Project 606475 - Allston Multimodal Project Industry Information Session



June 25, 2024



Table of Contents

1. Team Introductions

2. Purpose, Need, and Goals

3. Location and Existing Conditions

4. Major Scope Components

5. Environmental and Permitting Process

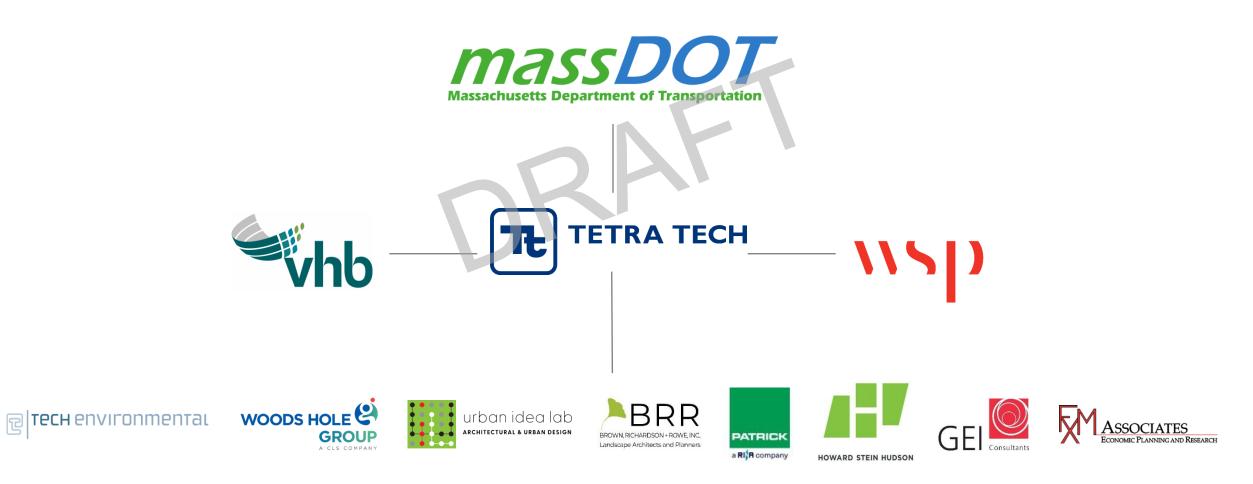
6. Key Stakeholders and Jurisdictions

7. Funding Plan and Construction Cost Estimate

8. Status and Schedule for Procurement

1. Team Introductions

Project Team





2. Purpose, Need, and Goals

Project Purpose

- Address deteriorating I-90 viaduct and substandard highway layout & geometry
- Alleviate existing infrastructure safety concerns
- Improve mobility of people and goods across all travel modes
- Reconnect Allston community to Charles River with expanded access





Project Need



Deteriorating Viaduct



Substandard Highway Geometry & Interchange Layout



7

Constrained Commuter Rail Operations



Safety & Operational Deficiencies





Insufficient & Inaccessible **Riverfront Green Space**



Inadequate Bicycle & Pedestrian Infrastructure



The I-90 Allston interchange is crucial to the Commonwealth's roadway network. This project will ensure the efficient operation of the interchange and result in the following benefits:

- Improved livability, connectivity, and open space for residents of Allston
- Increased regional mobility and roadway safety
- New open space along the Charles River, and expanded public access
- New multimodal street network and upgrades to Cambridge Street
- New and augmented bicycle and pedestrian connections
- Transit enhancements (new West Station)
- Improved neighborhood views due to removal of the elevated viaduct





3. Location and Existing Conditions

Project Location



- Cambridge Street bridge & Franklin Street pedestrian bridge over I-90 to the west
- Cambridge Street to the northwest
- Charles River to the northeast
- Commonwealth Avenue Bridge over I-90 to the east
- Boston University & Ashford Street to the south



Existing Conditions

- Former CSX Beacon Park Yard, with structures vacant and most tracks removed
- Curved I-90 mainline alignment with improvements from All Electronic Tolling (AET) project
- Elevated I-90 viaduct, with MBTA Commuter Rail and Grand Junction Rail (freight) tracks passing below
- Historic Soldiers Field Road with adjacent Paul Dudley White Path



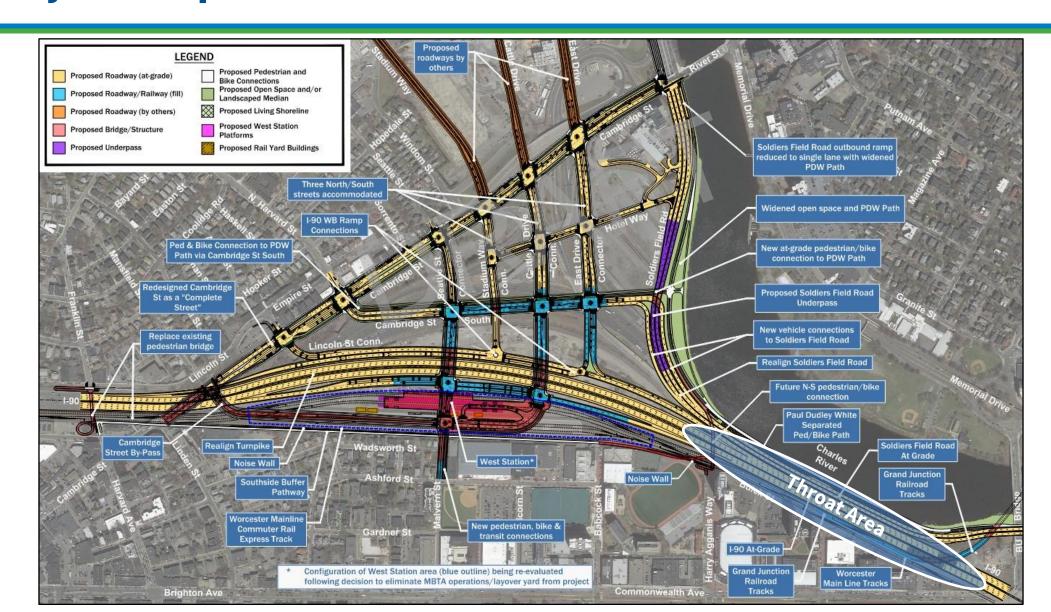
Third busiest interchange in Boston with an ADT for I-90 of 140,000 vehicles and ramps exceeding 60,000 vehicles



