BOSTON CHILDREN'S MUSEUM

In September 2019, Boston Children's Museum selected Sasaki, an internationally renowned landscape architecture firm, to lead a forward-thinking

Waterfront Master Planning Process

that would be groundbreaking in its ambition, innovation and creativity and where all aspects of the design would incorporate climate resiliency, which is critical to our location on the Fort Point Channel.

The high tide of the Fort Point Channel continues to climb higher. If no action is taken, the area in front of the Museum will serve as a pathway for frequent tidal flooding during coastal storms. The Climate Ready South Boston report states by the 2030s, "The 5-percent annual chance flood with 9 inches of sea level rise would flood far inland...and would connect flood pathways on the South Boston Waterfront to those originating on Seaport Boulevard and the Raymond L. Flynn Marine Park."

The Museum and Seaport District are increasingly **AT RISK OF FLOODING** due to sea level rise and storm surge.

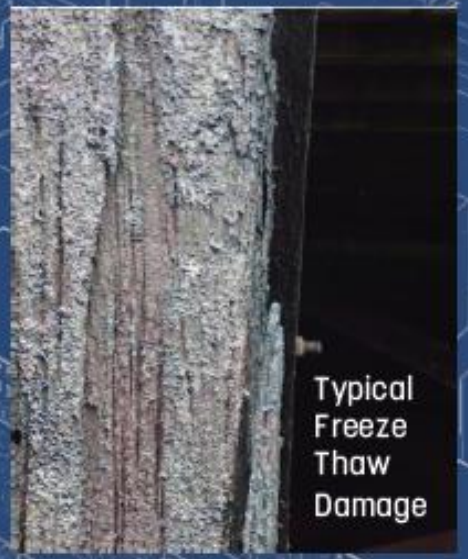
Pictured here, Winter Storm Riley (March 2, 2018) brought high tide within 4" of the Museum's Plaza and flooded Sleeper Street, briefly turning the Museum into an island.

40" of projected sea level rise by 2070

$8.1 billion expected in direct physical damages and relocation associated with flooding in Seaport by 2070

