



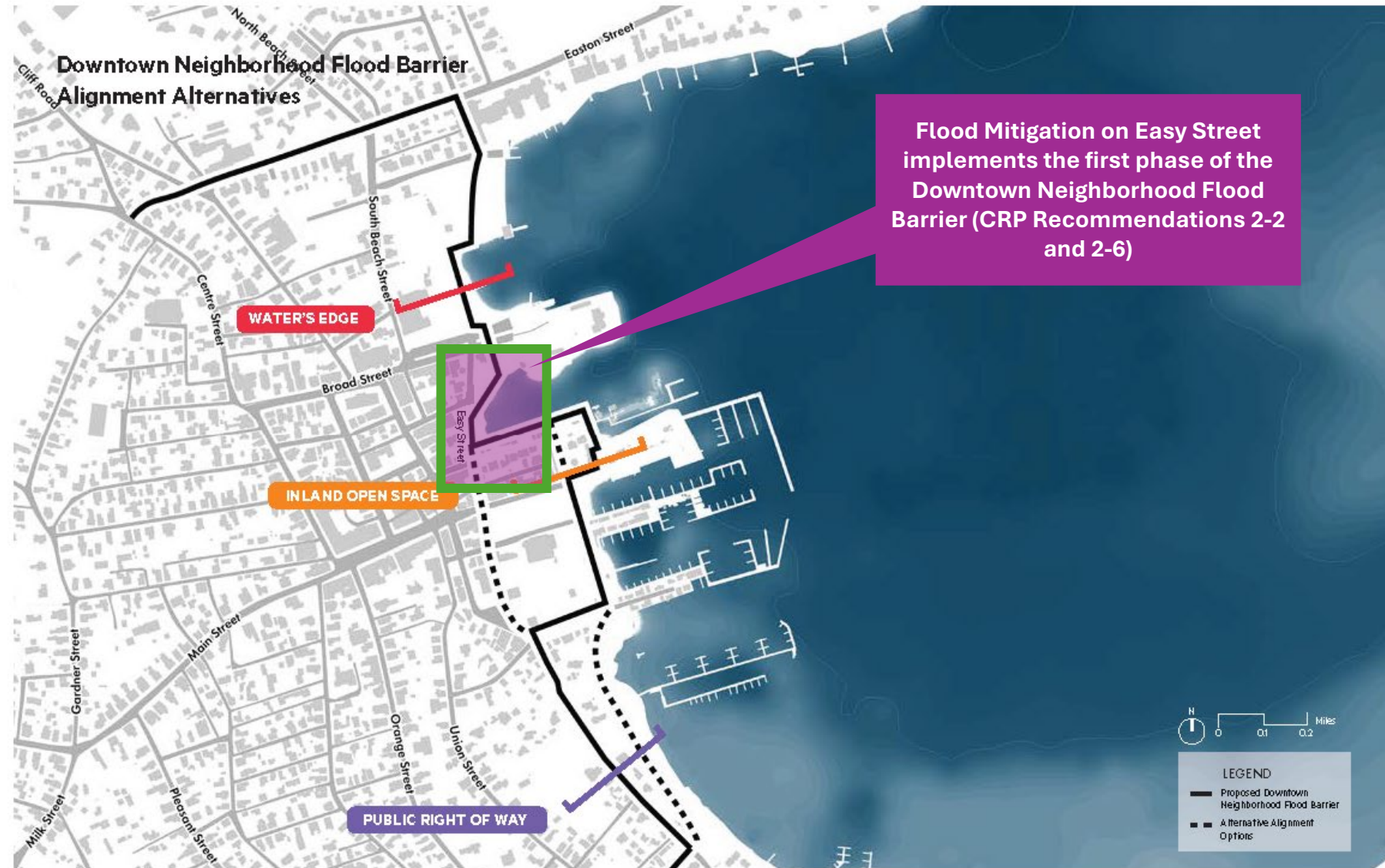
# Easy Street is Flooded AGAIN!

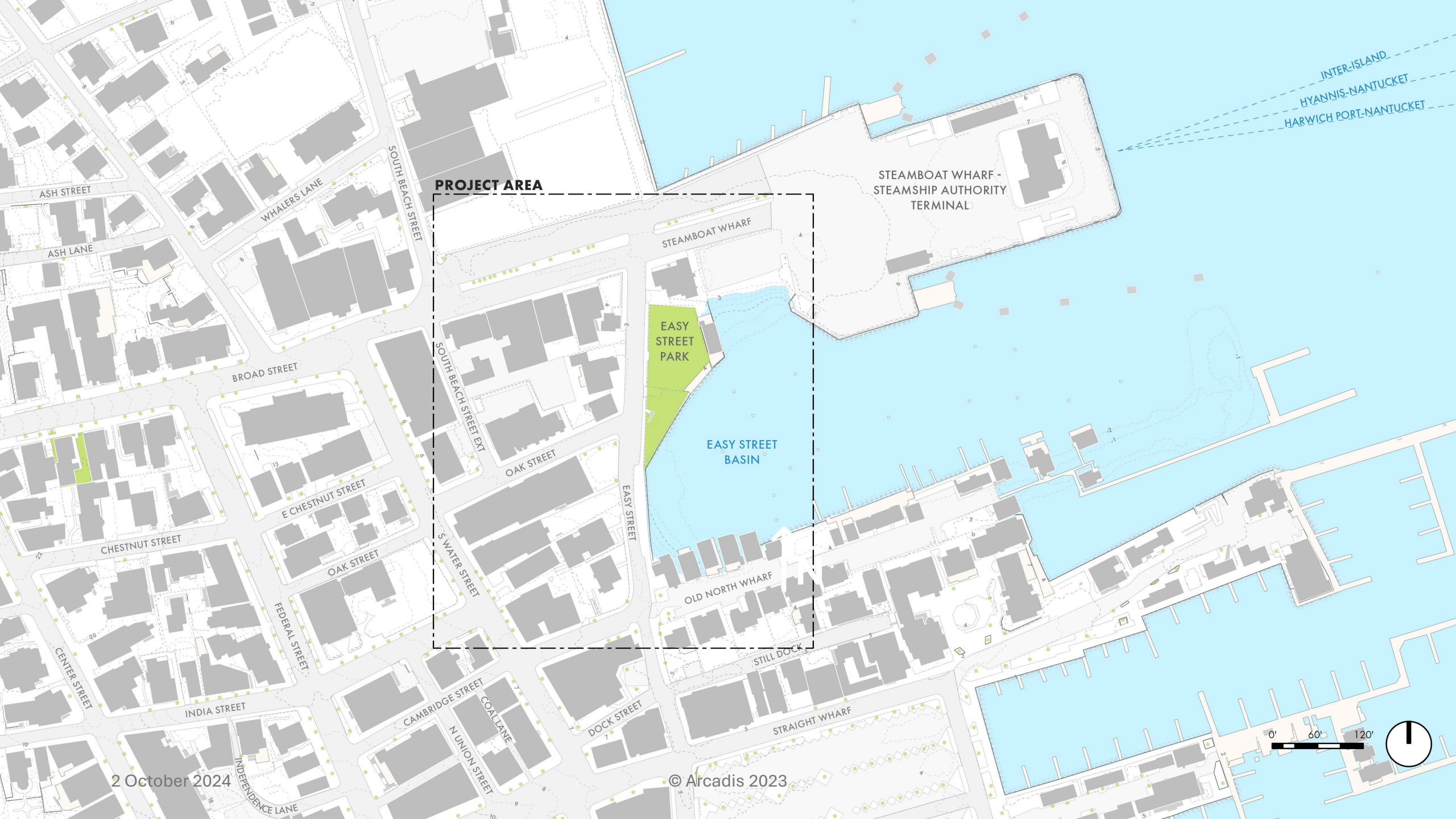
Nantucket's Plans to Mitigate Flooding on the Island's Most Important Transportation Corridor

