June 22, 2022

# Long Bridge Project Preliminary Engineering Phase

Virtual Public Meeting 7:00 – 8:00 PM

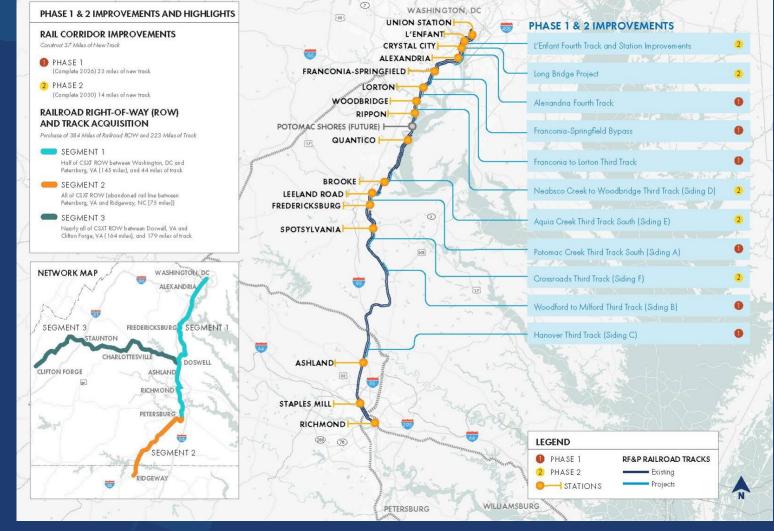






### Virginia Passenger Rail Authority

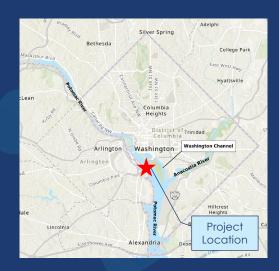
- Given all powers necessary for carrying out its statutory purposes:
  - Design, build, finance, and maintain rail facilities
  - Direct recipient of USDOT Grants
  - Eminent domain powers in Virginia
- Will own rail assets and right-of-way
- Will partner with other agencies to operate passenger and commuter rail service
- Governed by a 15-member Board







### **Project Location**











### **Project Areas**





Retaining Walls

• Maine Avenue SW Pedestrian Bridge

Area		Structures		
1	GW Parkway	<ul> <li>Potomac River Rail Bridge (extends over the Parkway and Potomac River)</li> <li>Potomac River Bicycle-Pedestrian Bridge (extends over the Parkway and Potomac River)</li> </ul>		
2	Potomac River	<ul> <li>Potomac River Rail Bridge (extends over the Parkway and Potomac River)</li> <li>Potomac River Bicycle-Pedestrian Bridge (extends over the Parkway and Potomac River)</li> <li>Retaining Walls and Landscape Design</li> </ul>		
3	East/West Potomac Parks	<ul> <li>Potomac River Bicycle-Pedestrian Bridge Landing</li> <li>WMATA/I-395 Bridge</li> <li>Ohio Drive SW Bridge</li> <li>Washington Channel Rail Bridge</li> <li>Retaining Walls and Landscape Design</li> </ul>		
		Maine Avenue SW Rail Bridge		



**Maine Avenue** 

**SW Area** 

4

### **Project Animation**



### **Flyover Animation**

Scan the QR code or click the following link (https://vimeo.com/709889894/c65c433a75) to access the flyover animation of the entire project.







### **Project Statistics**

1.8 mile

Project

3

**Rail Operators** 

70

**Daily Trains** 

20,000

**Feet of Track** 

6,000 ft

Retaining/Crashwalls

8

**Rail Bridges** 

2

Ped-Bike Bridges

37

**Stakeholders** 

3

**Complex Roadways** 

6,500 ft

Bridges

68

**Bridge Spans** 

59

**Bridge Piers** 





### Schedule

**DDOT Led** 

**VPRA** Led

2011–2016 Pre-NEPA

2011 FRA ARRA Grant

Phase I Study 2012–2015

Phase II Study 2015–2016

DDOT-DRPT Partnership through MOU

2016-2020 NEPA

2016 FRA TIGER Grant

FEIS/ROD Complete September 2020

Long Bridge Act December 2020

Identified Mitigation
Commitments & Permit
Identification

2021–2023

Preliminary Engineering (PE)

