

PROJECT OVERVIEW

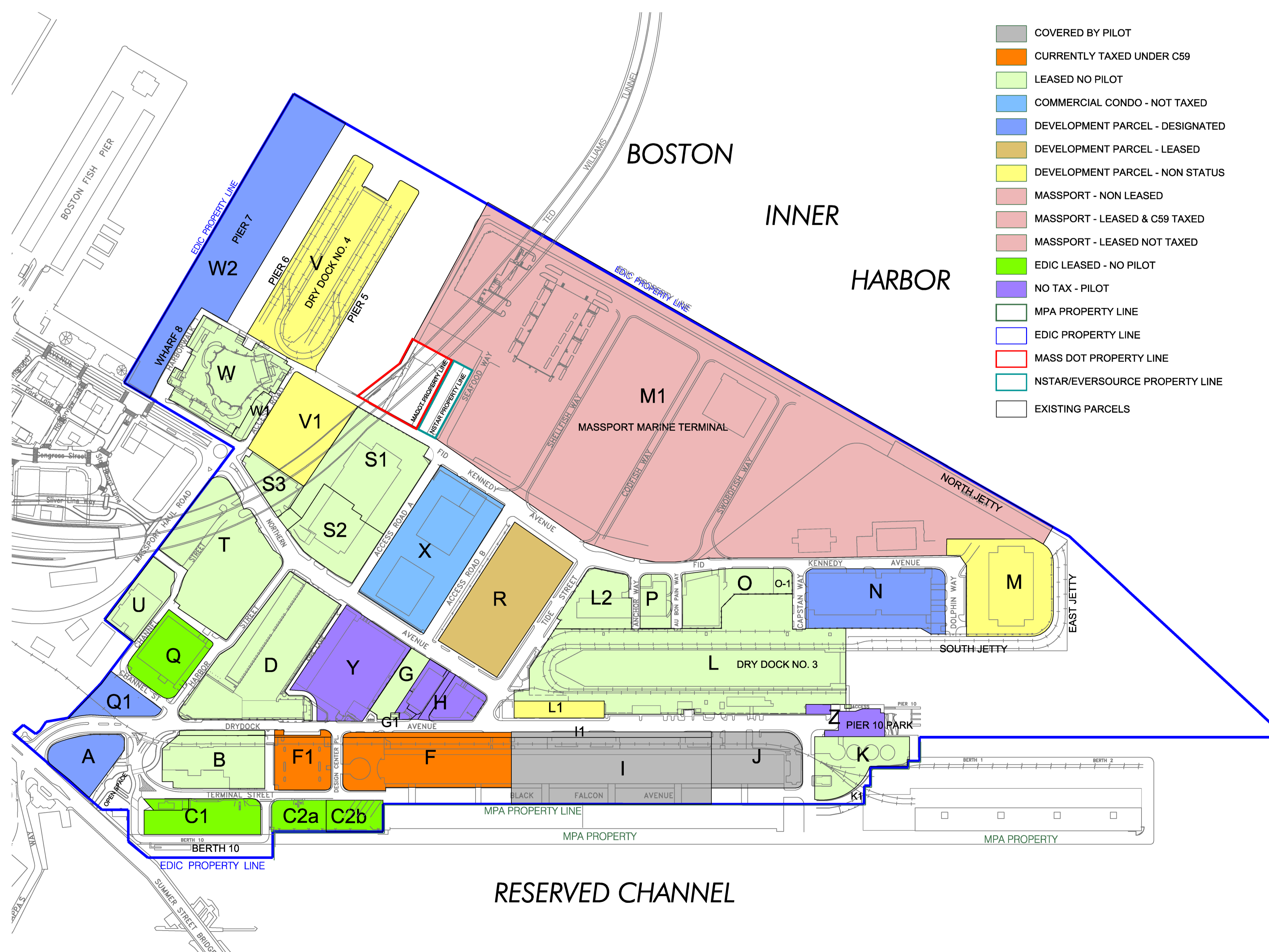
Launched in March 2023, the Raymond L. Flynn Marine Park (RLFMP) Flood Mitigation Planning and Feasibility project builds on previous planning by the City of Boston and the Boston Planning and Development Agency (BPDA) to evaluate options and advance a preferred design for flood risk mitigation within the RLFMP and South Boston more broadly. The RLFMP is owned by the Economic and Development Industrial Corporation (EDIC) and is located in the South Boston neighborhood of the City of Boston. It serves as a center for industrial, manufacturing, and research uses, with a special focus on marine industries.

GOALS AND OBJECTIVES

The Project has four primary goals:

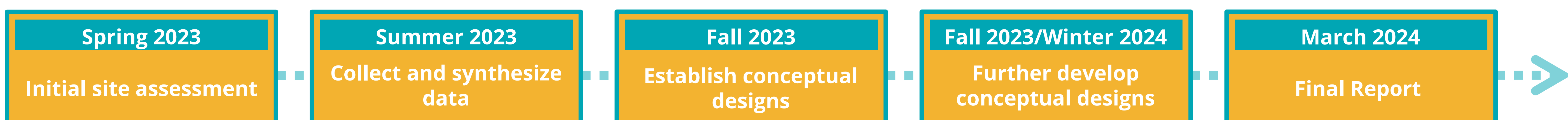
- **Assess Flood Vulnerability:** Develop a detailed understanding of flood risk at RLFMP and the potential benefits of flood risk mitigation options proposed during the *Coastal Resilience Solutions for South Boston* planning process that was undertaken from 2017-2018
- **Evaluate Prior Mitigation Steps:** Evaluate flood mitigation measures that have already been implemented or are planned for properties within and neighboring RLFMP
- **Engage Stakeholders:** Engage stakeholders to develop an understanding of mission-critical operational and other considerations related to the function of industrial and marine industrial businesses in the RLFMP and how they relate to flood mitigation in RLFMP
- **Develop a Feasible Flood Mitigation Design:** Identify a preferred long-term flood protection strategy for the RLFMP that accounts for increased flood risk with projected sea-level rise, and develop refined designs, cost estimates, and an implementation plan for the Project, with a focus on seeking grant funding and advancing to the next steps toward permitting and construction

