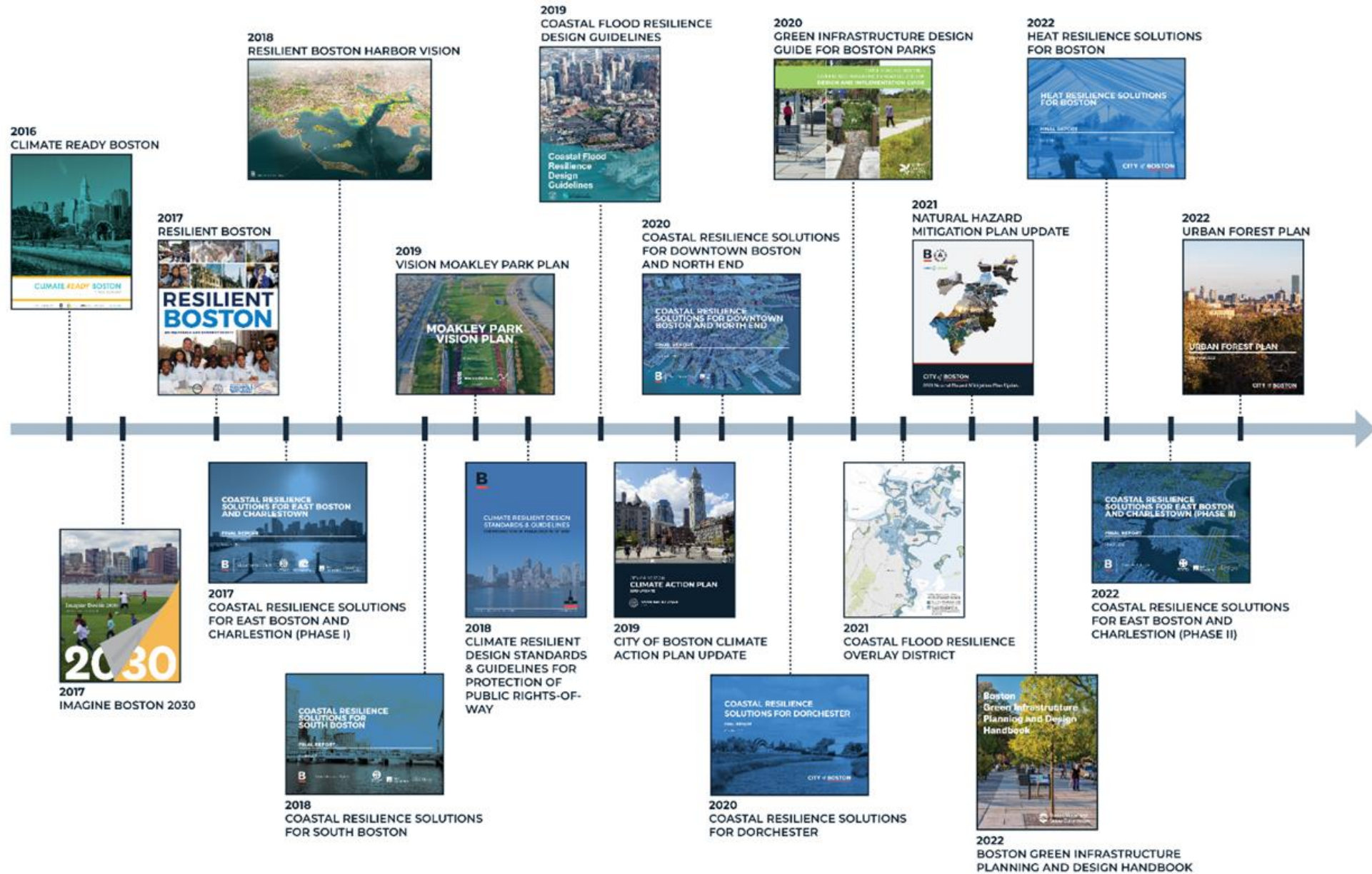


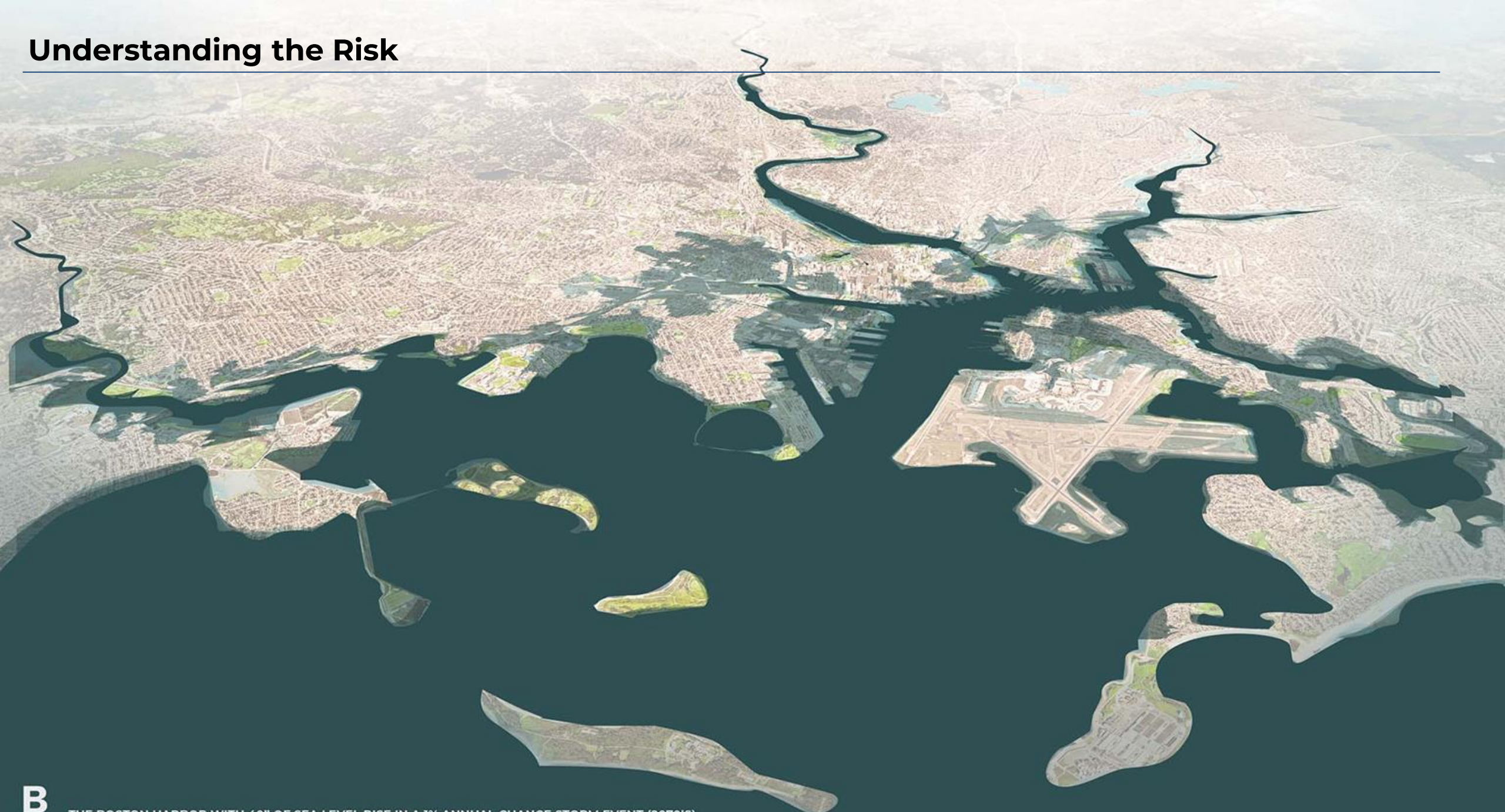
RESILIENT FORT POINT CHANNEL INFRASTRUCTURE FEMA PDM GRANT STATUS UPDATE



A Foundation of Community Driven, Data Informed Plans

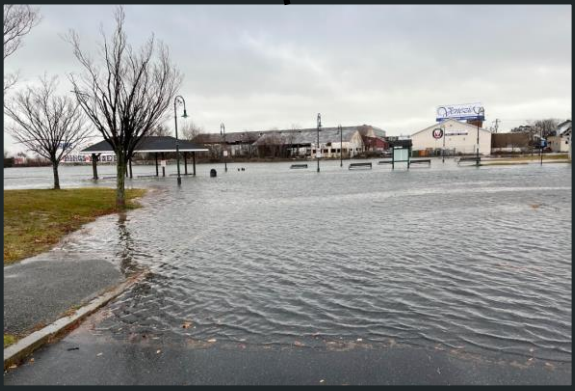
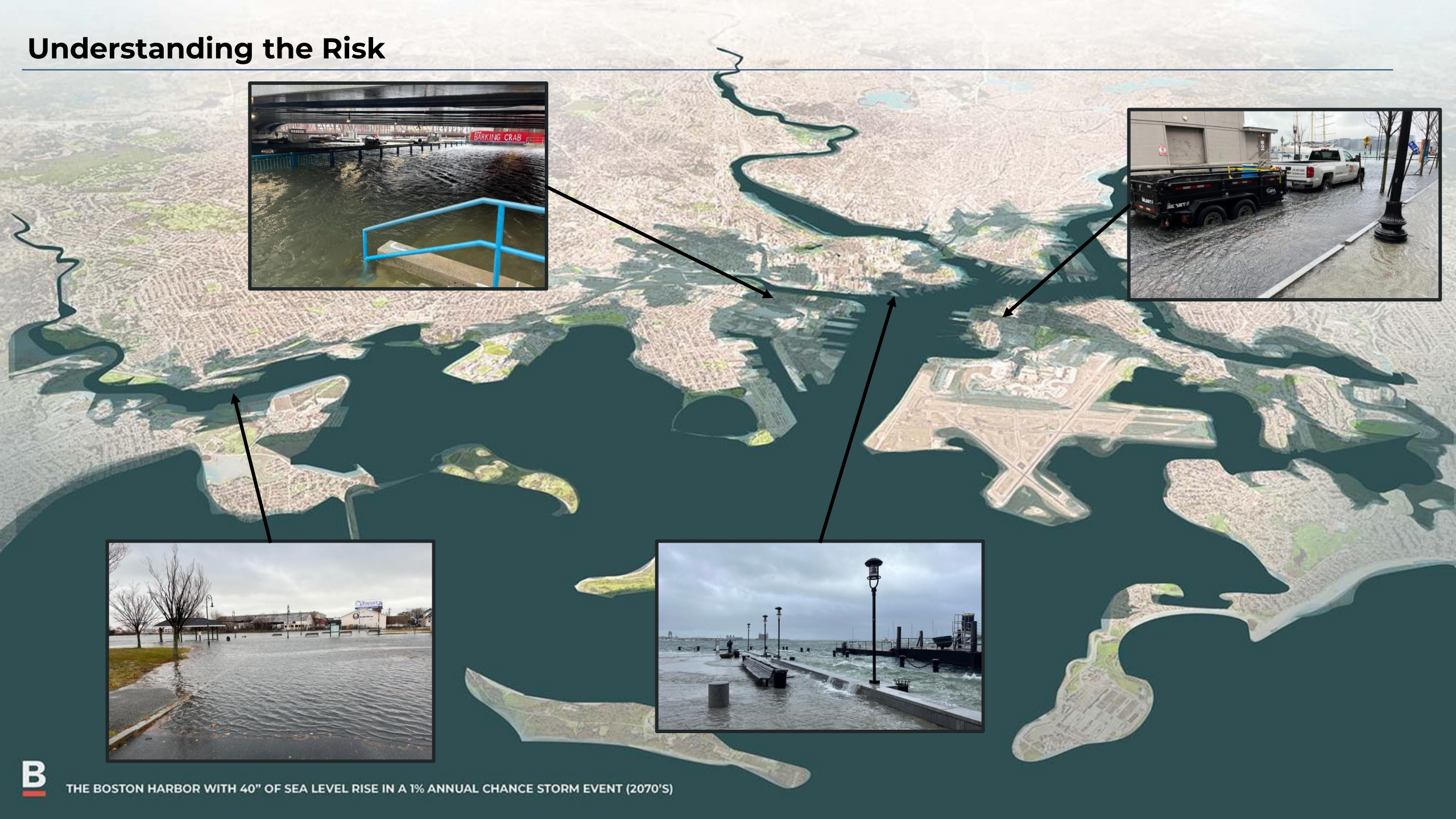


Understanding the Risk



THE BOSTON HARBOR WITH 40" OF SEA LEVEL RISE IN A 1% ANNUAL CHANCE STORM EVENT (2070'S)

