

High Line Bridge Replacement

Somerville, MA

Design Public Meeting – December 14, 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
- High Line Bridge
 - Site Location / Existing Conditions
 - Project Needs and Goals
 - Bridge Layout and Design
 - Construction Staging
 - Impacts during Construction
 - Project Schedule
- Additional Public Outreach
- Questions

H91CN01 - MBTA Rail Bridge Replacements Design-Build



Intervale Road
Weston, MA



Bacon Street
Wellesley, MA



High Line
Somerville, MA



Lynn Fells Parkway
Melrose, MA

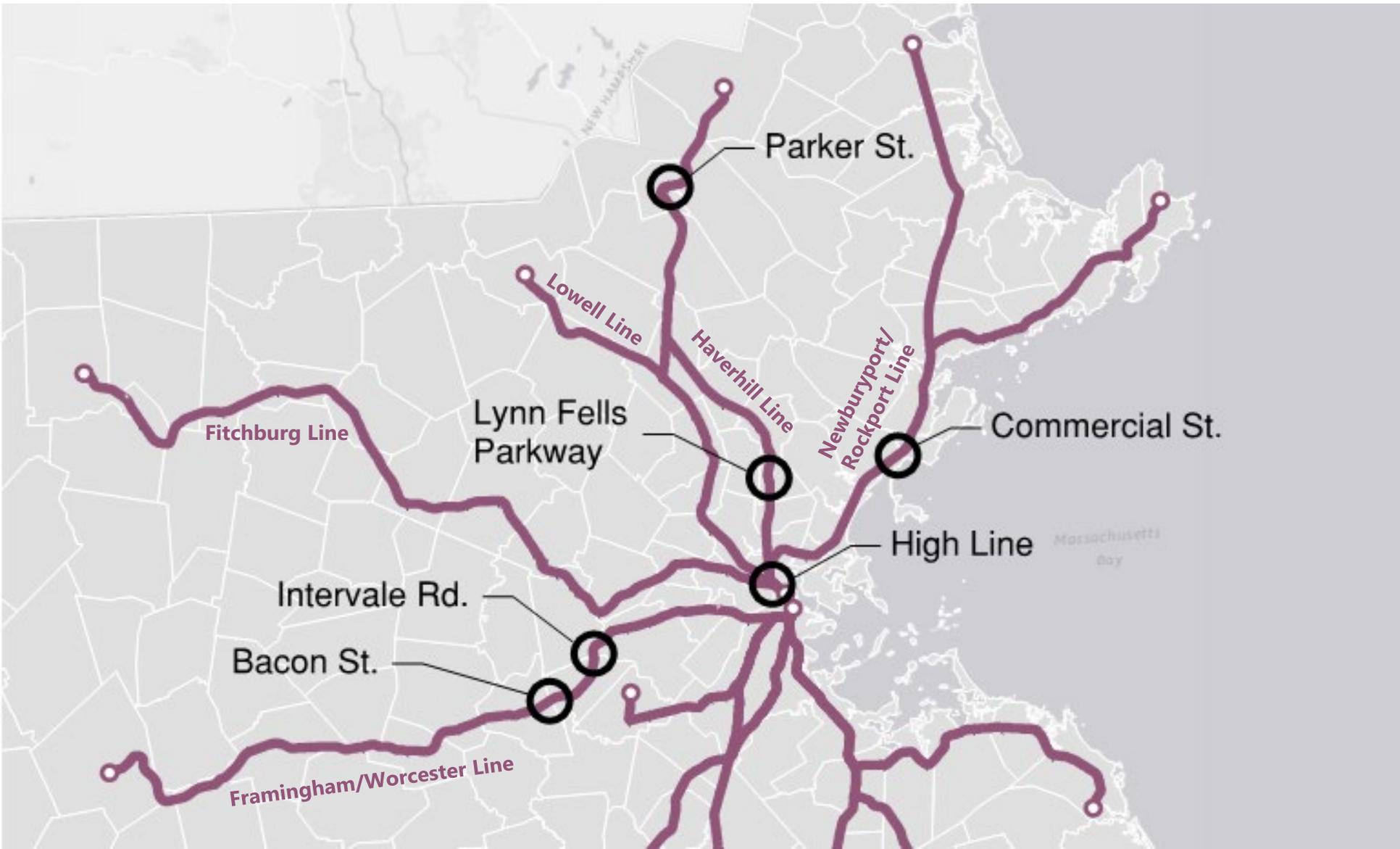


Parker Street
Lawrence, MA