TENANTS/USE BY PARCEL

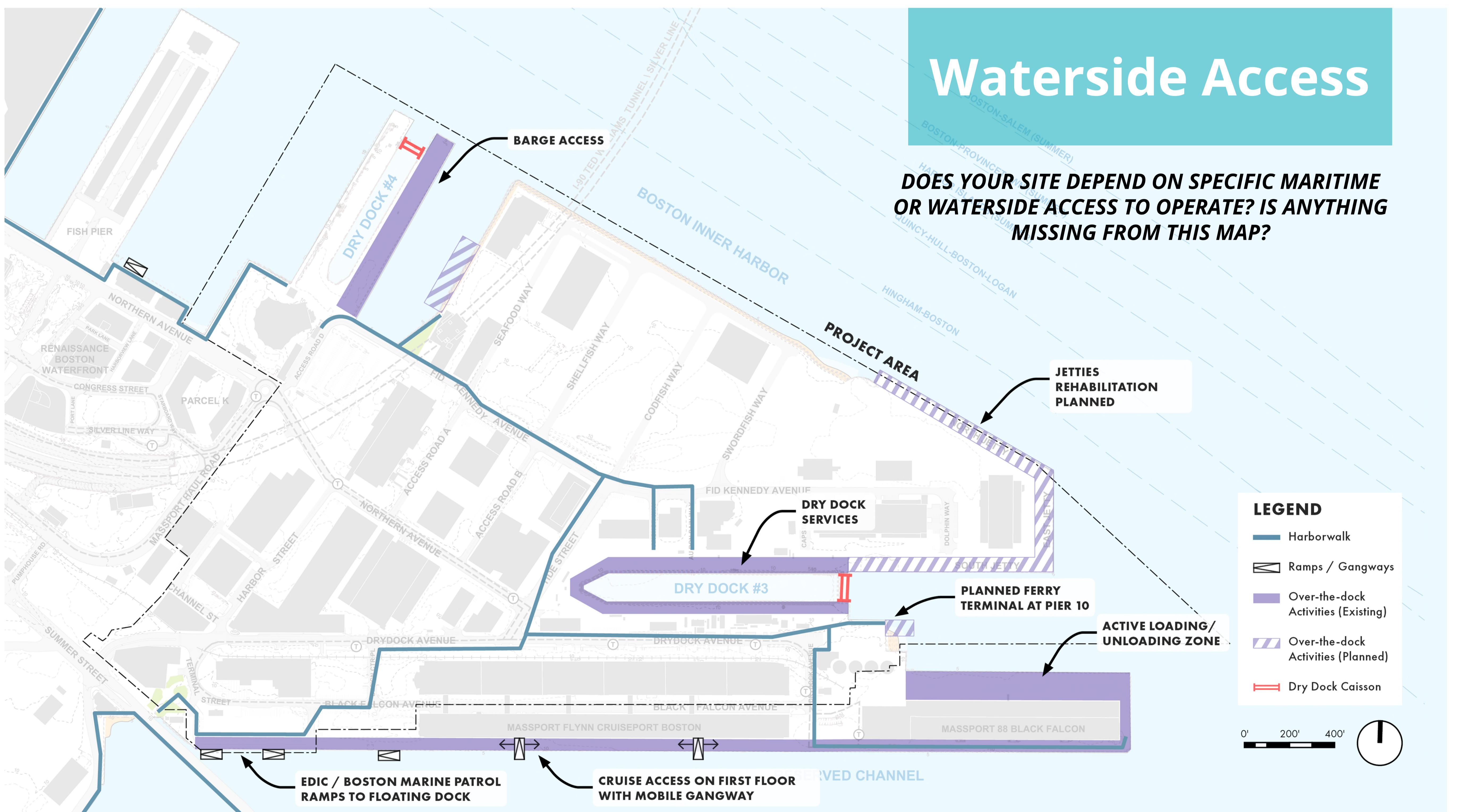
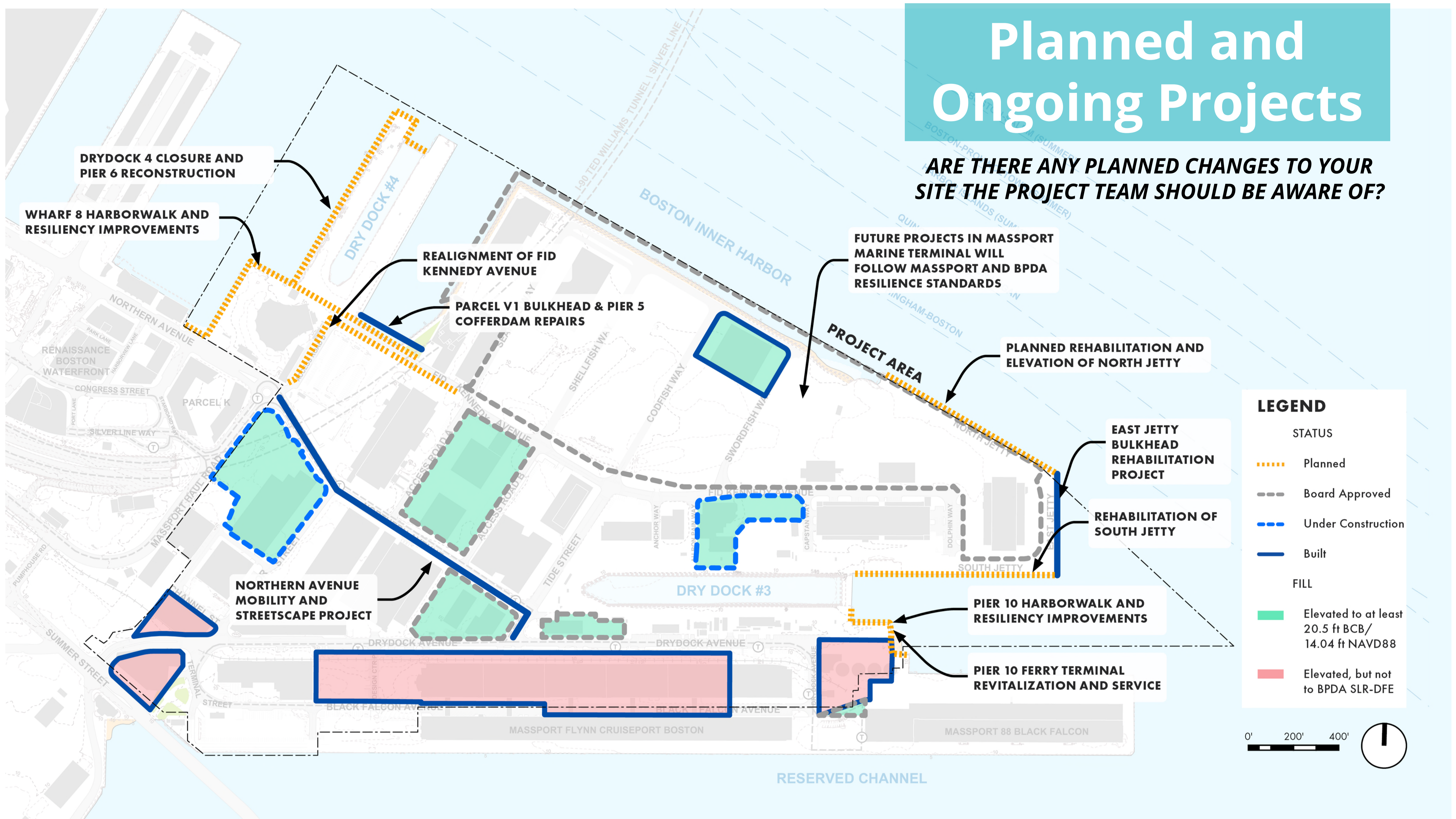


A	Harbinger Development – Hampton Inn
B	Northcoast Seafoods
C1	Cruise Ship Parking/Boston Harbor Patrol
C2a	Parking/BPDA
C2b	Massport Parking/Bus Staging
D	Cargo Ventures/Boston Freight/Vertex
F	Innovation and Design Building (IDB)
F1	Parking for IDB
G1	Verizon Equipment Building
H	BPDA Business Center
I	Innovation and Design Building
J	Drydock Center – Related Beal Mgt.
K	Coastal Cement
K1	Massport
L	Drydock #3 – Northeast Ship Repair
L1	Cronin Development
L2	Clarke Living
M	BPDA – 3 Dolphin Way
M1	Massport – North Jetty
M2	MassDOT/Eversource
N	Cannistraro
O	Ginkgo Bioworks
O1	Ginkgo Bioworks
P	Ginkgo Bioworks
Q	BPDA Management
Q1	Skanska Development
R	Innovation Square
S1	Nagle Seafood
S2	Harpoon Brewery
S3	Harpoon Brewery
T	South Boston Innovation Campus
U	Lincoln Property Co. and QuakerLane Capital
V	Drydock #4
V1	BPDA Parking Lot
W	Leader Bank Pavilion (Concert Venue)
W1	Yankee Lobster
W2	Wharf 8/Pier 7
X	310 Northern Ave
Y	Central Parking Garage
Z	Pier 10 Park

TIMELINE



SHARE YOUR THOUGHTS AND NOTE ADDITIONAL DETAILS ON THE MAPS BELOW.