Understanding the Risk



Moving from Planning to Action



DORCHESTER

SOUTH BOSTON

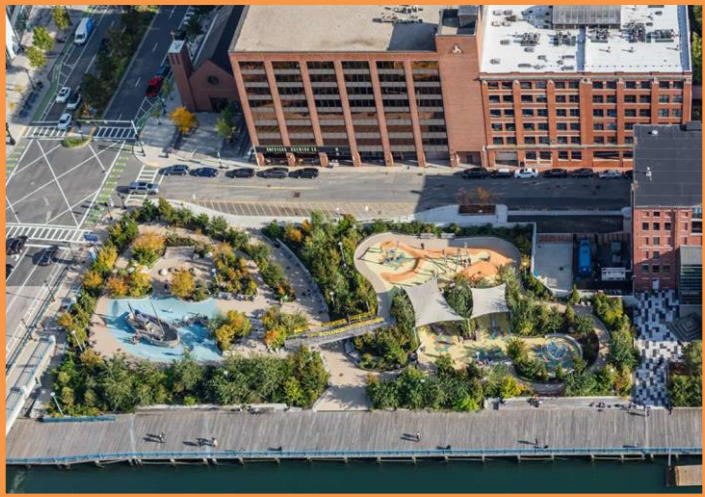
DOWNTOWN

EAST BOSTON

Moving from Planning to Action



McConnell Park, Dorchester
Photo: Dorchester Reporter



Martin's Park, Fort Point Channel

Photo: Michael Van Valkenburgh Associates, Inc.



