

RESERVED CHANNEL DEVELOPMENT

o|x|f|o|r|d

 PAPPAS ENTERPRISES, INC.

Massachusetts Building Congress

October 16, 2024

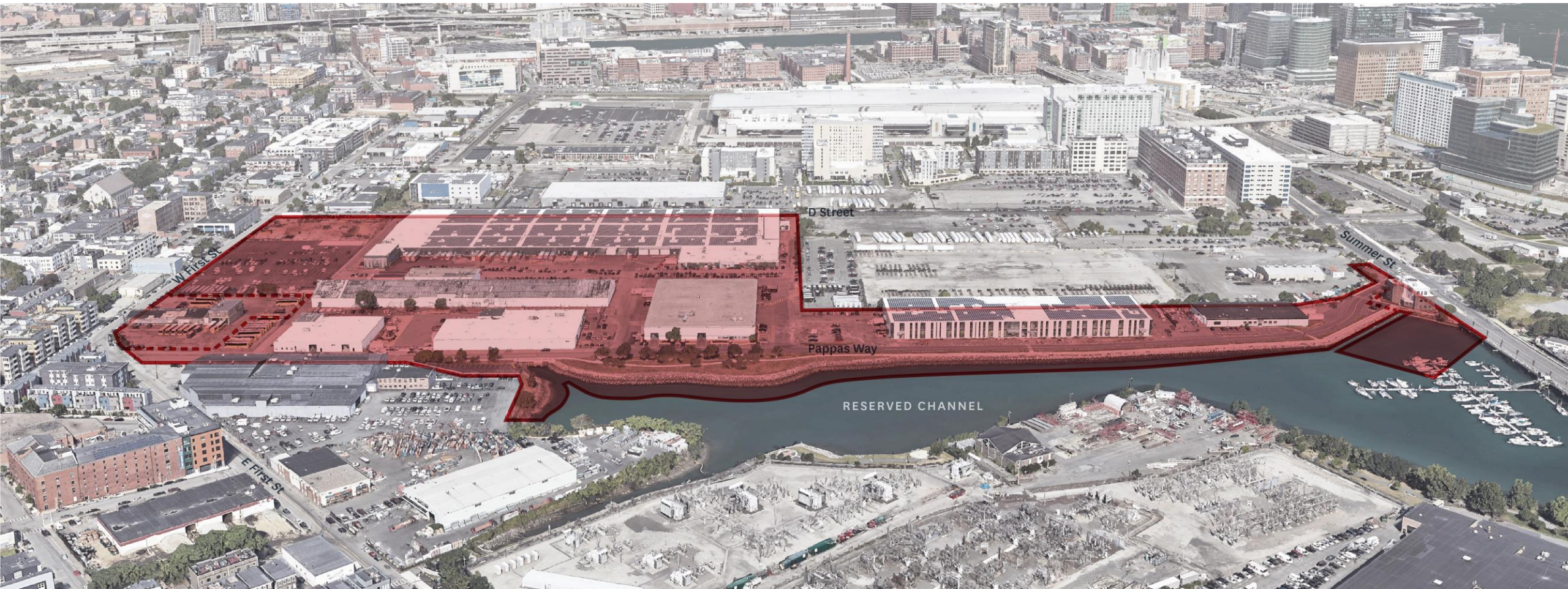


An aerial photograph of a city, likely San Francisco, with a blue overlay. A large, irregularly shaped area in the center is highlighted in a darker shade of blue. This area is bounded by D Street to the north, Passif Way to the east, and a 'RESERVED CHANNEL' to the south. The surrounding city is densely packed with buildings and streets. The title 'Introduction, Site History and Planning Status' is overlaid on the right side of the image in a white box with blue text.

Introduction, Site History and Planning Status

Introduction to the Partnership

In 2019, Oxford Properties and Pappas Enterprises formed a new partnership to own and operate the 42-acre site



The Reserved Channel Site Today



Site:

Approximately **42 acres**

 Massport Ground Lease: **38.23 ac**

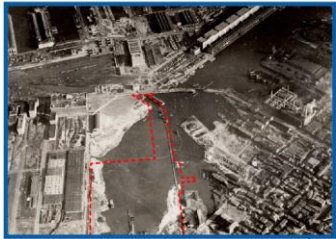
 Fee Ownership: **3.43 ac**

Today:

- ~**785,000 SF** of building area
- **9 buildings**
- **Use mix:** 20% life science, 15% office, and 65% industrial
- 12 tenants, short term to 10+ year term

Planning for the Future

1943: The US Navy begins filling parts of the Reserved Channel basin, creating the E Street Annex, the area occupied by PCC Today.



2010-2012: The new sea wall and harbor walk is constructed.



2010: A new, 75-year extension to the 1964 ground lease is executed.

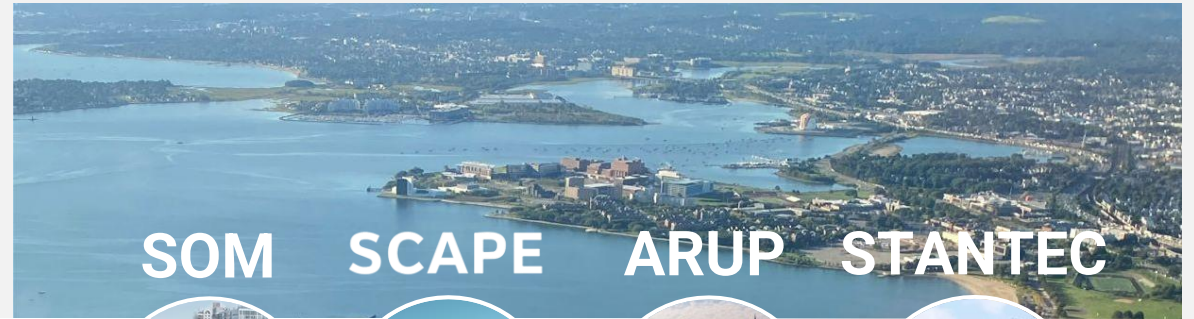
2018: 645 Summer St reopens as a state of the art laboratory building.



OXFORD

PAPPAS ENTERPRISES, INC.

2019



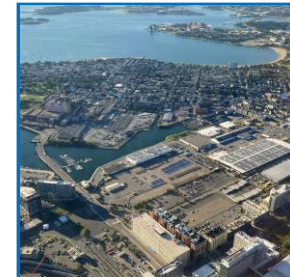
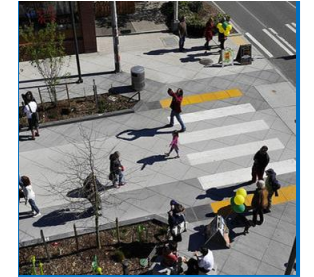
Public Process

Informal Engagements and Activations

Since 2021, the Partnership has held 50+ meetings, workshops, events & activations

- **Agency/Staff:** 20+ Meetings
- **Focus Groups:** 5 Group Meetings
- **Stakeholder Workshops:** 6 Meetings
- **Activation/Community Engagement:** 14+ Events
- **Additional Outreach:** 4 Meetings

