SEAPORT
Coastal Resilience

Design Update:
Community Workshop #2
December 16th, 2024

NYC/EDC NYC Mayor's Office of Climate & Environmental Justice

AECOM

Project Schedule

COMMUNITY MEETING #1: KICKOFF JUN 2024	
TODAY	
COMMUNITY MEETING #2: PUBLIC REALM DESIGN WORKSHOP	**COMMUNITY MEETING #3: PUBLIC REALM WORKSHOP**

COMMUNITY OUTREACH

DATA COLLECTION + SURVEY WORK

INVENTORY + ANALYSIS   **SCHEMATIC + DESIGN DEVELOPMENT**   **CONSTRUCTION DOCUMENTATION**

PROCUREMENT   **CONSTRUCTION**

| SPRING 2024 | SUMMER 2024 | FALL 2024 | WINTER 2025 | SPRING 2025 | SUMMER 2025 | FALL 2025 | WINTER 2026 | SPRING 2026 | SUMMER 2026 | FALL 2026 | 2027 | 2028 |

Data Collection & Design (Winter)

• Existing Drawing Collection

• Surveys (Topographic, Geotechnical, Utility, Bathymetric, Hydraulic)

• Site Inventory and Analysis

• Preliminary Alignment Feasibility Studies

• Coordination with Agencies

• Begin Public Art Process

• Begin Schematic/Pre-Conceptual Design

Agenda

SEAPORT
Coastal Resilience

01
Context & Background

Project Location

CITY
1 MI

NEIGHBORHOOD
1000 FT

SITE
500 FT

Manhattan

Queens

Brooklyn

Pearl St.

Brooklyn Bridge

FDR Drive

Lower Manhattan Coastal Resiliency (LMCR)

New Jersey

US Army Corps of Engineers NY-NJ Harbor & Tributaries Study

Lower Manhattan Coastal Resiliency (LMCR)
NYC's flood resiliency strategy to protect Lower Manhattan post-Superstorm Sandy

Battery Park City Coastal Resilience Projects

The Battery Coastal Resilience

Seaport Coastal Resilience

Broadway

Canal Street

Chambers Street

West Street

The Battery

FDR Drive

Brooklyn Bridge

Manhattan Bridge

Williamsburg Bridge

East Side Coastal Resiliency
2.4 Miles

Brooklyn Bridge-Montgomery Coastal Resilience (BMCR)

FiDi and Seaport Climate Resilience Master Plan

Brooklyn

N

What is Seaport Coastal Resilience?

NEAR-TERM

Seaport Coastal Resilience
2100s Tidal Flooding: EL 11'

Total Project Budget: **$228.8M**
(Design & Construction)

Responds to the immediate
need to protect the Historic
South Street Seaport

IN CONSTRUCTION

**Brooklyn Bridge-Montgomery
Coastal Resilience (BMCR)**
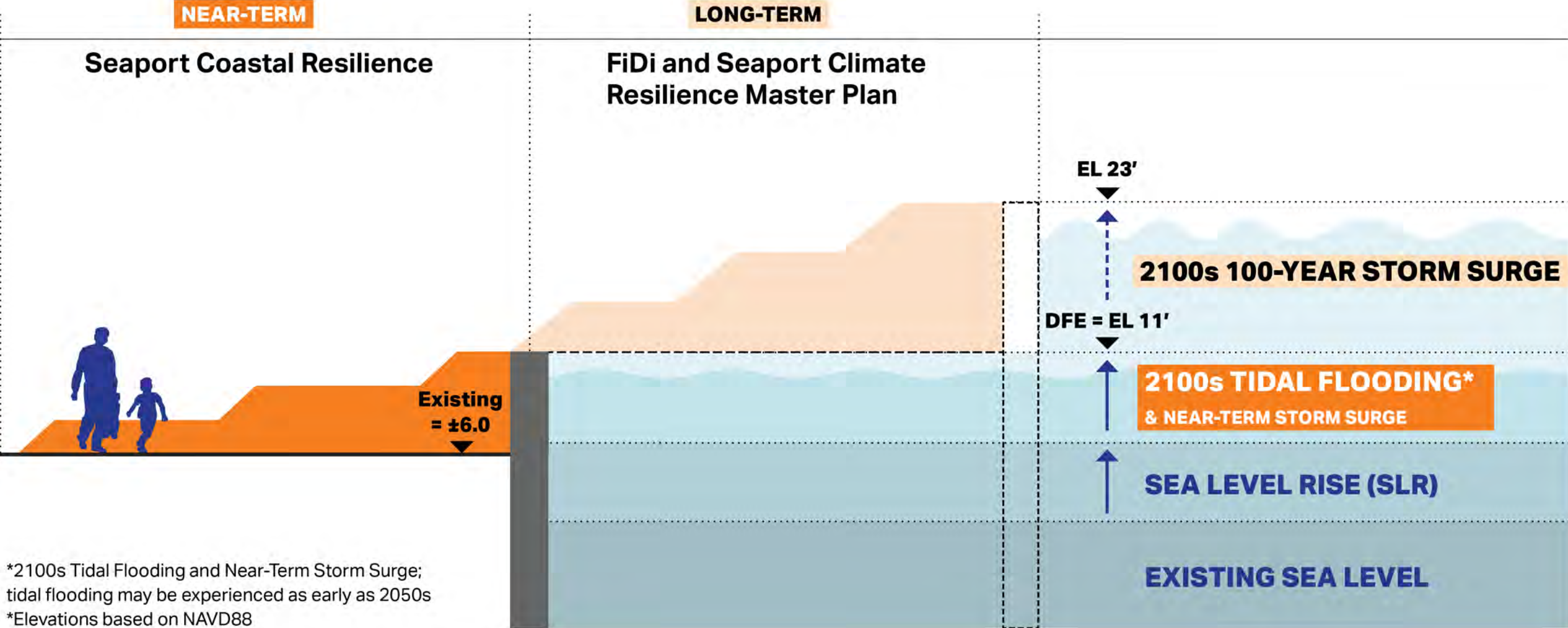2050s 100-Year Storm Surge:
EL 16.5'-18.5'

LONG-TERM

**FiDi and Seaport Climate Resilience
Master Plan**
2100s 100-Year Storm Surge: EL 23'

Comprehensive plan which protects both
FiDi and Seaport from coastal storms.
Draft limits as of October 2024; additional
design refinement and coordination
with stakeholders to be continued in
upcoming phases of work.

N

100'   200'   400'

Design Flood Elevation (DFE)

NEAR-TERM

Seaport Coastal Resilience

LONG-TERM

FiDi and Seaport Climate Resilience Master Plan

EL 23'

2100s 100-YEAR STORM SURGE

DFE = EL 11'

Existing = ±6.0

2100s TIDAL FLOODING*
& NEAR-TERM STORM SURGE

SEA LEVEL RISE (SLR)

EXISTING SEA LEVEL

*2100s Tidal Flooding and Near-Term Storm Surge; tidal flooding may be experienced as early as 2050s
*Elevations based on NAVD88

Why is Seaport being protected? | A historic district

1600 ·············· **1624** ·············· **1795-1900** ·············· **1967-TODAY** ···········▶
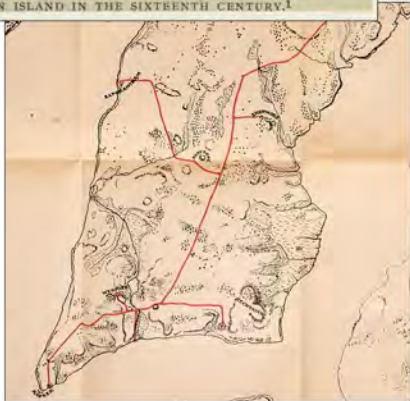
NYC pre-settlement

South Street Seaport District establishment

History of shipbuilding, shipping, and commerce

Continued neighborhood evolution

Why is Seaport being protected? | A historic district
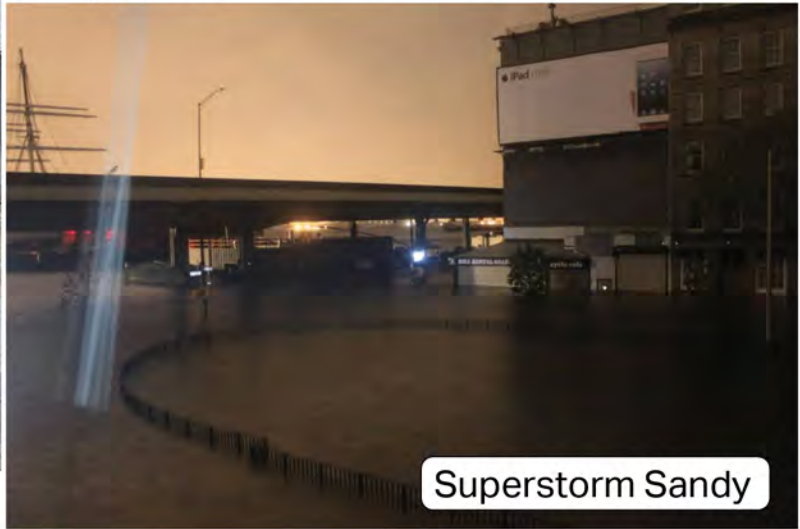
Fulton Street

Titanic Memorial

Superstorm Sandy

Why is Seaport being protected? | A district of diverse character

Access to water

Open space

Historic streets & buildings

Open space

N

100'   200'   400'
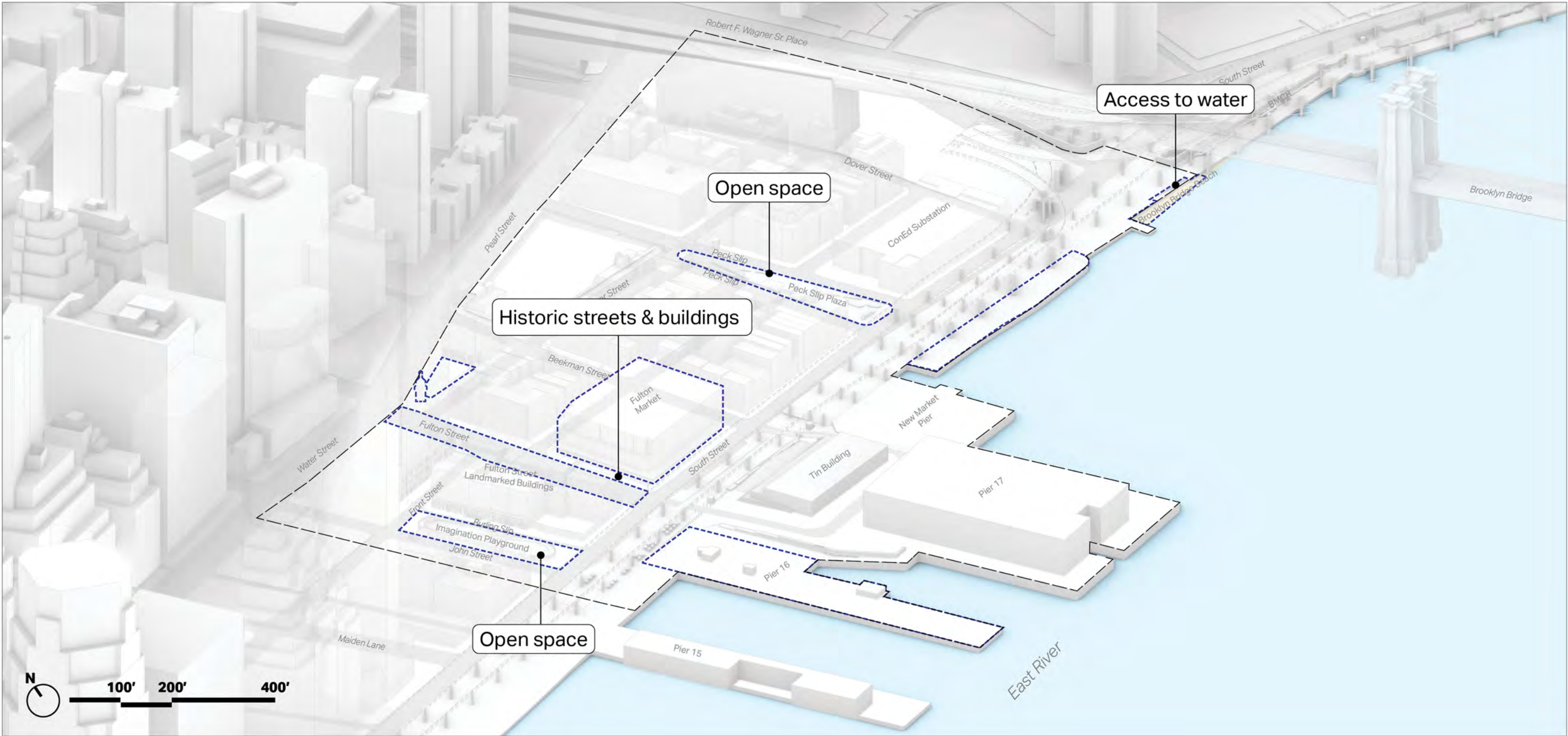
Why is Seaport being protected? | A district of diverse character

