of human remains and consider the ACHP's Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects (2007).
 - 2. In accordance with the Virginia laws stated above, the local jurisdiction within which the remains are found can obtain a permit from DHR for the archaeological removal of human remains should removal be necessary.
 - 3. For actions involving Native American human remains or burials, FRA will consult the appropriate Native American tribes and DC SHPO and/or DHR to determine a treatment plan for the avoidance, recovery and/or reburial of the remains. If the human remains or burials occur on NPS lands, NPS will ensure compliance with applicable laws in accordance with provisions of the Native American Graves Protection and Repatriation Act, as amended

(Public Law 101-601, 25 U.S.C. 3001 et seq) and regulations of the Secretary of the Interior at 43 CFR § 10.

VII. CONFIDENTIALITY

- A. If disclosure of location information could result in the disturbance of a cultural resource, all Signatories to this PA will ensure shared data, including data concerning the precise location and nature of historic properties, archeological sites, and properties of religious and cultural significance to Native American tribes, are protected from public disclosure to the greatest extent permitted by law, in accordance with 36 CFR § 800.11(c), Section 304 of the NHPA, Section 9 of the Archeological Resource Protection Act of 1979, and Executive Order 13007 Indian Sacred Sites (61 F.R. 26771-26772) dated May 24, 1996.
- B. For work executed on NPS land, NPS standard policies, Director's Orders #28 and 28A, along with NPS management policies will be followed. Per ARPA, the Superintendent of each park is the arbiter for what information can and cannot be released publicly.
- C. Consulting Parties and members of the public are not entitled to receive information protected from public disclosure.

VIII. DURATION

- A. This PA will expire if its terms are not carried out within ten (10) years from the date of its execution.
- B. Six (6) months prior to expiration, FRA, or DRPT with FRA's approval, may consult with the Signatories to re-evaluate this PA and amend it in accordance with Stipulation XII below.
- C. If FRA does not amend this PA prior to its expiration, FRA shall either (a) execute a new PA pursuant to 36 CFR § 800.14(b) or (b) comply with 36 CFR Part 800 for all remaining aspects of the Project as applicable.
- D. If FRA, in consultation with the Signatories, determines that the terms of this PA have been satisfactorily fulfilled prior to the expiration date, the PA shall terminate, and FRA shall provide all Consulting Parties with written notice of the termination.

IX. MONITORING AND REPORTING

- A. DRPT will provide the Signatories with a summary report detailing work undertaken pursuant to the PA's terms each year until the PA expires or is terminated. This report will include any scheduling changes proposed, any problems encountered, and any disputes or objections received in DRPT's efforts to carry out the terms of this PA.
- B. For mitigation measures for which NPS is the responsible party for implementation, NPS will notify and provide Signatories with a progress report on implementation of those measures at least annually via NPS' PEPC website (https://parkplanning.nps.gov/).

X. DISPUTE RESOLUTION

A. Should any Signatory to this PA object at any time to any actions proposed or the manner in which the terms of the PA are implemented, FRA will consult with such Signatory to resolve the

objection. If FRA determines that such objection cannot be resolved within thirty (30) calendar days, FRA will:

- 1. Forward all documentation relevant to the dispute, including FRA's proposed resolution, to the ACHP with a copy to the other Signatories to this PA and request that ACHP provide FRA with its comments on the resolution of the objection within thirty (30) calendar days of receiving the documentation.
- 2. If the ACHP does not provide comment regarding the dispute within the thirty (30) calendarday time period, FRA will make a final decision on the dispute and proceed accordingly.
- 3. FRA will document this decision in a written response to the objection that takes into account any timely comments regarding the dispute from the Signatories and provide the ACHP and Signatories with a copy of such written response.
- 4. FRA may then proceed according to its decision.
- 5. The Signatories remain responsible for carrying out all other actions subject to the terms of the PA that are not the subject of the dispute.
- B. Should a Consulting Party or member of the public object to any proposed action(s) or the manner in which the terms of the PA are implemented by submitting its objection to DRPT and/or FRA in writing, DRPT or FRA will notify the other Signatories and FRA will take the objection into consideration. FRA will notify the other Signatories of the objection, consult with the objecting party, and if FRA determines it appropriate, also consult with the other Signatories for not more than thirty (30) calendar days. Within fourteen (14) calendar days after closure of the consultation period, FRA will provide the objecting party and the Signatories with its final decision in writing.

XI. ADOPTABILITY

In the event that a Federal agency other than FRA is considering providing financial assistance, permits, licenses, or approvals for the Project, such Federal agency may become a Signatory to this PA as a means of satisfying its Section 106 compliance responsibilities. To become a Signatory to this PA, the agency official must provide written notice to the Signatories that the agency agrees to the terms of the PA, specifying the extent of the agency's intent to participate in the PA, and identifying the lead Federal agency for the Undertaking. The participation of the agency is subject to approval by the Signatories, who must respond to the written notice within thirty (30) calendar days or the approval will be considered implicit. Any other modifications to the PA will be considered in accordance with Stipulation XII.

XII. AMENDMENTS

A. In the event that the Construction Project Sponsor changes, and FRA is providing financial assistance for construction of the Project, FRA will inform all Signatories in writing of the change. If the terms of the PA remain unchanged as a result of a new Construction Project Sponsor, the written notification will serve as the amendment, and will not necessitate action pursuant to Stipulation XII.B. The amendment will be effective on the date of notification. FRA will file the amendment with the ACHP. If changes to the terms of the PA are necessitated as a result, then the PA will be amended in accordance with Stipulation XII.B.

B. Any Signatory to this PA may request that it be amended. The Signatories will consult for a minimum of thirty (30) calendar days, or another time period agreed upon by all Signatories, to consider such amendment. The amendment will be effective on the date it is signed by all of the Signatories. FRA will file the executed amendment with the ACHP.

XIII. TERMINATION AND WITHDRAWAL

- A. If any Signatory to this PA determines that the terms of the PA will not or cannot be carried out, that Signatory will immediately notify the other Signatories in writing and consult with them to seek resolution or amendment pursuant to Stipulation XII of the PA. If within sixty (60) days a resolution or amendment cannot be reached, any Signatory may terminate the PA upon written notification to the other Signatories. Once the PA is terminated, and prior to work continuing on the Undertaking, the lead Federal agency must either (a) execute a new PA pursuant to 36 CFR § 800.14(b); (b) comply with 36 CFR Part 800 for all remaining aspects of the Project; or (c) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. FRA will notify the Signatories as to the course of action it will pursue.
- B. If FRA determines it does not have an Undertaking relating to this Project, FRA may withdraw from participation in this PA entirely upon 90-days written notification to all Signatories. If another Federal agency or other agency acting as a Federal agency does not elect to continue utilizing the PA per Stipulations I.A.4 then the PA is terminated.

XIV. AVAILABILITY OF FUNDS

- A. The obligations of Federal agencies under this PA are pursuant to the Anti-Deficiency Act, 31 U.S.C. § 1341(a)(1), therefore nothing in this PA will be construed as binding the United States to expend in any one fiscal year any sum in excess of appropriations made by Congress for this purpose, or to involve the United States in any contract or obligation for the further expenditure of money in excess of such appropriations.
- B. DRPT's obligation to expend, pay or reimburse any funds under this PA is subject to the availability of appropriations by the Virginia General Assembly and allocations by the Commonwealth Transportation Board. No funds had been appropriated for the Project at the time of the effective date of this PA.

XV. SIGNATURES AND EFFECTIVE DATE

- A. Effective Date. This PA will become effective immediately upon execution by all Signatories.
- B. <u>Counterparts.</u> This PA may be executed in counterparts, each of which constitutes an original and all of which constitute one and the same Agreement.
- C. <u>Electronic Copies</u>. Within one (1) week of the last signature on this PA, FRA shall provide each Signatory with one high quality, legible, full color, electronic copy of the fully-executed PA and all of its attachments fully integrated into one, single document. If the electronic copy is too large to send by e-mail, FRA shall provide each Signatory with an electronic copy of the fully executed PA as described above, on a compact disc or other suitable, electronic means.

Execution and implementation of this PA evidences that FRA has considered the effects of this Undertaking on historic properties, afforded the ACHP a reasonable opportunity to comment, and satisfied its responsibilities under Section 106 of the NHPA and its implementing regulations.

[Signature Pages Follow]

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL RAILROAD ADMINISTRATION,
THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE,
THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES,
THE NATIONAL PARK SERVICE,
NATIONAL CAPITAL PLANNING COMMISSION,

AND

THE VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION REGARDING

THE LONG BRIDGE PROJECT

IN

WASHINGTON, D.C. AND ARLINGTON COUNTY, VIRGINIA

FEDERAL RAILROAD ADMINISTRATION

BY: Marlys Osterhues

Date

Chief, Environment and Project Engineering Division Office of Railroad Policy and Development

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL RAILROAD ADMINISTRATION,
THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE,
THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES,
THE NATIONAL PARK SERVICE,
NATIONAL CAPITAL PLANNING COMMISSION,

AND

THE VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION REGARDING

THE LONG BRIDGE PROJECT

IN

WASHINGTON, D.C. AND ARLINGTON COUNTY, VIRGINIA

DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICER

BY: David Maloney, State Historic Preservation Officer

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL RAILROAD ADMINISTRATION,
THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE,
THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES,
THE NATIONAL PARK SERVICE,

NATIONAL CAPITAL PLANNING COMMISSION,

AND

THE VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION REGARDING

THE LONG BRIDGE PROJECT

IN

WASHINGTON, D.C. AND ARLINGTON COUNTY, VIRGINIA

VIRGINIA DEPARTMENT OF HISTORIC RESOURCES

BY: Julie Langan, State Historic Preservation Officer

7.30.2020

Date

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL RAILROAD ADMINISTRATION, THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE, THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES, THE NATIONAL PARK SERVICE, NATIONAL CAPITAL PLANNING COMMISSION,

AND

THE VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION REGARDING

THE LONG BRIDGE PROJECT

IN

WASHINGTON, D.C. AND ARLINGTON COUNTY, VIRGINIA

NATIONAL PARK SERVICE

Charles

Date: 2020.07.09

Cuvelier

20:23:40 -04'00'

BY: Charles Cuvelier

Superintendent

George Washington Memorial Parkway

Region 1 - National Capital Area

JEFFREY REINBOLD

Digitally signed by JEFFREY REINBOLD

Date: 2020.07.20 10:42:26 -04'00'

BY: Jeff Reinbold

Superintendent

National Mall and Memorial Parks

Region 1 - National Capital Area

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL RAILROAD ADMINISTRATION,
THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE,
THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES,
THE NATIONAL PARK SERVICE,
NATIONAL CAPITAL PLANNING COMMISSION,

AND

THE VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION REGARDING

THE LONG BRIDGE PROJECT

IN

WASHINGTON, D.C. AND ARLINGTON COUNTY, VIRGINIA

Date

NATIONAL CAPITAL PLANNING COMMISSION

BY: Marcel Acosta, Executive Director

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL RAILROAD ADMINISTRATION,
THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE,
THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES,
THE NATIONAL PARK SERVICE,
NATIONAL CAPITAL PLANNING COMMISSION,

AND

THE VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION REGARDING

THE LONG BRIDGE PROJECT

IN

WASHINGTON, D.C. AND ARLINGTON COUNTY, VIRGINIA

VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION

Jernofe L. Mitchell

7/17/2020

BY: Jennifer Mitchell, Director

PROGRAMMATIC AGREEMENT AMONG

THE FEDERAL RAILROAD ADMINISTRATION, THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICE, THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES, THE NATIONAL PARK SERVICE, NATIONAL CAPITAL PLANNING COMMISSION,

AND

THE VIRGINIA DEPARTMENT OF RAIL AND PUBLIC TRANSPORTATION REGARDING

THE LONG BRIDGE PROJECT

IN

WASHINGTON, D.C. AND ARLINGTON COUNTY, VIRGINIA

CONCURRING PARTIES:	
DELAWARE NATION	
SIGNATURE:	Date
PRINT NAME:	
VIRGINIA RAILWAY EXPRESS	
SIGNATURE:	Date
PRINT NAME:	
FEDERAL TRANSIT ADMINISTRATION	
SIGNATURE:	Date
PRINT NAME:	
ANC 6D	
SIGNATURE:	Date
PRINT NAME:	
AMTRAK	
SIGNATURE:	Date
PRINT NAME:	

ARCHITECT OF THE CAPITOL SIGNATURE: Date _____ PRINT NAME: _____ ARLINGTON COUNTY HISTORIC PRESERVATION PROGRAM SIGNATURE: Date _____ PRINT NAME: CRYSTAL CITY CIVIC ASSOCIATION SIGNATURE: Date ____ PRINT NAME: **CSX TRANSPORTATION** SIGNATURE: Date _____ PRINT NAME: DC PRESERVATION LEAGUE SIGNATURE: Date _____ PRINT NAME: _____ PENTAGON RESERVATION SIGNATURE: Date PRINT NAME: **SOUTHWEST BID** Date _____ SIGNATURE: PRINT NAME:

U.S. COMMISSION OF FINE ARTS		
SIGNATURE:	Date	
PRINT NAME:	_	
U.S. GENERAL SERVICES ADMINISTRATION		
SIGNATURE:	Date	
PRINT NAME:		

APPENDIX A: LONG BRIDGE PROJECT PREFERRED ALTERNATIVE AND BIKE-PEDESTRIAN CROSSING OPTION

Figure 1: Preferred Alternative



Figure 2: Bike-Pedestrian Crossing Option



APPENDIX B: LIST OF CONSULTING PARTIES

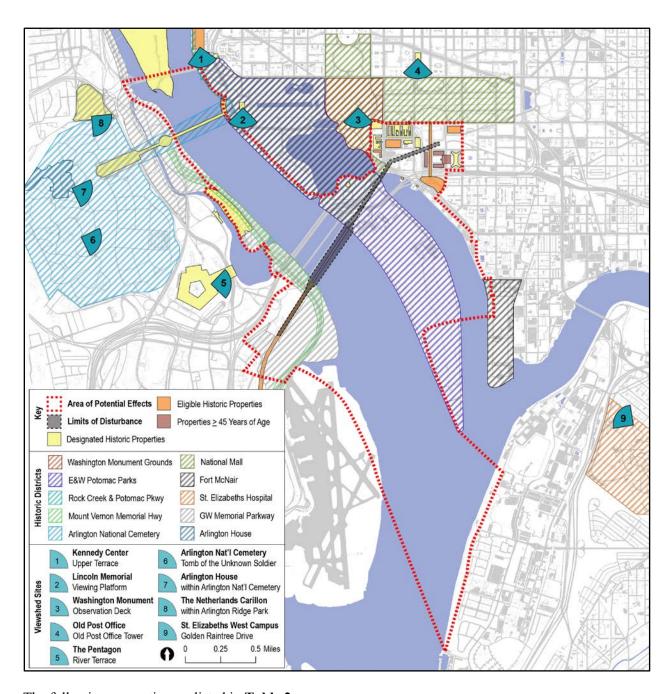
FRA initiated Section 106 consultation with DC SHPO and DHR on September 22, 2016. FRA and DDOT worked with DHR and DC SHPO to identify Consulting Parties, who were formally invited to participate in the Section 106 consultation process in March 2017. A list of those parties FRA invited to participate in the consultation process is shown in **Table 1** below.

Table 1: Agencies and Organizations Invited to Participate as Consulting Parties for the Long Bridge Project

Amtrak	National Mall Coalition ¹
Architect of the Capitol	NPS, Captain John Smith Trail ¹
Arlington County Historic Preservation Program	NPS, GWMP
Arlington County Manager ¹	NPS, National Capital Region
Arlington Historical Society ¹	NPS, National Mall & Memorial Parks
Arlington National Cemetery ¹	National Trust for Historic Preservation ¹
Catawba Indian Nation ¹	Pentagon Reservation (Department of Defense)
Committee of 100 on the Federal City ¹	Southwest BID
Crystal City Civic Association	Trust for the National Mall ¹
CSXT	U.S. Army Corps of Engineers, Baltimore District
DC Preservation League	U.S. Army Corps of Engineers, Norfolk District
Delaware Nation	U.S. Commission of Fine Arts
Delaware Tribe of Indians ¹	U.S. General Services Administration, National Capital Region
Federal Transit Administration	Virginia Department of Rail and Public Transportation
Mayor of the District of Columbia ¹	Virginia Railway Express
National Capital Planning Commission	Washington DC Chapter National Railway Historical Society ¹

¹ These organizations did not respond to the Consulting Party invitation or declined to participate as Consulting Parties.

APPENDIX C: AREA OF POTENTIAL EFFECTS AND LIST OF HISTORIC PROPERTIES



The following properties are listed in **Table 2.**

Table 2: List of Historic Properties

#	Name	Location	Designation
1.	National Mall Historic District	Washington, DC	DC Inventory of Historic Sites (DC), National Register of Historic Places (NRHP)
2.	Parkways of the National Capital Region	Washington, DC	Virginia Landmarks Register (VLR), Multiple Property Document (MPD) ²
3.	Rock Creek and Potomac Parkway Historic District	Along the Potomac River and Rock Creek from the Lincoln Memorial to the National Zoo, Washington, DC	DC, NRHP
4.	GWMP ³	Arlington, VA; Washington, DC	VLR, NRHP
5.	Mount Vernon Memorial Highway (MVMH) ⁴	Arlington, VA; Washington, DC	VLR, NRHP
6.	Plan of the City of Washington	Washington, DC	DC, NRHP
7.	East and West Potomac Parks Historic District	Washington, DC	DC, NRHP
8.	Thomas Jefferson Memorial	East Basin Drive SW, Washington, DC	DC, NRHP
9.	Central Heating Plant	325 13th Street SW, Washington, DC	DC, NRHP
10.	United States Department of Agriculture (USDA) Cotton Annex	300 12th Street SW, Washington, DC	DC, NRHP

² A Multiple Property Documentation Form is a cover document and not a nomination in its own right but serves as a basis for evaluating the National Register eligibility of related properties. In this instance, the resources within the MPD, GWMP and MVMH, are analyzed within the EIS as individually listed resources.

³ Within the Long Bridge Project Area, the GWMP is primarily located in Virginia. Segments of the GWMP, such as where it extends along Lady Bird Johnson Park, are located within the District. Outside of the Project area, the GWMP also extends into Maryland.

⁴ The same geographic considerations as described above for the GWMP also apply to the MVMH.

#	Name	Location	Designation
11.	HUD Building (Robert C. Weaver Federal Building)	451 7th Street, SW, Washington, DC	DC, NRHP
12.	USDA South Building	1352 C Street SW, Washington, DC	DC, NRHP
13.	Bureau of Engraving and Printing	301 14th Street SW, Washington, DC	DC
14.	Auditor's Building Complex	14th Street and Independence Avenue SW, Washington, DC	DC, NRHP
15.	Arlington Memorial Bridge (and related features)	Memorial Avenue, Arlington, VA, and Washington, DC	DC, NRHP
16.	Fort Leslie J. McNair Historic District (The Old Arsenal)	4th and P Streets SW, Washington, DC	DC, Determination of Eligibility (DOE) ⁵
17.	Titanic Memorial	Water and P Streets SW, Washington, DC	DC, NRHP
18.	Lunch Room Building and Oyster Shucking Shed	1100 Maine Avenue SW, Washington, DC	DC, DOE
19.	Cuban Friendship Urn	Reservation 332, Ohio Drive at 14th Street Bridge SW, Washington, DC	DC, NRHP
20.	Theodore Roosevelt Island National Memorial (Analostan Island)	Potomac River west of Georgetown Channel	DC, NRHP
21.	Lyndon B. Johnson Memorial Grove	Columbia Island in Lady Bird Johnson Park	DC, NRHP
22.	Lincoln Memorial (Statue of Lincoln) ⁶	West Potomac Park, Washington, DC	DC, NRHP
23.	Washington Monument and Grounds Historic District ⁶	14th Street, between Constitution and	DC, NRHP

[.]

⁵ A Determination of Eligibility Form is documentation outlining a resource's significance and applies the National Register Criteria for Evaluation to determine if the resource can be listed in the NRHP.

⁶ These properties are designated as viewshed locations outside of the APE boundaries.

#	Name	Location	Designation
		Independence Avenues, Washington, DC	
24.	Arlington House Historic District ⁶	Roughly bound by Sheridan Drive, Ord and Weitzel Drive, Humphrey's Drive and Lee Avenue in Arlington National Cemetery	VLR, NRHP
25.	Arlington National Cemetery Historic District ⁶	One Memorial Avenue, Arlington, VA	NRHP
26.	St. Elizabeths Hospital Historic District ⁶	2700 Martin Luther King Jr. Avenue SE, Washington, DC	DC, NRHP, National Historic Landmark (NHL)
27.	Netherlands Carillon (within Arlington Ridge Park) ⁶	Northwest corner of N Meade Street and Marwill Drive, Arlington, VA	VLR, NRHP,
28.	Old Post Office ⁶	1100 Pennsylvania Avenue NW, Washington, DC	DC, NRHP
29.	The Pentagon ⁶	US 1, Virginia Route 110, and I-395, Arlington, VA	VLR, NRHP, NHL
30.	Bureau of Engraving and Printing Annex	300 14th Street SW, Washington, DC	DOE
31.	Federal Office Building 10A (Orville Wright Building)	800 Independence Ave SW, Washington, DC	DOE
32.	Benjamin Banneker Park/Overlook; Tenth Street Overlook	Terminus of 10th Street SW, Washington, DC	DOE
33.	Richmond, Fredericksburg and Potomac Railroad Historic District	Along CSXT right-of- way in VA from Arlington County to the City of Richmond, VA	DOE
34.	Washington Marina Building	1300 Maine Avenue SW, Washington, DC	DOE

#	Name	Location	Designation
35.	L'Enfant Promenade	Section of 10th Street SW between Independence Avenue and Banneker Park, Washington, DC	DOE
36.	Lady Bird Johnson Park	GWMP, Washington, DC	DOE
37.	John F. Kennedy Center for the Performing Arts ⁶	2700 F Street NW, Washington, DC	DOE
38.	Liberty Loan Federal Building	401 14th Street SW, Washington, DC	DOE
39.	Astral Building (North Building, L'Enfant Plaza), 1968	955 L'Enfant Plaza SW, Washington, DC	Potentially eligible ⁷
40.	Comsat Building (South Building, L'Enfant Plaza), 1965	950 L'Enfant Plaza SW, Washington, DC	Potentially eligible
41.	Loew's L'Enfant Plaza Hotel (East Building, L'Enfant Plaza), 1971 to 1973	470-490 L'Enfant Plaza SW, Washington, DC	Potentially eligible
42.	USPS Building (West Building, L'Enfant Plaza), 1969 to 1971	475 L'Enfant Plaza SW, Washington, DC	Potentially eligible

-

⁷ Potentially eligible resources are those that have the possibility to be listed in the NRHP but a formal DOE has yet to be conducted.

APPENDIX D: ASSESSMENT OF EFFECTS REPORT CONCURRANCE LETTERS



GOVERNMENT OF THE DISTRICT OF COLUMBIA STATE HISTORIC PRESERVATION OFFICER



November 8, 2018

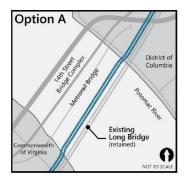
Ms. Amanda Murphy
Environmental Protection Specialist
Office of Railroad Policy and Development
U.S. Department of Transportation
Federal Railroad Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

RE: Assessment of Effects Report for the Long Bridge Project

Dear Ms. Murphy:

Thank you for providing the District of Columbia State Historic Preservation Officer (DC SHPO) with a copy of the *Assessment of Effects Report* for review and comment. We have reviewed the document and are writing to provide additional comments regarding effects on historic properties in accordance with Section 106 of the National Historic Preservation Act.

We understand that two action alternatives have been retained for further consideration. Alternative A proposes to retain and restore the historic bridge, and to construct a second bridge upstream from the existing structure. Alternative B proposes to replace the historic bridge with two newly constructed bridges in the same general alignment. Both alternatives also include the possibility of constructing a new bike-pedestrian bridge upstream from the new bridge(s) that will either be attached to (Option 1), or independent from the new railroad bridge (Option 2), but a decision regarding whether the bike-pedestrian bridge will be constructed as part of the project has not yet been made.



- New 2-track bridge upstream of existing bridge
- · Retain existing bridge



- New 2-track bridge upstream of existing bridge
- Replace existing bridge

Ms. Amanda Murphy Section 106 Consultation for the Long Bridge Project November 8, 2018 Page 2

Based upon our review of the report and the discussions held during the October 24, 2018 consulting parties' meeting, we concur that implementation of either action alternative will result in adverse effects on historic properties as outlined in the attached table. We also believe that Alternative A will have an indirect visual adverse effect on the East & West Potomac Park Historic District because it will block views to the historic bridge. However, the adverse effects associated with Alternative B will be far greater than those which will occur as a result of Alternative A because the former will completely destroy the historic bridge. For this reason, we recommend that Alternative A be selected as the Preferred Alternative.

Of the two options for the new bike-pedestrian bridge, an independent structure (Option 2) appears to result in fewer adverse effects because it will avoid the need to construct wider piers to accommodate both the new bike-pedestrian bridge and the new railroad bridge. This will allow the new railroad bridge piers to be much more similar in size and design to the historic piers and, therefore, more compatible with the historic context.

On a related note, we recommend that the new railroad bridge be constructed using "Through Plate Girders" (below, left) that match the historic girders rather than "Deck Plate Girders" (below right) that were used to construct the Metro bridge further upstream. Using "Through Plate Girders" will establish a consistent, compatible "vocabulary" for the railroad bridges and differentiate them from the Metro structure. Differences in age and subtle details should eliminate any confusion that the two railroad bridges were constructed simultaneously.



In addition to the minimization measures described above, we recommend that mitigation measures such as interpretive displays that address the existing historic bridge and the extended history of bridges along this alignment be developed and installed within the project area. Supplemental mitigation measures may also be required as we learn more about the proposed project.

If you should have any questions or comments regarding this matter, please contact me at andrew.lewis@dc.gov or 202-442-8841. Otherwise, we look forward to consulting further to develop an appropriate Section 106 agreement document.

Sincerely

Senior Historic Preservation Officer

DC State Historic Preservation Office

Assessment of Effects



Summary of Adverse Effects Determination

Historic Property	No Action Alternative	Action Alternative A	Action Alternative B	Cumulative Effects	Temporary Effects
National Mall DC	No Adverse Effect	No Adverse Effect	No Adverse Effect	No Adverse Effect	Indirect Adverse Effect
George Washington Memorial Parkway (GWMP) VA/DC	No Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect
Mount Vernon Memorial Highway (MVMH) VA/DC	No Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect
East and West Potomac Parks DC	No Adverse Effect	Direct Adverse Effect	Direct Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect



COMMONWEALTH of VIRGINIA

Department of Historic Resources

Matt Strickler Secretary of Natural Resources 2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan Director

Tel: (804) 367-2323 Fax: (804) 367-2391 www.dhr.virginia.gov

November 9, 2018

Ms. Amanda Murphy, Environmental Protection Specialist Federal Railroad Administration 1200 New Jersey Avenue SE, Mail Stop-20 Washington, DC 20590

Re: Long Bridge Project

Arlington County, Virginia DHR Project No. 2016-0932

Dear Ms. Murphy:

Thank you for requesting comments from the Virginia Department of Historic Resources (DHR) on the materials presented at the Fourth Consulting Parties Meeting held on October 30, 2018.

Action Alternatives. DHR recommends the selection of Option 2 for the bike-pedestrian crossing, as the footprint would be smaller than Option 1; it would not as directly impact the historic bridge and would be more easily reversible. We recommend that it be placed upstream. Because Long Bridge is contributing to the East-West Potomac Park, it should be retained and a new two-track bridge should be constructed. Action alternatives may include ground disturbances for piers and/or landings in Virginia and in the District of Columbia. Any necessary further survey should be completed prior to the selection of the preferred alternative.

Summary for Assessment of Effects. Regarding summary assessment for Virginia properties, DHR concurs with the following determinations:

Property	No Action Alternative	Action Alternative A	Action Alternative B	Cumulative Effects	Temporary Effects
George Washington Memorial Parkway	No Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect
Mount Vernon Memorial Highway	No Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect	Direct Adverse Effect	Direct and Indirect Adverse Effect

Western Region Office 962 Kime Lane Salem, VA 24153 Tel: (540) 387-5443 Fax: (540) 387-5446 Northern Region Office 5357 Main Street PO Box 519 Stephens City, VA 22655 Tel: (540) 868-7029 Fax: (540) 868-7033 Eastern Region Office 2801 Kensington Avenue Richmond, VA 23221 Tel: (804) 367-2323 Fax: (804) 367-2391 Page 2 November 9, 2018 DHR File No. 2016-0932

Long Bridge Project: Phase IA Archaeological Assessment Draft Technical Report. We have reviewed the document entitled Long *Bridge Project: Phase IA Archaeological Assessment Draft Technical Report* and find that its recommendations are sound. We support the proposed classification of areas with high, moderate, and no archaeological potential and the Recommended Actions presented in Section 11.5.

This letter provides our concurrence with the FRA's determination of Adverse Effect for all action alternatives as submitted. We look forward to continued consultation with the FRA and the other consulting parties as the project progresses. For any additional questions, please contact the reviewer assigned to this project, Adrienne Birge-Wilson at (804) 482-6092, or via email at adrienne.birge-wilson@dhr.virginia.gov.

Sincerely,

Roger W. Kirchen

Director, Review and Compliance Division

APPENDIX E: ASSESSMENT OF EFFECTS REPORT





Long Bridge Project

Section 106 Assessment of Effects Report

December 7, 2018







Long Bridge Project

Section 106 Assessment of Effects Report

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1.0 Introduction

The Federal Railroad Administration (FRA) in coordination with the District Department of Transportation (DDOT) assessed effects of the Long Bridge Project (the Project) on historic properties per Section 106 of the National Historic Preservation Act of 1966¹ and its implementing regulation.² FRA and DDOT are coordinating the Section 106 process with the preparation of an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act of 1969 (NEPA).

The Project consists of potential improvements to the Long Bridge and related railroad infrastructure located between the RO Interlocking near Long Bridge Park in Arlington, Virginia, and the L'Enfant (LE) Interlocking near 10th Street SW in the District of Columbia (the Long Bridge Corridor). The 1.8-mile Long Bridge Corridor is shown in **Figure 1-1**.

The purpose of the Project is to provide additional long-term railroad capacity and to improve the reliability of railroad service through the Long Bridge Corridor. Currently, there is insufficient capacity, resiliency, and redundancy to accommodate the projected demand in future railroad services. The Proposed Action is needed to address these issues and to ensure the Long Bridge Corridor continues to serve as a critical link connecting the local, regional, and national transportation network.

This report documents the assessment of effects to historic properties that could result from the Project. This report includes the following:

- 1. Description of the project alternatives considered and a description of the bike-pedestrian crossing mitigation option;
- 2. Summary of Section 106 consultation efforts completed to date;
- Description of the Area of Potential Effects (APE);
- 4. Listing identified historic properties and properties at or greater than 45 years of age within the APE;
- 5. Description of the methodology used for assessing effects on historic properties; and
- 6. Assessment of effects on historic properties.

FRA and DDOT considered comments from the District of Columbia State Historic Preservation Officer (DC SHPO), Virginia Department of Historic Resources (VDHR), and other Consulting Parties to the Section 106 process in preparing this final report.³

¹ 54 USC 300101.

² 36 CFR Part 800. Protection of Historic Properties.

³ FRA and DDOT provided a draft Assessment of Effects report to SHPOs and Consulting Parties for 30-day review (Oct 10, 2018

⁻ November 9, 2018), and held a Consulting Parties Meeting on October 24, 2018.



Figure 1-1 | Long Bridge Corridor





2.0 Description of the Undertaking

2.1. Project Background

The existing Long Bridge is a two-track railroad bridge, constructed in 1904, that is currently owned and operated by CSX Transportation (CSXT), a Class I freight railroad. The Long Bridge is a contributing structure to the East and West Potomac Parks Historic District. The Long Bridge Corridor serves freight (CSXT), National Railroad Passenger Corporation (Amtrak) intercity passenger rail, and Virginia Railway Express (VRE) commuter rail. Maryland Area Regional Commuter (MARC) service, which currently terminates at Washington Union Station in the District, plans to expand service across Long Bridge between the District and Northern Virginia. Norfolk Southern, also a Class I freight railroad, has trackage rights on Long Bridge but does not currently exercise those rights.

Long Bridge is a key element of the regional commuter railroad network and national railroad system for intra- and intercity passenger rail service, as well as freight railroad service along the Eastern Seaboard of the United States, linking the Northeast Corridor and Southeast High-Speed Rail Corridor. Projections indicate that freight and passenger growth will exceed the capacity of the existing two-track bridge across the Potomac River. Future demand will require new options and expanded infrastructure to avoid interrupting the movement of passengers and goods across the Potomac River and to provide service to economic centers north and south of Long Bridge.

2.2. Alternatives to Be Evaluated in the EIS

2.2.1. Action Alternatives

Based on the results of concept screening completed by FRA and DDOT, in addition to comments from agencies, the public, and Consulting Parties, FRA and DDOT selected two Action Alternatives to for evaluation in the EIS. **Figure 2-1** shows Action Alternative A and Action Alternative B.

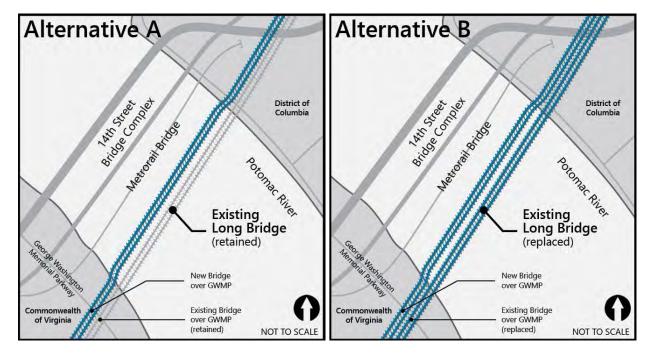
- Action Alternative A (Preferred Alternative):⁴ This alternative would retain the existing two-track Long Bridge and construct a new two-track bridge upstream of the existing Long Bridge to create a four-track crossing over the Potomac River. Action Alternative A proposes no repairs or modifications to the existing Long Bridge under this Project, and the central through-truss span would be retained. A new component railway bridge would also be constructed to span above the George Washington Memorial Parkway (GWMP). The existing two-track railroad bridge above the GWMP would remain.
- Action Alternative B: This alternative would replace Long Bridge with a new two-track bridge
 and construct another new two-track bridge upstream of the existing bridge to create a fourtrack crossing. This alternative would also construct two new component railway bridges
 spanning above the GWMP, necessitating the removal of the existing bridge.