+4' recommended increase in flood barrier elevation

Current Existing Sea Wall



Typical Freeze Thaw Damage

Severe Splitting with Section Loss

Moderate Voiding/Fill Loss around Piping Outflow

Imagine a

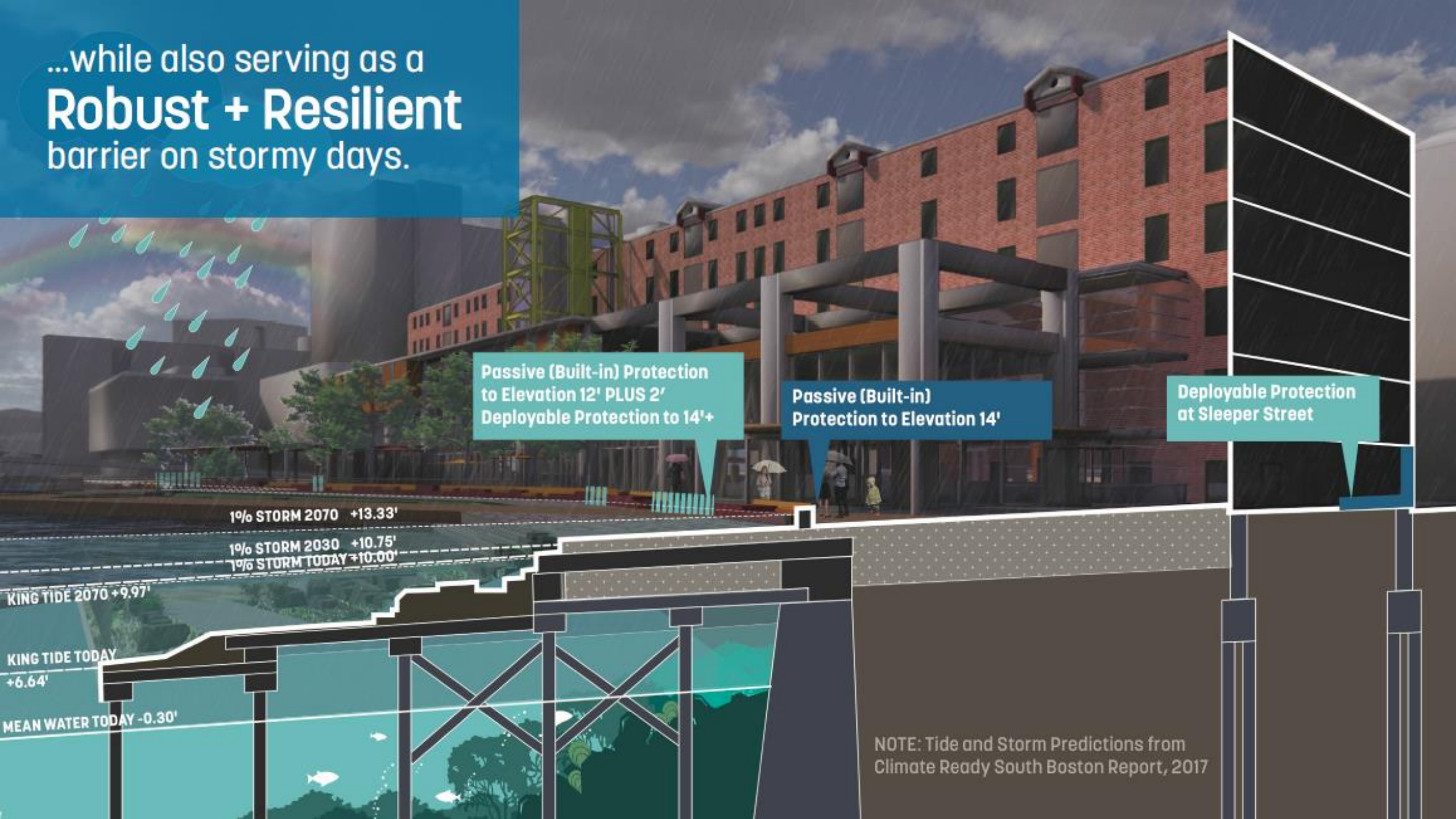
New Twist on Children's Wharf

