

NORTH/WEST BATTERY PARK CITY RESILIENCY PROJECT

Reach 5 Workshop

March 15, 2023



Battery Park
City Authority

Turner | CRUZ | ARCADIS | SCAPE | BIG WSP

Project Team

CLIENT TEAM:

CLIENT:



ADVISORS:



CONSULTANTS:



DESIGN-BUILD TEAM:

PRIMARY CONTRACT:



CONSULTANT:



SUB-CONSULTANTS:



Today's Workshop

- 1. Introduction and Project Overview (20 mins)**
- 2. Small Group Discussion (45 mins)**
- 3. Small Group Report Out and Response (45 mins)**
- 4. Closing Remarks**

Project Schedule



Precise construction completion dependent upon agency permitting and approvals.

A Piece of a Connected & Resilient Waterfront

US ARMY CORPS OF
ENGINEERS NY-NJ HARBOR
AND TRIBUTARIES STUDY



BATTERY PARK CITY
RESILIENCE PROJECTS
1.15 MILES

TRIBECA

SEAPORT

FINANCIAL
DISTRICT

THE BATTERY
COASTAL RESILIENCE
.33 MILES

THE FINANCIAL DISTRICT AND SEAPORT
CLIMATE RESILIENCE MASTERPLAN
HIGHLY CONSTRAINED AREA
.90 MILE

BROOKLYN BRIDGE - MONTGOMERY
COASTAL RESILIENCE
.80 MILES



EAST SIDE COASTAL
RESILIENCY

Today's Focus Area



REACH 4

REACH 3

REACH 5

REACH 7

REACH 6

REACH 2

REACH 1

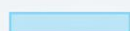
0' 175' 350' 700' 1,050'



Future Flood Risk

REACH 5

LEGEND

-  SWEL* DURING A 100-YEAR STORM EVENT WITH 2.5 FT OF SLR
-  PROJECT AREA
-  FERRY ROUTE

STILL WATER ELEVATION (SWEL) DOES NOT INCLUDE WAVE ACTION



Reach 5

REACH 5

HUDSON RIVER

FERRY
TERMINAL

PATH TUNNELS

PATH TUNNELS

BELVEDERE
PLAZA

300 VESEY
STREET

NORTH COVE
MARINA

NORTH END AVE.

KOWSKY
PLAZA

250 VESEY
STREET

WATERFRONT
PLAZA

PUMPHOUSE
PARK

SOUTH END AVE.

225 LIBERTY
STREET

REACH 5

NORTH COVE

What We Heard

“...preserve
iconic views of
waterfront.”

What We Heard

“...need more greenery
and shade.”

