



WELCOME TO THE LONG BRIDGE PROJECT

Public Meeting

Thursday, December 14, 2017

Open House Format: 4:00 p.m. to 7:00 p.m.

Formal Presentations: 4:30 p.m. and 6:00 p.m.

(same presentation at both times)



Project Overview



What is the Project?

- The Federal Railroad Administration (FRA) and the District Department of Transportation (DDOT) are preparing an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA).
- 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 of Columbia.
- The two-track Long Bridge was built in 1904 and is owned and maintained by CSX Transportation (CSXT).
- Virginia Railway Express (VRE) and Amtrak also currently use Long Bridge.
- Long Bridge is a contributing element to the East and West Potomac Parks Historic District.

Project Overview

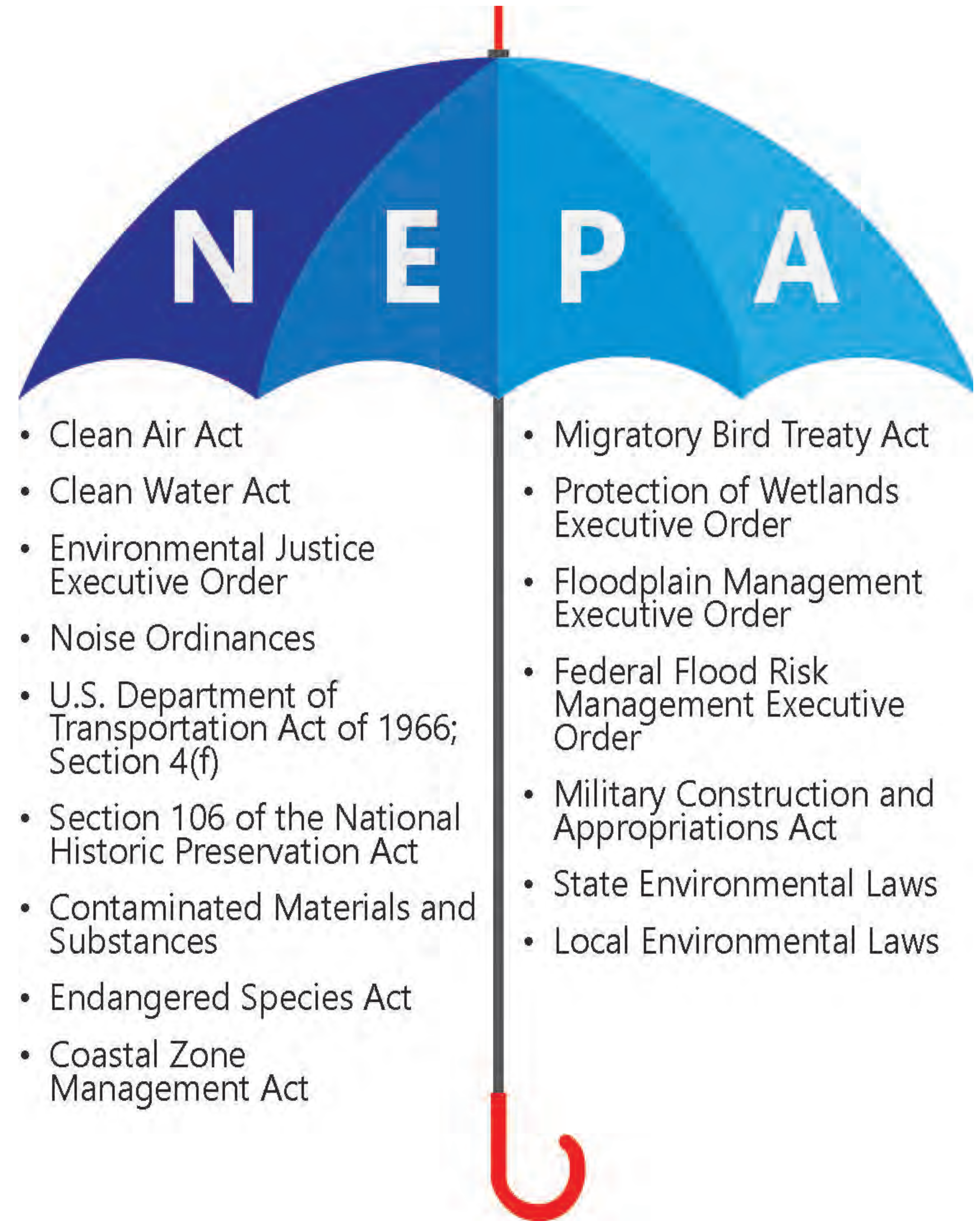
What is NEPA?

- The National Environmental Policy Act of 1969 (NEPA) requires Federal agencies to assess the environmental effects of their proposed actions prior to making decisions.
- NEPA encourages integrated compliance with other environmental laws so that a proposed project's impacts are comprehensively evaluated before implementation.
- To comply with NEPA, FRA and DDOT are preparing an EIS that will be made available for public review and comment.

What is Section 106?

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to:

- Consider and determine the direct AND indirect effects of a proposed undertaking on historic properties.
- Consult with State Historic Preservation Offices, Tribes, and other consulting parties.
- Avoid, resolve, or mitigate adverse effects to historic properties.
- See: 36 CFR Part 800 (Protection of Historic Properties).



- Clean Air Act
- Clean Water Act
- Environmental Justice Executive Order
- Noise Ordinances
- U.S. Department of Transportation Act of 1966; Section 4(f)
- Section 106 of the National Historic Preservation Act
- Contaminated Materials and Substances
- Endangered Species Act
- Coastal Zone Management Act
- Migratory Bird Treaty Act
- Protection of Wetlands Executive Order
- Floodplain Management Executive Order
- Federal Flood Risk Management Executive Order
- Military Construction and Appropriations Act
- State Environmental Laws
- Local Environmental Laws

Project Area Update

Previous Project Area Limits



Updated Project Area Limits



- The Project connects logical termini, has independent utility even if no additional transportation improvements in the area are made, and does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements in the area.
- Project limits updated based on:
 - All changes to infrastructure would be between Rosslyn (RO) and L'Enfant (LE) interlockings.
 - RO Interlocking provides transition between the Long Bridge Project and the separate and independent DC to Richmond Southeast High-Speed Rail (DC2RVA) project.
 - LE Interlocking provides transition between the Long Bridge Project and the separate and independent VRE projects that include the addition of a 4th track between LE and Virginia (VA) interlockings near 3rd Street SW.

New limits from RO Interlocking near Long Bridge Park in Arlington, Virginia to LE Interlocking near 10th Street SW in the District of Columbia.

Purpose and Need

The purpose of the Proposed Action is to provide **additional long-term railroad capacity** 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.

Train Operator	Current # of Trains per Day	2040 # of Trains per Day	Percent Increase
VRE	34*	92	171%
MARC	0	8	--
Amtrak	24	44	83%
CSXT	18	42	133%
Norfolk Southern	0	6	--
Total	76	192	

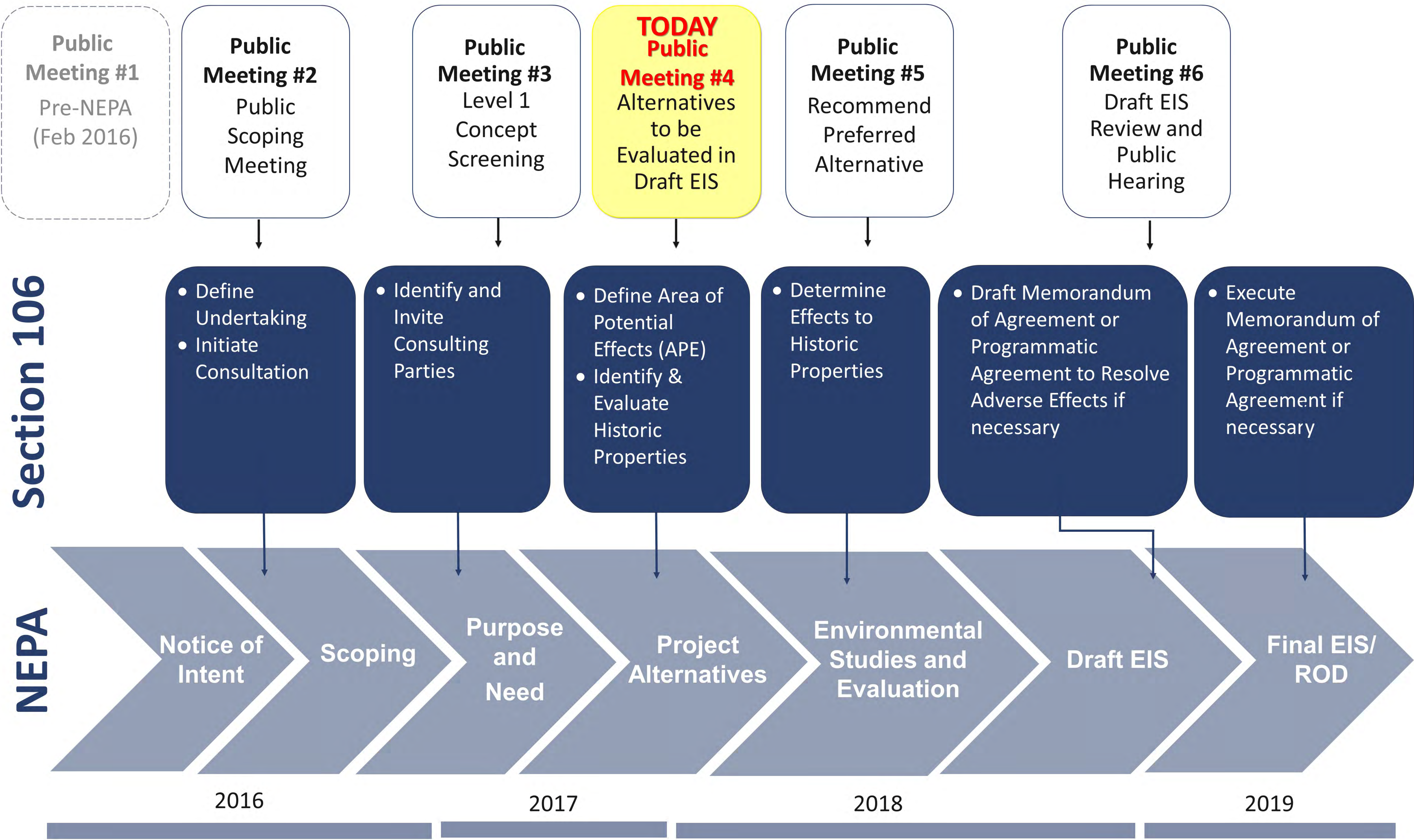
* The Fall 2016 public meeting materials stated that 32 VRE trains travel Long Bridge per day. This number did not account for one non-revenue round-trip, which brings the total to 34 trains per day.

On Time Performance		
	Current (Observed)	No Action (2040)
Commuter	91%	25%
Intercity Long Distance	70%	12%
Intercity Regional		7%

