



Goal and Purpose

Goal

To keep bridge infrastructure safe and operational by meeting all State and Federal Standards and to improve safety by providing wider sidewalks. In addition, provide a strong connectivity along this vital transportation corridor

Purpose

- To replace 104-year-old bridge
- To remove "Poor" condition from City Inventory
- To enhance Safety and Mobility



Project Location

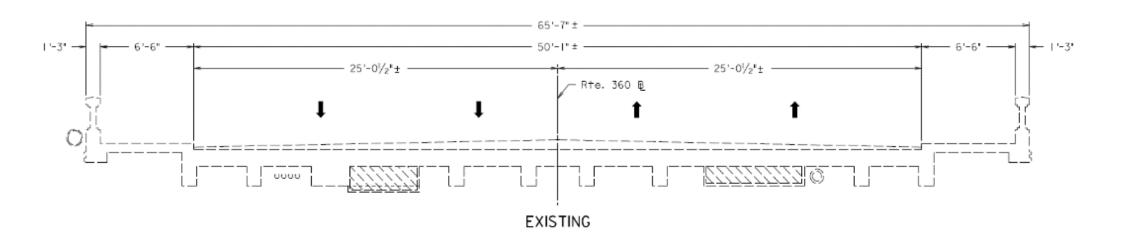
- Project is located within the Manchester Industrial Historic District
- Fast Developing Area





Existing Bridge Description

- Constructed in ~1921
- 2-Span Bridge: 41 ft long, 65.5 ft wide (out-to-out)
- 50 ft Travel Lane Width (2 lanes in each direction)
- 6.5 ft sidewalk on both sides
- National Highway System (US Rte. 360)
- 17,000 AADT