11

4. Major Scope Components

Project Scope - Throat Area





Project Scope - Existing Throat Area

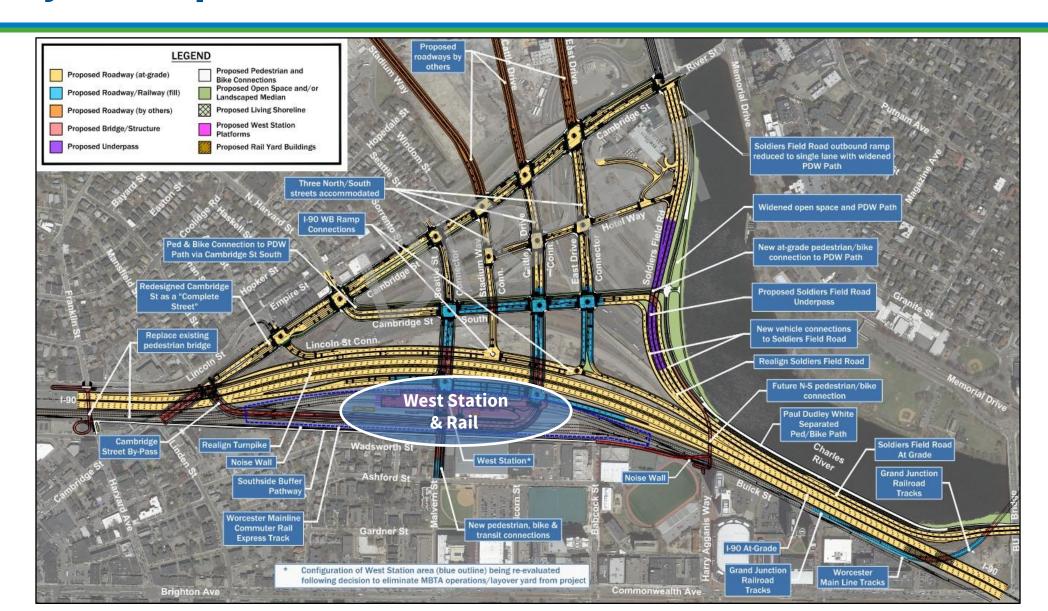
Project Scope - Proposed Throat Area

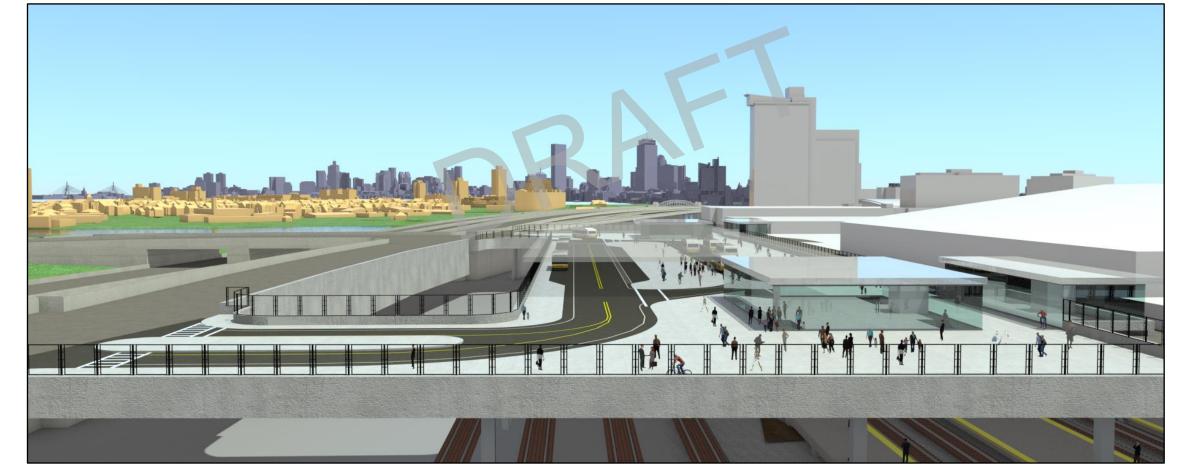


Project Scope - Proposed Throat Area