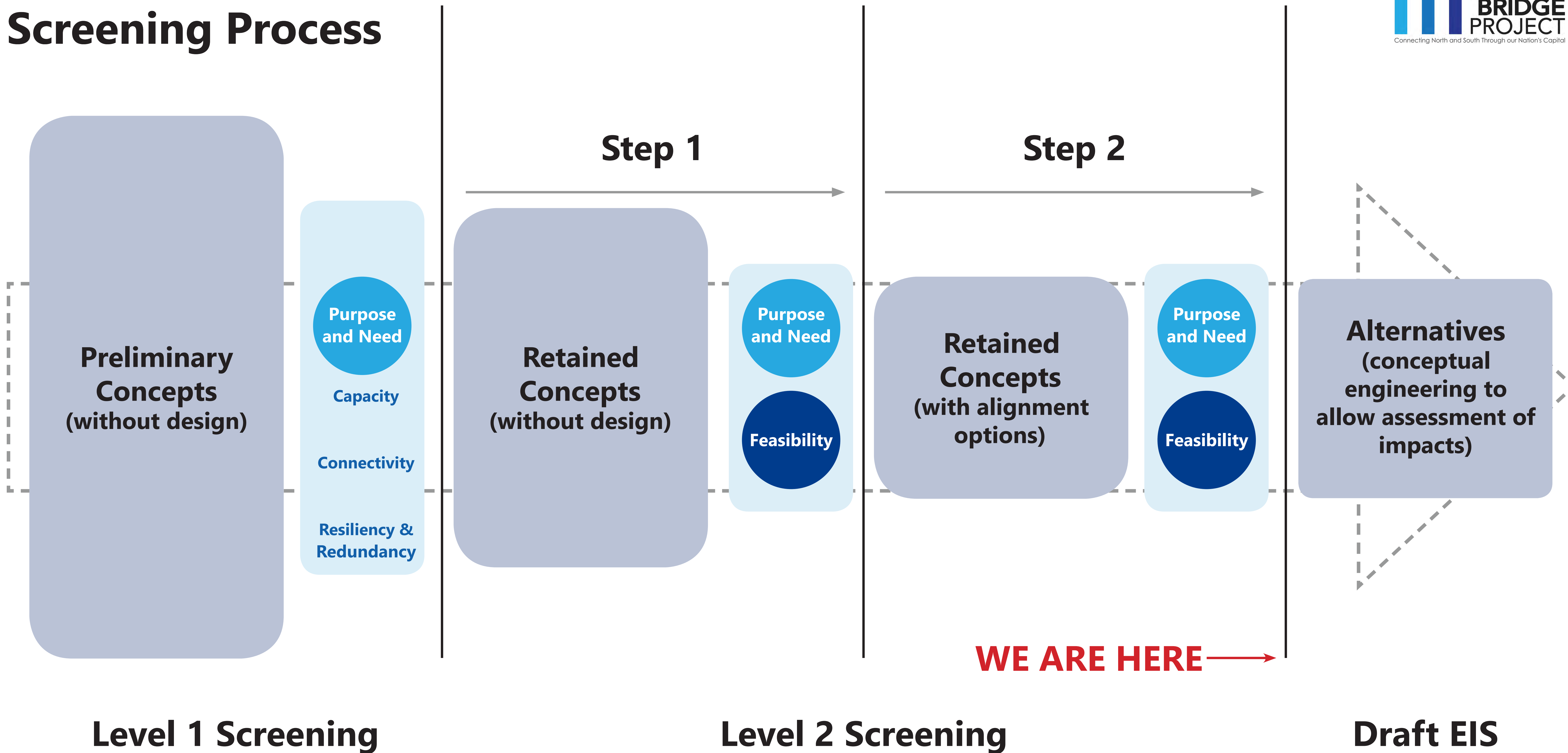
* The Fall 2016 public meeting materials reported different on-time performance from what is reported here for two reasons:

- (1) The Current percentage is now based on observed performance, while previously the percentage was based on modeling results; and
- (2) The No Action (2040) on-time performance has changed due to revisions in the model related to the tracks around L'Enfant Plaza Station.

Section 106 and NEPA Coordination



Screening Process



**Feasibility of bike-pedestrian crossing opportunities continue to be evaluated, but were not screened as part of the Level 2 Screening using Purpose and Need*

Purpose and Need

Capacity: Eliminates operational bottleneck and prevents development of future bottleneck.

- Project area (existing) is 2 tracks with 3-track approaches at RO Interlocking in Virginia and LE Interlocking in the District.
- Current projects, as well as medium- and long-term plans, would expand railroad capacity in Virginia and the District.
- New investment should not preclude additional railroad capacity to satisfy long-term needs.



Network Connectivity and Resiliency

& Redundancy: Improves ability to maintain normal railroad operations and network connectivity during planned maintenance and unanticipated outages.

- In order to maintain normal railroad operations during construction and later during planned maintenance or unanticipated outages, at least two tracks must remain in service across the river.
- The Long Bridge corridor serves as a critical link in the freight, commuter, and passenger railroad networks.
- If service across the bridge is interrupted:
 - Freight trains must divert to next closest crossing in Harpers Ferry, West Virginia;
 - VRE service between Virginia and the District is severed; and
 - Amtrak service between the Northeast Corridor and the Southeast Corridor is halted.

- **Provides 25 feet clearance between bridges over the river**

- Structures over river require periodic maintenance and inspection.
- 25 feet clearance enables vessels to fit between bridges for access.

- **Does not preclude future replacement or rehabilitation of existing bridge**

- Existing bridge will likely need rehabilitation or replacement before newer infrastructure.
- Must allow access to existing structure.

- **Does not require interlocking infrastructure over the river**

- Increased risk of derailment when making crossing movements.
- No interlocking infrastructure permitted on bridge, to minimize likelihood of derailments over water.

- **Avoids DoD Facility**

- Must preserve construction and maintenance access to railroad by staying 10 feet from the fence line of the facility.

Level 2, Step 1 Concept Screening Results

Concept	Concept 3	Concept 5	Concept 8
Number of Tracks	3 tracks	4 tracks	5 tracks
Purpose and Need			
Eliminates/prevents operational bottleneck	✗	✓	✗
Improves ability to maintain normal railroad operations and network connectivity during planned maintenance and unanticipated outages	✗	✓	✓
Feasibility			
Provides 25 feet clearance between bridges over the river	✓	✓	✓
Does not preclude future replacement or rehabilitation of existing bridge	✓	✓	✓
Does not require interlocking infrastructure over the river	✓	✓	✗
Avoids DoD Facility	✓	✓	✓

✗ indicates a fatal flaw

Retained for further analysis

Concept 3 (3 tracks)

- Would create a long-term bottleneck because it would not provide 4 tracks.
- Would not allow 2 tracks to remain in service across the river when planned maintenance or unanticipated outages occur on the middle track.

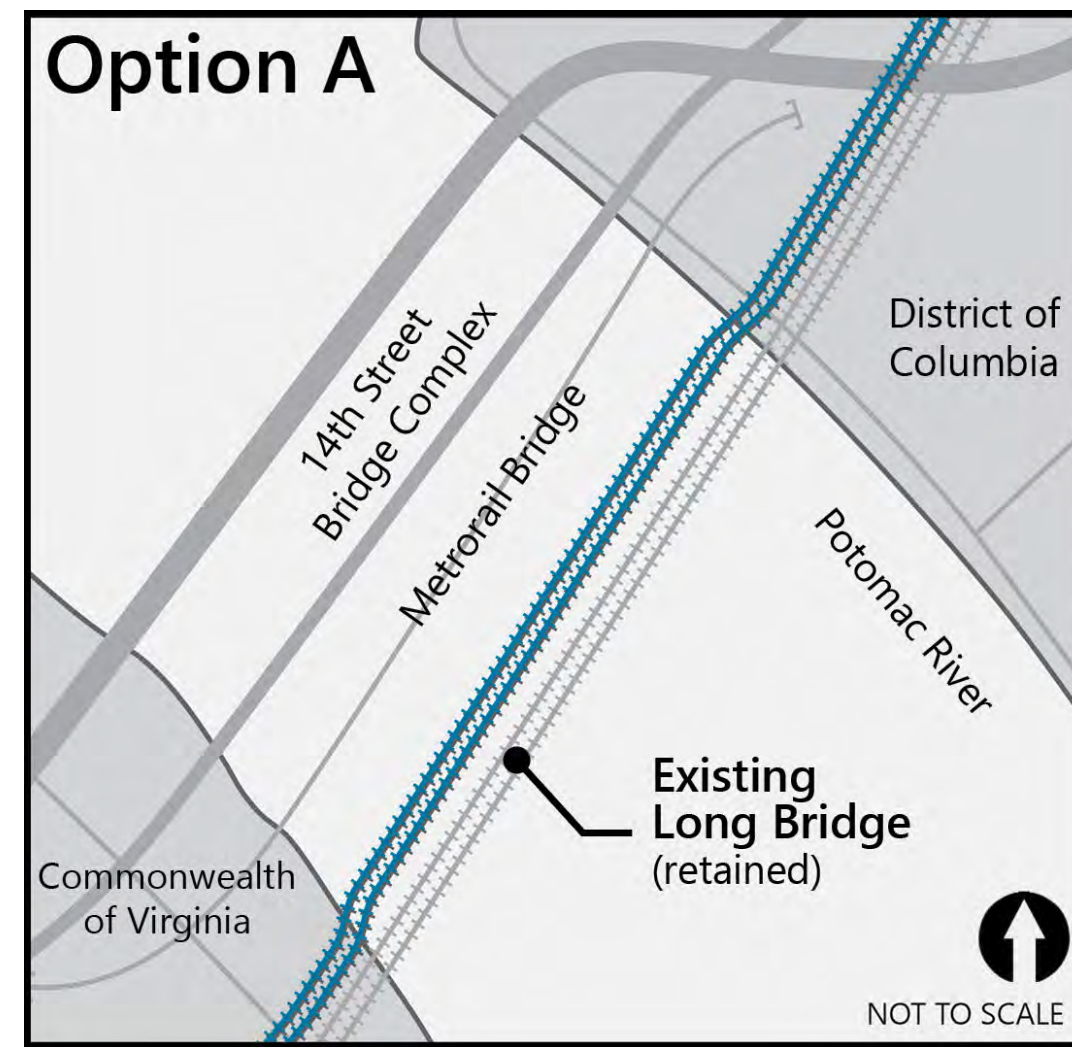
Concept 5 (4 tracks) meets Purpose and Need and is feasible.

Concept 8 (5 tracks)

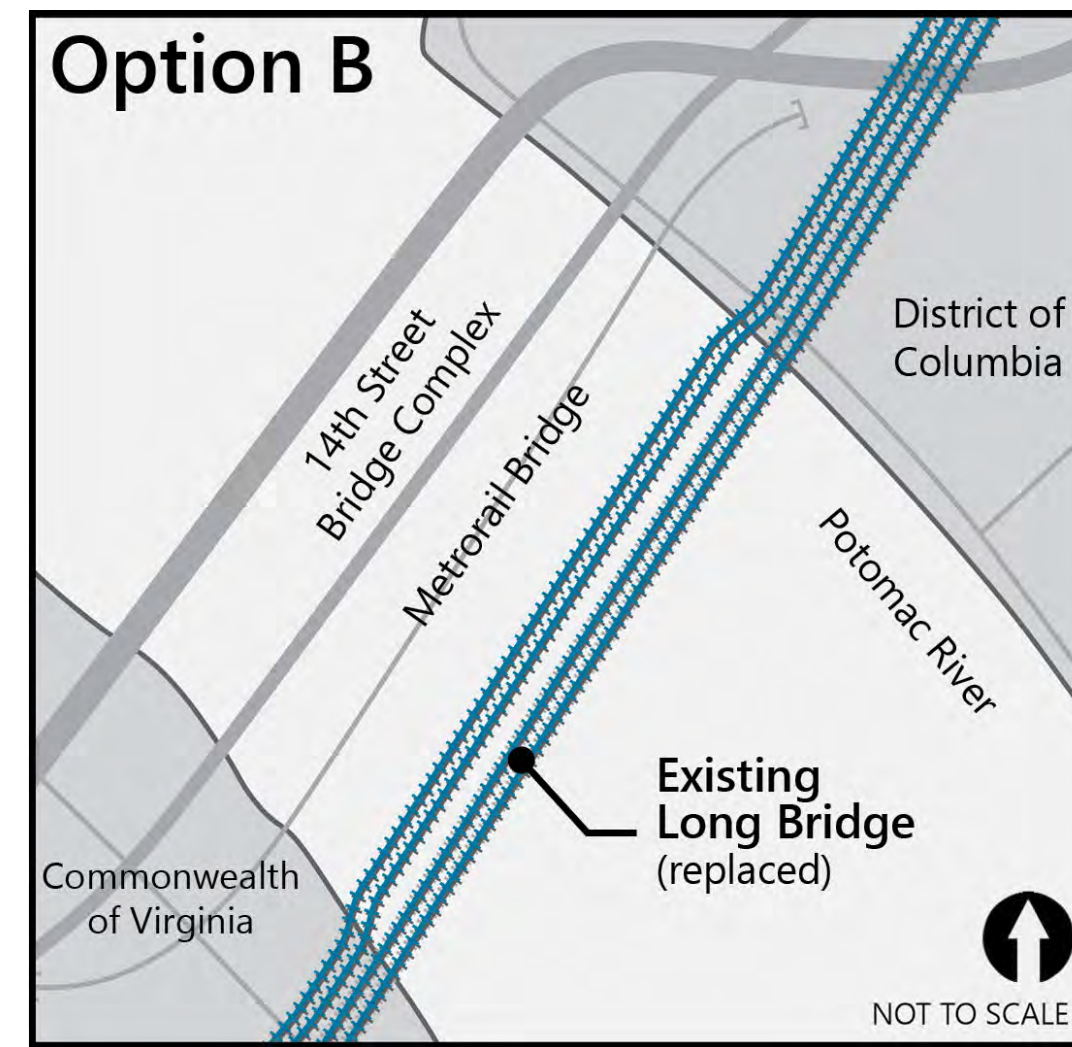
- Would create a new operational bottleneck by requiring trains using the 5th track to switch back to one of the 4 tracks on either side of the bridge.
- Would require interlocking infrastructure to extend onto the Long Bridge on the District side of the river.