**Design 15% to 30%** 

Determine Project Delivery Method

Begin Environmental Mitigation & Permits

Agreements with Partner Organizations

2023–2030 Final Design & Construction

Design-Build or Alternative Project Delivery

Land Acquisition
Activities

**Permitting** 

Final Design & Construction





### Design Decisions & Public Involvement

	Pre-NEPA (2011-2016)	NEPA (2016–2020)	PE (2021–Present)
Design Decisions	<ul> <li>2 Design Decisions</li> <li>No signature bridge over the Potomac River</li> <li>Four bridge types advanced in the alternative analysis</li> </ul>	<ul> <li>7 Design Decisions</li> <li>Four-track rail corridor</li> <li>19 preliminary concepts screened; tunnel, multimodal, and new corridor concepts eliminated</li> <li>Four bicycle-pedestrian crossing options</li> <li>Two rail bridge alternatives over Potomac River evaluated in DEIS</li> <li>Preferred Alternative: New two-track rail bridge; retain existing Long Bridge</li> <li>Steel through girder rail bridge over Potomac River</li> <li>Pre-fabricated truss Bicycle-Pedestrian bridge</li> </ul>	<ul> <li>Refinement of:</li> <li>Bicycle-Pedestrian Bridge ramps</li> <li>Materials for piers, abutments, and retaining walls</li> <li>Form of rail bridge over GWMP</li> <li>Landscape design</li> <li>Retaining wall locations and materials</li> <li>Architectural finishing of bridges</li> </ul> NOT finalized decisions.
Public & Stakeholder Meetings	• 4 Public Meetings	<ul> <li>4 Public Meetings</li> <li>1 Public Hearing</li> <li>5 Section 106 Consulting Parties Meetings</li> </ul>	<ul> <li>2 Public Pop-Up Events</li> <li>1 Public Meeting</li> <li>6 meetings with Section 106</li> <li>Signatories, CFA, and DDOT regarding the Design</li> <li>Monthly NPS meetings</li> </ul>





### Preliminary Engineering: Current Phase

### **Work Completed**

- 15% design development
- Soil boring sampling
- Utility research and mapping
- Survey and property research
- Tree survey and arborist evaluation
- Stakeholder coordination



### **Next Steps**

- 30% design development in progress
- Stakeholder coordination and feedback
- Design approvals: CFA and NCPC

### **Design Considerations**

- Aesthetic elements consistent with the Monumental Core and existing structures in viewsheds of NPS-administered properties
- Design elements that avoid or minimize impacts to natural resources, including landscaping, biological, and water resources



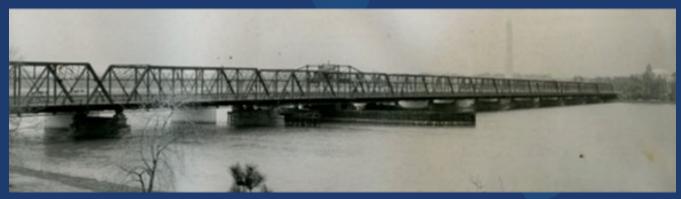


### Long Bridge Project Rail Bridges





### History of Rail Bridges



Historic Image of Long Bridge from Virginia Shoreline

From District Department of Transportation, "14th Street Bridge Complex (Various)," DDOT Historic Collections, accessed April 28, 2022, https://ddotlibrary.omeka.net/items/show/39#lg=1&slide=124.



Historic Note: Existing 1904 Long Bridge was a truss bridge, originally painted red



Historic Image of 14<sup>th</sup> Street and Long Bridge Rail Corridor Source: District Department of Transportation (DDOT) Library, DDOT Historic Collection



Existing GW Parkway Rail Bridge (1904)





