

# East Side Coastal Resiliency

Community Board 6  
Land Use & Waterfront Committee

433 1st Avenue (NYU School of Dentistry), Room 210

April 22, 2019



# **PRESENTATION AGENDA**

**PROJECT GOALS**

**CONCEPTUAL DESIGN**

**COASTAL STORM MODELING**

**ENVIRONMENTAL REVIEW**

**NEXT STEPS**

An aerial, isometric-style illustration of a cityscape. A large suspension bridge spans a body of water in the lower half of the image. Along the waterfront, there are several green sports fields, including baseball diamonds and soccer fields. The city is filled with numerous buildings of varying heights. The entire image has a teal/cyan color overlay.

# PROJECT GOALS

## PROJECT GOALS & ORIGIN

**Provide a reliable, integrated flood protection system; minimize use of closure structures.**

# Improve waterfront open spaces and access.

# Achieve implementation milestones and project funding allocations as established by HUD.

**Respond quickly to the urgent need for increased flood protection and resiliency.**

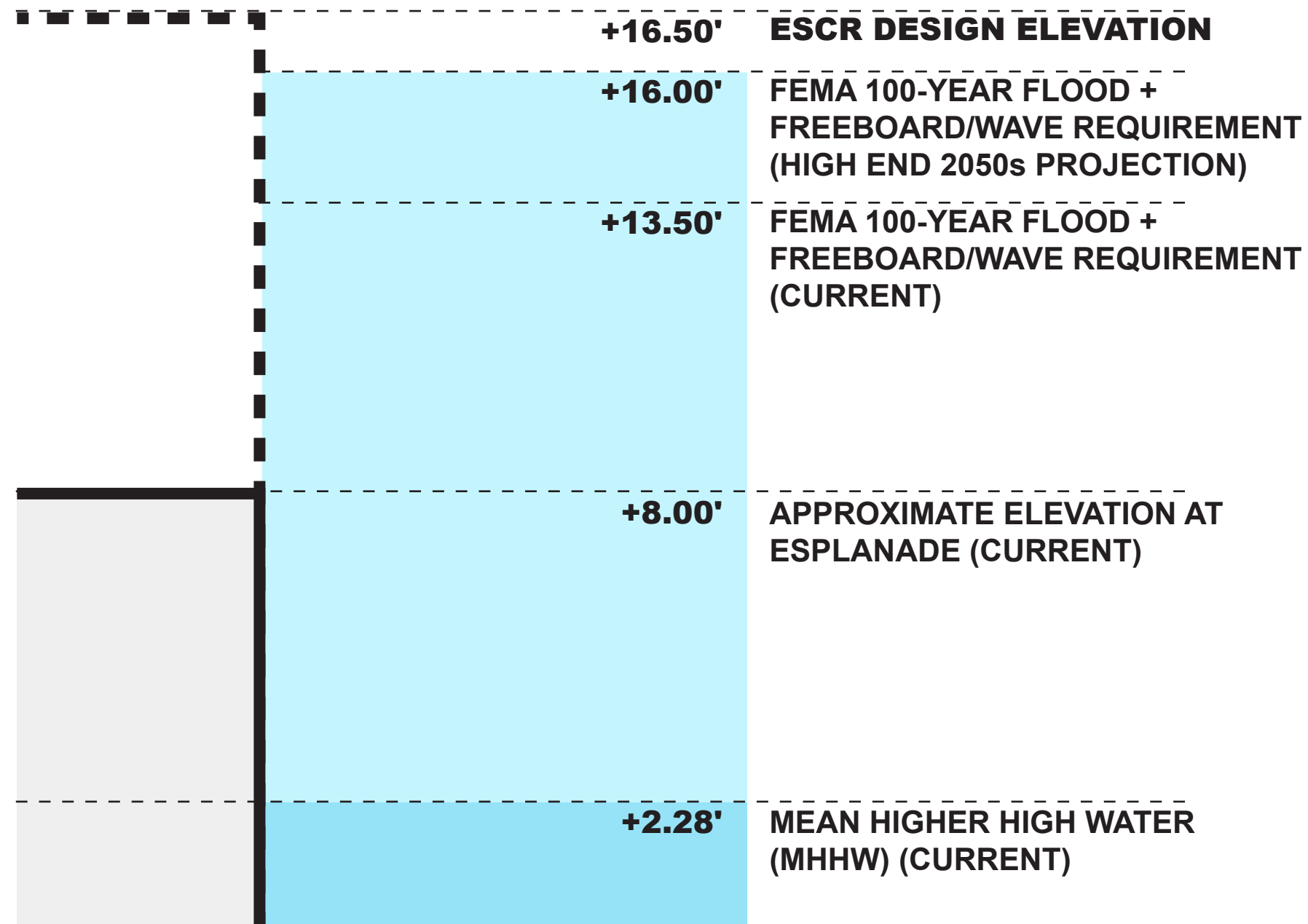


# FLOOD PROTECTION DESIGN CRITERIA

## DESIGN FLOOD ELEVATIONS

**HUD FUNDING REQUIREMENT: THE SYSTEM MUST PURSUE FEMA ACCREDITATION WITH MINIMUM SYSTEM ELEVATION AT CURRENT FEMA 100-YEAR STORM ELEVATION + WAVE ACTION**

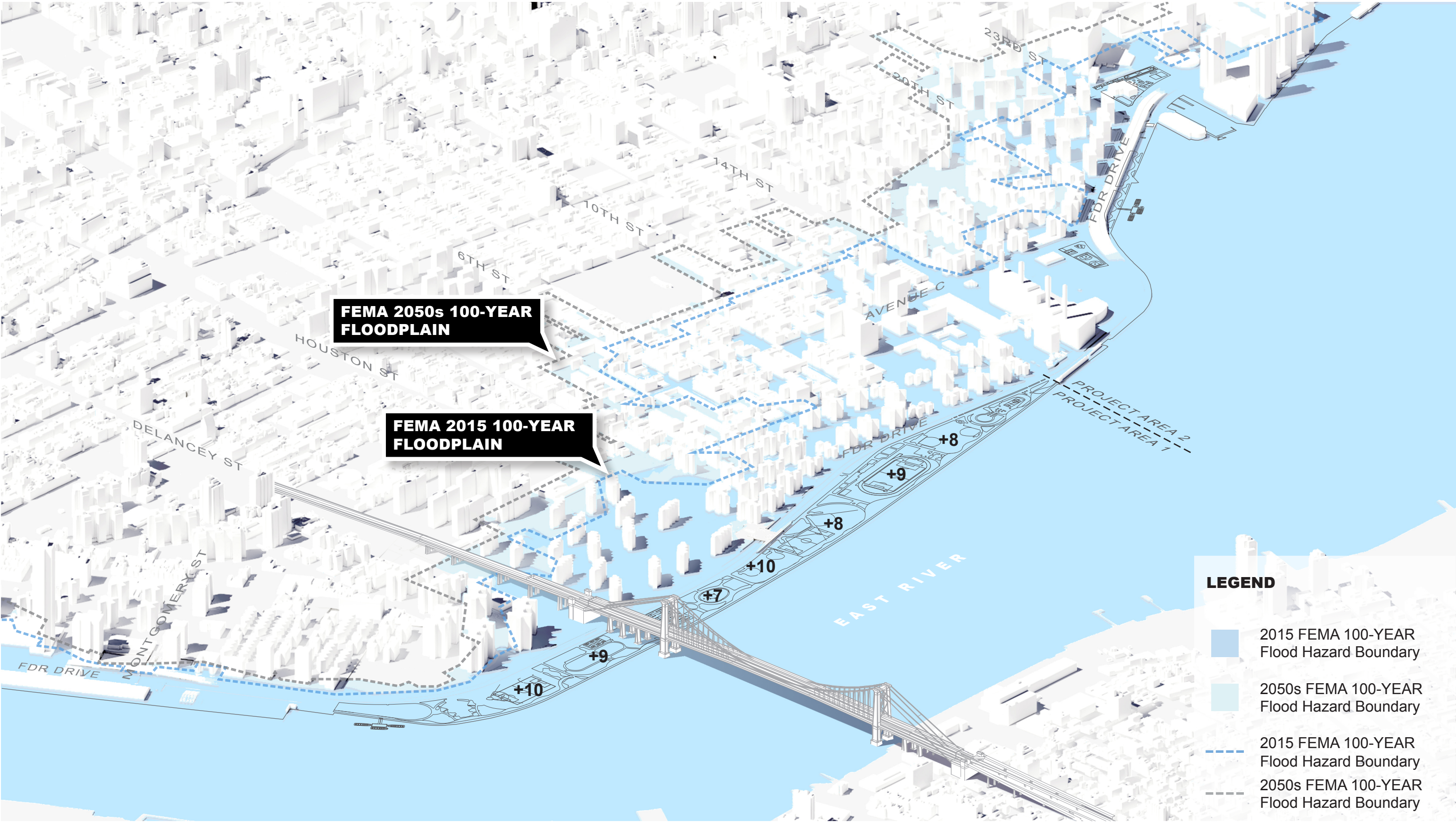
**DESIGN HEIGHT:**  
**DESIGN HEIGHT DETERMINED BY 2050s 100-YEAR STORM ELEVATION (INCL 30" SEA LEVEL RISE) + WAVE ACTION**



NOTE: ALL ELEVATIONS SHOWN IN NAVD88

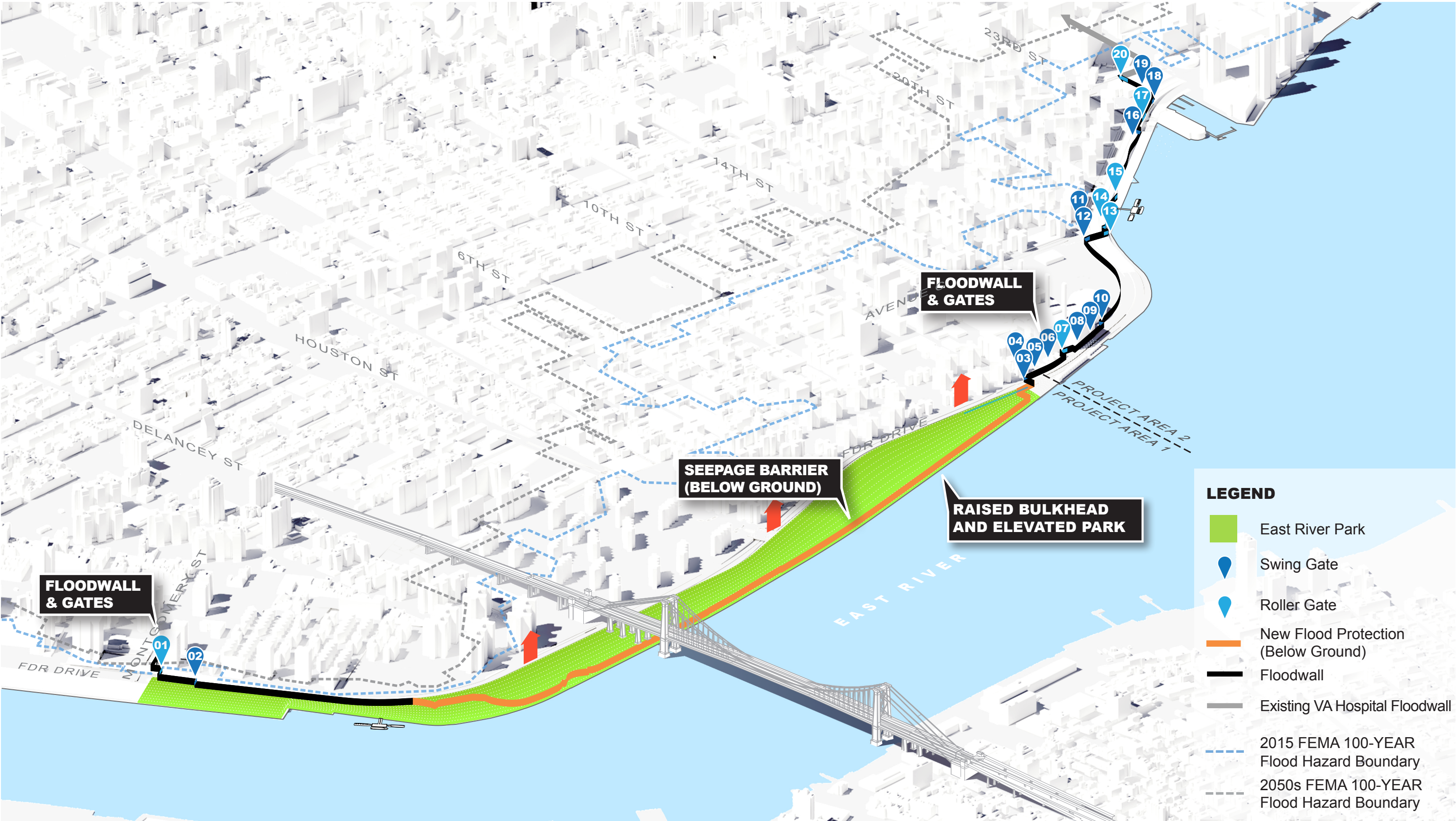
# CURRENT AND 2050s 100-YEAR FLOODPLAINS