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Town of Nantucket  
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Coastal Conference 2024

# Downtown Neighborhood Flood Barrier: Highest CRP priority





**PROJECT AREA**

STEAMBOAT WHARF -  
STEAMSHIP AUTHORITY  
TERMINAL

EASY  
STREET  
PARK

EASY STREET  
BASIN

OLD NORTH WHARF

STILL DOCK

STRAIGHT WHARF



ASH STREET

ASH LANE

WHALERS LANE

SOUTH BEACH STREET

BROAD STREET

SOUTH BEACH STREET EXT

OAK STREET

EASY STREET

E CHESTNUT STREET

CHESTNUT STREET

OAK STREET

FEDERAL STREET

CENTER STREET

INDIA STREET

CAMBRIDGE STREET

N UNION STREET

COAL LANE

DOCK STREET

INDEPENDENCE LANE

INTER-ISLAND  
HYANNIS-NANTUCKET  
HARWICH PORT-NANTUCKET

# Project Goals

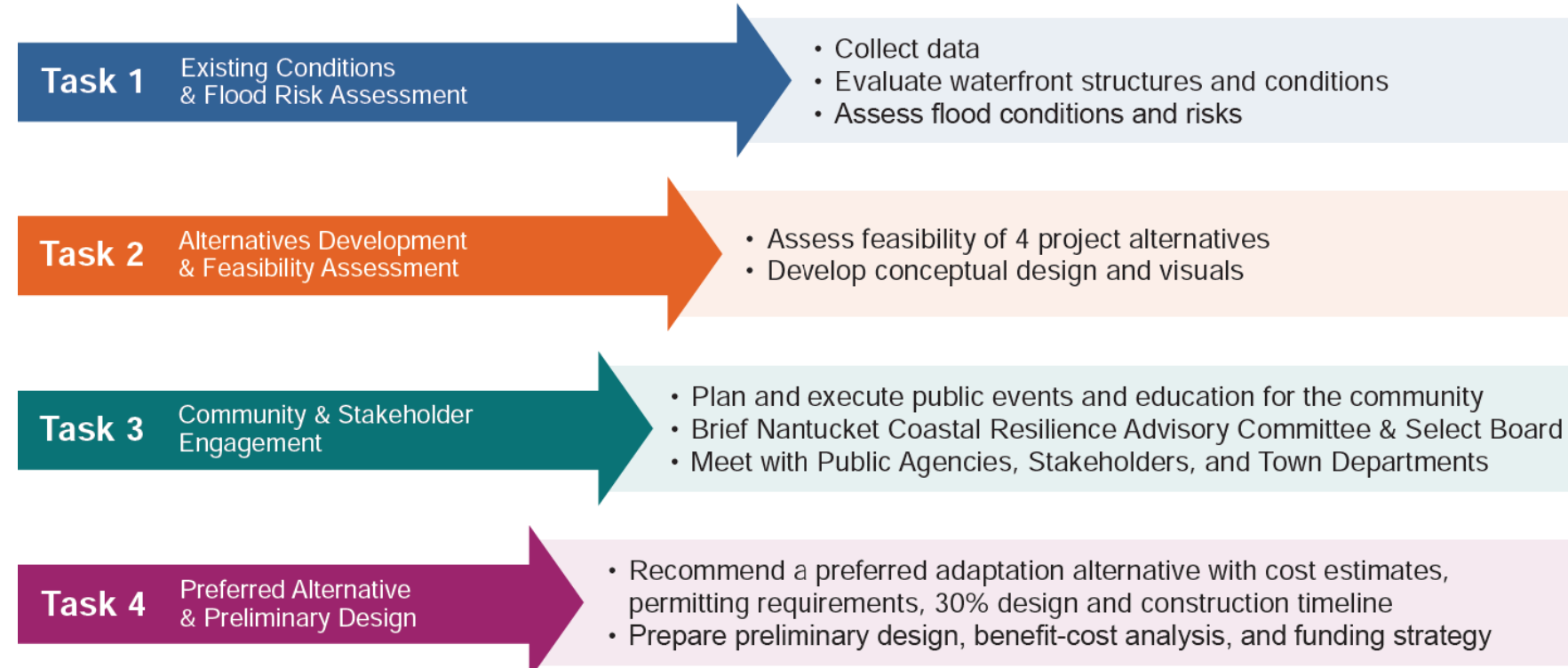
- Develop feasible project to mitigate stormwater and coastal flood risk along Easy Street
- Inclusively engage the Nantucket community and stakeholders island-wide in the design development process
- Seek co-benefits that improve access, mobility, and the environment as part of the design development process



