

Project Update August 2019

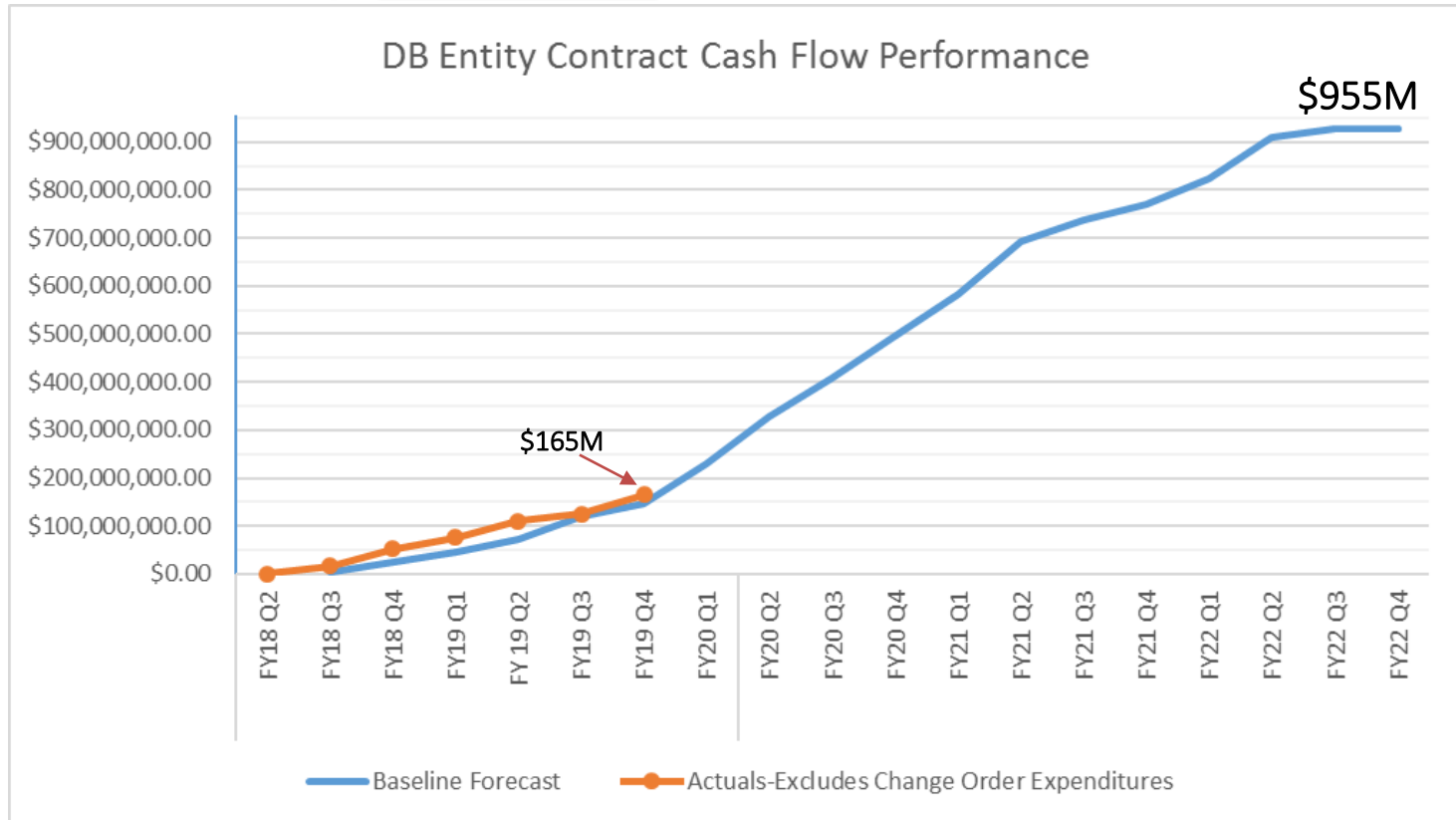


Agenda

- Program Control Metrics
- Significant Active Work Areas / Site Conditions
- Job Progress / Photos
- Schedule Pressures / Risks

