



ALLSTON I-90 PROJECT

A MULTIMODAL TRANSPORTATION PROJECT
MASSDOT BOARD MEETING
FEBRUARY 13, 2017

Overview

- Genesis of the Project
 - Need to replace and improve existing I-90 viaduct
 - Need for rail layover
 - Support for long-range development plans of former Beacon Park Yard (City of Boston and Harvard University)
 - Opportunities to support future development with a multimodal transportation system including new street grid and transit service
- Project elements established in the Environmental Notification Form (ENF) filed in October 2014
- Public process and stakeholder involvement has been a constant since the Task Force was formed in Spring 2014

Project Area



Site History: Beacon Park Yard (BPY)

- Portions of the site have been used for rail purposes since the 1830s
- In the mid-1800s, Beacon Park Yard was the site of a trotting park
- The site became a full rail yard in approximately 1890
- BPY was purchased by the Massachusetts Turnpike Authority in the early 1960s from the Penn Central, reserving to Penn Central an easement for rail purposes

Site History: Beacon Park Yard

- In 2000 and 2003, the Massachusetts Turnpike Authority, in two transactions, sold the fee in BPY to Harvard University, subject to an easement over the current highway assets and an easement for MBTA layover
- In 2009, MassDOT reached an agreement with CSX to purchase the Worcester main line, leading to CSX's decision to relocate the freight yard to Worcester and to sell its easement rights to Harvard in three future transactions
- Harvard and CSX completed the second of those transactions in late 2016, and the easement remains over only the part of BPY between I-90 and Soldiers Field Road. That will be transferred over the next few years to Harvard, pending completion of the clean-up

Project History

- Prompted by condition of I-90 viaduct in Allston and demand for increased Commuter Rail service
 - Aging structure (2023 seen as pivotal condition year)
 - MassDOT decided to not simply replace but to reconfigure the viaduct in order to take advantage of the removal of the toll plaza and to support development of an expanded neighborhood on the underlying land
 - Midday rail layover in the Beacon Park Yard area is crucial for current and future MBTA Commuter Rail operations
- Development opportunities presented by new plans for site
 - CSX has remediated and vacated the rail yard per sale to Harvard
 - Opportunity to create new transportation options to support the growth of a new neighborhood
 - Harvard plans to develop the site in next several decades, but has not yet proposed specific projects or filed planning documents
 - The area is approximately the size of the Back Bay



Project History

- MassDOT has been cooperating with the City of Boston, neighborhood stakeholders, and Harvard University on the transportation and development needs of the site for many years
- In 2013, MassDOT and Harvard signed a Letter of Intent, establishing a redevelopment framework for Beacon Park Yard (now called Allston Landing South)
- CSX rail storage/transfer activities have been discontinued (except for through service to Chelsea via Grand Junction) and the entire site is now owned by Harvard, subject to:
 - MassDOT easements for highway and current rail facilities (Framingham/Worcester Line)
 - MBTA easement for limited layover use

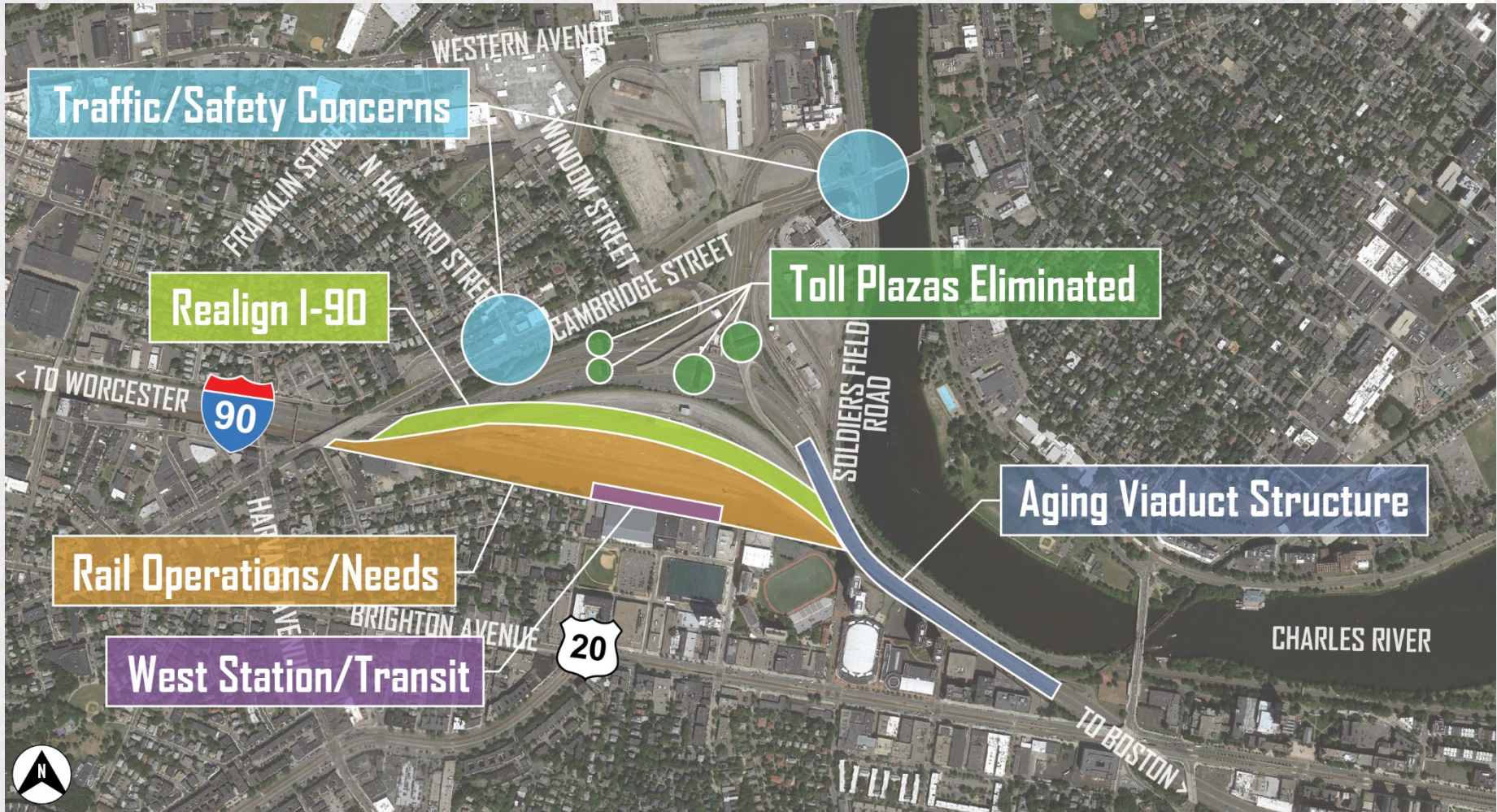
Project History

- MassDOT has been working with the MBTA, City of Boston, a Task Force of neighborhood stakeholders, and Harvard University to refine design concepts as the Allston I-90 project plans continue to evolve
- Significant compromises on all sides have been necessary
- Having filed an Environmental Notification Form (ENF) more than two years ago, MassDOT is preparing a Draft Environmental Impact Report for filing at the end of the summer, which assumes use of some Harvard land for transportation purposes in order to provide a foundation for future development and work by others

