New Arborway Bus Maintenance Facility and MBTA Bus Electrification Project

15% Design Public Meeting – Revised Concept

October 24, 2023

Bus Electrification Plan

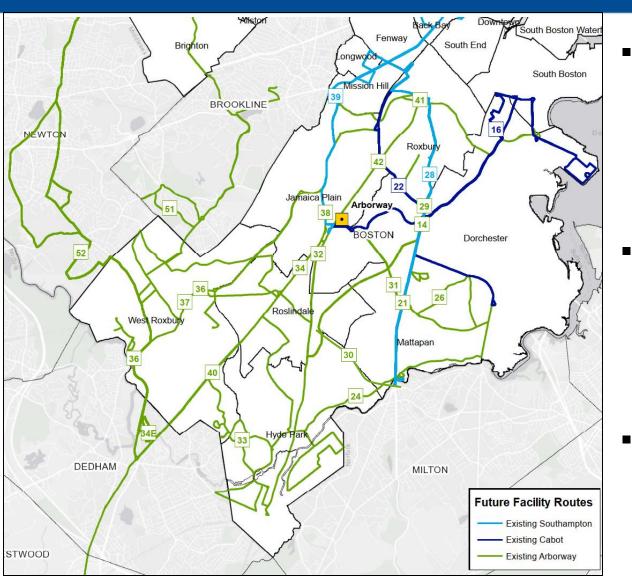
100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2039 2040

Target Bus Electrification Path (% Fleet)

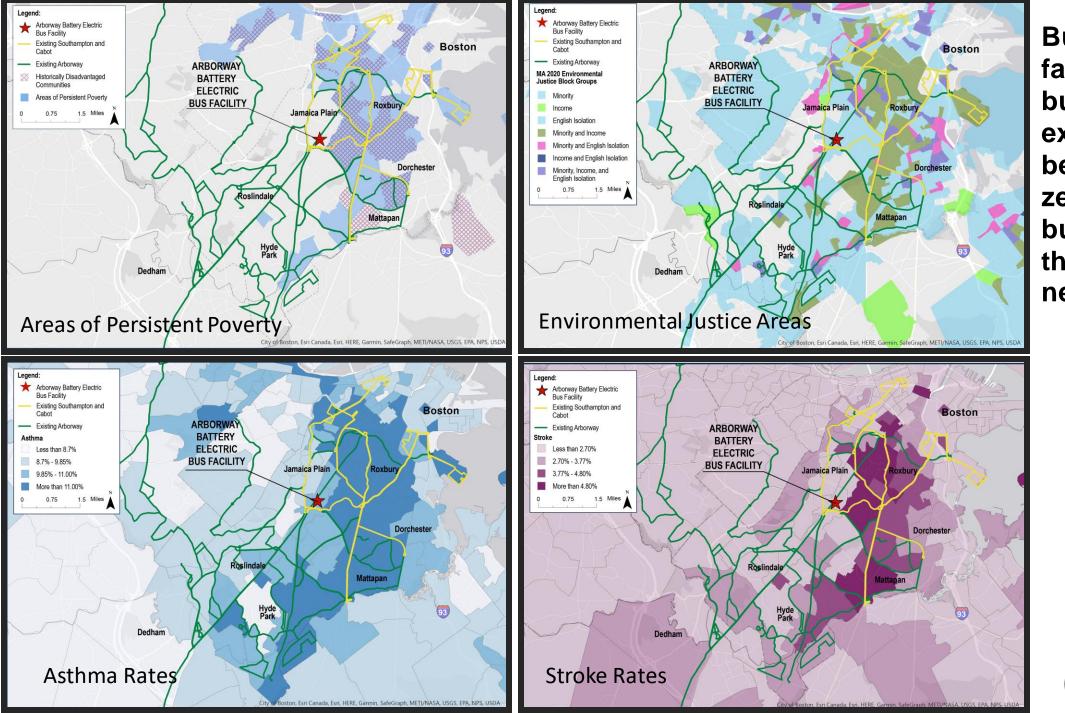
The MBTA aims to fully electrify its bus fleet by 2040 – one of the most aggressive electrification timelines in the United States – using battery electric buses (BEBs)

- Construct new facility with charging equipment every 2-3 years – \$4.5B investment
- Parallel Electric + Hybrid bus procurements allows for aggressive pace while meeting rider needs
- Massachusetts Climate Law requires MBTA to purchase solely zero emission buses after 2029 and fully electrify fleet by 2040