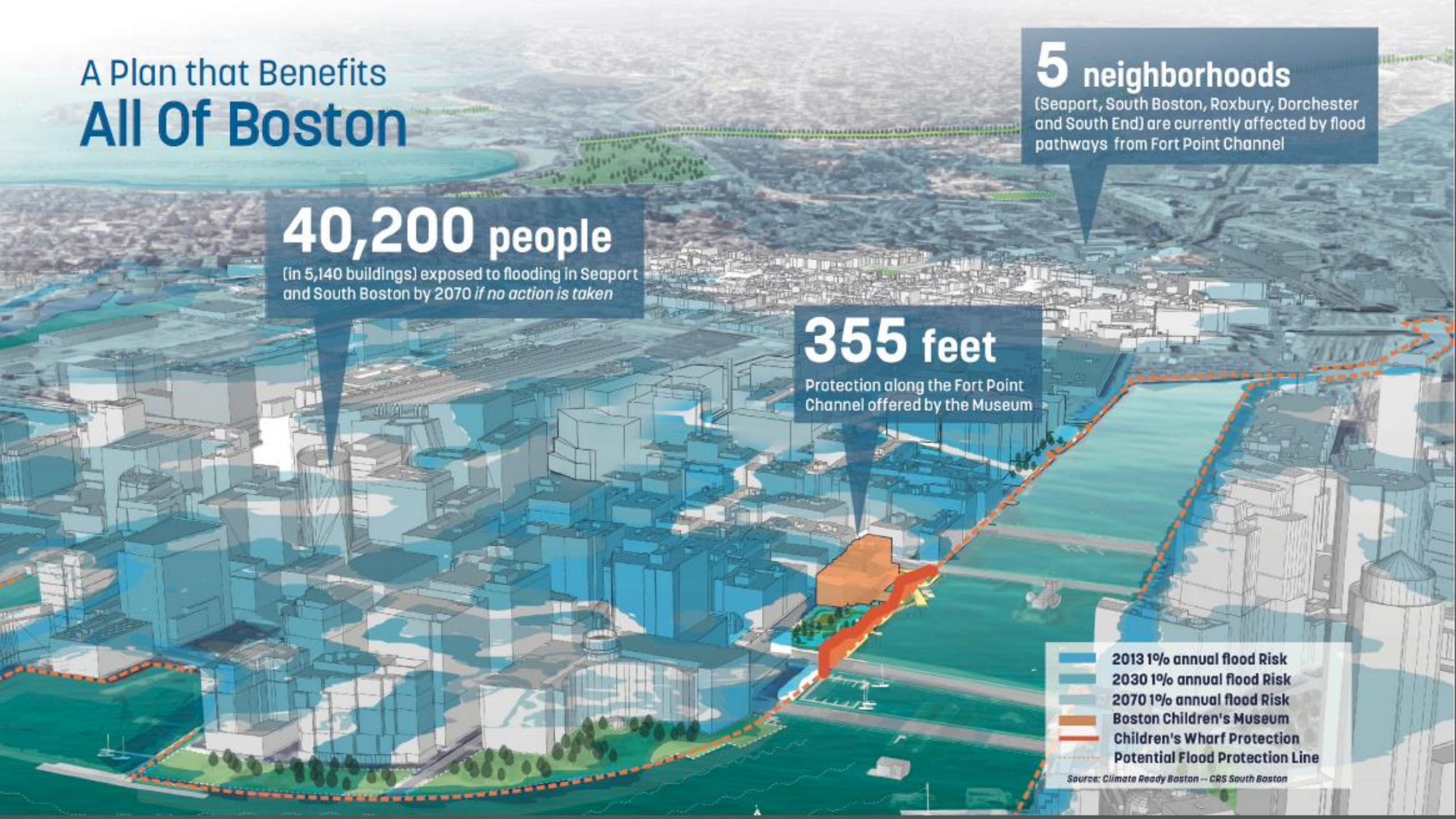
The waterfront vision is a dynamic and expressive landscape at the front door of the Boston Children's Museum that both protects the community from flooding and invites all visitors to engage in immersive experiences at the water's edge.

