

Norfolk Southern Pittsburgh Vertical Clearance Projects – Final Design

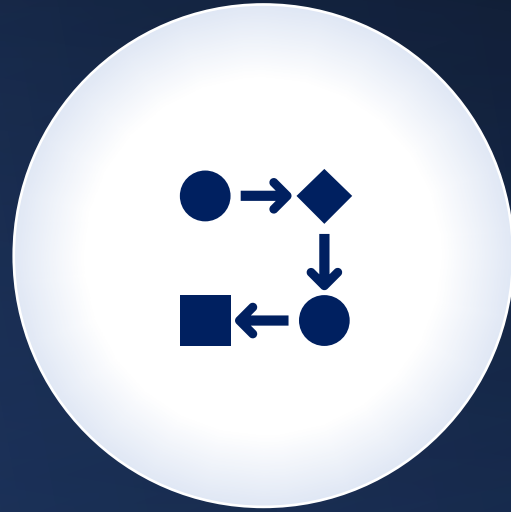
Amtrak Station (PT-353.20)
W. North Avenue Bridge (PC-1.60)
Pennsylvania Avenue Bridge (PC-1.82)
Allegheny Commons Pedestrian Bridge (PC-1.50)

December 2024



Previous Public Meetings

- On June 26, 2018, Norfolk Southern (NS) held a combined open house for the Pittsburgh Vertical Clearance Projects to introduce the public to the projects. An estimated 300 to 400 people attended including North Side residents and local government leaders. NS received more than 90 written comments at the meeting, with additional comments received later by email or postal mail.
- A second public open house was held for the project on January 18, 2023, to present the preferred alternatives for the vertical clearance projects and to accept comments from the public. Approximately 50 people attended the open house, and 24 comments were received at the meeting and via the online comment form posted on the NS website.
- Additional information about the Pittsburgh Vertical Clearance Projects' public involvement process is available on the NS website: [Pittsburgh Bridge Projects | Norfolk Southern](#)



Project Purpose and Need

Project Purpose: Pittsburgh Vertical Clearance Projects

Promote the efficient transportation of goods between Chicago and the New York/New Jersey commercial markets.

Improve mobility and safety for freight traffic through Pittsburgh.

Remove the final remaining vertical clearance restrictions preventing efficient flow of intermodal rail traffic.

Support truck/rail intermodal facilities along this important rail corridor by allowing for double-stack intermodal traffic, which is a PennDOT goal under the Commonwealth's State Rail Plan, developed in compliance with Federal Railroad Administration requirement and with the Rail Freight Preservation and Improvement Act of 1984, as amended, Public Law 587-119.*

* See US DOT, *The Strategic Multimodal Analysis, Task 3: Chicago-New York City Corridor Analysis, Final Report (Apr. 2006)* (<https://www.fhwa.dot.gov/policy/otps/sma/index.cfm>).

**Project
Needs:
Pittsburgh
Vertical
Clearance
Projects**

Forecasted
traffic
demands

Vertical
clearance
constraints

Operational
safety and
reliability

Public safety

Facility
deficiencies

Mobility



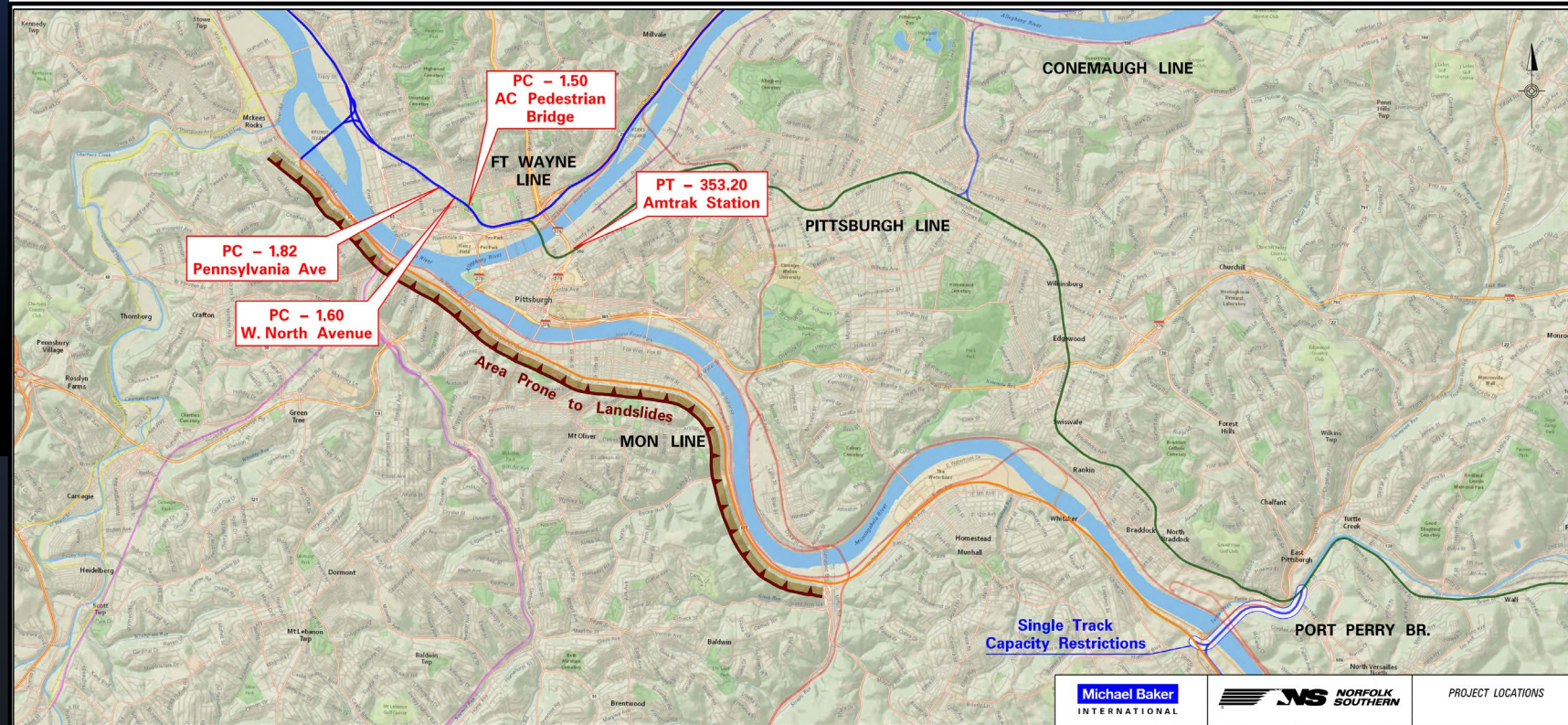
Project Locations

Description of Projects

Individual project locations consist of the Amtrak Station (PT-353.20) in downtown Pittsburgh; and the W. North Avenue Bridge (PC-1.60), the Pennsylvania Avenue Bridge (PC-1.82), and the Allegheny Commons Pedestrian Bridge (PC-1.50), all located in the North Side of the City of Pittsburgh.

The Washington Avenue and Columbus Avenue bridges were removed from the project, and the Allegheny Commons Pedestrian Bridge was added into the project.

No work as part of these projects is being done in the intervening track area between the four individual project locations.