What We Heard

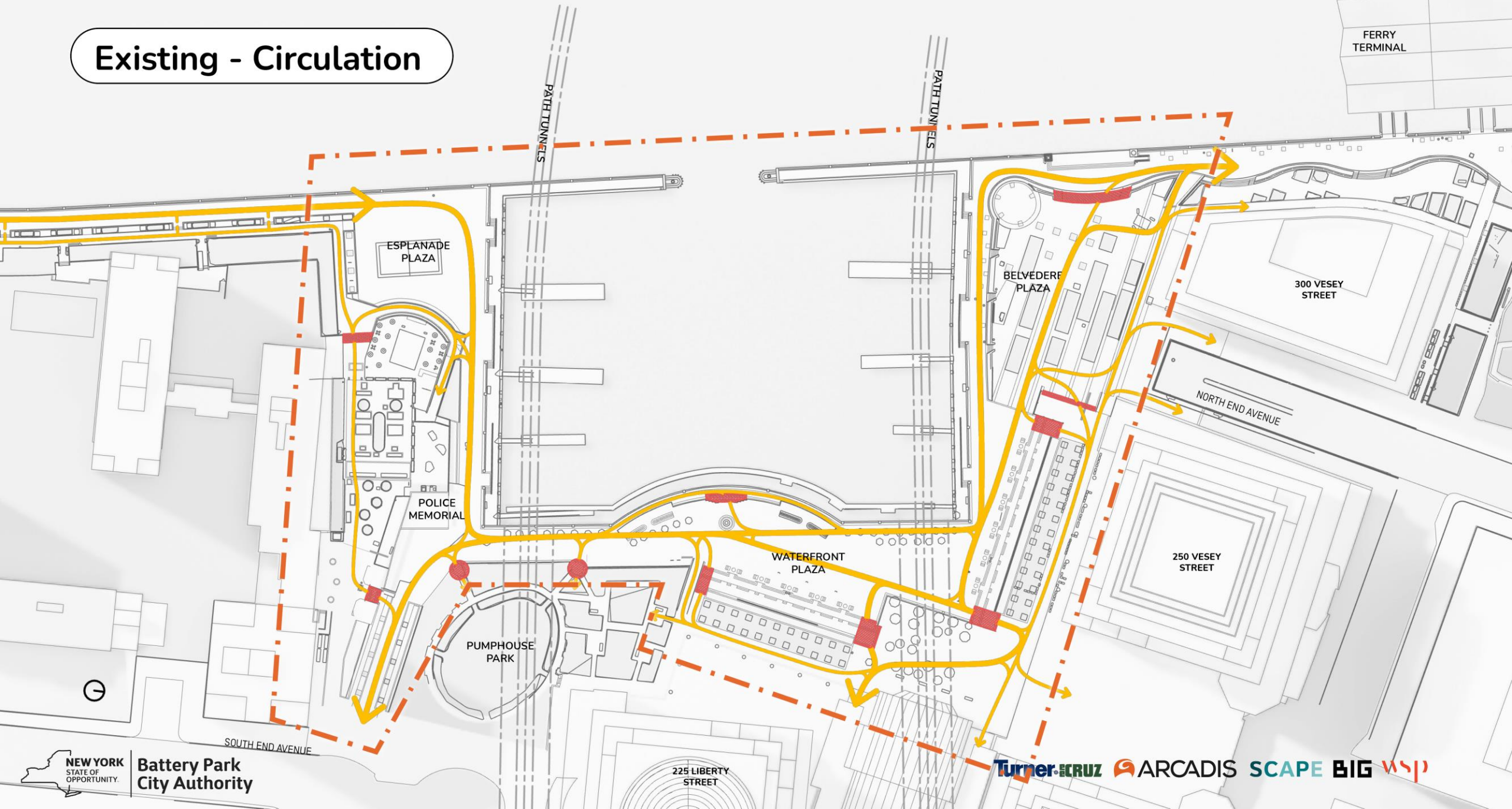
“...improve accessibility and mobility in the plaza area.”

Design Constraints

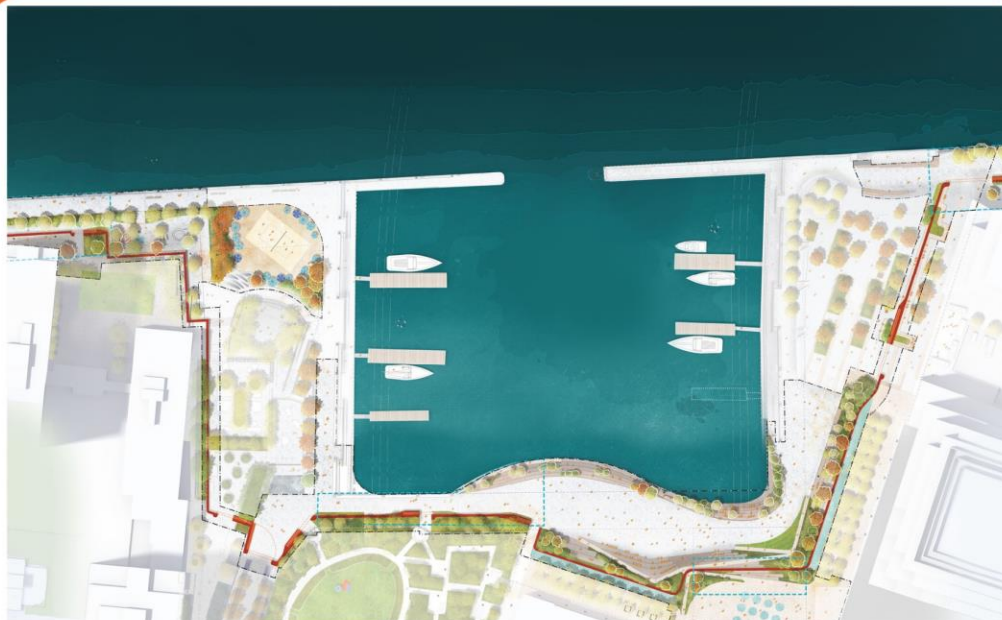
- RIVER WATER OUTFALL
- RIVER WATER INTAKE
- UTILITY EASEMENTS



Existing - Circulation



Reach 5



REACH 5A: UPLAND PLAZA

ADVANTAGES:

- Reduced flood barrier height
- Maintains most sight-lines to Hudson River
- Opportunity for new resilient hard and softscape design
- Redesign of plaza spaces to improve accessibility and programming
- Opportunity for improved access to the water and universal access

DISADVANTAGES:

- More disruption to North Cove Marina and Esplanade Plaza during construction
- Some areas of the plaza may still flood during major storm events



REACH 5B: BARGE GATE

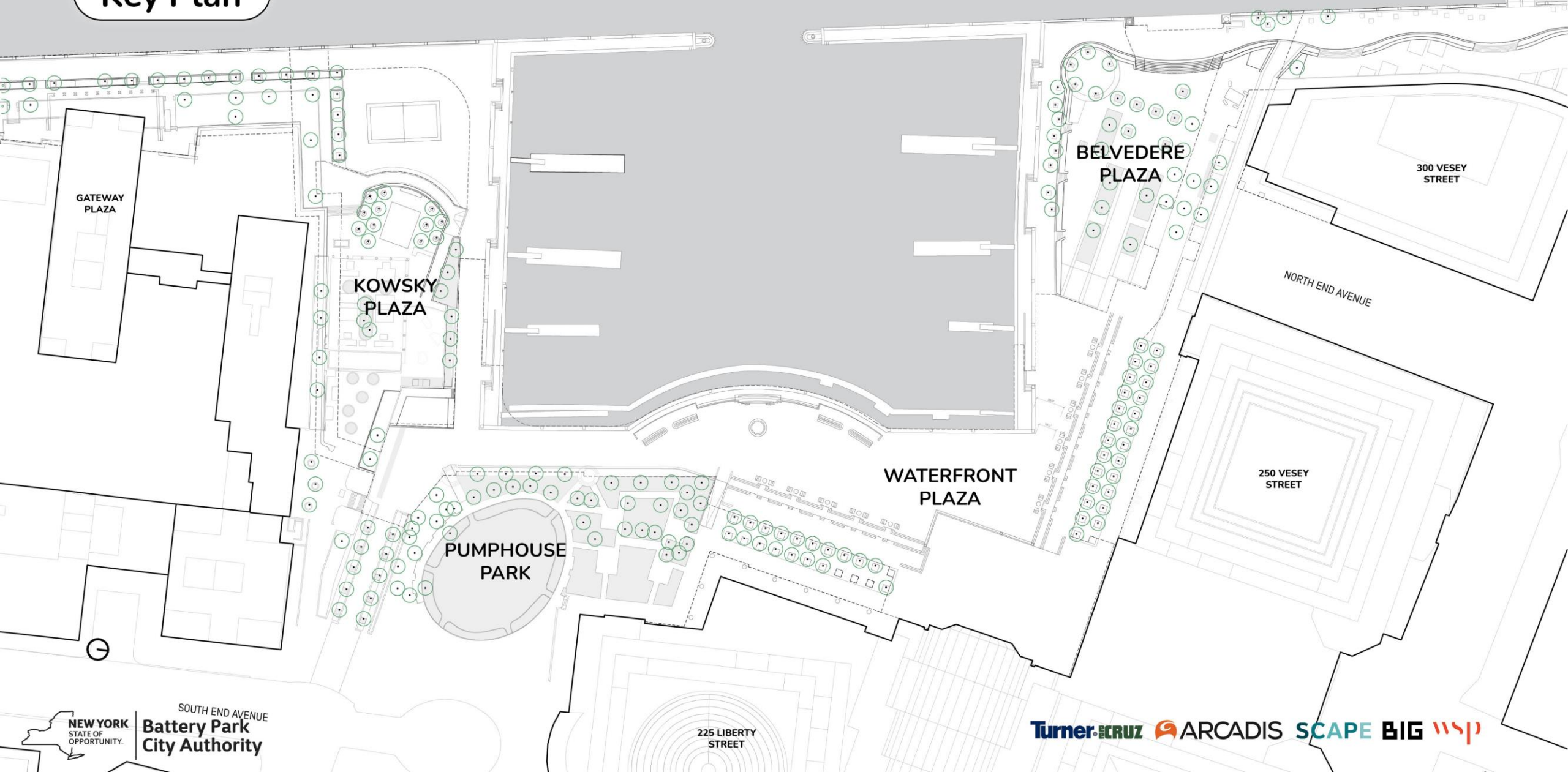
ADVANTAGES:

- Reduced disruption to North Cove Marina and Esplanade Plaza during construction
- Minimal changes to plaza design

DISADVANTAGES:

- Increased flood barrier height
- Significant impact on sight-lines to Hudson River
- Minimal opportunity for plaza upgrades
- Higher cost and complexity in operations and maintenance
- More complex and higher construction cost

Key Plan



Key Plan



BELVEDERE PLAZA

NORTH COVE

Belvedere Plaza

LEGEND

- FLOOD BARRIER SYSTEM (WALL)
- FLOOD BARRIER SYSTEM (DEPLOYABLE)

- NEW TREES
- EXISTING TREES
- IMPACTED TREES



NORTH COVE
MARINA

FERRY
TERMINAL

300 VESEY
STREET

NORTH END AVENUE

Turner CRUZ ARCADIS SCAPE BIG wsp

Belvedere Plaza



Belvedere Plaza



Belvedere Plaza



Belvedere Plaza



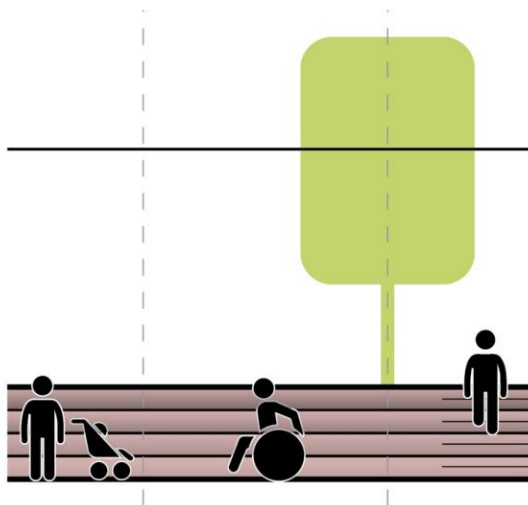
WATERFRONT PLAZA

NORTH COVE

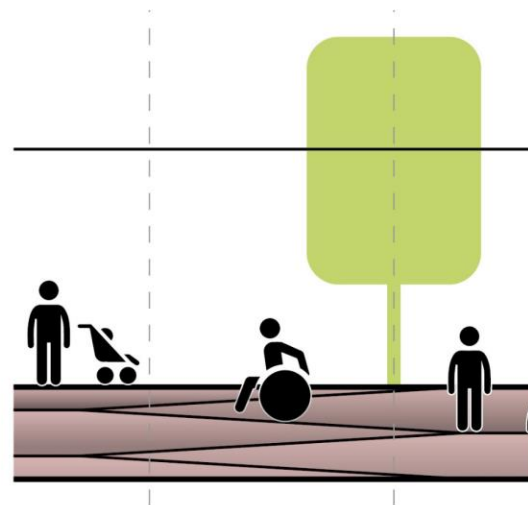
Design Concept

9.5'
▼

Design Concept

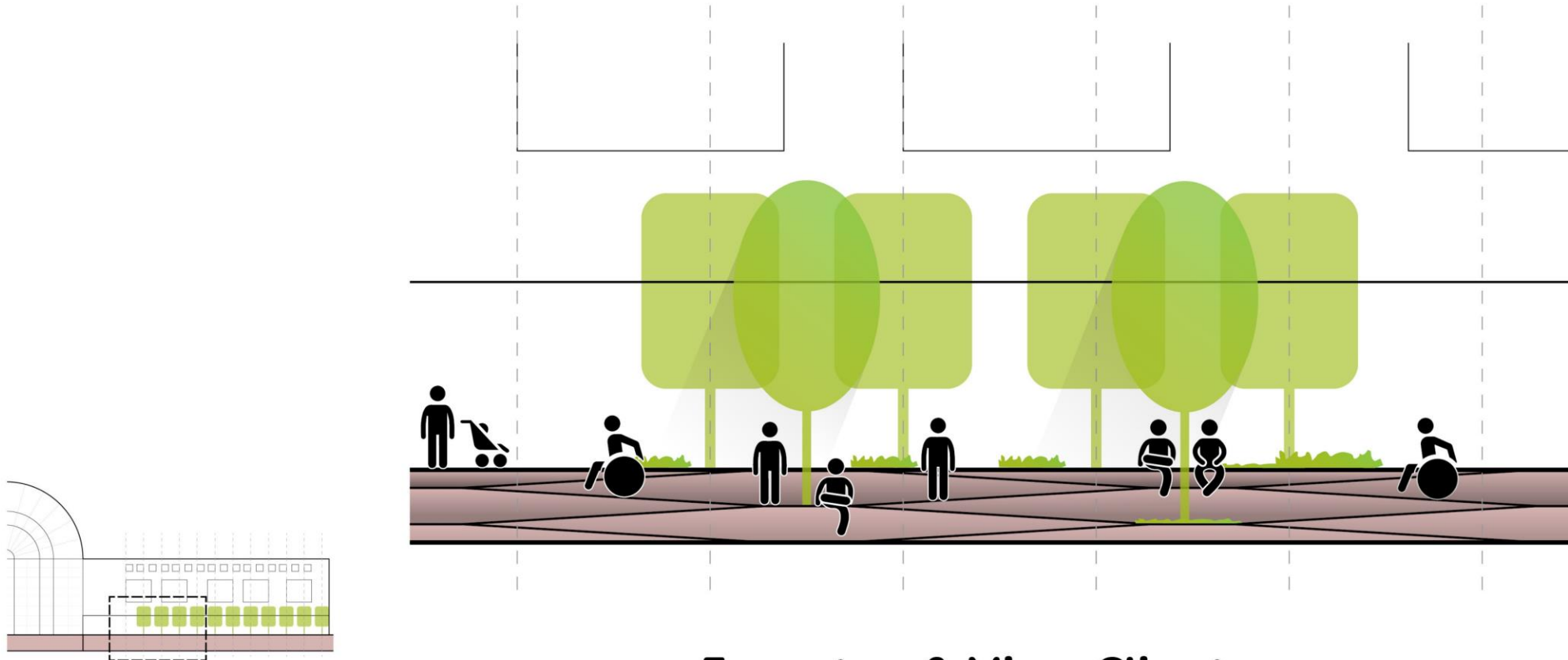


Limited Access



Universal Access

Design Concept



Ecosystem & Micro-Climate

Proposal



WATERFRONT
PLAZA

250 VESEY
STREET

225 LIBERTY
STREET

LEGEND

- FLOOD BARRIER SYSTEM (WALL)
- FLOOD BARRIER SYSTEM (DEPLOYABLE)
- NEW TREES
- EXISTING TREES
- IMPACTED TREES



Design Concept



Design Concept



Design Concept



Brookfield Place

9.5'

16.5'

13.5'

