



I-90 ALLSTON INTERCHANGE

A MULTIMODAL TRANSPORTATION PROJECT

PUBLIC INFORMATION MEETING

JUNE 17, 2015 – JACKSON MANN COMMUNITY CENTER

Welcome & Introductions

- **Project Team**
- **Meeting Agenda**

Project Team



CROSBY | SCHLESSINGER | SMALLRIDGE LLC

Meeting Agenda

- **Welcome & Introductions**
- **Project Overview & Approach**
- **Preferred Concept**
- **Progress on Refining the Preferred Concept**
 - Site Conditions & Constraints
 - Traffic Model Volumes & Operation Analysis/CTPS
 - West Station
- **On-Going Public Outreach**
- **Discussion/Questions/Answers**

Project Overview

- **This is an integrated, multimodal project of three components:**
 - Highway interchange
 - Rail/transit
 - Local/regional place-making
- **MassDOT will be staffing the project to reflect and integrate the different components.**
- **We plan to keep the three components together, but will separate as funding is identified.**
- **MassDOT will lead the transportation components, and will work with partners to develop the community place-making vision:**
 - City of Boston
 - Local neighborhood
 - Harvard University and Boston University

Project Approach



Highway & Interchange

Thomas Tinlin
Acting Highway
Administrator

Rail & Transit

Astrid Glynn
Rail & Transit
Administrator

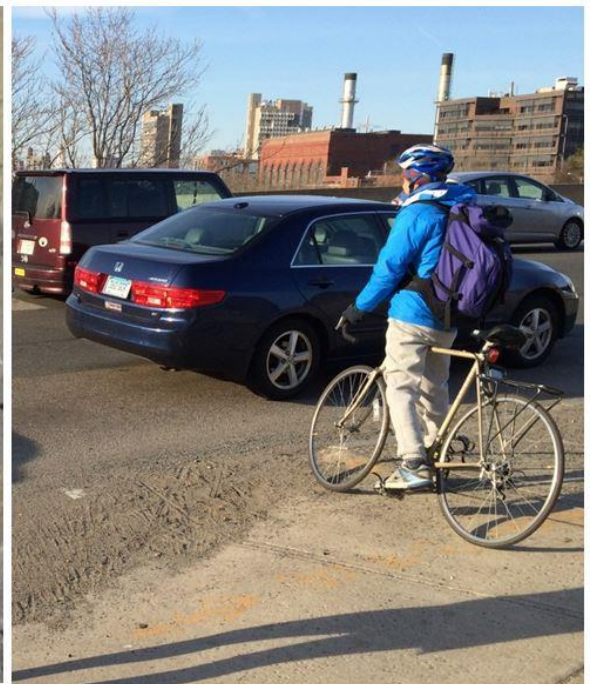
Community Place-making

David Mohler
Executive Director of
Transportation Planning

Unified Environmental Review

Highway & Interchange

- Regional
- Local
- Community



Rail & Transit Issues

- **West Station**
- **Layover Facilities**
- **Operations**



Community Place-making Issues

- Urban Design
- Open Space
- Land-Use



Image from Beacon Yards | BSA Urban Design Workshop - September 16-18, 2014 | Northeastern University Graduate Research Studio - Fall 2014/Spring 2015

Infrastructure Funding Issues

- **Highway & Interchange**
 - Presumed Funding Mechanism is Toll Revenue
 - Metropolitan Highway System Reserve Funds
(must be reviewed to ensure availability)
- **Rail & Transit/Community Place-making**
 - Public Private Partnerships will be critical
 - Additional sources to be determined
 - Toll revenues can not be used
 - Need to update and refine cost estimates

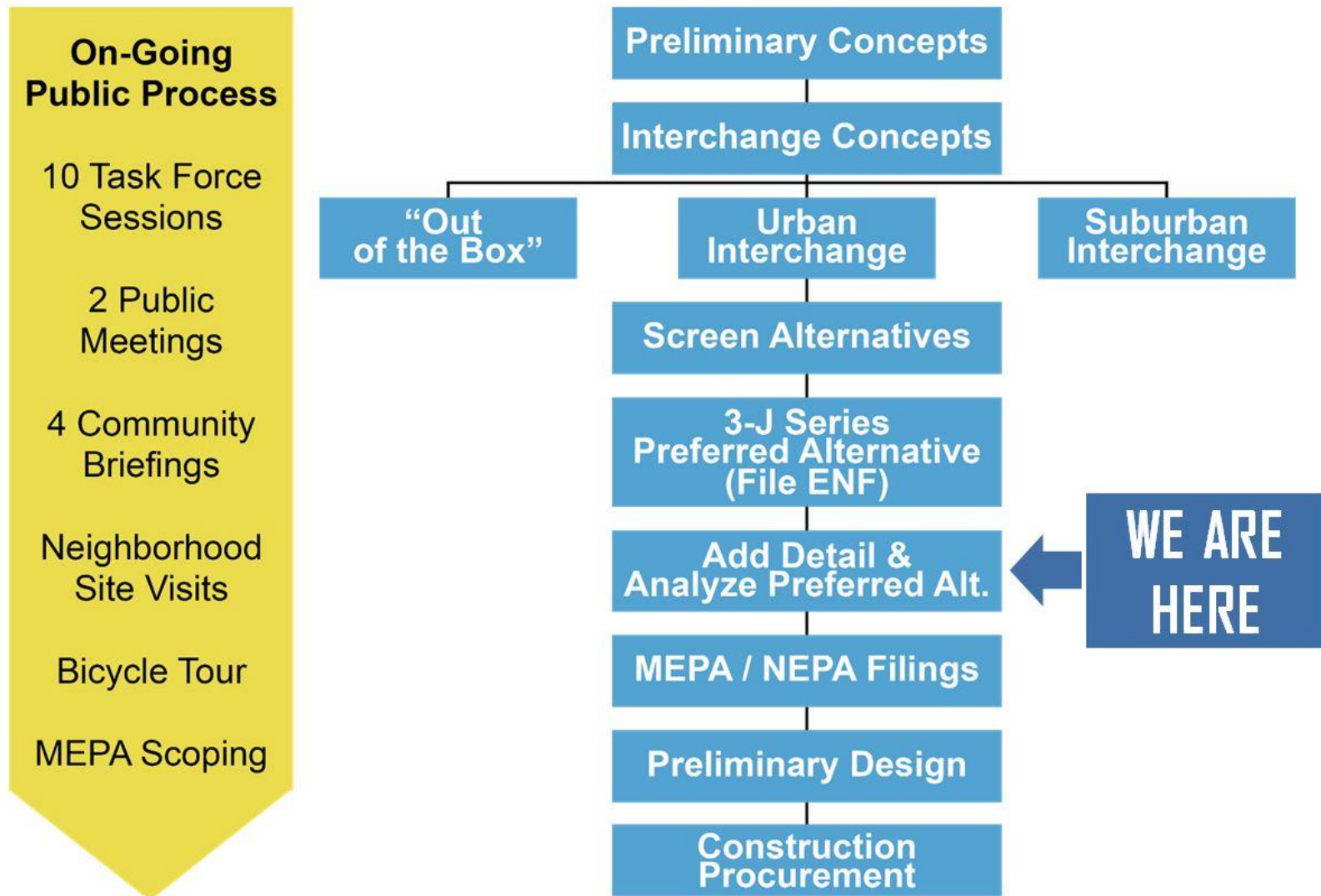
Meeting Agenda (cont.)

- Welcome & Introductions
- Project Overview & Approach
- Preferred Concept

Project Area



Determining the Preferred Alternative



Shared Priorities

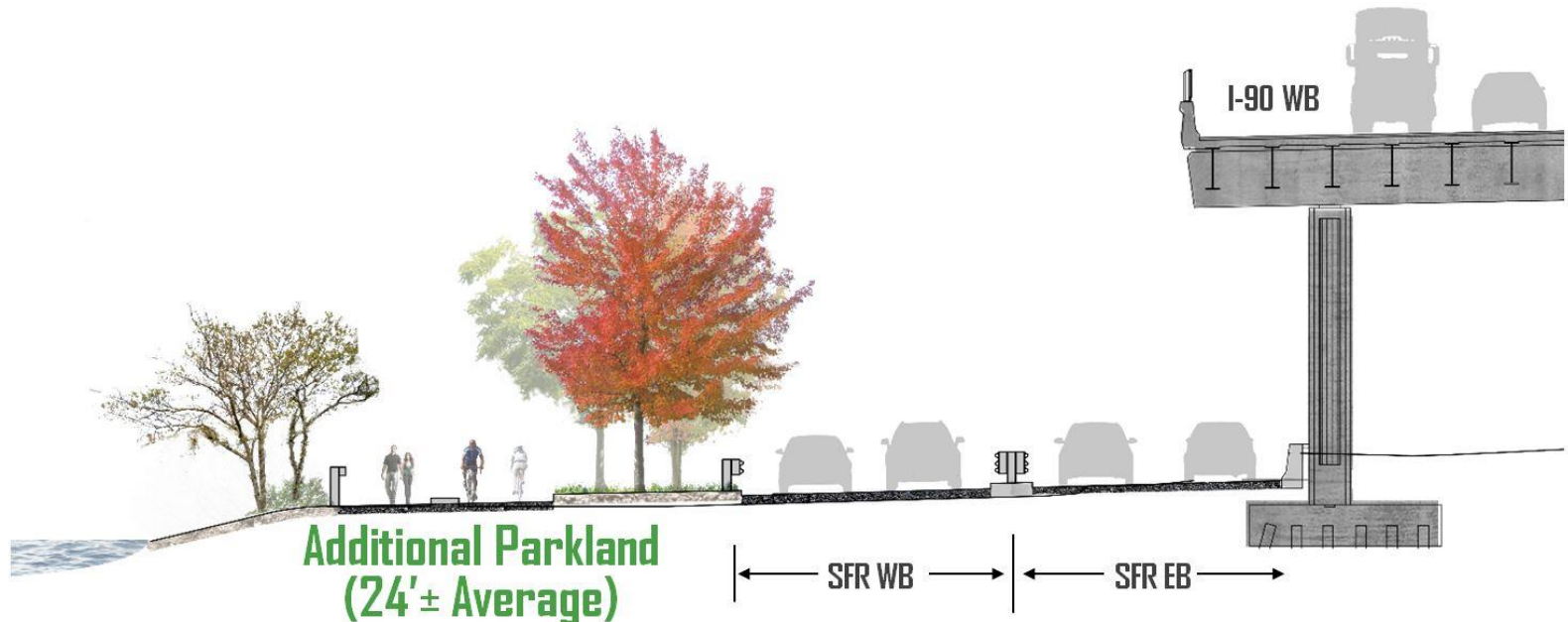
- ✓ *Improve safety for all modes: walking, cycling, driving, transit*
- ✓ **Realign I-90**
- ✓ **Context sensitive design or:**
 - ✓ **Lessen impact of interchange**
 - ✓ **Avoid inducing cut-through traffic with new configuration**
 - ✓ **Reconnect sections of Allston to each other and the River**
- ✓ **Protect the neighborhood during construction**
- ✓ **A more vibrant Cambridge Street that serves all modes**
- ✓ **Accessibility to transit at future West Station**
- ✓ **Work with City of Boston to prepare framework for new neighborhood**

Urban Interchange Option 3J: Preferred Concept for ENF

- **Alternative Identified for further Analysis in EA/EIR.**
- **3 Variants of 3J are being Evaluated**
 - **3J-1 (Cambridge St. Two-way)**
 - **3J-2 (Cambridge St., Cambridge St. South: One-Way Pair)**
 - **3J-3 (Cambridge St., Cambridge St. South: Two-Way Pair)**
- **Alternative still subject to modifications/refinements**
- **Design details will be developed with Public Input**

Urban Interchange Option 3J: Major Common Features

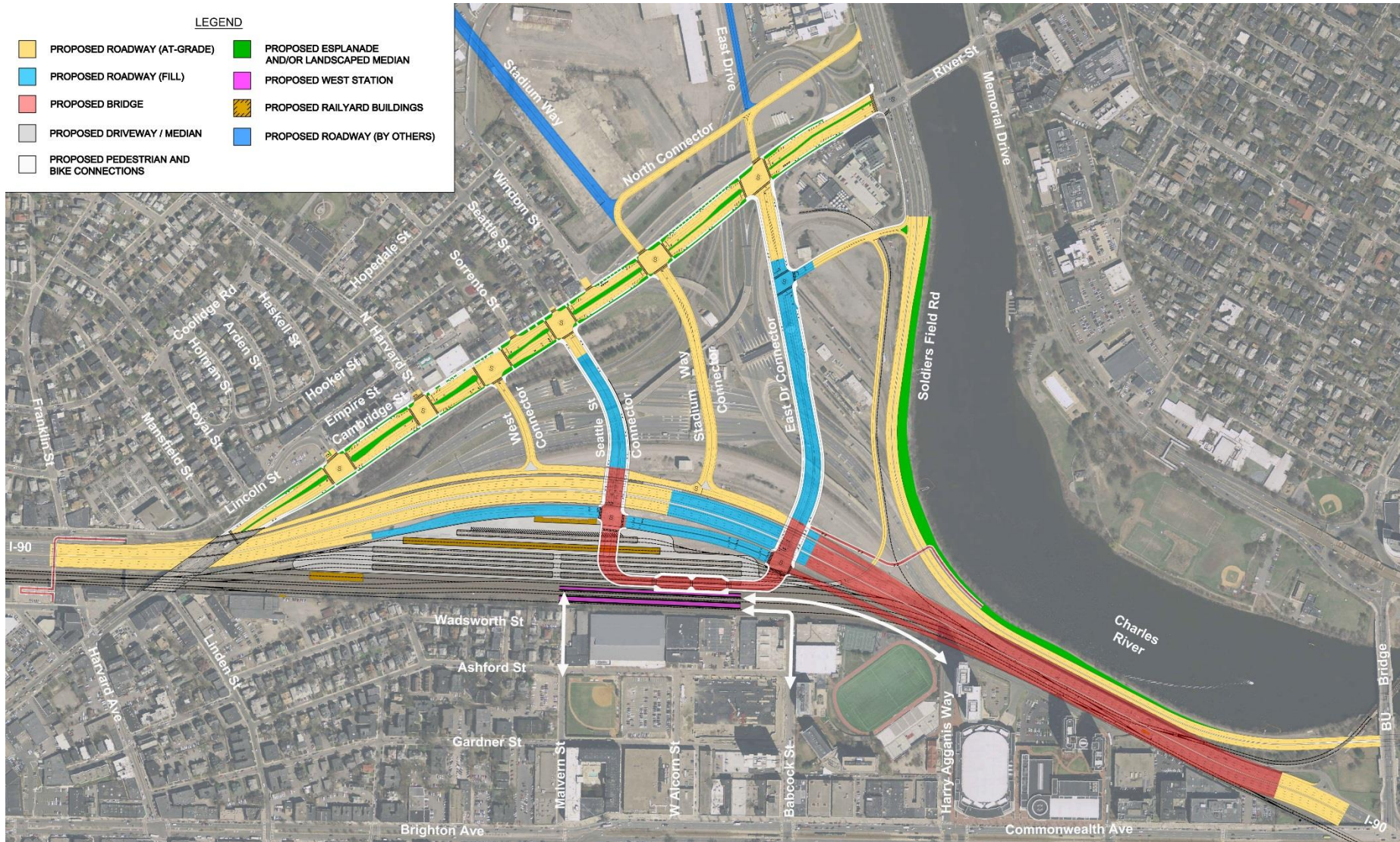
- Realign Turnpike/
Replace Viaduct
- Dedicated pedestrian/
bicycle infrastructure
- Incorporate West Station and
rail yard improvements
- Provide N-S pedestrian/bicycle
connections
- Redesign Cambridge St as
“Complete Street”
- Realign SFR to increase open
space along the Charles River