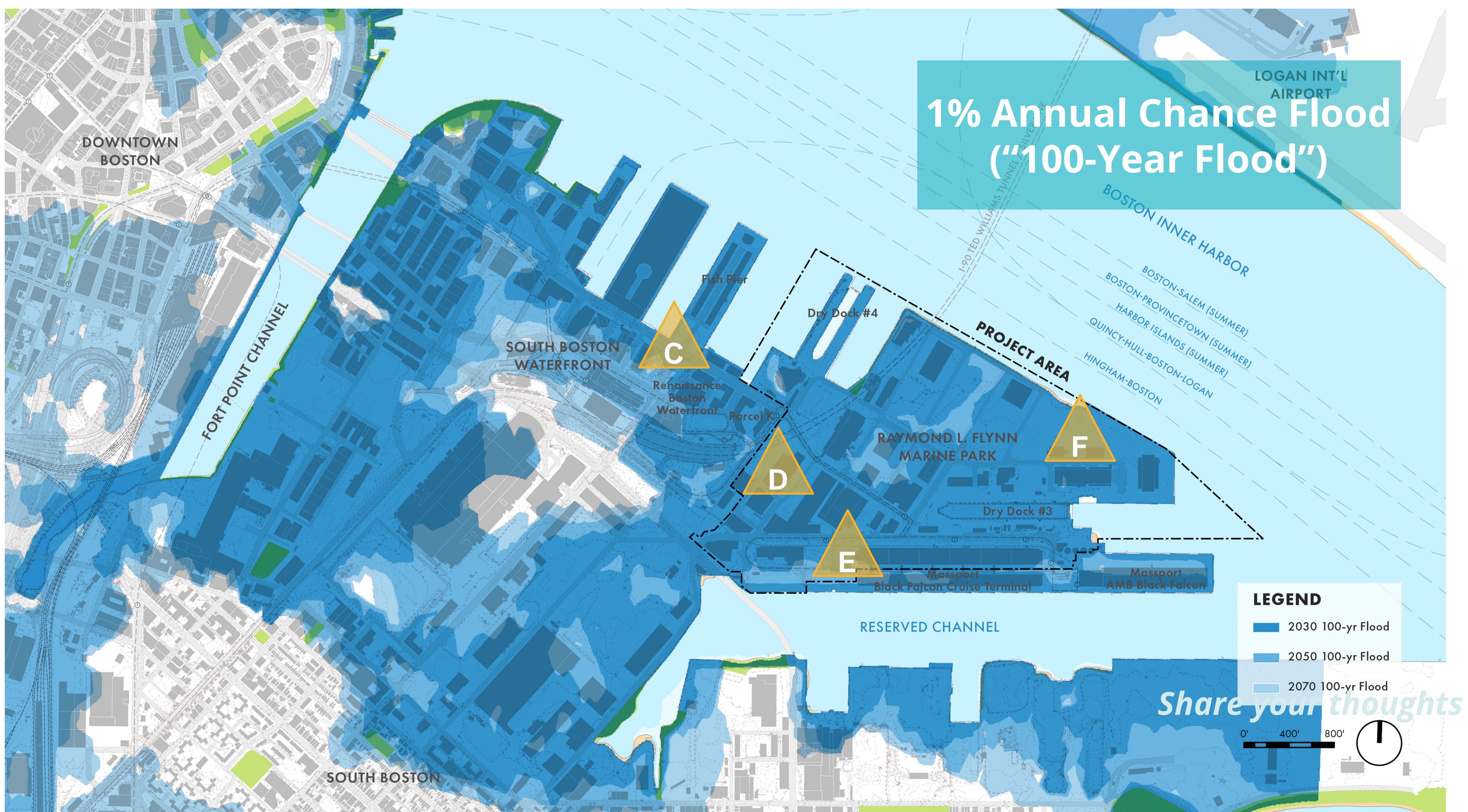
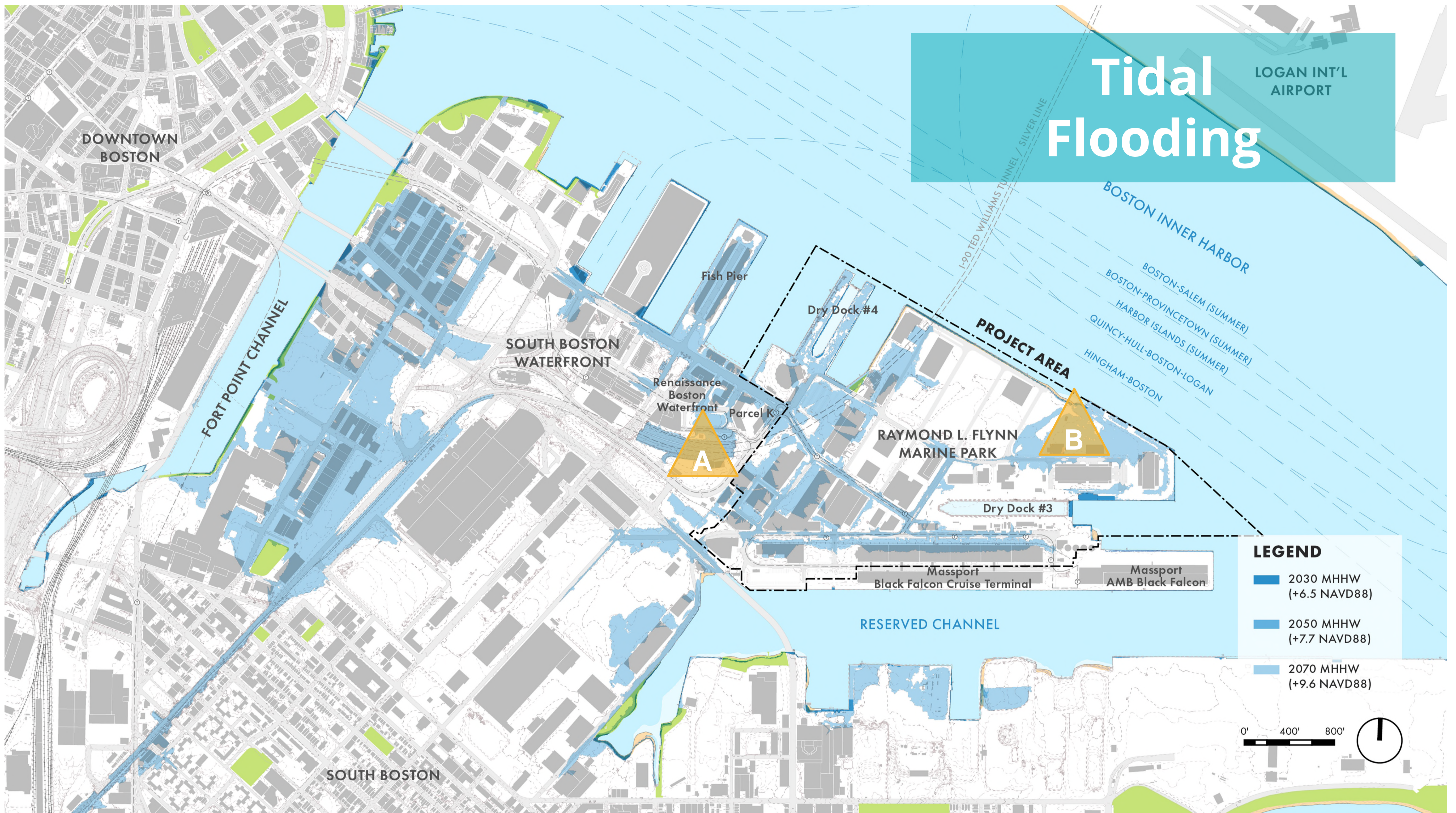


SHARE YOUR THOUGHTS AND NOTE ADDITIONAL DETAILS ON THE MAPS BELOW.

HAS YOUR SITE EXPERIENCED FLOODING IN THE PAST? WAS THERE DAMAGE?

