



MBTA SOUTH SHORE GARAGES REPAIR PROJECT

Braintree Garage

March 16, 2017



Kleinfelder, Inc.
Walker Parking Consultants | Architectural Engineers, Inc.
Keville Enterprises, Inc. | Vertical Transportation Excellence | WSP Group

AGENDA:

- Introduction
- Proposed Repairs and Improvements
- Safety and Accessibility
- Schedule
- Phasing
- Estimated Construction Cost
- Questions and Comments

INTRODUCTION – PROJECT OBJECTIVES

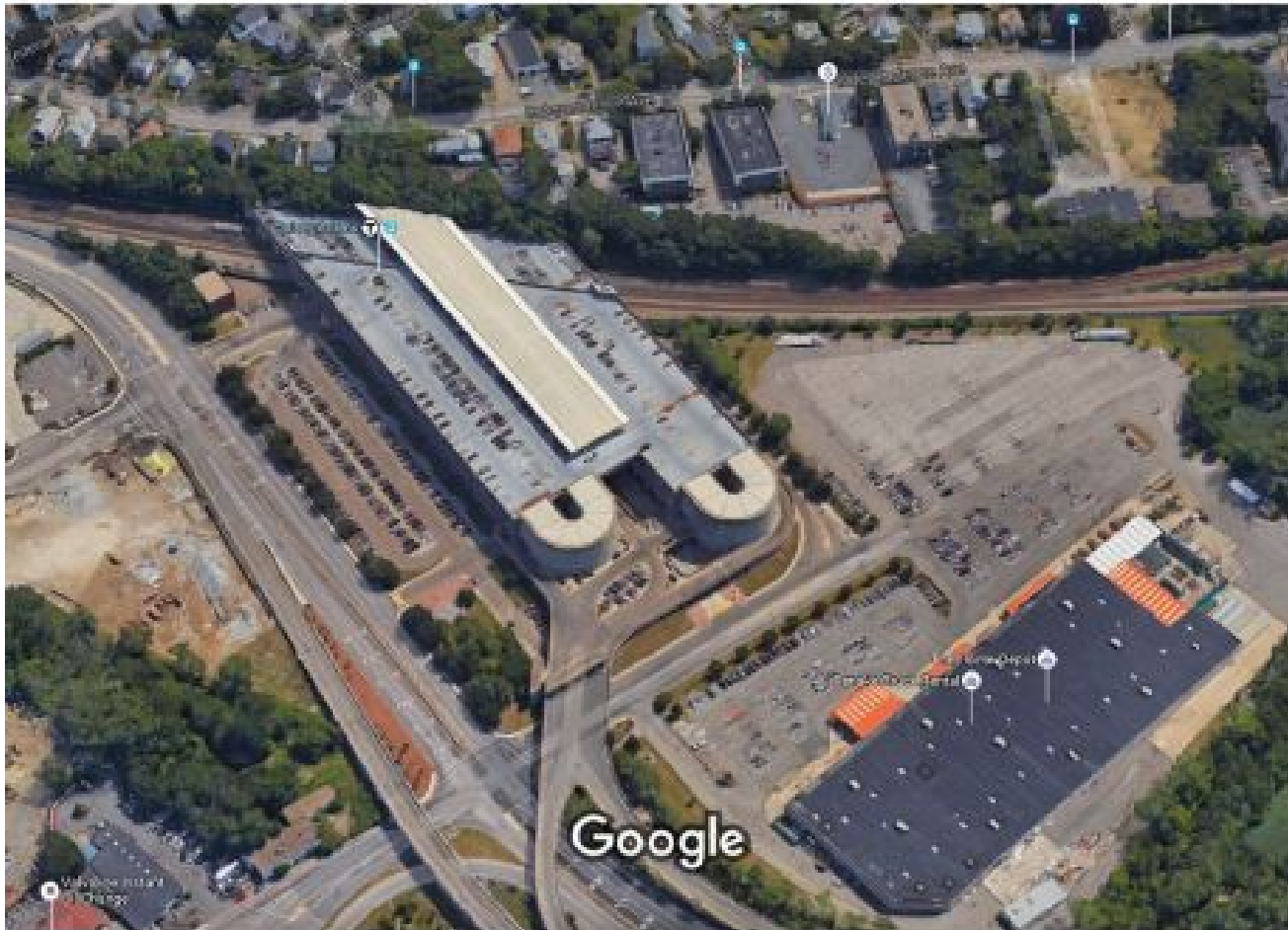
- Maintain the Garages in a “State of Good Repair” by focusing on long-term maintenance, rehabilitation or replacement of existing infrastructure.
- Provide continued reliable service to the public.
- Improve garage function and accessibility for applicable building code and ADA compliance.
- Increased parking with improved traffic circulation and wayfinding.