Langone Park, North End
Photo: Weston & Sampson

Moving from Planning to Action: Three Concurrent Strategies

Today's Storms

Strengthen Our Response to Today's Flooding

This Decade's Storms

Address Key 2030 Floodpaths

Beyond 2030

Transform Our 47 Miles of Coastline

Moving from Planning to Action: A Selection of Near Term Priority Areas



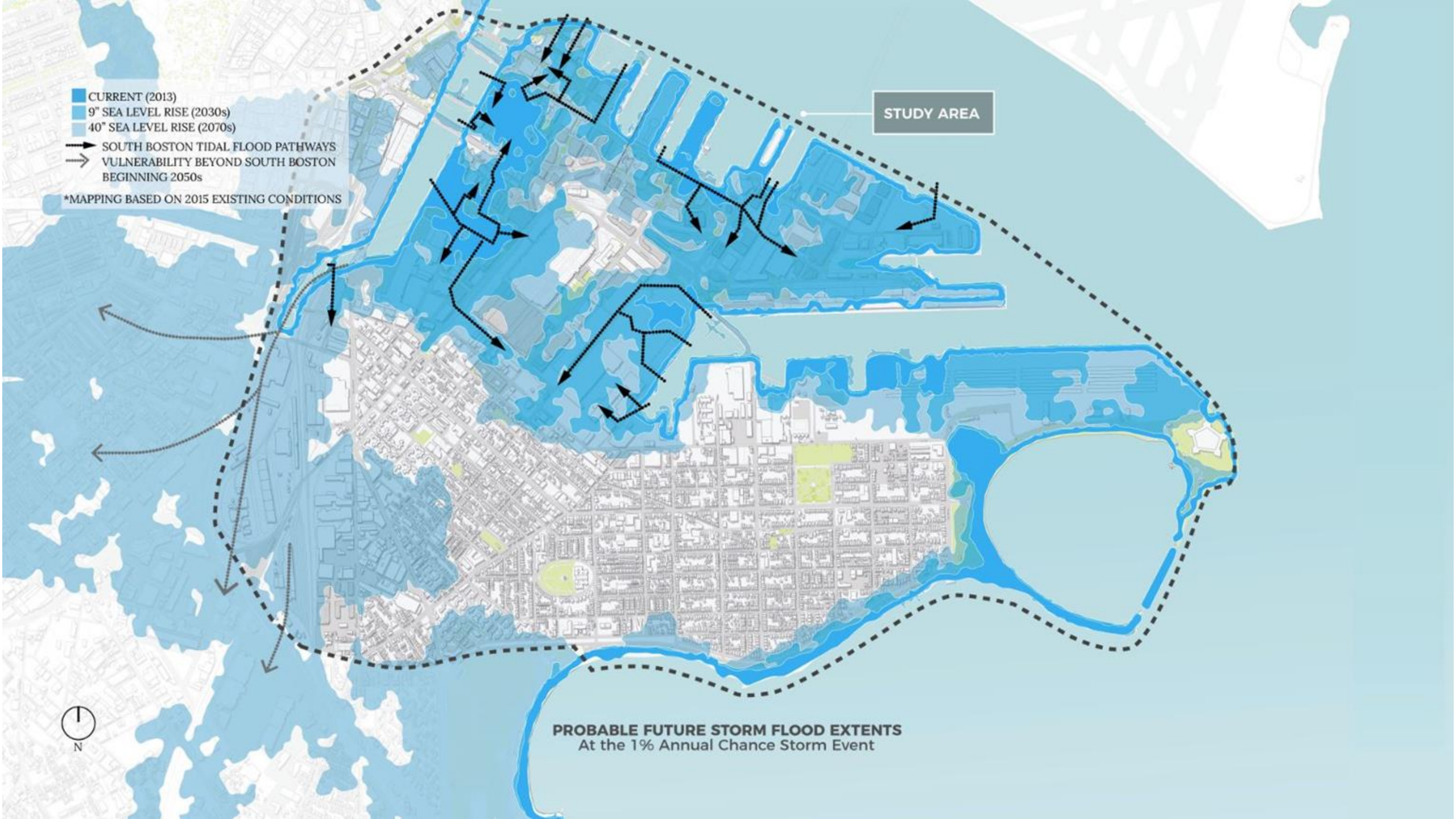
- CURRENT (2013)
- 9" SEA LEVEL RISE (2030s)
- 40" SEA LEVEL RISE (2070s)

- SOUTH BOSTON TIDAL FLOOD PATHWAYS
- VULNERABILITY BEYOND SOUTH BOSTON BEGINNING 2050s

*MAPPING BASED ON 2015 EXISTING CONDITIONS

STUDY AREA

PROBABLE FUTURE STORM FLOOD EXTENTS
At the 1% Annual Chance Storm Event

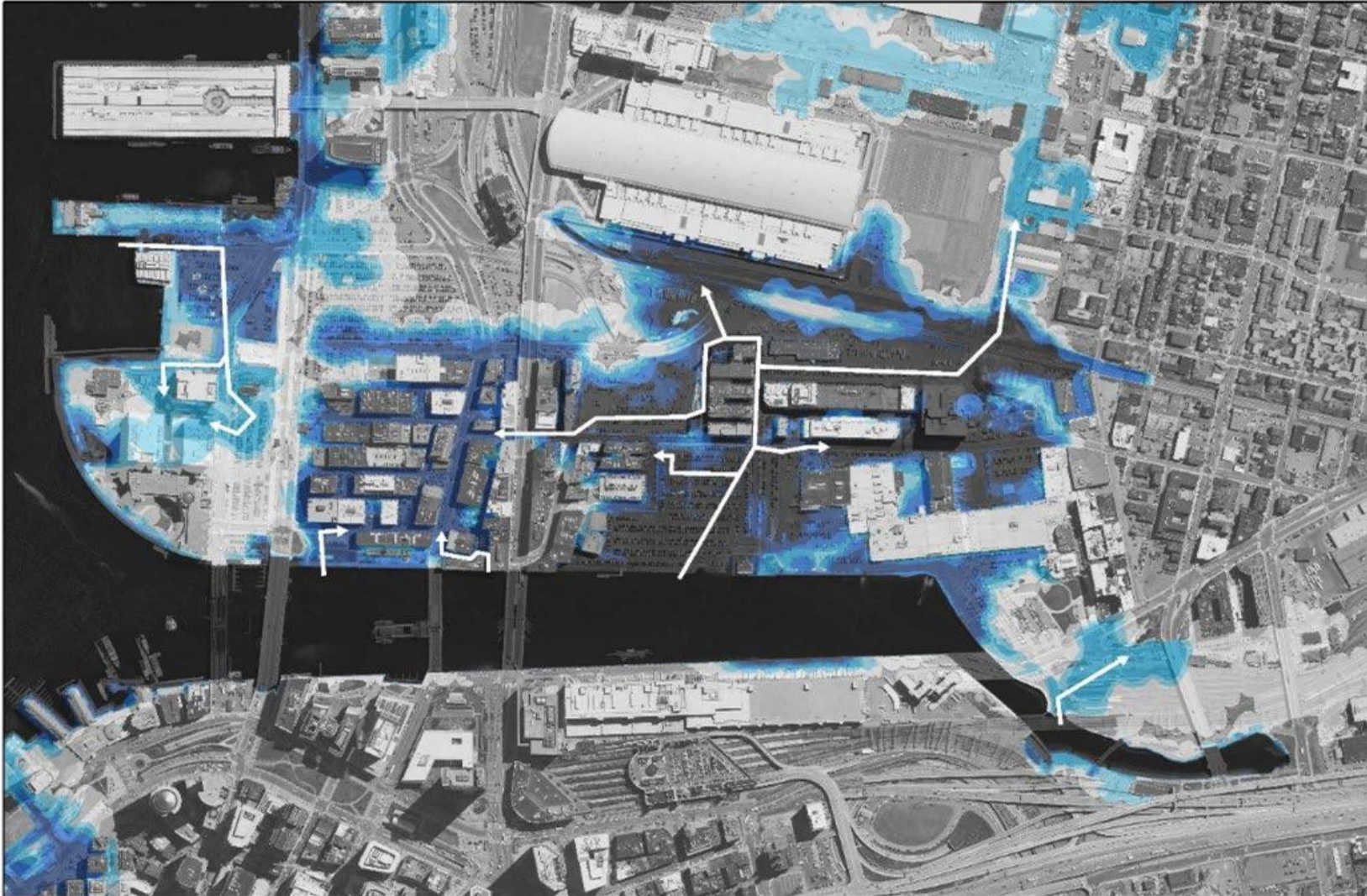


COASTAL RESILIENCE SOLUTIONS FOR SOUTH BOSTON PHASING PLAN



Flood Hazard Pathways That May Affect the Project

Fort Point Channel - Flood Pathway Analysis



“While there are some minor connections and fringe flooding areas that occur during the most extreme storm return period (1000- year), these connections are driven by water arriving from the Fort Point Channel flood entry points and not from other locations (e.g., Reserve Channel).”