**Feasibility of bike-pedestrian crossing opportunities continue to be evaluated, but were not screened as part of the Level 2 Screening using Purpose and Need*

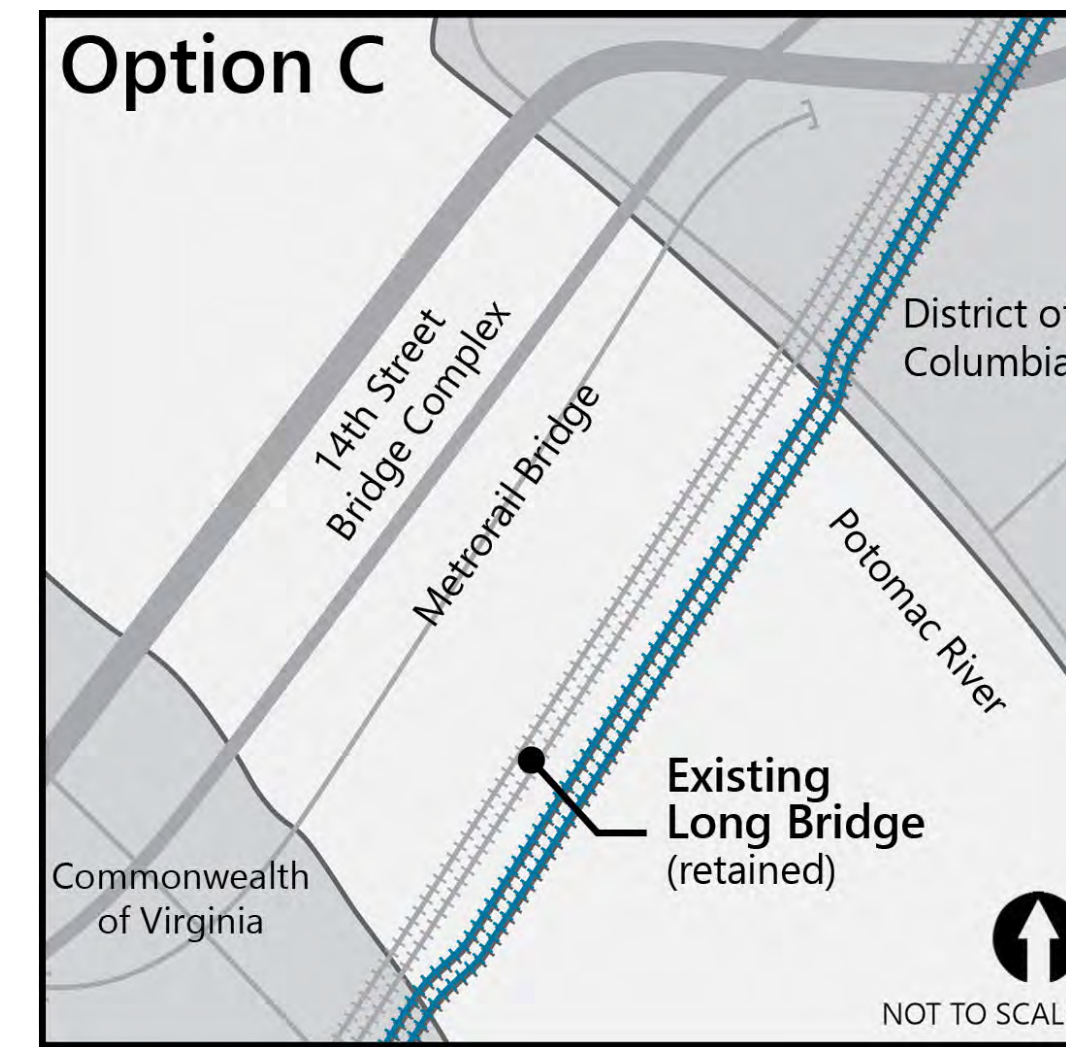
4-Track Alignment Options



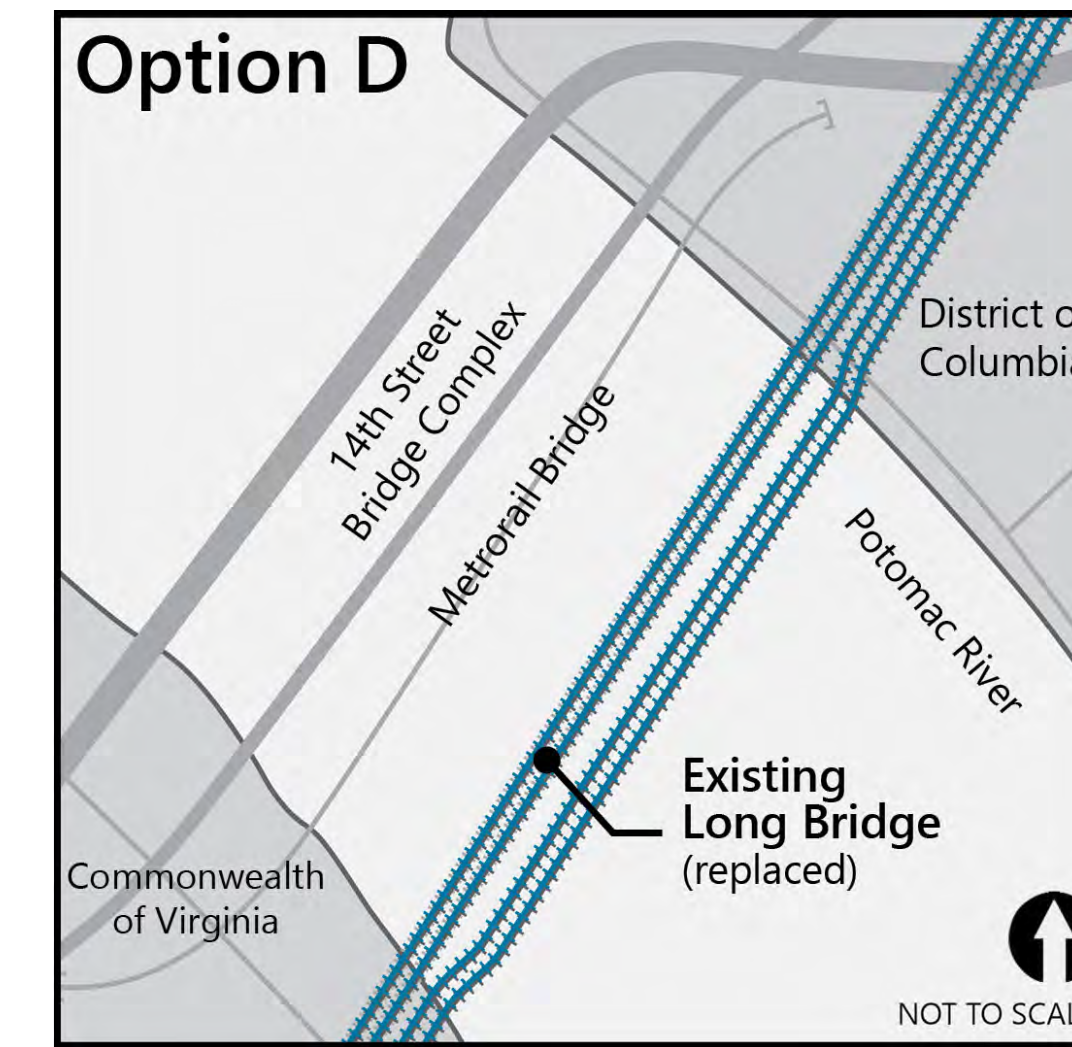
- New 2-track bridge upstream of existing bridge
- Retain existing bridge



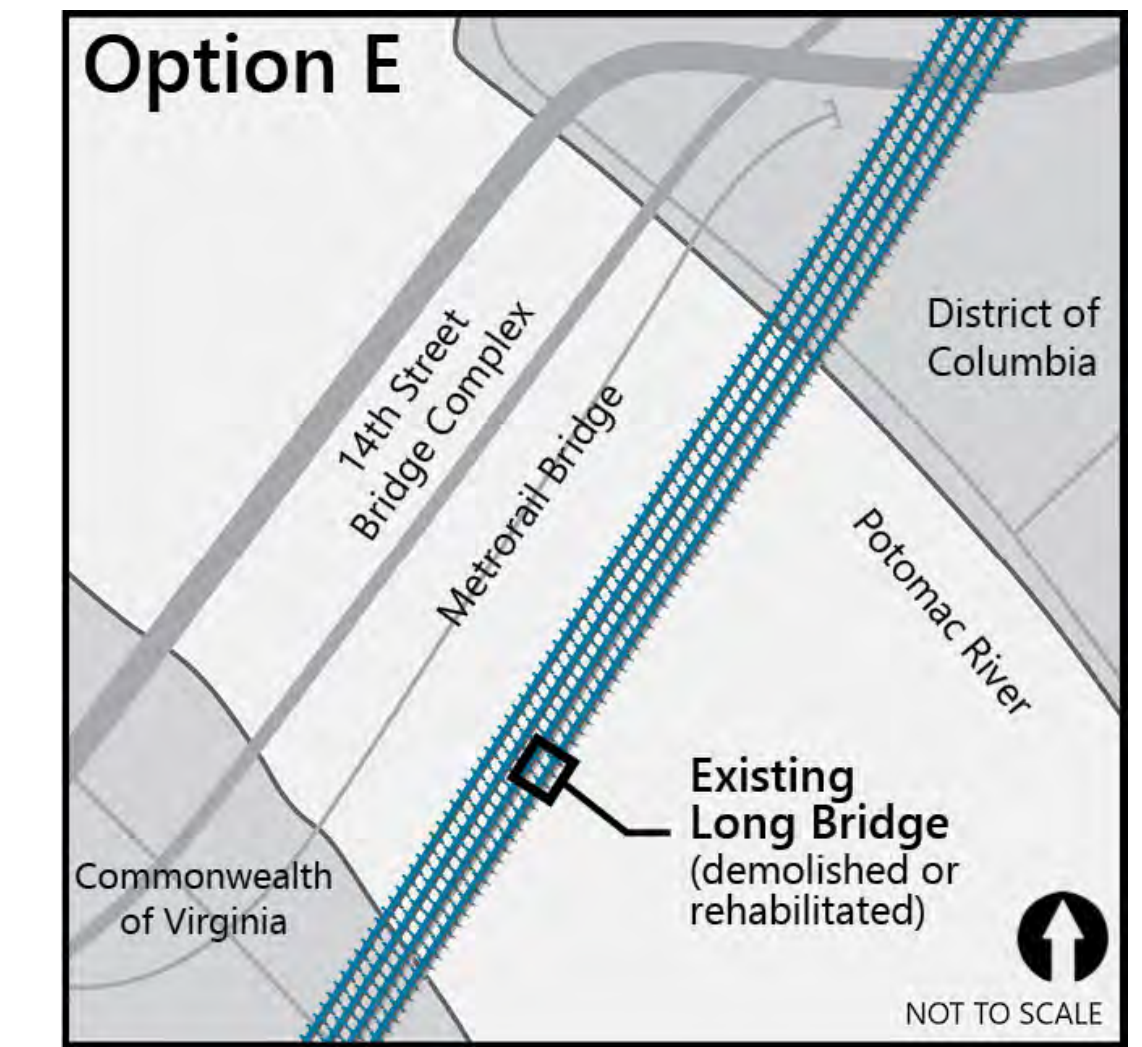
- New 2-track bridge upstream of existing bridge
- Replace existing bridge