Initial Performance Indicator – Dashboard Graphics

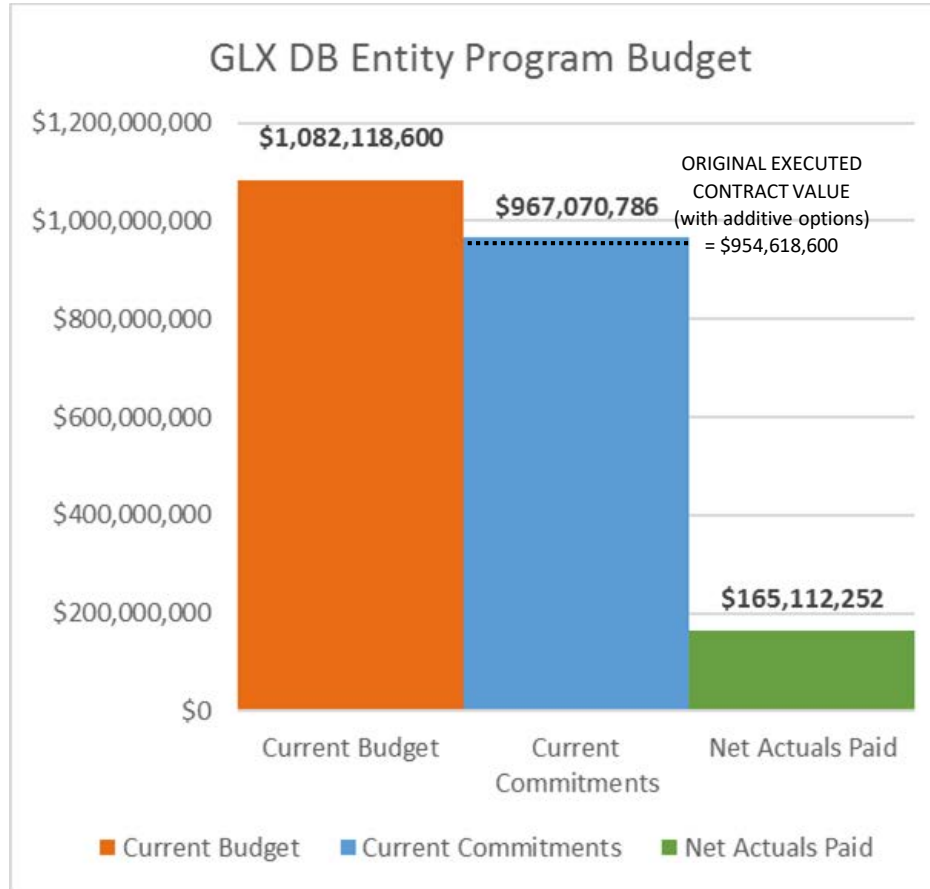
DB Entity Contract Cash Flow Performance



* Updated Quarterly. Data as of 6/26/19.