- Kirk Bosma, PE, Woods Hole Group



KAYAK LAUNCH



**100 ACRE MASTER PLAN
OPEN SPACE**



BOARDWALK

GE CAMPUS

**A SELF DEPLOYING
TIDAL GATE**

**FLOOD PROTECTION
CREST 14' ELEVATION**

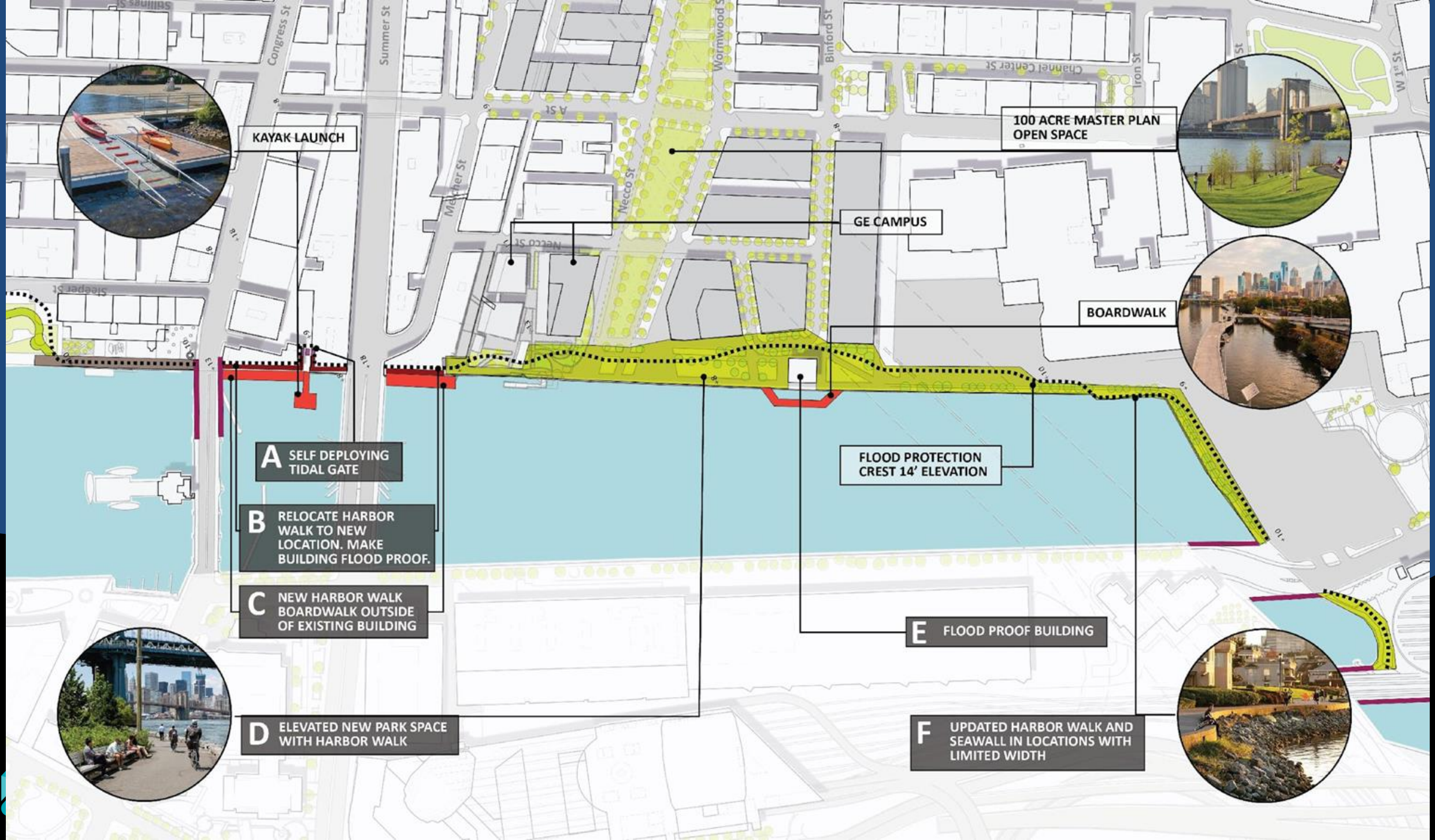
**B RELOCATE HARBOR
WALK TO NEW
LOCATION. MAKE
BUILDING FLOOD PROOF.**

E FLOOD PROOF BUILDING

**C NEW HARBOR WALK
BOARDWALK OUTSIDE
OF EXISTING BUILDING**

**D ELEVATED NEW PARK SPACE
WITH HARBOR WALK**

**F UPDATED HARBOR WALK AND
SEAWALL IN LOCATIONS WITH
LIMITED WIDTH**



Resilient Fort Point Channel Infrastructure Project



Project Purpose:

Protect the Fort Point neighborhood and South Boston from sea level rise and coastal flooding.

The proposed Project will consist of a mix of earthen berms and walls for a 2,300 linear foot stretch along the eastern edge of Fort Point Channel, as well as several deployable features to maintain access to the Harborwalk.

Project Progress to Date:

- **October 2018**, Recommended in *Coastal Resilience Solutions for South Boston*
- **January 2019**, City Submits FEMA PDM 18 Application
- **June 2019**, Project “Identified for Further Review” by FEMA
- **August 2019** - FEMA Region 1 issues 1st RFI for project
- **September 2019** - FEMA visits project site with City/MEMA
- **November 2019** - FEMA EHP team visits City Archives
- **January 2020** - FEMA issues 2nd RFI for project
- **August 2020** - Project granted approval by FEMA to move forward to Environmental Assessment, stating that “the project is technically feasible and effective/cost effective”

Resilient Fort Point Channel Infrastructure Project



- **February 2021** - FEMA shares sequencing for environmental review, and decides to split review process, with their consultant handling NEPA and City consultant handling MEPA
- **August 2021** - FEMA indicates that a Conditional Letter of Map Revision (CLOMR) will now be required prior to a notification of award
- **September 2021** - FEMA Region 1 shares a memo stating that a CLOMR will now be required prior to a notification of award
- **December 2021** ENF submitted to MEPA
- **March 2022** MEPA Certificate Issued
- **July 2022** BPDA Board authorizes advertise and issue RFP
- **March 2023** Award Contract to AECOM
- **November 2023** Contract executed with AECOM

Our Team

- AECOM
 - Project Manager
 - Civil and Structural Design, Permitting
- Weston & Sampson
 - Deputy Project Manager
 - Stormwater and Landscape Architecture Design, Environmental
- Woods Hole Group
 - Resilience Modeling, CLOMR, NPC
- CDW Consultants
 - Permitting
- GeoLogic
 - Drilling
- Regina Villa Associates
 - Outreach
- Brennan Consulting
 - Surveying