South Street Seaport's Waterfront

South Street Seaport's Historic Streets

Key Areas | Historic Streets

Granite Pavers

Red Brick Facades

Concrete & stonework

Cast Iron Details

Bluestone Pavers

Black Diamond Steel

Granite Pavers

Key Areas | Historic Streets - Site Material & Identity

Pavement

Granite Pavers

Bluestone Pavers

Concrete

Building Facade
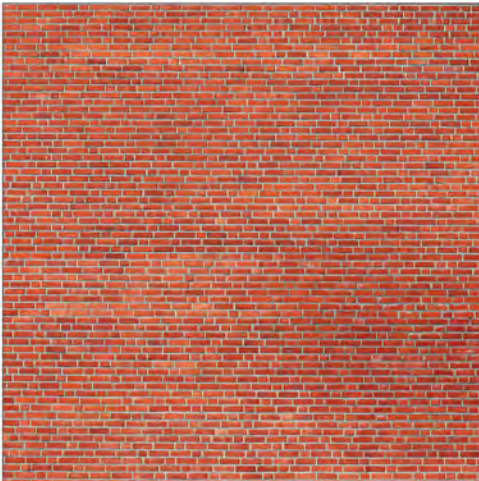
Red Brick Facade

Details & History

Black Diamond Steel

Stone

Cast Iron Details

Historical Markers

Anchors of the Seaport Artifacts

Key Areas | Waterfront

Maritime History

Wood Boardwalk

Historic Piers

Maritime History

Plantings

FDR Drive

Wood Boardwalk

SEAPORT
Coastal Resilience

AECOM
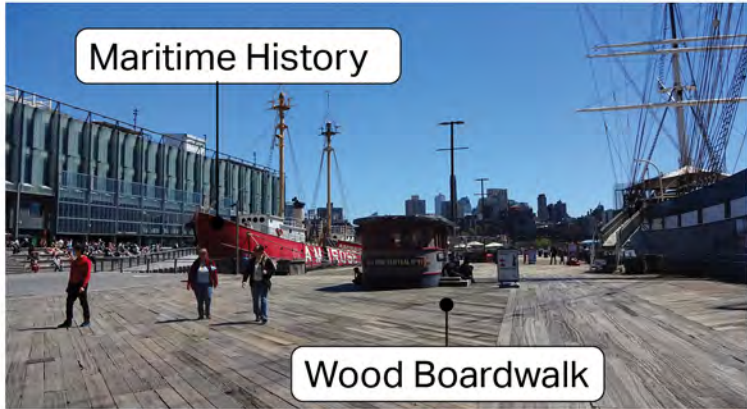
Key Areas | Waterfront - Site Material & Identity

Pavement

Wood Boardwalk

Hexagonal Pavers

Square Pavers

Infrastructure

FDR Drive Underpass

Details & History

Maritime

Wooden Pier Pillars
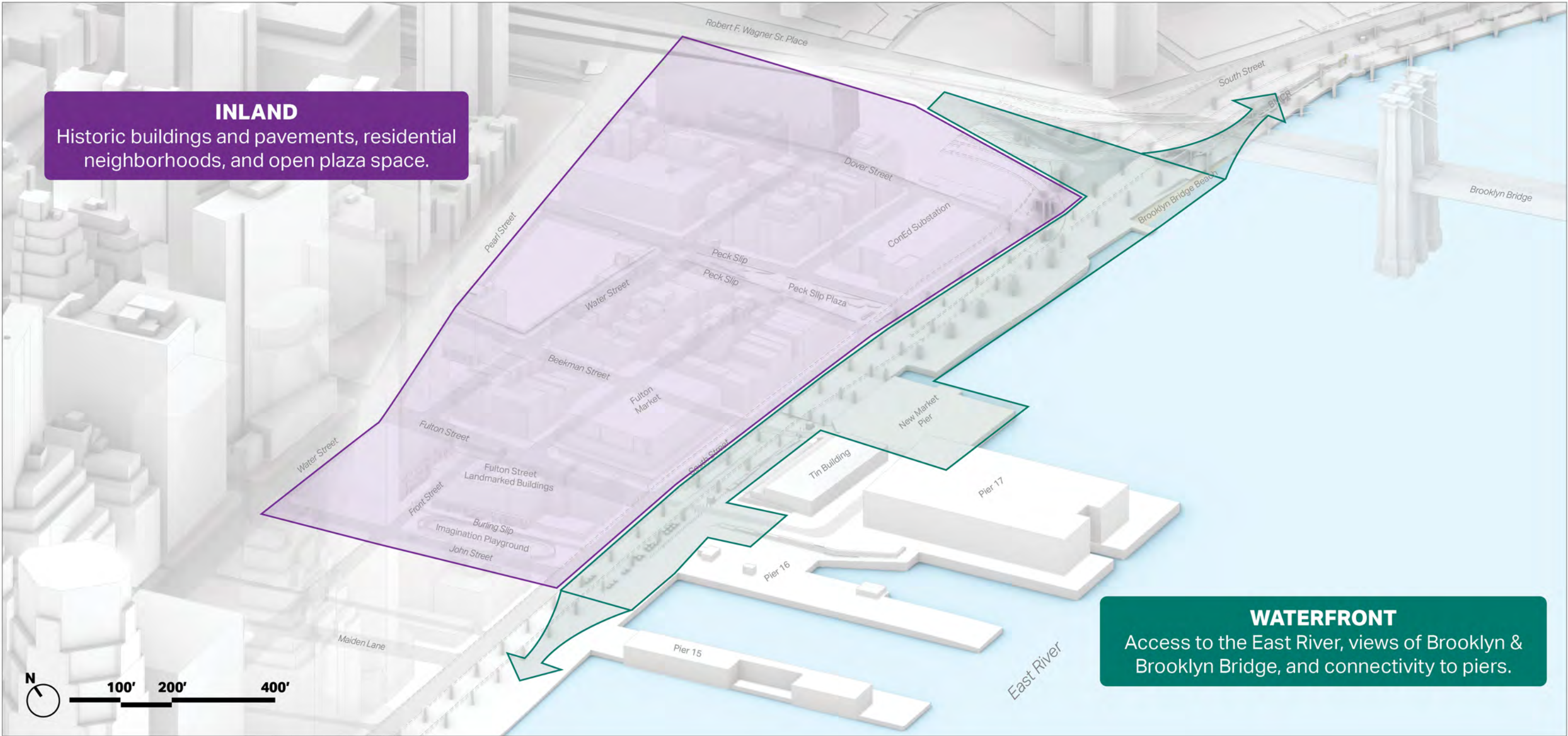

Historical Markers

Boulders

Site Topography

LEGEND

Existing Elevation

	10.1-12 ft
	8.1-10 ft
	6.1-8 ft
	4.1-6 ft
	4 ft

Existing Site Topography

*5x vertical scale

A' — Pearl Street — Water Street — Front Street — South Street — Waterfront — A''

14' / 12' / 10' / 8' / 6' / 4' / 4' / 6' / 11'
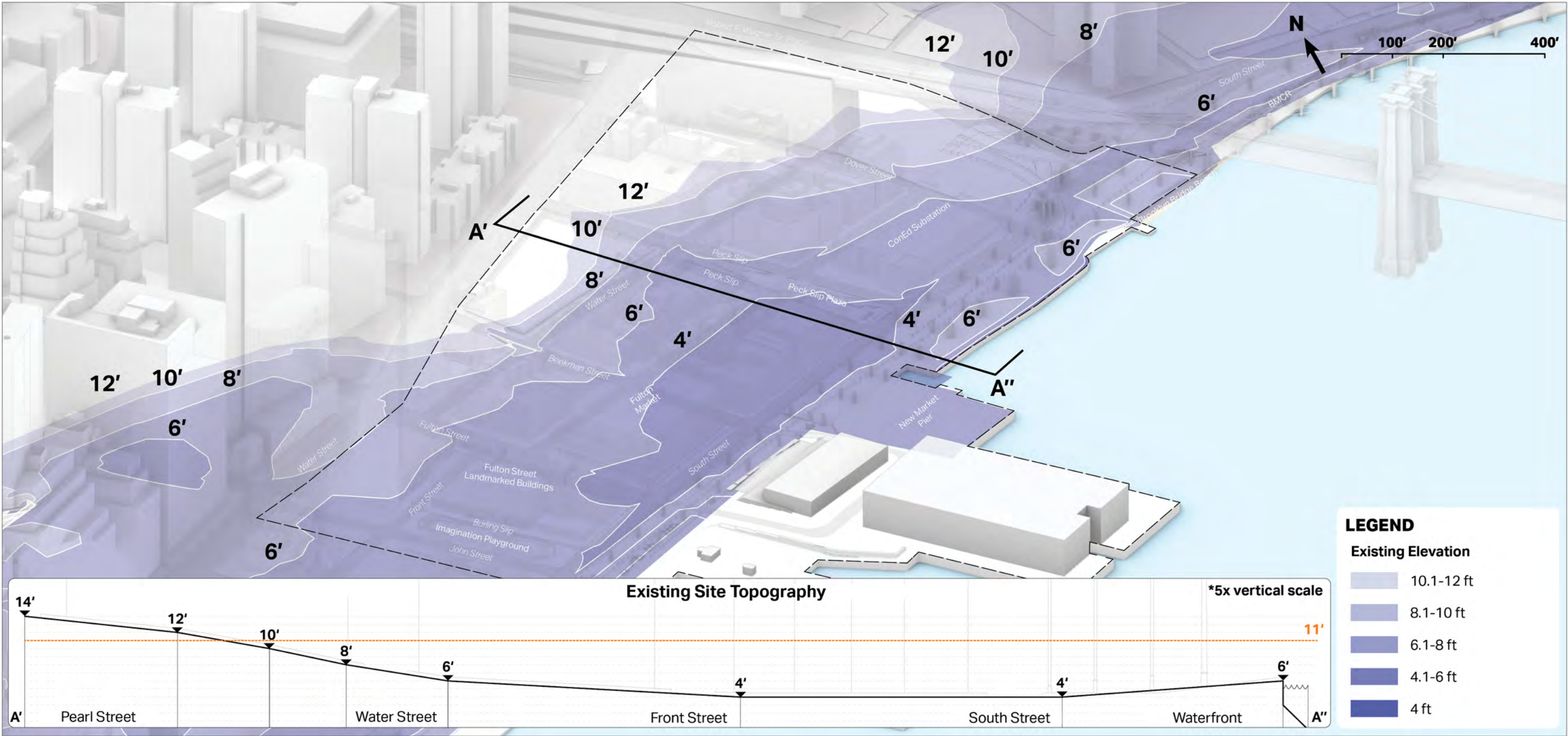
02
Design Process

Two Project Zones

INLAND
Historic buildings and pavements, residential neighborhoods, and open plaza space.

WATERFRONT
Access to the East River, views of Brooklyn & Brooklyn Bridge, and connectivity to piers.

N
100'   200'   400'

