



ROUTE IA CORRIDOR STUDY

Welcome! Please settle in.

The meeting will begin shortly...





ROUTE 1A

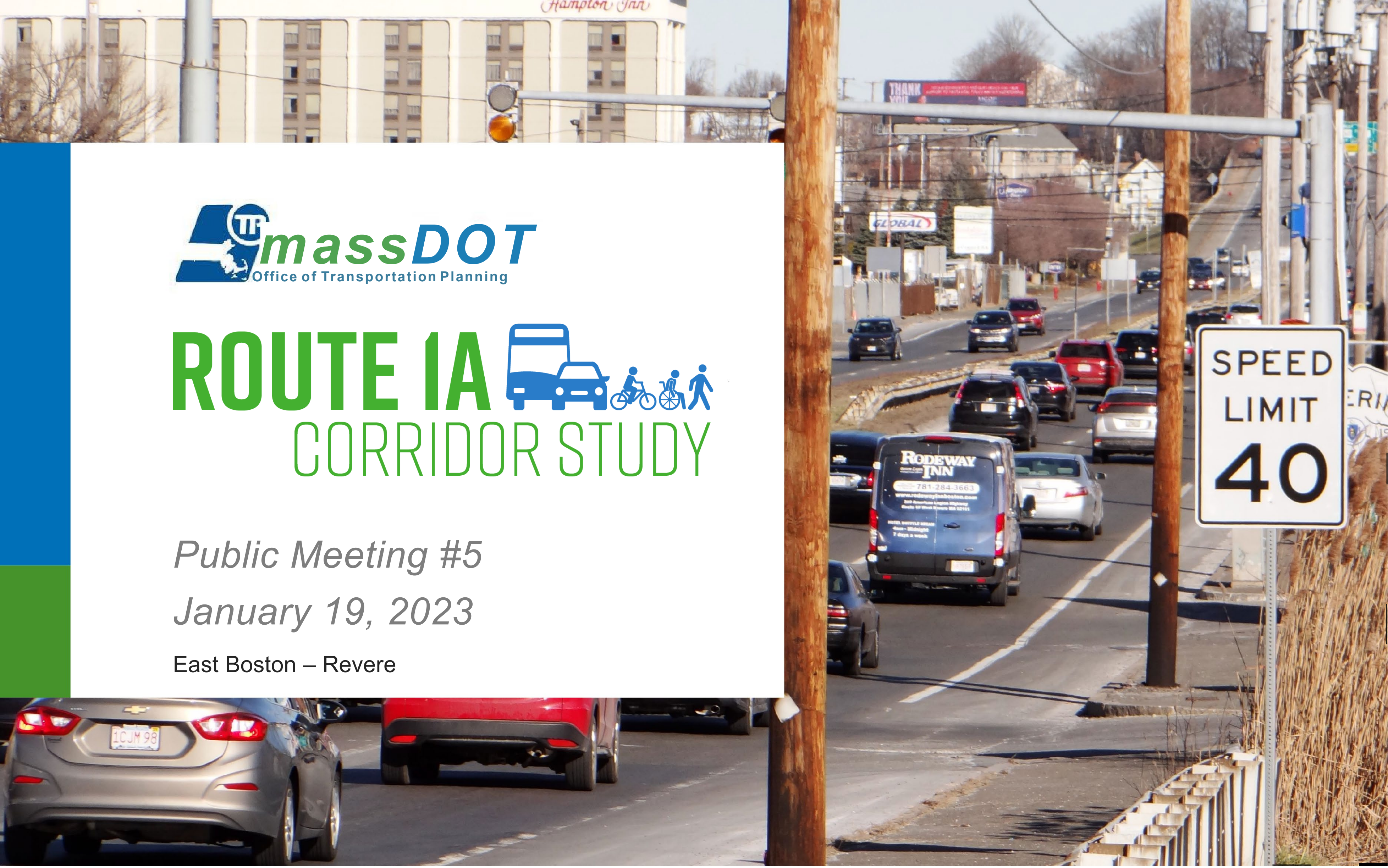


CORRIDOR STUDY

Public Meeting #5

January 19, 2023

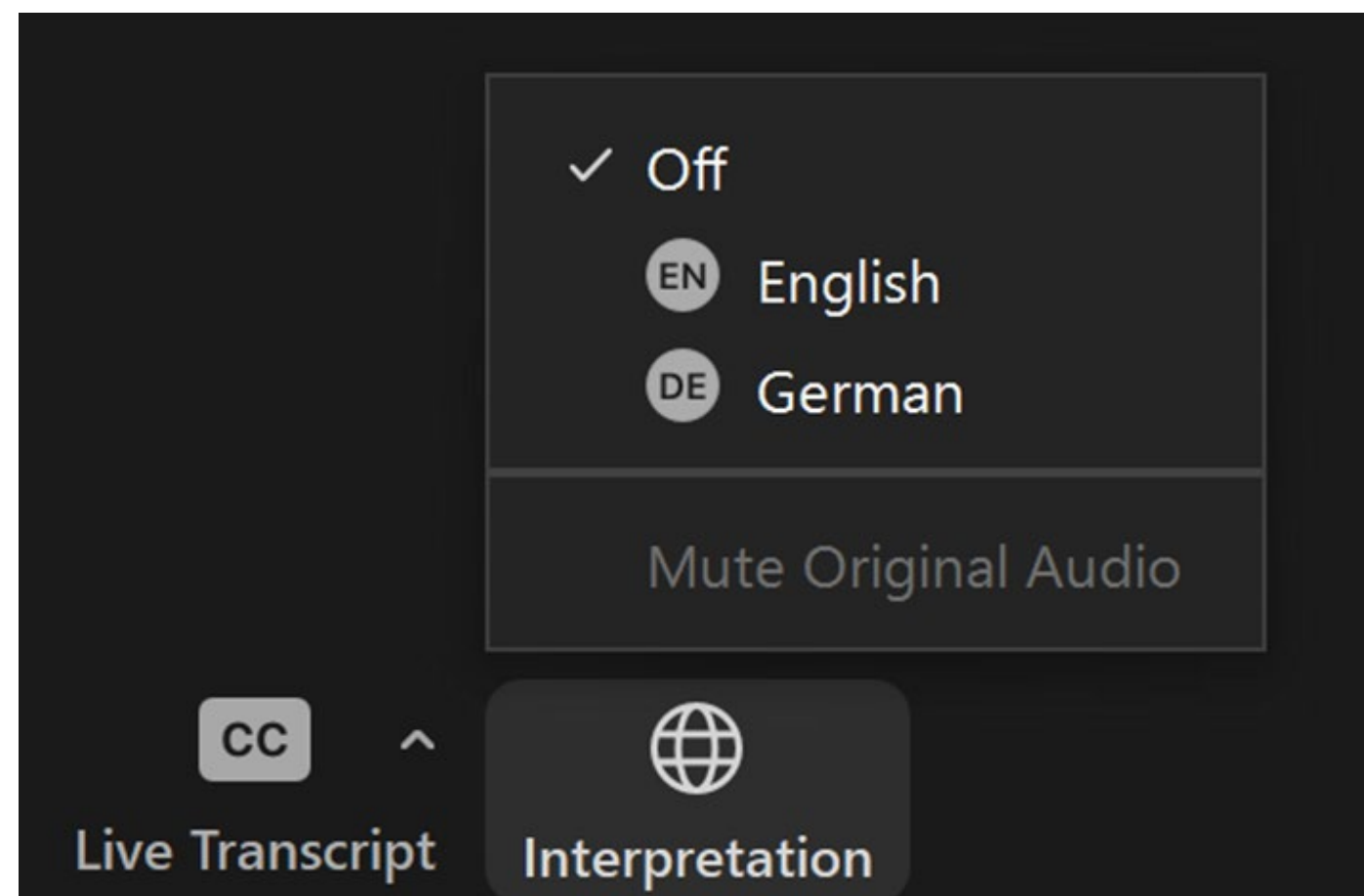
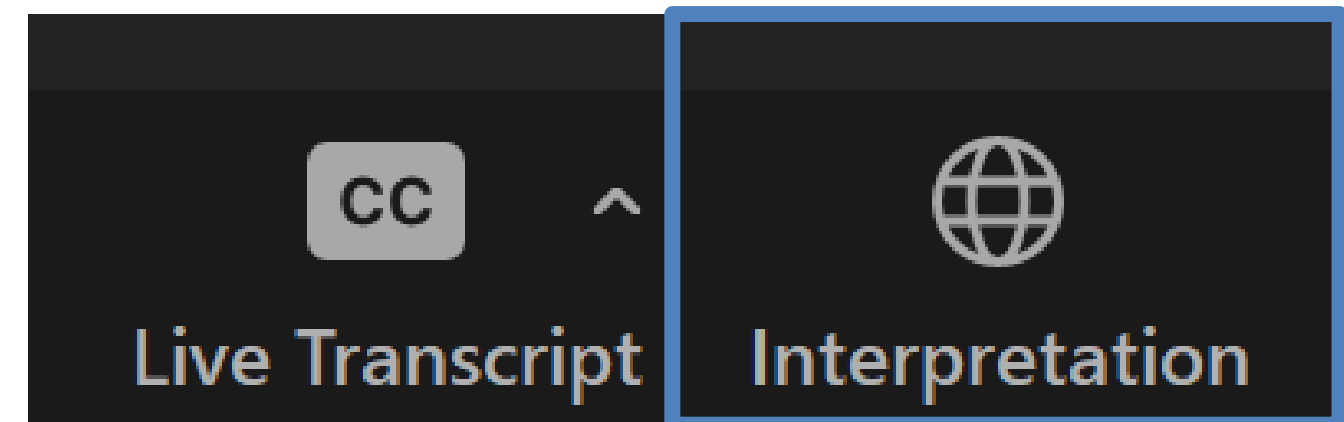
East Boston – Revere



How To Use Zoom - Interpretation

Select the **language** you would like to hear by clicking the **Interpretation** feature and selecting a language from the list provided.

To hear the **interpreted language only**, click **Mute Original Audio**.

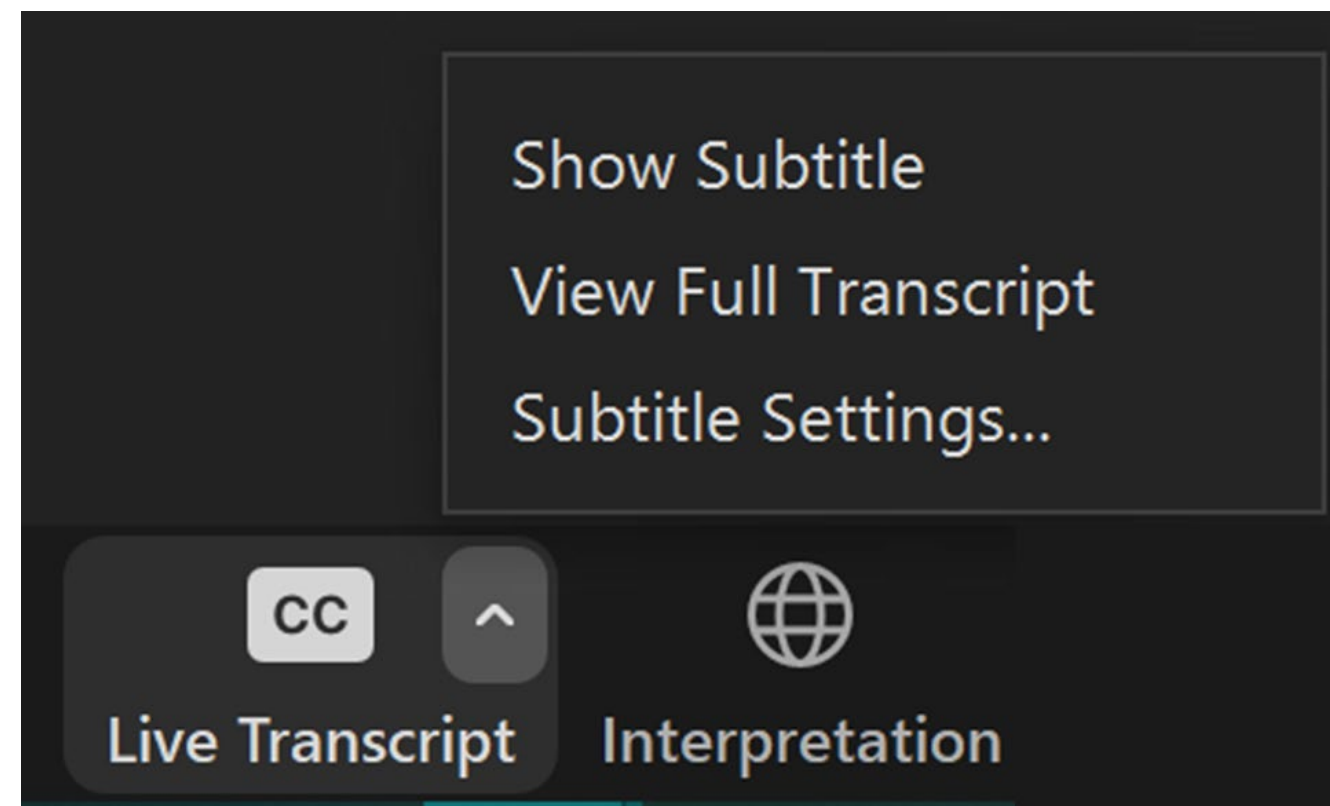
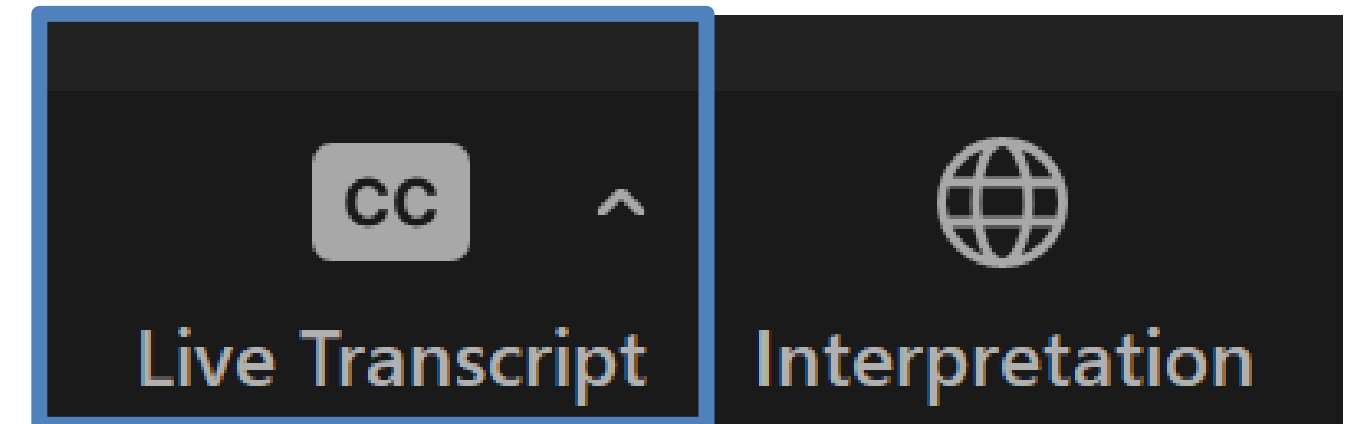


How To Use Zoom - Captioning

You can view **closed captions** by clicking the **Closed Captions** feature and selecting from the options shown.

Show Subtitle will **display a caption** at the bottom of the screen.

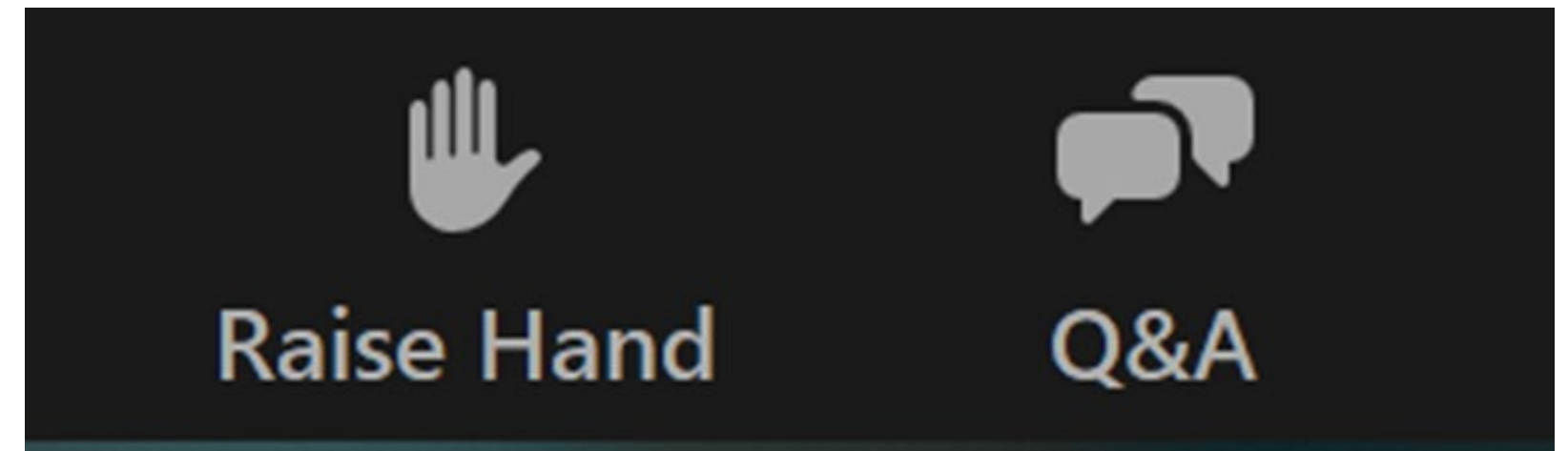
View Full Transcript will display the meeting's **audio transcription** in a window to the right.



How To Use Zoom – Submit a Question or Comment

You may use the **Q&A button** to submit a typed question or comment at any point during the meeting. When Q&A window pops up, type your question or comment in the comment box.

If you have a technical problem, please share your issue in the **Q&A feature** at any point during the meeting, and we will respond as quickly as possible.



What's your favorite candy?

Send anonymously

Cancel Send

Today's Agenda

- 1 Project Overview
- 2 Goals & Objectives
- 3 Rail Corridor Alternatives
 - (1) Shared Use Path Only
 - (2) Bypass Road + Shared Use Path
- 4 Alternatives Analysis and Evaluation
- 5 Key Findings and Next Steps



Meeting Purposes

- Present Key Findings of the evaluation of alternatives and solicit public input
 - Public Meeting presentation and recording will be posted to the study website
- Begin the public comment period on the study's Key Findings
 - Series of 2 (two) virtual Public Meetings to present Key Findings and solicit feedback:
 - First Meeting - Tuesday, December 20, 2022 at 6:00PM
 - Tonight - Thursday, January 19, 2023 at 6:00PM
 - Based on feedback from the public process, release a draft report for 30-day public comment period in late January 2023

Why Was This Study Initiated?

After receiving public feedback in response to a request to lease the inactive rail parcels along the Chelsea Creek, the MBTA's Fiscal and Management Control Board and MassDOT committed to conducting a study of the rail corridor.

Study Purpose and Need

The purpose of this study is to assess the potential uses of the MassDOT and MBTA rail parcels located between Route 1A and the Chelsea Creek in East Boston, and evaluate the Route 1A corridor between Bell Circle and Day Square.