Bus Electrification with New Arborway



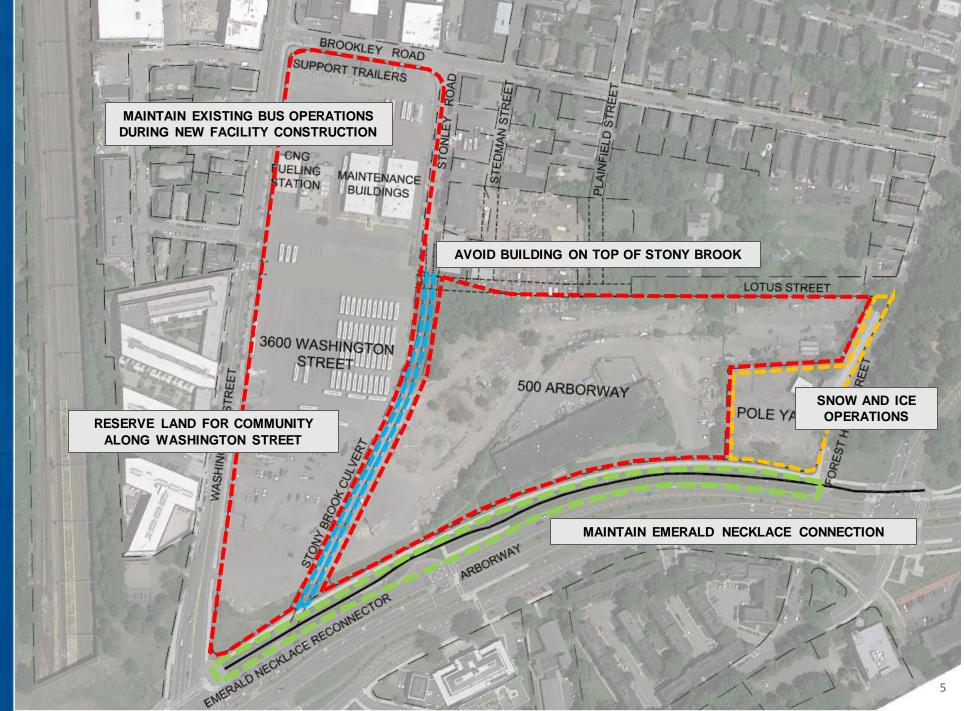
- Expands fleet from **118 CNG buses to 200 battery electric buses** to permanently transition both existing routes and additional routes in transit critical communities
 - Project must be complete ahead of 2028/29 replacement of CNG buses
- Expanded capacity for 60' buses
 - Route 32 to be upgraded to larger buses
 - Existing 60' routes #28 on Blue Hill Ave and #39 on Centre Street – shifted to Arborway and provided with battery electric buses
- 40% of local buses in Boston will be electric upon completion – including <u>all bus service in</u> <u>Jamaica Plain, Mattapan, Roslindale, and</u> <u>Hyde Park</u>



Building a facility for 200 buses will expand the benefits of a zero-emission bus fleet to those who need it most.