AMTRAK Station Project, Downtown Pittsburgh

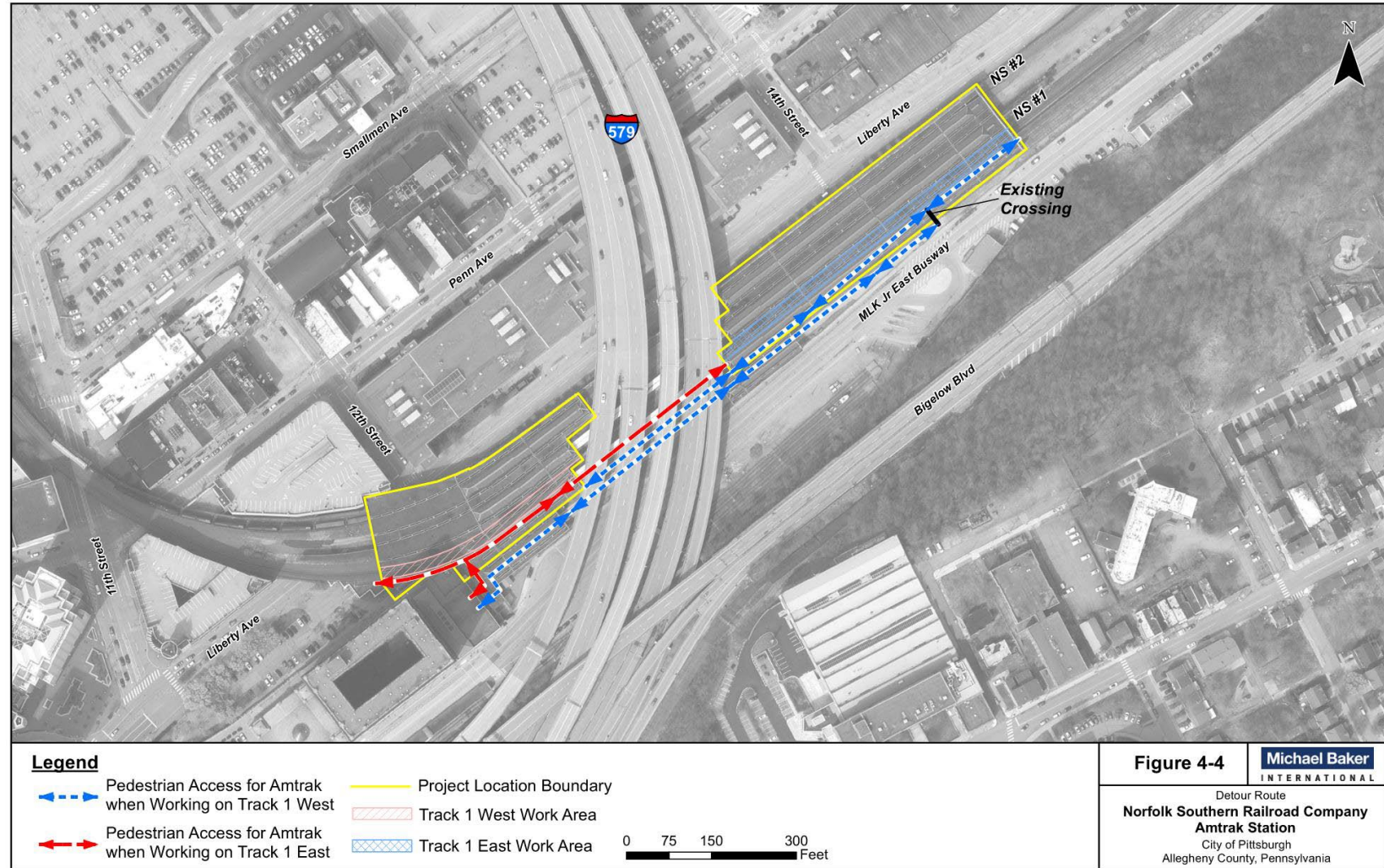
Project Description

The existing vertical clearance through Amtrak Station, housed within the ca. 1953-59 former Pennsylvania Railroad Station trainshed, will not allow for double-stack trains. The proposed undertaking will retrofit the beams of the northwest trainshed canopy over the freight line to obtain the desired vertical clearance.



Project Details

- Proposed work includes the trimming of existing girders; installation of a new exhaust chute framing and panels; and the application of protective coatings to the girders and exposed steel over both tracks
- No required right-of-way or temporary construction easements
- Construction to begin Spring/Summer 2025
- Railroad operations will remain in service throughout construction except for necessary short-term outages arranged in advance
- Pedestrians will be detoured during the work along Track 1, anticipated to be approximately 9 months



Project Photos and Renderings

Photo of existing girders and exhaust chutes over Track 1, through Amtrak trainshed, facing southwest.



Rendering of proposed girders and exhaust chutes over Track 1, through Amtrak trainshed, facing southwest.



Project Photos and Renderings

Photo of existing girders and exhaust chutes over Track 2, through Amtrak trainshed, facing southwest.



Rendering of proposed girders and exhaust chutes over Track 2, through Amtrak trainshed, facing southwest.