Initial Performance Indicator – Dashboard Graphics

DB Entity Contract Budget vs Commitments vs Actuals



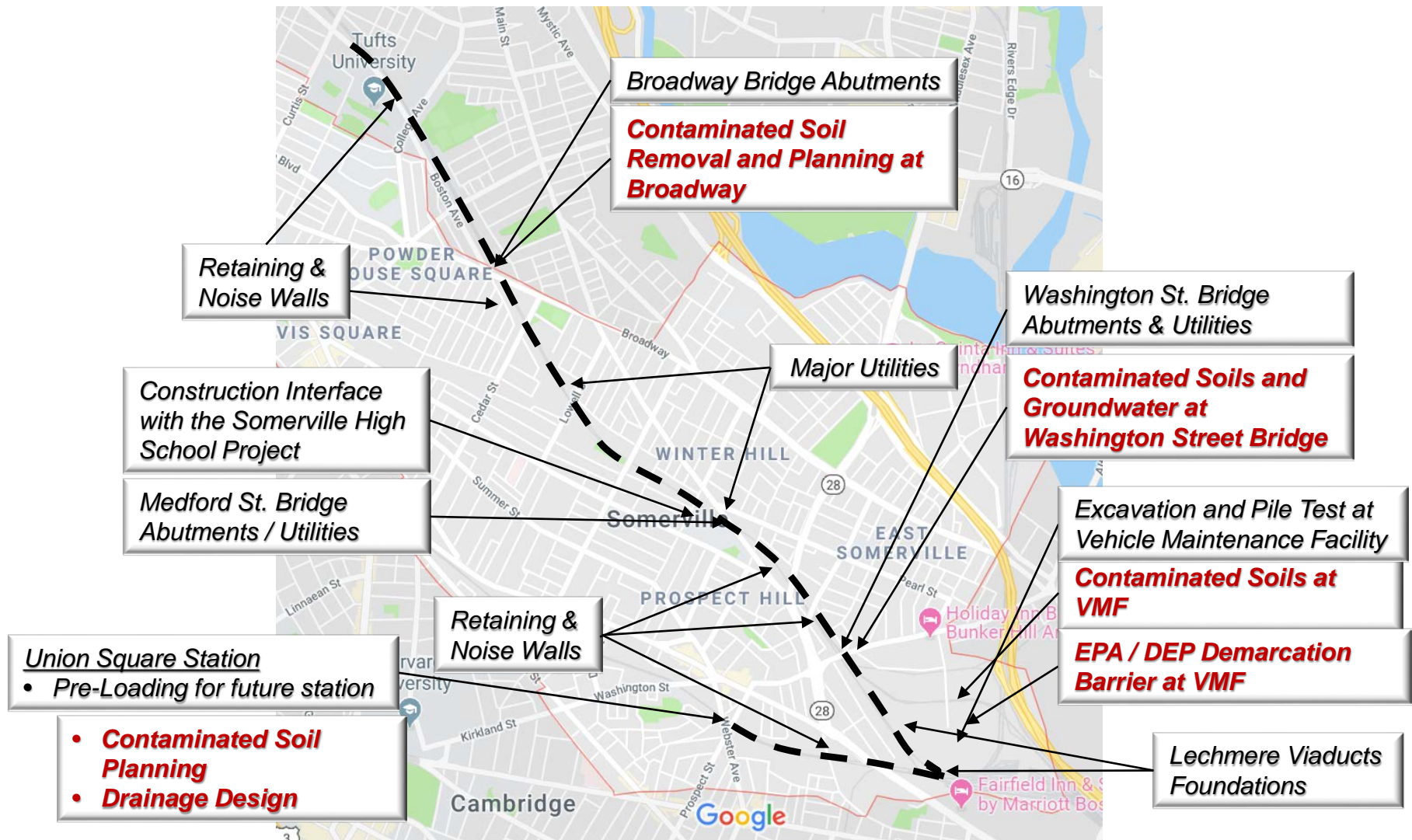
* The graph above shows the status of the largest GLX Cost Center = the DB Entity Base Contract Value (\$967M in blue), in addition to the MBTA Owner Contingency Value (for the DB Contract in orange). The \$165.1M of Paid (green) includes DB Entity Invoices 14 and 15 for \$14.5M and \$18.2M respectively, paid by the MBTA in June 2019.