# Project Outcome

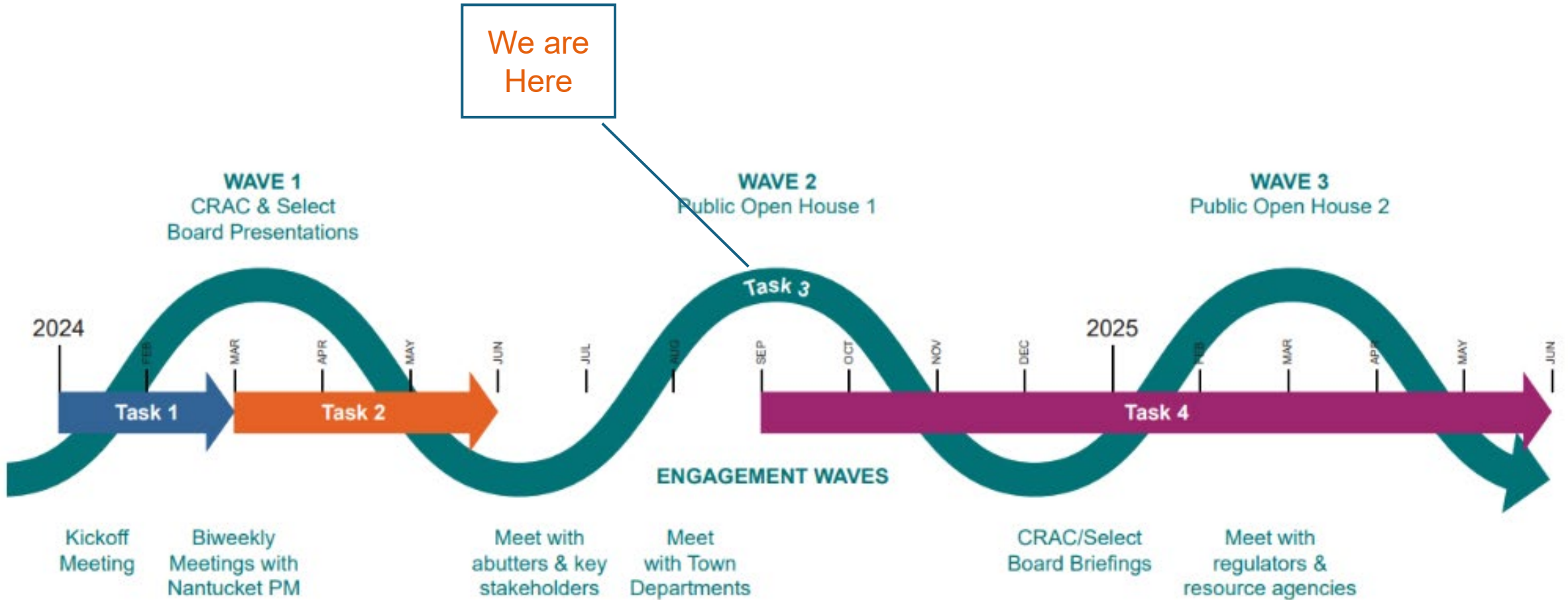
- 30% Design package that achieves outlined project goals
- Alternative is community supported

## PROJECT TASKS



# Project Timeline

We are Here



# Why?

## Coastal Flooding



# Why?

High Tide Flooding



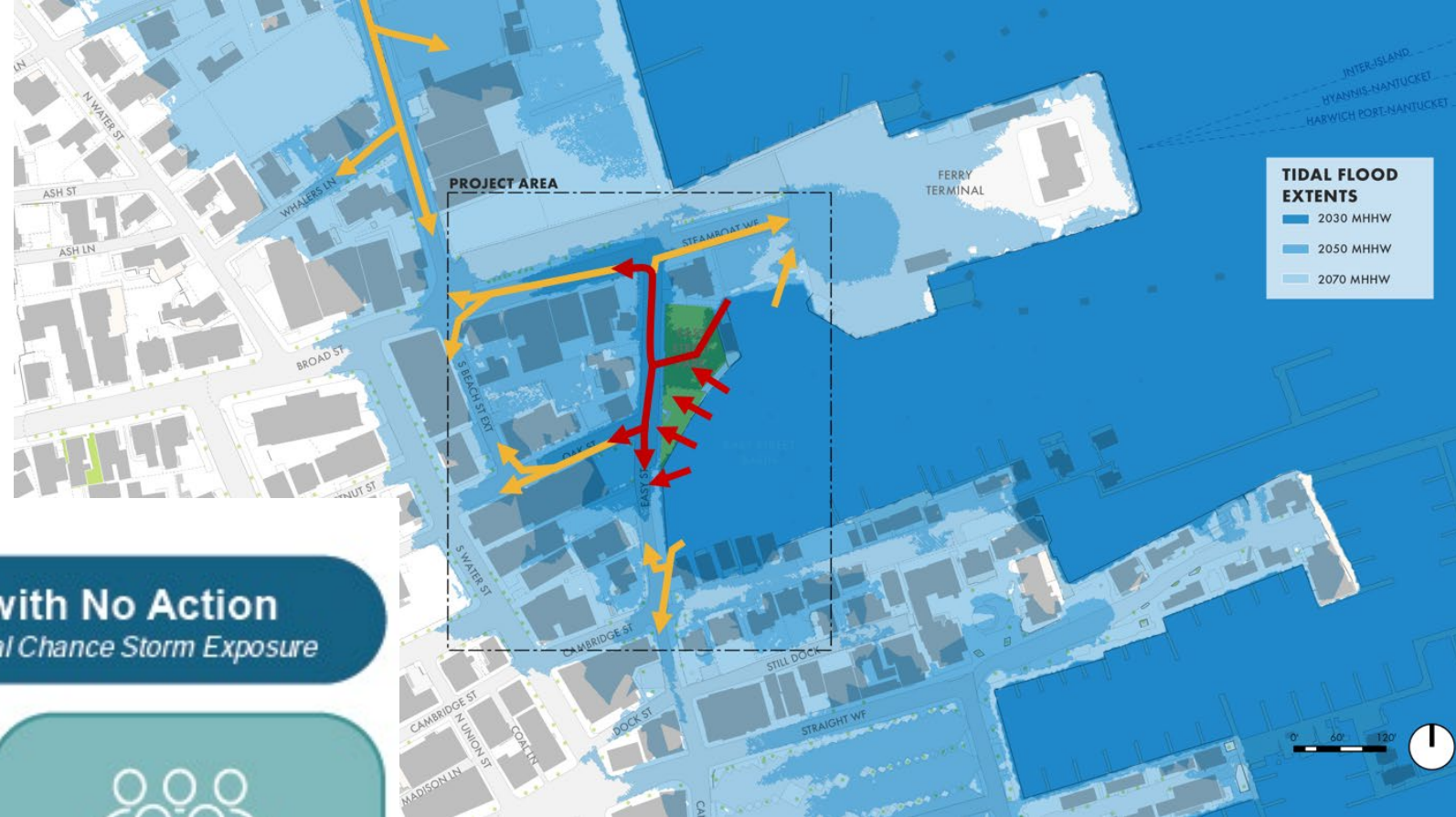
# Why?