Existing Bridge Conditions

- Major Substructure Rehabilitation 2005
 - \$400,000 cost for Emergency repair



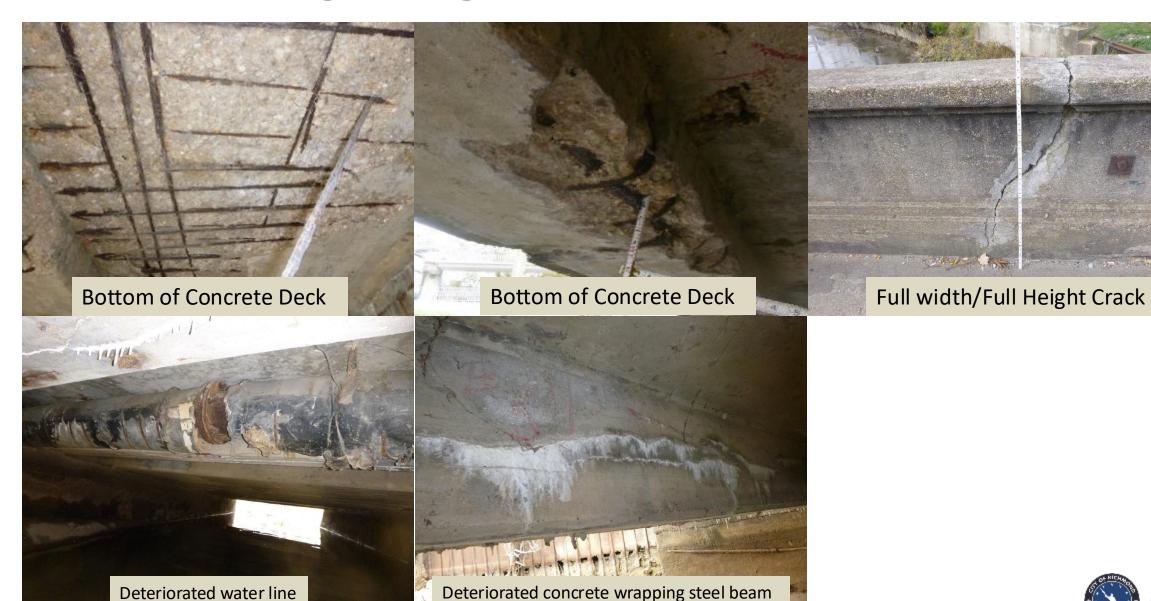




Photo from 2005 Rehabilitation



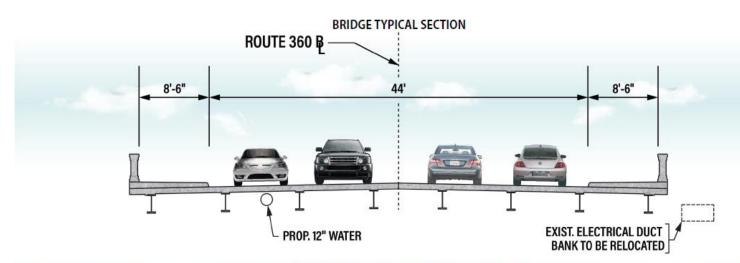
Existing Bridge Conditions

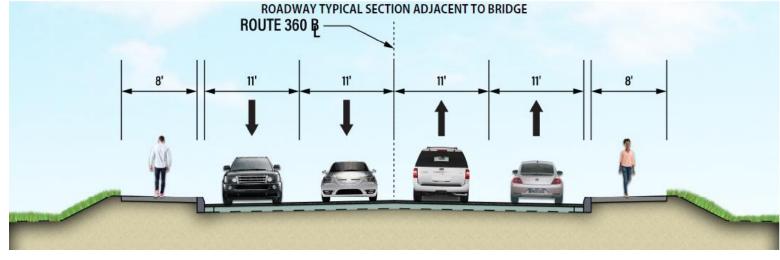




Proposed Canal Bridge Design

- Proposed Superstructure
 - Span Length = 62 ft
 - Bridge Width = 63 ft (out-to-out)
 - Originally 66 ft
 - Reduction in travel way to 44 ft
 - Originally 50 ft
 - Increased sidewalk width to 8'-6"
 - Originally 6.5 ft
 - Single Span Bridge
 - Structural Steel Beam
- Key Features
 - Lighting
 - Will be consistent with corridor
 - Architectural / Gateway parapet
 - Reduced Property Impacts
 - Only Temp. Constr. Easement Required







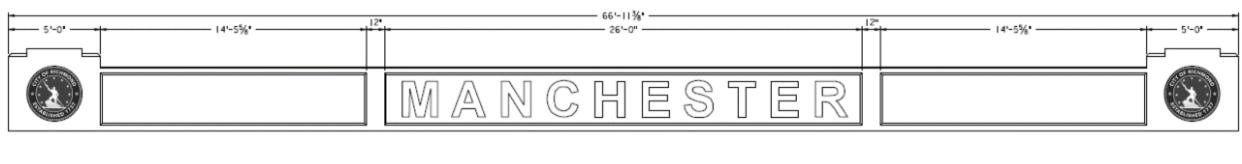
Proposed Canal Bridge Design

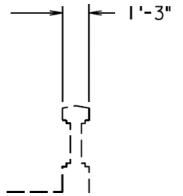


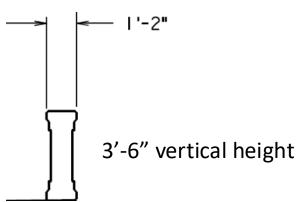


Proposed Parapet (Railing)

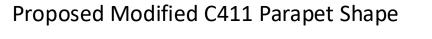
- Parapet Elevation View
 - Will have graffiti resistant coating
 - Parapet will have beige color
- Modified C411 ("Church Rail") that has opening filled in to create a solid look which is similar to the existing parapet
- City of Richmond Seal