Project Purpose in ENF

- The October 2014 Environmental Notification Form (ENF) envisioned a multimodal project for the Beacon Park Yard area:
 - I-90 viaduct and interchange to be rebuilt and realigned to facilitate future development by Harvard and neighborhood-building by the City
 - A new ‘West Station’ to be built to provide a Commuter Rail stop on the Worcester Line and to focus new pedestrian, bicycle, and transit connections through the Beacon Park Yard site
 - Rail layover to be built to contribute to current and foreseeable MBTA rail storage needs
 - Pedestrian and bicycle connections to be improved and created
 - Soldiers Field Road to be shifted in order to create pedestrian and bicycle connections to an expanded Paul Dudley White Bike Path along the Charles River (the ‘People’s Pike’ concept)

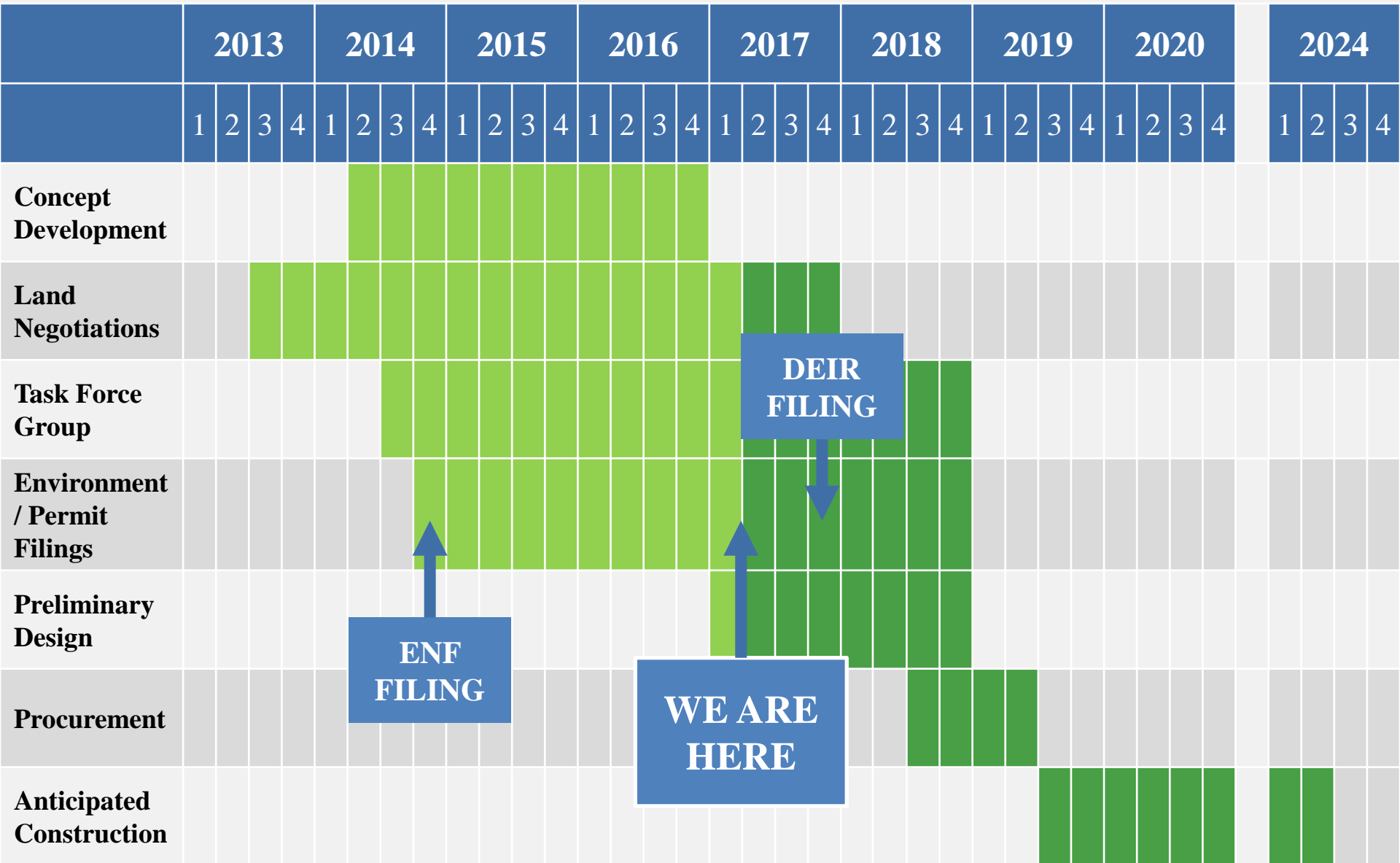
Project Purpose



MassDOT Goals for the Project

- Replace aging viaduct structure and realign I-90
- Improve safety for all modes: walking, cycling, driving, transit
- Protect the neighborhood during construction
- Support a vibrant Cambridge Street that serves all modes
- Provide pedestrians and bicycle accessibility to transit at future West Station
- Address rail layover needs
- Work with City of Boston to prepare framework for new neighborhood
- Context sensitive design to:
 - Lessen impact of interchange
 - Avoid inducing cut-through traffic with new configuration
 - Reconnect sections of Allston to each other and the River

Preliminary Project Timeline



How is the Project being Developed?