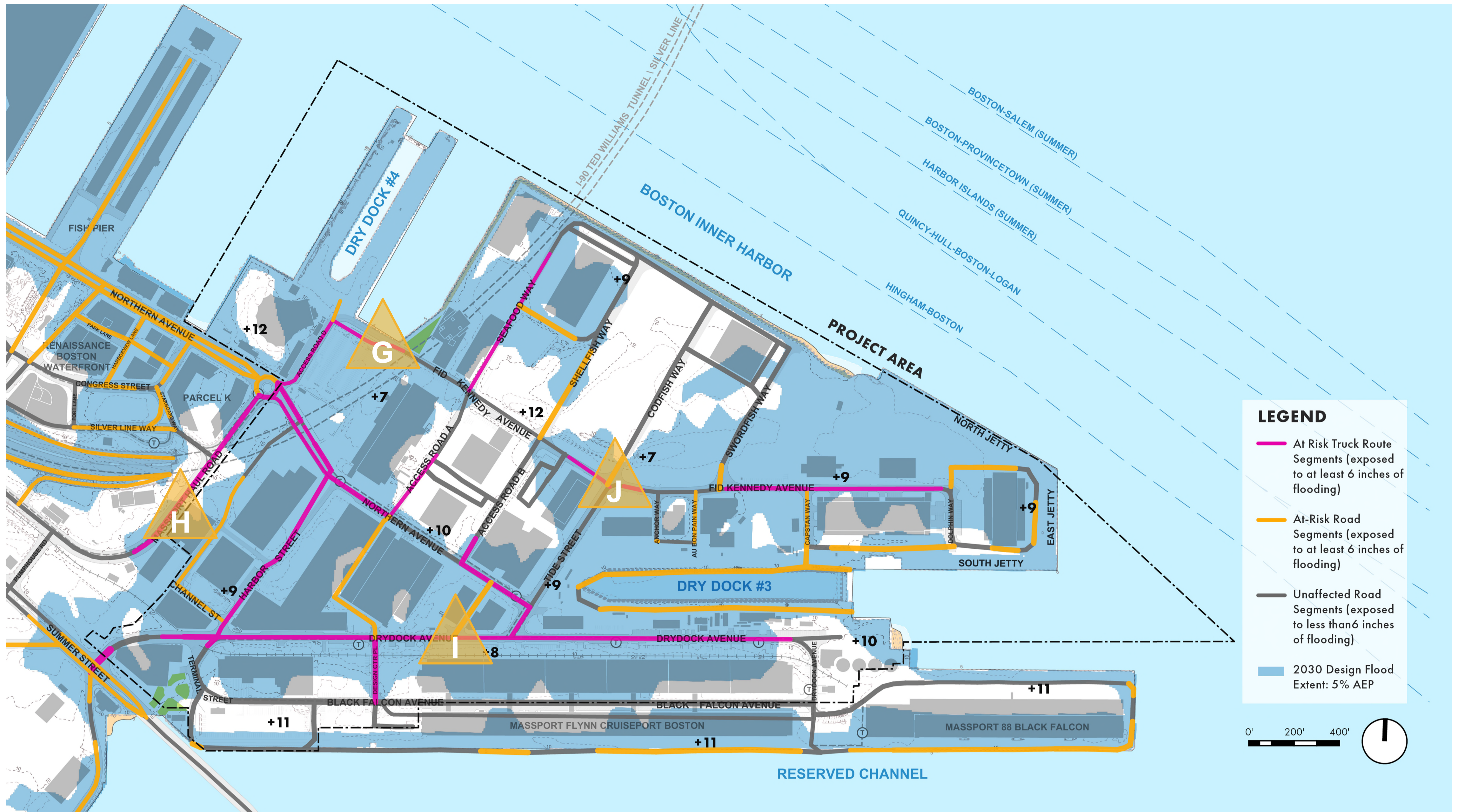
DO YOU HAVE PLANS TO EXPAND YOUR BUSINESS IN THE FUTURE AND DO FLOOD RISKS GIVE PAUSE TO THOSE PLANS?

HAS YOUR SITE IMPLEMENTED ANY TEMPORARY OR PERMANENT FLOOD MITIGATION PROJECTS?



Share your thoughts

Trucking and Bus Route Impacts



Key Findings

A Tidal flooding begins to impact key access routes including Northern Ave, Haul Road and public transportation to RLFMP after mid-century.

B Tidal flooding impacts a large portion of the marine park in 2070, including key jobs centers like the Innovation and Design Center and planned South Boston Marine Multiport.

C During the 2030 1% annual chance event, major flood pathways originate outside of RLFMP.

D The 1% annual chance flood in 2030 severely impacts all access to and from RLFMP.

E The 1% annual chance flood in 2030 impacts nearly every building in the marine park and will likely disrupt business operations.

F A major flood pathway during the 1% annual chance event is over North Jetty. Planned efforts to rehabilitate the jetties should consider this risk.

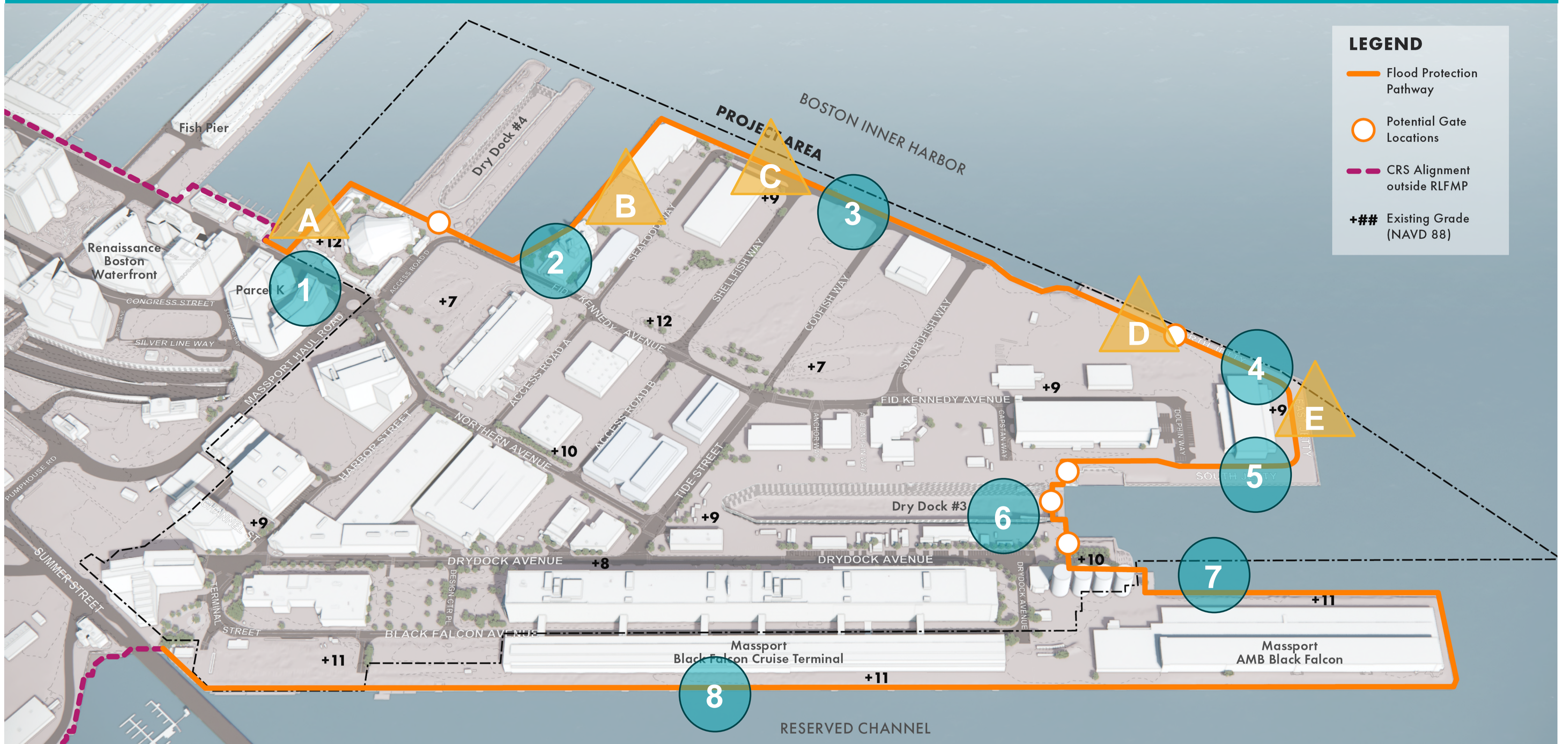
G The Eversource substation and I-90 vent building experience flooding with 5% annual chance flood in 2030 and tidal flooding in 2070.

H Flooding on Haul Road impedes trucking and public transportation to RLFMP.

I Flooding on Northern and Drydock Ave will impact vehicular, Silver Line, and bus service to Boston Design Center, Black Falcon Cruise Terminal, Boston Ship Repair, and other jobs centers.

J Flooding on Fid Kennedy Ave will impact service to Massport Marine Terminal and planned Multiport.

Full Perimeter Alternative



1 Potential Harborwalk to be coordinated with ongoing Wharf 8 project.

2 Existing pathway and green space raised 3' to 4' to mitigate wall height.

3 Floodwall runs along existing riprap shoreline. Designs should allow for waterside access in the future.

4 Alignment on fill behind existing jetties. Designs to be coordinated with jetty rehabilitation projects. Gates provide waterside access.

5 Coordination with Massport and sub-tenants needed to ensure alignment does not interfere with use of North, East, and South Jetty.

6 New caisson for drydock to double as flood gate.

7 Floodwall at the water's edge could impact maritime access and truck loading activities.

8 Further study needed to minimize impacts to over the dock activities. Requires close coordination with Massport.

9 Alternative alignment runs closer to building to reduce in-water work. Requires close coordination with Massport.

10 Alignment avoids active maritime edge and truck loading bays. Future adaptation likely needed to reduce risk to buildings outboard of alignment.