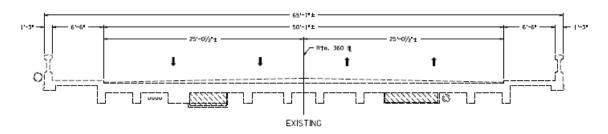


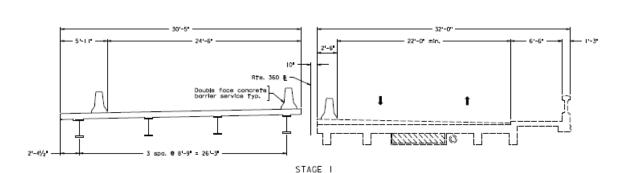


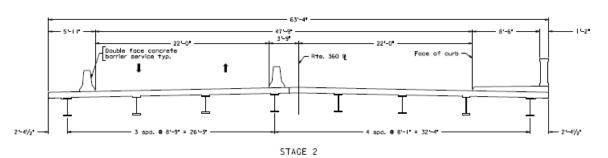




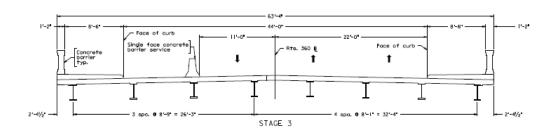
Proposed Sequence of Construction

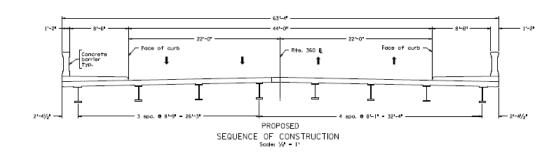






SEQUENCE OF CONSTRUCTION



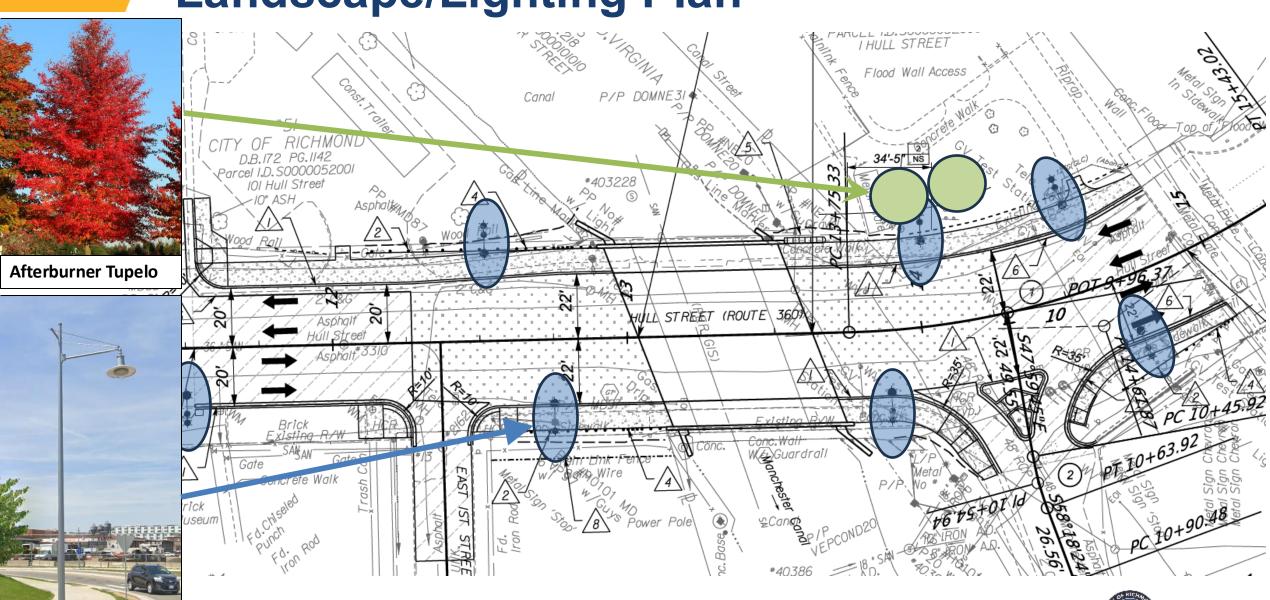


- 2 Lanes of Traffic Maintained at all times
- Pedestrian Detour will be required using adjacent bridge near South Fall Tower
- Access to Manchester Road will be maintained