Community Outreach Overview





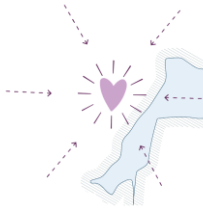
01

A global leader in resilience



02

A waterfront for all



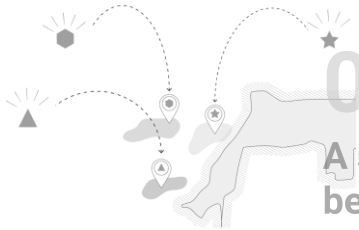
03

From an edge to a center



04

A welcoming place



05

A showcase for the best of South Boston



06

Springboard for success



07

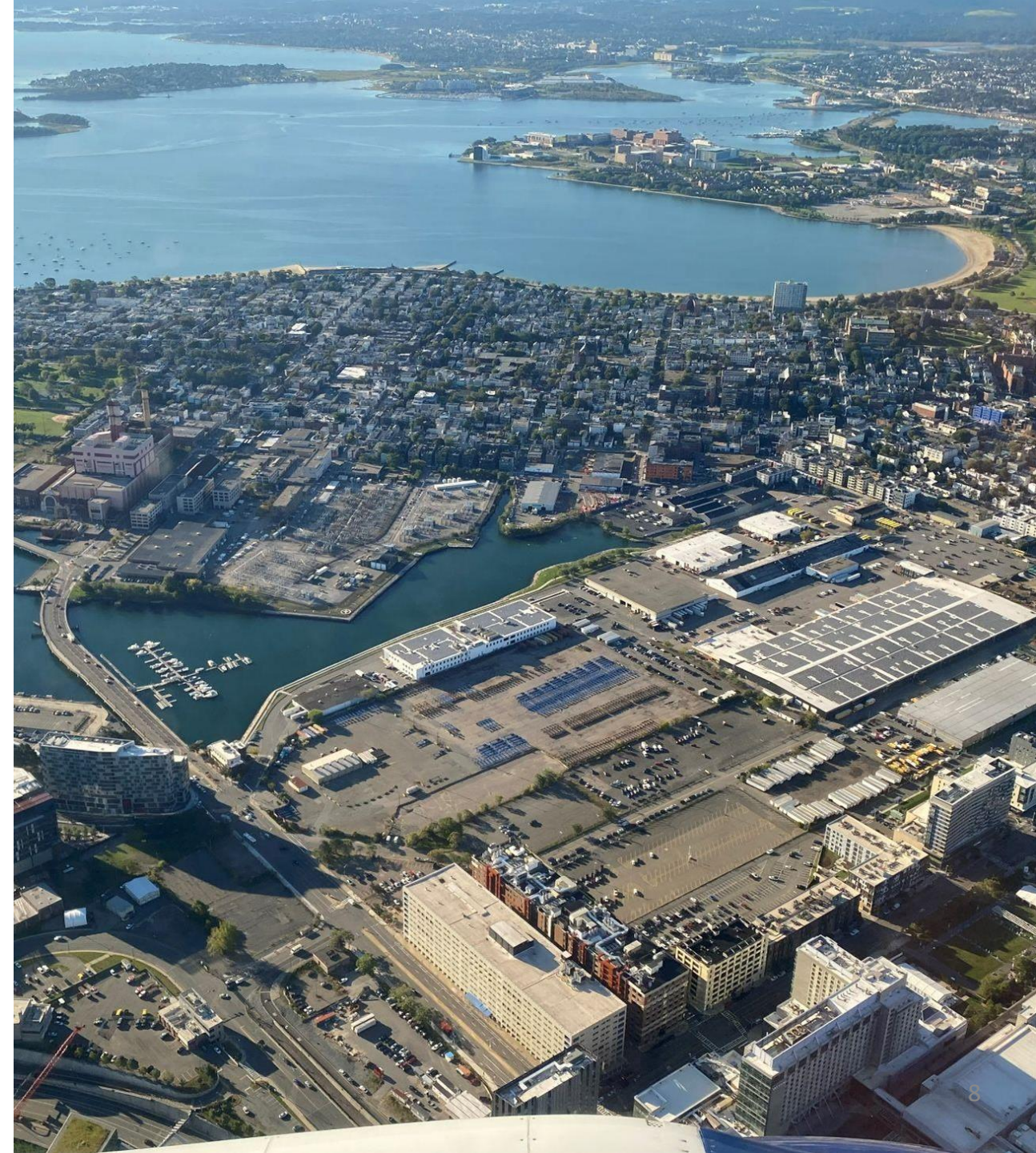
A partner in it together

Resiliency and Open Space

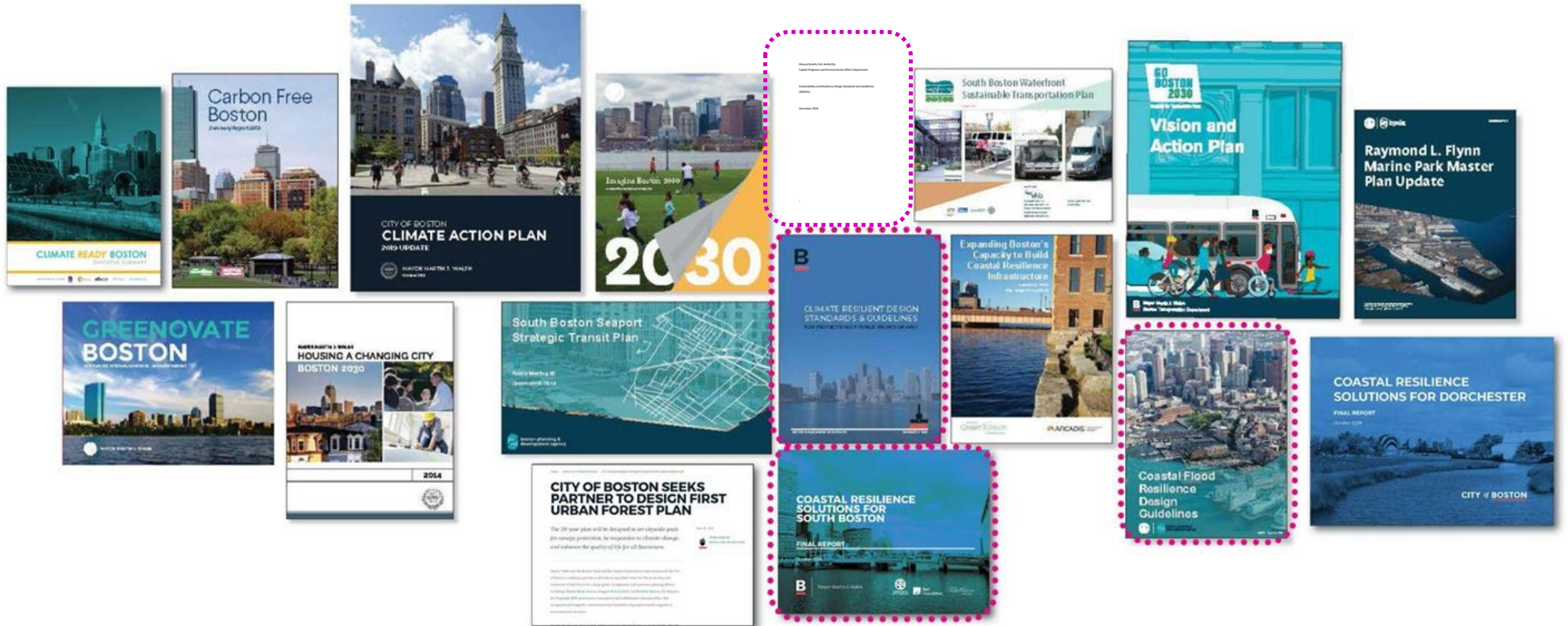


Resilience Goals

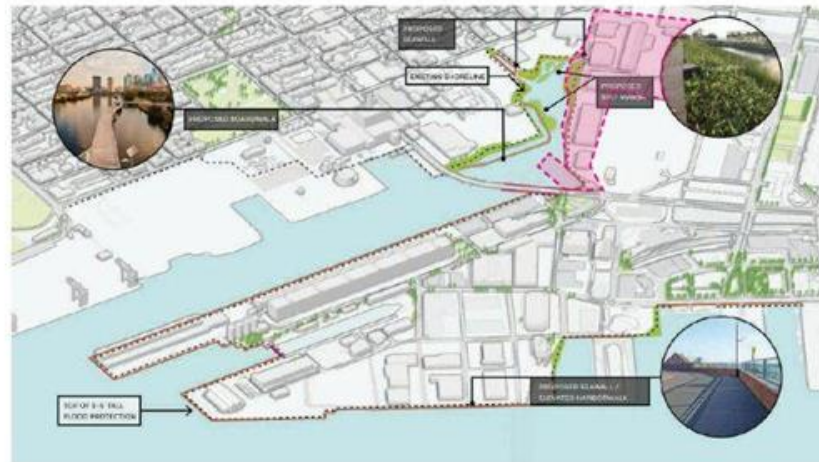
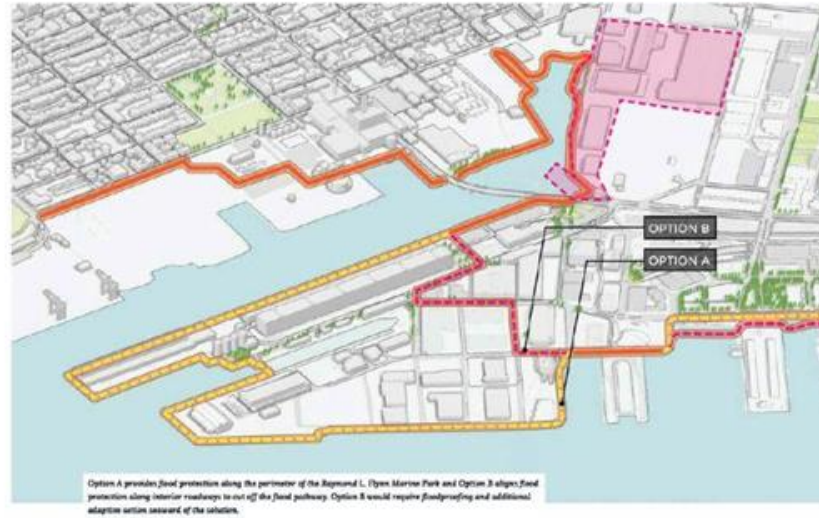
- 1| Develop an **accessible and inviting resilient waterfront landscape**
- 2| **Reduce impervious surface** on the site, adding areas for on site stormwater storage and infiltration
- 3| **Manage stormwater** (10-year, 24-hr storm) on site through a combination of engineered and landscape solutions
- 4| Expand and **enhance urban tree canopy**, cooling the site and mitigating the urban heat island effect
- 5| **Protect the site from coastal flooding, now and in the future.** Develop a long term resilient shoreline that compliments the city's vision for regional protection



Resilience Policy and Planning in Boston



City's Plan for Coastal Flooding and SLR



Estimated Costs for Alignment Options A and B

OPTION A	
ESTIMATED COST	\$87 - \$218 million
ESTIMATED MAINTENANCE COST	\$3.0 - \$3.6 million* per year

*Maintenance costs are expected to be 1.6 percent of the implementation cost.

OPTION B	
ESTIMATED COST	\$11 - \$19 million
ESTIMATED MAINTENANCE COST	\$2.0 - \$2.9 million* per year

*Maintenance costs are expected to be 1.5 percent of the total cost to implement the solution and exclude floodproofing operations and maintenance (FOM).

ALIGNMENT OPTION A: FLOOD PROTECTION OPTIONS AT THE SHORELINE OF THE MARINE PARK

Option A includes a perimeter water's edge solution (e.g., flood wall, sea wall, stepped access) to prevent flooding within the Raymond L. Flynn Marine Park.

Principal causes of future design cost variation could include:

- Whether the flood protection alignment occurs on existing land or within the water
- Whether the structure is a wall or earth-retention feature
- Ship to shore connections
- The number of penetrations of the protection feature (for example, requiring flap gates or surface openings with closable flood gates)

Current unknowns include:

- The number, type, and condition of existing outfalls using shorelines
- The number, type, and condition of buried subsurface utilities (electric, gas, stormwater, wastewater, fiber, etc.)
- Subsurface soil permeability conditions and the necessity for seepage cutoff measures such as sheet pile walls or other treatments

RAYMOND L. FLYNN MARINE PARK: MID-TERM AND LONG-TERM COASTAL RESILIENCE SOLUTIONS

We evaluated two alignment alternatives for the Raymond L. Flynn Marine Park and Reserved Channel:

- OPTION A:** Flood protection along the perimeter of the Raymond L. Flynn Marine Park and Reserved Channel
- OPTION B:** Flood protection interior to the Marine Park

For each option, there are minor variations possible for the alignments, and for each alignment, there are multiple technical approach options and a variety of possible design concepts.

EFFECTIVENESS
The effectiveness of both options is limited in the long term by flood pathways generated from other parts of the district. Flood pathways originating in the District's flood-prone areas would connect with Raymond L. Flynn Marine Park and Reserved Channel flood pathways with 9 inches of sea level rise, or a low probability flood event rate. The effectiveness of Option B largely depends on individual building floodproofing on the water side of the solution. Option A may be the most effective for the large portion of the Raymond L. Flynn Marine Park that would otherwise be at risk to at least monthly flooding with 40 inches of sea level rise.

EVALUATION CRITERIA PERFORMANCE

Criteria	Option A	Option B
EFFECTIVENESS	High	High
ENVIRONMENTAL IMPACT	High	High
DESIGN LIFE AND ADAPTABILITY	High	High
FEASIBILITY	High	High
EQUITY	High	High
SOCIAL IMPACT	High	High
VALUE CREATION	High	High

KEY CONSIDERATIONS:

- Careful design is required to avoid disruption of current and planned waterfront uses
- Potential operational disruption during construction of the flood protection solution
- Can be designed to address 40 inches of sea level rise now and may be adapted to address higher flooding later

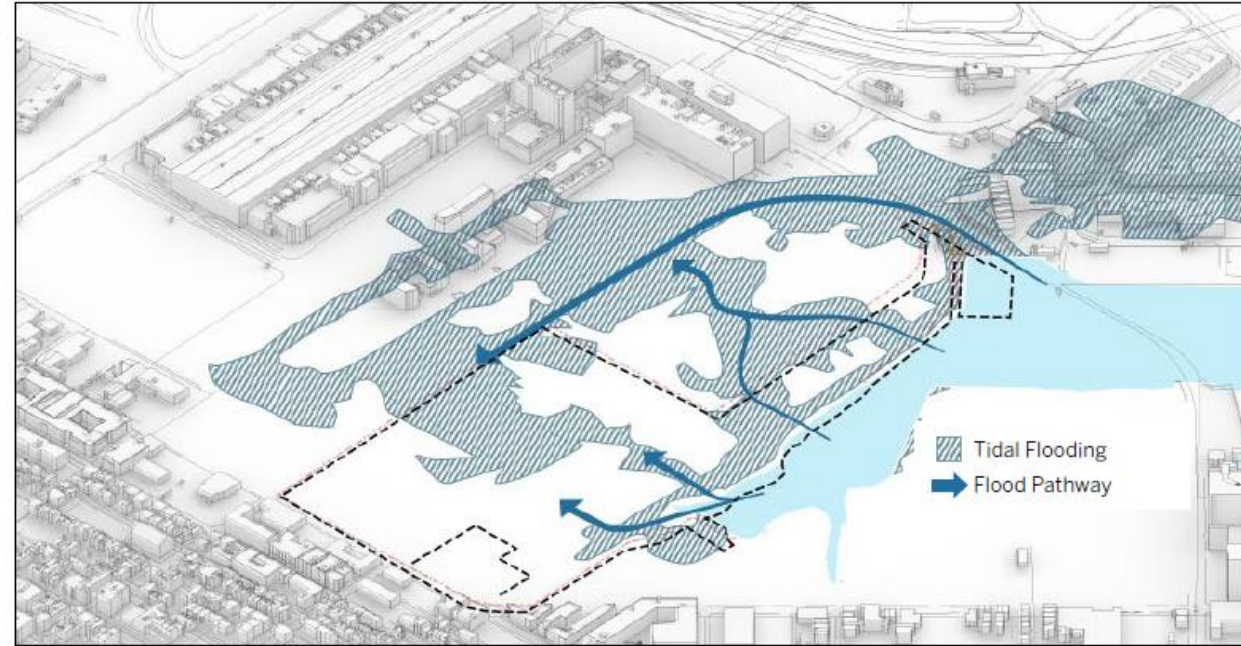
Ability to permit in-water construction and the presence of contaminated sediments
Availability of materials and labor and material costs

Source: Coastal Resilience Solutions for South Boston, 2018

Mitigating Coastal Flooding



1% Annual Chance Flood.



Average Monthly High Tide with 40" of Sea Level Rise

Managing Stormwater



STORMWATER FLOODING

Stormwater Flooding

Project Site

Source: <http://www.boston.gov/departments/environment/climate-ready-Boston-map-explorer>