11 Multiple gates needed to maintain pedestrian and vehicular access.

12 Alignment along Black Falcon Ave not feasible due to intense loading and access needs.

13 Shortened alignment reduces impact to pile structure and planned jetty rehabilitation projects, gate maintains access.

14 Alternative alignment runs along dry dock with gates to maintain access.

15 Eversource substation and I-90 vent building left outboard.

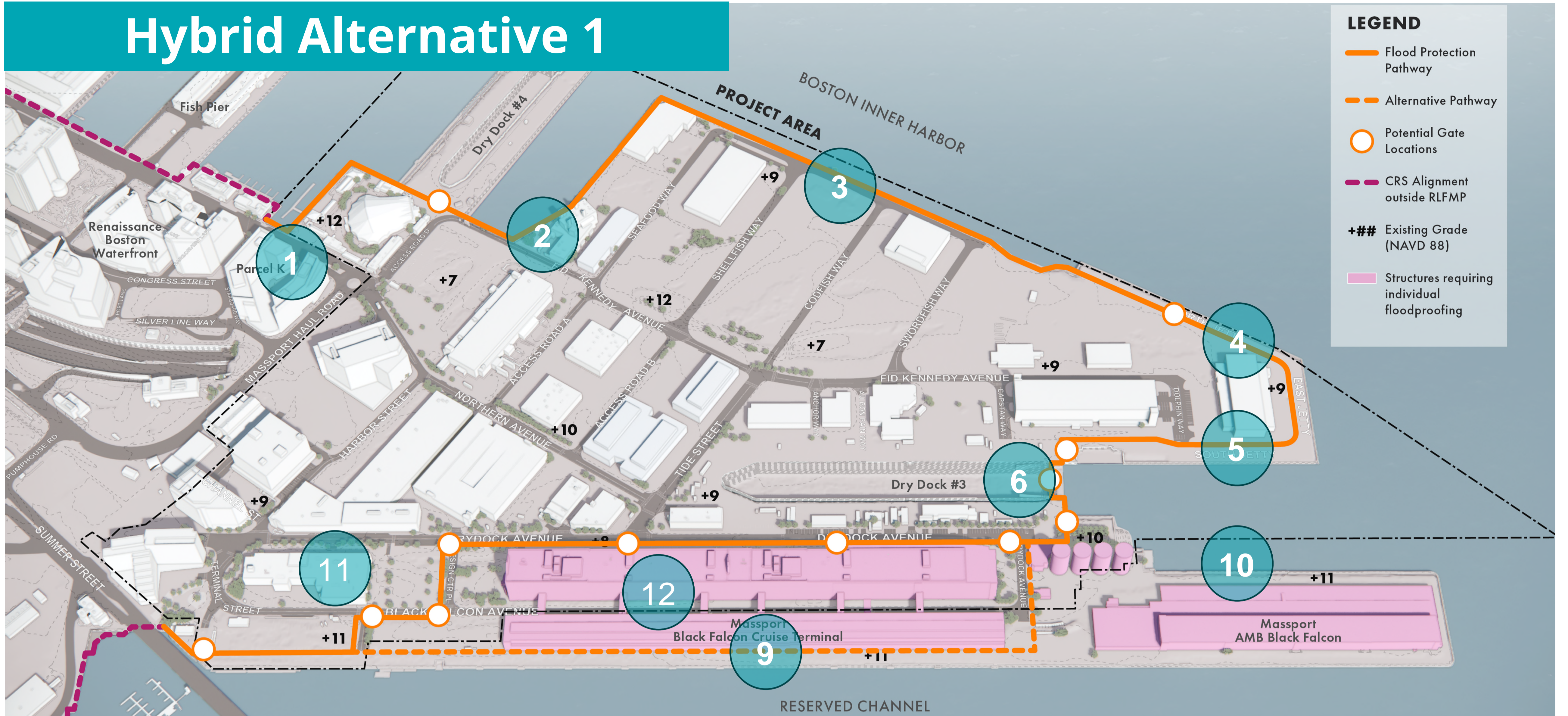
16 Multiple deployable gates necessary. Permanent structure will greatly constrain movements of the truck and impact loading activities.