Urban Interchange Option 3J-1

LEGEND

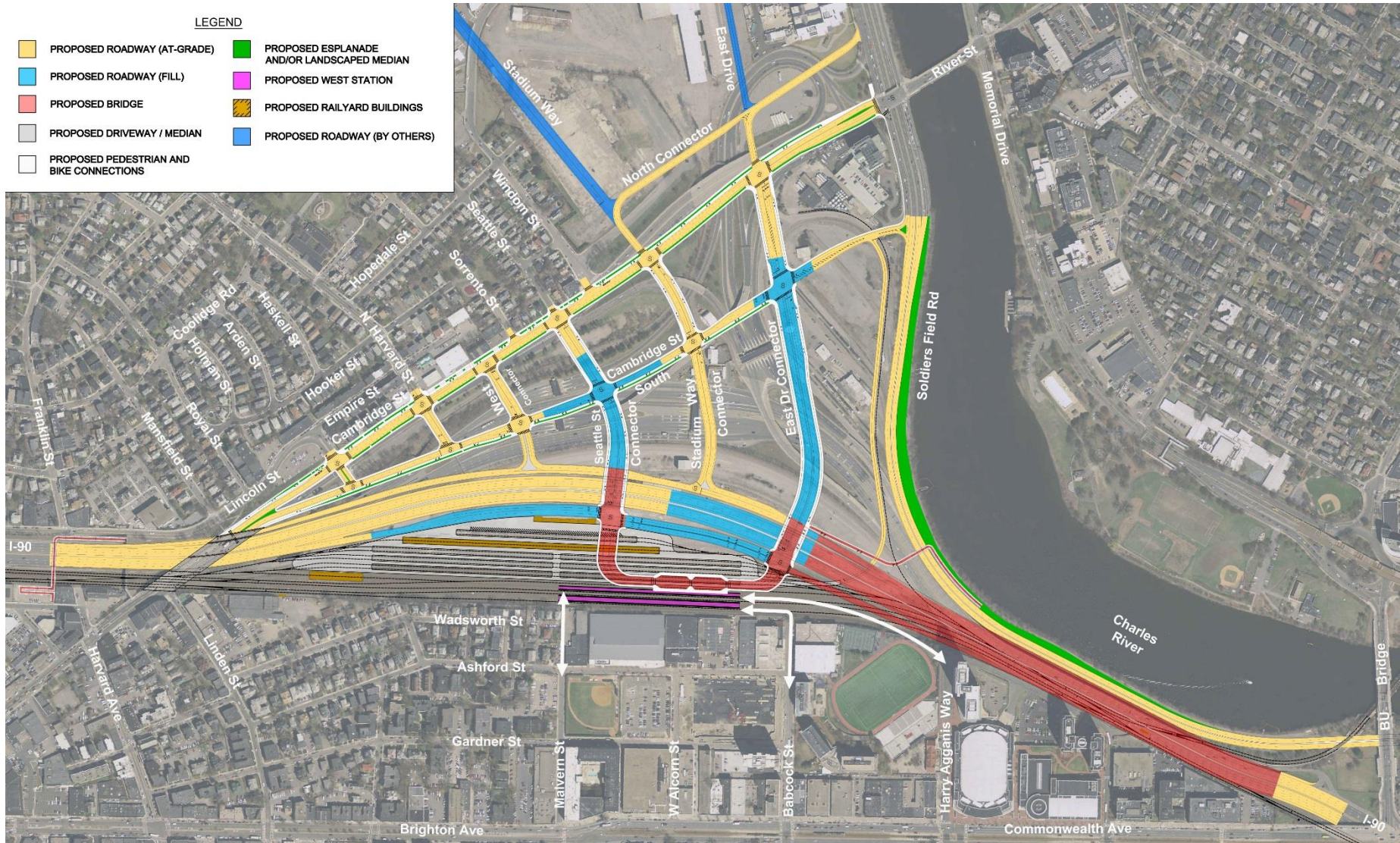
- | | |
|--|---|
|  PROPOSED ROADWAY (AT-GRADE) |  PROPOSED ESPLANADE AND/OR LANDSCAPED MEDIAN |
|  PROPOSED ROADWAY (FILL) |  PROPOSED WEST STATION |
|  PROPOSED BRIDGE |  PROPOSED RAILYARD BUILDINGS |
|  PROPOSED DRIVEWAY / MEDIAN |  PROPOSED ROADWAY (BY OTHERS) |
|  PROPOSED PEDESTRIAN AND BIKE CONNECTIONS | |



Urban Interchange Option 3J-2

LEGEND

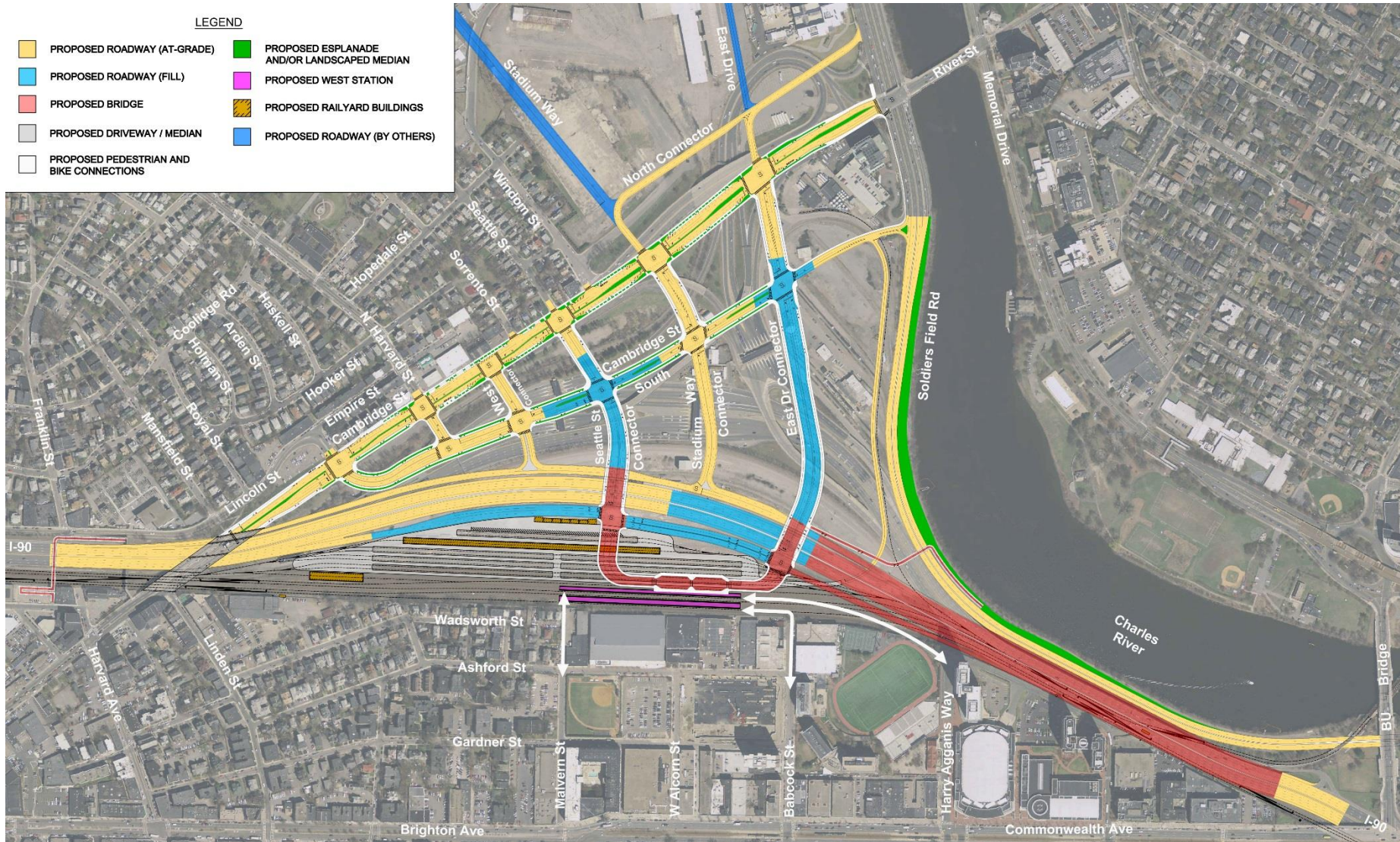
- PROPOSED ROADWAY (AT-GRADE)
- PROPOSED ROADWAY (FILL)
- PROPOSED BRIDGE
- PROPOSED DRIVEWAY / MEDIAN
- PROPOSED PEDESTRIAN AND BIKE CONNECTIONS
- PROPOSED ESPLANADE AND/OR LANDSCAPED MEDIAN
- PROPOSED WEST STATION
- PROPOSED RAILYARD BUILDINGS
- PROPOSED ROADWAY (BY OTHERS)



Urban Interchange Option 3J-3

LEGEND

- | | |
|--|---|
|  PROPOSED ROADWAY (AT-GRADE) |  PROPOSED ESPLANADE AND/OR LANDSCAPED MEDIAN |
|  PROPOSED ROADWAY (FILL) |  PROPOSED WEST STATION |
|  PROPOSED BRIDGE |  PROPOSED RAILYARD BUILDINGS |
|  PROPOSED DRIVEWAY / MEDIAN |  PROPOSED ROADWAY (BY OTHERS) |
|  PROPOSED PEDESTRIAN AND BIKE CONNECTIONS | |



Preliminary 3D Renderings – Concept 3J-3

View Looking Northeast



Preliminary 3D Renderings – Concept 3J-3

View of East Drive Connector Looking South



Preliminary 3D Renderings – Concept 3J-3

View of Seattle Street Connector Looking South



Preliminary 3D Renderings – Concept 3J-3

View of Cambridge Street Looking Southwest



MEPA Scope

- Issued December 24, 2014
- Dozens of comment letters/emails; hundreds of individual comments
- Major comment categories:
 - Alternatives Analysis
 - Open Space/Future Development
 - Bicycle and Pedestrian Accommodations/Multi-Modal
 - Traffic, Transportation, Transit
 - Air Quality/Greenhouse Gas Emission/Climate Change
 - Stormwater
 - Historic Resources/Parkland

MEPA Scope (cont.)

- **Alternatives Analysis:**
 - I-90 Viaduct and Soldiers Field Road
 - I-90 Interchange
 - West Station, Layover Yard and Maintenance Facilities
 - Bicycle and Pedestrian Accommodations
- **Traffic and Transit Analysis:**
 - Future Traffic and Transit Operations
 - Mitigate Impacts to Residential Areas
 - Evaluate Access to Packard's Corner
 - Air Quality and Greenhouse Gas
 - Noise
- **Accommodate Future Land Development**
- **Construction Staging and Impacts**

Meeting Agenda (cont.)

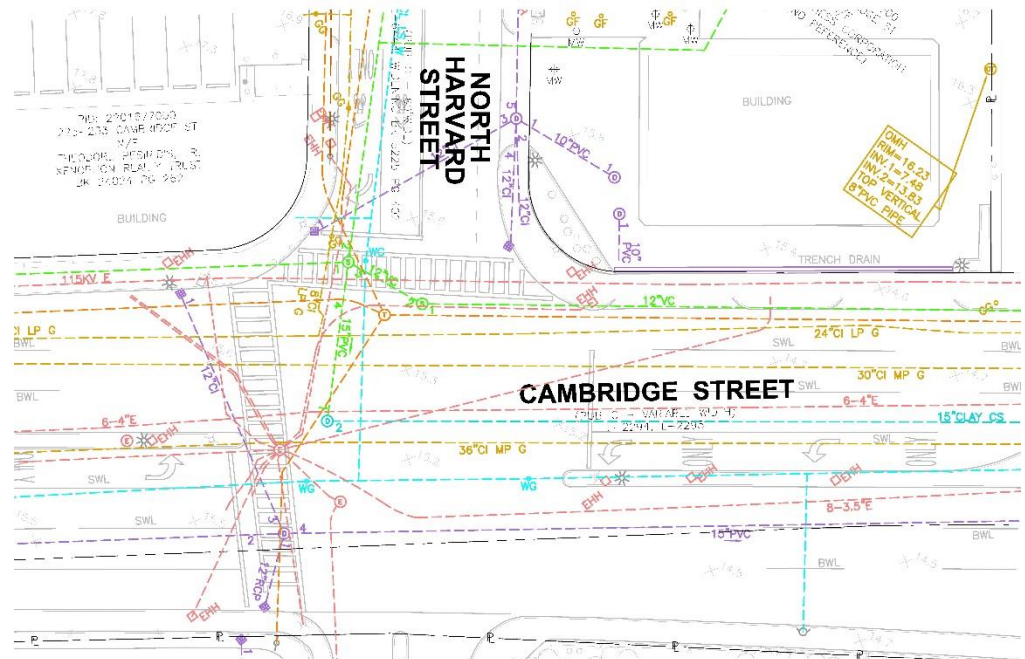
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Site Conditions & Constraints

- Geotechnical Investigations
- Soil Conditions
- Utility Coordination
- Stormwater Management
- Topographic Survey
- ROW Investigations
- Pipe Infrastructure Conditional Survey