RESERVED CHANNEL DEVELOPMENT MASTER PLAN

Mitigating Extreme Heat

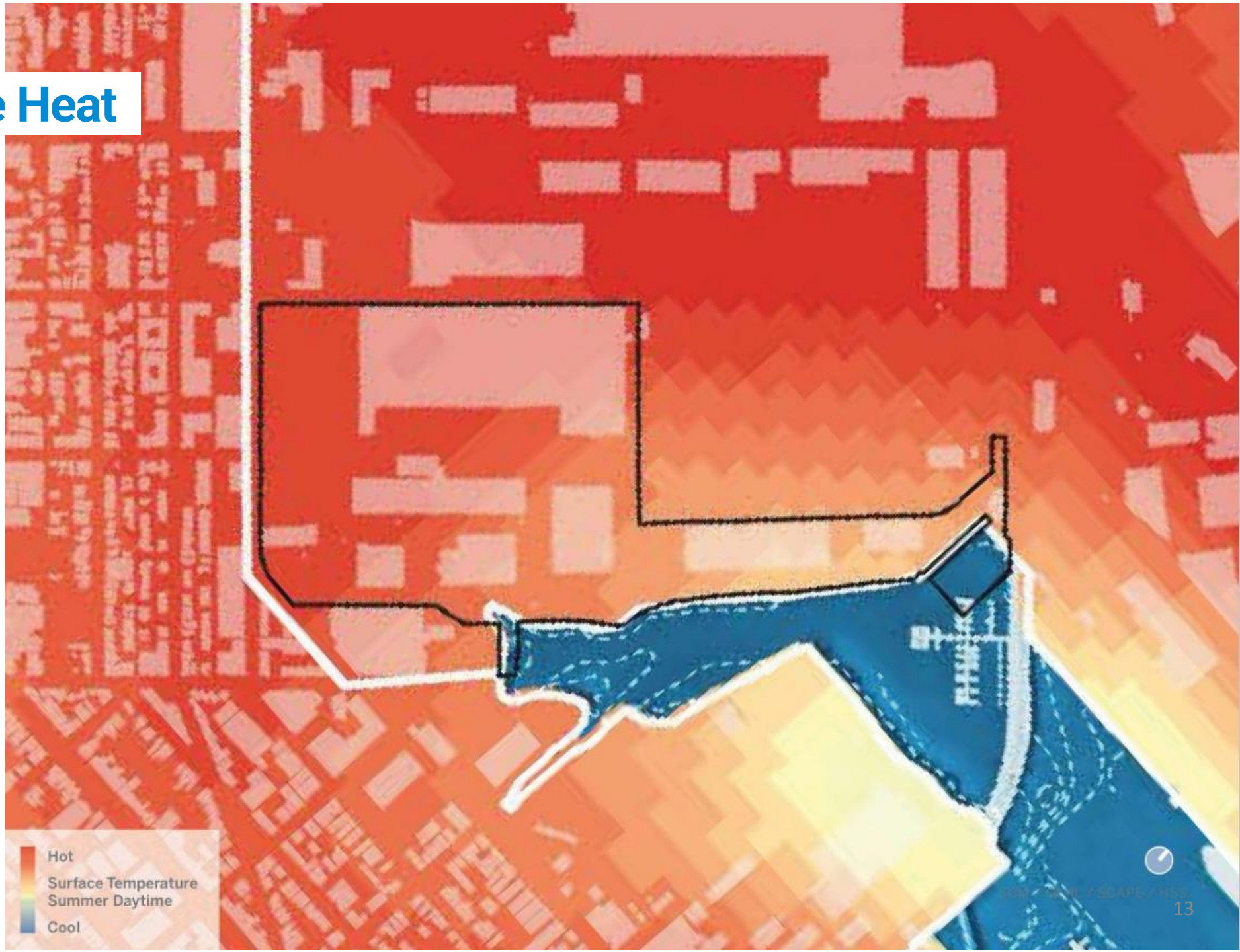


Data Source: Mass GIS (Bureau of Geographic Information) 2016

- Tree Canopy
- Permeable Soil
- Bareland
- Impervious



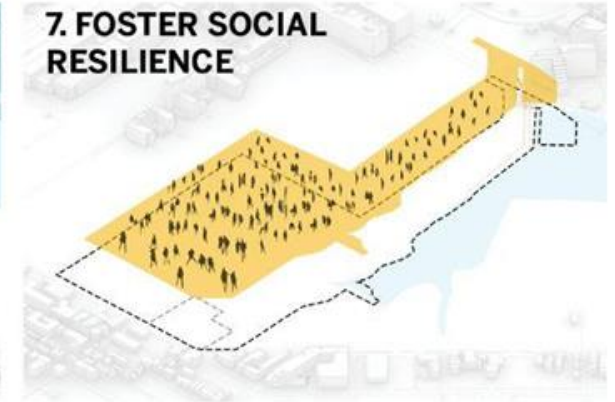
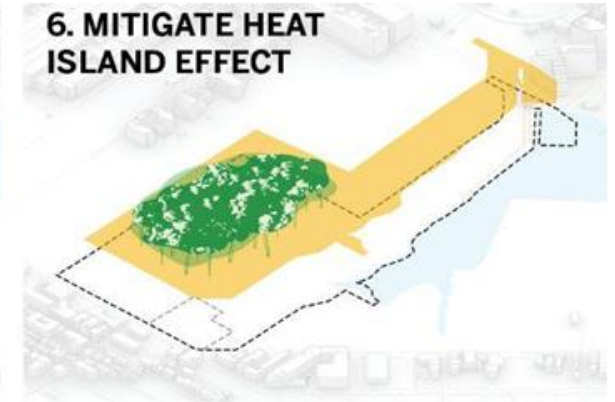
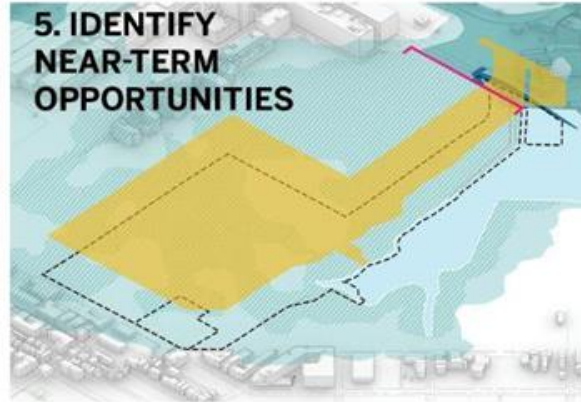
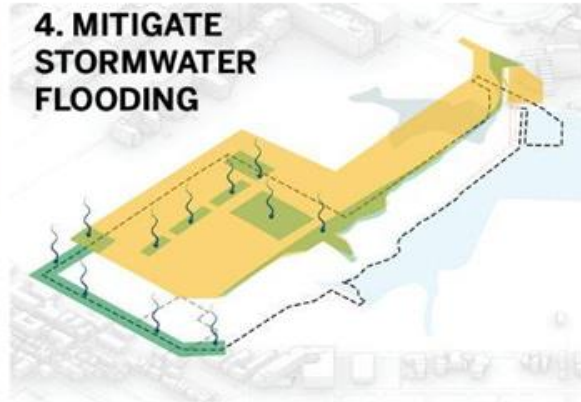
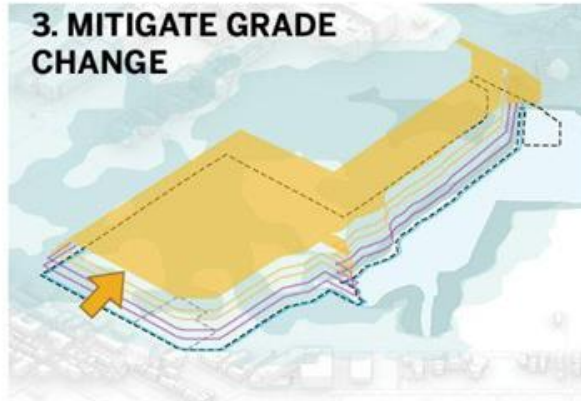
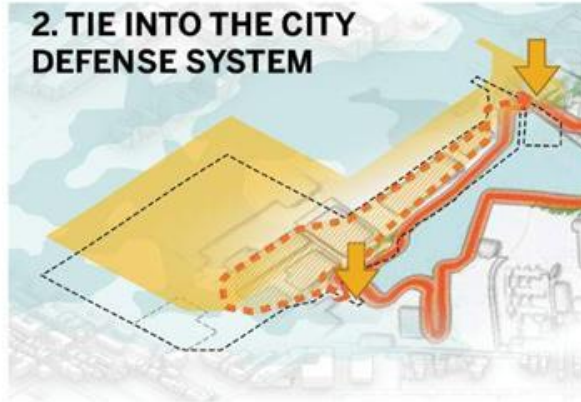
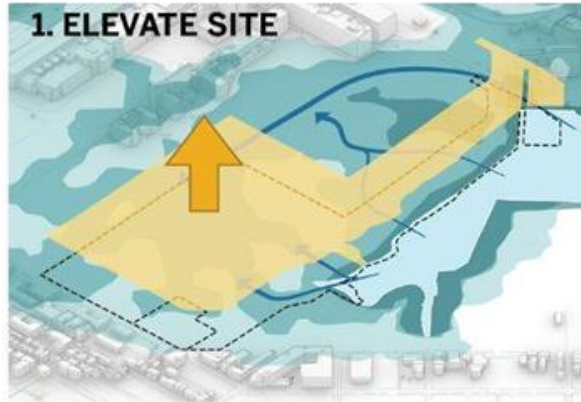
Data Source: City of Boston: Open data, Analyze Boston



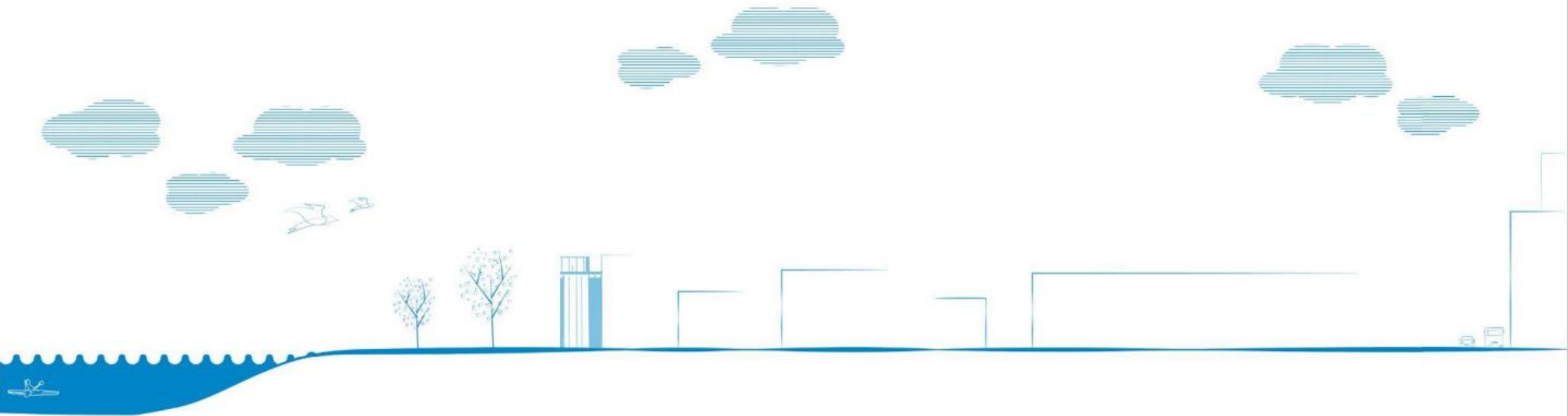
RESILIENCE STRATEGY/ APPROACH

BASE ASSUMPTIONS

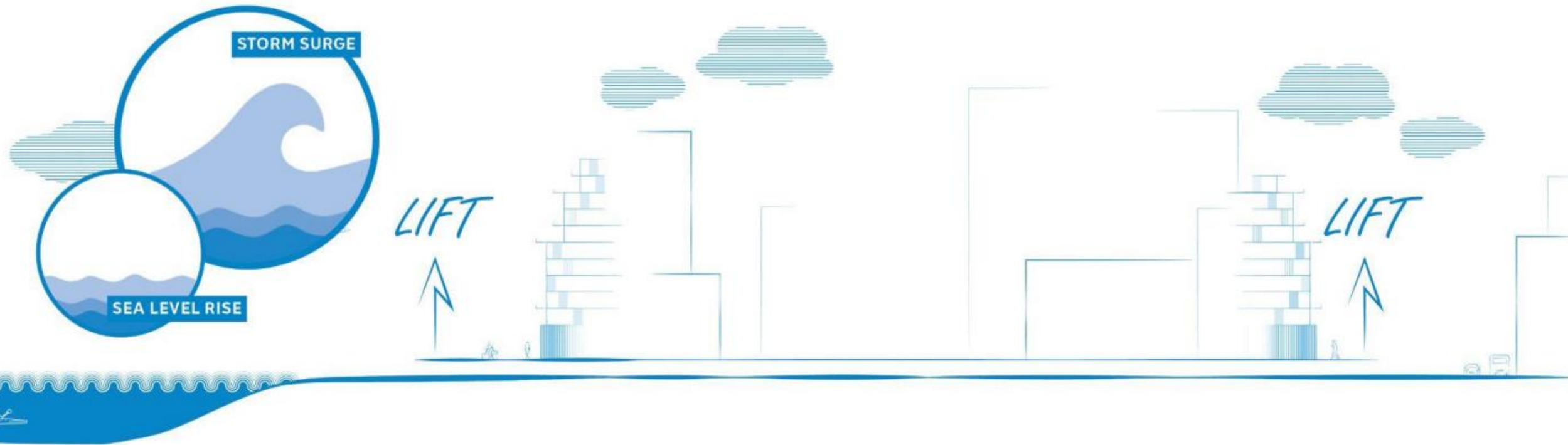
- 1. Elevate the site & buildings** to ensure it is resilient to future coastal flooding (regular tidal flooding and coastal storm event)
- 2. Meet city minimum flood defense DFE** to enable future accommodations for City's long-term plans for coastal flood defense
- 3. Maintain a good urban connections** to the surrounding neighborhood (mitigate potential urban design impacts of site elevation)
- 4. Mitigate any potential increases in stormwater flooding**
- 5. Identify opportunities** to address near-term coastal flooding in the wider neighborhood
- 6. Mitigate heat island effect**
- 7. Foster social resilience**