STUDY AREA



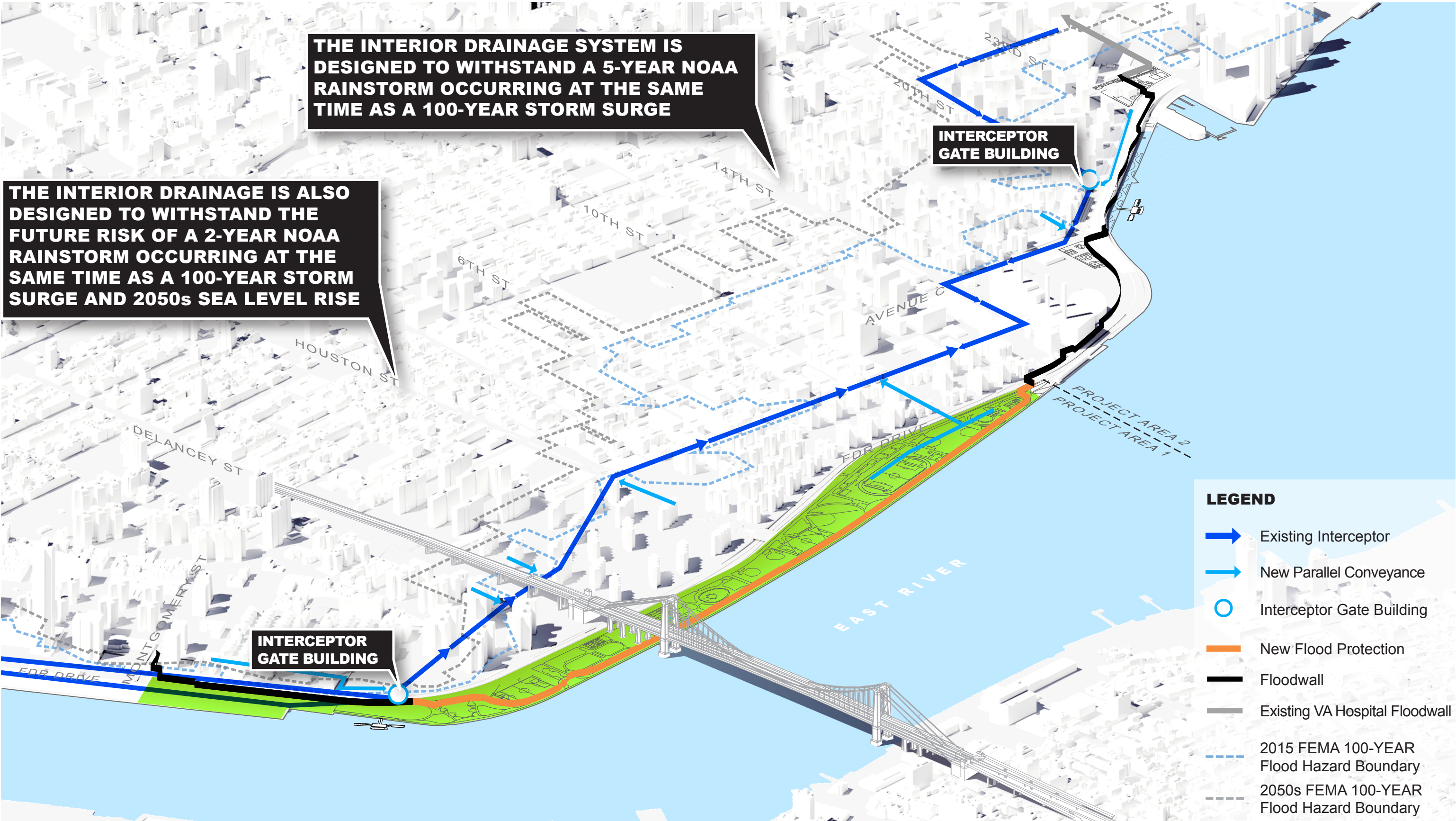
# IMPROVED RESILIENCY FOR COMMUNITY

## INTEGRATED FLOOD PROTECTION SYSTEM



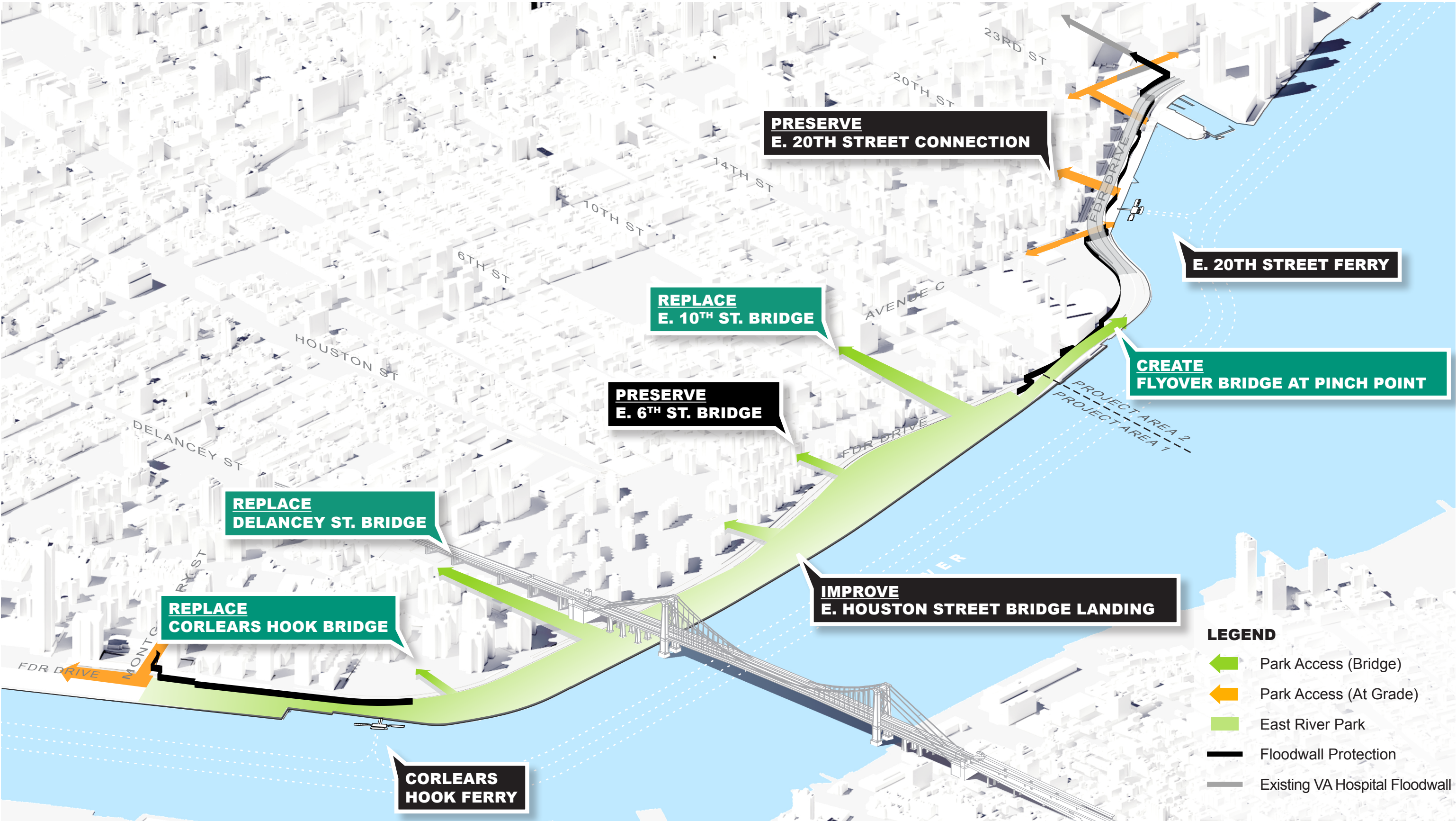
# ENHANCING DRAINAGE INFRASTRUCTURE

## INTERIOR DRAINAGE SYSTEM COMPONENTS AND DESIGN CRITERIA



# IMPROVED WATERFRONT ACCESS

REPLACING, IMPROVING AND CREATING NEW CONNECTIONS



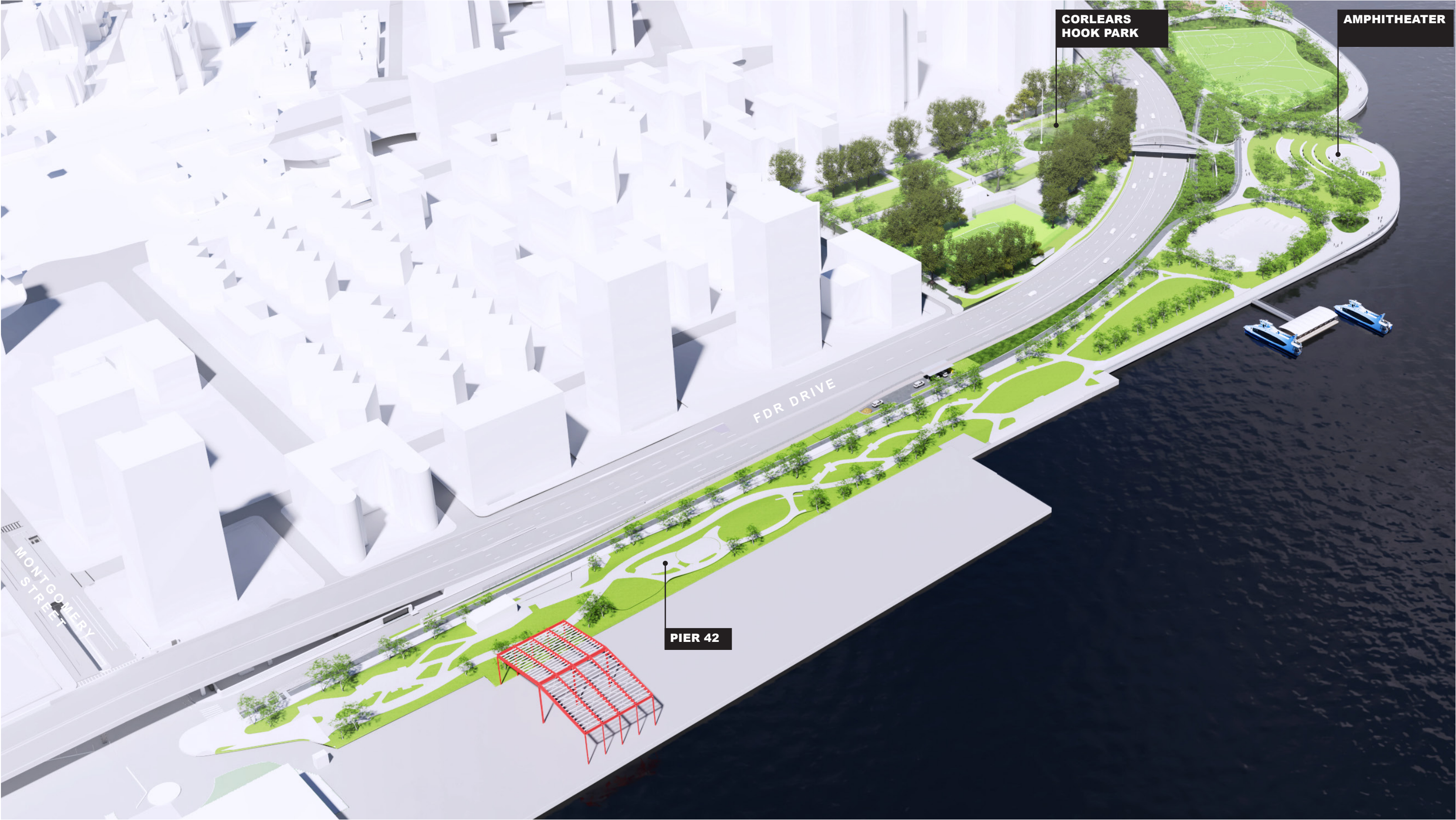
An aerial, isometric architectural rendering of a cityscape. A large suspension bridge spans a body of water in the lower half of the image. Along the waterfront, there are several green sports fields, including baseball diamonds and soccer fields. The city is filled with numerous rectangular building footprints of varying heights. The entire image is overlaid with a semi-transparent teal color.