W. North Avenue Bridge Project, North Side, Pittsburgh

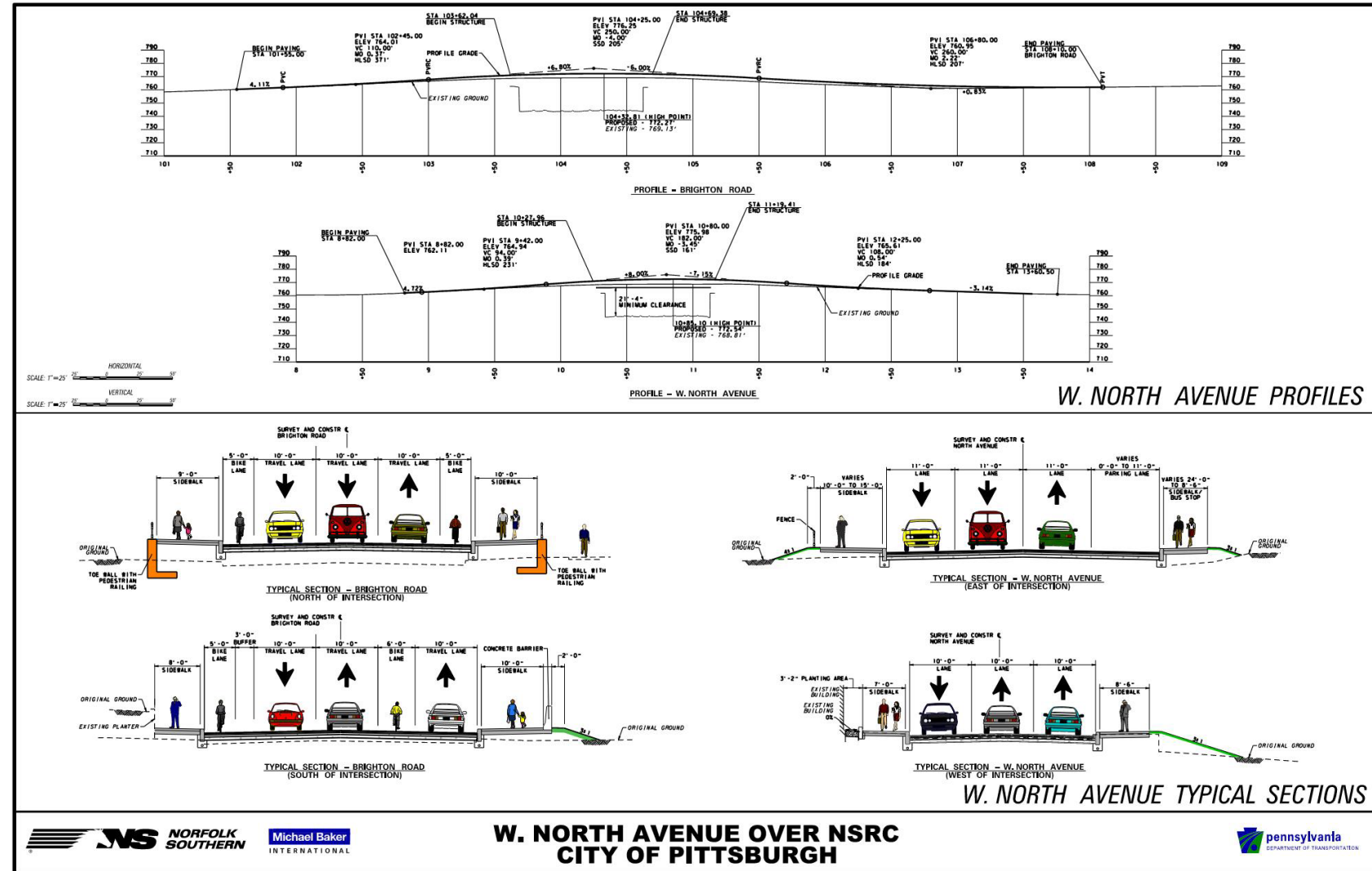
Project Description

The proposed undertaking will replace the W. North Avenue Bridge, which was constructed in 1929 and was raised in the late 1940s to its current elevation. The bridge carries W. North Avenue and Brighton Road over the Pennsylvania Railroad: Main Line (Pittsburgh to Ohio State Line) rail corridor historic district. The bridge will be replaced with a new structure to obtain the appropriate vertical clearance. Connecting and nearby streets will require grade changes to accommodate the height of the rehabilitated or new bridge.



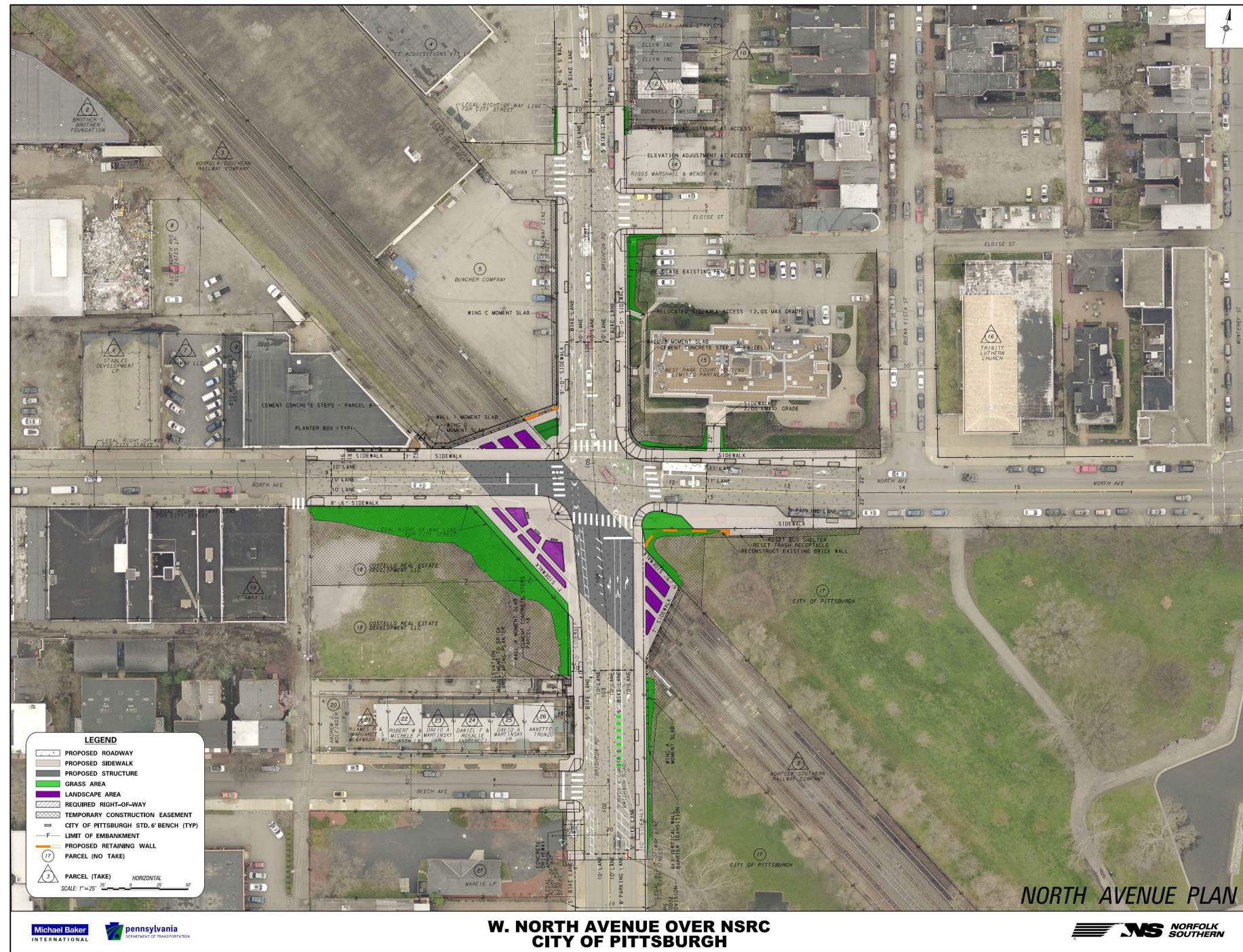
Project Details

- Replacement and raising of bridge superstructure with a single-span, reinforced concrete spread box beam structure
- Raising of adjacent street and sidewalk grades (approach work to extend 145' to the west and 240' to the east on W. North Avenue and 210' to the south and 340' to the north on Brighton Road)
- Maximum grade on W. North Avenue will be 8.0% on the west approach and 7.15% on the east approach; maximum grade on Brighton Road will be 6.8% on the south approach and 6.0% on the north approach
- Existing lane configurations (including bike lanes) will be maintained