RCD TODAY



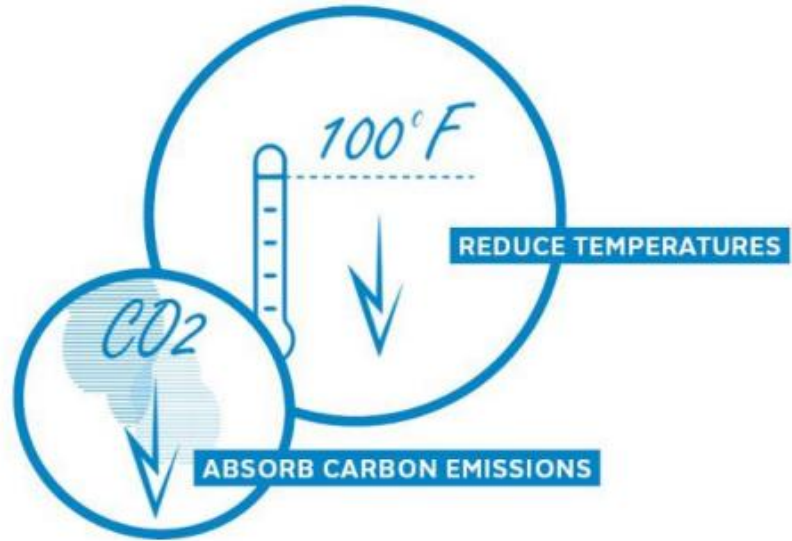
RESILIENCE STRATEGY



RESILIENCE STRATEGY



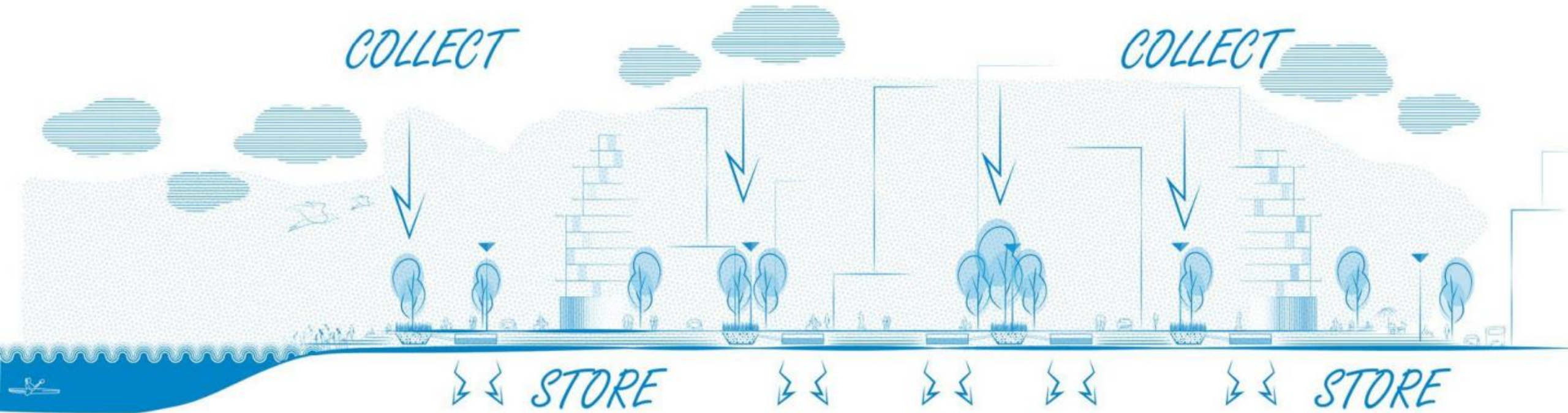
RESILIENCE STRATEGY



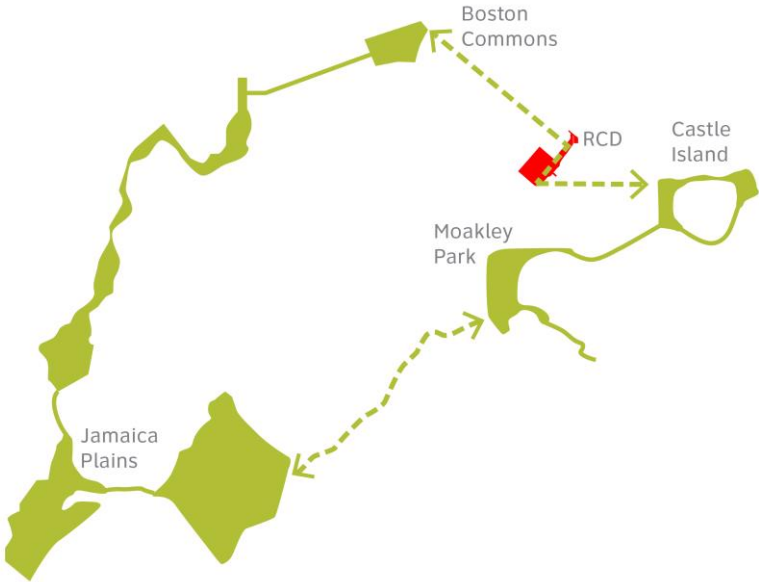
PLANT

PLANT

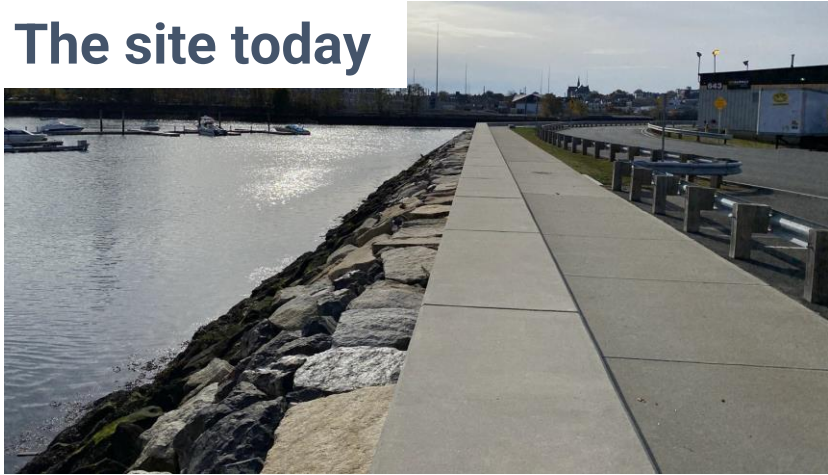
RESILIENCE STRATEGY



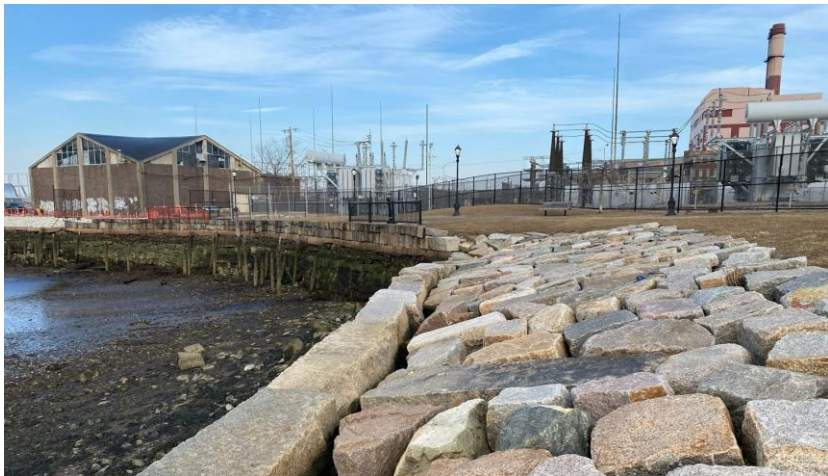
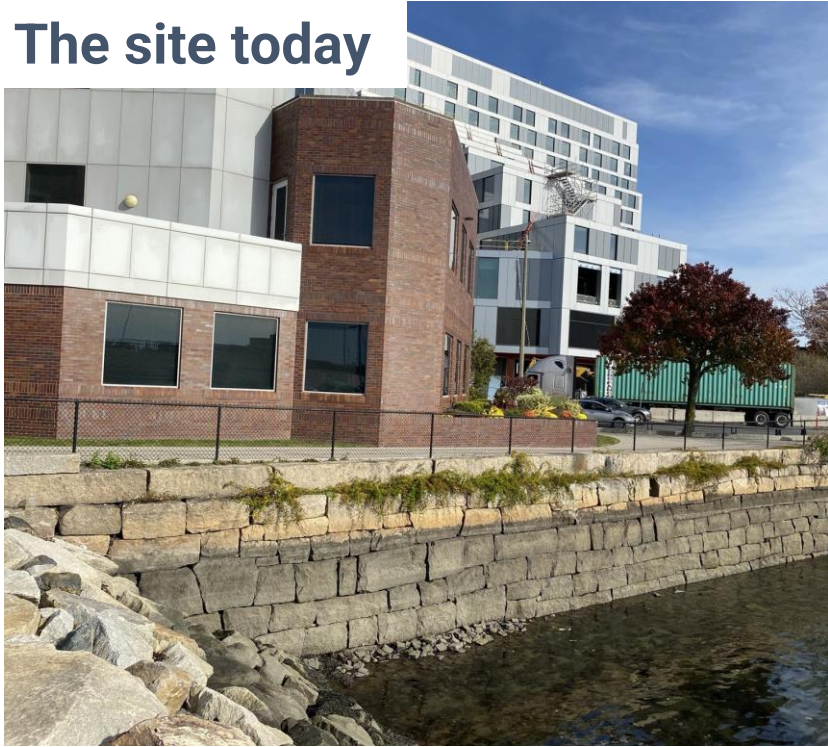
The stage for performative open space



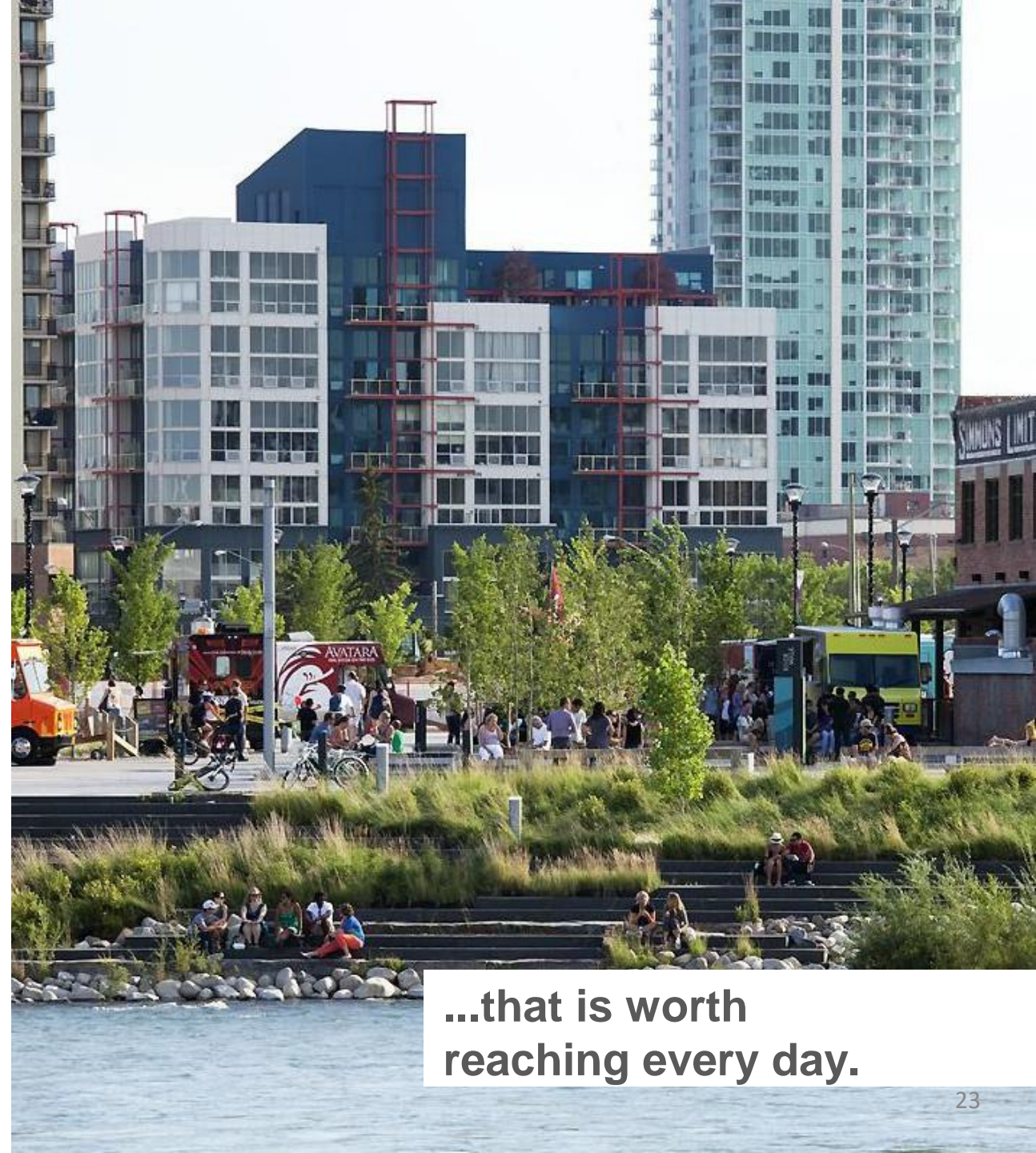
The site today



The site today



We want to make a more reachable waterfront...



...that is worth reaching every day.

Landscape and Open Space Programs

Programs



ACTIVE

"Suggest we have a very wide area for people to not only run, but also to rollerblade and skate."



CULTURAL

I'd like to see a "more curated space."

"Farmers market is high on my colleagues' list of needs."



PASSIVE

"It's nice to have a fully open canvas – unprogrammed space."