NEW YORK
STATE OF
OPPORTUNITY

Battery Park
City Authority

Turner CRUZ ARCADIS SCAPE BIG



PUMPHOUSE PARK

NORTH COVE

Pumphouse Park

Kowsky Plaza

NYC Police Memorial

Waterfront Plaza

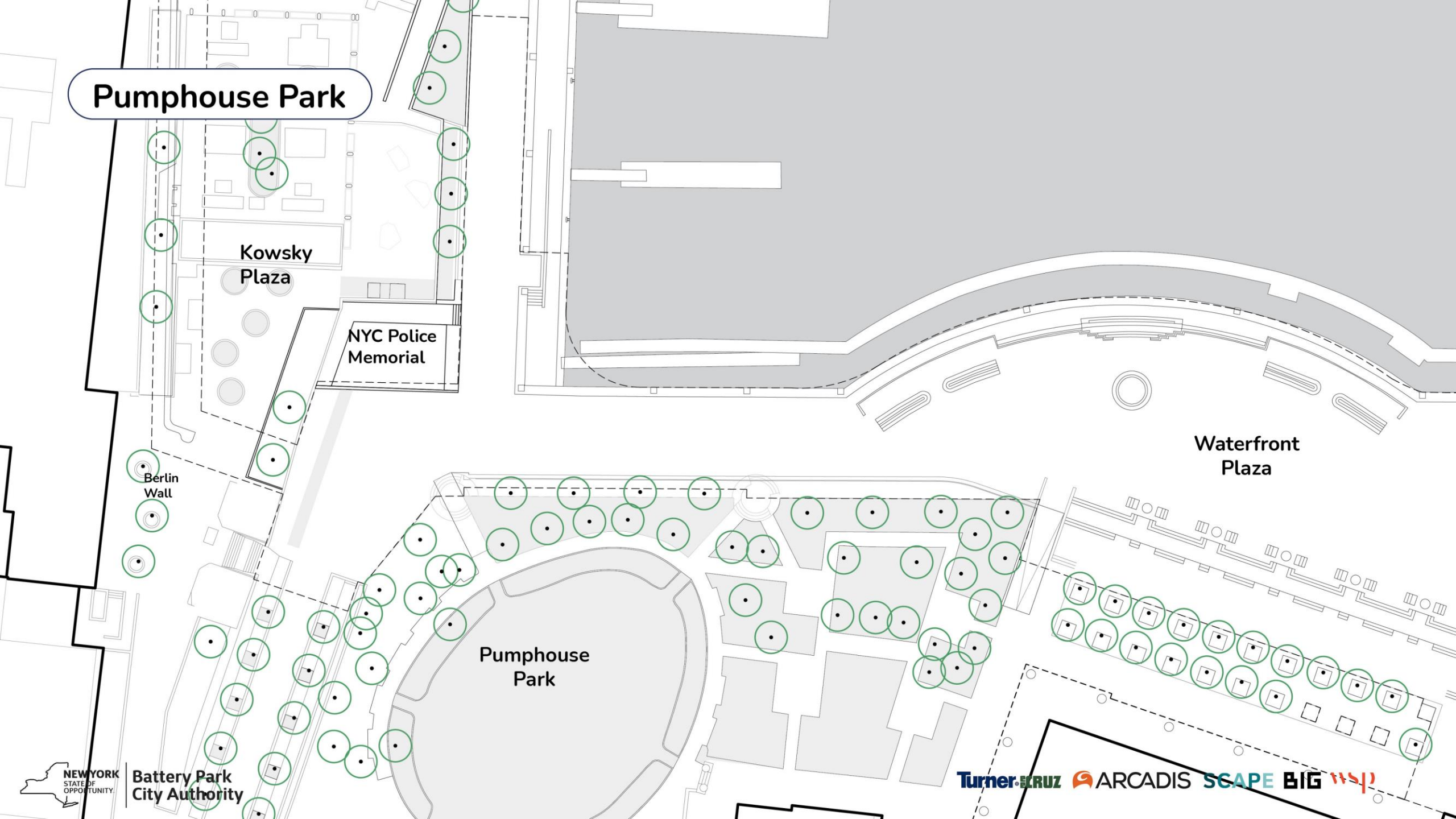
Berlin Wall

Pumphouse Park

NEW YORK
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OPPORTUNITY

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Pumphouse Park Constraints

LEGEND

- EXISTING PLATFORM
- PLATFORM REPLACEMENT
- PATH TUNNEL
- EASEMENT



Kowsky Plaza

NYC Police Memorial

Platform Replacement

Waterfront Plaza

Berlin Wall

Pumphouse Park

Battery Park City Authority

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OPPORTUNITY

Pumphouse Park Constraints

+17.5'

DFE

+11.0'

EXISTING RETAINING WALL

+9.5'