NOT FOR DISTRIBUTION Project Scope - West Station & Rail

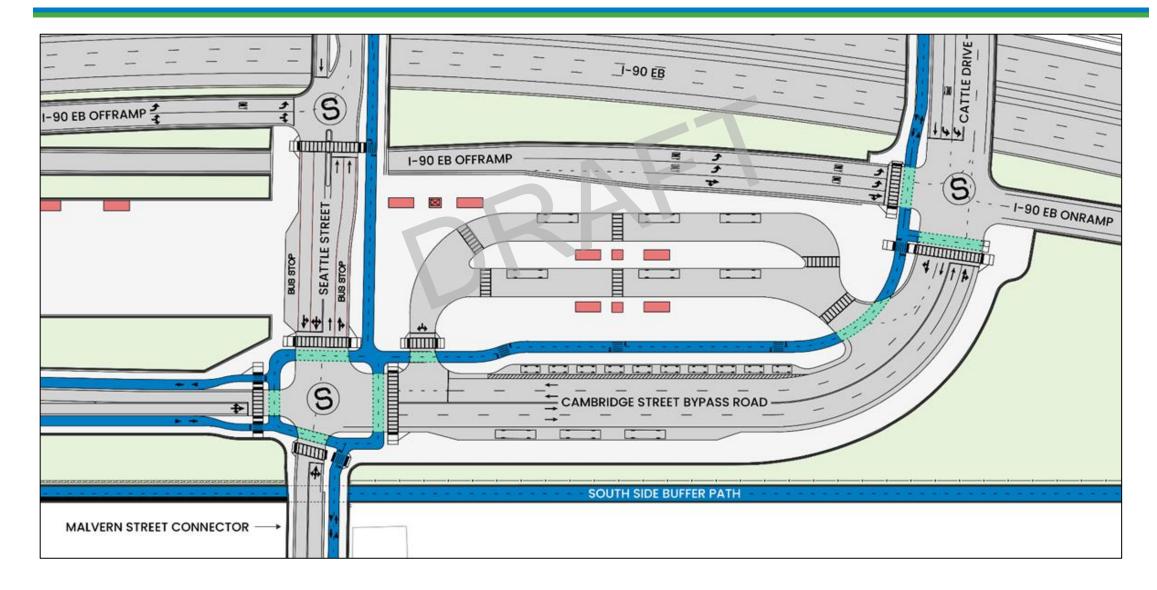




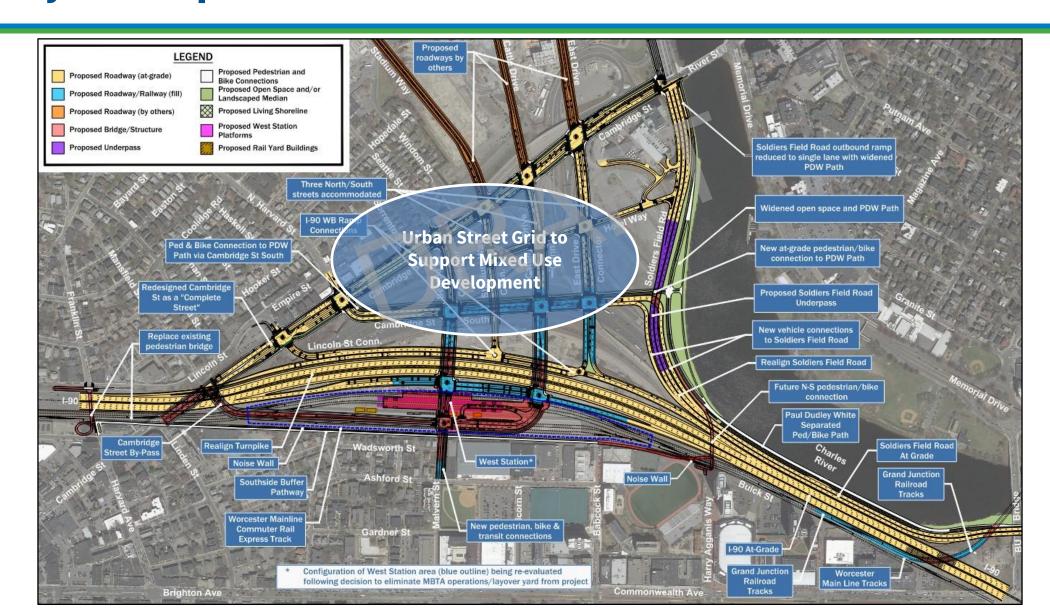
Project Scope - West Station & Rail

18

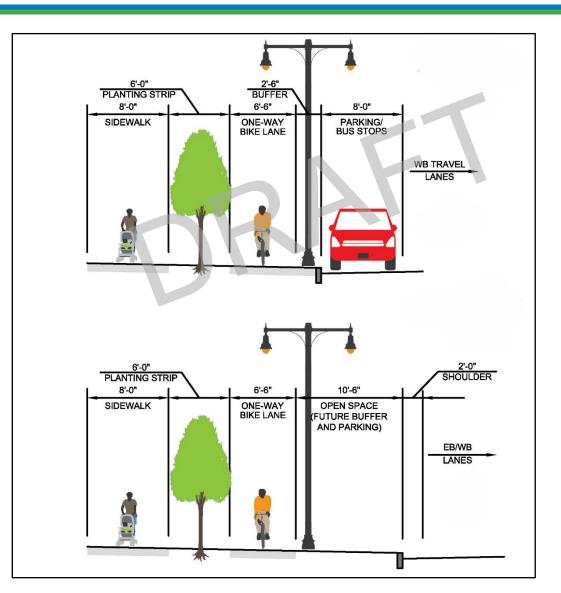
NOT FOR DISTRIBUTION Project Scope - West Station & Rail