### George Washington Memorial Parkway: Proposed Rail Bridge



Note: Bicycle-Pedestrian Bridge not shown





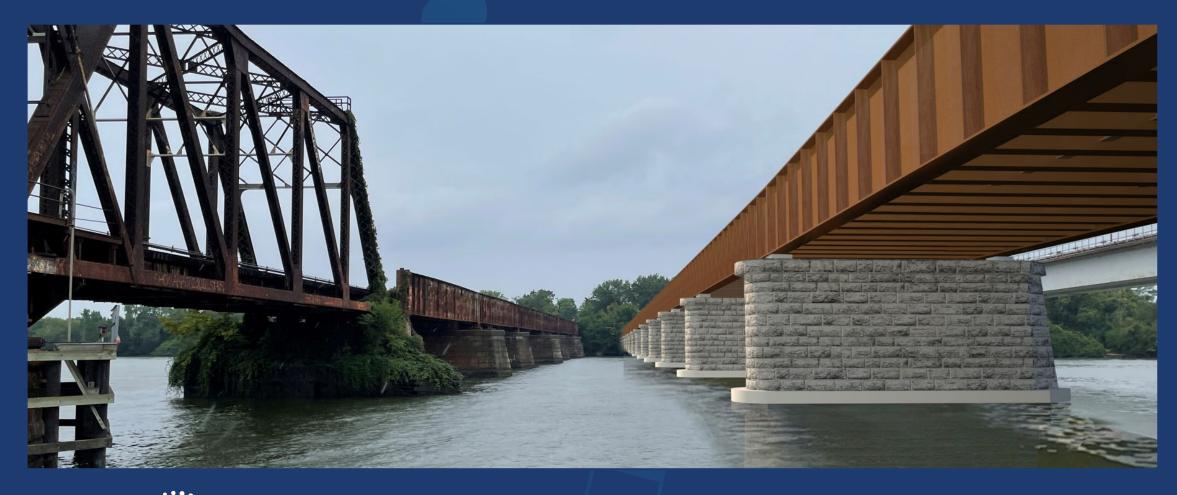
### **Potomac River Crossings**







### Potomac River: Proposed Rail Bridge







### East & West Potomac Parks: I-395 Rail Bridge



### **Existing Conditions**





District Department of Transportation, "14th Street Bridge Complex (Various)," DDOT Historic Collections, accessed May 10, 2022, https://ddotlibrary.omeka.net/items/show/39



### East & West Potomac Parks: Proposed I-395 Rail Bridge



Please note: Proposed landscaping is not shown.





### East & West Potomac Parks: Ohio Drive SW (East) Rail Bridge



### **Existing Conditions**







### East & West Potomac Parks: Proposed Ohio Drive SW (East) Rail Bridge



Please note: Proposed landscaping is not shown.





### East and West Potomac Parks: Washington Channel Rail Bridge

**Existing Conditions** 











### East and West Potomac Parks Proposed Washington Channel Rail Bridge







### Maine Avenue SW



**Existing Conditions** 







### Maine Avenue SW Proposed Rail Bridge



Note: Pedestrian bridge not shown.

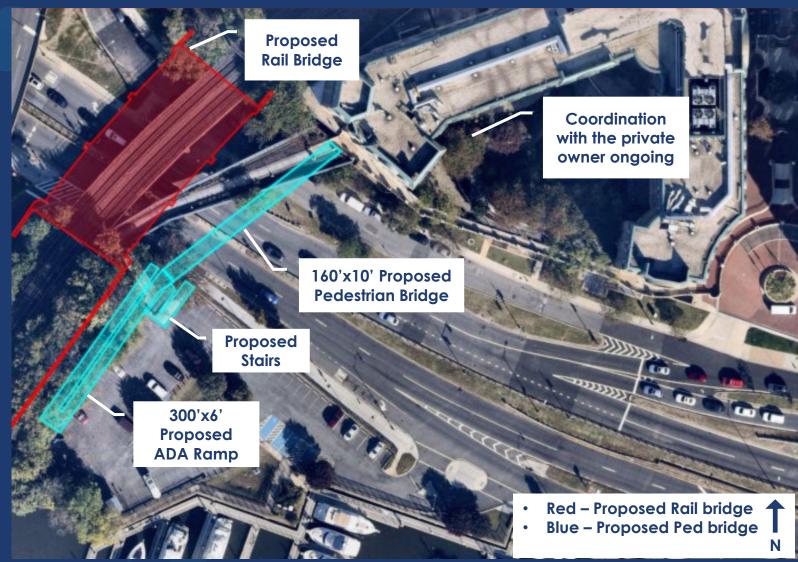




### Maine Avenue SW Crossings



- Existing rail and pedestrian bridges to be removed and replaced
- Existing pedestrian bridge is privately owned by the Portals Development Associates Limited Partnership and serves Republic Properties and the Mandarin Oriental Hotel



## Long Bridge Project Landscaping & Retaining Walls





### Wall A

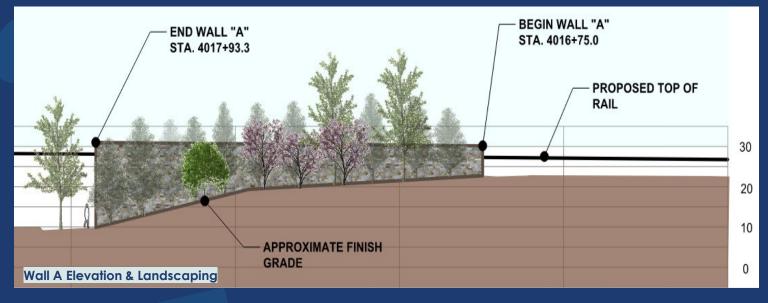


### **Retaining Walls Design Intent**

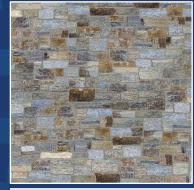
- Design vocabulary within the GW Parkway will be consistent with Parkway design vernacular
- Approximate, without replicating, the existing historic rail corridor not the surrounding highway corridor.