## Stormwater Flooding





# Flood Risk Assessment



**Coastal Flooding Risk through 2070 with No Action**  
*2023-2070 Cumulative Present Value of Risk, 2070 1% Annual Chance Storm Exposure*



**\$1.2  
Billion**

In expected losses



**85  
Buildings**

Adversely impacted



**33  
Residents\***

In impacted homes

**Overland Coastal Flood Pathways**  
Data Sources: Town of Nantucket, MC-FRM

**\$1.2 BILLION in  
cumulative losses if no  
action taken**

# Alternative Criteria



**PROTECTION &  
CO-BENEFITS**



**EASE & TIMING OF  
IMPLEMENTATION**



**ADAPTABILITY**



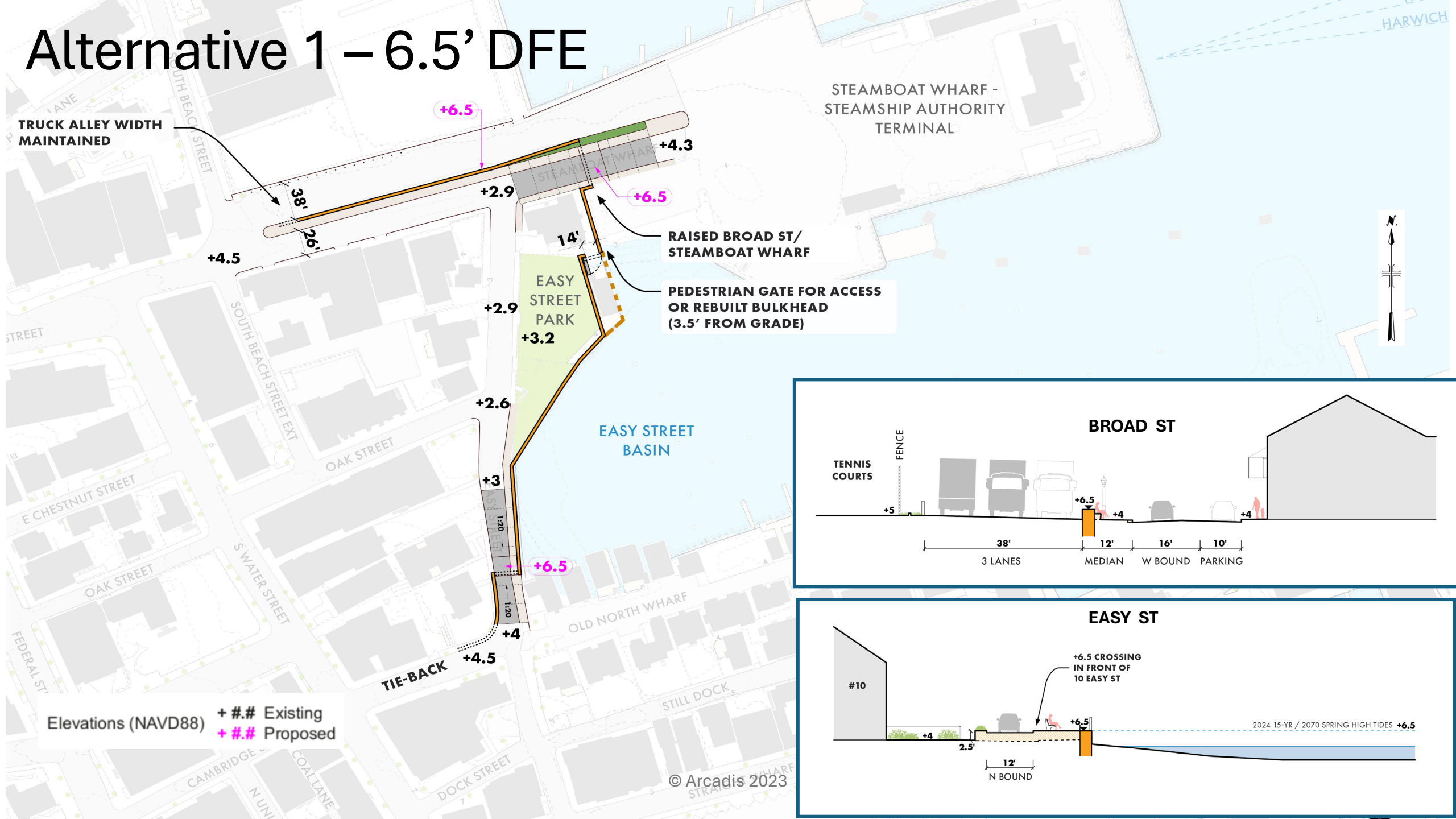
**PERMITTING  
& FUNDING**



**INTEGRATION**

Alternative	Level of Protection	Ease of Implementation	Adaptability	Integration	Fit for Funding	Co-benefits
Alternative 1 <i>Poster 7</i>	Medium	High	Medium	Medium	Low	Medium
Alternative 2 <i>Poster 8</i>	High	Medium	Medium	Low	Medium	Medium
Alternative 3 <i>Poster 9</i>	High	Low	High	High	High	High
Alternative 4 <i>Poster 10</i>	High	Low	High	High	High	High

# Alternative 1 – 6.5' DFE



TRUCK ALLEY WIDTH MAINTAINED

STEAMBOAT WHARF - STEAMSHIP AUTHORITY TERMINAL

RAISED BROAD ST / STEAMBOAT WHARF

PEDESTRIAN GATE FOR ACCESS OR REBUILT BULKHEAD (3.5' FROM GRADE)