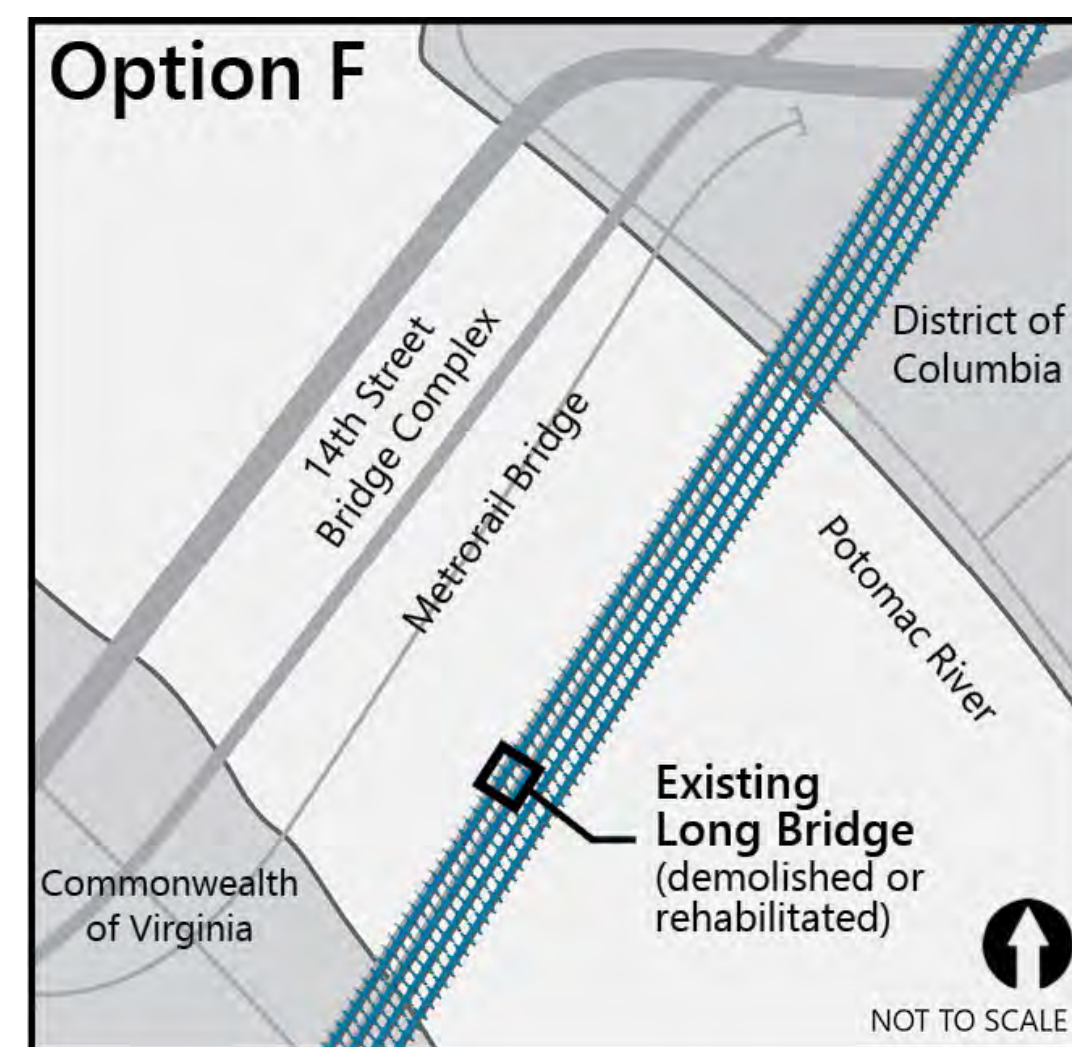
- New 2-track bridge downstream of existing bridge
- Retain existing bridge



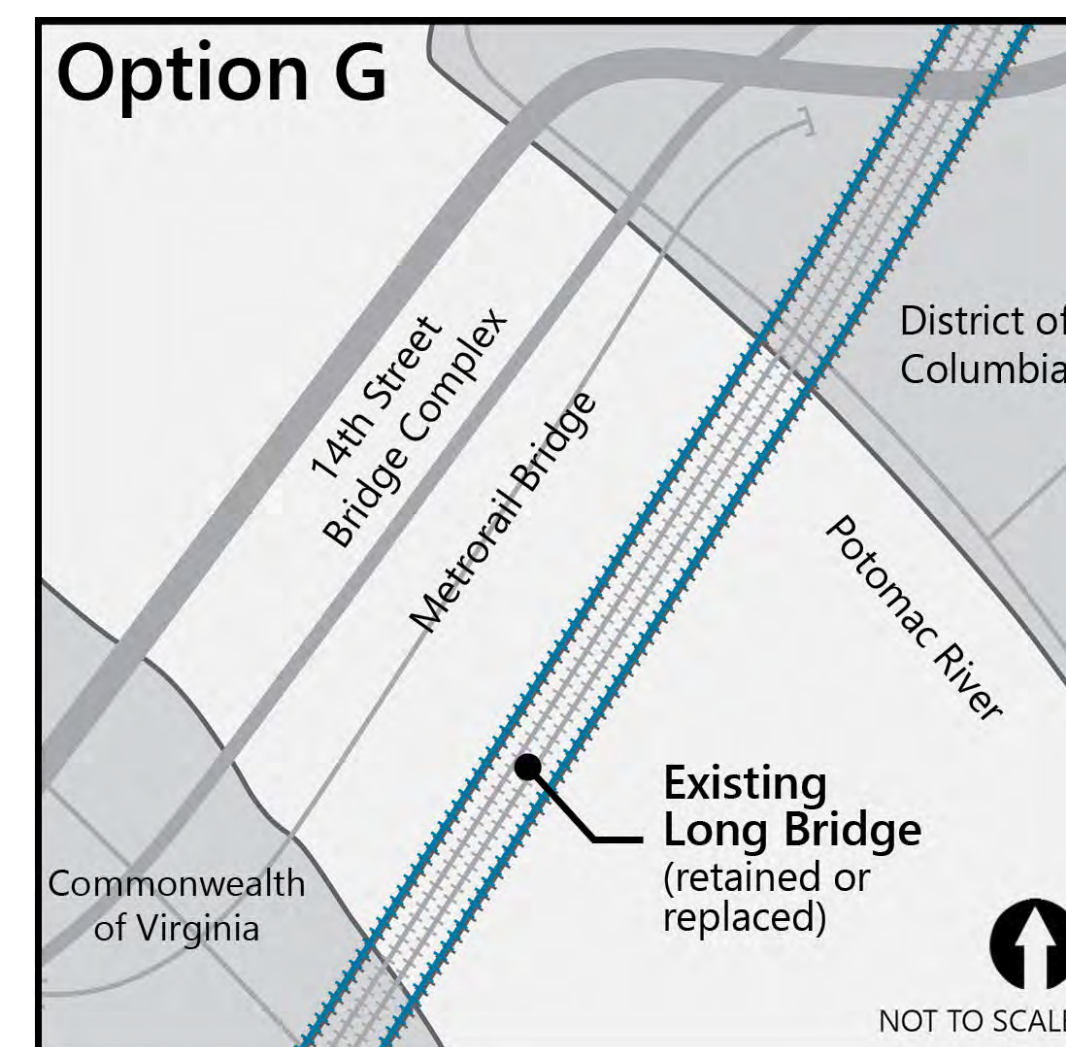
- New 2-track bridge downstream of existing bridge
- Replace existing bridge



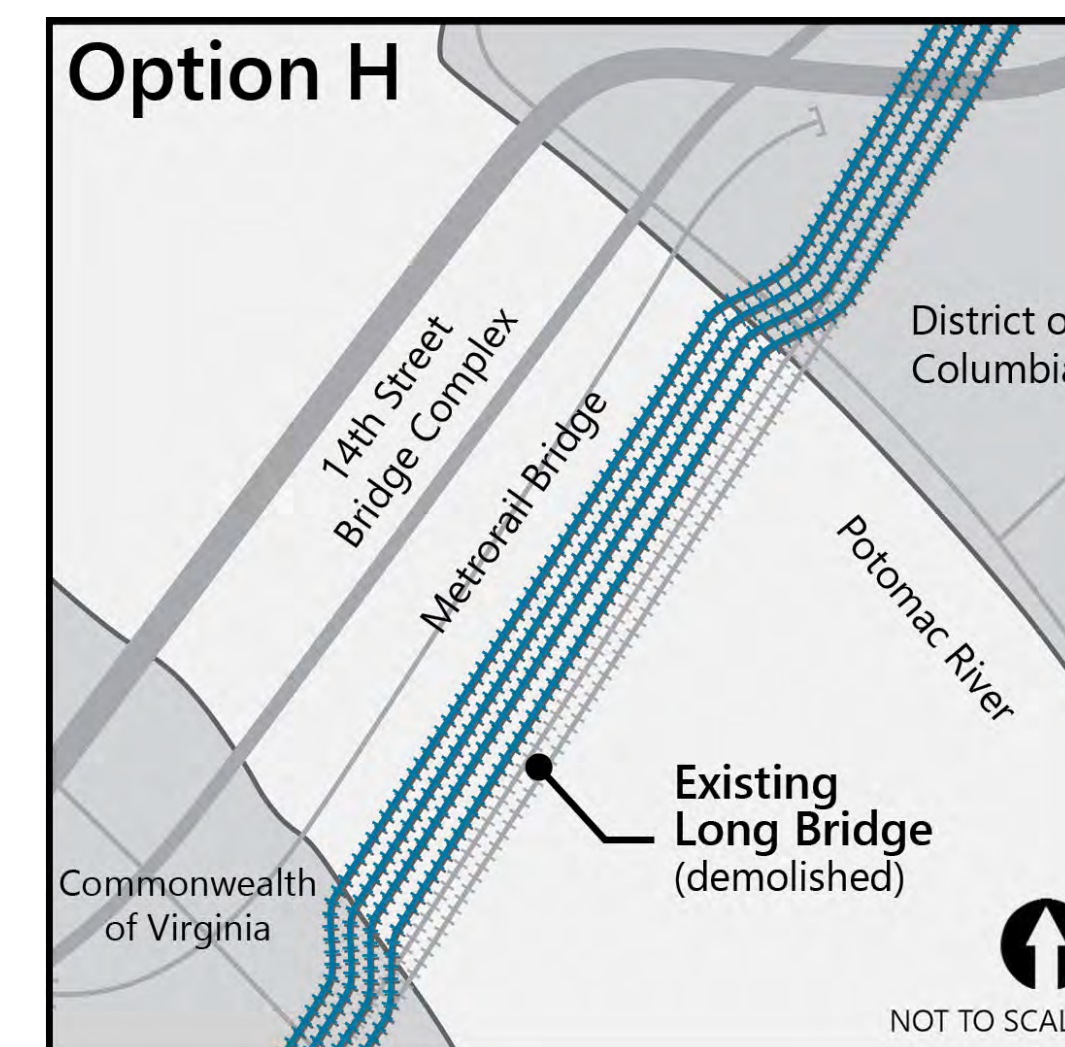
- New 2-track bridge upstream of existing bridge
- Demolish or rehabilitate existing bridge
- Expand new bridge to 4 tracks, overlapping footprint of previous bridge



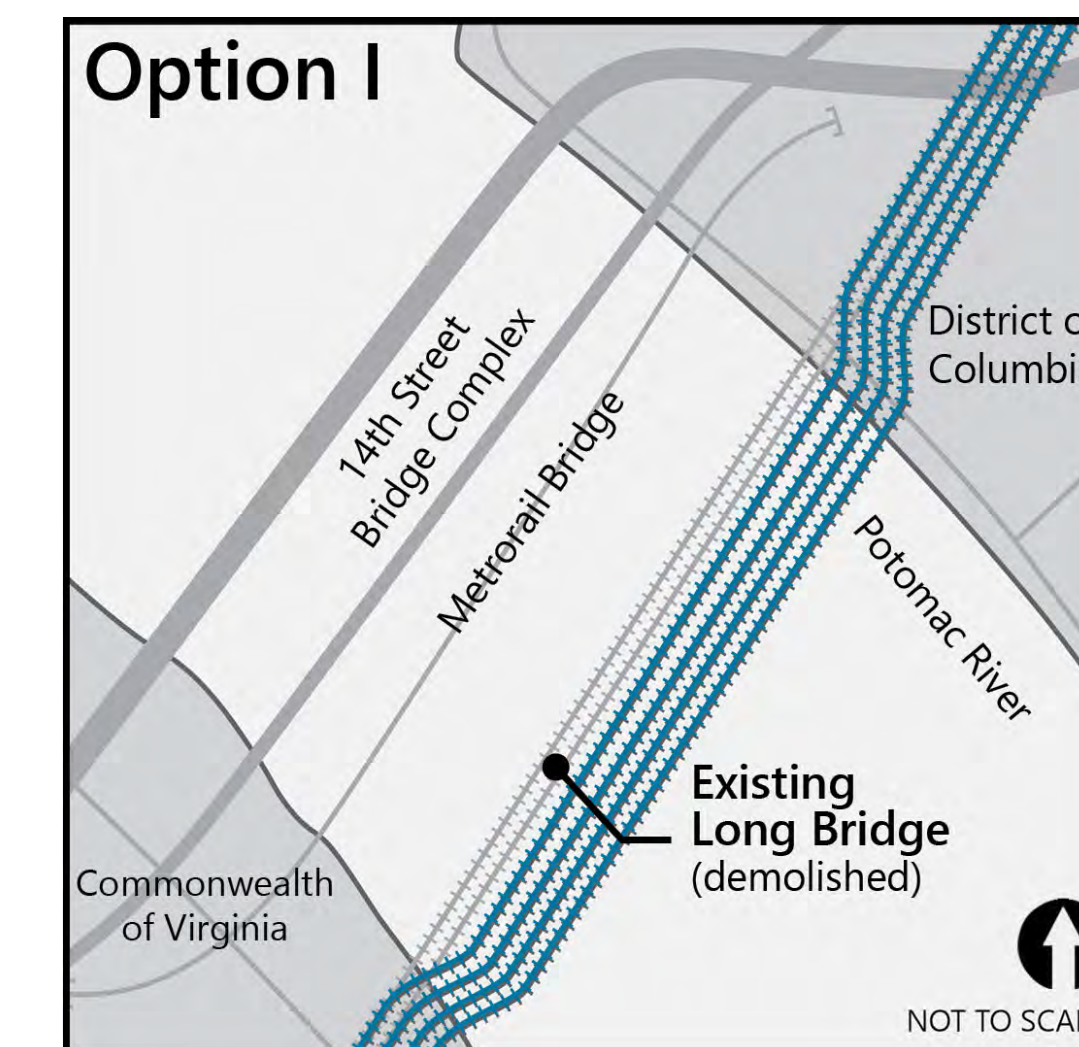
- New 2-track bridge downstream of existing bridge
- Demolish or rehabilitate existing bridge
- Expand new bridge to 4 tracks, overlapping footprint of previous bridge