Landscape and Open Space Character

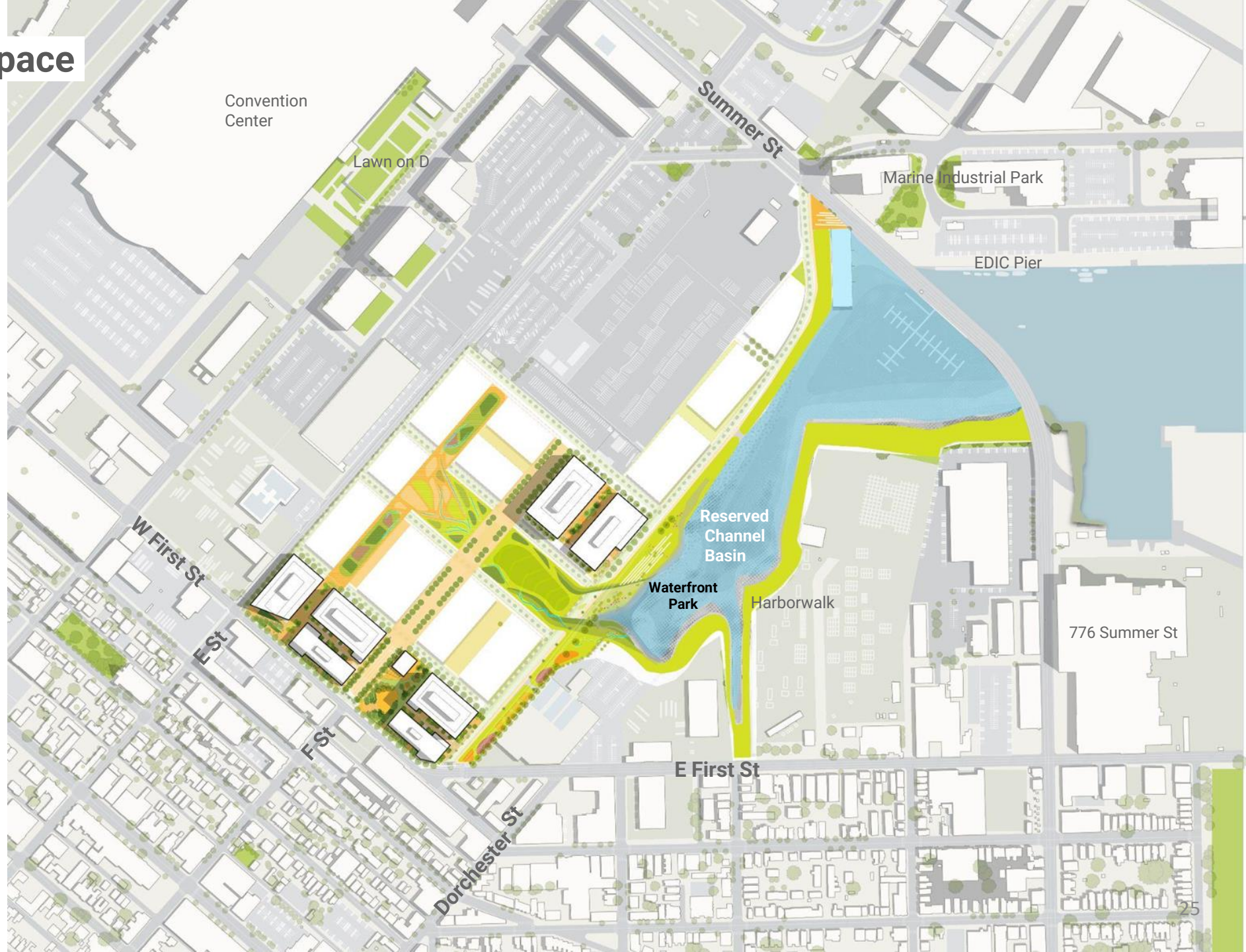




photo: Boy Scouts of America

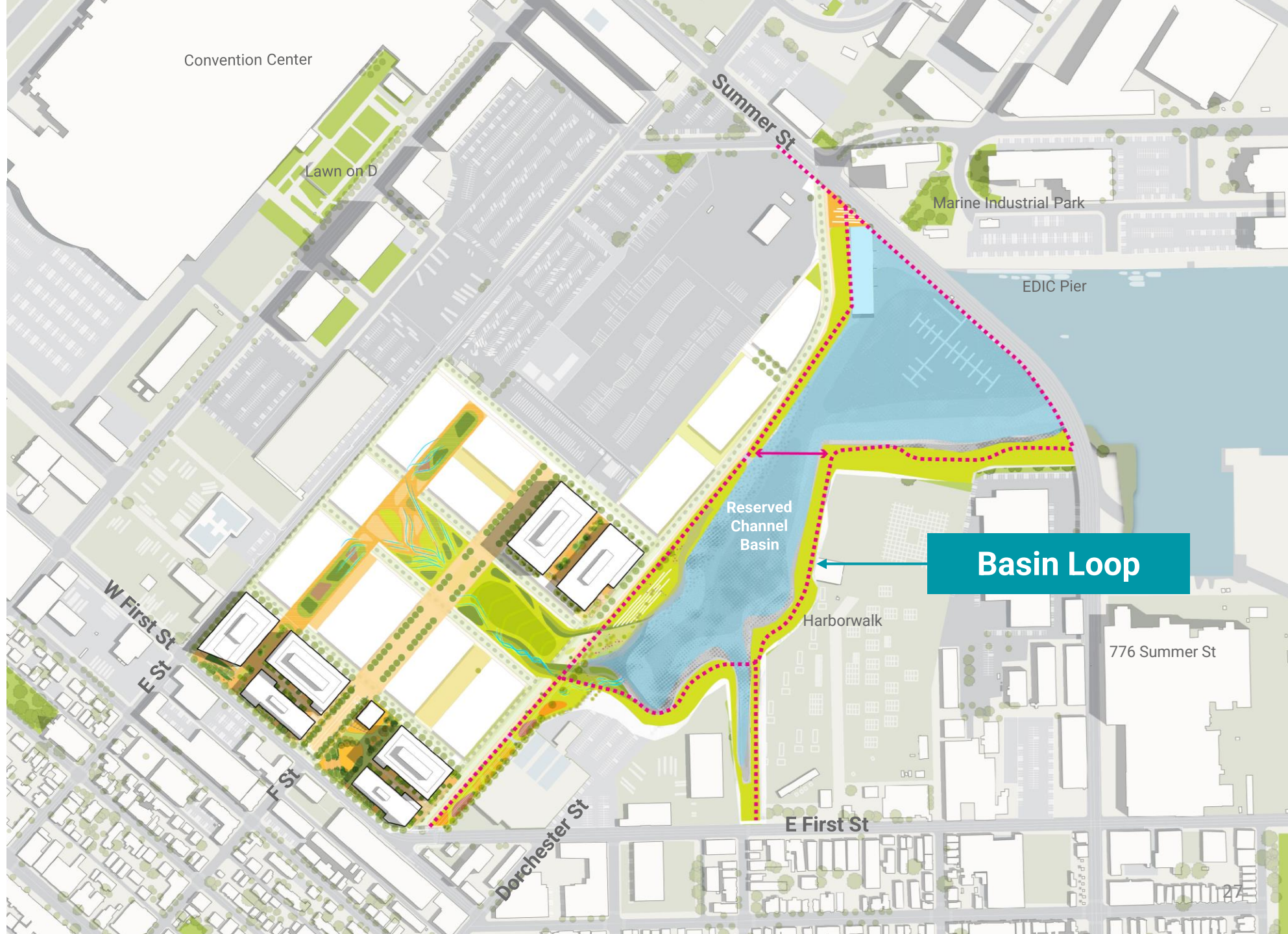
The Basin Loop

An immersive, lush, and replenishing nature walk in the city. A place to recharge devoted to ecological restoration and resilience.

Some elements might include:

- Learning lab & tours
- Community gardens
- Bird watching club
- Lush greenery
- Overlooks

The Basin Loop



Activated Waterfront





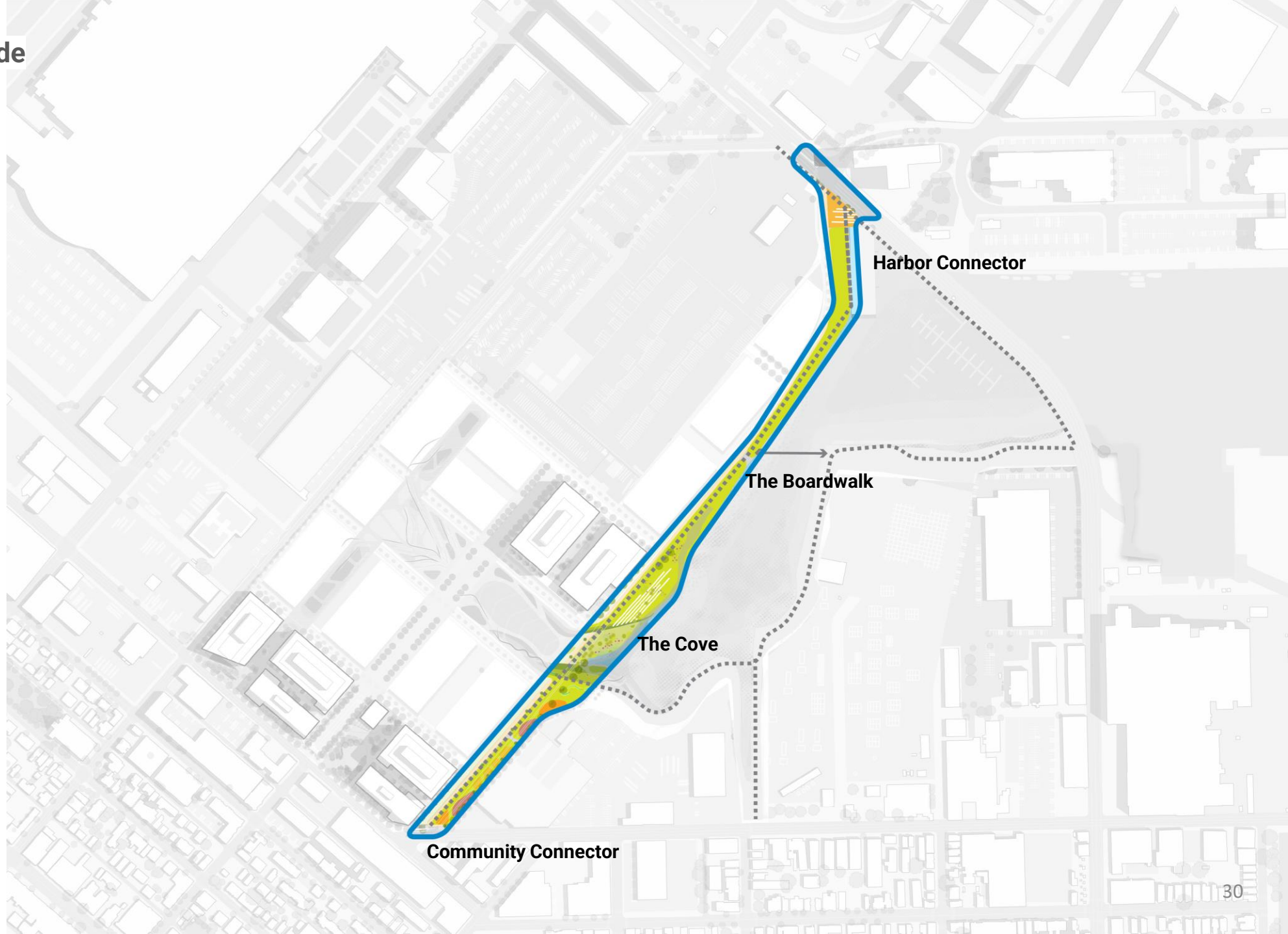
Waterfront Promenade

A boardwalk lined with shops and stalls, where established favorites and local upstarts create a lively and sociable waterfront.

Some elements might include:

- Communal boardwalk
- Small retailers and restaurants
- Patios
- Play features
- Weekend markets
- Local art
- Marina

The Waterfront Promenade



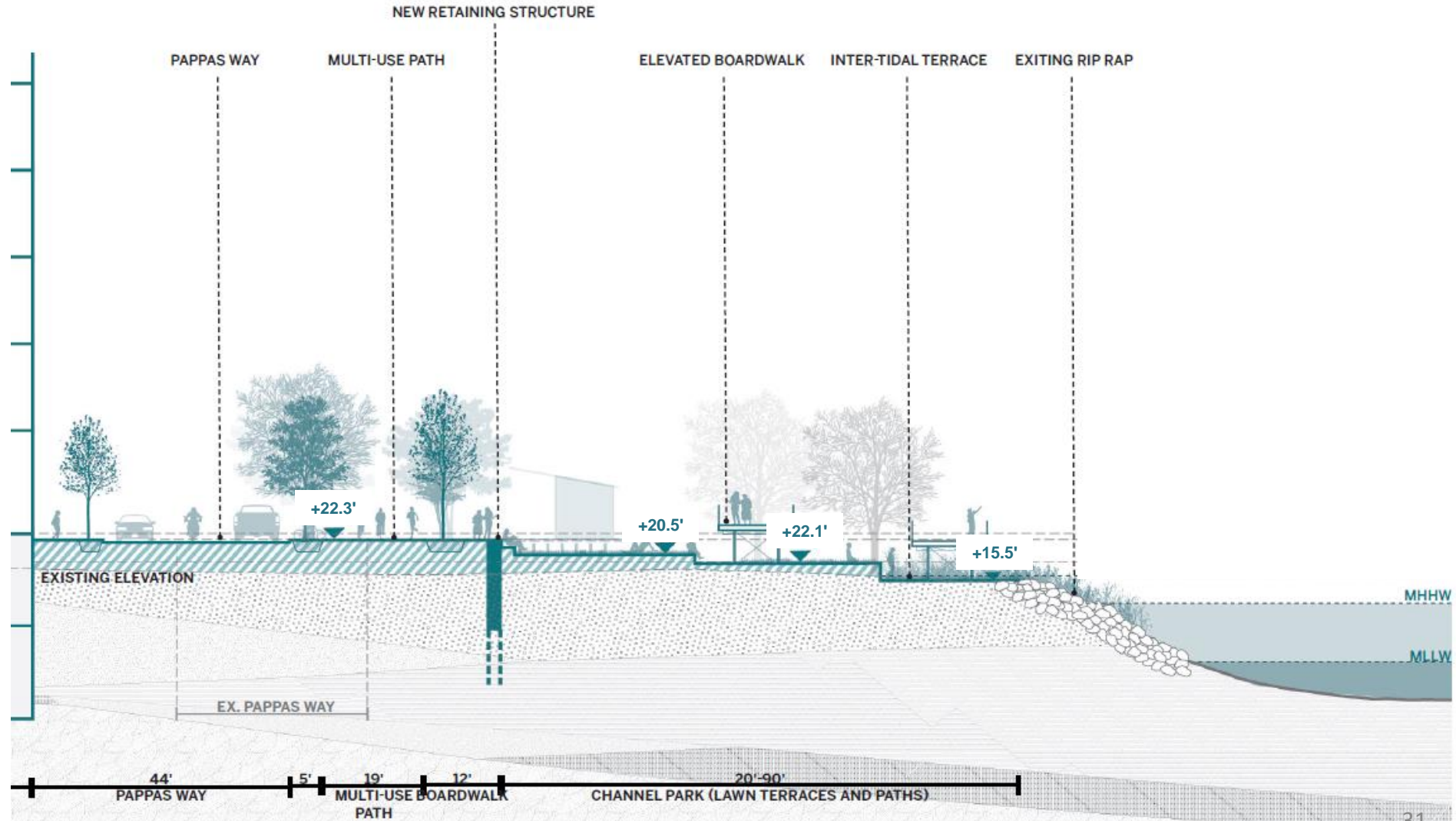
Harbor Connector

The Boardwalk

The Cove

Community Connector

The Waterfront Promenade



All elevations are in BCB, subtract 6.46' for NAVD88

Waterfront Promenade





Gathering Park

The neighborhood backyard – a flexible and open green space that invites people to make it their own, complemented by a rich calendar of local events.