EASY STREET BASIN

BROAD ST

TENNIS COURTS

38' 12' 16' 10'  
3 LANES MEDIAN W BOUND PARKING

EASY ST

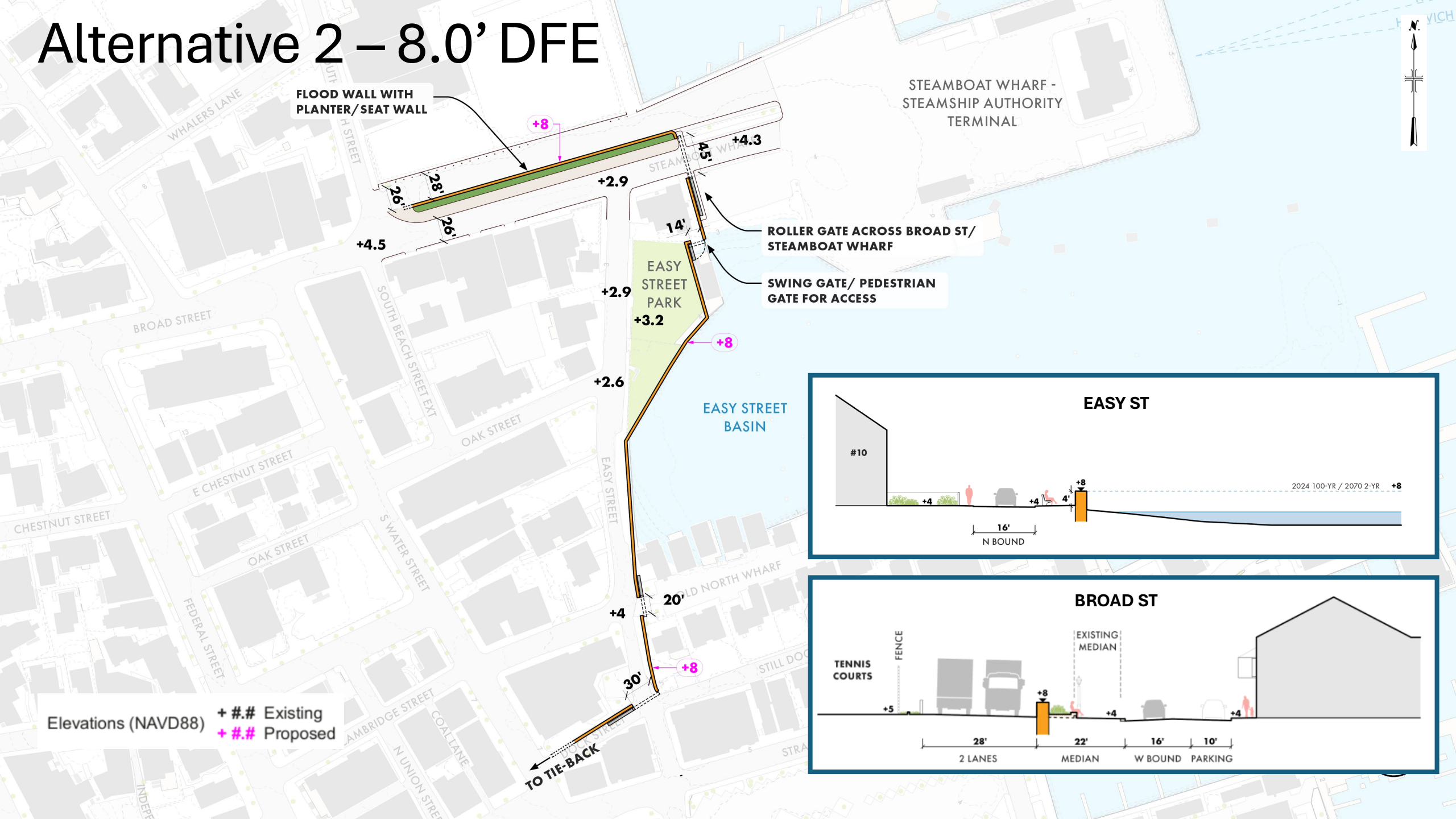
+6.5 CROSSING IN FRONT OF 10 EASY ST

12' N BOUND

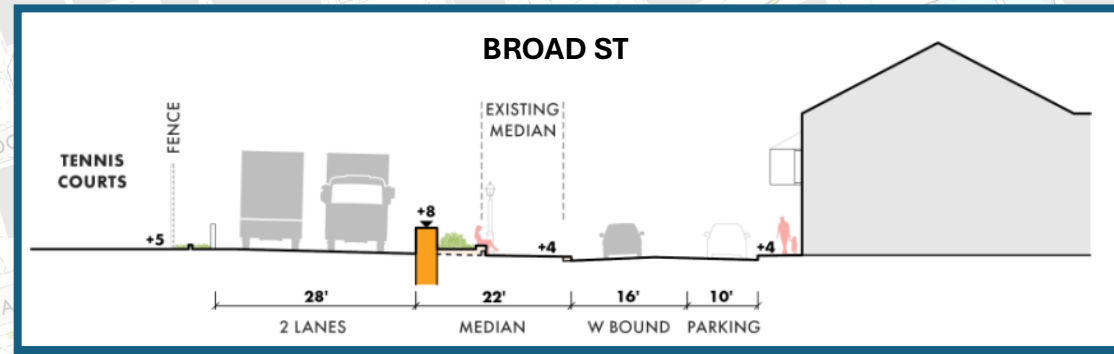
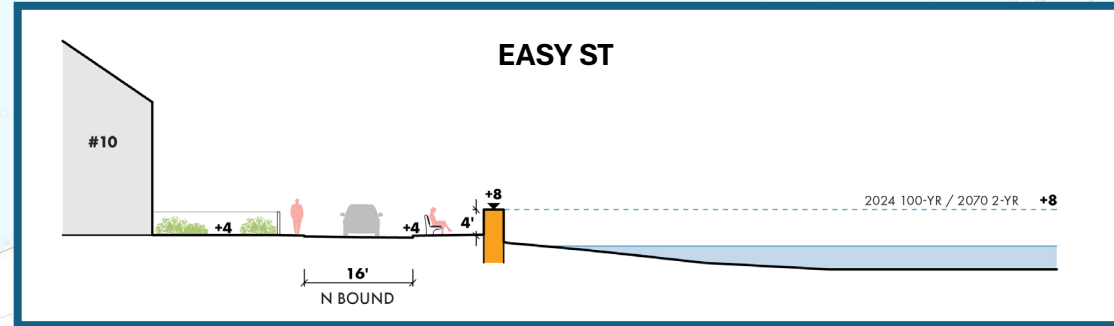
2024 15-YR / 2070 SPRING HIGH TIDES +6.5