Public Involvement

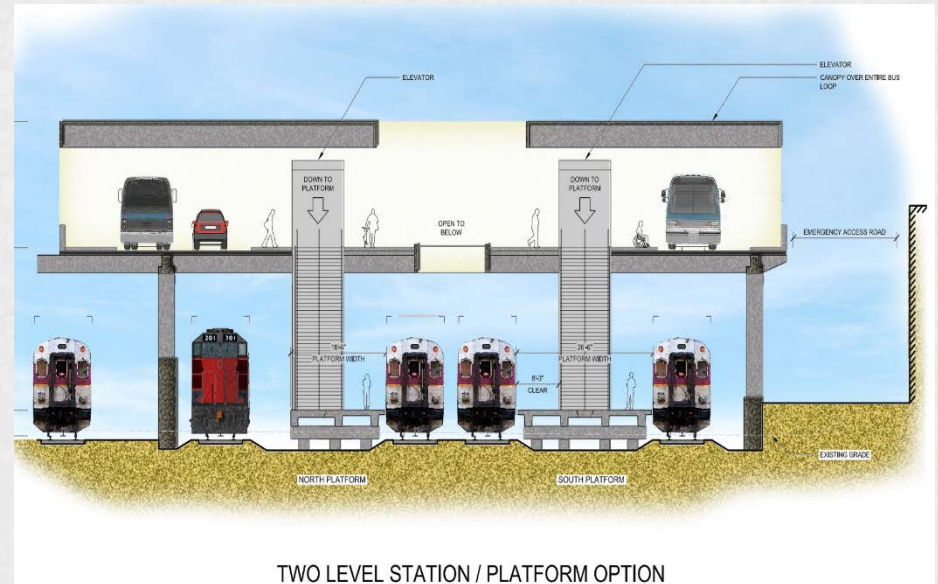
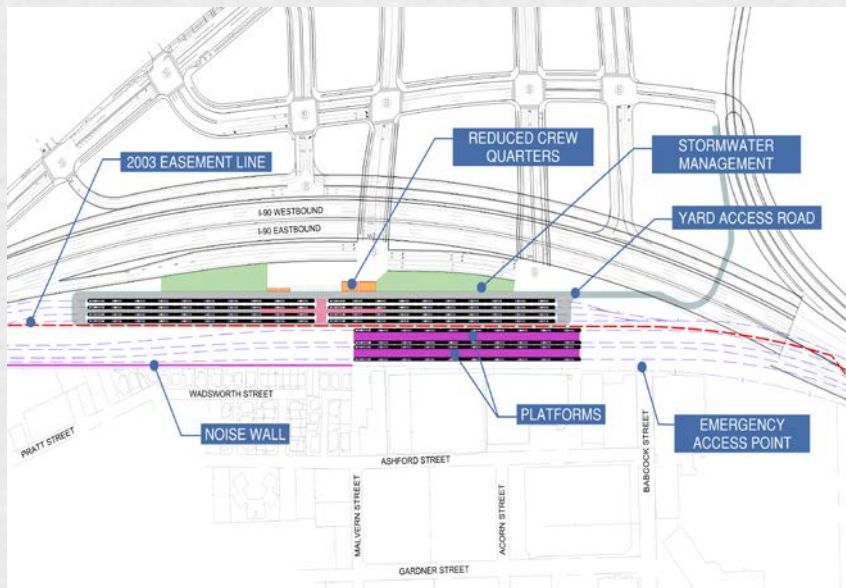
- Data Collection and Analyses of Existing Conditions
- Development of Conceptual Alternatives
- Evaluation of Alternatives:
Functional, Environmental (Social & Natural Environments)
- Refinement of Preferred Actions
- Environmental Documentation
- Preliminary Design
- Design-Build Procurement and Implementation

Project Elements: Overview



Project Elements: Rail Storage

- MBTA needs daytime rail storage proximate to South Station
- MassDOT and Harvard are currently negotiating the mutually acceptable number of storage tracks that can be included in the Allston project
 - Fewer tracks provide more land for development
 - More tracks provides the MBTA with greater flexibility and opportunities for long-term growth
- Long term operating needs have to be considered

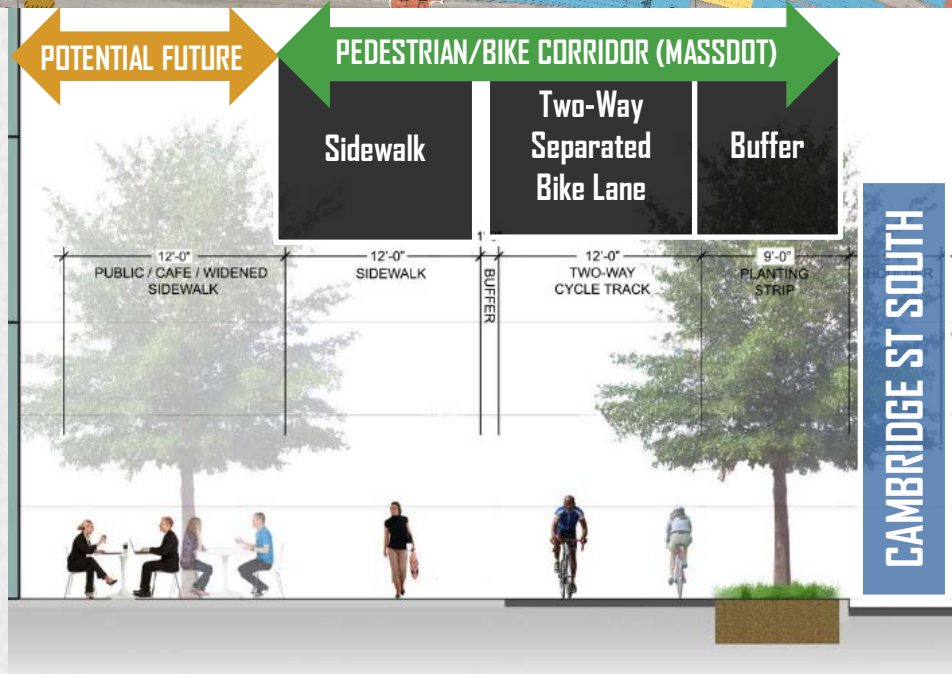
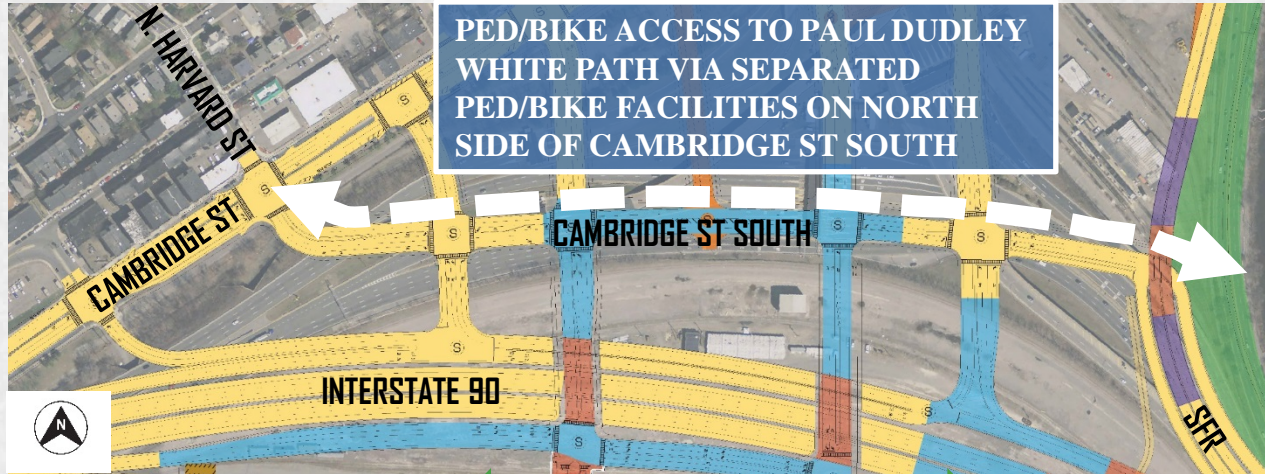


