

Commercial Street Bridge Replacement

Lynn, MA

Public Meeting – September 9, 2020



Meeting With You Today

- Mike Ryan – *MBTA Project Manager*
- Gary Orlando – *Project Manager (Barletta)*
- Bob Penfield – *Design Manager (VHB)*
- Andrew Burkholder – *Senior Engineer (VHB)*



Meeting Outline

- Design-Build Program Overview
- Commercial Street Bridge
 - Site Location / Existing Conditions
 - Project Needs and Goals
 - Bridge Layout and Design
 - Construction Staging
 - Traffic Impacts during Construction
 - Project Schedule
- Additional Public Outreach
- Questions

H91CN01 - MBTA Rail Bridge Replacements Design-Build



Intervale Road



Bacon Street



High Line



Lynn Fells Parkway

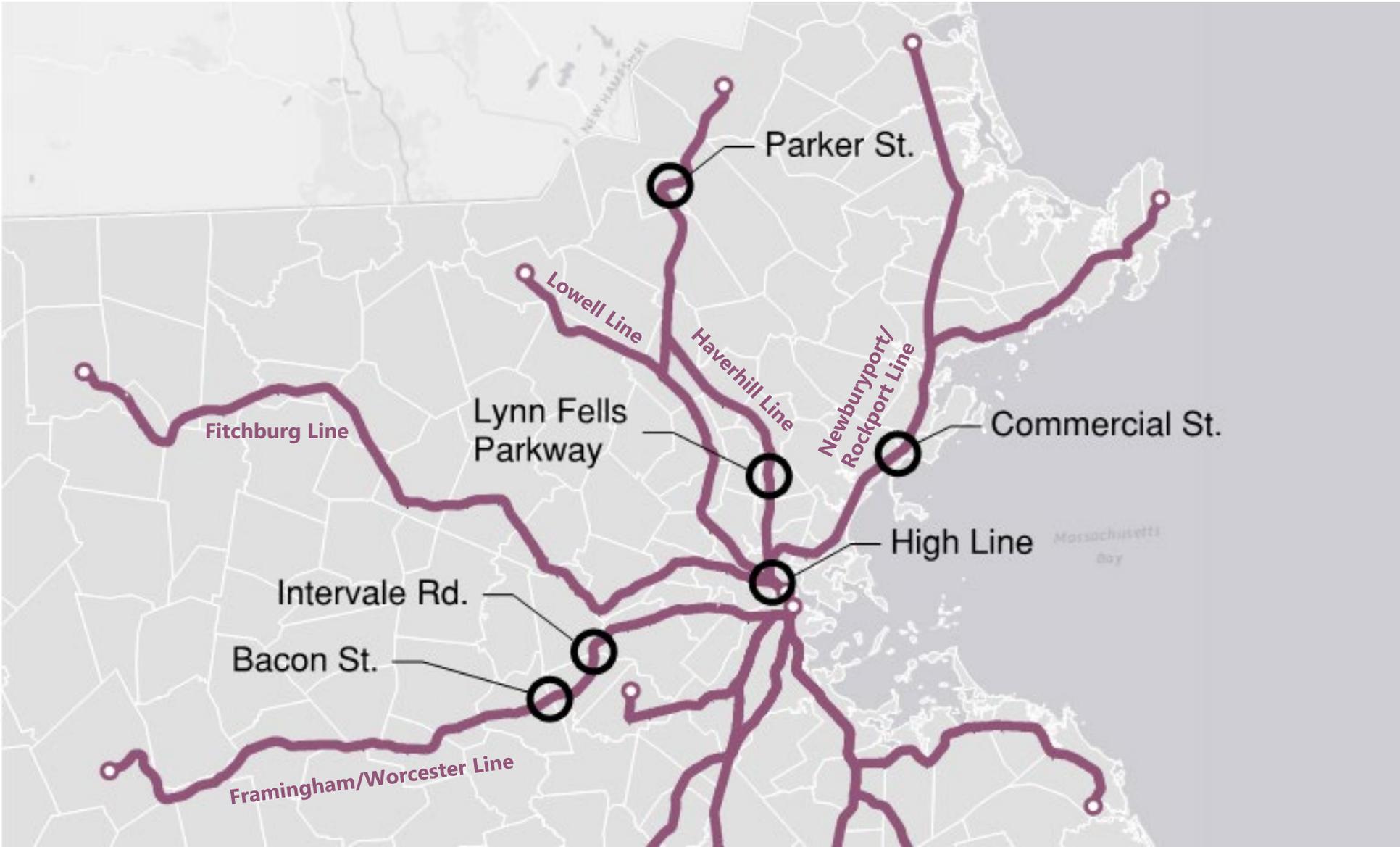


Parker Street



Commercial Street

H91CN01 - MBTA Rail Bridge Replacements Design-Build



Program Timeline

- 2016: Preliminary Design of the Bridges
- 2017: MBTA Capital Delivery – Accelerate pace of projects
 - Six individual projects combined into 1 large “program”
 - Use Design-Build to accelerate and encourage more innovation
- 2018-2019: Design-Build procurement
 - 9 Teams proposed, 3 Shortlisted
 - Barletta/VHB Team was the selected “Best-Value”
 - Highest Tech Score AND Lowest Price
- 2019-2022 - Final Design and Construction
 - Specific schedule varies by bridge
 - Full Program complete August 2022