Elevations (NAVD88) + ## Existing  
+ ## Proposed

# Alternative 2 – 8.0' DFE

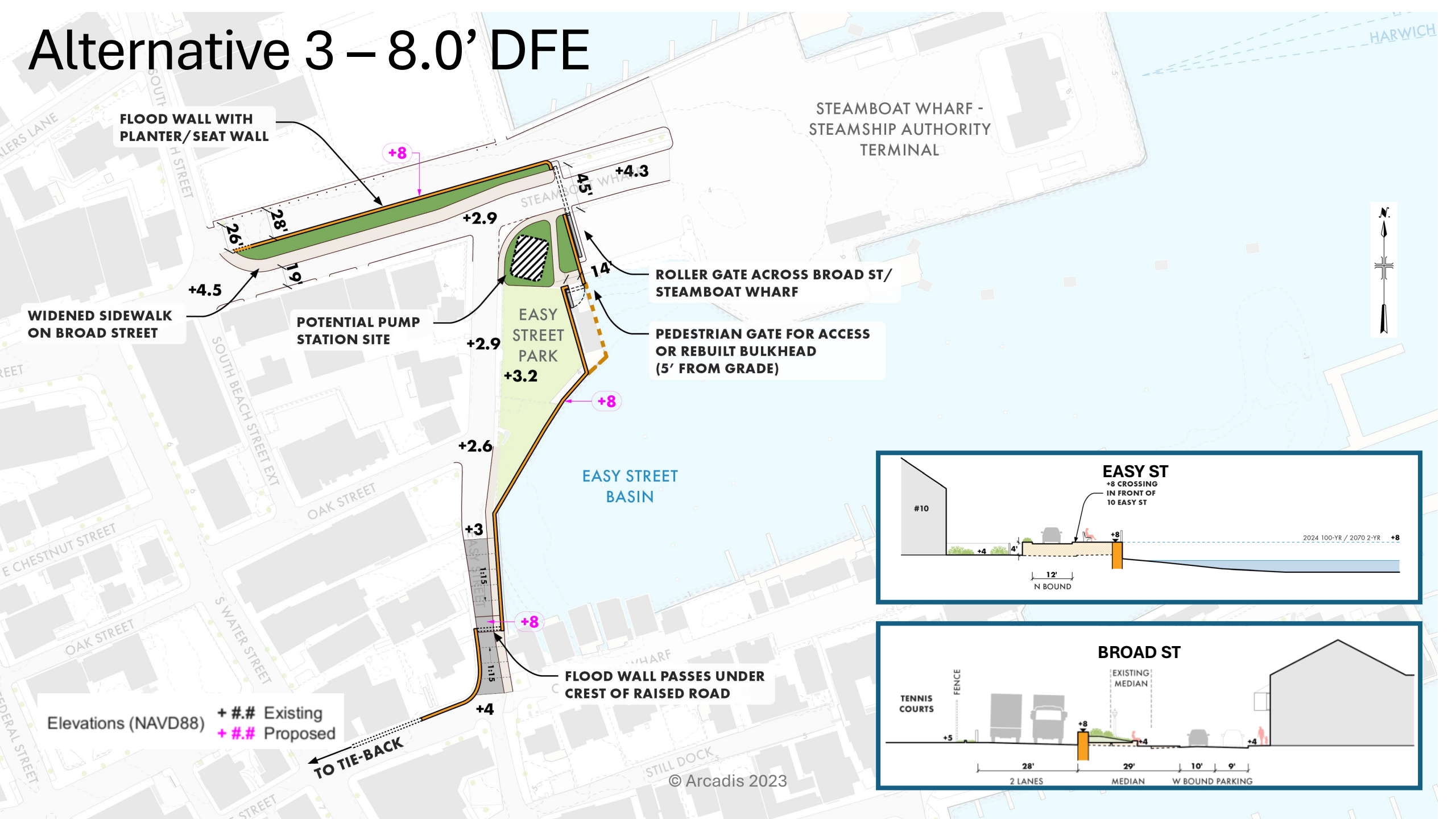


Elevations (NAVD88)   
 + ## Existing   
 + ## Proposed



TO TIE-BACK