TWO LEVEL STATION / PLATFORM OPTION

Project Elements: A New 'West' Station

- Two platforms/3-4 revenue service tracks
 - Service to South Station via Framingham/Worcester Line
 - Connection to Grand Junction
 - Potential for future urban rail service
- Bicycle and pedestrian access
 - South to Commonwealth Avenue
 - North to the Paul Dudley White Path and the Charles River
 - Accessible at all times and not limited to MBTA operational hours
- Bus access that could serve
 - MBTA Bus (significant neighborhood interest in bus connections to Commonwealth Avenue)
 - Taxi/TNC/private shuttle (Harvard, others)
 - Passenger dropoff
- No private parking facilities

Project Elements: People's Pike



Project Elements: Placemaking

- MassDOT provided \$150,000 for the BPDA to hire The Cecil Group to establish placemaking principles and design concepts to guide the creation of a new neighborhood at Beacon Park Yard
- The work has greatly influenced the development of MassDOT's design alternatives



Extensive Public Process

- MassDOT created a Task Force of stakeholders and community representations in 2014
 - 29 Task Force meetings have been held, including six workshops
 - Five BPDA-led placemaking sessions
 - Seven public meetings, including MEPA scoping session
- Extensive exploration of redesigns suggested by Task Force members, City, and Harvard
 - Three design charrettes completed, one additional scheduled for February 15th
 - \$250,000 provided by MassDOT for independent engineering evaluation of two proposals submitted to MassDOT by Task Force members

Major Issues and Trade-Offs

- Extent to which redesign of viaduct can accommodate stakeholder requests and expectations
 - Better pedestrian/bicycle access, particularly to Charles River (“People’s Pike”)
 - Lower/narrower roadway profile
 - Approach roads consistent with land development goals
- West Station
 - What should be the triggers for construction? Now, or when land development is such that demand can be demonstrated?
- Rail yard use over time
 - Use as layover yard before new neighborhood is developed
 - Partial transformation once new neighborhood is developed
- Project Phasing

Project Elements: Funding Options

- Project cost to be determined based on DEIR design
- Highway, interchange, and new roadways
 - MassDOT is currently assuming that toll revenues will be used to pay for some or all of the roadway elements of the project
 - Metropolitan Highway System Reserve funds
 - MassDOT is currently analyzing the capacity of the Reserve to support the costs of the project
 - I-90 as a whole has significant capital needs
- Rail, transit, and neighborhood-building
 - Toll revenues cannot be used
 - Public-Private partnerships will be critical
 - Additional sources will need to be determined in order to to match finance capacity and infrastructure need

Summary and Next Steps

- Complex multi-modal project with goals for transportation, placemaking, and development with many stakeholders
 - Harvard, Boston University, City of Boston, Federal Highway Administration, neighborhood residents, and businesses
 - Users of the regional highway system and rail/transit system
- Extensive public consultative process has improved the project and educated the project team on design trade-offs
- Need to move forward to DEIR
 - Framework for further evaluation of alternatives
 - Address needs of aging viaduct well before operational concerns arise
- Funding will be a challenge and phasing is being considered



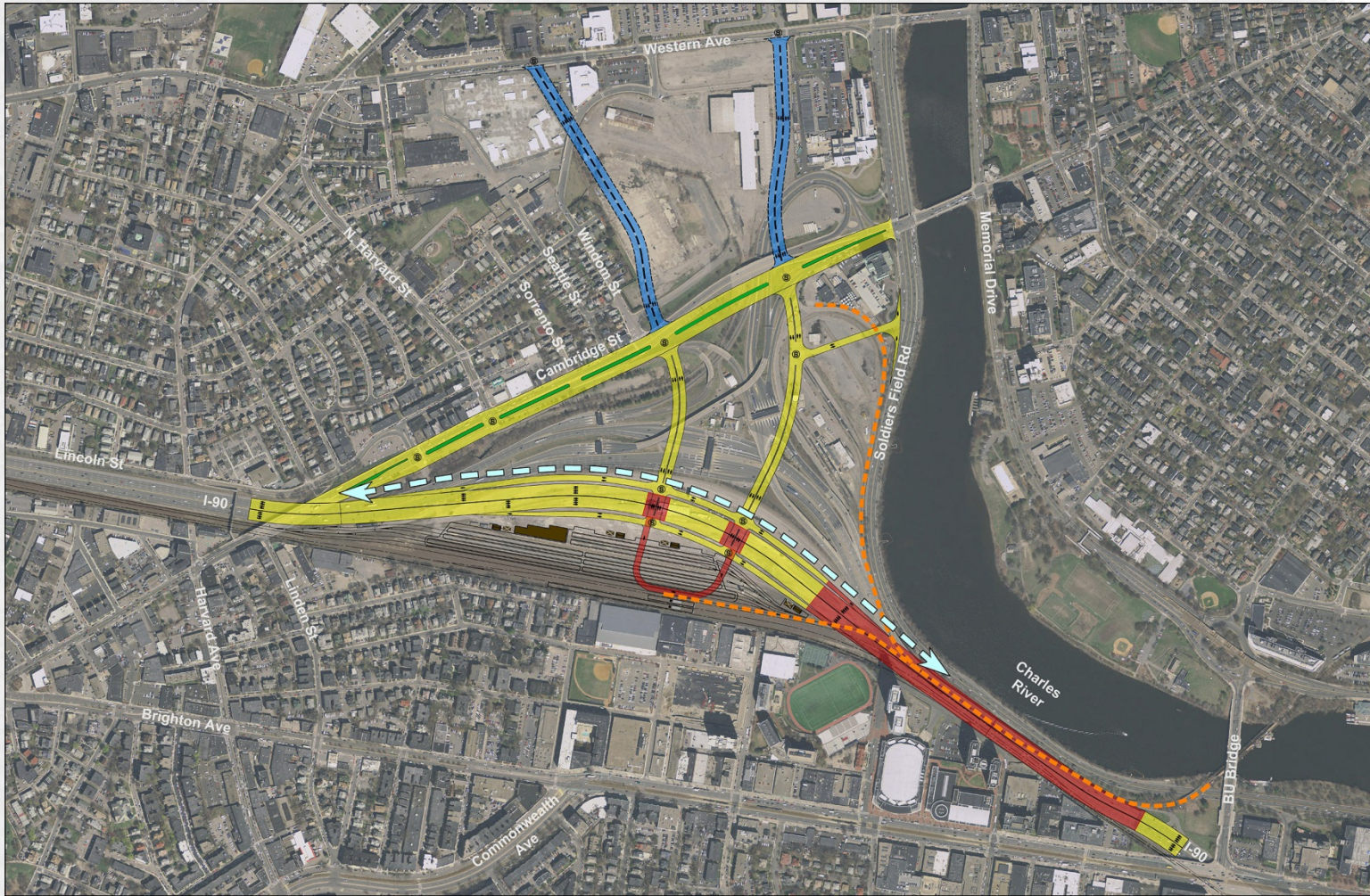
APPENDIX

Development of Conceptual Alternatives



- Eliminated Suburban Interchange Configurations
- Developed Urban Interchange Configurations
 - ENF Preferred Conceptual Alternatives
- Concept 3K Refinements developed since ENF
 - “Throat” Area Concepts Developed by Task Force Members
 - Boston Planning & Development Agency Placemaking Study
 - MassDOT coordination with Harvard University
 - Agreement between Houghton Chemical and Harvard University
- Current Concept 3K
 - Concept 3K with 3 “Throat” Area Variations