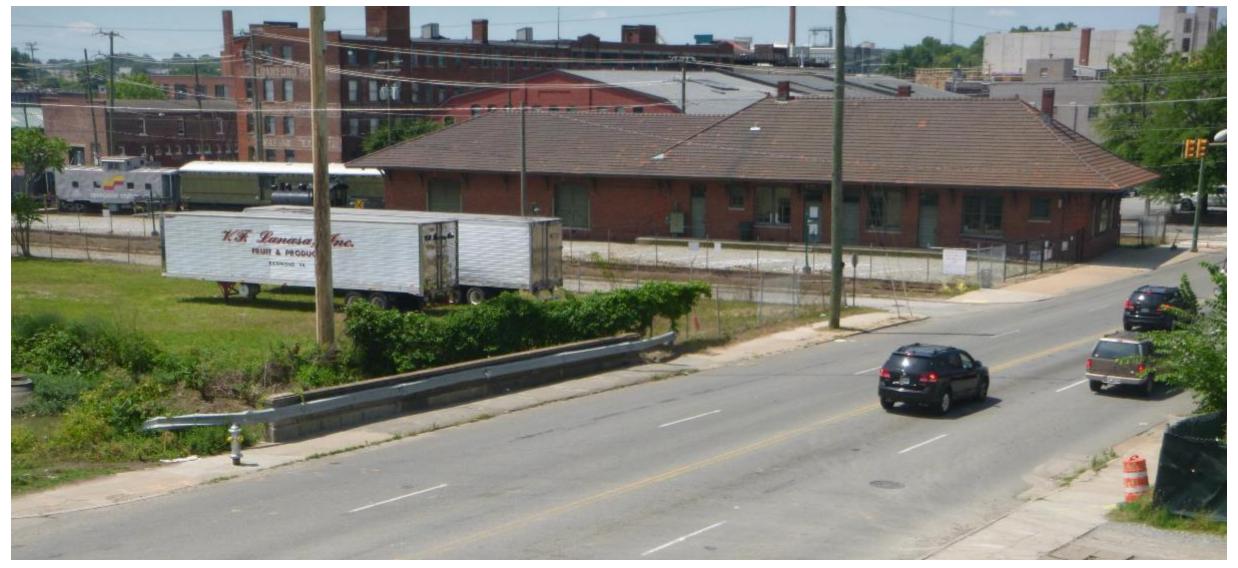
Landscape/Lighting Plan

Manchester Light



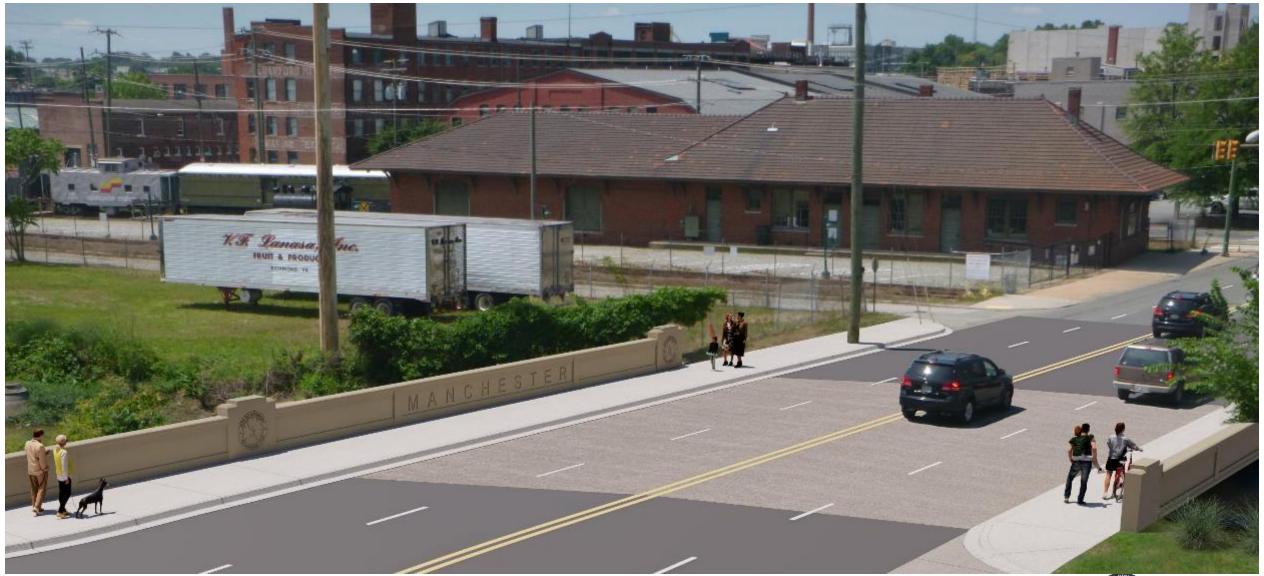


Existing Parapet – Looking South East





Proposed Parapet – Looking South East





Existing Parapet – Looking South West





Proposed Parapet – Looking South West





Project Schedule

Public Engagement Utility • Feb.-May 2022 On-going (Virtual) Relocation Right-of-Way/ • Feb. 2023 On-going **UDC** Conceptual Easements • Feb. 2023 Completed, waiting CPC Conceptual **NEPA** final approval Design Public • March 2025 **Early 2026** 100% Plans Hearing Public Input August 2025 Construction **Early 2026** Meeting Advertisement • October 2025 Start Final UDC • Spring 2026 Construction • Oct./Nov. 2025 Final CPC • Winter 2027 Completion

Project has to be completed prior to Mayo Bridge Project



Project Estimate and Budget

- Current Estimated Cost
 - -\$10.8M
 - Engineering = \$2.8M
 - Right-of-Way = \$0.2M
 - Construction = \$8.0M
- Current Funding
 - State of Good Repair = \$5.8M (Federal Funding)
 - Revenue Charing = \$5.0M (City GO Bond and State Funding



Public Outreach/Input