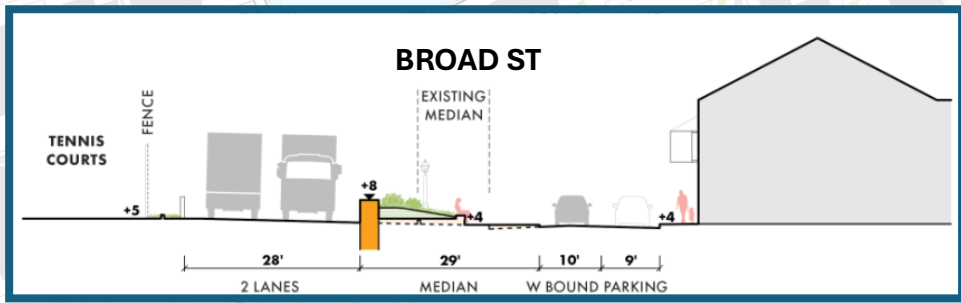
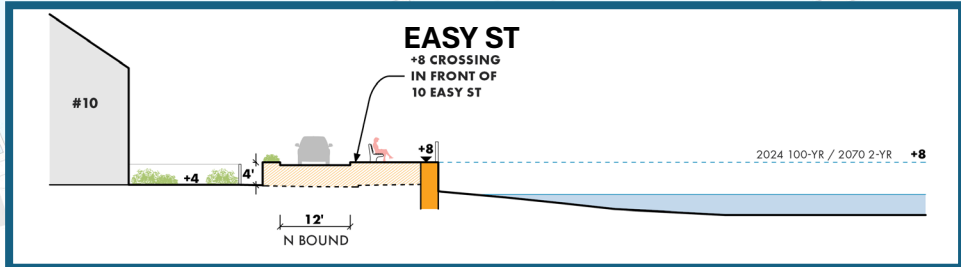
# Alternative 3 – 8.0' DFE



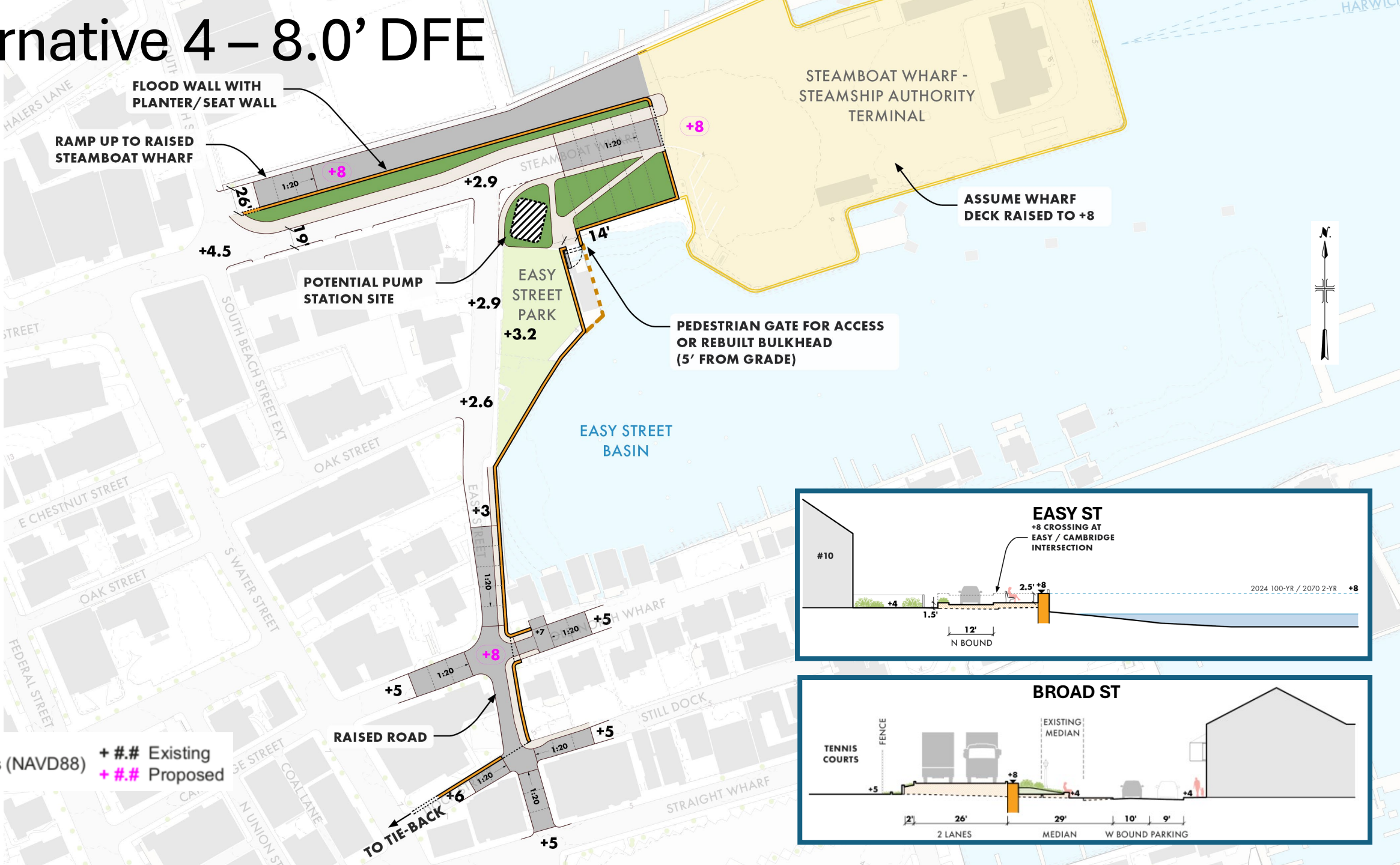
Elevations (NAVD88)   
 + ## Existing   
 + ## Proposed