A waterfront landscape that is a

Welcoming + Inclusive

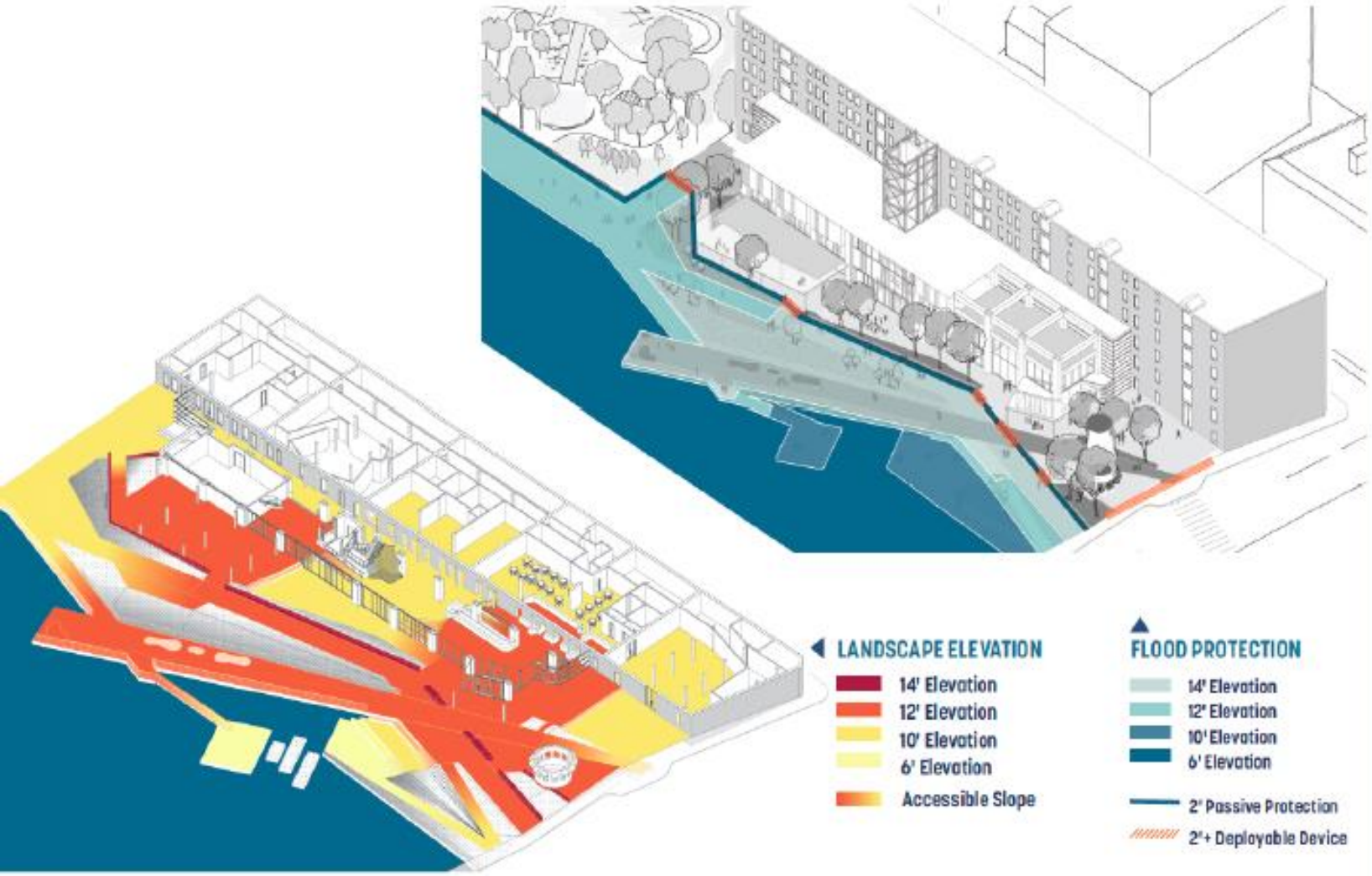
front yard every day...


...while also serving as a
Robust + Resilient
barrier on stormy days.
Passive (Built-in) Protection to Elevation 12' PLUS 2' Deployable Protection to 14'+
Passive (Built-in) Protection to Elevation 14'
Deployable Protection at Sleeper Street
1% STORM 2070 +13.33'
1% STORM 2030 +10.75'
1% STORM TODAY +10.00'
KING TIDE 2070 +9.97'
KING TIDE TODAY +6.64'
MEAN WATER TODAY -0.30'
NOTE: Tide and Storm Predictions from Climate Ready South Boston Report, 2017


A Plan that Benefits
All Of Boston
5 neighborhoods
(Seaport, South Boston, Roxbury, Dorchester and South End) are currently affected by flood pathways from Fort Point Channel
40,200 people
(in 5,140 buildings) exposed to flooding in Seaport and South Boston by 2070 *if no action is taken*
355 feet
Protection along the Fort Point Channel offered by the Museum
2013 1% annual flood Risk
2030 1% annual flood Risk
2070 1% annual flood Risk
Boston Children's Museum
Children's Wharf Protection
Potential Flood Protection Line
Source: Climate Ready Boston -- CRS South Boston

Flood Protection Strategy

Aligning With South Boston's Plan



- Completely aligned with the recommendations in Coastal Resilience Solutions for South Boston report (2018).
- A critical link in the overall flood protection strategy for the Fort Point Channel and the surrounding South Boston neighborhood through a combination of a raised seawall, stepped seating, and an elevated Harborwalk.
- Ties into the flood protection systems in Martin's Park and future flood protection along Congress Street; thus ensuring continuity along Fort Point Channel.
- When constructed, the site is fully protected up to elevation 14.0 feet, which aligns with the City's recommended target elevation, and makes allowances for increasing the flood protection to an elevation of 16.0 feet in the future.