- Project meets Expectations
- Project will have a Positive Impact
- Bike lanes are desired
- Fill in Manchester Canal for future development
 - Not a feasible option due to Historic District Designation
- Lighting wants lights that do not contribute to light pollution
 - Proposed lighting is consistent with already approved Street Scape plans on Hull St
- Signage
 - The embedment of "Manchester" was complimented
 - Potential signs to announce crossing of Manchester Canal
- Additional Trail Connectivity
 - Outside the scope of this project



Project Coordination

- Hull St. Streetscape
- Mayo Bridge Replacement
- Mayo Island Park
- Hull St Bridge Replacement







Mayo Bridge Project

Scope: Replace 112 years old bridge, structurally deficient, 2 lanes each direction, proposed 1 lane with wider sidewalk, 66 ft wide bridge

Schedule: Construction begins in 2028 and completed in 2031

Cost: \$194M total cost (\$90M secured, \$104M to be funded)

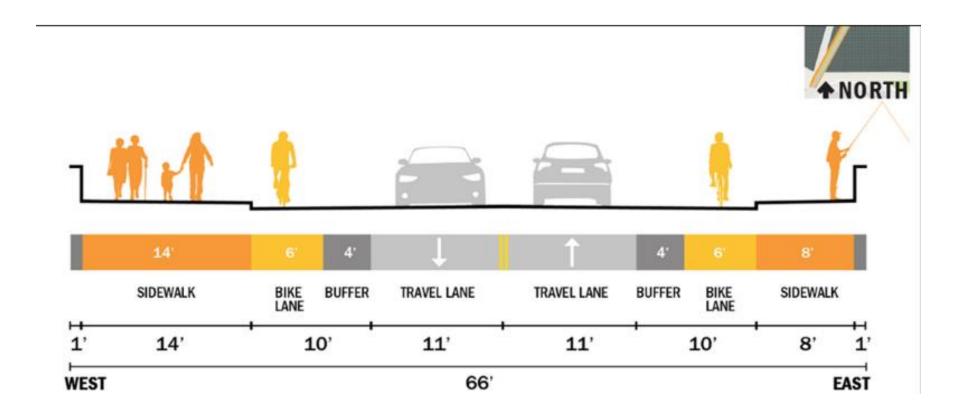
Coordination Point: The Hull St over Manchester Canal Bridge construction shall end before Mayo's Bridge construction begins in 2028