# CONCEPTUAL DESIGN

**EAST RIVER PARK**  
CONCEPTUAL DESIGN



**PIER 42 AREA**  
CONCEPTUAL DESIGN



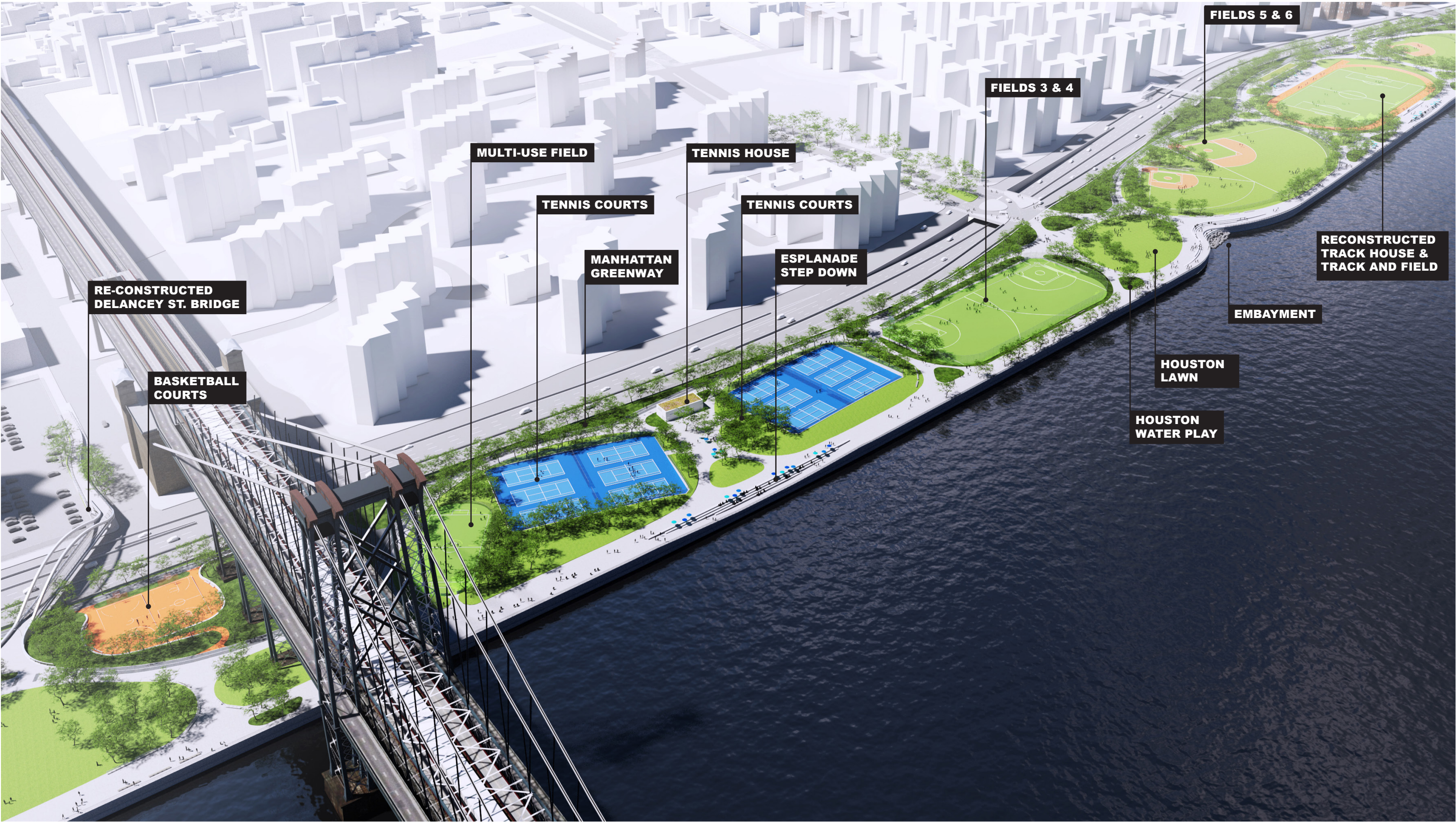
# CORLEARS HOOK TO DELANCEY STREET

CONCEPTUAL DESIGN



# HOUSTON STREET

CONCEPTUAL DESIGN



RE-CONSTRUCTED  
DELANCEY ST. BRIDGE

BASKETBALL  
COURTS

MULTI-USE FIELD

TENNIS COURTS

MANHATTAN  
GREENWAY

TENNIS HOUSE

TENNIS COURTS

ESPLANADE  
STEP DOWN

FIELDS 3 & 4

FIELDS 5 & 6

RECONSTRUCTED  
TRACK HOUSE &  
TRACK AND FIELD

EMBAYMENT

HOUSTON  
LAWN

HOUSTON  
WATER PLAY

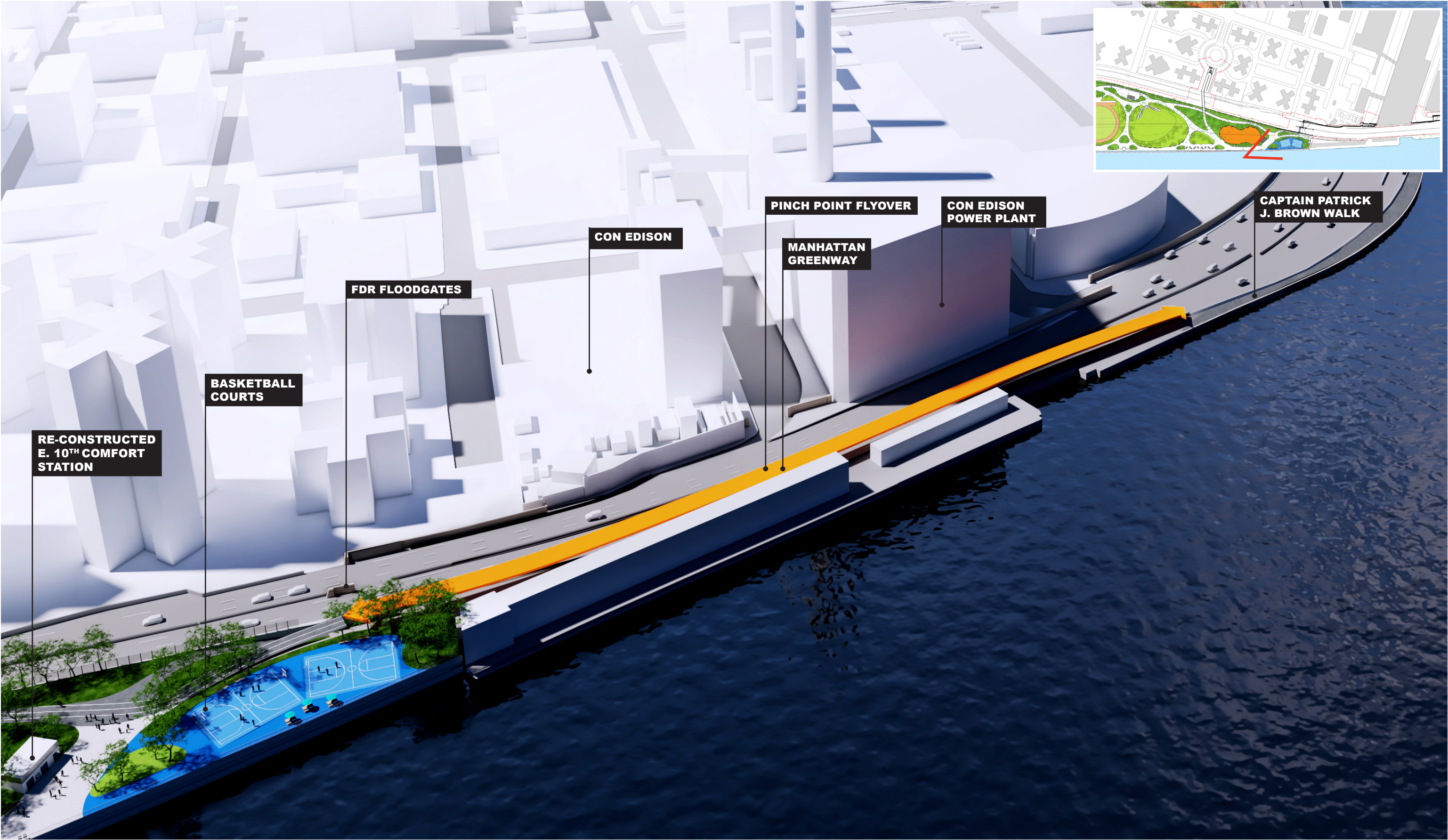
# TRACK & EAST 10TH STREET

CONCEPTUAL DESIGN



# FLYOVER BRIDGE (PINCH POINT)

CONCEPTUAL ALIGNMENT