Commercial Street
Lynn, MA

H91CN01 - MBTA Rail Bridge Replacements Design-Build



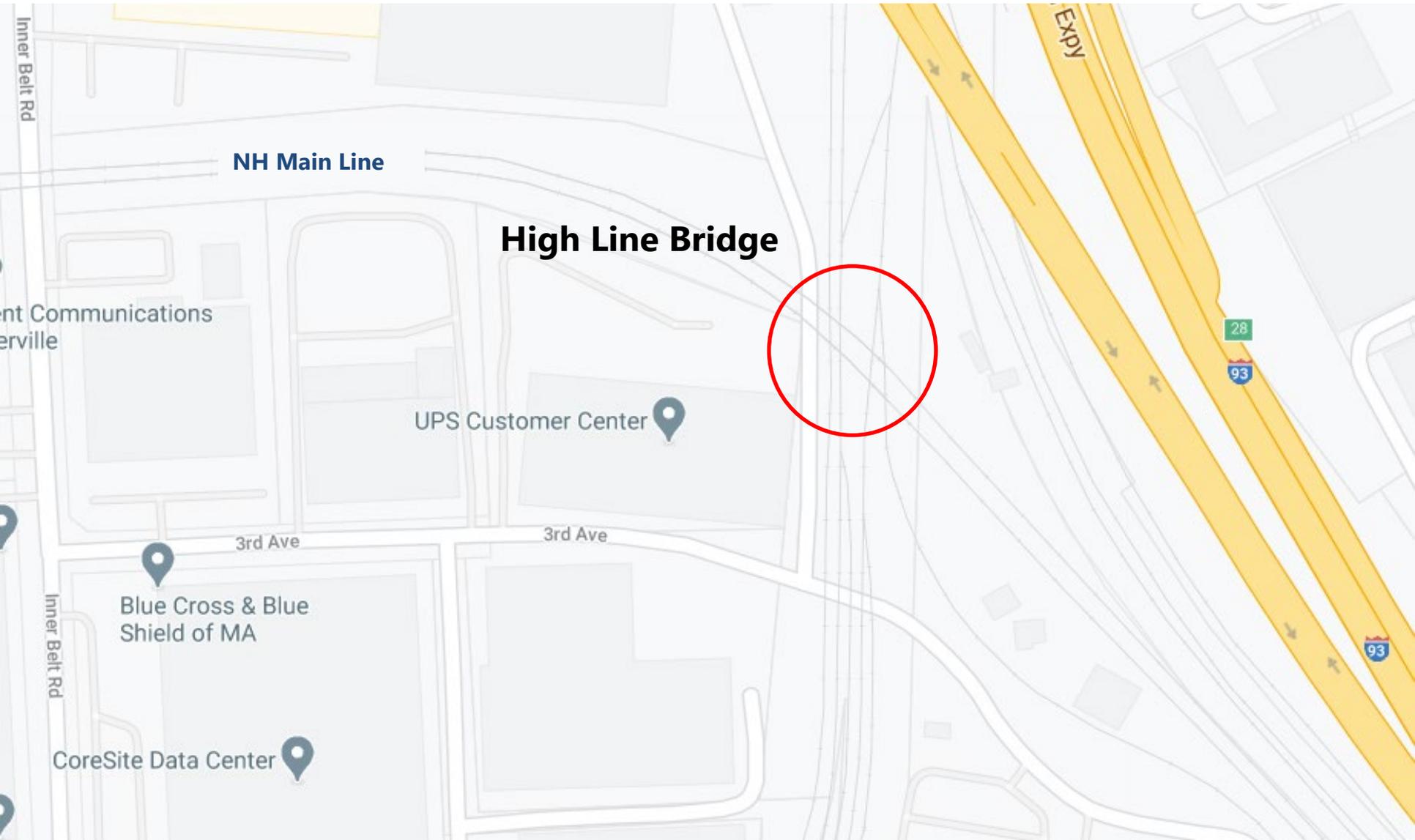
Program Timeline

- 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



High Line Bridge

Somerville, MA





High Line – Existing Conditions

- Existing Bridge
 - Originally built in 1927
- Two track structure
 - Steel trusses with open deck
 - Steel through girders
 - Concrete spill-through abutments
- Facilities Below
 - 4 RR tracks, 22'-0" wide access road
- Utilities
 - Signal cables on bridge
 - Multiple OH and UG utilities on site
- Railroad Operations
 - 57 commuter trains on weekdays