GARAGE SITES



Braintree Parking Garage

GARAGE SITES



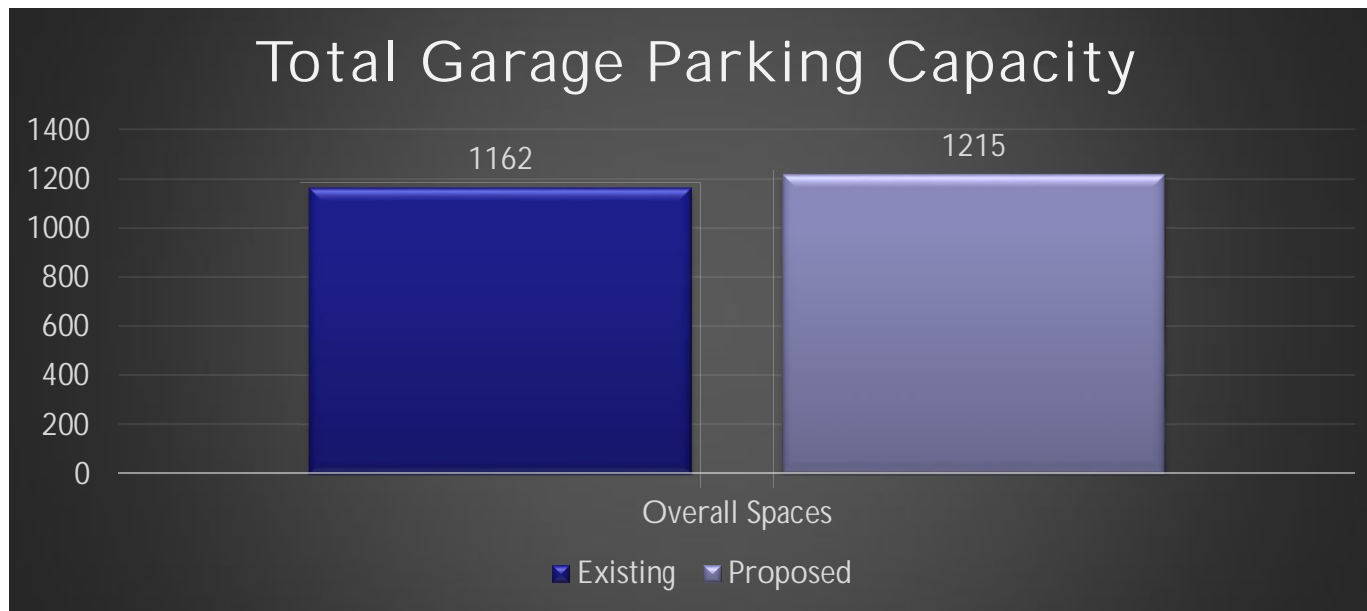
Quincy Adams Garage

Proposed Repairs - Braintree Garage :

- Parking Layout Improvements.
- Traffic Circulation Improvements.
- New Lobby with Redundant Elevators and Stairwell.
- Accessibility Improvements.
- Stairwell Code Compliance Upgrades.
- New Parking Service Office.
- Garage System Repairs and Improvements.

Braintree Garage Parking Layout Improvements

- Increased number of parking spaces.
 - 53 spaces gained

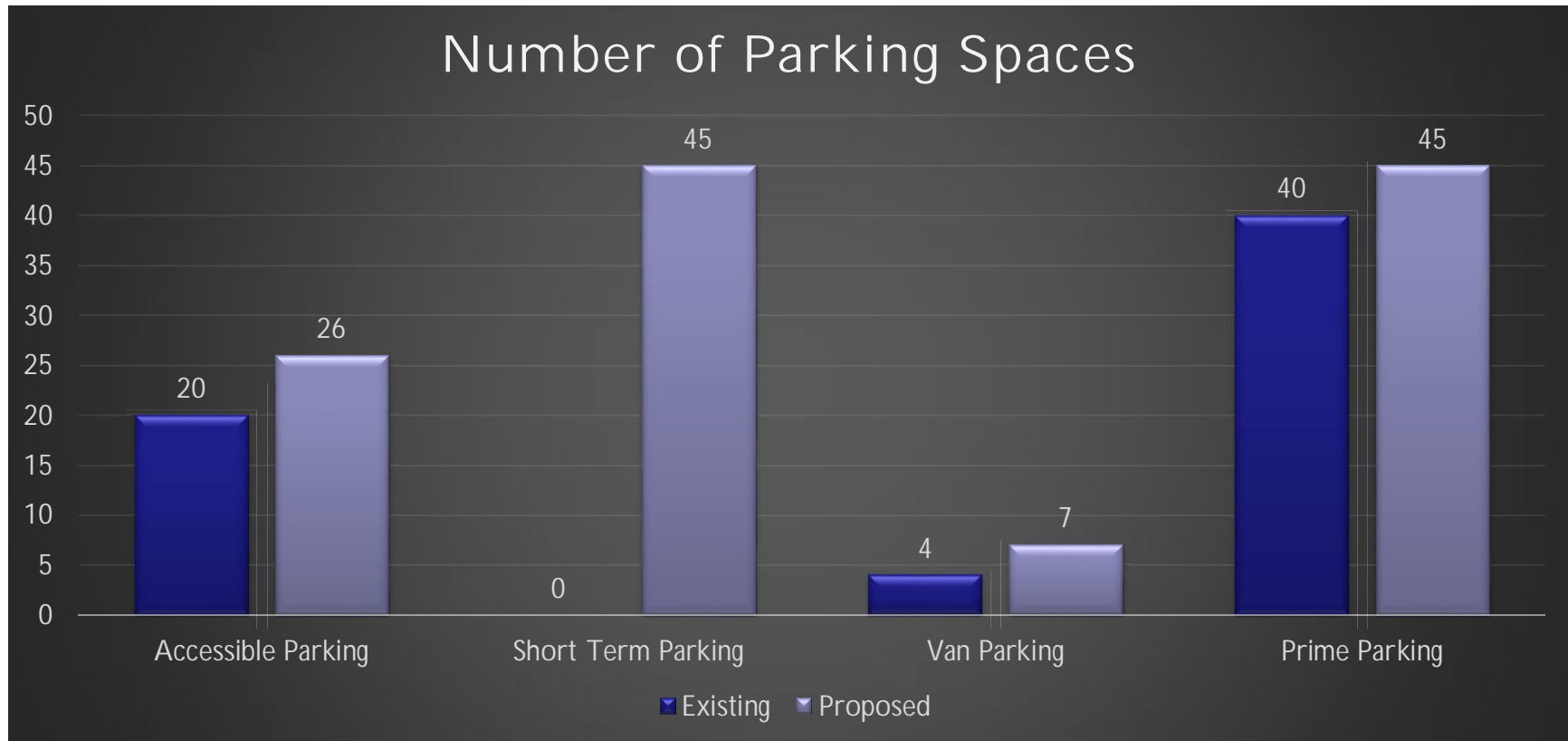


Braintree Garage Parking Layout Improvements

- Accessible parking spaces provided on all garage levels.
 - Six (6) accessible spaces gained overall.