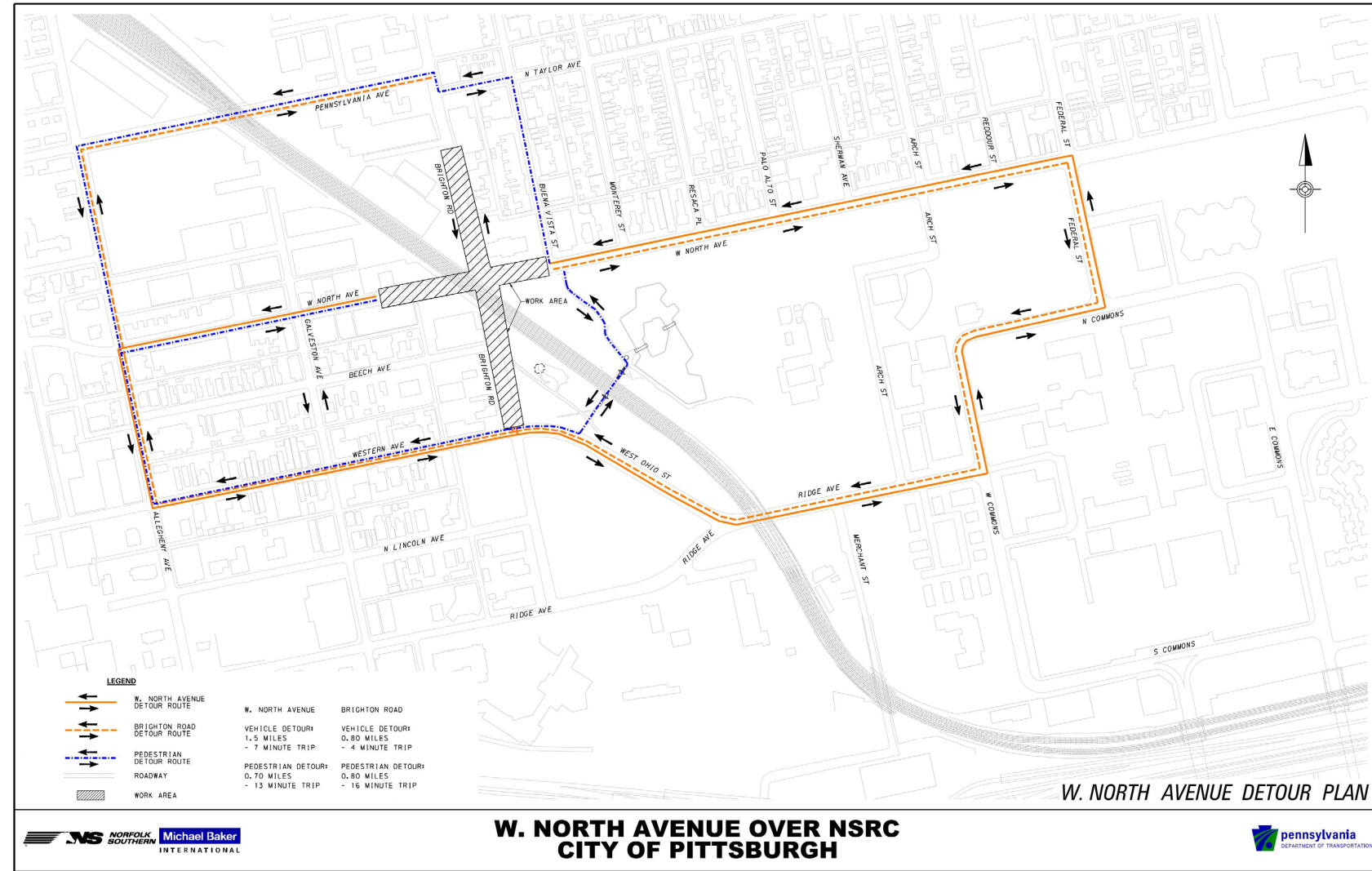
Project Details

- Construction of planting areas in Allegheny Commons at the corner of W. North Avenue and Brighton Road and the triangular plaza areas on the bridge
- Reconstruction of missing portions of brick park wall along W. North Avenue
- Temporary Construction Easements on 10 properties
 - J. Andrew Wolfinger
 - Buncher Company
 - 810 W. North Ave. Associates
 - West Park Court Housing
 - Costello Real Estate Development
 - Norfolk Southern Railway Company
- Required Sliver Take Right-of-Way Impacts:
 - J. Andrew Wolfinger
 - Buncher Company
 - 810 W. North Ave. Associates
 - West Park Court Housing
 - Costello Real Estate Development
 - Norfolk Southern Railway Company



Project Details

- Construction to begin Spring 2026 (after the completion of the Allegheny Commons Pedestrian Bridge)
- Pedestrian detour to use the new Allegheny Commons Pedestrian Bridge
- W. North Avenue Detour:
 - Vehicle: 1.5 miles – 7-minute trip
 - Pedestrian: 0.7 miles – 13-minute trip
- Brighton Road Detour:
 - Vehicle: 0.8 miles – 4-minute trip
 - Pedestrian: 0.8 miles – 16-minute trip



Project Photos and Renderings

Photo of existing W. North Avenue Bridge from track edge, facing northwest.



Rendering of proposed W. North Avenue Bridge from track edge, facing northwest.



Project Photos and Renderings

Photo of existing W. North Avenue Bridge from the southwest corner of Brighton Road and Beech Avenue, facing north.



Rendering of proposed W. North Avenue Bridge from the southwest corner of Brighton Road and Beech Avenue, facing north.



Project Photos and Renderings

Photo of existing W. North Avenue Bridge from street level at the northeast corner of W. North Avenue and Brighton Road, facing southeast.



Rendering of proposed W. North Avenue Bridge and addition of reconstructed brick wall from street level at the northeast corner of W. North Avenue and Brighton Road, facing southeast.



Project Photos and Renderings

Photo of existing W. North Avenue Bridge from W. North Avenue, facing northeast.



Rendering of proposed W. North Avenue Bridge from W. North Avenue, facing northeast.



Project Rendering

*Bird's Eye rendering of proposed
W. North Avenue Bridge,
facing southeast toward
Allegheny Commons.*





Pennsylvania Avenue Bridge Project, North Side, Pittsburgh

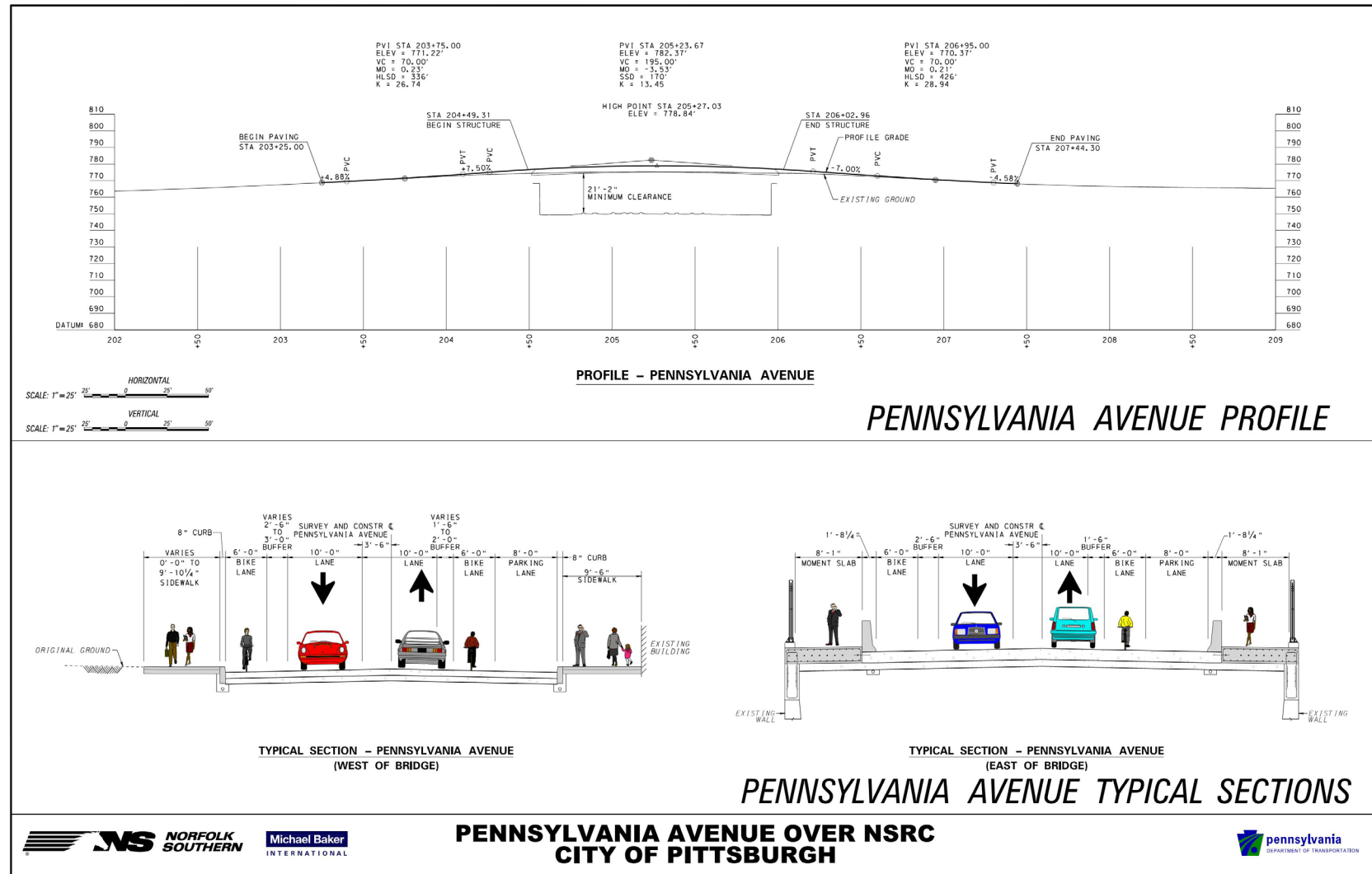
Project Description

The proposed undertaking will replace the ca. 1980 Pennsylvania Avenue Bridge in order to obtain the appropriate vertical clearance. The bridge carries Pennsylvania Avenue over the Pennsylvania Railroad: Main Line (Pittsburgh to Ohio State Line) rail corridor with an existing clearance of 18'-3". Connecting and nearby streets will require grade changes to accommodate the increased height of the bridge.