⁴ FRA and DDOT have identified Action Alternative A as the Preferred Alternative in the EIS. They informed agencies and the public of this decision on November 29, 2018.



North of the Potomac River crossing, the Action Alternatives follow substantially the same course. The following section describes elements common to both Action Alternatives.

Figure 2-1 | Action Alternatives to Be Evaluated in the EIS



2.2.2. Elements Common to Both Action Alternatives

The southern Project limit is the RO Interlocking, a series of signals and track crossovers allowing trains to switch between tracks. As part of the District to Richmond segment of the Southeast High-Speed Rail Corridor, the Virginia Department of Rail and Public Transportation (DRPT) is proposing a four-track crossover alignment at this location. Both Action Alternatives tie into the planned interlocking and add two new tracks in addition to the two existing tracks. The new and existing tracks would meet the switching and crossover length requirements necessary at an interlocking for interoperability.

Moving north from the RO Interlocking, the four-track alignment proposed for the Project would continue adjacent to Long Bridge Park and would then cross over the GWMP. In both Action Alternatives, a new bridge would be constructed over the Mount Vernon Trail (MVT) and continue across the Potomac River upstream of the existing bridge. Additional information on the proposed bridge design and engineering is described in **Section 2.2.4, Conceptual Engineering Studies**.

After crossing the Potomac River, the new Long Bridge structures in both Action Alternatives would extend over Ohio Drive SW in the District and end at an abutment north of the street. The new upstream bridge would extend into National Park Service (NPS) Parking Lot C. The two new western track alignments would continue north from NPS Parking Lot C with a new single-span bridge spanning

⁵ DRPT. *DC2RVA Tier II DEIS*, Appendix A – Alternatives Technical Report. Accessed from http://dc2rvarail.com/files/9615/0413/6228/Appendix A-Attachment A Corridor Segments.pdf. Accessed July 18, 2018.



the Washington Metropolitan Area Transit Authority (WMATA) Metrorail Yellow Line portal. Retaining walls would be required along the eastern and western sides of the four-track corridor to retain embankment fills.

The four new tracks would continue across I-395 on two separate two-track bridges. After bridging I-395, the four tracks would converge into parallel alignments and widen to the east of the existing track alignment, but would still be within the existing right-of-way. The four tracks would continue north along the corridor and cross over Ohio Drive SW for a second time on a single new four-track bridge. Retaining walls would again be required on either side of the corridor to retain embankment fill slopes.

The corridor would cross the Washington Channel at the mouth of the Tidal Basin on a single new four-track bridge that would replace the existing bridge. The channel is not navigable underneath the existing bridges. Just north of the Washington Channel crossing, the tracks would cross Maine Avenue SW and Maiden Lane on a new four-track bridge. The existing retaining wall along the west side of the tracks along the I-395 off-ramp would be maintained, and a new retaining wall would be required along the east side of the railroad corridor between the tracks and the Washington Marina parking lot. The alignment of the two new tracks would require that the pedestrian bridge over Maine Avenue SW be replaced on a new alignment.

The four-track alignment would proceed along the corridor between the Mandarin Oriental Hotel and the Portals V development and would continue underneath the Maryland Avenue SW overbuild. The tracks would share multiple bays between existing bridge piers, with some bridge modifications required.

From Maryland Avenue SW, the tracks would travel along the corridor underneath 12th Street SW, the 12th Street Expressway, and L'Enfant Plaza SW. Just north of L'Enfant Plaza SW, the four tracks would tie into the four tracks at LE Interlocking proposed by VRE, again meeting the switching and crossover length requirements necessary at an interlocking for interoperability.

2.2.3. No Action Alternative

The EIS will also evaluate the No Action Alternative, pursuant to NEPA implementing regulations. In the No Action Alternative, the Project would not be implemented. While the No Action Alternative is not consistent with the Project's Purpose and Need, it will serve as a baseline against which the potential effects of the Action Alternatives can be compared.

2.2.4. Conceptual Engineering Studies

FRA and DDOT are currently studying options to consider the feasibility and constructability of various bridge structure types under both Action Alternatives. In each alternative, the new bridges would be essentially identical in type and size. Over the navigation channels, a fixed span is proposed for the new bridge, with no ability to move or open for marine traffic. The vertical clearances beneath the bridge are restricted at the navigation channel, Ohio Drive SW, the Rock Creek Park Trail, and the MVT. Therefore, the bottom of the beams on the new bridge would be at the same elevation as that of the existing bridge. However, to meet new CSXT design criteria and maintain similar span lengths, the top of rail of the new bridge would be approximately 3 to 5 feet higher than the top of rail of the existing bridge.

The overall depth of the approach bridge superstructure would be similar to, or slightly deeper than, the existing bridge depth. This element would be further refined during final design. The main channel span

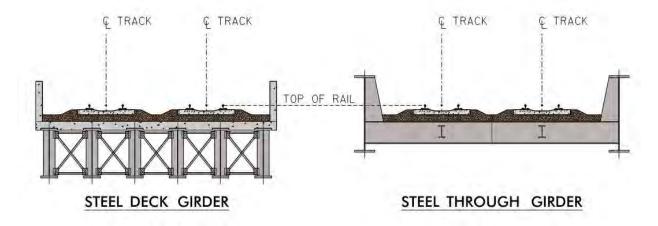


over the navigational channel would have a deeper superstructure depth than the approach bridges due to the longer span, with an overall depth approximately 50 percent greater than the existing through girders.

For Action Alternative A, the locations of the new piers in the Potomac River are proposed to remain in the same configuration as the existing Long Bridge and in line with existing piers. If Action Alternative B is selected, and the existing bridge is replaced with a new bridge, the span lengths for both new bridges would remain similar as the superstructure lengths are already at the maximum limits for the required design loading, bridge geometry, and vertical clearances.

Two structure types for the proposed bridge across the Potomac River are being considered, as shown in **Figure 2-2**: a steel through girder bridge and a steel deck girder bridge. These are common structure types for railroad bridges in the United States. In addition, these structure types are considerably more cost effective than other structure types. The shallow depth of the structure required over the navigation channel precludes the use of concrete girders at this location. For uniformity, only steel girders are proposed for the new bridges over the river.

Figure 2-2 | Structure Types Under Consideration



Given the location of the bridge and its proximity to major landmarks and trails, the aesthetics of the proposed bridge would be considered in final design. The main difference between the two structure types in terms of aesthetics is the visible structure depth. For the deck girder design, roughly half the depth is the steel girder and the other half is the concrete deck and parapet wall. For the through girder bridge, the entire visible depth is steel. The concrete deck and parapet of the deck girder option may be cast with a decorative form liner to economically give an aesthetic finish to the parapet. The through girders can be painted to enhance the bridge appearance.

Both evaluated structure types would be viewed as traditional railroad bridges in appearance, to provide visual consistency with the existing Long Bridge structure. These would not have any signature spans that would greatly stand out among the surrounding bridges. Additionally, none of the new bridges proposed in either Action Alternative would recreate the central through truss span on the existing Long Bridge. Feedback received from the public, agencies, and Consulting Parties indicated a preference for a new span or spans that preserves the uniformity of the existing Long Bridge-Metrorail-14th Street bridge



complex and avoids potential adverse visual effects resulting from a signature span. The new bridges would be a deck plate girder or through plate girder bridge type for all spans, as shown in **Figure 2-2**.

2.2.5. Bike-Pedestrian Crossing Options

Although not part of the Project's Purpose and Need, some agencies and members of the public have expressed strong support for a bike-pedestrian crossing. The Project has continued to explore the potential opportunity to accommodate connections that follow the trajectory of the Long Bridge Corridor to the pedestrian and bicycle network. A potential bike-pedestrian crossing could be implemented under either Action Alternative being evaluated in the EIS. While not part of the Project, FRA, DDOT, and NPS are continuing to consider a bike-pedestrian crossing option as potential mitigation for impacts to properties protected under Section 4(f) of the United States Department of Transportation Act of 1966.⁶

The Project evaluated the feasibility of four bike-pedestrian crossing options and considered if a crossing could be designed to be consistent with railroad operator plans and pursuant to railroad safety practices. The four options extend from the Long Bridge Park side of the GWMP to the north side of Ohio Drive SW at NPS Parking Lot C, with connections to the MVT and Ohio Drive SW. These options are summarized below:

- **Option 1A** would provide a crossing attached to the upstream side of the new upstream railroad bridge using a <u>shared superstructure</u> and <u>substructure</u> with the railroad bridge. This option would provide a direct connection to Long Bridge Park.
- **Option 1B** would provide a crossing attached to the upstream side of the new upstream railroad bridge using a <u>shared substructure and separate superstructures</u>. This option would provide a direct connection to Long Bridge Park.
- **Option 2** would provide a crossing on an <u>independent bridge on the upstream side</u> of the new upstream railroad bridge. This option would provide a direct connection to Long Bridge Park.
- Option 3 would provide a crossing on an <u>independent bridge downstream</u> of the existing railroad bridge. To optimize connections to bicycle and pedestrian facilities, the crossing would connect in the District to Ohio Drive SW near the NPS National Capital Region (NCR) Headquarters, rather than landing next to Long Bridge. A direct connection to Long Bridge Park would not be feasible with this option.

Options shown at the public and agency meetings in December 2017 did not show the crossing connecting across the GWMP to Long Bridge Park. However, following feedback received from the public and agencies (U.S. Commission of Fine Arts [CFA], National Capital Planning Commission [NCPC], and Arlington County) that emphasized the importance of a connection to Crystal City, the potential to cross the GWMP have been evaluated as part of all options.

The ramps connecting to the MVT in Virginia and to Ohio Drive SW in the District would begin sloping down to existing ground once the crossing reaches land on either side of the river or may begin sloping down while still over the river, which would minimize the length of ramp switchbacks. The determination of whether the bridge can begin sloping downward while still over the river channel

⁶ 49 USC 303



would be made in consultation with the United States Coast Guard regarding the minimum allowable vertical clearance over the channel.

FRA and DDOT will continue to consider Option 2 as potential mitigation for the Project. As shown in **Figure 2-3** and **Figure 2-4**, Option 2 provides the bike-pedestrian crossing on a completely separate structure approximately 25 feet upstream of the new upstream railroad bridge.

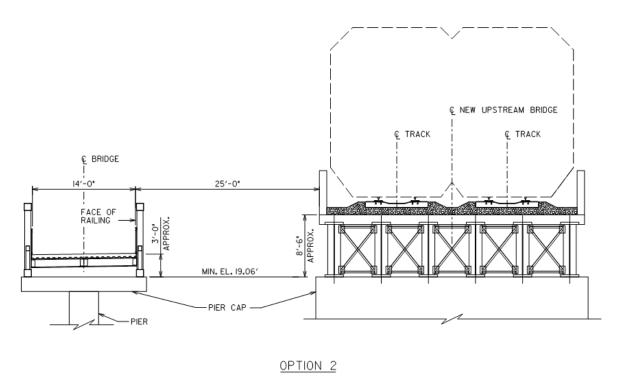
Option 2 is preferred by the railroad operators and NPS (land owner on either side of the bridge and the river bottom). This structure would be supported by single-column piers approximately 6 feet in diameter. The Option 2 piers would be significantly smaller than the piers in Option 1B as the size would be based on bike-pedestrian loading rather than railroad loading. The results of a Threat, Vulnerability, & Risk Assessment (TVRA) showed that this option would have the lowest risk, because the completely separate structure and distance between bridges would prohibit pedestrians from accessing the railroad bridge. Therefore, fewer security measures would be required. The completely separate structure also simplifies inspection and maintenance. Lastly, the construction cost of Option 2 would also be approximately 20 percent less than Option 1B.

Figure 2-3 | Bike-Pedestrian Crossing Option 2





Figure 2-4 | Section Diagram of New Upstream Railroad Bridge and Bike-Pedestrian Crossing Option 2



Options 1A, 1B, and 3 were eliminated from further consideration for the following reasons:

- The deck of Option 1A, because it shares its superstructure as well as its substructure with the new upstream railroad bridge, would be at a much higher elevation across the river. This would require longer ramps than the other options, resulting in additional impacts to the GWMP, MVT, and NPS Parking Lot C. Compared to the other options, Option 1A would also offer less separation between the bike-pedestrian crossing and the railroad bridge. This proximity to the railroad bridge would result in a less desirable experience for bicyclists and pedestrians and would make maintenance and inspection more difficult.
- Option 1B shares its substructure with the new upstream railroad bridge, but would have a separate superstructure, enabling additional separation distance from the active railroad. To support the bike-pedestrian crossing superstructure, the railroad bridge piers would be extended by approximately 22 feet farther upstream. The results of the TVRA showed that this option would have the second highest risk of the options available. Option 1B requires substantial security measures to make it more difficult for pedestrians to access the railroad bridge. The proximity to the railroad bridge would result in a less desirable experience for bicyclists and pedestrians and make maintenance and inspection more difficult. The extended railroad piers and security measures make Option 1B more expensive than Option 2.



 Option 3 would introduce a new visual element into the viewsheds from the GWMP, East Potomac Park, and Potomac River resulting in additional impacts. In addition, it could not provide a direct connection to Long Bridge Park.

2.3. Long Bridge Section 106 Consultation

FRA initiated Section 106 consultation with DC SHPO and VDHR on September 22, 2016. FRA and DDOT worked with VDHR and DC SHPO to identify Consulting Parties, who were formally invited to participate in the Section 106 consultation process in March 2017. A list of those parties FRA invited to participate in the consultation process is shown in **Table 2-1** below.

Table 2-1 Agencies and Organizations Invited to Participate as Consulting Parties for the Long Bridge Project

Amtrak	National Mall Coalition ¹
Architect of the Capitol	NPS, Captain John Smith Trail ¹
Arlington County Historic Preservation Program	NPS, GWMP
Arlington County Manager ¹	NPS, National Capital Region
Arlington Historical Society ¹	NPS, National Mall & Memorial Parks
Arlington National Cemetery ¹	National Trust for Historic Preservation ¹
Catawba Indian Nation ¹	Pentagon Reservation (Department of Defense)
Committee of 100 on the Federal City ¹	Southwest BID
Crystal City Civic Association	Trust for the National Mall ¹
CSXT	U.S. Army Corps of Engineers, Baltimore District ²
DC Preservation League	U.S. Army Corps of Engineers, Norfolk District ²
Delaware Nation	CFA
Delaware Tribe of Indians ¹	U.S. General Services Administration, National Capital Region
Federal Transit Administration (FTA)	DRPT
Mayor of the District of Columbia ¹	VRE
NCPC	Washington DC Chapter National Railway Historical Society ¹

¹ These organizations did not respond to the Consulting Party invitation or declined to participate as Consulting Parties.

FRA and DDOT jointly conducted four Section 106 Consulting Party meetings between April 2017 and October 2018. The specific content of those meetings is explained in **Table 2-2**. The feedback received during these meetings and in the subsequent comment periods informed the development of the APE, the identification of historic properties, the methodology for assessing effects, the assessment of effects on historic properties, and appropriate resolution strategies. In addition to meeting with Consulting Parties, FRA and DDOT held several public meetings throughout the NEPA process to provide information and solicit comments and questions from the public. These meetings also served as public meetings for the purposes of Section 106 consultation.

² During scoping, the Norfolk District designated FRA as the lead Federal agency for fulfilling its compliance obligations under Section 106. In November 2018, the Baltimore District designated FRA as the lead Federal agency for Section 106 compliance.



 Table 2-2
 Consulting Party Meetings for the Long Bridge Project

Date	Content
Meeting #1 April 25, 2017	Project overview; purpose and need; preliminary concepts and screening; Section 106 process; preliminary identification of historic properties; and role of the consulting party.
Meeting #2 November 15, 2017	Concept screening results; draft APE and field survey methodology; and identification of historic properties.
Meeting #3 May 30, 2018	Phase 1A archaeological assessment overview; methodology for assessing effects to historic properties.
Meeting #4 October 24, 2018	Phase IA archaeological assessment findings; findings of draft assessment of effects report; and avoidance, minimization, and mitigation strategies.



3.0 Identification of Historic Properties

This section provides a summary of the methodology utilized by FRA and DDOT to develop the project APE and identify historic properties, as well as the findings of those efforts. A detailed description of these methodologies and findings are described in the *Area of Potential Effects and Historic Properties Technical Report* (February 2018), which was provided to DC SHPO, VDHR, and the Consulting Parties (see **Appendix A**).

3.1. APE Development

Section 106 regulations define the APE as the geographic boundary within which an undertaking has the potential to directly or indirectly effect historic properties. The APE boundary reflects the scale and nature of an undertaking and may be different for different types of effects caused by an undertaking. For Section 106 consultation, the APE is defined to facilitate the identification of historic properties and to allow for the evaluation of potential effects to historic properties resulting from an undertaking.⁷

For the Project, FRA identified an APE and Limits of Disturbance (LOD) for the alternatives under consideration. The LOD boundary represents the area within which the Project has the potential to directly alter an existing feature or result in ground-disturbing activities. FRA subsequently refined the APE in consultation with DC SHPO, VDHR, and other Consulting Parties. By letters dated March 23, 2018, DC SHPO and VDHR concurred with the APE and LOD.

Following the dismissal of the bike-pedestrian crossing option downstream of the existing Long Bridge (see **Section 2.2.5**, **Bike-Pedestrian Crossing Options**), FRA revised the LOD to remove the alignment of that crossing option and its associated access ramps and landings (see **Figure 3-1**). The APE boundary remains unchanged.

3.2. Identification of Historic Properties

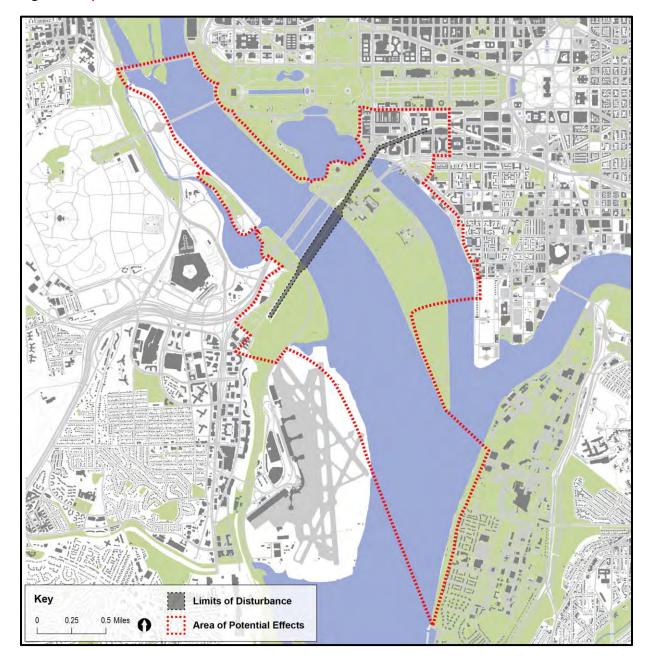
Concurrent with the development of the APE, FRA and DDOT identified historic properties within the APE boundaries in consultation with DC SHPO, VDHR, and the Consulting Parties (as shown in Figure 3-2). Per the Section 106 regulation, a historic property is defined as "... any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP)." The definition of historic properties includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (including artifacts, records, and material remains). The following tables provide a list of identified historic properties for the Project. Appendix A, Area of Potential Effects and Historic Properties Technical Report, provides more detailed information on the location and significance of these properties.

⁷ 36 CFR 800.16(d).

^{8 36} CFR 800.16(I)(1).



Figure 3-1 | Area of Potential Effects and Limits of Disturbance





Area of Potential Effects Eligible Historic Properties **Limits of Disturbance** Properties ≥ 45 Years of Age Designated Historic Properties National Mall Washington Monument Grounds **Historic Districts** E&W Potomac Parks Fort McNair St. Elizabeths Hospital Rock Creek & Potomac Pkwy Mount Vernon Memorial Hwy **GW Memorial Parkway** Arlington National Cemetery Arlington House Kennedy Center Arlington Nat'l Cemetery Tomb of the Unknown Soldier Lincoln Memorial **Arlington House** Viewing Platform within Arlington Nat'l Cemetery The Netherlands Carillon **Washington Monument** Observation Deck within Arlington Ridge Park **Old Post Office** St. Elizabeths West Campus Old Post Office Tower Golden Raintree Drive The Pentagon 0.25 0.5 Miles River Terrace

Figure 3-2 | Identification of Historic Properties

3.2.1. Designated Historic Properties

The following properties (**Table 3-1**) have been listed in the NRHP, DC Inventory of Historic Sites (DC), or the Virginia Landmarks Register (VLR). Two properties have been designated as National Historic Landmarks (NHL). In some cases, these properties were determined eligible for NRHP listing (Determination of Eligibility [DOE]) and were subsequently listed.



Table 3-1 Designated Historic Properties

#	Name	Location	Designation
1.	National Mall Historic District	Washington, DC	DC, NRHP
2.	Parkways of the National Capital Region	Washington, DC	VLR, NRHP
3.	Rock Creek and Potomac Parkway Historic District	Along the Potomac River and Rock Creek from the Lincoln Memorial to the National Zoo, Washington, DC	DC, NRHP
4.	GWMP ¹	Arlington, VA; Washington, DC	VLR, NRHP
5.	Mount Vernon Memorial Highway (MVMH) ²	Arlington, VA; Washington, DC	VLR, NRHP
6.	Plan of the City of Washington	Washington, DC	DC, NRHP
7.	East and West Potomac Parks Historic District	Washington, DC	DC, NRHP
8.	Thomas Jefferson Memorial	East Basin Drive SW, Washington, DC	DC, NRHP
9.	Central Heating Plant	325 13th Street SW, Washington, DC	DC, NRHP
10.	United States Department of Agriculture (USDA) Cotton Annex	300 12th Street SW, Washington, DC	DC, NRHP
11.	HUD Building (Robert C. Weaver Federal Building)	451 7th Street, SW, Washington, DC	DC, NRHP
12.	USDA South Building	1352 C Street SW, Washington, DC	DC, NRHP
13.	Bureau of Engraving and Printing	301 14th Street SW, Washington, DC	DC
14.	Auditor's Building Complex	14th Street and Independence Avenue SW, Washington, DC	DC, NRHP
15.	Arlington Memorial Bridge (and related features)	Memorial Avenue, Arlington, VA, and Washington, DC	DC, NRHP
16.	Fort Leslie J. McNair Historic District (The Old Arsenal)	4th and P Streets SW, Washington, DC	DC, DOE
17.	Titanic Memorial	Water and P Streets SW, Washington, DC	DC, NRHP
18.	Lunch Room Building and Oyster Shucking Shed	1100 Maine Avenue SW, Washington, DC	DC, DOE
19.	Cuban Friendship Urn	Reservation 332, Ohio Drive at 14th Street Bridge SW, Washington, DC	DC, NRHP
20.	Theodore Roosevelt Island National Memorial (Analostan Island)	Potomac River west of Georgetown Channel	DC, NRHP
21.	Lyndon B. Johnson Memorial Grove	Columbia Island in Lady Bird Johnson Park	DC, NRHP
22.	Lincoln Memorial (Statue of Lincoln) ³	West Potomac Park, Washington, DC	DC, NRHP
23.	Washington Monument and Grounds Historic District ³	14th Street, between Constitution and Independence Avenues, Washington, DC	DC, NRHP
24.	Arlington House Historic District ³	Roughly bound by Sheridan Drive, Ord and Weitzel Drive, Humphrey's Drive and Lee Avenue in Arlington National Cemetery	VLR, NRHP



25.	Arlington National Cemetery Historic District ³	One Memorial Avenue, Arlington, VA	NRHP
26.	St. Elizabeths Hospital Historic District ³	2700 Martin Luther King Jr. Avenue SE, Washington, DC	DC, NRHP, NHL
27.	Netherlands Carillon (within Arlington Ridge Park) ³	Northwest corner of N Meade Street and Marshall Drive, Arlington, VA	VLR, NRHP,
28.	Old Post Office ³	1100 Pennsylvania Avenue NW, Washington, DC	DC, NRHP
29.	The Pentagon ³	US 1, Virginia Route 110, and I-395, Arlington, VA	VLR, NRHP, NHL

¹ Within the Long Bridge Project Area, the GWMP is primarily located in Virginia. Segments of the GWMP, such as where it extends along Lady Bird Johnson Park, are located within the District. Outside of the Project area, the GWMP also extends into Maryland.

3.2.2. Eligible Historic Properties

The following properties have been determined eligible for listing in the NRHP by a Federal agency or recommended as eligible by VDHR or DC SHPO.

Table 3-2 | Eligible Historic Properties

#	Name	Location	Designation		
1.	Bureau of Engraving and Printing Annex	300 14th Street SW, Washington, DC	DOE		
2.	Federal Office Building 10A (Orville Wright Building)	800 Independence Ave SW, Washington, DC	DOE		
3.	Benjamin Banneker Park/Overlook; Tenth Street Overlook	Terminus of 10th Street SW, Washington, DC	DOE		
4.	Richmond, Fredericksburg and Potomac Railroad Historic District	Along CSX right-of-way in VA from Arlington County to the City of Richmond, VA	DOE		
5.	Washington Marina Building	1300 Maine Avenue SW, Washington, DC	DOE		
6.	L'Enfant Promenade	Section of 10th Street SW between Independence Avenue and Banneker Park, Washington, DC	DOE		
7.	Lady Bird Johnson Park	GWMP, Washington, DC	DOE		
8.	John F. Kennedy Center for the Performing Arts ¹	2700 F Street NW, Washington, DC	DOE		
9.	Liberty Loan Federal Building	401 14th Street SW, Washington, DC	DOE		
1 These	¹ These properties are designated as viewshed locations outside of the contiguous APE boundaries.				

² The same geographic considerations as described above for the GWMP also apply to the MVMH.

³ These properties are designated as viewshed locations outside of the contiguous APE boundaries.



3.2.3. Properties at or Greater than 45 Years of Age

Although the scope for this project does not include drafting formal DOEs, properties located within the APE that are at least 45 years of age were evaluated against the NRHP Criteria for Evaluation. An assessment of integrity for each property was also undertaken. This age was selected to account for the 50-year threshold that is generally observed in the evaluation of historic significance, and to account for the implementation schedule of the Project (which would extend 5 or more years into the future). These properties were identified using a range of documentation resources including real property and building permit data, historic maps and photographs, and aerial photographs. A preliminary evaluation of each property's potential historic significance and integrity is provided as a resource for future, or more detailed, evaluation by FRA or others at the time of Project implementation.

Table 3-3 | Properties at or Greater than 45 Years of Age

#	Name	Location	Date(s)	Preliminary Determination of Eligibility
1.	425 12 th Street SW ¹	425 12 th Street SW, Washington, DC	1959	Likely not eligible.
2.	Astral Building (North Building, L'Enfant Plaza)	955 L'Enfant Plaza SW, Washington, DC	1968	Potentially eligible.
3.	Comsat Building (South Building, L'Enfant Plaza)	950 L'Enfant Plaza SW, Washington, DC	1965	Potentially eligible.
4.	Loew's L'Enfant Plaza Hotel (East Building, L'Enfant Plaza)	470-490 L'Enfant Plaza SW, Washington, DC	1971 to 1973	Potentially eligible.
5.	USPS Building (West Building, L'Enfant Plaza)	475 L'Enfant Plaza SW, Washington, DC	1969 to 1971	Potentially eligible.
6.	398 Long Bridge Drive ¹	398 Long Bridge Drive, Arlington, VA	1957	Likely not eligible.

¹ VDHR or DC SHPO concurred with FRA's preliminary determination of ineligibility. For this reason, these properties are not considered historic properties and are not evaluated for adverse effects.

3.2.4. Archaeological Resources

Archaeological resources will be identified using a phased approach. FRA and DDOT have initiated the process by completing a Phase IA Archaeological Assessment in consultation with DC SHPO and VDHR. The Phase IA consists of a desktop review of known archaeological sites and areas that exhibit high archaeological potential. The Phase IA addresses both Action Alternatives and the potential bike-pedestrian crossing. Additional surveys will be conducted as needed now that a Preferred Alternative has been identified. Because NPS has jurisdiction over a majority of the area within the LOD (including the bottom lands of the Potomac River), FRA and DDOT will coordinate with them regarding potential effects on archaeological resources, including potential underwater archaeology. VDHR provided

⁹ National Register of Historic Places, National Register Bulletin, How to Apply the National Register Criteria for Evaluation (United States Department of the Interior, NPS, revised 2002).



concurrence on the recommendations and conclusions in the draft Phase IA technical report on November 9, 2018. DC SHPO concurred on November 19, 2018.



4.0 Assessment of Effects

This section provides a description of the criteria and methodology used to assess the Project's effects on historic properties. Following a summary determination of effect, the detailed assessment is organized by historic property and further separated between permanent or long-term effects, cumulative effects associated with the bike-pedestrian crossing options, and temporary or construction-related effects. Effects on archaeological resources are not addressed here but will be identified using the phased approach described above.

4.1. Criteria of Adverse Effect

The Section 106 implementing regulations provide a definition of the criteria of adverse effect: "An adverse effect is found when an undertaking may directly or indirectly alter any of the characteristics of a historic property that qualify it for inclusion in the National Register in a manner that would diminish the property's integrity of location, design, setting, materials, workmanship, feeling, or association." ¹⁰

Examples of adverse effects include:

- Physical destruction or damage;
- Alterations that are inconsistent with the Secretary's Standards for the Treatment of Historic Properties, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access;
- Removal of the property from its historic location;
- Change of the character of the property's use or of contributing physical features within the property's setting;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect or deterioration (except in certain religious or cultural cases); and
- Transfer, lease, or sale of property out of Federal ownership or control without adequate preservation controls.

4.2. Assessment of Effects Methodology

For the Project, FRA and DDOT have identified three main categories of potential adverse effects on historic properties:

- Direct physical effects that remove, damage, or alter a historic property within the LOD.
- **Indirect visual effects** that change the character of a historic property's setting or alter significant views.
- **Direct or indirect effects** resulting from vibration, or indirect effects from noise that may alter a historic property or diminish its integrity.

At the May 30, 2018, Consulting Party meeting, FRA and DDOT presented a methodology for assessing adverse effects based on each category above. These methodologies are described below.

^{10 36} CFR 800.5(a)(1).



4.2.1. Physical Effects

Based on the results of conceptual engineering for the Action Alternatives, FRA and DDOT described and evaluated the alternatives to determine their potential for direct physical effects on historic properties. For each historic property, the physical changes have been assessed against all seven aspects of historic integrity. If physical changes were determined to diminish any aspects of integrity that contribute to a property's historic significance, a finding of adverse effect has been made.

4.2.2. Visual Effects

Based on the results of conceptual engineering for the Action Alternatives, FRA and DDOT reviewed NRHP and cultural landscape documentation to identify and evaluate significant views and viewsheds for historic properties in the APE. FRA and DDOT also carried out visual assessments utilizing conceptual engineering results and existing survey documentation. For each historic property, the visual effect has been assessed against all seven aspects of historic integrity. If visual effects were determined to diminish any aspects of integrity that contribute to a property's ability to convey its historic significance, a finding of adverse effect has been made. Indirect adverse effects were most likely to result when an alternative permanently removed or impeded views that contribute to the historic significance of a property or diminished a property's historic integrity. Visual effects generally diminished a property's integrity of setting, feeling, and association. This methodology has also followed VDHR guidance for assessing visual effects on historic properties to aid in determining if they are adverse. ¹¹

4.2.2.1. Viewshed Analysis

To better understand and evaluate the effects of the proposed Action Alternatives, FRA and DDOT prepared a series of photographic simulations that visualize the appearance of these alternatives as compared against existing conditions. The selected locations were sites that demonstrated a moderate or high potential for adverse effects resulting from either Action Alternative. Specific to historic properties, moderate- or high-potential sites were those:

- With views or vistas that contribute demonstrably to the historic significance of a given historic property;
- Where the existing Long Bridge Corridor was currently clearly visible; and
- Where either Action Alternative had the potential to obstruct or alter historic views or vistas or diminish the integrity of a historic property.

At the November 2017 Consulting Parties meeting, FRA and DDOT solicited and received input from the Consulting Parties to determine important viewsheds to include in the APE. In August 2018, FRA and DDOT coordinated with Consulting Parties with technical expertise on the matter, namely the DC SHPO, VDHR, NPS, CFA, and NCPC to develop the list of sites selected for additional visual analysis using photo simulations (see **Figure 4-1** and **Table 4-1)Error! Reference source not found.**

¹¹ VDHR. Assessing Visual Effects on Historic Properties. Accessed from https://www.dhr.virginia.gov/pdf_files/Assessing_Visual_Effects_JUN10.pdf. Accessed May 9, 2018.