Some elements might include:

- Multi-purpose lawn
- Market pavilions
- Flexible seating
- Sociable seating
- Shaded areas
- Local food kiosks
- Recurring events
- Community center

Gathering Park



The Grove

Gathering
Lawn

Gathering Park - Summer



Gathering Park - Winter





01
A global leader in resilience



02
A waterfront for all



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From an edge to a center



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A welcoming place



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A showcase for the best of South Boston



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Springboard for success



07
A partner in it together

Framework Planning & Urban Design

Invest in open space
An exceptional waterfront
loop + a network of parks
and plazas

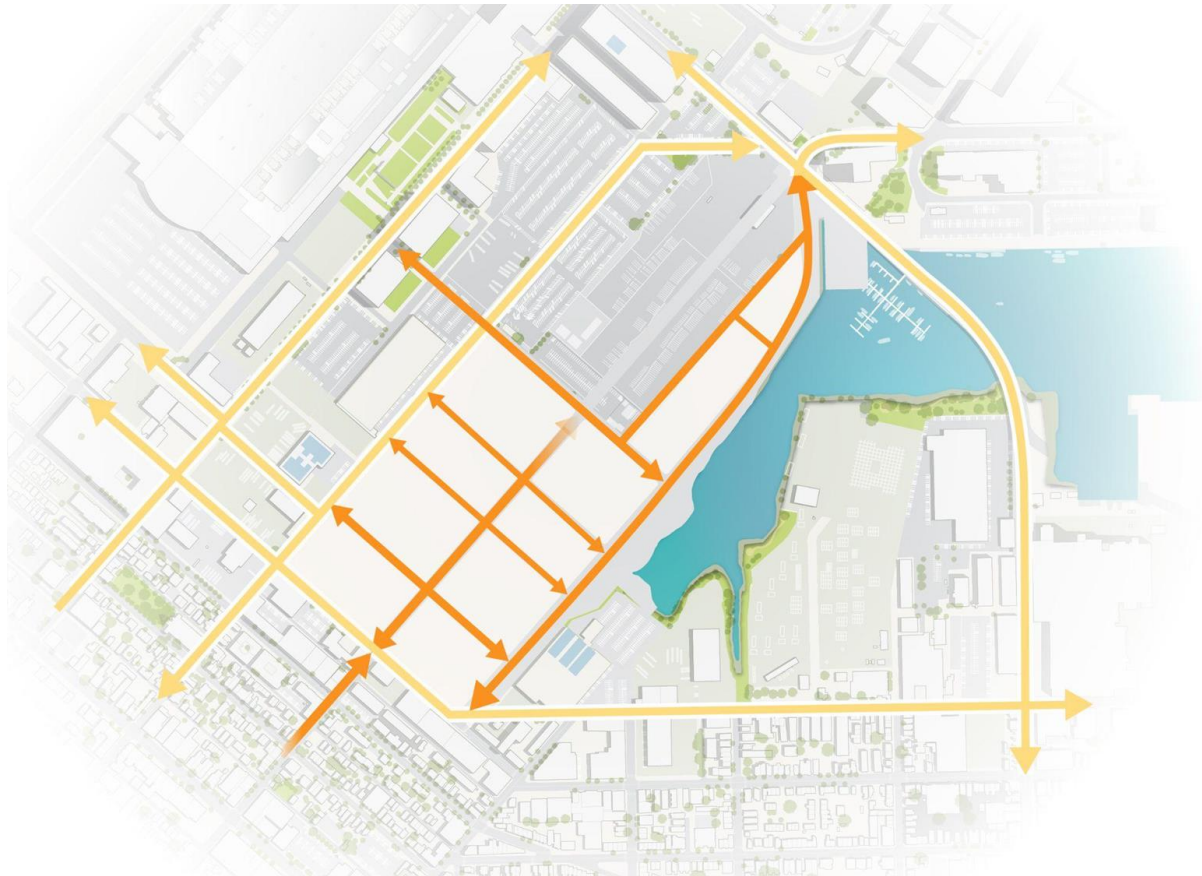


Hunters Point Park, New York



Tanner Spring Park, Portland

**Complete the grid
Extend existing South
Boston streets into
the new district**

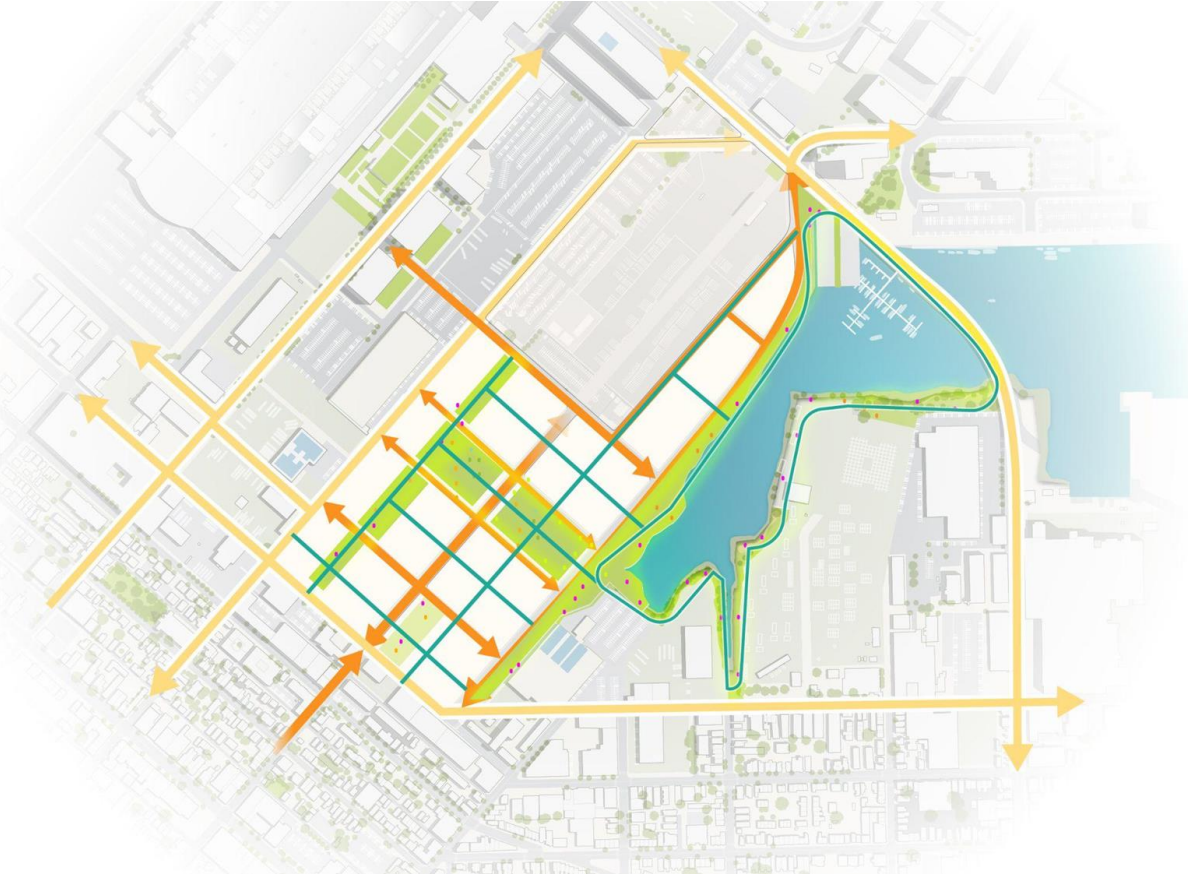


Victoria Gardens, Rancho Cucamonga

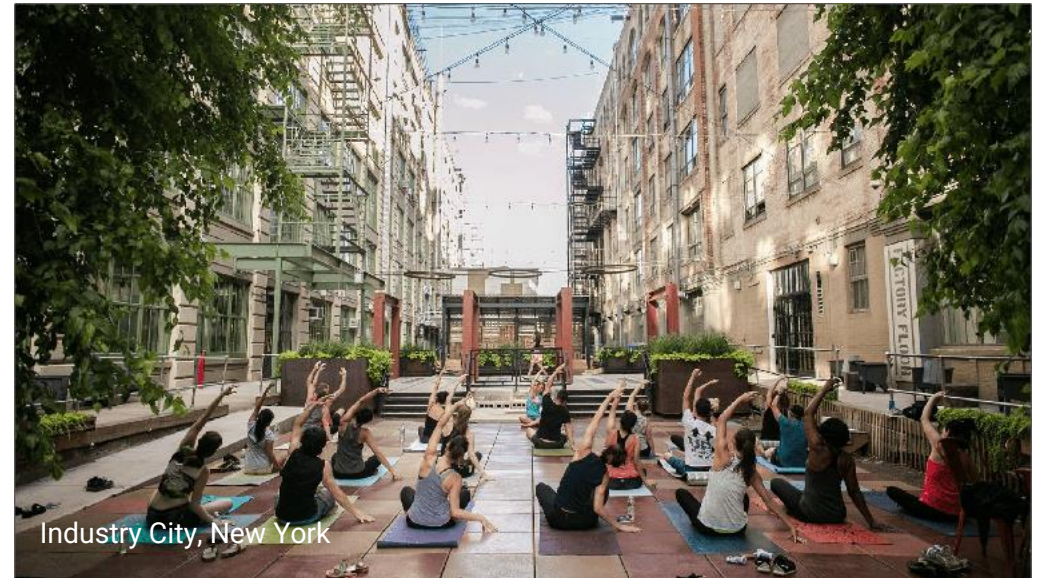
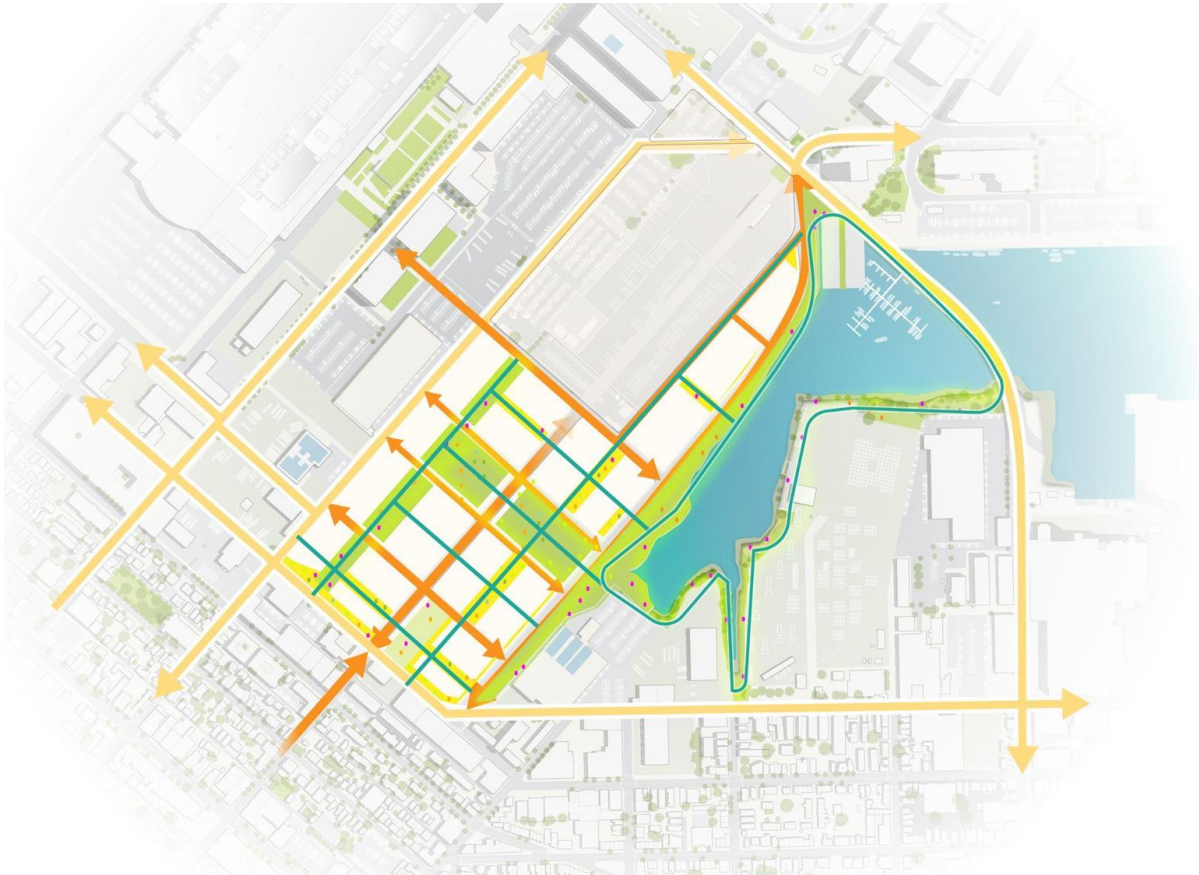