Project Scope - Urban Street Grid



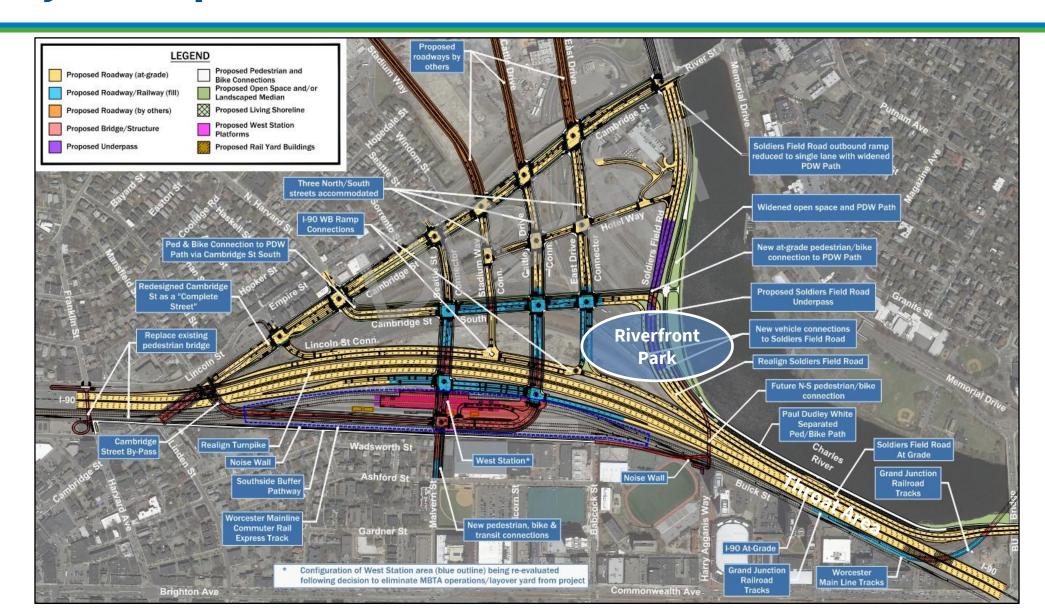
Project Scope - Urban Street Grid



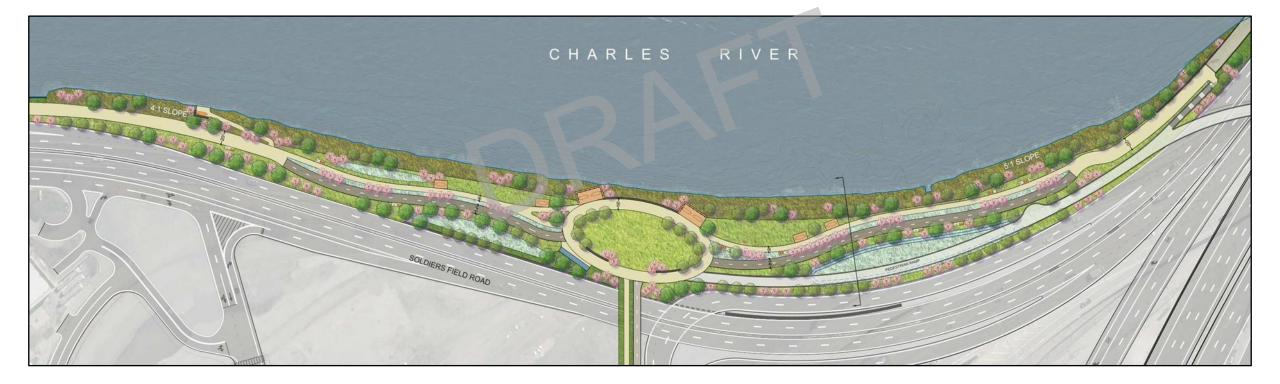


Project Scope - Urban Street Grid

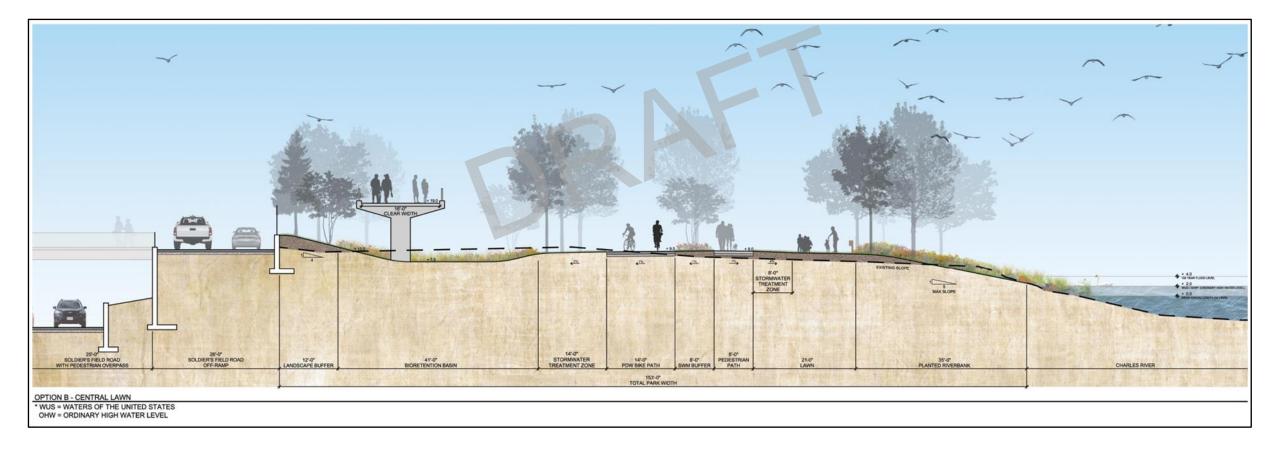
Project Scope - Riverfront Park



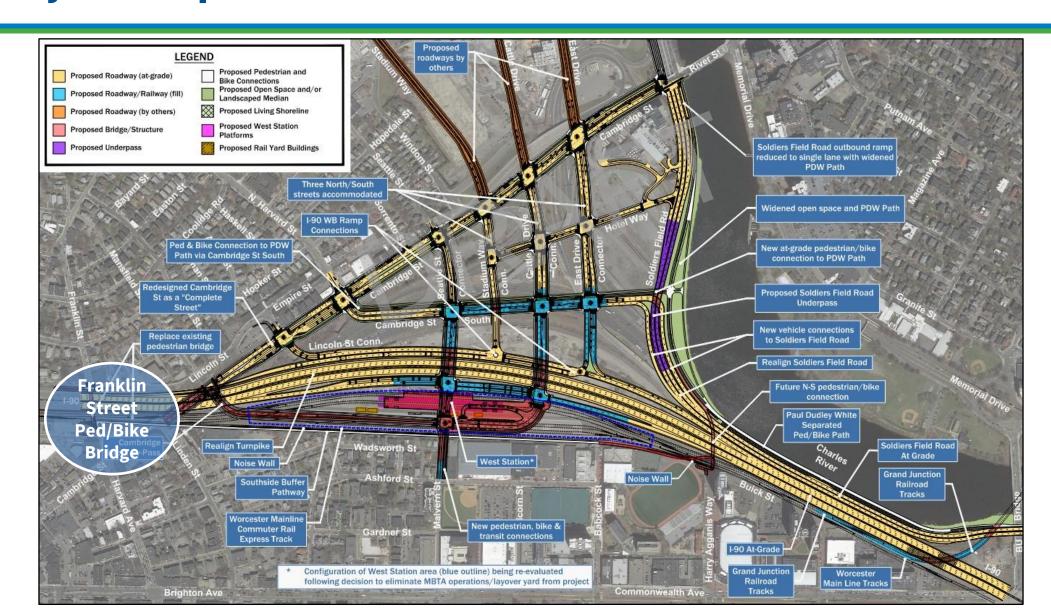
Project Scope - Riverfront Park

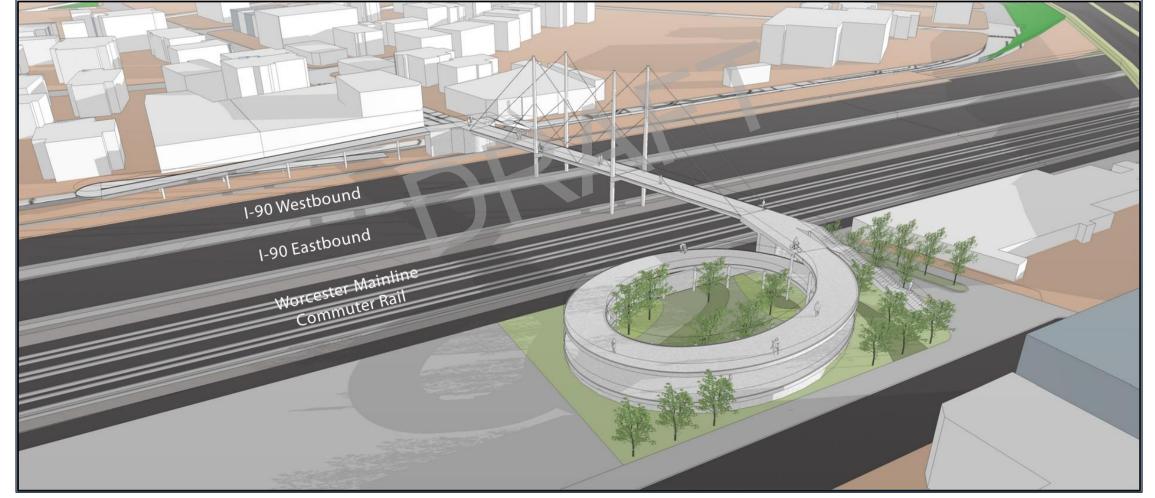


Project Scope - Riverfront Park



Project Scope - Overview





Project Scope - Franklin Street Ped/Bike Bridge

Project Scope - Franklin Street Ped/Bike Bridge



Project Scope - Roadway





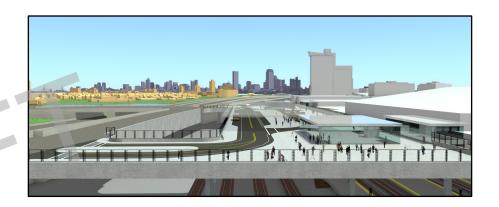
- Replace existing I-90 Turnpike, elevated viaduct B-16-359, and highway interchange with new re-aligned, at-grade highway system and split diamond urban interchange
- Reconstruct and re-align Soldiers Field Road, including a new grade separation with on/off ramps
- Construct new multimodal City street
 network with Complete Streets features
- Construct/reconstruct 19 signalized
 intersections
- Construct noise barriers along I-90



Project Scope - Rail

- Construct new MBTA 'West Station' with elevated busway concourse and realigned Worcester Main Line tracks
- Construct express/bypass tracks to support
 more reliable commuter rail service
- Construct Malvern Transitway
- Construct re-aligned Grand Junction Rail freight tracks, including new bridge over I-90 and associated approach on retained fill

MassDOT and the MBTA are currently re-evaluating the configuration of the entire West Station area following the decision to eliminate the proposed MBTA operations/layover yard from the project







Project Scope - Bridge/Structure





- Demolish existing I-90 viaduct B-16-359, to be replaced with at-grade highway
- Construct new Seattle Street and Cattle Drive bridges over I-90 mainline and I-90 WB ramp
- Construct new Cambridge Street South bridge over Stadium Way
- Fully replace Cambridge Street bridge B-16-056
 over tracks and I-90
- Demolish and relocate Franklin Street pedestrian bridge B-16-057 over tracks and I-90
- Construct new Agganis Way pedestrian bridge over tracks, I-90 and Soldiers Field Road to new riverfront park



Project Scope - Bridge/Structure (cont.)