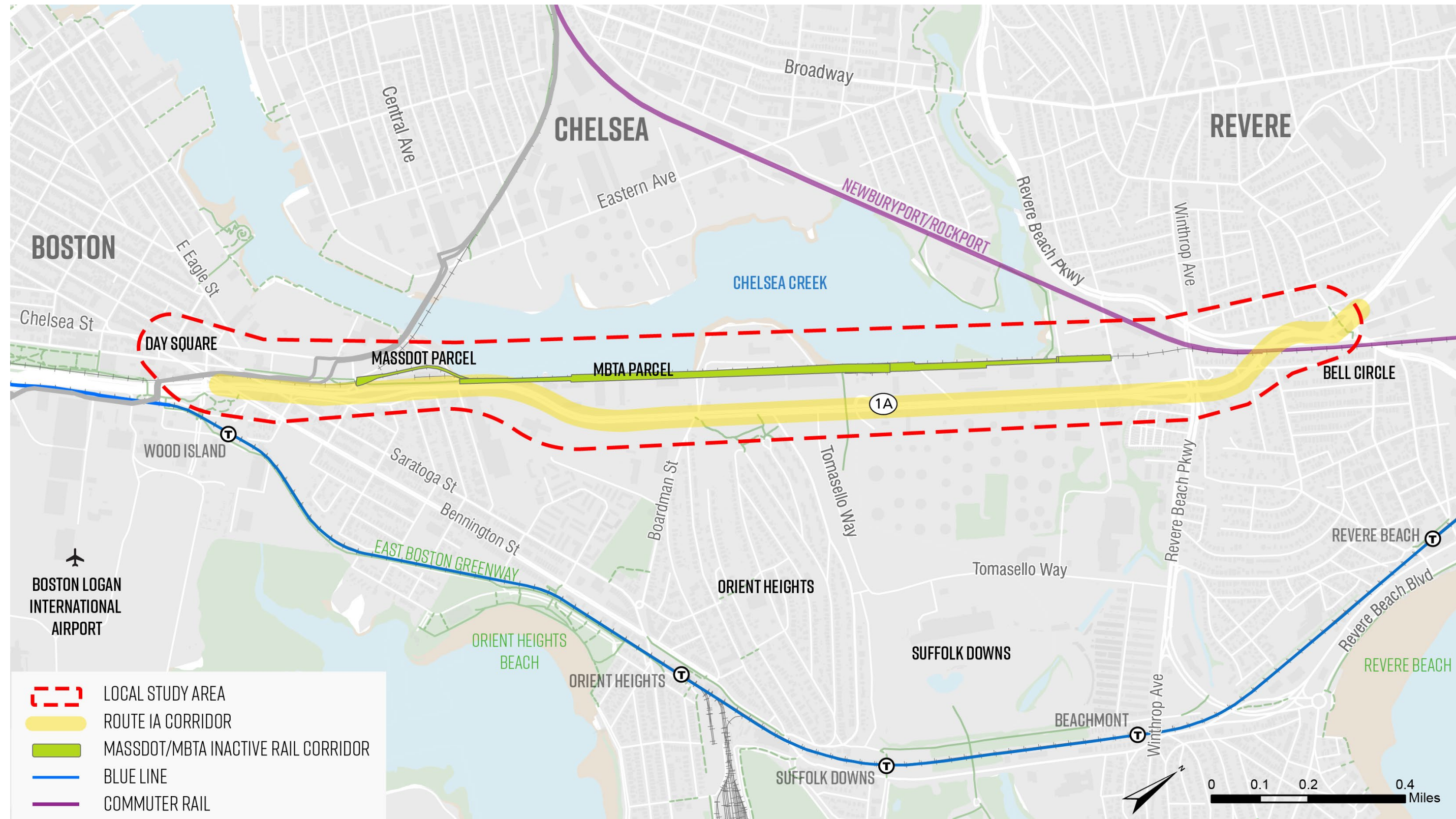
The study will identify opportunities to:

- improve walking, biking, and transit conditions
- address safety deficiencies for all users
- accommodate freight needs and increasing demand on the corridor due to new development
- mitigate potential impacts of climate change



Study Corridor

Our study corridor includes the MassDOT/MBTA owned rail parcels along the Chelsea Creek and Route 1A from Chelsea Street in East Boston to Bell Circle in Revere.



Study Goals

Safety

- Improve safety for people using all modes of transportation (walking, biking, transit, driving, etc.)

Connectivity

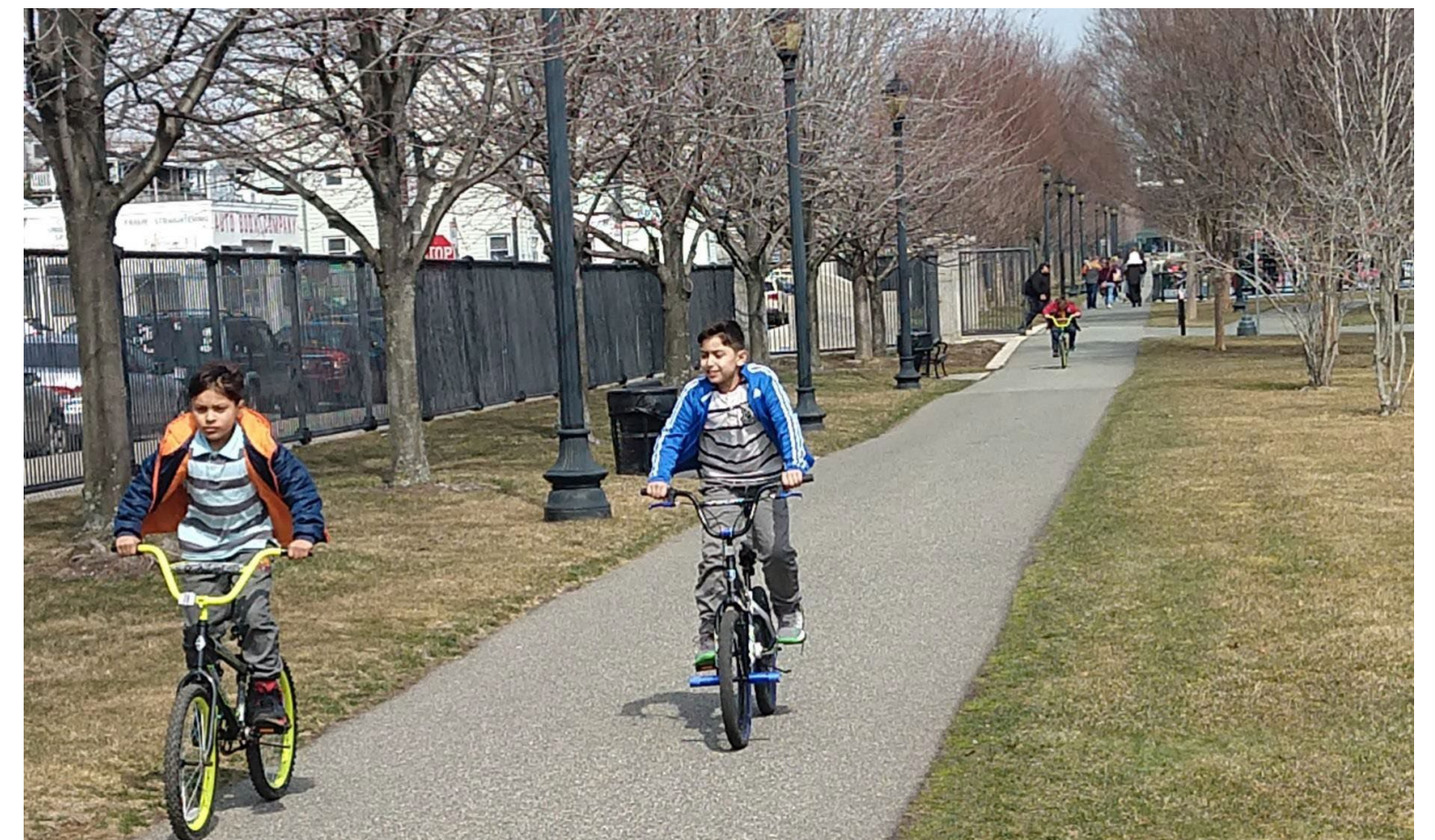
- Expand and enhance connectivity for users of all modes of transportation along and across the Route 1A corridor
- Balance local and regional transportation needs and improve the reliability of freight transportation

Sustainability and Climate Change Resiliency

- Improve air quality and access to public and natural resources
- Enhance resilience of corridor infrastructure and surrounding area

Equity

- Enhance corridor benefits and reduce corridor burdens on Environmental Justice communities



Study Schedule



Public Involvement

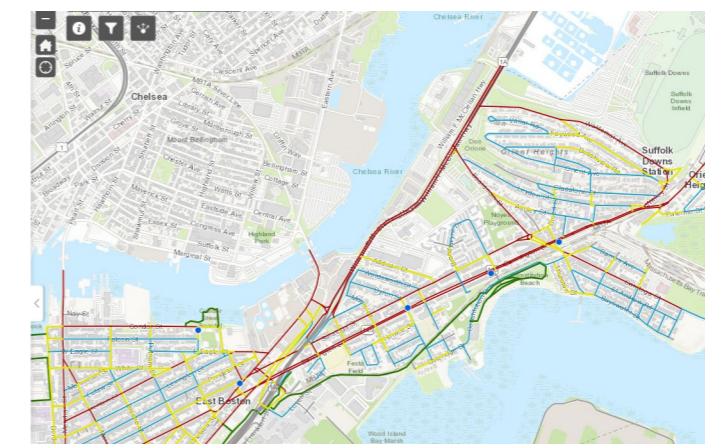
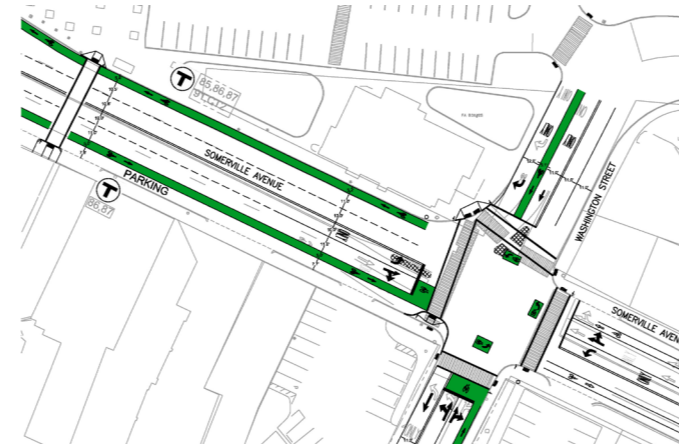
Study Context

Existing & Future Conditions

Alternatives Development

Alternatives Analysis

Key Findings & Conclusions



Fall 2021

Fall 2021/
Winter 2022

Spring 2022

Spring/Summer
2022

Fall 2022/
Winter 2023

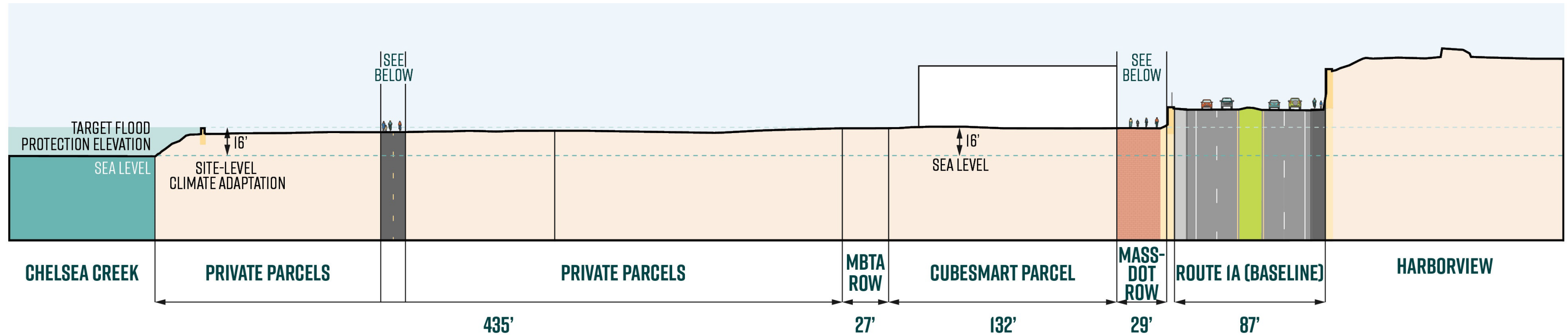


Alternatives

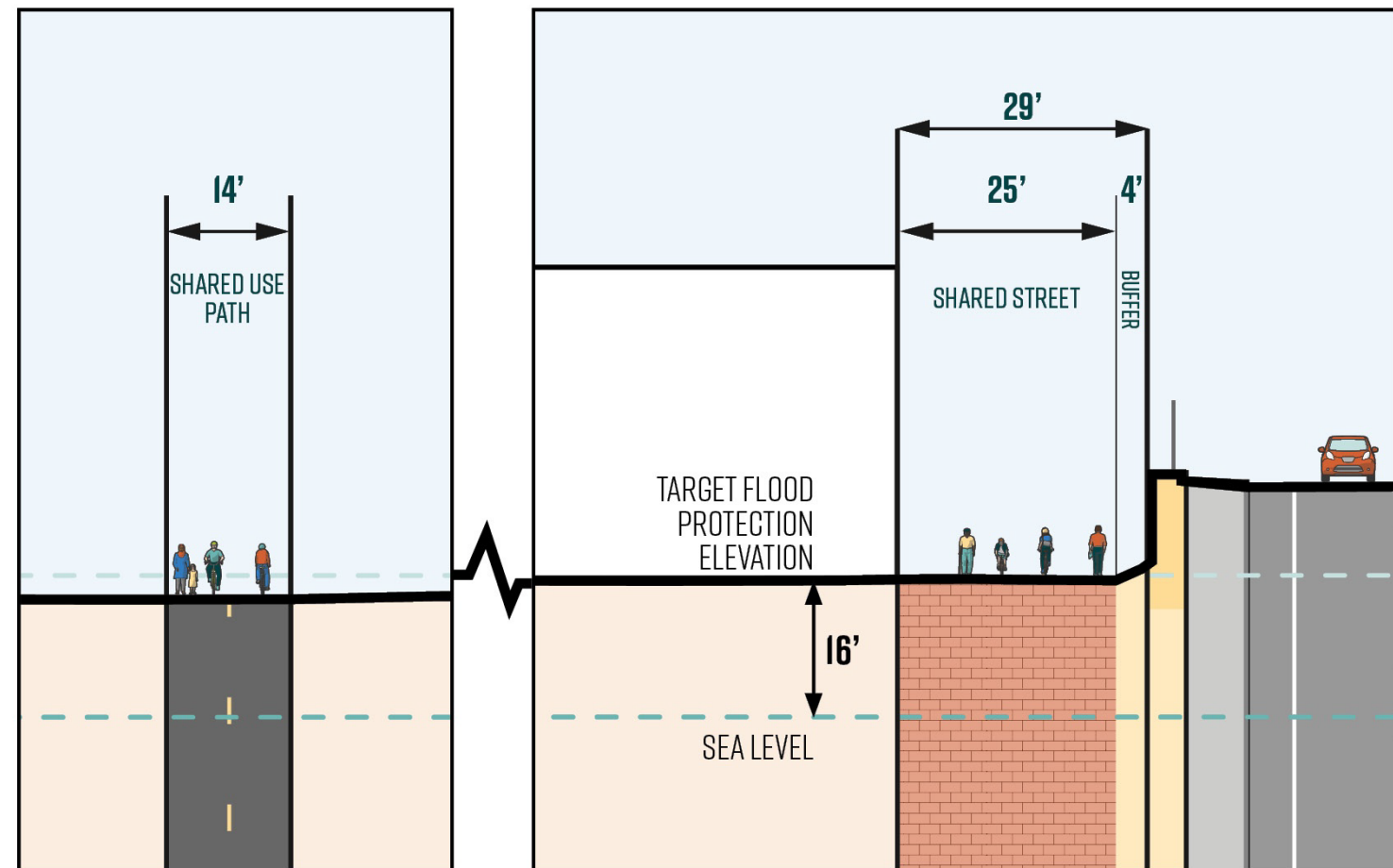
Alternative 1: Shared Use Path Only



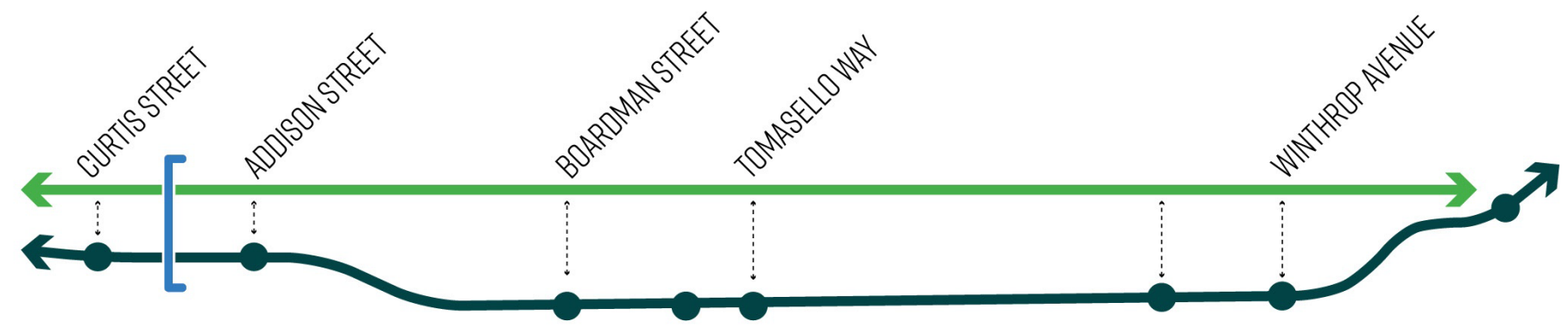
Alternative 1: Shared Use Path Only – Curtis Street to Addison Street



CROSS SECTION DETAIL



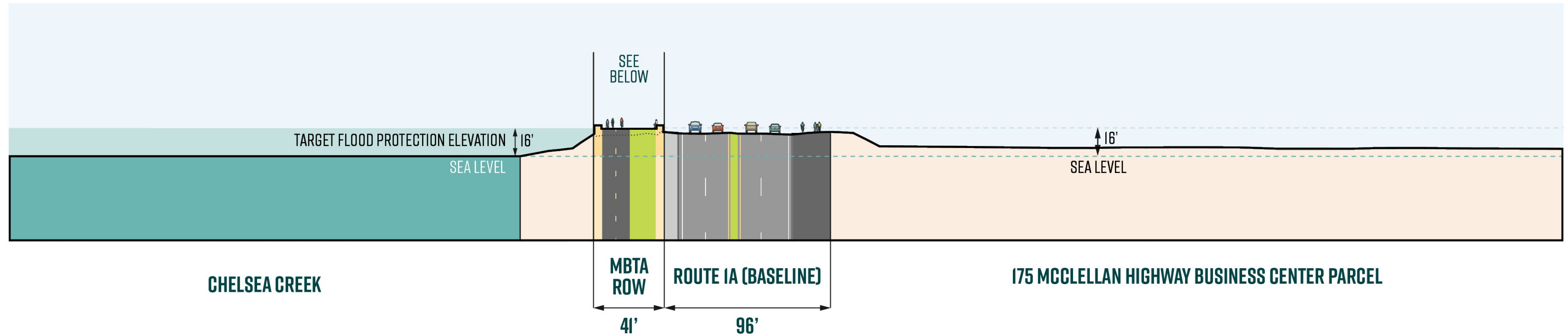
LOCATION ALONG CORRIDOR



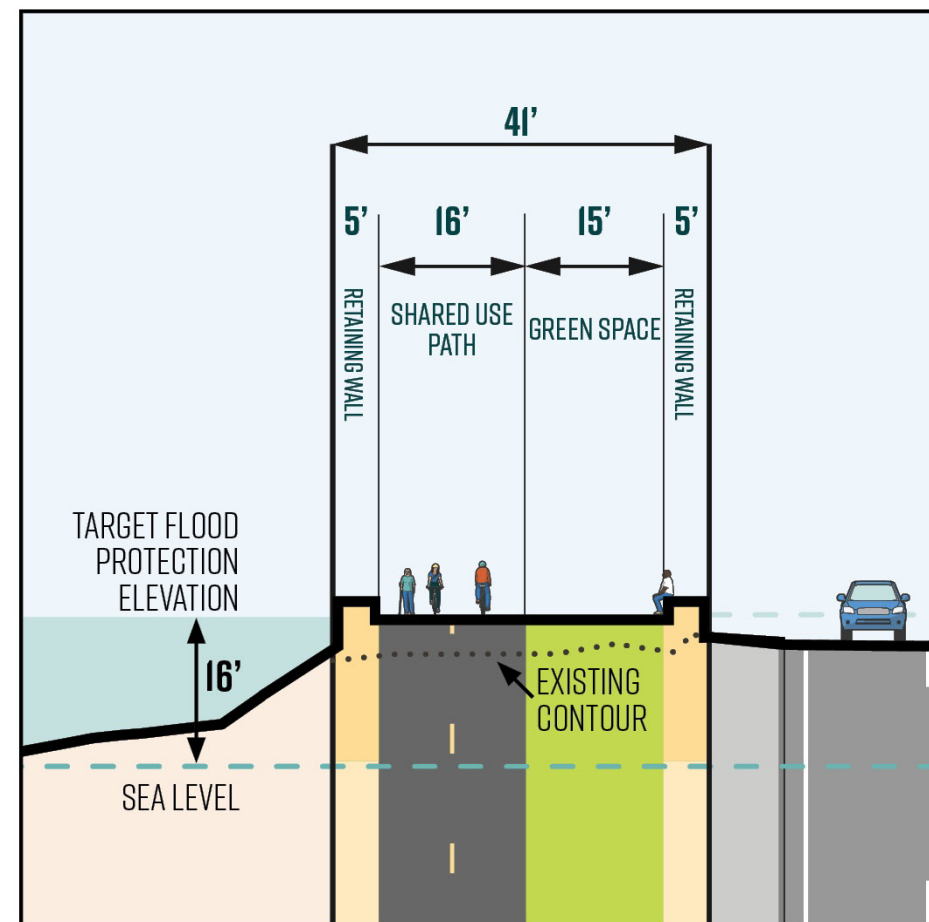
Alternative 1: Path Only – North of Addison Street to Boardman Street