Figure 4-1 | Viewshed Locations (overlaid on APE)

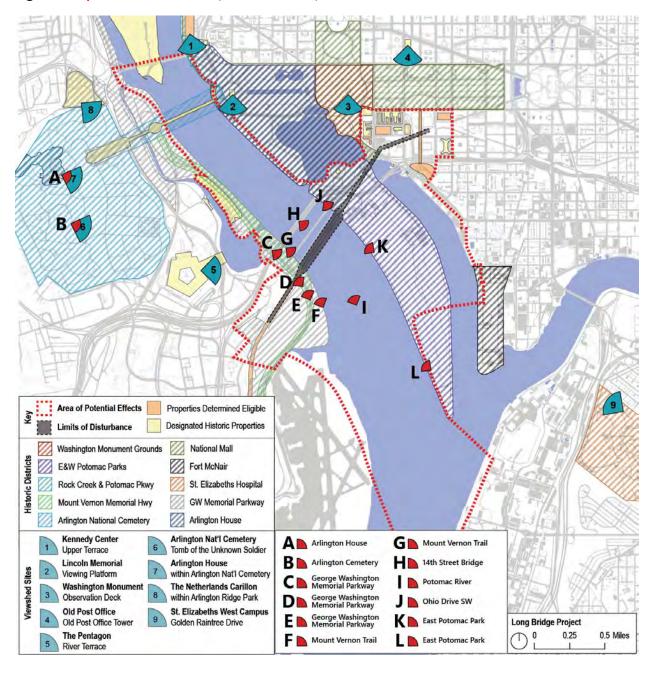




Table 4-1 Viewshed Analysis Locations

#	Site/Property	Location
Α	Arlington House	View from Arlington House facing southeast
В	Arlington National Cemetery	View from Tomb of the Unknown Solder facing southeast
С	GWMP	View from southbound motorway approaching Metrorail Bridge
D	GWMP	View from northbound motorway approaching Metrorail and 14th Street bridges
Е	GWMP	View from northbound motorway approaching GWMP railroad crossing
F	GWMP, MVT	View from Gravelly Point Park approaching Long Bridge facing north
G	GWMP, MVT	View from north of Long Bridge facing south
Н*	I-395 Bridge	View from center of bridge facing south
l*	Potomac River	View from south of Long Bridge facing north
J	East Potomac Park	View from Ohio Drive SW facing southwest
K	East Potomac Park	View from Buckeye Drive vicinity facing northwest
L	East Potomac Park	View from end of Hains Point facing northwest
* The	ese visualizations will also sup	oport analysis of impacts in the Visual Resources chapter of the DEIS but are not presented in this report as

^{*} These visualizations will also support analysis of impacts in the visual Resources chapter of the DEIS but are not presented in this report as they are not historic properties.

4.2.2.1. Methodology to Create Viewshed Simulations

To create these views, FRA and DDOT conducted field surveys to photograph existing conditions. They then created three-dimensional massing models of Action Alternatives A and B that were aligned with the existing Long Bridge Corridor in these locations. The three-dimensional models were overlaid on existing conditions photographs and manipulated digitally to adjust for light and shadow, render materials, and approximate anticipated vegetative conditions. The viewshed simulations are shown on the following pages in **Figures 4-2** through **4-11**. 12

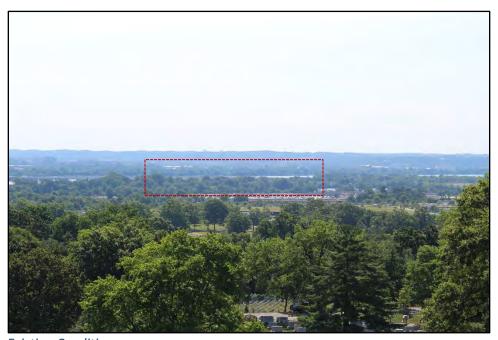
¹² An additional round of field visits and photo simulations will be conducted in late 2018 to assess winter (leaves-off) views and confirm the findings described in this report. Any changes to the assessment of effects based on winter views will be incorporated into the Final Assessment of Effects Report that will be attached as an appendix to the administrative draft of the DEIS.



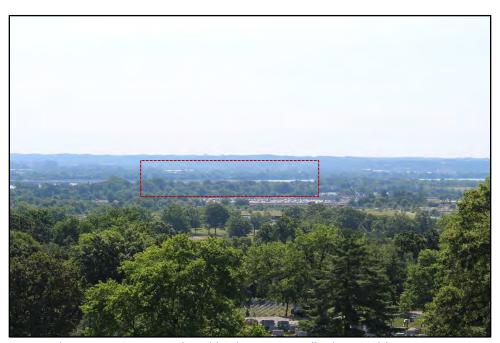
4.2.2.2. Viewshed Simulations

Figure 4-2 | Viewshed Location A (Arlington House)

View from Arlington House facing southeast (existing Long Bridge location outlined in red)



Existing Conditions



Action Alternative A: New railroad bridge not visually discernable.





Action Alternative B: New railroad bridges not visually discernable.

Figure 4-3 Viewshed Location B (Arlington National Cemetery)

View from Tomb of the Unknown Soldier facing southeast (existing Long Bridge location outlined in red)



Existing Conditions





Action Alternative A: New railroad bridge not visually discernable.



Action Alternative B: New railroad bridges not visually discernable.



Figure 4-4 | Viewshed Location C (GWMP)

View from southbound motorway approaching Metrorail Bridge



Existing Conditions



Action Alternative A: New railroad bridge visible behind Metrorail Bridge.





Action Alternative B: New railroad bridges visible behind Metrorail Bridge.

Figure 4-5 | Viewshed Location D (GWMP)

View from northbound motorway approaching Metrorail and 14th Street bridges



Existing Conditions





Action Alternative A: New railroad bridge visible behind existing railroad bridge.



Action Alternative B: New railroad bridges visible.



Figure 4-6 | Viewshed Location E (GWMP)

View from northbound motorway approaching GWMP railroad crossing



Existing Conditions



Action Alternative A: New railroad bridge abutment partially visible.





Action Alternative B: New railroad bridges visible.

Figure 4-7 Viewshed Location F (GWMP, MVT)

View from Gravelly Point Park approaching Long Bridge facing north



Existing Conditions





Action Alternative A: New railroad bridge not visually discernable.

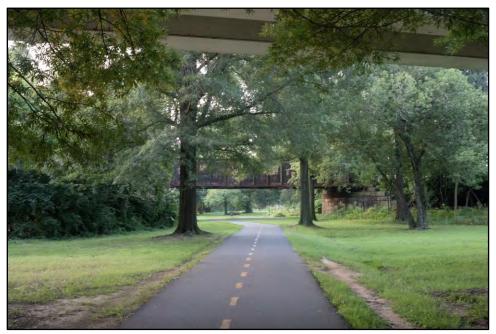


Action Alternative B: New railroad bridge visible.



Figure 4-8 | Viewshed Location G (GWMP, MVT)

View from north of Long Bridge facing south



Existing Conditions



Action Alternative A: New railroad bridge visible.





Action Alternative B: New railroad bridges visible.

Figure 4-9 | Viewshed Location J (East Potomac Park)

View from Ohio Drive SW facing southwest



Existing Conditions





Action Alternative A: New railroad bridge visible.



Action Alternative B: New railroad bridges visible.



Figure 4-10 Viewshed Location K (East Potomac Park)

View from Buckeye Drive vicinity facing northwest



Existing Conditions



Action Alternative A: New railroad bridge not visually discernable.





Action Alternative B: New railroad bridge visible.

Figure 4-11 | Viewshed Location L (East Potomac Park)

View from end of Hains Point facing northwest



Existing Conditions





Action Alternative A: New railroad bridge not visually discernable.



Action Alternative B: New railroad bridge visible.



4.2.3. Noise and Vibration Effects

This assessment has been coordinated with the EIS analysis for noise and vibration. FRA and DDOT have overlaid the Noise and Vibration Study Area with the APE (as shown in **Figure 4-12**).**Error! Reference source not found.** In accordance with EIS methodology, noise and vibration analysis has been based on Federal Transit Administration (FTA) Guidelines. Based on the EIS assessment, FRA and DDOT identified historic properties that would experience noise and vibration levels above FTA thresholds. FTA guidelines defer to local construction and operational noise limits where applicable. If noise and vibration levels above FTA or local thresholds were determined to diminish any aspects of integrity that contributed to a property's historic significance, a finding of adverse effect has been made.

The EIS analysis for noise and vibration evaluates both temporary construction and permanent operational effects due to noise and vibration for the following classifications of each:

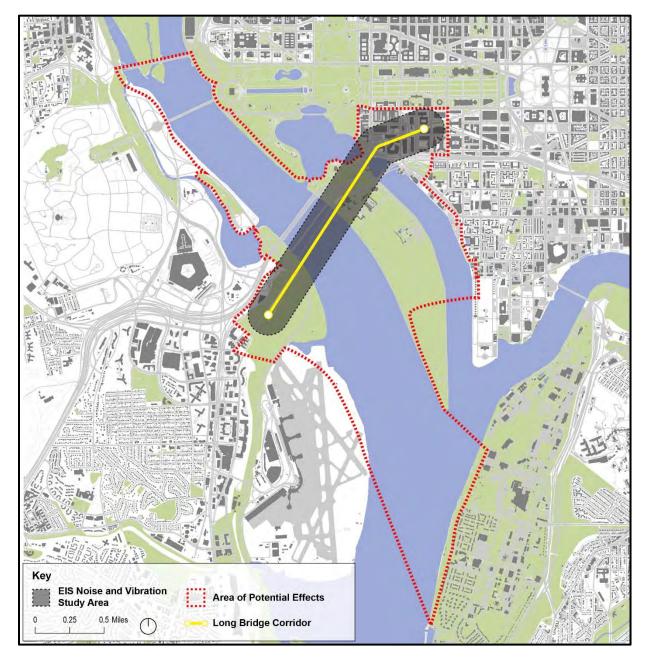
- **Ground-borne vibration**, defined as the oscillatory motion of the ground, occurs when forces associated with the wheel-rail interaction are transmitted through the track structure into the ground and into adjacent buildings. Vibration may be perceptible and disturb people or sensitive activities in nearby buildings.
- Noise is typically defined as unwanted or undesirable sound. Noise is evaluated based on its
 potential to cause human annoyance. Because humans can hear certain frequencies or pitches
 of sound better than others, sound levels are measured and reported using a descriptor called
 the A-weighted sound level. A-weighted sound levels weight different frequencies of sound to
 correspond to human hearing and are expressed in decibel notation as dBA.
- Ground-borne noise is generated when vibration propagates into a room and causes the walls, ceilings, and floor to vibrate and generate a low frequency rumble. Ground-borne noise is generally only perceptible in buildings where airborne paths (such as paths through windows or openings) are not present. Ground-borne noise is of particular concern for special-use buildings, such as theatres and recording studios.

The process to evaluate the potential effects from noise and vibration included identifying noise- and vibration-sensitive receptors, understanding the predominant sources of noise and vibration, and characterizing existing noise and vibration conditions through measurements. Noise receptors were categorized into the FTA Land Use Noise Categories based on the human use of the property as it relates to the potential for noise to cause human annoyance. Receptors are primarily located at ground-level outdoor areas of frequent human use. Parks that have areas for passive recreation are considered sensitive to noise. Commercial and industrial properties are not typically evaluated for operational noise impact unless there are outdoor areas of frequent human use. Residential, institutional, commercial, and industrial land uses are typically evaluated for construction-period noise effects.

Vibration-sensitive land uses are similar to noise-sensitive land uses except that vibration, as it relates to human annoyance, is only evaluated inside buildings and is not evaluated at parks. All buildings and structures are evaluated for potential structural damage due to high-impact construction equipment such as impact pile driving. The thresholds for potential structural damage are greater than the thresholds for human annoyance. Train operations generally do not generate sufficient vibration to cause structural damage unless the trains are extremely close to sensitive buildings. Historic properties are often more susceptible to vibration and have lower thresholds for increased risk of structural damage.



Figure 4-12 | Noise and Vibration Study Area Overlaid on APE





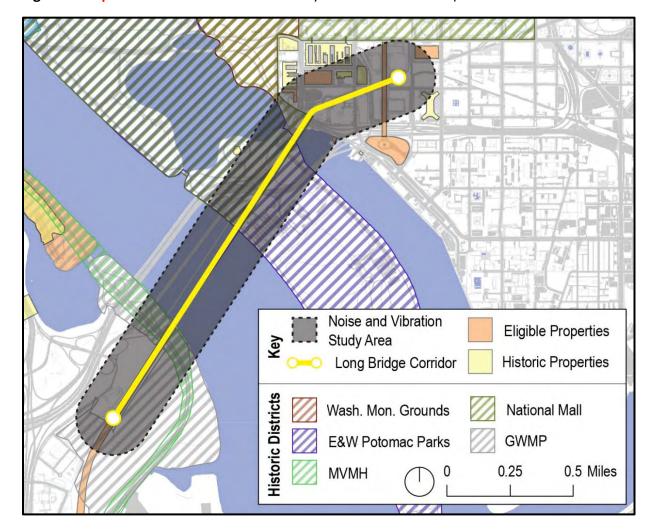


Figure 4-13 Detail of Noise and Vibration Study Area with Historic Properties

4.3. Summary Determination of Effect

This assessment finds that both Action Alternatives adversely affect the GWMP, MVMH, and East and West Potomac Parks historic districts. Direct adverse effects to these resources would result due to the removal or alteration of contributing features, including vegetation. The direct adverse effects would be intensified in Action Alternative B because of greater LOD areas, and the removal of the Long Bridge (a contributing resource to the East and West Potomac Parks Historic District) and a component railway bridge above the MVMH and the GWMP (a contributing resource to the GWMP).

Both alternatives create permanent, indirect adverse effects resulting from visual changes on the GWMP, MVMH, and East and West Potomac Parks historic districts.¹³ Analysis compiled to support the

¹³ This assessment is based on existing NRHP, DC, VLR, DOE, cultural landscape, and other available documentation for each historic property. NPS has indicated that it considers the existing Long Bridge and the circa-1930 component railroad bridge spanning above the motorway to be contributing to the GWMP Historic District. The NRHP documentation for the GWMP



noise and vibration section of the EIS found there would be no permanent, direct or indirect adverse effects on historic properties resulting from noise or vibration.

Construction activities, including construction-related staging, access, and noise and vibration for both Action Alternatives adversely affect the National Mall, the MVMH, the GWMP, and East and West Potomac Parks historic districts. These effects are temporary and would be limited to the periods of construction for each Action Alternative. These effects could likely be avoided or minimized in intensity and duration through appropriate construction management techniques. Section 0, Temporary and Construction-Related Effects, provides a list of the historic properties affected.

4.4. Permanent or Long-Term Effects

An evaluation of permanent and long-term effects anticipated from Action Alternative A and Action Alternative B are described in **Table 4-2**. The evaluation is organized by classifications of historic properties as described previously.

Table 4-2 | Permanent or Long-Term Effects

Property Action Alternative A (Preferred Alternative) Action Alternative B Designated Historic Properties – Historic Districts (HDs)

Physical Effects: A portion of the Long Bridge Corridor extends through the National Mall HD. For Action Alternative A, the limits of disturbance would be approximately 6.9 acres within the HD. Despite this, there are no identified contributing features within the railroad corridor. Therefore, no direct adverse effect would result under this alternative.

National Mall HD (DC)

Visual Effects: NRHP and Cultural Landscape documentation identify no significant views within this portion of the HD. Therefore, <u>no indirect adverse effect</u> from changes to historic views and viewsheds would result under this alternative.

Noise and Vibration: The National Mall is located within the Noise and Vibration Study Area. Several receptor locations within the HD were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. None of these levels exceeded FTA thresholds for noise or vibration. Therefore, no adverse effects from permanent operational changes

Physical Effects: A portion of the Long Bridge Corridor extends through the National Mall HD. For Action Alternative B, the limits of disturbance would be approximately 7.1 acres within the HD. Despite this, there are no identified contributing features within the railroad corridor. Therefore, no direct adverse effect would result under this alternative.

Visual Effects: The effects described under Action Alternative A would be similar under Action Alternative B. Therefore, <u>no indirect adverse effect</u> from changes to historic views and viewsheds would result under this alternative.

Noise and Vibration: The effects described under Action Alternative A would be similar under Action Alternative B. Therefore, <u>no</u> <u>adverse effects</u> from permanent operational changes to noise or vibration would result under this alternative.

references neither structure. However, VDHR has recommended that the component railroad bridge to be contributing to the GWMP Historic District. Additionally, because the Long Bridge was extant during the period of significance of the GWMP (1930-1966), it forms a contributing part of the GWMP historic setting.



Action Alternative A (Preferred Alternative)

Action Alternative B

to noise or vibration would resulting under this alternative.

Physical Effects: The RCPP is located outside of the limits of disturbance. Therefore, <u>no direct</u> adverse effect would result under either Action Alternative.

Rock Creek and Potomac Parkway (RCPP) HD (DC) **Visual Effects:** The RCPP Potomac Waterfront Section cultural landscape report cites the sweeping, panoramic view of the Potomac River shoreline as being contributing to the historic district. Views south from the RCPP to the Project Area are currently impeded by the Roosevelt Bridge. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: The RCPP is located outside of the noise and vibration study area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Physical Effects: Under Action Alternative A, the limits of disturbance would be approximately 0.9 acres of the GWMP. In addition to the infringement on undeveloped parkland, construction of a new railroad bridge would necessitate the removal of contributing vegetation, especially mature trees that date to the 1932 planting plan of GWMP, which were intended to visually screen the railroad bridge from the motorway. Loss of these trees would diminish the integrity of design, materials (specifically, the contributing vegetation), and feeling of the GWMP, creating a direct adverse effect.

George Washington Memorial Parkway (GWMP) HD (DC/VA)

Visual Effects: The existing, non-contributing bridges along this portion of the GWMP have compromised its integrity of feeling, association, and setting. The addition of a new bridge within this existing cluster of structures has no potential to further diminish these aspects of the Parkway's integrity. Therefore, no indirect adverse effects from changes to historic views and viewsheds would result under this alternative. See Figures 4-4, 4-5, and 4-6 Error! Reference source not found.for illustrations of these changes.

Although the introduction of a new railroad bridge structure above the Potomac River would alter views along the shoreline facing north toward the Monumental Core or south to Hains Point, the findings of the viewshed analysis indicates that these are insufficient to

Physical Effects: Impacts described under Action Alternative A would be similar under Action Alternative B, although intensified in a result of a second new railroad bridge construction. The expanded limits of disturbance would be approximately 1.6 acres. Action Alternative B also proposes the replacement of the existing component railroad bridge spanning above the GWMP, which has been recommended by VDHR as a contributing resource to the GWMP, resulting in a direct adverse effect.

Visual Effects: For views along the Parkway, the effects described under Action Alternative A would be similar under Action Alternative B. Therefore, <u>no indirect adverse effects</u> from changes to historic views and viewsheds would result under this alternative. See Figure 4-4 for illustrations of these changes.

Action Alternative B replaces the existing Long Bridge. This structure and its central through truss span form a significant visual component of the GWMP when traveling north and south along the MVT. In this location, removing this visual element would diminish the integrity of setting and association of the HD, resulting in an indirect adverse effect. See Figures 4-7 and 4-8Error! Reference source not found. for illustrations of these changes.



Action Alternative A (Preferred Alternative)

diminish any aspect of the integrity of the GWMP.¹⁴ There would be <u>no indirect adverse</u> effect.

Noise and Vibration: A portion of the GWMP is located within the Noise and Vibration Study Area. Vibration analysis has indicated that there would be **no adverse effect** resulting from increased operational vibration.

Noise analysis has indicated that the increase in noise resulting from permanent operational changes would be moderate (that is, perceptible to general users). However, several factors minimize this perceived change, including the existing high degree of ambient noise along the GWMP (generally resulting from automobile traffic along the GWMP and surrounding roads), the relatively infrequent occurrence of train traffic relative to automobile traffic, and the HD's primary use for active recreation. For these reasons, the change in operational noise would not be sufficient to diminish the integrity of setting, feeling, and association of the property. Therefore, no adverse effect from noise or vibration would result.

Action Alternative B

Noise and Vibration: The effects described under Action Alternative A would be similar under Action Alternative B. Therefore, <u>no</u> <u>adverse effect</u> from noise or vibration would result.

MVMH HD (DC/VA)¹⁵

Effects to the MVMH would be similar and additive to those described above affecting the GWMP, under both Action Alternatives. Both Action Alternatives would create direct adverse effects on the MVMH. The limits of disturbance for Action Alternative A encompass approximately 0.9 acres of the HD.

Effects to the MVMH would be similar and additive to those described above affecting the GWMP, under both Action Alternatives. Both Action Alternatives would create direct adverse effects on the MVMH. The limits of disturbance for Action Alternative B encompass approximately 1.6 acres of the HD.

Action Alternative B would also create <u>indirect</u> <u>adverse effects</u> on the MVMH.

¹⁴ The Monumental Core represents the central concentration of the Federal presence in the nation's capital. It is comprised of the National Mall, East and West Potomac Parks, the Federal Triangle, the Northwest Rectangle, and Southwest Federal Center. ¹⁵ The railroad bridge spanning the roadway is described in the NRHP nomination for the MVMH, but it is unclear from the existing NRHP documentation if this structure is classified as a contributing resource. It has been assumed to be contributing for the purposes of this assessment.



Action Alternative A (Preferred Alternative)

Action Alternative B

Physical Effects: A portion of the Long Bridge Corridor extends through the Plan of the City of Washington HD. Because the Project proposes no alterations to the contributing streets and reservations, there would be **no direct adverse effect** under either Action Alternative.

Visual Effects: The Project proposes no changes to the contributing views and vistas of the HD. Therefore, <u>no indirect adverse effects</u> from changes to historic views and viewsheds would result under either Action Alternative.

Plan of the City of Washington HD (DC)

Noise and Vibration: A portion of the Plan of the City of Washington is located within the Noise and Vibration Study Area. Vibration analysis has indicated that there would be <u>no adverse</u> <u>effect</u> to contributing components of the Plan of the City of Washington resulting from increased operational vibration.

Noise analysis has indicated that the increase in noise resulting from permanent operational changes would be moderate (that is, perceptible to general users) for certain areas along the Long Bridge Corridor that are located within the boundaries of the Plan of the City of Washington. However, several factors minimize this perceived change, including the existing high degree of ambient noise within the SW Quadrant street grid and the lack of sensitive land uses (such as areas of passive recreation). For these reasons, the change in operational noise would not be sufficient to diminish the integrity of setting, feeling, and association of the property. Therefore, <u>no adverse effect</u> from noise would result under either Action Alternative.

Physical Effects: Under Action Alternative A, the LOD encompass approximately 5.6 acres within East Potomac Park. In addition to the infringement on undeveloped parkland, construction of a new railroad bridge would necessitate the removal of up to four contributing Japanese Cherry Trees along the perimeter of East Potomac Park, in addition to other mature vegetation. Loss of these features would diminish the integrity of design, materials (specifically, the trees themselves), and feeling of the park, creating a direct adverse effect.

East and West Potomac Parks HD (DC)

Visual Effects: Addition of a new bridge would obstruct views of the existing Long Bridge from the north, diminishing the visual integrity of this contributing structure and resulting in an indirect adverse effect. Otherwise, viewshed simulations have indicated that Action Alternative A has no potential to impact contributing views, particularly those around the perimeter of East Potomac Park, including those facing toward the Monumental Core and views up and down the Potomac River toward Virginia. See Figures 4-9, 4-10, and 4-11 for illustrations of these changes.

Physical Effects: Action Alternative B proposes the removal of the existing Long Bridge to construct a new railroad bridge in its location. The Long Bridge (Potomac Railroad Bridge) is a contributing element of the HD. Removing it would diminish the integrity of design, feeling, association, and materials of the HD, creating a direct adverse effect. Additionally, as described under Action Alternative A, removal of the contributing Japanese Cherry Trees and other mature vegetation would result in a direct adverse effect. This effect would be intensified because of a second new railroad bridge construction, necessitating the removal of up to seven contributing cherry trees, and the expansion of the LOD to approximately 5.8 acres.

Visual Effects: The existing Long Bridge, with its central through truss span, is a contributing visual element to the HD. Removing it would diminish the integrity of setting, feeling, and association of the HD, creating an <u>indirect adverse effect</u>. The other indirect adverse effects described under



Action Alternative A (Preferred Alternative)

Noise and Vibration: A portion of East Potomac Park is located within the Noise and Vibration Study Area. Several receptor locations within the HD were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. None of these levels exceeded FTA thresholds for noise or vibration. Therefore, no adverse effect from noise or vibration would result.

Action Alternative B

Action Alternative A would be similar under Action Alternative B.

Noise and Vibration: The effects described under Action Alternative A would be similar under Action Alternative B. Therefore, <u>no</u> <u>adverse effect</u> from noise or vibration would result.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Fort Leslie J. McNair Historic District (The Old Arsenal) HD (DC)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds; however, based on the siting of the HD and its relatively open shoreline, this analysis finds that contributing views would include the views of the Potomac River and the District around the perimeter of the site. The Project has no potential to alter or impede these views. The Project also has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, **no effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Washington Monument and Grounds HD (DC)

Visual Effects: The NRHP and cultural landscape documentation for this property references the multiple significant views and vistas that contribute to the significance of the Monument and its surrounding landscape. Relevant to the Project, this includes views from the top of the Monument to the surrounding cityscape and beyond. Although both Action Alternatives would be visible from the Monument viewing platform, the perceptible changes would be miniscule in relation to the degree and expansive nature of the contextual changes resulting from decades of contemporary development. The Project Area is also located beyond the main focal points in the Monumental Core that the viewing platform provides, such as to the Capitol and White House, and would not obstruct these views. For these reasons, neither Action Alternative has the potential to diminish the property's integrity of setting, feeling, or association. Therefore, no indirect adverse effects from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Arlington House HD (VA)

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.



Action Alternative A (Preferred Alternative)

Action Alternative B

Visual Effects: The NRHP documentation for this property references the dramatic, panoramic views of the District afforded by the house's prominent siting. Viewshed simulations prepared for this property indicate that the Action Alternatives would be minimally visible and have no potential to diminish the property's integrity of setting, feeling, or association. Therefore, <u>no indirect adverse effects</u> from changes to historic views and viewsheds would result under either Action Alternative. See **Figure 4-2 Error! Reference source not found.** for illustrations of these changes.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Arlington National Cemetery HD (VA)

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Visual Effects: The NRHP documentation for this property repeatedly references the panoramic views toward the District. Viewshed simulations prepared for this property indicate that the Action Alternatives would be minimally visible and have no potential to diminish the property's integrity of setting, feeling, or association. Therefore, <u>no indirect adverse effects</u> from changes to historic views and viewsheds would result under either Action Alternative. See **Figure 4-3 Error! Reference source not found.** for illustrations of these changes.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

St. Elizabeths Hospital HD (DC)

Visual Effects: The NHL and cultural landscape documentation for this property reference the panoramic views of the District and Alexandria, which contribute to the significance of the therapeutic landscape at St. Elizabeths. Although the existing Long Bridge has limited visibility from parts of the landscape, in consideration of the great distance between the two sites, there is no potential to impede or alter these panoramic views under both Action Alternatives and no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Designated Historic Properties – Individual Historic Properties

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Thomas Jefferson Memorial (DC)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds; however, in consideration of the siting and design of the Memorial, this analysis finds that they would include the vistas of the Tidal Basin and reciprocal views between the Memorial and White House. Because the Long Bridge Corridor is not visible from the Memorial due to substantial groupings of mature vegetation around the southeastern edge of the Memorial site and the adjacent elevated roadways, the project has no potential to alter or impede these views or to diminish the property's integrity of setting, feeling, or association.



Central Heating

Plant (DC)

Action Alternative A (Preferred Alternative)

Action Alternative B

Therefore, no indirect adverse effects from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, no effect from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the

Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates

the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. No indirect adverse effects from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, no adverse effect from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, no indirect adverse effects from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, no adverse effect from noise or vibration would result under either Action Alternative.

HUD Building (Robert C. Weaver Federal **Building) (DC)**

USDA Cotton

Annex (DC)

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey.



Action Alternative A (Preferred Alternative)

Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, <u>no indirect</u> <u>adverse effects</u> from changes to historic views and viewsheds would result under either Action Alternative.

Action Alternative B

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

USDA South Building (DC)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. **No indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Bureau of Engraving and Printing (DC) **Visual Effects:** The NRHP documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.



Property Action Alternative A (Preferred Alternative) Action Alternative B

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Auditor's Building Complex (DC)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Arlington Memorial Bridge (and related features) (DC/VA)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. However, based on the bridge's design and urban context, this analysis finds that they include reciprocal views between Arlington National Cemetery and the Lincoln Memorial and the panoramic vistas along the Potomac River. The latter have been interrupted over time by the Roosevelt Bridge and 14th Street-Metrorail complex of bridges. Due to the Project's location relative to the Memorial Bridge and the obstructions listed above, it has no potential to impede contributing views or to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, **no effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Titanic Memorial (DC)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. The memorial was moved to its existing location in 1968 and does not retain integrity of location or setting. The NRHP documentation for the property (prepared in 2006) described the new site as much less successful and appropriate for the memorial than was its original site. Despite this fact, the memorial has retained its general context and siting in proximity to a body of water. Neither Action Alternative has any potential to alter this context, and therefore no potential to further diminish the property's integrity of setting, location, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Lunch Room Building and

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.



Oyster Shucking Shed (DC)

Action Alternative A (Preferred Alternative) Action Alternative B

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Cuban Friendship Urn (DC)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. The urn was moved to its existing location in 1997 and does not retain integrity of location or setting. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Theodore Roosevelt Island National Memorial (Analostan Island) (DC)

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. In consideration of the period of significance of the property and the failed attempts to develop planned viewing platforms, this analysis identifies no significant views in the direction of the Long Bridge Corridor. ¹⁶ Therefore, the project has no potential to alter contributing views or to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Lyndon B. Johnson

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

¹⁶ During the 1930s, a viewing platform at the south end of the island was planned, allowing views facing south and east toward the Lincoln Memorial and generally toward the Potomac River and Long Bridge beyond. These plans were scrapped during the construction of the Roosevelt Bridge in the 1960s. During much of the nineteenth and twentieth centuries, the Potomac River shorelines along Georgetown and Foggy Bottom were industrial in character, and these views from Roosevelt Island were considered undesirable and contrary to its natural character.



Action Alternative A (Preferred Alternative) Action Alternative B

Memorial Grove (DC/VA)

Visual Effects: The NRHP documentation identifies significant views from the property to the Monumental Core of the District. Because the Long Bridge Corridor extends to the southeast of the Grove and is not visible from within the property, the Project it has no potential to alter or impede these views or to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, **no effect** from noise or vibration would result under either Action Alternative.

Lincoln Memorial (Statue of Lincoln) (DC)

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Visual Effects: The NRHP and cultural landscape documentation for this property notes the importance of the West Potomac Park setting to the design of the Lincoln Memorial, including the panoramic views of the Potomac River and Mall its site afforded. Maturing vegetation in addition to several modern bridges has since obscured these views to the south, southeast, and northeast. In consideration of these existing conditions and the far distance between the Lincoln Memorial and the Long Bridge Corridor, both Action Alternatives would result in **no indirect adverse effect** on the property.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, **no effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Arlington Ridge Park (VA)

Visual Effects: The NRHP documentation for this property identifies the park and contributing Netherlands Carillon as a significant western backdrop for the National Mall and West Potomac Park. However, the Netherlands Carillon was not intended to serve as a public viewing platform and views from it do not contribute to the significance of the property. The Long Bridge Corridor is not visible from the property at ground level, and therefore the Project has no potential to affect contributing views or viewsheds or to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

Old Post Office (DC)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds. The existing viewing platform was created after the property's period of significance and does not contribute to its significance. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Therefore, the Project has no potential to affect contributing views or viewsheds or to diminish the property's integrity of setting, feeling, or



Action Alternative A (Preferred Alternative)

Action Alternative B

association. Therefore, no indirect adverse effects from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, no effect from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

The Pentagon (VA)

Visual Effects: The NRHP documentation for this property identifies no significant views or viewsheds; However, the landmark boundaries extend to include the plaza facing the Potomac River, so this analysis finds that the related views of the District's Monumental Core and Potomac River are important to the character of the property. Although the existing Long Bridge is minimally visible from this plaza, given the relationship of the Long Bridge Corridor to the southeast of this viewshed, there is no potential to impede views under either Action Alternative. Therefore, no indirect adverse effects from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, no effect from noise or vibration would result under either Action Alternative.

Properties Determined Eligible

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

Engraving and Printing Annex

Bureau of

(DC)

Visual Effects: The DOE documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, no indirect adverse effects from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, no adverse effect from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

Federal Office Building 10A (Orville Wright Building) (DC)

Visual Effects: The DOE documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, no indirect



Action Alternative A (Preferred Alternative)

Action Alternative B

<u>adverse effects</u> from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Benjamin Banneker Park/Overlook; Tenth Street Overlook (DC) **Visual Effects:** The cultural landscape and DOE documentation for this property identifies significant views facing south and east overlooking the cityscape below and Potomac River and Washington Channel beyond. This documentation also notes that potential views toward the Tidal Basin and Jefferson Memorial were obscured by the 14th Street Bridges at the time of the Overlook's construction. Due to the Project's location relative to the Overlook, it has no potential to impede extant contributing views toward the Potomac River or cityscape below. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Richmond, Fredericksburg and Potomac (RF&P) Railroad HD (VA) Physical Effects: The Project proposes alterations to the RF&P Railroad at its eastern terminus to accommodate the additional two tracks and link these tracks to the new bridge proposed under each Action Alternative. Despite this change, the HD would continue its use as a railroad corridor, and the primary components of its operation and design would remain intact, both within this section and along the remainder of its approximately 110-mile length between the Potomac River and Richmond. For these reasons, the property would retain its integrity of design, materials, feeling, location, workmanship, association, and setting. Therefore, the Action Alternatives would result in <u>no adverse effect</u>.

Visual Effects: The DOE documentation for this property identifies no significant views or viewsheds and this analysis has identified none further. Therefore, <u>no indirect adverse effects</u> from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Because the property's significance is directly related to its historic and current use as a railroad corridor, a moderate (that is, perceptible but not severe) increase in noise in vibration would not indirectly diminish its integrity. The permanent changes in operational vibration would not exceed FTA thresholds for vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.



Action Alternative A (Preferred Alternative)

Action Alternative B

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Washington Marina Building (DC) **Visual Effects:** The DOE documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The L'Enfant (10th Street) Promenade extends directly above the Long Bridge Corridor. However, the Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

L'Enfant Promenade (DC) **Visual Effects:** The DOE documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Lady Bird Johnson Park (DC) **Visual Effects:** The DOE and cultural landscape documentation for this property identifies multiple views and vistas that contribute to the significance of the island that comprises Lady Bird Johnson Park. Relevant to the Long Bridge Project, this includes panoramic views of vehicles traveling along the MVMH and GWMP and general internal views north and south along the island. Field survey conducted along the motorway has indicated that the existing Long Bridge is nearly imperceptible when travelling along the motorway and not at all visible from the interior of the island. This is due to the angle of visibility, the extent of mature vegetation, and the visual obstructions caused by the Memorial and 14th Street-Metrorail



Action Alternative A (Preferred Alternative) Action Alternative B

Bridges. For this reason, the Project has no potential to impact contributing views or viewsheds. No **indirect adverse effect** would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, **no effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

John F. Kennedy Center for the Performing Arts (DC)

Visual Effects: The DOE documentation for this property identifies no significant views or viewsheds. However, in consideration of the design and siting of the Kennedy Center, this analysis has identified the panoramic views of the Potomac River and environs as being contributing to the significance of this property. Field survey has indicated that the existing Long Bridge is minimally visible from the upper terrace of the property, but these views are diminished by the far distance and intervening obstructions, notably the 14th Street and Metrorail bridges. For this reason, the Project has no potential to alter or impede contributing views. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located outside of the Noise and Vibration Study Area. Therefore, <u>no effect</u> from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, no direct adverse effect would result under either Action Alternative.