- New 1-track bridge on either side of existing bridge
- Retain or replace existing bridge

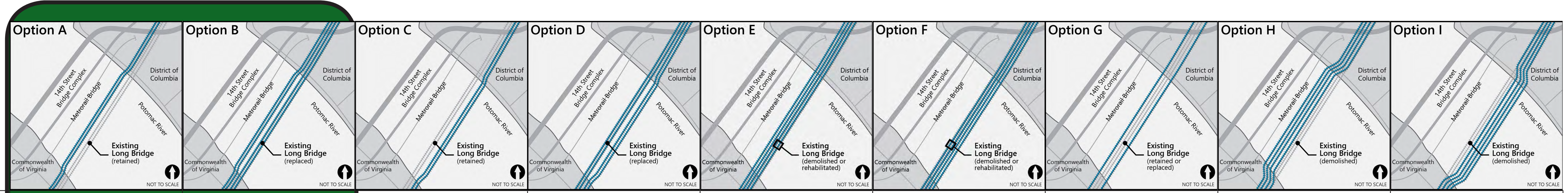


- New 4-track bridge upstream of existing bridge
- Demolish existing bridge



- New 4-track bridge downstream of existing bridge
- Demolish existing bridge

Level 2, Step 2 Concept Screening Results



Option	A	B	C	D	E	F	G	H	I
Purpose and Need									
Eliminates/prevents operational bottleneck	✓	✓	✓	✓	✓	✓	✓	✓	✓
Improves ability to maintain normal railroad operations and network connectivity during planned maintenance and unanticipated outages	✓	✓	✓	✓	✗	✗	✓	✗	✗
Feasibility									
Provides 25 feet clearance between bridges over the river	✓	✓	✓	✓	✓	✓	✓	✓	✓
Does not preclude future replacement or rehabilitation of existing bridge	✓	✓	✓	✓	✓	✓	✗	✓	✓
Does not require interlocking infrastructure over the river	✓	✓	✓	✓	✓	✓	✓	✓	✓
Avoids DoD Facility	✓	✓	✗	✗	✓	✗	✓	✓	✗

✗ indicates a fatal flaw

Retained

**Feasibility of bike-pedestrian crossing opportunities continue to be evaluated, but were not screened as part of the Level 2 Screening using Purpose and Need*

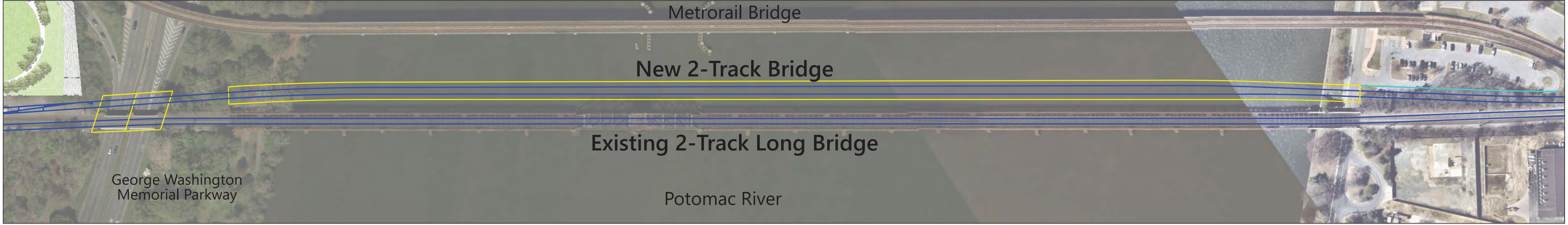
Proposed Action Alternative A

4-track alignment; new 2-track bridge upstream (retain existing 2-track bridge)

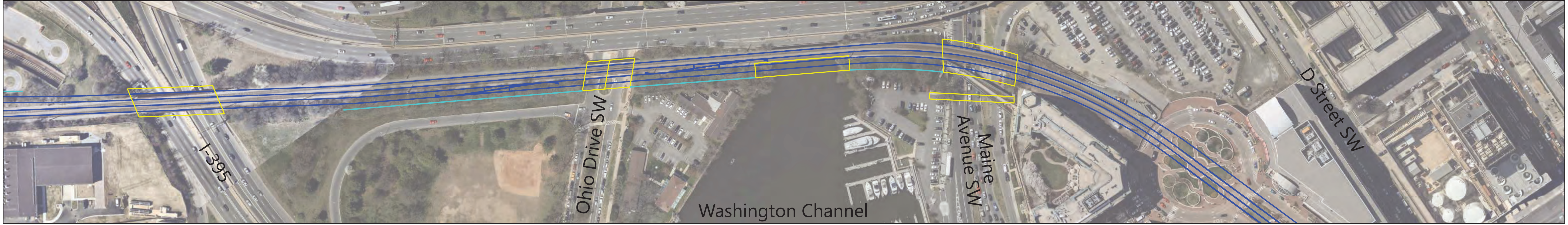
Track Alignment in Virginia



Track Alignment Crossing the Potomac River

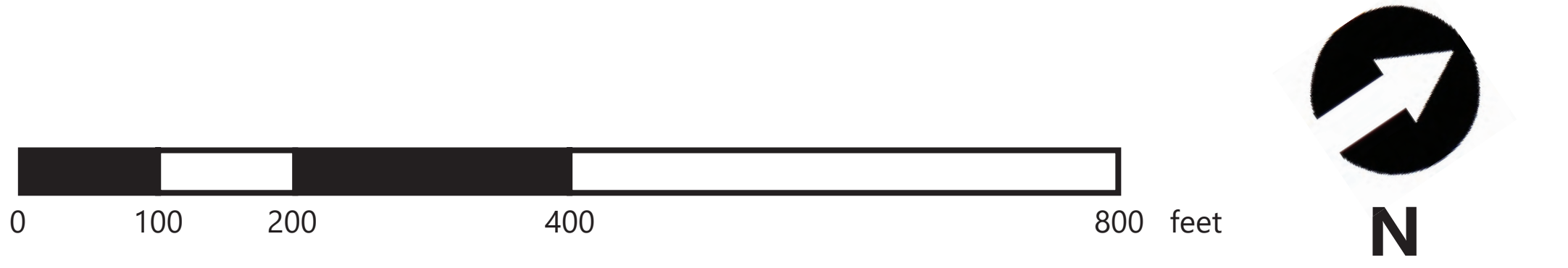


Track Alignment in the District



Legend

- Track Alignment (centerlines)
- Retaining Walls
- New Bridge Structures



0 100 200 400 800 feet

N

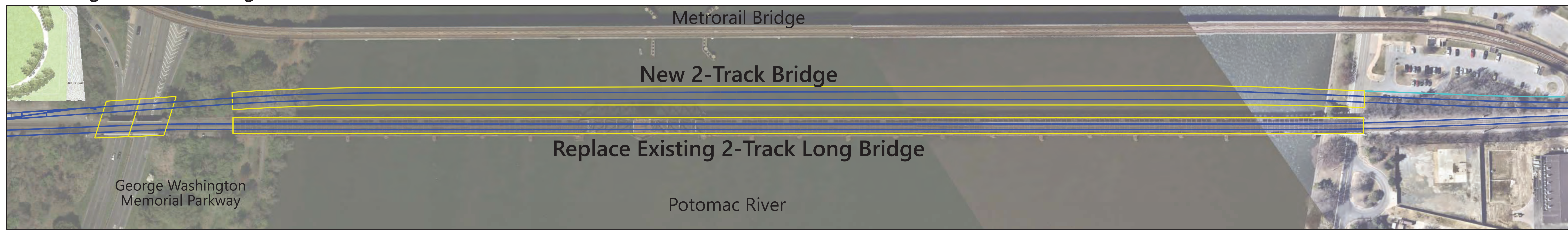
Proposed Action Alternative B

4-track alignment; new 2-track bridge upstream (replace existing 2-track bridge)

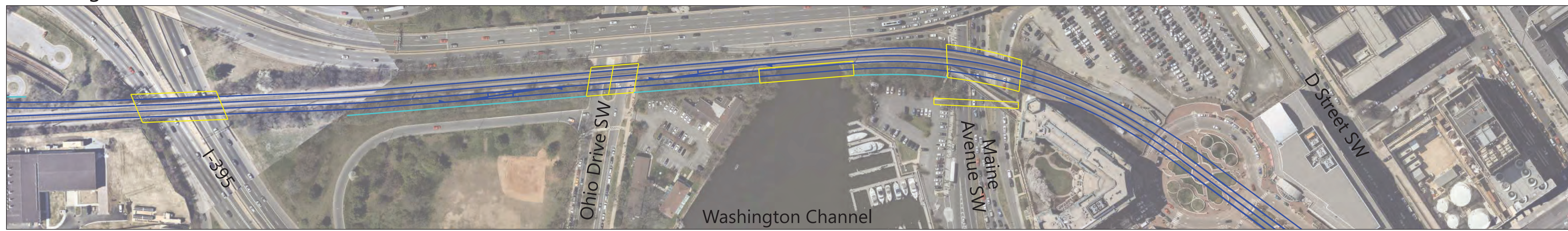
Track Alignment in Virginia



Track Alignment Crossing the Potomac River

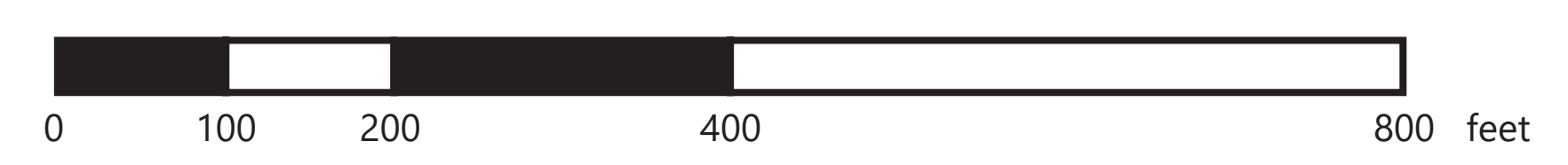


Track Alignment in the District



Legend

- Track Alignment (centerlines)
- Retaining Walls
- New Bridge Structures



Bicycle and Pedestrian Crossing Opportunities



- Although not part of the Proposed Action 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 path 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.