Design Objectives

CONNECT
neighborhood &
waterfront

PROTECT
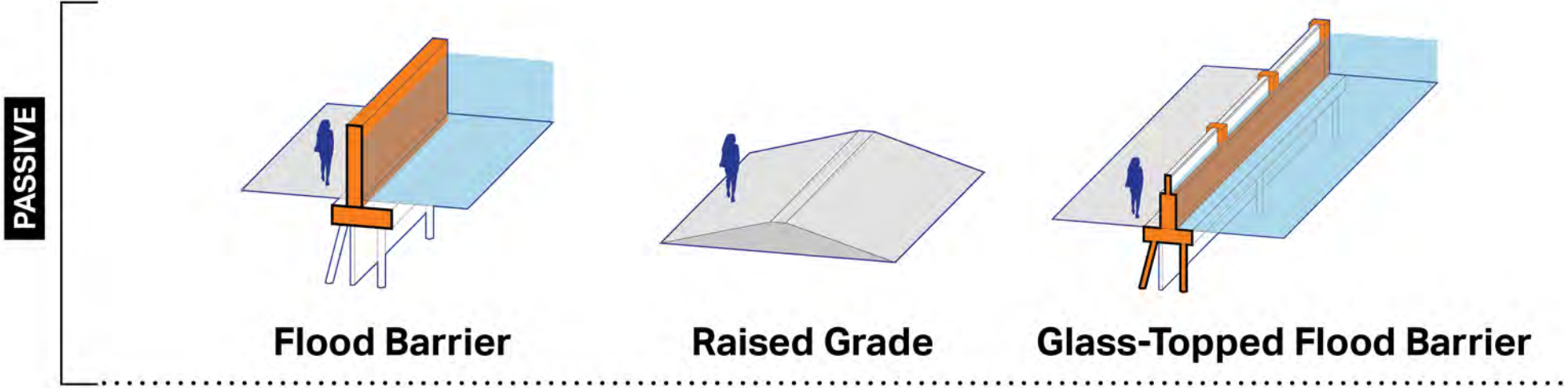maximum land
area

INTEGRATE
infrastructure
with placemaking

ENHANCE
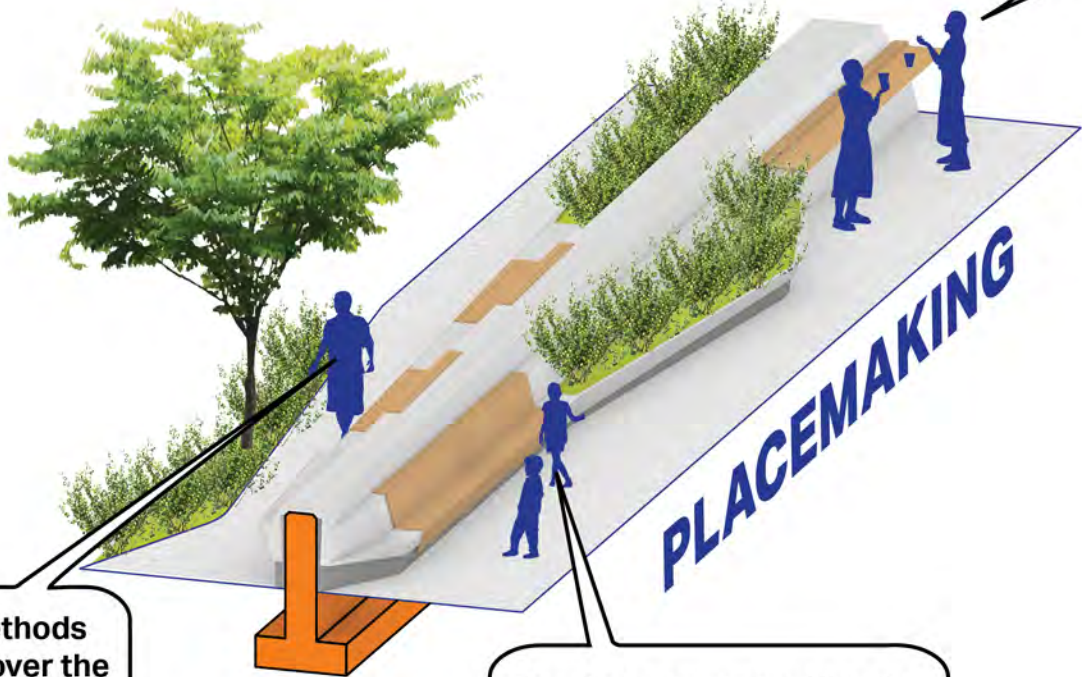public realm
experience
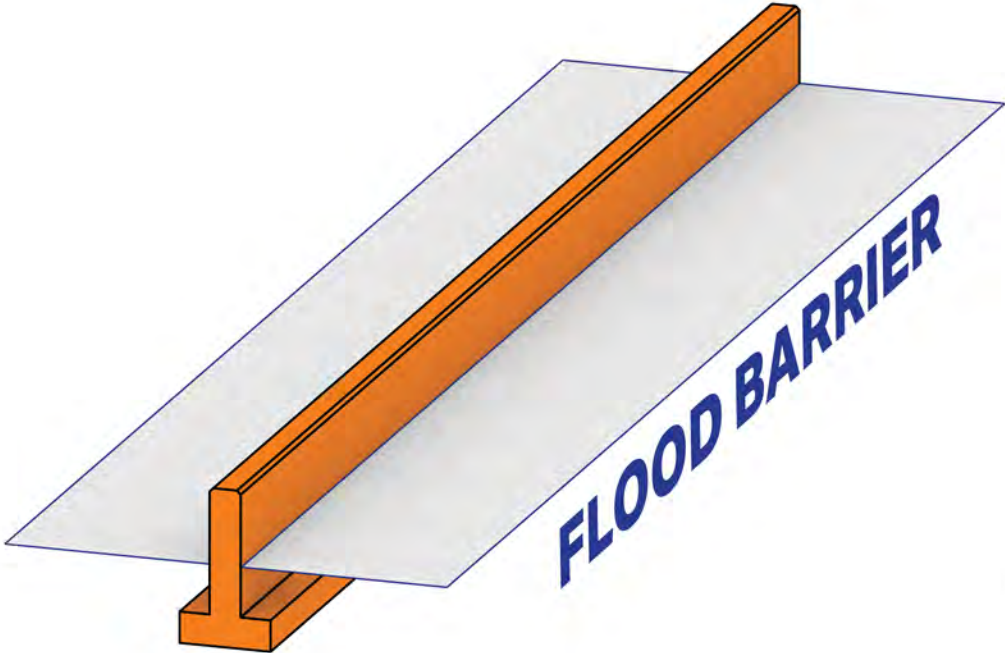

CELEBRATE
the historic
character

Flood Alignment Toolkit
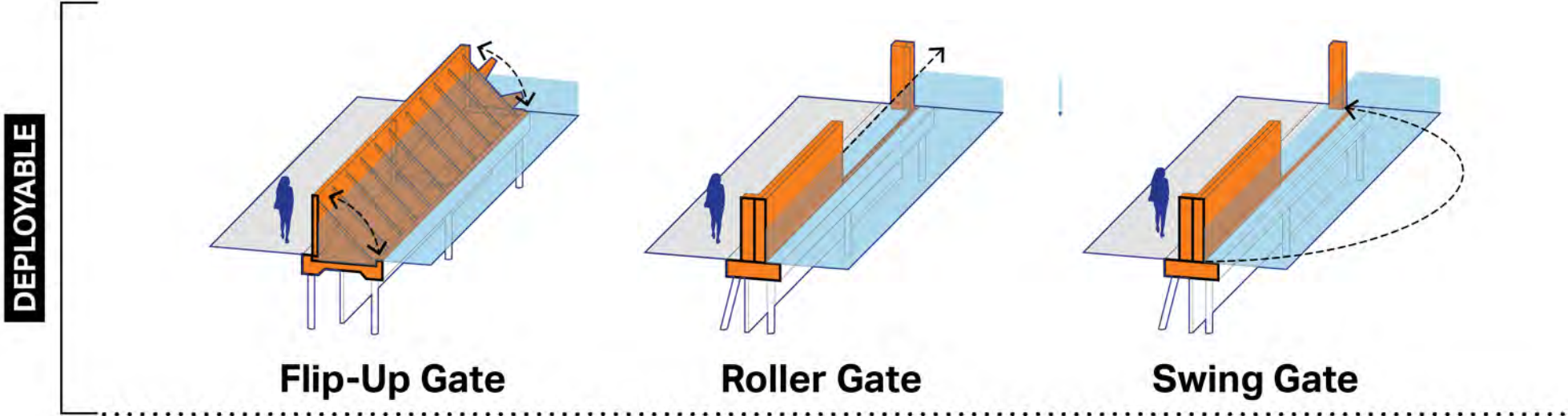
PASSIVE

Flood Barrier

Raised Grade

Glass-Topped Flood Barrier

DEPLOYABLE

Flip-Up Gate

Roller Gate

Swing Gate

Design Approach

What did we hear last time?

Protect waterfront views & maritime uses

Integrated green infrastructure and trees

Protect Imagination Playground

Enhance ADA accessibility

Multi-purpose infrastructure

What would you like to see in the Seaport?

Pedestrian & cyclist intersection safety

Flexible social spaces for activities

Placemaking Design Toolkit

TALL

4.5-6'

Raised Esplanade   Stepped Seating   Climbable Slope   Step-Down   Stepped Bench   Standing Counter   Barrier

3-4.5'

Mounded Play   Stepped Planter Shelves   Planter Bench   Art Showcase   Leaning Edge   Vegetated Screen   Barrier

1.5-3'

Raised Street   Seating Planter   Table   Sloped Planter   Formliner   Deployable   Barrier

0-1.5'

Raised Grade   Elevated Plaza   Playscape   Planter   Bench   Deployable   Barrier

SHORT

WIDE   NARROW

03

The Flood Alignment

AECOM

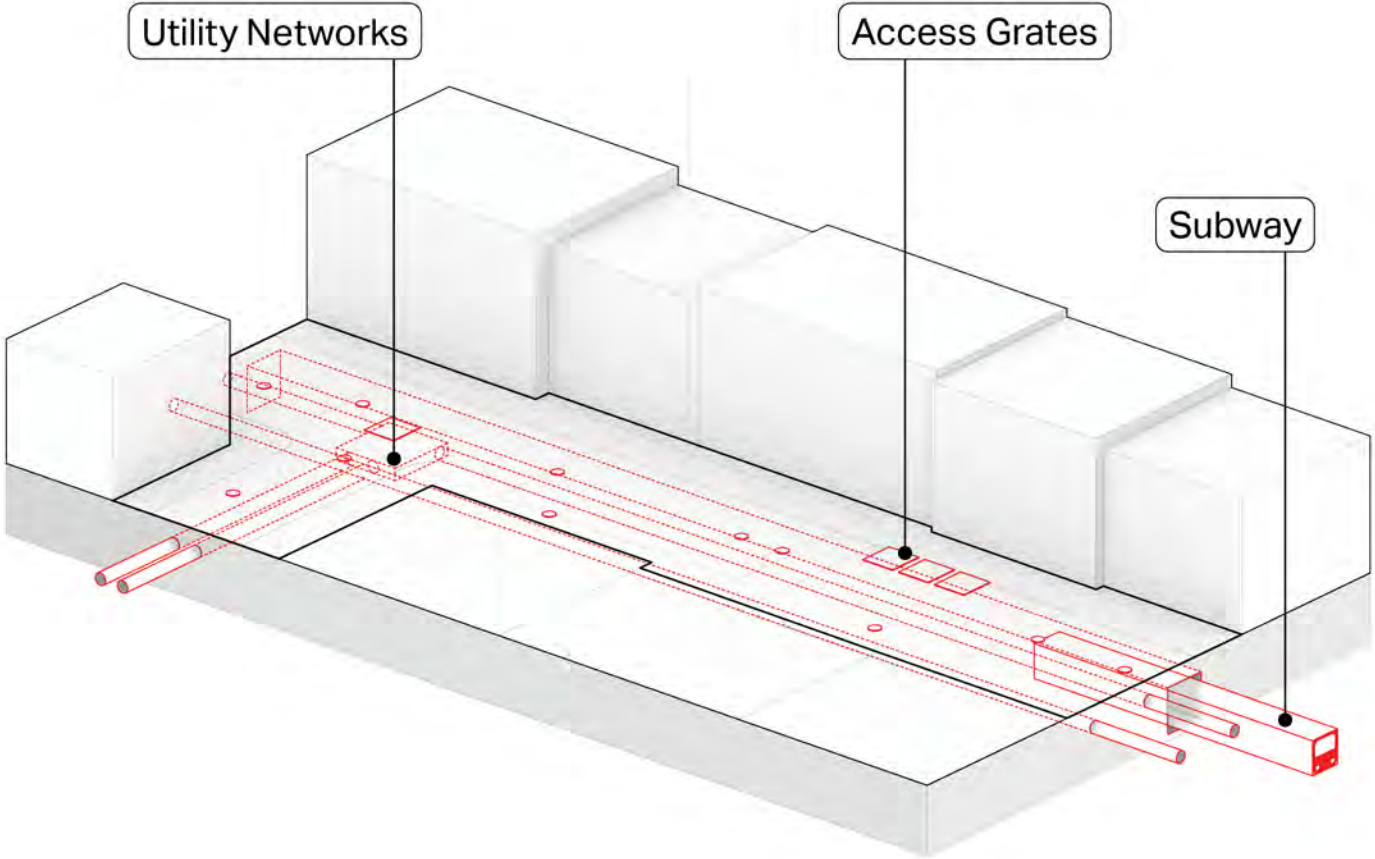# Key Considerations

MAXIMIZING protected area

ENHANCING universal access
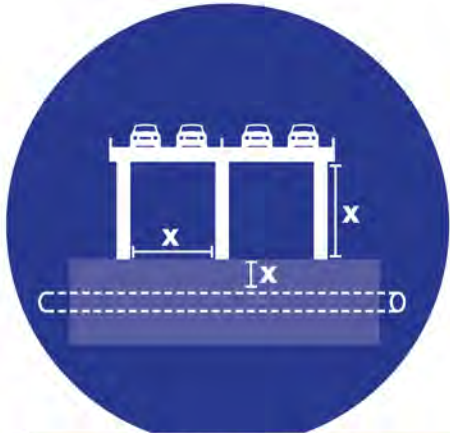
NAVIGATING existing utility and corridor constraints
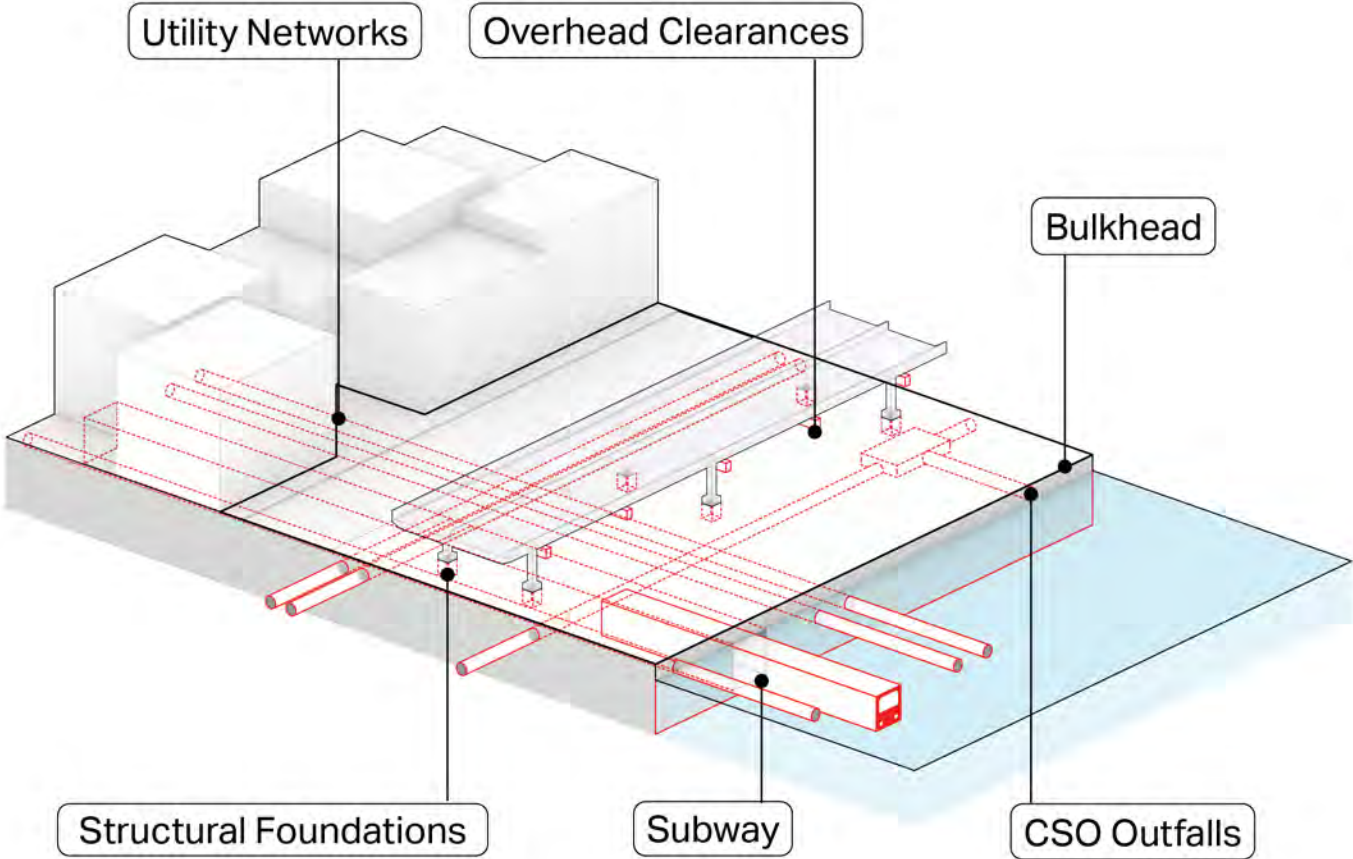
Key Considerations | Inland

