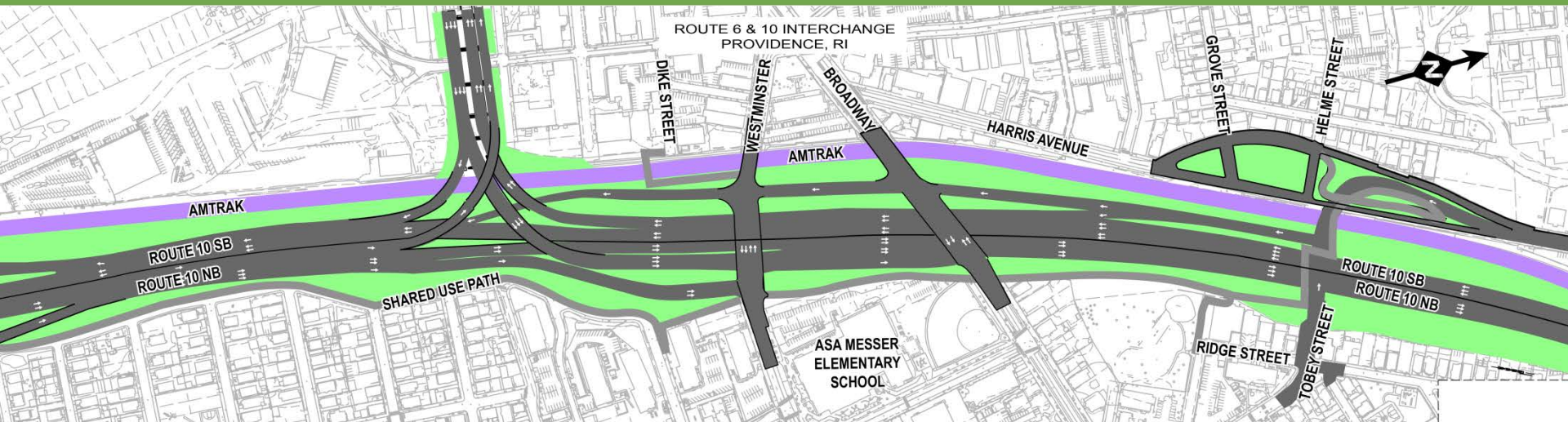




# Design Builds and the Reconstruction of the Route 6 & Route 10 Interchange

ACEC/MA & ACEC/RI Breakfast on Design-Build and P3, July 23, 2019



**Lori A. Fisette, MBA, Manager of Project Management**  
**James D. McGinn, P.E., Project Manager II**

# *RI Design Builds*



- 51<sup>st</sup> in the Nation
- Rhodeworks
- 10 year plan

# *RI Design Builds*

- 13 current contracts (4 non interstate)
- 1 RFQ
- Innovative ways to lessen procurement and design

## 2 Strategies:

- On Call Task Order Program
- Design Build



# *RI Design Builds*



- Benefits:
- Shifted responsibility of design to consultant
- Improved cost estimating
- Innovative design solutions
- Minimizes long term disruption of roadways
- DB partnership between contractor and designer
  - Acceleration of project time frame

## *RI Design Builds*

- Challenges:
- Teams still working to design entire project before starting construction
- Took time for DB teams to gel



# *RI Design Builds*



- Expectations:
  - Owner
    - Prepare RFP
    - Technical guidance
    - Final inspection/close out process
    - RFIs
  