Commercial Street – Existing Conditions

9

- Existing Bridge
 - Originally built in 1913
- Four track structure (2 active)
 - Steel girders with open deck
 - Concrete gravity abutments
- Roadway
 - 33'-6" face-to-face of curb
 - 8'-3" sidewalks (both sides)
- Utilities
 - Signal and fiber optic on bridge
 - PTC, power overhead
- Railroad Operations
 - 68 commuter trains on weekdays
 - 26 commuter trains on weekends
 - Local freight as well





Commercial Street – Project Need

- Existing bridge is in poor condition
 - Steel superstructure rated as 4 (out of 10)
- MBTA's continuing need to
 - Provide safe and efficient transportation for T riders and the public
 - Maintain and improve the state of good repair of its infrastructure





Commercial Street – Project Goals

- Restore the State of Good Repair
- Replace the structurally deficient bridge with one that:
 - Is resilient, with a 75-yr expected service life
- Minimize impacts to:
 - Abutters
 - Commuter Rail riders
 - Users of Commercial Street





Commercial Street – Bridge Design

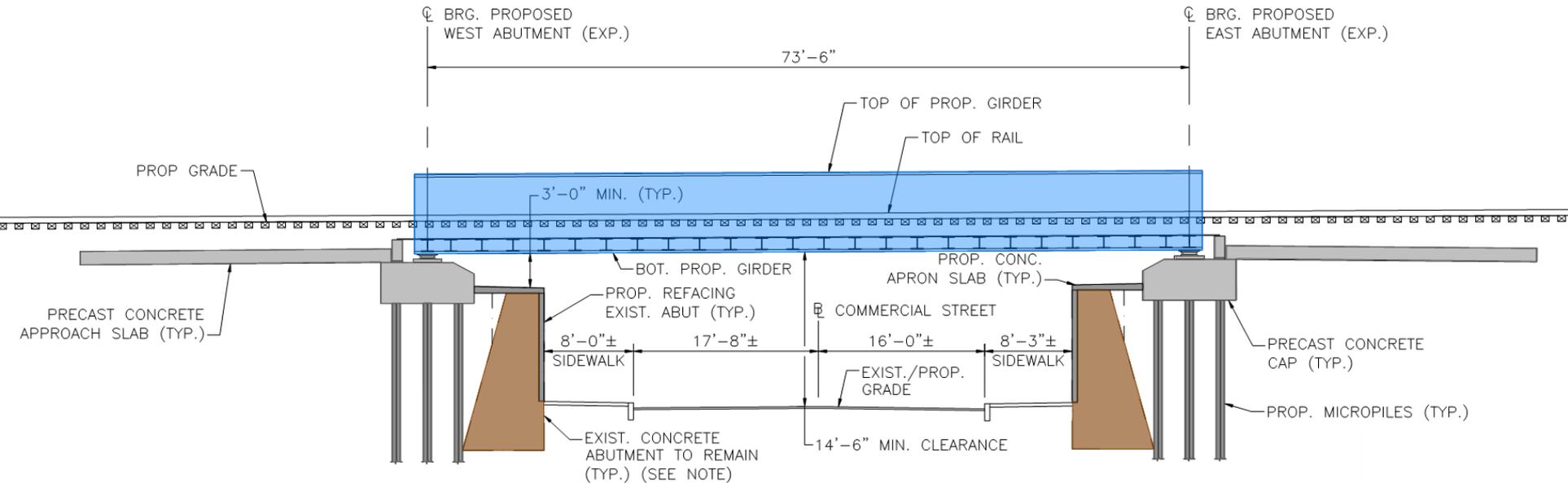
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- Complete bridge replacement
 - Track profile to be raised to accommodate ballasted structure and maintain vertical clearance
 - Use accelerated construction techniques to reduce impacts
- New structure
 - Single-span, with new abutments built behind existing abutments
 - Designed to accommodate future third track
- All construction within existing Right of Way
 - No anticipated easements required



Commercial Street – Bridge Design

- New concrete abutments built behind existing abutments
- Vertical clearance = 14'-6" (min.)
- Drilled micropiles