Utility Networks · Access Grates · Subway
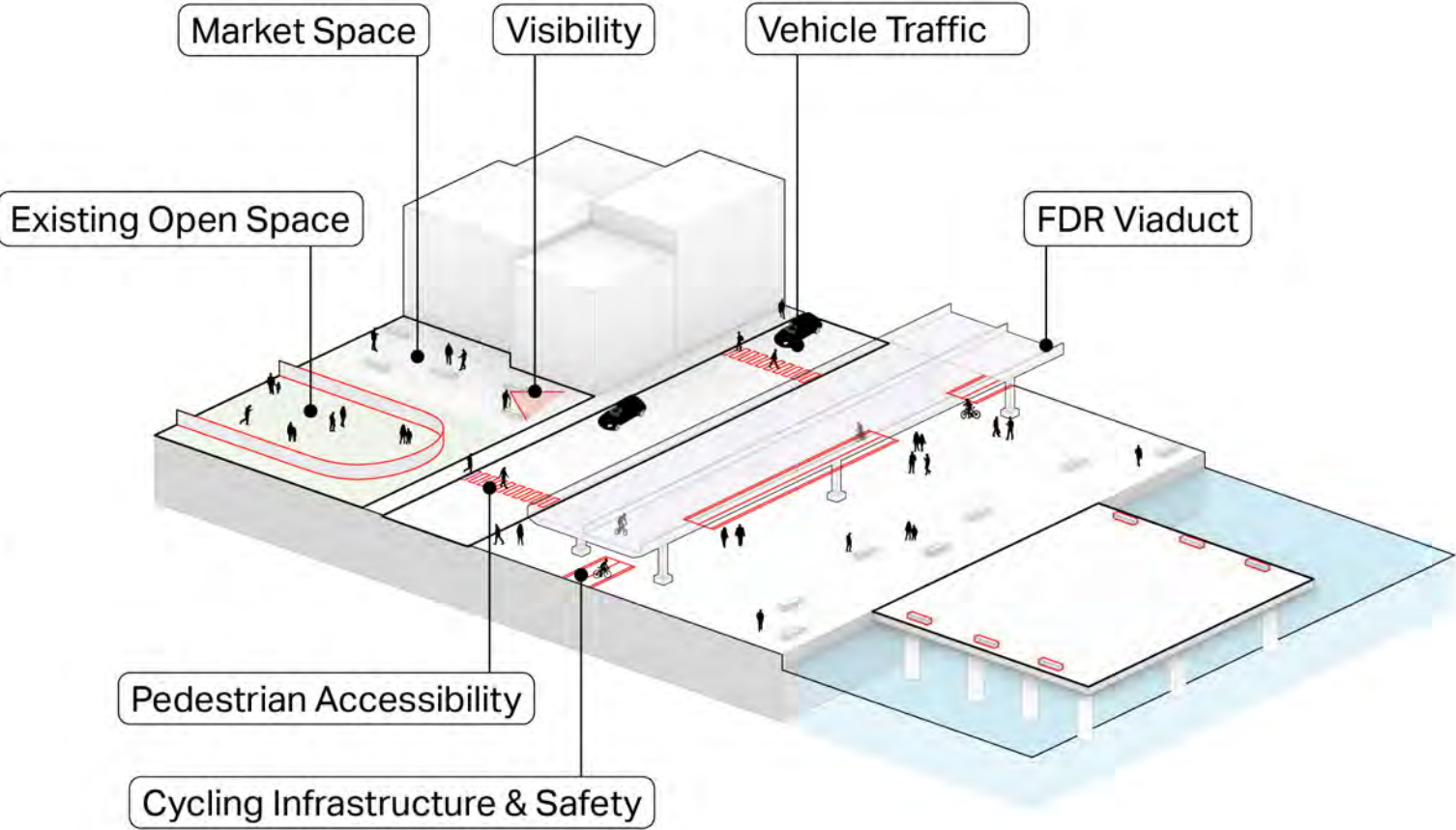
Utility Networks

Pedestrian Access · Ground Floor Windows · Building Entrances · Narrow Sidewalks · Vehicular Access
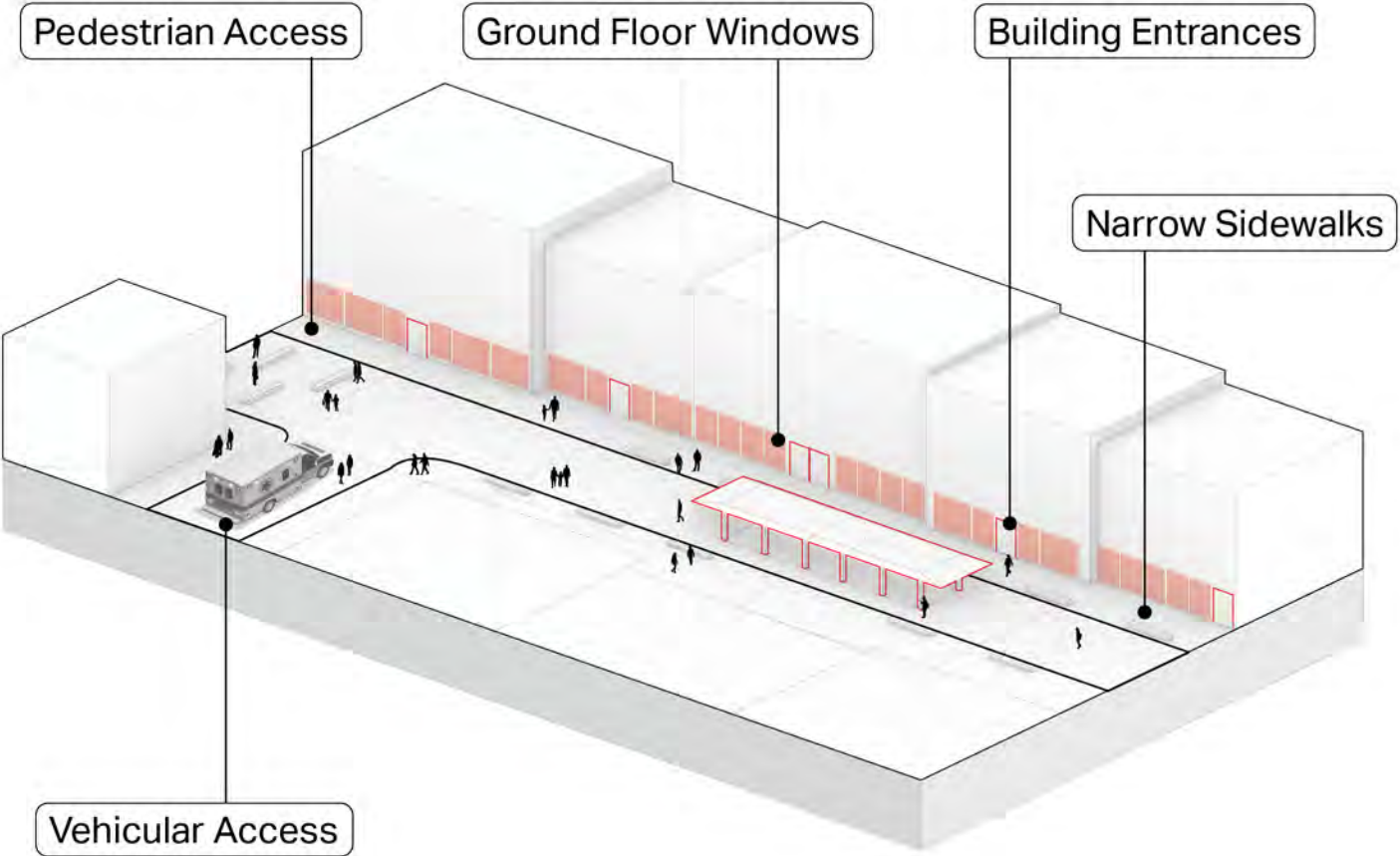
Circulation & Adjacent Uses

Key Considerations | Waterfront

Subsurface Infrastructure

Utility Networks
Overhead Clearances
Bulkhead
Structural Foundations
Subway
CSO Outfalls

Adjacent Planned Projects

Market Space
Visibility
Vehicle Traffic
Existing Open Space
FDR Viaduct
Pedestrian Accessibility
Cycling Infrastructure & Safety

Preliminary Flood Alignment

Deployable Barrier

Fixed Barrier

HEIGHT OF INTERVENTION

Fixed Barrier

— 4-6' Tall

— 2-4' Tall

— 0-2' Tall

Passive Sill & Deployable
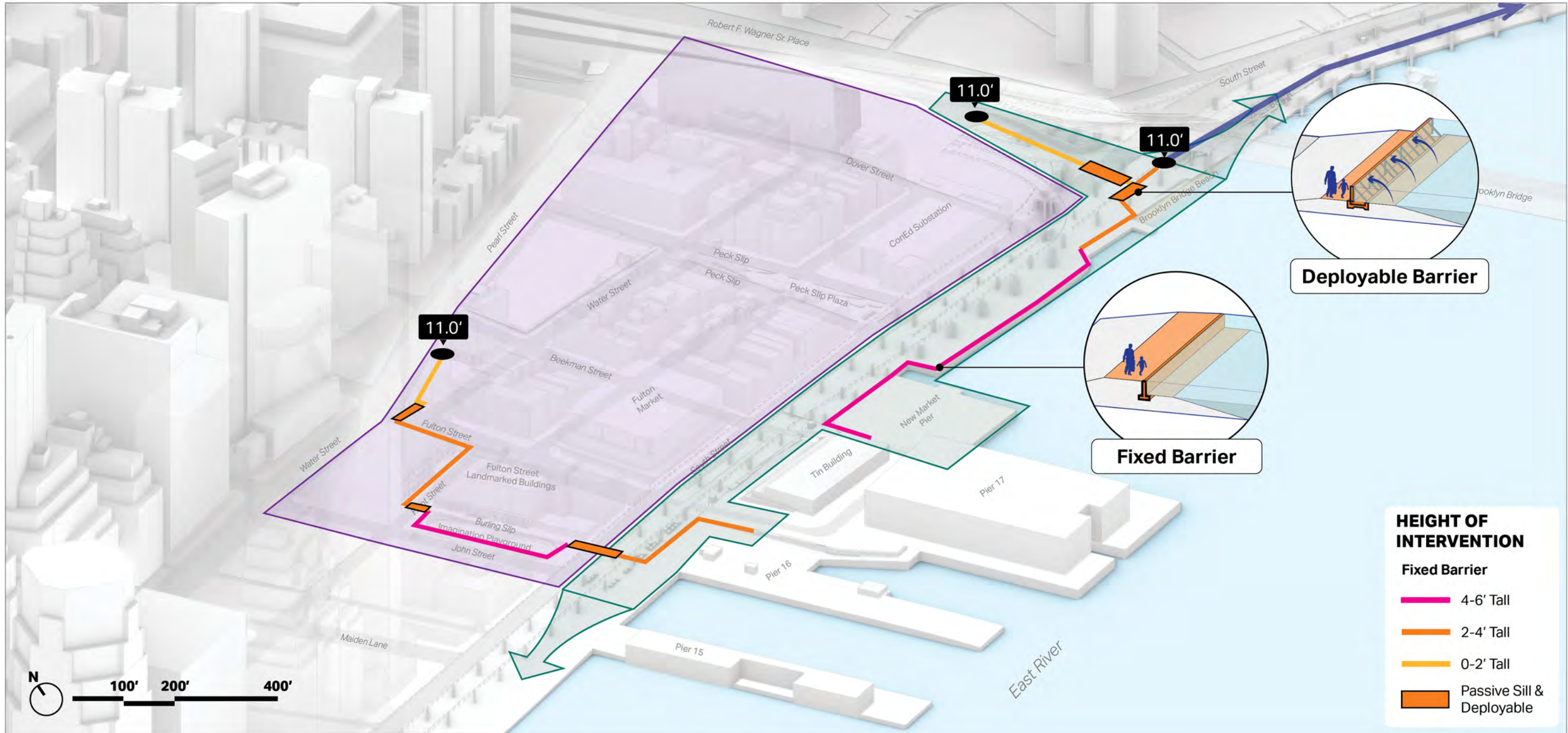
Design Flood Elevation (DFE)

Fixed Barrier = EL 11'
2100s Tidal Flooding & Near-Term Storm Surge

Existing = EL ±6.0'