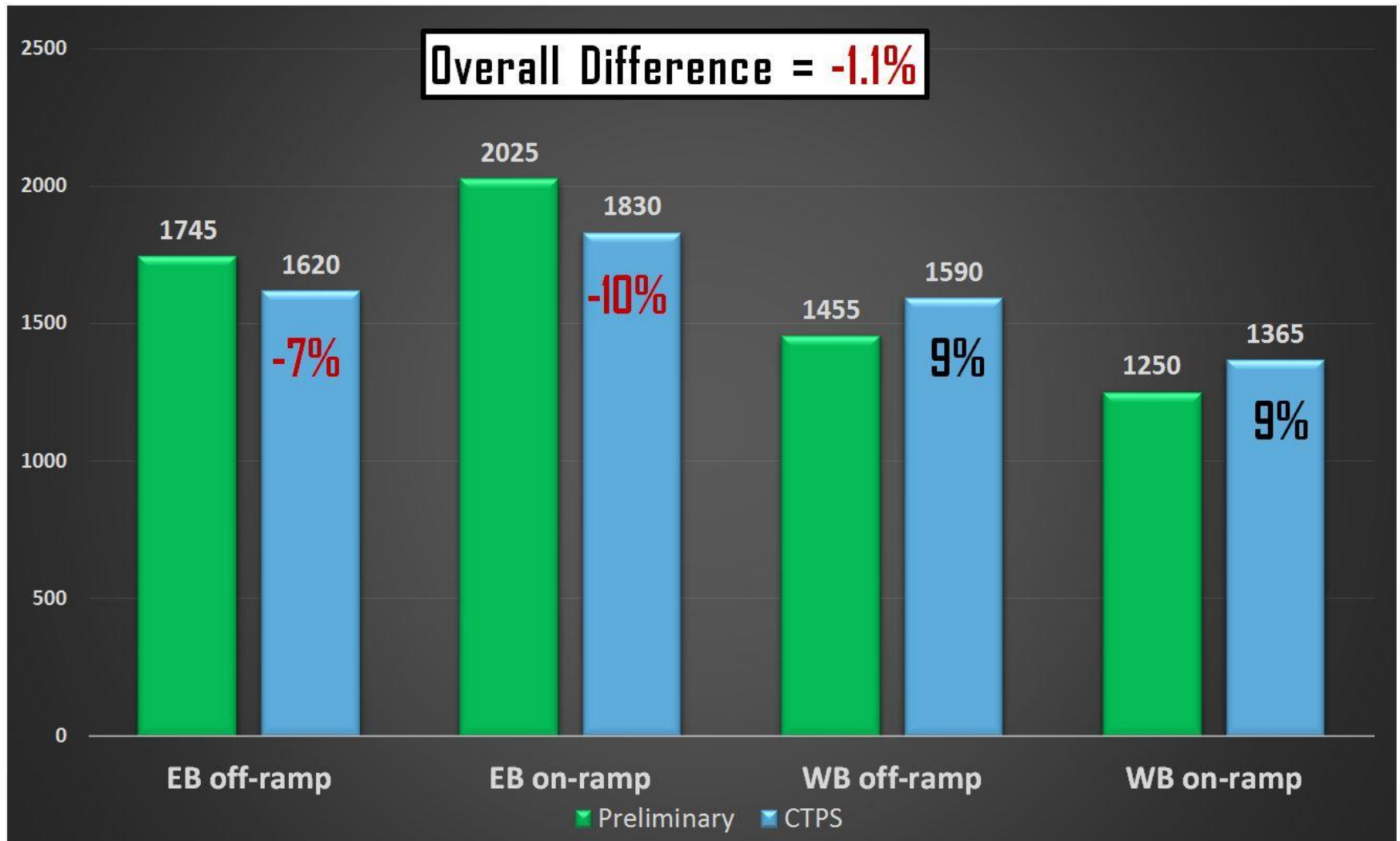
EVERSOURCE



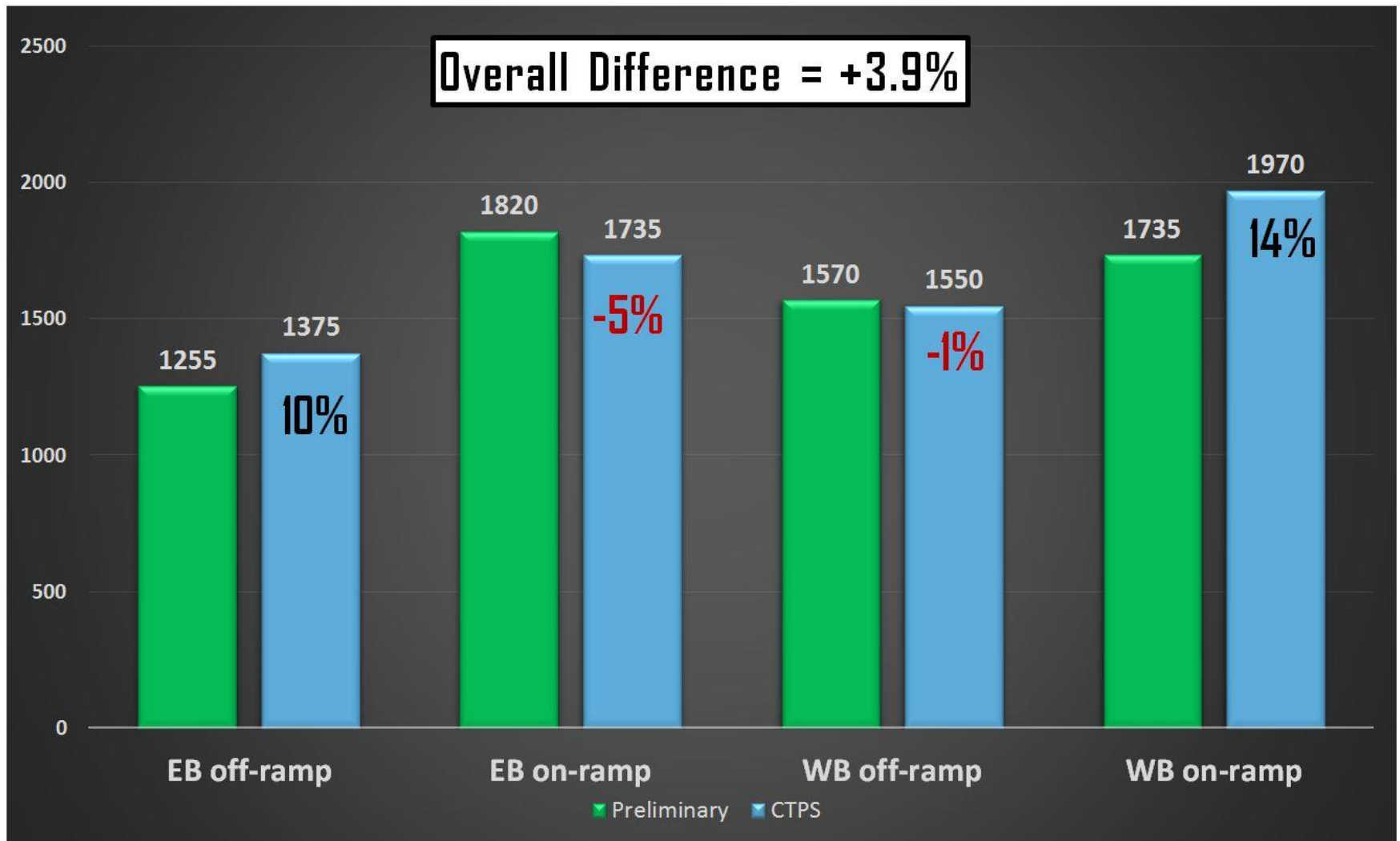
Traffic Analysis Update

- Analysis for the ENF
- On-Going refined analysis with CTPS volumes

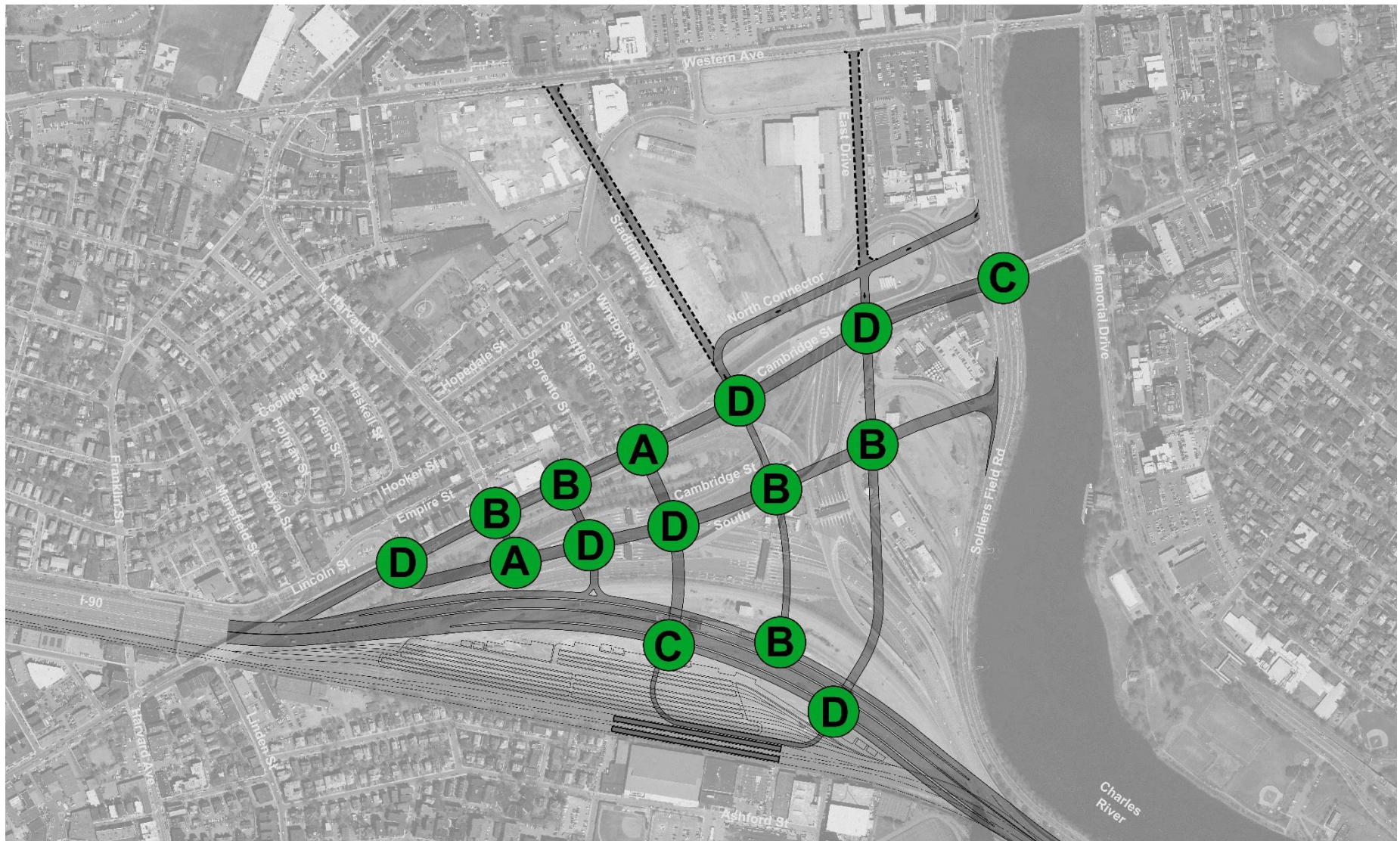
2035 AM Peak Hour I-90 Ramp Volume Comparison



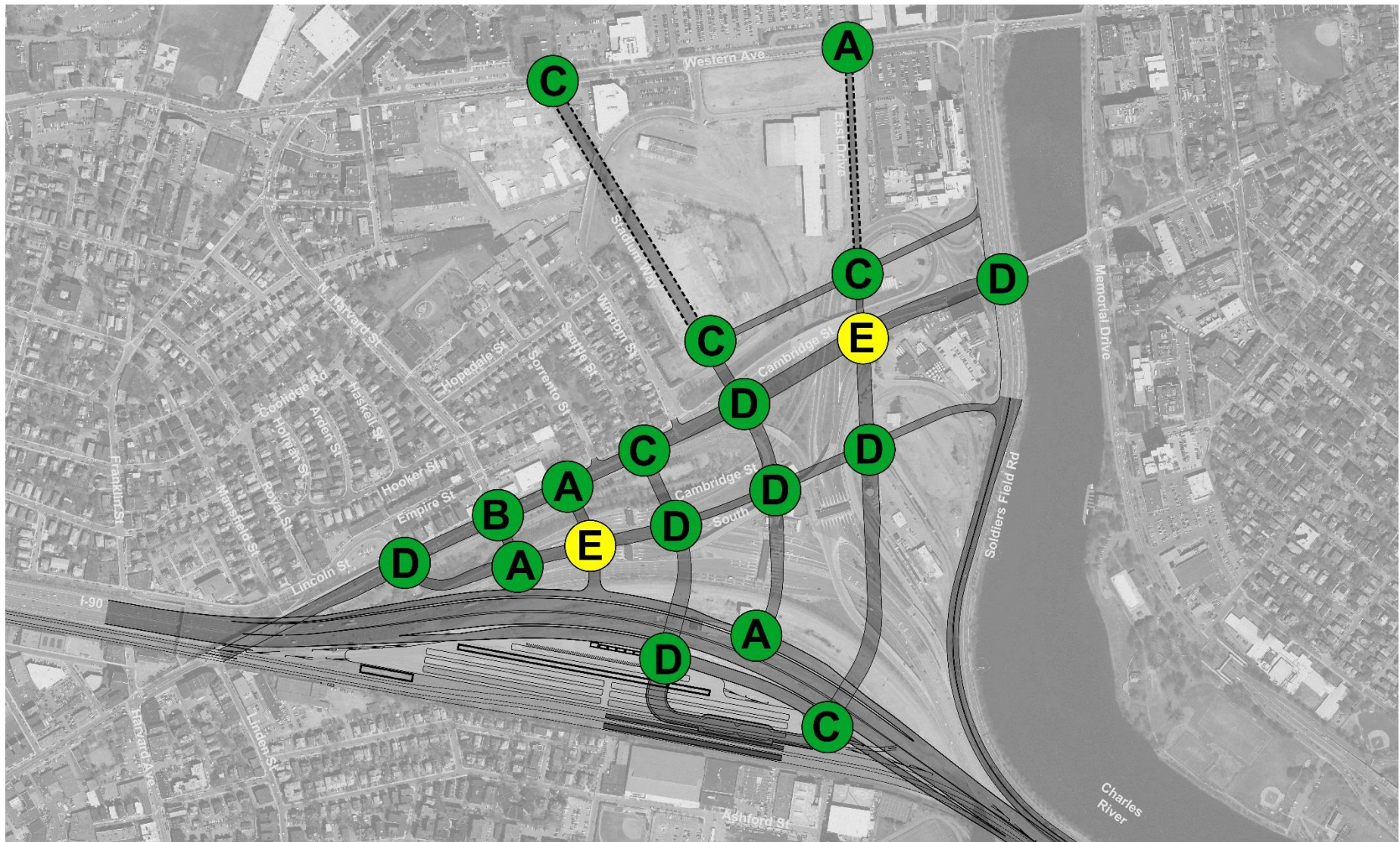
2035 PM Peak Hour I-90 Ramp Volume Comparison



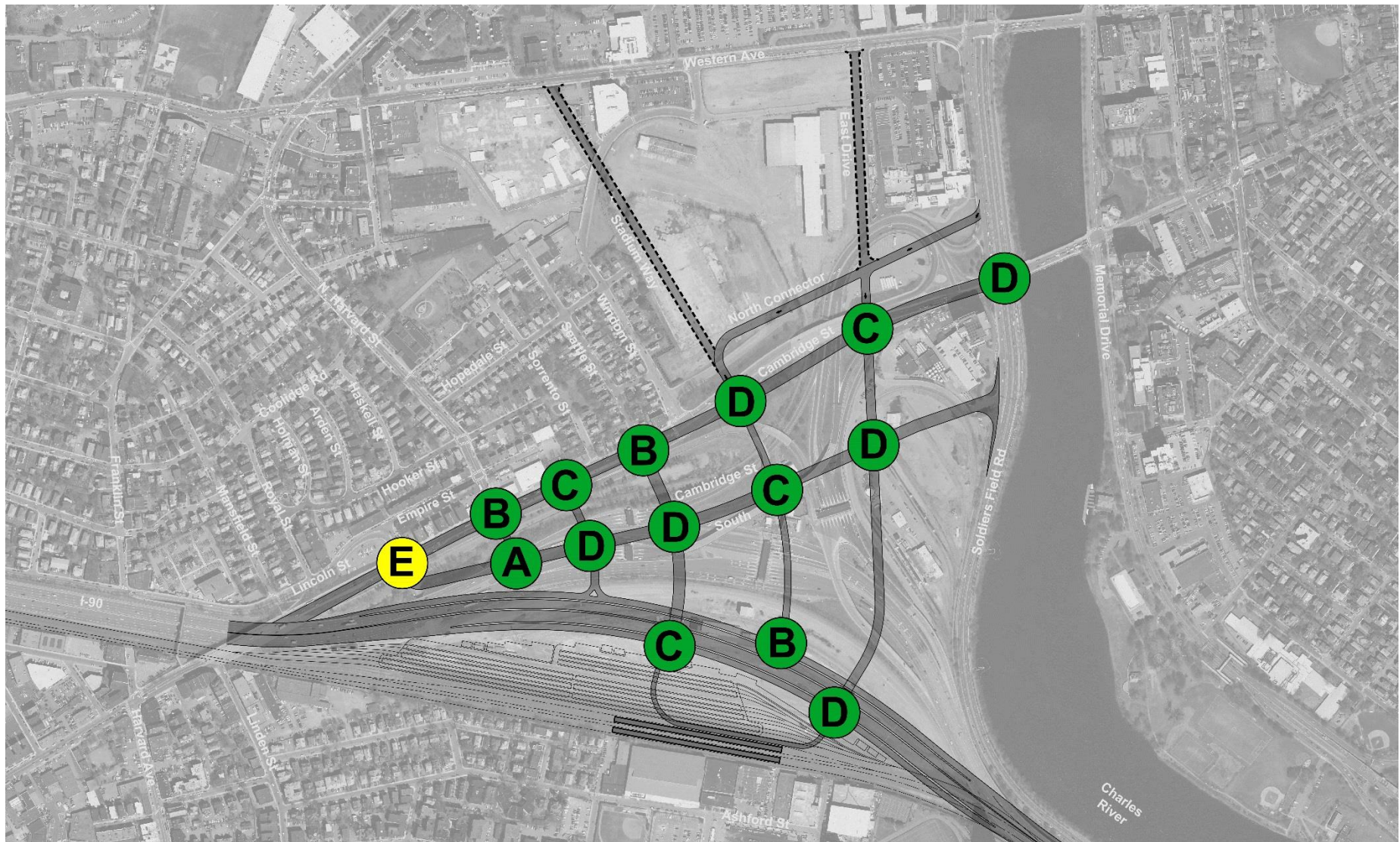
2035 AM Traffic Operations – Preliminary Volumes