  - DB Team
    - Project Design
    - Shop drawings
    - RFIs

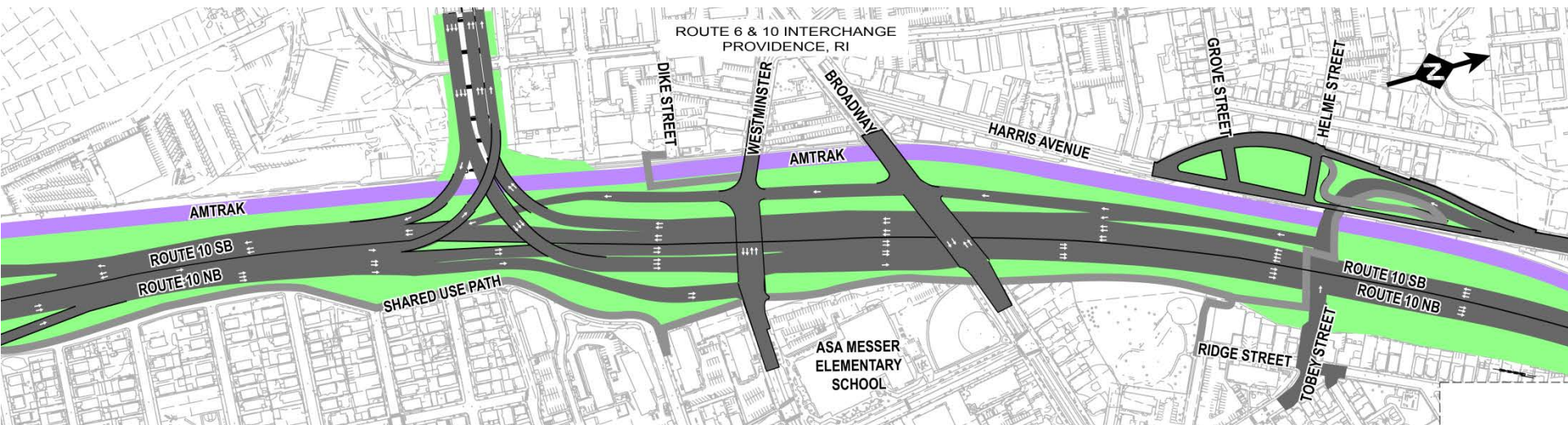
# *The Reconstruction of the Route 6 & 10 Interchange*

- Originally constructed in the 1950s
- Links three major commuter roadways
- Carries 100,000 vehicles daily
- Nine bridges, seven are structurally deficient
- Largest single contract in RIDOT history \$247 Million



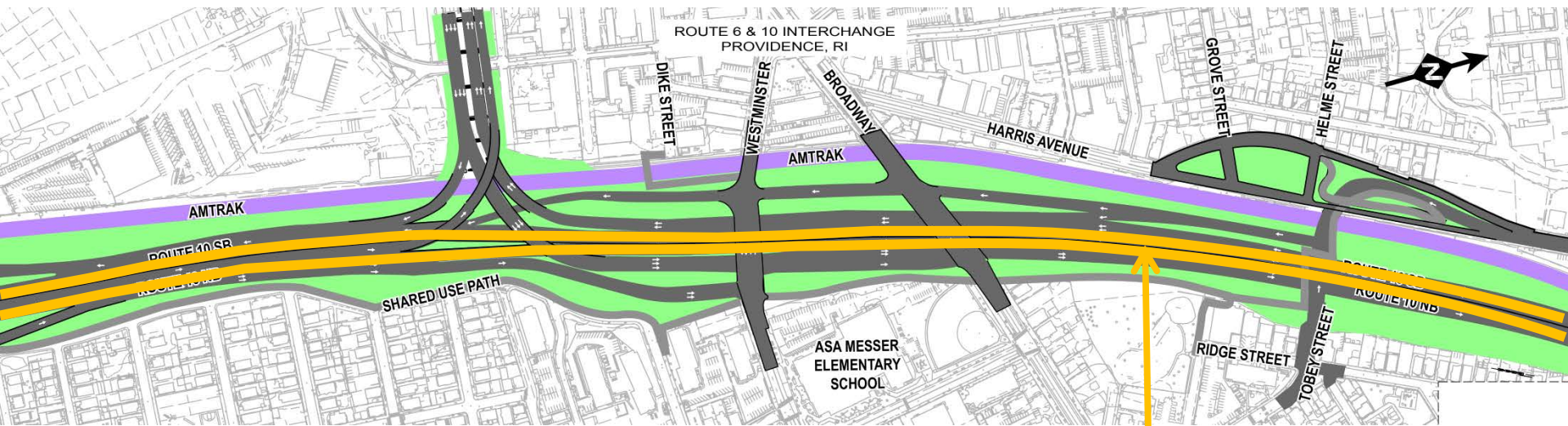
# Key Elements of the Project

- Route 10 roadway reconstruction, realignment and safety upgrades
- Replacement of the main interchange bridges
- Construction of a Route 10N to Route 6W flyover ramp
- Replacement of Westminster and Broadway bridges
- Replacement of Tobey Street and Harris Avenue bridges
- Dedicated Service Road to Route 10S
- Construction of multi-use paths