Fixed Barrier

Deployed Barrier = EL 11'
2100s Tidal Flooding & Near-Term Storm Surge

Passive Sill = EL 8.5'
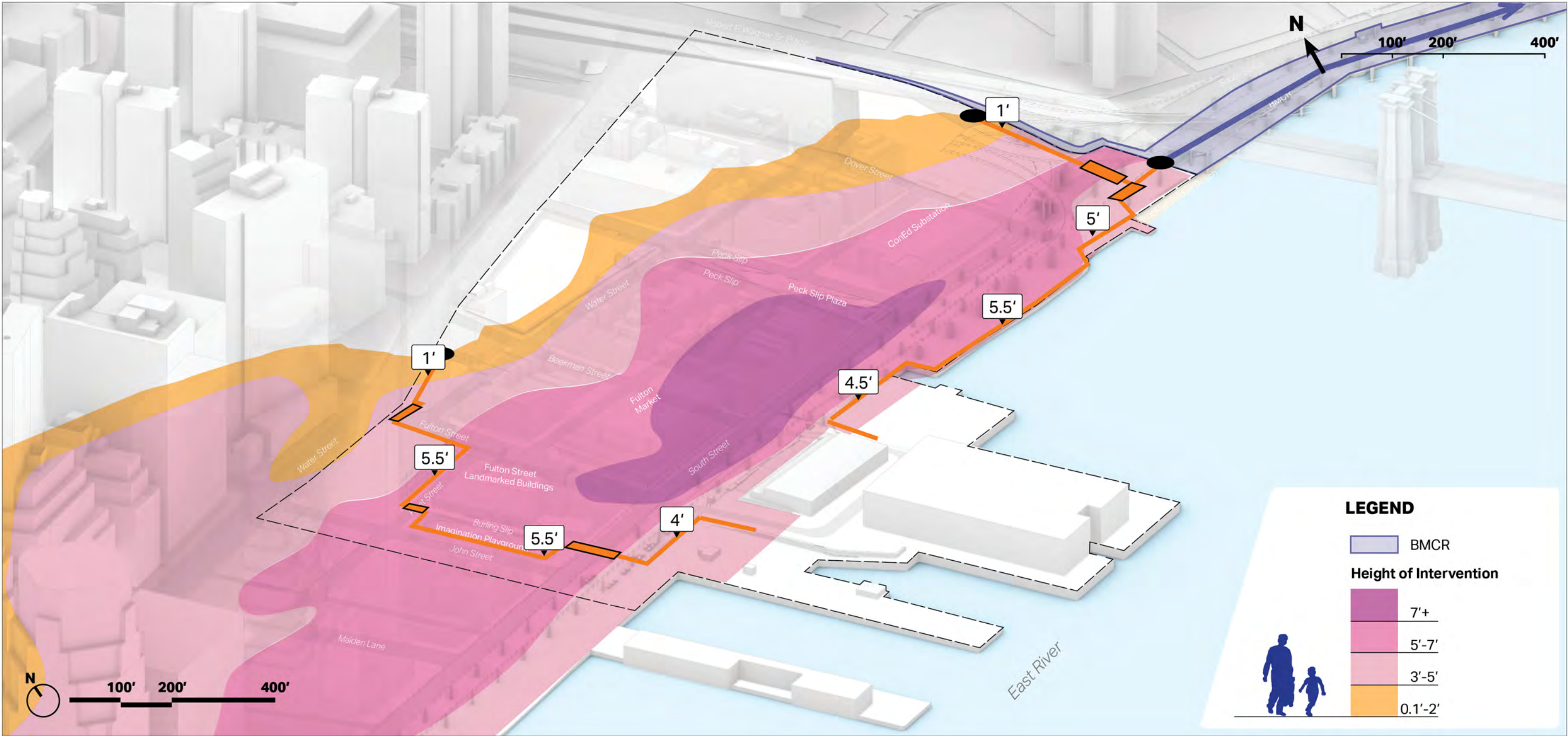**up to 2080s Tidal Flooding**

Existing = EL ±6.0'
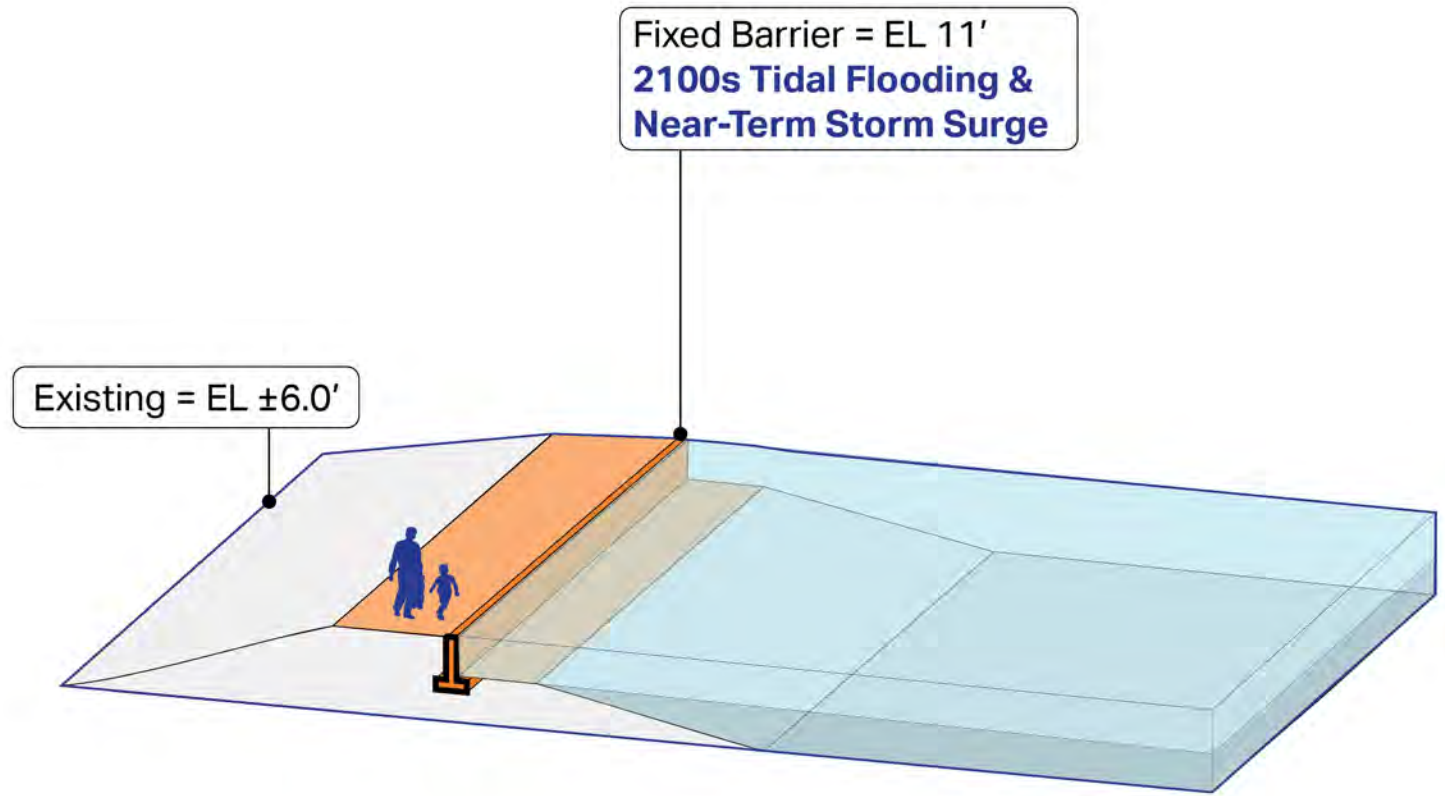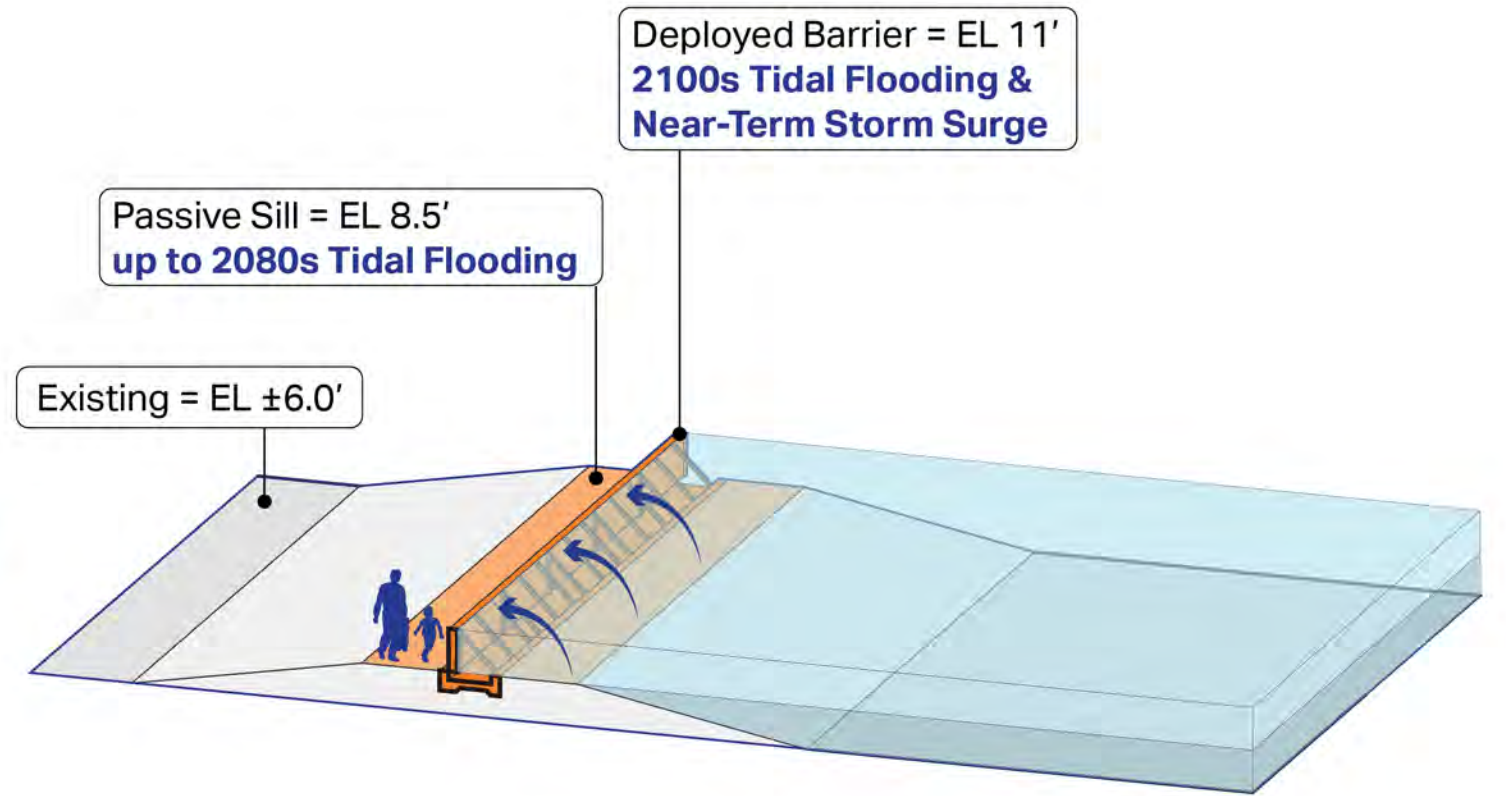
Passive Sill & Deployable Barrier

*Elevations based on NAVD88

Height of Intervention (HOI)