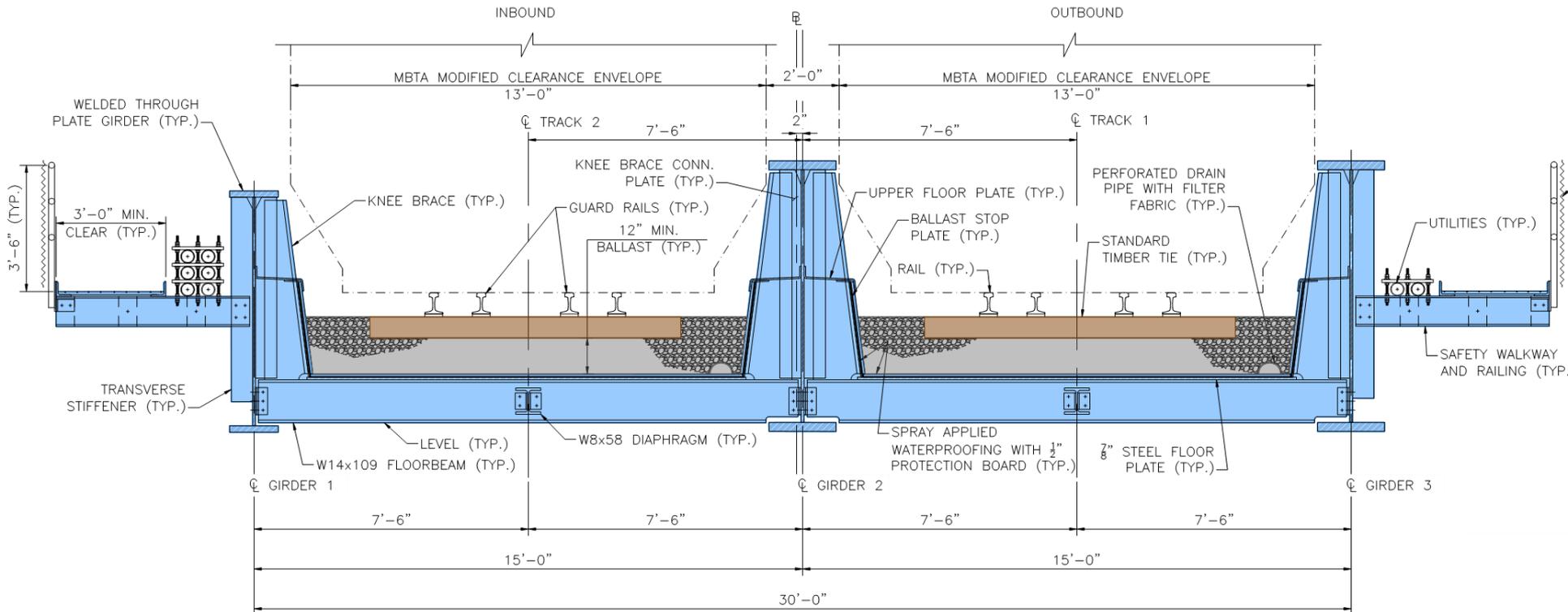


BRIDGE LONGITUDINAL SECTION



Commercial Street – Bridge Design

- Ballasted through-girder
- Supports 2 tracks
- Designed to accommodate future third track