Existing Site Constraints

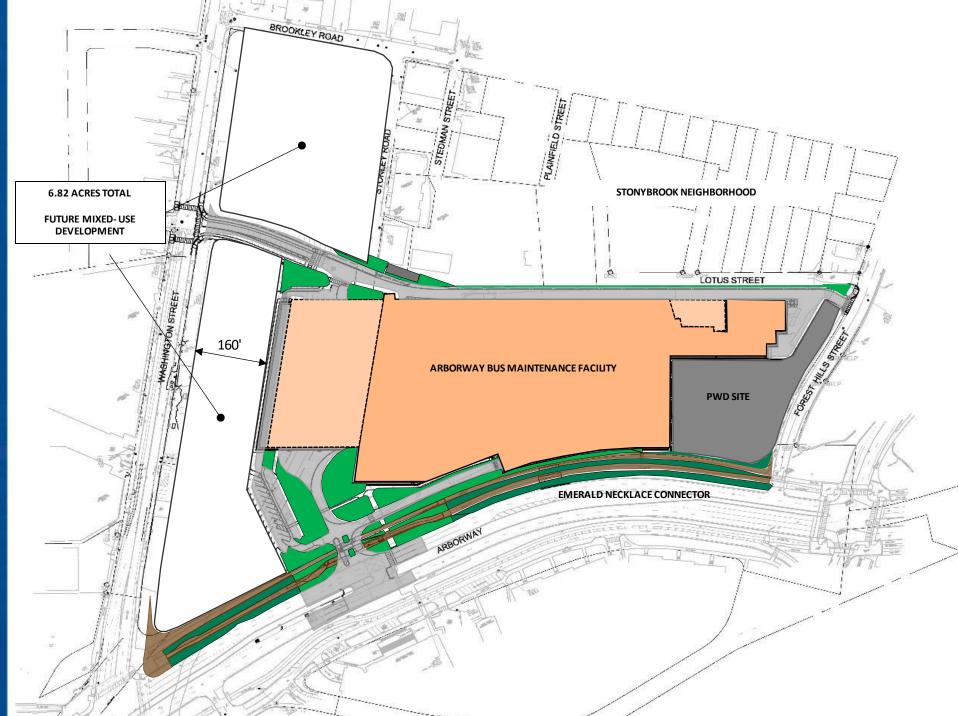


Site Plan – June 2023

- Indoor storage and maintenance capacity for 200 battery electric buses
- Modern and safe
 working conditions

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- 6.82 acres dedicated to community uses and maintains 1.3 acres for DPW functions
 - Building height comparable to surrounding new development, second level spans culvert area



Concept – June 2023

Major Concerns Lack of 8 acres for community uses Size of the building Treatment of Arborway edge

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We heard you!

Boston Bulletin citywide news • street by street FREE JUNE 29, 2023

Through a collaborative effort between the MBTA and the City of Boston, we developed a concept that provides 8 acres for community uses



en of the West Roxbury Education Complex for the

press opposition nt, WRHS plan

Pauline A. Shaw Elementary and the Charles H. Taylor Elementary Schools in Dorchester and the combining of the th the John D. Philbrick Elementary and chool Charles Sumner Elementary Schools in meet-Roslindale arding Boston Mayor Michelle Wu said at hn D. the school's announcement of the plan tience that the Madison will be expanding into Techthe old O'Bryant space - as it was beurv to fore the O'Bryant moved in - and the

xbury O'Bryant will be moving to the West Park-Roxbury High School site. While the administration and Boston Public Schools a few

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ingof

representatives said during the announcement that alumni from both the

O'Bryant Moving Continued on page 4 After being relocated to a leased lot

COLETTSY PROTO

Alexandra Markiewicz (far left) listens to a speaker read a four page statement to a packed crowd at the English High School Auditorium in Jamaica Plain. PHOTO BY RICHARD HEATH

Arborway garage meeting attendees not happy

Richard Heath Staff Reporter

At a rare in-person meeting on June 22. MBTA Deputy Director of Bus Modernization Alexandra Markiewicz gave a detailed description of the proposed two-story bus garage that would house 200 electric buses, now at the 15 percent design phase. This was the second MBTA-sponsored public meeting, the first held vir-

tually on Dec. 9, 2021. Many in Jamaica Plain have been angry over the 1.3-acre city DPW yard at the Forest Hills Street-end of the Arborway yard that, for over 20 years, was supposed to be folded into MBTA property.

ton Street, promised for over 20 years to be transferred to the city largely for housing, from 8 acres to 6.5 acres. The two-hour, full house meeting was frequently broken up by cat calls. "Where's the mayor?"

on American Legion Hwy in 2014, the

vard sat empty: in 2021 for reasons un-

clear, DPW decided to keep the yard for

"Where's the DPW?"

Others in the audience held signs "Affordable Housing, Not Salt." Nancy said she lives in one of the