TO TIE-BACK

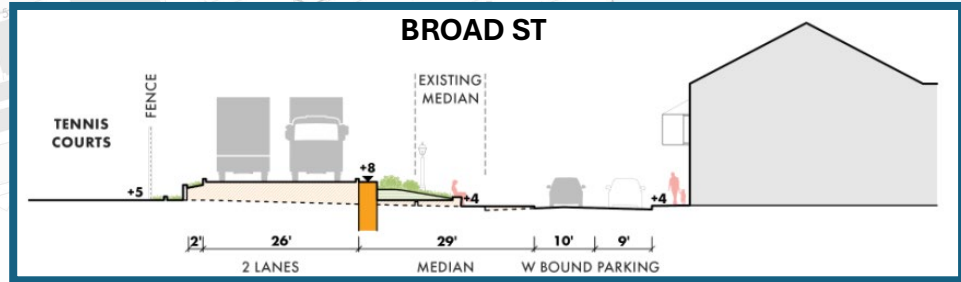
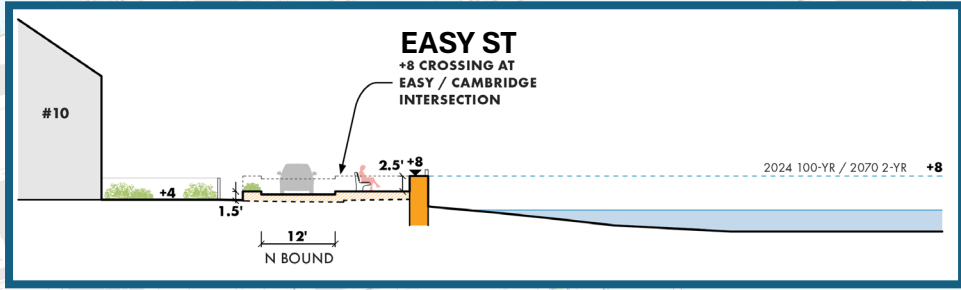
© Arcadis 2023



# Alternative 4 – 8.0' DFE



Elevations (NAVD88) **+##** Existing  
**+##** Proposed



# Alternative 5 – 8.0' DFE

TRUCK ALLEY WIDTH MAINTAINED  
EXTENDED SIDEWALK AT BROAD STREET

BROAD STREET RAISED TO +5

+4.5

FLOOD PROTECTION UNDER SIDEWALK

APPROX. 4.5' DIFFERENCE BETWEEN EXISTING DRIVEWAY AND RAISED ROAD

EASY STREET RAISED TO +8

+3.3

TO TIE-BACK +6

+8

+6

+8

+8

+8

+5

+4.6

EASY STREET BASIN

+5

+5

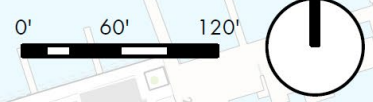
+5

STEAMBOAT WHARF - STEAMSHIP AUTHORITY TERMINAL

POTENTIAL PUMP STATION SITE

POTENTIAL PULL-IN AREA

Elevations (NAVD88)  
+ ## Existing  
+ ## Proposed



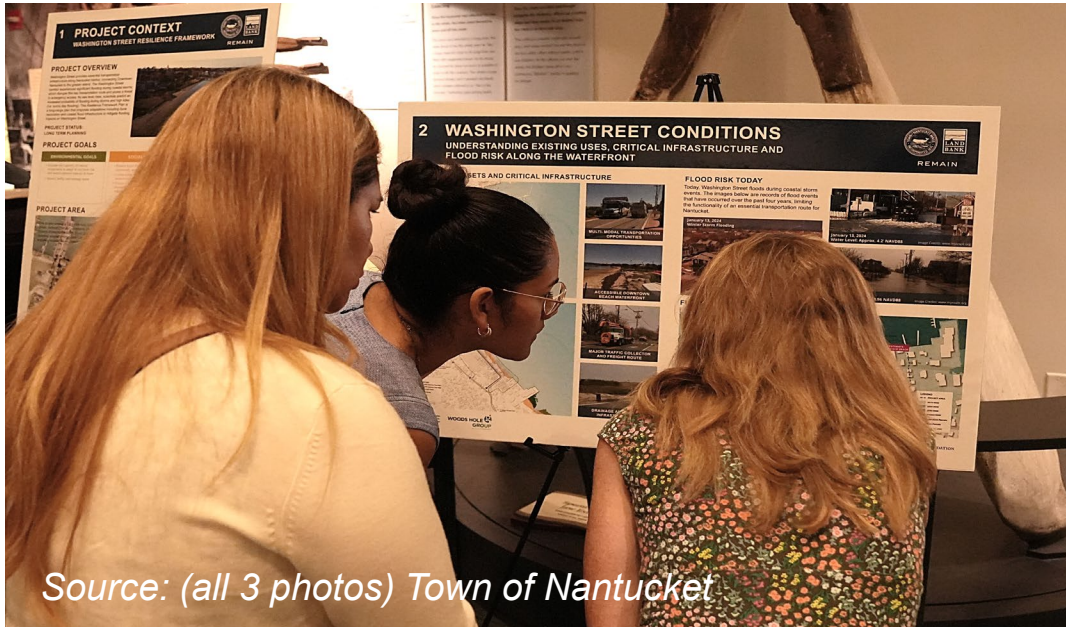


# Open House 1

Open House 1

AUG 7, 2024

- 2 Sessions
- Drop in
- Interpreters
- Free food and drinks
- Approx 115 attendees total (roughly 50 at each session)



Source: (all 3 photos) Town of Nantucket



# Questions and (hopefully) Answers



## HISTORIC FLOOD EVENTS

October 30, 1991

January 04, 2018

February 09, 2013  
December 12, 1992

January 23, 2005

October 29, 2018

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