Option 3A



- PROPOSED ROADWAY
- PROPOSED ROADWAY (BY OTHERS)
- PROPOSED BRIDGE
- GRAND JUNCTION & HOUGHTON CHEMICAL RAIL CONNECTIONS
- PROPOSED SHARED USE PATH

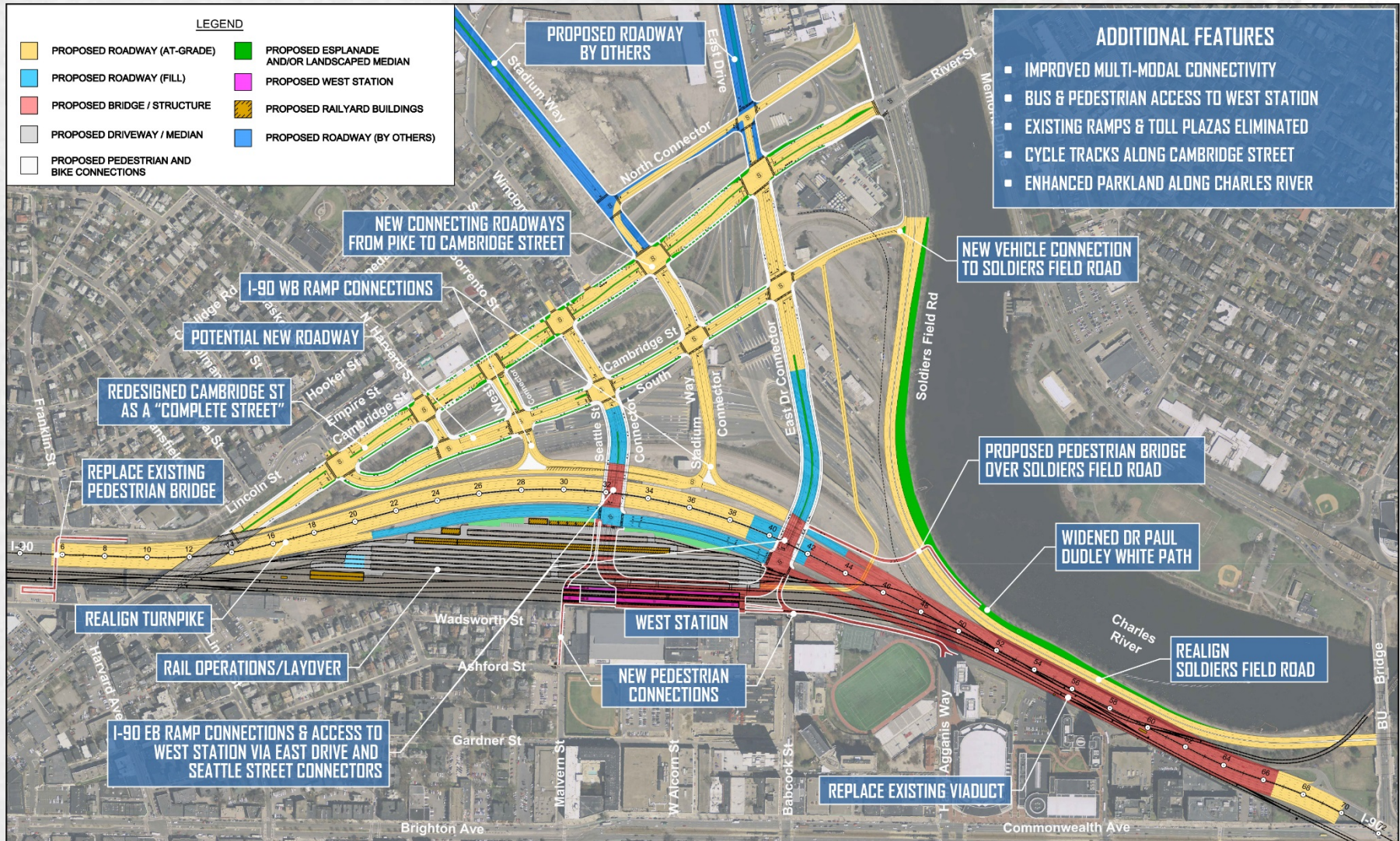
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I-90 Interchange
Allston, Massachusetts
May 21, 2014