Work Fronts / Site Conditions



Significant Active Work Areas



Progress Photos



Viaduct Foundation Work



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Progress Photos

Broadway Bridge

- *Permanent foundation work commences this month*
- *New bridge deck steel fabrication underway*



Progress Photos

Washington St. Bridge

- *New north and south abutments have been poured*
- *Drainage work continues; structural steel delivery next month*



Progress Photos



Sub surface drainage work continues
(existing and new)

Progress Photos

Vehicle Maintenance Facility

- *270 foundation piles being driven*
- *Site grading to continue; drainage work underway*



Excavation and Pile Test at Vehicle Maintenance Facility



Progress Photos

Noise & Retaining Walls

Between McGrath Hwy – Walnut St.

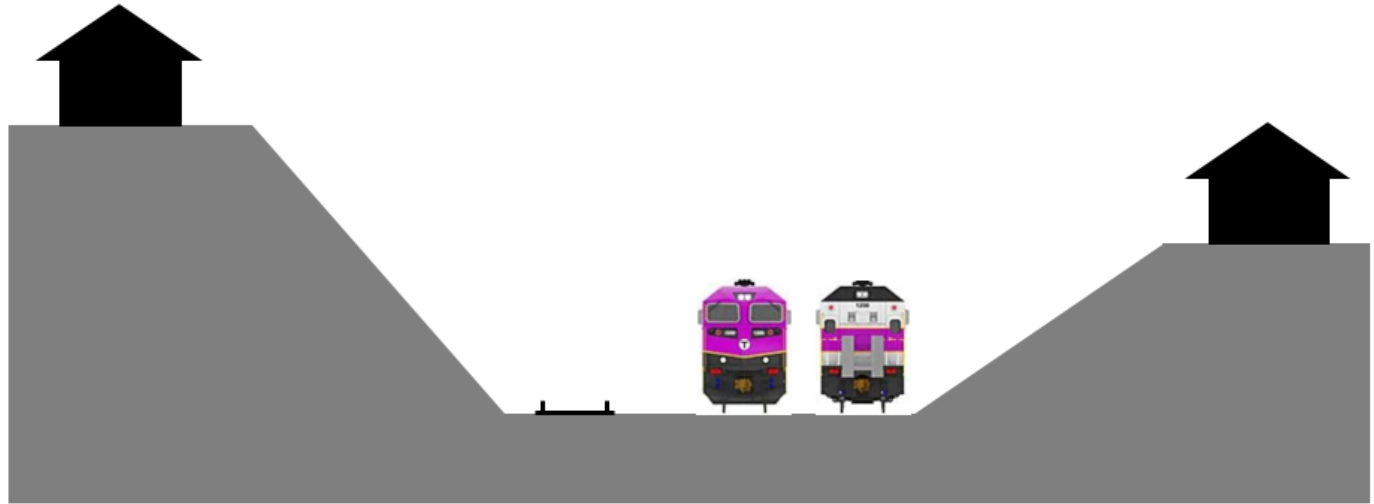
– *Awaiting panel installation*



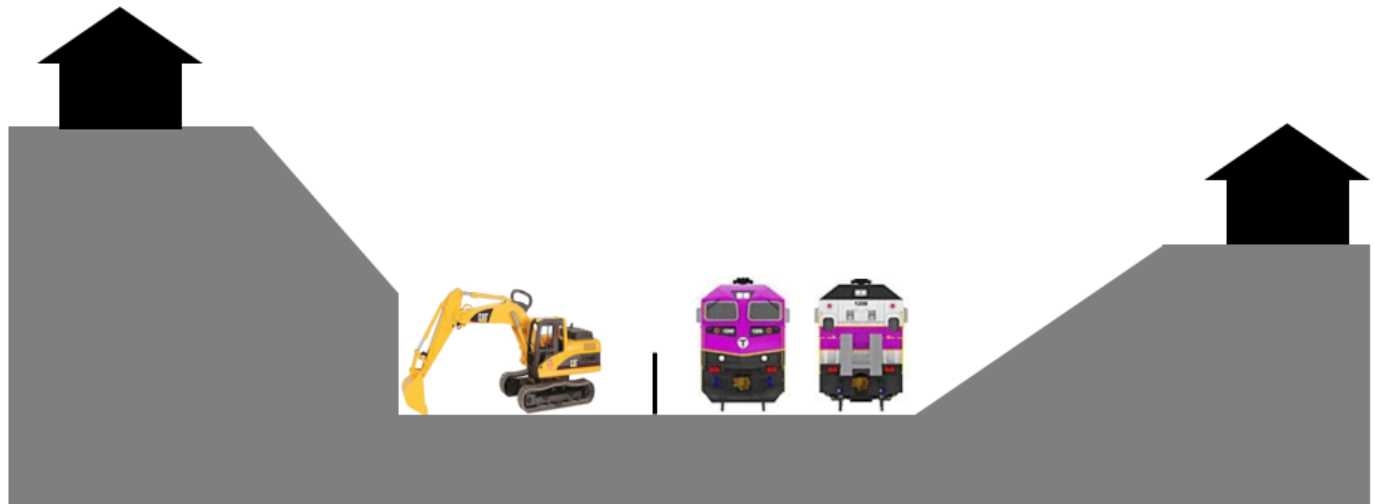
Retaining & Noise Walls

Construction Sequencing

***Original
Configuration***



Fall 2018



Construction Sequencing

**Current
Configuration**



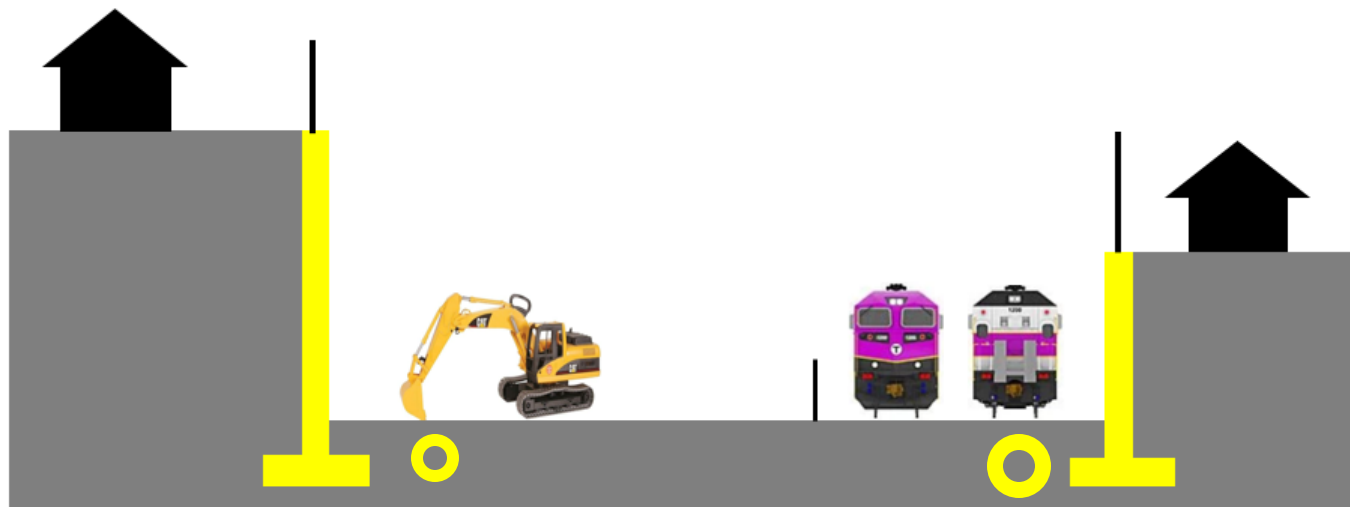
Remaining 2019 Goal =
Lowell Commuter Rail Line
Track Shift to the East Side
Before the Winter

**2019 Performance
Goal =
November 2019**



Construction Sequencing

2020 / 2021



**New
Green Line
In Service**



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Remaining 2019 Performance Goal