A Robust Structural Framework

Proposed Piles

More than 120 new piles will support boardwalk and landscape features extending the museum's presences into the Channel.

Proposed Lightweight Soil

Plants will grow in soils designed to maximize ecological health while minimizing structural load.

Proposed Lightweight Fill

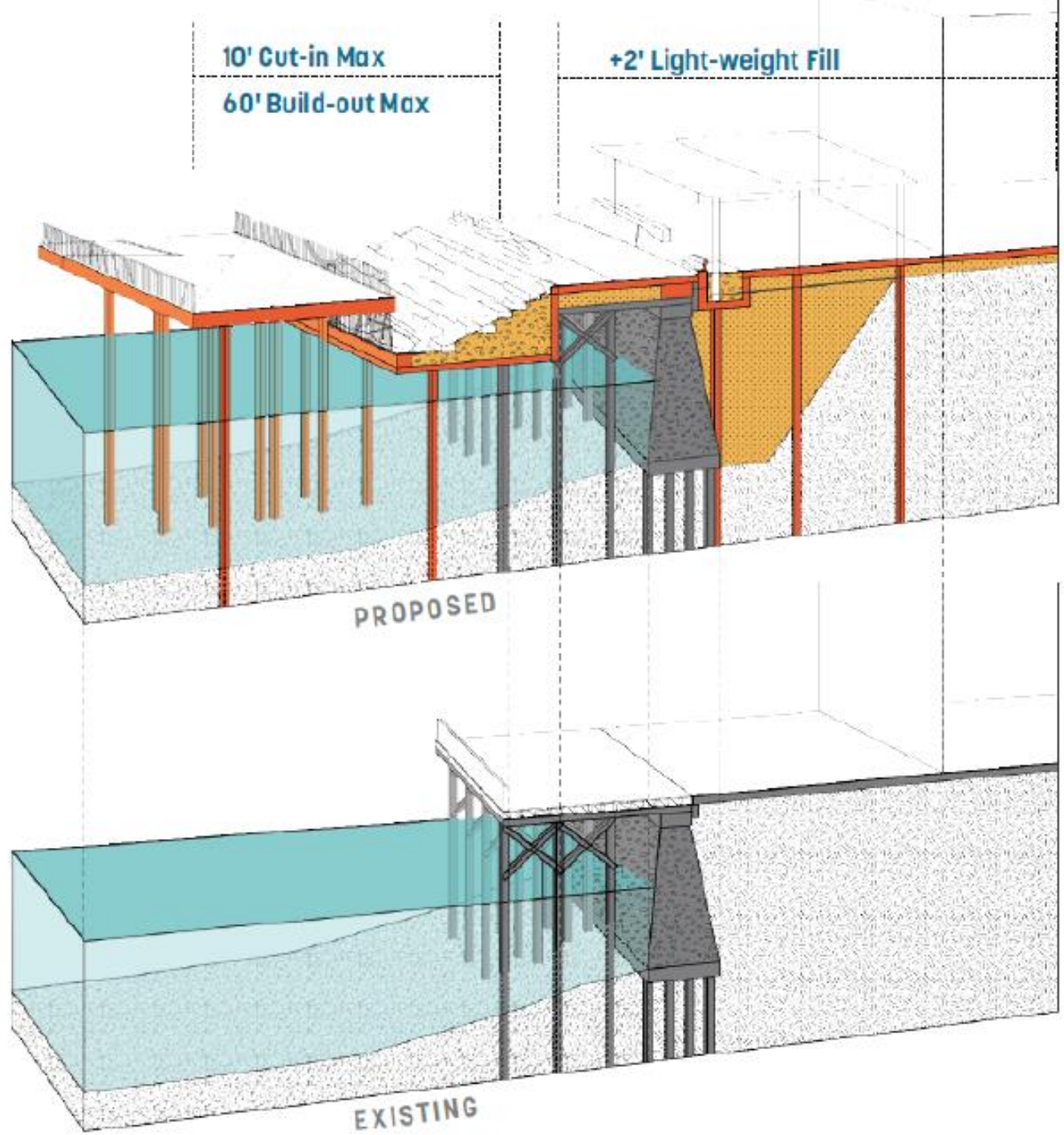
Lightweight fill allows an increase in landscape elevation (for flood protection) without over-burdening the existing seawall. Over 2,000 cubic yards of lightweight fill will be needed.