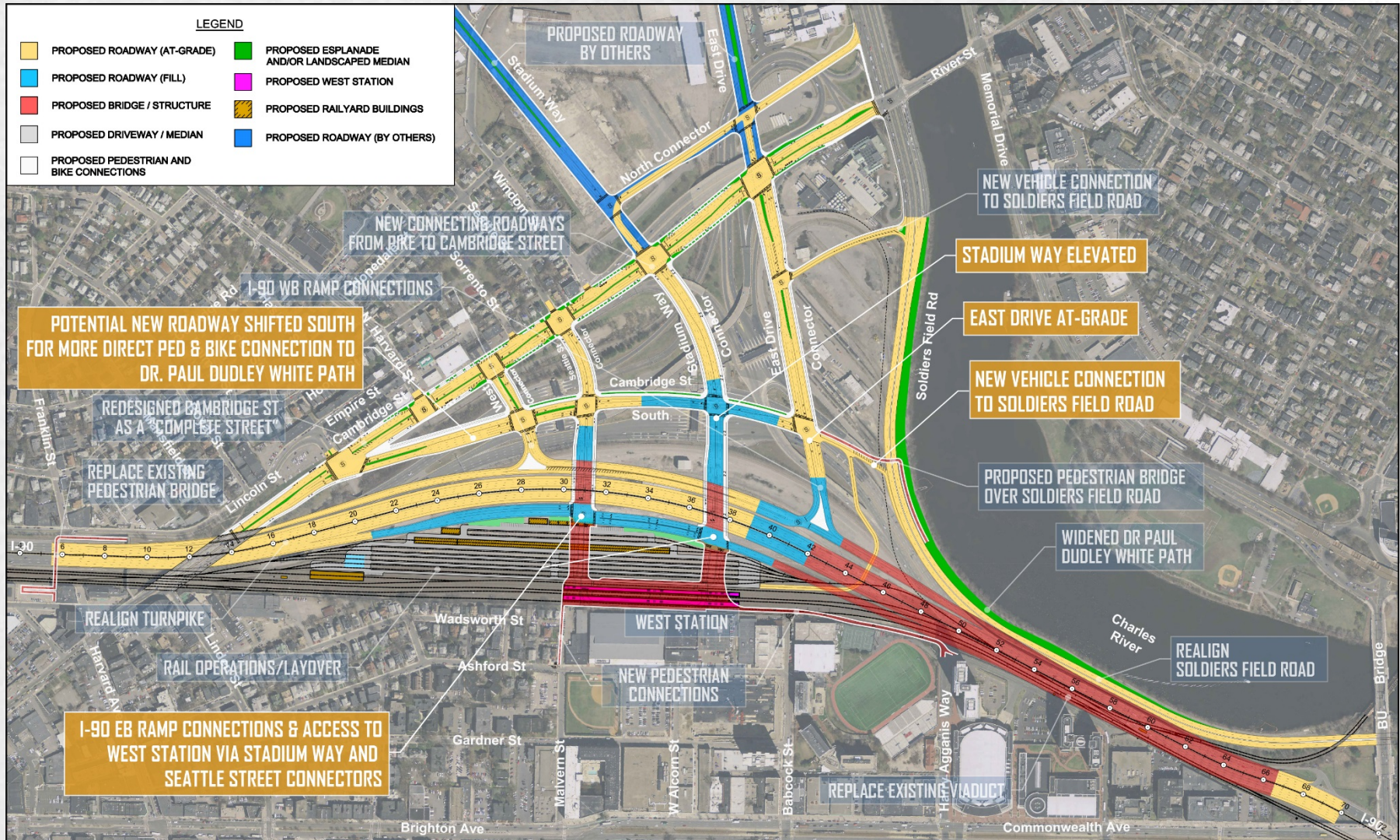
Option 3A

ENF Preferred Urban Interchange Alternative

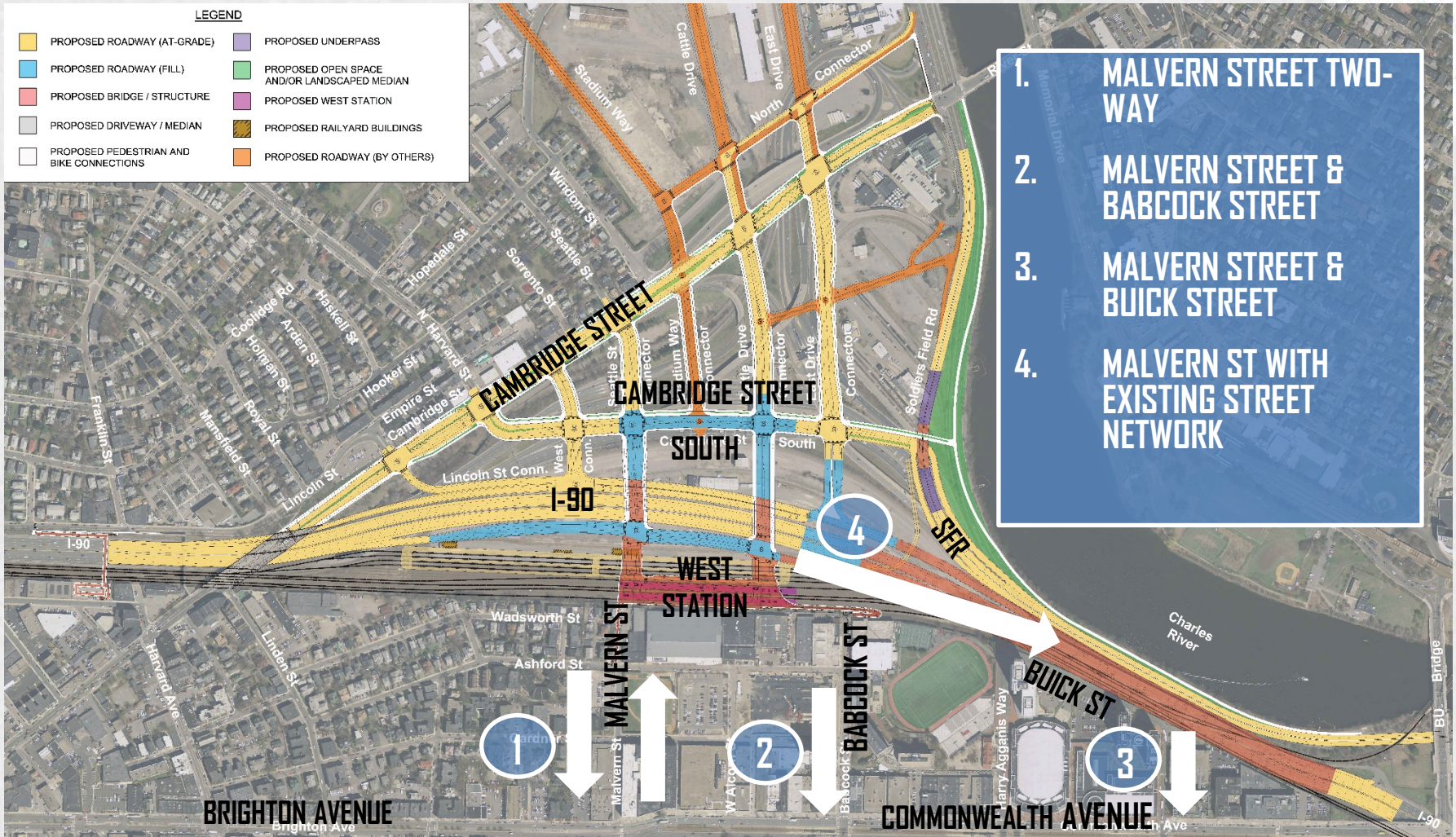