Alternative 1: Shared Use Path Only – North of Addison Street



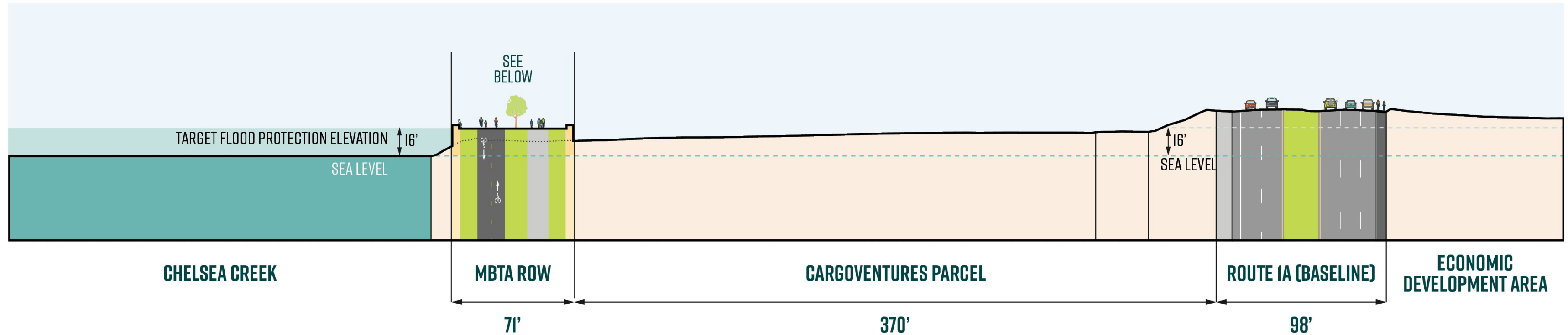
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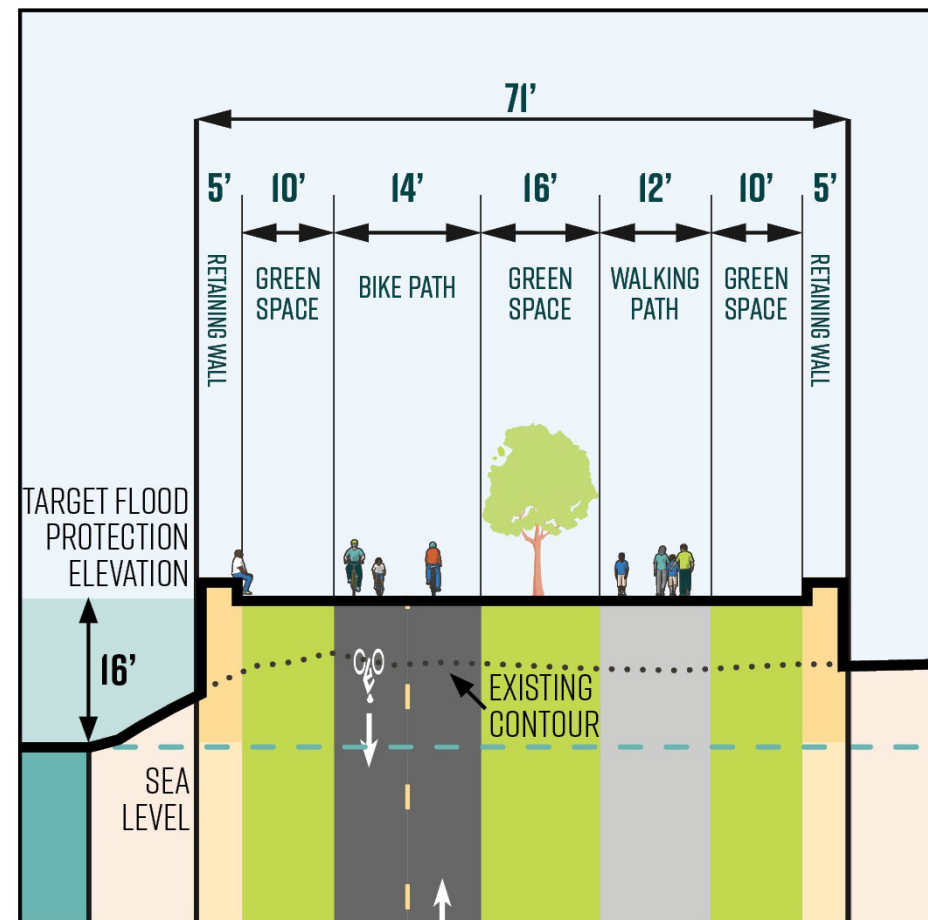
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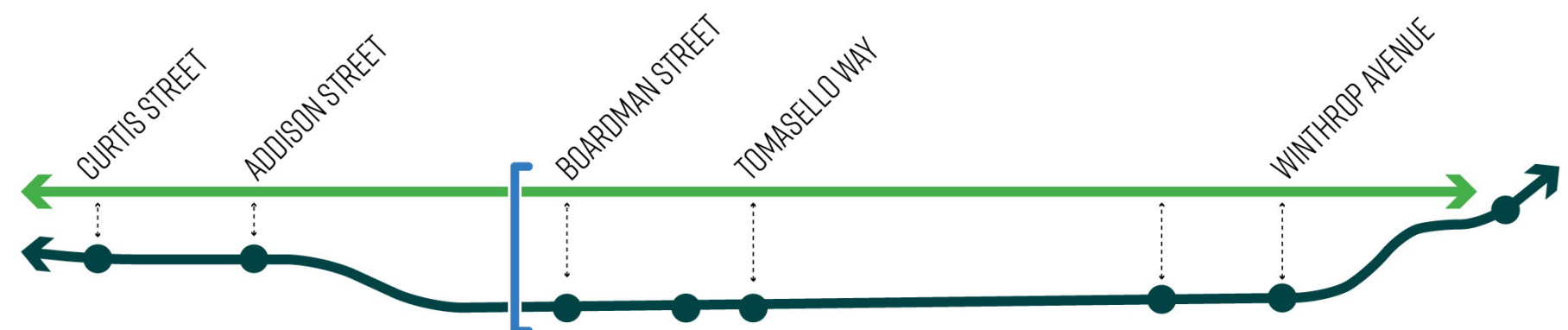
Alternative 1: Shared Use Path Only – South of Boardman Street



CROSS SECTION DETAIL

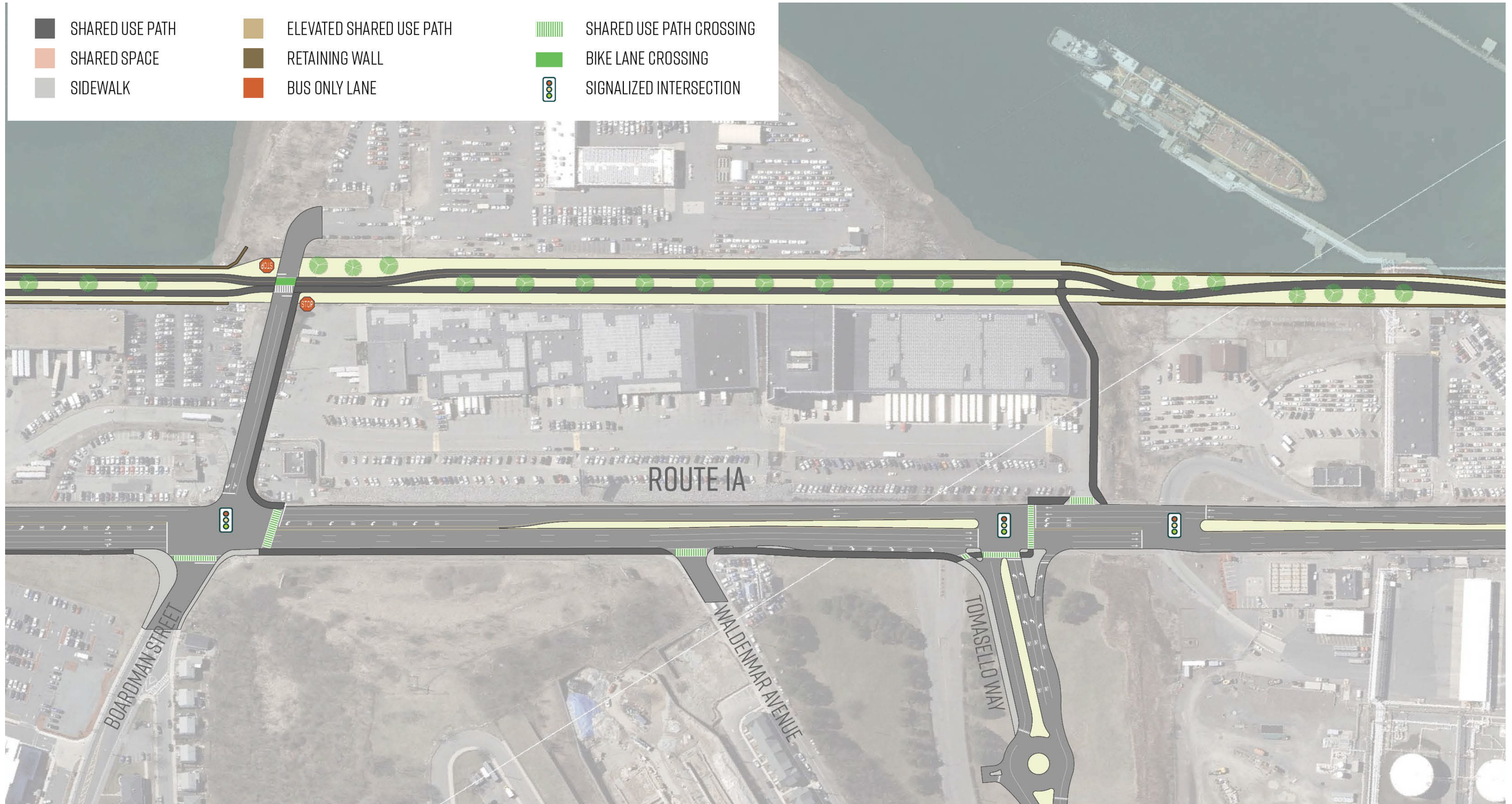


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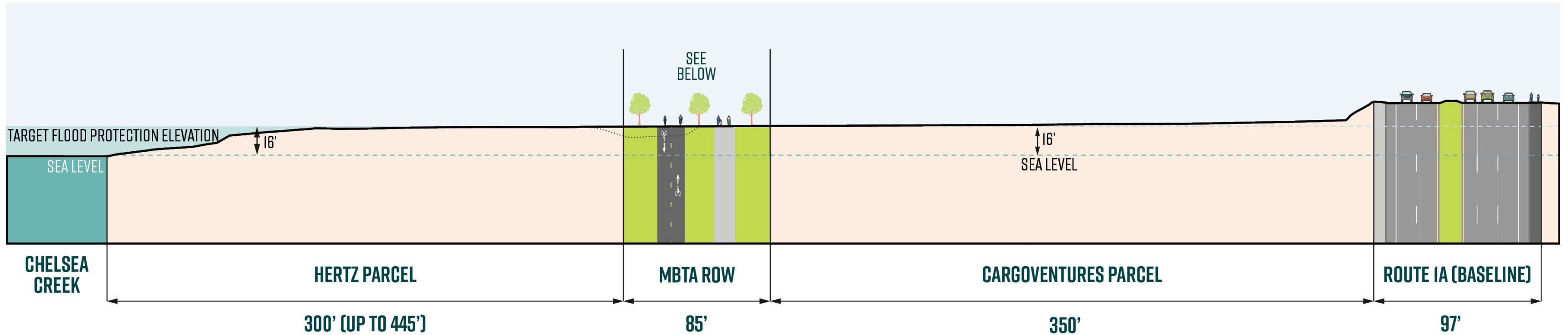


Alternative 1: Path Only – Boardman Street to Tomasello Way

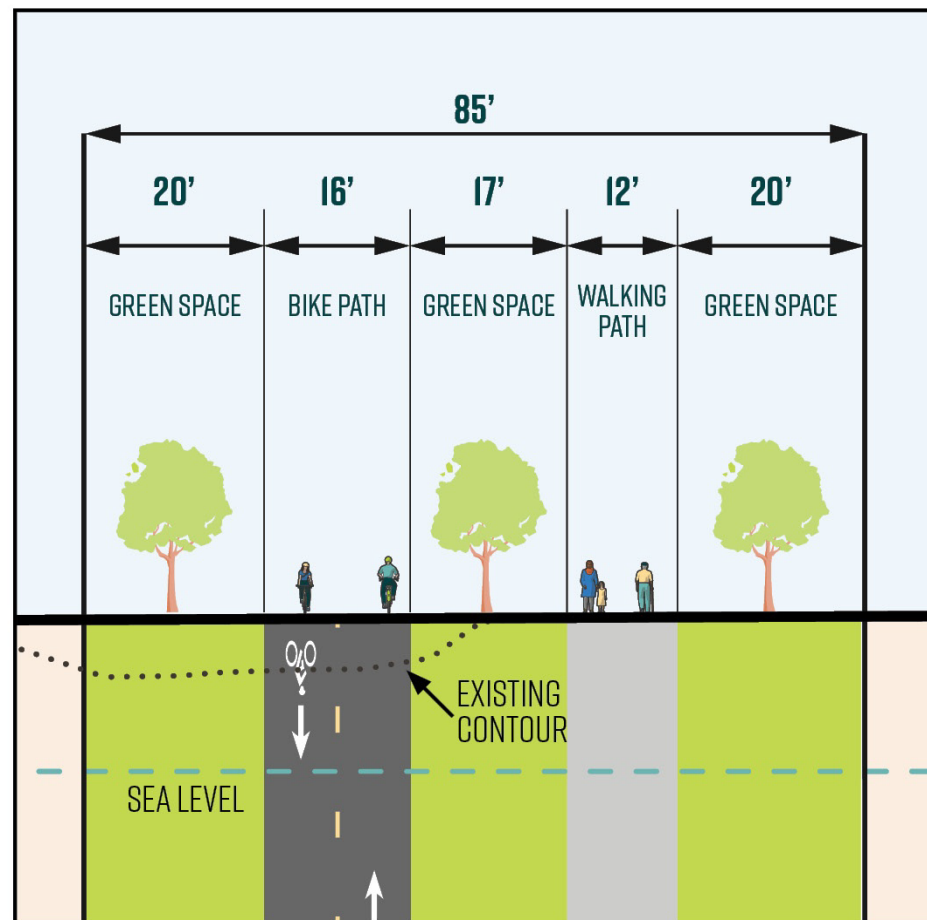
- SHARED USE PATH
- SHARED SPACE
- SIDEWALK
- ELEVATED SHARED USE PATH
- RETAINING WALL
- BUS ONLY LANE
- SHARED USE PATH CROSSING
- BIKE LANE CROSSING
- SIGNALIZED INTERSECTION



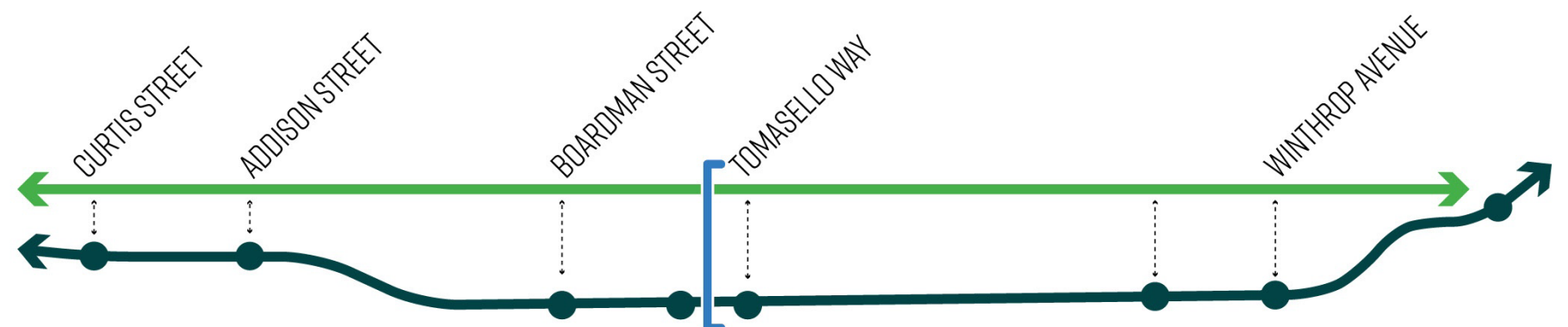
Alternative 1: Shared Use Path Only – South of Tomasello Way



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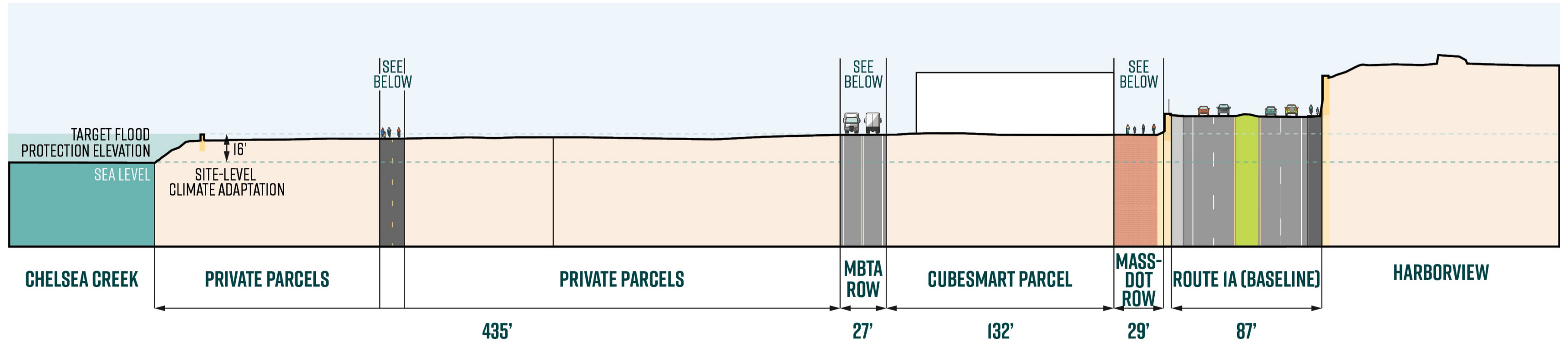
LOCATION ALONG CORRIDOR



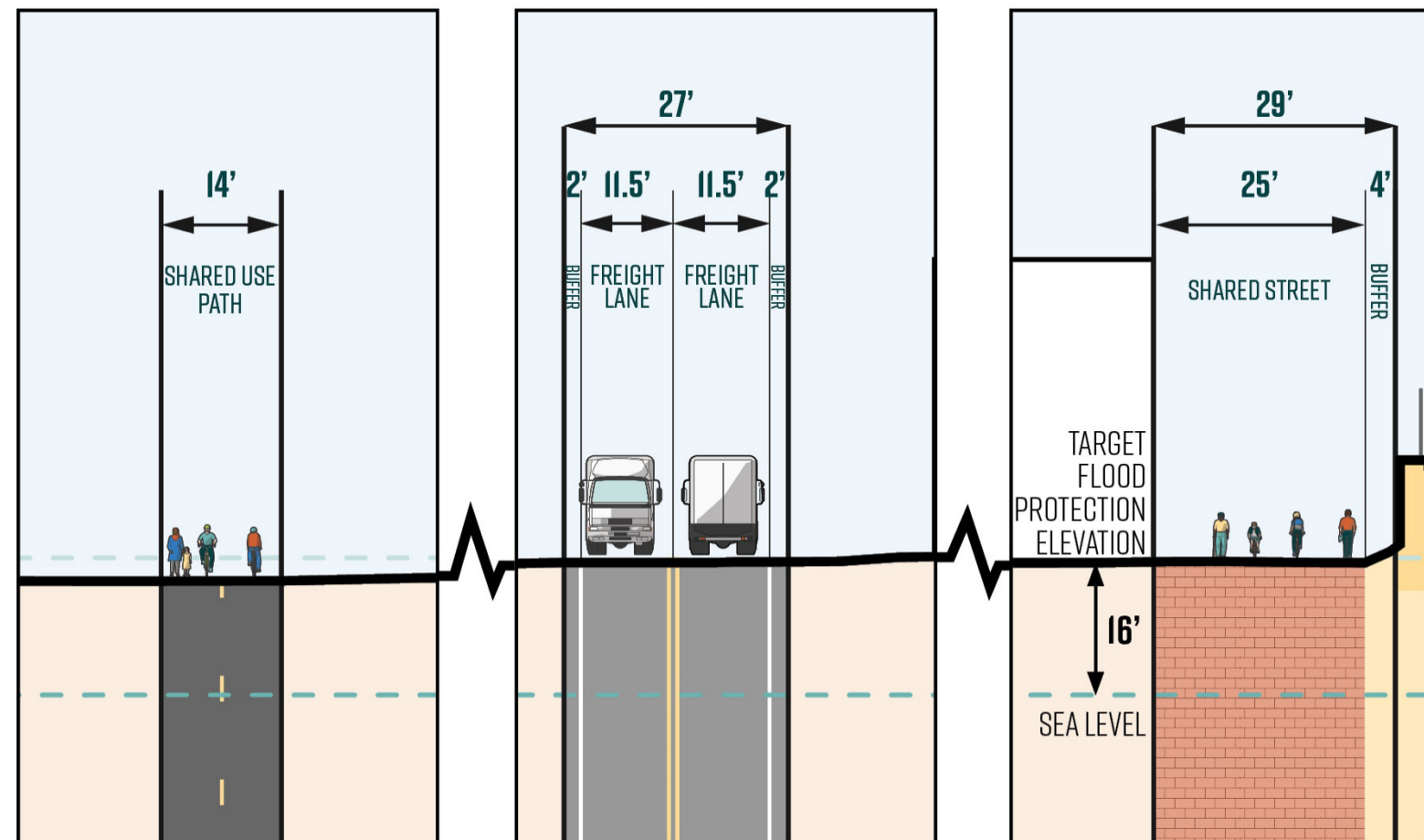
Alternative 2: Bypass Road and Shared Use Path



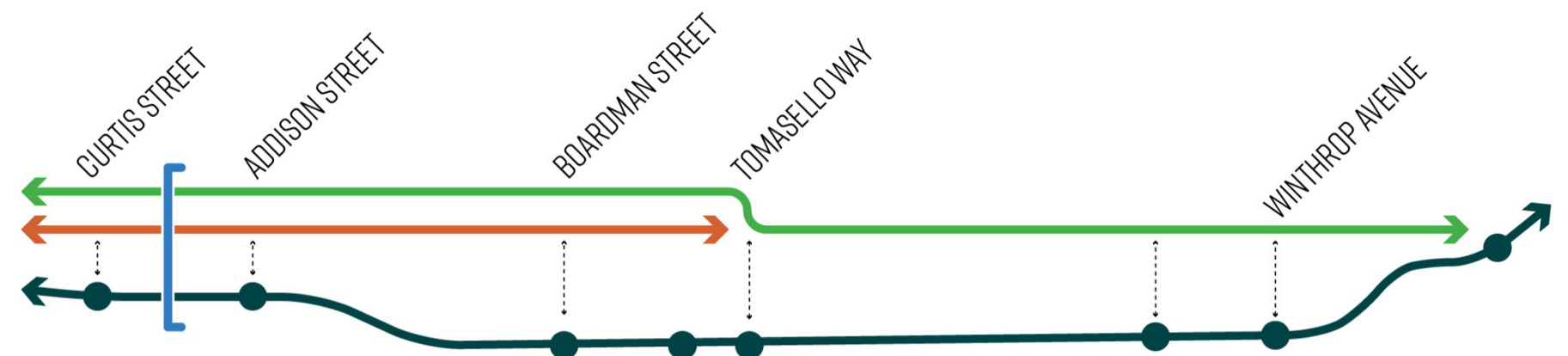
Alternative 2: Bypass with Shared Use Path – Curtis St. to Addison St.