TRANSVERSE SECTION

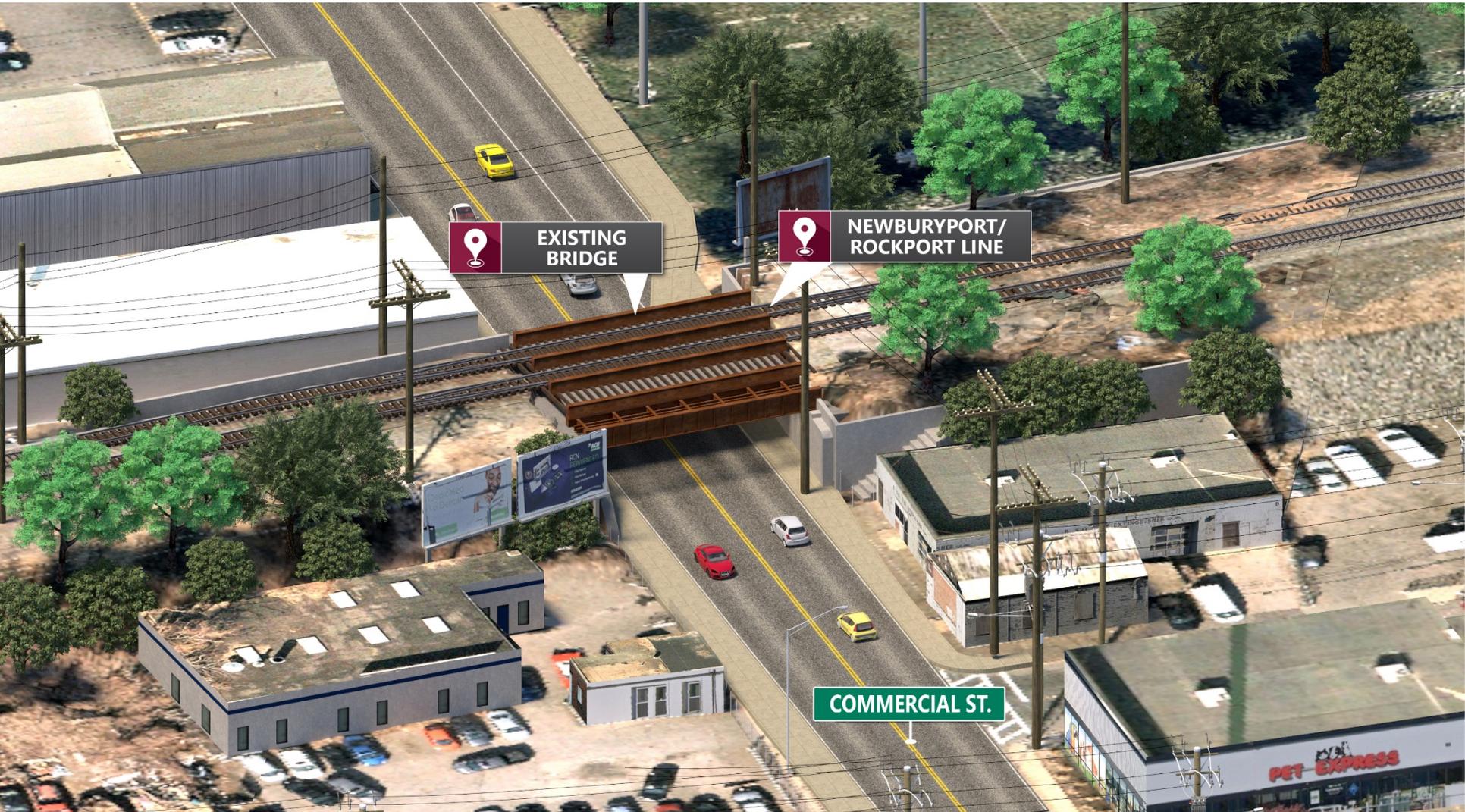


Commercial Street – Final Condition



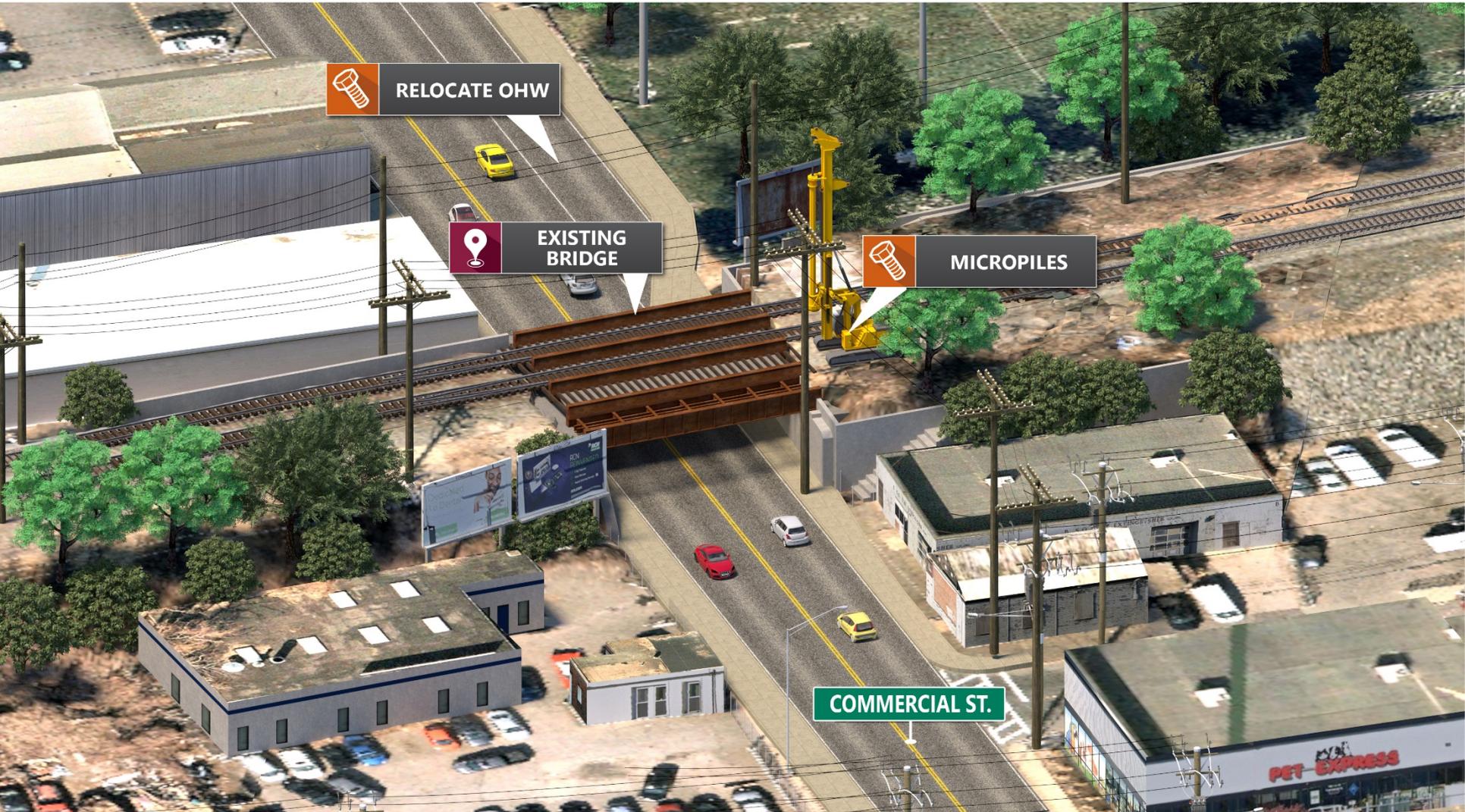


Construction Staging





Construction Staging



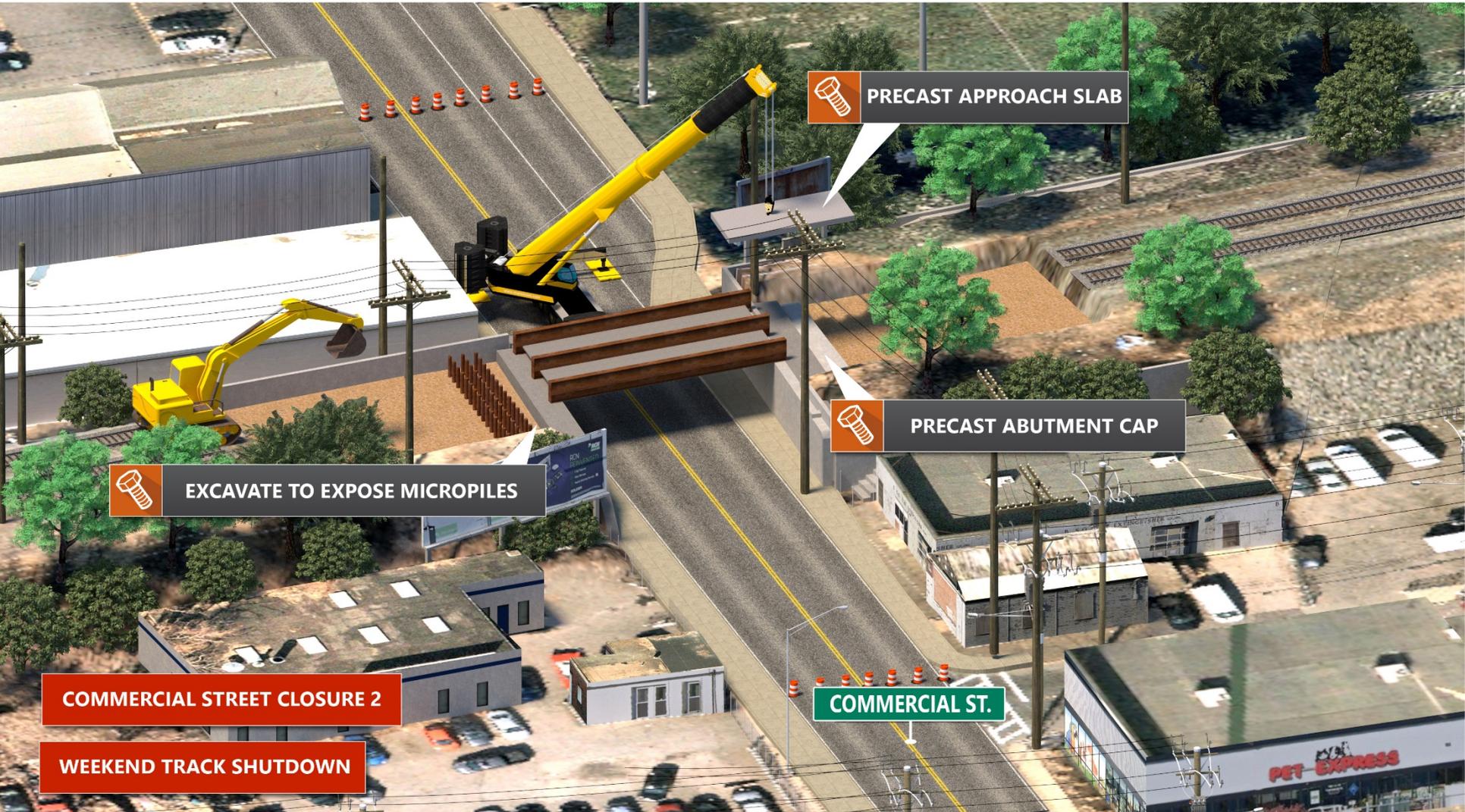


Construction Staging





Construction Staging



 PRECAST APPROACH SLAB

 PRECAST ABUTMENT CAP

 EXCAVATE TO EXPOSE MICROPILES

COMMERCIAL STREET CLOSURE 2

WEEKEND TRACK SHUTDOWN

COMMERCIAL ST.

