

# **SOUTH BATTERY PARK CITY RESILIENCY**

## COMMUNITY ENGAGEMENT PUBLIC MEETING #3

June 24, 2019

# AGENDA

## Kick Off – Heather Morgan (AECOM)

## Wagner Park Conceptual Designs

Landscape Architecture – Gonzalo Cruz (AECOM)

Civil Design – Matt Jones (MKA)

Architecture – Tom Phifer and Gabriel Smith (Thomas Phifer & Partners)

## Wagner Park Q&A from 6:45 – 7:15

## Museum of Jewish Heritage Conceptual Designs

Structural Engineering – Louis Diaz (AECOM)

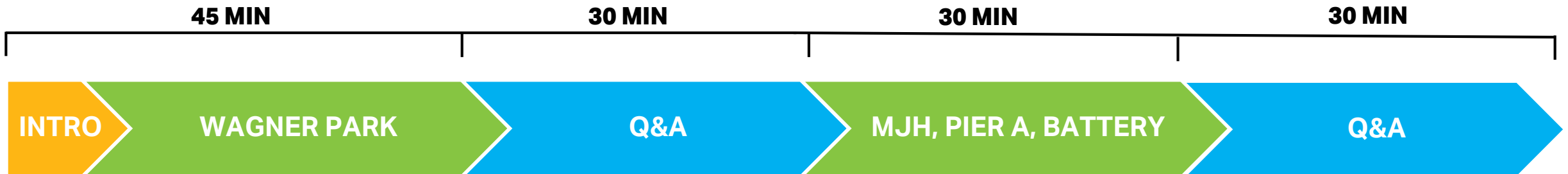
## Pier A Plaza Conceptual Designs

Landscape Architecture – Gonzalo Cruz (AECOM)

## Battery Park Bike Segment Conceptual Designs

Landscape Architecture – Gonzalo Cruz (AECOM)

