

Brooklyn Bridge Esplanade

Located on the East River between Peck Slip and Catherine Slip in Manhattan

CB 3 Presentation

October 10, 2019

Starr Whitehouse Landscape Architects and Planners

This project is made possible by a grant from the Lower Manhattan Development Corporation, which is funded through Community Development Block Grants from the U.S. Department of Housing and Urban Development.

Andrew M. Cuomo, Governor • Bill de Blasio, Mayor

NYC / EDC



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DESIGN GOALS

- Connect inland to the neighborhoods
- Employ resilient and floodable materials
- Provide a continuous esplanade and bikeway
- Minimize pedestrian and bicycle conflicts
- Utilize the site furnishings palette from adjacent built sections of the esplanade

FUNDING

- \$15M - US Housing and Urban Development Community Development Block Grant (HUD CDBE) administered by LMDC
- \$6M - Office of the Manhattan Borough President, Councilmember Margaret Chin
- Total Budget: \$21M
- Project Size: 1500 LF



ADJACENT PROJECTS IN DESIGN AND CONSTRUCTION

BMCR Project:

- Planned flood protection from the Brooklyn Bridge to Montgomery Slip
- Exact alignment to be determined concurrent with esplanade design

Reconstruction of Peck Slip (by DPR):

- Completion planned in spring 2021

Tin Building Reconstruction:

- Renovated building to open in 2020

New Market Building:

- Demolition in Q2 2019; no current design plans

Interim Flood Protection Project (by NYCEM):

- Installation 2019

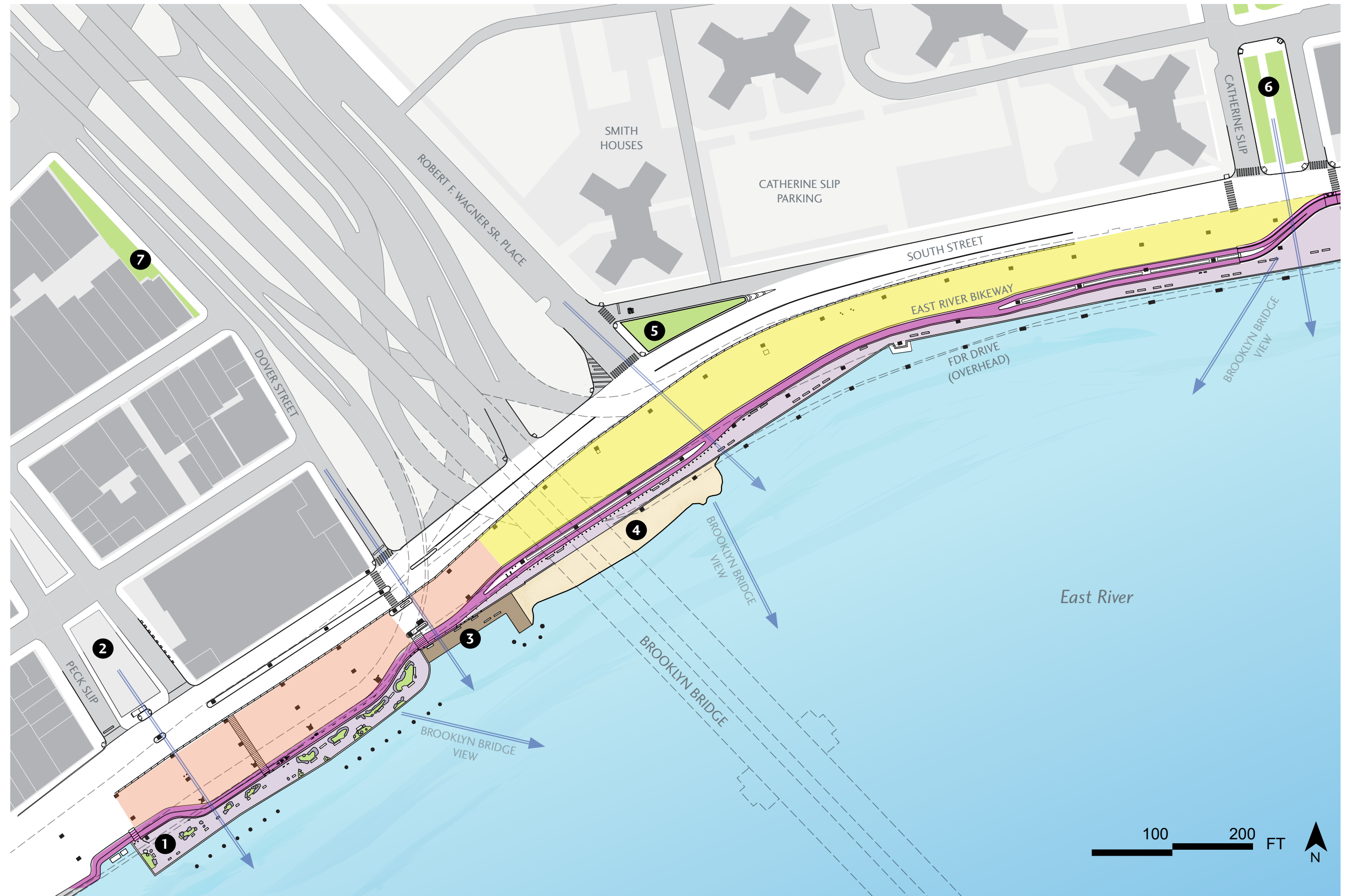


EXISTING CONDITIONS

- 1 JERRY DRISCOLL WALK
- 2 (FUTURE) PECK SLIP PARK
- 3 WOOD DECK WALK
- 4 NATURAL SHORELINE
- 5 ROBERT WAGNER GREENSTREET
- 6 CATHERINE SLIP MALL
- 7 FISHBRIDGE PARK GARDEN & DOG RUN

EXISTING PROGRAMS

- PARKING LOTS
- VEGETATED SPACES
- PASSIVE RECREATION
- BIKE PATH
- NATURAL SHORE
- CONSTRUCTION AREA
- VIEW CORRIDORS



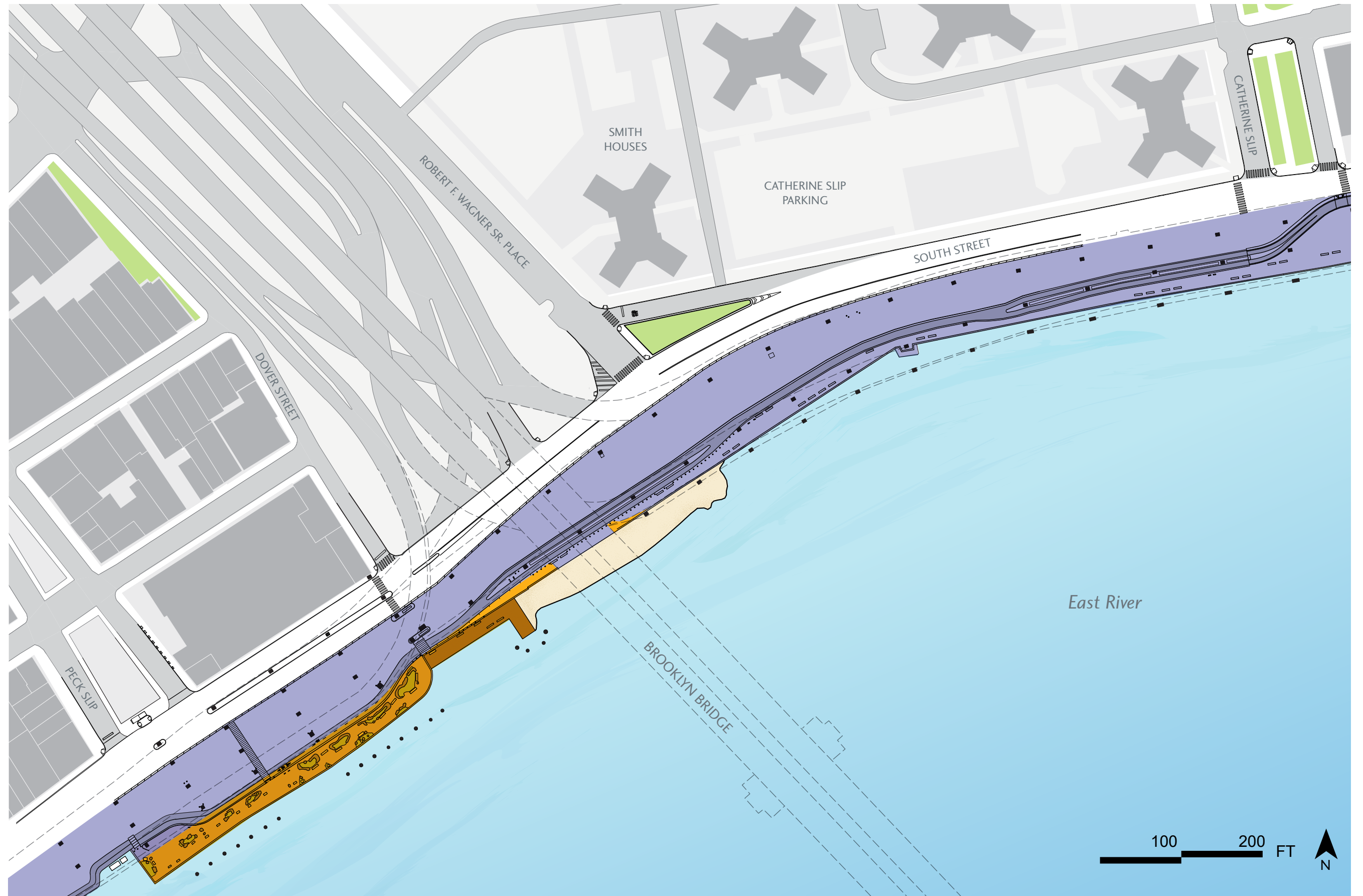
BROOKLYN BRIDGE ESPLANADE - Existing Conditions

October 10, 2019

COVER LEGEND

COVERED BY HIGHWAY STRUCTURE

UNCOVERED



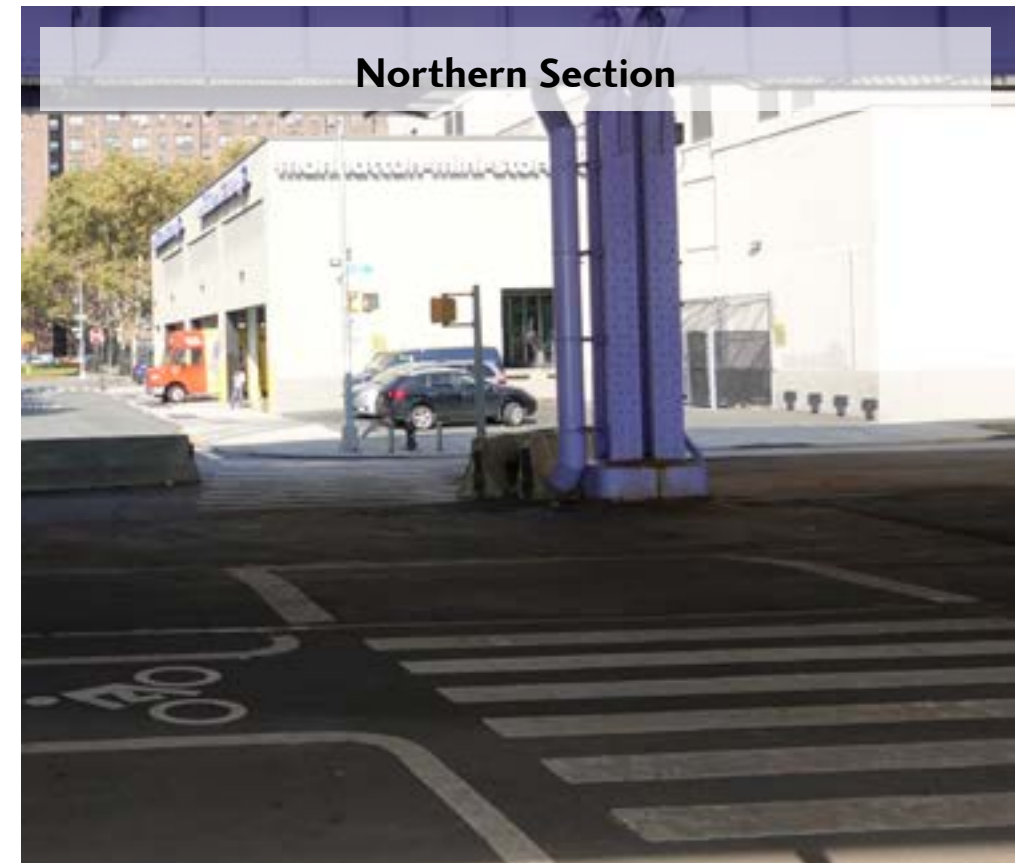
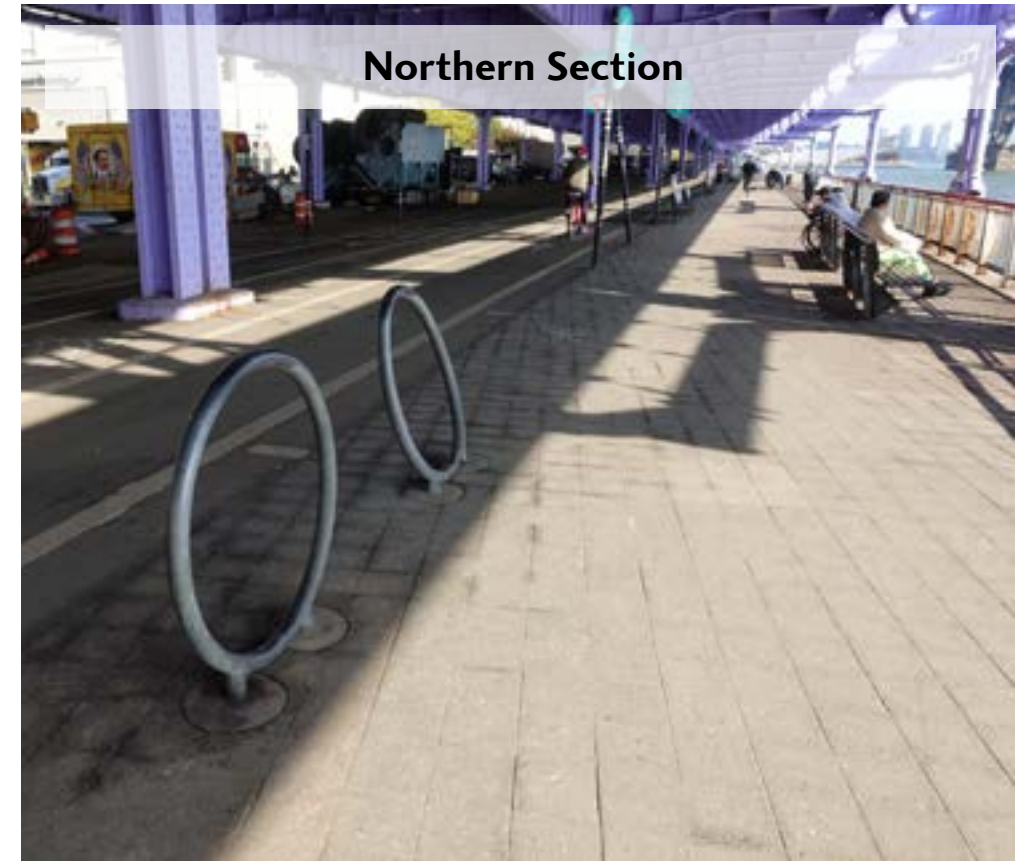
BROOKLYN BRIDGE ESPLANADE - Covered Vs. Uncovered Space