### **Landscape Design Intent**

- Restore historic landscapes planned in parkland around rail corridor
- Screen existing and proposed rail bridges and walls
- Bicycle-Pedestrian Ramp landscaping design to address safety concerns and maximize visibility of users







Proposed Stone Cladding at GW Parkway- Broken Ashlar





### Walls C, F, G, H, and I



### **Retaining Walls Design Intent**

- Granite block masonry stone cladding proposed
- Approximate, without replicating, the existing historic rail corridor not the surrounding highway corridor.

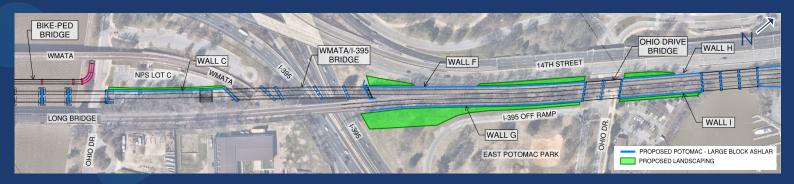
### Landscape Design Intent

- Restore historic landscapes planned in parkland around rail corridor
- Screen existing and proposed rail bridges and walls

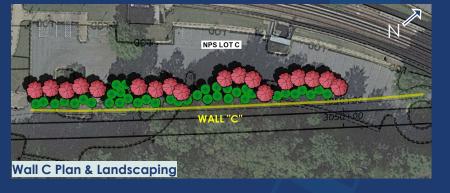


**Proposed Stone Cladding** 











# Long Bridge Project Potomac River Bicycle-Pedestrian Bridge





### **Existing Bicycle-Pedestrian Network**





### Potomac River Bicycle-Pedestrian Bridge

### **Existing Conditions**





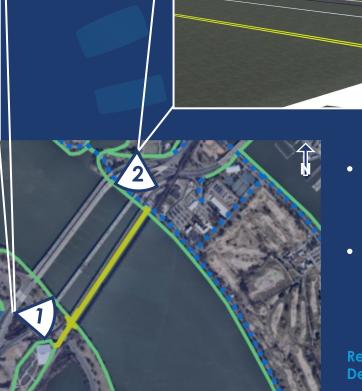
### Potomac River Bicycle-Pedestrian Bridge



**Proposed Connections to Existing Network** 



 Ramps and stairs will connect the bridge to the Mount Vernon Trail, bridge continues to Long Bridge Park





- Ramp from bridge to Ohio Drive SW (West) will end in a Tintersection
- Prefabricated truss and pier shapes will match the bridge



Renderings are for illustration purposes only.

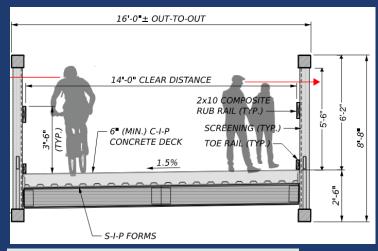
Design details will be refined based on comments.

### Potomac River Bicycle-Pedestrian Bridge



### **Design Intent**

- A safe, effective pedestrian and bike crossing
- Low profile and simple structure that blends with the surrounding bridges
- Truss size is based on span length determined by pier alignment
- Top chord is placed above eye-level



Bicycle-Pedestrian Bridge Transverse Section







### **Share your Questions & Comments**

**TONIGHT:** Use the Live Event Q&A box

June 22-July 11, 2022: surveymonkey.com/r/LongBridgeSummer2022



Scan to Access Project Survey

### **Stay Connected**

#### **VPRA Social Media**

LinkedIn – Virginia Passenger Rail Authority (VPRA) Twitter – @VAPassengerRail Facebook – Virginia Passenger Rail Authority

Review project information: <a href="mailto:transformingrailva.com/projects/long-bridge/">transformingrailva.com/projects/long-bridge/</a>

Submit comments/questions: <a href="https://transformingrailva.com/get-involved/contact/">https://transformingrailva.com/get-involved/contact/</a>

Sign up for VPRA Emails to be notified of future events: https://vapassengerrailauthority.org/