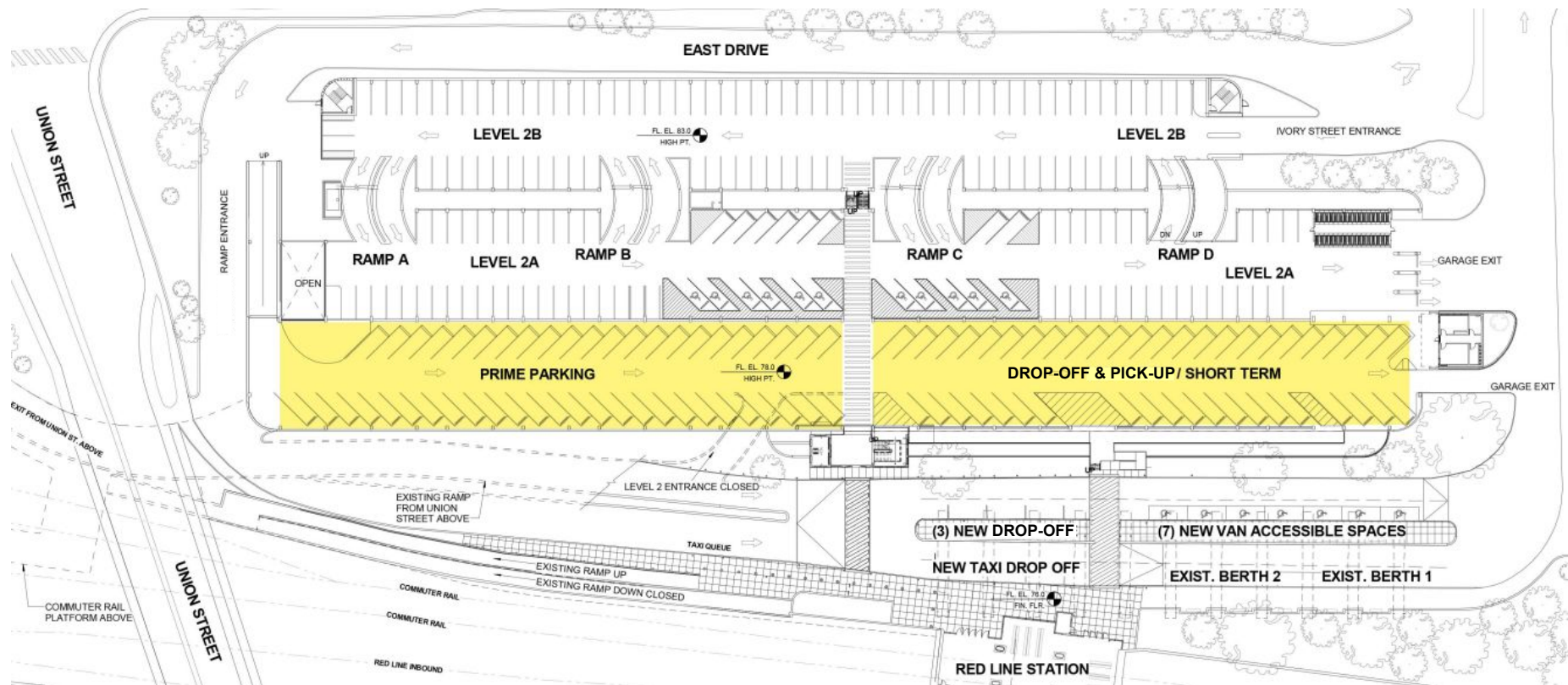
- Increased “prime” and “short-term” parking spaces on Level 2 of the Garage.