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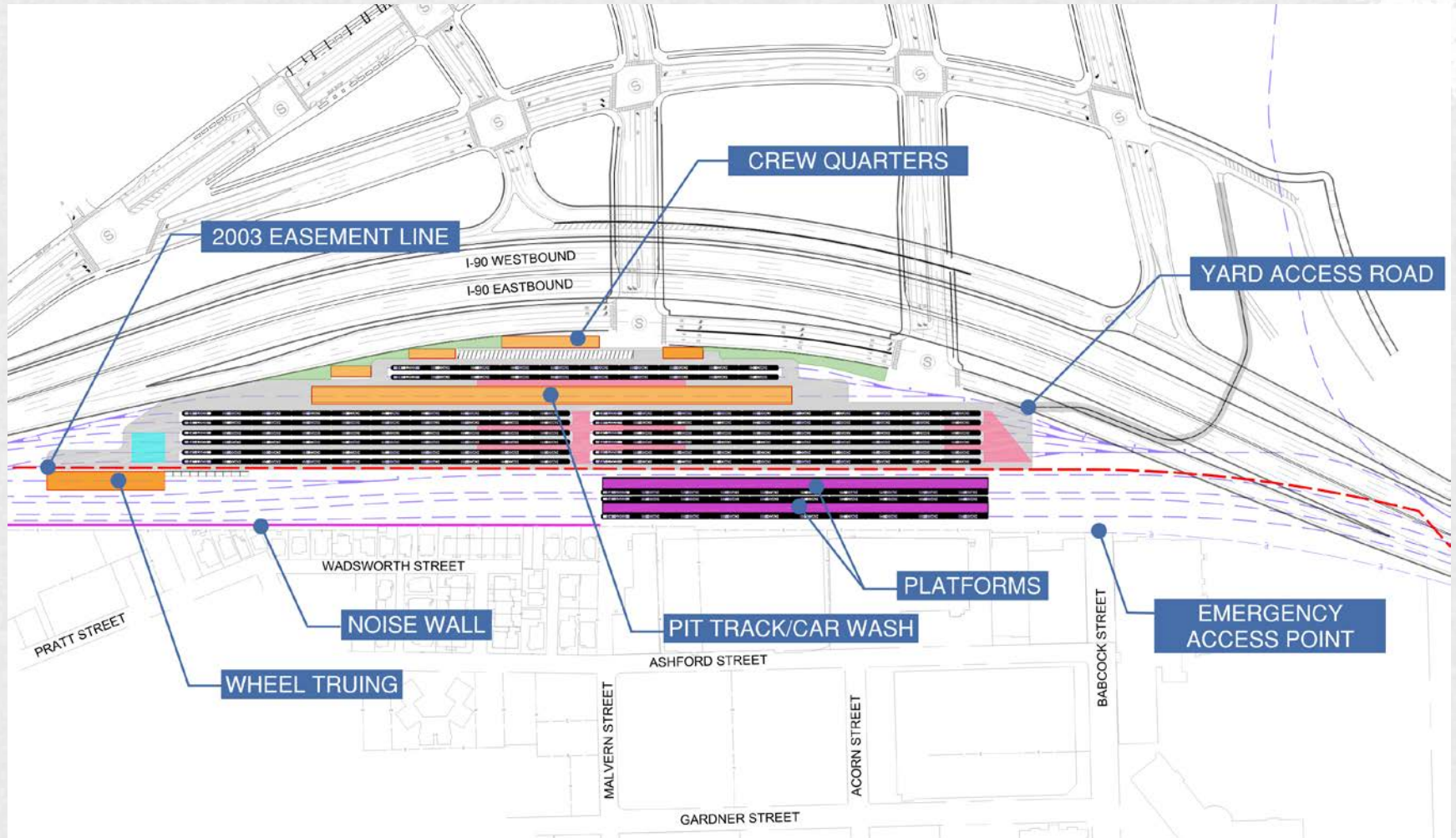
Urban Interchange Concept 3K