Shift NH-1 and NH-2 to the East side

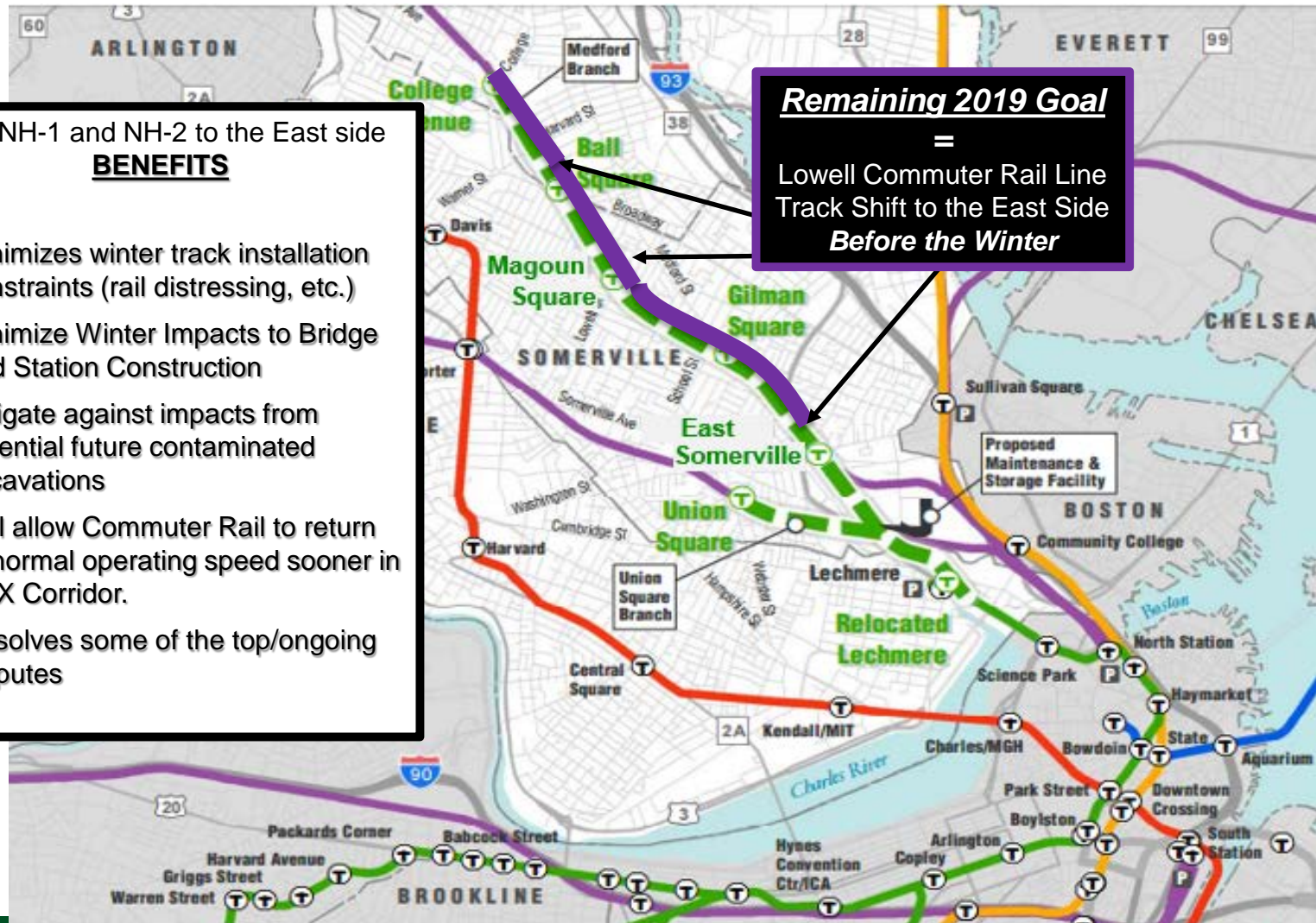
BENEFITS

1. Minimizes winter track installation constraints (rail distressing, etc.)
2. Minimize Winter Impacts to Bridge and Station Construction
3. Mitigate against impacts from potential future contaminated excavations
4. Will allow Commuter Rail to return to normal operating speed sooner in GLX Corridor.
5. Resolves some of the top/ongoing disputes