- Construct new Soldiers Field Road underpass to allow for at-grade pedestrian/bike connection from Cambridge Street South to riverfront park
- Construct deck elevated busway concourse
 over tracks for new MBTA 'West Station'
- Construct new elevated Cambridge Street
 Bypass Road over tracks from Cambridge Street
 bridge to new 'West Station' busway concourse
- Construct new Grand Junction Rail bridge over I-90
- Fully replace Grand Junction Rail bridge
 over Soldiers Field Road



Project Scope - Recreation

- Construct expanded DCR riverfront parkland including recreational greenspace with multimodal paths and at-grade connection to new City street grid
- Reconstruct and expand Paul Dudley White path along Charles River
- Construct new 30' wide shared use path along southerly edge of rail corridor









Project Scope - Construction Staging

- Highly constrained corridor in Throat Area
- BTC to include suggested construction staging concept
- Performance criteria will be included for such items as:
 - Travel lane requirements on I-90, Soldiers Field Road, and local streets
 - Requirement to maintain all existing interchange connections
 - Worcester Main Line minimum track requirements
 - Focus on early opening of pedestrian/bike infrastructure where feasible
- Multiple temporary highway, ramp, and rail alignments expected
- Long-duration closure of Grand Junction Rail anticipated (several years)



Key Project Statistics



Total Roadway: 8 Miles

I-90 Mainline & Ramps: 3 Miles

Soldiers Field Road Mainline & Ramps: 2 Miles

City Street Grid: 3 Miles





Sidewalk: 5 Miles Cycle Track: 3 Miles Shared Use Path: 2 Miles





Total Bridge & Deck Structures: 12

Roadway: 7 Pedestrian: 2 Rail: 2 West Station Deck: 1



Throat Area 3D Visualization

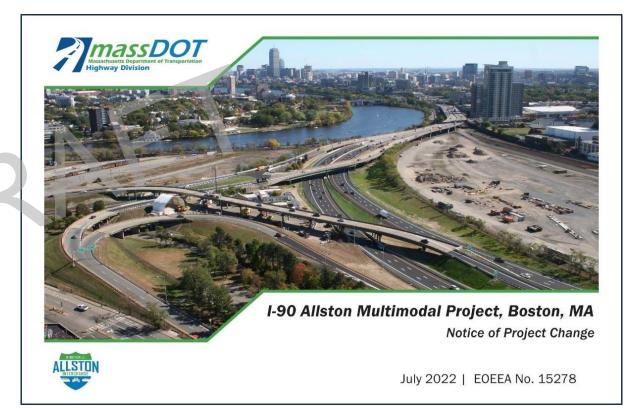




5. Environmental and Permitting Process

Proposed NEPA/MEPA Timeline

- MEPA Notice of Project Change (NPC): Filed July 2022
- Joint NEPA Draft Environmental Impact Statement (DEIS)/MEPA Supplemental Draft Environmental Impact Report (SDEIR): Fall 2025
- MEPA Final Environmental Impact Report (FEIR): Summer 2026
- NEPA Final Environmental Impact Statement (FEIS)/ Record of Decision (ROD): Fall 2026







Environmental Permitting Considerations

Several factors are involved in the environmental permitting process:

- Potential placement of up to one acre of fill in the Charles River associated with riverbank improvements and a widened Paul Dudley White Path
- Dredging will be required to construct riverbank improvements
- A portion of relocated I-90 will be located within the Charles River Basin Historic District
- Article 97 process is required for conversion of parkland to highway use
- Large portion of the project is located within filled and flowed tidelands and requires Chapter 91 approval
- If Paul Dudley White Path is located in the river on a structure not connected to the shoreline, a US Coast Guard Bridge Permit may be required





Shoreline Types

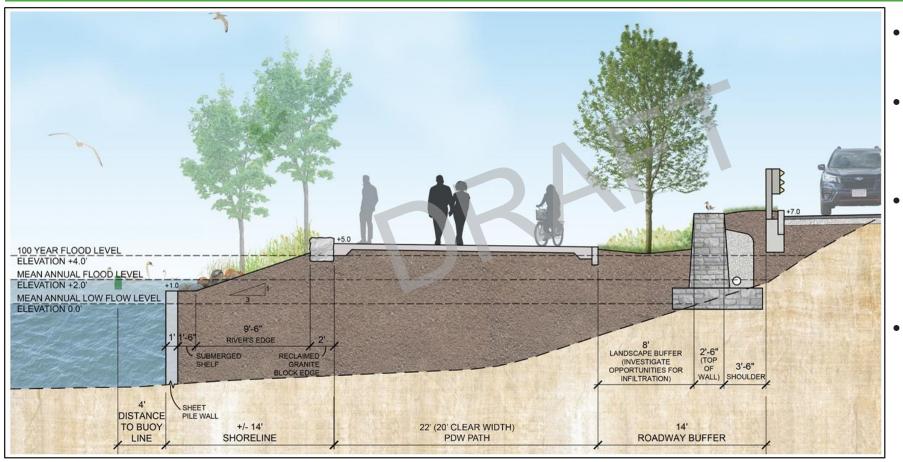


4,370 LF of Shoreline

- Shoreline treatment varies throughout the project extents
- Opportunity for planted edge at appropriate locations
- Where required, hardened edge proposed
- Various options being refined in the Throat Area