Parc Passeig De Sant Joan, Parcelana

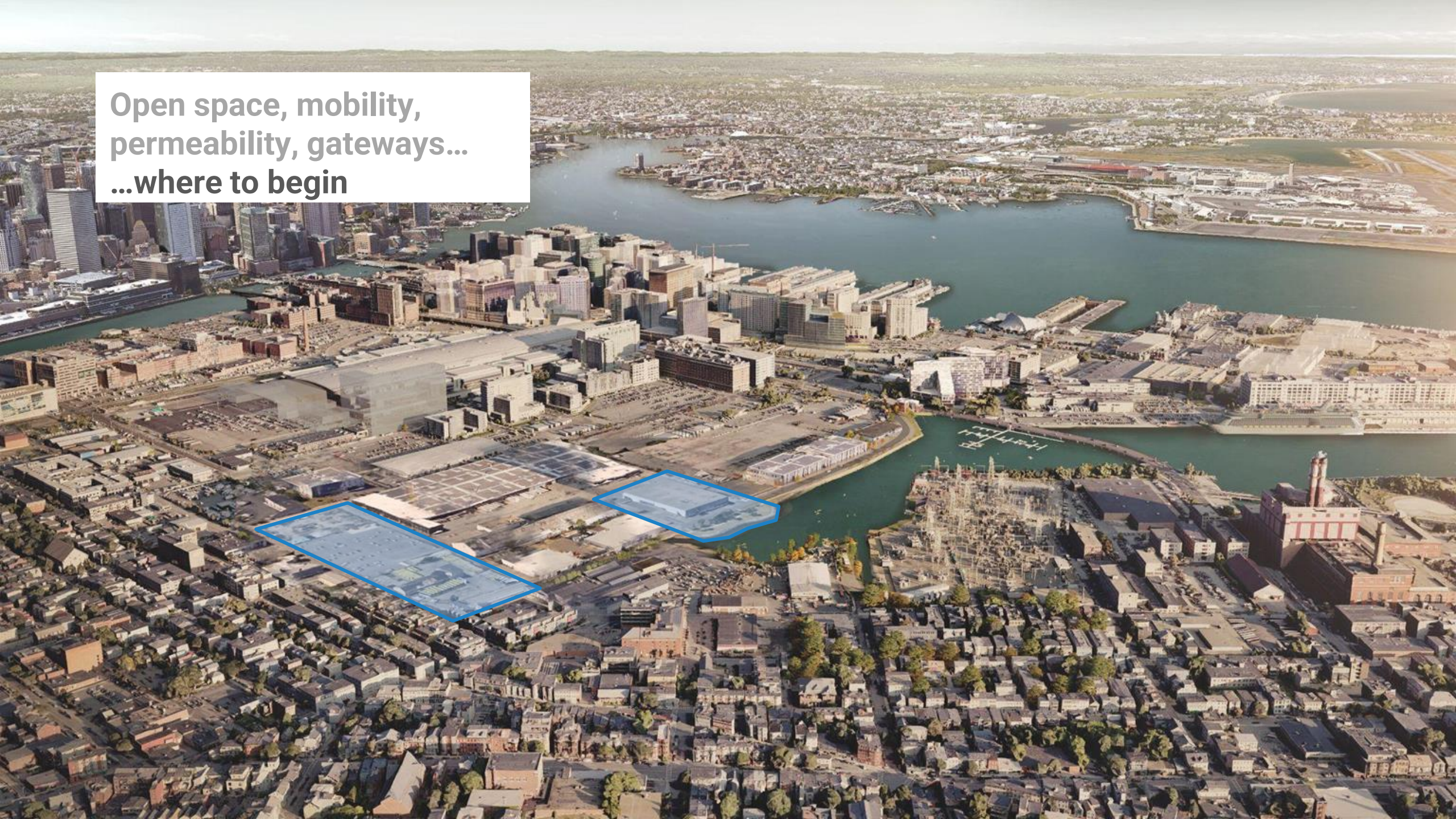
Prioritize permeability
Further breakdown the
development with a
latticework of alleys

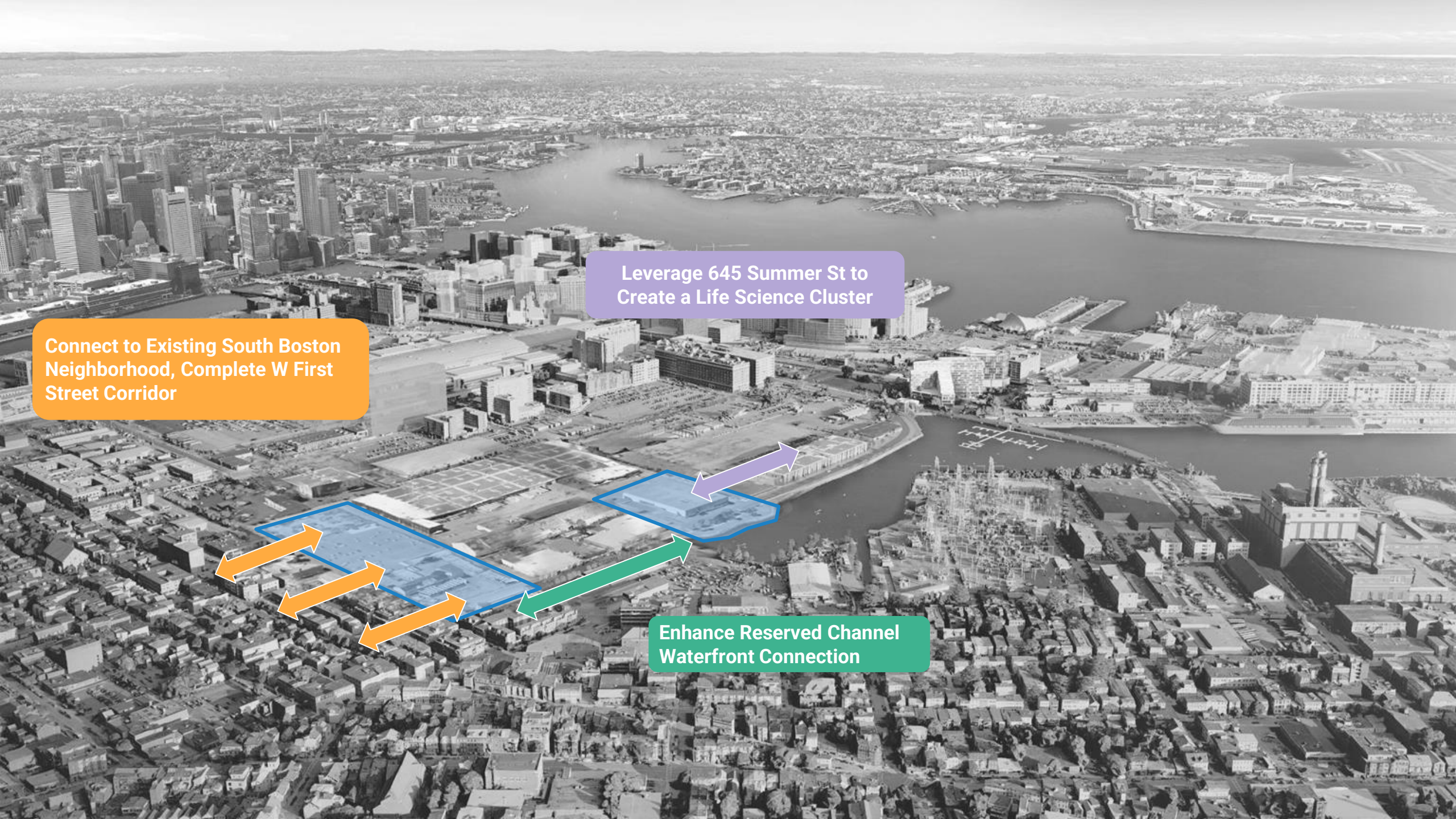


Inviting gateways
Strategic insertions of
courtyards, pocket parks,
and mini plazas...



Open space, mobility,
permeability, gateways...
...where to begin





Connect to Existing South Boston Neighborhood, Complete W First Street Corridor

Leverage 645 Summer St to Create a Life Science Cluster

Enhance Reserved Channel Waterfront Connection





Active Ground Floor Uses & Neighborhood Amenities



Increased Employment



Improved Pedestrian Environment



Revitalized Waterfront Open Space



New Open Spaces and Public Ways



Hundreds of New Residences



Neighborhood and Site Resiliency



Phase 1 Project Uses

	BLOCK A	BLOCK B	BLOCK C	TOTAL	%
LAB/COMMERCIAL SF	343,500	538,000	567,000	1,448,500	83%
RESI SF	91,000	109,500	-	200,500	12%
RESI UNITS	~95 Units	~110 Units	-	~205 Units	-
RETAIL/AMENITY SF	18,500	30,500	41,000	90,000	5%
TOTAL SF	453,000	678,000	608,000	1,739,000	100%

Focus on West 1st St

- ~ 200 new residences
- 3 Commercial Buildings
- ~50,000 SF retail & amenities
- Civic Pavilion
- 1, 5, 6 & 11 stories