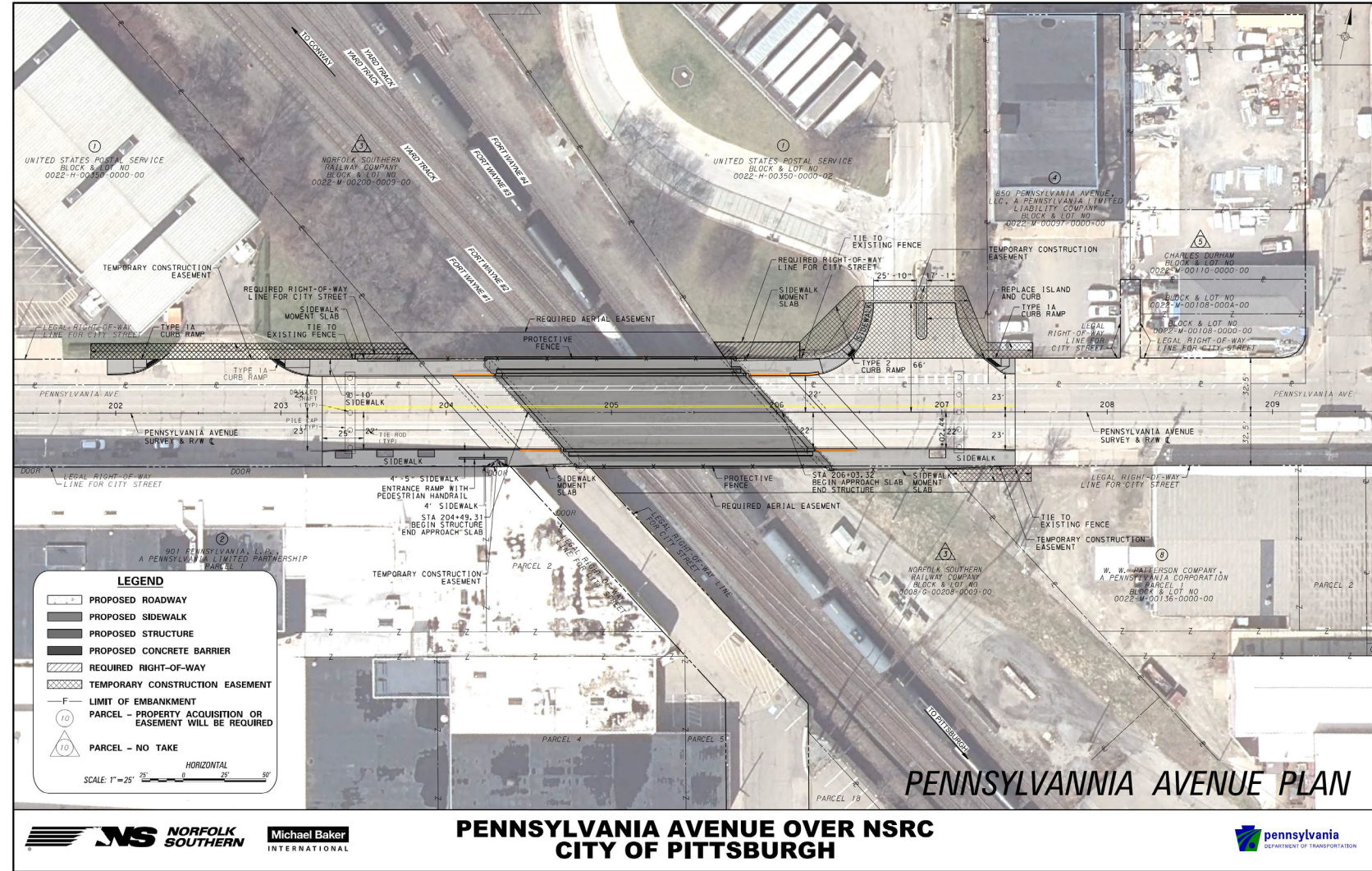
Project Details

- Replacement and raising of bridge superstructure with a single-span, steel pony truss structure
- Raising of adjacent street and sidewalk grades (approach work to extend 255' to the west and 150' to the east on Pennsylvania Avenue)
- Maximum grade on Pennsylvania Avenue will be 7.50% on the west approach and 7.00% on the east approach
- Existing lane configurations (including bike lanes) will be maintained