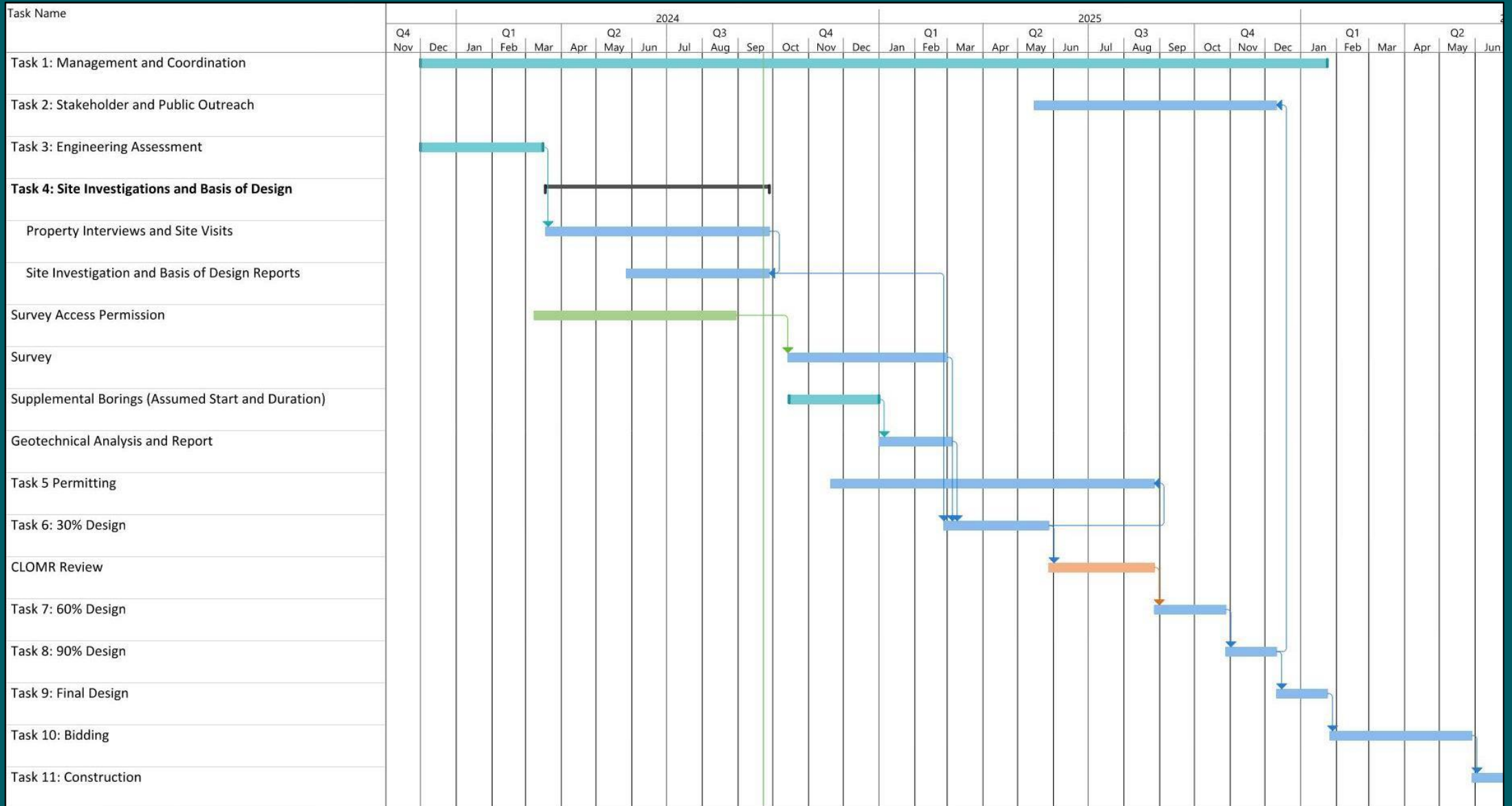


Project Considerations

- Mix of Technical, Financial, and Project Acceptance



Approach and Schedule



Project Schedule (as of 09/2024, prepared by AECOM)

Boston Planning and Development Agency
Resilient Fort Point Channel Engineering Assessment

Draft

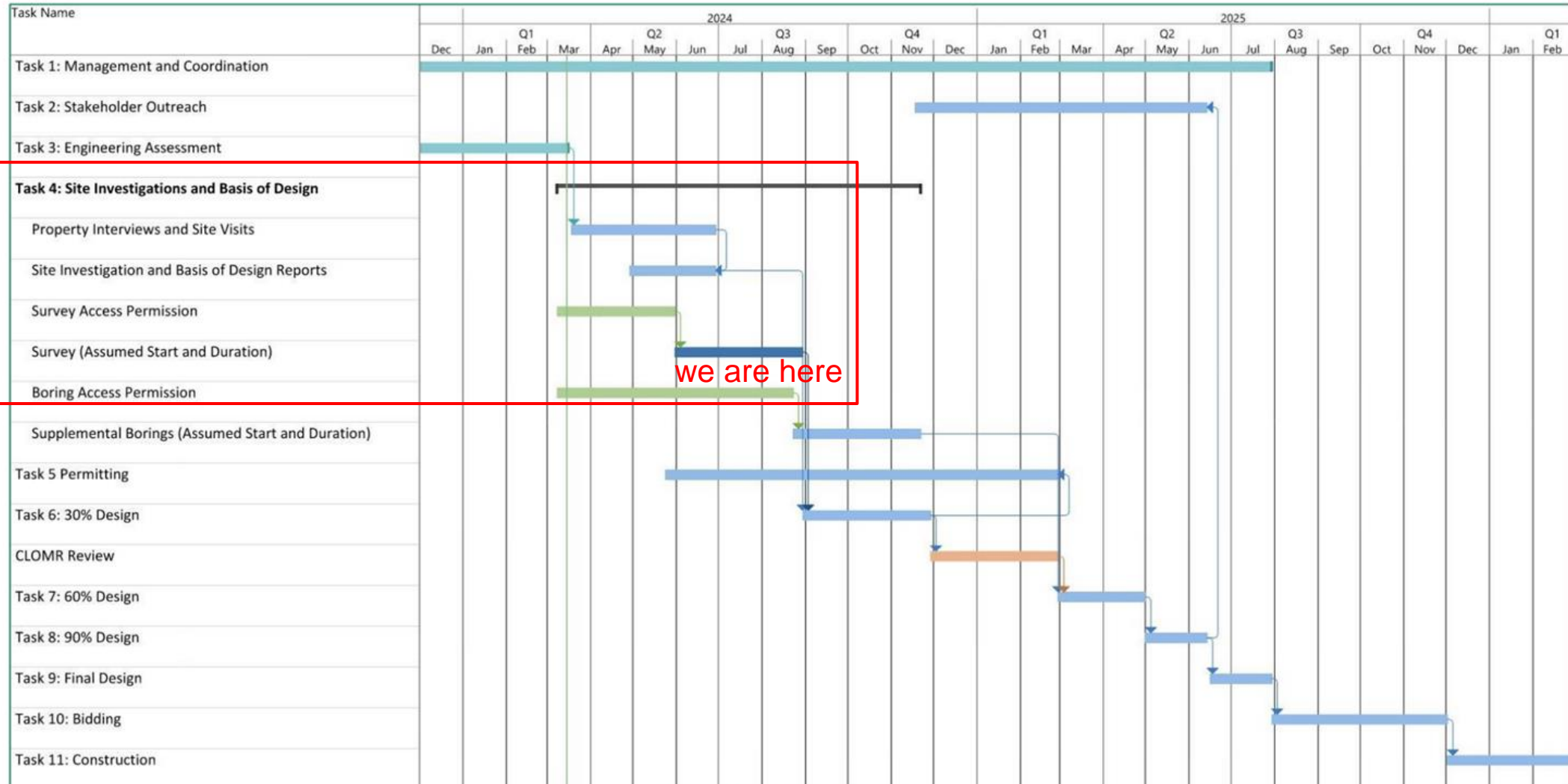
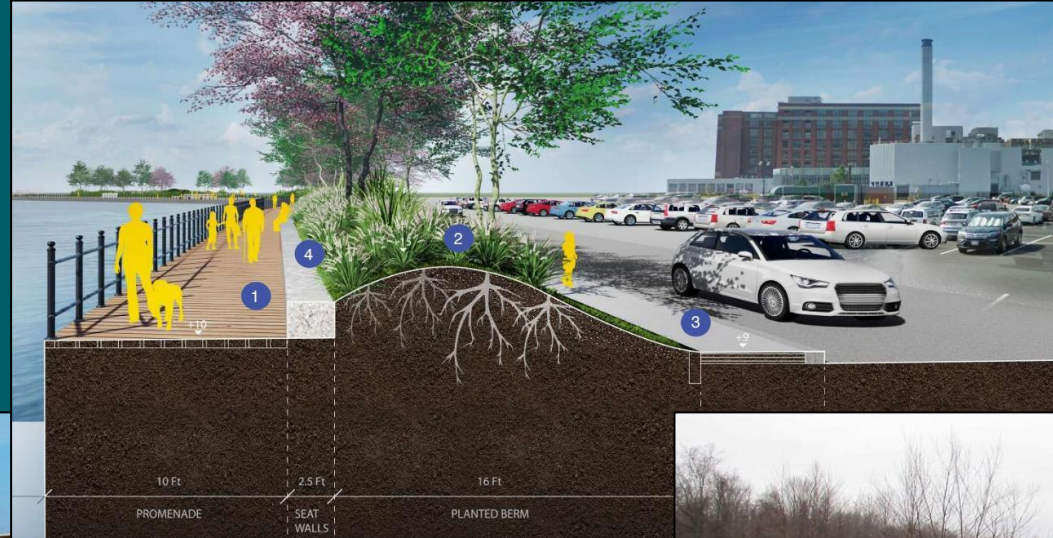