Liberty Loan Federal Building (DC)

Visual Effects: The DOE documentation for this property identifies no significant views or viewsheds. This analysis has identified no significant views or viewsheds in the direction of the Long Bridge Corridor from any areas that were publicly accessible at the time of field survey. Additionally, the property is located in a highly developed urban context that largely postdates the development of the Long Bridge Corridor. Therefore, the Project has no potential to diminish the property's integrity of setting, feeling, or association. Therefore, **no indirect adverse effects** from changes to historic views and viewsheds would result under either Action Alternative.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Properties at or Greater than 45 Years of Age

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Astral Building (DC)

Visual Effects: Given the nature of the Project and the location of this property relative to the Long Bridge Corridor, there would likely be <u>no adverse effect</u> under either Action Alternative on contributing views or viewsheds. This finding will be reevaluated if contributing views or viewsheds are identified prior to Project implementation.



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Action Alternative B

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Comsat Building (DC)

Visual Effects: Given the nature of the Project and the location of this property relative to the Long Bridge Corridor, there would likely be <u>no adverse effect</u> under either Action Alternative on contributing views or viewsheds. This finding will be reevaluated if contributing views or viewsheds are identified prior to Project implementation.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Loew's L'Enfant Plaza Hotel (DC)

Visual Effects: Given the nature of the Project and the location of this property relative to the Long Bridge Corridor, there would likely be <u>no adverse effect</u> under either Action Alternative on contributing views or viewsheds. This finding will be reevaluated if contributing views or viewsheds are identified prior to Project implementation.

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.

Physical Effects: The Project proposes no direct physical changes to this property. Therefore, **no direct adverse effect** would result under either Action Alternative.

Visual Effects: Given the nature of the Project and the location of this property relative to the Long Bridge Corridor, there would likely be **no adverse effect** under either Action Alternative on contributing views or viewsheds. This finding will be reevaluated if contributing views or viewsheds are identified prior to Project implementation.

USPS Building (DC)

Noise and Vibration: This property is located within the Noise and Vibration Study Area. Receptor locations within these boundaries were tested to determine the amount of increase of noise and vibration resulting from permanent operational changes. Within close proximity to this property, none of these levels exceeded FTA thresholds for noise or vibration. Therefore, **no adverse effect** from noise or vibration would result under either Action Alternative.



4.5. Cumulative Effects

As previously stated, the Long Bridge Project is exploring the potential for a bike and pedestrian connection that follows the trajectory of Long Bridge. This potential connection (Option 2) could constitute a cumulative effect as a result of the Long Bridge Project. An evaluation of these effects is described in **Table 4-3** below. The evaluation is organized by classifications of historic properties as described previously. For properties not included in this list, no adverse effects are anticipated.

Table 4-3 Cumulative Effects – Bike-Pedestrian Crossing Option

Property	Option 2 –	Independ	lent Bridge
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Designated Historic Properties – Historic Districts (HD)

The LOD for Option 2 would encompass approximately 0.7 acres of the HD.

In addition to the infringement on undeveloped parkland, construction of a possible bike-pedestrian crossing and access ramp has the potential to remove contributing vegetation, especially mature trees that date to the 1932 planting plan of the parkway, which were intended to visually screen the railroad bridge from the motorway. This would result in a direct adverse effect.

GWMP HD (DC/VA)

The existing, non-contributing bridges along this portion of the GWMP have compromised its integrity of feeling, association, and setting. The addition of a potential bike-pedestrian bridge within this existing cluster of structures has no potential to further diminish these aspects of the GWMP's integrity. Therefore, <u>no indirect adverse effects</u> from changes to historic views and viewsheds would result under this alternative.

MVMH HD (DC/VA) Effects to the MVMH would be similar and additive to those described above affecting the GWMP. Option 2 would create <u>direct adverse effects</u> on the MVMH. Under Option 2, the LOD would encompass approximately 0.6 acres of the HD.

East and West Potomac Parks HD (DC) Construction of a bike-pedestrian crossing and access ramp would necessitate the removal of up to two contributing Japanese Cherry Trees along the perimeter of East Potomac Park in addition to other mature vegetation. This would result in a <u>direct adverse effect</u>. The LOD for Option 2 would encompass approximately 0.3 acres of the HD.

The ramp crossing and access ramp also have the potential to obstruct views of the existing Long Bridge from the north. This obstruction would diminish the visual integrity of the HD and would create an <u>indirect adverse effect</u>.



4.6. Temporary Effects

The two Action Alternatives for the Project can be feasibly constructed. However, the proposed new bridge structures and other infrastructure along the Long Bridge Corridor combined with site constraints present challenges for contractor access and staging, material transportation, and completing site work. For both Action Alternatives, it is anticipated that construction materials and equipment would be transported via trucks as well as barging up the Potomac River. Materials and equipment transported via river would be unloaded onto temporary bulkheads constructed within the Potomac River on the NPS-administered parkland on either side of the river in both the District and Virginia.

Although no specific construction start date or schedule has been determined, it is projected that Action Alternative A (Preferred Alternative) construction would last approximately 60 months. Under Action Alternative B, this schedule extends to approximately 99 months, which includes phasing the bridges over the Potomac River where the new upstream bridge is constructed and put into service before demolition can begin on the existing Long Bridge. The new downstream bridge would then be constructed in the same location as the existing Long Bridge. Apart from the new Potomac River bridge(s) proposed under each Action Alternative, construction activities would primarily include track construction throughout the Long Bridge Corridor, associated bridge construction at abutments and piers, construction of embankments and retaining walls, and bridge superstructure construction.

An evaluation of temporary direct and indirect adverse effects resulting from visual and physical changes are described in **Table 4-4**. Temporary impacts under Action Alternative B would be similar to those described for Action Alternative A (Preferred Alternative) except that the estimated duration of construction would be approximately 99 months due to the replacement of the existing Long Bridge and component railroad bridge that crosses the GWMP.

Table 4-4 | Temporary Effect Assessment Resulting from Visual and Physical Changes

Property Effect Determination

Designated Historic Properties – Historic Districts (HD)

Construction activities for both Action Alternatives would require temporary use of, and access to, various areas of East Potomac Park that form a part of the National Mall HD. Both NPS Parking Lot B and NPS Parking Lot C would be closed during construction and used for construction staging and access. These parking lots are located within, but do not contribute to, the National Mall HD. Temporary construction access and staging areas would also be required for areas between the DOD Facility and I-395 North lanes, both east and west of the CSXT tracks.

National Mall HD (DC)

Use of these areas for construction access and staging would temporarily diminish the integrity of setting, feeling, and association of the National Mall Historic District and would constitute a <u>temporary indirect adverse effect</u> on this property.

GWMP HD (DC/VA)

Construction of both Action Alternatives would require the temporary use of land along the GWMP and MVT to support construction activities. Construction staging and access areas would be located at the GWMP crossing in the median of the roadway as well as west and east of the crossing. Construction would require temporary relocation of a portion of the MVT for public safety and to allow construction access and staging along the water.



Property Effect Determination

Temporary effects in this area would last over 4 years and would diminish the integrity of feeling, association, and setting of the GWMP through both construction staging and trail relocation. This would constitute a <u>temporary direct and indirect adverse effect</u> on this property.

MVMH HD (DC/VA)

Under both Action Alternatives, impacts to the MVMH would be similar and additive to those described above affecting the GWMP. Temporary effects in this area would last over four years and would diminish the integrity of feeling, association, and setting of the GWMP through both construction staging and trail relocation. This would constitute a <u>temporary direct and indirect</u> adverse effect on this property.

Construction activities for both Action Alternatives would require temporary use of, and access to, various areas of East Potomac Park. Both NPS Parking Lot B and NPS Parking Lot C would be closed during construction and used for construction staging and access. These parking lots are located within, but do not contribute to, the historic district. It is anticipated that one of these staging locations would be the site of a temporary concrete plant during construction.

East and West Potomac Parks HD (DC)

Temporary construction access and staging areas would also be required for areas between the DOD Facility and I-395 North lanes, both east and west of the CSXT tracks near the WMATA portal. Finally, access would be required in a section along the southern bank of the Washington Channel, in close proximity the U.S. Engineer's Storehouse, which is a contributing building to the historic district. The Storehouse is located approximately 200 feet from the Long Bridge Corridor.

Temporary effects in this area would last over 4 years and would diminish the integrity of feeling, association, and setting of the East Potomac Park through construction staging. This would constitute a <u>temporary indirect adverse effect</u> on this property.

The information presented in **Table 4-5** below summarizes where temporary adverse effects resulting from increased noise are anticipated under both Action Alternatives (vibration caused from temporary constructed activities were not found to exceed FTA thresholds at any of the receptor locations). This list was derived from the noise and vibration analysis, which considers various factors (type of construction activity, distance of this activity from the historic property, and construction noise level) in determining if construction noise would exceed FTA threshold criteria. In some cases, an approximate range of construction noise levels has been included.

Construction noise w evaluated according to the District noise ordinance and Arlington County Noise Control Code, Chapter 15.¹⁷ The District imposes a noise ordinance prohibiting construction sound levels above 80 dBA (except for pile driving) measured 25 feet from the outermost limits of the site between 7:00 AM and 7:00 PM unless a variance is granted. For this reason, it is very likely that construction noise within the District exceeding 80 dBA (also the FTA threshold) would be reduced to comply with the ordinance. Therefore, the effects for properties located in the District have been listed below as potential

¹⁷ DC Municipal Regulations Chapters 20–27; Arlington County. Arlington County Code: Chapter 15, Noise Control Ordinance. Accessed from https://countyboard.arlingtonva.us/wp-content/uploads/sites/22/2016/04/Chapter-15-NOISE-CONTROL.pdf. Accessed May 1, 2018.



effects. It is very likely these effects could be fully avoided through appropriate construction management procedures.

The Arlington County noise ordinance allows construction activity to produce sound no greater than 70 dBA in manufacturing zones, 65 dBA in commercial zones, and 55 dBA in residential and special-purpose zones during nighttime houses. The Arlington County noise ordinance does not limit daytime construction noise (7:00 AM to 9:00 PM on weekdays and 10:00 AM to 9:00 PM on weekends and legal holidays). The GWMP and MVMH historic districts, including the MVT, are located in a special-purpose zone S-3A, which imposes a 55-dBA nighttime construction noise limit.

Table 4-5 | Temporary Effect Assessment Resulting from Noise

Historic Property ¹⁸	Construction Noise Level (dBA)*	Noise Threshold (dBA)*	Exceeds Criteria	Potential for Effect
National Mall HD	61.1-68.9	80	No	None
GWMP HD	81.5-83.4	55	Yes	Potential to diminish the integrity of setting, feeling, and association of the HD
MVMH HD	81.5-83.4	55	Yes	Potential to diminish the integrity of setting, feeling, and association of the HD
Plan of the City of Washington HD	61.1-87.3	80	Yes	Based on use and general ambient noise, potential for adverse effect is minimal
East and West Potomac Parks HD	61.1-84.7	80	Yes	Potential to adversely affect contributing buildings within HD, especially the U.S. Engineer's Storehouse adjacent to the Washington Channel and Long Bridge Corridor
Thomas Jefferson Memorial	61.1	80	No	None
Central Heating Plant	72.3-73.2	80	No	None
USDA Cotton Annex	72.3-73.2	80	No	None
HUD Building	70.8-77.1	80	No	None
USDA South Building	63.9-68.6	80	No	None
Bureau of Engraving and Printing	63.9-68.6	80	No	None
Cuban Friendship Urn	61.9-68.9	80	No	None
Bureau of Engraving and Printing Annex	63.9-68.6	80	No	None
Federal Office Building 10A	70.8-77.1	80	No	None

¹⁸ Because not every historic property within the Noise and Vibration Study Area was utilized as a receptor location, this table extrapolates data using the closest available receptor.



Historic Property ¹⁸	Construction Noise Level (dBA)*	Noise Threshold (dBA)*	Exceeds Criteria	Potential for Effect
Richmond, Fredericksburg and Potomac Railroad HD	81.5-83.4	70	Yes	Based on use and general ambient noise, potential for adverse effect is minimal
Washington Marina Building	70.8-77.1	80	No	None
L'Enfant Promenade	67.7-81.8	80	Yes	Based on use and general ambient noise, potential for adverse effect is minimal
Liberty Loan Federal Building	63.9-68.6	80	No	None
Astral Building	72.3-73.2	80	No	None
Comsat Building	72.3-73.2	80	No	None
Loew's L'Enfant Plaza Hotel	72.3-73.2	80	No	None
USPS Building	72.3-73.2	80	No	None

^{*} dBA is a method of measuring units of sound (decibels) that have been weighted to account for relative loudness as perceived by the human ear.



5.0 Resolution of Effects

5.1. Avoidance and Minimization Measures

Throughout the Project, FRA and DDOT, in consultation with DC SHPO, VDHR, and the Consulting Parties, have identified measures to avoid or minimize potential adverse effects on historic properties, including those resulting from temporary construction activities. The following measures have been adopted to date to avoid or minimize anticipated effects:

- Action Alternative A (Preferred Alternative) retains the existing Long Bridge, which is a
 contributing element to the East and West Potomac Parks Historic District. Action Alternative A
 also retains the existing component railroad bridge that carries the Long Bridge above the
 GWMP, which is a contributing element to the GWMP Historic District. In comments following
 the 4th Consulting Parties meeting, DC SHPO, VHDR, and other Consulting Parties indicated a
 preference for Action Alternative A, which has fewer and less intense adverse effects on historic
 properties than Action Alternative B.
- Alternatives that considered the construction of a new railroad bridge and associated railroad
 infrastructure outside of the existing Long Bridge Corridor were dismissed from further
 consideration. This avoids potential effects generated by expanding the scope and constructing
 the project within a significantly larger geographic area.
- The new railroad bridge would be designed with a vertical clearance, visual appearance of the structural system, and alignment that closely references that of the existing Long Bridge as well as of the adjacent 14th Street-Metrorail bridge complex. This design approach avoids potential adverse visual effects that could have been caused by a less compatible type of new bridge structure, including a signature span bridge. In comments following the 4th Consulting Parties meeting, DC SHPO requested that the new bridge design be compatible with the existing Long Bridge. Further, DC SHPO indicated a preference for a through plate girder bridge type to create a consistent aesthetic for the railroad bridges and distinguish them from the Metrorail bridge.
- As recommended by NPS, any new component bridges or other structures introduced into NPSadministered properties would be designed and aesthetically treated to be compatible with the
 character of existing resources. This minimizes the potential adverse effect of introducing new
 features into the historic districts. For example, within the GWMP and MVMH historic districts,
 new bridge piers could be clad with stone to match the piers of the existing railroad bridge. To
 the extent possible, trees and other vegetation could be introduced to partially mitigate the loss
 of mature vegetation and to visually screen new bridge structures.
- The bicycle-pedestrian crossing option (Option 2) closely parallels the Long Bridge Corridor upstream of the existing Long Bridge. This minimizes potential adverse physical and visual effects with longer or more geographically dispersed crossing options. As the design of this crossing option advances, consultation will continue on the alignment and aesthetics of the bridge to avoid and minimize adverse effects. In comments following the 4th Consulting Parties meeting, DC SHPO, VDHR, and other Consulting Parties indicated a preference for Option 2. This



- option has a smaller footprint and less intense adverse effects on historic properties than Option 1B¹⁹.
- Temporary effects resulting from noise and vibration could be avoided or minimized using a variety of construction management techniques. Visual effects can be minimized by providing appropriate screening between construction staging areas and cultural resources, limiting the size of construction staging areas, and locating them away from sensitive views and viewsheds. In the District, compliance with construction noise ordinances would fully avoid most temporary effects otherwise resulting from construction noise.
- For construction access and staging activities, potential effects on archaeological resources can be minimized or avoided by locating these activities away from areas of high archaeological potential or within sites that are paved or have been previously disturbed.

Effects Summary

After incorporating the avoidance and minimization measures, Table 5-1 below provides a summary of determinations for historic properties where adverse effects were unavoidable.

Table 5-1 | Summary of Adverse Effects Determination

	Action	Action		
Historic Property	Alternative A	Alternative B	Cumulative Effects	Temporary Effects
National Mall HD (DC)	No adverse effect	No adverse effect	No adverse effect	Indirect adverse effect
GWMP HD (DC/VA)	Direct adverse effect	Direct and indirect adverse effect	Direct adverse effect	Direct and indirect adverse effect
MVMH HD (DC/VA)	Direct adverse effect	Direct and indirect adverse effect	Direct adverse effect	Direct and indirect adverse effect
East and West Potomac Parks HD (DC)	Direct and indirect adverse effect	Direct and indirect adverse effect	Direct adverse and indirect effect	Direct and indirect adverse effect

Mitigation Measures and Next Steps

In comments following the 4th Consulting Parties meeting, DC SHPO, VDHR, and other Consulting Parties provided suggestions for potential mitigation strategies. These include the following categories:

- Interpretation: Development of physical or digital interpretive materials to document the history of the Long Bridge Corridor and its adjacent historic properties.
- Vegetation Restoration: Restoration of mature vegetation removed during project implementation, in accordance with NRHP and cultural landscape documentation where available, in addition to the removal of invasive vegetation.
- Cultural Landscape Documentation: Development of cultural landscape inventories or reports for affected landscapes adjacent to the railroad corridor.

¹⁹ FRA and DDOT assessed the effects of Option 1B, and presented those findings to SHPOs and Consulting Parties in the Draft Assessment of Effects Report and at the 4th Consulting Parties Meeting.



- **Physical Rehabilitation**: Rehabilitation and repair of railroad infrastructure in the District or contributing resources within East and West Potomac Parks Historic District.
- **Archaeological Investigation**: Continuation of phased archaeological investigation, including underwater archaeology.
- **Viewshed Protection**: Creation and implementation of a viewshed protection plan for GWMP and MVMH in the vicinity of the railroad corridor.

The Section 106 consultation process is ongoing. FRA and DDOT will continue to consult with DC SHPO, VDHR, and the Consulting Parties to identify ways to minimize and mitigate adverse effects on these historic properties. FRA will also notify the Advisory Council of Historic Preservation notice of the adverse effect determination for the Project and provide the Council an opportunity to comment. A Section 106 agreement document (Programmatic Agreement or Memorandum of Agreement) will identify minimization and mitigation measures and describe any consultation that would continue through the design and construction processes.



Appendix A:

Area of Potential Effects and Historic Properties Technical Report



Long Bridge Project

Environmental Impact Statement

Area of Potential Effects and Historic Properties Technical Report

February 23, 2018







Long Bridge Project

Area of Potential Effects and Historic Properties Technical Report

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1.0 Introduction

The Federal Railroad Administration (FRA) and District Department of Transportation (DDOT) are concurrently preparing an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA), and an assessment of effects on historic properties per Section 106 of the National Historic Preservation Act (NHPA) for the Long Bridge Project (the Project). The Long Bridge Project consists of potential improvements to the Long Bridge and related railroad infrastructure located between the Rosslyn (RO) Interlocking near Long Bridge Park in Arlington, Virginia, and the L'Enfant (LE) Interlocking near 10th Street SW in the District (the Long Bridge Corridor). The Long Bridge Corridor is shown in Figure 1-1.

The purpose of the Proposed Action is to provide additional long-term railroad capacity and to improve the reliability of railroad service through the Long Bridge Corridor. Currently, there is insufficient capacity, resiliency, and redundancy to accommodate the projected demand in future railroad services. The Proposed Action is needed to address these issues and to ensure the Long Bridge Corridor continues to serve as a critical link connecting the local, regional, and national transportation network.

Although not part of the Proposed Action's Purpose and Need, the Project will explore the potential opportunity to accommodate connections that follow the trajectory of the Long Bridge Corridor to the pedestrian and bicycle network. The feasibility of this opportunity will be assessed as the Project progresses and will consider whether a crossing can be designed to be consistent with railroad operator plans and pursuant to railroad safety practices. Future efforts to accommodate connections to the pedestrian and bicycle network may be advanced as part of the Project, or as part of a separate project(s) sponsored by independent entities.

This report outlines the methodology for delineating and refining the Area of Potential Effects (APE) in accordance with Section 106 of the NHPA (54 U.S.C. § 300101 et seq.)¹ and its implementing regulations (36 CFR Part 800) for the Project.²

This report includes the following:

- 1. A description of the methodology used to delineate the APE;
- 2. Results of the field survey completed to inform APE development; and
- 3. An identification of historic properties as well as properties at or greater than 45 years of age that may be affected by the Long Bridge Project.

³⁶ CFR Part 800, Protection of Historic Properties, http://www.achp.gov/regs-rev04.pdf.



⁵⁴ USC 300101, National Park Service and Related Programs, National Preservation Programs, Division A-Historic Preservation

http://uscode.house.gov/view.xhtml?req=(title:54%20section:300101%20edition:prelim)



Figure 1-1 Long Bridge Project Area Limits





2.0 APE Methodology

2.1. Section 106 and Virginia Department of Historic Resources (VDHR) Guidance

The Section 106 regulations define an APE as, "...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. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking" (36 CFR 800.16[d])¹. The APE is defined to allow for the evaluation of potential effects to historic properties resulting from an undertaking. According to the steps prescribed by the Section 106 regulations, the APE must be defined before the identification of historic properties and evaluation of potential effects occurs. Types of effects on historic properties may include:

- Direct (such as physical destruction, damage, relocation, or alteration of a property);
- Indirect (such as introduction of visual, atmospheric, or audible elements that diminish the integrity of a property's significant historic features);
- Temporary;
- Future; and
- Cumulative.

Adverse effects occur when an undertaking may directly or indirectly alter characteristics of a historic property that qualify it for inclusion in the National Register of Historic Places. Examples of adverse effects are stated in 36 CFR Part 800.5(a)(2). Adverse effects have the potential to occur both during the construction and operational periods of a project.

For each undertaking, the Section 106 regulations (36 CFR Part 800) require the lead Federal agency to determine an APE boundary that considers multiple types of effects on historic properties, rather than multiple APEs that address various effects. However, non-contiguous APEs may be developed to include multiple alternative project areas or multiple areas where possible effects may be reasonably anticipated. The regulations also require the lead Federal agency seek information from consulting parties and others likely to have knowledge of, or concerns with, historic properties in the area, to identify issues relating to the undertaking's potential effects on historic properties.

The VDHR provides guidance on APE development, requiring the APE to include all locations where the project will cause ground disturbance, all locations from which the project may be visible or audible, and all locations where the project may result in changes to land use, public access, traffic patterns, etc.³ The DC Historic Preservation Office (DCSHPO) does not offer comparable guidance.

2.2. Development of the APE

The APE for the Long Bridge Project was delineated to identify and document the areas from which the Project could result in ground disturbance or could be reasonably visible or audible. Assumptions for the area within which the alternatives could be located were identified based on the results of Level 1 Concept Screening presented to the public and agencies in May 2017. Level 1 Concept Screening

³ VDHR, Defining Your Area of Potential Effects, http://www.dhr.virginia.gov/pdf_files/Defining_Your_APE.pdf.



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assessed preliminary concepts by their ability to meet the Project's Purpose and Need based on railroad capacity, transportation network connectivity, and railroad resiliency and redundancy. The 6 concepts found to meet Purpose and Need, as a result of Level 1 Screening were:

- 3-track crossing
- 3-track crossing with bike-pedestrian crossing
- 4-track crossing
- 4-track crossing with bike-pedestrian crossing
- 5-track crossing
- 5-track crossing with bike-pedestrian crossing

These concepts all occur within the existing Long Bridge Corridor. Only above ground crossings (bridges) were found to meet Purpose and Need because a freight tunnel could not feasibly connect to existing freight infrastructure, and a passenger-only tunnel would not improve redundancy. The concepts vary in terms of the number of tracks and whether or not a bike-pedestrian crossing is included. Because of the need for any new bridge to tie back into the existing railroad corridor (network connectivity), all concepts would be constructed within a relatively tight band either within the current Long Bridge alignment, or upstream or downstream of the current alignment. The opportunity is currently being explored to provide a bike-pedestrian connection on a new railroad bridge, or on a separated structure upstream or downstream of a railroad bridge. Upstream bike-pedestrian c alignments are constrained by the Metrorail bridge, while downstream alignments would need to avoid a Department of Defense Facility in East Potomac Park, and would therefore land close to the NPS headquarters building. Therefore, the outer limits of the potential Limits of Disturbance are set by the bike-pedestrian crossing alignment options, as depicted in

Figure 2-1.



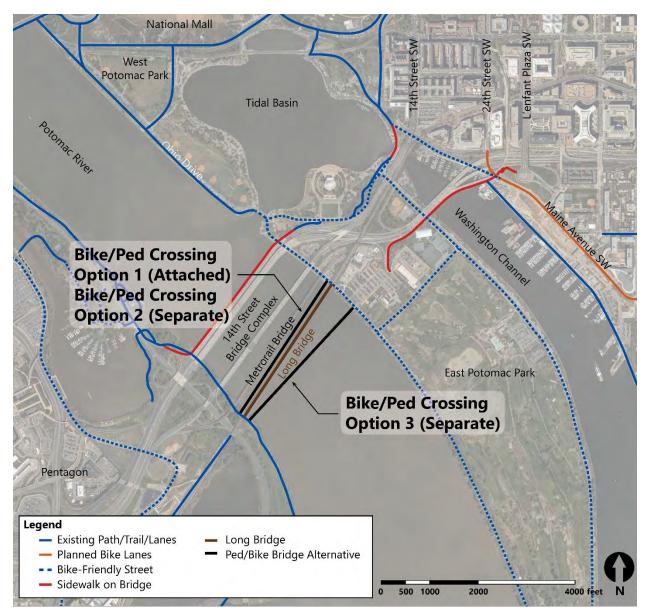


Figure 2-1 | Potential Bike-Pedestrian Crossing Alignment Options



The APE and Limits of Disturbance boundaries were mapped two dimensionally, although it was assumed that the boundaries encompass both above-ground and below-ground resources, including potential underwater and archaeological resources.

The Limits of Disturbance boundary (

Figure 2-2, black dashed line) represents the area within which the Project has the potential to directly alter an existing feature or result in ground-disturbing activities.4 Along the span of the existing Long Bridge and on NPS land on either side of the Potomac River, the Limits of Disturbance includes potential realignments of the existing railroad bridge in addition to potential bike and pedestrian crossings. These potential bridge alignments extend from the existing Metrorail Bridge to a distance of approximately 500 feet to the southeast. Additionally, the Limits of Disturbance extend outward from these points on the east and west banks of the Potomac, at a distance of approximately 250-300 feet, to incorporate associated bike-pedestrian access ramps on each side. Along the remainder of the Long Bridge corridor, the Limits of Disturbance includes a buffer of approximately 50' on either side of the existing corridor centerline between RO and LE Interlockings.

The APE (

Figure 2-2, red dashed line) represents areas from which atmospheric or environmental changes are possible. The methodologies used to develop the APE included:

- Digital mapping and aerial photography to guide and supplement field data;
- The impact of topographic and other vertical changes (such as buildings and viewing platforms) and their effect on potential views and viewsheds, including sightlines from various locations in and surrounding the National Mall and wider viewsheds in areas along the banks of the Potomac River; and
- Windshield-level field surveys around the Project Area to determine the visibility of the Project, based on height of the existing Long Bridge steel trestle and component bridge, abutment, and track structures.⁵

The LOD is defined as the geographic area(s) within which ground disturbance is anticipated to occur resulting from a specific project. It is developed to better understand the potential effects to archaeological resources within the APE. For the Long Bridge Project, once FRA the LOD may be refined, in consultation with SHPOs, as project engineering progresses by the size and location of bridge piers, abutments, etc. and the associated limits of ground disturbance.

Visibility of the existing Long Bridge Project area was generally used as a determinant of the delineation of the APE boundaries over potential effects resulting from sound and vibration. Sound diminishes as a function of distance at a higher rate than light. An object further away could still be seen but may not be heard; or could be heard to a small degree that would not cause adverse effects.

Therefore, changes to views and viewsheds resulting from Project implementation will have the greatest potential to affect historic properties. Additionally, permanent changes in sound regularity or intensity are not anticipated; however, there may be temporary effects during construction.

The process to evaluate the affected environment for noise and vibration will include identifying noise and vibration-sensitive receptors, understanding the predominant sources of noise and vibration, and characterizing existing noise and vibration conditions through measurements and modeling. This process will be conducted concurrently with the EIS studies, and the findings will be incorporated into the delineation of the final APE and in the assessment of effects on historic properties.

Therefore, although other indirect effects (such as audial changes) have be considered, there is a lesser potential for these effects to influence the outer boundaries of the APE. At the time in the Section 106 process when adverse effects are identified, it will be necessary to use available engineering data to quantify and evaluate the potential adverse effects associated with temporary and permanent impacts resulting from the project. Temporary impacts may include construction noise and vibrations; permanent impacts may include increased railroad traffic noise and vibration.

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Field survey photographs led to the identification of viewshed locations outside of the contiguous APE boundary. The field survey and photographs were used to determine visibility of the Long Bridge from specific viewshed vantage points. The selection of the viewshed sites was informed by several factors. Viewshed sites are areas from which the project area was clearly visible from a specific exterior vantage point or publicly accessible plaza or viewing platform. However, the view was sufficiently limited in these locations to not warrant expanding the APE to encompass the entirety of each site (for example, the Long Bridge was visible from Arlington House and the Tomb of the Unknown Soldier but not the entirety of Arlington Cemetery). Interiors of buildings were excluded from consideration. All viewshed sites are also historic properties, so there may be potential for impacts to these properties from the implementation of the Long Bridge Project. The viewsheds identified (

Figure 2-2) include:

- The Kennedy Center
- The Washington Monument
- The Lincoln Memorial
- St. Elizabeths West Campus
- Arlington Cemetery, Tomb of the Unknown Soldier
- Arlington House⁶
- Netherland Carillon (within Arlington Ridge Park)
- The Old Post Office Tower
- The Pentagon⁷

Future refinement of the APE will include:

- Reconsidering and adjusting the Limits of Disturbance boundary as EIS alternatives are further refined;8
- Incorporating future noise and vibration analysis findings; and
- Accounting for any additional feedback from DCSHPO and VDHR.

Long Bridge Section 106 Consultation

The first Section 106 consulting parties meeting for the Long Bridge Project was held on April 25, 2017 at the DDOT offices. The attendees provided preliminary guidance for the development of an APE in the context of the preliminary project concepts presented. The comments received indicated a preference for a single, comprehensive APE inclusive of all possible project alternatives (including options for potential bicycle and pedestrian access that follows the trajectory of the Long Bridge Corridor); that considers multiple types of effects (direct and indirect); and is sufficiently sized to accommodate the

Site visits and field surveys photographs were taken from several additional viewshed points from which Long Bridge was either not visible These sites include the Air Force Memorial, the Marine Corps War Memorial, at ground level at Arlington Ridge Park, the Washington National Airport historic terminal, and the Pentagon Metro Station.



Arlington House is located within the boundaries of Arlington National Cemetery. It is not administered by Arlington Cemetery but rather separately administered by the National Park Service.



expansive and uninterrupted views along the Potomac River to the Long Bridge Corridor. Following the meeting, FRA and DDOT provided the Consulting Parties with a comment period ending May 9, 2017.

The second Section 106 consulting parties meeting was held on November 15, 2017 at the DCSHPO office. At this meeting, FRA and DDOT presented Draft APE and Limits of Disturbance boundaries in addition to the preliminary identification of historic properties. The attendees provided comments on the historic property identification, additional viewshed sites from which the Project area is visible, potential archaeological resources, and the graphic representation of the APE. FRA and DDOT incorporated those comments into the findings of this report. Following the meeting, FRA and DDOT provided the Consulting Parties with a comment period ending December 6, 2017.



Key Limits of Disturbance Area of Potential Effects Viewsheds Kennedy Center **Arlington Cemetery** Upper Terrace Tomb of the Unknown Soldier Lincoln Memorial Arlington House Viewing Platform within Arlington Cemetery The Netherlands Carillon **Washington Monument** Observation Deck within Arlington Ridge Park St. Elizabeths West Campus Old Post Office Old Post Office Tower Golden Raintree Drive The Pentagon River Terrace Long Bridge Project

Figure 2-2 | Map of APE, Limits of Disturbance, and Viewshed Sites

2.4. Field Survey Documentation

To establish preliminary boundaries for the APE, Esri ArcGIS and Google Maps were used to identify reasonable outer extents for a potential APE boundary. These reasonable outer extents included areas

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of higher elevation (from which views would be more likely); major roadways (particularly elevated highways that would have a greater potential to block views); and other urban conditions like building density, street patterns, tree coverage, and potential viewsheds.

Impacts of topographic and other vertical changes, effects on potential views and viewsheds, and sightlines were tested by visiting specific viewing locations and viewing platforms. The existence of views toward the Long Bridge and the Long Bridge Corridor were recorded in field notes and digital photography. Exteriors of buildings and sites (such as the Kennedy Center upper and lower terraces) were also visited to confirm the visibility of the Long Bridge from these points.

The windshield survey was conducted to establish the outer boundaries of the Draft APE. Ten separate field surveys (on June 30, July 3, September 14, September 15, September 19, September 22, November 6, November 28, December 1, and December 5, 2017) were conducted to test and document the visibility of the Long Bridge Project from multiple and various geographic areas. The locations of these field survey points are documented in Figure 2-3.