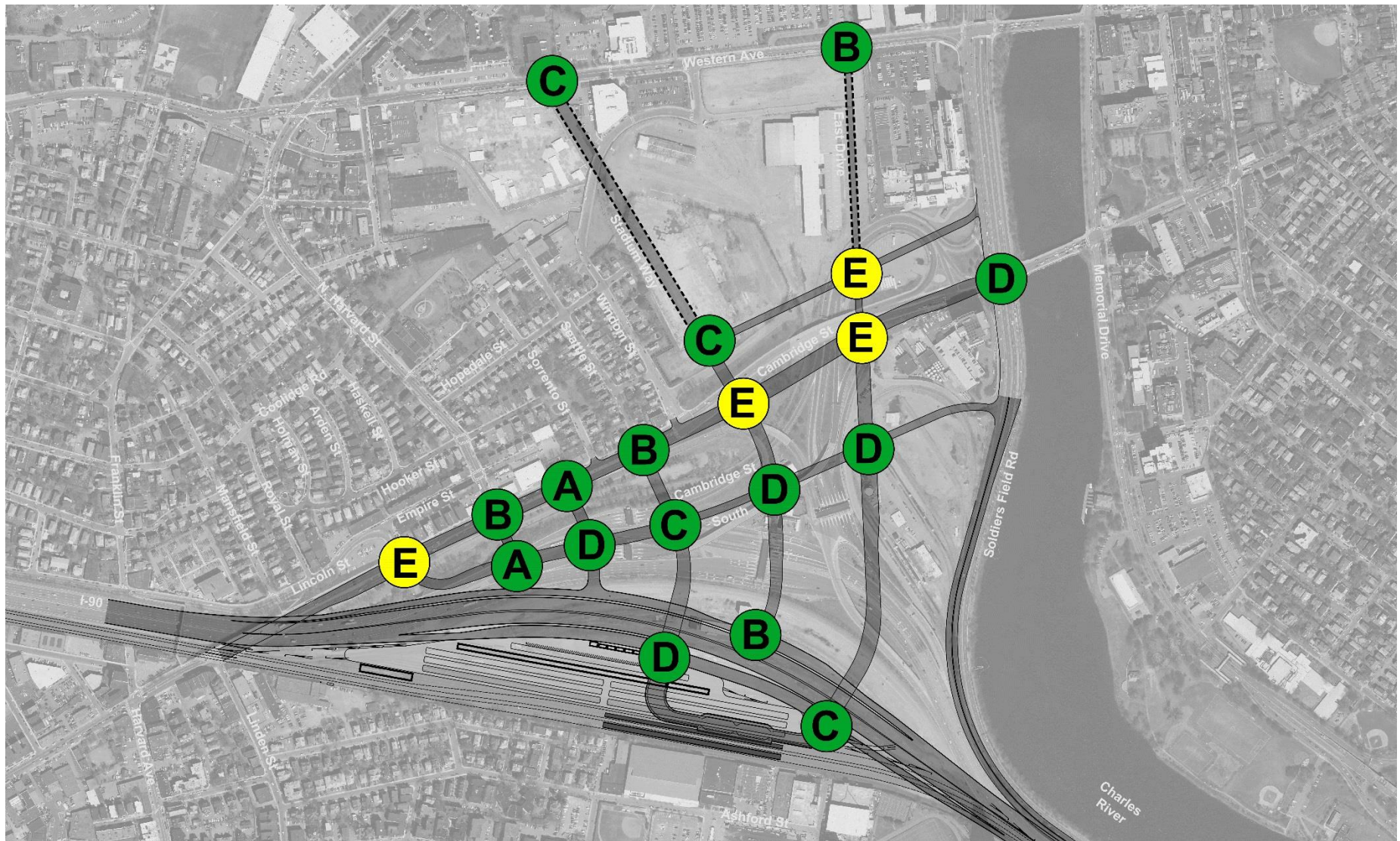
2035 AM Traffic Operations – CTPS Volumes



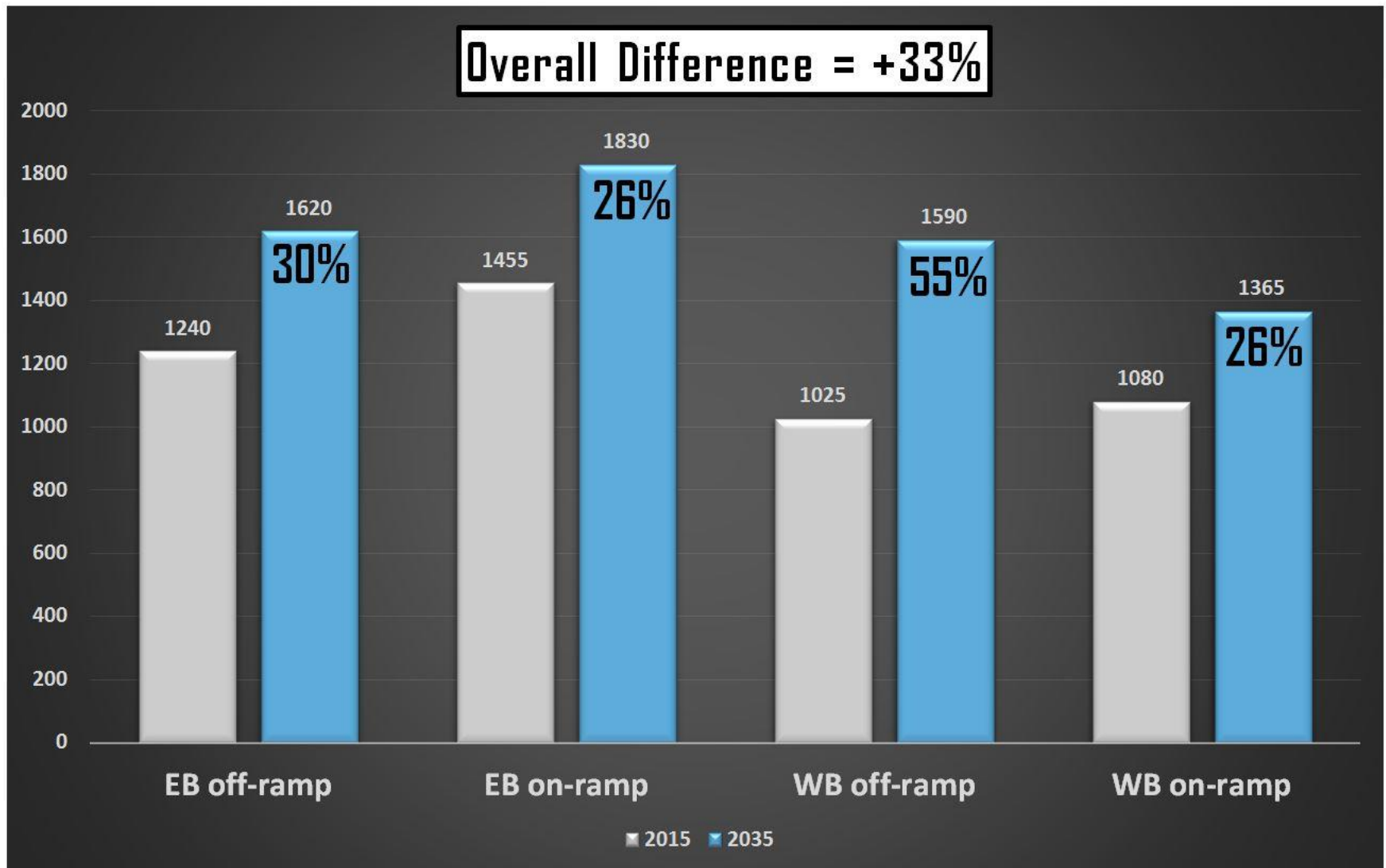
2035 PM Traffic Operations – Preliminary Volumes



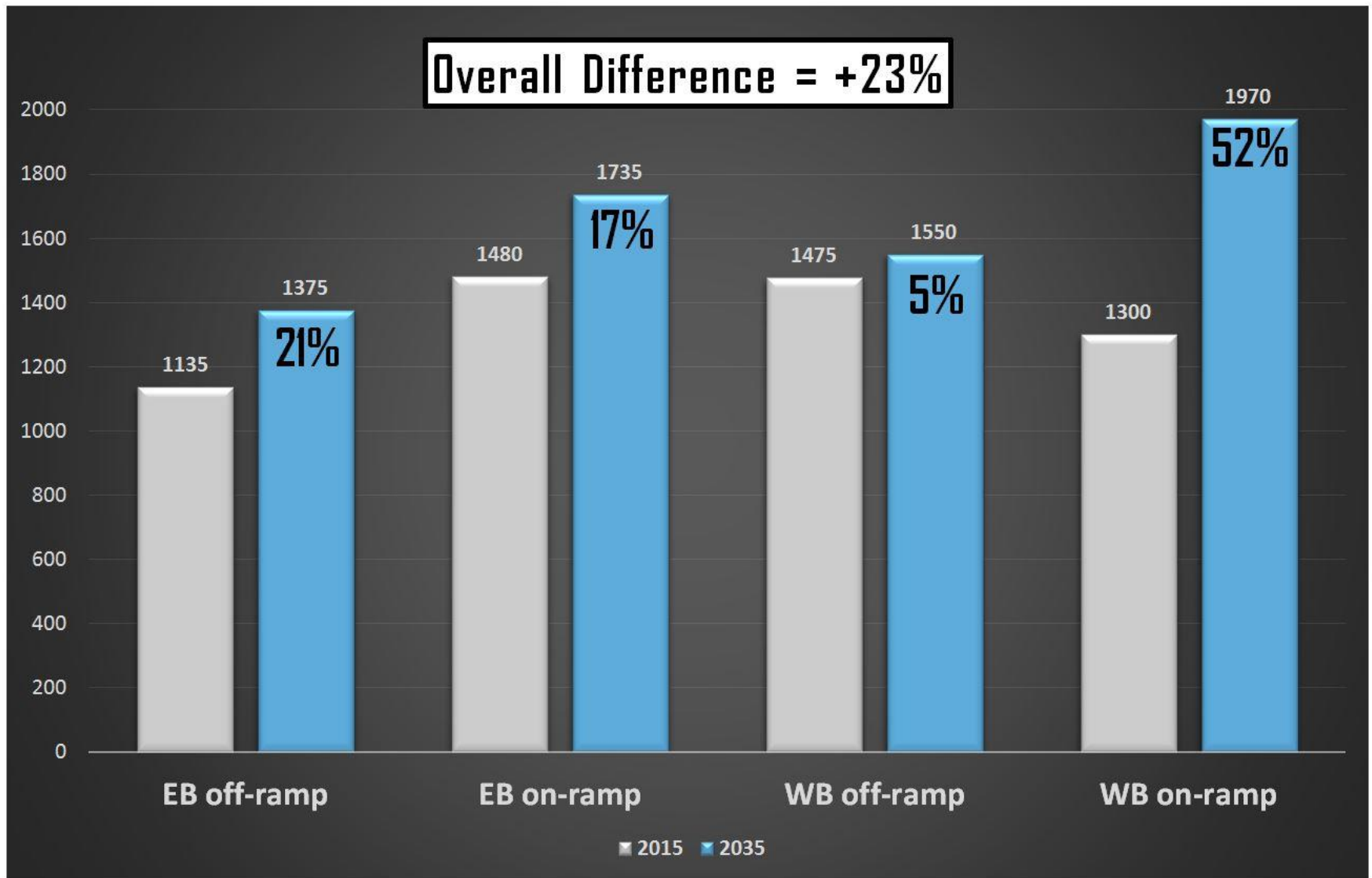
2035 PM Traffic Operations – CTPS Volumes



AM Ramp Volumes: 2015 Existing vs. 2035 Build



PM Ramp Volumes: 2015 Existing vs. 2035 Build



Additional Analyses Required by MEPA

- **Switching East Drive and Stadium Way connections to I-90 ramp system**
- **Vehicular connection to Comm. Ave**
- **2020 Opening year analysis**

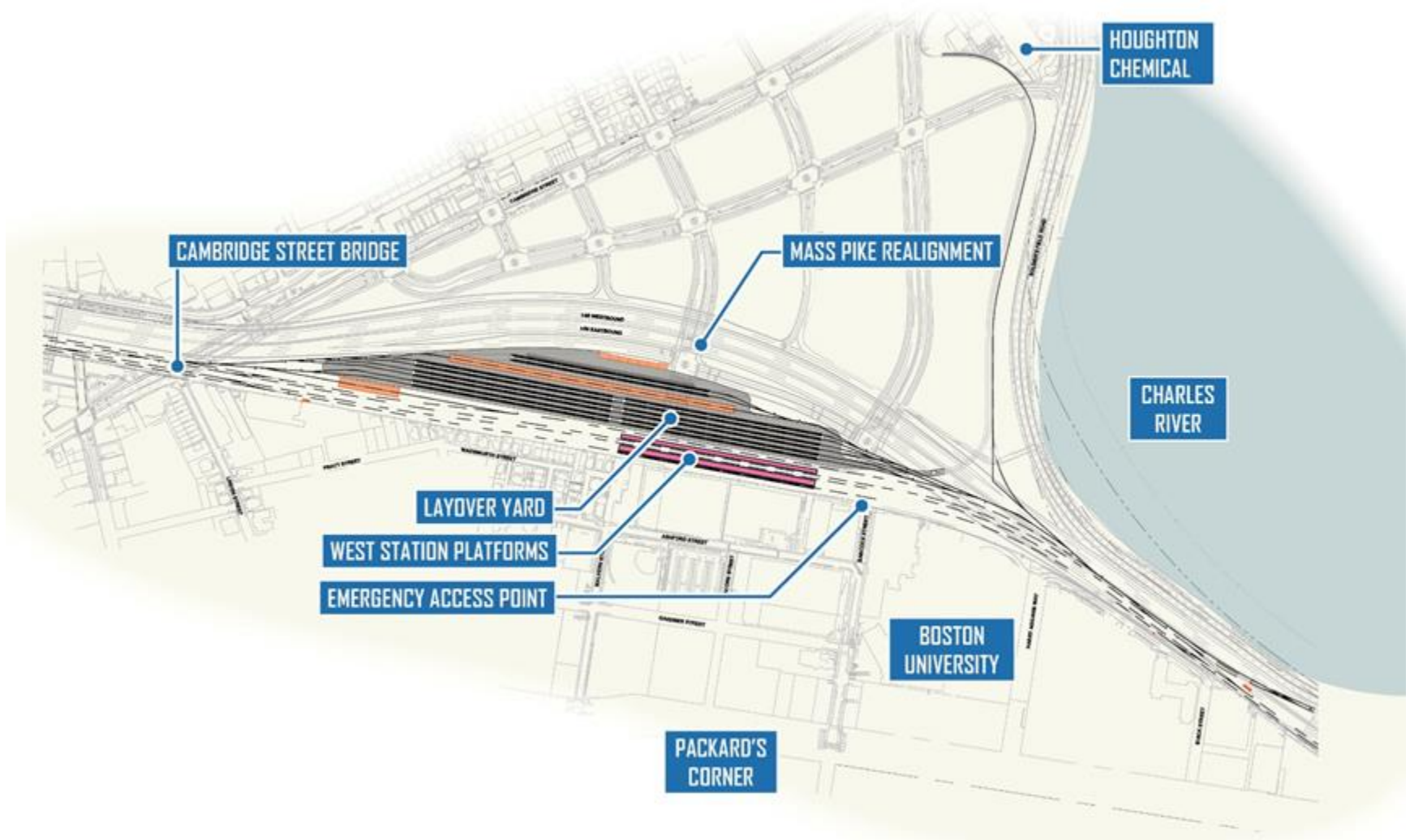
Beacon Park Yards and West Station

- Analysis of I-90 RR components began Oct. 2014
- Consists of
 - Beacon Park Yards
 - West Station
- Beacon Park Yards design follows SSX DEIR
 - Layover Tracks
 - Running Repairs
 - Crew Quarters
- West Station
 - Evolved from Public Process/Neighborhood input
 - Accommodates multimodal use and considers expanded rail service