Figure 44 Project Schedule

Barrier Styles – Berm

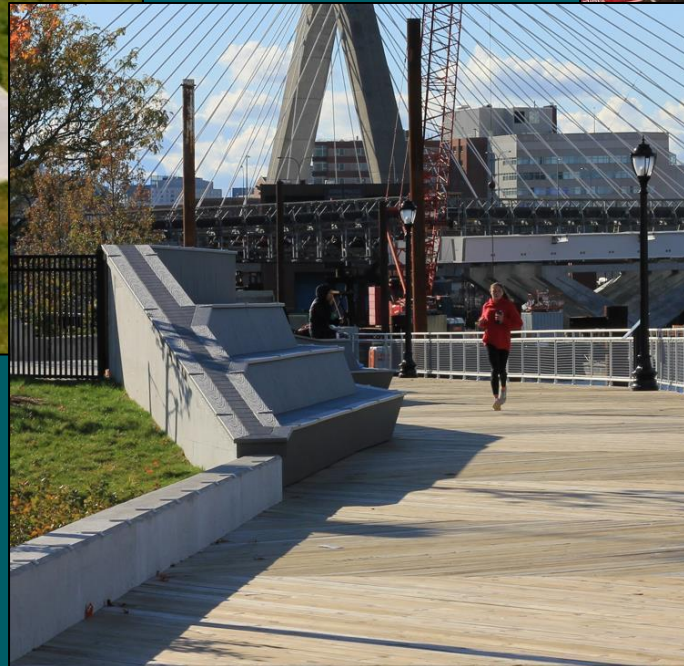
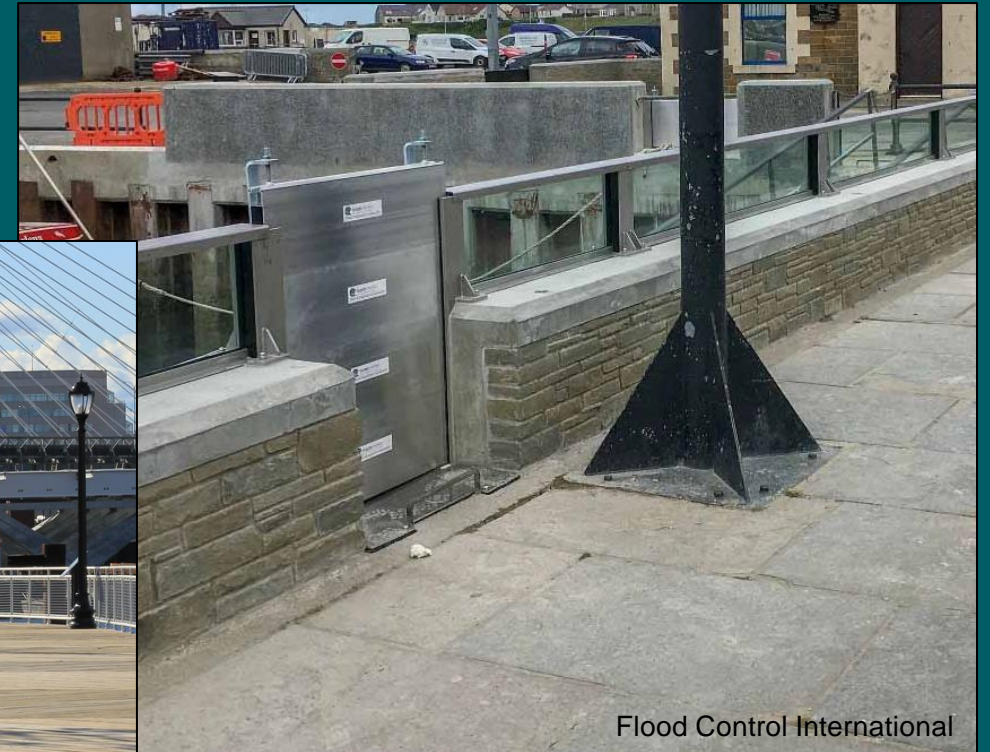


- Concepts – Final layout, configuration, and features to be determined



Barrier Styles – Flood Wall

- Example barrier styles shown
- Minor landscaping features could be added to these walls



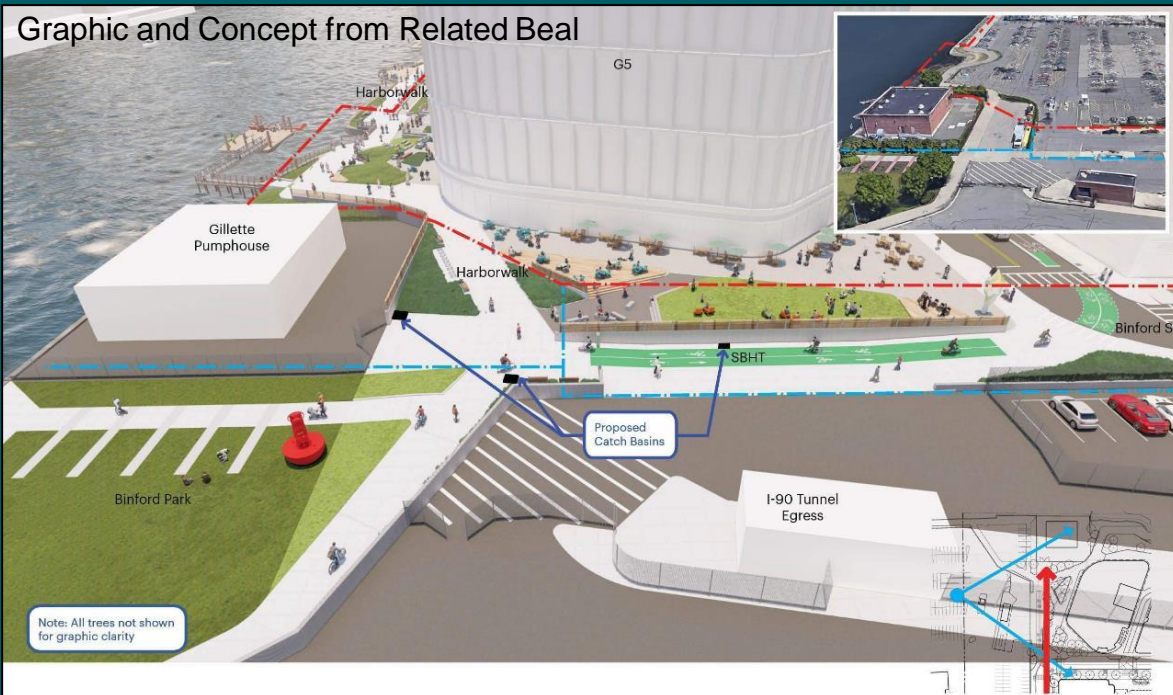
Flood Control International



Binford Street Access and Gate

- Intent is to

- Coordinate with property development
- Continued access to Gillette Pumphouse while in operation
- Allow maintenance and pedestrian access to Harborwalk and Binford St. Park
- Continued access for I-90 Tunnel Egress