# PROJECT AREA 2

CONCEPTUAL DESIGN



# MURPHY BROTHERS PLAYGROUND

EXISTING CONDITIONS



# MURPHY BROTHERS PLAYGROUND

CONCEPTUAL DESIGN



# STUYVESANT COVE PARK

EXISTING CONDITIONS



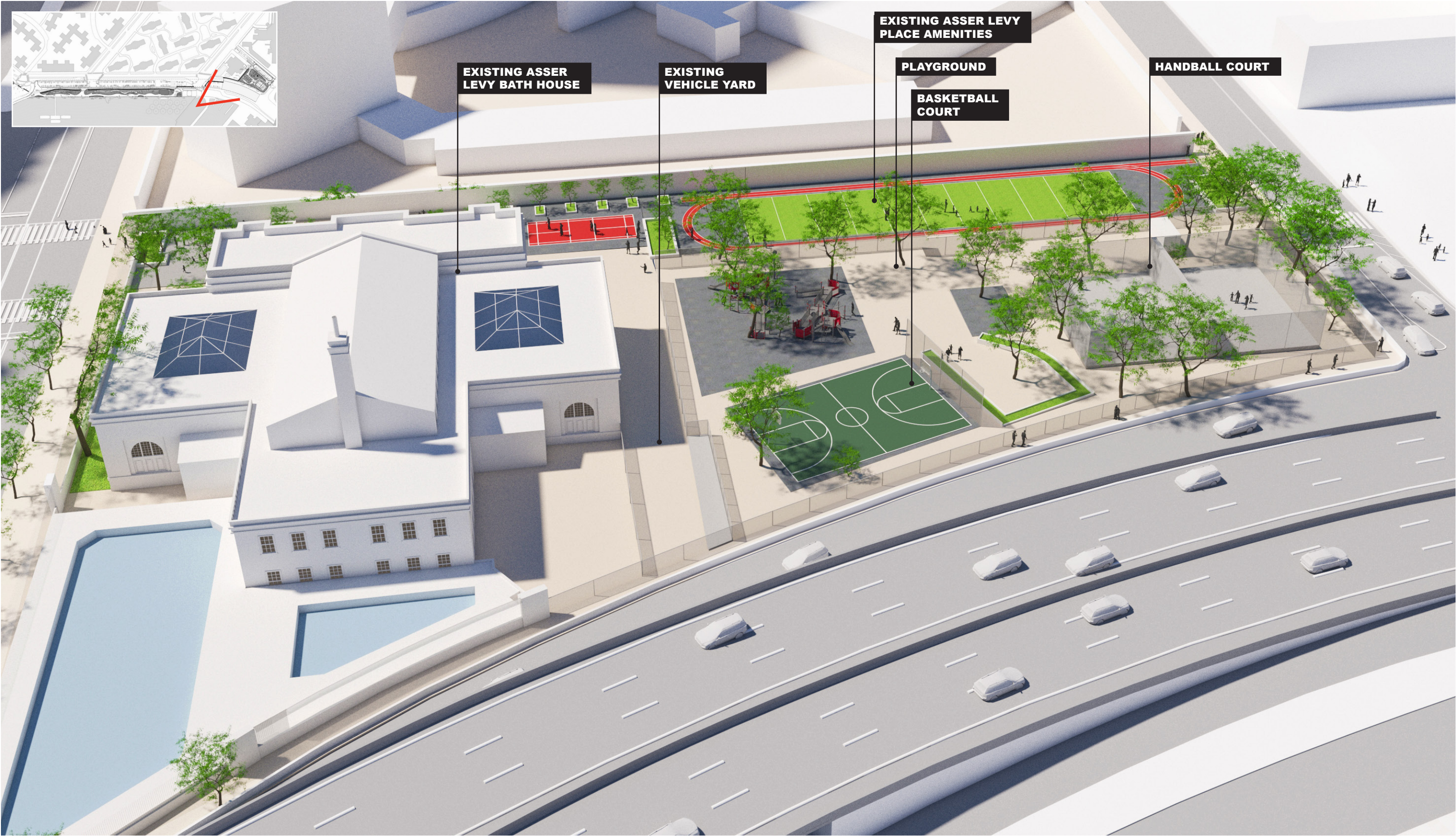
# STUYVESANT COVE PARK

CONCEPTUAL DESIGN



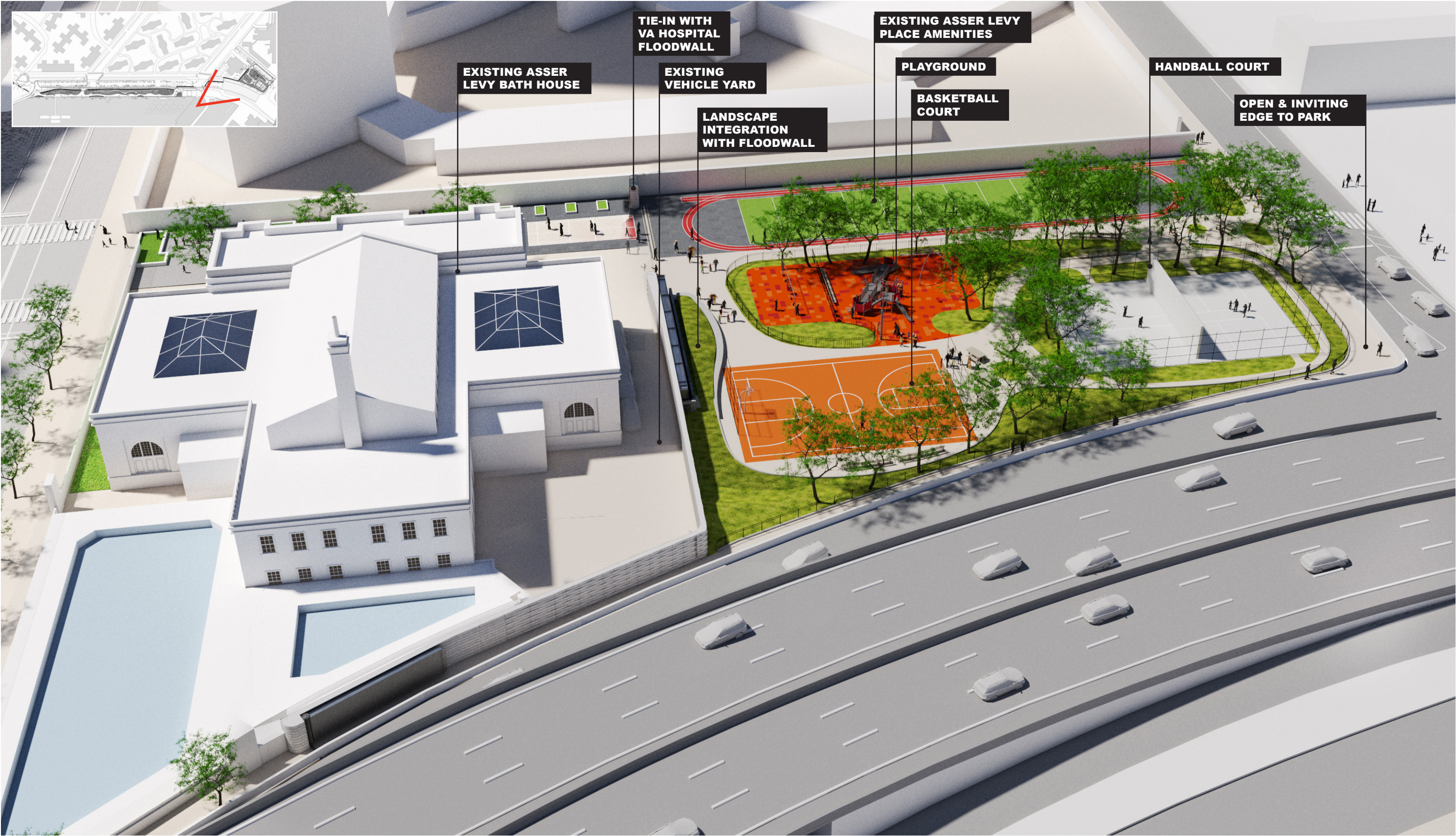
# ASSER LEVY PLAYGROUND

EXISTING CONDITIONS



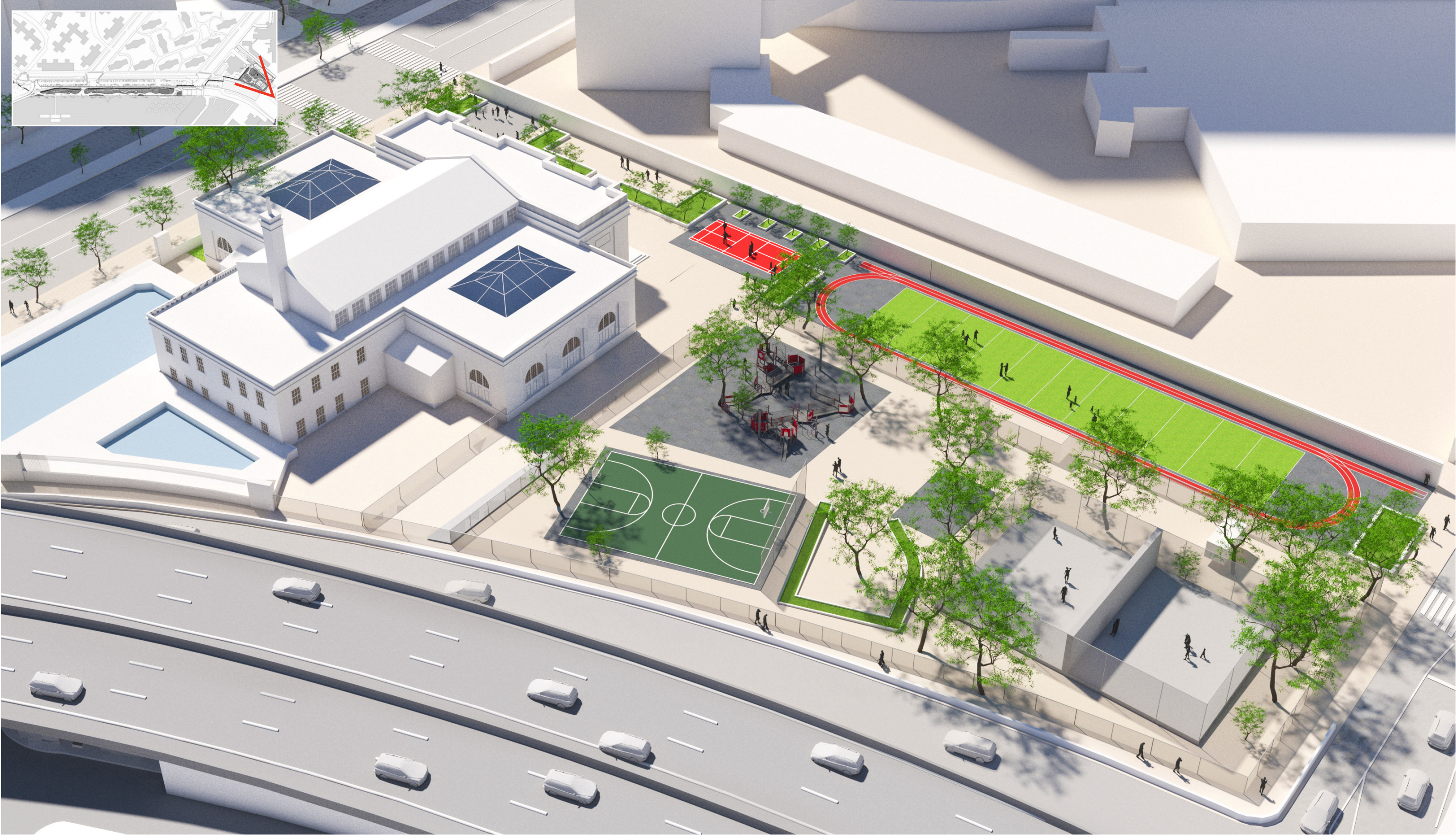
# ASSER LEVY PLAYGROUND

CONCEPTUAL DESIGN



# ASSER LEVY PLAYGROUND

EXISTING CONDITIONS



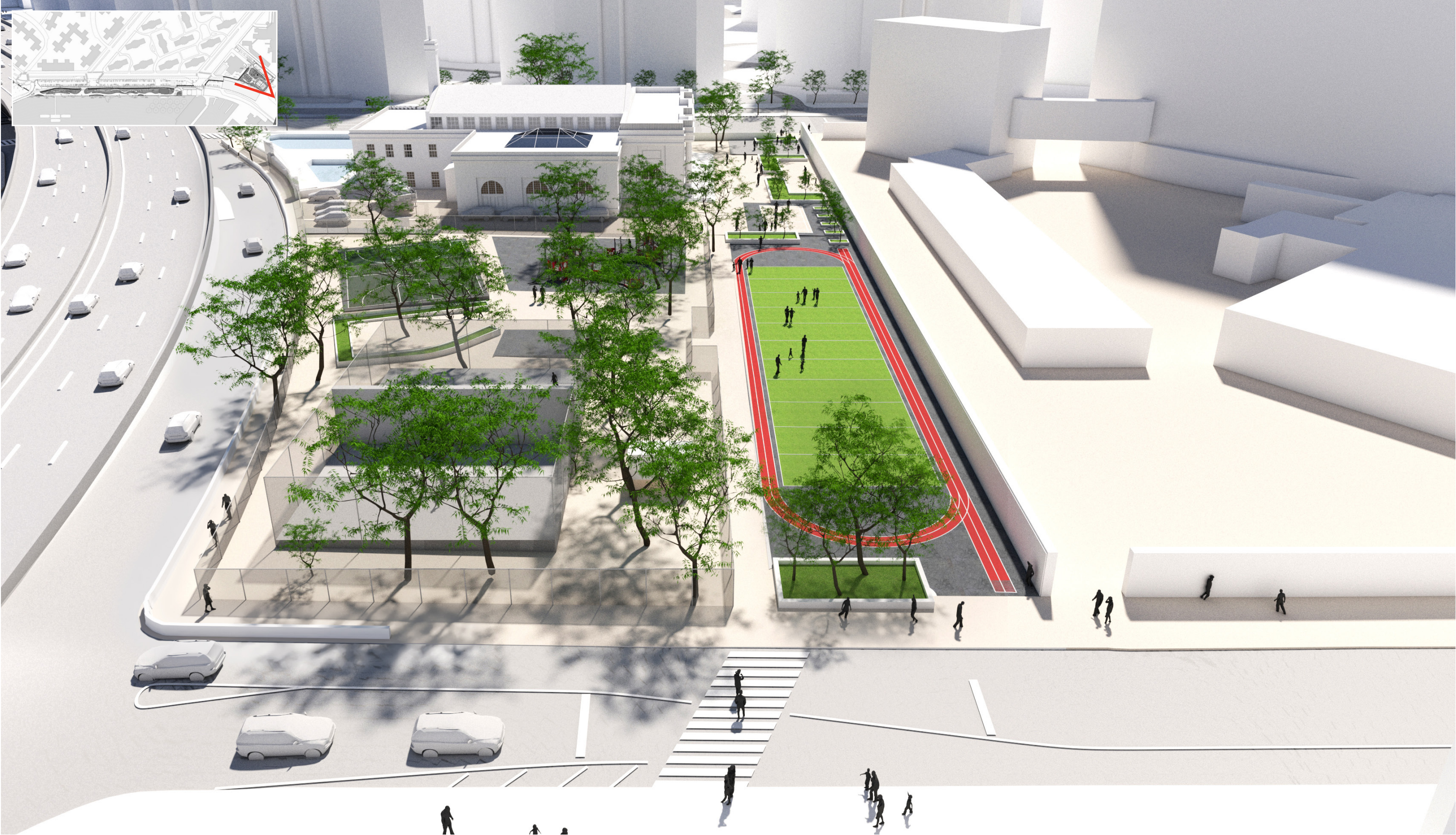
# ASSER LEVY PLAYGROUND

CONCEPTUAL DESIGN



# ASSER LEVY PLAYGROUND

EXISTING CONDITIONS



# ASSER LEVY PLAYGROUND

CONCEPTUAL DESIGN