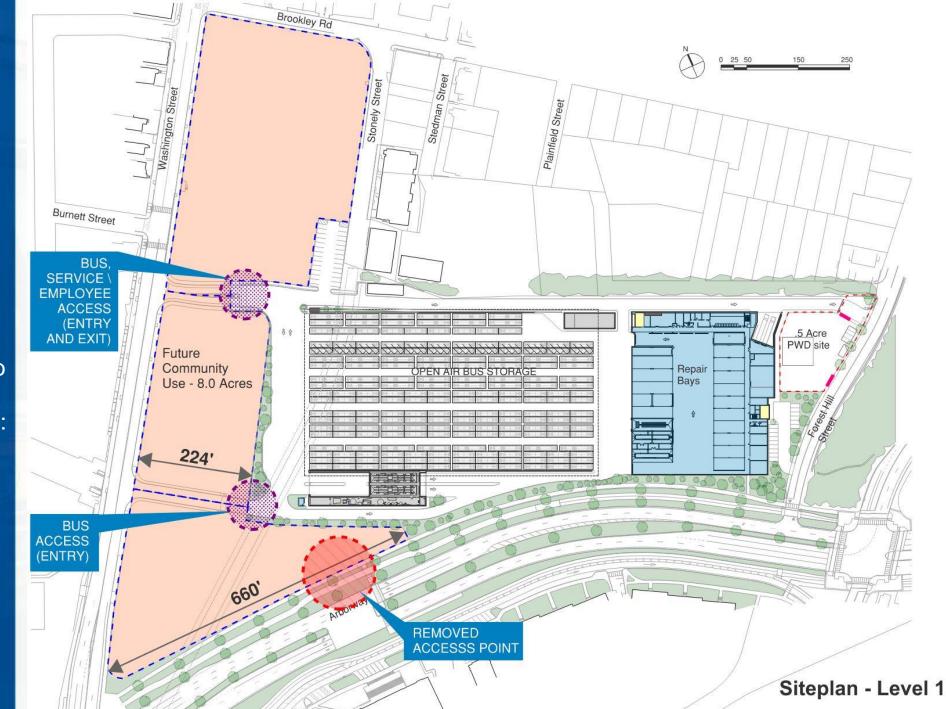
> JP Arborway Continued on page 10

What has angered JP housing advocates about this decision is it reduces the amount of acreage along Washing-

winter storage of snow melt.

Site Plan with 8 Acres for Community Use

- Reduces MBTA facility size to canopy covered surface storage and twolevel maintenance facility to <u>support 200 BEBs</u>
- Reduces PWD site size to 0.5 acres
- Includes as part of 8 acres:
 - 150 employee parking spaces based on concept generated from Urban Land Institute (ULI) group
 - Expanded Arborway frontage to improve edge treatment