Braintree Garage Parking Layout Improvements



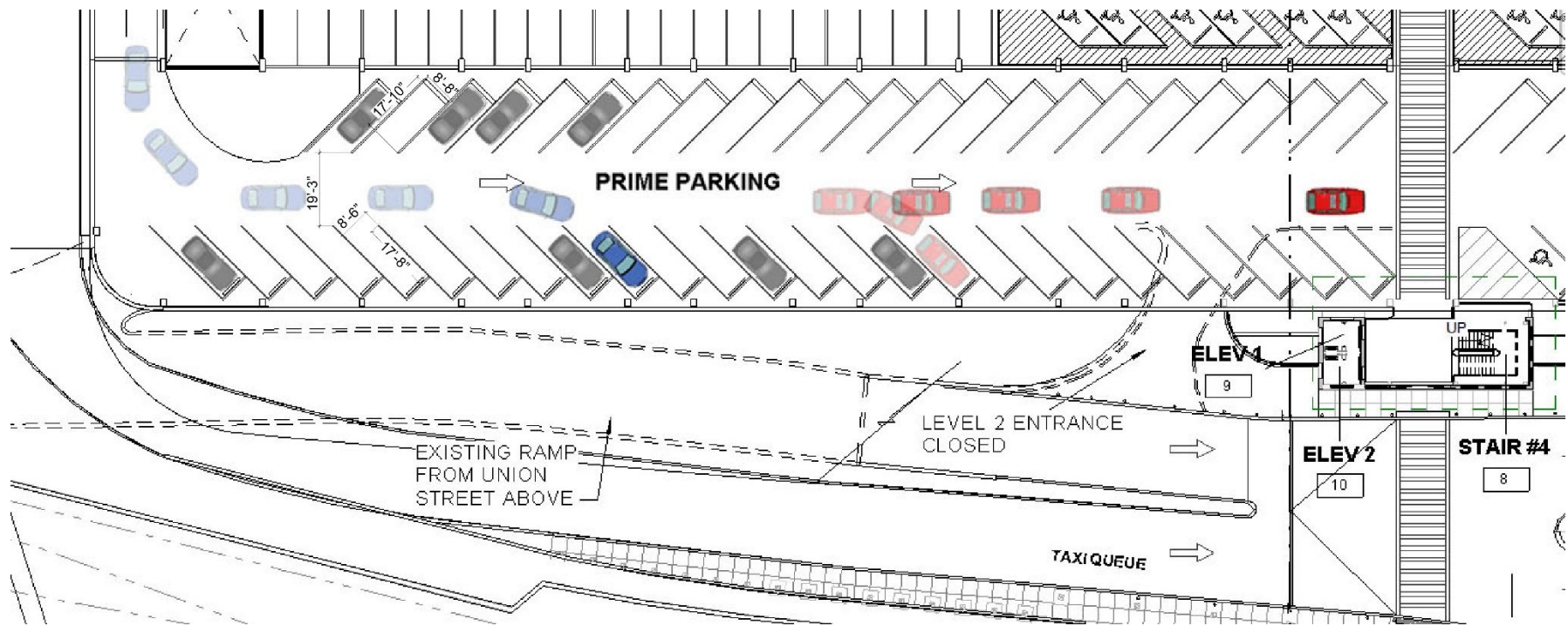
Braintree Garage

Traffic Circulation Improvements within Garage



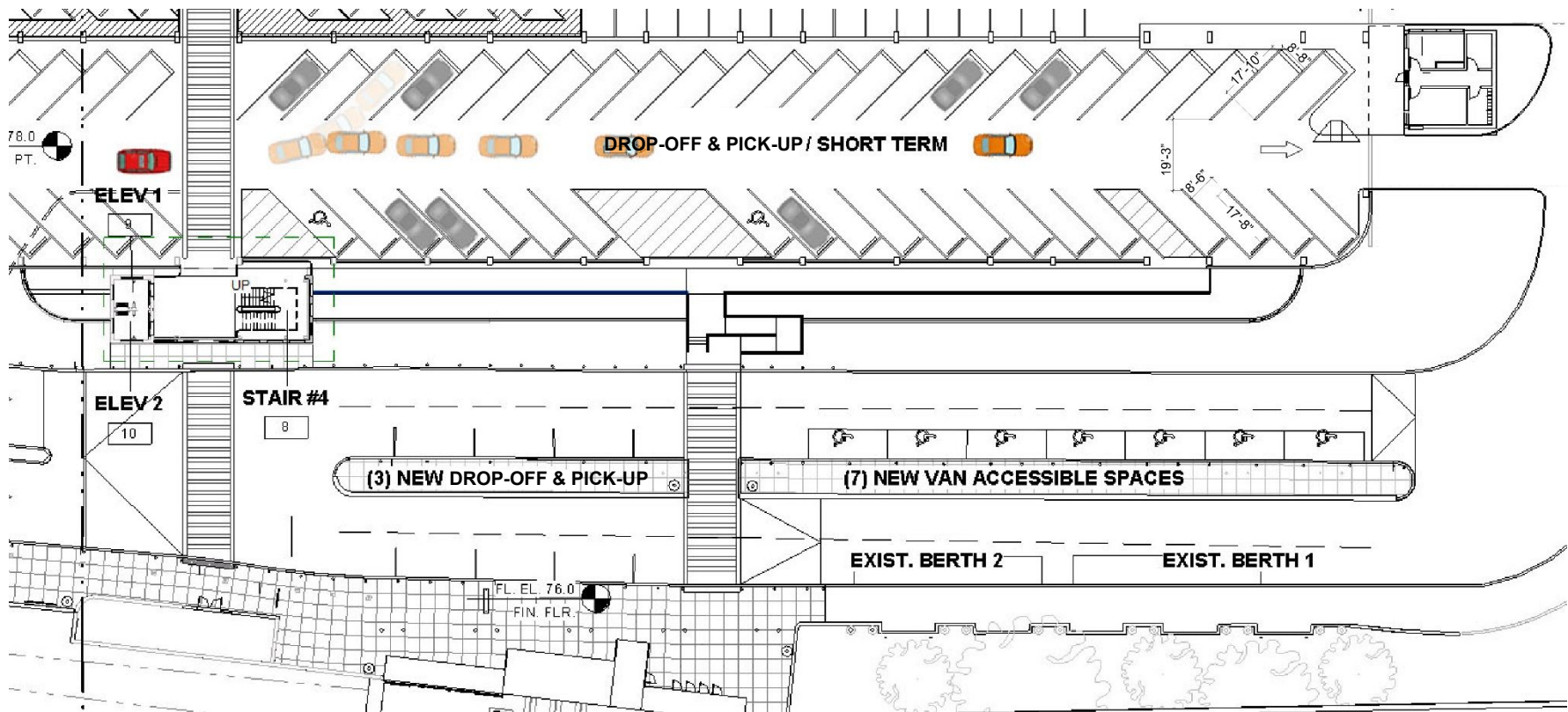
Braintree Garage

Traffic Circulation Improvements – Prime Parking Area



Braintree Garage

Traffic Circulation Improvements – Drop Off Area



Braintree Garage

Current Traffic Circulation at Station Entrance



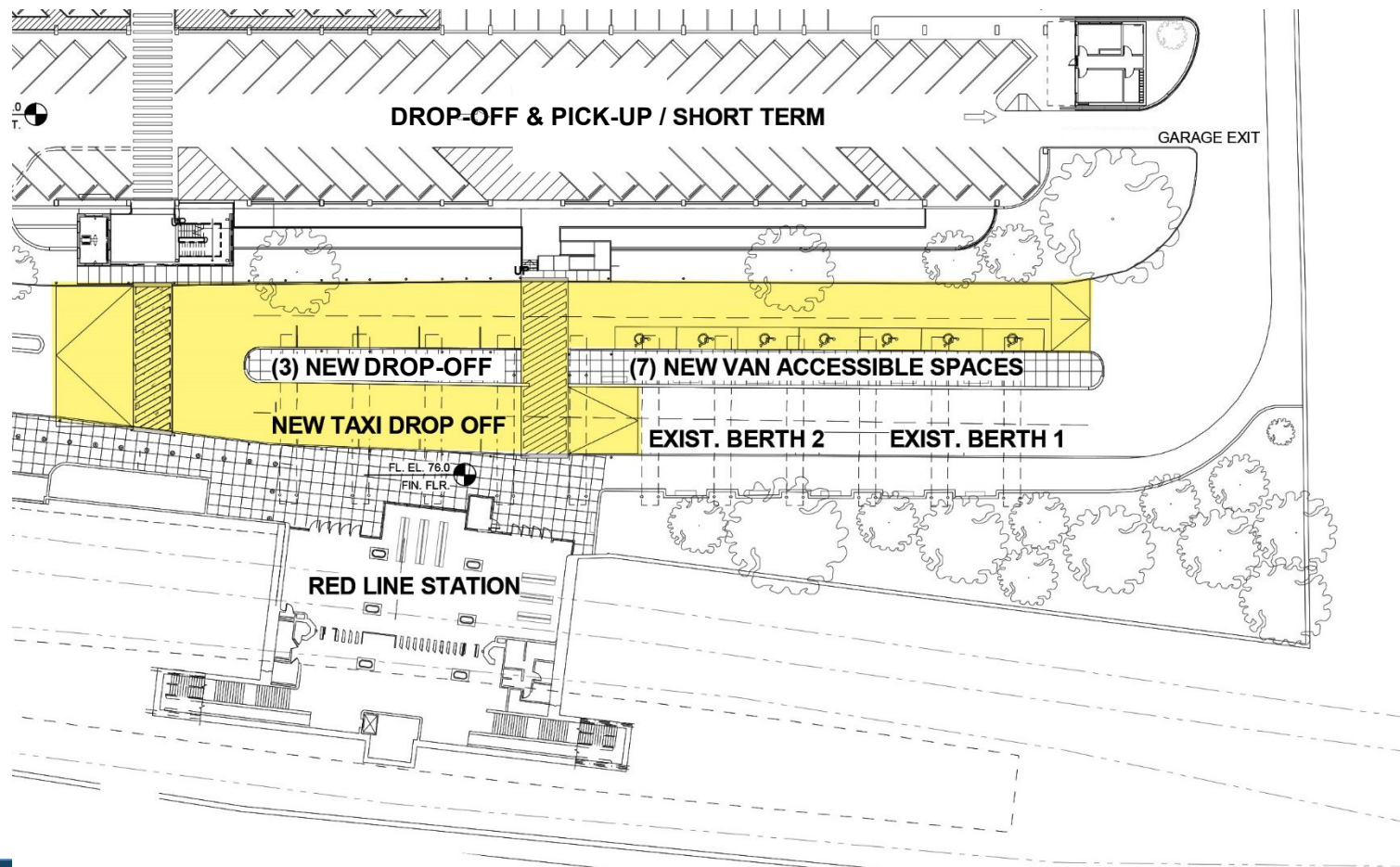
Current Busway

Current Drive Lane



Braintree Garage

Traffic Circulation Improvements at Station Entrance



Braintree Garage Traffic Circulation Improvements

- Improved Drop Off / Short-Term parking layout to reduce traffic congestion.
- New wayfinding and traffic signage at all levels.
- Angled parking spaces provided for Prime Parking and Drop Off areas. Parallel-oriented parking spaces eliminated within Drop Off Area.
- New busway and station entrance canopy roofs.