The field survey locations indicated in Figure 2-3 are points chosen as representative areas within the APE that illustrate visibility of the Long Bridge Corridor. These points are distributed geographically across the APE. These areas are shown in further detail with accompanying supporting maps and photographs to depict views of the Long Bridge in

Figure 2-4 through Figure 2-31. Site visits and field surveys photographs were taken from several additional viewshed points from which the Long Bridge was not visible. These sites include the Air Force Memorial, the Marine Corps War Memorial, at ground level at Arlington Ridge Park, the Washington National Airport historic terminal, and the Pentagon Metro Station.



Figure 2-3 | Map of Field Survey Locations

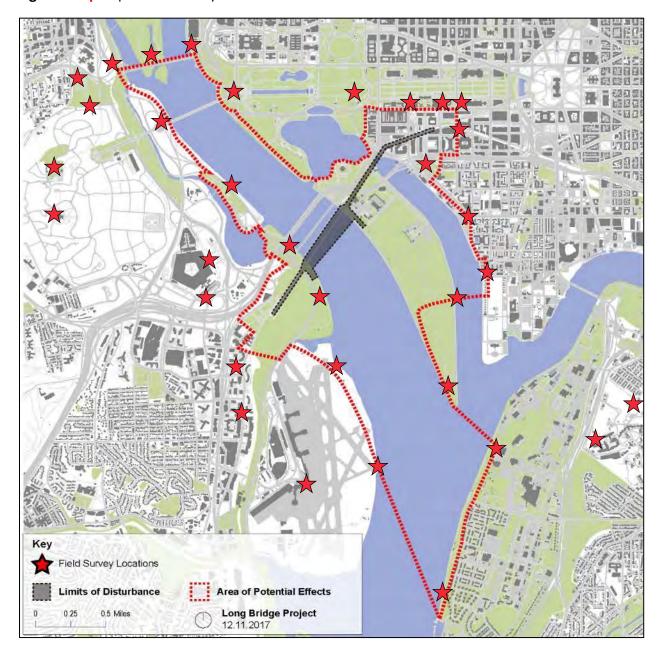




Figure 2-4 Representative Areas within the APE That Illustrate the Visibility of the Long Bridge Corridor

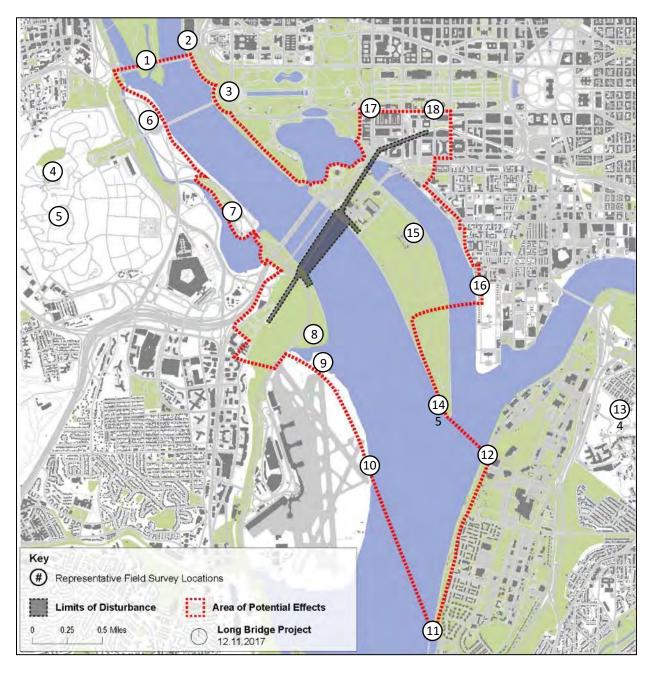




Figure 2-5 | Map detail of photograph locations 1, 2, and 3

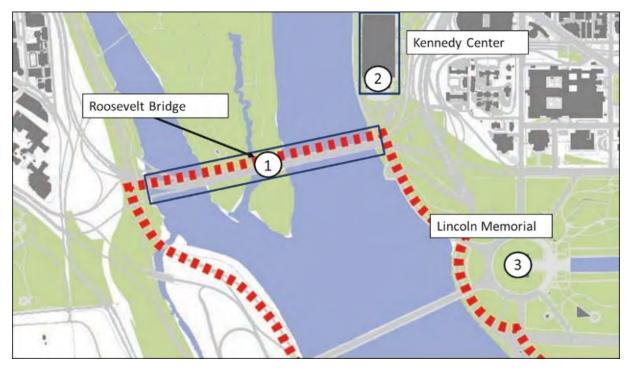


Figure 2-6 | Photograph location 1. Long Bridge from the west end of the Roosevelt Bridge, facing southeast

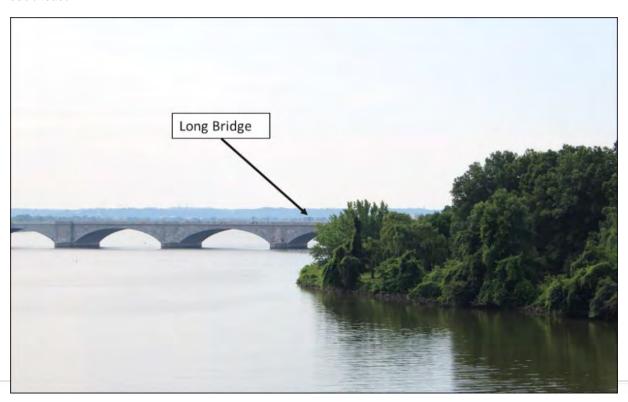




Figure 2-7 | Photograph location 2. Long Bridge from the west section of the Kennedy Center upper terrace, facing southeast



Figure 2-8 | Photograph location 3. Long Bridge from the Lincoln Memorial public viewing platform, facing southeast





Figure 2-9 | Map detail of photograph locations 4 and 5 at Arlington National Cemetery

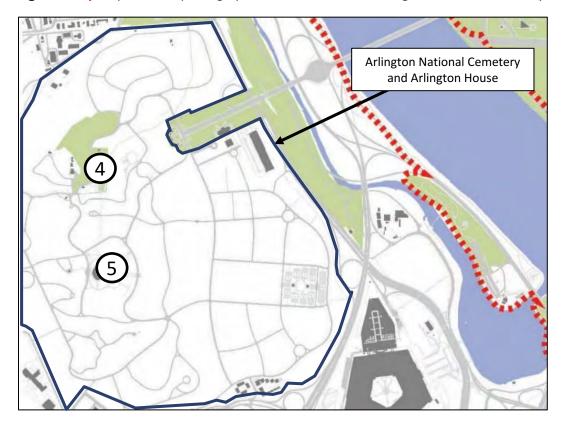


Figure 2-10 | Photograph location 4. Long Bridge from Arlington House, facing southeast

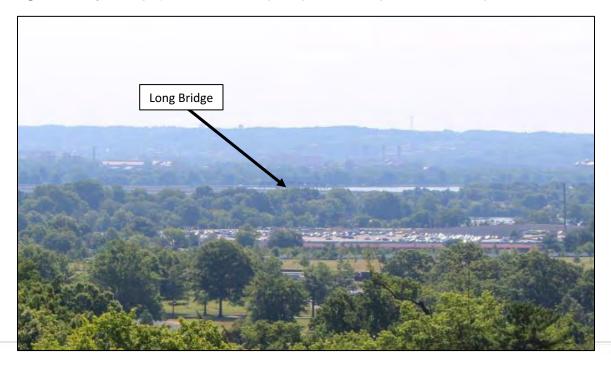




Figure 2-11 | Photograph location 5. Long Bridge from the Tomb of the Unknown Soldier, facing west



Figure 2-12 | Map detail of photograph locations 6, 7, and 8 at George Washington Memorial Parkway, Gravelly Point, and Mount Vernon Trail.

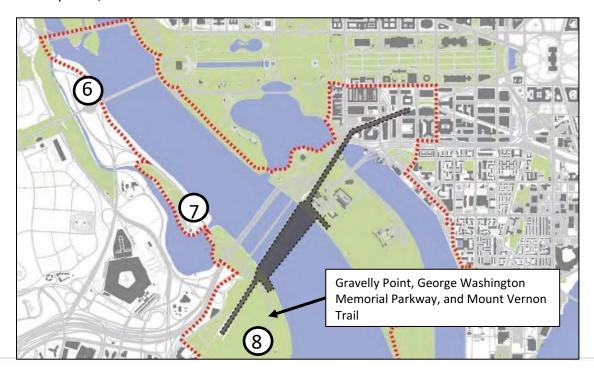




Figure 2-13 | Photograph location 6. Long Bridge from Mount Vernon Trail to the north of Arlington Memorial Bridge, facing southeast

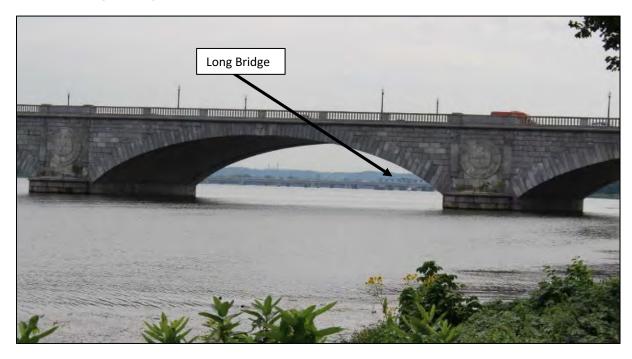


Figure 2-14 Photograph location 7. Long Bridge from the Mount Vernon Trail to the north of I-395, facing southeast





Figure 2-15 | Photograph location 8. Long Bridge from Gravelly Point, facing north



Figure 2-16 | Map detail of photograph locations 9 and 10 at Reagan National Airport

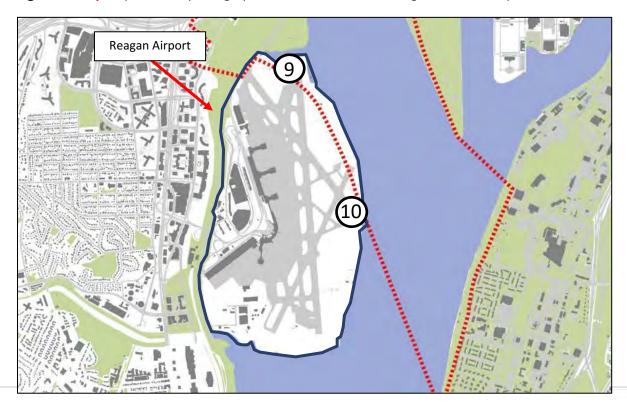




Figure 2-17 | Photograph location 9. Long Bridge from north boundary of Reagan Airport at the Potomac River, facing north



Figure 2-18 | Photograph location 10. Long Bridge from the southern edge of the airport, facing north/northwest





Figure 2-19 | Map detail of photograph locations 11 and 12, Joint Base Anacostia-Bolling

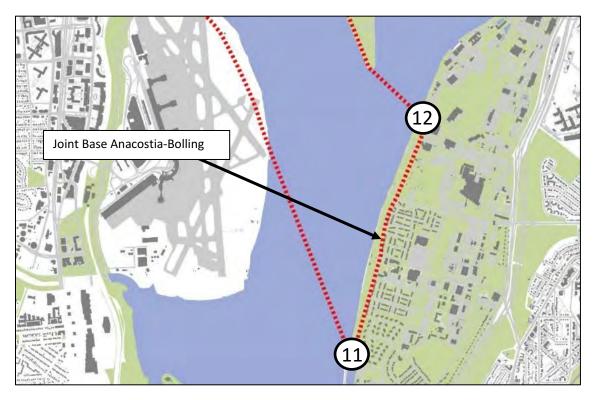


Figure 2-20 | Photograph location 11. Long Bridge from Arnold Avenue, SW, facing northwest

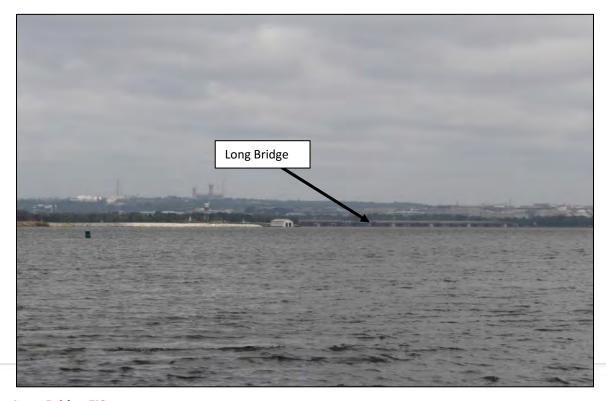




Figure 2-21 Photograph location 12. Long Bridge to the west of Boundary Drive at the Anacostia River, facing northwest

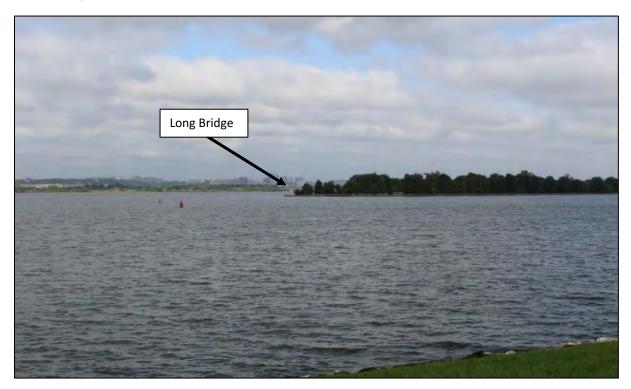


Figure 2-22 | Map detail of photograph location 14, St. Elizabeths West Campus

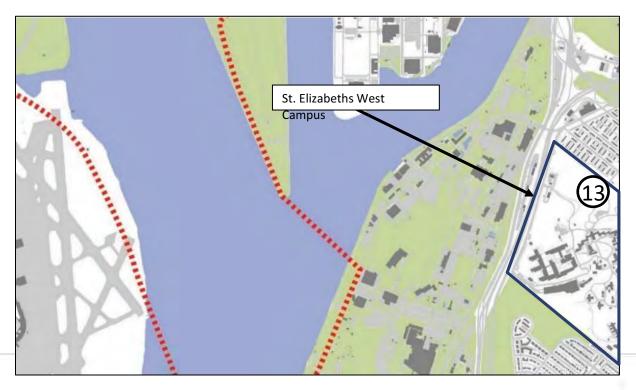




Figure 2-23 | Photograph 2. Long Bridge from Saint Elizabeths West Campus, facing northwest

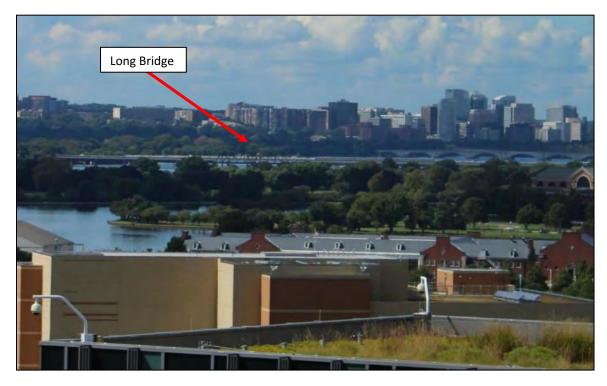


Figure 2-24 Map detail of photograph locations 14, 15, and 16, East Potomac Park, Hains Point, and Fort McNair

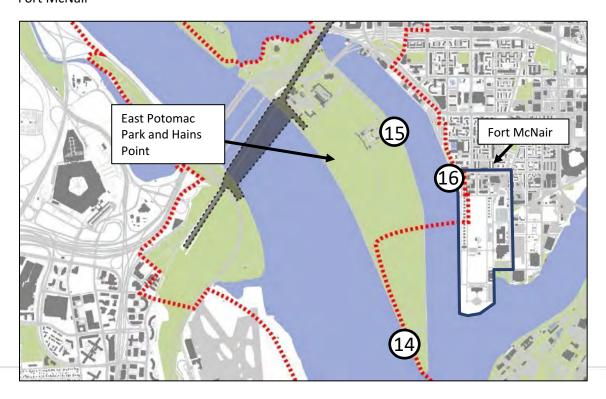




Figure 2-25 | Photograph location 14. Long Bridge from Hains Point, facing northwest



Figure 2-26 Photograph location 15. Long Bridge Corridor from East Potomac Park at the Washington Channel, facing northwest





Figure 2-27 | Photograph location 16. Long Bridge Corridor from Fort McNair at B Street SW, facing northwest

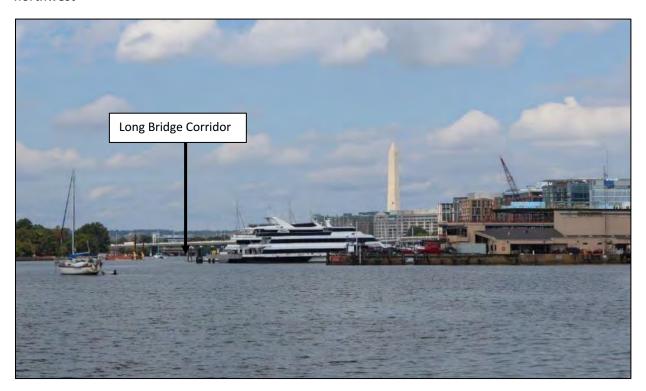
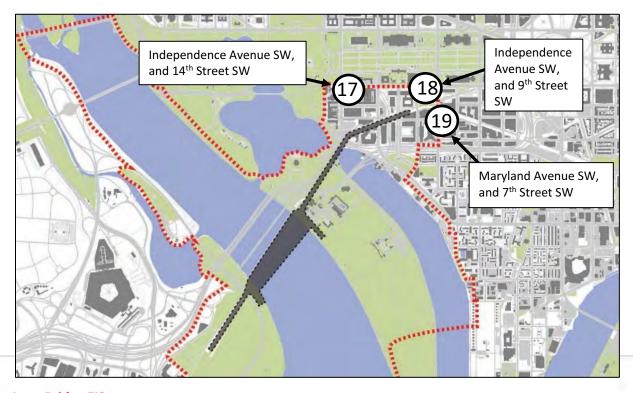


Figure 2-28 | Map detail of photograph locations 17, 18, and 19



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Figure 2-29 Photograph location 17. Long Bridge Corridor from Independence Avenue SW, and 14th Street SW facing south

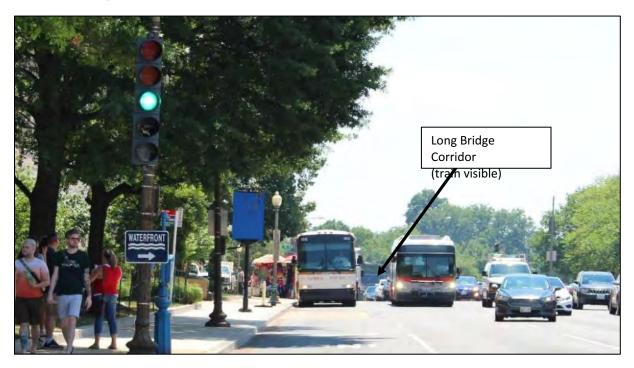


Figure 2-30 Photograph location 18. Long Bridge Corridor from intersection of Independence Avenue SW and 9th Street SW, facing south

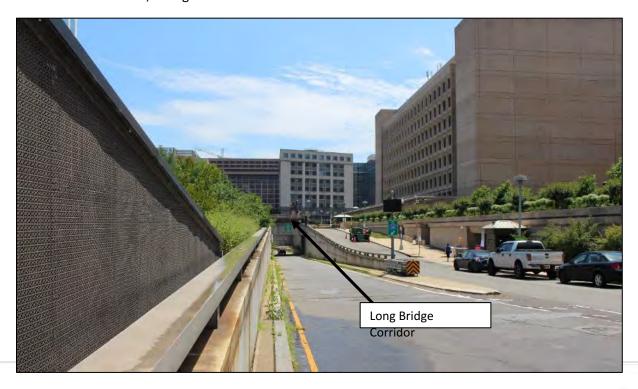




Figure 2-31 Photograph location 19. Long Bridge Corridor from intersection of Maryland Avenue SW, and 7th Street SW, facing southwest





3.0 Identification of Historic Properties

Once an APE has been defined, the Federal agency must "...make a reasonable and good faith effort..." to identify historic properties within its boundaries (36 CFR § 800.4(b)(1)). A historic property is defined as "any prehistoric or historic district, site, building, structure, or object included on, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria" (including artifacts, records, and material remains relating to the district, site, building, structure or object" (36 CFR § 800.16(l)(1)).

In August 2016, FRA and DDOT completed the *Long Bridge Project, Environmental Data Collection Report* (Data Collection Report), which included preliminary identification of historic properties within and in the vicinity of the designated study area. The study area was defined by a 1,000-foot buffer along the length of the Long Bridge Corridor. Historic properties were identified using the following information sources:

- Geographic Information System (GIS) mapping data provided by the District and Arlington County;
- DCSHPO Inventory of Historic Sites;
- NRHP database;
- General Services Administration (GSA) Historic Buildings website;
- Virginia Landmarks Register (VLR); and
- Virginia Cultural Resource Information System (V-CRIS).

The *Data Collection Report* was shared with several consulting parties, including VDHR and DCSHPO in September 2016, and the findings related to historic properties were again presented at the consulting party meetings in April and November 2017.

The APE has extended beyond this study area; as such, the above sources were reexamined to identify additional historic properties within the APE. The identification effort was expanded to include the following additional sources of information:

- Properties that are pending or have been recently listed in the NRHP, which were not listed in the August 2016 Data Collection Report;
- Properties that have been formally determined eligible for NRHP listing;
- Properties at or greater than 45 years of age that have not been previously evaluated for NRHP eligibility; and
- Contributing streets and avenues, views and vistas, reservations, and other contributing components listed in the Plan of the City of Washington (L'Enfant Plan; L'Enfant-McMillan Plan) NRHP Documentation.

In the future, the identification effort will be expanded to include:

Potential archaeological resources within the Limits of Disturbance; and

⁹ A 1000-foot buffer was uniformly selected for all environmental resources in the Data Collection Report. FRA selected this buffer to compile preliminary existing data on environmental resources within the vicinity of the Long Bridge Corridor; but it is not an indication that FRA has made any determination that effects would only occur within this 1000-foot buffer zone.



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Any additional feedback from DCSHPO, VDHR, and other consulting parties.

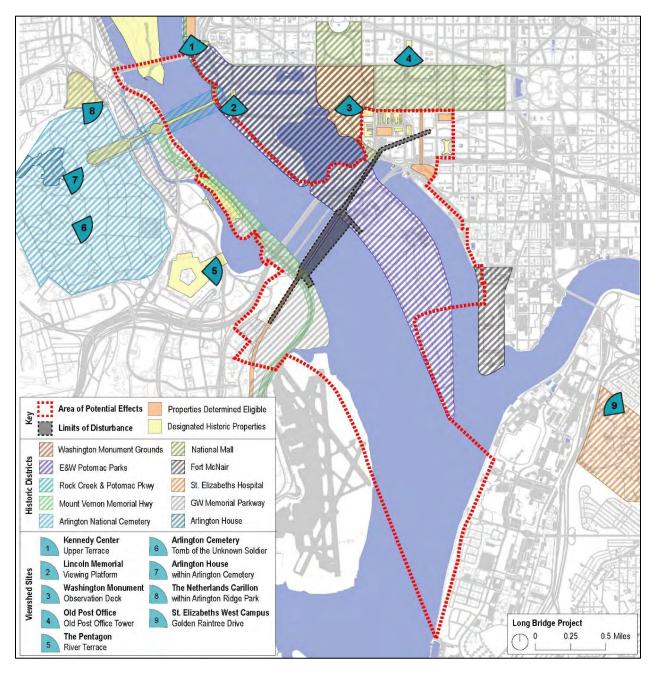
Although the scope for this project does not include drafting formal determinations of eligibility, properties located within the APE that are at least 45 years of age were evaluated against the NRHP Criteria for Evaluation. An assessment of integrity for each property was also undertaken. This age was selected to account for the fifty-year threshold that is generally observed in the evaluation of historic significance, and to account for the implementation schedule of the Long Bridge Project (which may extend five or more years into the future). These properties were identified using a range of documentation resources including real property and building permit data, historic maps and photographs, and aerial photographs. A preliminary evaluation of each property's potential historic significance and integrity is provided herein as a resource for future, more detailed evaluation by the FRA or others at the time of project implementation.

Archaeological resources will be identified using a phased approach. FRA and DDOT will initiate the process by completing a Phase 1A Archaeological Assessment in consultation with DCSHPO and VDHR. The Phase 1A will consist of a desktop review of known archaeological sites and areas that exhibit high archaeological potential. The Phase 1A will address all alternatives, once a Preferred Alternative is identified, additional surveys will be conducted as needed. Because the U.S. Department of the Interior has jurisdiction over a majority of the area within the Limits of Disturbance (including the bottom lands of the Potomac River), FRA and DDOT will coordinate with the National Park Service regarding potential impacts to archaeological resources, including potential underwater archaeology.

National Register of Historic Places, Frequently Asked Questions. http://www.nationalregisterofhistoricplaces.com/faq.html



Figure 3-1 | Map of APE with Designated and Eligible Historic Properties





3.1. Designated Historic Properties

The following properties have been listed in the NRHP, DC Inventory of Historic Sites (DC), and/or the VLR. Two properties have been designated as National Historic Landmarks (NHL). In some cases, these properties were determined eligible for National Register listing (Determination of Eligibility [DOE]) and were subsequently listed.

Table 3-1 List of historic properties previously listed in the NRHP, DC Inventory, or VLR. Several of the below properties listed on the DC Inventory have also been determined eligible for listing on the NRHP.

#	Name	Location	Designation
1.	National Mall Historic District	DC, NRHP	
2.	Parkways of the National Capital Region	Washington, DC	VLR, NRHP
3.	Rock Creek and Potomac Parkway Historic District	Along the Potomac River and Rock Creek from the Lincoln Memorial to the National Zoo.	DC, NRHP
4.	George Washington Memorial Parkway	Arlington County, (Extends to City of Alexandria and Fairfax County)	VLR, NRHP
5.	Mount Vernon Memorial Highway	Mount Vernon Memorial Highway Arlington County (Extends to City of Alexandria, and Fairfax County)	
6.	Plan of the City of Washington	Washington Region Multi-Property Submission	DC, NRHP
7.	East and West Potomac Parks Historic District	Washington, DC	DC, NRHP
8. 9.	Thomas Jefferson Memorial Central Heating Plant	East Basin Drive SW, Washington, DC 325 13th Street SW, Washington, DC	DC, NRHP DC, NRHP
10.	U.S. Department of Agriculture (USDA) Cotton Annex	300 12th Street SW, Washington, DC	DC, NRHP
11.	HUD Building (Robert C. Weaver Federal Building)	451 7th Street, SW, Washington, DC	DC, NRHP
12.	U.S. Department of Agriculture South Building	1352 C Street SW, Washington, DC	DC, NRHP
13.	Bureau of Engraving and Printing	301 14th Street SW, Washington, DC	DC
14.	Auditor's Building Complex	14th Street and Independence Avenue SW	DC, NRHP
15.	Arlington Memorial Bridge (and related features)	Memorial Avenue, DC & Virginia	DC, NRHP
16.	Fort Leslie J. McNair Historic District (The Old Arsenal)	4th and P Streets SW	DC, DOE
17.	Titanic Memorial	Water and P Streets SW	DC, NRHP
18.	Lunch Room Building and Oyster Shucking Shed	1100 Maine Avenue SW	DC, DOE
19.	Cuban Friendship Urn	Reservation 332, Ohio Drive at 14th Street Bridge SW	DC, NRHP
20.	Theodore Roosevelt Island National Memorial (Analostan Island)	Potomac River west of Georgetown Channel	DC, NRHP
21.	Lyndon B. Johnson Memorial Grove	Columbia Island in Lady Bird Johnson Park	DC, NRHP
22.	Lincoln Memorial (Statue of Lincoln) *	West Potomac Park, Washington, DC	DC, NRHP



#	Name	Location	Designation		
23.	Washington Monument and Grounds Historic District*	14th Street, between Constitution and Independence Avenues, Washington, DC	DC, NRHP		
24.	Arlington House Historic District*	Roughly bound by Sheridan Drive, Ord and Weitzel Drive, Humphrey's Drive and Lee Avenue in Arlington National Cemetery	VLR, NRHP		
25.	Arlington National Cemetery Historic District*	One Memorial Avenue, Arlington, VA	NRHP		
26.	St. Elizabeths Hospital Historic District*	2700 Martin Luther King Jr., Avenue, SE	DC, NRHP, NHL		
27.	Netherlands Carillon (within Arlington Ridge Park)*	Northwest corner of N Meade Street and Marshall Drive in Arlington, VA	VLR, NRHP,		
28.	Old Post Office*	1100 Pennsylvania Avenue, NW	DC, NRHP		
29.	The Pentagon*	U.S. 1, Va. 110, and Interstate 395	VLR, NRHP, NHL		
	* These properties are designated as viewshed locations outside of the contiguous APE boundaries.				

1. National Mall Historic District

Location: Washington, DC Designation: DC, NRHP

The National Mall Historic District (the Mall) is comprised of the monumental core of Washington, DC, an original design element of Major General Pierre Charles L'Enfant's Plan for the Capital City. The L'Enfant Plan was further refined and expanded in the McMillan Commission's 1901-1902 plan for the City of Washington. L'Enfant designed the National Mall to serve as the central axis of Washington's monumental core. The Plan called for the Mall to be a 400-foot-wide, mile long, "grand avenue" from the Capitol to a point directly south of the President's house. The site was to be lined with landscaped areas and gardens. The 1901 McMillan Commission restored and supplemented the L'Enfant Plan primarily by removing obtrusive elements and bordering the Mall with public buildings.

Figure 3-2 | National Mall





2. Parkways of the National Capital Region

Location: Throughout the Washington, DC,

metropolitan region.

Designation: NRHP, VLR

Multi-property documentation for scenic parkways of the Washington, DC region including the George Washington Memorial Parkway, the Mount Vernon Memorial Highway, and the Rock Creek and Potomac Parkway, among others.

Figure 3-3 | Rock Creek and Potomac Parkway



3. Rock Creek and Potomac Parkway

Location: Along the Potomac River and Rock Creek from the Lincoln Memorial to the National Zoo.

Designation: DC, NRHP

The first parkway for which legislation was passed in the Nation's Capital and one of the earliest parkways constructed in the region. In 1913, Congress passed the Public Buildings Act, which authorized the creation of the parkway. Planning, design, and land acquisition of the parkway continued through the 1930s, and the parkway was completed in 1935.

Figure 3-4 | Rock Creek and Potomac Parkway



4. George Washington Memorial Parkway

 ${\it Location:} \ {\it Arlington} \ {\it County,} \ {\it City} \ {\it of} \ {\it Alexandria,} \ {\it and} \ {\it Fairfax}$

County

Designation: VLR, NRHP

The George Washington Memorial Parkway is a 25-mile scenic parkway administered by the National Park Service. Constructed predominantly in the 1930s, the parkway provides a ceremonial and recreational corridor between northern Virginia and Mount Vernon, the home and estate of George Washington.

Figure 3-5 | George Washington Memorial Parkway (Mount Vernon)





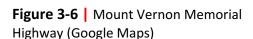
5. Mount Vernon Memorial Highway

Location: Arlington County, City of Alexandria, and Fairfax

County

Designation: VLR, NRHP

Original 15.2-mile segment of the scenic parkway commemorating the birth of George Washington.





6. Plan of the City of Washington

Location: Includes original elements of Pierre Charles L'Enfant's plan for the City of Washington, including later elements proposed by the McMillan Commission Designation: NRHP, DC

Multi-property submission for the street grid, diagonal avenues, parks, vistas among monuments and sites over Federal land within the L'Enfant Plan boundary, and the airspace above this matrix up to the legal height limit in the City.

Figure 3-7 | Detail, L'Enfant Plan Facsimile, 1887 (Library of Congress)



7. East and West Potomac Parks Historic District

Location: Washington, DC Designation: NRHP, DC

Historic district comprising 730 acres of park land along the Potomac River. Standing memorials in the parks include the Lincoln and Jefferson Memorials.

Contributing features to this historic district include the Inlet Bridge, the U. S. Engineers Storehouse, the National Capital Region Building complex, East Potomac Park Golf Course, East Potomac Park Field House, East Potomac Park Swimming Pool, and D-1 Substation Building.

Figure 3-8 | Hains Point, East and West Potomac Parks Historic District





The Long Bridge, constructed in 1904, is a contributing feature to the East and West Potomac Parks historic district.¹¹

Figure 3-9 | Long Bridge



8. Thomas Jefferson Memorial

Location: 16 East Basin Drive SW, Washington, DC Designation: NRHP, DC

National Memorial dedicated to third U.S. President Thomas Jefferson. Designed by notable architect John Russell Pope, the memorial was constructed between 1937 and 1942. Sited facing the Tidal Basin, the memorial forms a significant component of the city's monumental plan.

Figure 3-10 | Jefferson Memorial (National Park Service)



9. Central Heating Plant

Location: 325 13th Street SW, Washington, DC

Designation: NRHP, DC

A heating plant completed in 1934 to supply steam to Federal buildings. Designed in the Art Deco style by architect Paul Phillipe Cret under the direction of the Supervising Architect of the Treasury Department.

Figure 3-11 | Central Heating Plant



The Evening Star. 1904. First Train Passes, New Railway Bridge Used for First Time. August 25, 1904.



10. USDA Cotton Annex

Location: 300 13th Street SW, Washington, DC

Designation: NRHP, DC

The Bureau of Agricultural Economics (BAE) Building, now known as the Cotton Annex, was built in 1936 to 1937 for the USDA under the auspices of Supervising Architect of the Treasury Louis A. Simon (1933–1939).





11. U.S. Department of Housing and Urban Development (HUD) Building (Robert C. Weaver Federal Building)

Location: 451 7th Street SW, Washington, DC

Designation: NRHP, DC

Completed in 1968 by the architect Marcel Breuer. The modernist design and execution of the HUD building exemplifies the primary tenets of the "Guiding Principles for Federal Architecture" as set forth by President John F. Kennedy's administration in 1962.

Figure 3-13 | HUD Building



12. USDA South Building

Location: 1352 C Street SW, Washington, DC

Designation: DC, NRHP

Completed in 1936, the South Building is significant for its association with the growth of the Department of Agriculture; broader patterns of city development in the District; and as an excellent example of the Stripped Classical style of Federal architecture of the 1930s.