October 10, 2019



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LEGEND


 PROJECT LIMIT


UTILITIES (APPROX.)


 WATER MAIN

 SEWER MAIN

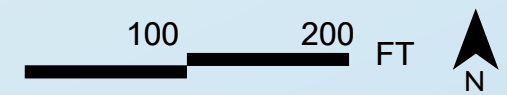
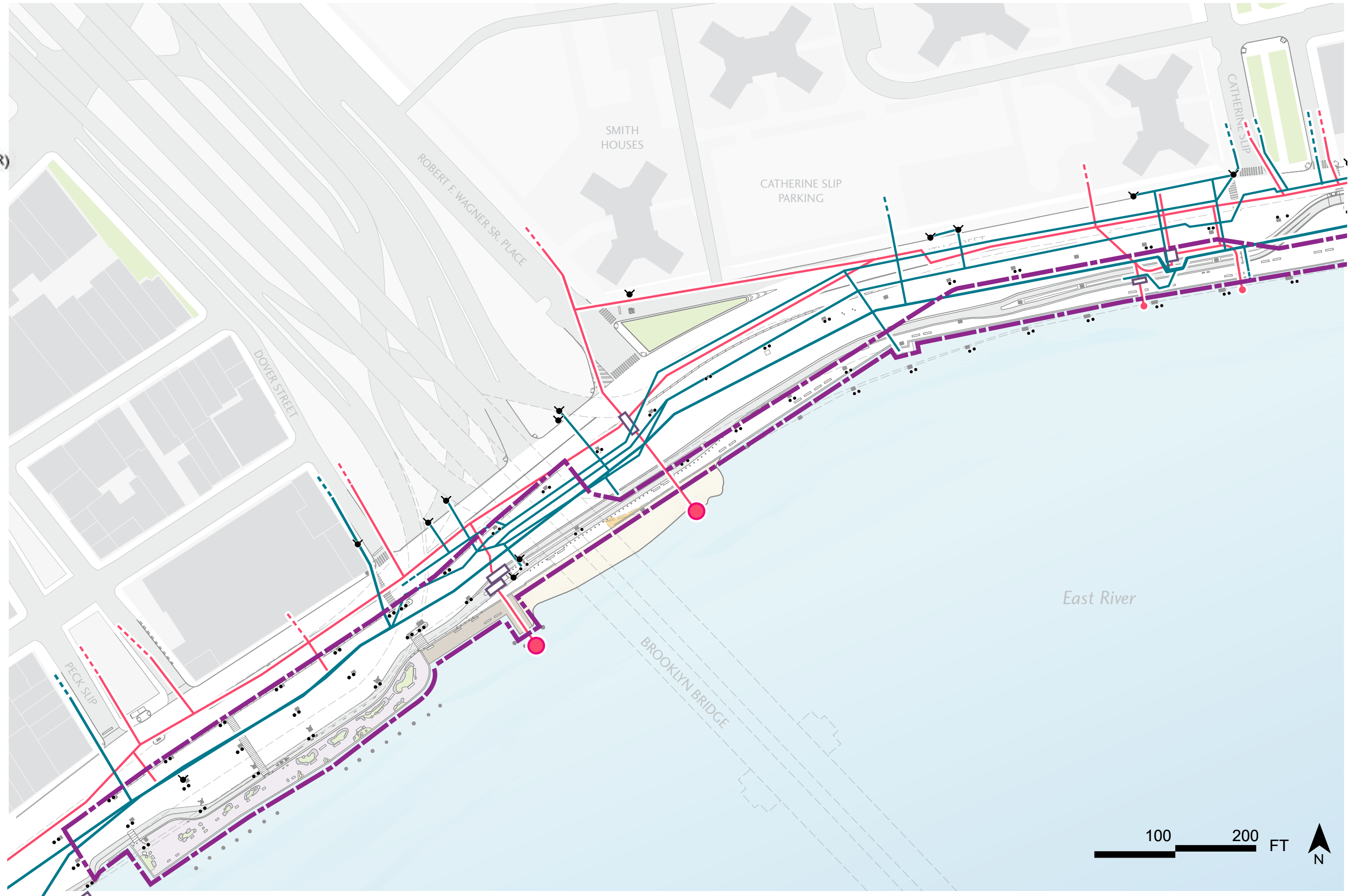
 OUTFALL (MINOR)