04

Pre-Design Framework
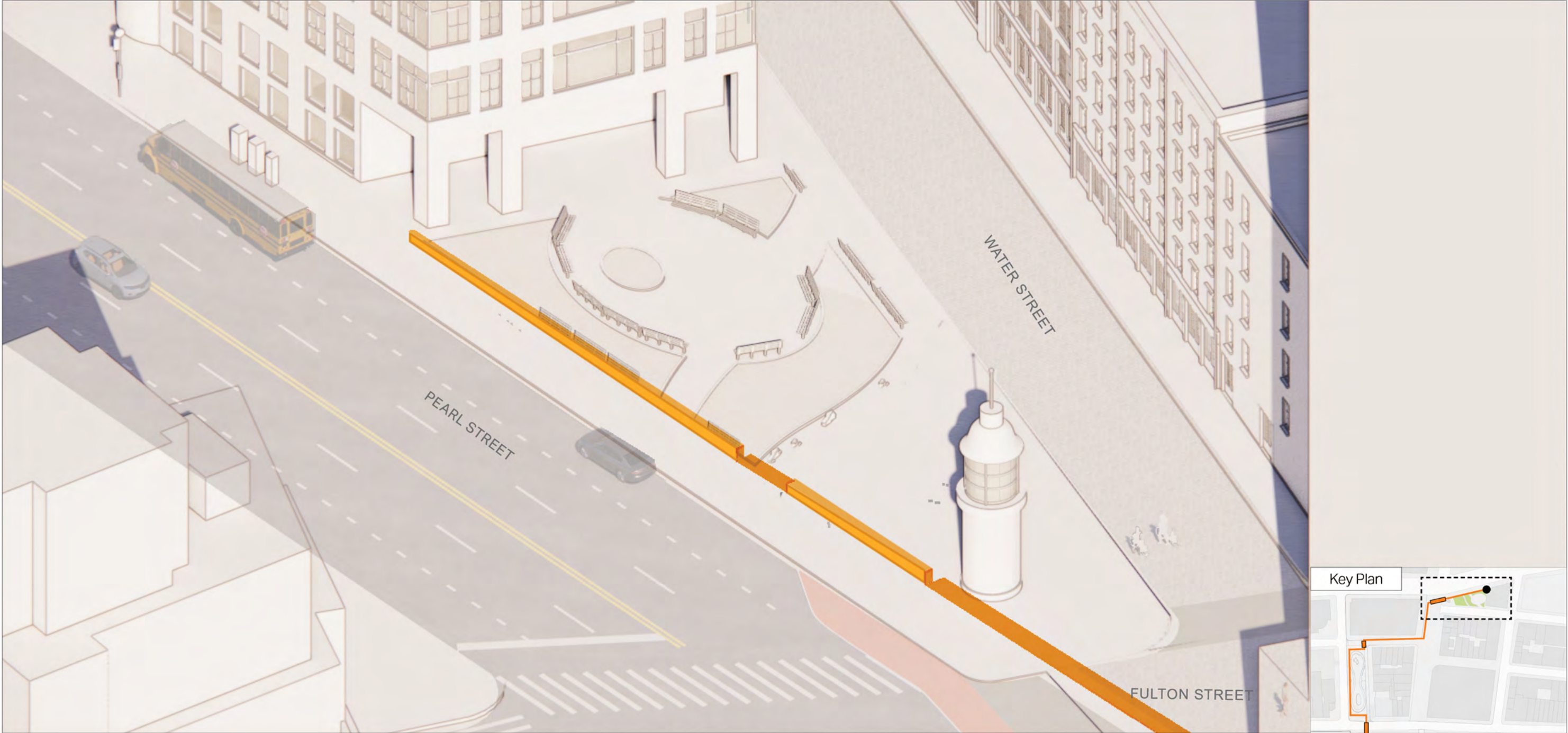
AECOM

Preliminary Alignment

INLAND PROJECT ZONE

WATERFRONT PROJECT ZONE

PEARL STREET

WATER STREET

WATER STREET

WATER STREET

FRONT STREET

FRONT STREET

JOHN STREET

FULTON STREET

BEEKMAN STREET

PECK SLIP

PECK SLIP

DOVER STREET

ROBERT F. WAGNER SR. PLACE

BROOKLYN BRIDGE EXIT RAMP

SOUTH STREET

SOUTH STREET

PIER 17 DRIVEWAY

N

50' 100' 200'
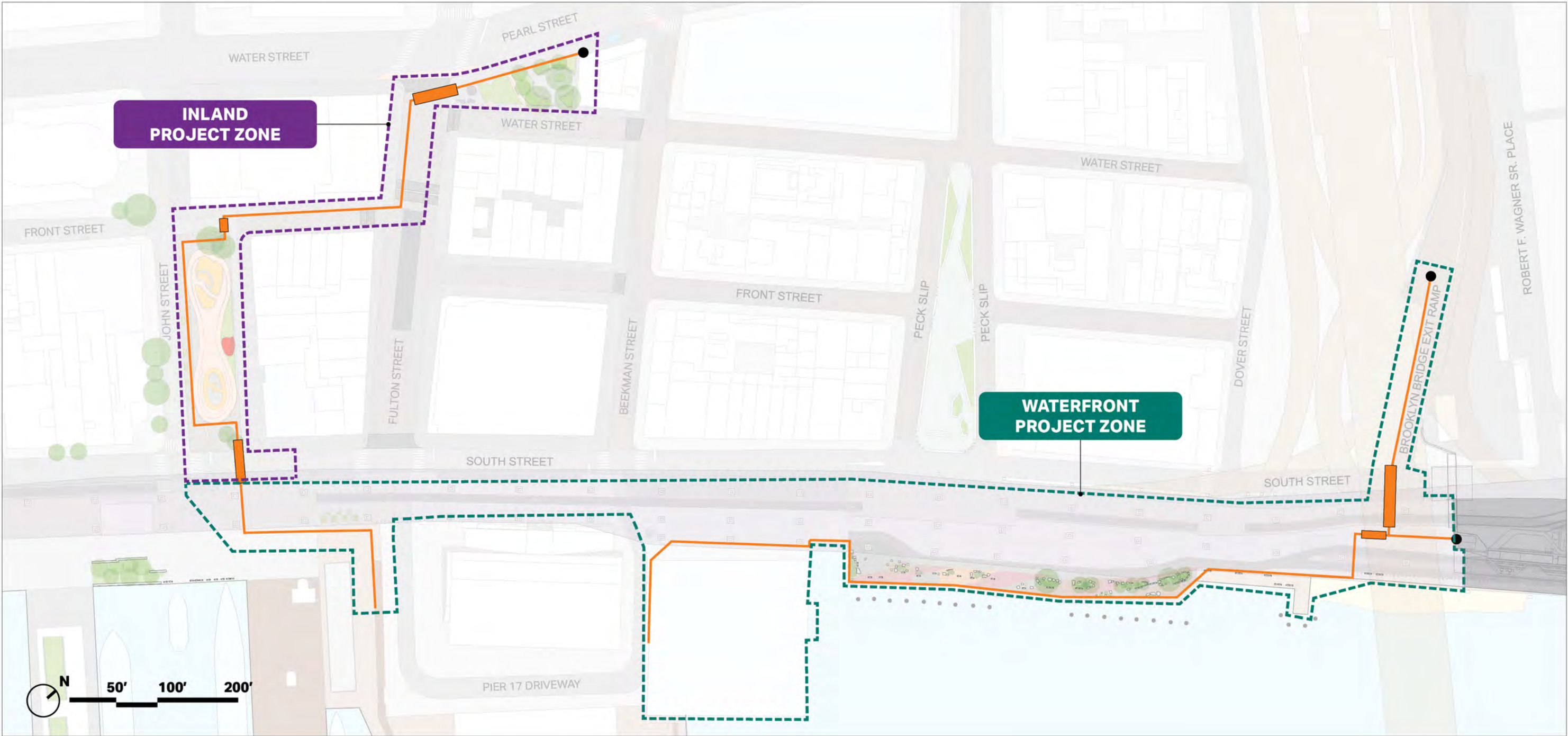
Inland Alignment | Project Areas

Area 1
Tie-In At Titanic Memorial

Area 2
Seaport Streets

Area 3
Imagination Playground

Overall Key Plan

WATER STREET
PEARL STREET
WATER STREET
FRONT STREET
JOHN STREET
FULTON STREET
BEEKMAN STREET
PECK SLIP
SOUTH STREET

N
10'   20'   40'

Area 1: Tie-in at Titanic Memorial | Aerial View

Key Plan

Area 1: Titanic Memorial | Flood Alignment Infrastructure

Crosses Fulton Street

DEPLOYABLE

8.5'

9'

HEIGHT OF INTERVENTION: 0-2'

DEPLOYABLE

8.5'

11'

11'

11'

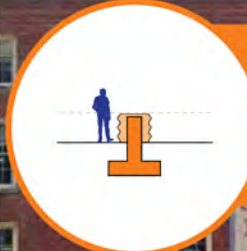Ties into 11' elevation at end of Memorial

11'

10'

Area 1: Titanic Memorial | Placemaking Opportunities

SLOPED PLANTER
Mitigates the height of intervention by raising existing planted areas.

BLEACHER SEATING
Provides additional seating along Titanic Memorial and Pearl Street.

CELEBRATE
the historic character

FORMLINER & WALL CLADDING
Takes inspiration from the materials of the historic South Street Seaport.

SEATING PLANTER
Creating planter benches provide additional seating along Titanic Memorial, complementing existing uses.

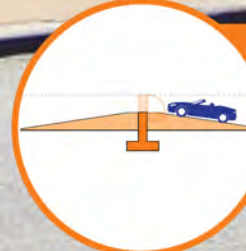**CONNECT**
neighborhood & waterfront

Potential space for planting & shade

RAISED STREET & DEPLOYABLE
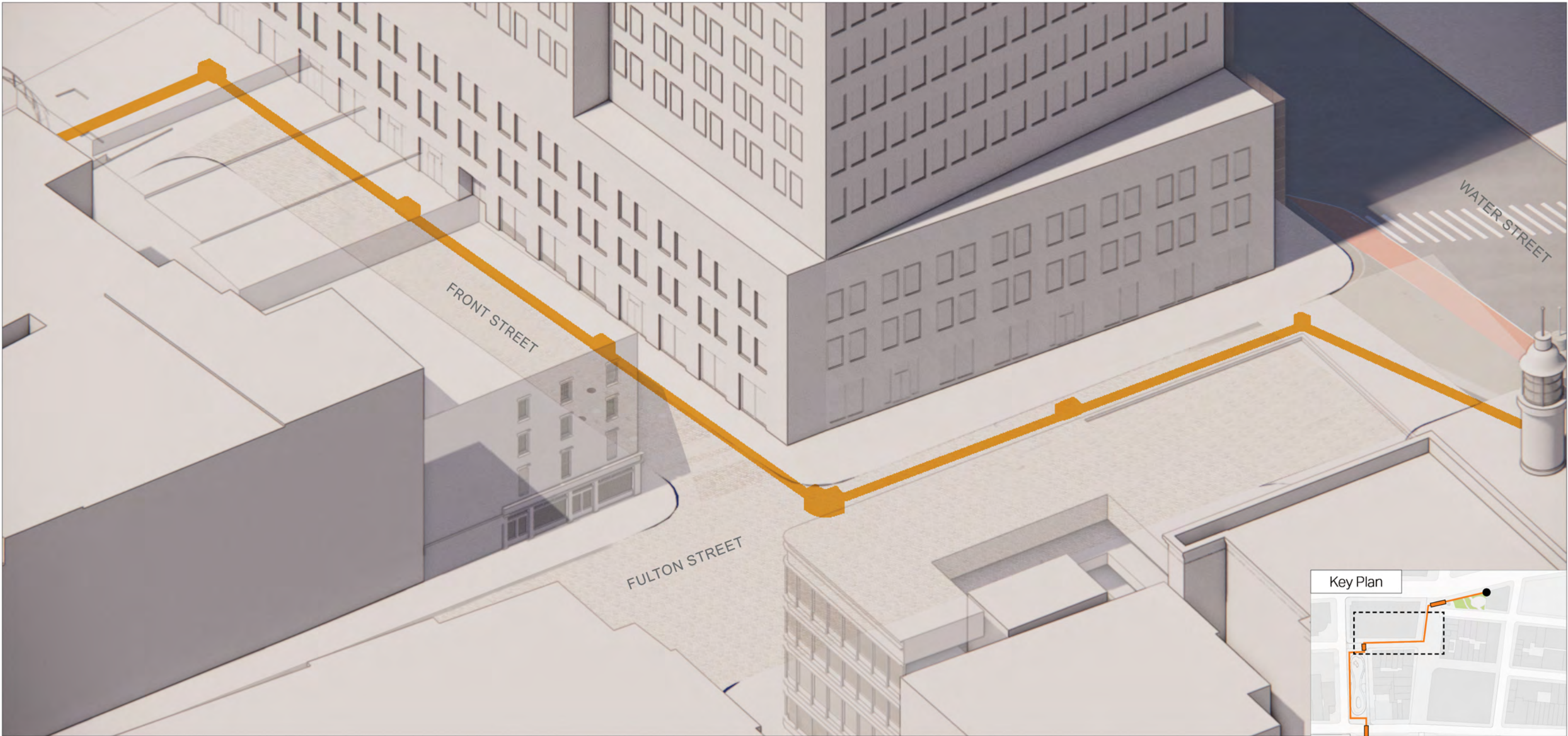Raising the street level and establishing a deployable across South Street allows for free circulation.

ENHANCE
public realm experience

The flood alignment allows clear and accessible pedestrian connectivity throughout the project site.

11'   11'   11'   8.5'   8.5'   9'   10'

WATER STREET

FRONT STREET

FULTON STREET

Key Plan

7'

Crosses Front Street to Imagination Playground

Turns on Fulton Street

DEPLOYABLE

DEPLOYABLE PASSIVE : 2-4'

11'

8.5'

7'

8.5'

7'

ENHANCE
public realm experience

Opportunity for small, informal gatherings along Front Street

DEPLOYABLE
Using a deployable to reach the design flood elevation keeps view corridors clear.

PLANTER BENCH
Potential to use planting & stepped seating to mitigate the height of intervention.

8.5'

CELEBRATE
the historic character

FORMLINER & WALL CLADDING
Takes inspiration from the materials of the historic South Street Seaport.

CONNECT
neighborhood & waterfront

7'

Crosses Front Street to Imagination Playground

Turns on Fulton Street

HEIGHT OF INTERVENTION: 2-4'

11'

7'

11'

7'

Area 2: Seaport's Streets | Flood Alignment Infrastructure, Scenario 2: Passive Glass-Topped

SLOPED PLANTER
Potential to use planting to mitigate the height of intervention.

GLASS-TOPPED BARRIER
Using a glass-top keeps view corridors clear and minimizes the width of the intervention.