Figure 3-14 USDA South Building





13. Bureau of Engraving and Printing (BEP) (Main Building)

Location: 301 14th Street SW, Washington, DC

Designation: DC

The building was designed by the Office of the Supervising Architect of the Treasury, under Supervising Architect James Knox Taylor. The Neoclassical style building was completed in February 1914.

Figure 3-15 | BEP Main Building



14. Auditor's Building Complex

Location: 14th Street and Independence Avenue SW,

Washington, DC

Designation: DC, NRHP

The Auditors Building was the first building designed and constructed for the U.S. Department of the Treasury Bureau of Engraving and Printing. Originally completed in 1880, the building had three major additions in 1891, 1895, and 1900. Originally designed by James B. Hill, Supervising Architect of the Treasury Department, the building is also significant for its architectural style.

Figure 3-16 Auditor's Building (Library of Congress)



15. Arlington Memorial Bridge (and Related Features)

Location: Memorial Avenue, DC and Virginia

Designation: DC, NRHP

The 1932 bridge and its related features are a major element of 1902 McMillan Commission plan for the city. The bridge serves as a symbolic link between the north and the south, connecting Arlington House (home of Robert E. Lee) and the Lincoln Memorial.

Figure 3-17 | Memorial Bridge





16. Fort Leslie J. McNair Historic District (The Old Arsenal)

Location: Fourth and P Streets SW, Washington, DC

Designation: DC, DOE

Fort McNair was established in 1791 and today is the third oldest U.S. Army installation in continuous use. The district is significant in the fields of architecture, military history, military education, and health and medicine.

Figure 3-18 | Fort McNair (National Defense University)



17. Titanic Memorial

Location: Water and P Streets SW, Washington, DC

Designation: DC, NRHP

The Titanic Memorial was designed by the female sculptor Gertrude Vanderbilt Whitney. The sculpture is significant as it is only one of five located in the District designed by a woman. Completed in 1916, the statue was originally erected at the Rock Creek and Potomac Parkway in 1930. In 1968, the statue was relocated to its present location.

Figure 3-19 | Titanic Memorial



18. Lunch Room Building and Oyster Shucking Shed

Location: 1100 Maine Avenue SW, Washington, DC

Designation: DC, DOE

The Lunch Room Building and Oyster Shucking Shed are significant as they are the only extant buildings associated with the 1916-1918 Municipal Fish Wharf and Market on Water Street. The buildings illustrate Congress' support for the City Beautiful movement as implemented by the improvement of the District's shoreline, and recognition of the need to address issues with the District's fishing industry, as well as they health and welfare of the District's citizens.

Figure 3-20 | Lunch Room





19. Cuban Friendship Urn

Location: Reservation 332, Ohio Drive at Fourteenth

Street Bridge SW, Washington, DC

Designation: DC, NRHP

The urn is significant as it is the second gift of sculpture presented to the District of Columbia by a foreign nation. It was presented to President Calvin Coolidge in Havana in 1928, and Congress authorized its acceptance on May 22, 1928.

Figure 3-21 | Cuban Friendship Urn (Wikimedia Commons)



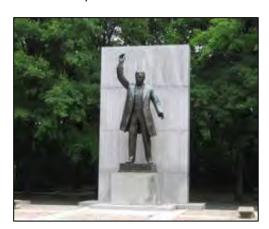
20. Theodore Roosevelt Island National Memorial (Analostan Island)

Location: Potomac River west of Georgetown Channel

Designation: DC, NRHP

The 88-acre island is a memorial to Theodore Roosevelt, twenty-sixth President of the United States. It was presented to the U.S. by the Roosevelt Memorial Association in 1931 and opened to the public in 1936.

Figure 3-22 Roosevelt Memorial (National Park Service)





21. Lyndon B. Johnson Memorial Grove on the **Potomac**

Location: George Washington Memorial Parkway

Designation: NRHP

Authorized by Congress in 1973, the Memorial Grove established an official memorial to President Lyndon B. Johnson. The site is significant for its association with the historic pattern of creating presidential memorials, which began with the Washington Monument, and as an excellent example of twentieth century landscape architecture.

Figure 3-23 | Johnson Memorial Grove (National Park Service)



22. Lincoln Memorial (Statue of Lincoln)

Location: West Potomac Park, Washington, DC Designation: DC, NRHP

The Lincoln Memorial is significant as an important example of Neoclassical style architecture. It is the foremost memorial to the sixteenth President of the United States, and as the terminus of the extended Mall plan in the Senate Park Commission's (popularly known as the McMillan Commission) 1902 plan for the city. The memorial was designed by architect Henry Bacon, and Lincoln's statue is the work of sculptor Daniel Chester French.

Figure 3-24 | Lincoln Memorial (National Park Service)





23. Washington Monument and Grounds Historic District

Location: 14th Street, between Constitution and Independence Avenues, Washington, DC

Designation: DC, NRHP

The Washington Monument and Grounds Historic District is significant under Criterion A in the areas of: politics and government as part of the establishment of the national capital; social history as a gathering place for the American citizenry to express their First Amendment rights; ethnic heritage for its association with the 1963 March on Washington for Jobs and Freedom; and locally as the site of continuing entertainment and recreation. The historic district is also significant for its architecture, planning, and design, and as a planned cultural landscape. There are several views and vistas that contribute to the significance of the historic district, including views from the top of the monument to surrounding city and important sites.

Figure 3-25 | Washington Monument and Grounds (National Park Service)

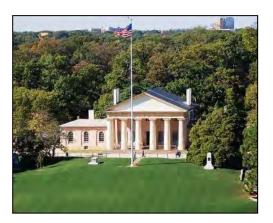


24. Arlington House Historic District

Location: Roughly bound by Sheridan Drive, Ord and Weitzel Drive, Humphrey's Drive and Lee Avenue in Arlington National Cemetery, Arlington, VA Designation: VLR, NRHP

The Arlington House Historic District is significant for its association with George Washington Parke Custis (step-grandson of George Washington) and General Robert Edward Lee (military leader and important figure in the American Civil War); its architecture and landscape design; its reflection of the ethnic heritage of enslaved African Americans and household slaves who worked and lived on site; its association with Arlington National Cemetery; as one of the Federal government's first attempts at historic preservation (1925 legislation, 1928-1935 restoration); and its archaeology. There are several views and vistas that contribute to the significance of the historic district, including views from the house eastward. Arlington House Historic District is located within the boundaries of the Arlington National Cemetery Historic District. It

Figure 3-26 Arlington House (National Park Service)





is not administered by Arlington Cemetery but rather separately by the National Park Service.

25. Arlington National Cemetery Historic District

Location: One Memorial Avenue, Arlington, VA

Designation: NRHP

Arlington National Cemetery Historic District is significant as the country's most sacred national cemetery. Created from the former estate of Mary Anna Custis Lee (wife of Civil War Confederate General Robert E. Lee) and purchased by the Federal Government in 1864, the site includes several significant contributing architectural features, including Arlington House, the Tomb of the Unknown Soldier, the Arlington Memorial Amphitheater, and numerous additional memorials. The current Long Bridge is visible from Arlington House, the Tomb of the Unknown Soldier, and their immediately surrounding landscapes.

Figure 3-27 Arlington National Cemetery (Arlington Cemetery)



26. St. Elizabeths Hospital Historic District

Location: 2700 Martin Luther King Jr., Avenue SE,

Washington, DC

Designation: DC, NRHP, NHL

St. Elizabeths Hospital Historic District is one of the nation's earliest institutions for the treatment of mental illness. Established through the efforts of Dorothea Dix, the leading mental health reformer of the 19th century, the hospital was chartered by Congress in 1852 as the Government Hospital for the Insane, with the

mission to provide humane care for patients from the Army, Navy, and District of Columbia. The historic district features a significant collection of late-19th and early 20th-century architecture, including the Center Building (1853-1855), an early example of the linear plan for mental hospital wards developed by reformer Thomas Kirkbride.

Figure 3-28 | St. Elizabeths West Campus





27. Netherland Carillon (within Arlington Ridge Park)

Location: Within Arlington Ridge Park at the northwest corner of N Meade Street and Marshall Drive in Arlington, VA

Designation: Contributing resource within Arlington Ridge Park (NRHP, VLR)

The Netherlands Carillon is located at the south end of Arlington Ridge Park. The Netherlands Carillon, designed by Dutch architect Joost W.C. Boks, is a Modernist steel framework with a memorial carillon. The carillon was presented as a gift to the United States by the Netherlands in thanks for the aid provided by the United States during and after World War II. The carillon is set within a picturesque landscape designed by National Park Service landscape architects in the early 1960s. The Netherlands Carillon appears to be potentially individually eligible per NPS documentation.



Location: 1100 Pennsylvania Avenue, NW Designation: DC, NHRP (located within Federal Triangle (DC, DOE) and Pennsylvania Avenue National Historic Site (NHS, NR, DC)

The Old Post Office and Clock Tower (1891 – 1899) was designed by the Office of the Supervising Architect of the Treasury under Willoughby J. Edbrooke to house both the Post Office Department as well as the City Post Office. The first Federal Office building to be constructed in the area later known as Federal Triangle, it is one of the few Romanesque Revival style buildings of monumental scale to be constructed in Washington. At the time of its completion, its 315-foot clock tower was the third highest building in the District, after the Washington Monument and the Capitol.

Figure 3-29 | The Netherlands Carillon (National Park Service)



Figure 3-30 The Old Post Office (National Park Service)





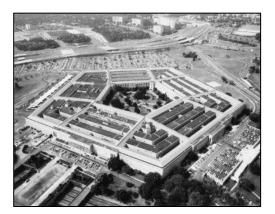
29. The Pentagon

Location: U.S. 1, Va. 110, and Interstate 395

Designation: VLR, NRHP, NHL

The Pentagon (1941 – 1943) was primarily designed by architects George Edwin Bergstrom and David J. Witmer. The Pentagon is significant as a NHL for its association with "events that have made a significant contribution to the geopolitical role of the United States as a world power" from World War II to the present, and for its association with the lives of nationally significant individuals from 1941 to today. Although the building's architecture did not qualify the building as an NHL, the building is considered architecturally important as it embodies the Stripped Classical style of architecture popular during the period, and as the largest and one of the last of Washington's monumental buildings designed in accordance with the McMillan Commission's 1902 plan for the City of Washington.

Figure 3-31 | The Pentagon (VDHR)





3.2. Eligible Historic Properties

The following properties have been determined eligible or recommended as eligible for listing in the National Register of Historic Places.

Table 3-2 List of historic properties that have been determined eligible for listing in the NRHP by a Federal agency or recommended as eligible by a SHPO.

#	Name	Location	Designation
1.	Bureau of Engraving and Printing Annex	300 14th Street SW, Washington, DC	DOE
2.	Federal Office Building 10A (Orville Wright Building)	800 Independence Ave SW, Washington, DC	DOE
3.	Benjamin Banneker Park/Overlook; Tenth Street Overlook	Terminus of 10th Street SW, Washington, DC	DOE
4.	Richmond, Fredericksburg and Potomac Railroad Historic District	Along CSX right-of-way in VA from Arlington County to the City of Richmond	DOE
5.	Washington Marina Building	1300 Maine Avenue SW	DOE
6.	L'Enfant Promenade	Section of 10th Street SW between Independence Avenue and Banneker Park	DOE
7.	Lady Bird Johnson Park	George Washington Memorial Parkway	DOE
8.	John F. Kennedy Center for the Performing Arts*	2700 F Street NW, Washington, DC	DOE
9.	Liberty Loan Federal Building	401 14th Street SW, Washington, DC	DOE
	* These properties are designated as viewshed locations outside of the contiguous APE boundaries.		

1. Bureau of Engraving and Printing (BEP) Annex

Location: 300 14th Street SW, Washington, DC

Designation: DOE

The BEP Annex was constructed between 1936-1938 for the BEP under the auspices of the Office of the Supervising Architect, Louis A. Simon, Supervising Architect, and Neal A. Melick, Supervising Engineer. The BEP Annex is significant for its association with the operation and growth of the BEP during the twentieth century, and as a distinctive example of a Stripped Classic style Federal building constructed in the 1930s.

Figure 3-32 | BEP Annex





2. FOB 10A; Orville Wright Building

Location: 800 Independence Avenue SW, Washington,

DC

Designation: DOE

FOB 10A was originally constructed between 1961 and 1963 for GSA, and was one of the earliest to be constructed as part of the urban renewal program for southwest Washington, DC. The International style building was designed by the architectural firms of Holabird & Root & Burgee, and Carroll, Grisdale & Van Alen.

Figure 3-33 | FOB 10A (GSA)



3. Benjamin Banneker Park/Overlook; Tenth Street Overlook

Location: Terminus of 10th Street SW, Washington, DC Designation: DOE

Landscape completed in 1969 and designed by landscape architect Dan Kiley, is a 200-foot wide elliptical concrete plaza with a large, central, conical, fountain of green granite. Designed and constructed as part of the National Capital Planning Commission's (NCPC) 1956 Urban Renewal Plan: Southwest Urban Renewal Project C.

Figure 3-34 | Banneker Park



4. Richmond, Fredericksburg and Potomac Railroad Historic District

Location: Along CSX right-of-way in eastern Virginia from the Potomac River in Arlington County to the South Broad Street Station in the City of Richmond, VA Designation: DOE (recommended as eligible by VDHR staff)

The Richmond, Fredericksburg, and Potomac Railroad was a railroad connecting Richmond, Virginia, to Washington, DC. The railroad corridor conveys its association with transportation from ca. 1837 through 1943, when the demand for railroad transportation began to wane. In 2017, VDHR staff recommended the railroad corridor potentially eligible as an historic district.

Figure 3-35 | Richmond, Fredericksburg and Potomac Railroad (Richmond, Fredericksburg & Potomac Railroad Historical Society, Inc.)





5. Washington Marina Building

Location: 1300 Maine Avenue SW, Washington, DC

Designation: DOE

Completed in 1938, the Washington Marina Building was an element of a larger Works Progress Administration (WPA) project to improve the Washington Channel. The project was completed by the WPA and the U.S. Army Corps of Engineers. The building is significant for its association with the WPA and improvement of the District's waterfront.

Figure 3-36 | Washington Marina Building



6. L'Enfant Promenade

Location: Section Tenth Street SW between Independence Avenue and Banneker Park

Designation: DOE

The promenade, originally known as the Tenth Street Mall, was a key element of I.M Pei and Harry Weese's plan for Southwest Redevelopment Area. The promenade is significant for its association with the creation and implementation of the NCPC's 1950 Comprehensive Plan for the District of Columbia.

Figure 3-37 | L'Enfant Promenade



7. Lady Bird Johnson Park

Location: In the George Washington Memorial Parkway along the Potomac River, directly across the river from

West Potomac Park Designation: DOE

The park is comprised of a man-made island, originally known as Columbia Island, that was constructed between 1915 and 1930. The park was constructed in connection with the Arlington Memorial Bridge's construction. In the 1960s and 1970s, the island was improved as part of the Johnson Administration's beautification program, and by a tree planting plan

Figure 3-38 | Lady Bird Johnson Park (Cultural Landscape Foundation)





designed by the landscape architect Edward Durrell Stone, Jr.

8. John F. Kennedy Center for the Performing Arts

Location: 2700 F Street NW, Washington, DC

Designation: DOE

The Modernist style building was designed by the American architect Edward Durrell Stone and was constructed between 1964 and 1971. The Kennedy Center has been determined historically significant as an important work by Stone, and as the only memorial to President Kennedy in the vicinity of Washington, DC.

Figure 3-39 | Kennedy Center (Wikimedia Commons)



9. Liberty Loan Federal Building

Location: 401 14th Street SW, Washington, DC

Designation: DOE

The building was originally constructed as one of many temporary office buildings to support wartime bureaucratic expansion and housed the Liberty Loans bond program during World War I. It is the only surviving "tempo" building. The building has housed several Treasury organizations and Federal agencies. Today, the building is used by the U.S. Department of the Treasury's Bureau of the Fiscal Service. 12 DCSHPO and the General Services Administration (GSA) consider the building eligible for NRHP listing and GSA is currently preparing a formal DOE.

Figure 3-40 | Liberty Loan Federal **Building (Google Maps)**



[&]quot;Liberty Loan Federal Building," GSA, accessed October 18, 2017, https://www.gsa.gov/real-estate/gsa-properties/visiting-publicbuildings/liberty-loan-federal-building.





3.3. Properties at or Greater than Forty-Five Years of Age

The following properties were constructed prior to 1972. Preliminary determinations have been made regarding each property's potential eligibility for listing in the NRHP.

Table 3-3 List of historic properties that have been determined eligible for listing in the NRHP by a Federal agency or recommended as eligible by a SHPO.

#	Name	Location	Date(s)	Preliminary Determination of Eligibility
1.	425 12 th Street SW	425 12 th Street SW, Washington, DC	1959	Likely not eligible.
2.	Astral Building (North Building, L'Enfant Plaza)	955 L'Enfant Plaza, SW Washington, DC	1968	Potentially eligible.
3.	Comsat Building (South Building, L'Enfant Plaza)	950 L'Enfant Plaza, SW Washington, DC	1965	Potentially eligible.
4.	Loew's L'Enfant Plaza Hotel (East Building, L'Enfant Plaza)	470-490 L'Enfant Plaza SW, Washington, DC	1971 to 1973	Potentially eligible.
5.	USPS Building (West Building, L'Enfant Plaza)	475 L'Enfant Plaza, SW Washington, DC	1969 to 1971	Potentially eligible.
6.	398 Long Bridge Drive	398 Long Bridge Drive, Arlington, VA	1957	Likely not eligible.

1. 425 12th Street, SW

Location: 425 12th Street SW, Washington, DC

Date of Construction: 1959

A one-story brick substation surrounded by a solid brick fence owned by PEPCO. Although the nondescript utilitarian building appears to maintain its integrity, based on cursory research it does not appear to meet the National Register criteria for evaluation. As such, the property is likely not eligible for listing in the NRHP.

Figure 3-41 | 425 12th Street, SW (Google Maps)



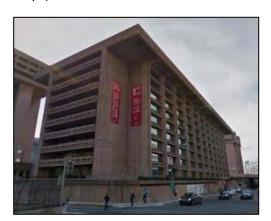


2. Astral Building (North Building, L'Enfant Plaza)

Location: 955 L'Enfant Plaza SW, Washington, DC Date of Construction: 1968

Designed by Araldo A. Cossutta, a partner with the architectural firm of I.M. Pei and Partners. Completed as part of Phase I of L'Enfant Plaza. The building is part of the larger L'Enfant Plaza complex, which includes the Comsat Building (South Building) (1965), Loew's L'Enfant Plaza Hotel (East Building) (1971 to 1973), USPS Building (West Building) (1969 to 1971) and the plaza. L'Enfant Plaza was a major feature of the urban renewal of the southwest quadrant of Washington, DC, that took place during the mid-20th century, and is an interesting example of the Brutalist style in Washington, DC. The building appears to maintain sufficient integrity of location, design, setting, materials, workmanship, feeling and association to convey its significance. As such, the property is potentially eligible for listing in the NRHP.

Figure 3-42 | Astral Building (Google Maps)



3. Comsat Building (South Building, L'Enfant Plaza) Location: 950 L'Enfant Plaza SW, Washington, DC

Date of Construction: 1965

Designed by Araldo A. Cossutta, a partner with the architectural firm of I.M. Pei and Partners. Completed as part of Phase I of L'Enfant Plaza. The building is part of the larger L'Enfant Plaza complex, which includes the Astral Building (North Building) (1968), Loew's L'Enfant Plaza Hotel (East Building) (1971 to 1973), USPS Building (West Building) (1969 to 1971) and the plaza. L'Enfant Plaza was a major feature of the urban renewal of the southwest quadrant of Washington, DC, that took place during the mid-20th century, and is an interesting example of the Brutalist style in Washington, DC. The building appears to maintain sufficient integrity of location, design, setting, materials, workmanship, feeling and association to convey its significance. As such, the property is potentially eligible for listing in the NRHP.

Figure 3-43 Comsat Building (Google Maps)



¹³ Francesca Russello Ammon, Historic American Buildings Survey, Southwest Washington Urban Renewal Area, HABS DC-856 (2004), 91.

¹⁴ Francesca Russello Ammon, Historic American Buildings Survey, Southwest Washington Urban Renewal Area, HABS DC-856 (2004), 91.



4. Loew's L'Enfant Plaza Hotel (East Building, L'Enfant Plaza)

Location: 470-490 L'Enfant Plaza SW, Washington, DC Date of Construction: 1971 to 1973

Part of the second phase of the L'Enfant Plaza construction. Construction of the building began in fiscal year 1971 and was completed in 1973. The building was designed by Vlasimil Koubek, a local architect. The building is part of the larger L'Enfant Plaza complex, which includes the Astral Building (North Building) (1968), Comsat Building (South Building) (1965), USPS Building (West Building) (1969 to 1971) and the plaza. 15 L'Enfant Plaza was a major feature of the urban renewal of the southwest quadrant of Washington, DC, that took place during the mid-20th century, and is an interesting example of the Brutalist style in Washington, DC. The building appears to maintain sufficient integrity of location, design, setting, materials, workmanship, feeling and association to convey its significance. As such, the property is potentially eligible for listing in the NRHP.

Figure 3-44 | Loew's L'Enfant Plaza Hotel (Google Maps)



5. USPS Building (West Building, L'Enfant Plaza)

Location: 475 L'Enfant Plaza SW, Washington, DC Date of Construction: 1969 to 1971

Part of the second phase of the L'Enfant Plaza construction, the building was separated from the plaza by the L'Enfant Promenade. Construction of the building began in 1969 and the building was completed in 1971. The building was purchased by the U.S. Postal service in 1972. The building was designed by Vlasimil Koubek, a local architect. The building is part of the larger L'Enfant Plaza complex, which includes the Astral Building (North Building) (1968), Comsat Building (South Building) (1965), Loew's L'Enfant Plaza Hotel (East Building) (1971 to 1973), and the plaza. L'Enfant Plaza was a major feature of the urban renewal of the southwest quadrant of Washington, DC, that took place during the mid-20th

Figure 3-45 USPS Building (Google Maps)



Francesca Russello Ammon, Historic American Buildings Survey, Southwest Washington Urban Renewal Area, HABS DC-856 (2004), 92.

¹⁶ Francesca Russello Ammon, Historic American Buildings Survey, Southwest Washington Urban Renewal Area, HABS DC-856 (2004), 92.



century, and is an interesting example of the Brutalist style in Washington, DC. The building appears to maintain sufficient integrity of location, design, setting, materials, workmanship, feeling and association to convey its significance. As such, the property is potentially eligible for listing in the NRHP.

6. 398 Long Bridge Drive

Location: 398 Long Bridge Drive, Arlington, VA

Date of Construction: 1957

A brick-clad commercial building. The building is composed of a two-story entrance block, and large, one-story warehouse space. The building's façade appears to have undergone several alterations, including changes to the fenestration, window replacement, main entrance alteration, and the addition of first floor awnings. The building appears to lack historic significance and integrity and is likely not eligible for listing in the NRHP.

Figure 3-46 | 398 Long Bridge Drive (Google Maps)



APPENDIX F: ACHP LETTER





December 21, 2018

Ms. Amanda Murphy Environmental Protection Specialist Federal Railroad Administration 1200 New Jersey Avenue SE Washington, DC 20590

Ref: Proposed Long Bridge Project

Arlington, Virginia and Washington, District of Columbia

ACHPConnect Log Number:13480

Dear Ms. Murphy:

The Advisory Council on Historic Preservation (ACHP) has received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and it is determined that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the Virginia and Washington, DC State Historic Preservation Officer's (SHPO's), and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA, and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with the notification of adverse effect. If you have any questions or require further assistance, please contact Sarah Stokely at (202) 517-0224 or by email at sstokely@achp.gov.

Sincerely,

LaShavio Johnson

Historic Preservation Technician Office of Federal Agency Programs

a Shavio Johnson

APPENDIX G: NATIVE AMERICAN TRIBE INITIATION LETTERS







Federal Railroad Administration

March 31, 2017

Dr. Wenonah G. Haire Tribal Historic Preservation Officer Catawba Indian Nation 1536 Tom Steven Road Rock Hill, SC 29730

Re: National Historic Preservation Act Section 106 Consulting Party Invitation Long Bridge Project – Washington, DC and Arlington County, Virginia

Dear Dr. Haire:

The Federal Railroad Administration (FRA) is the lead federal agency responsible for conducting consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR § 800 (Section 106) for the Long Bridge Project (the Project). The Project consists of potential improvements to the Long Bridge and related railroad infrastructure between the District of Colombia and Arlington, Virginia. The purpose of this letter is to provide background information on the Project and invite your organization or agency participate in the Section 106 process as a consulting party.

Long Bridge Project Background

The existing Long Bridge was constructed in 1904, and is owned and maintained by CSX Transportation (CSXT). Currently, the two-track bridge serves CSXT freight trains, National Railroad Passenger Corporation (Amtrak) passenger rail, and Virginia Railway Express (VRE) commuter rail. Norfolk-Southern retains trackage rights to operate over the bridge but does not exercise them currently.

The purpose of the Project is to provide additional long-term rail capacity to improve the reliability of rail service through the Long Bridge corridor. Currently, there is insufficient capacity, resiliency, and redundancy to accommodate the projected demand in future rail services. The Project is needed to address these issues and to ensure the Long Bridge corridor continues to serve as a critical link connecting the local, regional, and national railroad network. Additional information is available on the Long Bridge Project website: www.longbridgeproject.com.

Long Bridge Project Section 106, EIS, and Consulting Party Role

FRA provided grant funding to the District Department of Transportation (DDOT) for preliminary engineering and environmental review for the Project. Currently, there is no funding for construction of the Project, but Section 106 consultation is being conducted because FRA may provide construction funding in the future.

The purpose of the Section 106 consultation process is to identify historic properties that could be affected by the proposed Project; assess adverse effects on those properties; and develop ways to resolve those effects through appropriate avoidance, minimization, and/or mitigation measures. By way of this letter, FRA is inviting your agency or organization to participate as a consulting party in the Section 106 process pursuant to 36 CFR § 800.3(f). If you would like more information regarding the role of a Section 106 consulting party, FRA encourages you to review the Advisory Council on Historic Preservation's *Citizen's Guide to Section 106 Review*: http://www.achp.gov/docs/CitizenGuide.pdf.

FRA is coordinating Section 106 consultation with the National Environmental Policy Act (NEPA) process. To comply with NEPA, FRA and DDOT are preparing an Environmental Impact Statement (EIS) to analyze potential impacts associated with the range of alternatives under consideration. FRA published a Notice of Intent (NOI) to prepare the EIS in the Federal Register on August 26, 2016. Following the NOI publication, a 45-day public scoping period commenced. In conjunction with the scoping period, FRA initiated the Section 106 process with the District of Columbia State Historic Preservation Officer (DC SHPO) and Virginia Department of Historic Resources (VDHR), Interagency and public scoping meetings were held on September 14, 2016.

Historic Properties

The Long Bridge is a contributing resource to the East and West Potomac Parks Historic District. FRA and DDOT conducted a preliminary identification of historic properties within or adjacent to the Long Bridge corridor, which extends approximately 3.2 miles from the VRE Crystal City Station in Arlington, VA to Control Point Virginia located near 3rd Street SW in Washington, DC. Please see the attachment to review the historic properties that have been identified to date.

Next Steps

FRA and DDOT invite you to attend the first Section 106 consulting parties meeting for the Long Bridge Project scheduled for Tuesday, April 25, 2017 at the DDOT Office, 55 M Street, SE, Washington, DC or via teleconference from 1:00 – 3:00 PM EST (conference line information will be provided in a separate communication). We would appreciate your participation in this meeting to provide feedback that will help guide the identification of historic properties.

If you wish to participate as a consulting party, please complete the attached form and return it to FRA by April 28, 2017. If you do not respond to this invitation, you may request consulting party status in the future; however, the Project will advance and you may not have an opportunity to comment on previous steps. If you are not the appropriate point of contact for your organization, please feel free to forward this communication.

FRA and DDOT appreciate your interest in the Long Bridge Project. If you have any questions about the Project or the Section 106 process, please contact Amanda Murphy, FRA Environmental Protection Specialist, at (202) 493-0624 or amanda.murphy2@dot.gov.

Sincerely,

Laura Shick

Federal Preservation Officer

Environmental & Corridor Planning Division Office of Railroad Policy and Development

aun a. Strick_

Attachments:

Consulting Party Invitation Response Form Cultural Resources Preliminary Data Collection

Amanda Murphy, FRA Anna Chamberlain, DDOT cc: David Maloney, DC SHPO Andrew Lewis, DC SHPO Julie Langan, VDHR Ethel Eaton, VDHR



I would like to participate as a Section 106 consulting party for the Long Bridge Project:

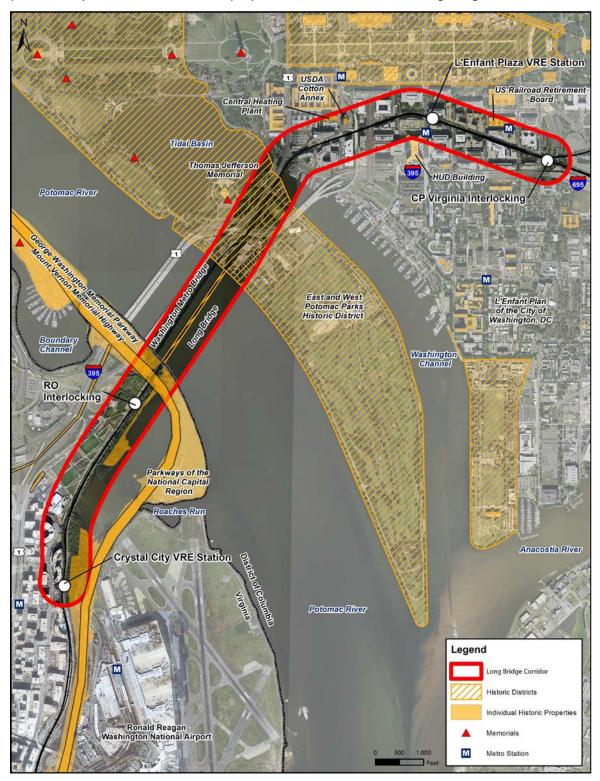
Contact Name (Print)	Organization/Agency		
Address	State Zip Code		
Phone Number	Email Address		
Signature	Date		

Please return a response by **April 28, 2017** to:

Email: amanda.murphy2@dot.gov



| Preliminary Identification - Historic properties within and near the Long Bridge Corridor





| Preliminary Identification - Historic properties within and near the Long Bridge Corridor

Name	Owner	Location	Historic Significance	NRHP ID	State ID
Parkways of the National Capital Region	NPS	Washington Region Multi- Property Submission	Multi-property submission for scenic parkways of the Washington, DC region including George Washington Memorial Parkway and Mount Vernon Memorial Highway.	NRHP# 64500086	DHR# 029- 5524
L'Enfant Plan of the City of Washington, DC	NPS- NCR	Washington Region Multi- Property Submission	Multi-property submission for the street grid, diagonal avenues, parks, vistas among monuments and sites over federal land within the L'Enfant Plan boundary, and the airspace above this matrix up to the legal height limit in the City	NRHP#97 000332	
East and West Potomac Parks Historic District	NPS- NAMA	Washington, DC	Historic district comprising 730 acres of park land along the Potomac River. Standing memorials in the parks include the Lincoln and Jefferson Memorial. The Long Bridge (aka, the Potomac River Swing Bridge) was also identified as a contributing element to the historic district.	NRHP# 73000217	ID#D_028
Thomas Jefferson Memorial	NPS- NAMA	East Basin Drive SW, Washington, DC	National Memorial dedicated to Thomas Jefferson.	NRHP# 66000029	ID#L_0296
Central Heating Plant	GSA	325 13 th Street SW, Washington, DC	A heating plant completed in 1936 to supply steam to Federal buildings. Designed under the guidance of the US Commission of Fine Arts.	NRHP# 07000637	ID#L_0289 /L_0704
USDA¹ Cotton Annex	GSA	300 12 th Street SW, Washington, DC	The Bureau of Agricultural Economics (BAE) Building, now known as the Cotton Annex, was built in 1936–1937 for the US Department of Agriculture (USDA) under the auspices of Supervising Architect of the Treasury Louis A. Simon (1933–1939).	NRHP# 15000683	ID#L_1458
HUD Building (Robert C. Weaver Federal Building)	HUD	451 7th Street, SW, Washington, DC	Completed in 1968 by the architect Marcel Breuer. The modernist design and execution of the HUD building exemplifies the primary tenets of the "Guiding Principles for Federal Architecture" as set forth by President John F. Kennedy's administration in 1962.	NRHP# 08000824	ID#L_0703
US Railroad Retirement Board (Mary Switzer Building)	GSA	330 C Street SW, Washington, DC	Built during the Federal office construction program of the 1920s and 1930s for the Railroad Retirement Board (established 1934), and associated with the establishment of a nationwide pension program; illustrates sustained implementation of the McMillan Plan.	NRHP# 07000638	ID#L_0706
George Washington Memorial Parkway	NPS- GWMP ¹	Arlington County (extends beyond Study Area to City of Alexandria and Fairfax County)	38.3-mile scenic parkway commemorating the birth of George Washington.	NRHP# 95000605	DHR# 029- 0218; 029- 5524; DHR# 029- 0228
Mount Vernon Memorial Highway	NPS- GWMP	Arlington County (extends beyond Study Area to City of Alexandria and Fairfax County)	Original 15.2-mile segment of the scenic parkway commemorating the birth of George Washington.	NRHP# 81000079	DHR# 029- 0218; 029- 5524





Federal Railroad Administration

March 31, 2017

Mr. Brice Obermeyer
Director, Delaware Tribe Historic Preservation Office
Delaware Tribe of Indians
1200 Commercial Street
Roosevelt Hall, Room 212
Emporia, KS 66801

Re: National Historic Preservation Act Section 106 Consulting Party Invitation Long Bridge Project – Washington, DC and Arlington County, Virginia

Dear Mr. Obermeyer:

The Federal Railroad Administration (FRA) is the lead federal agency responsible for conducting consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR § 800 (Section 106) for the Long Bridge Project (the Project). The Project consists of potential improvements to the Long Bridge and related railroad infrastructure between the District of Colombia and Arlington, Virginia. The purpose of this letter is to provide background information on the Project and invite your organization or agency participate in the Section 106 process as a consulting party.