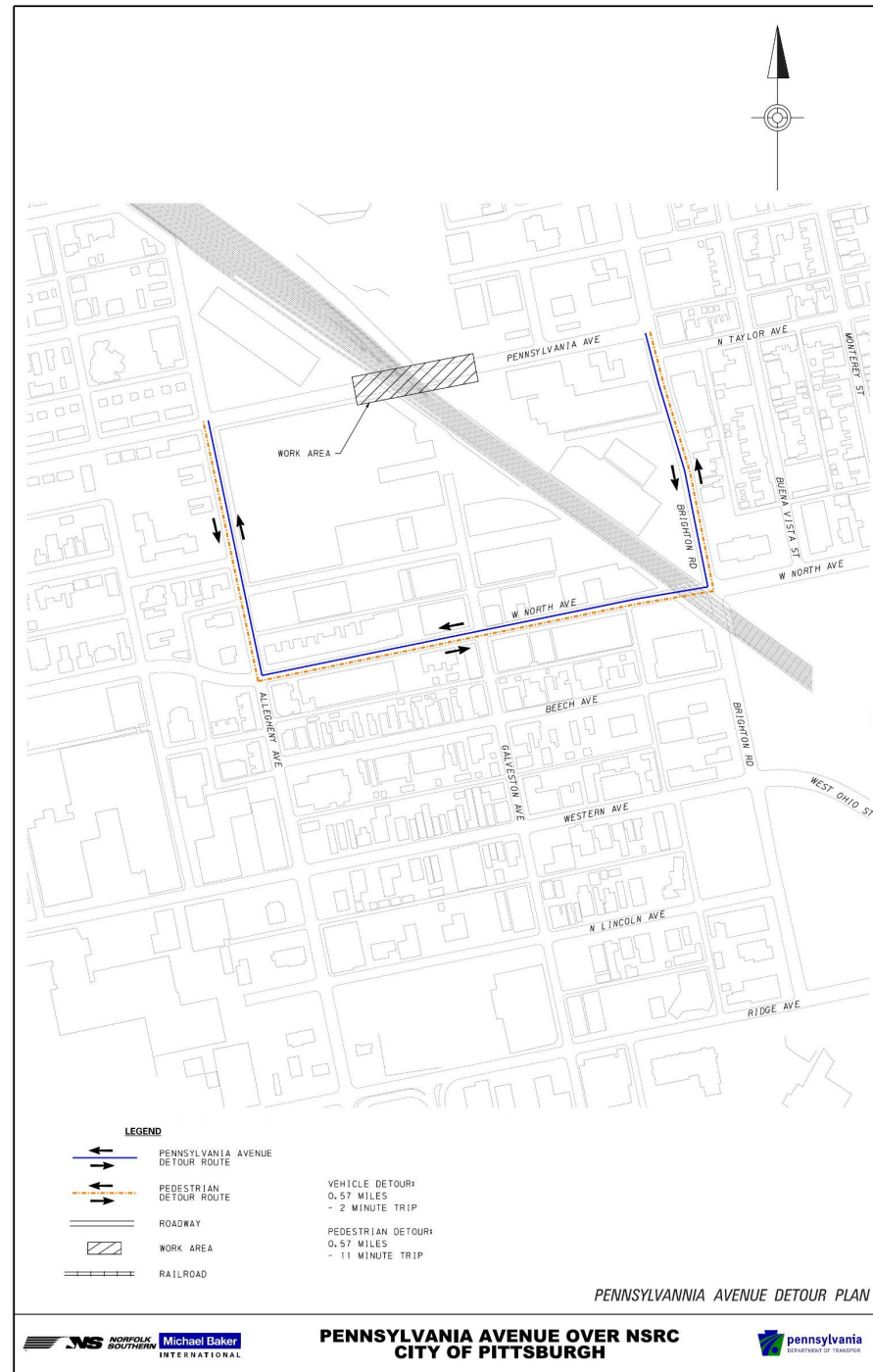
Project Details

- Construction of bifurcated sidewalk at 901 Pennsylvania Avenue to maintain access to building from Pennsylvania Avenue
- Temporary Construction Easements on four properties
- Required Right-of-Way impacts (sliver take only):
 - United States Postal Service
- Required Aerial Easement impacts:
 - Norfolk Southern Railway Company



Project Details

- Construction to begin Spring 2027
- Pennsylvania Avenue Detour:
 - Vehicle:
0.57 miles – 2-minute trip
 - Pedestrian:
0.57 miles – 11-minute trip



Project Photos and Renderings

*Photo of existing
Pennsylvania Avenue Bridge,
facing southwest.*



*Rendering of proposed
Pennsylvania Avenue Bridge,
facing southwest.*



Project Photos and Renderings

*Photo of existing
Pennsylvania Avenue Bridge,
facing northwest.*



*Rendering of proposed
Pennsylvania Avenue Bridge,
facing northwest.*



Project Photos and Renderings

*Photo of existing
Pennsylvania Avenue Bridge,
facing southwest.*



*Rendering of proposed
Pennsylvania Avenue Bridge,
facing southwest.*



Project Photos and Renderings

*Photo of existing
Pennsylvania Avenue Bridge,
facing southwest.*



*Rendering of proposed
Pennsylvania Avenue Bridge,
facing southwest.*



Project Photos and Renderings

*Photo of existing sidewalk and
entrance to 901 Pennsylvania
Avenue, facing southeast.*



*Rendering of proposed sidewalk
and entrance to
901 Pennsylvania Avenue,
facing southeast.*





Allegheny Commons Pedestrian Bridge, North Side, Pittsburgh

Project Description

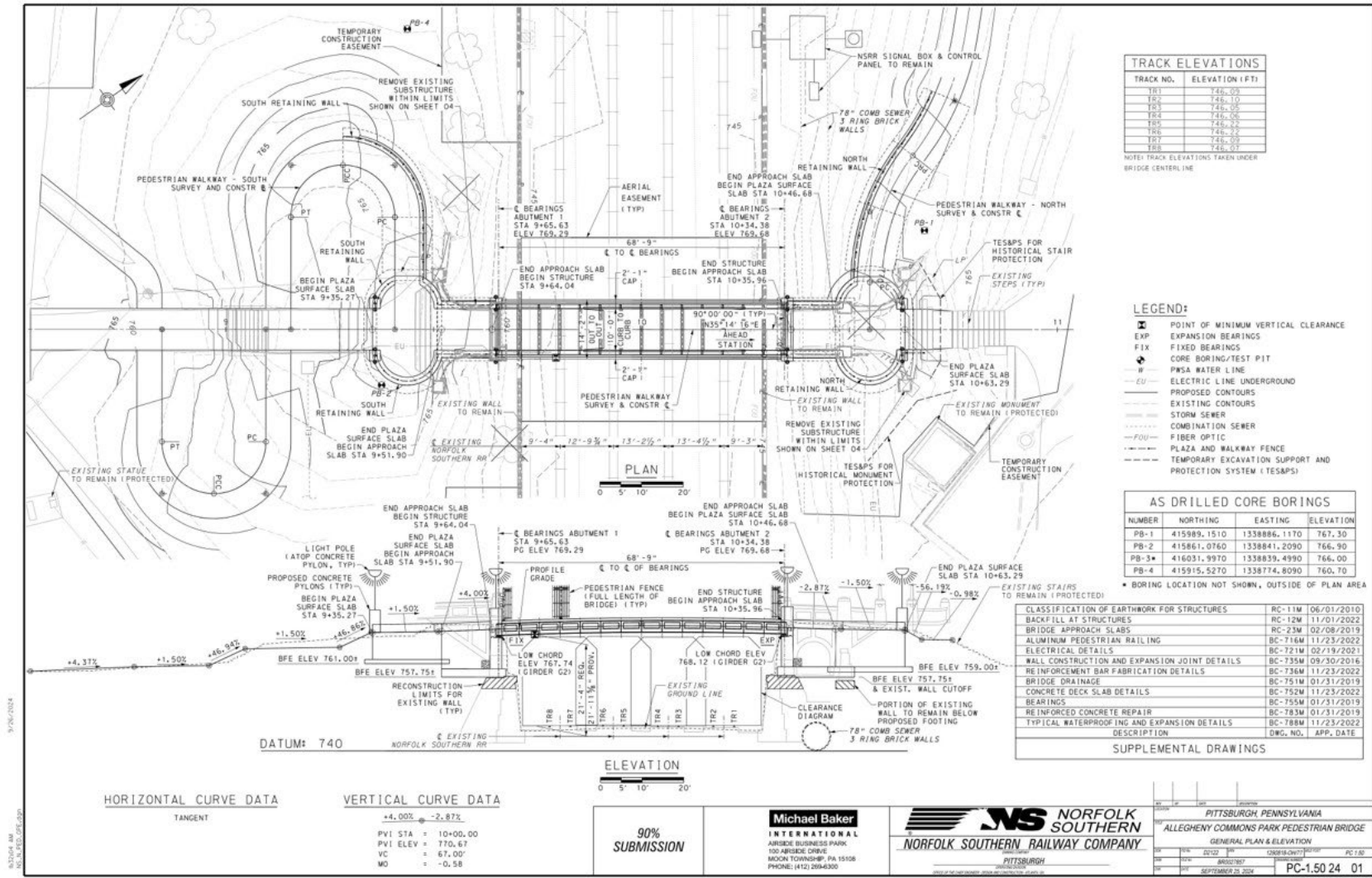
The pedestrian bridge was constructed by the Pennsylvania Railroad in 1906. The center span was demolished in 2013.

The pedestrian bridge was listed as a priority project in the 2002 Allegheny Commons Master Plan and again in the 2018 Action Plan. The project will restore the pedestrian connection with a new bridge based, in part, on the design of the original bridge.