17 Roadway raising is not feasible given heavy truck activities in the area.

18 Individual floodproofing needed for large number of buildings.

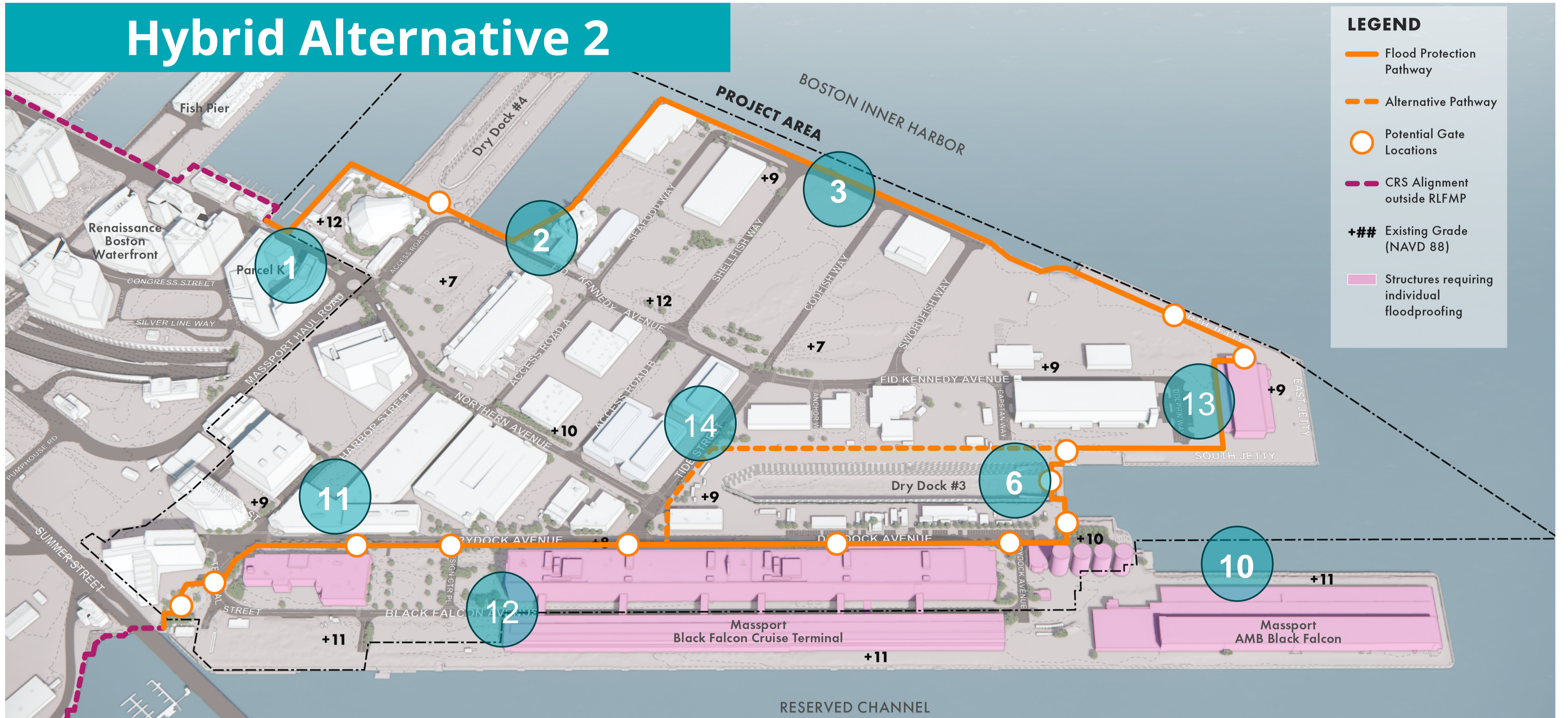
FLOOD PROTECTION

Hybrid Alternative 1



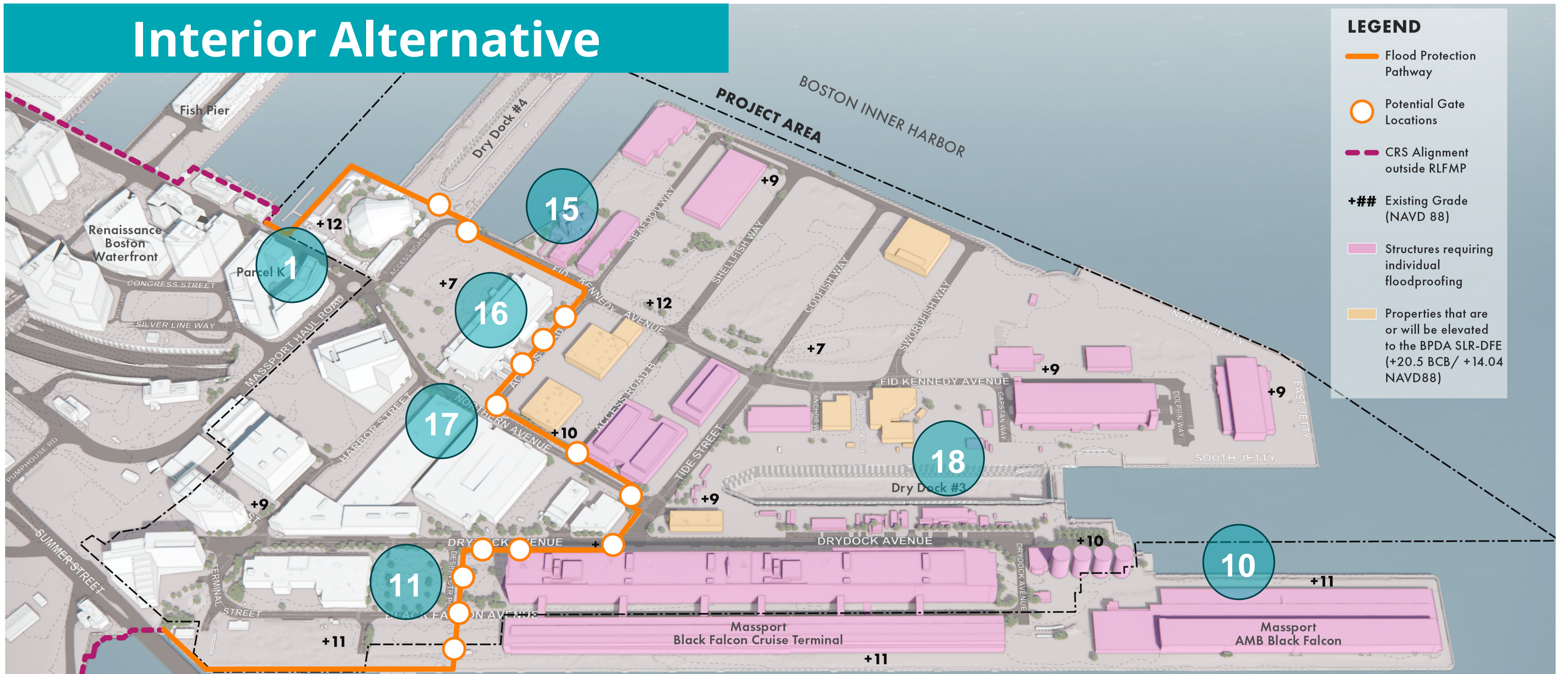
- LEGEND**
- Flood Protection Pathway
 - Alternative Pathway
 - Potential Gate Locations
 - CRS Alignment outside RLFMP
 - ###** Existing Grade (NAVD 88)
 - Structures requiring individual floodproofing

Hybrid Alternative 2



- LEGEND**
- Flood Protection Pathway
 - Alternative Pathway
 - Potential Gate Locations
 - CRS Alignment outside RLFMP
 - ###** Existing Grade (NAVD 88)
 - Structures requiring individual floodproofing

Interior Alternative



- LEGEND**
- Flood Protection Pathway
 - Potential Gate Locations
 - CRS Alignment outside RLFMP
 - ###** Existing Grade (NAVD 88)
 - Structures requiring individual floodproofing
 - Properties that are or will be elevated to the BPDA SLR-DFE (+20.5 BCB / +14.04 NAVD88)

Toolkit

Representative Sections

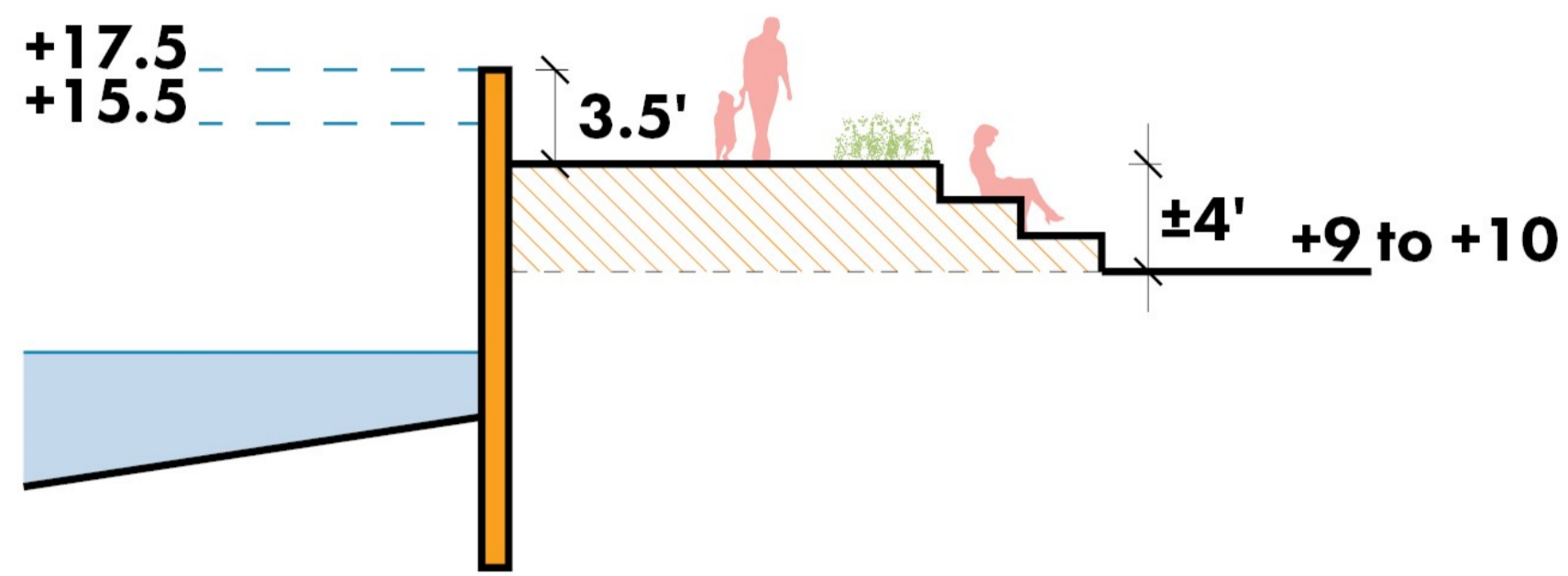
DFEs (NAVD88)

Near-Term
15.5 ft = 2050 1%
Annual Chance Flood

Long-Term
17.5 ft = 2070 1%
Annual Chance Flood

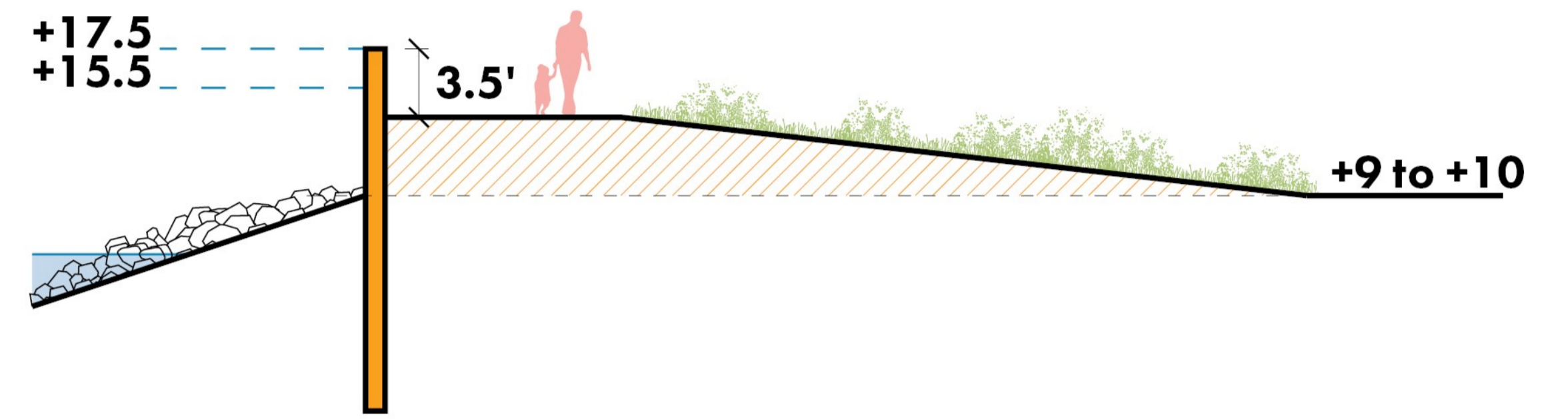
Based on Massachusetts Coastal Flood Risk Model