# ASSER LEVY PLAYGROUND

## EXISTING CONDITIONS

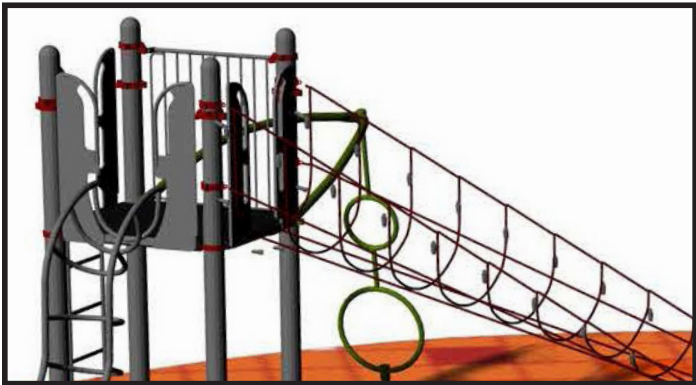


**ASSER LEVY PLAYGROUND**  
CONCEPTUAL DESIGN



# RESILIENT PLAYGROUND FEATURES

## SITE STRATEGY



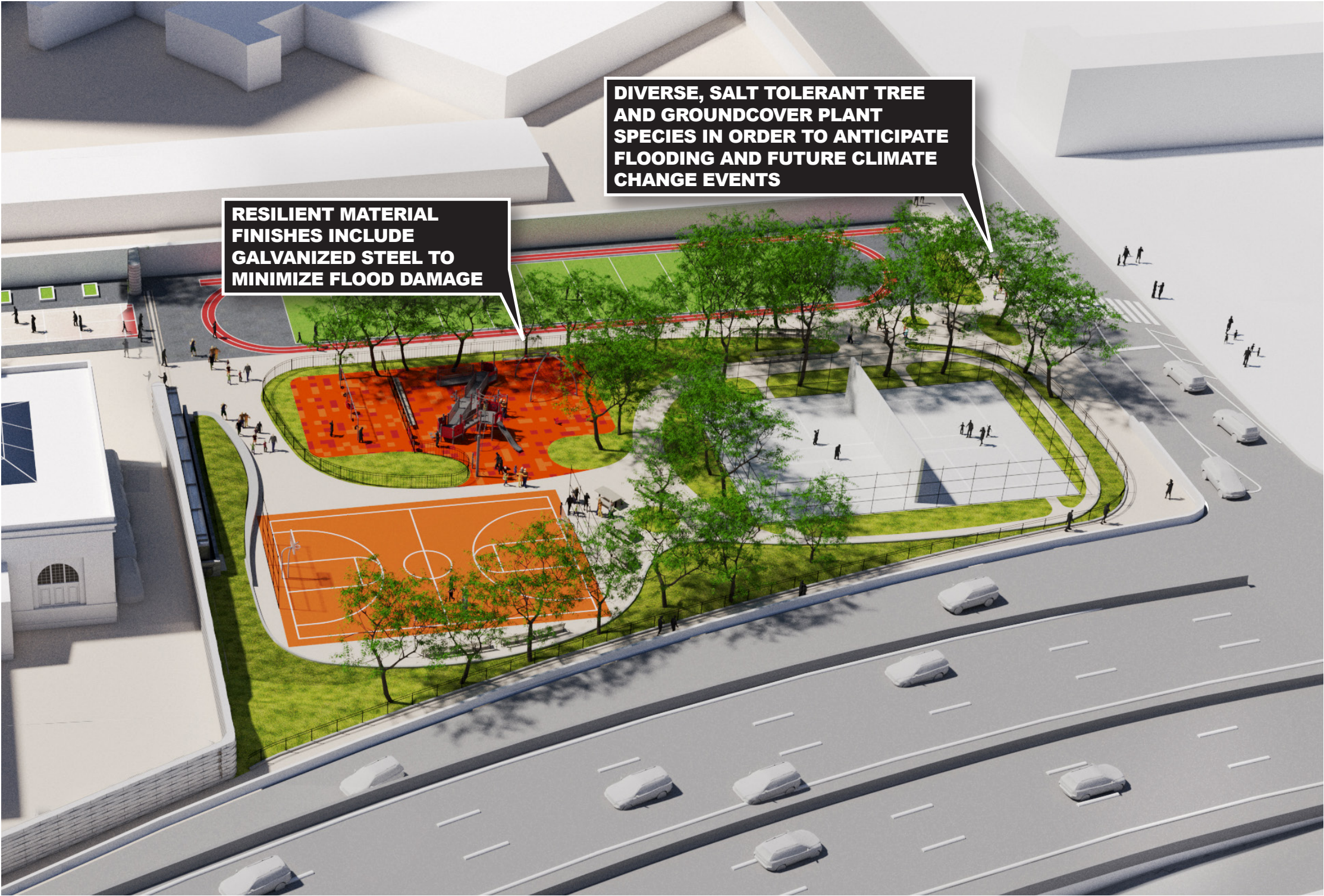
MATERIAL FINISHES



PLANTING



HARDSCAPE



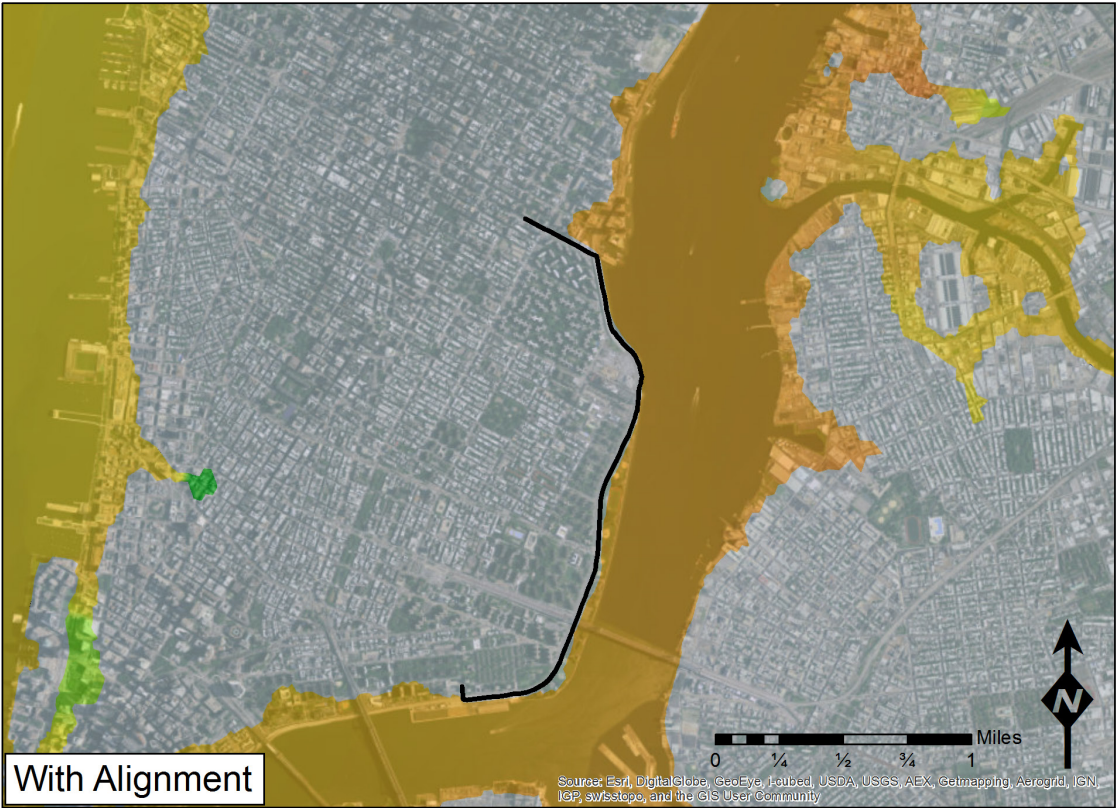
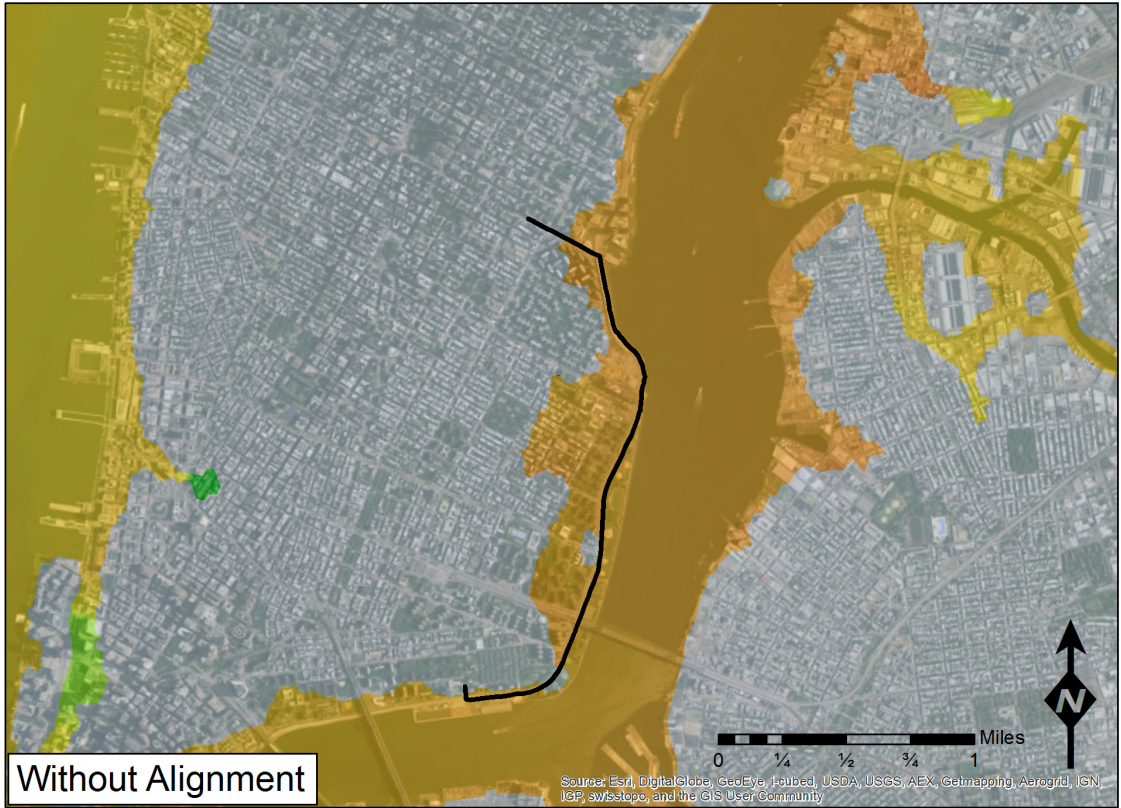
An aerial photograph of a city, likely New York City, showing a dense urban area with a large bridge crossing a body of water. The bridge has a suspension structure. Along the waterfront, there are several green spaces, including baseball fields and parks. The image is overlaid with a semi-transparent teal color.