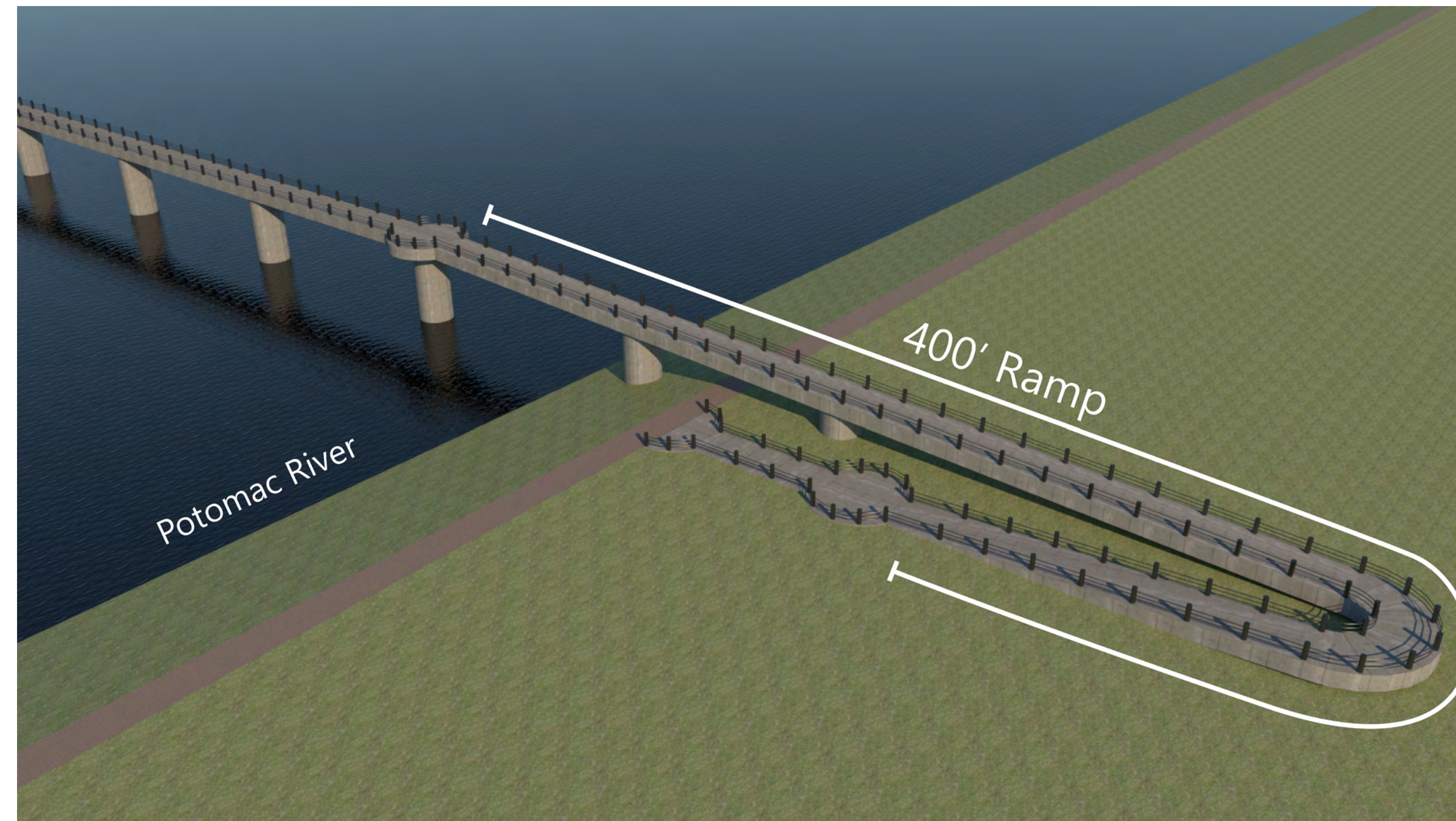
Each bike-pedestrian option could work with either Proposed Action Alternative

**Feasibility of bike-pedestrian crossing opportunities continue to be evaluated, but were not screened as part of the Level 2 Screening using Purpose and Need*