Graphic and Concept from Tishman Speyer

Binford Street Access and Gate

- Gate styles have trade-offs between capital and operational costs



Stop Logs

Prairie Supply



Sliding Gate

Orange Flood Control



Swinging Gate

Watertight International



Tilt-up Gate

Flood Control International

Northern Deployable Barriers

- Need for barriers within operational life of barriers is to be determined in future design phase



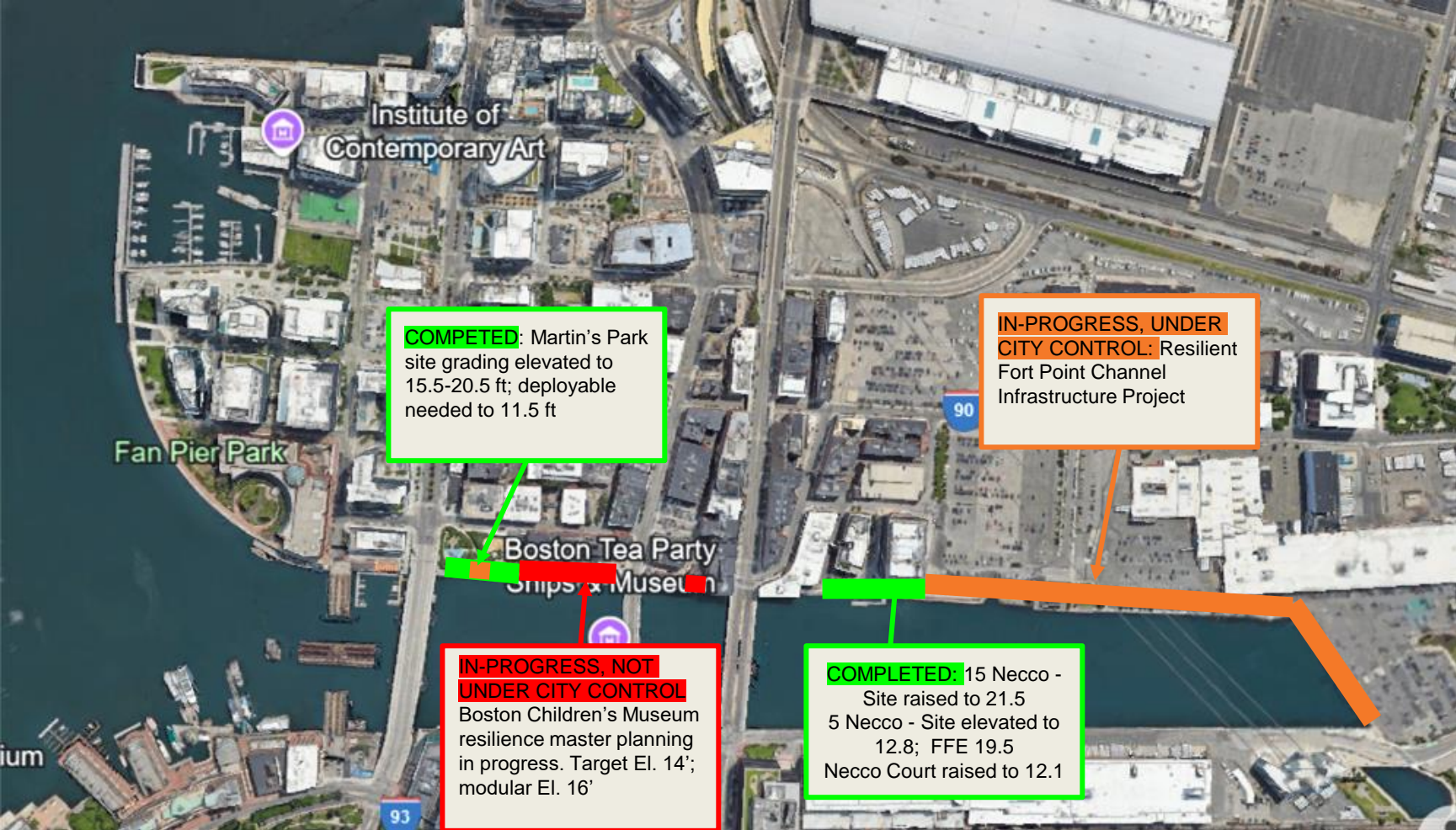
Prairie Supply



AquaFence



Related Resilience Initiatives



Key Project Stakeholders

5-15 Necco, National Development

244-284A Project, Related Beal

232 A St. Project, Tishman Speyer

Gillette



Stakeholder Project Status Summary

Project	Resilience Strategy	Status	Timeframe for design and construction	Outstanding Issues/Questions
232A St (Tishman and Speyer)	Raised grade across the site, El. 21.5, berm with minimized footprint	Board Approved	Unknown time frame	
244- 284 A St (Related Beal)	Raised grade across the site, integration with berm, El. 21.5; harborwalk elevated to address 2070 HAT	Board Approved	Anticipated phased construction Unknown time frame	Interim flood protection needed in the event project moves forward with Building G6 (A Street property).
15 Necco (National Development)	Raised grade across the site, integration with berm, El. 21.5;	Completed	Site has been raised; construction is complete	
5-6 Necco (National Development)	Resilience Retrofit of 5 Necco; FFE 19.5' Necco Court and Necco St improvements	Completed (need to double-check status of street elevations)	19th century wharf buildings have been retrofitted to 2050 DFE. Open space built to align with 15 Necco DFE	Modeling required to confirm Necco Court/Street sidewalk elevation is effective