 CSO OUTFALL

 DEP VAULT

 DOWNSPOUT

 HYDRANT



COVER LEGEND

- UTILITIES OFFSET
- BMCR
- MAINTENANCE PATH (12' TYP)
- PROPOSED BIKE LANE





Planter / Bench Seating



Planter / Bench Seating



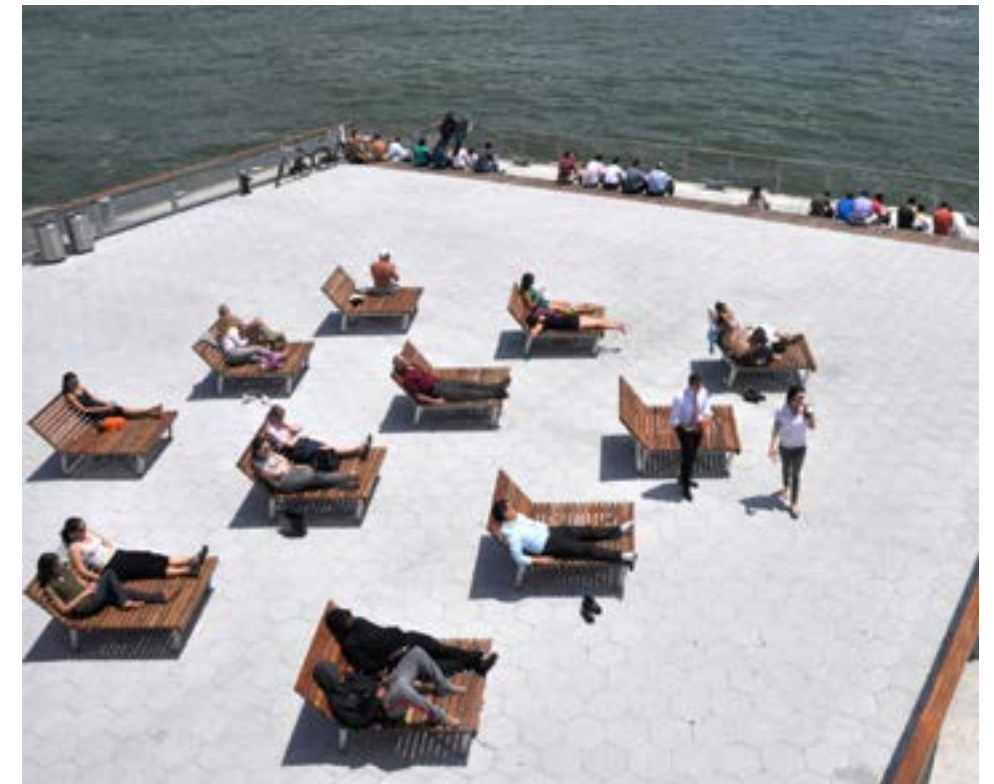
Stepped Seating



Picnic Tables and Seating




Picnic Tables and Seating

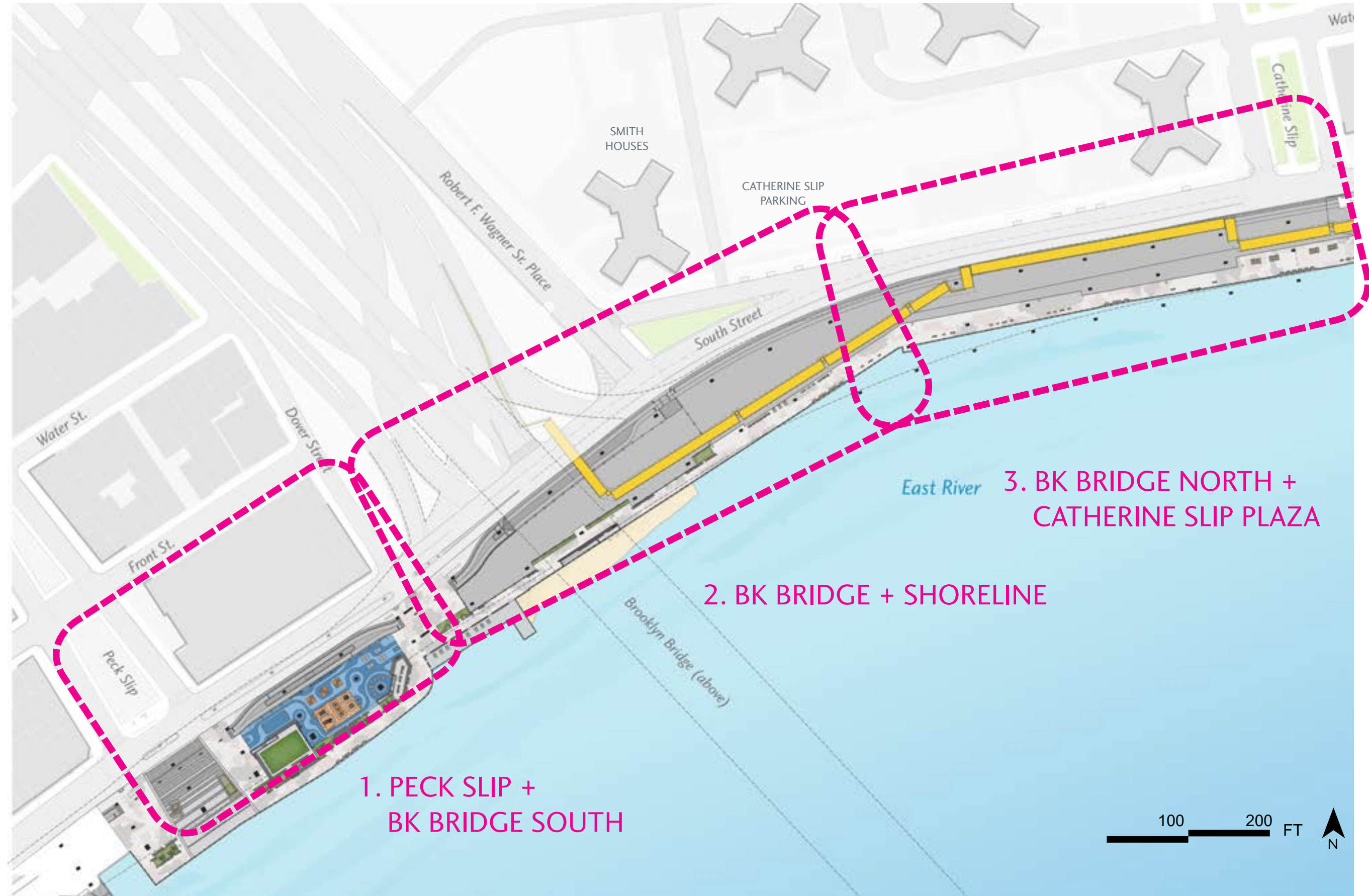


Chaise Lounges

LEGEND

 ENLARGED PLAN AREA

 BMCR



BROOKLYN BRIDGE ESPLANADE - Final Site Design

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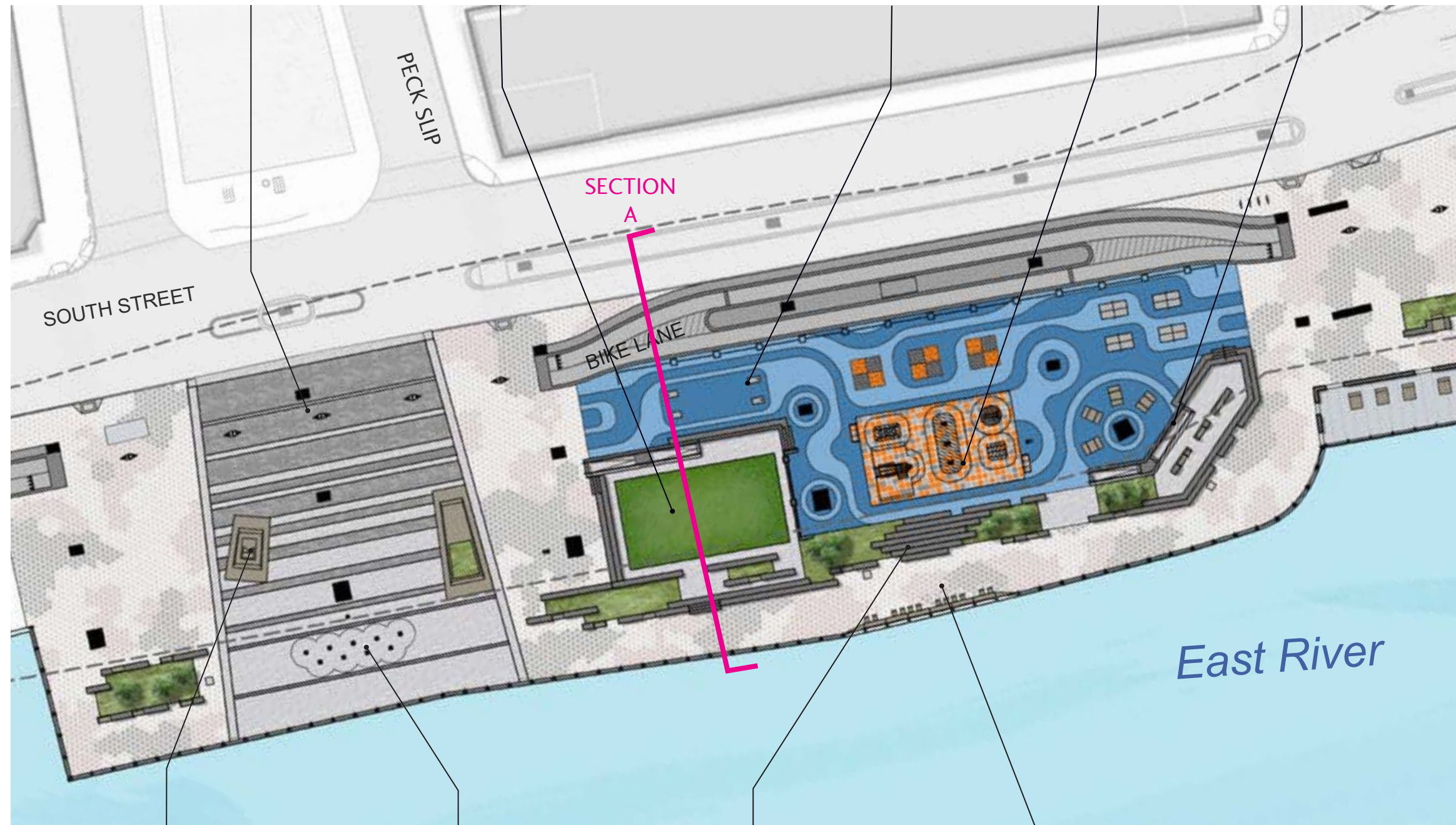
DOT BIKE PAVERS

ARTIFICIAL TURF
PLAY AREA

PAINTED ASPHALT
GAME AREA

ADULT FITNESS
EQUIPMENT

VIEWING DECK
WITH ADA ACCESS
RAMP

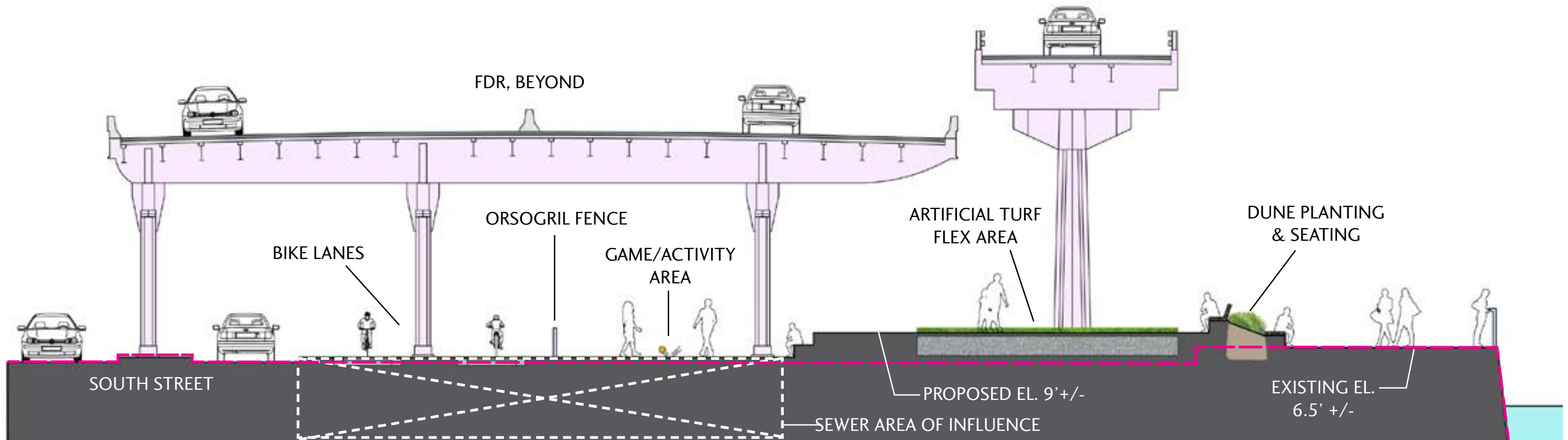


SEATING
PLATFORMS

SPRAY SHOWER

DOUBLE SIDED
BLEACHER
SEATING

ADA ACCESSIBLE
BAR SEATING



SECTION A

PLAZA WITH BIKE RACKS

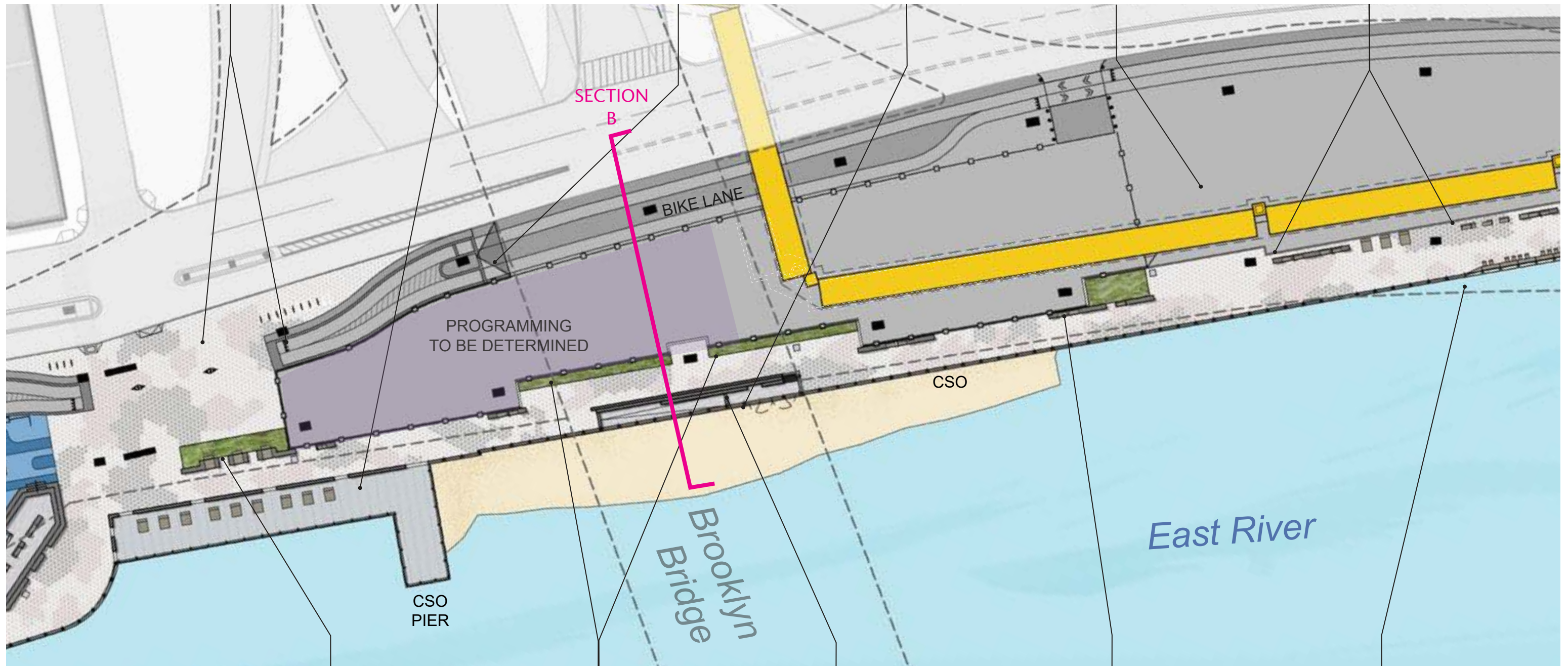
STEEL GRATE OBSERVATION DECK WITH CHAISE LOUNGES

AT-GRADE BIKE LANE NORTH OF BROOKLYN BRIDGE

GET-DOWN AND GATE

TO BE PROGRAMMED AS PART OF BMCR

SEATING MODULES WITH CHAISE LOUNGES



CHAISE AND BENCH SEATING WITH PLANTING MODULE

"GREEN SCREENS" WITH PLANTED VINES

GET-DOWN WITH ADA RAMP

BENCH SEATING WITH PLANTING MODULE

ADA ACCESSIBLE BAR SEATING

 BMCR Alignment

BROOKLYN BRIDGE ESPLANADE - BK Bridge + Shoreline

October 10, 2019

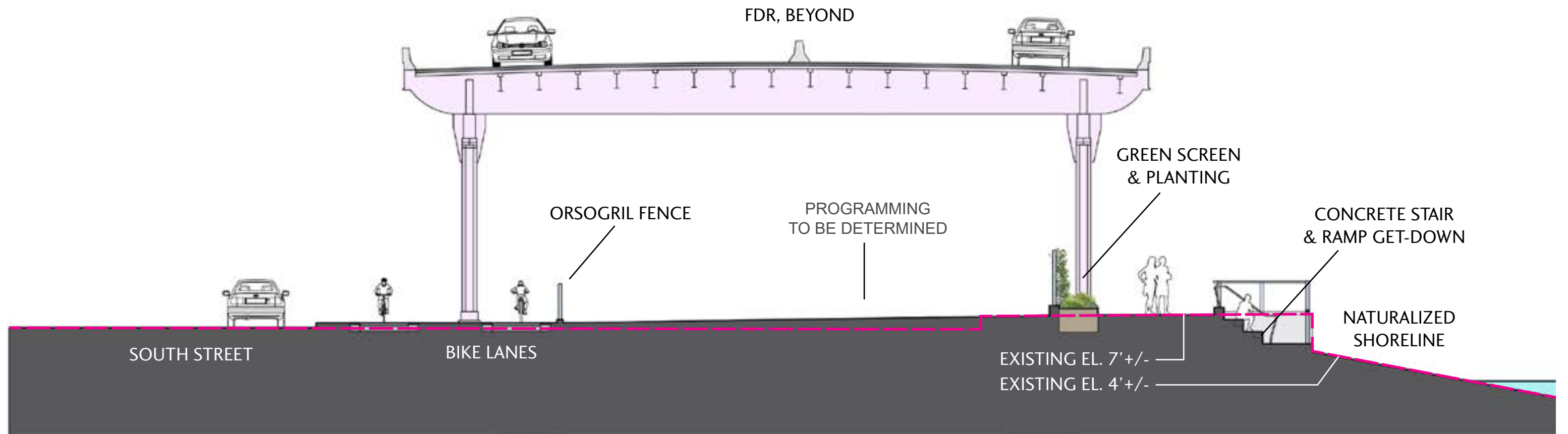


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BROOKLYN BRIDGE ESPLANADE - Get-Down at Brooklyn Bridge
October 10, 2019