Existing Piles

Existing piles are timber friction piles bearing in marine clay. The design re-uses as many as possible.

Existing Sea Wall

Built in 1890, the seawall is a fieldstone block construction in fair condition, requiring some repair.



An Immersive and Engaging Experience

The Harborwalk continues recreational access along the entirety of Boston's harbor edge.
A planted and rocky slope stretches down to the current high tide level, showcasing native plant communities and providing visitors with a visual clue to the tidal fluctuation and rising sea levels.
The pivoting of the Children's Wharf opens generous space for programming and activation of the Museum's edge, Harborwalk and waterfront.
A new three-season event pavilion will enable daily activities and serve as a rentable program space overlooking the waterfront.

1 WATER STEPS, FLOATING WETLANDS + DOCK

2 MESSY PLAY AREA + ATRIUM CONNECTION

3 CHILDREN'S WHARF + WATER HAMMOCKS

4 EVENT SPACE

5 MUSEUM ENTRY + ARRIVAL

Climate change

is the most critical issue facing our world, our families, and our young people today. For younger children (ages 6-10) climate change is a familiar term, but less clear is how they might take an active role in both understanding this issue and making positive change. The Museum will explore and test resources that can positively impact children's ability to understand climate change and empower them to take action.

observe

explore

touch

discover

relax

The lower water steps provide a platform for discovery and performance at the water's edge.

2

enjoy

experiment

build

play

engage

The Messy Play area offers sand and water play as well as flexible programming space connected to the Museum's interior.

3

view

rest

observe

explore

On the Children's Wharf, the water hammocks invite visitors to enjoy a different perspective on the harbor.

welcome

rest

excite

arrive

The Museum's renovated entry is a welcoming, spacious and inclusive arrival point for all visitors, with flood protection built-in.

protect

engage

Key Meetings To Date

Government	Foundations	Other
• Senators – Markey/Warren • Congress –Pressley & Lynch • FEMA and MEMA • Mayor Wu • Rep. Biele • Boston Planning and Development Authority (BPDA) • Senator Collins • Rep. Michlewitz • Boston City Council President Flynn	• Smith Family Foundation • Blue Cross Blue Shield Foundation • Liberty Mutual Foundation • Yawkey Foundation • Fish Family Foundation • Klarman Foundation • Lynch Foundation • Fidelity Foundation • New Balance Foundation • Plymouth Rock Assurance Foundation • James & Catherine Stone Foundation • Conservation Law Foundation	• Green Ribbon Commission • Boston Harbor Now • Amazon • Stone Living Lab • Marguilies Perruzzi Architects • Wharf District Council

Next Steps

- Continue to explore funding opportunities from City, State, Federal Agencies, and other funding strategies
- Begin conversations with City and State officials about permitting issues/hurdles
- Analyze financial and operating implications of a phased project
- Commence an architectural analysis of the Museum space and its connectivity to the prospective waterfront project
- Generate a detailed evaluation of the public and private systems that affect our property
- Engage a Project Manager/Firm to provide preconstruction services to assist with pricing, scheduling, and construction sequencing

Thank you!