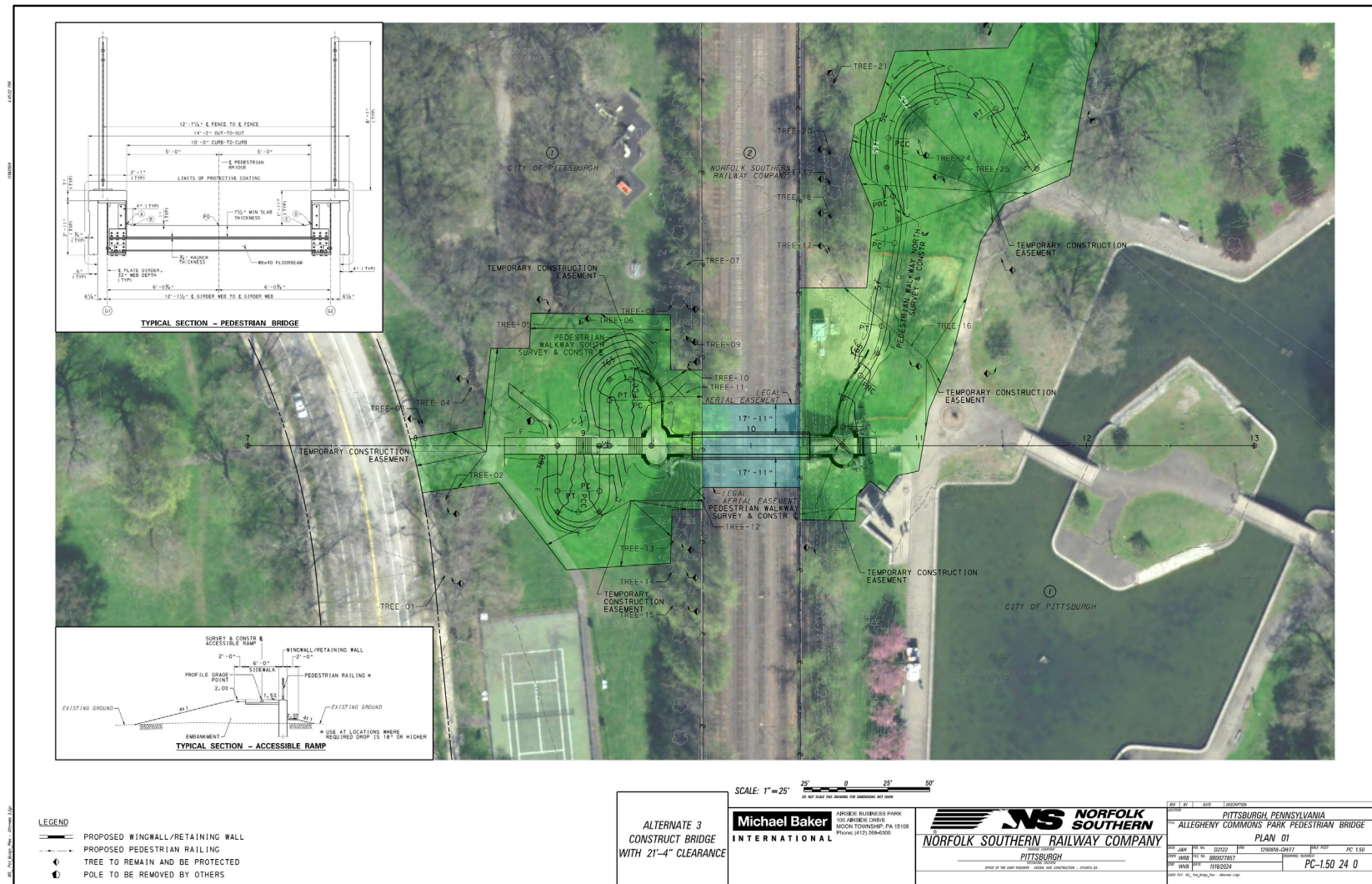
Project Details

- Construction of new steel, through-girder bridge superstructure with 21'-4" vertical clearance
- Bridge façade panels and upper portions of the plaza walls will include recessed architectural panels (similar to those used on the 1906 pedestrian bridge and the current W. Ohio Street Bridge)
- Existing stairs on west side of bridge will be replaced at the same location with a slightly lower elevation at the top landing to minimize impacts to the park landscape



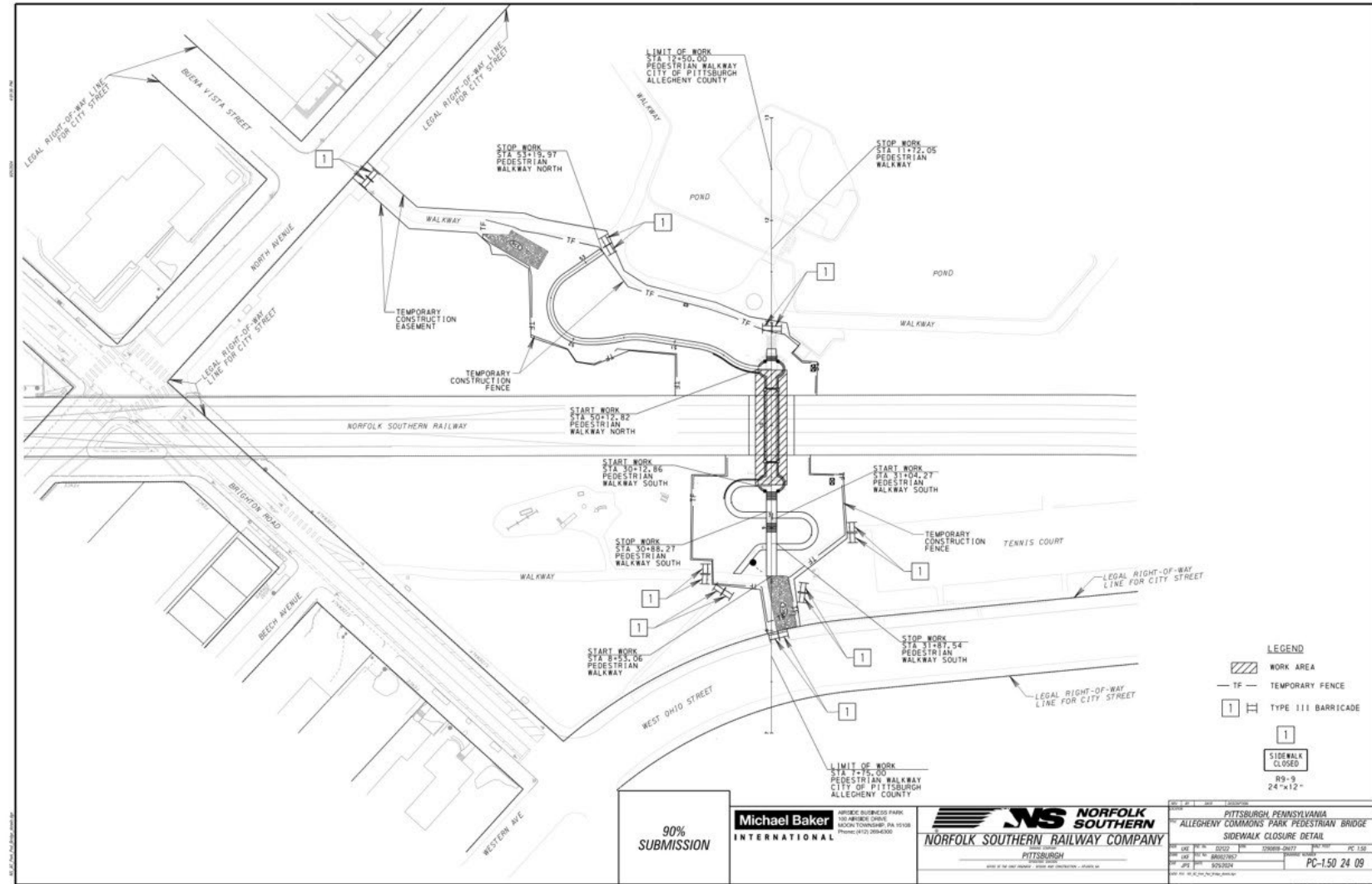
Project Details

- Construction of new, ADA compliant, 6'-wide approach paths and new oval plaza areas at each end of the bridge
- Bridge plazas will have benches integral to the curved sections of concrete parapet walls
- Installation of new lighting including four ornamental fixtures at each end of the bridge (two at the plaza entrance and two at the bridge entrance)
- Screening of railroad signal cabinet located 60' northwest of the pedestrian bridge location on the east side of the tracks
- Temporary Construction Easement on one property owned by the City of Pittsburgh



Project Details

- Construction to begin Spring 2025
- Pedestrian Access:
 - Access to the park on North Avenue across from Buena Vista will be closed to allow access for construction vehicles and equipment
 - All other access to the park from North Avenue, Arch Street, Ridge Avenue and West Ohio Street will remain open



Project Photos

Allegheny Commons Pedestrian Bridge Project location, showing the depressed railroad corridor with concrete retaining walls with stone coping and decorative wrought iron fencing, facing southeast.