SECTION B

BMCR CONSTRUCTION
AND OPERATIONAL
BUFFER AREA*

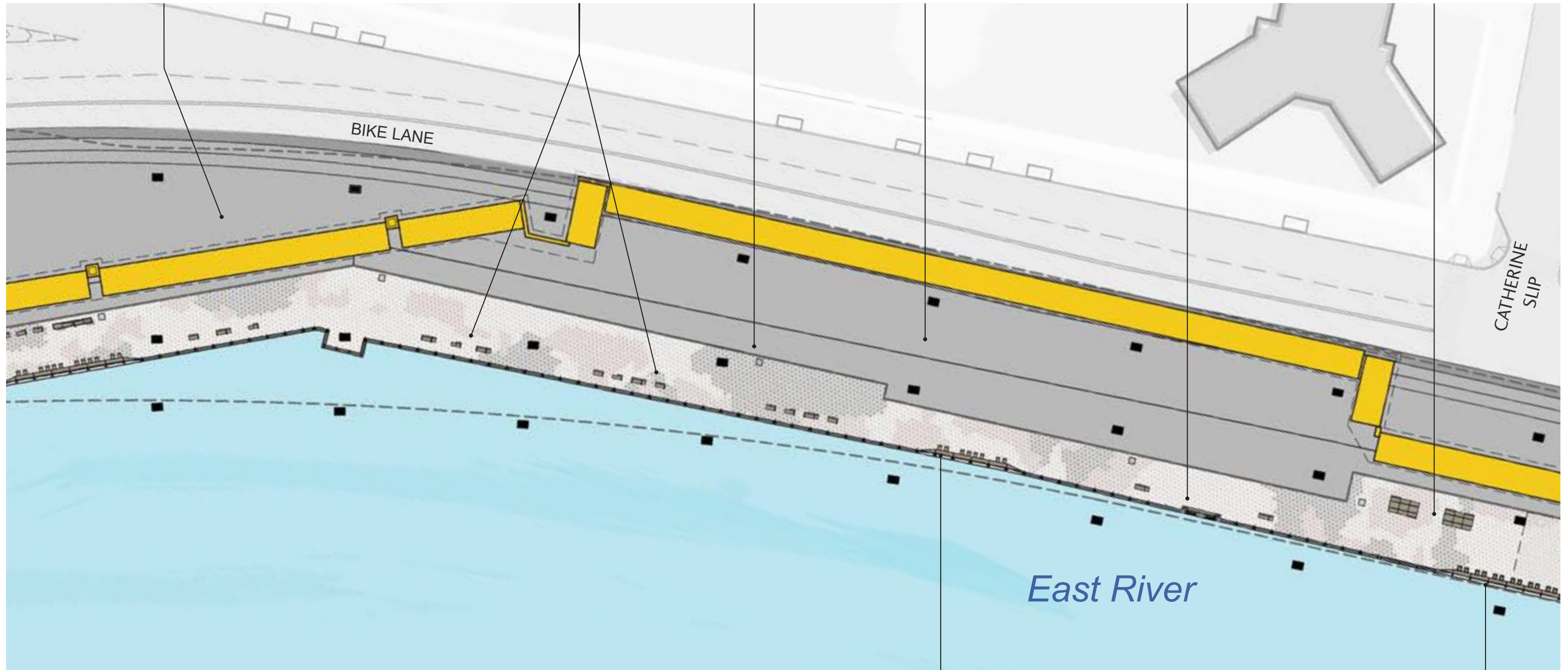
FREE STANDING
BENCHES

INTERIM GRADED
CURB

BMCR CONSTRUCTION
AND OPERATIONAL
BUFFER AREA*

FISH CLEANING STATION
INTEGRATED WITH RAIL;
ADA RAIL PROVIDED

PICNIC TABLE AREA



* Future programming will be provided through the BMCR contract in this area, and will be coordinated with Community Board 3, city agencies, and state agencies in future design phases

ADA ACCESSIBLE
BAR SEATING

BAR SEATING

 BMCR Alignment

BROOKLYN BRIDGE ESPLANADE - BK Bridge North

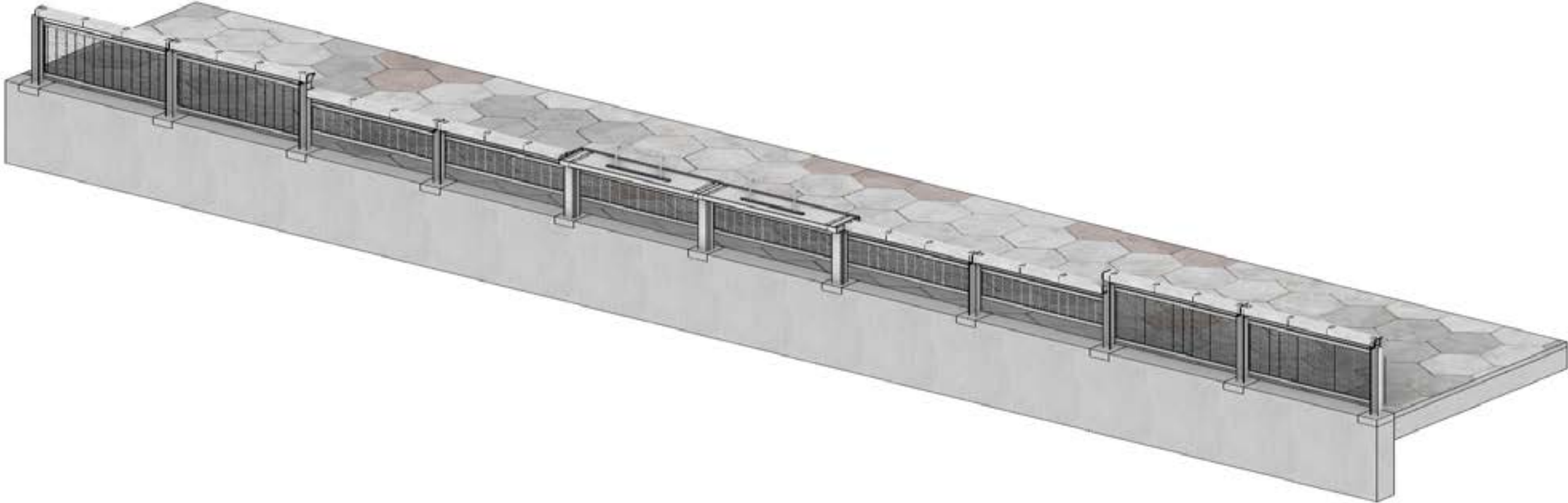
October 10, 2019



ADA Fish Cleaning Station



Fish-Out Location

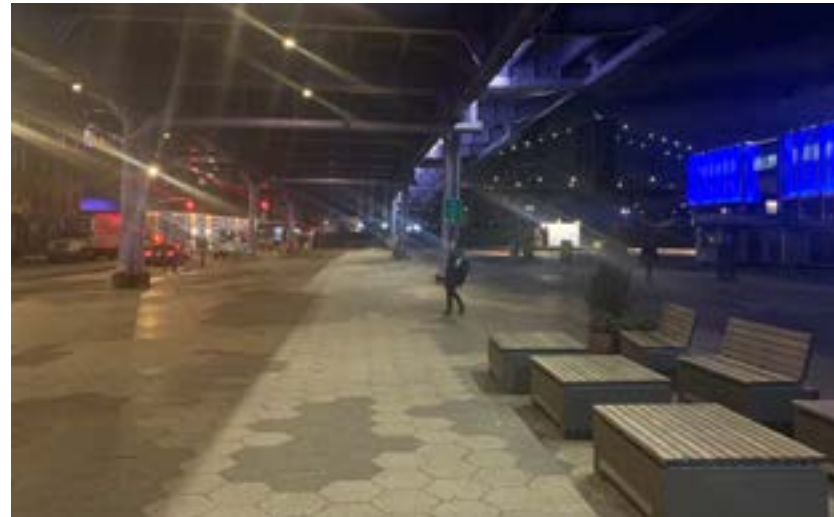




BROOKLYN BRIDGE ESPLANADE - Catherine Slip Plaza
October 10, 2019

LIGHTING DESIGN

- FDR structure-mounted downlights (used in previous ERE sections)
- Wallwashing light fixtures on FDR structure fascia (used in previous ERE sections)
- City-approved and maintained luminaires on columns of NYCDOT-owned ramp



Downlighting



FDR Fascia Lighting



Column Lighting



Column Lighting



Sports Lighting

VINES



Lonicera sempervirens



Aristolochiaceae macrophylla



Campsis radicans

GRASSES



Deschampsia cespitosa



Panicum virgatum



Carex flacca

PERENNIALS



Hypericum perforatum



Green Screen Planting Areas



Green Screen Planting Character

SHRUBS



Hamamelis virginiana



Ilex glabra



Cornus sericea

GRASSES



Deschampsia cespitosa



Carex amphibola



Carex flacca

PERENNIALS



Heuchera spp.