ENHANCE
public realm experience

11'

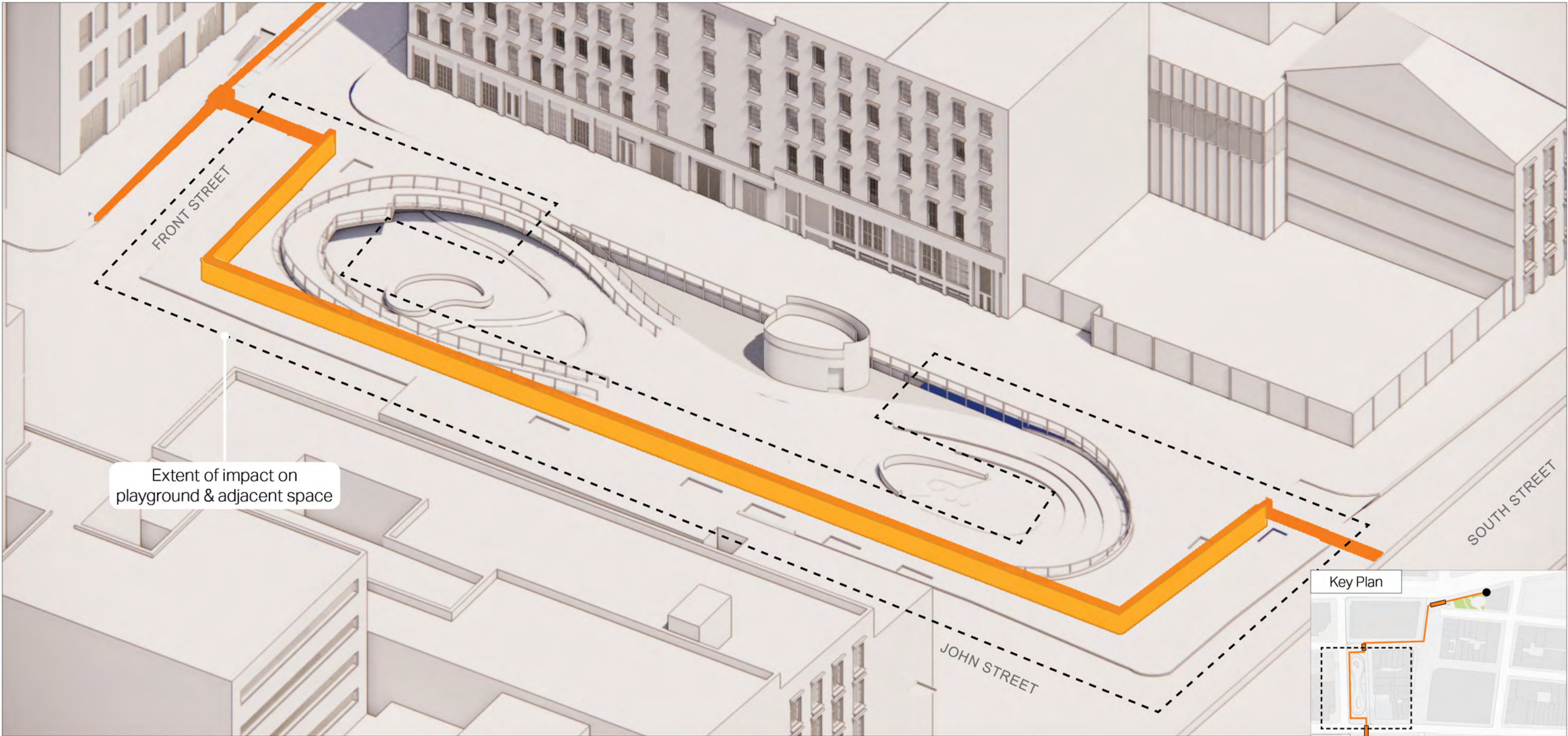Opportunity for a variety of seating types

CELEBRATE
the historic character

FORMLINER & WALL CLADDING
Takes inspiration from the materials of the historic South Street Seaport.

CONNECT
neighborhood & waterfront

7'

Area 3: Imagination Playground | Aerial View

Extent of impact on playground & adjacent space

FRONT STREET

SOUTH STREET

JOHN STREET

Key Plan

SEAPORT
Coastal Resilience

AECOM

6'

5'

5'

4.5'

Key Plan

Connects to alignment along Front Street

Connects to Pier 16/17 across South Street

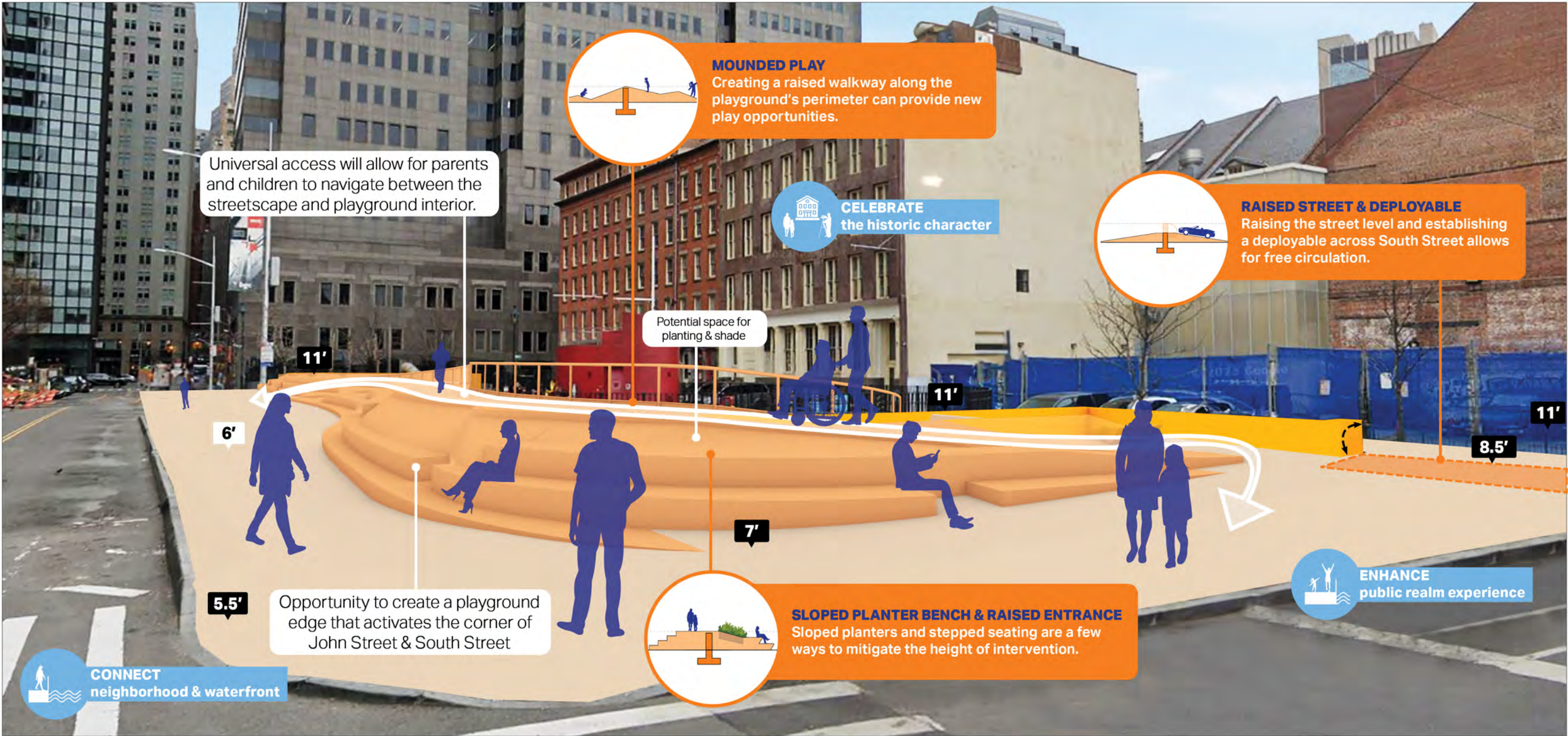HEIGHT OF INTERVENTION: 4-6'

DEPLOYABLE

11'
11'
11'
6'
5'
5'
4.5'

Area 3: Imagination Playground | Placemaking Opportunities

Area 3: Imagination Playground | Placemaking Opportunities

MOUNDED PLAY
Creating a raised walkway along the playground's perimeter can provide new play opportunities.
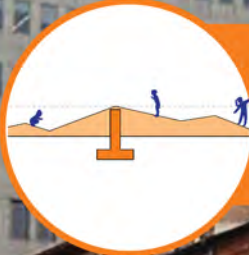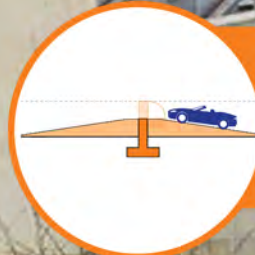
Universal access will allow for parents and children to navigate between the streetscape and playground interior.

CELEBRATE the historic character

RAISED STREET & DEPLOYABLE
Raising the street level and establishing a deployable across South Street allows for free circulation.

Potential space for planting & shade

11'

11'

11'

6'

8.5'

7'

5.5'

Opportunity to create a playground edge that activates the corner of John Street & South Street

SLOPED PLANTER BENCH & RAISED ENTRANCE
Sloped planters and stepped seating are a few ways to mitigate the height of intervention.

ENHANCE public realm experience

CONNECT neighborhood & waterfront

Waterfront Alignment | Project Areas

Area 4 — Pier 16 & 17

Area 5 — Jerry Driscoll Waterfront

Area 6 — BMCR Tie-In

FULTON STREET

BEEKMAN STREET

PECK SLIP

SOUTH STREET

PIER 16

TIN BUILDING

NEW MARKET PIER

PIER 17

N

10'   20'   40'

Overall Key Plan

Key Plan

8'

7'

7'

Key Plan
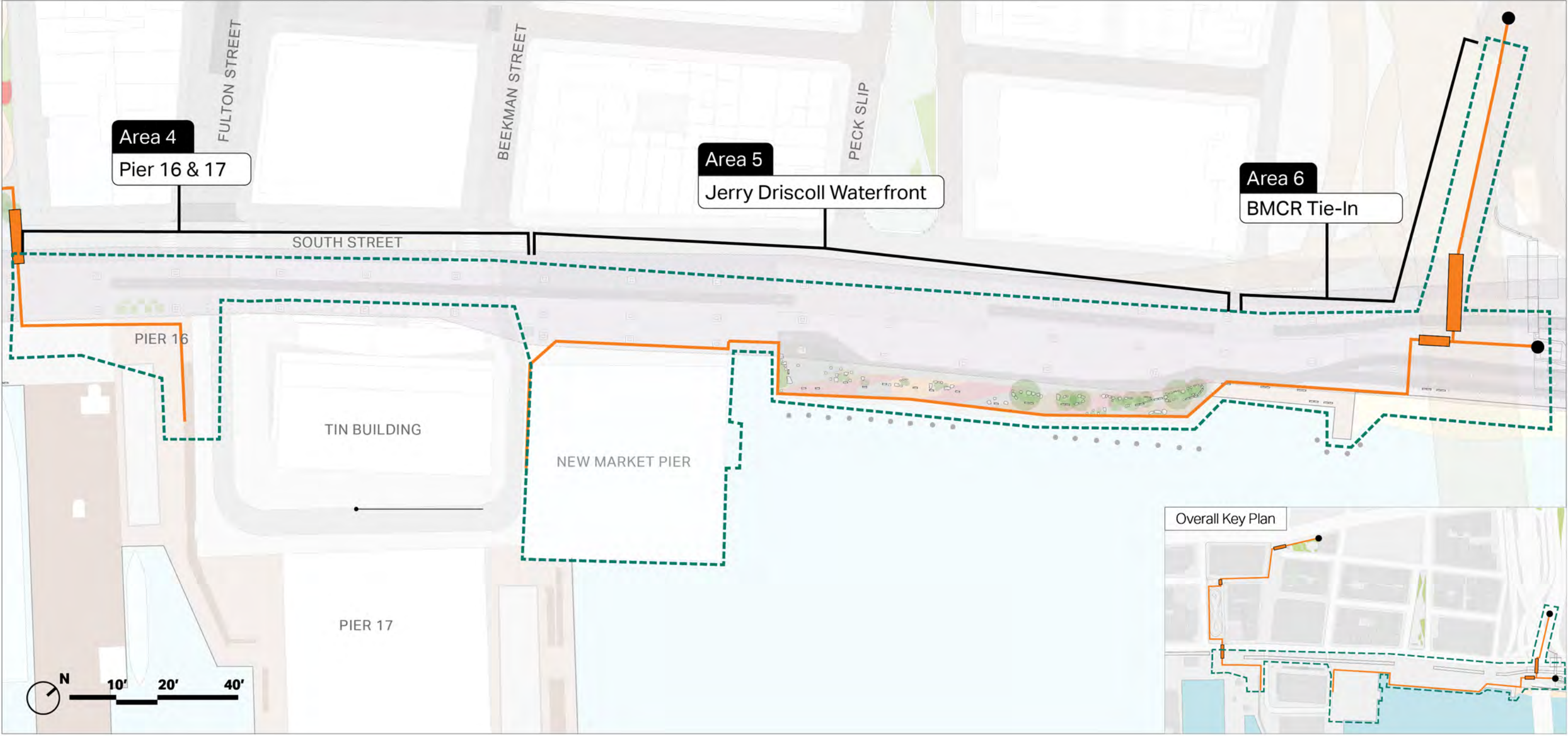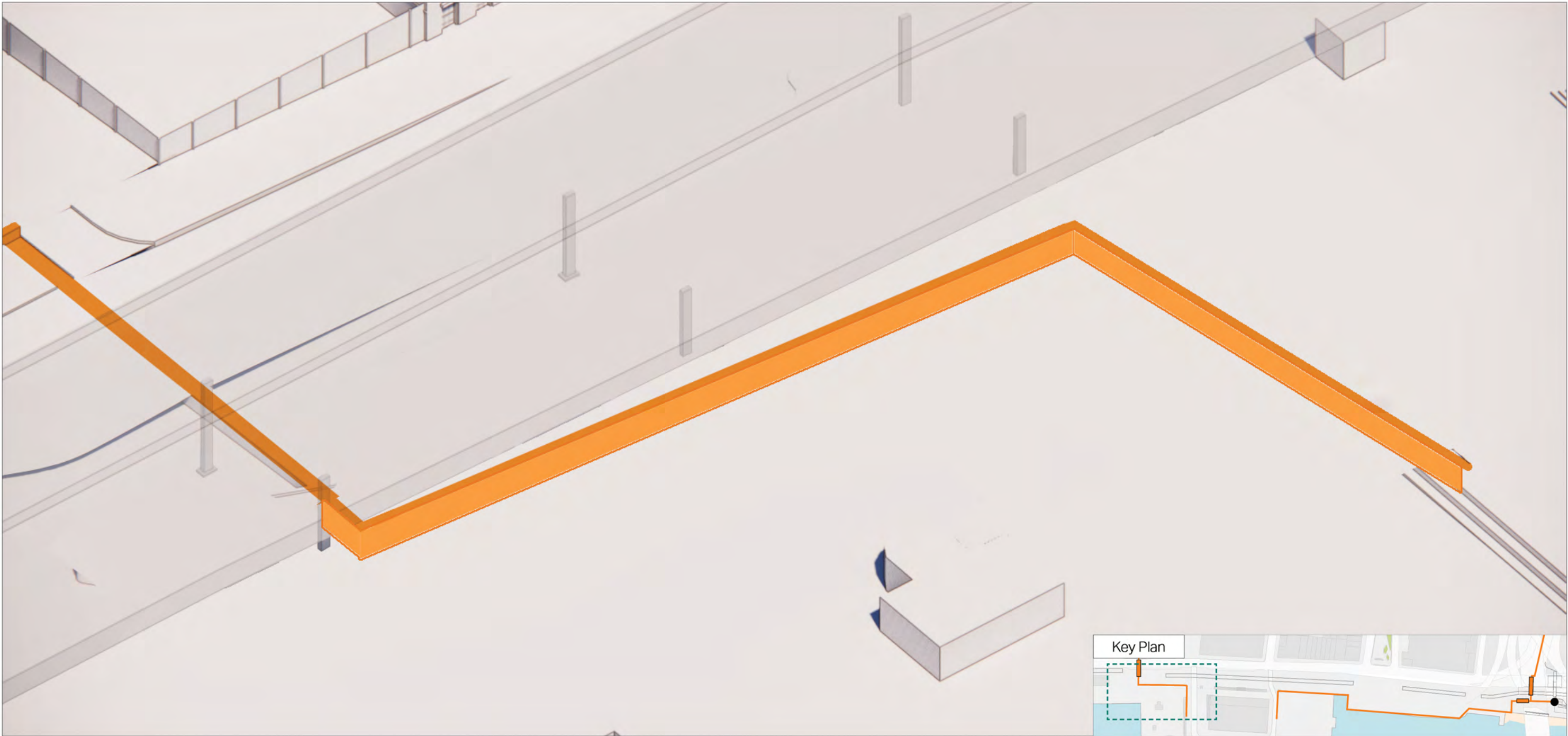
Area 1: Pier 16 & 17 | Flood Alignment Infrastructure