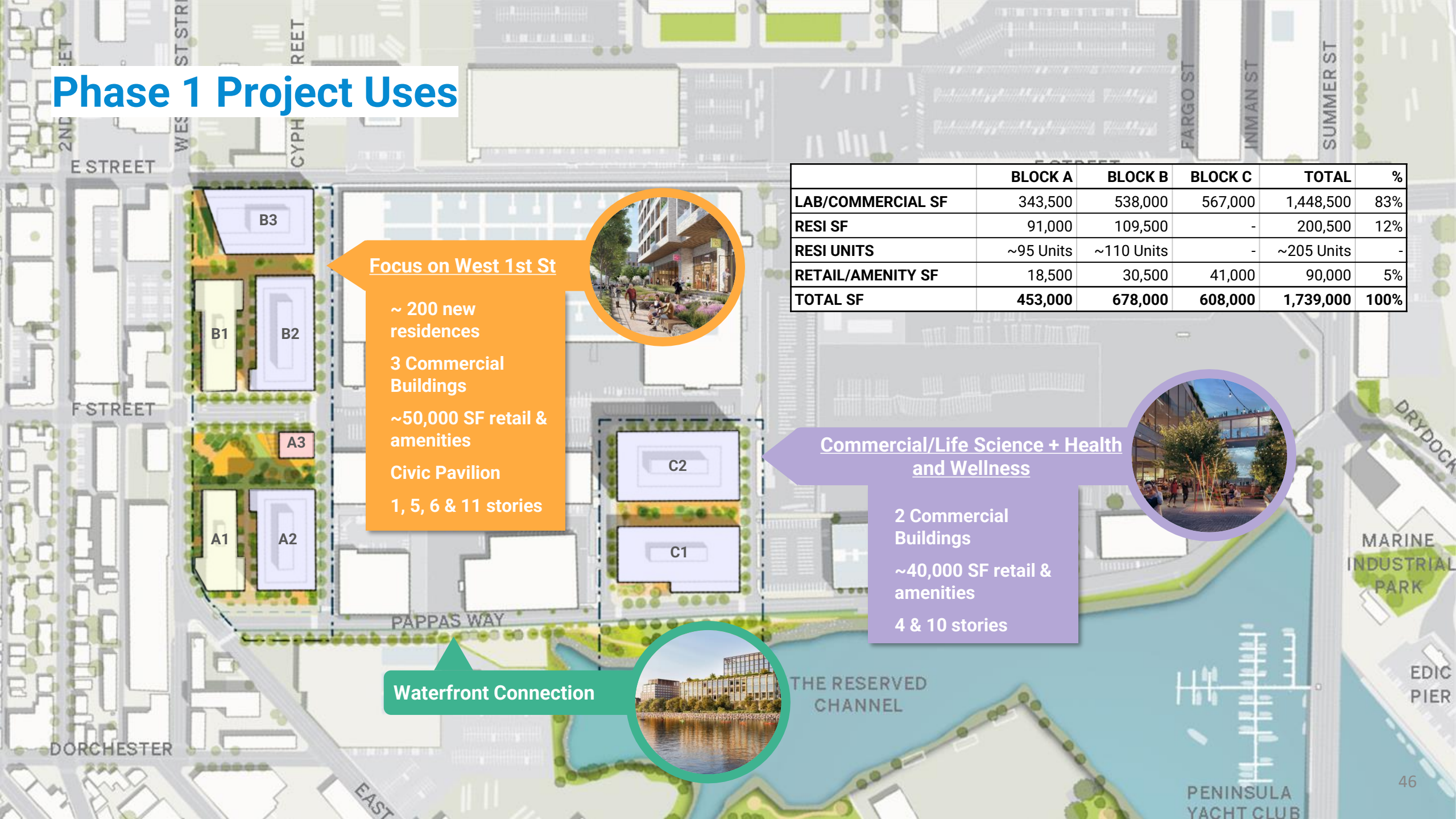


Commercial/Life Science + Health and Wellness

- 2 Commercial Buildings
- ~40,000 SF retail & amenities
- 4 & 10 stories

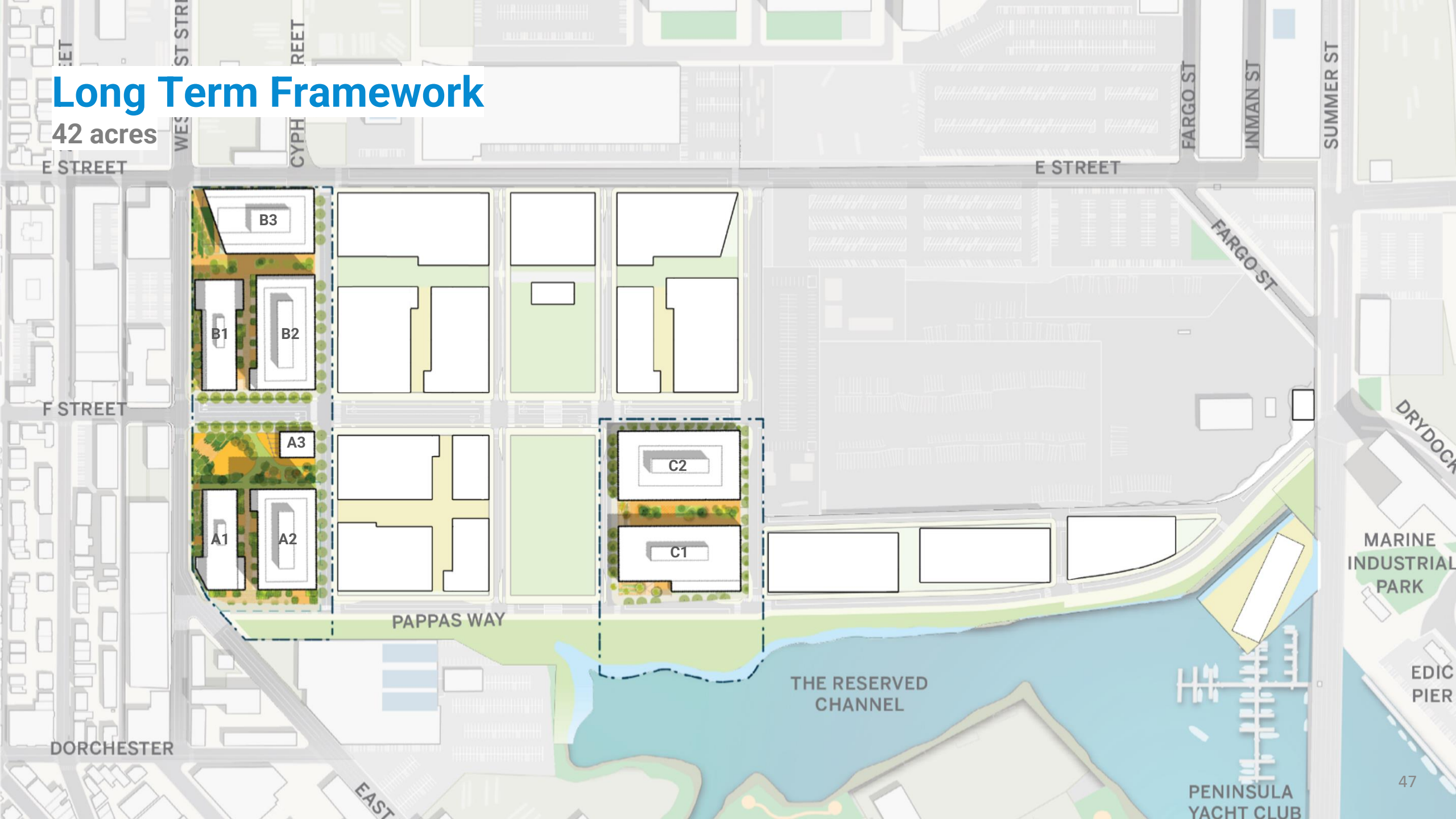


Waterfront Connection



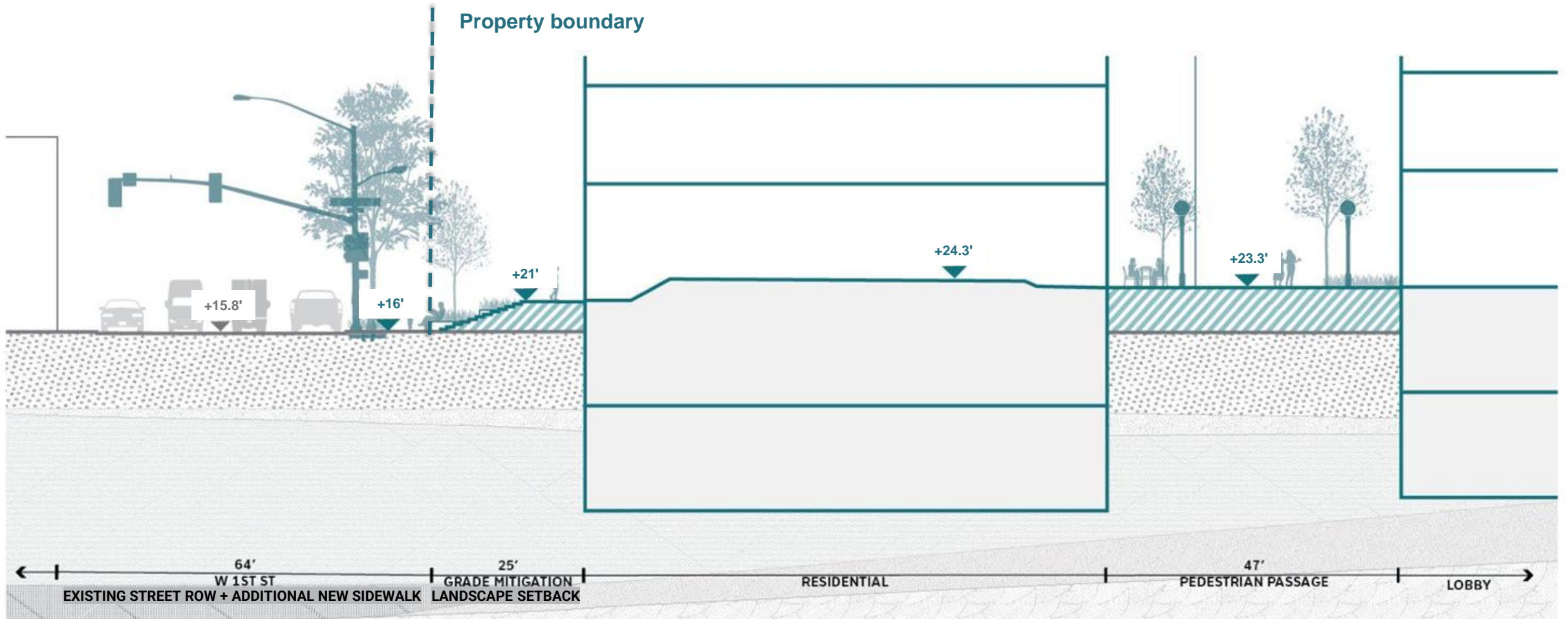
Long Term Framework

42 acres



Resilient Foundation Oriented to Public Benefit

Potential Edge Condition (West First Street) | Split Grade Mitigation



All elevations are in BCB, subtract 6.46' for NAVD88

Benefits Could Be...
An Enhanced
Public Realm



Illustration of West First Street Frontage

**Benefits Could Be...
Playground /
Neighborhood Park**



Illustration of First Street Open Space

Benefits Could Be...
New pedestrian
connections

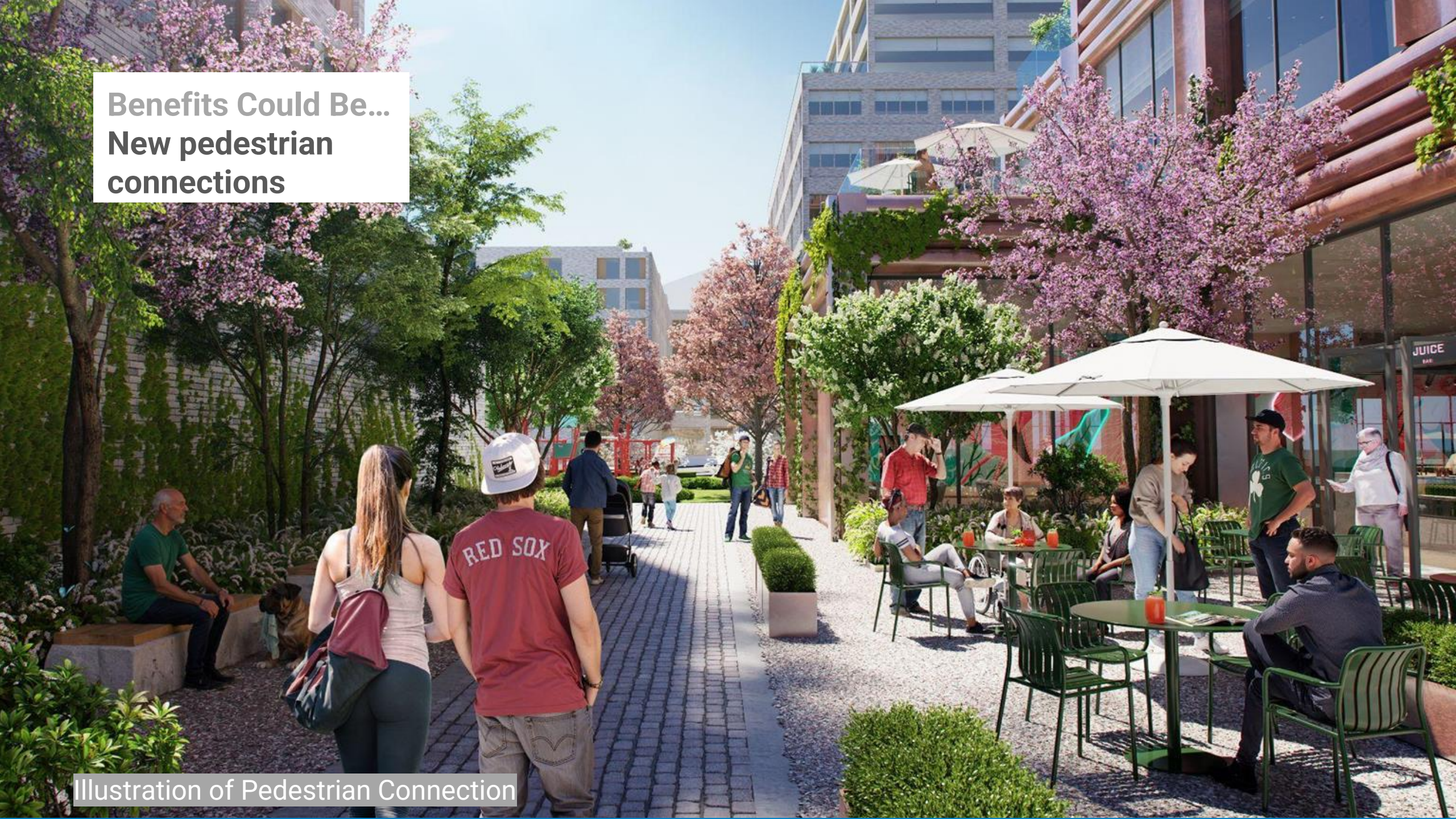


Illustration of Pedestrian Connection

Benefits Could Be...
Local amenities
and retail

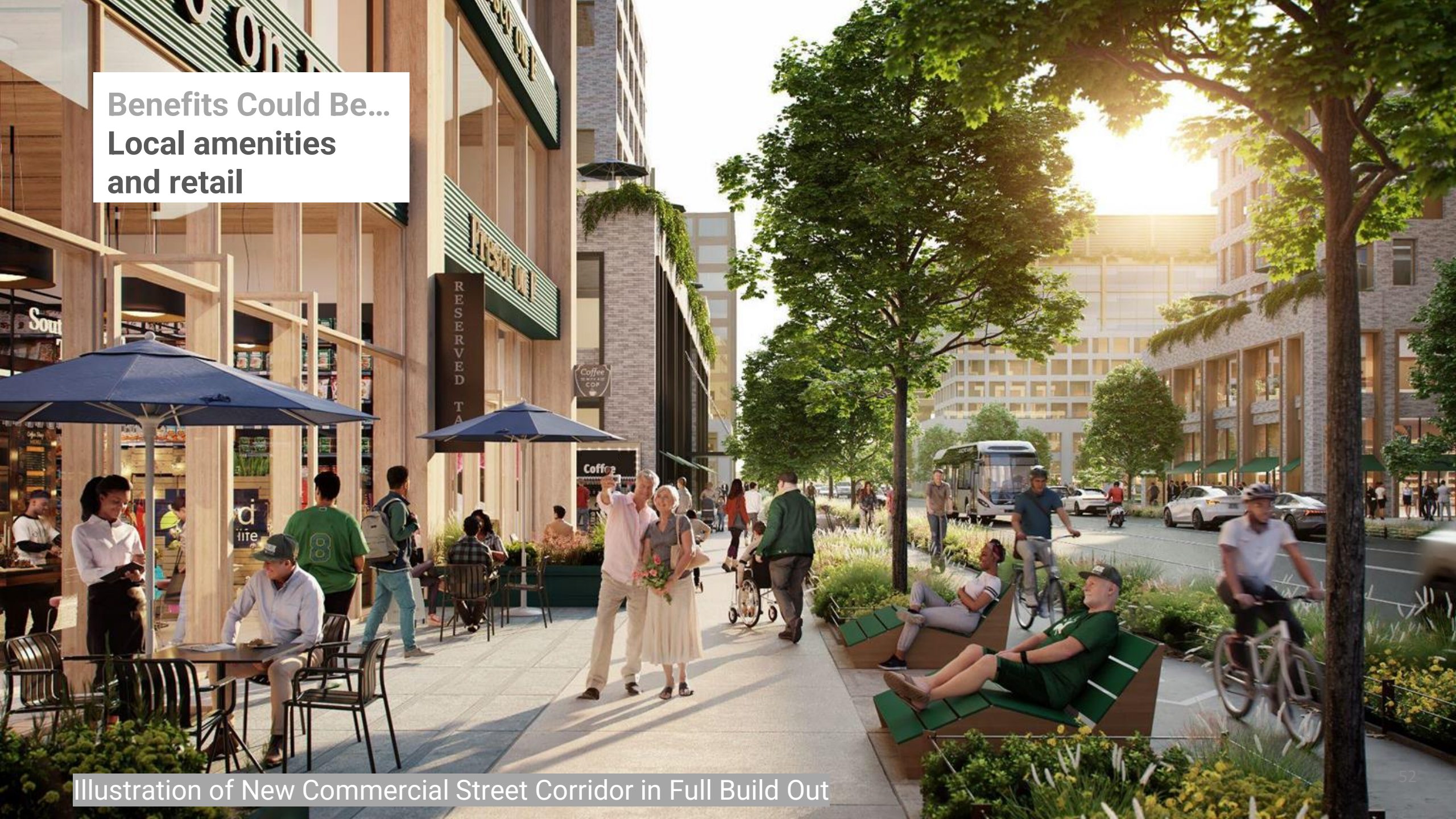


Illustration of New Commercial Street Corridor in Full Build Out

**Benefits Could Be...
Market / Grocer**



Illustration of Landscape Corridor & Potential Grocery Story

Benefits Could Be...
Community center
/ rec center



Reference Photo: Chicago Library – Little Italy Branch

Benefits Could Be...
Senior housing



Illustration of Reserved Channel and Block 'C'

**Benefits Could Be...
Diversity in
architectural language
and design excellence**



Illustration of West First Street and E Street

Benefits Could Be...
**Waterfront
revitalization**



Illustration of Reserved Channel and Block 'C'



Thank you & Q&A



- Sign up at our [Project Website](https://rcdboston.com)
rcdboston.com