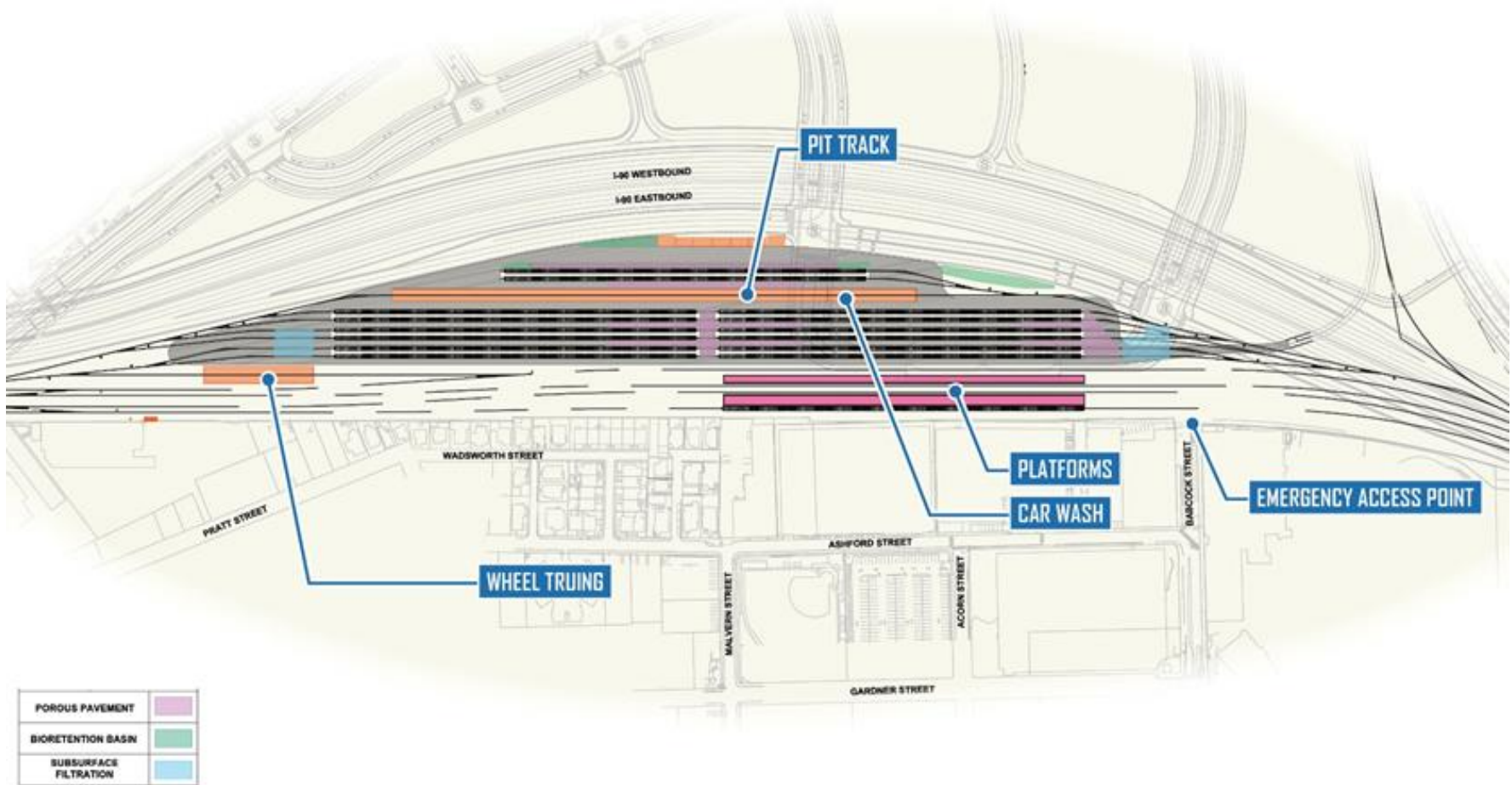
Railyard Overview

- **Beacon Park Yards**
 - Layover Tracks for 14-18, 9-Car Consists
 - Sheltered Pit Track
 - Wheel Truing
 - Car Wash/Deicing Facility
 - Crew Quarters
 - Substation
- **Do Not Preclude Future Restoration of Grand Junction**
- **Maintain Houghton Chemical/Freight Activities**

Rail & Transit Elements



Beacon Park Yard Elements



Tracks Below Viaduct



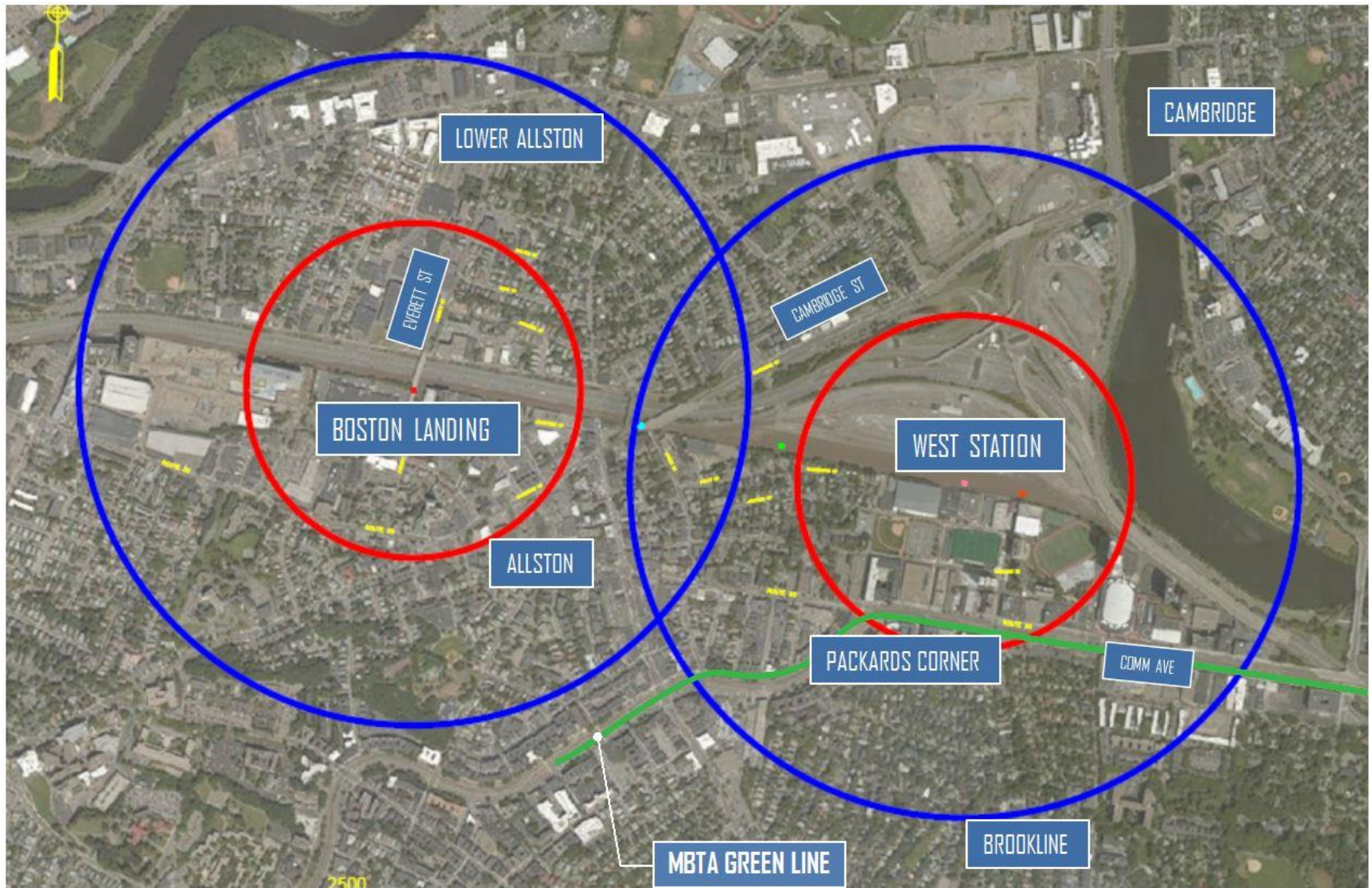
West Station Elements

- **2 Platforms/3-4 Revenue Service Tracks**
 - So. Station Service via Framingham/Worcester Branch
 - Future Urban Rail Service
- **Bicycle/Pedestrian Access South/Comm Ave to North/PDW Path**
 - Accessible at all times and not limited to MBTA operational hours
- **Bus Loop Access to Station serving**
 - MBTA Bus
 - Intercity Bus, Logan Express
 - Taxi/Shuttle
 - K & R
- **No Parking Facilities**

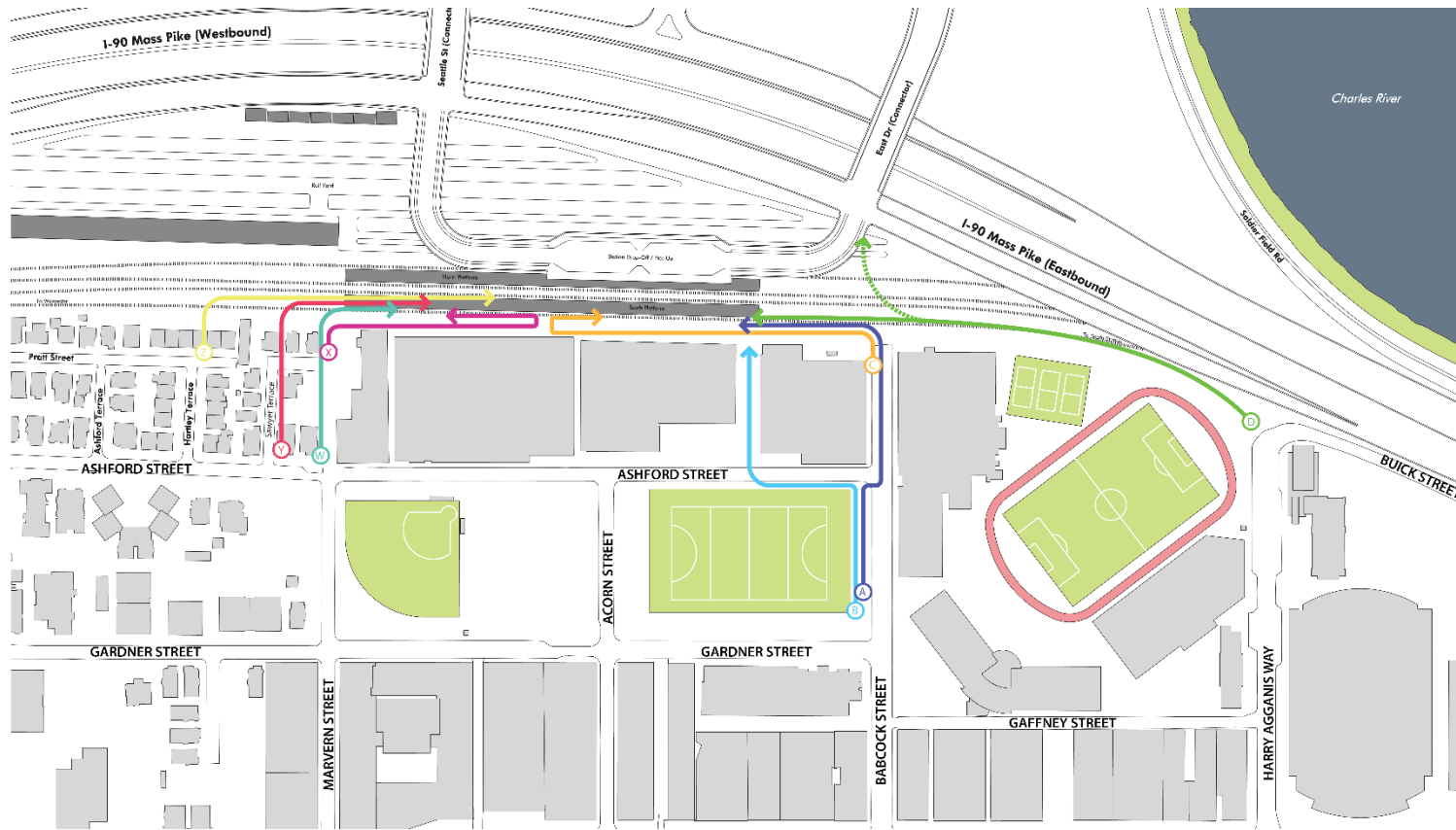
Transit Proximity



Boston Landing/West Station Capture Comparison



Pedestrian/Bicycle Path Preliminary Study



A BRIDGE OVER ASHFORD V1

Start Elevation 39'
Elevation Gain 16'
Total Distance 820'
Avg. Slope 1.9%

- Utilizes existing terrain, minimizes elevation gain to Mezz. Level (55')
- Strong visual relationship and proximity with Corner Ave
- Opportunity for seating overlooking sports field; landscaping
- Bridging over Ashford requires roadway vertical clearances
- Landscaping, park atmosphere
- Bridging over Ashford requires roadway vertical clearances
- Columns adjacent to Babcock Street

B BRIDGE OVER ASHFORD V2

Start Elevation 39'
Elevation Gain 16'
Total Distance 760'
Avg. Slope 2.1%

- Utilizes existing terrain to minimize elevation gain to Mezz. Level
- Opportunity for seating overlooking sports field; landscaping
- Bridging over Ashford requires roadway vertical clearances
- Horizontal clearances along Ashford will violate path width and column locations
- Isolated between buildings