Geranium maculatum

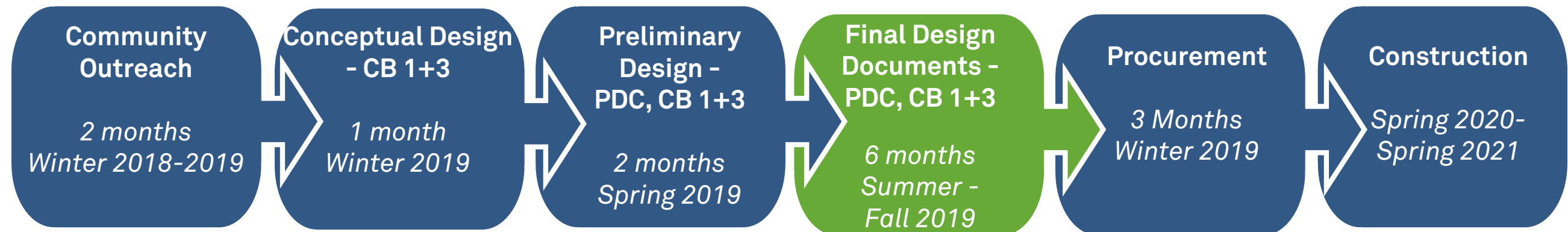


Cove Planting Areas

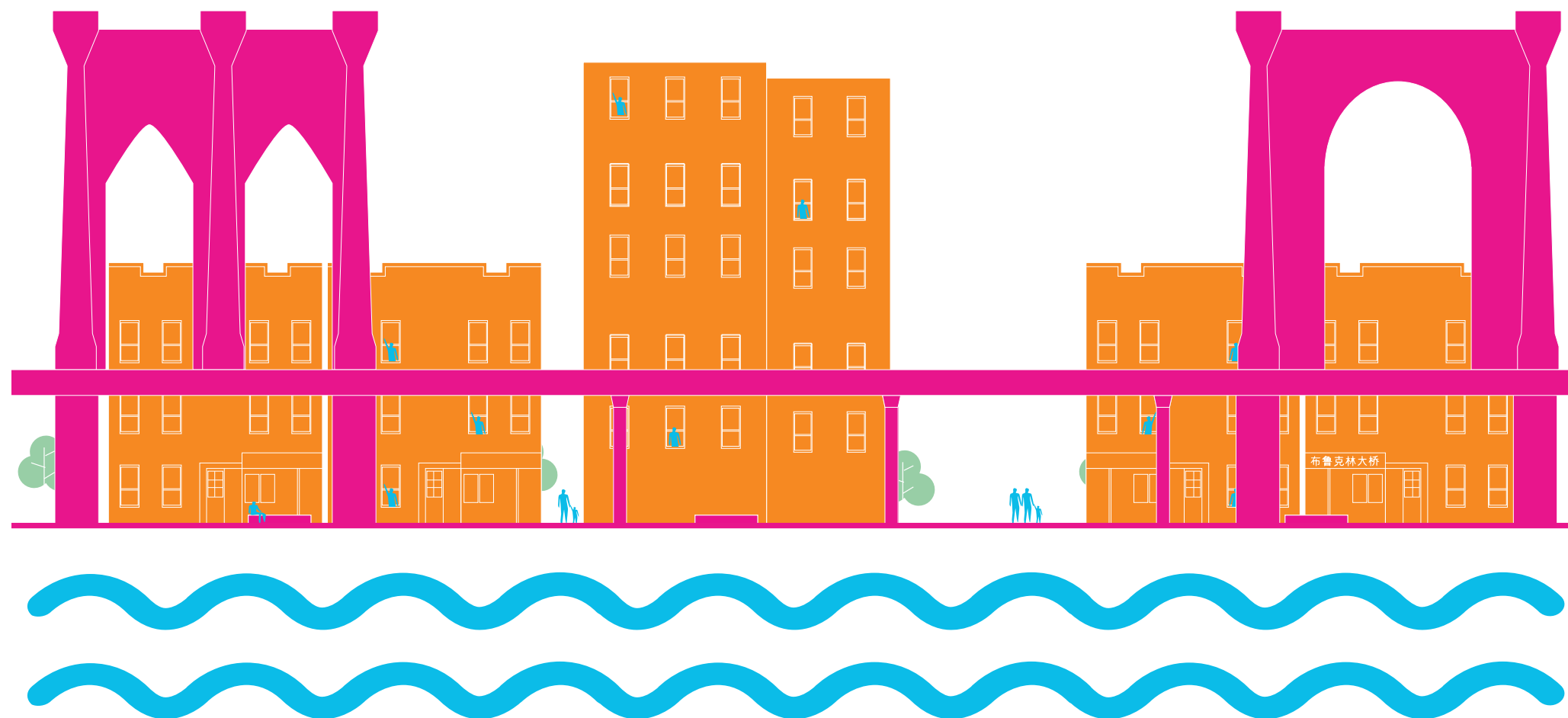


Cove Planting Character

PROJECT TIMELINE

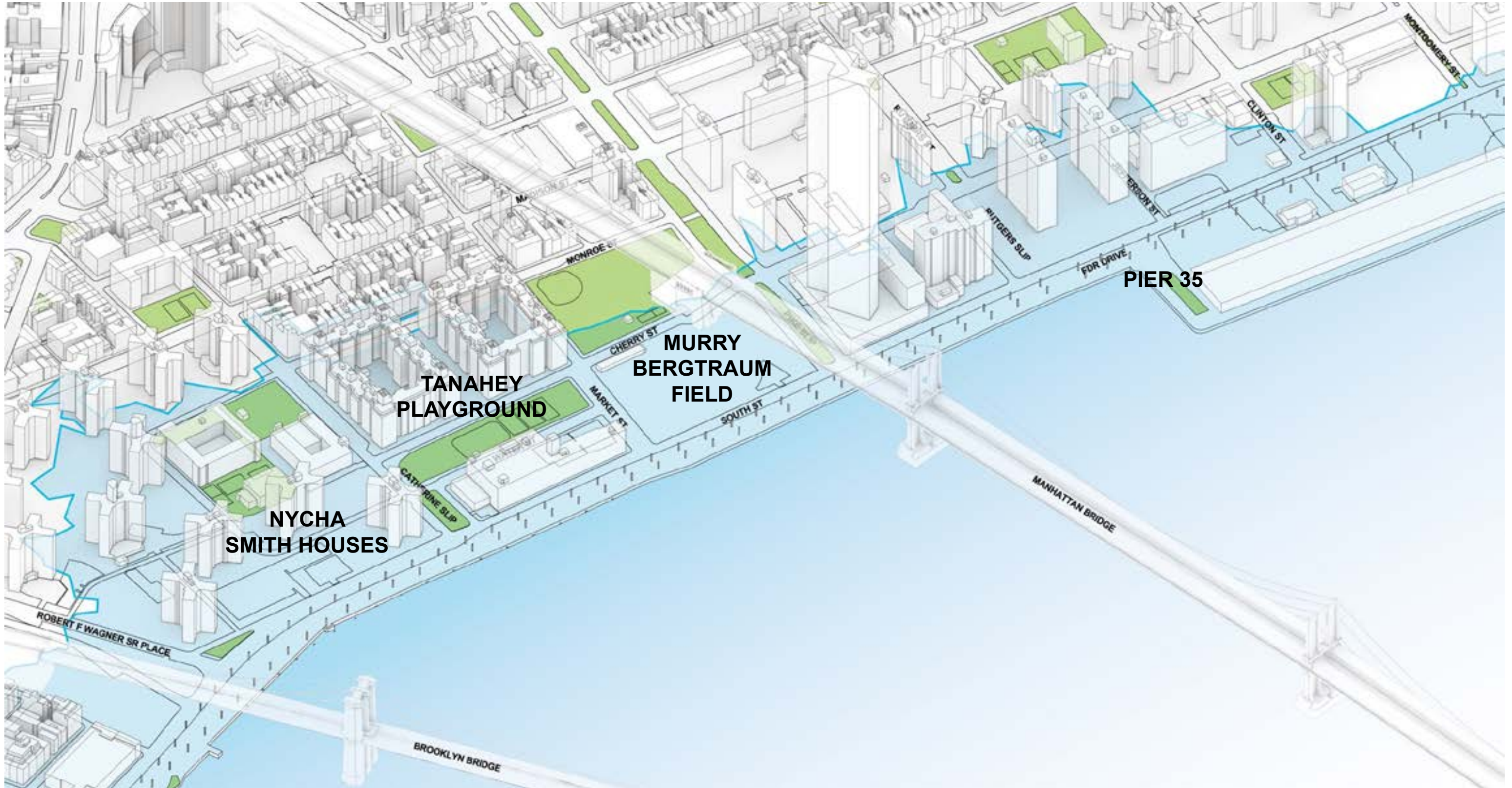


- Design to be completed by late fall 2019
- Construction to be completed by spring 2021, deadline to maintain federal funding

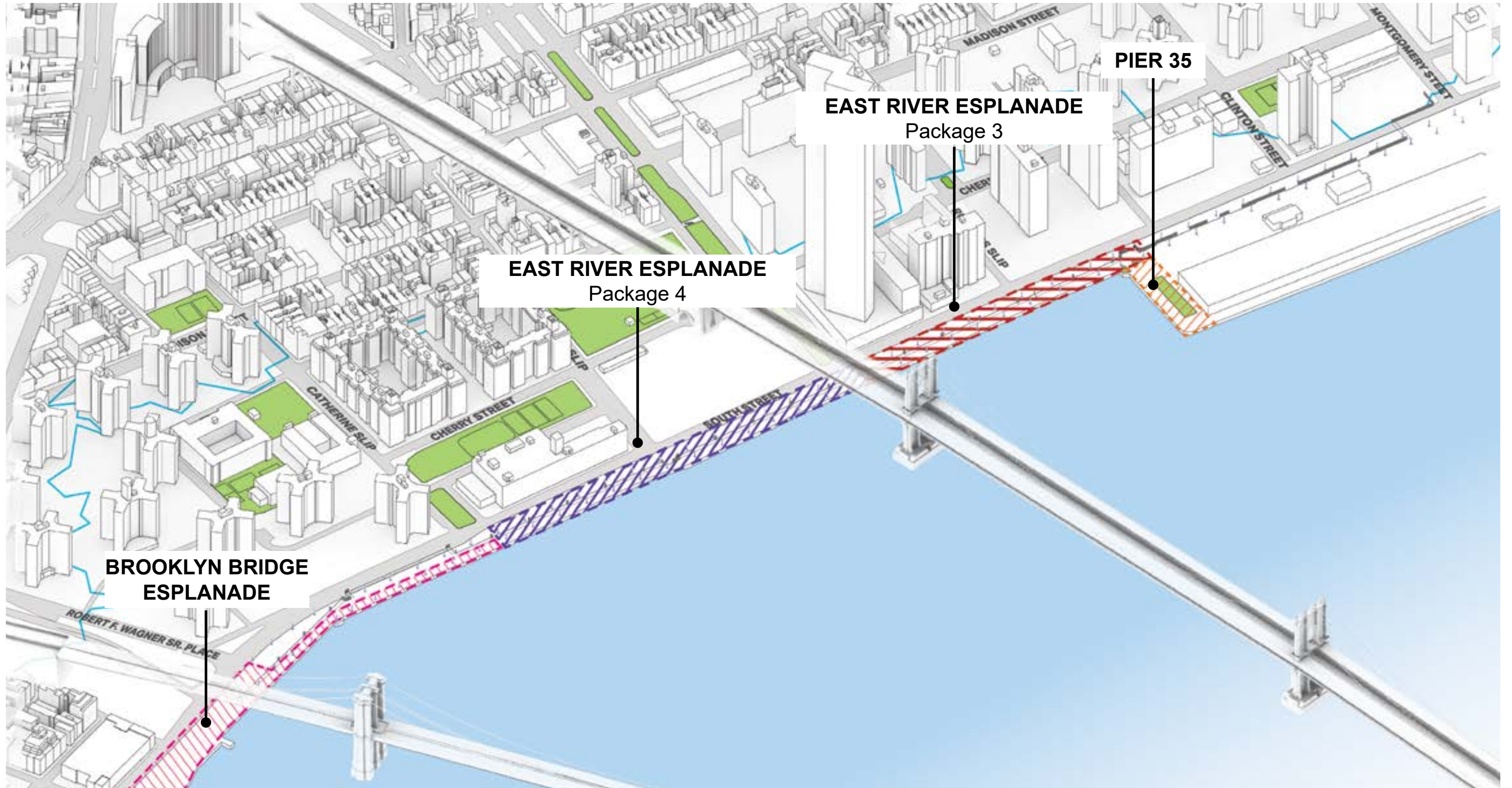


BK Bridge - Montgomery Coastal Resilience

Two Bridges Neighborhood - 2050s 100-Year Floodplain



Project Coordination



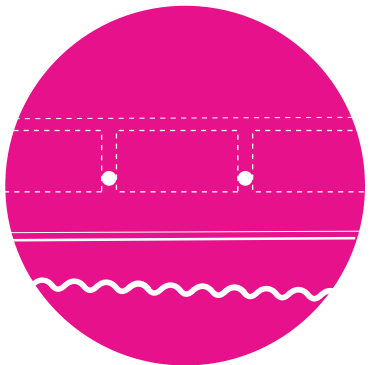
BMCR Flood Protection Design



Resilience Infrastructure



Raised Platform (Sea Level Rise)