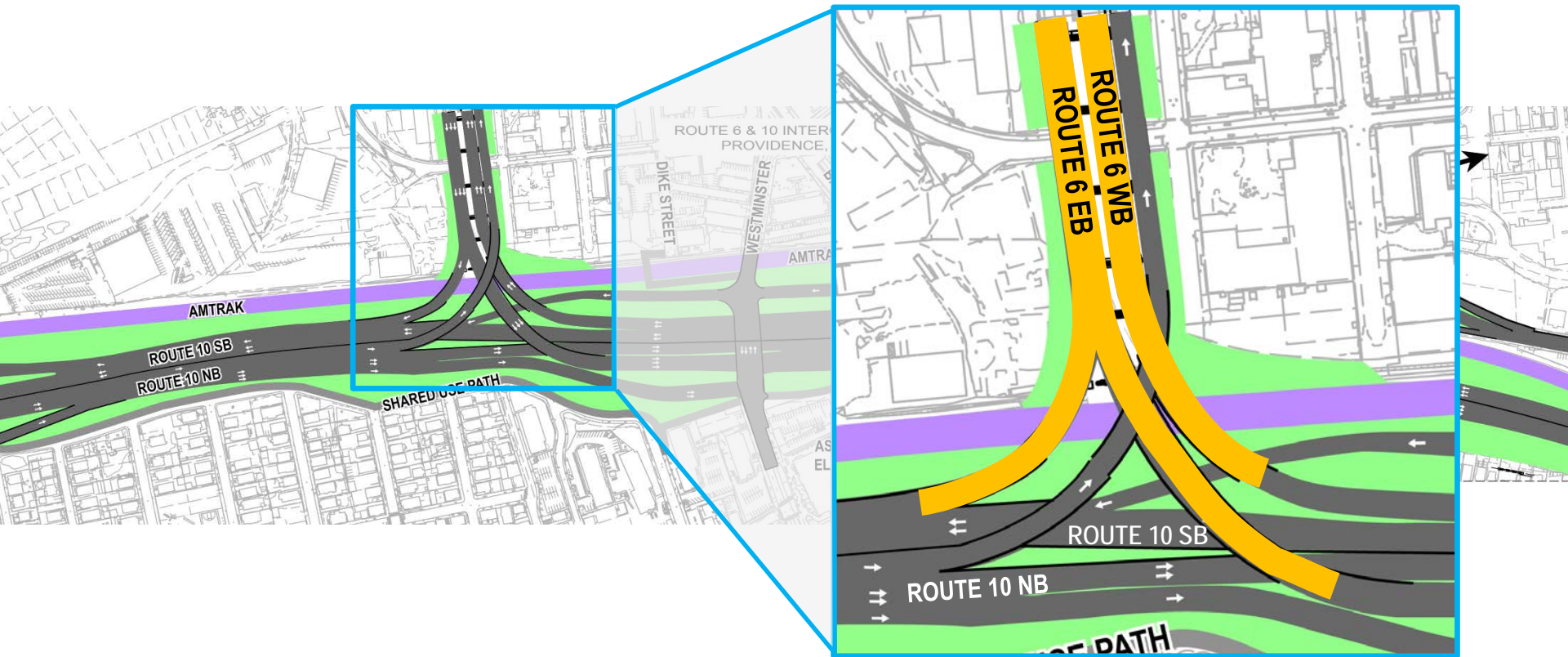


# Route 10 roadway reconstruction, realignment and safety upgrades