Braintree Pedestrian Bridge



2008 Condition

- Bridge will be demolished as part of this repair project and replaced with a canopy.

- Bridge closed February 2017 due to deteriorated condition.



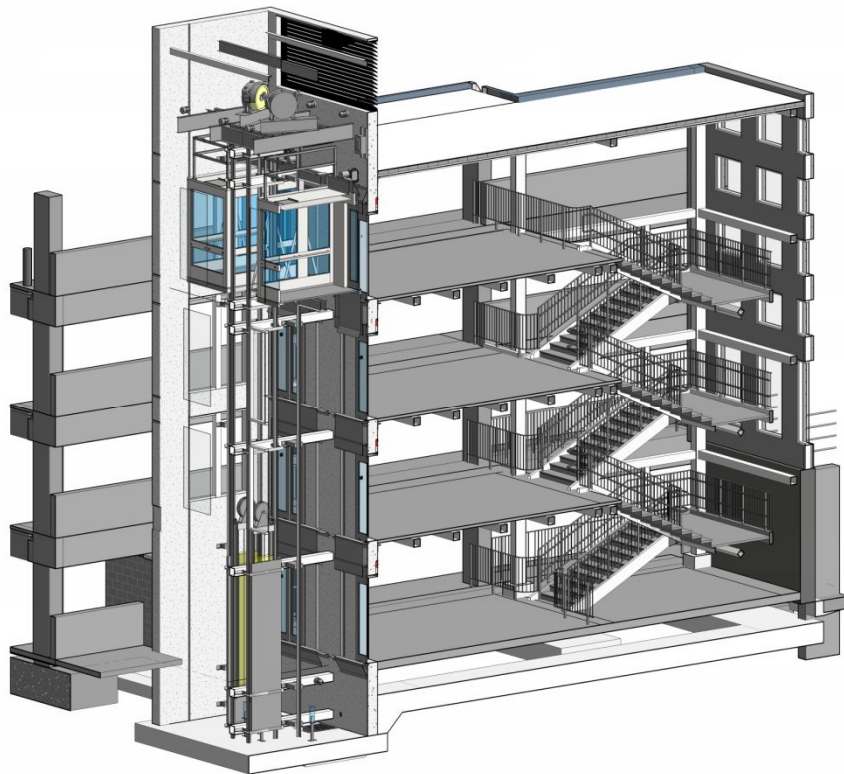
2016 Condition

Braintree Garage Accessibility Improvements: Proposed Garage Lobby

- Weather protection for all customer circulation pathways and waiting areas.
- Covered at-grade crossing to station and commuter rail ramp connection.
- Raised pedestrian connection to Station (no curb ramps).



Braintree Garage Accessibility Improvements: Proposed Garage Lobby

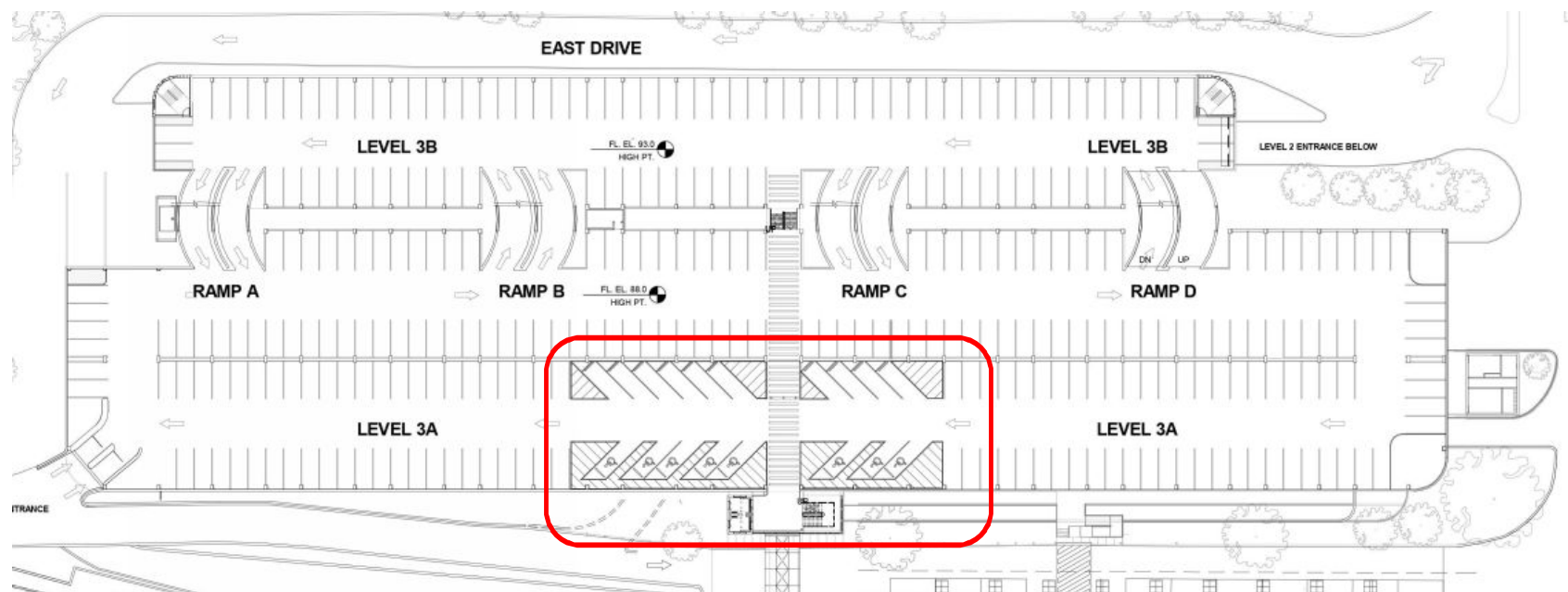


① CUT-AWAY SECTION AXON VIEW OF HOISTWAY
Scale:

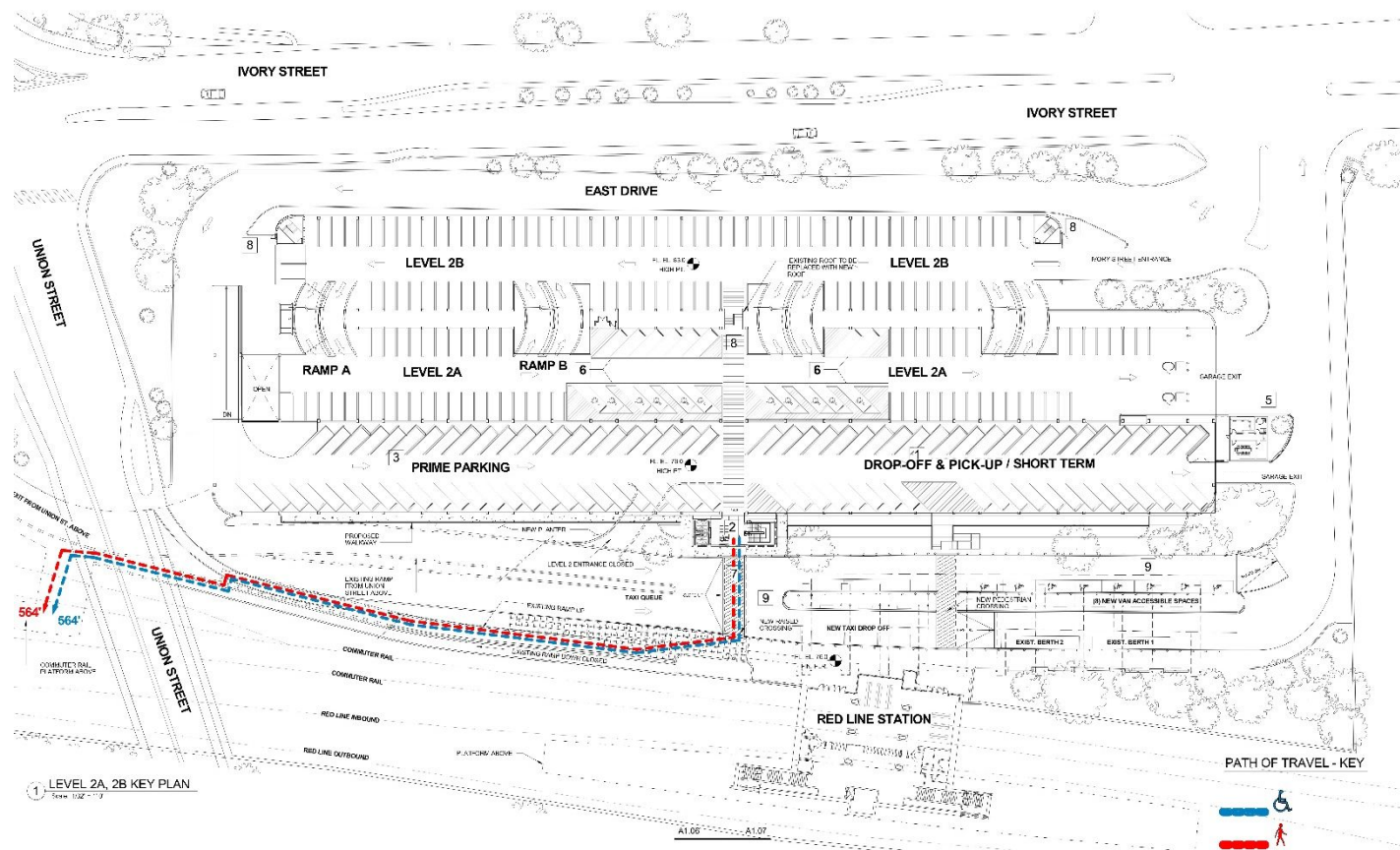
- Universal path of travel that is equal for all user groups.
- Centralized redundant elevators.
- New aluminum tread/riser stair system with code compliant railings.

Braintree Garage Accessibility Improvements:

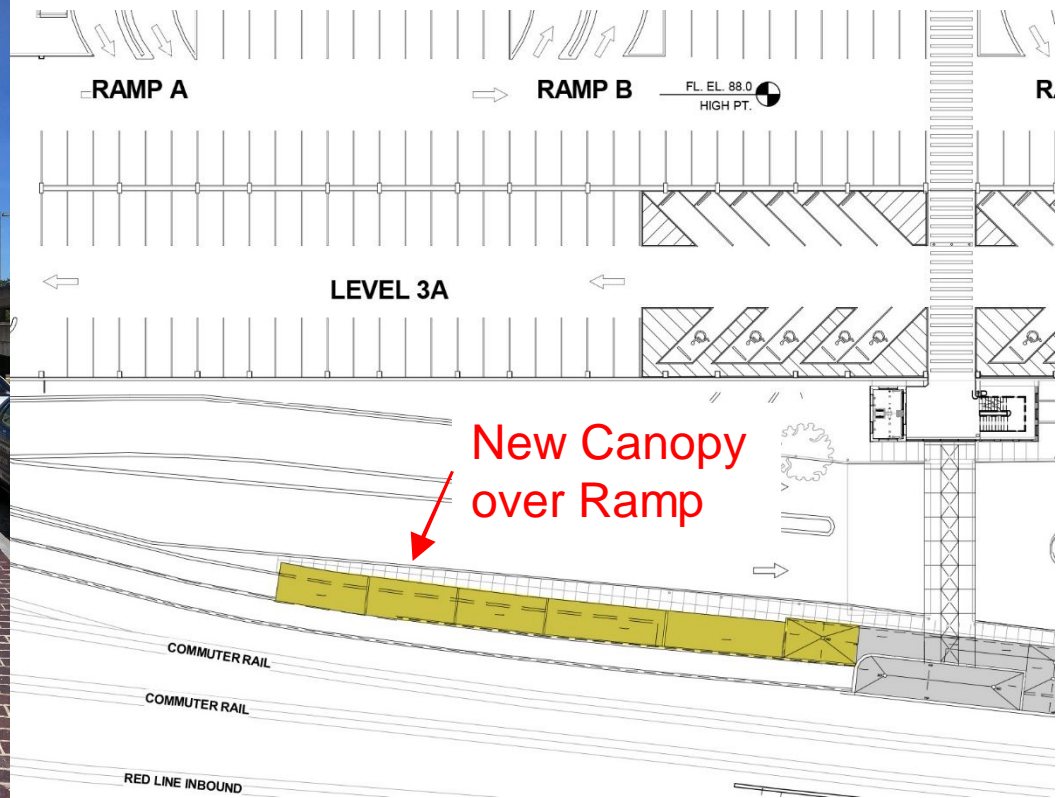
Accessible parking spaces provided on each level