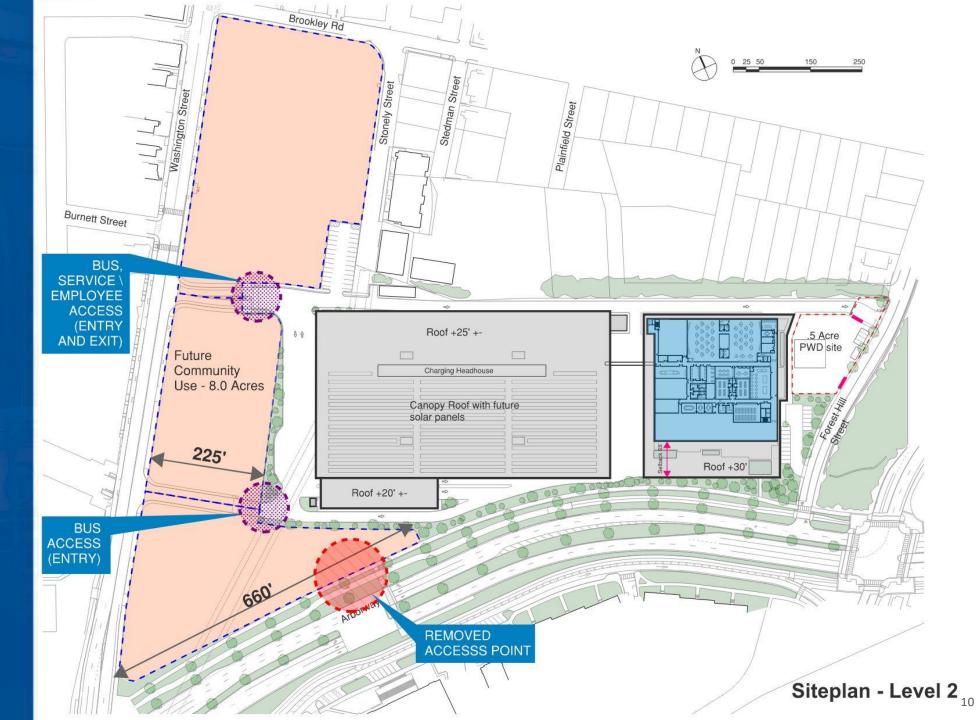


Site Plan – Level 2

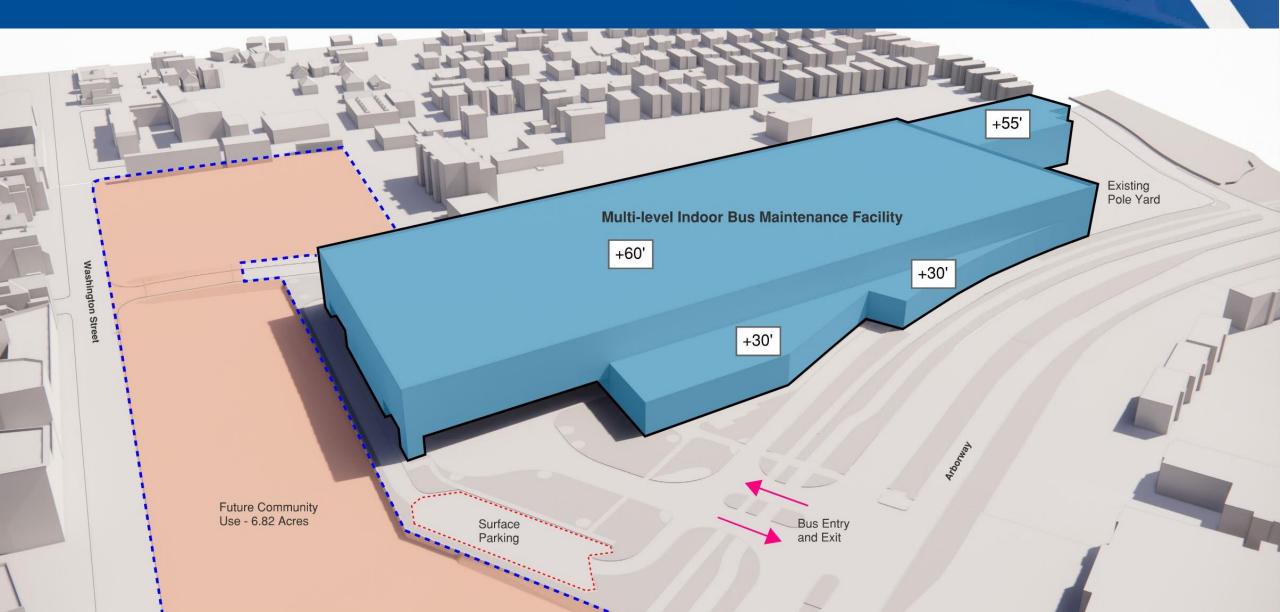
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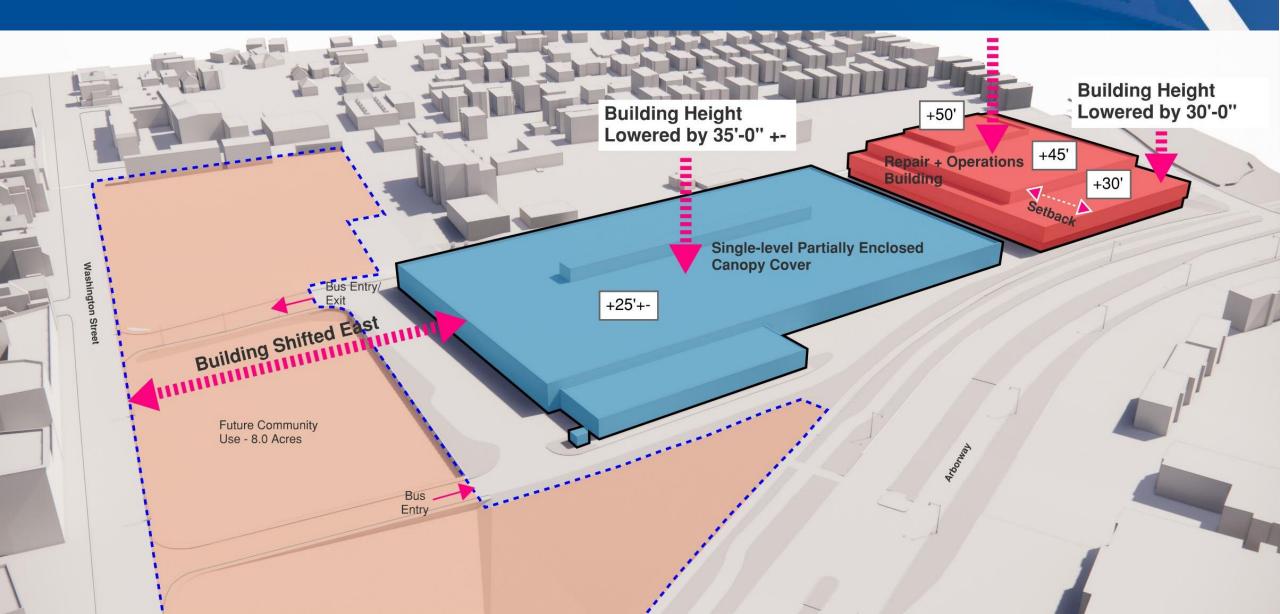
- Back up Operations
 Control Center and bus
 facility administrative/
 support spaces on
 second level
- Space for charging equipment and solar on bus storage canopy