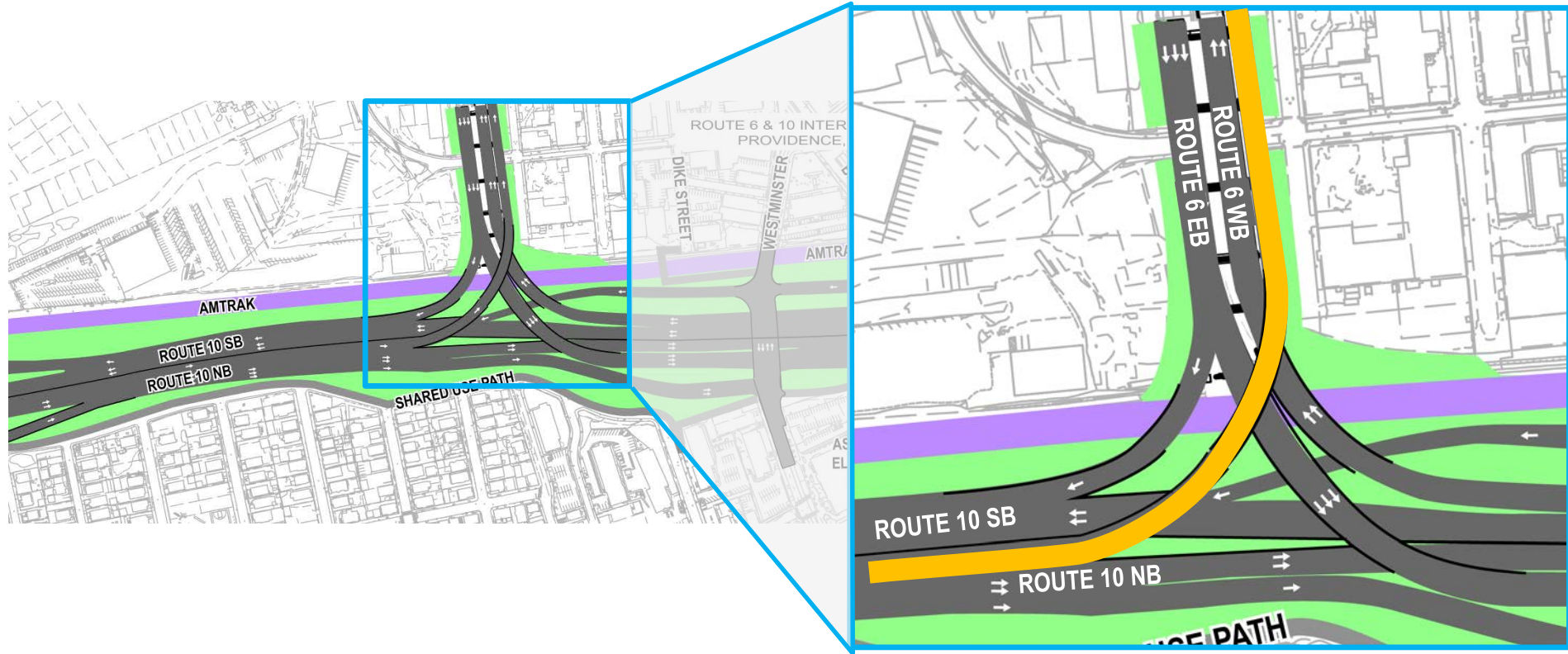


Route 10

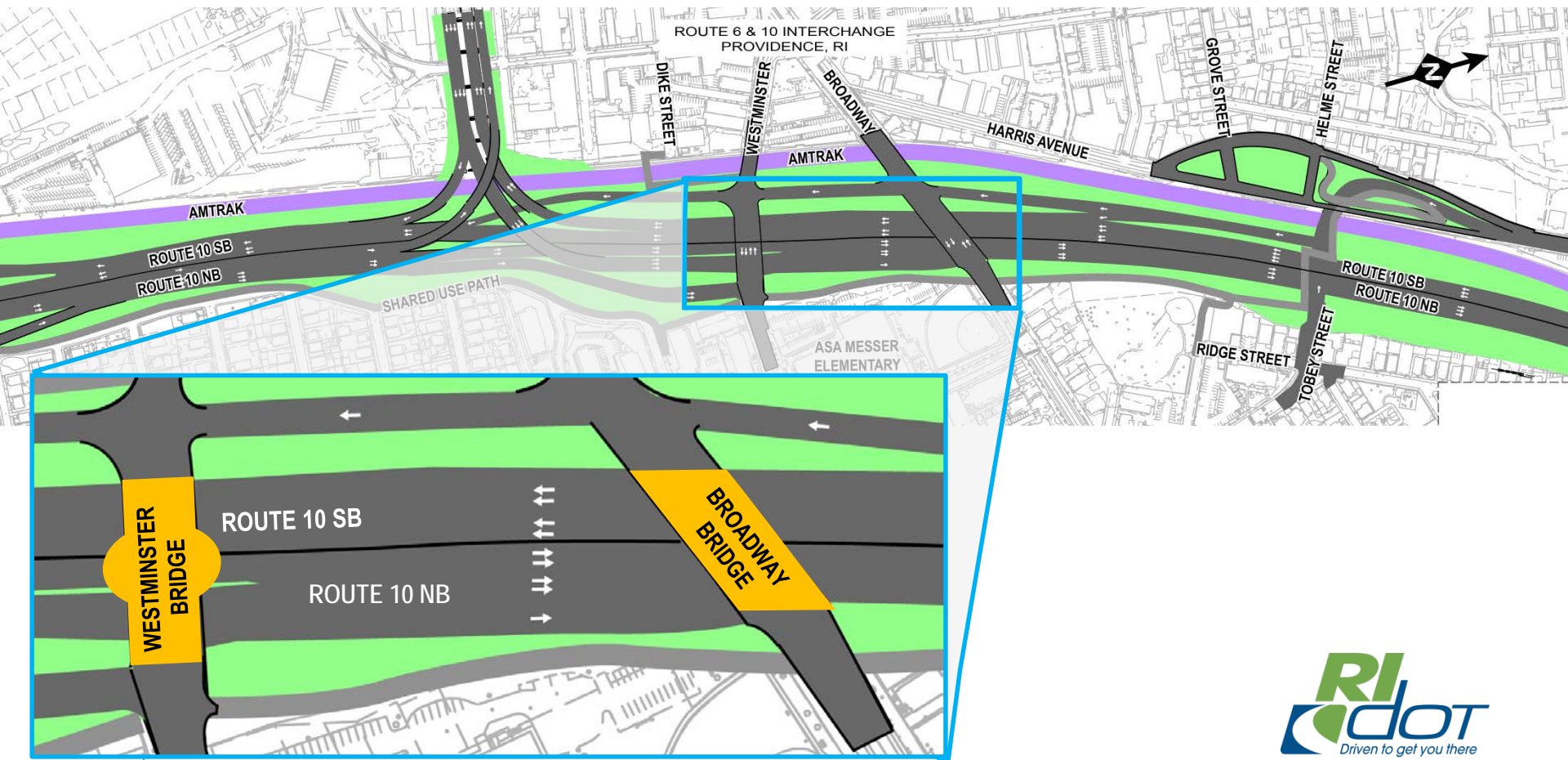
# Replacement of the 6/10 interchange bridges