CROSS SECTION DETAIL



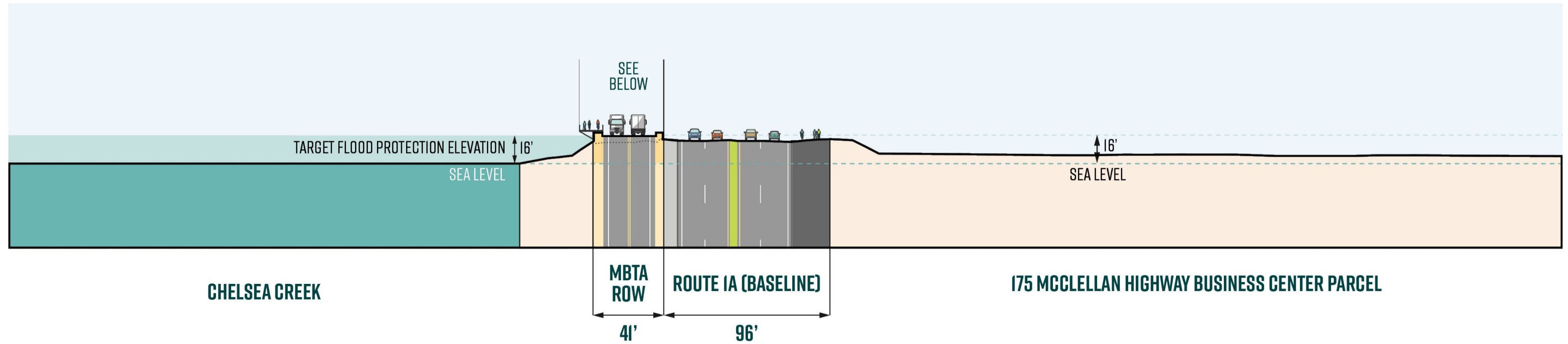
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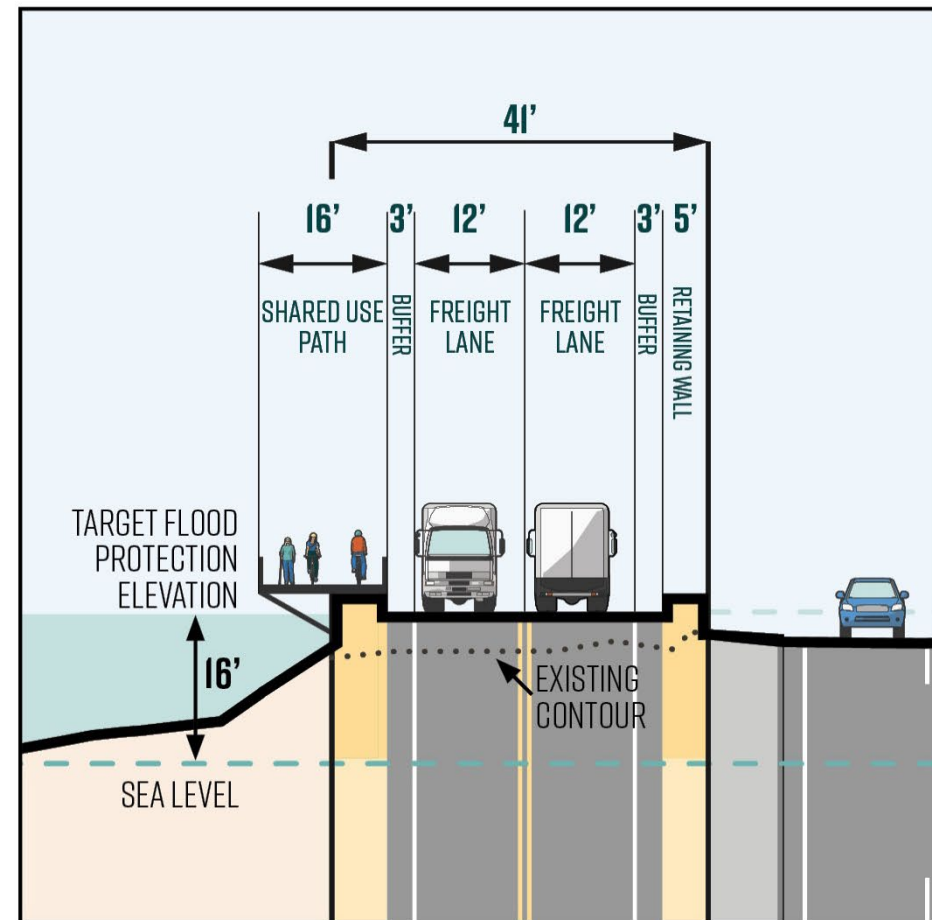
Alternative 2: Bypass with Path – North of Addison St. to Boardman St.



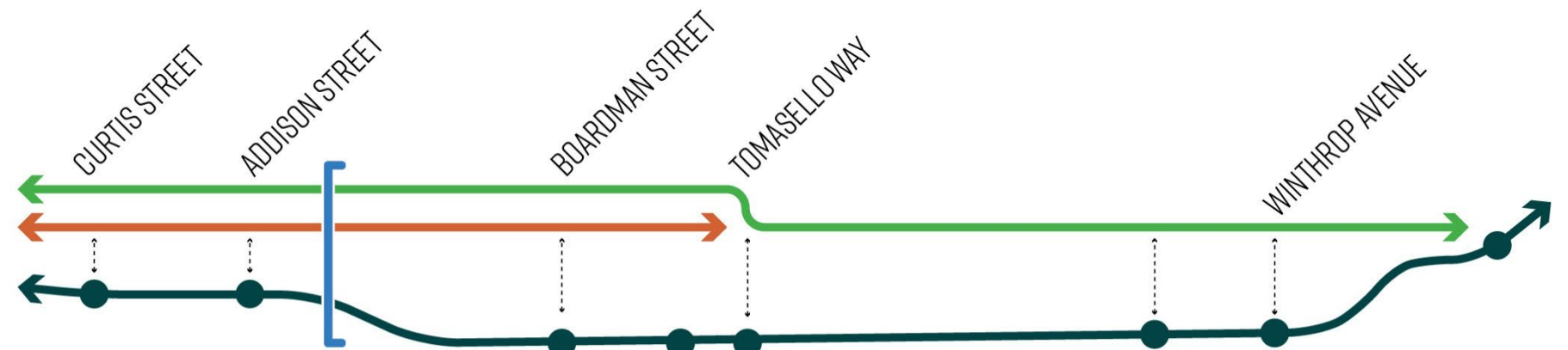
Alternative 2: Bypass with Shared Use Path – North of Addison Street



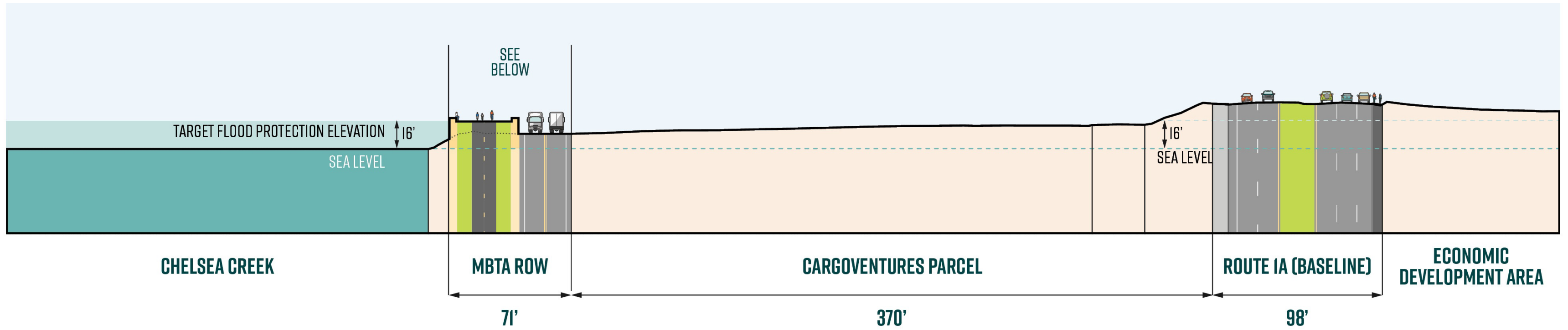
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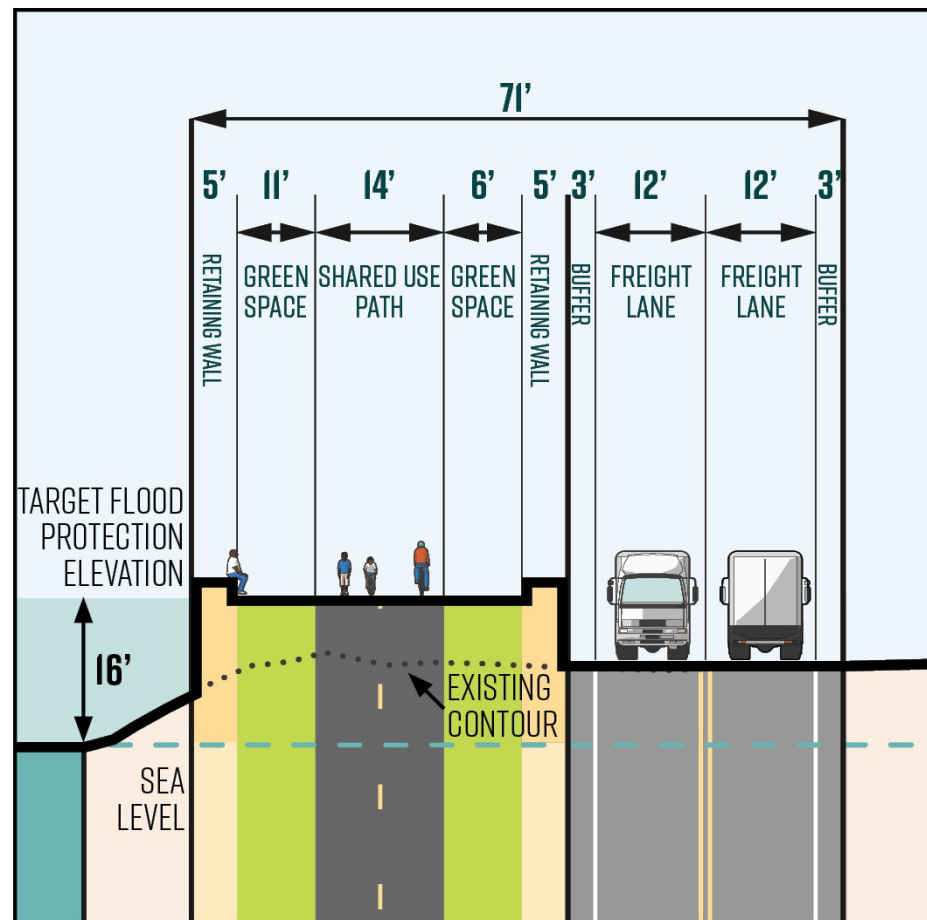
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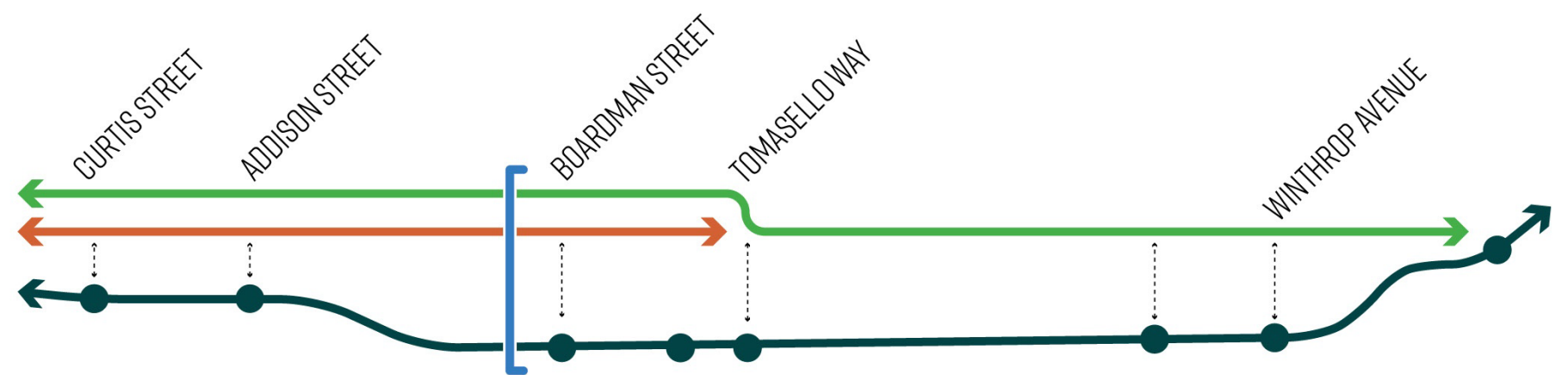
Alternative 2: Bypass with Shared Use Path – South of Boardman St.



CROSS SECTION DETAIL

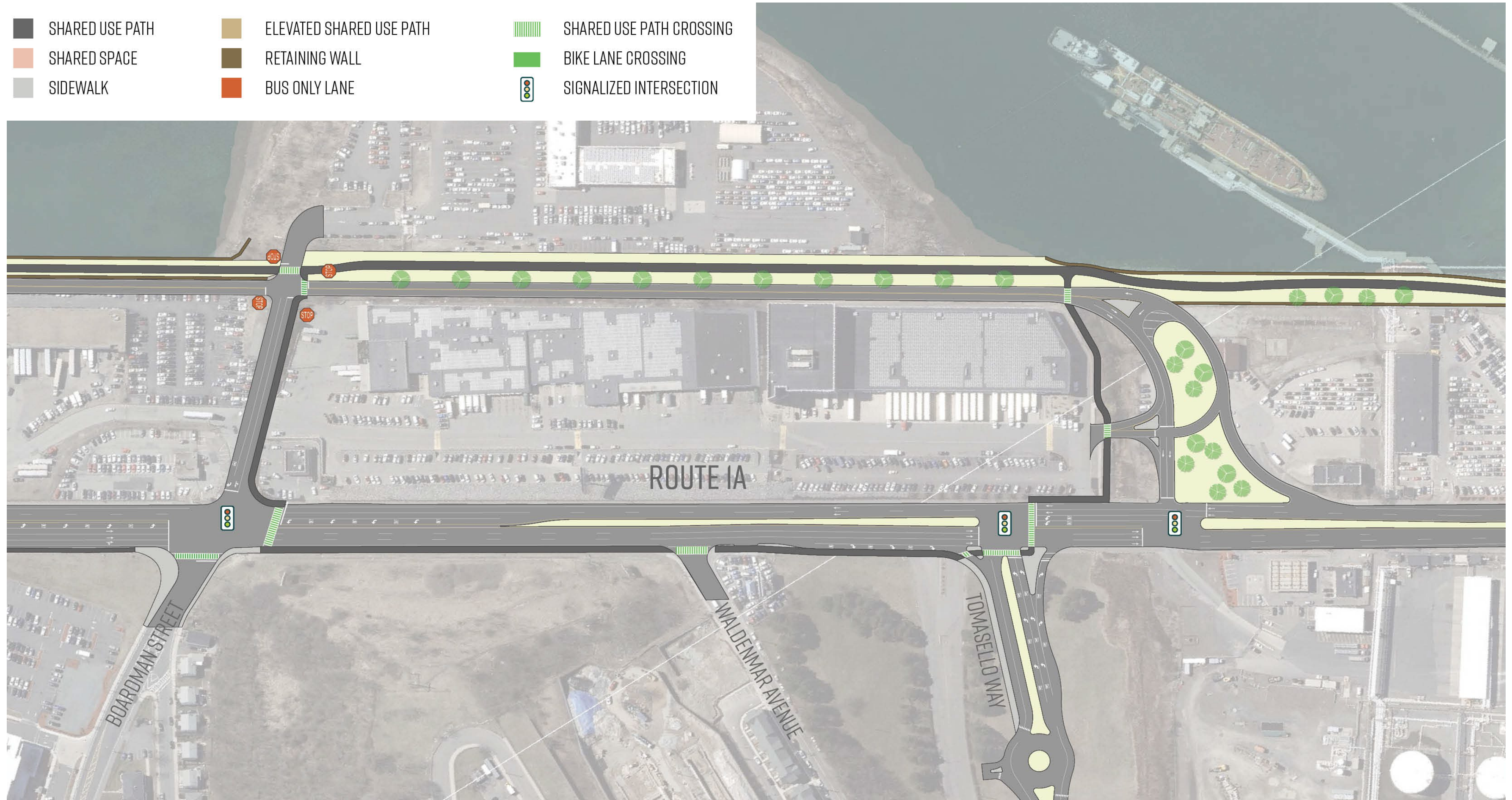


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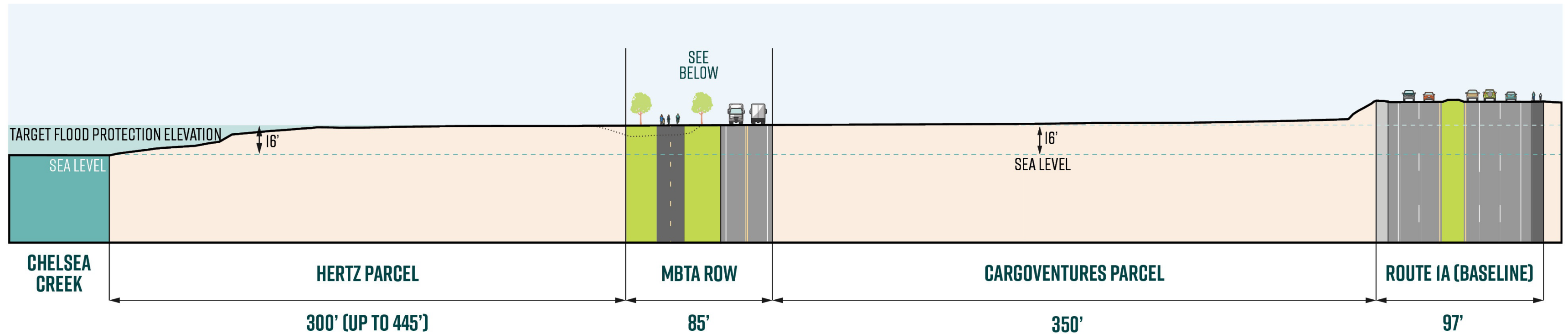