 - 16 commuter trains on weekends
 - Amtrak – 10 trains per day





High Line – Project Need

- Existing bridge is in poor condition
- 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





High Line – 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
 - Local businesses





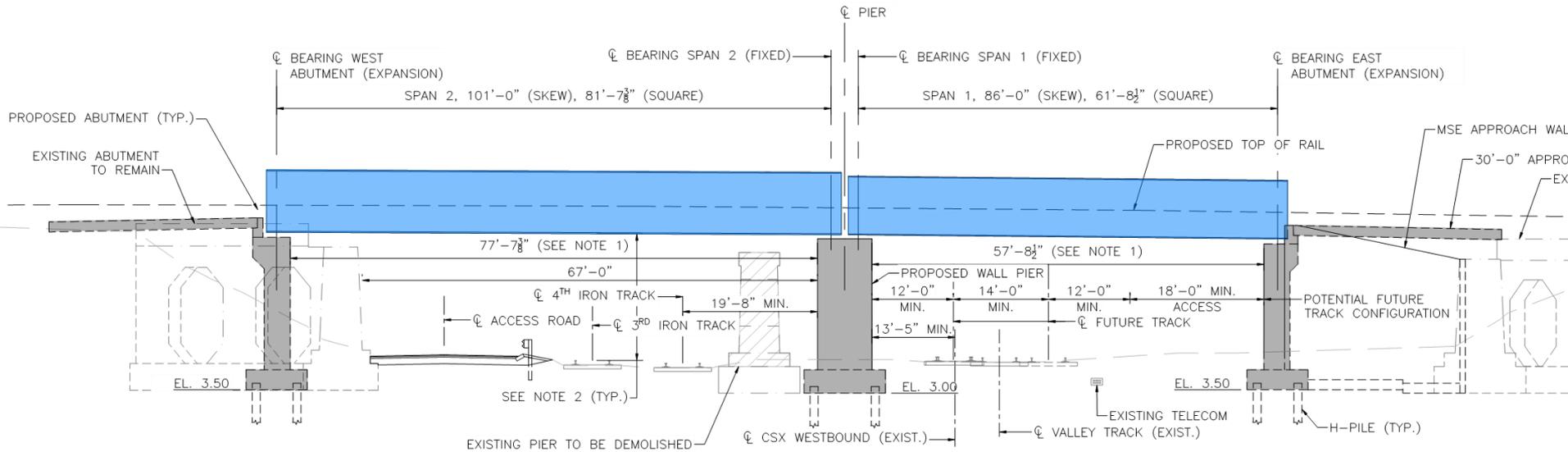
High Line – Bridge Design

- Complete bridge replacement
 - Track will be realigned to allow new bridge to be built beside existing bridge.
- New structure
 - Two-span, with new abutments and pier
- All construction within existing Right of Way
 - No anticipated easements required