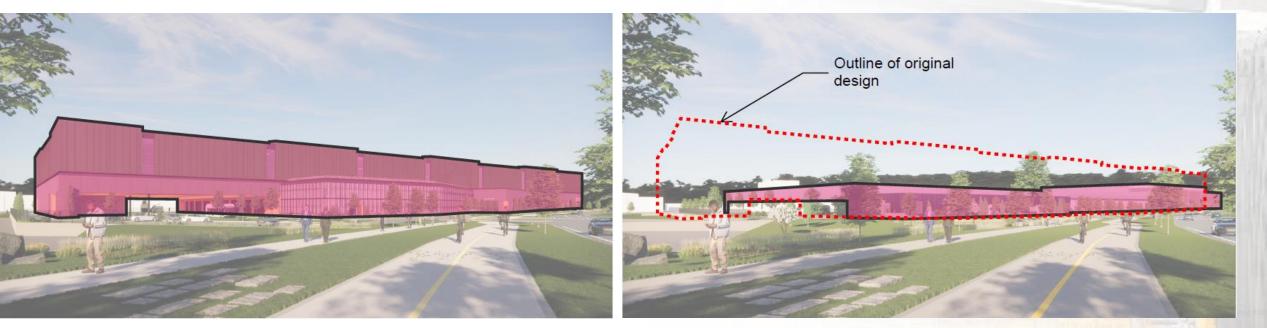
Original Massing Design



Revised Massing Design



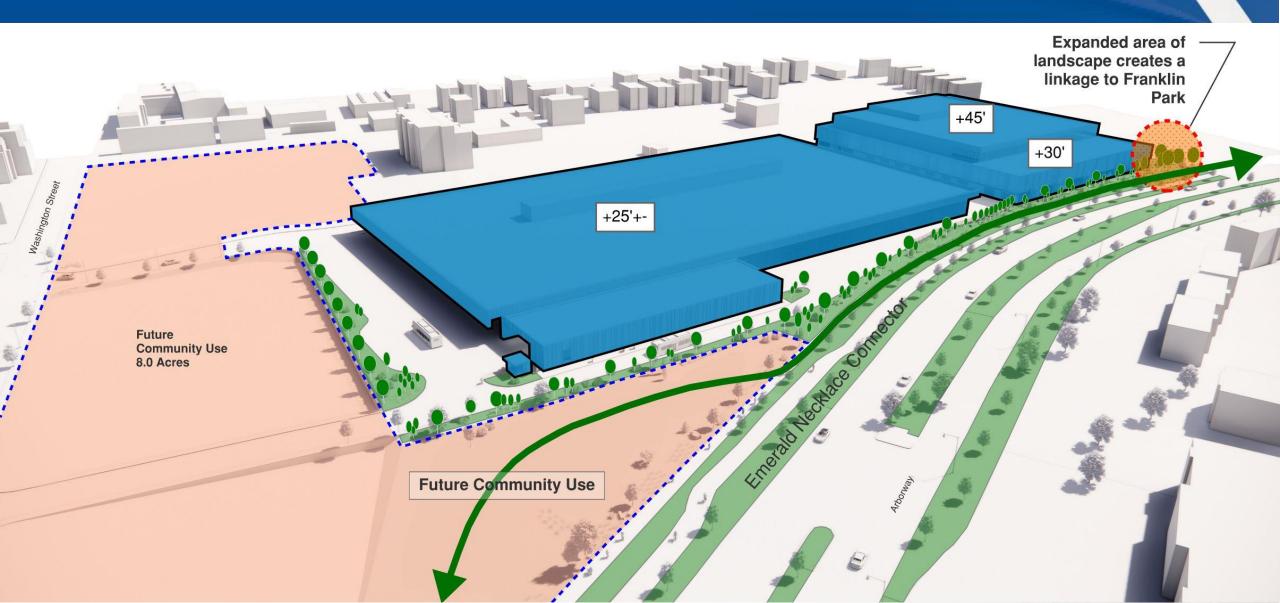
Before/After Scale Change





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Arborway Connectivity



Community Uses: Outline of Process

Various community processes will guide the community use parcels (including: original CPCAY process, Forest Hills Improvement Initiative, PLAN JP/Rox, and many others).