Long Bridge Project Background

The existing Long Bridge was constructed in 1904, and is owned and maintained by CSX Transportation (CSXT). Currently, the two-track bridge serves CSXT freight trains, National Railroad Passenger Corporation (Amtrak) passenger rail, and Virginia Railway Express (VRE) commuter rail. Norfolk-Southern retains trackage rights to operate over the bridge but does not exercise them currently.

The purpose of the Project is to provide additional long-term rail capacity to improve the reliability of rail service through the Long Bridge corridor. Currently, there is insufficient capacity, resiliency, and redundancy to accommodate the projected demand in future rail services. The Project is needed to address these issues and to ensure the Long Bridge corridor continues to serve as a critical link connecting the local, regional, and national railroad network. Additional information is available on the Long Bridge Project website: www.longbridgeproject.com.

Long Bridge Project Section 106, EIS, and Consulting Party Role

FRA provided grant funding to the District Department of Transportation (DDOT) for preliminary engineering and environmental review for the Project. Currently, there is no funding for construction of the Project, but Section 106 consultation is being conducted because FRA may provide construction funding in the future.

The purpose of the Section 106 consultation process is to identify historic properties that could be affected by the proposed Project; assess adverse effects on those properties; and develop ways to resolve those effects through appropriate avoidance, minimization, and/or mitigation measures. By way of this letter, FRA is inviting your agency or organization to participate as a consulting party in the Section 106 process pursuant to 36 CFR § 800.3(f). If you would like more information regarding the role of a Section 106 consulting party, FRA encourages you to review the Advisory Council on Historic Preservation's *Citizen's Guide to Section 106 Review*: http://www.achp.gov/docs/CitizenGuide.pdf.

FRA is coordinating Section 106 consultation with the National Environmental Policy Act (NEPA) process. To comply with NEPA, FRA and DDOT are preparing an Environmental Impact Statement (EIS) to analyze potential impacts associated with the range of alternatives under consideration. FRA published a Notice of Intent (NOI) to prepare the EIS in the Federal Register on August 26, 2016. Following the NOI publication, a 45-day public scoping period commenced. In conjunction with the scoping period, FRA initiated the Section 106 process with the District of Columbia State Historic Preservation Officer (DC SHPO) and Virginia Department of Historic Resources (VDHR), Interagency and public scoping meetings were held on September 14, 2016.

Historic Properties

The Long Bridge is a contributing resource to the East and West Potomac Parks Historic District. FRA and DDOT conducted a preliminary identification of historic properties within or adjacent to the Long Bridge corridor, which extends approximately 3.2 miles from the VRE Crystal City Station in Arlington, VA to Control Point Virginia located near 3rd Street SW in Washington, DC. Please see the attachment to review the historic properties that have been identified to date.

Next Steps

FRA and DDOT invite you to attend the first Section 106 consulting parties meeting for the Long Bridge Project scheduled for Tuesday, April 25, 2017 at the DDOT Office, 55 M Street, SE, Washington, DC or via teleconference from 1:00 – 3:00 PM EST (conference line information will be provided in a separate communication). We would appreciate your participation in this meeting to provide feedback that will help guide the identification of historic properties.

If you wish to participate as a consulting party, please complete the attached form and return it to FRA by April 28, 2017. If you do not respond to this invitation, you may request consulting party status in the future; however, the Project will advance and you may not have an opportunity to comment on previous steps. If you are not the appropriate point of contact for your organization, please feel free to forward this communication.

FRA and DDOT appreciate your interest in the Long Bridge Project. If you have any questions about the Project or the Section 106 process, please contact Amanda Murphy, FRA Environmental Protection Specialist, at (202) 493-0624 or amanda.murphy2@dot.gov.

Sincerely,

Laura Shick

Federal Preservation Officer

Environmental & Corridor Planning Division Office of Railroad Policy and Development

aun a. Strick_

Attachments:

Consulting Party Invitation Response Form Cultural Resources Preliminary Data Collection

Amanda Murphy, FRA Anna Chamberlain, DDOT cc: David Maloney, DC SHPO Andrew Lewis, DC SHPO Julie Langan, VDHR Ethel Eaton, VDHR



I would like to participate as a Section 106 consulting party for the Long Bridge Project:

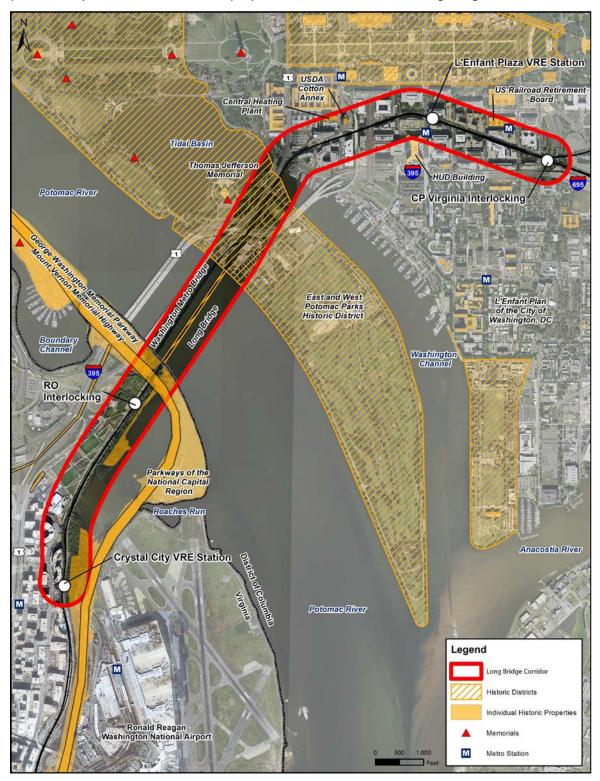
Contact Name (Print)	Organization/Agency
Address	State Zip Code
Phone Number	Email Address
Signature	Date

Please return a response by **April 28, 2017** to:

Email: amanda.murphy2@dot.gov



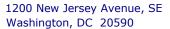
| Preliminary Identification - Historic properties within and near the Long Bridge Corridor





| Preliminary Identification - Historic properties within and near the Long Bridge Corridor

Name	Owner	Location	Historic Significance	NRHP ID	State ID
Parkways of the National Capital Region	NPS	Washington Region Multi- Property Submission	Multi-property submission for scenic parkways of the Washington, DC region including George Washington Memorial Parkway and Mount Vernon Memorial Highway.	NRHP# 64500086	DHR# 029- 5524
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HUD Building (Robert C. Weaver Federal Building)	HUD	451 7th Street, SW, Washington, DC	Completed in 1968 by the architect Marcel Breuer. The modernist design and execution of the HUD building exemplifies the primary tenets of the "Guiding Principles for Federal Architecture" as set forth by President John F. Kennedy's administration in 1962.	NRHP# 08000824	ID#L_0703
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Federal Railroad Administration

March 31, 2017

Mr. Jason Ross Section 106 Manager Delaware Nation P.O. Box 825 Anadarko, OH 73005

Re: National Historic Preservation Act Section 106 Consulting Party Invitation Long Bridge Project – Washington, DC and Arlington County, Virginia

Dear Mr. Ross:

The Federal Railroad Administration (FRA) is the lead federal agency responsible for conducting consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR § 800 (Section 106) for the Long Bridge Project (the Project). The Project consists of potential improvements to the Long Bridge and related railroad infrastructure between the District of Colombia and Arlington, Virginia. The purpose of this letter is to provide background information on the Project and invite your organization or agency participate in the Section 106 process as a consulting party.

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The purpose of the Project is to provide additional long-term rail capacity to improve the reliability of rail service through the Long Bridge corridor. Currently, there is insufficient capacity, resiliency, and redundancy to accommodate the projected demand in future rail services. The Project is needed to address these issues and to ensure the Long Bridge corridor continues to serve as a critical link connecting the local, regional, and national railroad network. Additional information is available on the Long Bridge Project website: www.longbridgeproject.com.

Long Bridge Project Section 106, EIS, and Consulting Party Role

FRA provided grant funding to the District Department of Transportation (DDOT) for preliminary engineering and environmental review for the Project. Currently, there is no funding for construction of the Project, but Section 106 consultation is being conducted because FRA may provide construction funding in the future.

The purpose of the Section 106 consultation process is to identify historic properties that could be affected by the proposed Project; assess adverse effects on those properties; and develop ways to resolve those effects through appropriate avoidance, minimization, and/or mitigation measures. By way of this letter, FRA is inviting your agency or organization to participate as a consulting party in the Section 106 process pursuant to 36 CFR § 800.3(f). If you would like more information regarding the role of a Section 106 consulting party, FRA encourages you to review the Advisory Council on Historic Preservation's *Citizen's Guide to Section 106 Review*: http://www.achp.gov/docs/CitizenGuide.pdf.

FRA is coordinating Section 106 consultation with the National Environmental Policy Act (NEPA) process. To comply with NEPA, FRA and DDOT are preparing an Environmental Impact Statement (EIS) to analyze potential impacts associated with the range of alternatives under consideration. FRA published a Notice of Intent (NOI) to prepare the EIS in the Federal Register on August 26, 2016. Following the NOI publication, a 45-day public scoping period commenced. In conjunction with the scoping period, FRA initiated the Section 106 process with the District of Columbia State Historic Preservation Officer (DC SHPO) and Virginia Department of Historic Resources (VDHR), Interagency and public scoping meetings were held on September 14, 2016.

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FRA and DDOT appreciate your interest in the Long Bridge Project. If you have any questions about the Project or the Section 106 process, please contact Amanda Murphy, FRA Environmental Protection Specialist, at (202) 493-0624 or amanda.murphy2@dot.gov.

Sincerely,

Laura Shick

Federal Preservation Officer

Environmental & Corridor Planning Division Office of Railroad Policy and Development

aun a. Strick_

Attachments:

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Amanda Murphy, FRA Anna Chamberlain, DDOT cc: David Maloney, DC SHPO Andrew Lewis, DC SHPO Julie Langan, VDHR Ethel Eaton, VDHR



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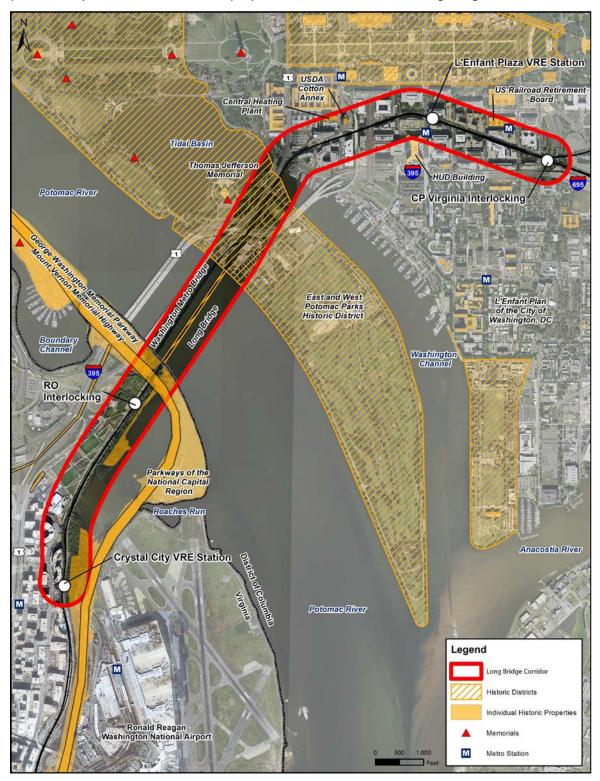
Contact Name (Print)	Organization/Agency
Address	State Zip Code
Phone Number	Email Address
Signature	Date

Please return a response by **April 28, 2017** to:

Email: amanda.murphy2@dot.gov



| Preliminary Identification - Historic properties within and near the Long Bridge Corridor





| Preliminary Identification - Historic properties within and near the Long Bridge Corridor

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APPENDIX H: SUMMARIES OF CONSULTING PARTY MEETINGS





SECTION 106 CONSULTING PARTY MEETING #1

Date: Tuesday, April 25, 2017 Time: 1:00 PM to 3:00 PM

Place: DDOT HQ - 55 M St SE, Washington, DC and via teleconference

FINAL 5/15/2017

Attendance:

NAME	ORGANIZATION	PHONE	EMAIL
Anna Chamberlin	DDOT	202.671.2218	anna.chamberlin@dc.gov
Kate Youngbluth	DDOT	202.645.8625	katherine.youngbluth@dc.gov
Steve Plano	DDOT	202.671.2274	Stephen.plano@dc.gov
Jonathan Rogers	DDOT	202-671-3022	jonathan.rogers.2@dc.gov
Amanda Murphy	FRA	202.493.0624	amanda.murphy2@dot.gov
Bradley Decker	ВАН	202.346.9299	decker_bradley@bah.com
Paz Aviles (via phone)	BAH	301.219.5006	aviles_maria@bah.com
Frances Burg	FRA	202.493.0558	frances.burg@dot.gov
Paul Moyer	VHB	571-389-8140	pmoyer@vhb.com
Lee Farmer	VHB	571-389-8162	lfarmer@vhb.com
Tom Hickey	VRE	703-980-2930	thickey@vre.org
Oscar Gonzalez	VRE	703-838-9325	ogonzalez@vre.org
Bill Marzella	EHTTraceries	202-393-1199	bill.marzella@traceries.com
Laura Hughes	EHT Traceries	202-393-1199	Laura.hughes@traceries.com
Dave Salmon	Crystal City Civic	703-416-6750	dave.salmon@rmxtalk.com
	Association (CCCA)		
Carol Fuller	CCCA	703-477-5954	cfuller603@aol.com
Amrita Hill	Amtrak	202-906-2481	hilla@amtrak.com
Johnette Davies	Amtrak	215-349-1354	johnette.davies@amtrak.com
Jeremy Peterson	APKS	202-942-5029	jeremy.peterson@apks.com
Randy Marcus	CSX	804-916-1532	randy_marcus@csx.com
Mike Commisso	NPS	202-245-4693	michael_commisso@nps.gov
Bradley Krueger	NPS-GWMP	703-289-2509	bradley_krueger@nps.gov
Jamie Herr	AOC	202-226-3414	jherr@aoc.gov
Tambo Prince	AOC	202-438-5595	tprince@aoc.gov
FJ Lindstrom	CFA	202-504-2200	flindstrom@cfa.gov
Lee Webb	NCPC	202-742-4280	lee.webb@ncpc.org
Andrew Lewis	DCSHPO	202-442-8841	andrew.lewis@dc.gov
Dan Koenig	FTA	202-219-3528	daniel.koenig@dot.gov
Ethel Eaton (via phone)	VDHR	804- 367-2323	ethel.eaton@dhr.virginia.gov
Lexie Albe (via phone)	Southwest BID	202-618-3515	lalbe@swbid.org



- Anna Chamberlain (DDOT) opened meeting and invited attendees, including those calling in remotely, to introduce themselves.
- DDOT reviewed the meeting agenda; provided an overview of the Long Bridge existing conditions and capacity; the Long Bridge Project scope; the phased approach to alternatives development and environmental documentation; the extent of the Long Bridge Corridor; the Purpose and Need Statement; and Preliminary Concepts.
 - Various attendees asked for additional information/clarification regarding the number of bridges and other contributing structures along the Long Bridge corridors (in addition to the Long Bridge itself), and if any had been determined as historic.
 - RESPONSE: In addition to the Long Bridge itself, there are 6 component bridges (including the Long Bridge) within the Long Bridge Corridor. The Long Bridge is a contributing resource to the East and West Potomac Parks Historic District. Otherwise, none of the component bridges are listed in the NRHP.
 - DCSHPO asked if these would include the bridges and overpasses that follow the Virginia Avenue corridor.
 - RESPONSE: As a component of this phase of the project, infrastructure will be studied in greater detail.
 - Amtrak noted that it would be helpful to illustrate other ongoing studies in the vicinity of the corridor, such as the Crystal City VRE station and L'Enfant Plaza.
 - RESPONSE: An illustration of these studies will be provided to Consulting Parties.
 - DC SHPO asked if the Amtrak bridge over South Capitol Street would be affected.
 - RESPONSE: It is unlikely that the bridge over South Capitol Street would be affected.
 - FTA asked for additional information regarding the development of the Study Area.
 - RESPONSE: DDOT confirmed that the study area has not changed since NEPA was initiated.
 In Phase I, the study area reached Alexandria, but was adjusted to avoid overlapping with DC2RVA Project.
- DDOT presented the Preliminary Concepts. They noted that they were not associated with infrastructure at this point. Concepts 9 and 10—which consider a new corridor location—were added in response to fall 2016 scoping comments.
 - DCSHPO asked if a geographic area was defined for a potential new corridor.
 - RESPONSE: It has not.
- Amanda Murphy (FRA) presented an overview of the Section 106 consultation process, including the
 preliminary identification of historic properties, historic photographs of the Long Bridge, an outline
 of future efforts to continue the identification of historic properties, the roles of the consulting
 parties; and coordination of Section 106 and NEPA efforts; information on upcoming NEPA
 Interagency and public meetings on May 16, 2017.
 - o Some attendees noted that not all historic properties had been identified
 - RESPONSE: The identification of historic properties would continue throughout the Section 106 process, and FRA welcomes additional comments. Please provide any information you have regarding additional designated or potential historic properties.



- FRA provided information for the upcoming Interagency and Section 106/NEPA Public Meetings.
 - FRA provided information for consulting parties to submit comments, requested by May 9, 2017.
 - FRA noted that the address listed could be used for formal correspondence, but preferred letters be sent by email.
- DCSHPO noted that, per the Section 106 implementing regulations, the Area of Potential Effects (APE) should be delineated before historic properties are identified.
- DCSHPO also stated that as the Long Bridge is highly visible, FRA should draft the APE to be as large as possible to consider views.
- DCSHPO asked if FRA has specific guidelines for the identification of historic properties in the APE.
 - RESPONSE: There is no FRA guidance; however, they intend to create both a direct and indirect APE.
 - DCSHPO stated that, although no engineering was associated with the alternatives at this point,
 APE development should assume a worst-case scenario (i.e., a taller replacement bridge structure)
 - Attendees encouraged FRA to develop one APE that addresses all alternatives, to expedite the review process
- CFA encouraged FRA to add the FAA, MWAA, and Pentagon (DOD) to the consulting parties list.
 - RESPONSE: FAA and MWAA are participating agencies for the EIS. FRA will invite DOD to be a
 participating agency. FRA has determined that these agencies' potential concerns/issues are
 more suited to be addressed during the NEPA process, rather than as a consulting party under
 Section 106.
- NPS NAMA asked which Tribal Historic Preservation Offices were consulted thus far.
 - RESPONSE: The Pamunkey Tribe declined to participate in consultation unless an inadvertent archaeological discovery was made. FRA added that other Tribes, identified by VDHR, were invited to participate as consulting parties.
- The Crystal City Civic Association queried if FRA and DDOT consulted with the State of Maryland to consider the ongoing project to replace the US-301 bridge and how that project may offer an alternative corridor.
 - o RESPONSE: We have not.
 - o CFA added that it might be a desirable to avoid hazardous materials entering the District.
- FTA questioned the project's potential to create an adverse effect.
 - RESPONSE: One potential adverse effect could be due to the potential replacement of the Long Bridge itself, which is a contributing element to the East and West Potomac Parks Historic District.
- NPS NAMA encouraged the consideration of potential indirect adverse effects to the National Mall and Plan of the City of Washington historic districts.
 - o RESPONSE: Comment noted; this will be considered.



CONSULTING PARTIES MEETING #2 MEETING NOTES

Date: Wednesday, November 15, 2017

Time: 12:30 PM to 2:00 PM

Place: Phone call and in-person (DCOP Office)

FINAL 01/08/2018

Attendees:

NAME	PHONE	EMAIL
DDOT	55 M Street SE	, Suite 500, Washington, DC 20003
Anna Chamberlin	202.671.2218	anna.chamberlin@dc.gov
Kate Youngbluth	202.645.8625	katherine.youngbluth@dc.gov
Steve Plano	202.671.2274	stephen.plano@dc.gov
FRA	1120 Vermont	Ave NW, Washington, DC 20005
Amanda Murphy	202.493.0624	amanda.murphy2@dot.gov
Russell Krupen	202.493.0888	russell.krupen@dot.gov
Bradley Decker (contract support, BAH)	202.346.9299	decker_bradley@bah.com
AOC	441 D Street S	N, H2-54, Washington, DC 20515
Jamie Herr (via phone)	202.226.0800	jherr@aoc.gov
Amtrak	60 Massachuse	etts Ave NE, Washington, DC 20002
Amrita Hill	202.906.2481	hilla@amtrak.com
Johnette Davies	215.349.1354	johnette.davies@amtrak.com
CFA	401 F Street N	N, Suite 312, Washington, DC 20001
Frederick Lindstrom	202.504.2200	flindstrom@cfa.gov
DC SHPO	110 4 th Street S	SW, Ste. 650 East, Washington, DC 20024
Andrew Lewis	202.442.8841	andrew.lewis@dc.gov
GSA	301 7th Street SW, Rm. 4004, Washington, DC 20407	
Nancy Witherell (via phone)	202.260.0663	nancy.witherell@gsa.gov
VDHR	2801 Kensingto	on Ave., Richmond, VA 23221
Ethel Eaton (via phone)	804.482.6088	ethel.eaton@dhr.virginia.gov
Adrienne Birge-Wilson (via phone)	804.482.6087	Adrienne.Birge-Wilson@dhr.virginia.gov
VRE	1500 King St, S	uite 202, Alexandria, VA 22314



NAME	PHONE	EMAIL
Oscar Gonzalez	703.838.9325	ogonzalez@vre.org
CSXT	1331 Pennsylv	ania Ave NW #560, Washington, DC 20004
Randy Marcus	804.916.1532	randy_marcus@csx.com
DRPT	600 E. Main St	#2102, Richmond, VA 23219
Randy Selleck	804.591.4442	randy.selleck@drpt.virginia.gov
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A. Purpose and Need

• Anna Chamberlin (DDOT) reviewed the Purpose and Need for the project, which is to provide additional capacity, network connectivity, and resiliency and redundancy within the Long Bridge Corridor.

B. Project Overview and Schedule

- DDOT provided an overview of the Long Bridge. The bridge is a two-track steel truss railroad bridge constructed in 1904. It is a contributing element to the East and West Potomac Parks Historic District. It is currently owned by CSXT and on average services 76 freight, intercity passenger, and commuter rail trains per day.
- DDOT described the updated Project Area Limits to the Consulting Parties.



- Concept refinement to date has established that any physical changes to existing infrastructure would not extend beyond the RO and LE interlockings.
- The official northern terminus of the DC to Richmond Southeast High-Speed Rail (DC2RVA) project as stated in the Tier II Draft EIS is Control Point Rosslyn (RO) at milepost CFP 110 in Arlington, Virginia. The RO Interlocking provides a transition point between these separate and independent projects and is therefore the appropriate place to set the limits of the Long Bridge Project.
- The planned Virginia Railway Express (VRE) L'Enfant Station and storage track project includes the eventual conversion of the existing storage tracks into a full fourth track between LE and Virginia Interlockings. The LE Interlocking provides a transition point between the separate and independent Long Bridge and VRE projects and is therefore the appropriate place to set the limits of the Long Bridge Project.
- All the projects discussed have independent utility.
- These other projects, DC2RVA and VRE projects, will be included in the Long Bridge EIS in the No Action and Cumulative Effects Chapters. All the projects will be subject to Section 106 and therefore the entire corridor will still be examined.
- DC SHPO asked whether all projects in the corridor have an FRA action. Amanda Murphy (FRA) responded that the VRE L'Enfant Station project would likely be led by FTA once it is federally assisted or funded. FRA is the lead on the DC2RVA project, and has been coordinating with VDHR. DC SHPO has not been involved with DC2RVA because the project is located entirely in Virginia.
- The Crystal City Civic Association later asked if those separate undertakings removed from the Long Bridge Project area would be addressed in a separate Section 106 consultation process. FRA confirmed that it would, but by different federal agencies in accordance with Section 106 regulations.
- DDOT reviewed the Section 106 and NEPA schedules
 - Methodology report has been sent out to the Cooperating and Participating Agencies;
 comments are due December 4, 2017.

C. Level 1 Concept Screening Results

- Amanda Murphy (FRA) reviewed the Level 1 Concept Screening process and results that
 were presented to the public and agencies in May 2017. The Level 1 Concepts were
 screened against the Purpose and Need.
 - DC SHPO asked why the new corridor concept was eliminated. FRA responded that the concept did not meet the project need for connectivity.
 - DC SHPO asked whether specific new corridors were considered as a part of the new corridor concept. FRA responded that while the project team is aware of the previous work related to alternate railroad corridors, the concepts reviewed as part of the Level 1 Screening did not include specific alignments.
- FRA informed participants that the Level 2 Screening process is currently underway. This
 process will identify alternatives to be considered in the DEIS. Once the screening is
 finalized, the alternatives will be presented at the next public meeting planned for
 December or January.
- Additional clarification was requested regarding the bike and pedestrian bridge alternatives.
 FRA clarified that this structure could be implemented independently of the rail bridge.



D. Draft Area of Potential Effect (APE)

- FRA described the Draft APE and the process used to develop the boundary of the APE.
 - APE boundary (delineated as a red dotted line on the map) is generous and takes into consideration seasonal tree coverage and long-distance views from high points.
 - APE considers both direct and indirect impacts.
 - Visibility of the Long Bridge determined the formation of the outer boundary of the APE.
- The APE was developed based on the concepts retained after the Level 1 Concept Screening. The Limits of Disturbance (shaded gray on the map) encompass the largest predicted limit of disturbance based on a 5-track bridge including a pedestrian and bike bridge (including the associated approach ramps) and track work that would occur in the corridor.
- Bill Marzella (Traceries) presented the field survey photographs and findings for sample areas throughout the APE. Traceries noted the following:
 - The presentation is not inclusive of all survey work completed.
 - o Field survey was conducted from publicly accessible areas.
 - Viewsheds were based on the assumption that a new bridge would be equally or less visible than current Long Bridge structure.
- Traceries noted that there are several overlapping Historic Districts within the APE. This
 includes: portions of the National Mall, Washington Monument Grounds, and East and West
 Potomac Parks; and Arlington House and Arlington National Cemetery.

Questions and Discussion

- Participant asked if the APE boundaries were changed for the various concepts. FRA
 responded that the APE boundaries are broad in order to encompass all concepts, and the
 footprints of the various bridge concepts are not widely varied as they all must connect to
 the railroad tracks on either side of the Long Bridge.
- VDHR expressed concern that the draft APE does not include Arlington House, while the
 Long Bridge can be viewed from there. FRA responded that areas within the primary Draft
 APE (indicated with a red, dashed line) are the areas from which the Long Bridge Corridor is
 most visible; however, the APE is discontinuous to include several locations from which the
 project area is visible at a specific point but not from the surroundings.
 - DC SHPO noted that they agree with this approach.
 - ACTION: FRA to invite Arlington Cemetery to be a consulting party to the Project.
- DC SHPO stated the Parties will need general massing and dimensions of the design concepts to assess effects.
- One unidentified attendee asked whether effects will be assessed on several alternatives. FRA responded that yes, effects will be assessed on all alternatives. The assessment of effects will factor into the preferred alternative selection.
- VDHR asked whether the project team intends to assess archaeological sites and when that work will be conducted. FRA responded that yes, it will be conducted.
 - ACTION: FRA to follow up with the Parties on schedule and approach of archaeological assessment.
- DC SHPO asked what informed the canted shape of the Limits of Disturbance. Traceries
 replied that it reflected potential Long Bridge realignments in addition to a potential,
 separate bike and pedestrian bridge structure and approach ramps.
- DC SHPO asked about the scope of construction within the Long Bridge corridor aside from the Long Bridge. Would other bridges in the District be affected, including the pedestrian



bridge over Maine Avenue? DDOT responded that limits of disturbance will generally be within the existing right-of-way, noting that historically there was an additional track that has since been removed. There is the potential for impact to bridges within the corridor, including the pedestrian bridge over Maine Avenue. Because the project limits end at LE Interlocking, there would be no impacts to bridges past 10 Street SW.

- NPS will follow up with official correspondence, but mentioned additional areas to survey (see below). NPS asked if consultation with tribes is underway. FRA responded that VDHR provided a list of tribes to consult (Delaware Nation, Delaware Tribe of Indians, Catawba Indian Nation, and Pamunkey Tribe). The Delaware Nation agreed to participate as a consulting party and the Delaware Tribe of Indians declined to participate. The Catawba Indian Nation and the Pamunkey Tribe were invited to participate but did not respond.
- VDHR noted that Arlington House is located within Arlington National Cemetery, but that it is a separate property and is administered by the George Washington Memorial Parkway.
 - ACTION: On subsequent, revised APE maps, an asterisk will indicate the separate ownership of Arlington Cemetery and Arlington House.
- VDHR stated that Arlington National Cemetery should be invited to act as a consulting party.
- Additional suggested areas to survey include:
 - o Air Force Memorial
 - East Plaza and high points at the Pentagon, including transit center
 - o Inside the historic section of Ronald Reagan Washington National Airport
 - Old Post Office Tower
 - Arlington Ridge Park
 - Netherlands Carillon (NPS to coordinate access)

E. Identification of Historic Properties

- 1. Presentation
- Traceries described the historic properties identified within the draft APE including:
 - o Properties and districts listed in the National Register of Historic Places;
 - Properties determined eligible;
 - National Historic Landmarks (NHL);
 - o Properties in the DC Inventory of Historic Sites and the Virginia Landmarks Register;
 - Arlington County Local Historic Sites; and
 - Properties greater than 45 years of age that were not previously identified that may be eligible in the future.
- 2. Questions and Discussion
- VDHR stated Arlington House is a NHL
 - o **ACTION:** Traceries to confirm NHL status of Arlington House with VDHR.
- It was asked whether the Pentagon is a Consulting Party. The Pentagon should be marked as a landmark if it is included in the APE. FRA responded that the Pentagon was invited to be a Consulting Party.
- DC SHPO requested that DDOT and FRA coordinate with DC SHPO on identification of buildings that are over 45 years old as DC SHPO is aware of buildings that fall into that category but have been deemed ineligible. DC SHPO noted that they did not consider the Roosevelt Bridge to be eligible.



- GSA stated that a determination of eligibility (DOE) on the Liberty Loan Federal Building is currently being finalized.
 - ACTION: GSA to provide additional information on Liberty Loan Federal Building DOE.
- Representatives from the Crystal City Civic Association asked about buildings 35 and 36 on the map, marked as structures over 45 years old. Traceries and FRA noted that these buildings have been extensively modified and are likely not eligible. General discussion followed regarding these buildings, noting that many of the buildings in this area do exceed fifty years of age, but have been retrofitted and no longer retain their original appearances.
- VDHR stated the Virginia properties over 45 years old but not previously identified should be surveyed and documented in the V-CRIS system to VDHR standards.
- DC SHPO asked if any properties within the Draft APE had been designated as NHLs. Traceries responded that only St. Elizabeths Hospital Historic District had been identified (in addition to possibly Arlington House, per discussion above). DC SHPO noted that FRA must meet the Section 106 regulations as they apply to NHLs.
- Bradley Krueger (NPS GWMP) provided several comments on the identification of historic properties, including: the Arlington Memorial Bridge and approaches have a separate historic designation from Arlington Cemetery; Mount Vernon Highway and Arlington Cemetery do not overlap; and several documented cultural landscapes in the APE, including Gravelly Point, Roaches Run, the Memorial Avenue Corridor, and Lady Bird Johnson Park.
 - Traceries responded that National Register, NPS, and V-CRIS often provide conflicting documentation on the designation and extent of historic properties. Traceries also noted that cultural landscape documentation would be critical in assessing effects.
 - FRA requested that NPS provide any documentation they may have on their historic properties, including GIS layers of boundaries, if available.
 - ACTION: NPS GWMP to provide documentation on historic properties and cultural landscapes in the APE.

F. Next Steps

- FRA and DDOT request comments on the Draft APE and identification of historic properties by December 6, 2017.
- FRA projected the following dates and topics for the next Consulting Parties meetings:
 - Spring 2018: Assess Adverse Effects
 - Summer 2018: Resolve Adverse Effects (if necessary)
- FRA/DDOT noted that the alternatives will likely be presented within a month or two, which will allow for the Assessment of Effects analysis to commence.



CONSULTING PARTIES MEETING #3

Date: Wednesday, May 30, 2018

Time: 1:00 PM to 2:30 PM

Place: 55 M St SE (DDOT Conference Room 531)

FINAL 06/19/18

Attendance:

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A. Introduction and Overview

- Kate Youngbluth (DDOT) opened the meeting and performed introductions.
- Amanda Murphy (FRA) provided an overview of the project.
 - The Long Bridge is a two-track steel truss railroad bridge constructed in 1904. It is a contributing element to the East and West Potomac Parks Historic District. It is currently owned by CSXT. CSXT, VRE and Amtrak currently operate on the bridge. Norfolk Southern has trackage rights.
 - On average 76 freight, intercity passenger, and commuter rail trains use the bridge per day.
 - Amanda noted that the bridge is the only railroad connection between Virginia and the District, with the next closest crossing in Harpers Ferry, WV.
 - The purpose of the Project is to provide additional capacity, network connectivity, and resiliency and redundancy within the Long Bridge Corridor.

B. Section 106 Process

- Amanda provided an overview of the Section 106 process, how it relates to the National Environmental Policy Act (NEPA) process, and consultation to date.
 - This meeting is the third Section 106 Consulting Parties meeting. DDOT and FRA have also held three public meetings to date that have served as Section 106 meetings.
 - At the previous Section 106 Consulting Parties meeting in November 2017, DDOT and FRA presented the Level 1 Concept Screening results, the Draft Area of Potential Effect (APE), and preliminary identification of historic properties.
 - DC SHPO and VDHR provided concurrence on the APE in March 2018.
 - Based on VDHR's suggestion at the last meeting, FRA reached out to Arlington National Cemetery and invited them to be a Consulting Party, but they declined.
- Bill Marzella (Traceries) described the APE and identification of historic properties.
 - Bill noted that comments received from the Consulting Parties at the last meeting informed the final APE and list of historic properties.
 - o DDOT and FRA conducted additional field survey in response to comments.
 - The field survey did not result in revisions to the APE, but DDOT and FRA did add several properties (viewsheds) outside the contiguous border:
 - Netherlands Carillon
 - Old Post Office Tower
 - Pentagon
 - o Bill noted the limits of disturbance (LOD) within the APE and explained that this is there area within which DDOT and FRA would expect most of the direct effects to occur.
 - Lee Webb (NCPC) asked if there were any additional viewsheds had been added since the November meeting.