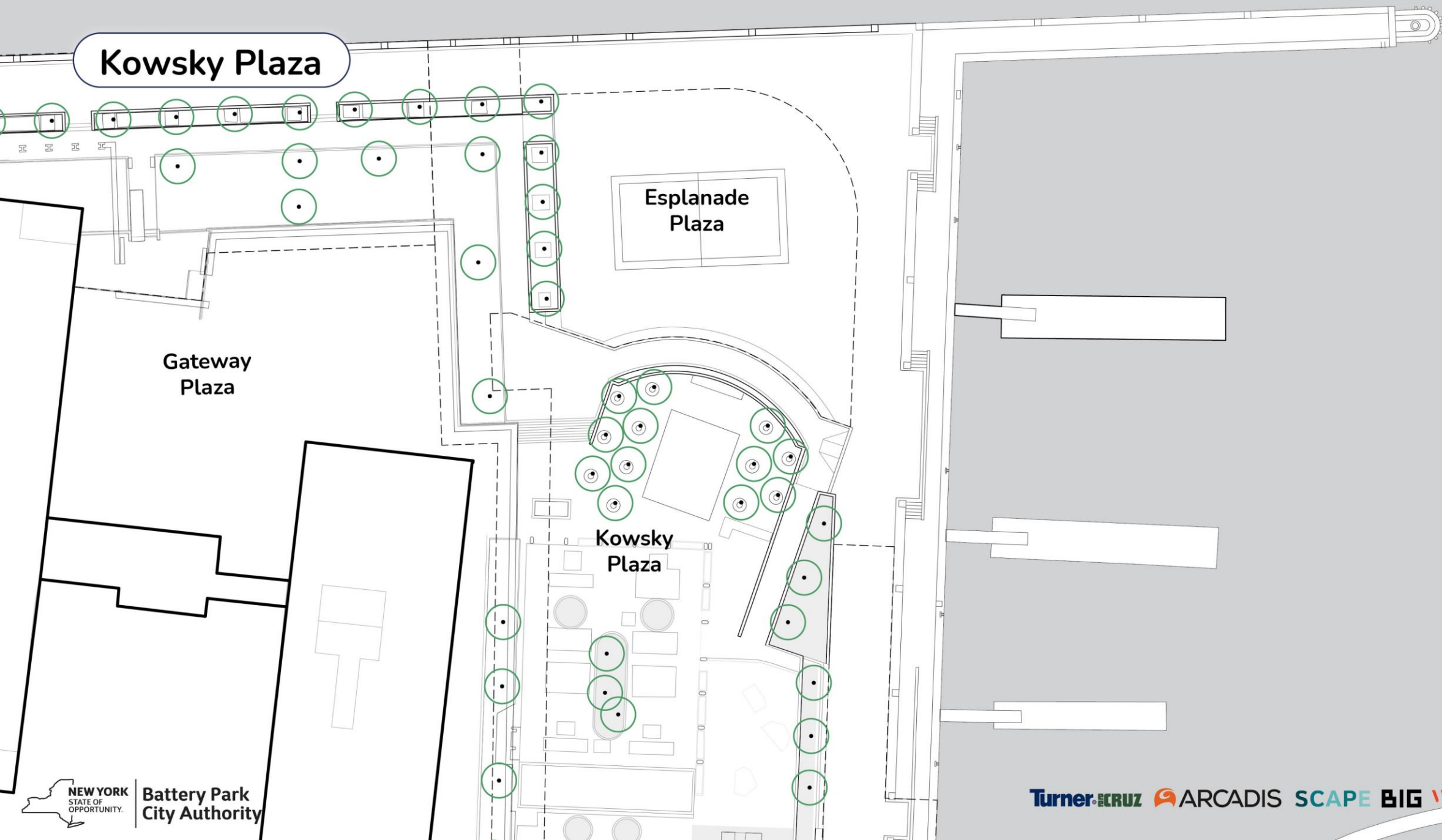
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KOWSKY PLAZA