# COASTAL STORM MODELING

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100 YEAR PEAK STORM TIDE - PRELIMINARY ANALYSIS

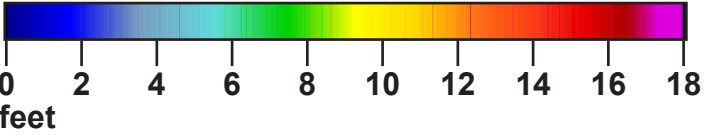
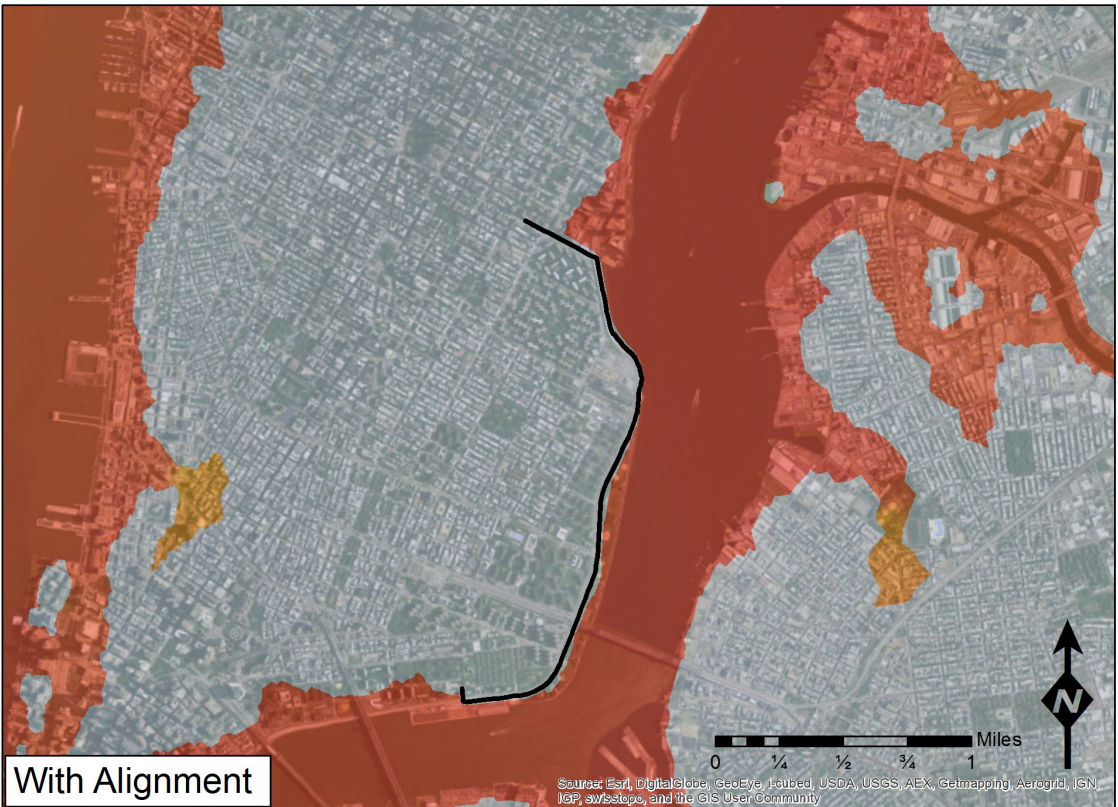
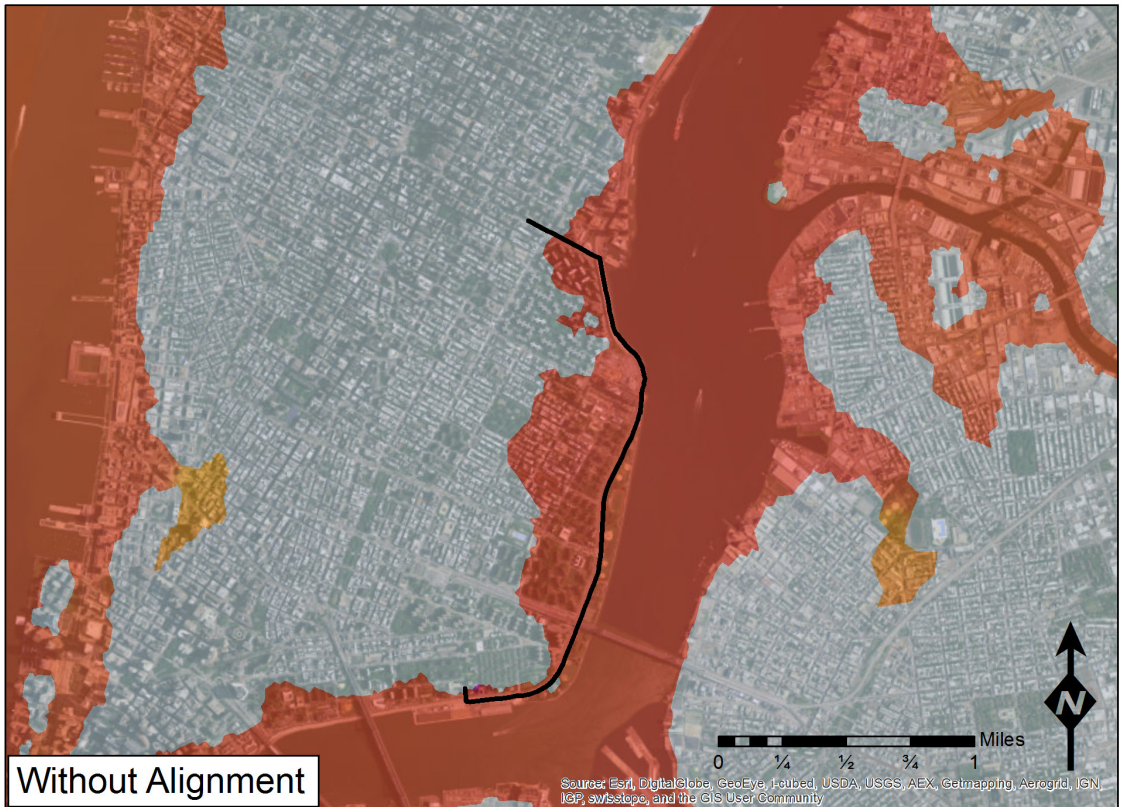
## CURRENT DAY (NO SEA LEVEL RISE)



## PRINCIPLE CONCLUSIONS

- Areas outside the ESCR Flood Protection System alignment would not experience any increase or decrease in peak storm tide elevations caused by the ESCR flood protection alignment, in both current or future conditions.
- The ESCR Flood Protection System would not increase flooding in the areas outside of the flood protection alignment.

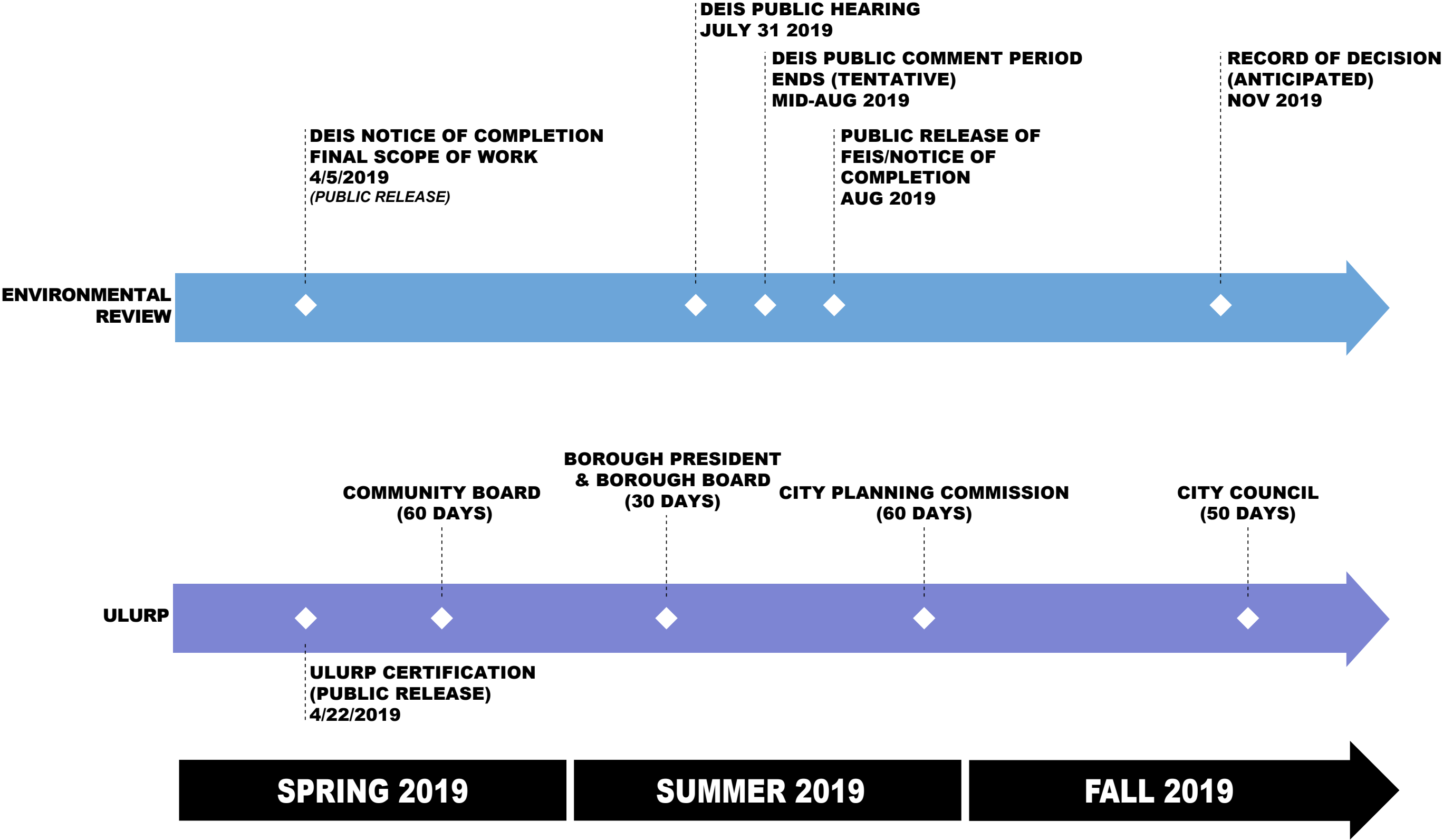
## WITH 2050s SEA LEVEL RISE



An aerial photograph of a city, likely New York City, showing a dense urban area with a grid of streets and buildings. A large bridge, possibly the Manhattan Bridge, spans a body of water. Along the waterfront, there are several green spaces, including baseball fields and parks. The image is overlaid with a semi-transparent teal color.