Alternative 2: Bypass with Path – Boardman Street to Tomasello Way

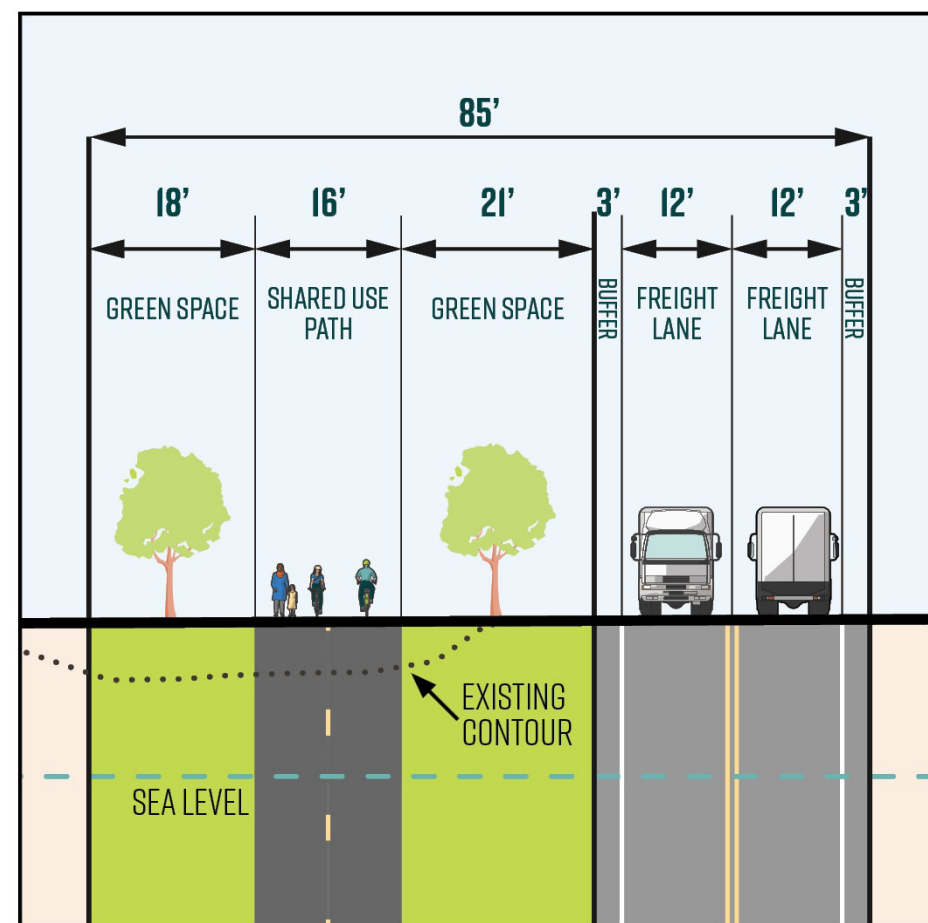
- SHARED USE PATH
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- SIDEWALK
- ELEVATED SHARED USE PATH
- RETAINING WALL
- BUS ONLY LANE
- SHARED USE PATH CROSSING
- BIKE LANE CROSSING
- SIGNALIZED INTERSECTION



Alternative 2: Bypass with Shared Use Path – South of Tomasello Way



CROSS SECTION DETAIL



LOCATION ALONG CORRIDOR

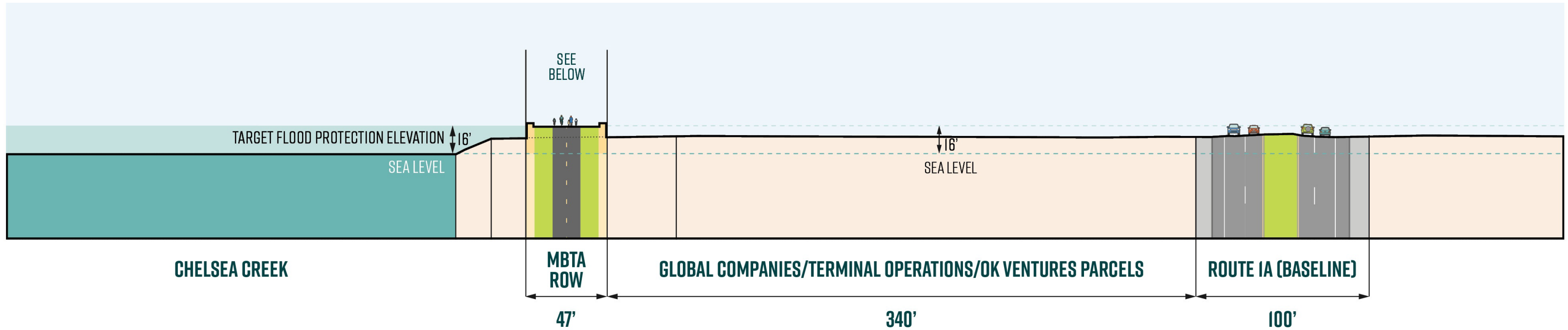


Both Alternatives – North of Tomasello Way to Railroad Street

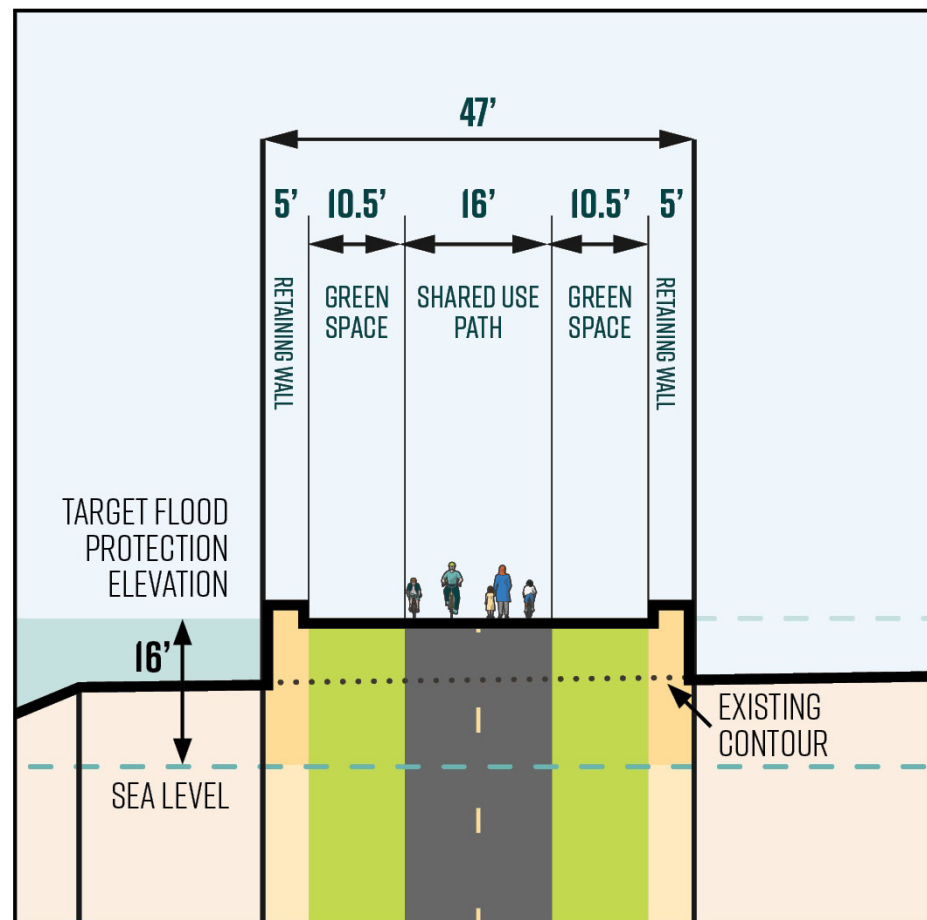
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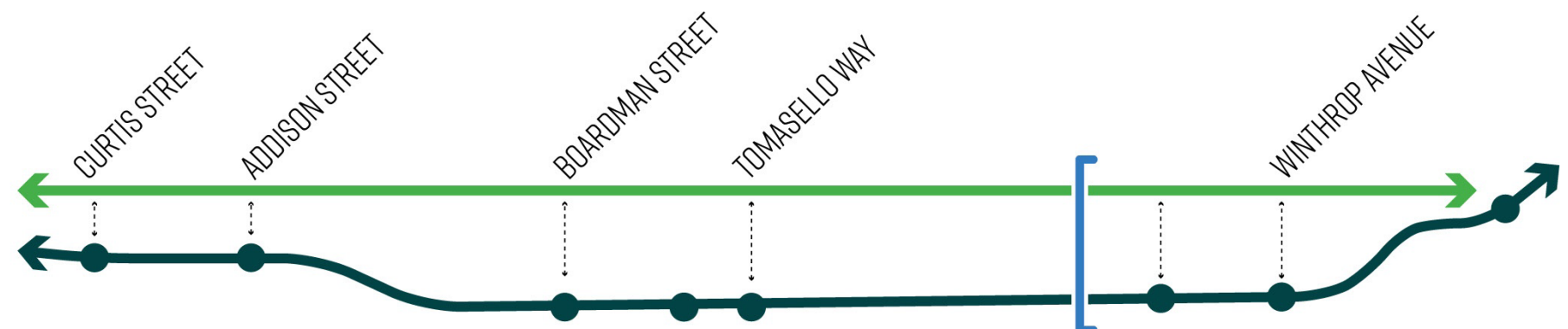
Both Alternatives – South of Railroad Street



CROSS SECTION DETAIL



LOCATION ALONG CORRIDOR



Both Alternatives – Railroad Street to Winthrop Avenue



Bell Circle Connections – Option A (Harris Street)




Bell Circle Connections – Option B (Revere Beach Parkway)





Evaluation of Alternatives

Evaluation of Goals and Metrics Relative to Baseline

Goal	Metric	Alternative 1 – Path Only	Alternative 2 – Bypass + Path
Safety	 Crash Modification Factors	Somewhat Better	Somewhat Better
Safety	Pedestrian Comfort (Level of Crossing Stress)	Better than Base	Somewhat Better
Safety	Bicycle Comfort (Leve of Traffic Stress)	Better than Base	Somewhat Better
Connectivity	Truck Volumes	Comparable to Base	Somewhat Better
Connectivity	Intersection Operations	Comparable to Base	Somewhat Better
Connectivity	Employment Access	Somewhat Better	Somewhat Better
Resilience	Flood Protection	Somewhat Better	Somewhat Better
Resilience	Heat Island	Better than Base	Somewhat Better
Resilience	Restored / Improved Natural Resources	Better than Base	Somewhat Better
Equity	Truck Impacts on Noise & Air Quality – Residents	Comparable to Base	Somewhat Better
Equity	Truck Impacts on Noise & Air Quality – Path Users	Somewhat Better	Somewhat Worse
Equity	Public Health (Access to Recreation, Natural Resources)	Better than Base	Somewhat Better
Feasibility	Cost	Somewhat Worse	Worse
Feasibility	Permitting	Somewhat Worse	Somewhat Worse

Legend



Better than Baseline



Somewhat Better



Comparable to Baseline



Somewhat Worse



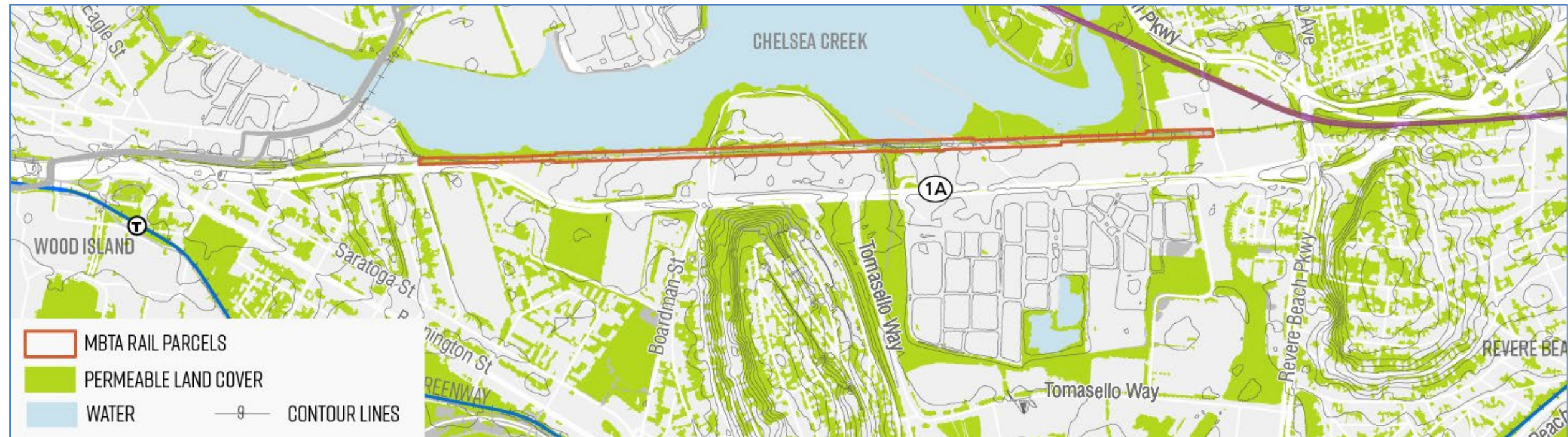
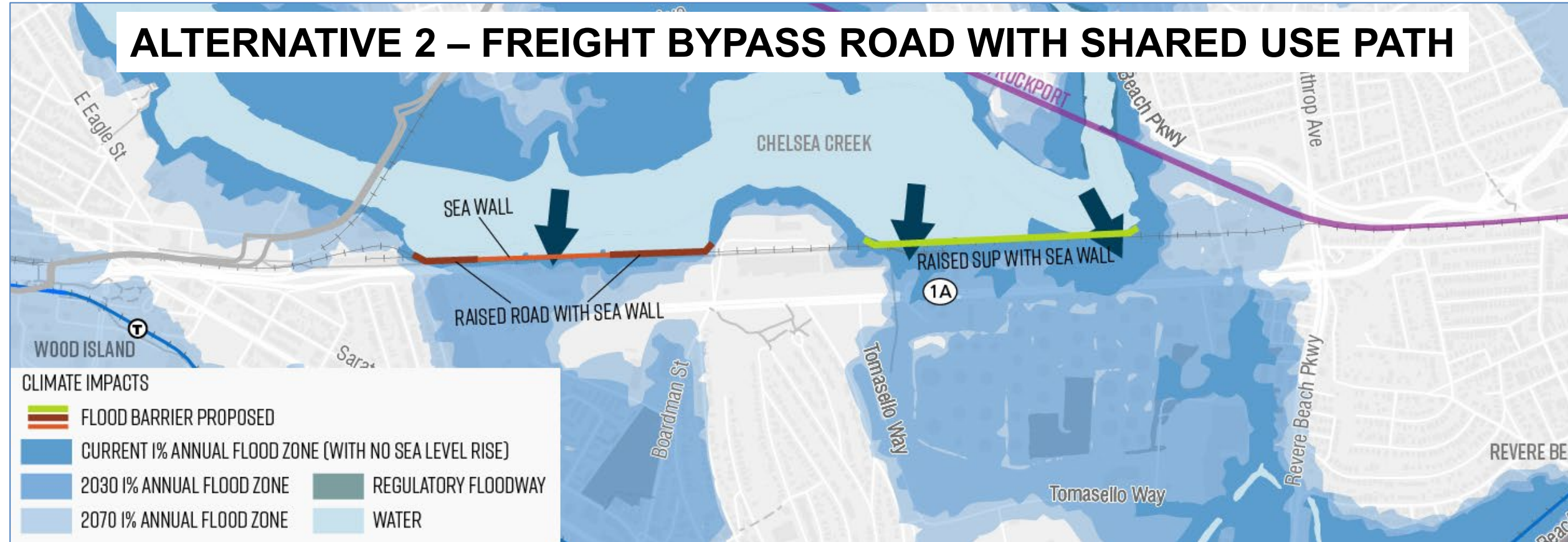
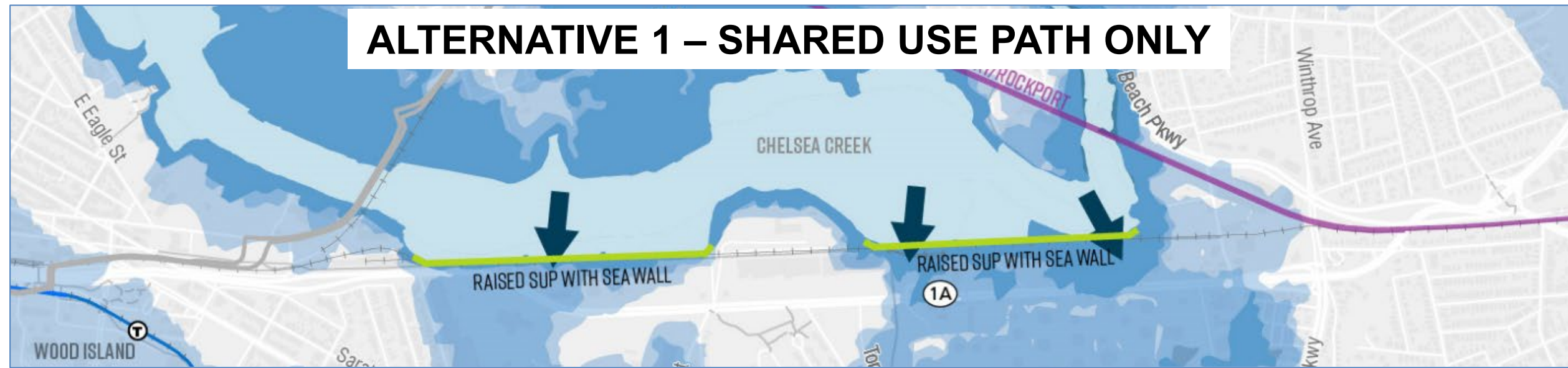
Worse

Resilience

Both alternatives provide flood protection for 2070 sea level rise

Alternative 1 provides 3.4 acres of additional green space

- Less pavement, more permeable cover for drainage, flood control
- More green space reduces heat island effect
- Better access to recreation and natural resources



Truck Diversions from Route 1A to Bypass Road – Alternative 2

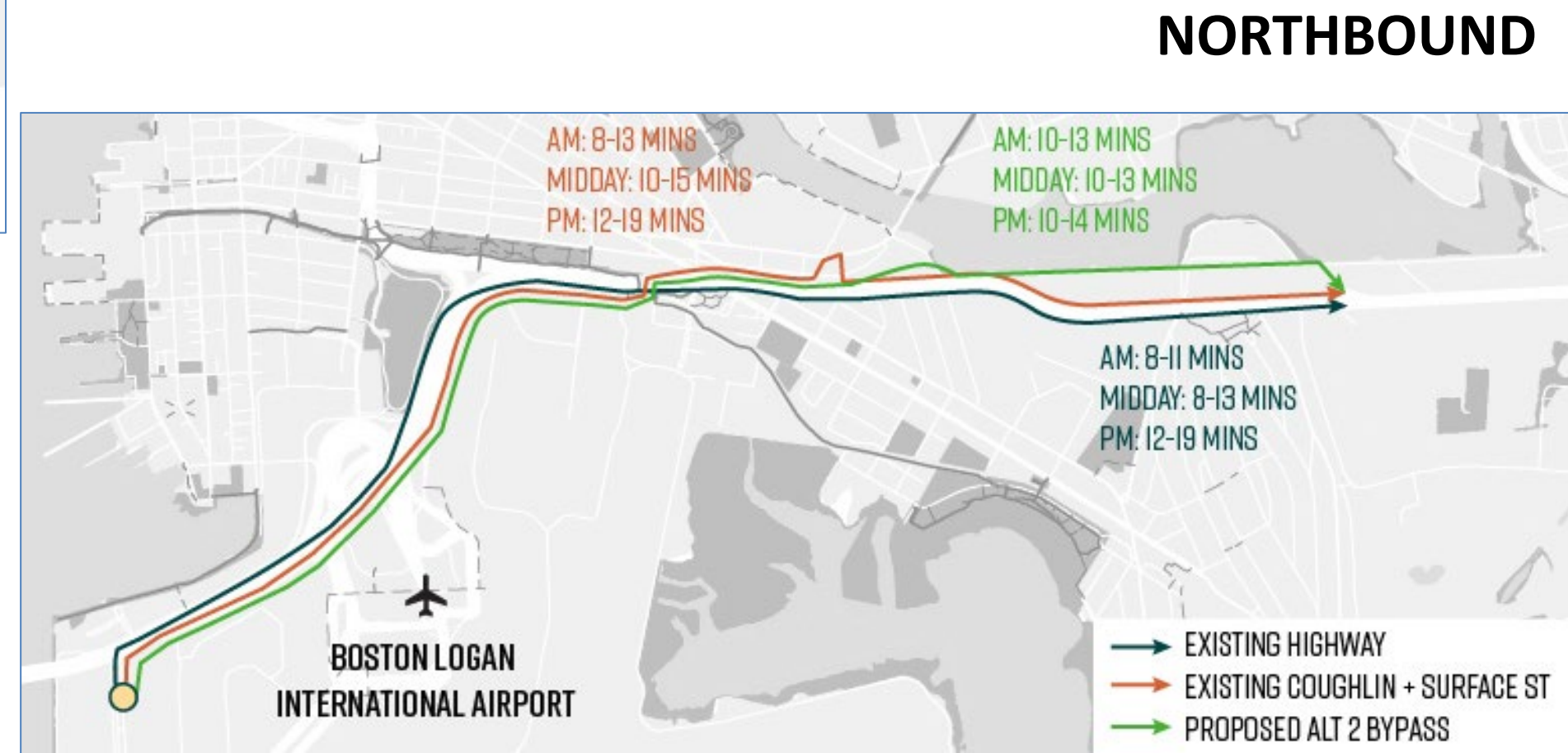
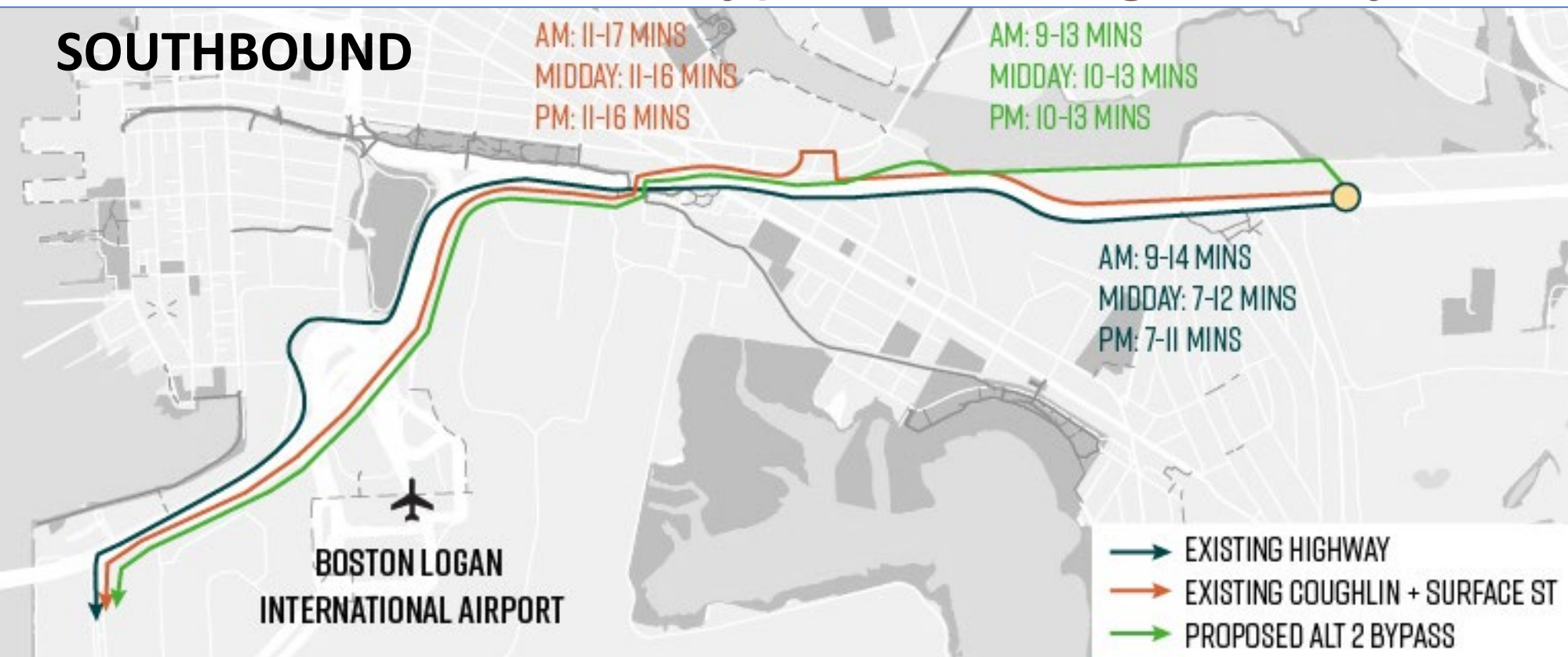
2040 Traffic Projections	AM Peak Hour	PM Peak Hour	Daily
SB Trucks – Bypass Road	67	53	1,047
SB Trucks – Route 1A	42	63	1,721
SB Total Route 1A Traffic	2,427	2,449	44,824
NB Trucks – Bypass Road	42	50	821
NB Trucks – Route 1A	123	86	1,801
NB Total Route 1A Traffic	1,646	2,830	38,722