A



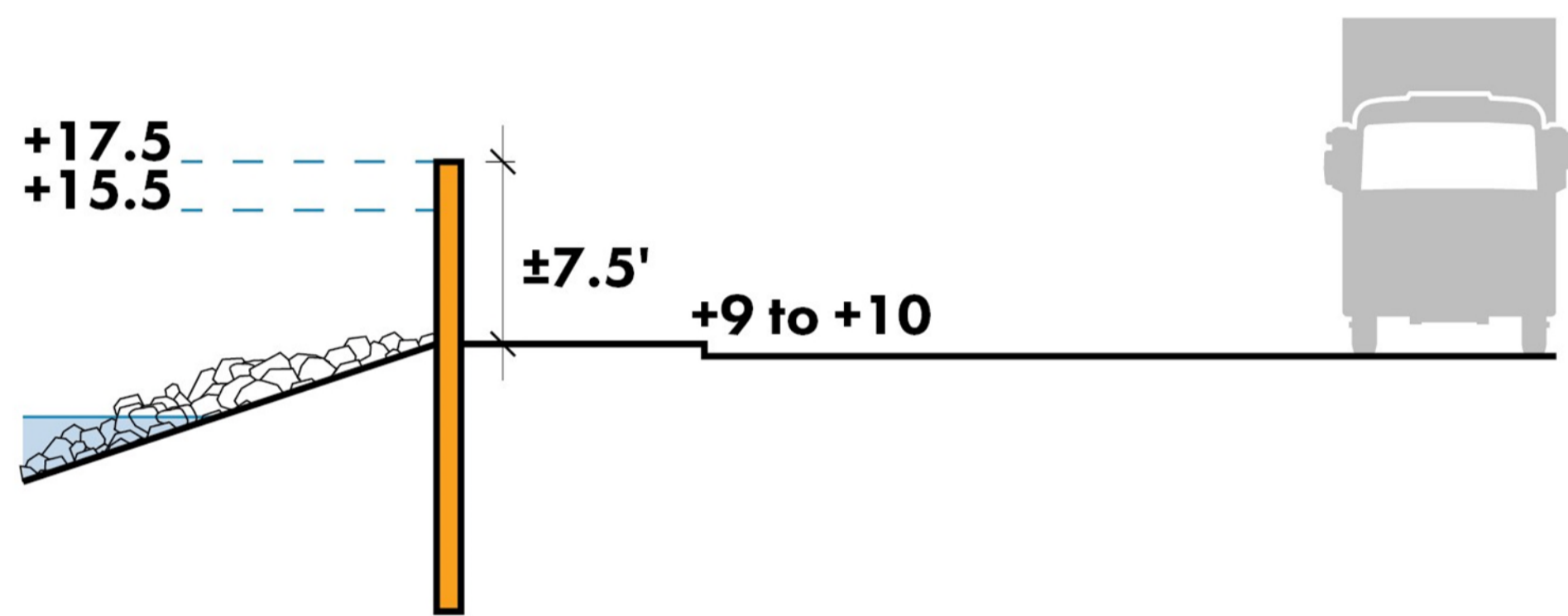
SECTION A - POTENTIAL RAISED HARBORWALK

B

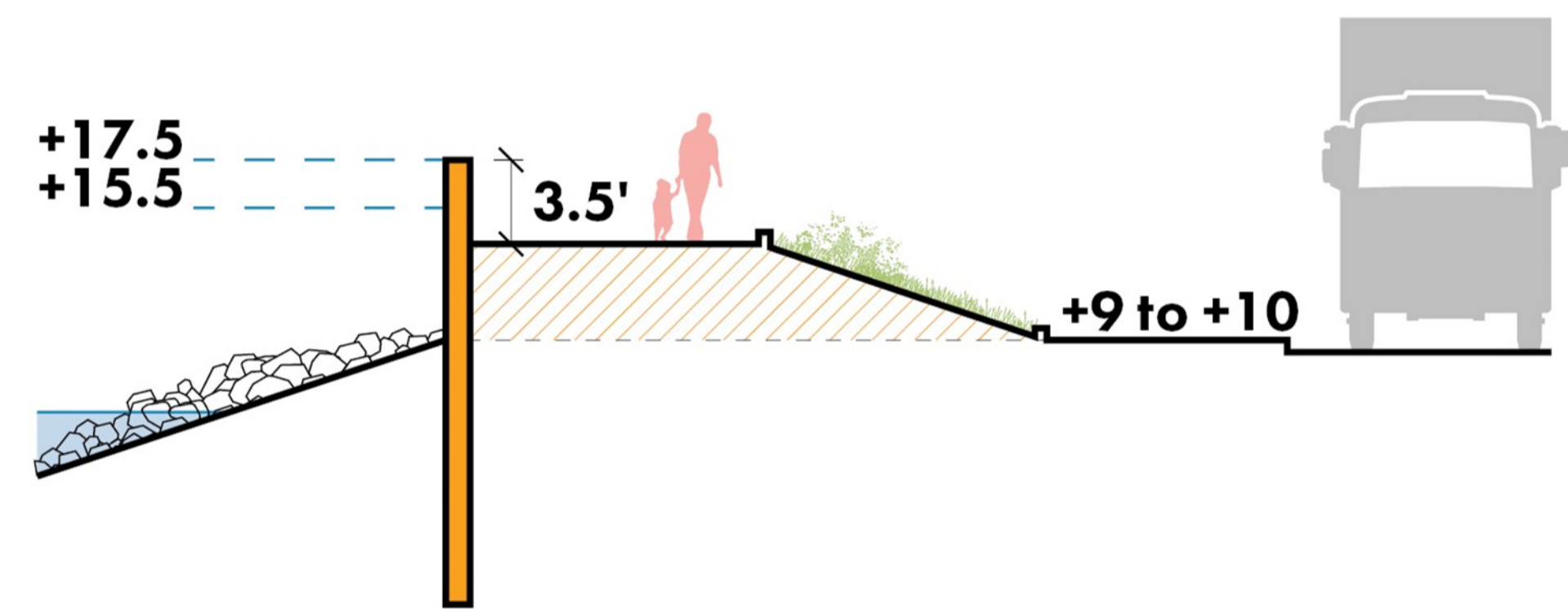


SECTION B - RAISED LANDSCAPE OR PARK SPACE

C

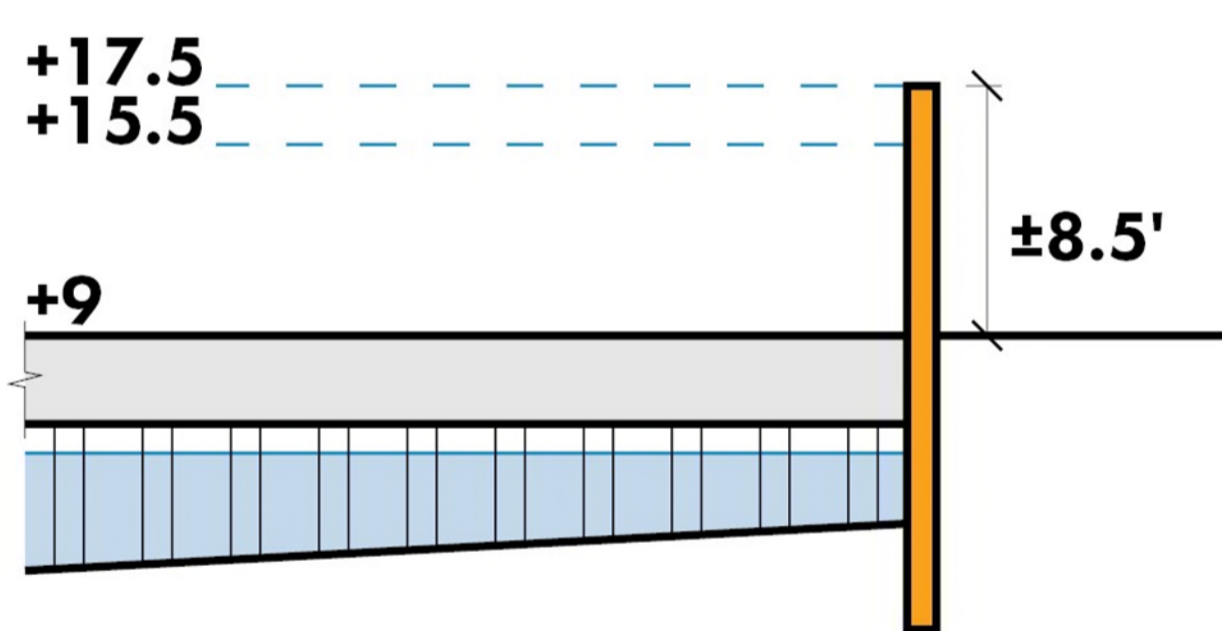


SECTION C - FLOODWALL ALONG SHORELINE



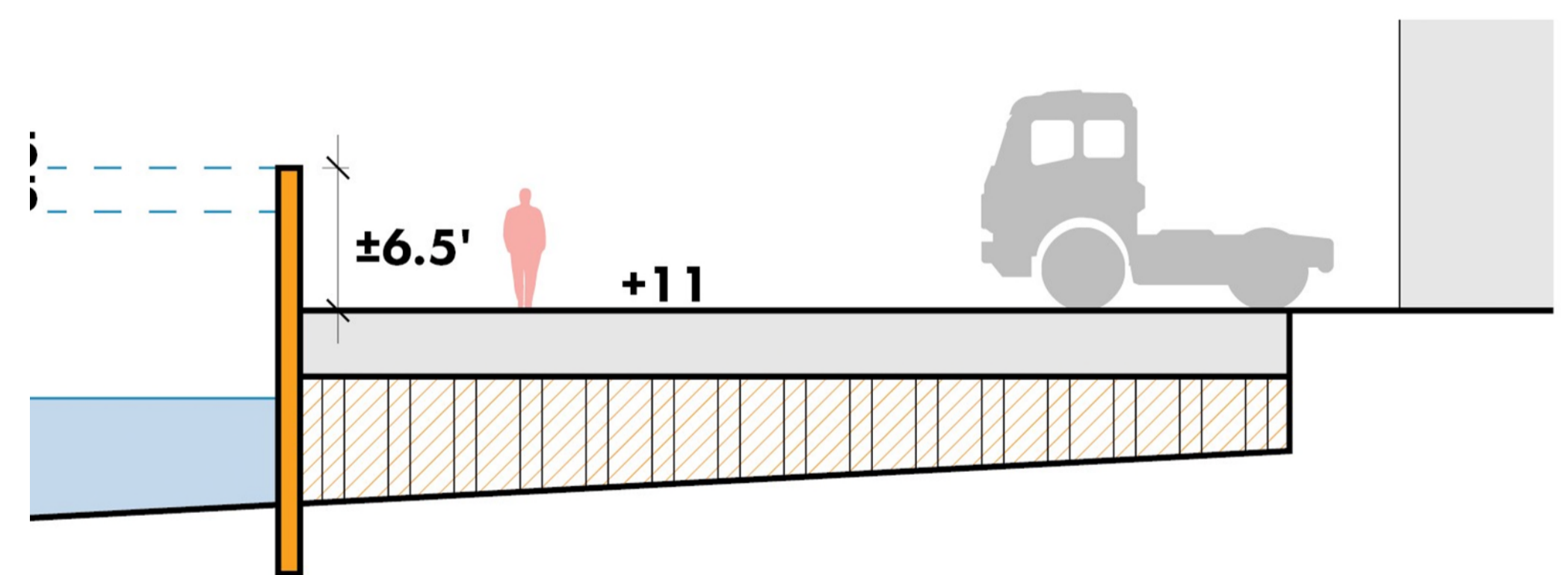
SECTION C ALT - POTENTIAL RAISED LANDSCAPE

D



SECTION D - FLOODWALL AT BACK OF JETTY

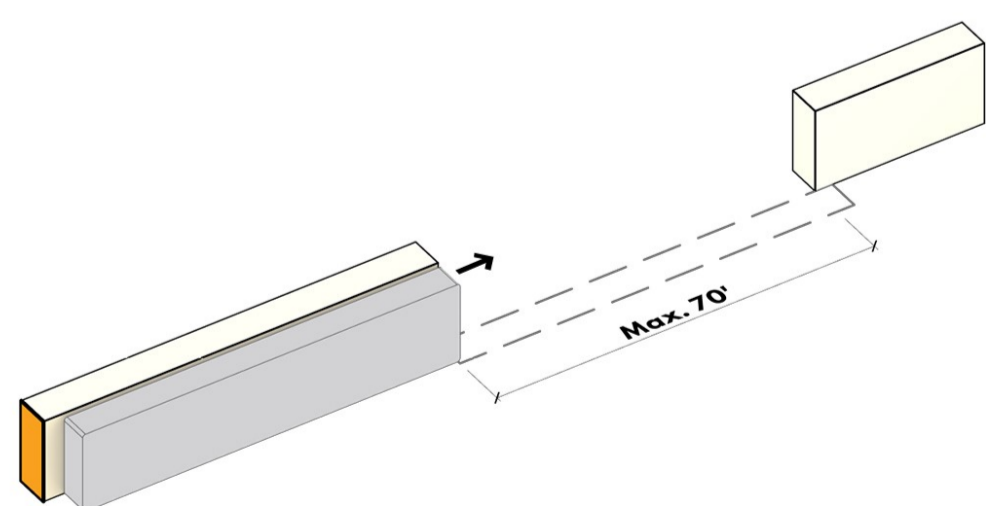
E



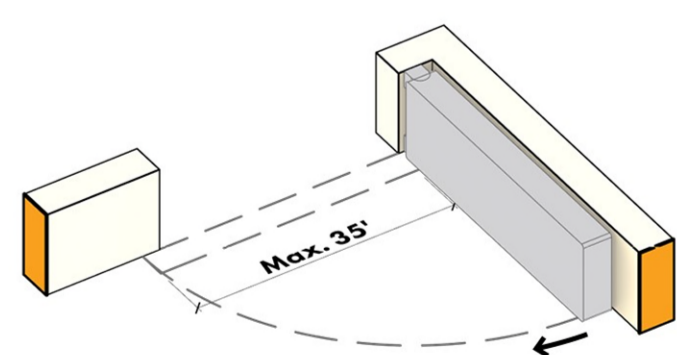
SECTION E - FLOODWALL AT WATERS EDGE

Representative Floodgates

Examples at the East Side Coastal Resiliency Project, NYC:



ROLLER GATE



SWING GATE



EVALUATION CRITERIA

We use evaluation criteria to assess options and determine which design alternatives best advance the goals of the project (as described on the *Project Overview* board).

Baseline Criteria – All alternatives must meet these.



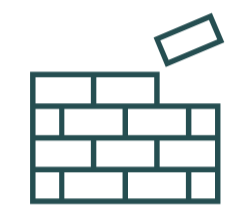
Effectiveness

Reduces long-term flood risk to businesses and infrastructure within RLFMP



Feasibility

Integrates with industrial business operations
Minimizes disruption to existing and planned ship-to-shore connections. Consistent with DPA policy and Chapter 91 License



Design life and adaptability

Provides protection through at least 2050 and can be adapted to higher levels of flood protection in the future

Criteria for comparing design options



Environmental Benefits

Minimize adverse impacts to wetlands and other sensitive habitats



Social Impact

Protects or enhances economic vitality of RLFMP and job access for Bostonians



Equity

Prioritizes protection for businesses providing well-paying jobs. Minimizes disruption to and protects public transportation



Value Creation

Leverages private investments to protect BPDA assets
Creates a model for safe, resilient economic development

SHARE YOUR THOUGHTS BELOW.

WHAT OTHER THINGS WE SHOULD CONSIDER?

**WHAT IS IMPORTANT TO YOUR SITE/OPERATIONS
WHEN DETERMINING PREFERRED ALIGNMENT?**