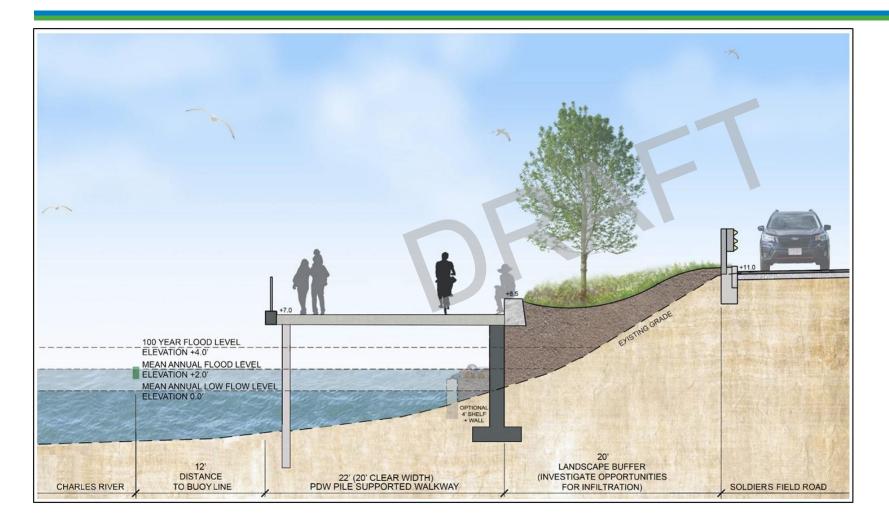
Shoreline Concept - Fill Supported Walkway Section



- Integrates PDW with shoreline
- Improves maintenance access
- Can only be used for a portion of Throat Area due to high fill impacts
- Provides habitat at river's edge



Shoreline Concept - Pile Supported Walkway Section



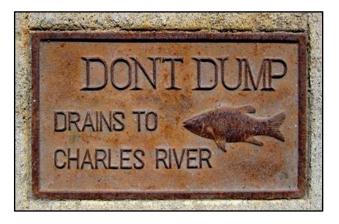
- Pile supported concrete walkway limits fill impacts in river
- Widened planted roadway buffer improves parkway experience
- Optional sheet pile toe to provide habitat structure and continuous corridor



Stormwater Management

- Driven by Charles River phosphorus TMDL, compliance with MassDEP Stormwater Management Standards
- Bioretention areas, stormwater wetlands, surface infiltration basins, subsurface infiltration chambers, porous pavement
- Design considerations: hydraulic conductivity of historic fill, minimizing groundwater mounding to prevent mobilization of existing contaminants
- Advanced further than other project components to support permit applications







Anticipated Project Permits and Approvals - Federal





Anticipated Project Permits and Approvals - State/Local





45

6. Key Stakeholders and Jurisdictions

Key Stakeholders





Key project stakeholders include:





CITY of BOSTON

- MassDOT •
- Federal Highway Administration (FHWA)
- Massachusetts Bay Transportation Authority (MBTA)
- Department of Conservation & Recreation (DCR)
- City of Boston
- Flected Officials
- Harvard University
- **Boston University** •
- Allston Task Force

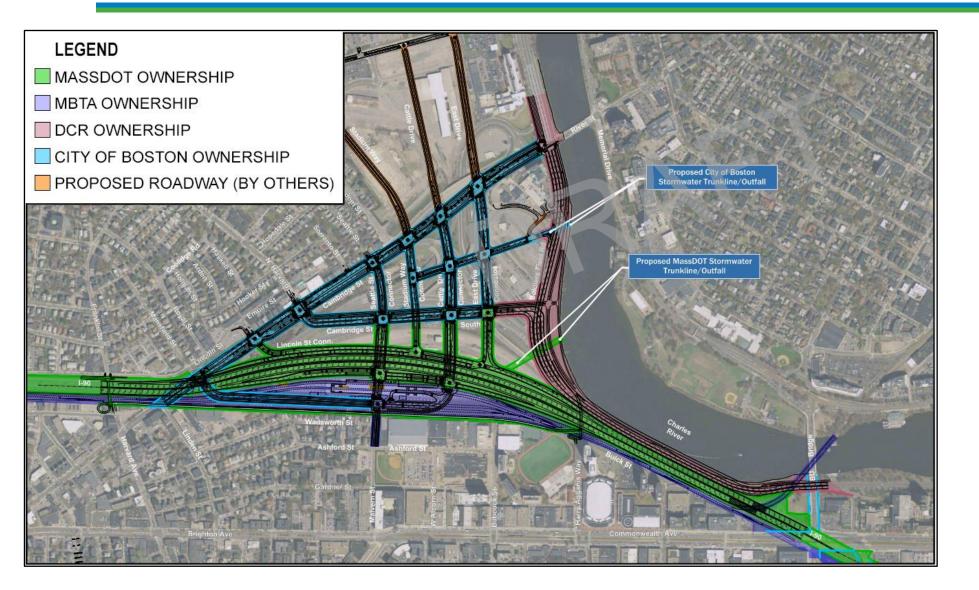






NOT FOR DISTRIBUTION

Multi-Jurisdictional Project



 Infrastructure ownership spread across several jurisdictions

48

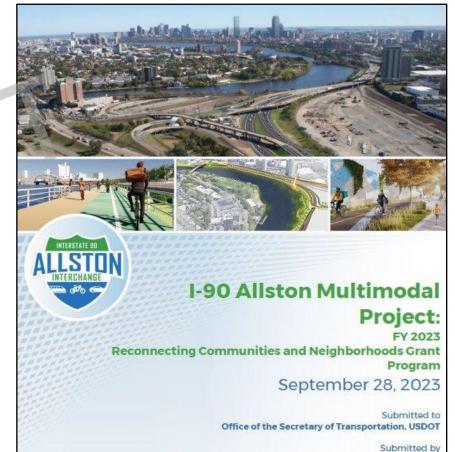
- Harvard University owns majority of underlying property within interchange
- Robust third-party coordination