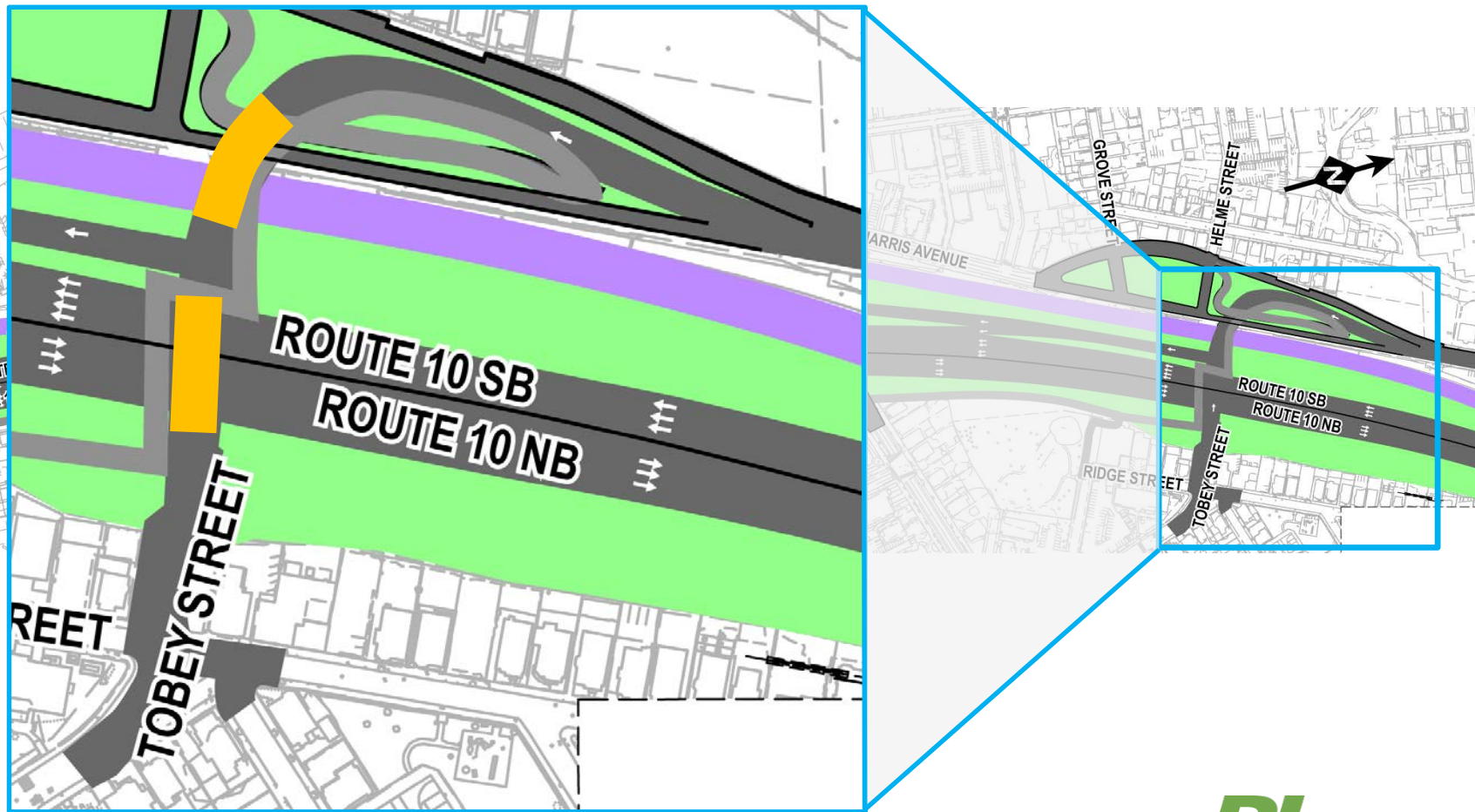
# Construction of a Route 10N to Route 6W flyover ramp