# ENVIRONMENTAL REVIEW

# ENVIRONMENTAL REVIEW SCHEDULE



# UNIFORM LAND USE REVIEW PROCEDURE (ULURP)

## PROPOSED ACTIONS

### ACQUISITIONS (EASEMENTS):

#### Project Area 1

- Gouverneur Gardens Cooperative
- East River Housing Corporation
- NYCHA (Riis Houses and Baruch Houses)

#### Project Area 2

- Con Edison - For Operations & Maintenance of the Flood Protection System
  - Con Edison Power Station
  - Con Edison Office and Parking Lot
- VA Medical Center - For Operations & Maintenance of the Flood Protection System
  - VA Hospital
- Captain Patrick J Brown Walk (NYSDOT) - For Construction of the Flyover Bridge

**A zoning text amendment is necessary to acknowledge compliance of the proposed design with the City's Waterfront Zoning regulations for a portion of the project area.**

**City Map change (anticipated at a later date) for the reconstruction of pedestrian bridges.**

# **ENVIRONMENTAL REVIEW STANDARDS**

## **COORDINATED ENVIRONMENTAL REVIEW UNDER 3 STATUTES:**

*Environmental Impact Statement (EIS) will satisfy requirements of all three statutes*

- National Environmental Policy Act (NEPA)
- State Environmental Quality Review Act (SEQRA)
- City Environmental Quality Review (CEQR)

## **LEAD AGENCIES:**

*Environmental review coordinated by head agencies, with cooperating, involved and interested Federal, State and City agencies*

- NEPA - NYC Office of Management and Budget
- SEQRA/CEQR - Department of Parks & Recreation

# **ALTERNATIVES ANALYZED IN THE DEIS**

**ALTERNATIVE 1:**    **No Action Alternative**

**ALTERNATIVE 2:**    **Flood Protection System on the West Side of East River Park –  
Baseline**

**ALTERNATIVE 3:**    **Flood Protection System on the West Side of East River Park –  
Enhanced Park and Access**

**ALTERNATIVE 4:**    **Flood Protection System with a Raised East River Park**  
**(Preferred Alternative)**

**ALTERNATIVE 5:**    **Flood Protection System East of FDR Drive**

# DEIS IMPACT ANALYSES OVERVIEW

## DEIS CONSTRUCTION ANALYSES:

- Socioeconomics
- Open Space\*\*
- Historic and Cultural Resources
- Urban Design and Visual Resources (views)
- Natural Resources
- Hazardous Materials
- Water and Sewer Infrastructure
- Energy
- Transportation\*
- Air Quality
- Greenhouse Gas
- Noise\*\*
- Public Health

*\*Potential For Significant Adverse Impacts*

*\*\*Unavoidable*

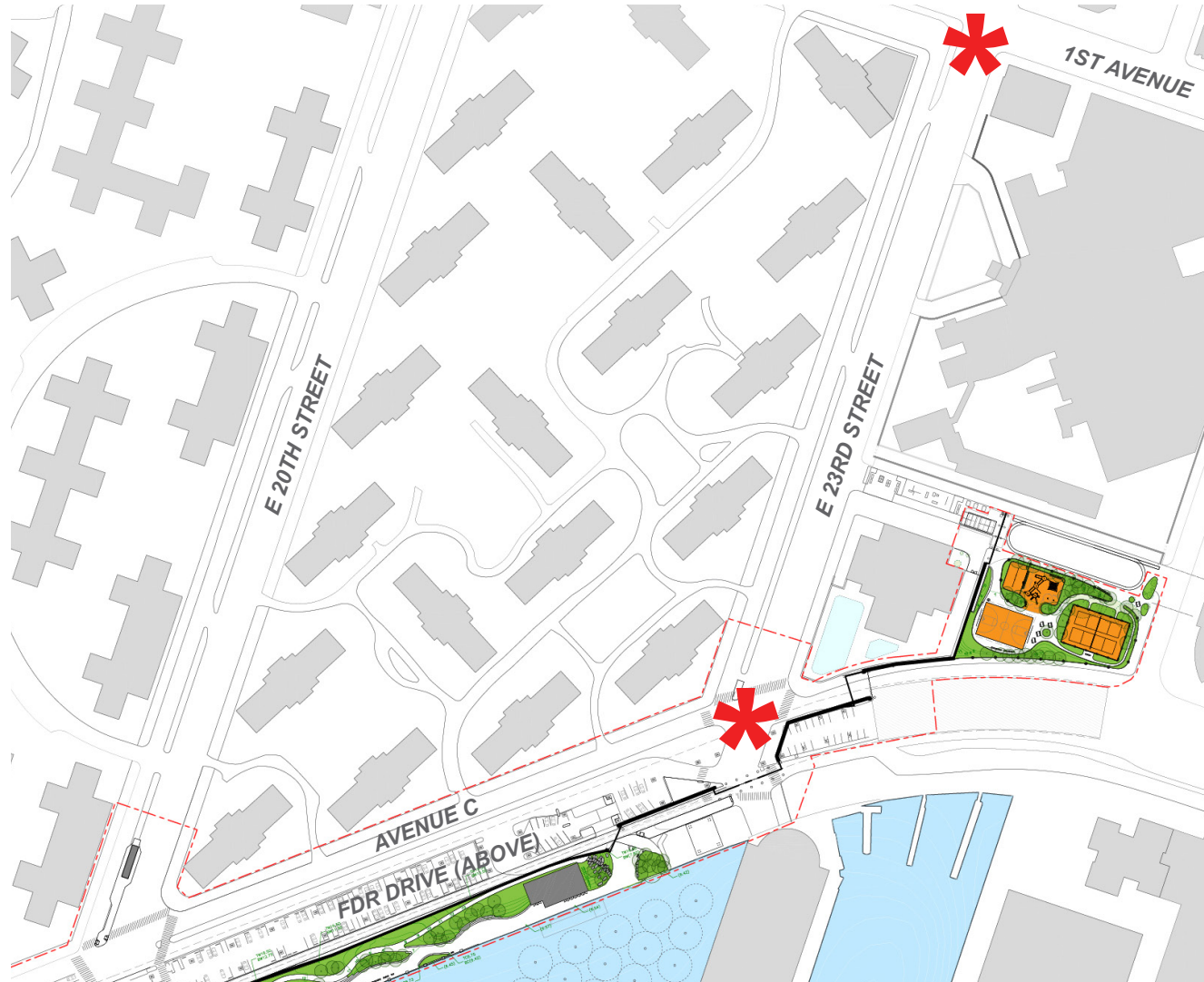
## DEIS OPERATIONAL ANALYSES:

- Land Use, Zoning, and Public Policy
- Socioeconomics
- Open Space
- Historic and Cultural Resources
- Urban Design and Visual Resources (views)\*\*
- Natural Resources
- Hazardous Materials
- Water and Sewer Infrastructure
- Transportation
- Neighborhood Character
- Environmental Justice

# DEIS - CONSTRUCTION PERIOD EFFECTS

## PROJECT AREA 2 - ANALYSES, ASSUMPTIONS AND RESULTS

### TRANSPORTATION

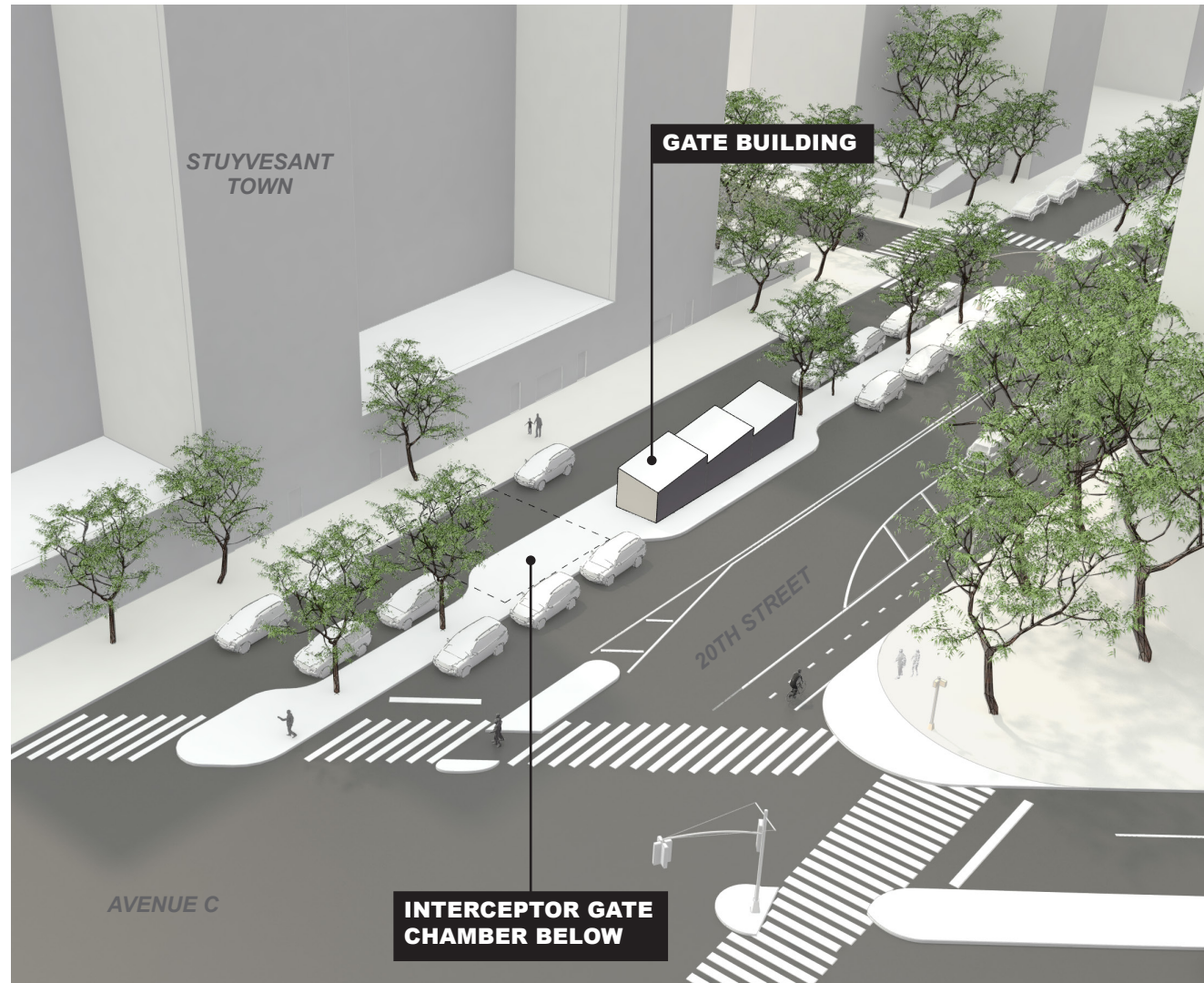


- Traffic impacts during construction identified at the following intersections (and effects could be fully mitigated with signal timing changes):
  - East 23rd Street and First Avenue
  - East 23rd Street and Avenue C
- Maintenance and Protection of Traffic (MPT) Plans are being developed to ensure safety of the public and maintenance of traffic flow during construction