C END OF BARCOCK SWITCHBACK

Start Elevation 19'
Elevation Gain 36'
Total Distance 800'
Max Slope 4.5%

- Compact design w/ minimal intrusions on Babcock Street and surrounding buildings
- Simple layout would make for easier construction and lower costs
- Low starting elevation requires an increase in slope to Mezz. Level
- Visually hidden by BU buildings; safety concerns

D AGGANIS WAY FLYOVER

Start Elevation 34'
Elevation Gain 21'
Total Distance 1000'
Avg. Slope 2.1%

- Ample construction space
- Utilizes terrain, making for a more gradual ramp which benefits bikers and persons with disabilities
- Few turns reduces chance for pedestrian traffic conflicts
- Setback isolated from West Station; close to highway
- Requires appropriate railroad horizontal and vertical clearances

W DRIVEWAY AT MALVERN STREET

Start Elevation 35'
Elevation Gain 20'
Total Distance 450'
Max Slope 4.5%

- Compact design with few turns and short overall ramp distance
- Utilizes terrain; minimizes elevation gain to Mezz. Level
- Driveway and horizontal clearance concerns with existing commercial building

X END OF MALVERN SWITCHBACK

Start Elevation 26'
Elevation Gain 29'
Total Distance 650'
Max Slope 4.5%

- Minimal impact to existing properties; requires minimal excavation
- Complements Option C
- Visually hidden from travel network; raises safety concerns
- Proximity to major sewer line; requires concrete box culverts
- Space limitations requires narrower ramp width
- Sharp switchback

Y SAWYER TERRACE RAMP

Start Elevation 33'
Elevation Gain 22'
Total Distance 490'
Max Slope 4.5%

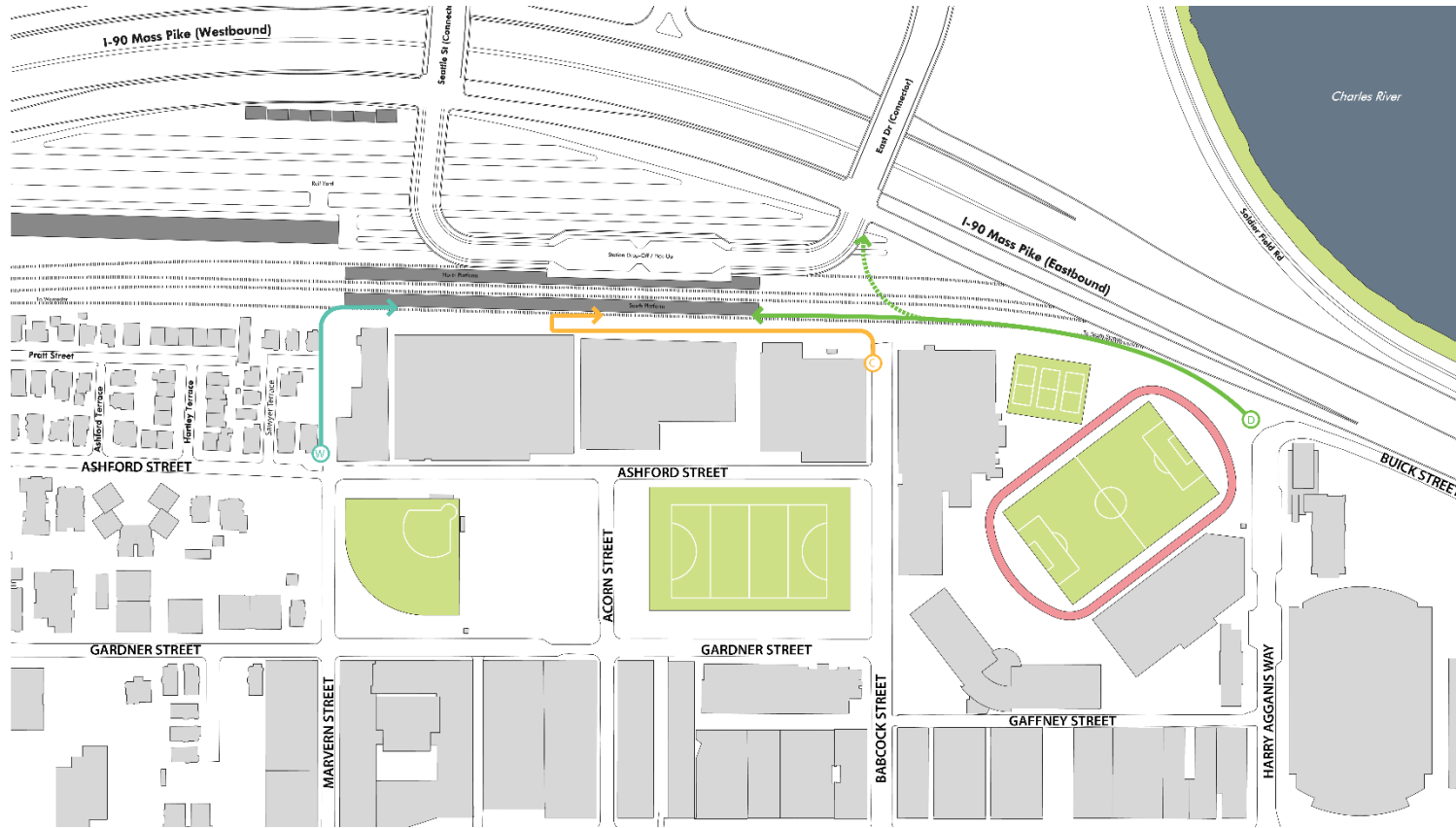
- Utilizes terrain; minimizes elevation gain to Mezz. Level
- Wider pathway compared to Option W
- Requires acquisition of residential properties

Z HARTLEY TERRACE RAMP

Start Elevation 26'
Elevation Gain 26'
Total Distance 650'
Max Slope 4.0%

- Entrance/Exit leads towards west; better connection from Street throughway; at intersection of more substantial residential streets
- Proposed community park entrance
- Requires acquisition of residential properties

Pedestrian/Bicycle Path Detailed Study



C END OF BARCOCK SWITCHBACK

Start Elevation 19'
Elevation Gain 36'
Distance Req'd 800'
Max Slope 4.5%

- + Compact design w/ minimal impacts on Babcock Street and surrounding buildings
- + Simple layout would make for easier construction and lower costs
- Low starting elevation requires an extensive climb to Mezz Level
- Visually hidden by the buildings; safety concerns

D AGGANIS WAY FLYOVER

Start Elevation 34'
Elevation Gain 21'
Total Distance 1000'
Avg. Slope 2.1%

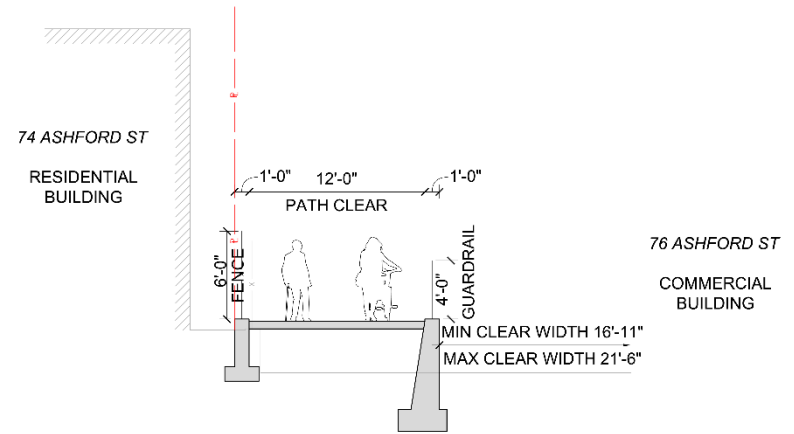
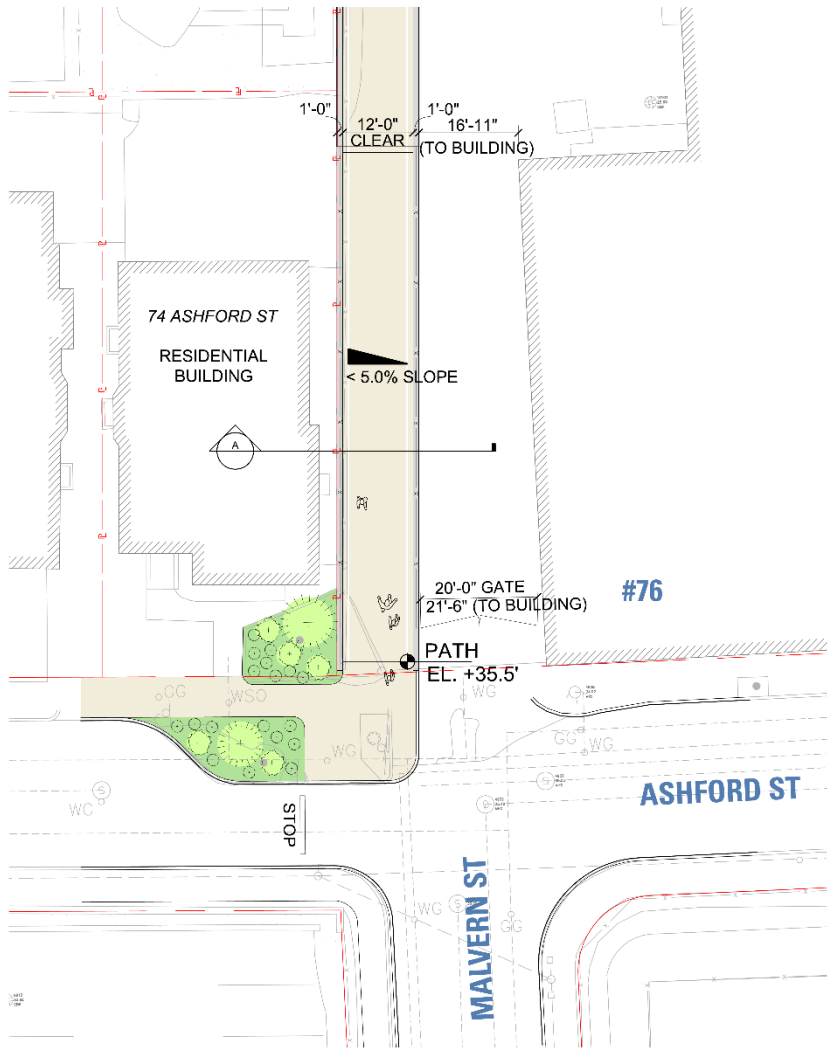
- + Ample construction space
- + Utilizes terrain, making for a more gradual ramp which benefits bikes and persons with disabilities
- + Few lane reductions chance for pedestrian traffic conflicts
- Somewhat isolated from West Station close to highway
- Requires appropriate railroad horizontal and vertical clearances

W DRIVEWAY AT MALVERN STREET

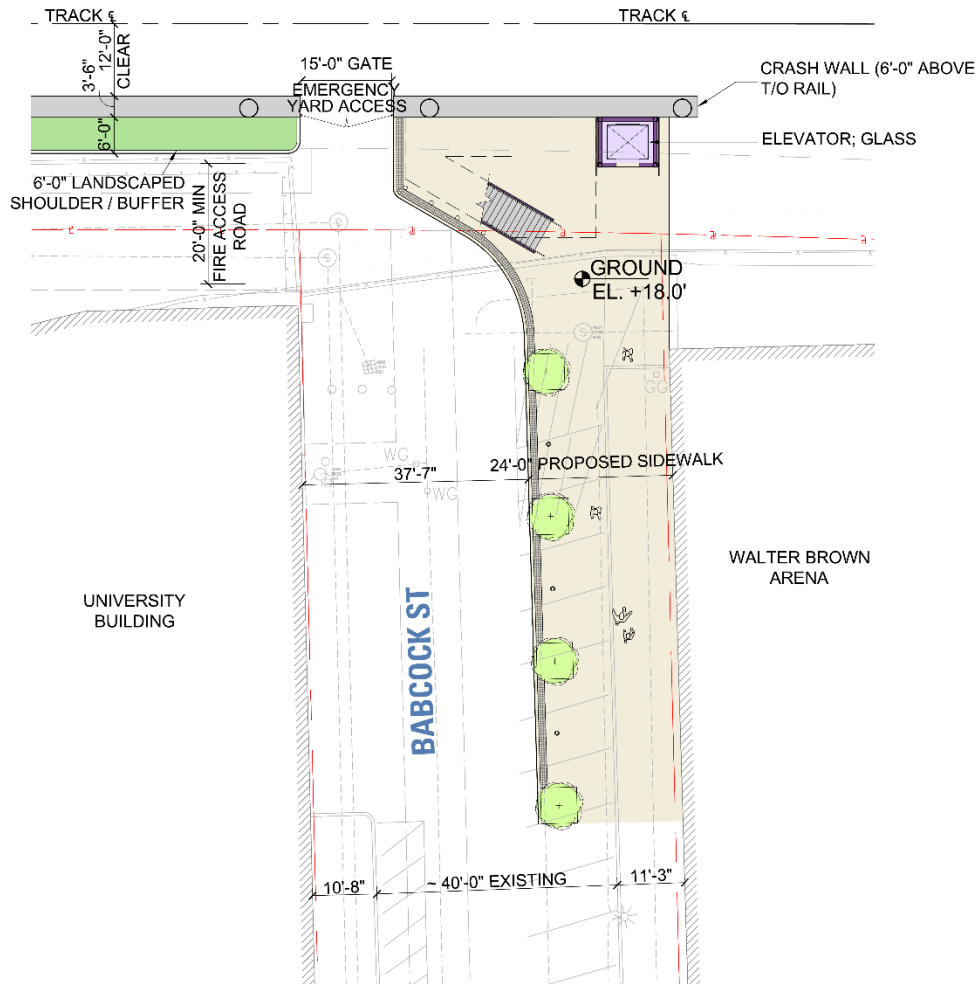
Start Elevation 33'
Elevation Gain 20'
Distance Req'd 450'
Max Slope 4.5%

- + Compact design with its short overall ramp d/s
- + Utilizes terrain, minimize elevation gain to Mezz. Le
- Driveway and horizontal clearance concerns with commercial building