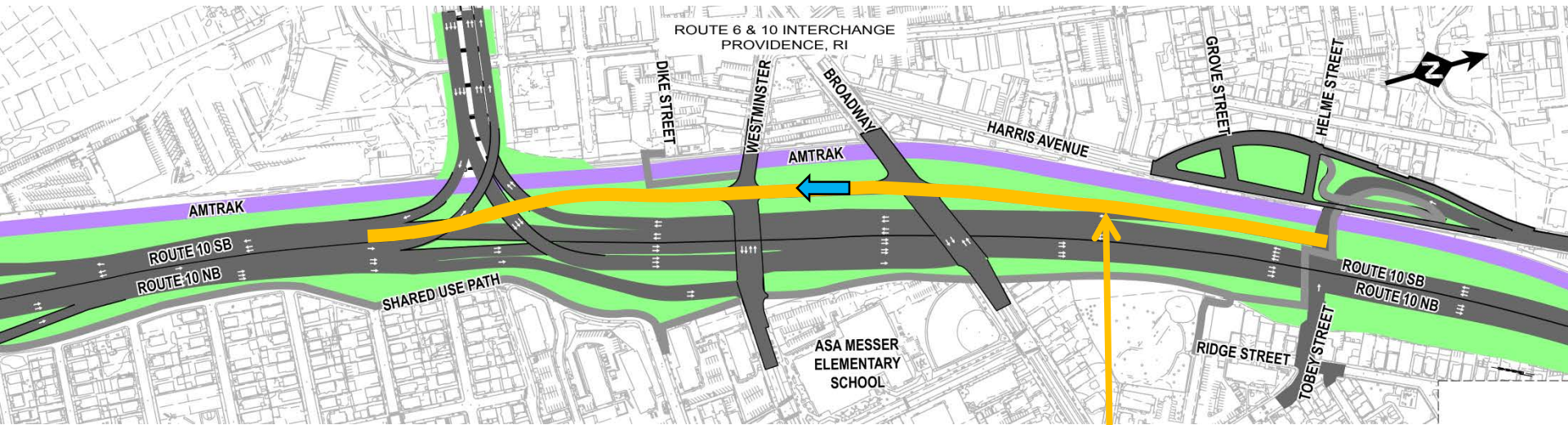
# Replacement of Westminster and Broadway bridges