 Bill responded that DDOT and FRA surveyed five properties based on comments received from the Consulting Parties, but only the three mentioned above were added (Air Force Memorial and Ronald Reagan Washington National Airport were not added due to field survey results.)

Phase 1A Archaeological Assessment

- Bill noted that DDOT and FRA have initiated the Phase 1A Archaeological Assessment (Phase 1A) as suggested in November.
 - DDOT and FRA will present the initial findings to the Consulting Parties in Fall 2018 and will integrate the results into the Assessment of Effects Report and the cultural resources analysis in the Draft Environmental Impact Statement (DEIS).
 - Bill explained that the Phase 1A is a four-step process including:
 - 1. Archeological and historical background research
 - 2. Analysis of elevation change over time
 - 3. A site visit to field-verify the desktop assessment
 - 4. Preparation of the Phase 1A documentation, including a Management Summary and technical report.
 - Bill noted that DC SHPO and VDHR provided concurrence on the Phase 1A Work Plan in May 2018.
- o Elevation Change Analysis
 - Bill provided an overview of the elevation change (cut and fill) analysis, that tracks historic elevations against current topography. The analysis also includes bathymetric (underwater) elevations.
 - Bill showed an example heat map documenting areas of fill (red) vs. cuts (green).
 - Bill noted that this is a desktop assessment that will need to be followed up with fieldwork as the project advances.
 - Ruth Trocolli (DC SHPO) asked what year the map was prepared in. Bill responded that he believed it was from the 1880s but will clarify. Ruth noted the need to factor in some amount of variation due to the use of historic maps which were not as accurate as current maps. (Note: Bill later clarified that the historic map used in the District to prepare the elevation change analysis is the 1880 Green Map, which Ruth Trocolli indicated was acceptable for analysis)
 - Oscar Gonzalez (VRE) noted that the use of red and green can be challenging for color-blind individuals. Bill responded that this map is a standard map from ESRI GIS, but it can be modified or another color scheme can be picked. Ruth confirmed that there is no standard for this analysis and other colors can be used. Boll noted that the color spectrum is supplemented with counter lines at 5' intervals, allowing the map to be read independently of colors.

C. Action Alternatives

- Screening Process:
 - Kate provided an overview of the two-step concept screening process for the Project.



- The Level 1 screening occurred from Fall 2016 to Spring 2017. This screening narrowed 18 initial concepts (plus the No Action) down to the No Action and three concepts (three, four, and five or more tracks).
- The Level 2 screening started in Summer 2017 and resulted in two Action Alternatives, both with four tracks, and the No Action Alternative.

Action Alternatives for the DEIS:

- Kate presented the two Action Alternatives that will be analyzed in the DEIS and Section 106 process.
- Alternative A would construct a new two-track bridge upstream of the existing bridge and retain the existing bridge, resulting in four tracks through the project limits.
- Alternative B would construct a new two-track bridge upstream of the existing bridge and then replace the existing bridge with a new two-track bridge, resulting in four tracks through the project limits.

• Potential Bike-Pedestrian Crossing Opportunities

- Kate noted that, as presented previously, the DDOT and FRA are continuing to explore the feasibility of bike-pedestrian crossing opportunities.
- DDOT and FRA are looking at best practices related to railroad safety and operations.
- Laurel Hammig (NPS-NCR) asked whether both attached and detached options were still being considered. Kate responded that both options are still being evaluated.

D. Methodology for Assessing Effects

- Bill presented the methodology for the assessment of effects.
 - Per the implementing regulations for Section 106 (36 CFR 800.5), an adverse effect is found when an undertaking may directly or indirectly alter any of the characteristics of a historic property that qualify it for inclusion in the National Register in a manner that would diminish the property's integrity of:
 - Location
 - Design
 - Setting
 - Materials
 - Workmanship
 - Feeling
 - Association
 - Examples of adverse effects include:
 - Physical destruction of or damage to the property
 - Alterations to a property (including restoration, rehabilitation, repair, maintenance, stabilization, etc.) that are not consistent with the Secretary's Standards for the Treatment of Historic Properties
 - Removal of a property from its historic location
 - Change to a property's significant use or setting



- Introduction of visual, atmospheric or audible elements that diminish integrity
- Neglect of a property (except in certain religious and cultural cases)
- Transfer, lease, or sale of property out of Federal ownership or control without adequate preservation protections
- Bill explained that the analysis will evaluate:
 - Direct physical effects
 - Indirect visual effects
 - Direct or indirect effects resulting from vibration
 - Indirect effects from noise
- Bill described the methodology for assessing direct physical effects:
 - Based on conceptual engineering information (including alignments, construction staging, and limits of disturbance), the analysis will describe and evaluate the potential for the alternatives to have direct physical effects on historic properties.
 - For each historic property, the analysis will assess the physical effect against all seven aspects of historic integrity.
 - A finding of adverse effect will be made if physical effects will diminish any aspects of a property's historic integrity.
 - Bill explained that historic properties within the LOD have the greatest potential to incur direct physical effects resulting in adverse effects. These include:
 - East and West Potomac Parks Historic District (including Long Bridge as a contributing element)
 - George Washington Memorial Parkway
 - Mount Vernon Memorial Highway
 - Any potential archaeological resources
- Bill described the methodology for assessing indirect visual effects:
 - o The analysis will identify significant views or viewsheds for each property.
 - Bill noted that most properties already have this documentation
 - For the significant views, a limited number of massing diagrams will be created to superimpose the proposed alignments over existing conditions photographs.
 - For each historic property, the analysis will assess the visual effect against all seven aspects of historic integrity.
 - Bill noted that VDHR provides extensive guidance on assessing visual effects to determine whether they are adverse.
 - A finding of adverse effect will be made if visual effects would diminish any aspects of a property's historic integrity.
 - Bill noted that indirect visual effects will most likely result in adverse effects when an alternative:
 - Permanently removes or impedes views that contribute to the historic significance of a property; or
 - Diminishes a property's historic integrity. Visual effects will most likely affect a property's integrity of setting, feeling, and association.



- Bill described the methodology for assessing noise and vibration effects:
 - The analysis will overlay the noise and vibration study area with the APE to identify historic properties that may be affected.
 - The noise and vibration assessment will be conducted in accordance with Federal Transit Administration (FTA) guidelines.
 - Based on the noise and vibration assessment, the analysis will identify historic properties that may experience noise and vibration levels above FTA thresholds.
 - A finding of adverse effect will be made if noise and vibration levels above FTA thresholds would diminish any aspects of integrity that contribute to a property's historic significance.
 - Effects from noise and vibration may be permanent operational impacts or temporary impacts resulting from construction and staging.
 - Vibration and noise have the potential to effect historic properties indirectly. Indirect
 effects resulting from noise or vibration will likely affect historic properties' integrity of
 setting, feeling, and association.
 - Additionally, vibration has the potential to affect historic properties directly. Direct, physical effects resulting from excessive vibration has the potential to affect integrity of design, materials, and workmanship.
 - Lee Webb asked whether the analysis would distinguish between temporary and longterm impacts.
 - Bill responded that yes, construction & staging (temporary impacts) will be distinguished from the long-term operational impacts.
 - Laurel Hammig asked whether a benchmark year is being used.
 - Amanda responded that 2040 has been used throughout the project as the planning year.
 - Chuck Gullakson (CSXT) asked for clarification on the width of the noise and vibration study area on either side of the railroad corridor.
 - Bill responded that he believed the distance is 1,000 feet.
 - Following the meeting, DDOT and FRA confirmed that the study area for noise is 750 feet from the track alignment without intervening buildings and 375 feet with intervening buildings. The vibration screening distance depends on the type of sensitive land use and the type of railroad project. For commuter railroad operations, the vibration screening distance is 200 feet for residential uses, 120 feet for institutional uses, and up to 600 feet for particularly sensitive receptors such as research facilities with vibration-sensitive equipment, theaters, and recording studios.

E. Next Steps

 Amanda stated that the project team is accepting comments on this meeting through June 13th. The preferred method for submitting comments is through the website or via email to info@longbridgeproject.com.



- DDOT and FRA will provide the draft Assessment of Effects Report for review in late summer. At the next Consulting Parties meeting in the Fall, DDOT and FRA will solicit input on avoidance, minimization, and mitigation strategies.
 - Amanda asked that participants review the report in advance of the meeting and come prepared to discuss specific issues. Given the large number of properties in the APE, this will enable a more focused meeting.
 - Amanda noted that the next meeting will focus on major properties with anticipated effects.
- Bill noted that the project team may be reaching out to owners of historic properties for additional detail to help with assessing effects.

F. Questions and Comments

- Lee Webb asked how many listed historic properties are in the APE.
 - o Amanda responded that the number is around 30.
 - Following the meeting, FRA and DDOT confirmed that the number of designated historic properties within the APE is 29, including the viewshed sites. This includes both individual properties and historic districts designated at the state and federal levels. Additionally, 9 properties in the APE have been determined eligible for NRHP listing. Four additional properties within the APE have been identified as potentially eligible for NRHP listing.
- Randy Selleck (DRPT) asked whether DDOT and FRA are asking for comments on the report as well as the slides presented at this meeting.
 - Amanda clarified that DDOT and FRA are not soliciting comments on the report as it won't be prepared until this summer, just the methodology as presented at this meeting.
- Carol Fuller (Crystal City Civic Association) asked about the timeline for a decision about including a bike-pedestrian connection.
 - Anna Chamberlin (DDOT) responded that the bike-pedestrian analysis is happening concurrently with the assessment of effects. DDOT and FRA will present options for a bike-pedestrian connection with the selection of the Preferred Alternative in the Fall.
 - Carol stressed that she didn't feel the bike-pedestrian bridge would ever get built if it becomes separated from the Long Bridge Project. She noted that she strongly encourages selecting a bike-pedestrian crossing option that crosses the GWMP and connects to the trail in Long Bridge Park.
 - Carol noted that various entities with which she is involved (Crystal City Civic Association, Friends of Long Bridge Park, the Crystal City BID) want to make sure they have the opportunity to be further engaged with this decision. Anna noted that the team is currently evaluating various connectivity options and DDOT and FRA are considering the impacts of the bike/ped connections on historic properties.



CONSULTING PARTIES MEETING #4

Date: Wednesday, October 24, 2018

Time: 10:30 AM to 12:00 PM

Place: 55 M St SE (DDOT Conference Room 639)

FINAL 11/30/18

Attendance:

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A. Introduction and Overview

- Amanda Murphy (FRA) opened the meeting and completed introductions.
- Amanda provided an overview of the meeting purpose and agenda:
 - The primary purpose of this meeting is to present a high-level overview of the Long Bridge Project Section 106 Assessment of Effects Report.
 - The Meeting also includes a Section 106 process update, Action Alternatives for DEIS, conceptual engineering, potential mitigation for a bike-pedestrian crossing, assessment of effects, and resolution of effects before discussing next steps.

B. Section 106 Process and NEPA Coordination Update

- Amanda provided an overview of the Section 106 Process and consultation to date and briefly addressed what was covered at the previous three meetings.
 - This meeting is the fourth of the Section 106 Consulting Party meetings for the Long Bridge Project. At the previous meeting, FRA and DDOT presented a methodology for assessing effects on historic properties.
 - o Public and interagency meetings would be held on November 29, 2018.
 - FRA provided an overview of the Area of Potential Effect (APE). Since the last meeting, the Limits of Disturbance (LOD) have been updated to remove the downstream bike-pedestrian crossing that was dismissed from consideration.

C. Action Alternatives

- Kate Youngbluth, DDOT, presented an update on the Action Alternatives to be evaluated in the DEIS.
 - Action Alternative A involves a new two-track bridge upstream of the existing bridge. This option preserves the historic Long Bridge and component railroad bridge over the George Washington Memorial Parkway (GWMP).
 - Action Alternative B involves a new two-track bridge upstream of the existing bridge and the replacement of the existing bridge.
 - Two types of common railroad bridges are being considered for the new two-track bridge: a steel deck girder bridge and a steel through girder bridge. Depth of the structure is the primary difference between the two structure types. They are representative of common railroad bridge types throughout the U.S. The existing Long Bridge is primarily a through girder bridge with a central through trestle span. The new bridge would be formally and aesthetically compatible with the existing.
 - Amanda stated that a signature bridge was considered early on, but that is no longer being considered as an option based on comments that have been received thus far.
 - Andrew Lewis (DC SHPO) asked if a decision has been made about which bridge option would be used. Amanda responded that no decision has been made yet.
 Both are currently being considered and a selection would be made during the final design phase.
- Kate presented the proposed treatments of the new GWMP railroad bridge:



- Action Alternative A would preserve the existing bridge and construct a new bridge upstream while Action Alternative B would replace the existing bridge and construct a new bridge upstream. For both options, the aesthetic of the new bridge would be compatible with the existing bridge and with the GWMP.
- Kate presented the proposed alignments for the bike-pedestrian crossing option:
 - The bike-pedestrian crossing is being considered as potential mitigation for Section 4(f) impacts. Four potential options were originally being considered, but that has been narrowed down to two options under consideration:
 - Option 1 would be attached to the new upstream railroad bridge. This option would share the same substructure as the railroad bridge but a separate superstructure. This option would require substantial security measures in addition to extending the large railroad bridge piers further upstream to support the superstructure.
 - Option 2 would be separate from the new railroad bridge. This bridge would utilize single column piers and have a much smaller substructure footprint than Option 1. Option 2 would also be less difficult to inspect and maintain and would cost approximately 20 percent less than Option 1.
 - Amrita Hill (Amtrak) noted that Amtrak prefers Option 2. Amanda stated that VRE, Amtrak, and CSXT have all expressed a preference for Option 2 as well, and that only one of the options would be carried forward in the DEIS. Additional comments from the Consulting Parties are welcome.
 - Andrew Lewis noted that visual impacts could be minimized by choosing Option 2 since the bridges would have smaller footprints, and that this option makes sense from a historic preservation standpoint.

D. Identification of Historic Properties

- Bill Marzella (EHT Traceries) presented the APE and noted that the assessment of effects
 included all those historic properties located within the APE boundaries, in addition to the
 viewshed properties outside of the contiguous APE boundaries.
 - Catherine Dewey (NPS-NAMA) pointed out that the U.S. Engineers' Storehouse is missing from the APE map, and that NPS is very concerned about effects to that property. Bill responded that this property has been identified that as a contributing resource to East and West Potomac Parks Historic District.
 - Bill stated that a large number of historic properties are located within the APE, but only those for which there are adverse effects would be addressed in the presentation.
- Phase IA Archaeological Assessment
 - Paul Kreisa (Stantec) discussed the Phase IA process which was coordinated with DC SHPO and VDHR. The Phase IA assessed the potential for archaeological resources within the LOD and archaeological projects completed within or near the LOD.
 - Paul gave an overview of the process:
 - A desktop analysis was conducted; historic maps were assessed to identify historic resources that are no longer extant.



- A 150-meter corridor with high potential for Native American archaeological resources was identified in the process.
- Bathymetric (underwater) analysis along the Potomac River to identify change in the depth of the river, particularly due to dredging.
- A site visit was conducted to determine if desktop analysis missed anything and to look at things like utilities and any type of infrastructure that couldn't be identified at the desktop level.
- Paul then presented the results of the analysis. Areas were divided into levels of no/low, moderate, and high potential for existence of archaeological resources.
 - Area a: This area extends into an existing staging area and has no/low potential.
 - Area 1: Historically located along the shore of the Potomac River, Area 1 has a high potential for Native American archaeological resources.
 - Area 2: Former location of Jackson City. Archaeological investigations have located structural remains, so this area has potential for future discovery.
 - Area b: Historically located in the Potomac River, so there is no archaeological potential.
 - Area II: Within the Potomac River west side. This area has no/low potential due to extensive dredging.
 - Area I: Within the Potomac River east side. This area has moderate potential due to a lower impact from dredging. DC SHPO indicated that someone found a Paleoindian point in the area. However, geoarchaeology for the Potomac River Tunnel indicated that the historic shoreline has eroded away, so there is diminished potential.
 - East Potomac Park: As made land, this area has very limited potential for archaeological resources.
 - East of Maine Avenue: The historic shoreline of the Potomac ran through the area so there is potential for Native American sites.
 - At the northeast corner of the LOD excavation and tunneling for laying the railroad in the nineteenth century corresponds to a very low potential for archaeological resources.
- The Phase IA draft technical report has been submitted to DC SHPO and VDHR for review and comment. After the identification of the Preferred Alternative in the DEIS, Section 106 would continue, and recommended investigations would be conducted based on consultation with the appropriate SHPO.

E. Assessment of Effects

- Bill Marzella presented a brief update to the assessment of effects methodology:
 - Visual Effects: FRA and DDOT developed photo simulations for selected properties within the APE to support the evaluation of visual effects. The views were identified based on properties that had documented significant views and where adverse effects were most likely. Analysis was also used to support the analysis of visual resources in the DEIS.



- Noise and Vibration Effects: Bill discussed the assessment for the Noise and Vibration Study Area. All historic properties located within the study area were evaluated. It was determined that, for all historic properties located outside this area, there would be no effects.
- Bill presented a table summary for a determination of effects for Action Alternatives A and B, including temporary and cumulative effects associated with the bike-pedestrian crossing options. Bill noted that Action Alternatives A and B would have different lengths of construction, 60 months (A) and 99-100 months (B).
 - Andrew Lewis asked if the proposed project would increase the number of trains moving through the corridor. Amanda responded that the Project would enable planned increases in train volumes by the railroad operators, although the Project itself would not run additional trains. The increase in train volumes was factored into the noise and vibration analysis.
- Bill presented effects determinations for the following properties:
 - National Mall Historic District
 - Temporary construction staging and access would create an indirect adverse effect on the National Mall. The staging areas would be located on existing parking lots within the National Mall and East Potomac Park and a staging area off Ohio Drive SW on the Washington Channel side. Andrew Lewis noted that DC SHPO wants to ensure any potential effects to the Jefferson Memorial have been taken into account.
 - No direct adverse effects were identified for either Action Alternative or bike-pedestrian crossing option.
 - o GWMP Historic District:
 - Under both Action Alternatives, removal of contributing vegetation would be a direct adverse effect. The original 1930s planting near the bridge was intended to screen the railroad bridge from viewers using the GWMP.
 - Under Action Alternative B, removal of the existing railroad bridge over the GWMP and Long Bridge would create direct and indirect adverse effects.
 - Cumulative effects from bike-pedestrian crossing options would be similarly direct and adverse due to the removal of contributing vegetation.
 - Temporary effects would be adverse in both Action Alternatives due to necessary construction staging, access, and trail relocation.
 - The GWMP has a sequence of several bridges near the Long Bridge Corridor, most of which do not contribute to the historic district. Due to the diminished integrity of the GWMP in this location, it was determined that the addition of one or more new bridge(s) would have no potential to diminish the integrity of the district and there would be no adverse effect.
 - For Action Alternative B, there would be an indirect adverse effect due to the removal of Long Bridge and the loss of the central trestle, which forms a visual landmark for users of the Mount Vernon Trail.
 - Simone Monteleone (NPS-GWMP) stated that GWMP doesn't necessarily agree with no adverse visual effect from Action Alternative A. She also



asked why the noise thresholds for GWMP are higher compared to the National Mall. In response, Bill stated that, per the noise and vibration analysis prepared for the DEIS, the GWMP is classified as an active recreation area, and therefore has a higher perceived noise (dBA) threshold than areas of passive recreation. He also noted that there is a high degree of ambient noise caused by plane and car traffic in this area.

- Mount Vernon Memorial Highway (MVMH) Historic District:
 - Effects on the MVMH would be similar and additive to those described above for the GWMP.
- Viewshed Analysis for GWMP and MVMH:
 - Bill presented the sequence of existing conditions photographs and photo simulations for Action Alternatives A and B along the GWMP.
 - Simone Monteleone commented that canopy trees between the Metrorail bridge and the existing railroad bridge would likely not have room in the future to mature with the addition of a new secondary railroad bridge. She requested that the photo simulations be updated to reflect that with the Action Alternatives.
- East and West Potomac Parks Historic District:
 - Both Action Alternatives would necessitate the removal of contributing vegetation, namely Japanese cherry trees along the perimeter of Hains Point, constituting a direct adverse effect. The removal of the contributing Long Bridge in Action Alternative B would represent the total loss of a contributing feature, intensifying the direct adverse effect.
 - Under Action Alternative B, the removal of the existing bridge and trestle was not determined to be an indirect adverse effect.
 - Under both Action Alternatives, construction noise has the potential to temporarily diminish the integrity of the contributing U.S. Engineers' Storehouse (located adjacent to the Washington Channel).
 - Andrew Lewis asked if the removal of the truss is an effect. Bill responded by stating that it was determined to be a direct physical effect but not an indirect visual effect. Andrew stated that he would argue that removal of the truss, since it is a direct adverse effect from the Virginia side, it should also be a direct adverse effect from the District (Potomac Park) side.
- Viewshed Analysis for East and West Potomac Parks:
 - Bill presented the photo simulations prepared for East and West Potomac Parks.
 - Tammy Stidham (NPS-NCR), asked if the number of contributing Japanese cherry trees identified for removal had been quantified. Lee Farmer (VHB) responded that the number is approximately four in Action Alternative A and seven in Action Alternative B. Tammy also stated that, as part of DEIS, the number of trees to be removed would need to be quantified (not just cherry trees).



F. Additional Questions and Comments

- Andrew Lewis asked if photo simulations of the bike-pedestrian crossing options had been developed. Amanda stated that they had not been but may be once a preferred crossing option has been identified. Amanda also stated that there would be continued coordination during the design process.
- Adrienne Birge-Wilson (VDHR) asked if any renderings had been prepared to show the new
 railroad bridge options and how they would be affected by the proposed bike-pedestrian
 crossing options. Amanda responded that there were not, as no final design for them had
 been developed as of yet, only conceptual engineering to this point.
- Tammy Stidham asked for clarification of potential temporary effects on Hancock Park.
 Amanda responded that FRA and DDOT are still considering whether it would be necessary to use that reservation for construction staging and access and would notify NPS when the issue was resolved.

G. Resolution of Effects

- Amanda stated that FRA and DDOT welcome additional ideas on potential avoidance, minimization, and mitigation options from DC SHPO, VDHR, and the Consulting Parties.
 Amanda noted what measures had been identified and integrated into the Action Alternatives to date.
- Tammy Stidham noted that, in addition to the replacement of lost vegetation, NPS would be
 offering a number of comments for proposed mitigation.
 - Catherine Dewey added that this may include interpretation, possible rehabilitation of the U.S. Engineers' Storehouse, or rehabilitation of the seawalls in East Potomac Park.
 - NPS also requested additional information about the effects on the U.S. Engineers' Storehouse and the distance between that building and the new bridge that would be constructed above the Washington Channel.
- Andrew Lewis stated that the Secretary of the Interior's Standards require compatibility
 with the existing historic bridge and other historic properties, not necessarily the nonhistoric bridges, and for that reason DC SHPO prefers the through-girder structural option.
- Frederick Lindstrom (CFA) suggested that improving the visual appearance of other railroad bridges in the District (through painting, etc.) could be a potential mitigation option.
- Oscar Gonzalez (VRE) asked if it would be possible to transplant (rather than remove)
 historic vegetation. NPS responded that it would be difficult in a constrained space and
 would vary based on species. It is not likely something that NPS would require.

H. Continued Consultation

FRA and DDOT request comments by November 9, 2018 on the Consulting Party meeting
materials and assessment of effects report, including proposed resolution strategies. These
comments would be incorporated into the report and utilized to select a Preferred
Alternative.



- Once these comments had been incorporated, FRA and DDOT would prepare a final assessment of effects report for DC SHPO and VDHR. The Advisory Council on Historic Preservation would also be notified of the determination of effect.
- FRA and DDOT would conduct a fifth Consulting Parties meeting, to present resolution strategies, in late Winter or Early Spring 2019.
- Although a project proponent for construction has not yet been determined, an MOA or PA
 would be drafted at a minimum amongst FRA, DC SHPO, and VDHR and would include a
 stipulation for how it can be amended in future to identify a project proponent and any
 parties responsible for implementing the project, including proposed mitigation.
 - Amanda noted that FRA intends to execute an MOA or PA by Winter 2020 in advance of the completion of the EIS Record of Decision in Summer 2020.



CONSULTING PARTIES MEETING #4

Date: Thursday, August 1, 2019 Time: 1:00 PM – 2:30 PM

Place: 55 M St SE (DDOT Conference Room 639)

FINAL 08/21/2019

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A. Introductions

- Kate Youngbluth (DDOT) welcomed everyone and noted that this is the fifth Consulting Party (CP) meeting for the Long Bridge Project.
- She explained that the plan for the meeting is to walk through the presentation and discuss with the group. We will take comments for next thirty (30) days. Please feel free submit comments to the Project email address (info@longbridgeproject.com).
- The Programmatic Agreement (PA) will be available for Consulting Party and public review with the DEIS in September. There will be a forty-five (45) day comment period with a public hearing in October.

B. Section 106 Process Update

- Katherine Zeringue (FRA) provided an overview of coordination between the National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) Section 106 processes. She noted that the Project is getting close to its public review milestone for the draft Environmental Impact Statement (EIS) and the draft PA.
- She noted that the PA will be discussed at this meeting. The document will outline future steps in terms of Section 106 processes and obligations. The primary purpose of this meeting is to discuss proposed Section 106 mitigations with the consulting parties.

C. DEIS Update

Katherine reviewed the selection of the Preferred Alternative. She noted that Action Alternative
 A (the Preferred Alternative) would avoid adversely affected more historic properties than
 Action Alternative B, and this consideration of avoidance to historic properties was part of the
 decision-making process. The Preferred Alternative has fewer impacts to historic resources,
 shorter construction time, and is less expensive to build.

D. Review of Area of Potential Effects (APE) and Historic Properties

- Katherine reviewed the identification of historic properties and Area of Potential Effects (APE).
- Phase 1A Archaeological Assessment
 - Katherine noted that the PA states identification of archaeological impacts will be done later
 in the design phase and commits the Project to future Identification and evaluation. This is
 one of the reasons the resolution document is a PA and not a Memorandum of Agreement.
 - The Phase IA determined areas of no, low, and high probability of resources and whether those resources might be prehistoric or historic. This will need to be ground-truthed later in the process. If adverse effects are identified, the project team will consult on resolution.



E. Review of Determination of Effects

- Katherine summarized the determination of effects. Action Alternative A (the Preferred Alternatives) would have:
 - o Temporary indirect adverse effect to the National Mall Historic District
 - Permanent direct adverse effect, cumulative direct adverse effect, and temporary direct and indirect adverse effect to the George Washington Memorial Parkway (GWMP) and Mount Vernon Memorial Highway (MVMH) historic districts.
 - Permanent direct and indirect adverse effect, cumulative direct and indirect adverse effect, and temporary direct and indirect adverse effect to the East and West Potomac Parks Historic District.
- Katherine reviewed the avoidance measures for the project, which include:
 - o Retaining Long Bridge and the railroad bridge over the GWMP in Action Alternative A.
 - Dismissing alternatives outside the Long Bridge Corridor because they did not meet Purpose and Need.

F. Potential Resolution of Adverse Effects

- Katherine noted that the regulations require considering avoidance measures first. Selection of
 Action Alternative A means the two historic bridges will remain in place. Placement of the new
 bridge between existing bridges also minimizes some adverse visual effects.
- Katherine explained that to date the project team has had extensive discussion with NPS
 regarding mitigation measures, as all affected resources are under their jurisdiction. The project
 team has also had some conversations with DC SHPO and VDHR. The purpose of this meeting is
 to also gather input from the Consulting Parties.
- She explained that NPS has agreed to take responsibility for implementation of many of the
 mitigation measures outlined in the draft PA. The Virginia Department of Rail and Public
 Transportation (DRPT) will be providing the funding, as they will be the Project Sponsor for final
 design and construction.
- Tammy Stidham (NPS) asked for clarification regarding adverse effects to the National Mall.
 Katherine replied that there would be temporary indirect adverse effects to the National Mall, as shown on Slide 7.
- Andrew Lewis (DC SHPO) asked if other federal agencies would be providing federal funding. He suggested that the PA should be revised to provide flexibility if another agency besides FRA provides funding.
 - o Katherine will confirm that the PA contains an adoptability clause to address this concern.



Design Review

- Katherine noted that this pretty standard minimization and mitigation. As design advances, the SHPOs and NPS will have opportunity to review and provide input on designs and their concerns.
- Frederick Lindstrom (CFA) noted that FRA has not included Commission of Fine Arts (CFA) or National Capital Planning Commission (NCPC) in this design review. They should be included in design review, since they have approvals. The Project Sponsor will have to present this project to both agencies, so better to engage them sooner rather than later.
- David Valenstein (FRA) noted that the project team will follow up with CFA and NCPC on their processes to determine when the Project should be presented.

• Tree Protection Plan

- Katherine explained that some vegetation will need to be removed for construction of the
 Project that is considered contributing to the historic properties.
- A tree protection plan would try to minimize impacts to those contributing resources. The plan would be in place before construction begins.

• Tree Restoration Plan

- Katherine explained that for vegetation that must be removed, DRPT will give NPS money to develop and implement a restoration plan. NPS will have the discretion to determine what is best in terms of replacement species and the locations.
- David Gadsby (GWMP) noted that staff had question about the wording. It should be clear that NPS is responsible for carrying out work, not for paying for it.
 - Katherine responded that FRA will make sure the language is clear in the PA.

• Interpretation Plan

- Katherine explained that DRPT would provide funding to NPS to prepare and implement the interpretation plan.
- The interpretation will include a website as well as physical wayside signage. Both SHPOs have expressed that physical signage is important.
- She noted that the PA currently has language about SHPOs and NPS being involved in the development of the interpretive materials. FRA is open to including others if they would like to be involved in this.

• <u>Viewshed Protection Plan</u>

 Katherine noted that DRPT would provide funding to NPS to prepare an implement an MVMH Viewshed Protection Plan and Inventory and Assessment from Alexandria to Columbia Island. The plan would be developed prior to completion of the preliminary engineering phase.



Cultural Landscape Inventories

 Katherine noted that DRPT would provide funding to NPS to prepare and implement cultural landscape inventories for MVMH from Alexandria to Columbia Island and for East and West Potomac Parks from the golf course to the railroad corridor.

• Construction Management Plan

 Katherine explained that DRPT would develop and implement a construction management plan that would include a noise and vibration control plan, construction management requirements, location of construction staging areas away from sensitive views and viewsheds, and sizing and screening to minimize the visual impact of staging areas.

Archaeology

- Katherine noted that FRA has not yet identified any adverse effects to archaeological resources. However, if adverse effects are determined through identification and evaluation, DRPT would develop mitigation in coordination with stakeholders and Consulting Parties.
- David Gadsby asked about the archaeological overview and assessment the NPS has suggested as mitigation.
 - Katherine responded that the project team has been trying to gain clarity on whether that is a mitigation measure for an adverse effect to an archaeological resource or whether it would be part of the Section 106 identification and evaluation phase. She suggested continuing to work with NPS to come up with appropriate language and put it in the appropriate document.
 - David Gadsby responded this is a different process for NPS than identification and evaluation. It is a decision-making document that they use to inform interpretive measures, so it's not the same as identification.
 - Andrew asked what is the resource/effect being mitigated.
 - David Gadsby explained that the resource is the maritime cultural landscape for the Potomac River and its shoreline. The archaeological overview and assessment is a baseline document NPS uses to understand archaeological resources.
 - Andrew suggested reaching out to Dr. Ruth Trocolli, with DC SHPO, if she can be of assistance.
 - Tammy responded she would be curious to hear Ruth's thoughts on the matter.
 - Katherine responded FRA will continue to work through this issue with NPS and the DC SHPO.

Bike-Pedestrian Crossing

 Andrew asked whether there has been any word from Virginia on the bike-pedestrian connection.



- David Valenstein responded that FRA has identified the bike-pedestrian bridge as mitigation for impacts to Section 4(f) parkland.
- Katherine explained that it is a Section 4(f) mitigation measure with Section 106 implications, so FRA is recognizing it as part of the project and has accounted for its adverse effect in the PA.
- Andrew stated that DC SHPO supports the bike-pedestrian bridge even though it will have adverse cumulative effects.
- Katherine noted that it was considered under cumulative effects under Section 106
- Andrew stated that DC SHPO is comfortable with what is proposed in the PA and is not suggesting any additional mitigation for the bike-pedestrian bridge, but wanted to ensure language within the PA was clear on the relationship between this 4(f) measure and Section 106.
- Andrew asked whether there any other Section 4(f) mitigation measures that need to be addressed through Section 106 and the PA as well.

G. Resolution Document and Next Steps

- Katherine stated that the Draft PA review for consulting parties will be concurrent with the DEIS
 and the public review period. However, it will still be directly distributed to the Consulting
 Parties.
- Lee Webb (NCPC) noted that NCPC hasn't been included as a signatory. They are typically a signatory for anything they have approval for.
 - Andrew suggested double-checking correspondence from NCPC about their action (review vs approval).
 - Lee Webb will check if NCPC has approval. If they do, he will send the boilerplate Whereas clauses and language.
- Andrew asked whether USACE has weighed in.
 - Lee Farmer (VHB) responded that they designated FRA as the lead.
- Tammy noted that NPS has permits for the bed of the river, for some of the construction, a land exchange in Virginia and a land transfer in the District.
 - o Andrew asked whether NPS is doing their Section 106 separately.
 - Tammy responded that if there is Section 106 consultation required in implementation of mitigation measures, NPS would do the consultation required. But for NPS actions, this Section 106 process should cover them.
 - Andrew suggested that NPS maybe be able to satisfy the Section 106 process in this PA for all of the mitigations through the design review process.
 - Katherine requested that the signatories provide specific language during their backcheck of the PA, if they have it to address these types of concerns and issues.



• Katherine noted that FRA will review and make sure federal actions required by USACE and USCG are accurately represented.