# DEIS - CONSTRUCTION PERIOD EFFECTS

## PROJECT AREA 2 - ANALYSES, ASSUMPTIONS AND RESULTS

### NORTH INTERCEPTOR GATE CHAMBER AND BUILDING

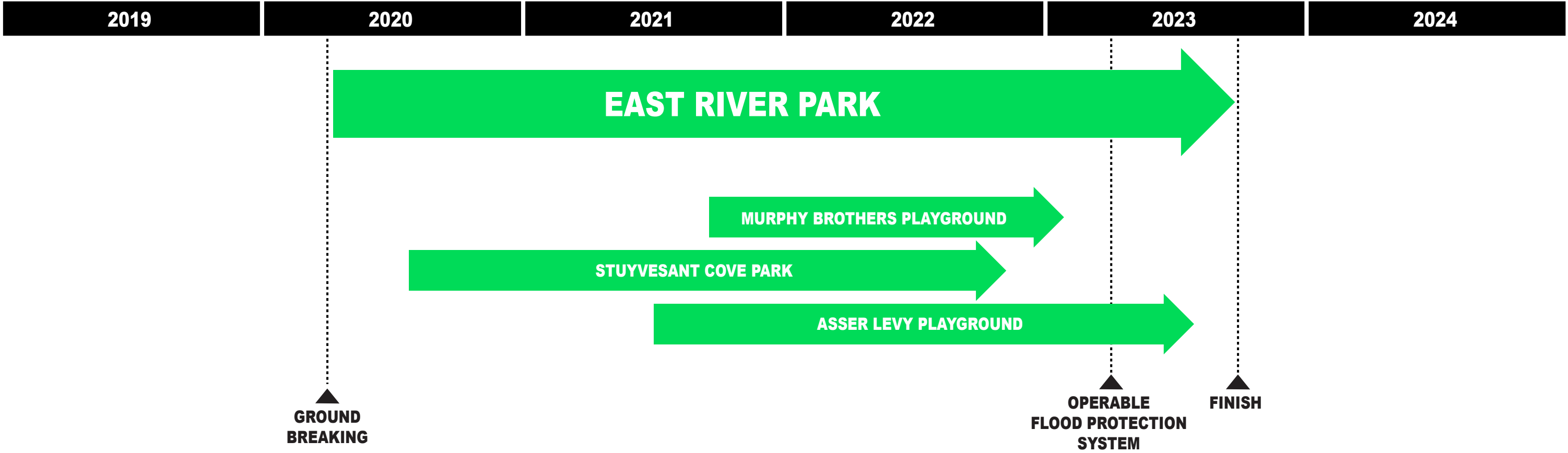


- 20th Street Gate/Gate House construction is anticipated to last for approximately 1 year
- Approximately 11 parking spaces could be lost on East 20th Street during construction and completion of the Interceptor Gate House
- Potential air emission reduction measures include fugitive dust suppression program and an Air Emission Reduction Program (e.g. fuel and idling restrictions)
- Potential construction noise mitigation measures include specifying use of quieter equipment models or methods, as well as use of noise barriers and equipment enclosures
- Preliminary staging areas include existing parking areas under the FDR Drive and the median on East 20th Street

# DEIS - CONSTRUCTION PERIOD EFFECTS

PROJECT AREA 2 - ANALYSES, ASSUMPTIONS AND RESULTS

## OPEN SPACES:



*Note: Pedestrian access to Solar One will be maintained during construction, ferry service will be maintained*

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# NEXT STEPS

## PROJECT GOALS & ORIGIN

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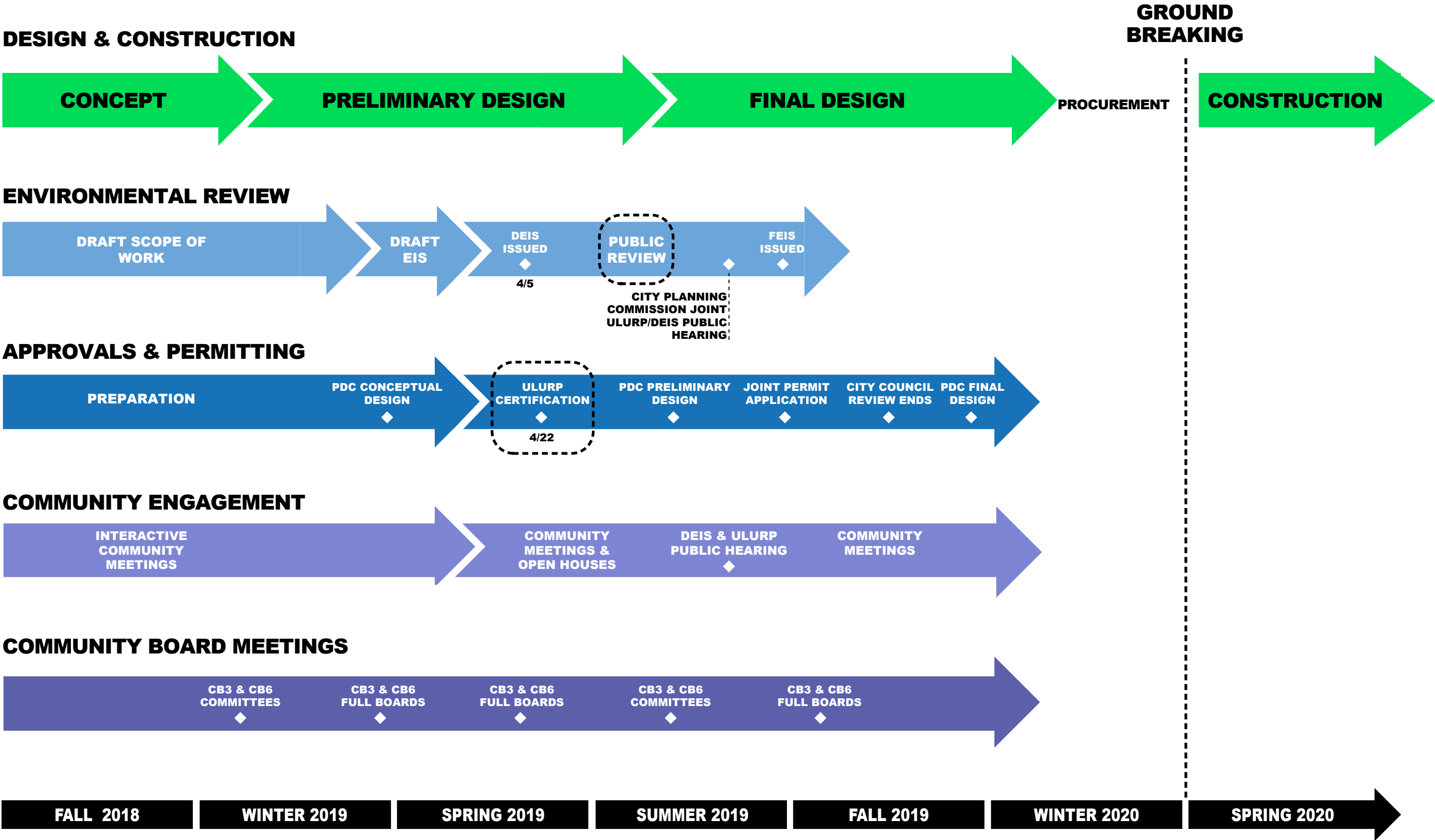
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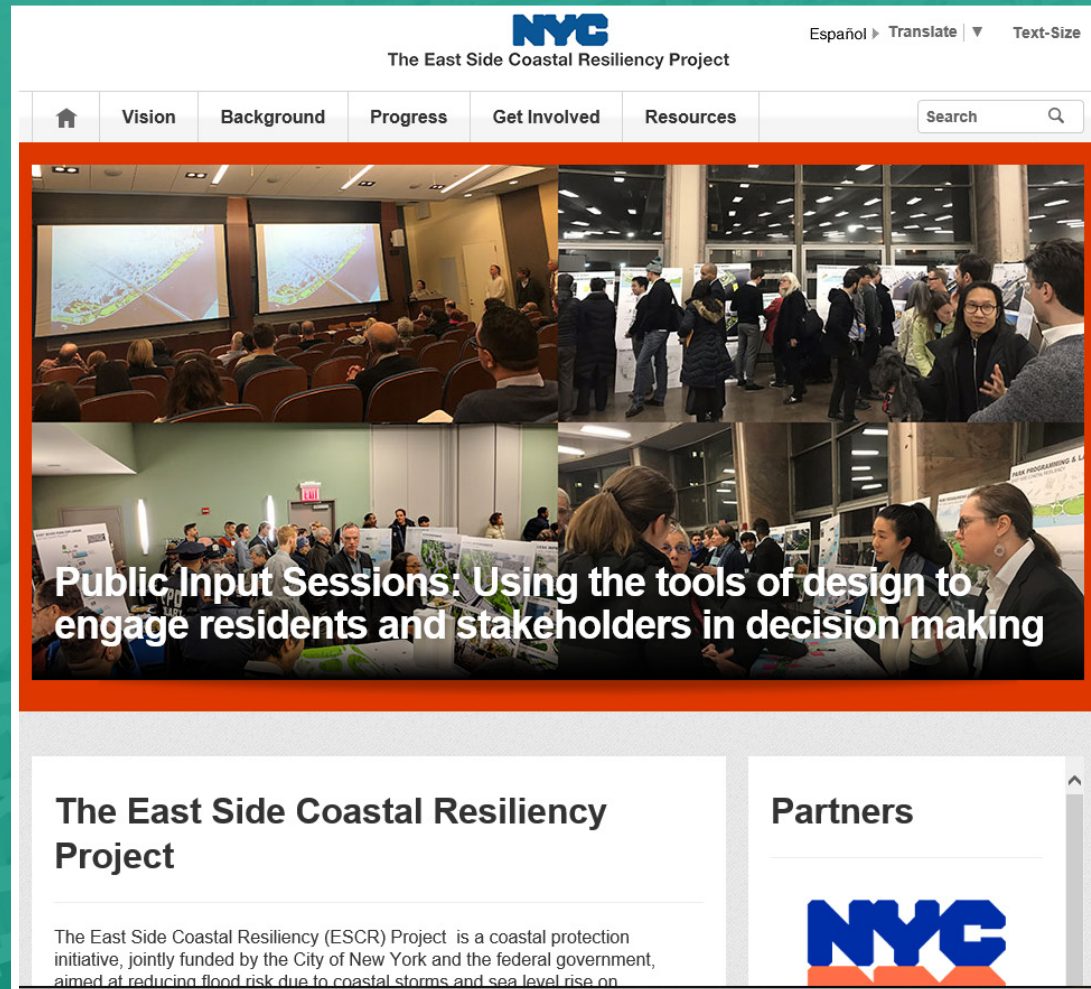
**Respond quickly to the urgent need for increased flood protection and resiliency.**



# NEXT STEPS: DESIGN AND ENGAGEMENT PROCESS



# Website



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