Note: 2040 travel conditions, development, travel times, and truck volumes assumed for this analysis. Current travel patterns of freight vehicles informed by StreetLight data.

- Estimated peak hour truck diversions to Bypass Road in 2040
 - ~42 – 67 trucks would use new bypass road during each peak hour
 - Heavier SB demand for Bypass (AM = 61%, PM = 46%) than NB (AM = 25%, PM = 37%)
- Estimated daily truck diversions to Bypass Road in 2040
 - ~1,870 trucks would use the new Bypass Road on a daily basis
 - ~35% of Route 1A truck traffic, ~2% Route 1A total traffic in 2040

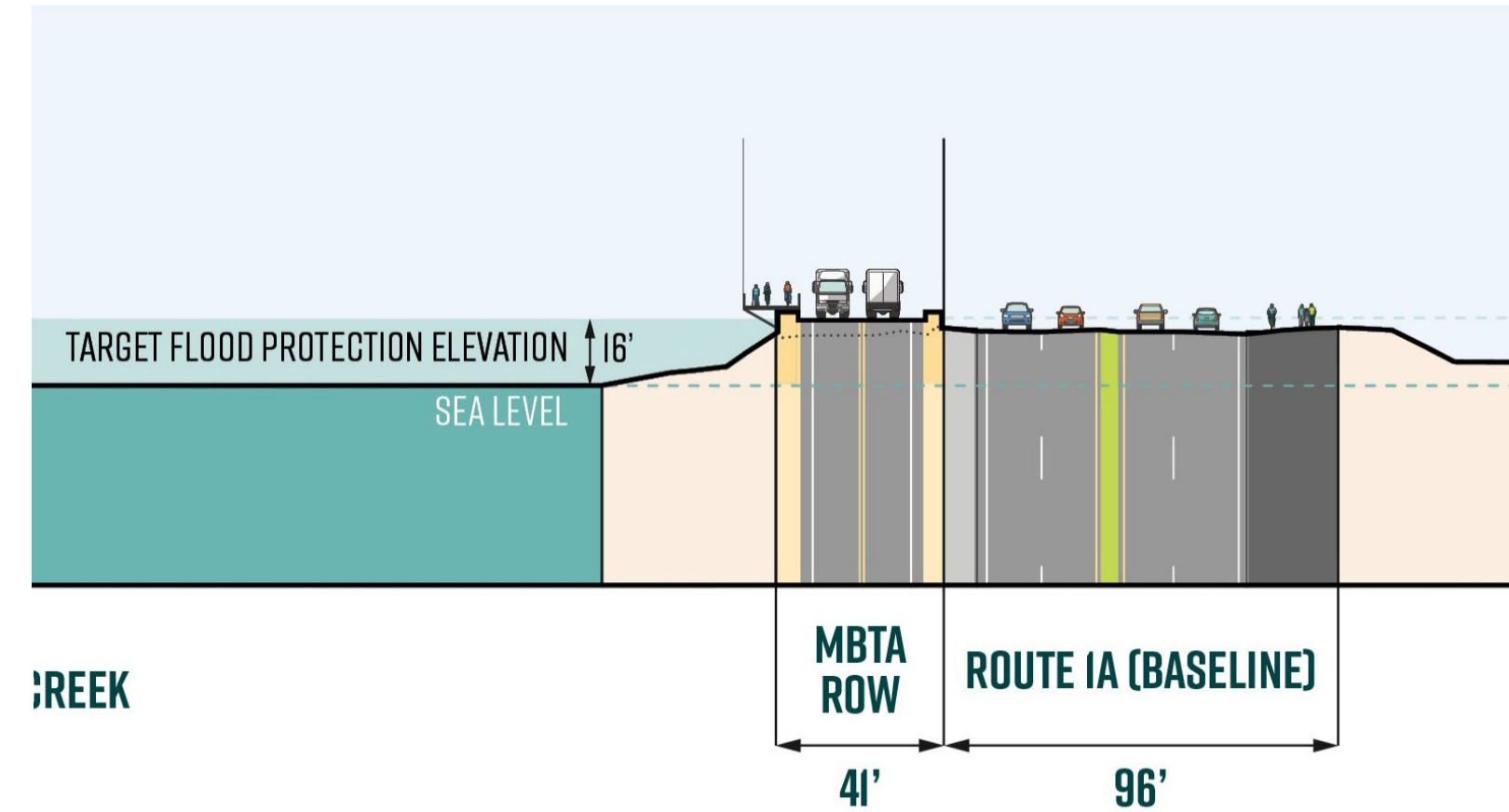
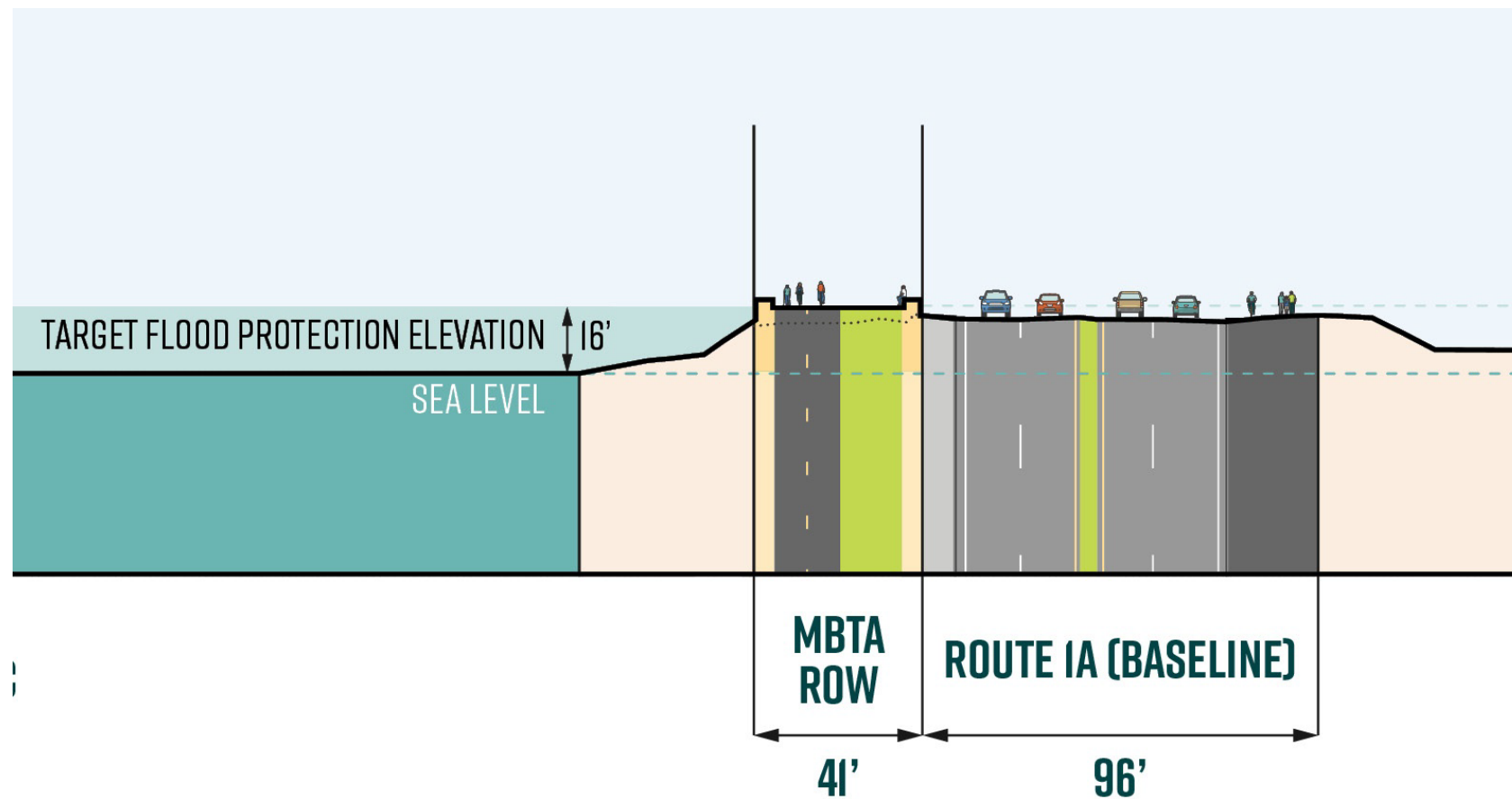
Truck Diversions to Bypass Road – Alternative 2: Travel Time Analysis

- Diversions based on vehicle travel times
- Travel times between jughandle and Airport shorter on Bypass Road during peak directional periods (Southbound AM, Northbound PM), otherwise shorter via Route 1A
- Travel times on Bypass Road generally more reliable due to separation from road network



Potential for Transit Access

- Future Baseline
 - Bus Network Redesign eliminates Route 1A bus service
 - Current land use, zoning not conducive to transit demand
- Alternative 1 – Shared Use Path Only
 - No separate roadway for potential transit use
 - Transit priority would require use of Route 1A
- Alternative 2 – Bypass Road with Path
 - Bypass Road could allow transit vehicles
 - Potential for transit priority away from Route 1A congestion



Safety – Crash Modification

Both alternatives provide safety improvements

- Separation of Route 1A SB from Curtis Street and off-ramp
- Improved signalization of Addison Street

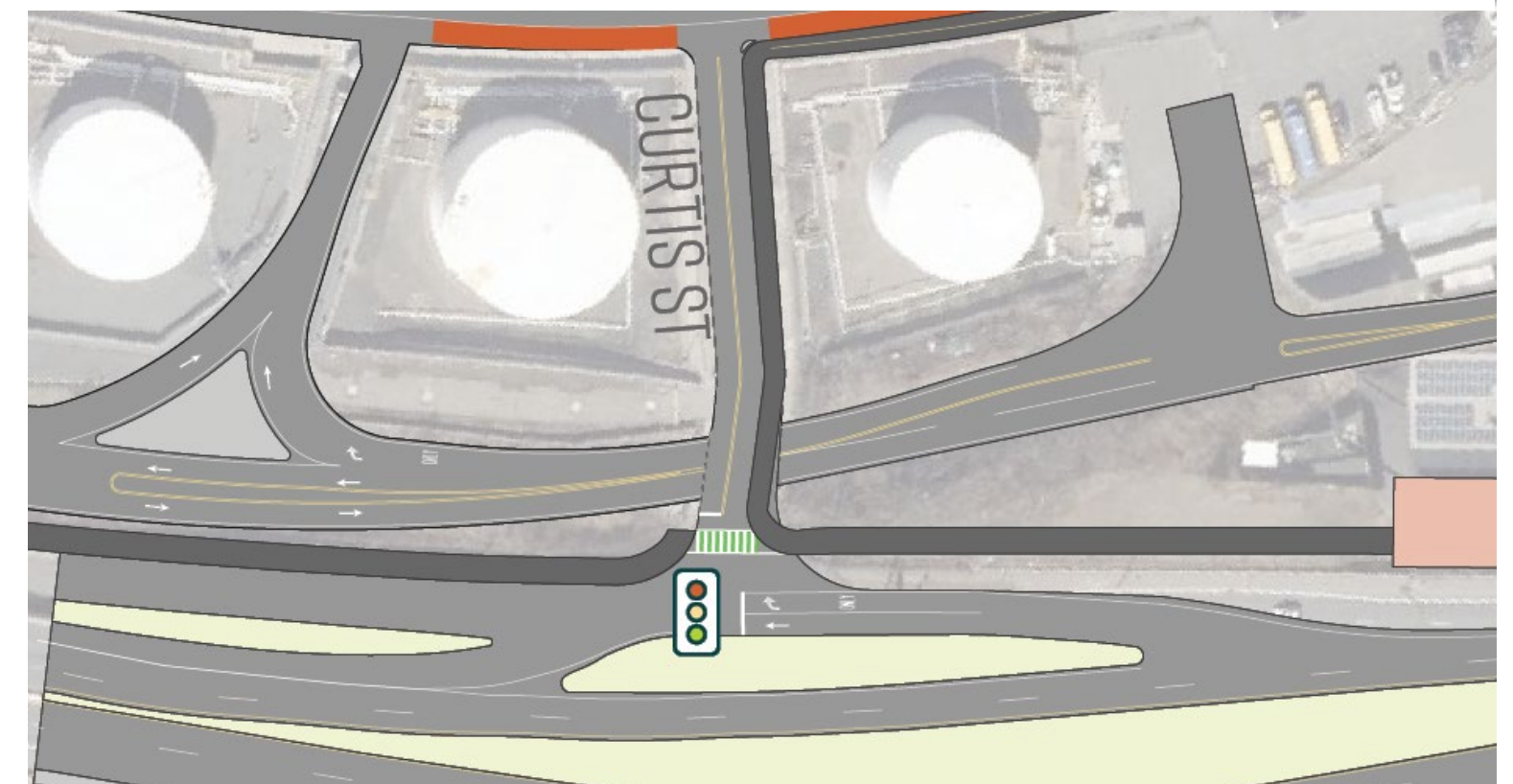
Alt. 1 reduces conflicts compared to Alt. 2

- Alternative 1: Shared use path crosses Curtis Street below grade
- Alternative 2 has greater ped – bike conflicts
 - Shared use path crosses Curtis Street at grade, with heavy truck and general traffic conflicts
 - Bypass Road creates four new ped – bike conflicts with trucks along shared use path

ALT. 1 – SHARED USE PATH ONLY

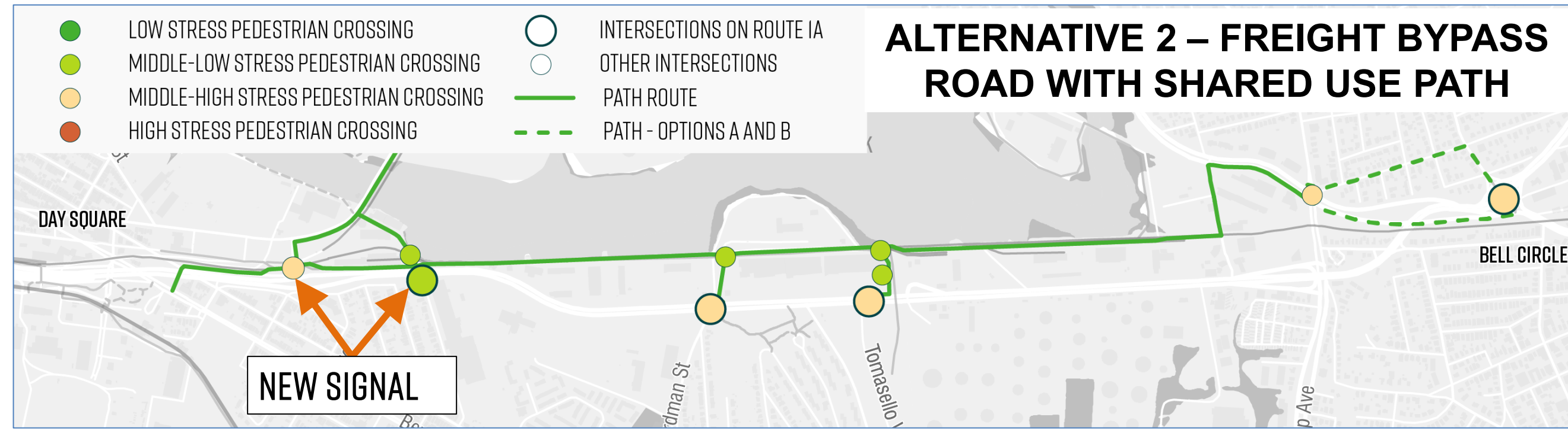
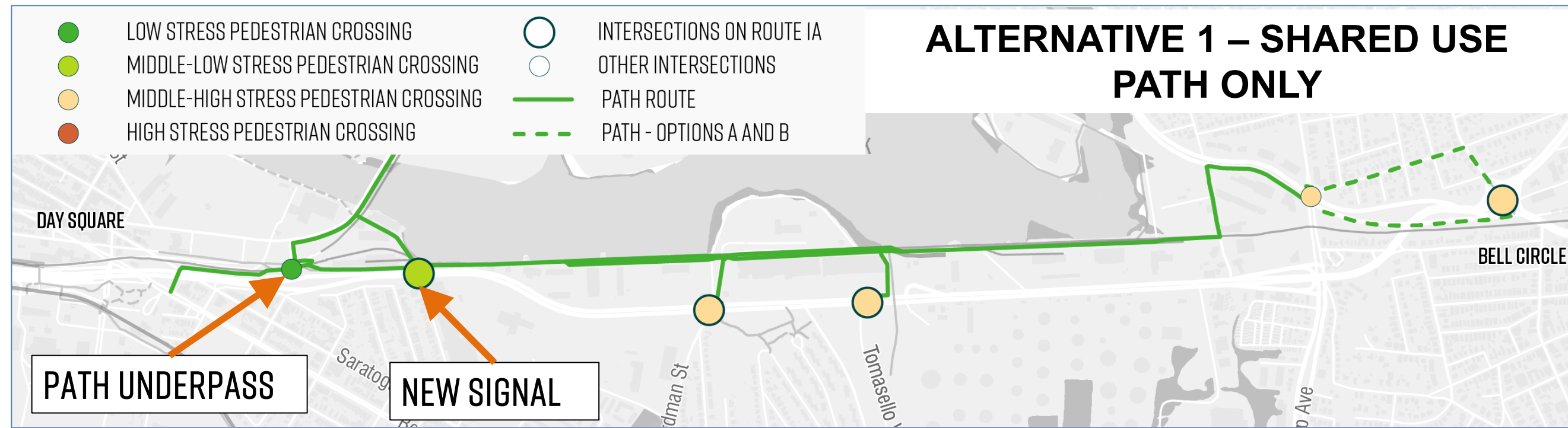
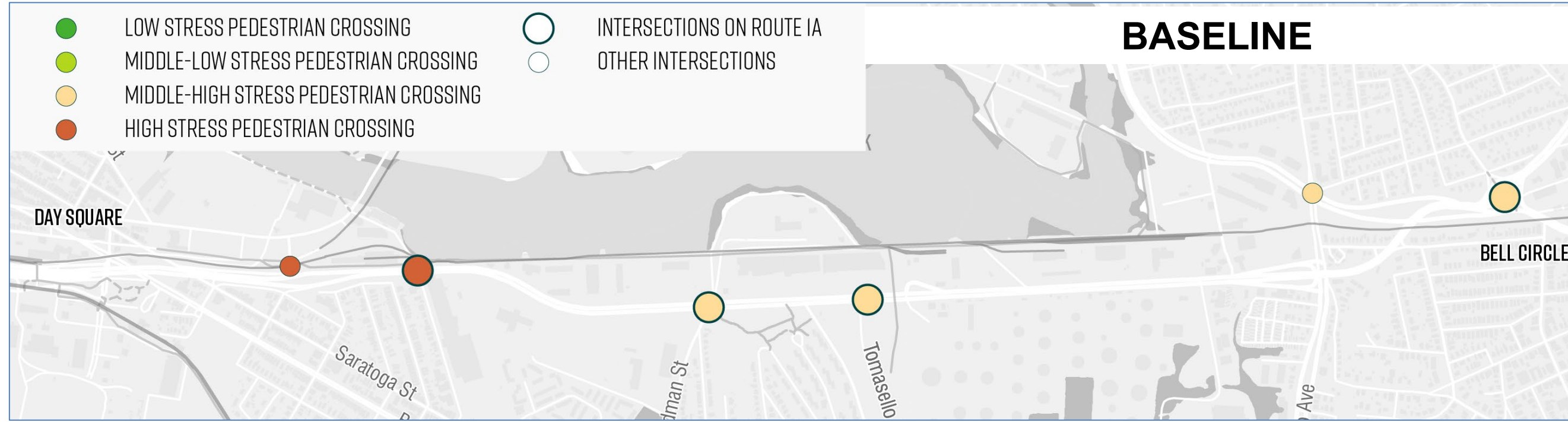