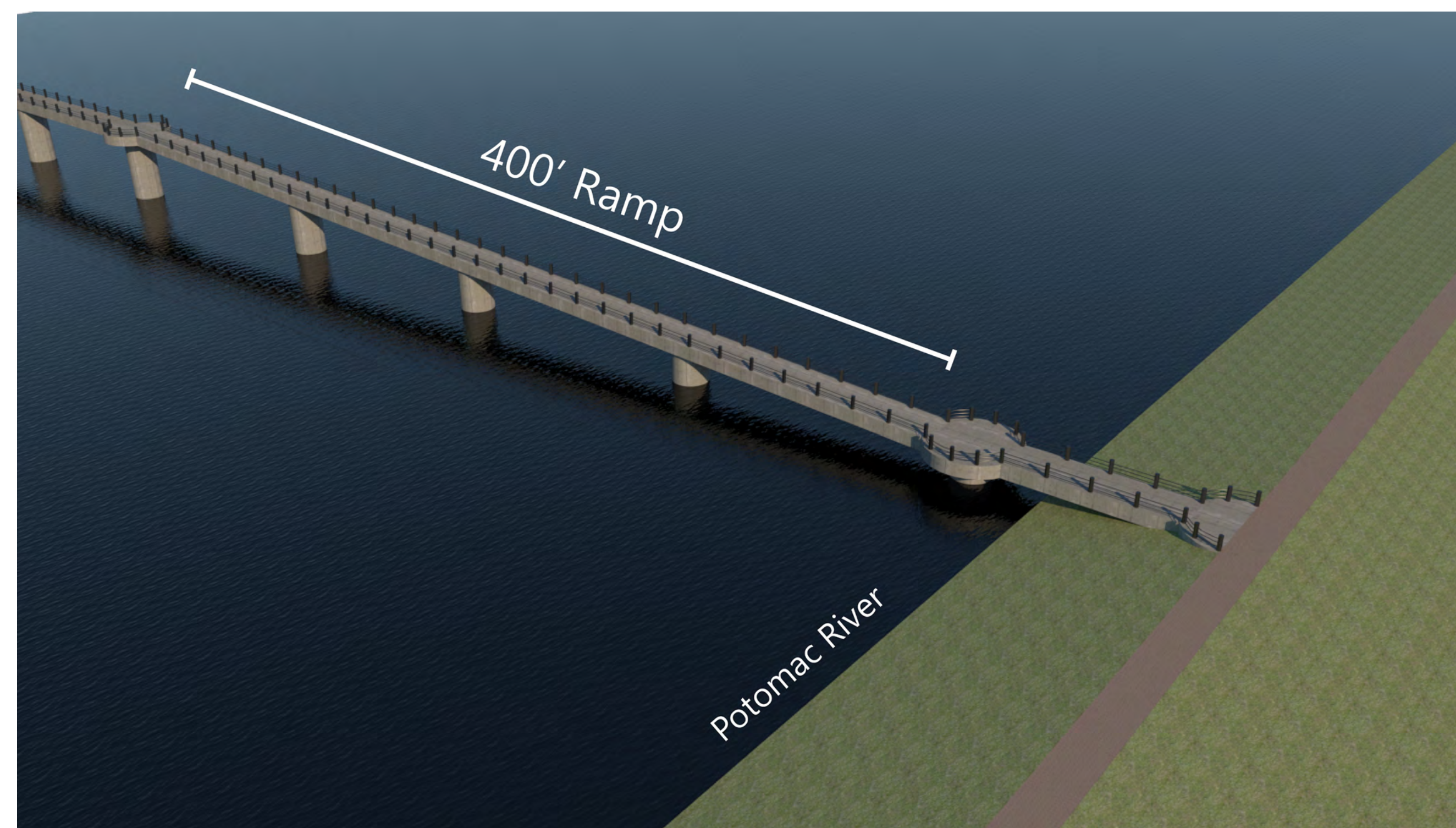
Bicycle and Pedestrian Crossing Ramps

Potential Ramp Types

Landing with Ramp over Land



Landing with Ramp over Water

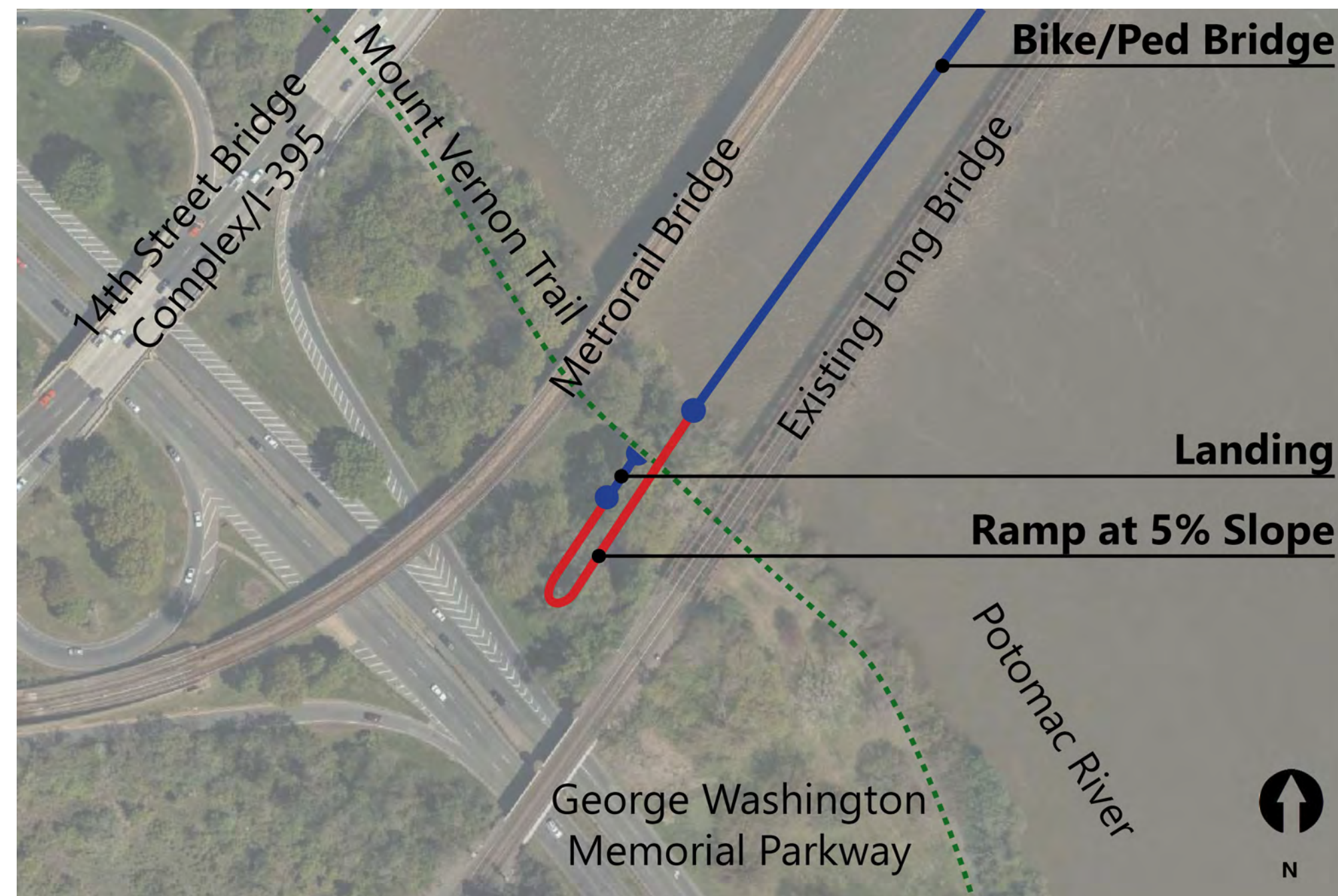


**Length of ramp dictated by maximum 5 percent slope required by Americans with Disabilities Act regulations*

Bicycle and Pedestrian Crossing Landings

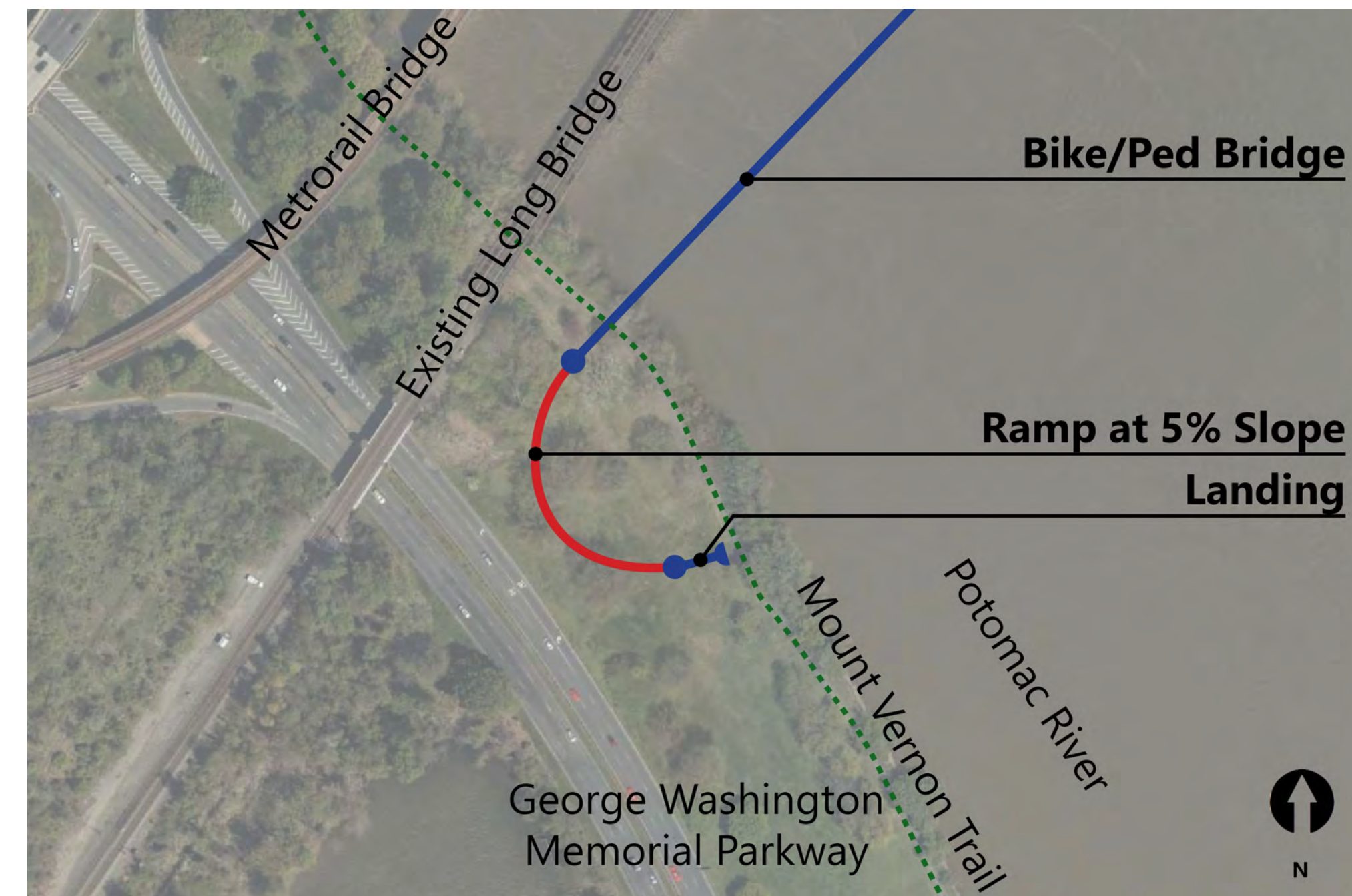
Potential Ramps on the Virginia Side

Upstream of Railroad Bridges

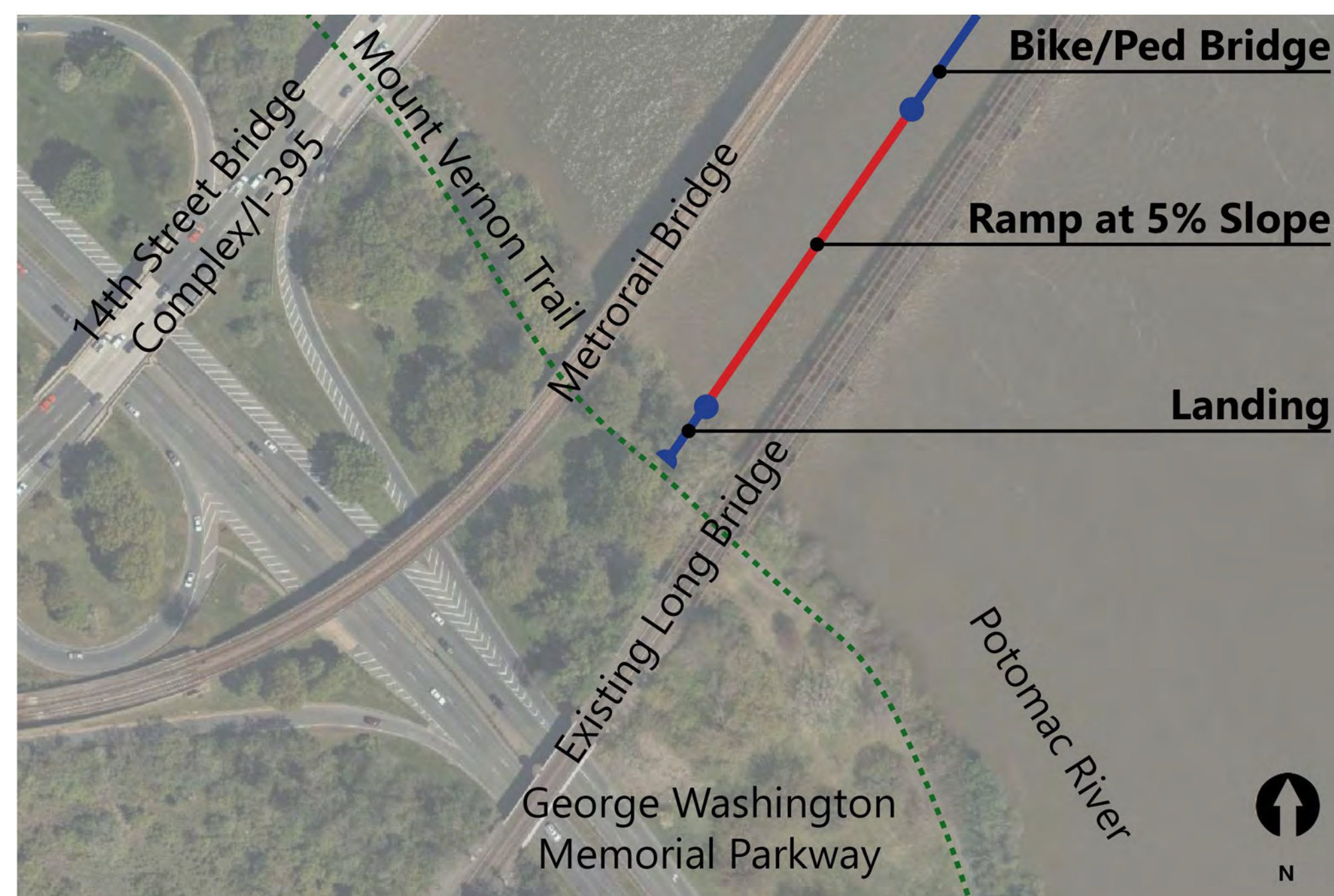


Landing with ramp over land

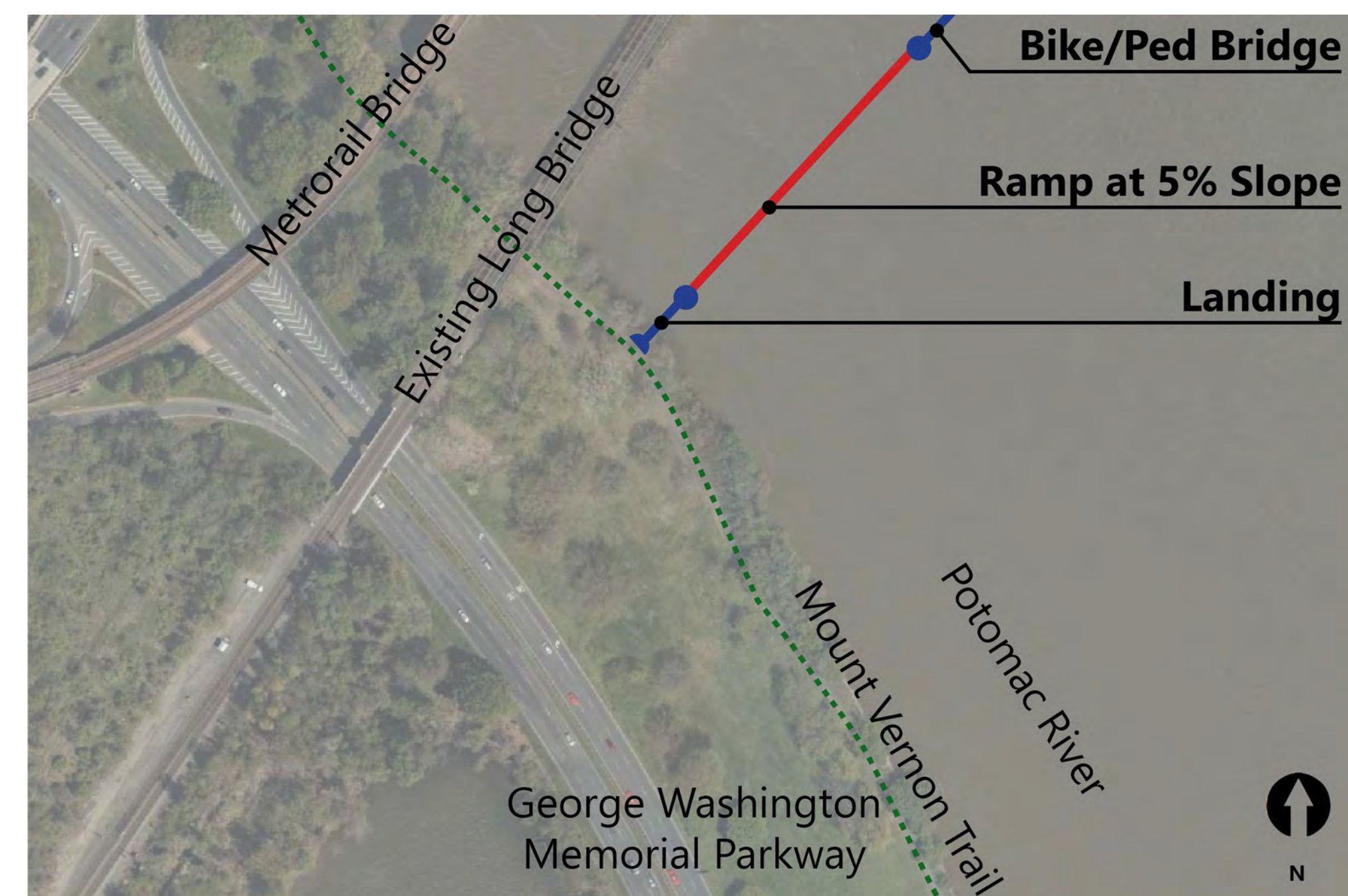
Downstream of Railroad Bridges



Landing with ramp over land



Landing with ramp over water



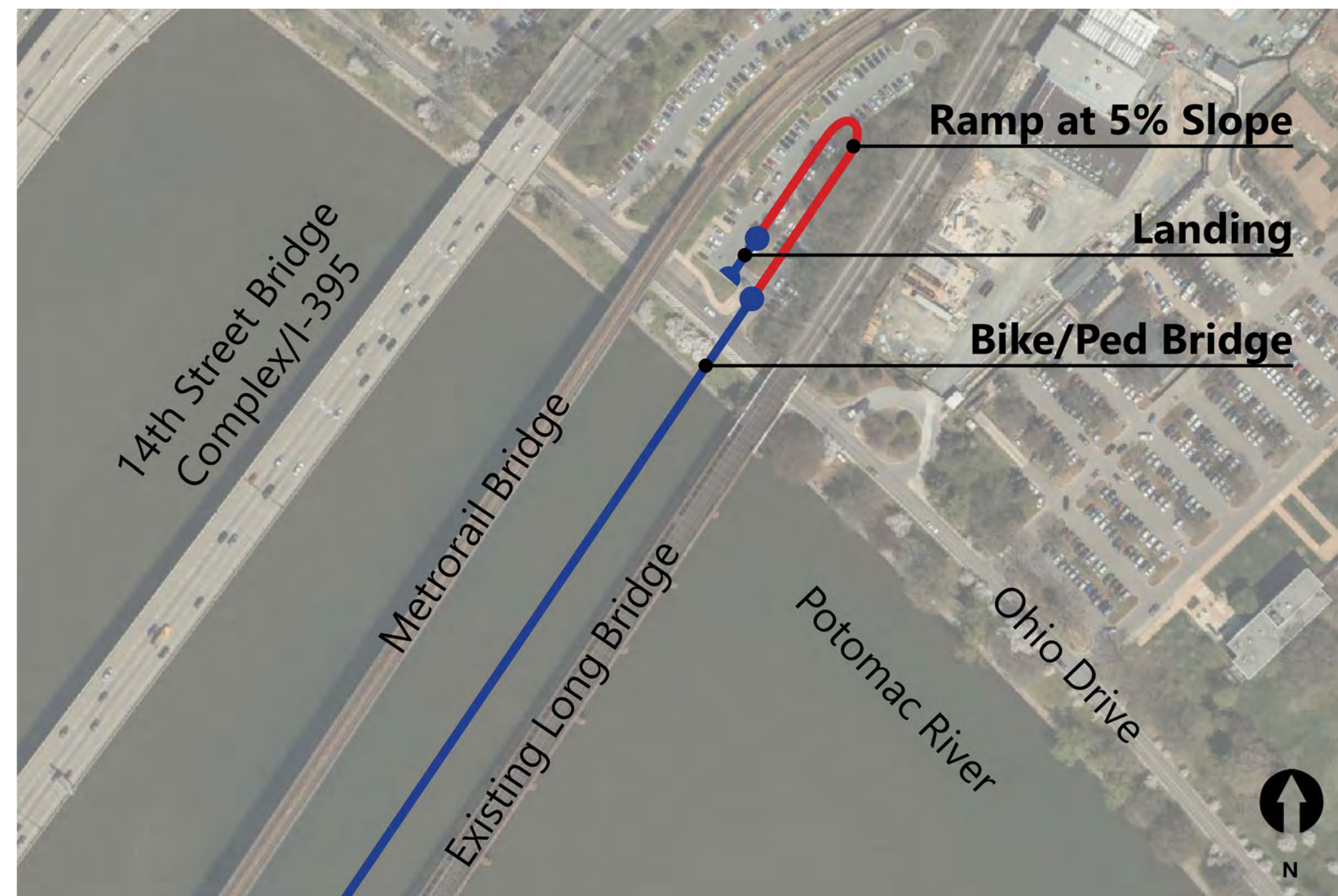
Landing with ramp over water

*Maximum 5 percent slope required by Americans with Disabilities Act regulations

Bicycle and Pedestrian Crossing Landings

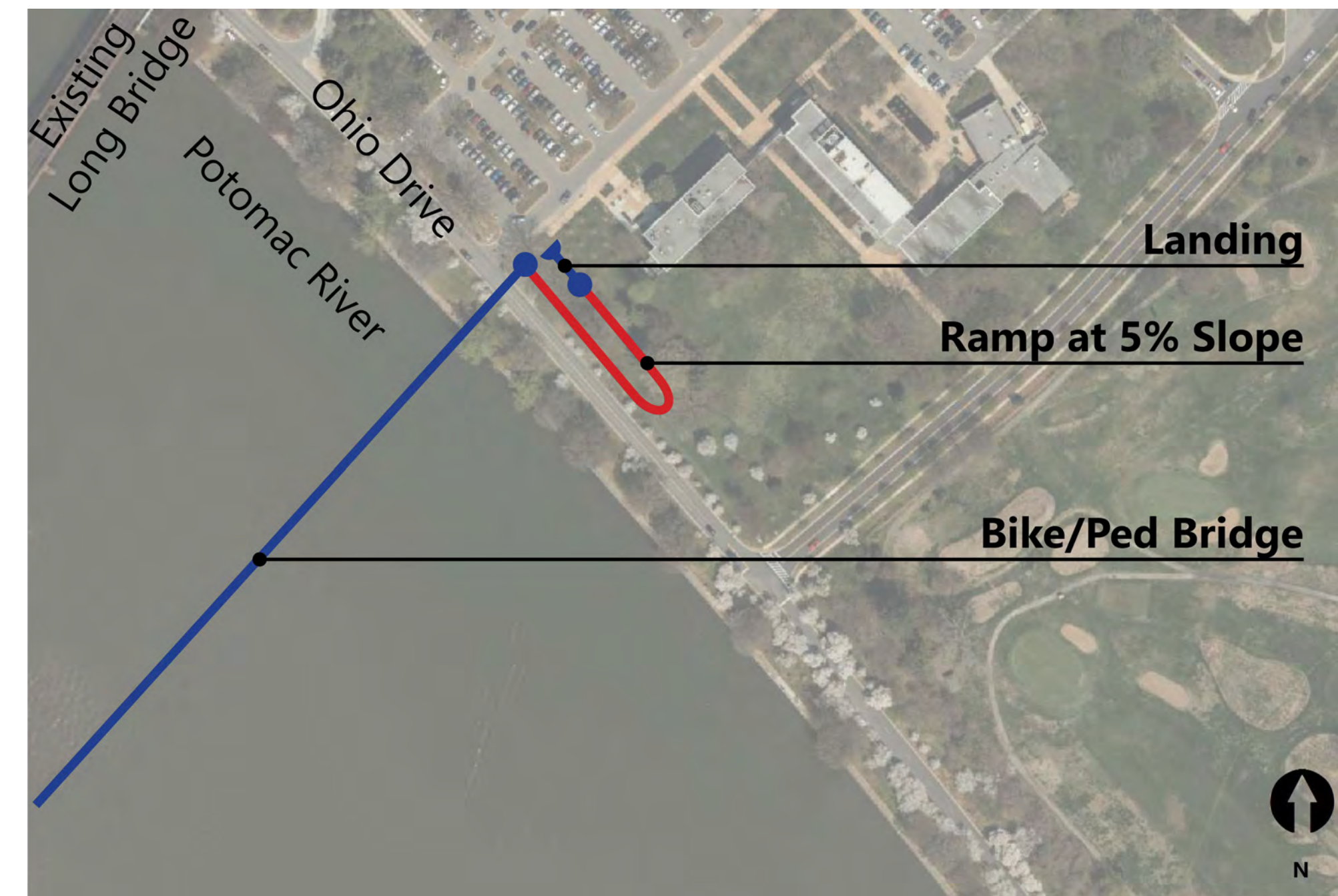
Potential Ramps on the District Side

Upstream of Railroad Bridges

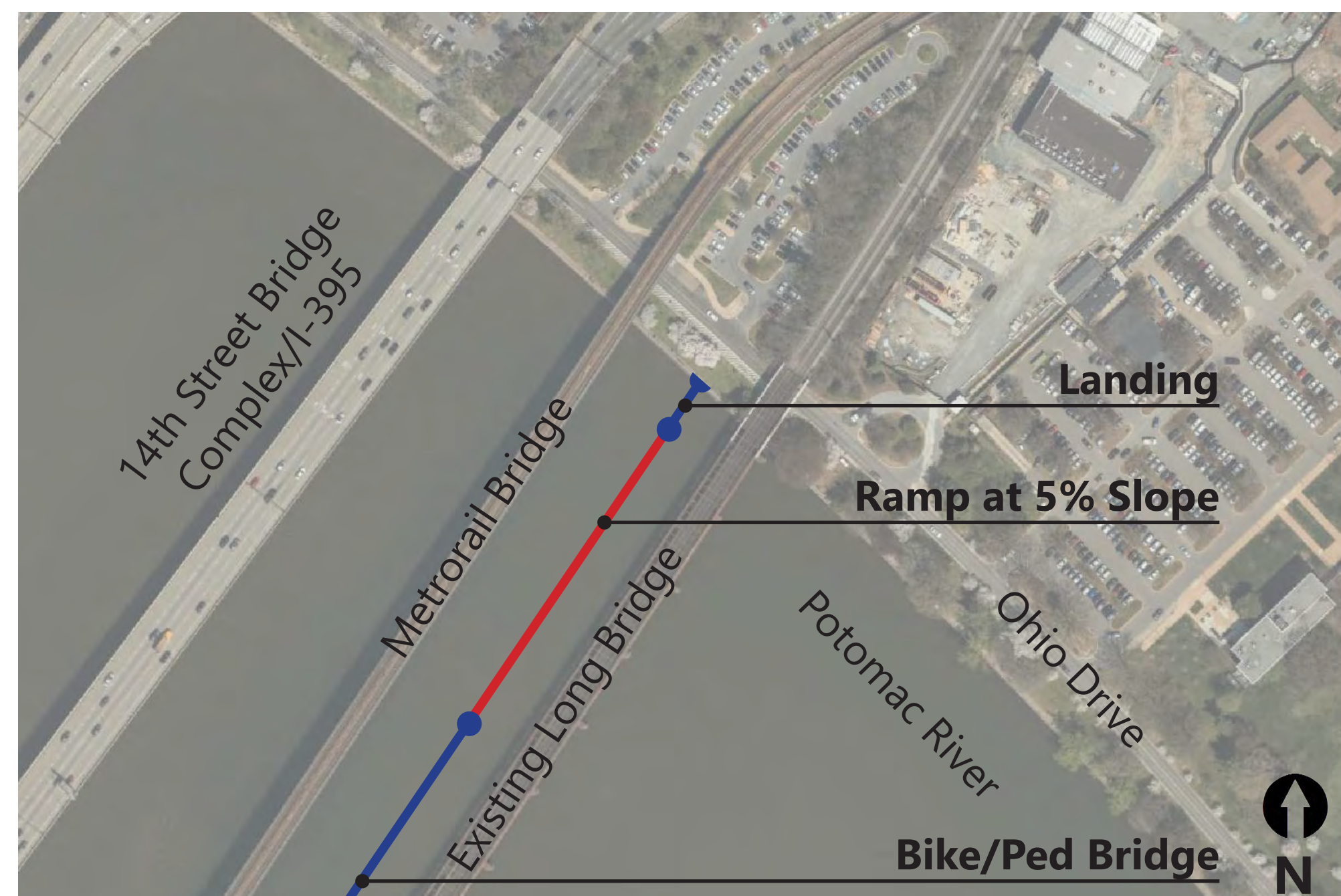


Landing with ramp over land

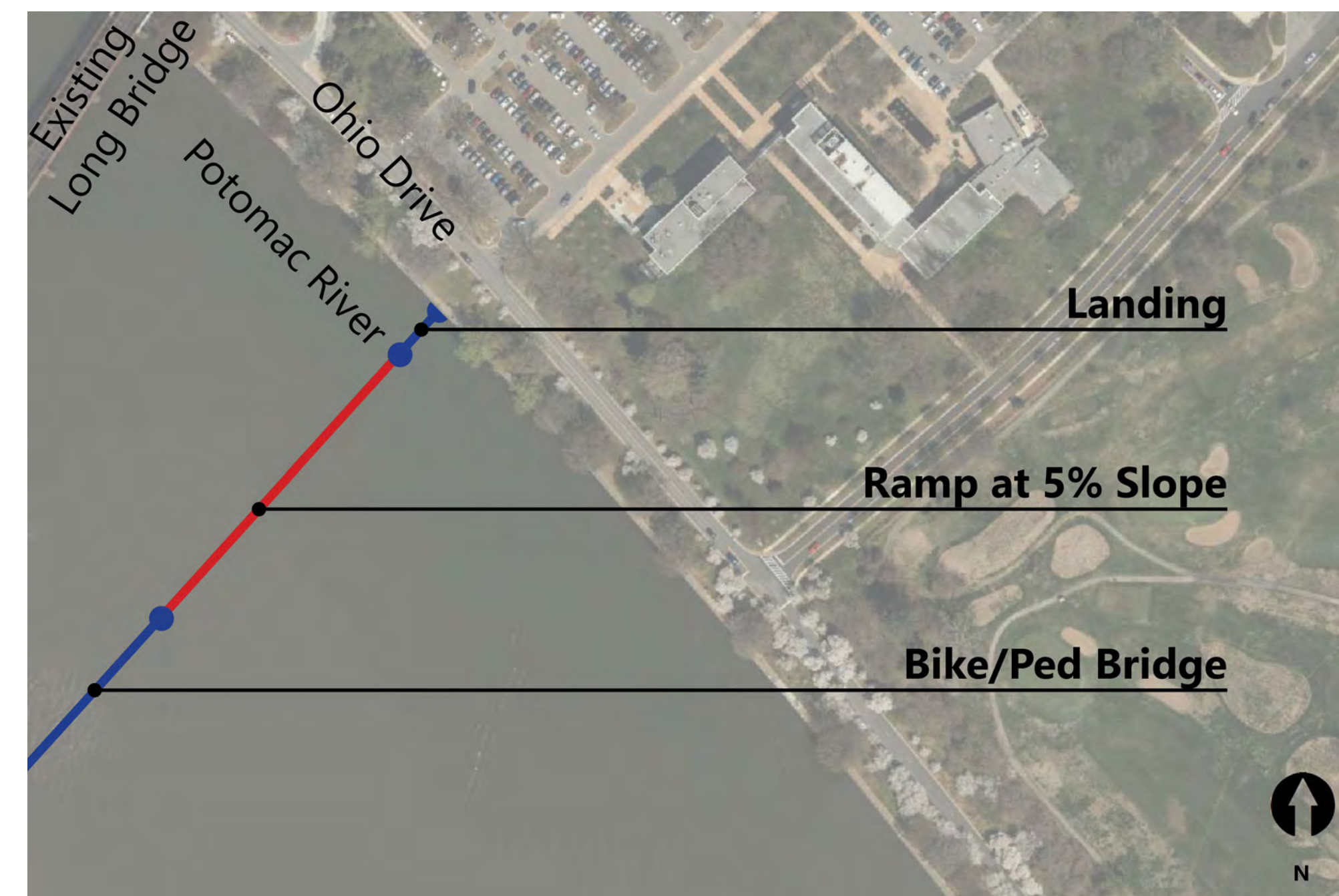
Downstream of Railroad Bridges



Landing with ramp over land



Landing with ramp over water



Landing with ramp over water

**Maximum 5 percent slope required by Americans with Disabilities Act regulations*

No Action Alternative

The No Action Alternative for the Long Bridge EIS consists of the existing transportation network, plus all projects within the Project Area that are predictable by the planning year of 2040. The No Action Alternative does not include the Long Bridge Project.



Project	Year Complete
L'Enfant North and South Storage Tracks	2017
Virginia Avenue Tunnel (under construction)	2019
I-395 HOT Lanes	2020
Boundary Channel Drive Interchange	2021
Crystal City-Potomac Yard Transitway Extension	2021
Fourth Track Virginia (VA) to L'Enfant (LE) Interlocking	2021
Project Journey (new commuter concourse and security checkpoint at the Ronald Reagan Washington National Airport)	2021
Crystal City Metro Station East Entrance	2022
VRE Crystal City Station Improvements	2023
L'Enfant Station Improvements	2024
DC to Richmond High Speed Rail (DC2RVA)	2025
Arlington Complete Streets (Army Navy Drive, Crystal Drive, Clark Bell Street, 12 th Street South, 18 th Street South, 23 rd Street South, and 27 th Street South)	2037
Reconfigure Crystal City Street Network and Circulation Patterns	2040