VDOT Managed Project – will be delivered by Design-Build Procurement



Mayo Bridge Typical Section

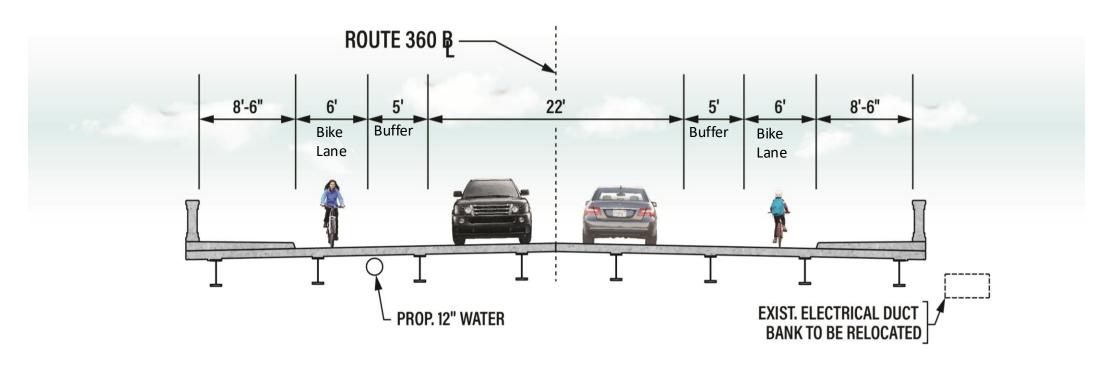
Typical Section from VDOT Website 10/6/2025





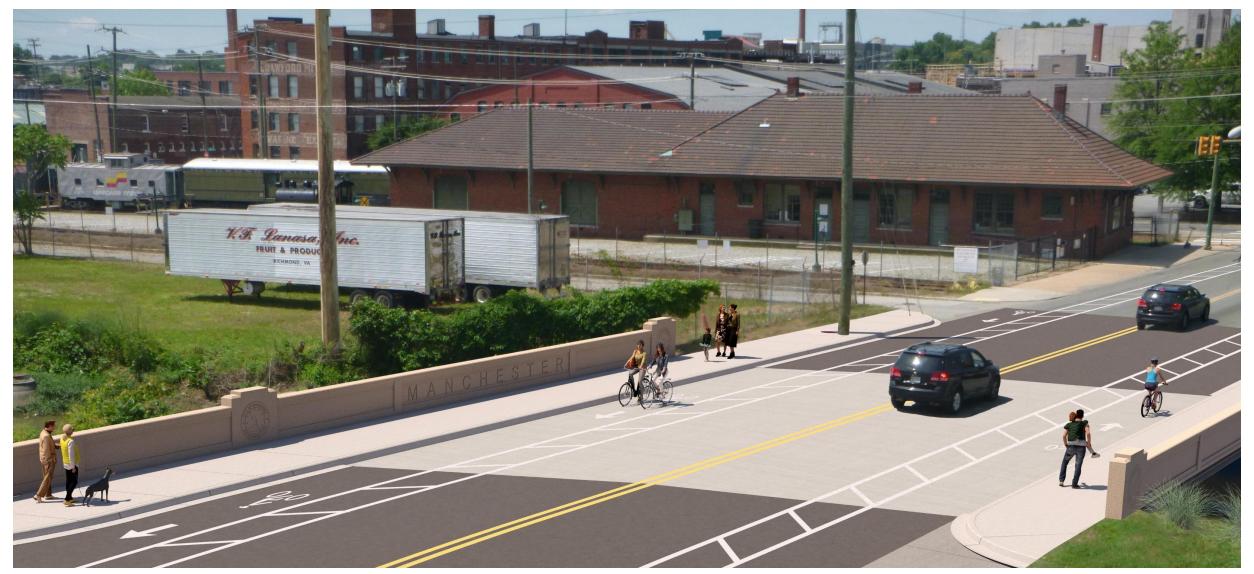
Potential Future Typical Section

- Potential Typical Section AFTER Mayo Bridge Reconstruction is complete
- Painted Buffer Zone
 - No flexible delineators to allow emergency access to corridor and to allow easy access over side of bridge