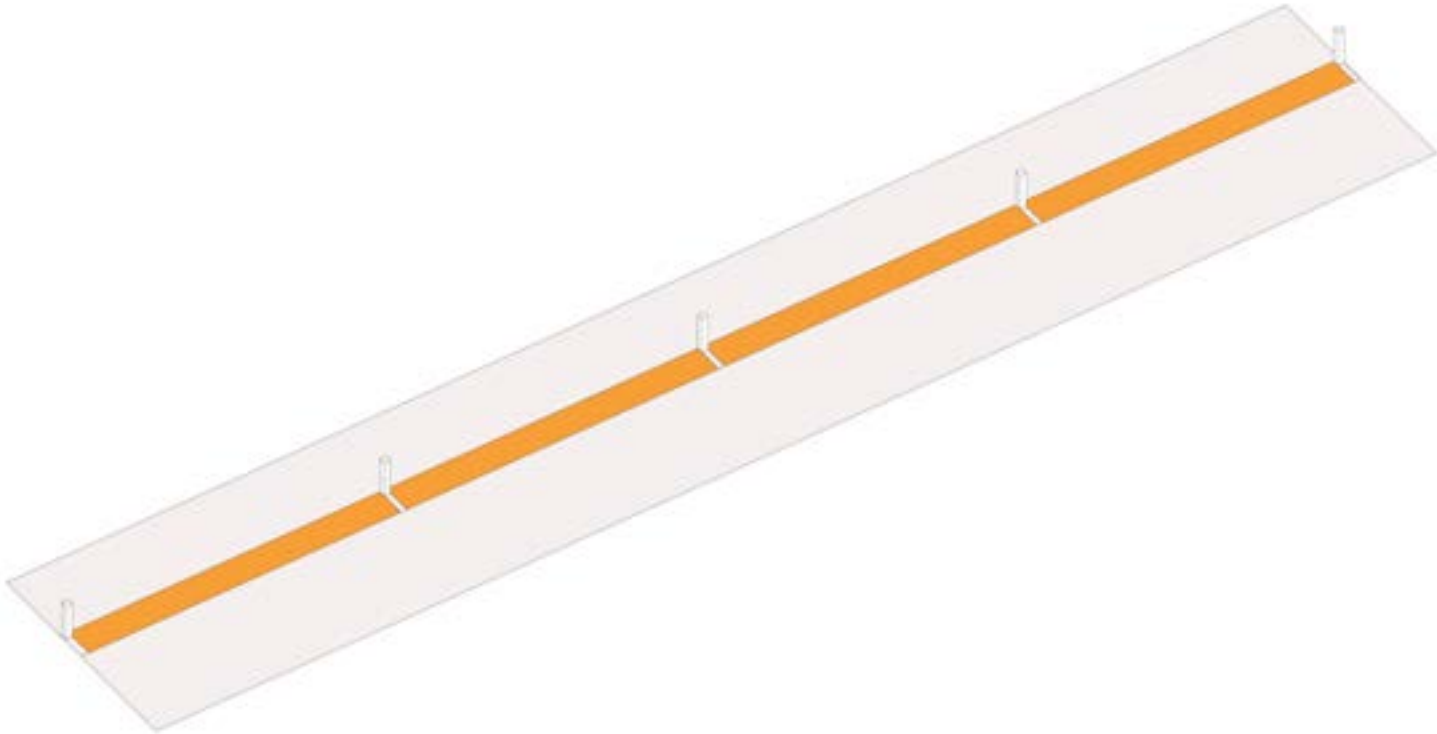


Alignment - Location of Infrastructure

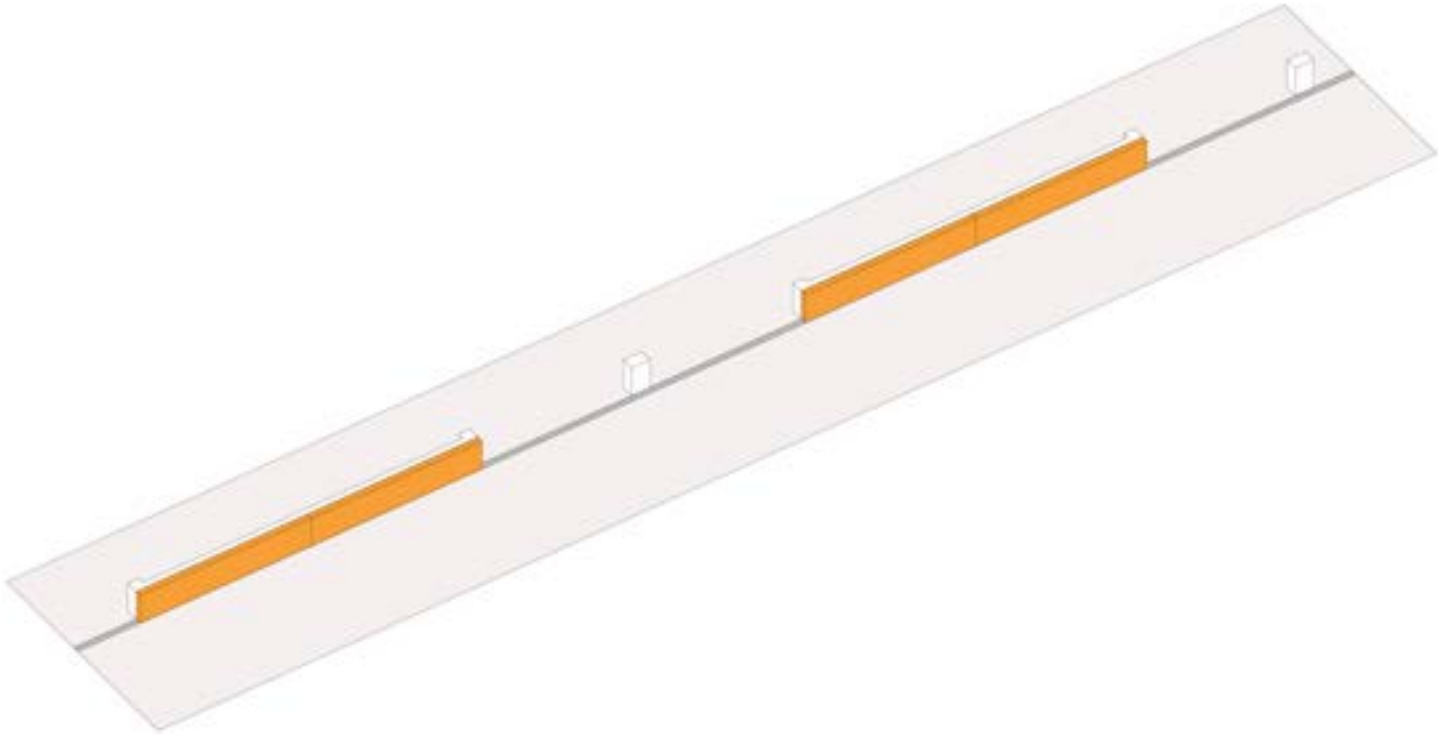
Infrastructure Toolkit

To preserve views and access along the waterfront, the project will utilize an infrastructure toolkit that combines fixed structures with deployable flood gates.

Flip Up Barrier: Sunny Day



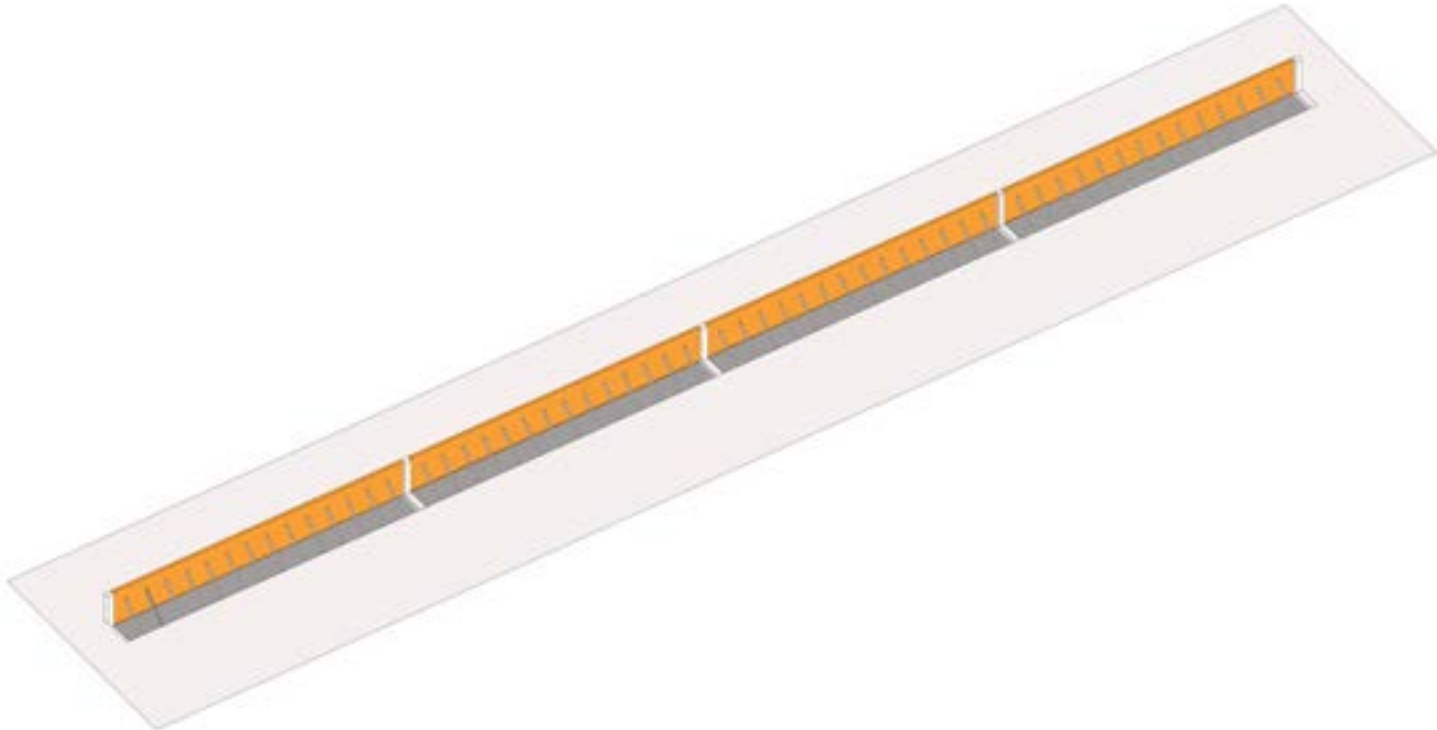
Roller Gates & Fixed Structures: Sunny Day



Infrastructure Toolkit

To preserve views and access along the waterfront, the project will utilize an infrastructure toolkit that combines fixed structures with deployable flood gates.

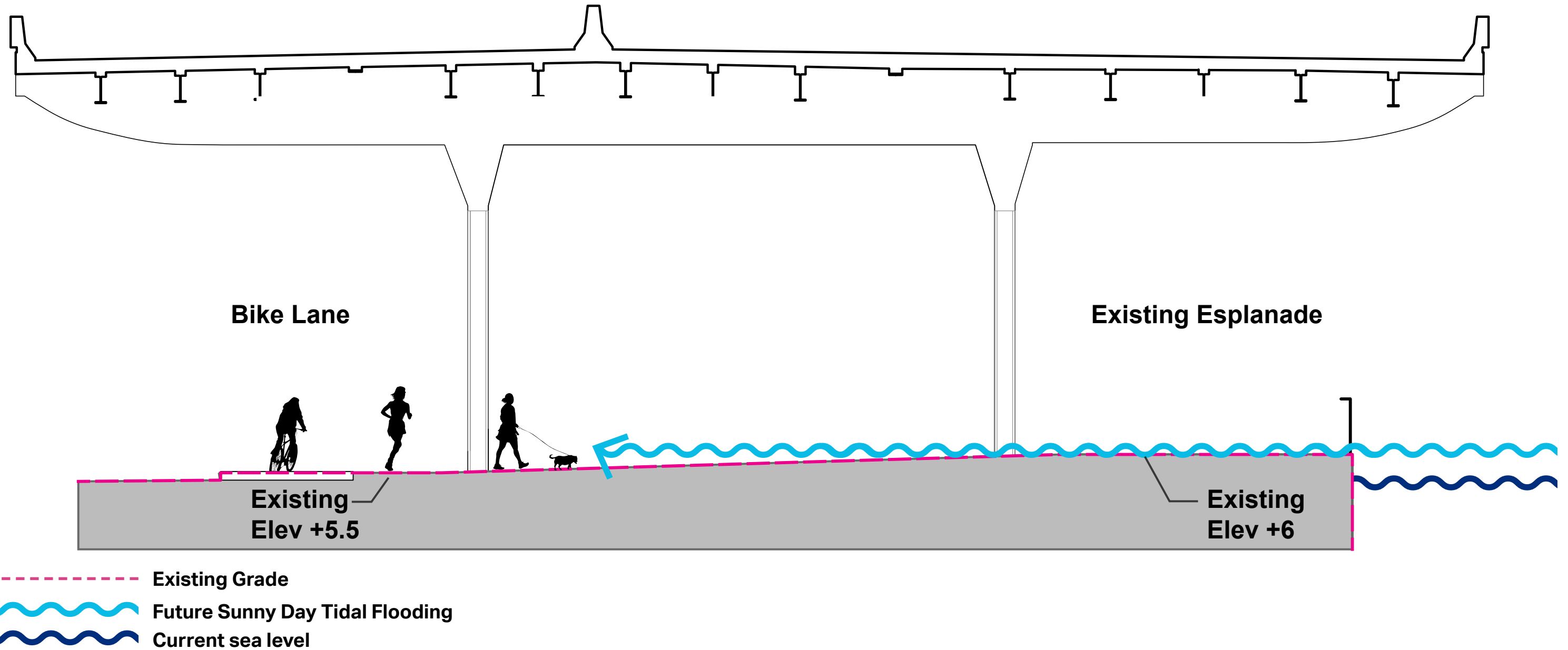
Flip Up Barrier: Deployed



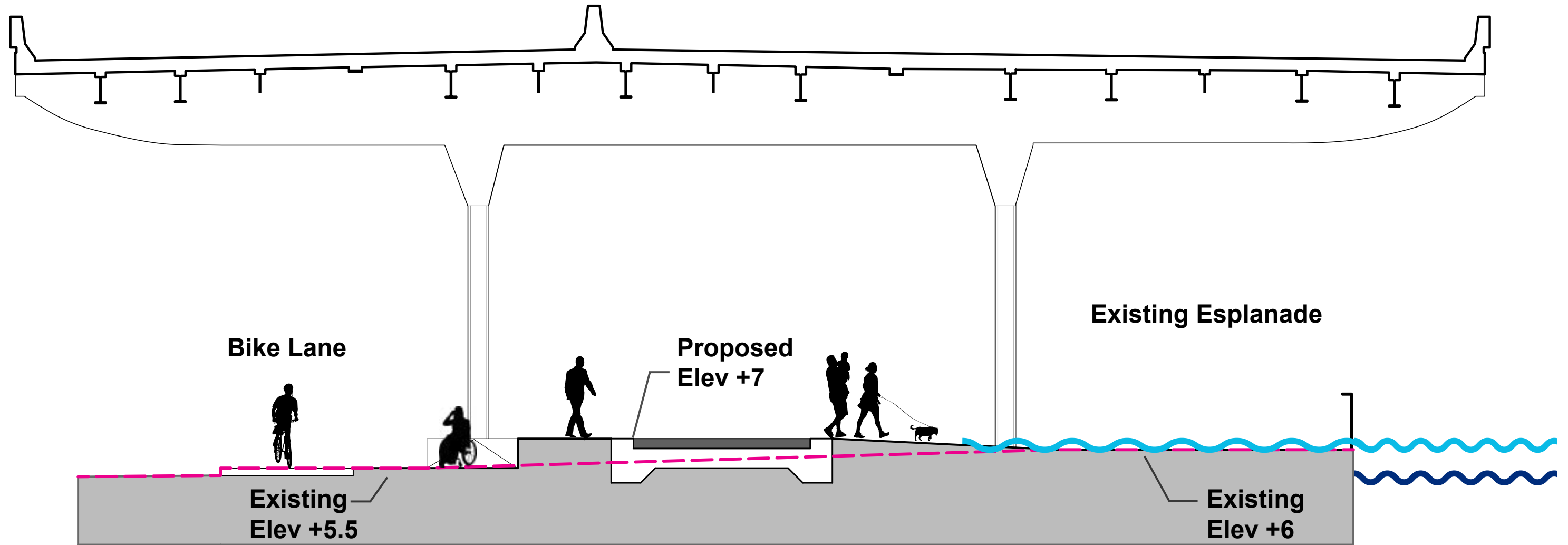
Roller Gates & Fixed Structures: Deployed