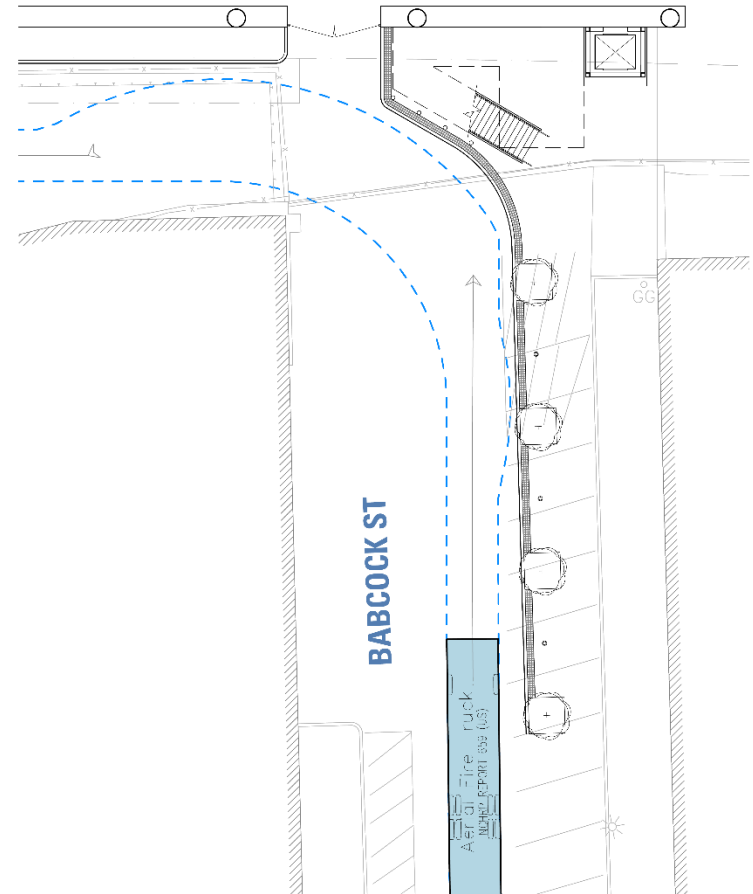
Malvern St Station Access Point



Babcock St Station Access Point

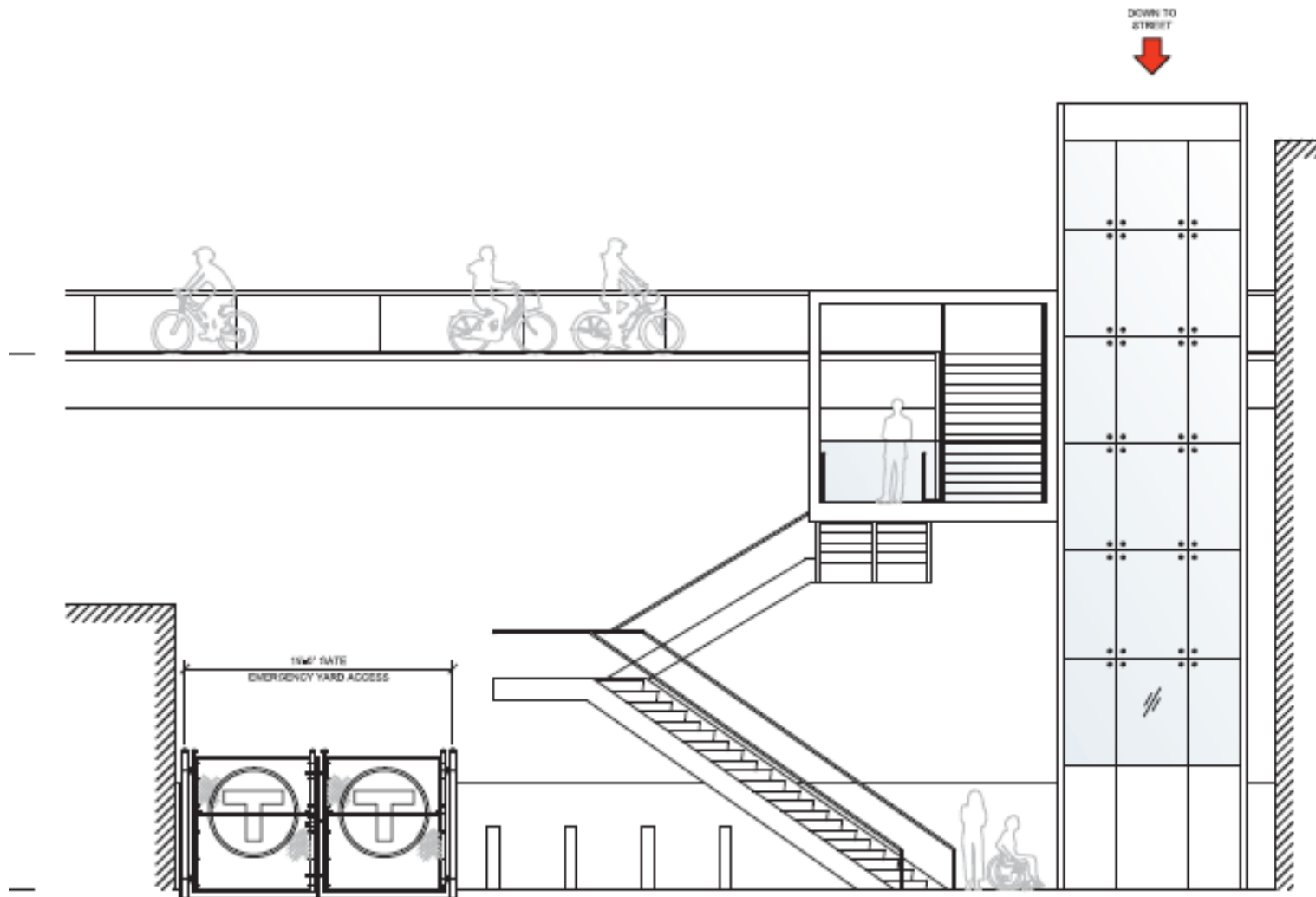


Bicycle/Pedestrian Path

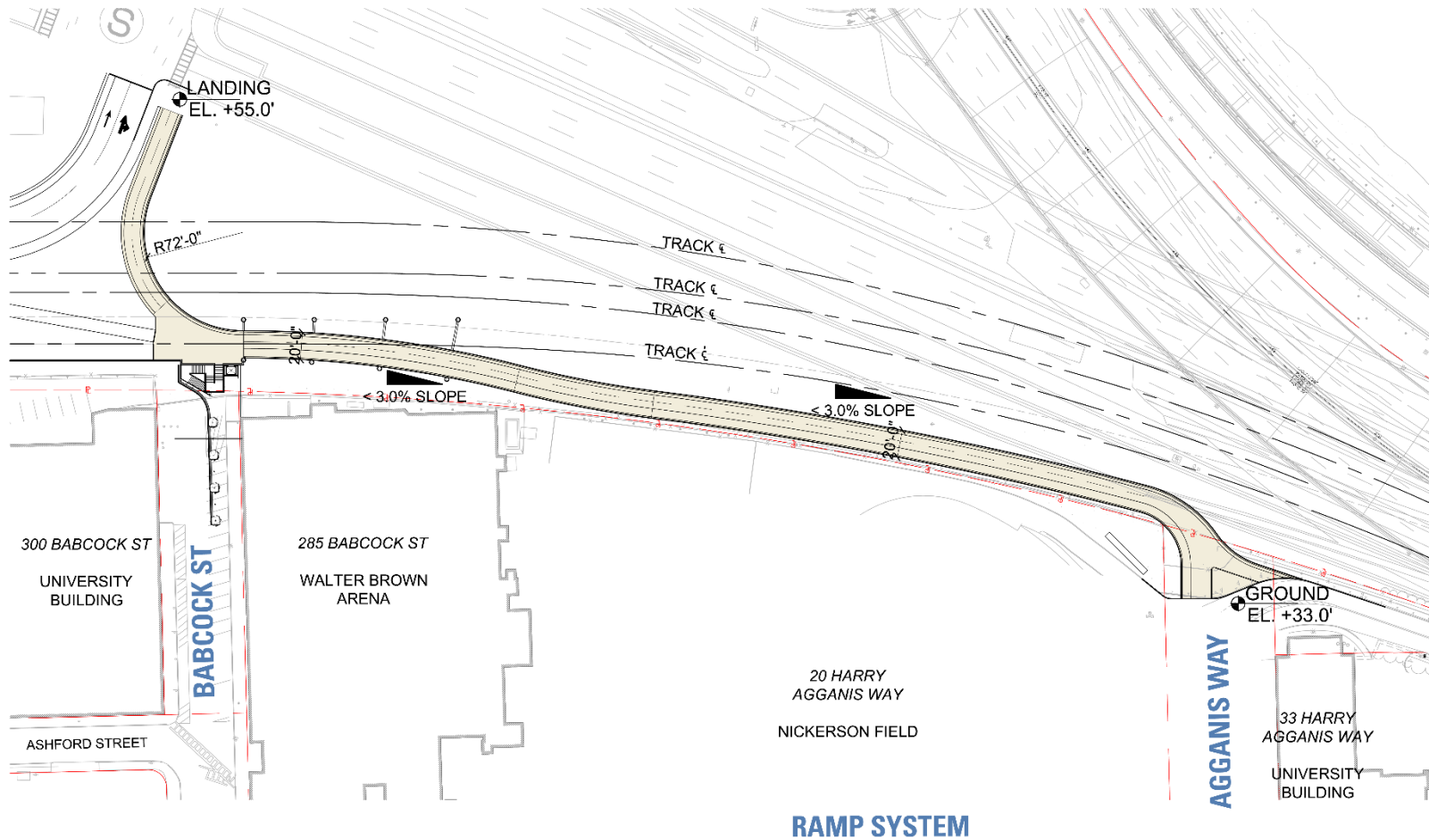


Emergency Vehicle Access

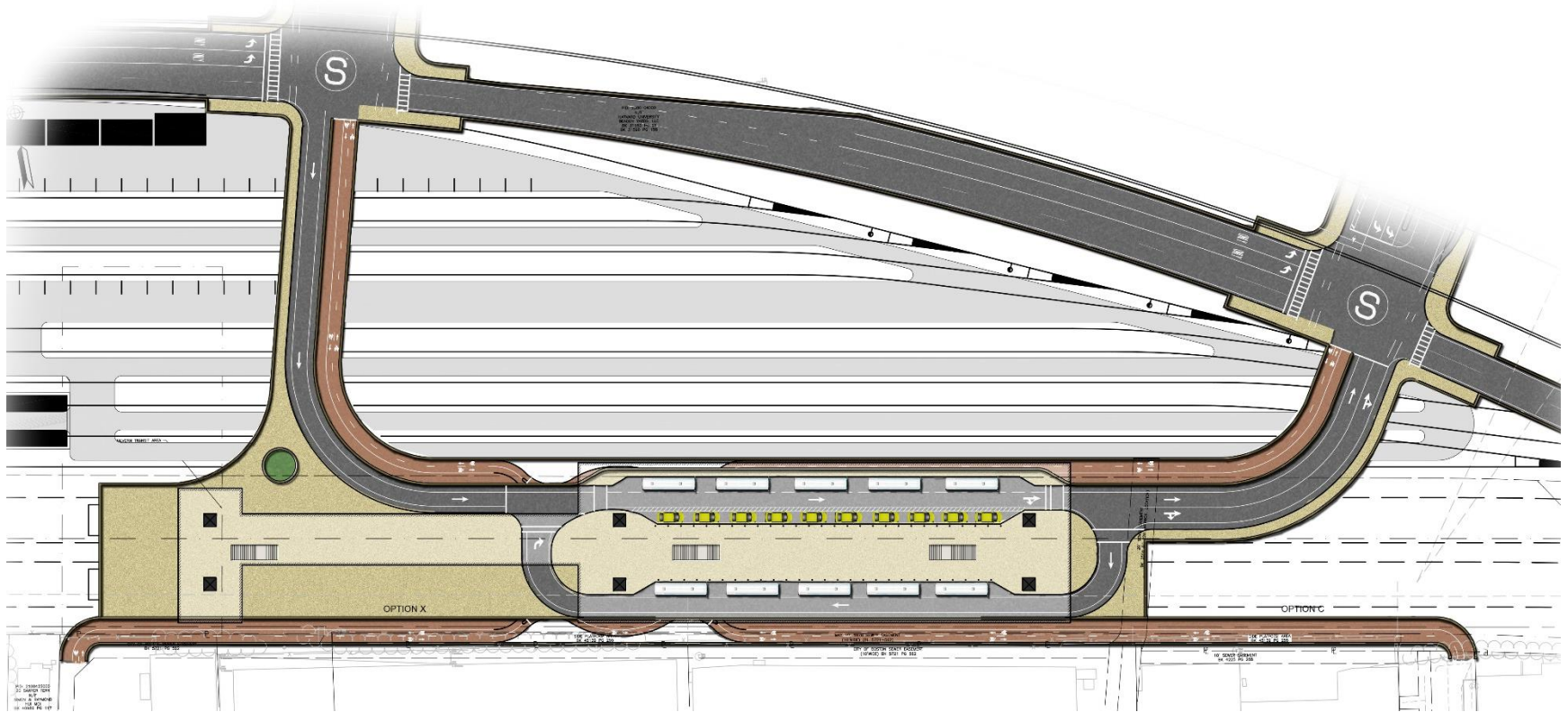
Stair & Elevator at Babcock St.