The City's goal is to dig deeper, modernize the planning to meet current policy, and prepare for disposition. Recently on other similar sites, this process has looked like:

Visioning & goal setting

Based off JP/Rox and other recent community processes, to establish needed uses

Developing and running feasibility on scenarios

which are reviewed and refined with the public

Drafting and reviewing the RFP

with the public to outline developer requirements, urban design guidelines, establishing selection criteria, and other details

Facilitating community discussions

about the proposals for the site, and selecting the development team for the site.

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Community Use Parcels

8 acres of Community Uses to be defined through future process

- 1. Accommodates the 980 units, including incomerestricted units, outlined through PLAN: JP/Rox
- 2. Includes the potential for open space
- 3. Can advance Washington Street improvements envisione d by PLAN JP/Rox
- 4. Can accommodate a smallformat grocery store or other retail use
- 5. Accommodates some MBTA employee parking within the potential development



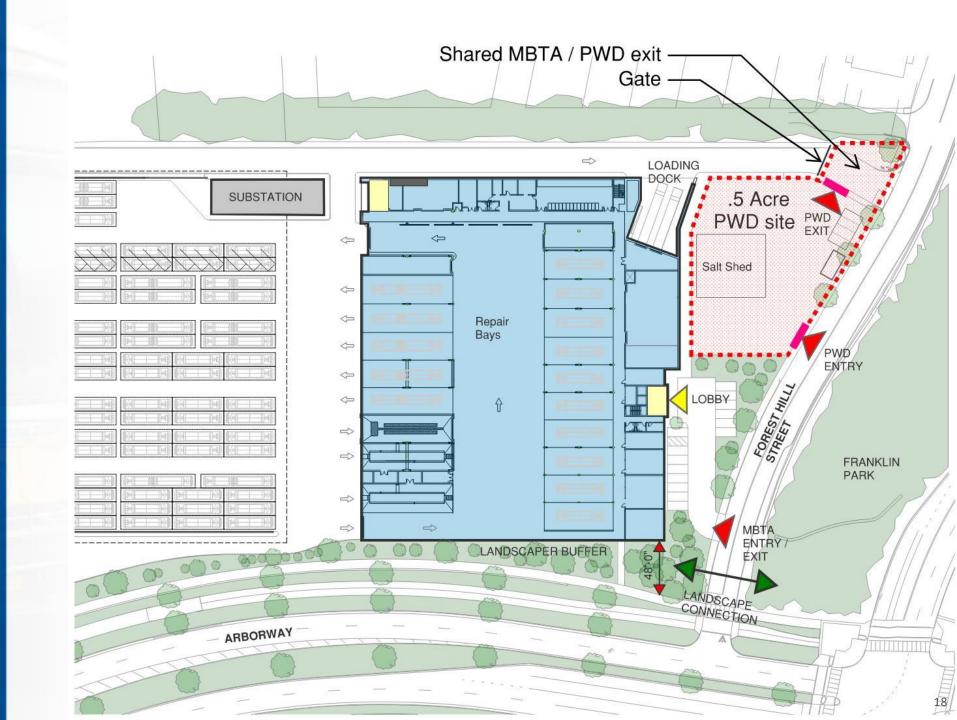
Community Use Parcels

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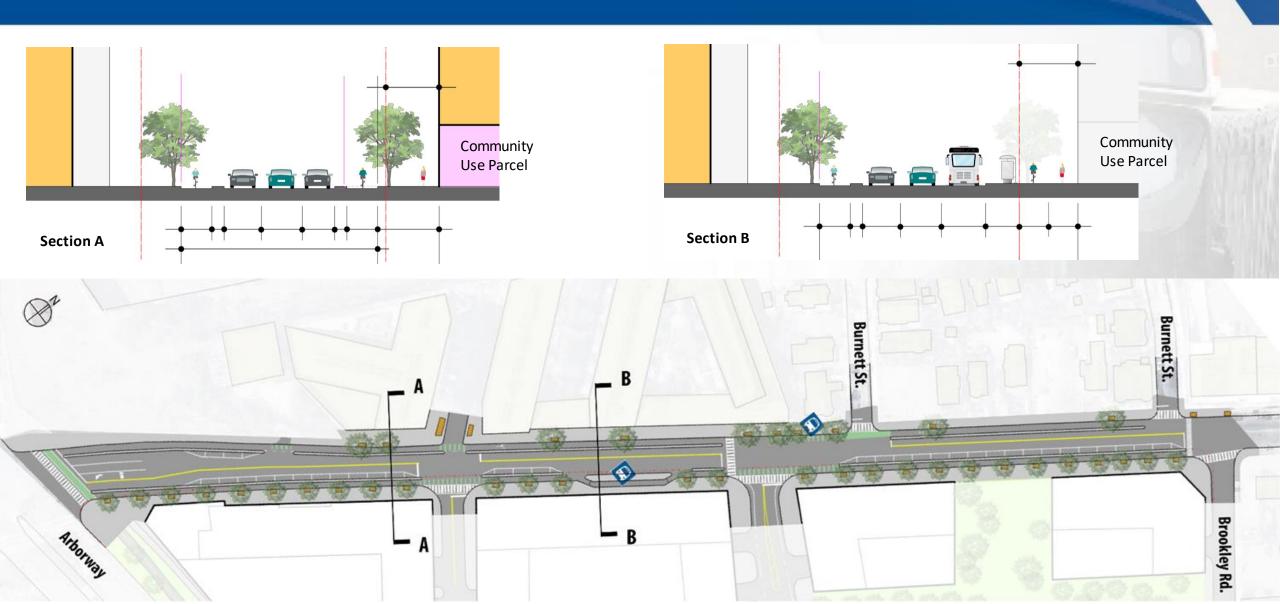
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Public Works Department (PWD) Site



Washington Street & the Community Use Parcels



Timeline / Next Steps

Represents schedule needed to replace existing CNG fleet with battery electric buses per Legislative mandate.