Project Photos

Allegheny Commons Pedestrian Bridge Project location, showing the depressed railroad corridor with concrete retaining walls with stone coping and decorative wrought iron fencing, facing northeast.



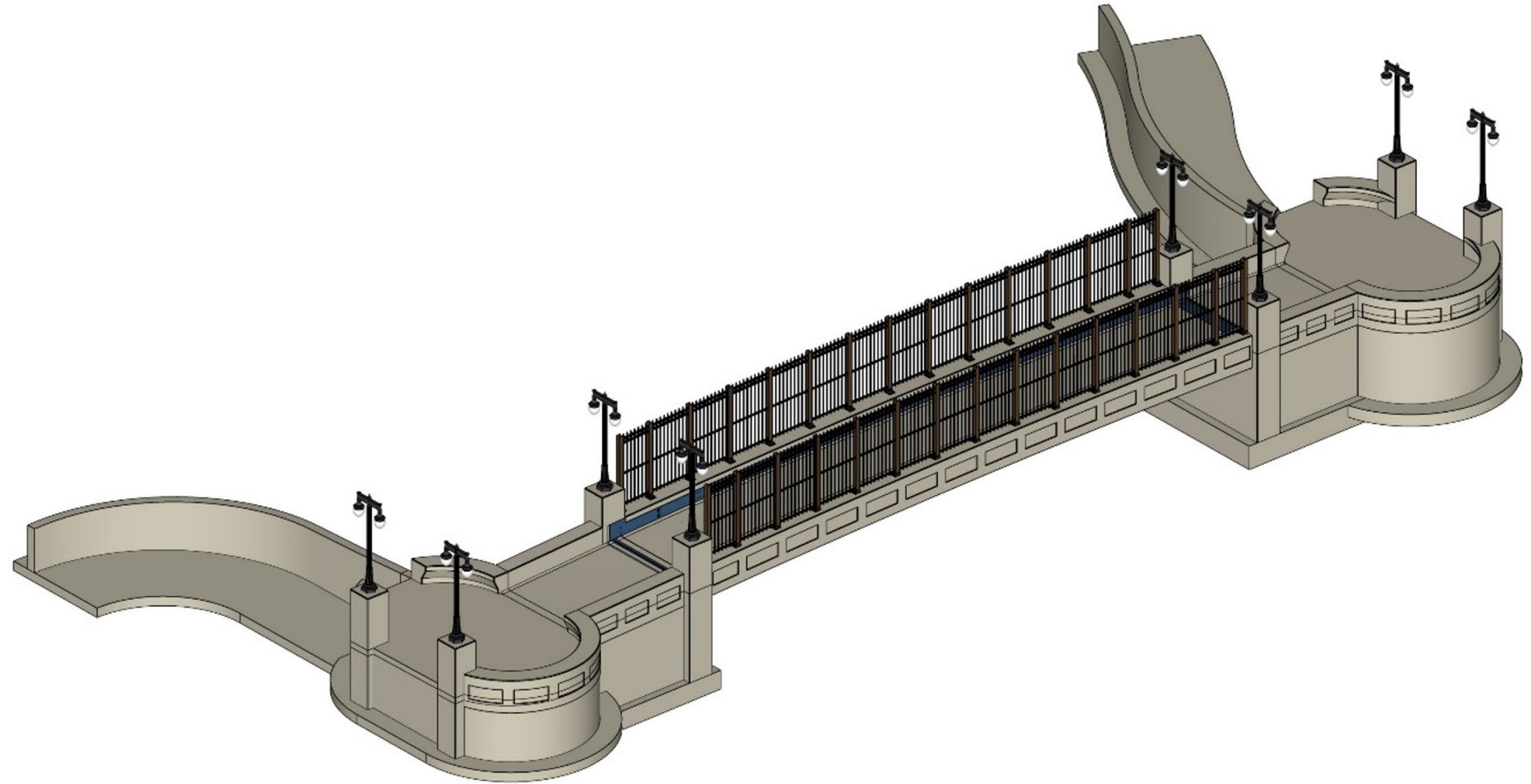
Project Photos

*Allegheny Commons
Pedestrian Bridge Project
location, showing the
existing stairs on the west
side, facing northeast.*



Project Rendering

*Rendering showing bridge and plaza configurations
(note: railings in plazas and walkways are not shown).*



60%
SUBMISSION

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NORFOLK SOUTHERN
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PITTSBURGH

PITTSBURGH, PENNSYLVANIA	
ALLEGHENY COMMONS PARK PEDESTRIAN BRIDGE	
STRUCTURE LIGHTING DETAILS	
DATE	NOV 20 2024
BY	XXXXX
APP'D	XXXXX
DATE	MARCH 22 2024
PC-1.50 24	39

Project Rendering

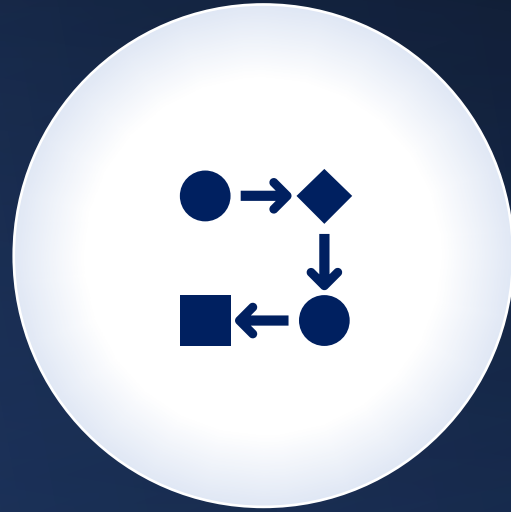
*Bird's Eye rendering of
proposed Allegheny
Commons Pedestrian
Bridge and paths facing
east toward North
Avenue.*



Project Rendering

*Rendering of view
of the Allegheny
Commons Pedestrian
Bridge and signal box
visual screening, facing
northeast.*





Section 2002 Impacts

Section 2002 of the Pennsylvania Administrative Code of 1929 specifies that agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there are no prudent and feasible alternatives to using those resources, and the proposed project plans include all possible planning to minimize harm to the property or the project has a de minimis impact on the property.

AMTRAK STATION PROJECT

No impacts on Section 2002 resources

W. NORTH AVENUE BRIDGE PROJECT

Pennsylvania Railroad: Main Line (Pittsburgh to Ohio State Line) Railroad Corridor Historic District – permanent property impacts, including the bridge replacement, and temporary construction easements; Section 2002 Evaluation for Projects that Necessitate the Use of Historic Bridges

Allegheny Commons – temporary construction easements; temporary Section 2002 impact

International Harvester Company Building – permanent right-of-way takes and temporary construction easements; de minimis Section 2002 impact

PENNSYLVANIA AVENUE BRIDGE PROJECT

Allegheny Second Ward Industrial Historic District – temporary construction easements; temporary Section 2002 impact

ALLEGHENY COMMONS PEDESTRIAN BRIDGE PROJECT

Allegheny Commons – temporary construction easements; temporary Section 2002 impact

Contacts

Follow-up questions or comments
can be directed to:

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