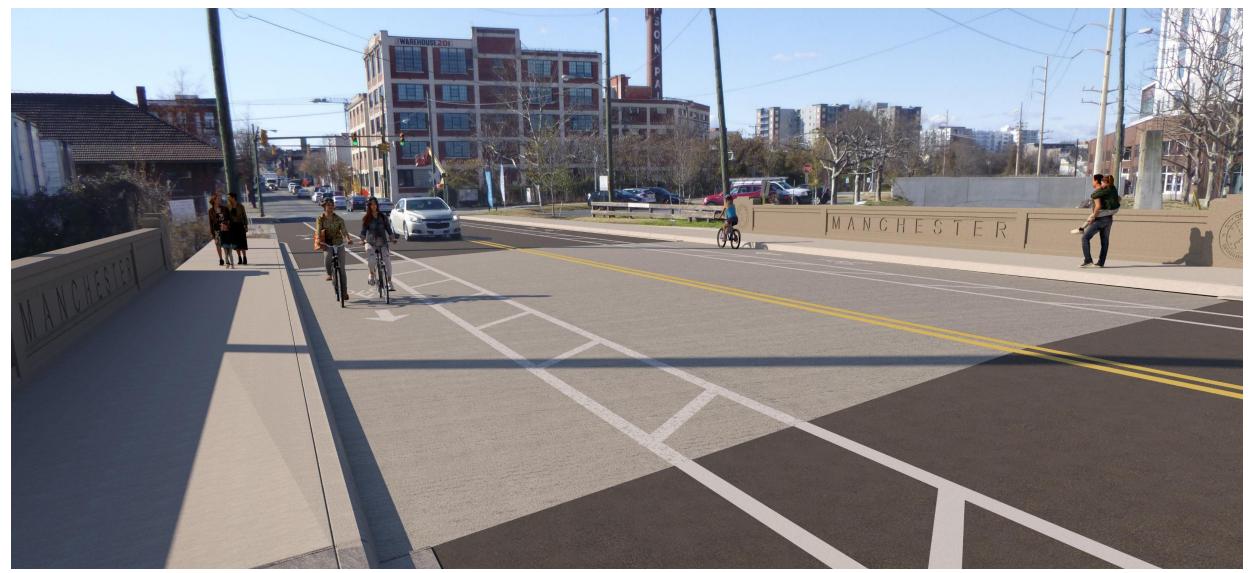


Potential Future Rendering AFTER Mayo Bridge Reconstruction





Potential Future Rendering AFTER Mayo Bridge Reconstruction





Mayo Island Park

Scope: Convert Mayo Island into a 16-acre flood-resilient park with restoration, trails, picnic areas, and native plantings.

Schedule: Construction begins in Fall 2025 and ends in Fall 2026

Cost: \$31M (\$15M land acquisition + \$16M park development) fully funded

Coordination point: The Island Park construction should end before Mayo's Bridge construction begins in 2028





Mayo Island Park

 Maintain 2 travel lanes in each direction as presented to CPC for conceptual approval 8/19/2025







Hull St. Streetscape

Maintaining 2 travel lanes in each direction

Scope: Infrastructure improvement initiative aimed at enhancing safety and accessibility along Hull Street between 9th street to Mayo Bridge

Schedule: Construction begins in early 2026 and ends in 2027

Cost: \$5.5M fully funded

Coordination point: The Streetscape construction should end before Mayo Bridge construction begins in 2028.





Recommendations

Construct the Hull St over Manchester Canal Bridge per current alignment and detailing

Revisit striping/lane configuration after Mayo Bridge is completed.