Preliminary Design – Now– December 2023

- Advance concept to 15% design
- Re-submit MEPA Notice of Project Change
- Coordination with BWSC, Eversource, and DCR on project changes
- Incorporate feedback from internal and external stakeholders
- Award contract for Final Design Phase

Final Design Phase – January 2024 – December 2025

- Continued stakeholder and public engagement
- Continued coordination on permits and Eversource power supply
- Targeted Construction Start 2025/2026

Targeted Completion – 2029*

*assumes 39 months for construction, beginning with early procurements before completion of design. Quincy CM schedule assumes 42 months for construction.

Check www.mbta.com/arborwaybus for updates. Email ArborwayBus@mbta.com to get on our list!

Alexandra Markiewicz Deputy Director of Bus Modernization, MBTA amarkiewicz @mbta.com

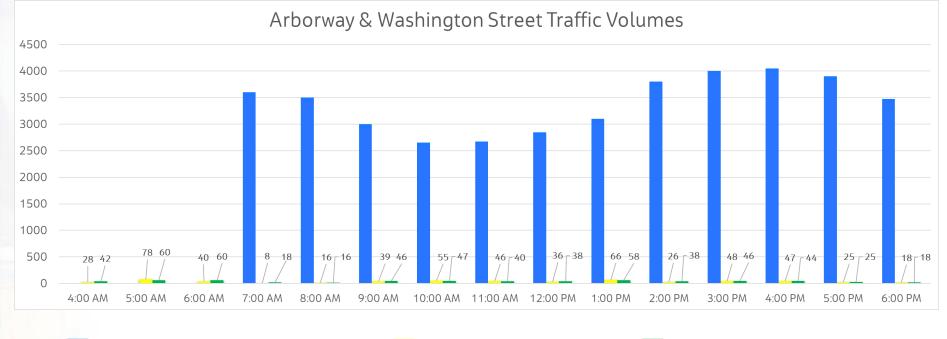
Jascha Franklin-Hodge Chief of Streets, City of Boston jascha.franklin-hodge@boston.gov

Diana Fernandez Deputy Chief of Urban Design, BPDA diana.fernandez@boston.gov



Traffic Analysis

- Site generated trips do not occur during AM and PM peaks.
- Facility Peaks occurs around 5AM, 1PM and 7PM
- Bus facility traffic is minimal when compared to Washington Street/Arborway traffic



Arborway & Washington Street Volume

Bus Facility Volume

Other Vehicle Facility Volume

Traffic Analysis Volume Key

Volume Key Existing/Future (Difference) 7AM Peak Hour

- Most trips from the facility are existing
- The new facility is not estimated to add significant AM peak hour trips to the network compared to the current facility