High Line – Bridge Design

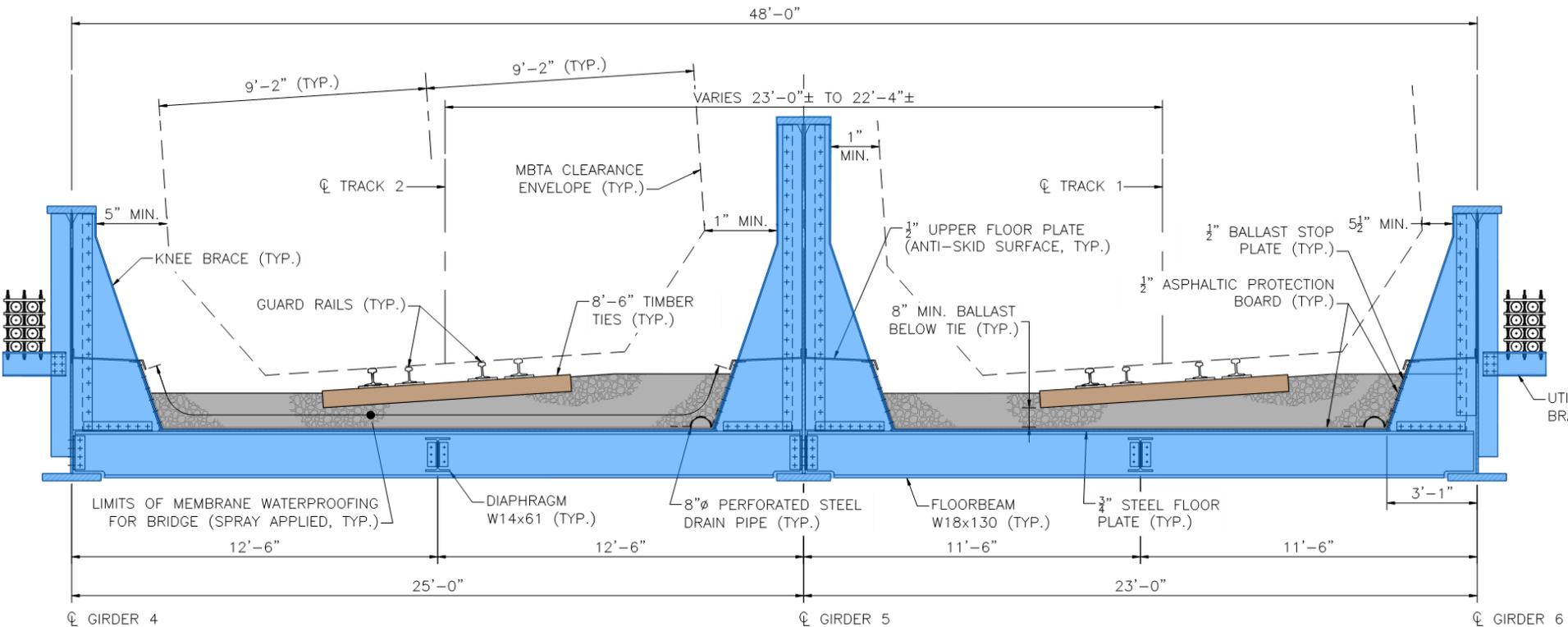
- New concrete abutments and pier
- Driven steel piles
- Steel color = black