# Replacement of Tobey Street and Harris Avenue bridges

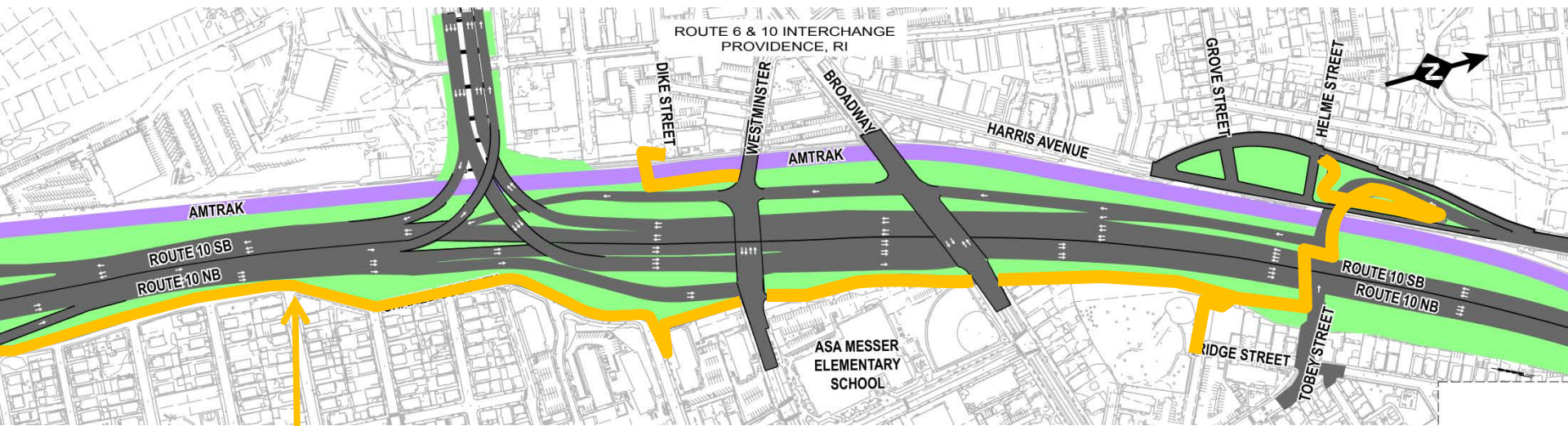


# Dedicated Service Road to Route 10S



Dedicated Service Road to Route 10 S

# Construction of multi-use paths



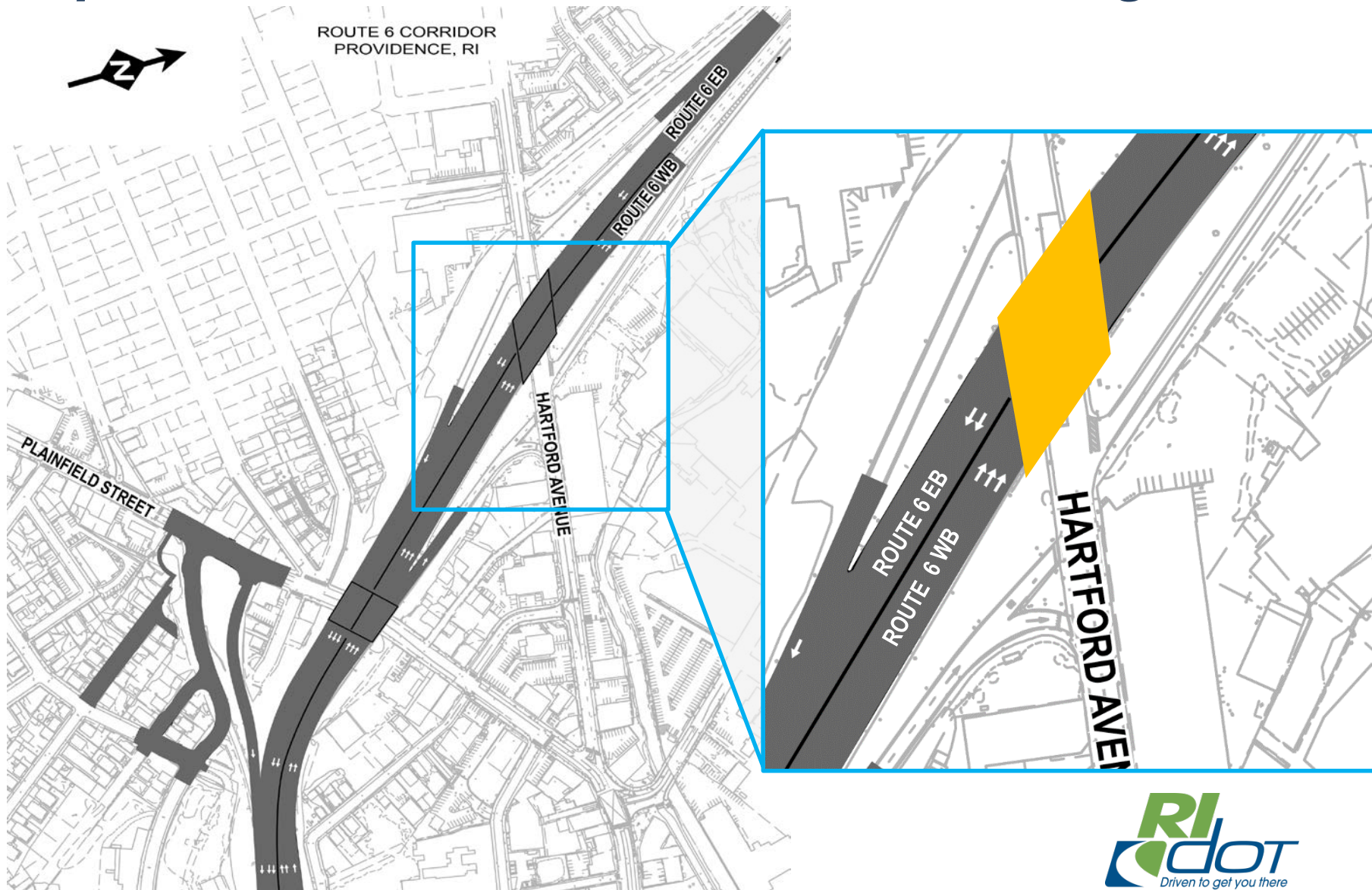
Multi-Use Path

# Construction of a Ramp from Plainfield to Route 6E and Replacement of Plainfield Bridge



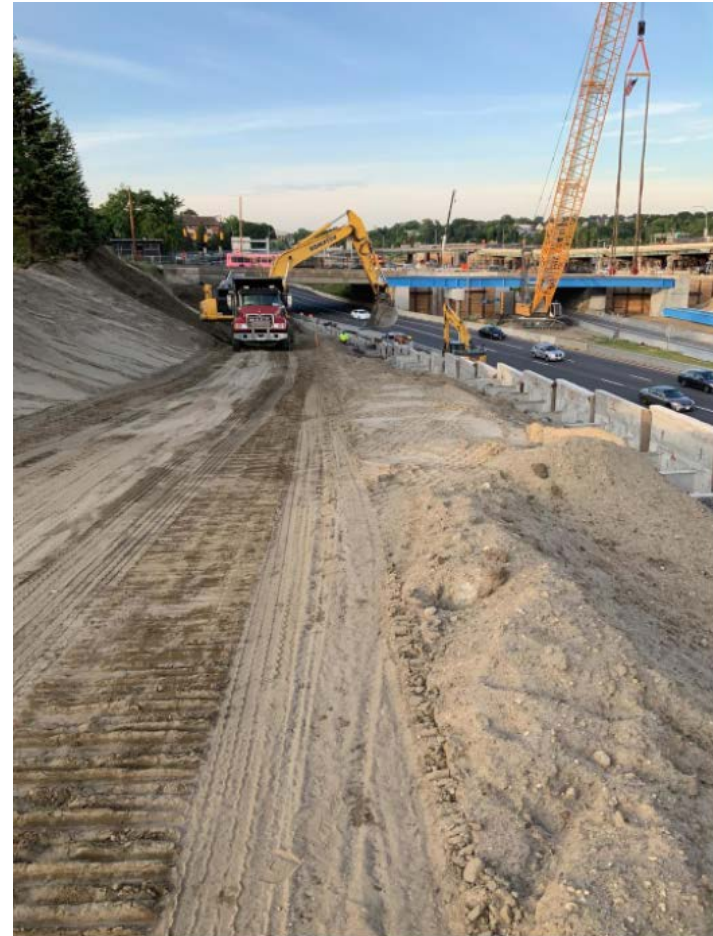


# Replacement of the Hartford Avenue Bridge



# 6/10 Project Constraints

- Utilities
  - National Grid Gas
  - National Grid Electric
  - Verizon
  - AT&T
  - Providence Fire
  - Providence Water
  - Providence Sewer
  - Narragansett Bay Commission
- AMTRAK
- Environmental



# Why Design-Build?

- RIDOT Staffing
  - Lump Sum requires fewer RIDOT Construction personnel
  - Bid Items do not need to be tracked
- Shop Drawings
  - Contractor's engineer reviews and approves
- Shifted AMTRAK & Utility Coordination to DB Team
- Schedule
  - Allows construction to begin sooner while design is still ongoing
  - Greater flexibility to the DB team to sequence the work

# 6/10 Schedule Milestones

<b>ACTIVITY</b>	<b>DATE</b>
<b>Award Design-Build Contract</b>	<b>December 21, 2017</b>
<b>NEPA Approval</b>	<b>March 30, 2018</b>
<b>Begin Final Design</b>	<b>April 1, 2018</b>
<b>Begin Construction</b>	<b>July, 2018</b>
<b>Design Completed</b>	<b>Fall 2019</b>
<b>Construction Completed</b>	<b>Fall 2023</b>