PET EXPRESS

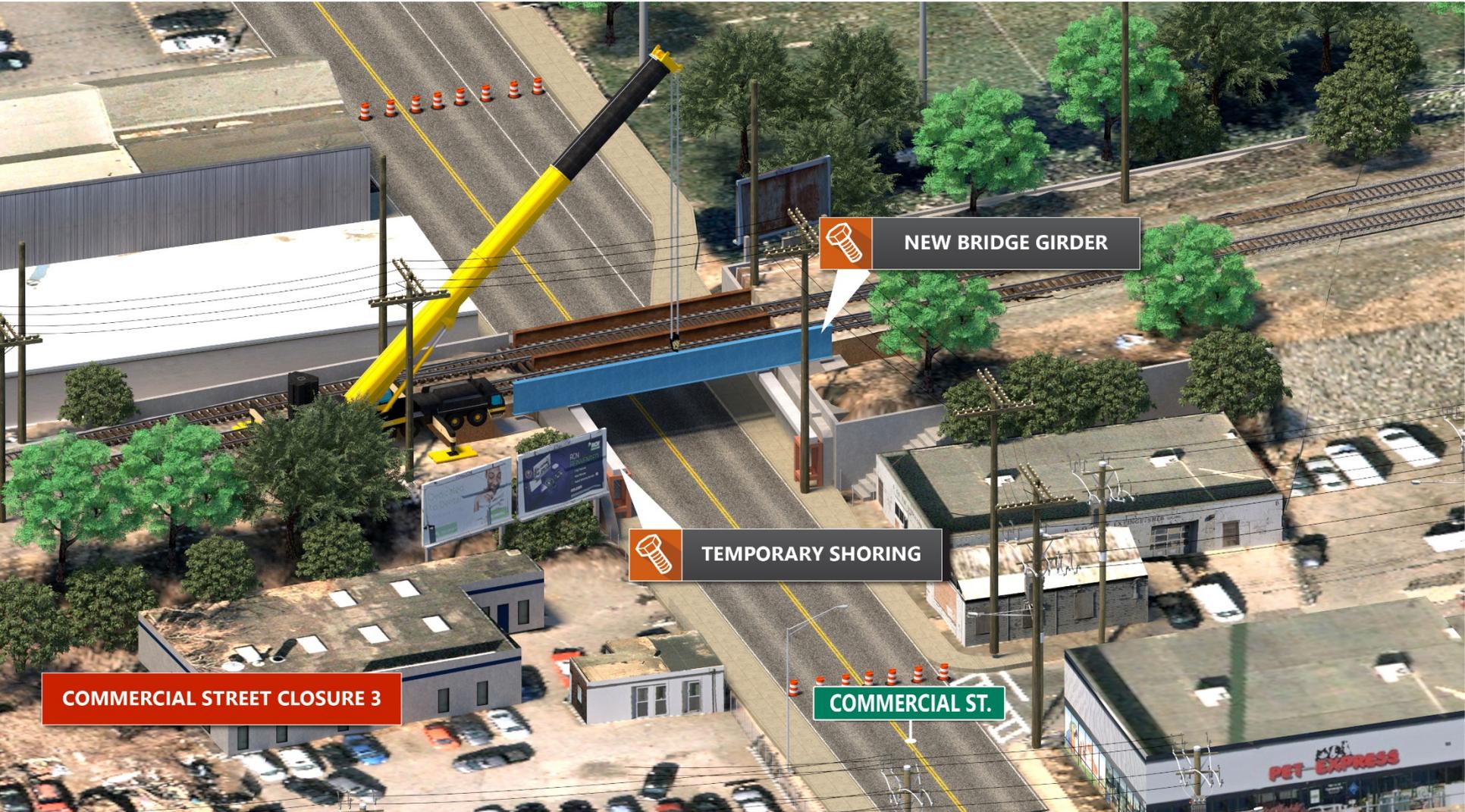


Construction Staging





Construction Staging



 **NEW BRIDGE GIRDER**

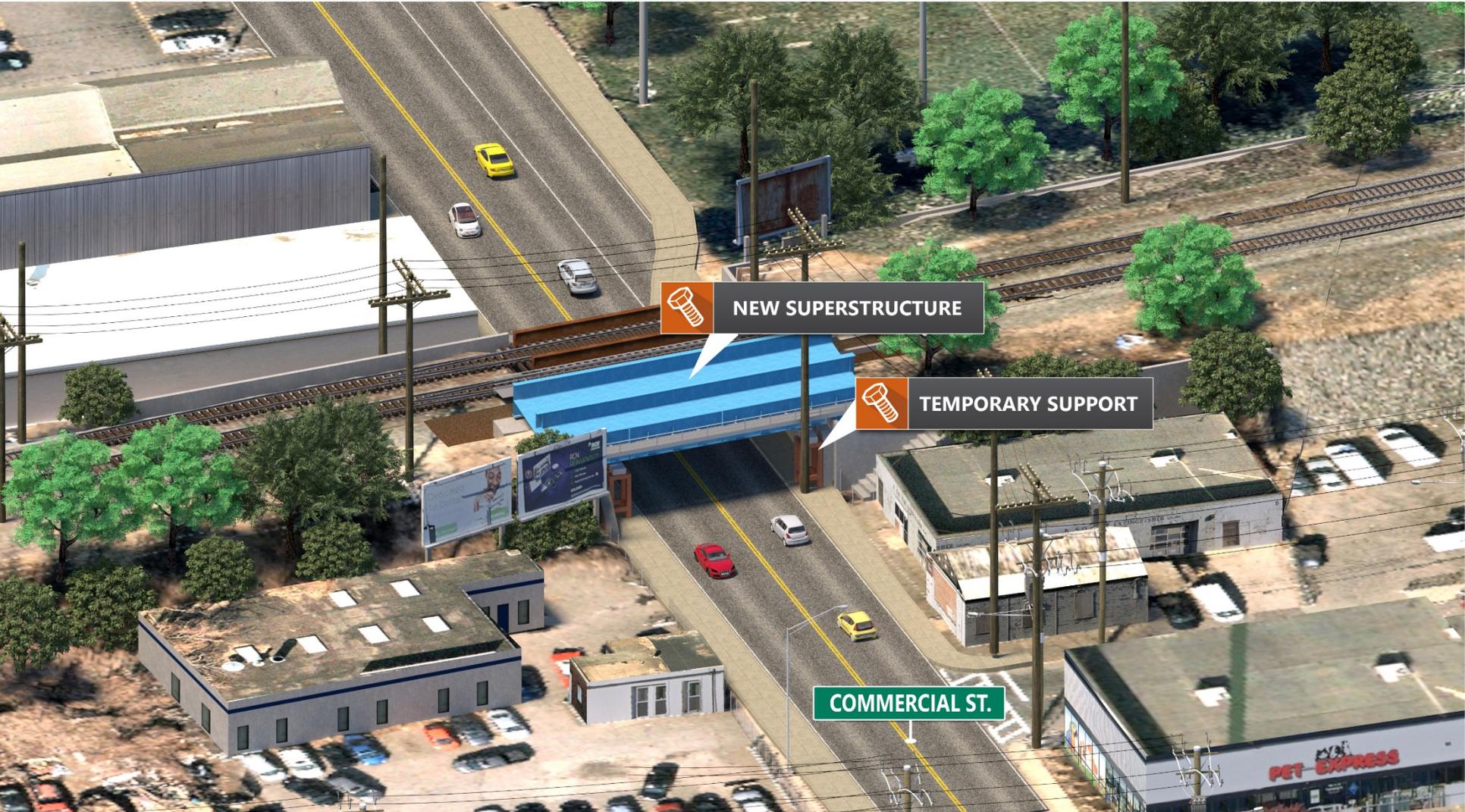
 **TEMPORARY SHORING**

COMMERCIAL STREET CLOSURE 3

COMMERCIAL ST.