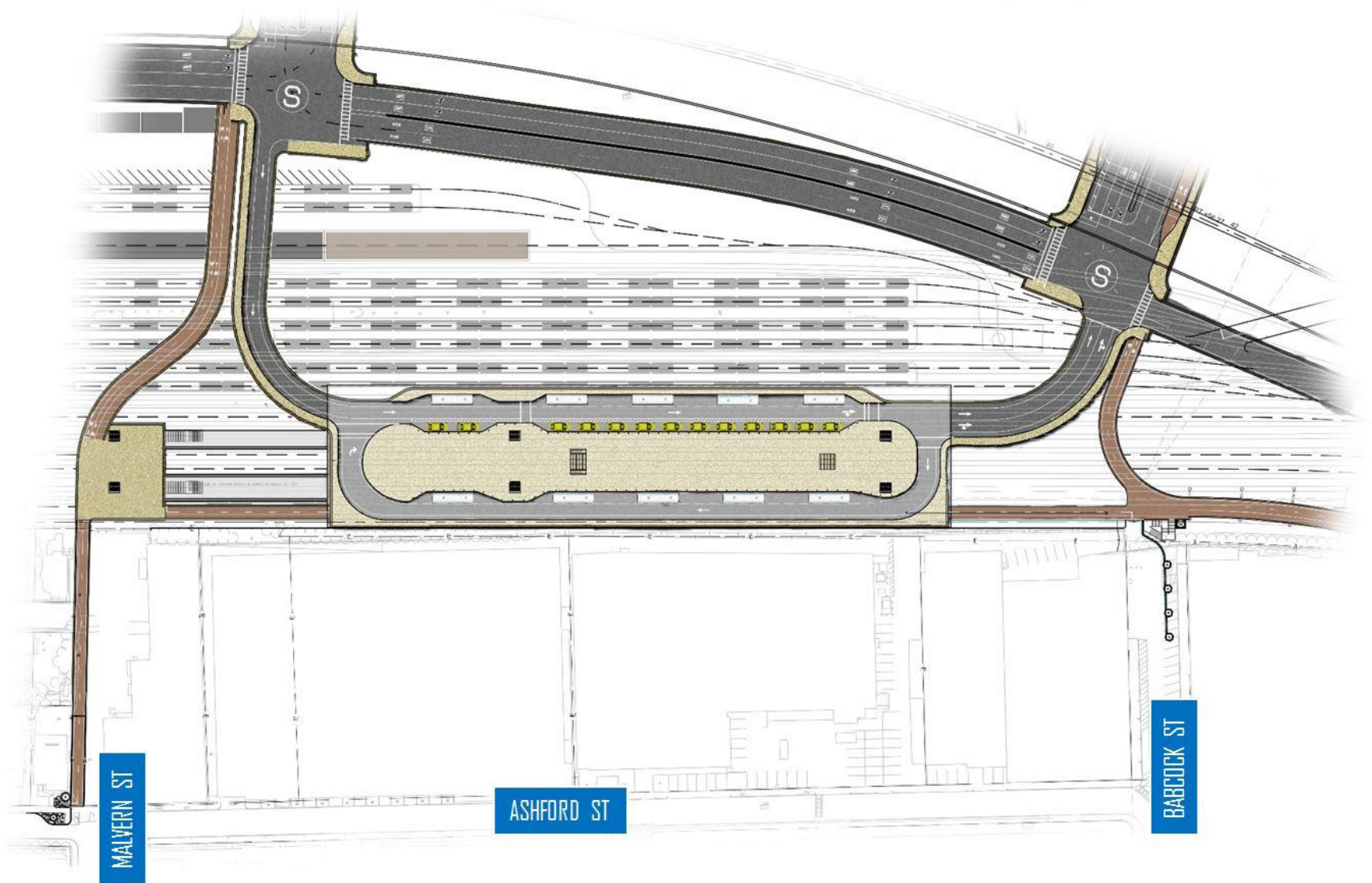
Agganis Way Station Access Point



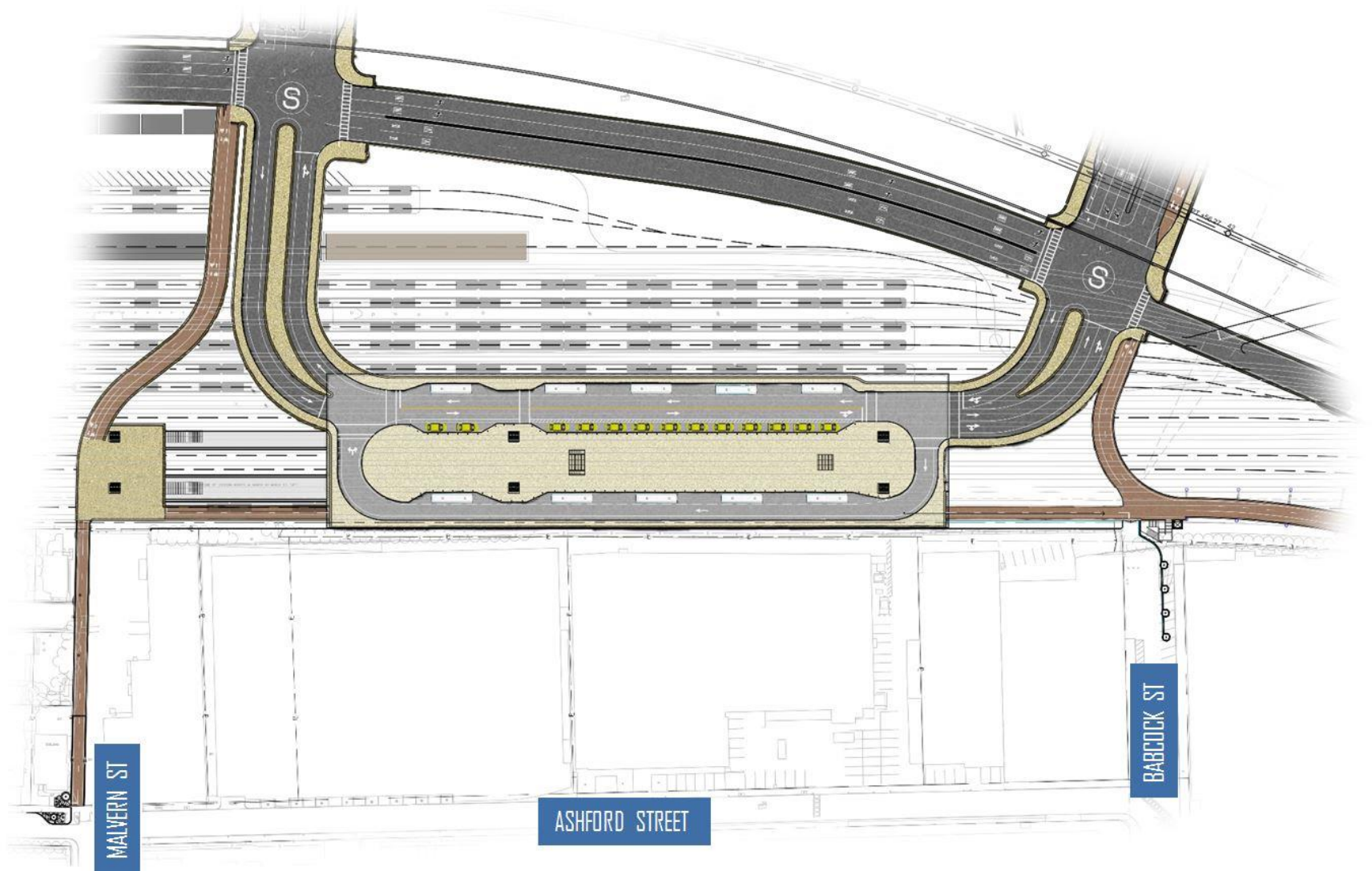
One-Way/Three Level Station



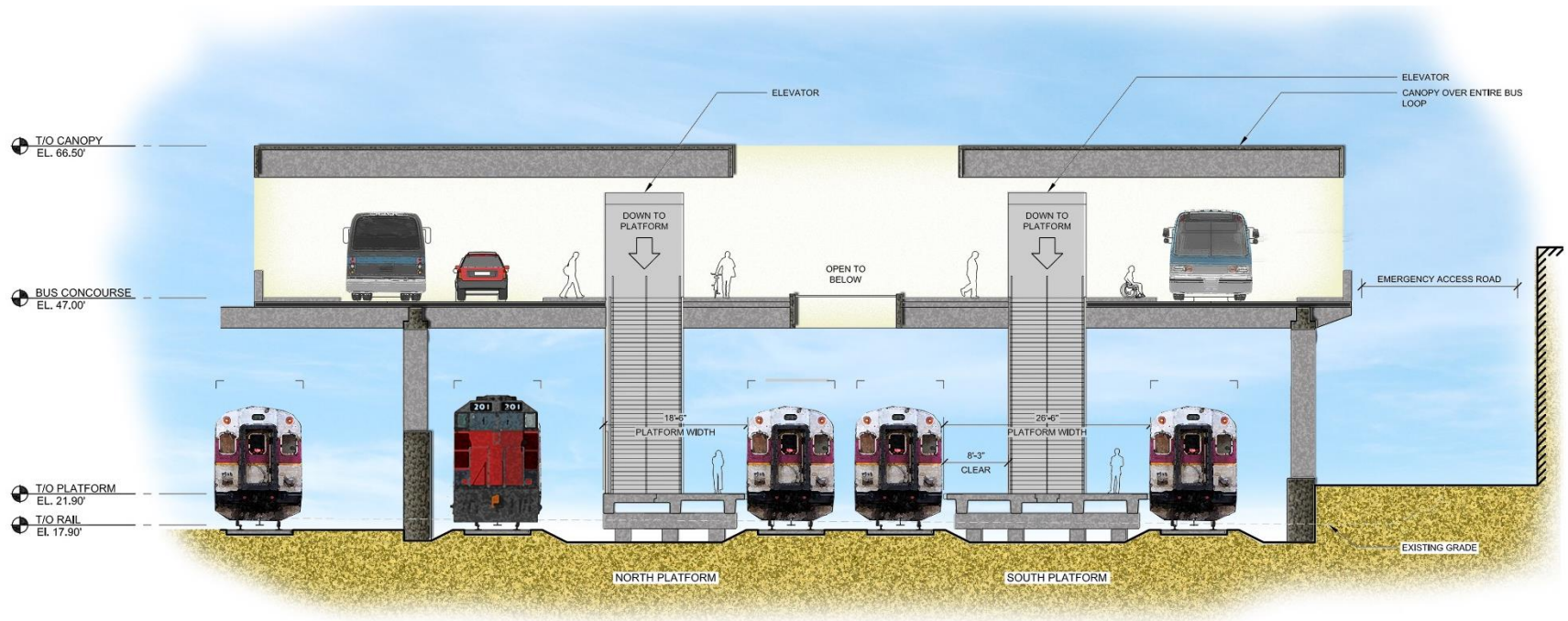
One-Way/Two Level Station



Two-Way/Two Level Station

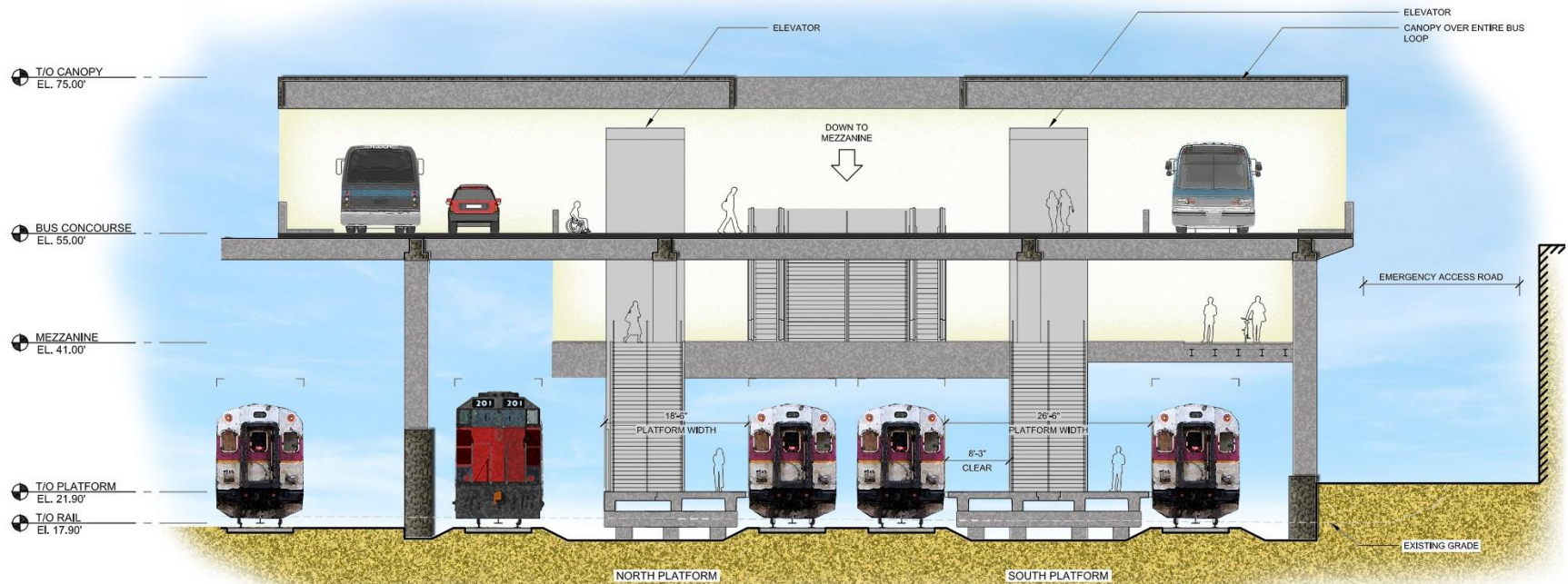


Two Level Station Section



TWO LEVEL STATION / PLATFORM OPTION

One-Way/Three Level Station Section

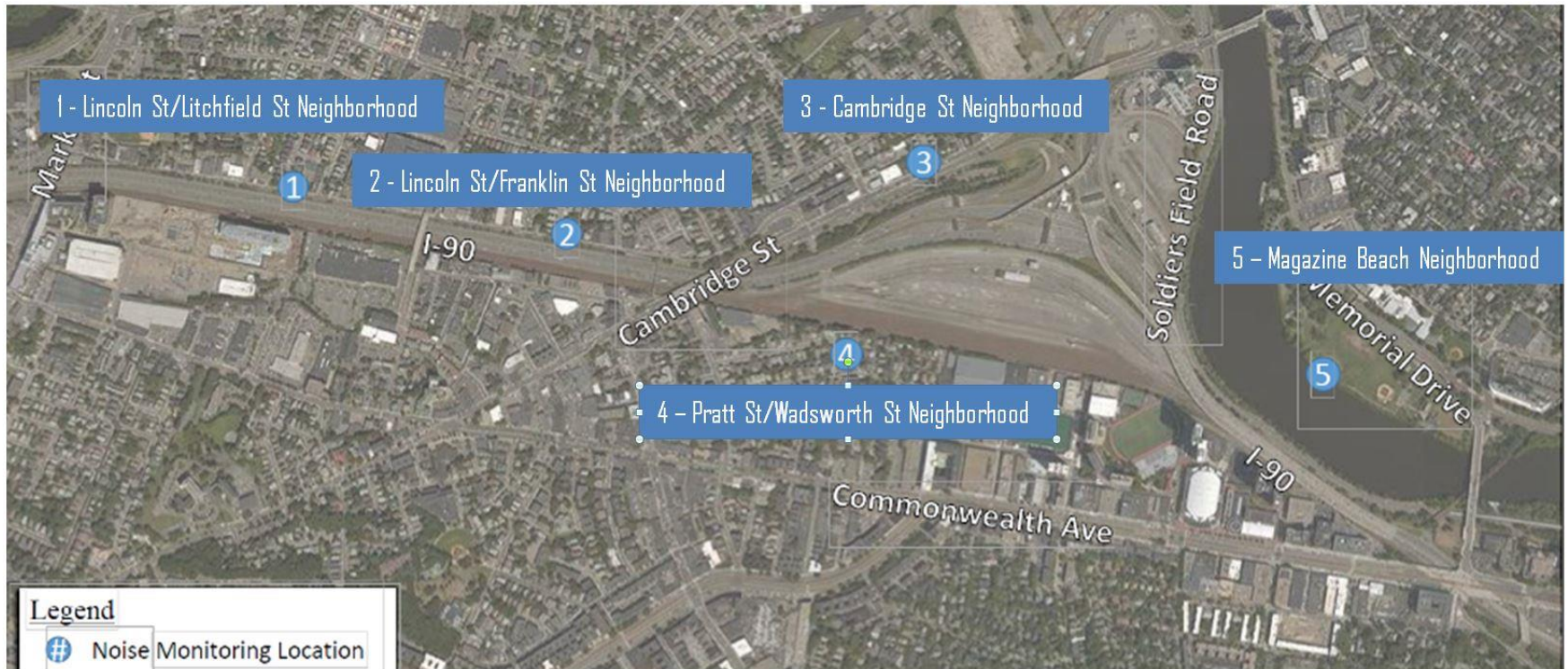


THREE LEVEL STATION / PLATFORM OPTION

I-90 Noise Study Outline

- **Five (5) Noise Study areas**
- **Considers both Highway and Railroad Sources**
- **Study Locations Represent Receptor Locations within 500 ft**
 - Includes Two (2) I-90 Type 2 Locations
 - Cambridge Study Location added in Response to ENF Comment
- **Considers mobile noise sources (tire, engine, and exhaust stack)**
 - Positive finding results in barriers slightly higher than the noise source

Noise Impact Study Locations



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- On-Going Public Outreach

On-Going Public Outreach

- **There are two parts to the public process:**
 - **Task Force (meetings open to the general public)**
 - Break into groups to focus on the different project components?
 - **General civic engagement for broad-based outreach**
 - **We will be asking for written feedback on how best to shape the two processes**
- **MassDOT and the MBTA have other processes underway that are relevant to the work being done here:**
 - **The Program for Mass Transportation**
 - **5-year Capital Investment Plans**
 - **MBTA Service Planning**

On-Going Public Outreach (cont.)

- **Regular Website Updates**
 - just Google: I-90 Allston Interchange
- **Quarterly Public Information Meetings**
- **Revive Task Force**
 - Task force members to be contacted
 - Need to ensure sufficient discussion:
 - Highway & Interchange
 - Rail & Transit
 - Community Place-making

Potential Task Force Meeting Topics

- **Multi-Modal Traffic Operations**
- **Urban Design Analysis**
- **Street Network Configuration**
- **West Station and Rail Operations**
- **Pedestrian/Bicycle Network**
- **Viaduct Configuration**
- **Soldiers Field Road Relocation**
- **Environmental Analysis**
- **Construction Staging**

Preliminary Project Timeline



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- Discussion/Questions/Answers

Question & Comments

Patricia Leavenworth, PE, **MassDOT, Chief Engineer**

10 Park Plaza, Boston, MA 02116

Attn: Bridge Project Management - Project File No: 606475

Nathaniel Curtis, **Howard Stein Hudson, Public Involvement**

(617) 482 – 7080 ext. 236

ncabral-curtis@hshassoc.com