ALT. 2 – FREIGHT BYPASS ROAD WITH SHARED USE PATH



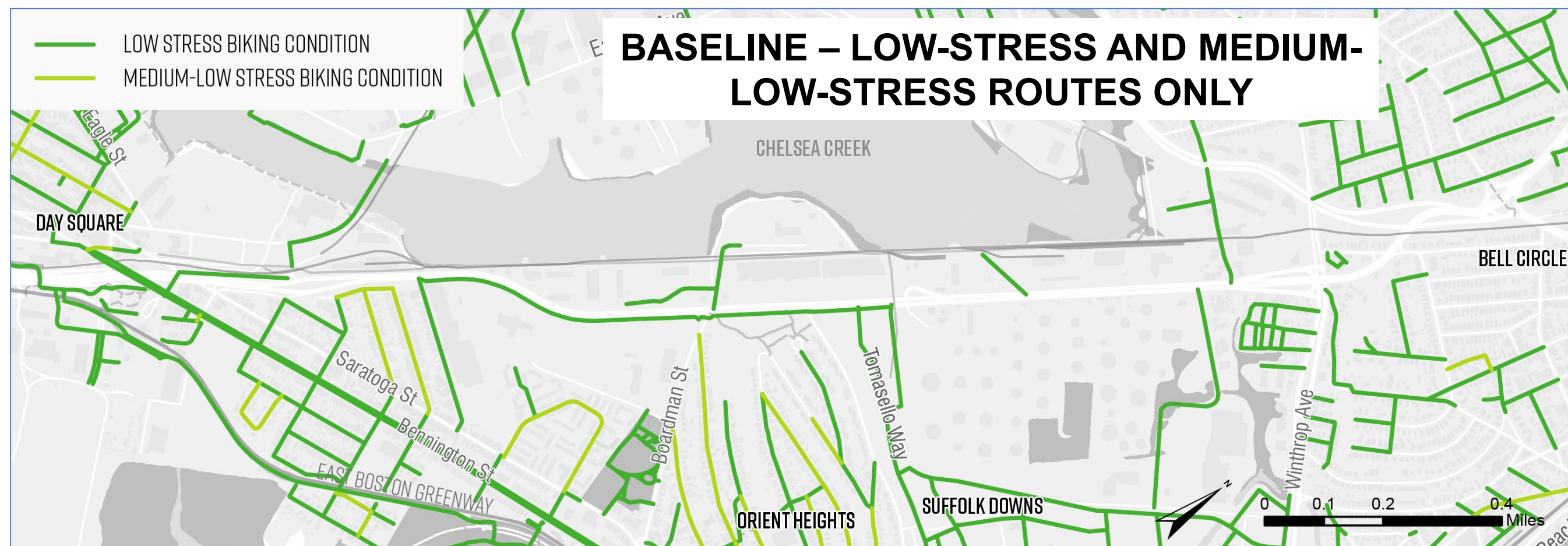
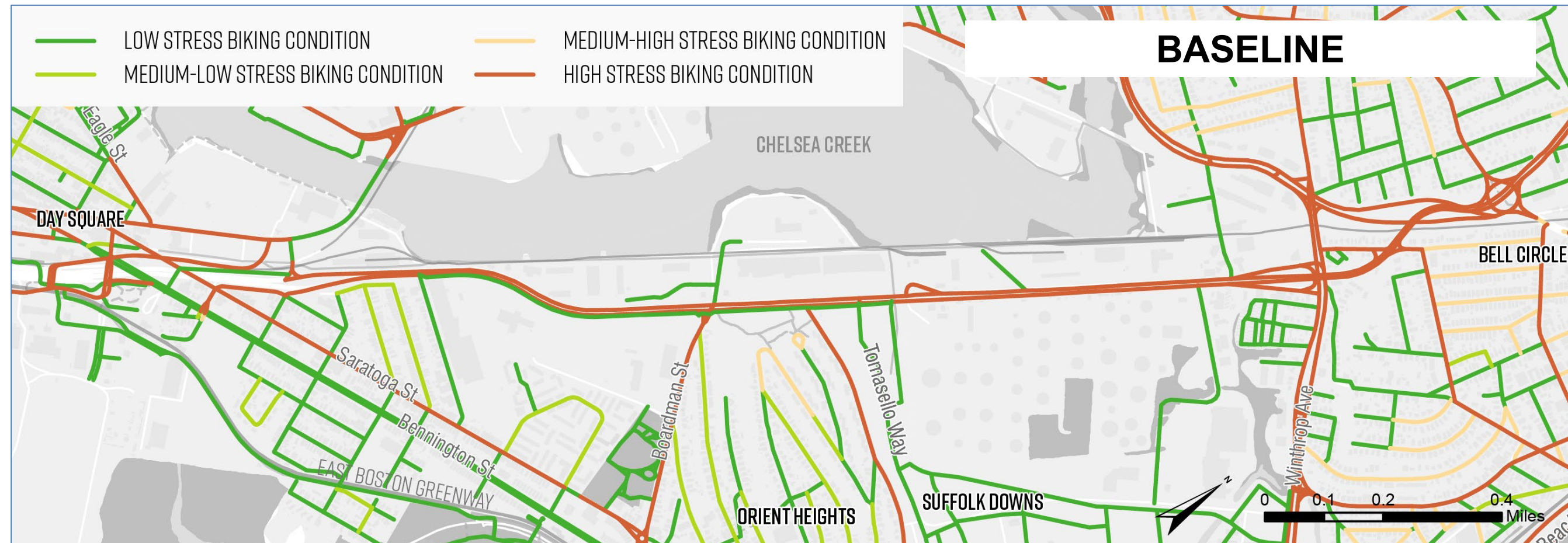
Pedestrian Crossing Comfort

- Number of crossings and pedestrian comfort based on lanes, traffic volume, speed, proximity
- Baseline condition has high stress crossings throughout corridor and on side streets
- Alternative 1 – Crossing conditions improved by signal at Addison Street and Curtis Street underpass
- Alternatives 2 – Signals at Addison Street and Curtis Street, 4 added path crossings of Bypass Road



Bicycling Comfort

- Bicycling comfort based on type of bike facility, number of lanes, traffic volume, traffic speed, proximity
- Baseline condition has high bicycling stress
- Only low-stress route in corridor in Baseline condition is shared use path along east side of Route 1A (Addison – Tomasello) proposed as Suffolk Downs mitigation



Bicycling Comfort

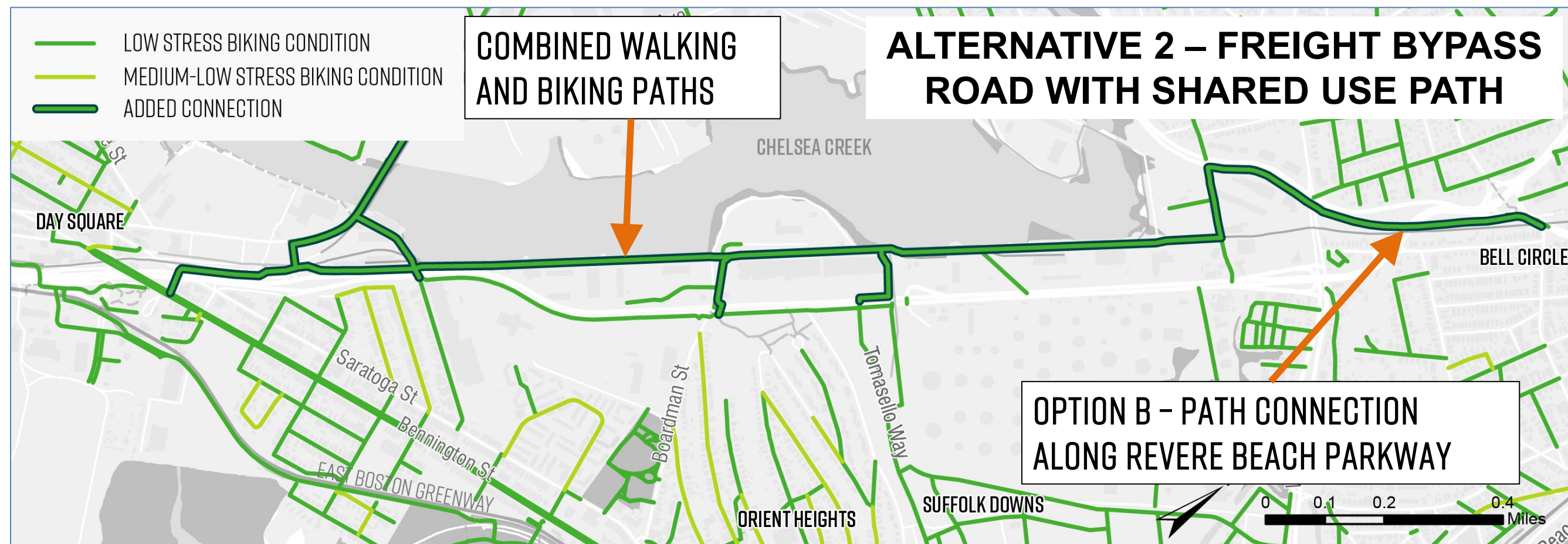
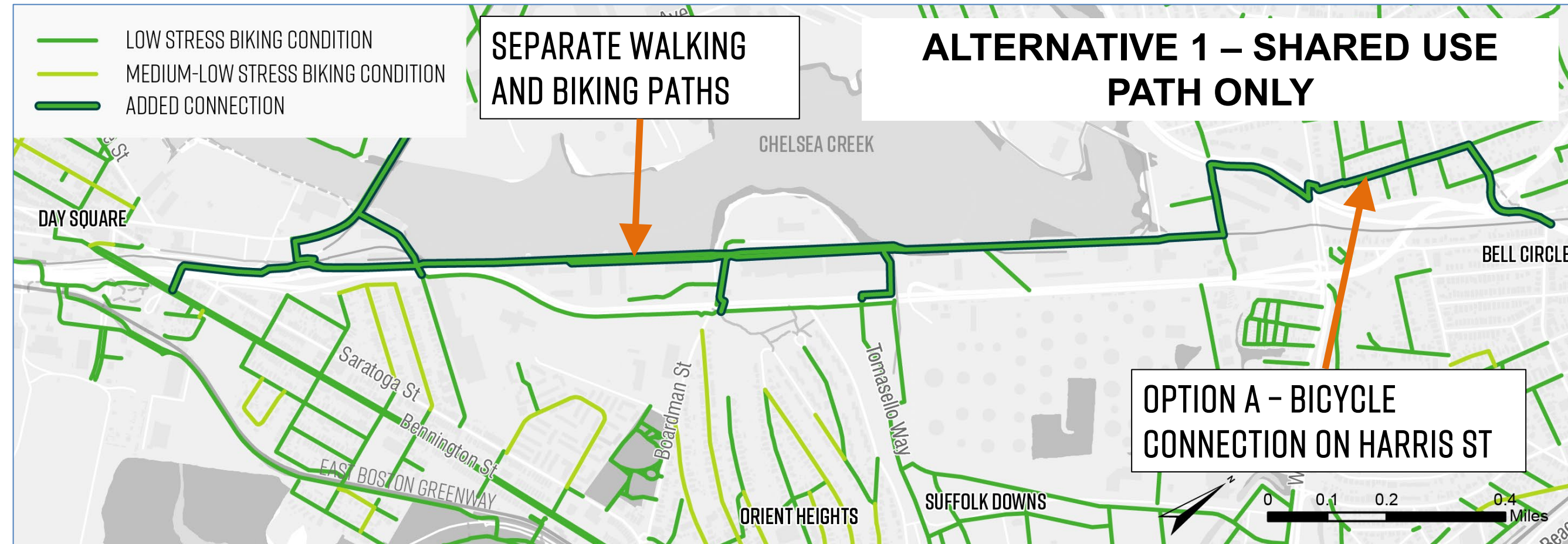
- Both alternatives provide continuous path throughout the study corridor

Alternative 1

- Provides separate biking and walking paths, more park space, greater comfort

Alternative 2

- Narrower combined walking and biking path adjacent to Bypass Road, less comfort
- Bell Circle Option A:** Sharrows on Harris Street, better connection to west side
- Bell Circle Option B:** Separated shared use path on Revere Beach Parkway ramp



Safety – Pedestrian and Bicycle Comfort/Level of Stress on Path

Alternative 1 provides higher level of pedestrian and bicycle comfort

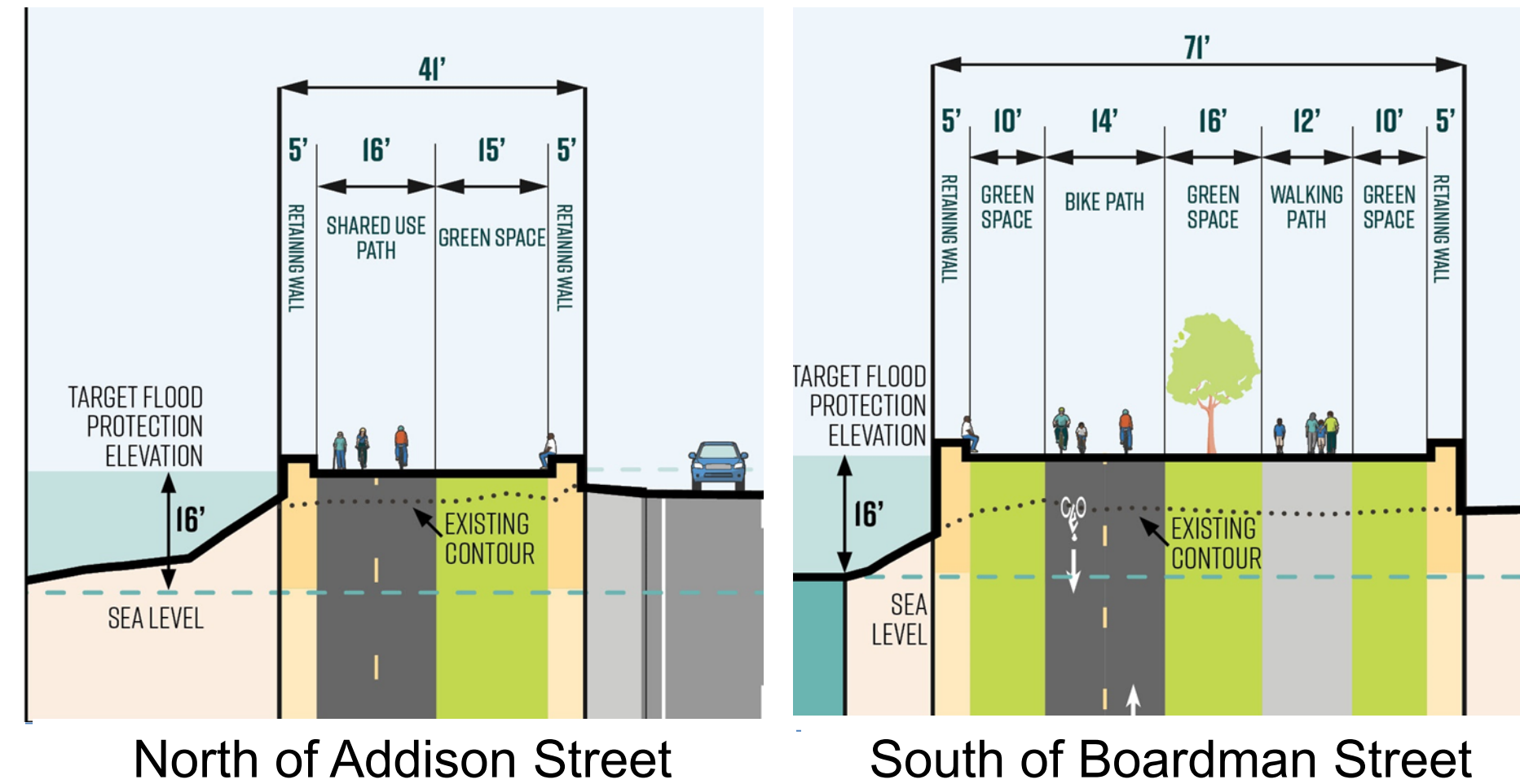
- More open space provided, buffer between shared use path and traffic
- Adequate space for separate walking and biking paths
- Allows for path underpass at Curtis Street

In Alternative 2, Bypass Road constrains path

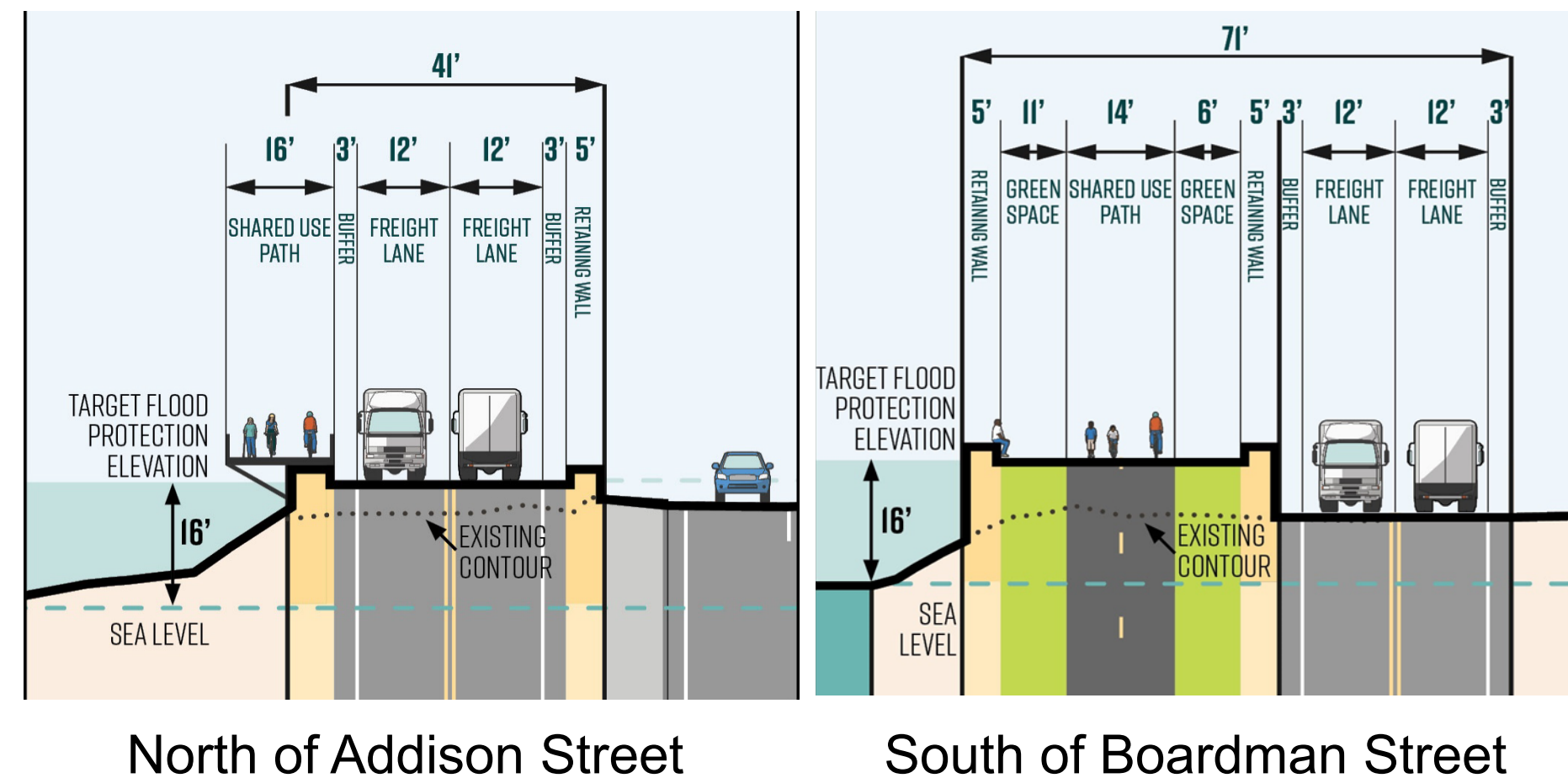
- Need for cantilevered section + seawall
- Proximity of trucks to path users