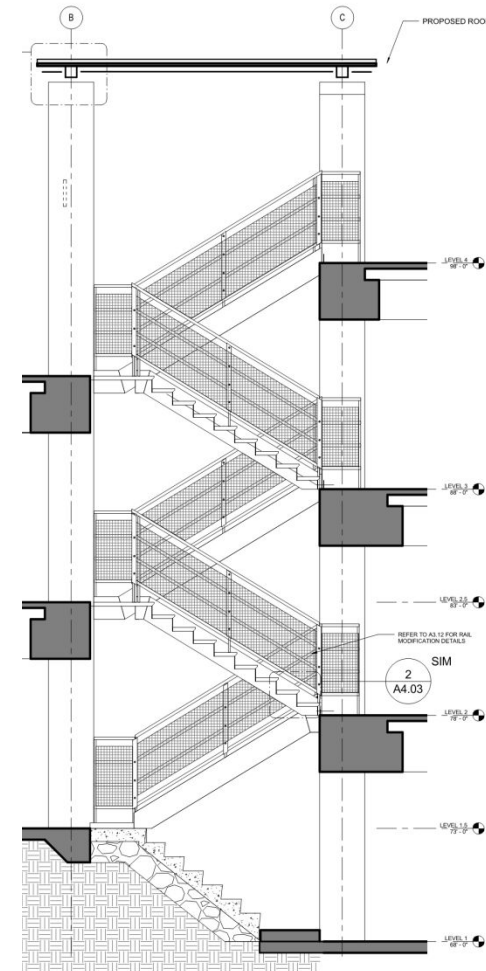
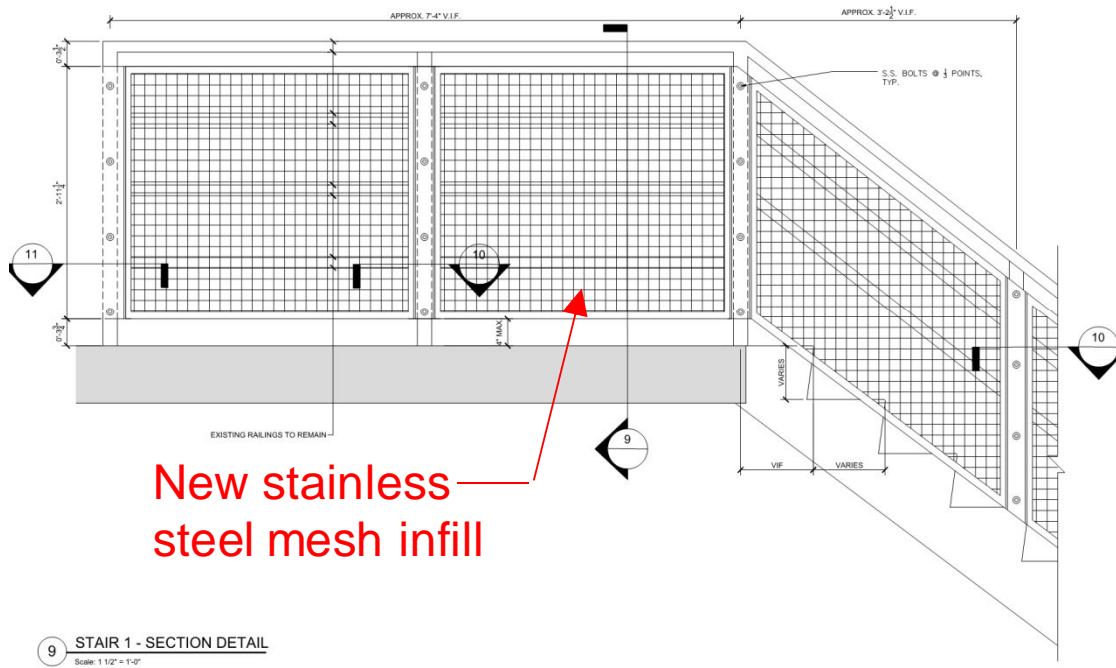
Braintree Garage Accessibility Improvements: Improved universal path of travel to commuter rail



Braintree Garage Accessibility Improvements: Improved universal path of travel to commuter rail



Braintree Garage Architectural Improvements: Stairwell code compliance upgrades



Braintree Garage Structural Repairs:

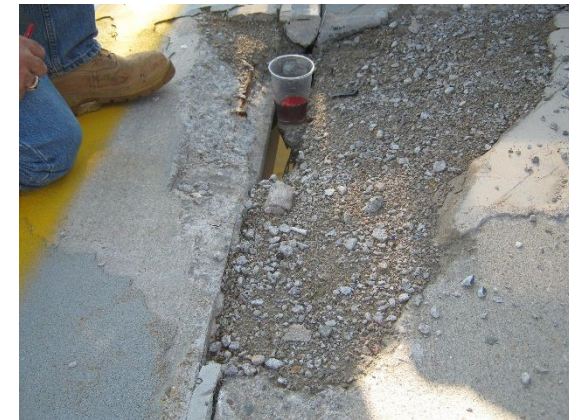
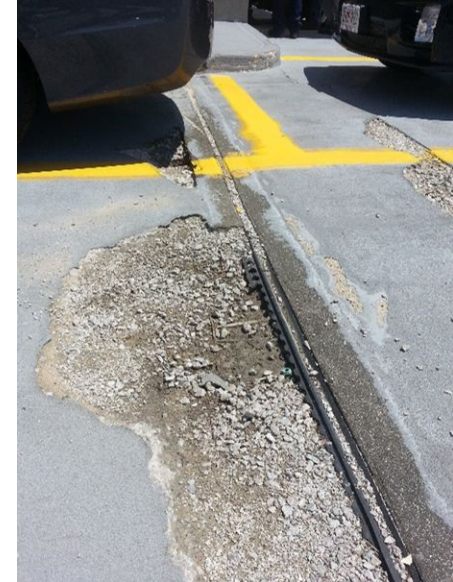
○ Concrete Repairs