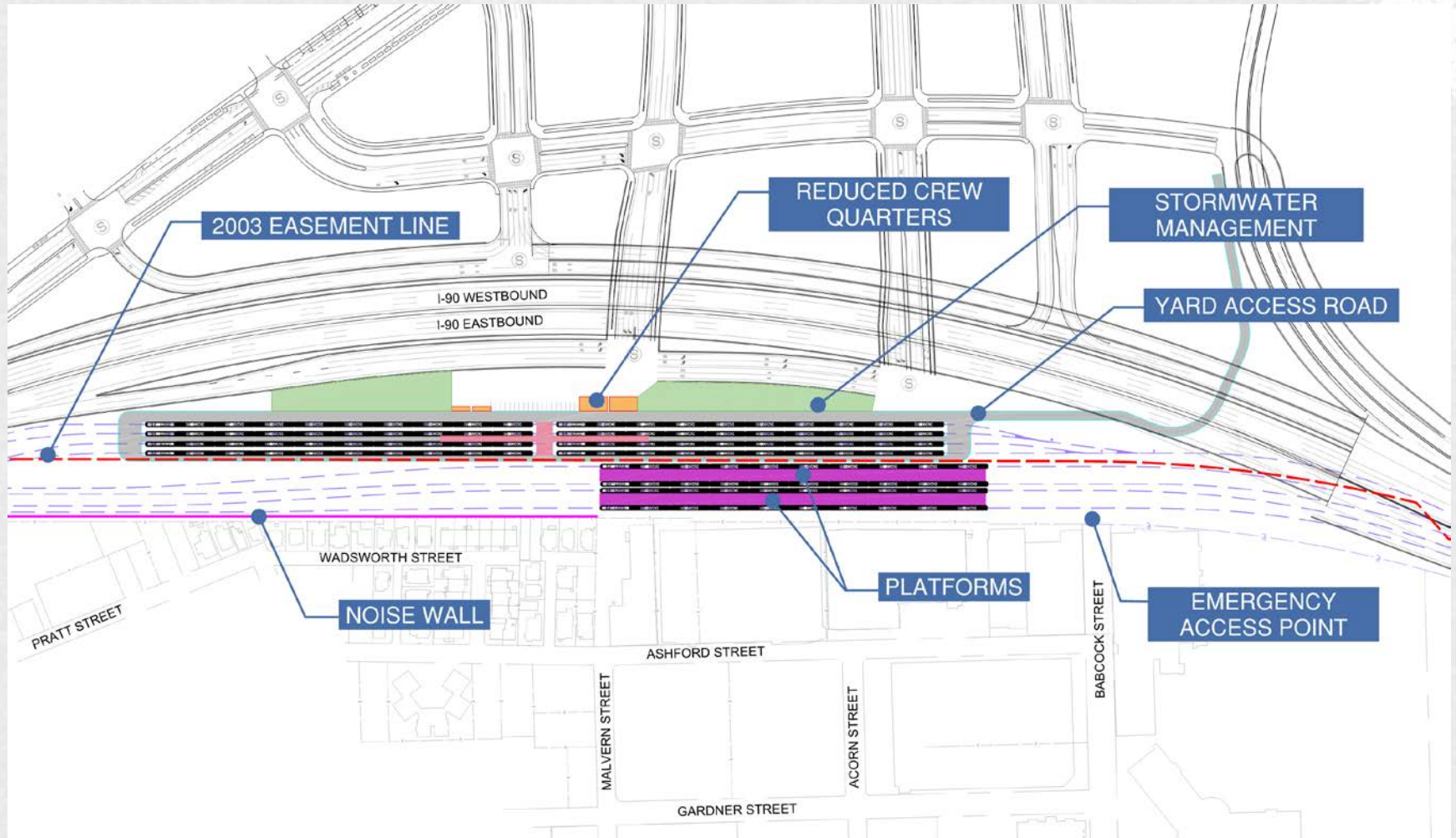
North/South Connection Considerations



Concept 3K Refinements: Previous Rail Yard Design

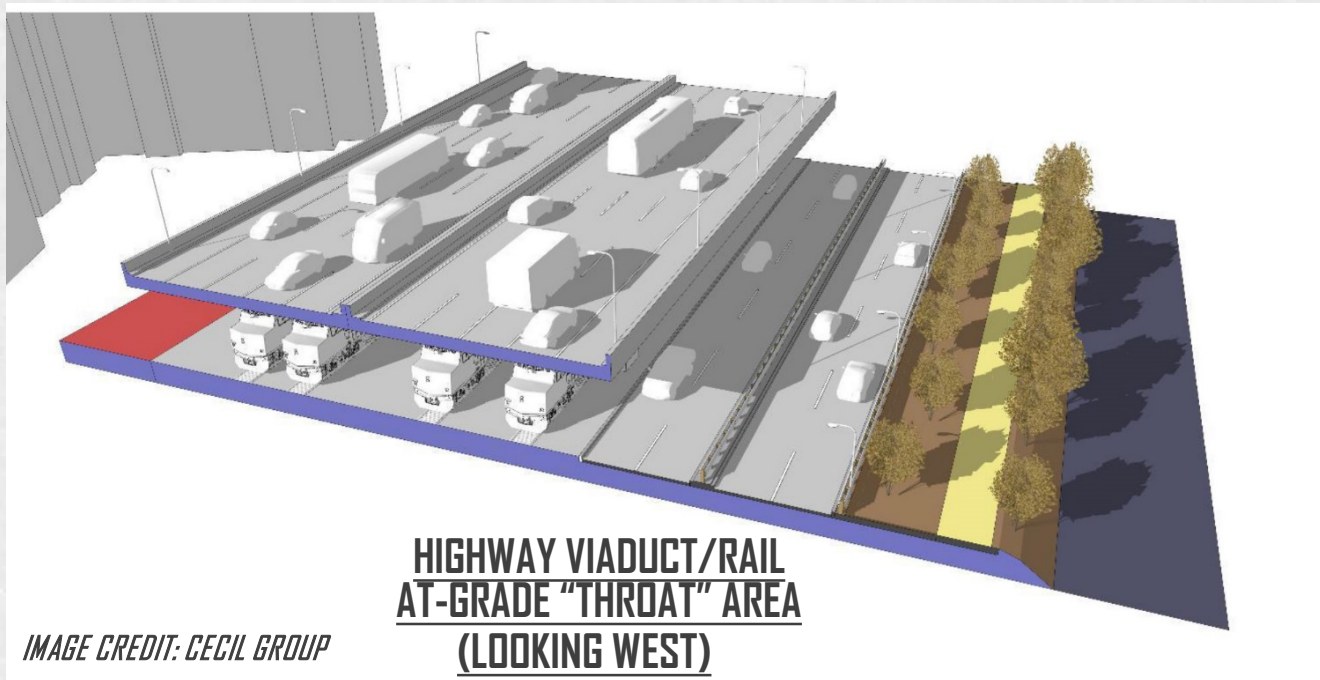


Concept 3K Refinements: New Rail Yard Option



DEIR Variations: Highway Viaduct/Rail At-Grade

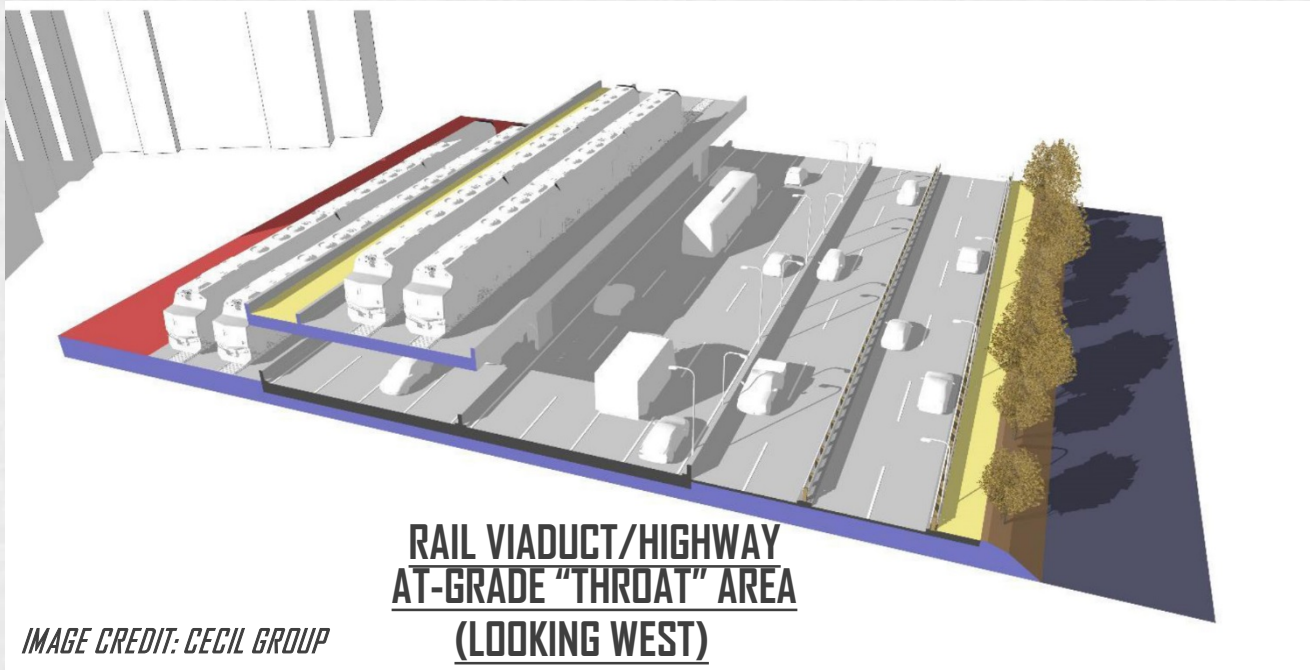
- Replacement of I-90 Viaduct
- Widened PDW Path with Additional Open Space
- Flexibility for Future Rail Expansion and Maintenance
- Opportunity for Improved I-90 Shoulder Widths for Safety, Stormwater Management and Maintenance



DEIR Variations:

Rail Viaduct/Highway At-Grade

- Removes I-90 Viaduct and Replaces with At-Grade I-90
- Requires GJ over SFR Bridge Replacement/Adds GJ Flyover Bridge and Rail Viaduct Over I-90 with Pedestrian Path
- Requires Mainline Commuter Rail to be Depressed
- Increased Environmental Permitting Challenges



DEIR Variations: Highway/Rail At-Grade

- Removes I-90 Viaduct and replaced with At-Grade I-90
- Requires GJ over SFR Bridge Replacement/Adds GJ Flyover Bridge over I-90 and GJ Retained Structure
- Increased Environmental Permitting Challenges