Massachusetts Department of Transportatio

7. Funding Plan and Construction Cost Estimate

USDOT Grant Award

- The Allston Multimodal Project was recently awarded \$335 Million in USDOT Reconnecting Communities and Neighborhoods (RCN) Federal Discretionary Grant money
- MassDOT lead applicant, jointly with the City of Boston
- Strong financial commitment and collaboration between MassDOT and the City of Boston, Harvard University and Boston University
- Obligation deadline: September 2026



Massachusetts Department of Transportation The City of Boston



Key Construction Cost Elements

Modified At-Grade Scope	Estimated Cost	
Highway (I-90 Mainline & Ramps)	\$595 M	
Soldiers Field Road/Parkland	\$200 M	
Street Grid/Structures	\$420 M	
West Station/Track	\$325 M	
Grand Junction Rail Bridge	\$100 M	
Total Estimated Cost*	\$1.64 B	

* Non-construction costs excluded Estimate assumes approx. 7-8 yr construction period beginning in 2028





8. Status and Schedule for Procurement

Current Project Activities

- Continuing to advance all at-grade highway alternative and interchange concept designs
- Conducting regional traffic modeling (Boston MPO/ CTPS)
- Advancing required documentation and analysis for NEPA/MEPA filings
- Conducting additional subsurface explorations
- Conducting survey on key underground utilities
- Continued outreach with key Stakeholders and the Public



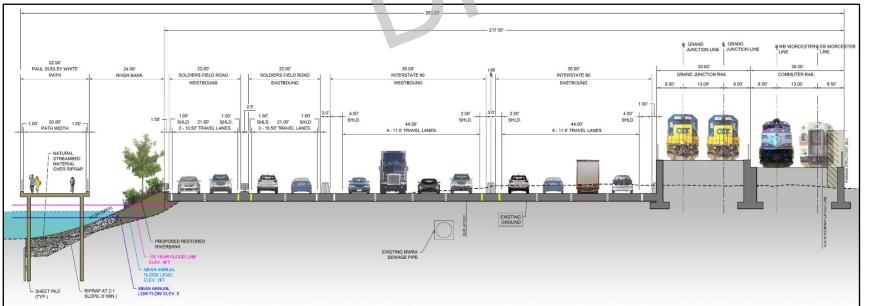


NOT FOR DISTRIBUTION

Project Challenges and Risks

- Complex traffic management
- Constrained Throat Area construction
- Closure of Grand Junction Rail
- Third party coordination
- Utility relocations and coordination

- Soil and groundwater management
- Project visibility/public outreach
- Environmental compliance monitoring
- Design approvals/packaging





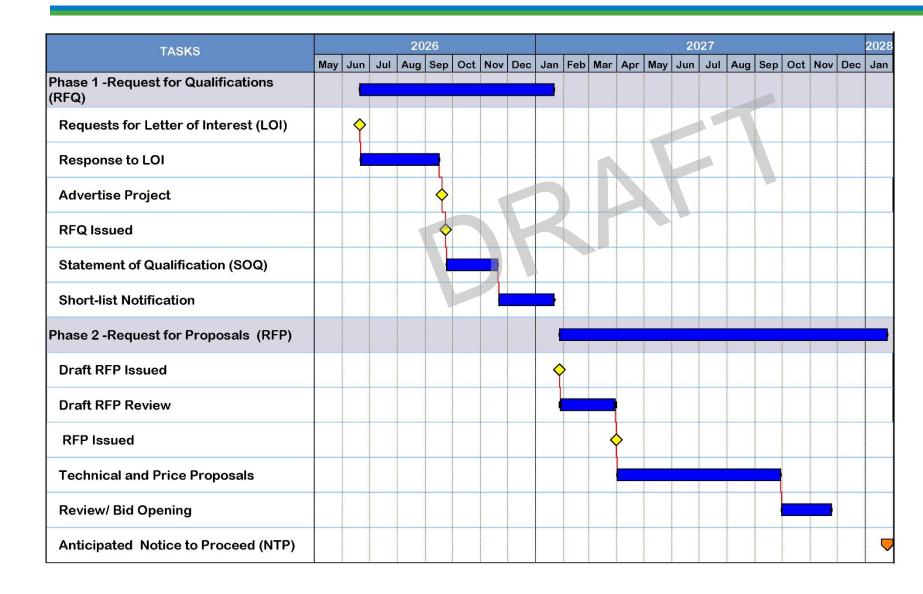
Draft Project Schedule

TASKS	2024	2025	2026	2027
	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D
Massachusetts Environmental Policy Act	<u>↑</u>			
Supplemental Draft Environmental Impact Report				
Final Environmental Impact Report (FEIR)				
Interchange Modification Report				
National Environmental Policy Act				
Draft Environmental Impact Statement (DEIS)				
Final Environmental Impact Statement / Record of Decision				
Environmental Permits	We Are			
Preliminary Design	Here			
Pre 25% Design (Permit Support)				
Base Technical Concept (BTC) / 25% Design				
Procurement				



NOT FOR DISTRIBUTION

Draft Procurement Schedule



- Procurement start tied to NEPA clearance
- Timeline has been extended due to size and complexity of project
- Open to
 refinements
- Anticipated NTP
 January 2028





ThankYou