- Beams
- Columns
- Floor Decks
- Precast Tees
- Walls



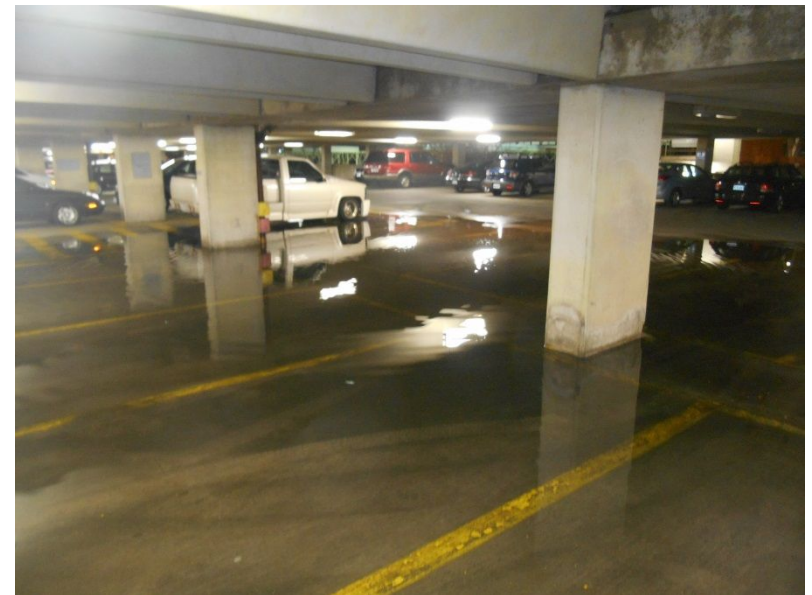
Braintree Garage Structural Repairs:

- Expansion Joint Replacement
- Sealant Joint Replacement
- Open Parking Decks to Receive a Polyurethane Waterproofing Traffic Membrane Coating
- Covered Parking Decks to Receive a Penetrating-Corrosion Inhibiting Sealer



Braintree Garage Plumbing Repairs:

- Remove and replace all garage drains, sanitary waste piping and storm water piping systems within the garage.
- Proposed repairs in combination with continued maintenance will minimize ponding water on parking levels.



Braintree Garage Electrical Improvements:

- New LED light fixtures and surface mounted circuiting.
- Improved lighting increases visibility and safety for garage users.
- New emergency generator and distribution to emergency lighting systems.
- New fire alarm system.



Braintree Garage Security & CCTV System:

- Cameras at each vehicle entrance and exit. Will provide front and rear view of the vehicle.
- Cameras at each pedestrian entrance into the Stairwells. This is from each parking level and the exterior of the stairwell.
- Approximately 25 cameras will be added.

Braintree Garage Fire Protection Improvements:

- Remove and replace all fire protection standpipes down to finished grade and connect to new distribution system installed on the underside of the 2nd floor parking levels.
- Remove and replace all fire department hose valve connections on all standpipes at each floor level.

Contract Schedule Milestones:

- Public Meetings..... April 2017
- Advertise for Bids.....April 2017
- Contract Award.....June 2017
- Construction Start (NTP).....September 2017
- Completion of Work at Braintree Garage....July 2019*
(* Anticipated)

- Construction Duration – Braintree Garage
 - 23 months *

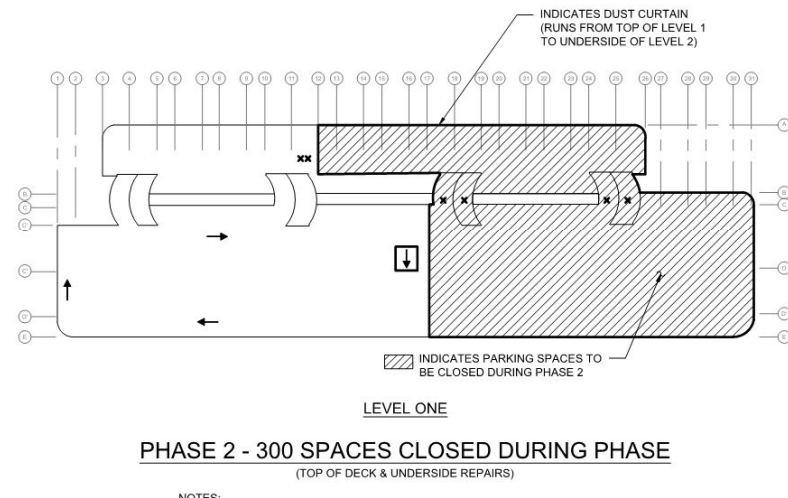
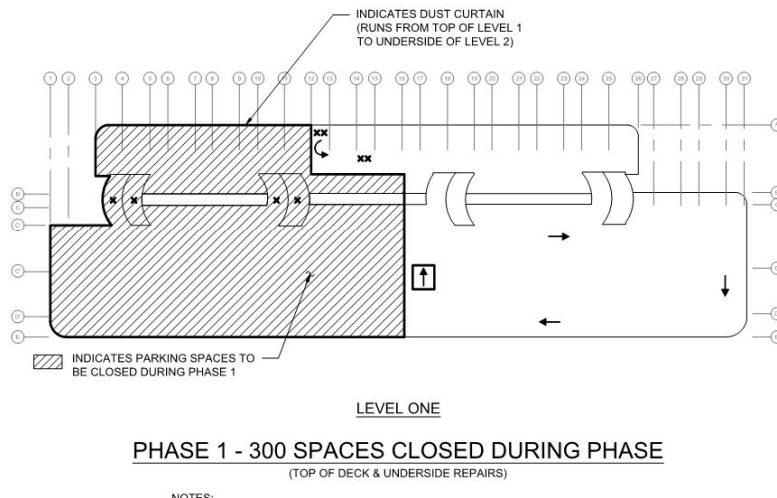
CONSTRUCTION PHASING APPROACH

Construction Phasing Approach:

- Maintain parking supply as well as pedestrian and vehicle flow thru and around work/protection zones so that the garages and the station(s) they serve remain functional for the duration of the project.
- Construction to adhere to the Town of Braintree Noise Level Ordinances.
- Allow for the efficient progression of work to facilitate cost efficiency and adherence to a schedule.

Construction Phasing:

- Phasing based on limiting the total project parking space impact to taking 300 spaces (total project) out of service at any one time with no more than 300 of these spaces taken out of service in a single garage.



Parking Mitigation during Construction:

- Temporary parking lot to be constructed within the Braintree Transfer Station Property.
- Public pay-by-phone lot will be capable of accommodating between 100 to 120 vehicles.
- Offset loss of parking during garage construction.



Estimated Construction Cost

- Single construction contract to repair and improve the Quincy Adams and Braintree Garages.
- Anticipated Contract Award Date - June 2017
- Estimated Overall Construction Cost = \$92M

Thank You.

○ Questions and Comments