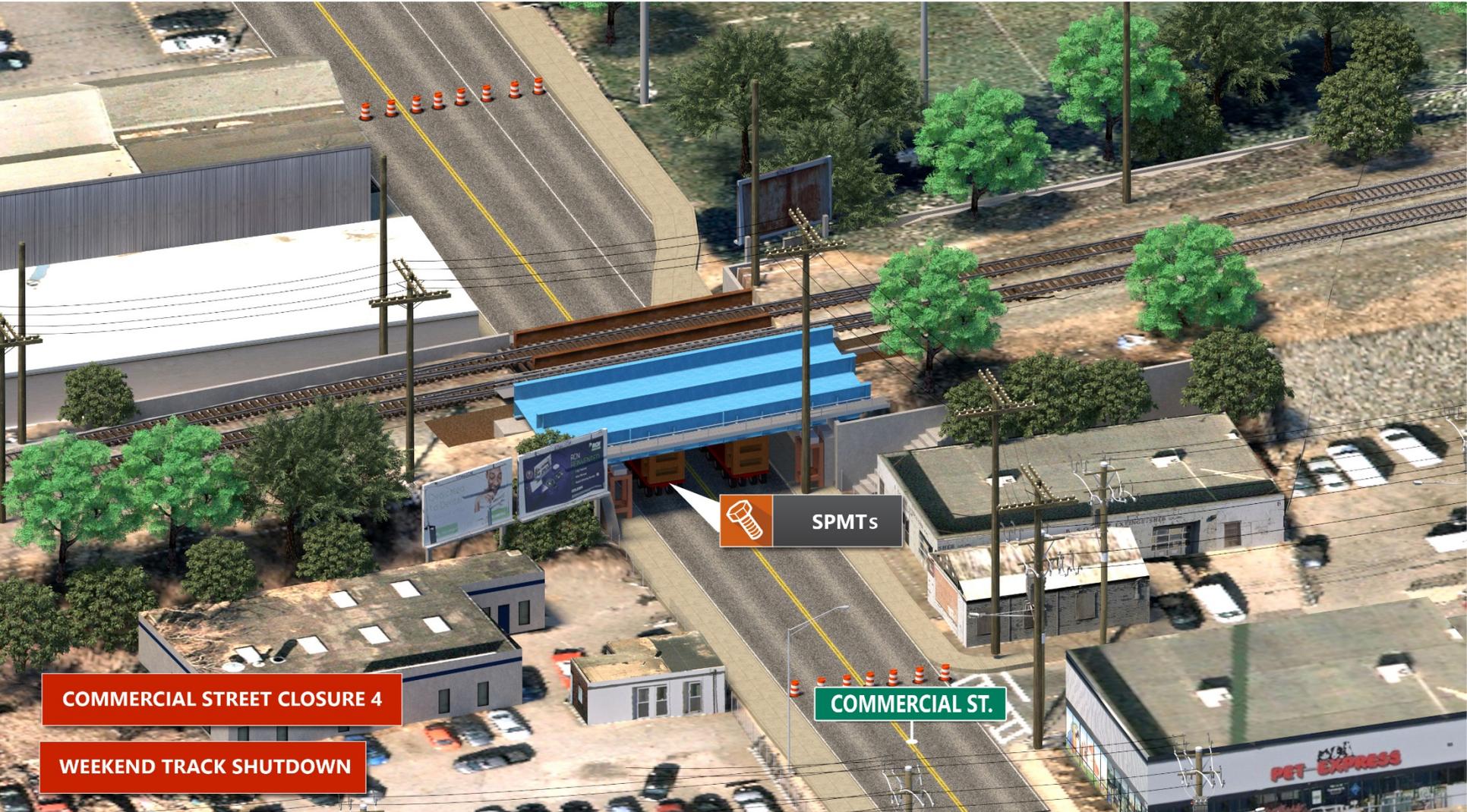


Construction Staging



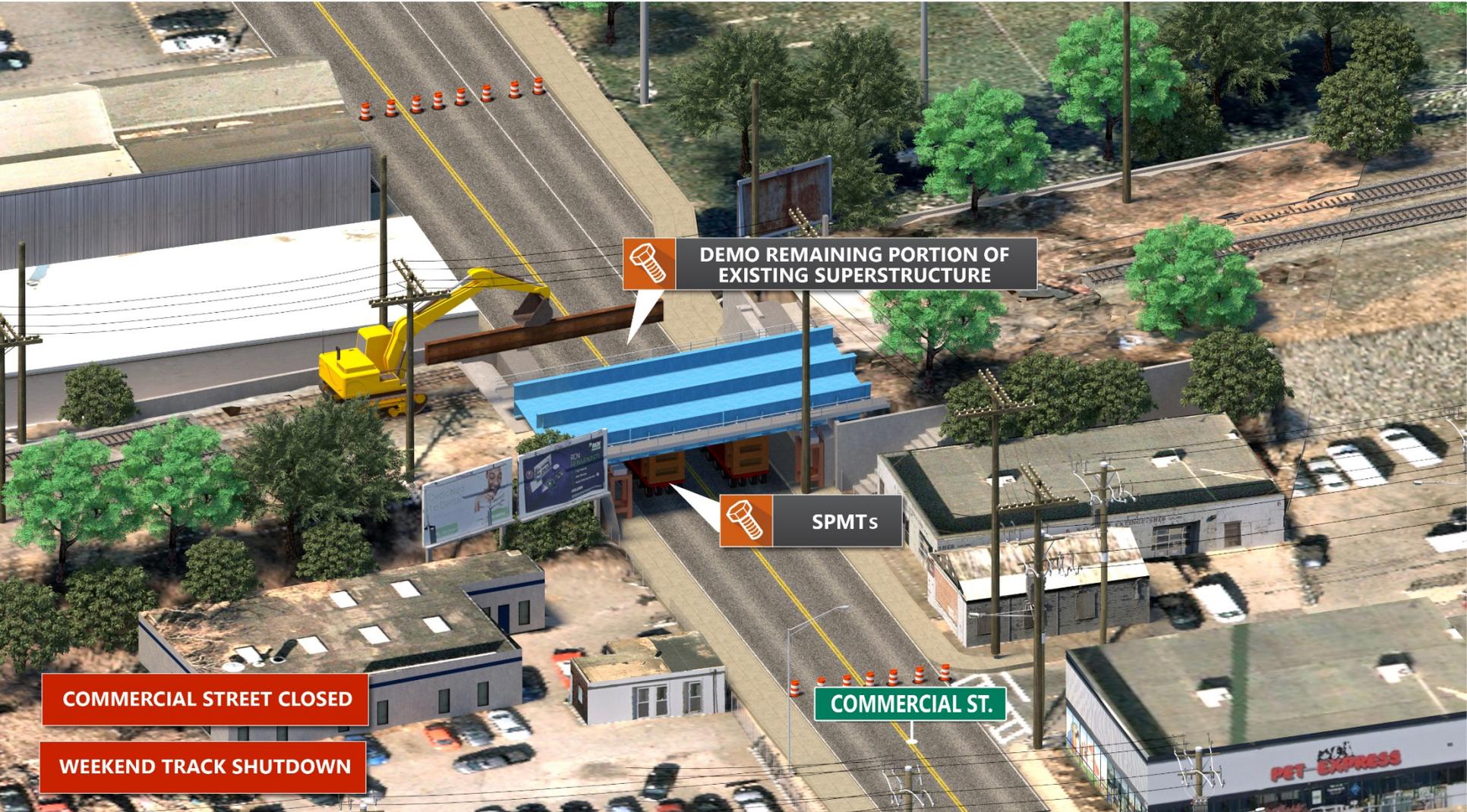


Construction Staging





Construction Staging





Construction Staging



**NEW SUPERSTRUCTURE
IN FINAL POSITION**

COMMERCIAL STREET CLOSURE 4

WEEKEND TRACK SHUTDOWN

COMMERCIAL ST.

PET EXPRESS



Construction Staging





Construction Staging





Traffic Detours





Project Status and Schedule

- Construction
 - Site Clearing – Fall 2020
 - Site Prep - Fall 2020
 - Foundation Work – Spring 2021
 - Partial Demo of Existing Bridge – Spring 2021
 - Construct New Bridge – Summer 2021
 - Move New Bridge Into Place – Fall 2021
 - Site Cleanup – Spring 2022





How Can You Reach Us?

- Project Website:
www.MBTA.com/CommercialStBridge
- Email:
CommercialStBridge@MBTA.com
- 24-Hour Hotline:
(617) 571-7878

Questions?