Raised Platform to Address Sunny Day Tidal Flooding from SLR

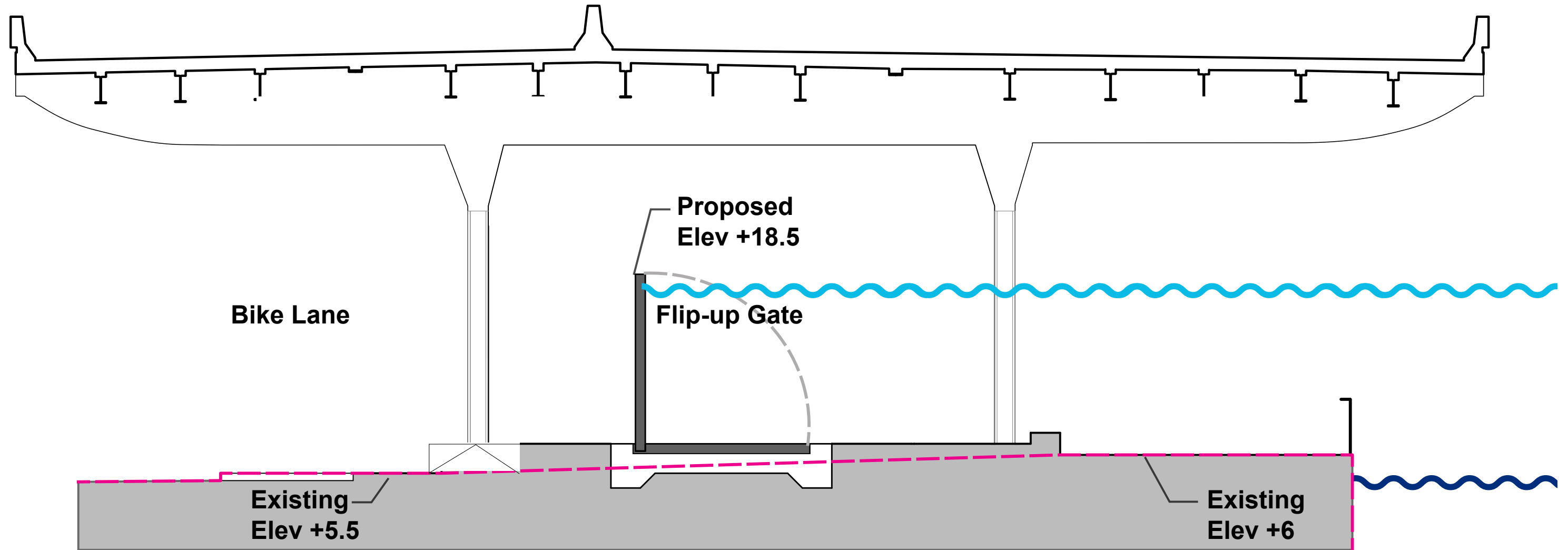


Raised Platform to Address Sunny Day Tidal Flooding from SLR



- Existing Grade
- Future Sunny Day Tidal Flooding
- Current sea level

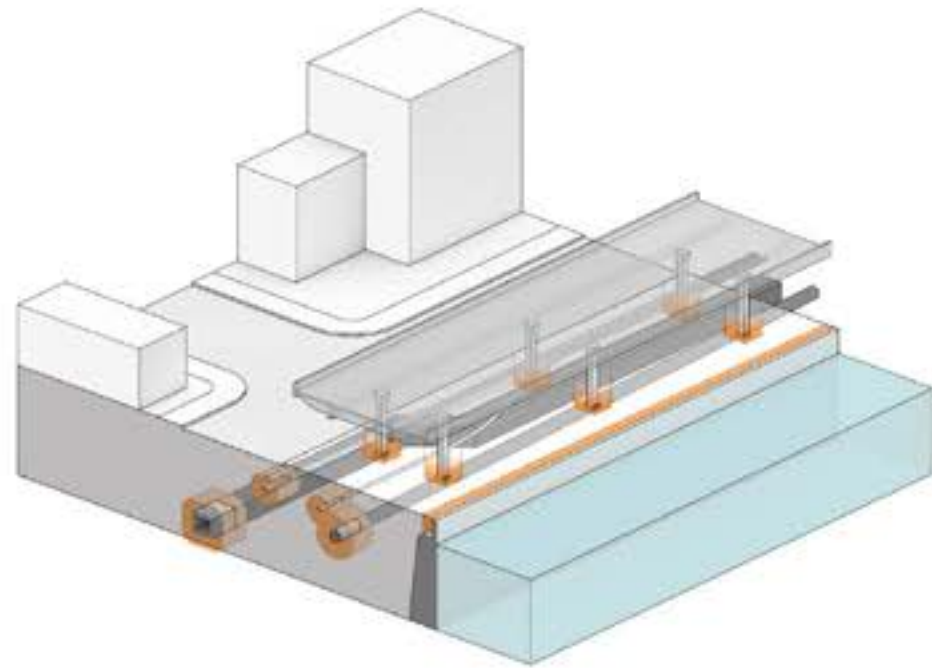
Deployed Flood Infrastructure



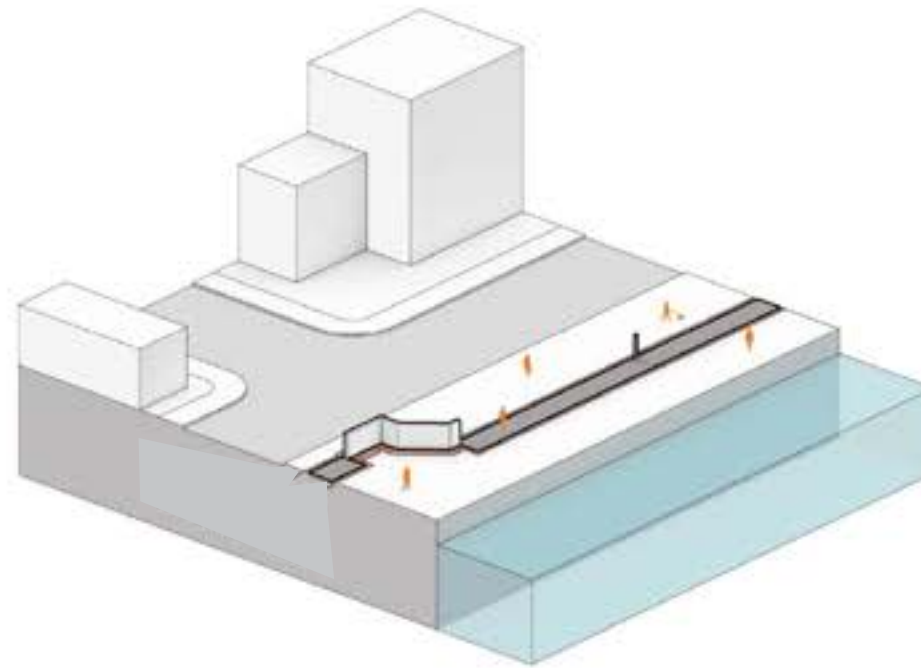
- Existing Grade
- ~~~~~ 2050s 100-Year Storm Surge
- ~~~~~ Current sea level

Flood Protection Alignment - Location of Infrastructure

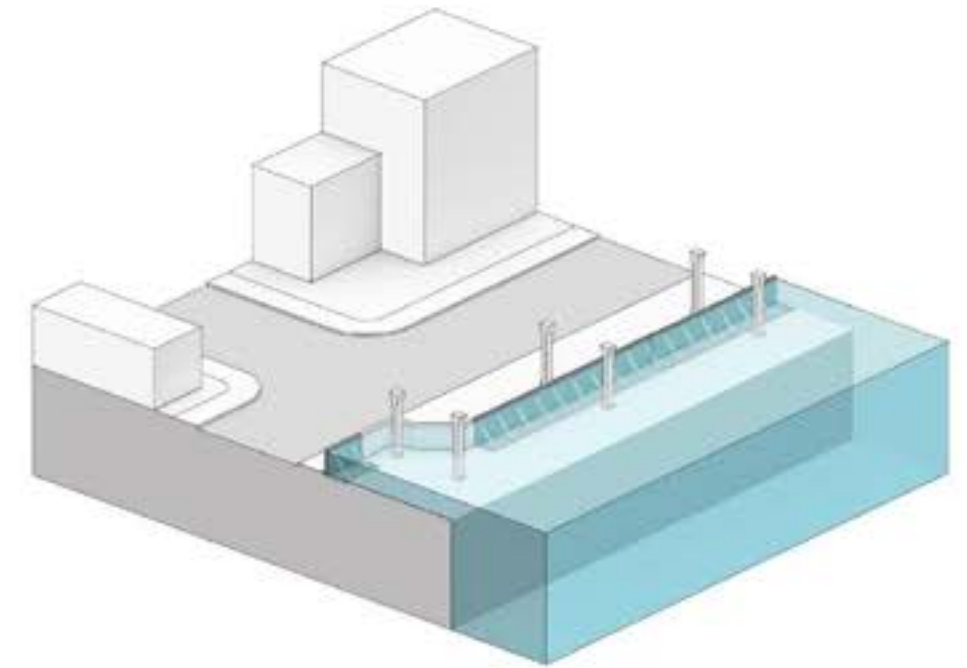
Site Constraints
Existing Infrastructure