High Line – Bridge Design

- 2-Span, ballasted through-girder
- Supports 2 tracks



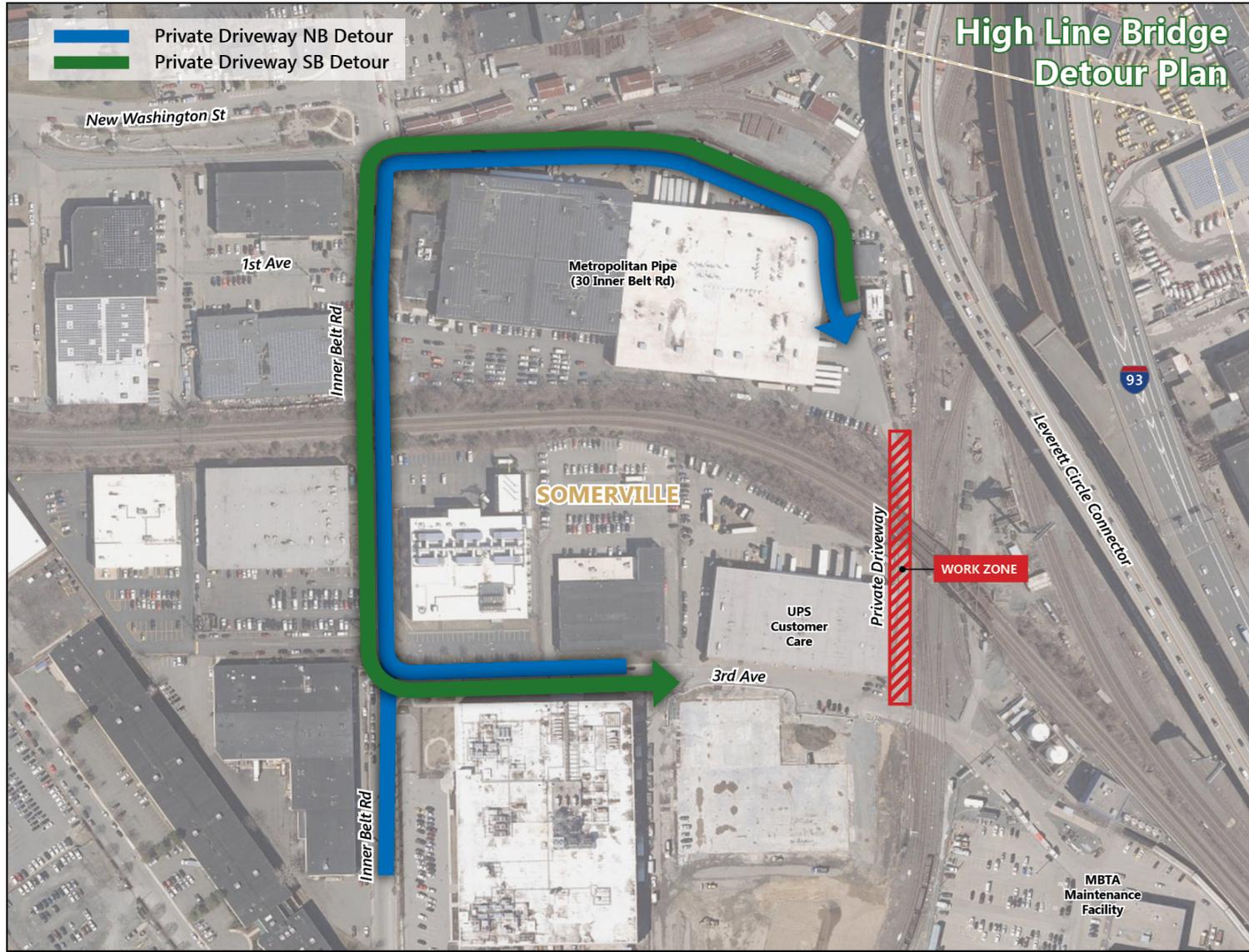


High Line – Final Condition





Traffic Detours





Project Status and Schedule

17

- Construction
 - Site Clearing – Complete
 - Site Prep – Spring 2021
 - Foundation Work – Winter/Spring 2021
 - Construct New Bridge – Spring to Fall 2021
 - Approach Wall, Embankment, and Track Construction – Spring/Summer 2022
 - Demo Existing Bridge – Fall 2022
 - Site Cleanup – Fall 2022





How Can You Reach Us?

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

Questions?