HEIGHT OF INTERVENTION: 2-4'

Connects to deployable across South Street

Tie-in further up Pier 17 driveway

11' 11' 11' 8' 7' 7'

Universal access between South Street and the waterfront

STEPPED PLANTER SHELVES
Opportunities for layers of seating and plantings.

PLANTER BENCH
Seating opportunities could be considered to provide ample space to sit, lounge, and relax along Pier 17.

CELEBRATE the historic character

CONNECT neighborhood & waterfront

Potential space for shade & planting

SLOPED PLANTER
Planting could be considered for heat reduction and biodiversity.

ENHANCE public realm experience

ELEVATED PLAZA
Open space can be designed to host a variety of events that foster community inclusivity and multi-functional use.

11' 11' 11' 8' 7' 7'

Key Plan

Area 2: Jerry Driscoll Waterfront | Existing Conditions

Area 2: Jerry Driscoll Waterfront | Flood Alignment Infrastructure

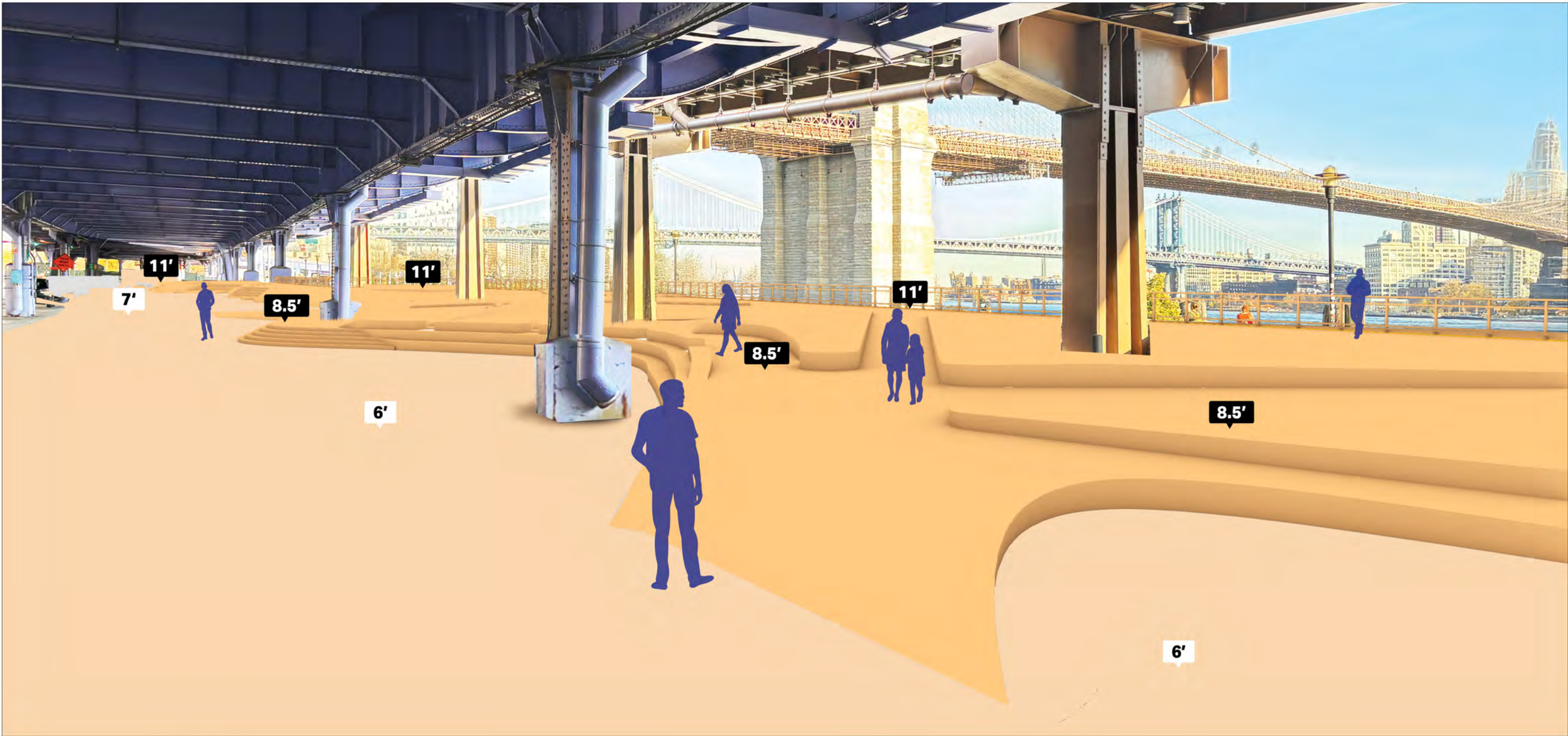# Area 2: Jerry Driscoll Waterfront | Placemaking Opportunities

MOUNDED PLAY
Opportunity to integrate play within grade change.

RAISED ESPLANADE
Creating a raised esplanade achieves the project's design flood elevation while maintaining access along the waterfront.

Universal access between South Street and the waterfront

PROTECT maximum land area

Sun exposure allows for planting areas with shade trees

CONNECT neighborhood & waterfront

Space for active & passive programs

STEPPED SEATING
Tiered seating at the waterfront can give rise to gathering areas of varying scales.

ENHANCE public realm experience

11'
7'
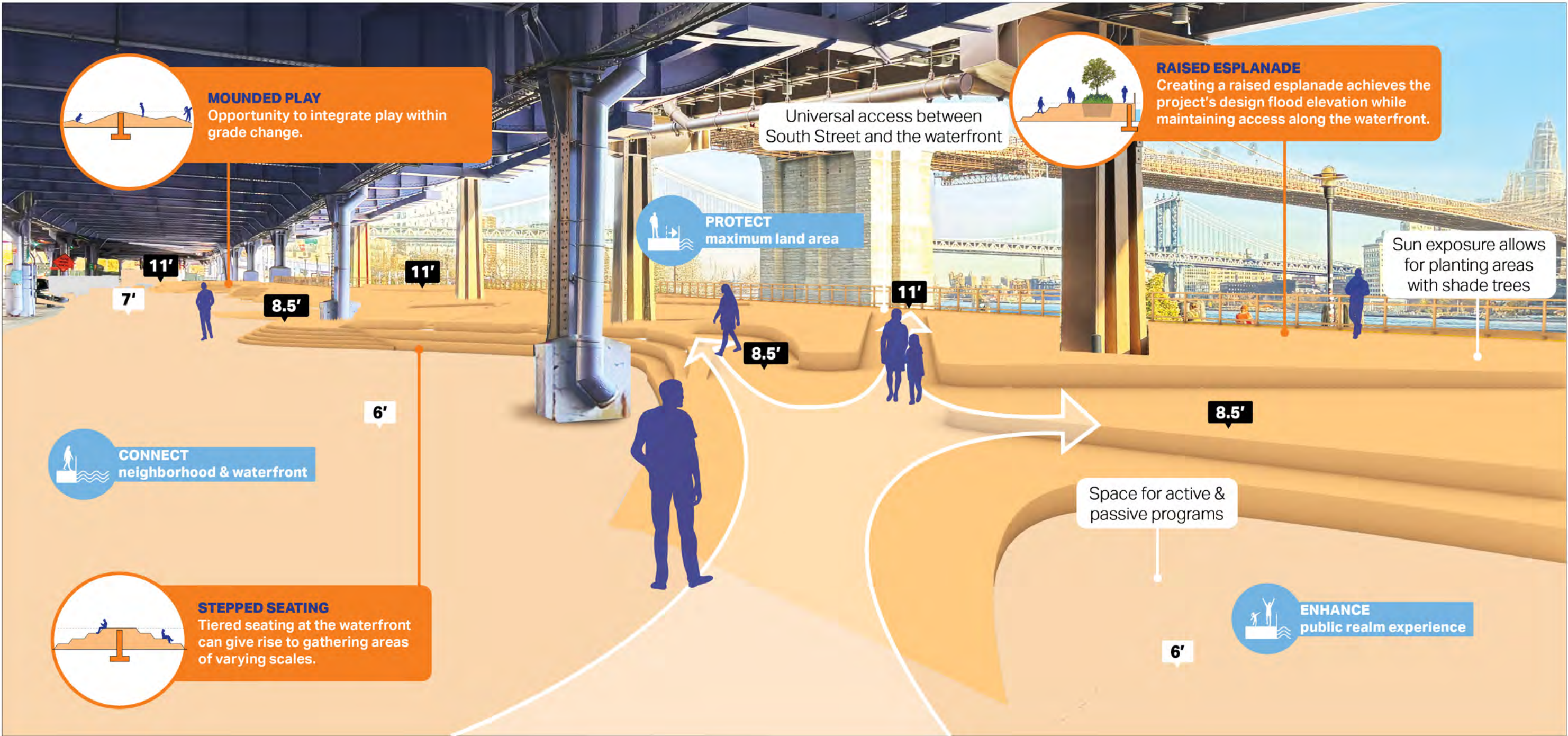8.5'
6'
11'
8.5'
11'
8.5'
6'

SEAPORT Coastal Resilience

AECOM

Area 2: Jerry Driscoll Waterfront | Existing Conditions

Area 2: Jerry Driscoll Waterfront | Placemaking Opportunities

Area 2: Jerry Driscoll Waterfront | Placemaking Opportunities

STEPPED SEATING
Tiered seating at the waterfront can give rise to gathering areas of varying scales.

RAISED ESPLANADE
Creating a raised esplanade achieves the project's design flood elevation while maintaining access along the waterfront.

ENHANCE
public realm experience

Opportunity to create a variety of seating types

Potential for active & passive programs

Maintaining waterfront view corridors

PROTECT
maximum land area

Sun exposure allows for planting areas with shade trees

8.5'

11'

CONNECT
neighborhood & waterfront

Deployable Flood Barrier

Fixed Flood Barrier

Key Plan

Continues waterside along Jerry Driscoll Waterfront

HEIGHT OF INTERVENTION: 2-4'

DEPLOYABLE

11'

8.5'

6'

7.5'

Connects to BMCR Flood Alignment

Area 3: BMCR Tie-in | Placemaking Opportunities

RAISED ESPLANADE
Creating a raised esplanade achieves the project's design flood elevation while maintaining access along the waterfront.

STEPPED SEATING
Tiered seating at the waterfront can give rise to gathering areas of varying scales.

PROTECT
maximum land area

DEPLOYABLE FLOOD GATE
Adopting a deployable flood gate at this location allows for emergency vehicular access.

CONNECT
neighborhood & waterfront

ENHANCE
public realm experience

Potential for active & passive programs

Potential space for planting

11'
8.5'
6'
7.5'

Next Steps | Community Outreach

December — **Community Workshop #2:**
Alignment Updates & Public Realm Design Workshop

January — **CB1 (Environmental Protection Committee):**
Share feedback from Community Workshop #2
and design progress

Spring 2025 — **Public Walking Tours/Pop-Up Events**

Spring 2025 — **Community Workshop #3:**
Present design progress and receive feedback

SEAPORT
Coastal Resilience

How to Comment

Comment Form
Fill out a comment form at tonight's meeting and leave it in the comment box.

Web Contact Form
bit.ly/ContactSPCR

Email
SPCR@fhistudio.com

Visit the Project Website*
www.nyc.gov/site/lmcr/progress/seaport-coastal-resilience-project.page

Please provide comments by Friday, January 3, 2025.

*or scan QR code

Thank You!