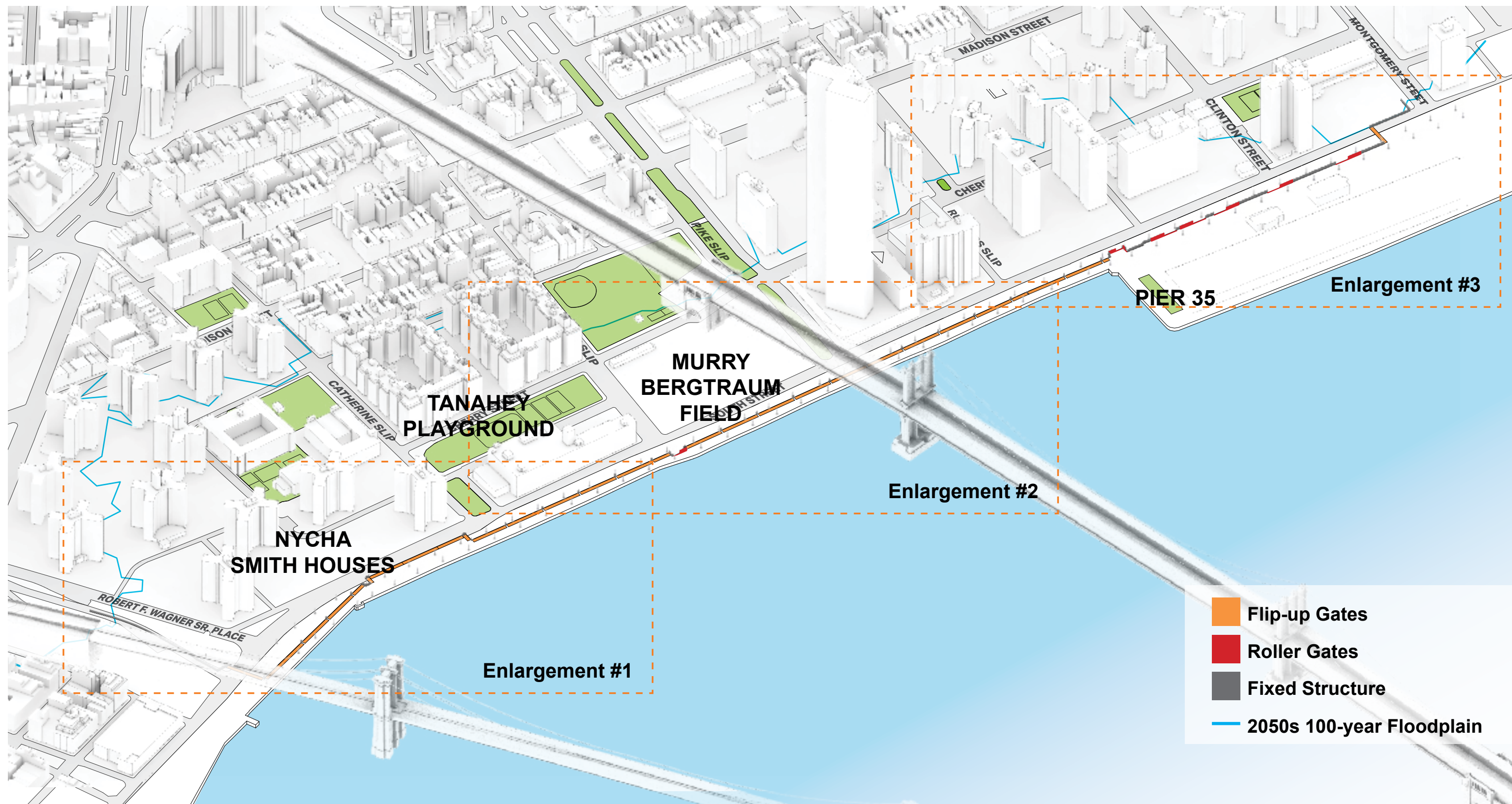
Line of Protection
Sunny Day



Line of Protection
Deployed



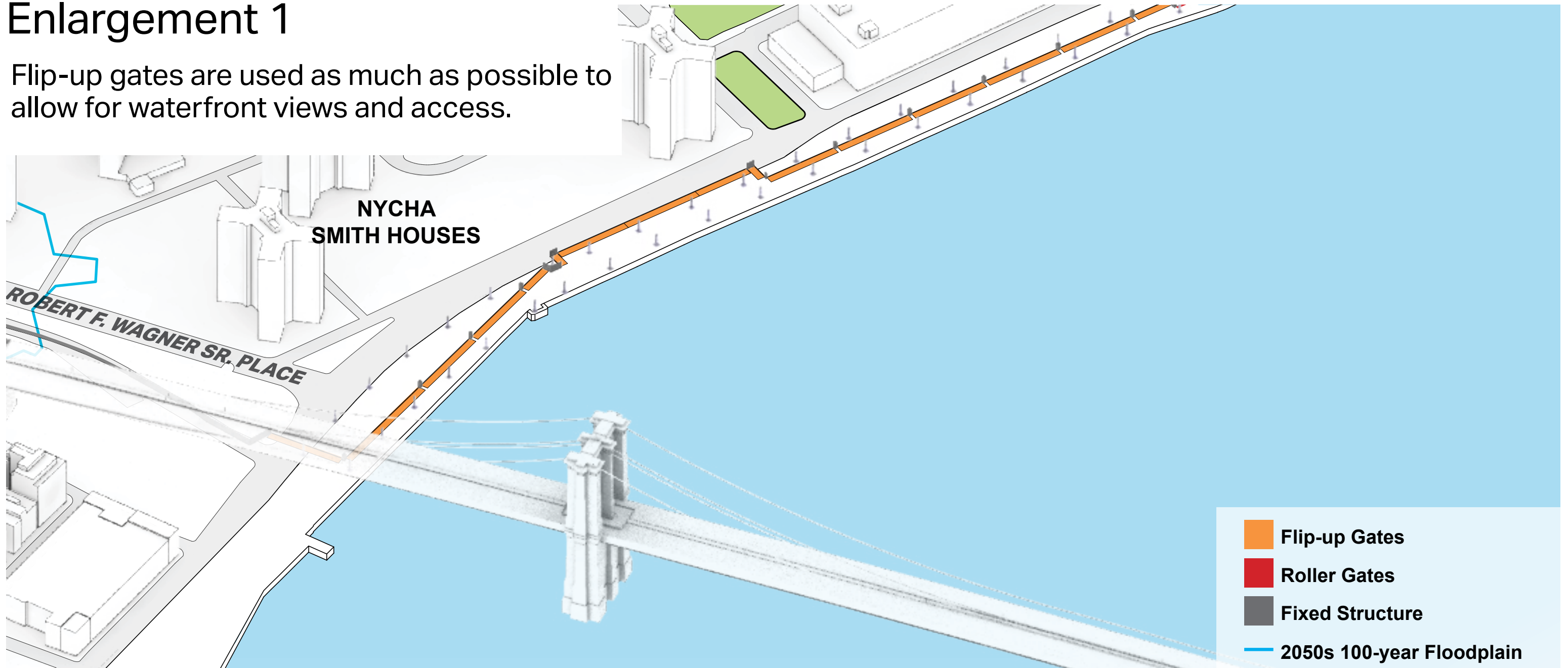
Flood Protection Alignment



Flood Protection Alignment

Enlargement 1

Flip-up gates are used as much as possible to allow for waterfront views and access.

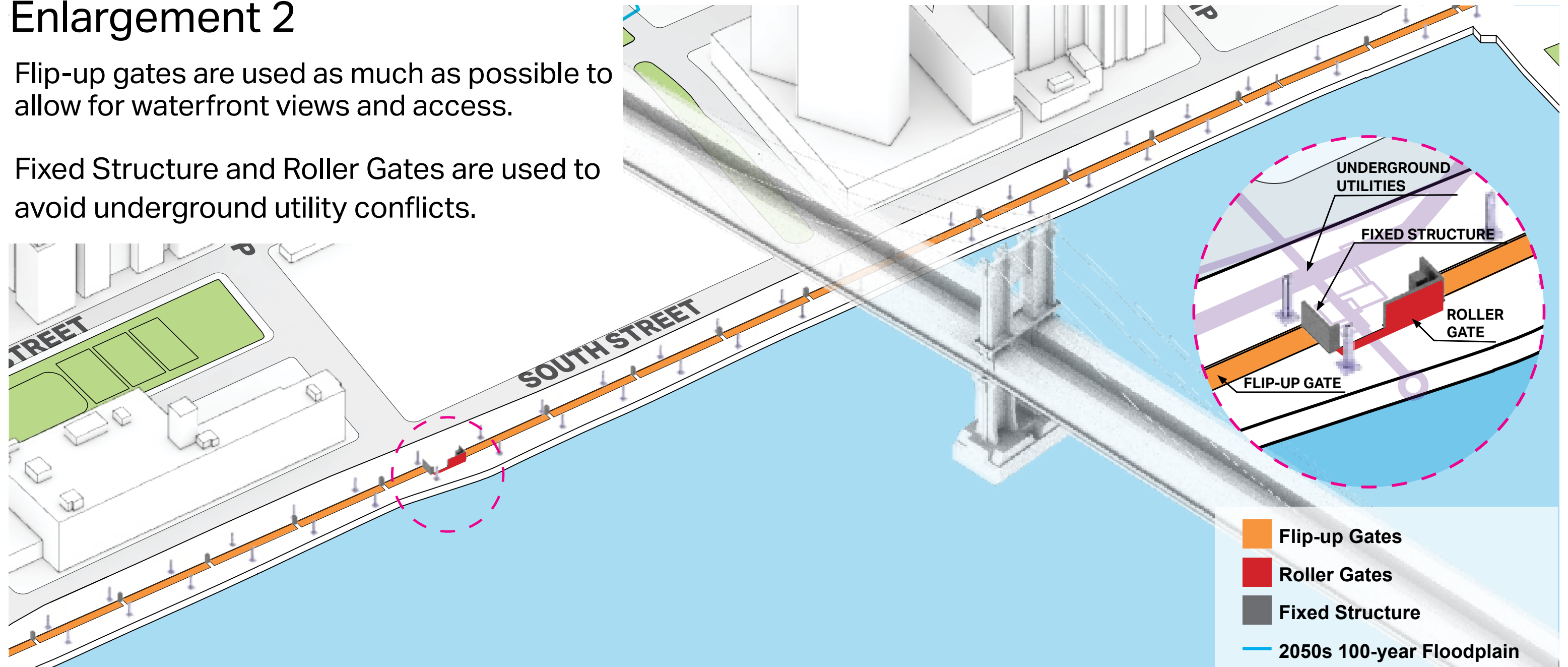


Flood Protection Alignment

Enlargement 2

Flip-up gates are used as much as possible to allow for waterfront views and access.

Fixed Structure and Roller Gates are used to avoid underground utility conflicts.



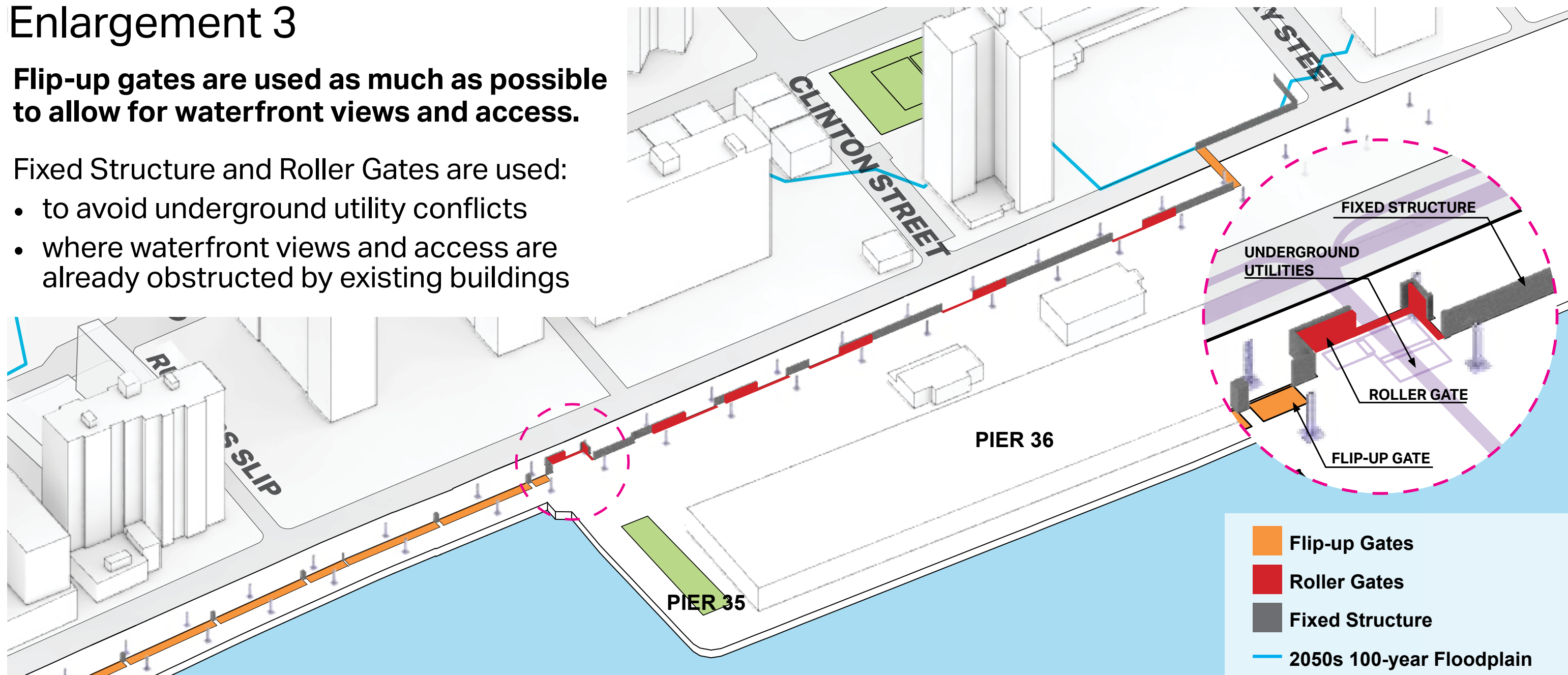
Flood Protection Alignment

Enlargement 3

Flip-up gates are used as much as possible to allow for waterfront views and access.

Fixed Structure and Roller Gates are used:

- to avoid underground utility conflicts
- where waterfront views and access are already obstructed by existing buildings



Interior Drainage System

The BMCR project includes drainage system upgrades to manage interior rainfall during storm events.

The BMCR and ESCR **drainage systems will be connected** so that stormwater flows to the Manhattan Pump Station and gets pumped to and treated at the Newtown Creek Wastewater Treatment Plant.



Proposed Program