NORTH COVE

Kowsky Plaza

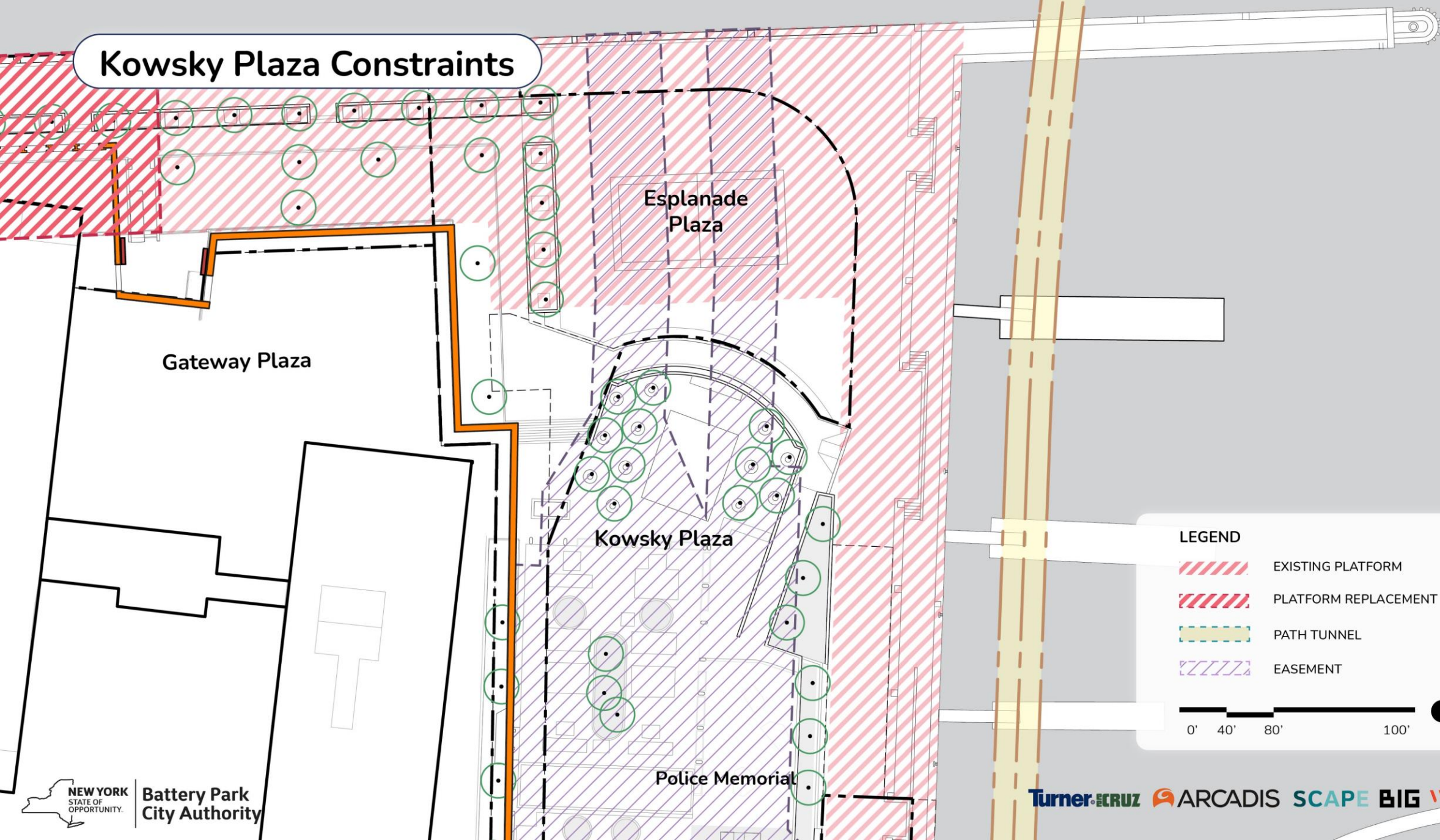


Gateway
Plaza

Esplanade
Plaza

Kowsky
Plaza

Kowsky Plaza Constraints



LEGEND

- EXISTING PLATFORM
- PLATFORM REPLACEMENT
- PATH TUNNEL
- EASEMENT



Kowsky Plaza Constraints

+20.5'

EXISTING PRIVACY WALL

+16.5'

DFE

+14.5'

DATUM REFERENCE: NAVD88

KOWSKY PLAZA, WXY

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