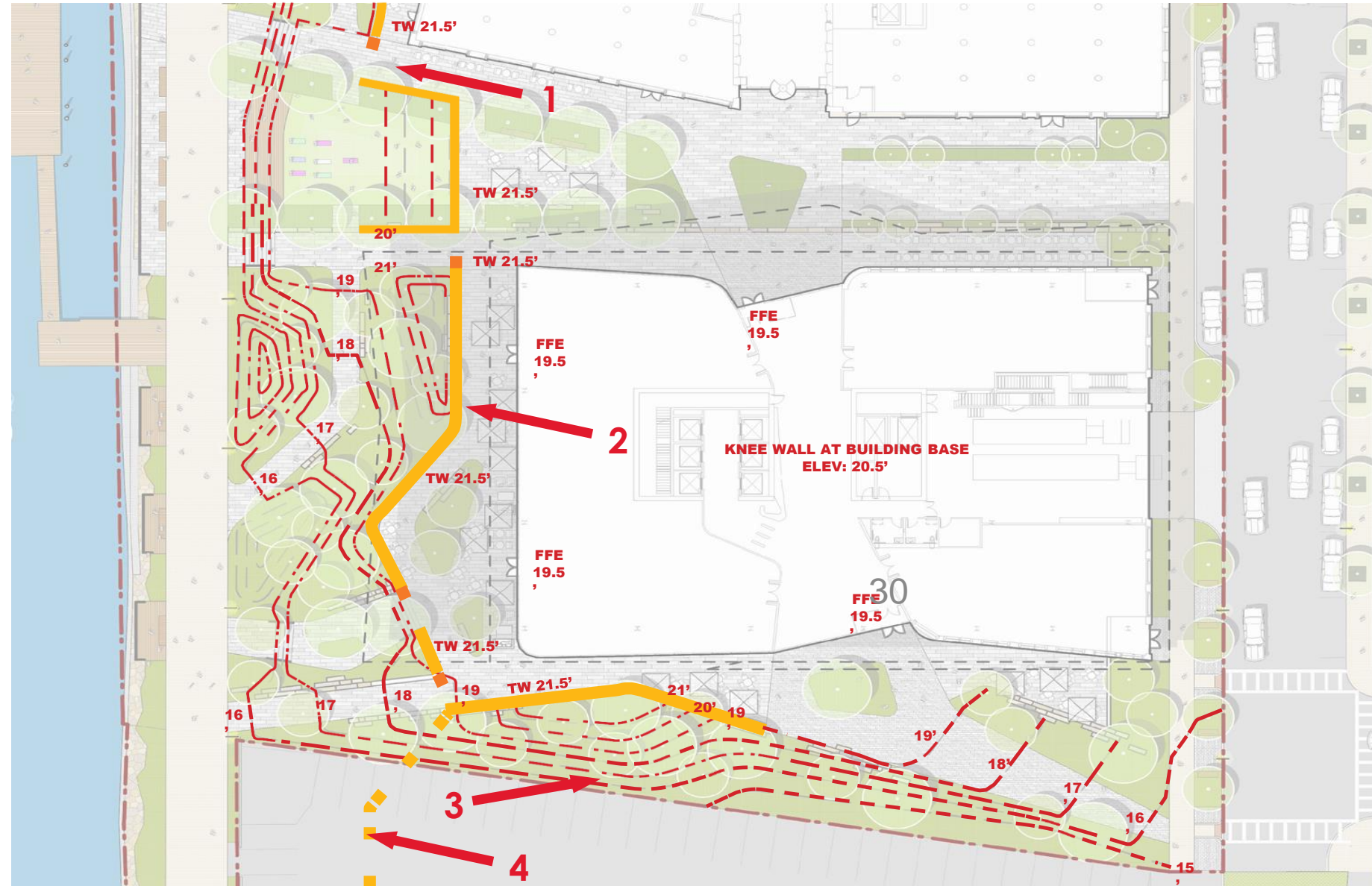
244-284 A St Resilience Strategy

2070 Highest Astronomical Tide
+16.71 (BCB)
40" SLR



15 Necco Resilience Strategy

1. Limited deployable protection locations where accessible paths connect to Harborwalk
2. Continuous flood protection at elevation +21.5'
3. Future park elevations will connect to continue flood protection along Fort Point Channel
4. Seamless integration of FEMA flood protection measures



Project Design



244-284 A St Proposed Design at Harborwalk



Information on Tides (Based on NOAA Buoy at mouth of Fort Point Channel)

Highest tides occur once a month on
a new or full moon

2021 Monthly high tides range from
11.56 to 13.16 BCB

2021 Highest tide of all the monthly
high tides (Highest Astronomical
Tide) 13.38 BCB

2070 Sea Level Rise projections are
3.3'

2070 projected Highest Astronomical
Tide 16.71 BCB

Building FFE & SLR Protective Ridge 21.50

2070 1% Storm BCB 20.50

Proposed Harborwalk 15.25-21.25

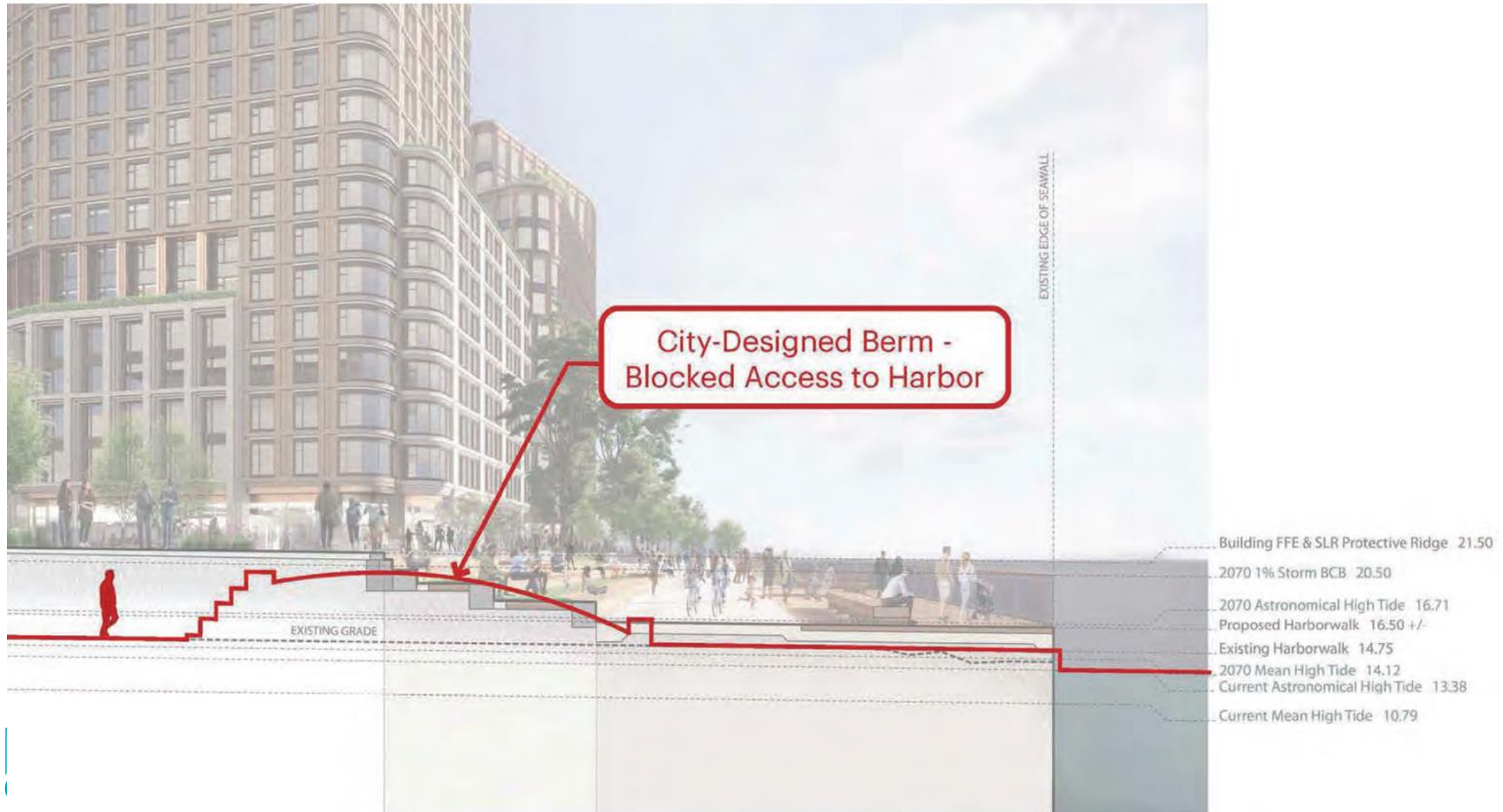
2070 Highest Astronomical Tide 16.71

Existing Harborwalk 14.60-15.75

Current Highest Astronomical Tide 13.38

Current Mean High Tide 10.79

244-284 A St Proposed Design at Harborwalk



Upcoming Project Activity

- Project survey
- Project geotechnical work
- 30% Design/CLOMR
- FEMA Award
- Community workshops
- Permitting
- Construction Design