ALT. 1 – SHARED USE PATH ONLY



ALT. 2 – FREIGHT BYPASS ROAD WITH SHARED USE PATH



Equity – Truck Impacts on Noise and Air Quality

Alternative 1 better for path users

- Lack of trucks and separation from all traffic (~400' for most of corridor length)
- Quieter, cleaner user experience

Alternative 2 better for East Boston residents

- Bypass Road lowers truck volumes along Route 1A by ~35% south of Tomasello
- Benefit in noise and air quality for residents at the western end of Orient Heights neighborhood



East Boston Greenway



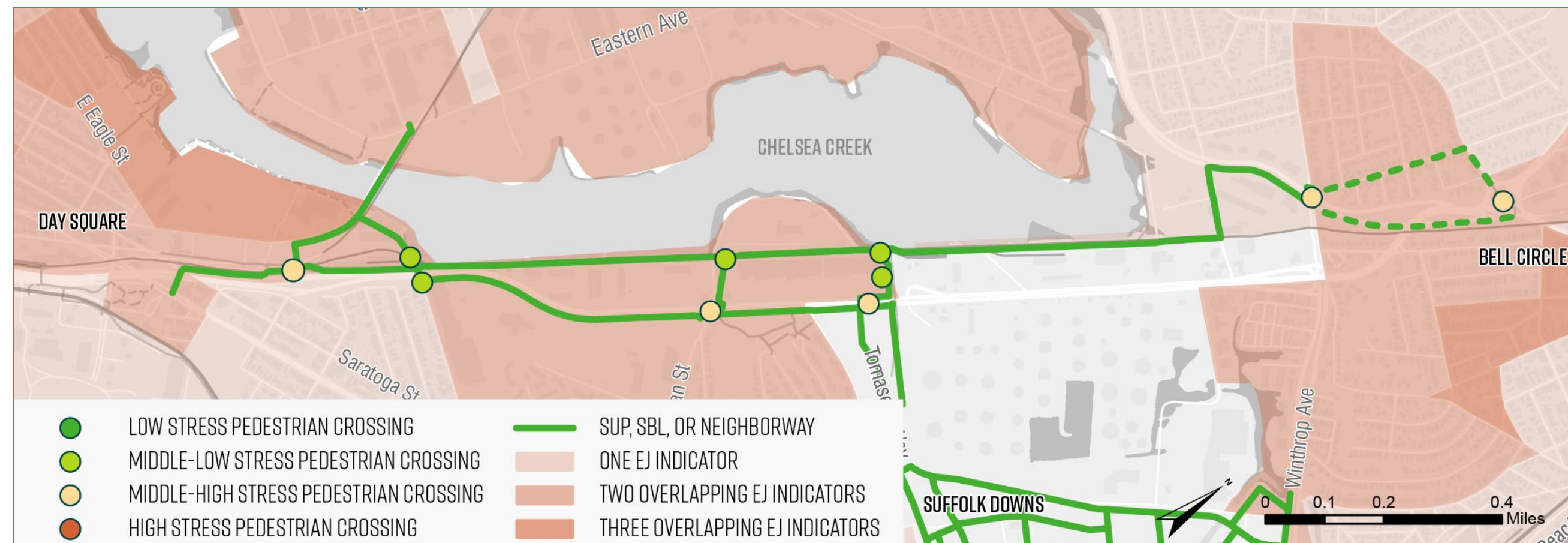
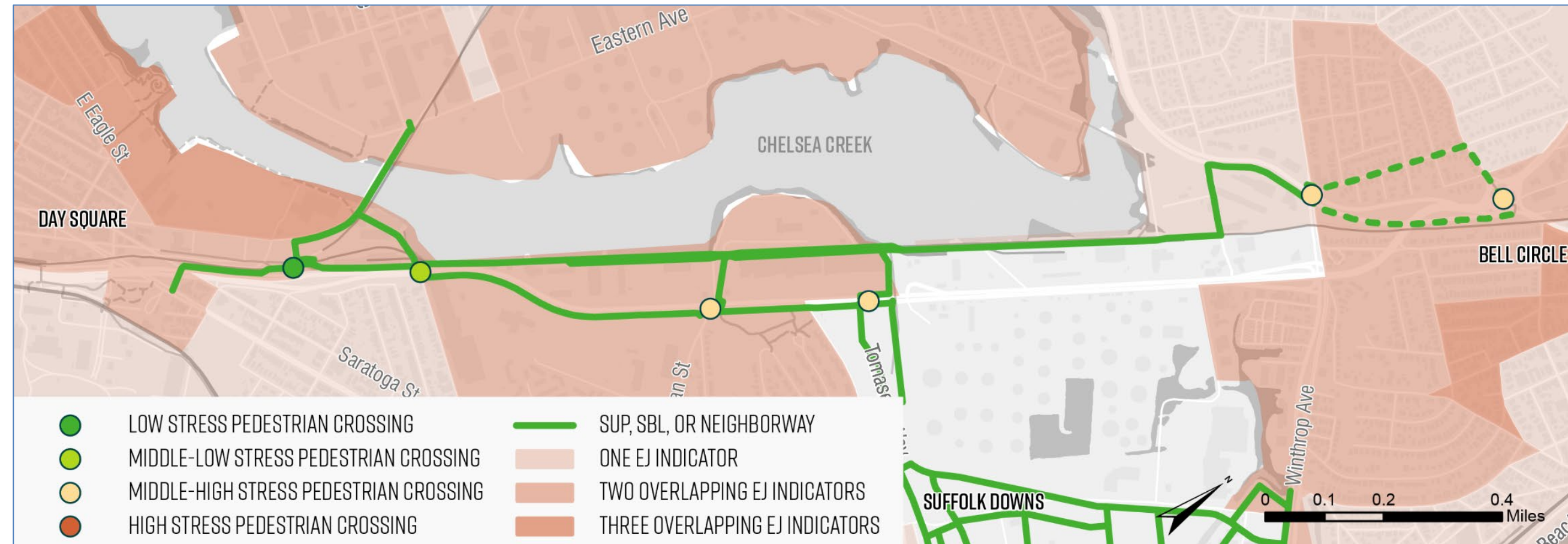
North Greeley Separated Bike Path in Portland, OR (Source: Jonathan Maus)

Equity – Environmental Justice (EJ)

Both alternatives provide better neighborhood connections for EJ communities

Alternative 1 would provide better recreation, access to natural resources for EJ communities

- Less crossing conflicts and lower crossing stress
- More green space along path, reduced heat island
- Better Chelsea Creek access



Capital Costs – Both Alternatives

Major Components

- Common elements in both alternatives
 - Shared use path and traffic controls
 - Seawall sections
 - Railroad St. Bridge over Commuter Rail
 - Soil disposal allowance
- High contingencies for planning estimate

Alternative 2 cost is \$35.5M (50%) higher

- Largest cost increment from cantilevered path (4,200 feet)
- Roadway is also a significant increase

Option A vs. Option B – Northern Path

- Negligible difference in capital cost

Order of Magnitude Estimates (\$ 2022 Millions)

MAINLINE ALTERNATIVE	ALT. 1	ALT. 1	ALT. 2	ALT. 2
	Shared Use Path Only	Shared Use Path Only	Bypass Road & Path	Bypass Road & Path
BELL CIRCLE APPROACH	A	B	A	B
	(Harris Street)	(Revere Beach Pkwy)	(Harris Street)	(Revere Beach Pkwy)
Common Elements	33.1	33.2	33.3	33.4
Cantilever Path along Creek	--	--	10.1	10.1
Freight Bypass Road	--	--	6.5	6.5
CONSTRUCTION SUBTOTAL	33.1	33.2	49.9	50.0
10% Police Detail	3.3	3.3	5.0	5.0
20% Utilities	6.6	6.6	10.0	10.0
40% Design Contingency	13.2	13.2	20.0	20.0
40% Construction Contingency	13.2	13.2	20.0	20.0
Soil Allowance	1.5	1.5	1.5	1.5
TOTAL CAPITAL COST	70.9	71.0	106.4	106.5

Anticipated Permits

Major Issues

- Most issues related to Chelsea Creek
- Berm would introduce new fill into creek
 - Significant permitting challenge

Federal Level

- Construction has potential to affect wetlands, water quality, and stormwater
- Discovery of hazardous materials would trigger EPA involvement

State Level

- Filing required given wetlands and proximity to Low-Income populations
- Anticipate an Environmental Notification Form

AGENCY WITH JURISDICTION	PERMIT OR DECISION NEEDED TO ADVANCE
<i>MA Office of Coastal Zone Management</i>	Coastal Zone Consistency Concurrence
<i>MA Office of Coastal Zone Management</i>	DPA Boundary Coordination
<i>MA Department of Environmental Protection</i>	Chapter 91 (Low Tidelands)
<i>MA Department of Environmental Protection</i>	Order of Conditions (State Wetlands) issued by City Conservation Commission
<i>U.S. Army Corps of Engineers</i>	Section 404 (Federal Wetlands)
<i>U.S. Army Corps of Engineers</i>	Section 401 (Water Quality)
<i>U.S. Environmental Protection Agency</i>	National Pollutant Dispersion Elimination System (Stormwater General Construction Permit)

Evaluation of Goals and Metrics Relative to Baseline

Goal	Metric	Alternative 1 – Path Only	Alternative 2 – Bypass + Path
Safety	Crash Modification Factors	Somewhat Better	Somewhat Better
Safety	Pedestrian Comfort (Level of Crossing Stress)	Better than Base	Somewhat Better
Safety	Bicycle Comfort (Leve of Traffic Stress)	Better than Base	Somewhat Better
Connectivity	Truck Volumes	Comparable to Base	Somewhat Better
Connectivity	Intersection Operations	Comparable to Base	Somewhat Better
Connectivity	Employment Access	Somewhat Better	Somewhat Better
Resilience	Flood Protection	Somewhat Better	Somewhat Better
Resilience	Heat Island	Better than Base	Somewhat Better
Resilience	Restored / Improved Natural Resources	Better than Base	Somewhat Better
Equity	Truck Impacts on Noise & Air Quality – Residents	Comparable to Base	Somewhat Better
Equity	Truck Impacts on Noise & Air Quality – Path Users	Somewhat Better	Somewhat Worse
Equity	Public Health (Access to Recreation, Natural Resources)	Better than Base	Somewhat Better
Feasibility	Cost	Somewhat Worse	Worse
Feasibility	Permitting	Somewhat Worse	Somewhat Worse

Legend



Better than Baseline



Somewhat Better



Comparable to Baseline



Somewhat Worse



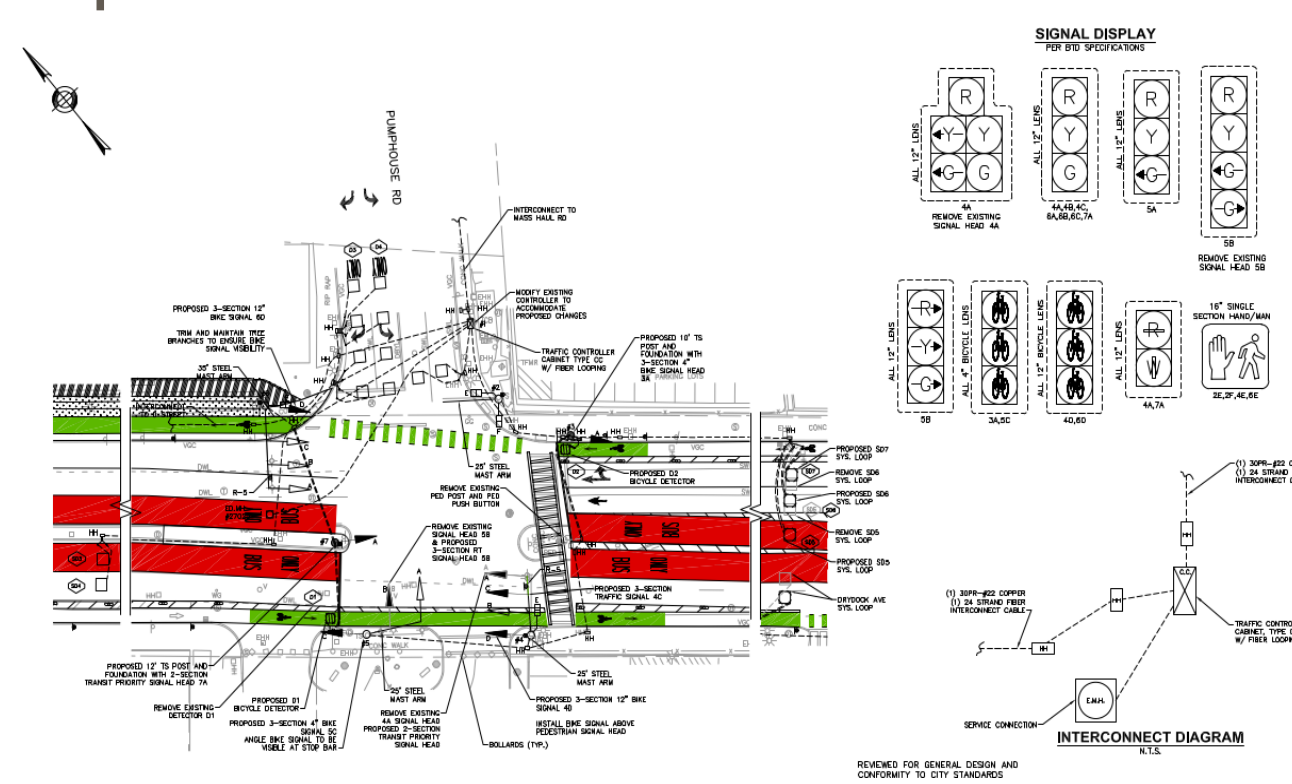
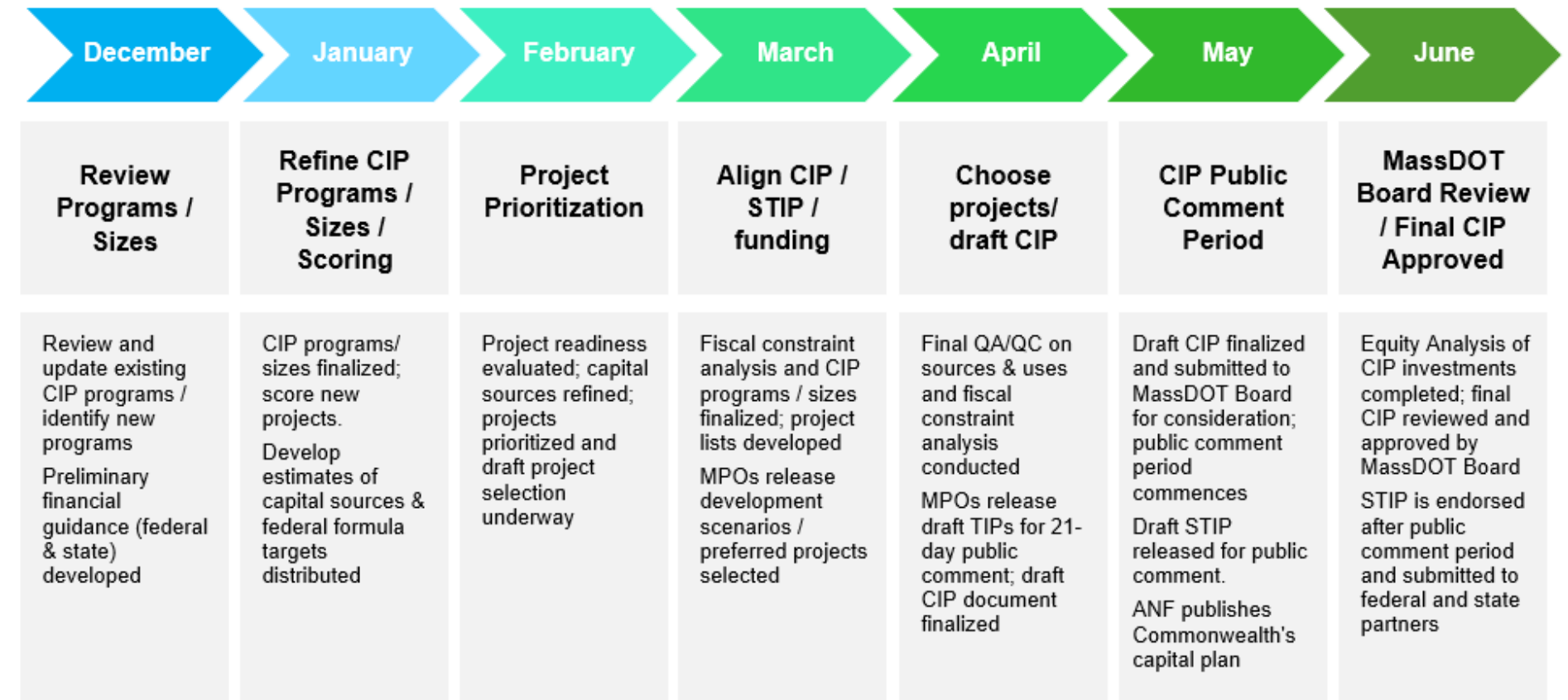
Worse



Next Steps

Project Development Process

- Community and Stakeholder Consensus
- Identify Project Proponent
- Project Initiation
- Capital Investment Plan Adoption
 - Identification of federal and state funding sources and amounts
- Metropolitan Planning Organization Process
 - Evaluation by Boston Region MPO
 - Inclusion in Transportation Improvement Program (TIP) for funding
- Permitting
- Project Design
- Construction



Potential Funding Opportunities

FEDERAL FUNDING

- FHWA Formula Funds
- CMAQ Funds
- Competitive Grant Funding
 - Carbon Reduction Program (\$1.28B nationwide, annually)
 - Safe Streets and Roads for All (\$5B nationwide, 5 years)
 - Reconnecting Communities Pilot (\$1B nationwide, 5 years)
 - Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) - ~\$1.4B annually nationwide for planning and construction of resilience improvements

STATE FUNDING

- MA Capital Investment Program (CIP)
- Grant Funding Programs (Chapter 90, MassTrails, Complete Streets, Shared Streets and Spaces)

PRIVATE FUNDING

- Potential private developer funding for Bypass Road



Questions and Answers

What feedback would you like to share with us?

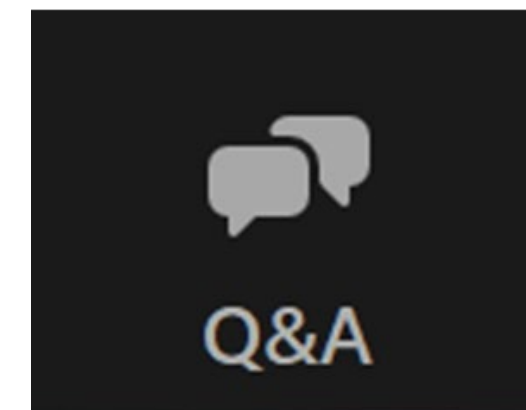
What additional questions do you have?

Questions and Answers

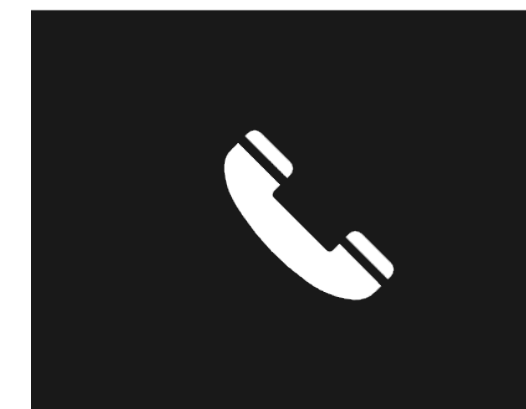
- Please share only one question or comment at a time
- Use the “**Q&A**” button to submit a typed question or comment
- Press the “**Raise Hand**” button to share your question or comment verbally. Wait for the moderator to recognize and unmute you before speaking.
- If you have joined by phone only, you may “raise your hand” by pressing the star button and then nine (*9)
- *After you speak, we will lower your hand and you will be muted to allow the team to respond and provide opportunities for others to participate*
- Comments may also be sent to Rt1ACorridorStudy@dot.state.ma.us
- Website: <https://www.mass.gov/route-1a-corridor-study>



To speak,
click “**Participants**”
then “**Raise hand**”



Click **Q&A**
to “Ask A Question”



***9**
Raise Hand



Thank you!

For question and comments please email:
Rt1ACorridorStudy@dot.state.ma.us

Sign up for project updates:
<https://www.mass.gov/route-1a-corridor-study>