Remaining 2019 Goal

=

Lowell Commuter Rail Line
Track Shift to the East Side
Before the Winter





Schedule Pressures



Project Schedule Highlights

	From Board Presentation March 2017	<i>Statused</i>
1. Federal Transit Administration (FTA) Risk Refresh	1/25/17 - 1/26/17	1/25/17 – 1/26/17 (Actual)
2. Issue Request for Proposals for DB Shortlist	3/14/17	3/14/17 (Actual)
3. Hold One-on-Ones	3/28/17 – 4/20/17	3/28/17 - 4/20/17 (Actual)
4. Alternative Technical Concept (ATC) Process	6/8/17 – 8/9/17	6/8/17 – 8/9/17 (Actual)
5. Design Build Proposals Due	9/28/17	9/28/17 (Actual)
6. Bid Opening/Select Design Build Entity	11/28/17	11/28/17 (Actual)
7. Notice to Proceed to Design Build Entity	2/9/18	* 12/20/17 (Actual)

* *7-weeks earlier than the original schedule to create schedule benefit from 2018 construction season*

Current Schedule Pressures

		From Board Presentation March 2017	<i>Stated</i>
1.	Federal Transit Administration (FTA) Risk Refresh	1/25/17 -1/26/17	1/25/17 – 1/26/17 (Actual)
2.	Issue Request for Proposals for DB Shortlist	3/14/17	3/14/17 (Actual)
3.	Hold One-on-Ones	3/28/17 – 4/20/17	3/28/17/4/20/17 (Actual)
4.	Alternative Technical Concept (ATC) Process	6/8/17 – 8/9/17	6/8/17 – 8/9/17 (Actual)
5.	Design Build Proposals Due	9/28/17	9/28/17 (Actual)
6.	Bid Opening/Select Design Build Entity	11/28/17	11/28/17 (Actual)
7.	Notice to Proceed to Design Build Entity	2/9/18	* 12/20/17 (Actual)

Interim Milestones

➤ Lowell Line Commuter Rail Track Shift 11/15/19 ** Goal

**** Schedule recovery initiatives are in progress --- to avoid winter risks and to achieve contractual milestones dates**

Schedule Pressure – Contributing Factors

- Design Progression
- DB Entity Organization Capacity (Planning and Resources)
- Slow Critical Path Progression on Primary Drainage Installation
- Differing Site Conditions (Contaminated Soils/Groundwater)
- Utilities and Subsurface Obstructions (disputed)
- Upcoming Winter Impacts on Track Work and Bridge Work
- Potential for additional Differing Site Conditions / Utility issues

Project Schedule Recovery Initiatives

- Enforcement of Contractual Deliverables/Milestones
- Accelerated Design Reviews / Design Package Breakout
- Additional resources (staffing and equipment)
- Longer work hours (additional shifts, weekends, night work)
- DB Entity Working 'at-risk'
- Supportive Engagement with RR Operations / Keolis
- Rail Road Operations Considerations (Improved/Larger Work Zones and improved safety)

Other Commuter Rail Road Operations Objectives

- Common Goal for getting Lowell Line tracks over to permanent alignment before the Winter.
- Will allow for
 - a sooner-than-planned return to Maximum Allowable Speed in the GLX corridor (trains currently operating at a reduced speed through the work zone)
 - minimized disruption Commuter Rail passengers / Amtrak
 - a wider work zone and greater/safer separation between work activities and commuter operations

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