## Overall Q&A from 7:45 – 8:15



# YOUR TEAM | PRESENTERS



**PRESENTER**

**HEATHER MORGAN, RLA**  
**AECOM**  
PROJECT MANAGER



**PRESENTER**

**GONZALO CRUZ**  
**AECOM**  
LANDSCAPE  
ARCHITECTURE + URBAN  
DESIGN



**PRESENTER**

**MATT JONES**  
**MAGNUSSON KLEMENCIC**  
**ASSOCIATES**  
CIVIL ENGINEERING



**PRESENTER**

**GABRIEL SMITH**  
**THOMAS PHIFER &**  
**PARTNERS**  
ARCHITECTURE



**PRESENTER**

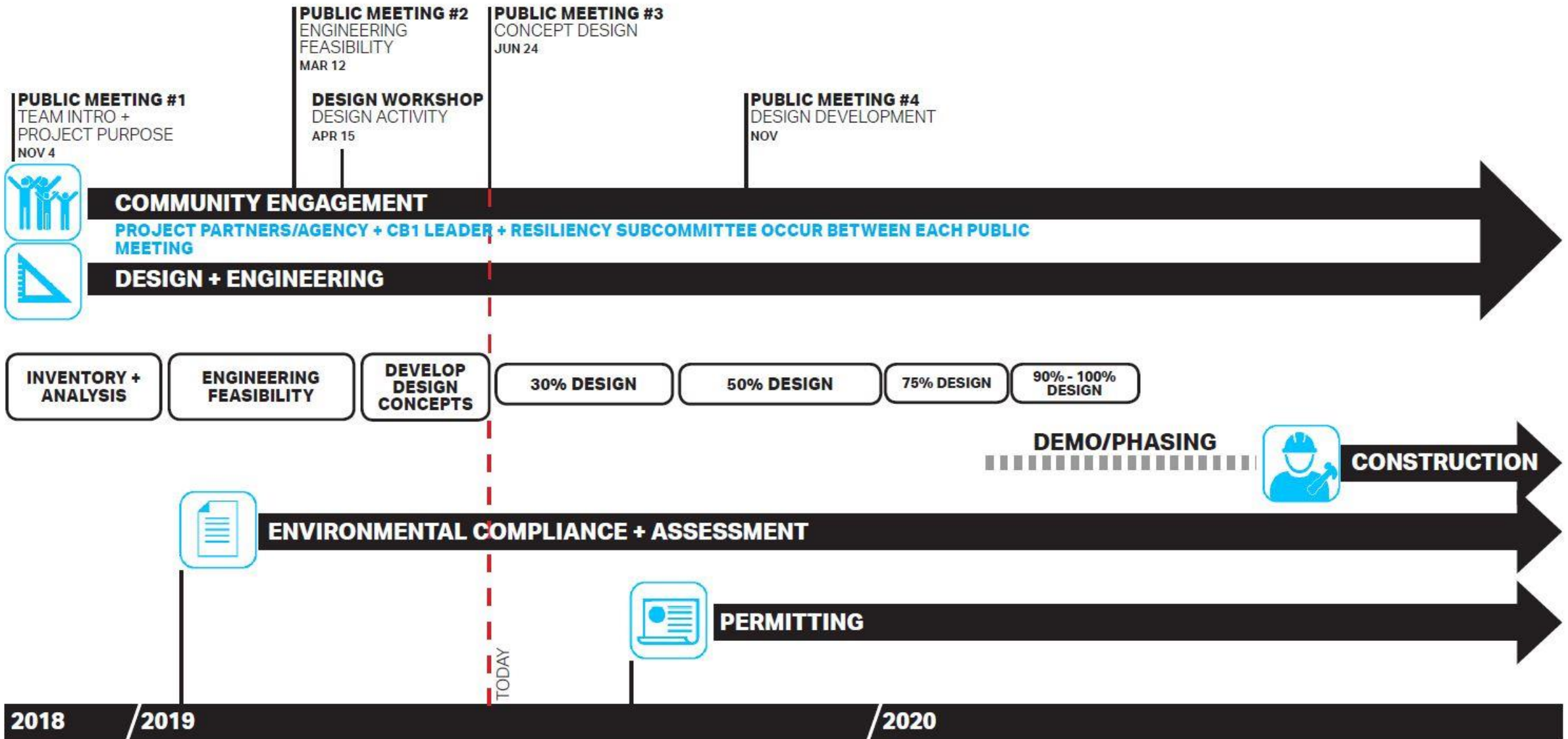
**THOMAS PHIFER**  
**THOMAS PHIFER &**  
**PARTNERS**  
ARCHITECTURE



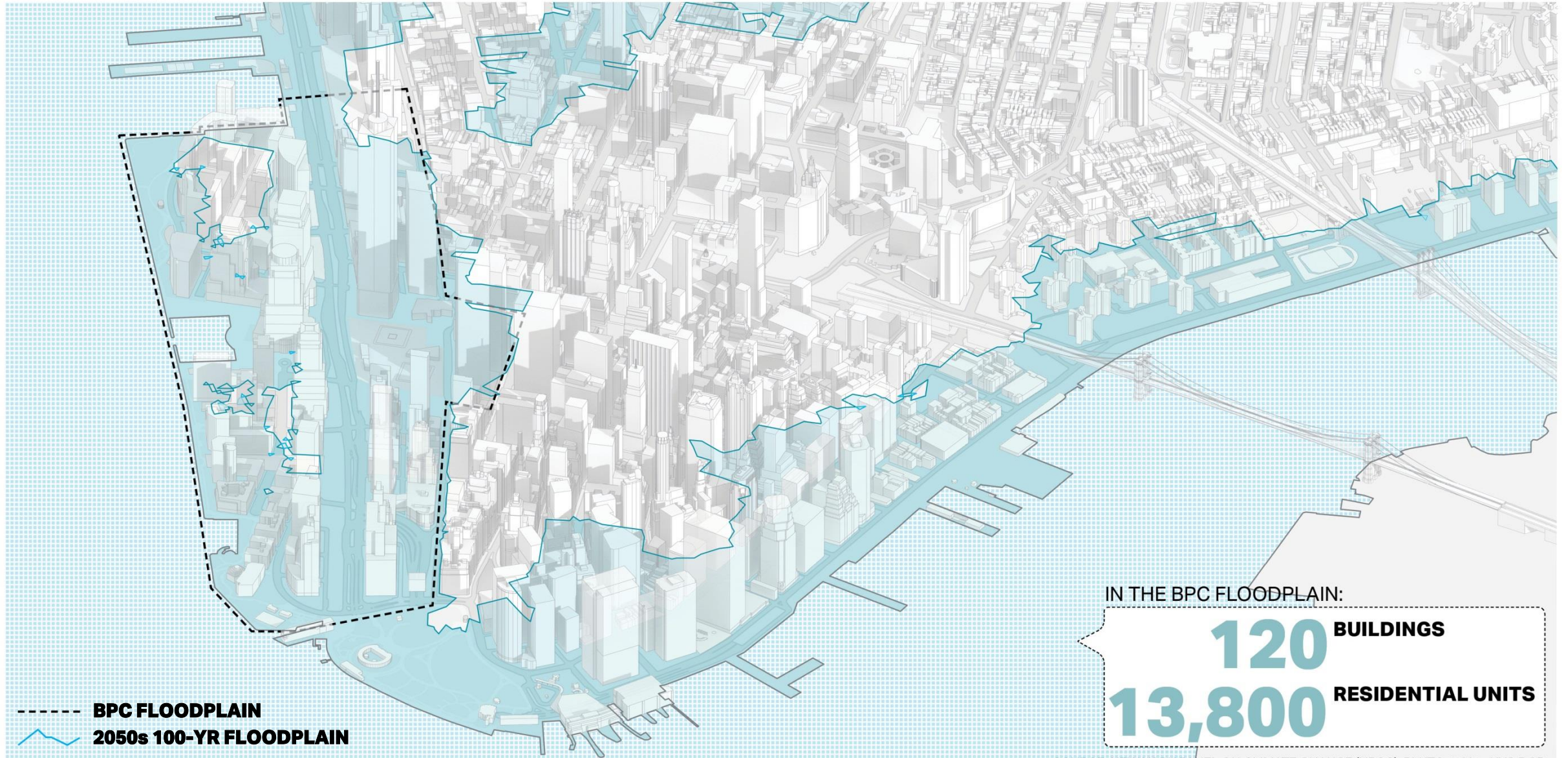
**PRESENTER**

**LOUIS DIAZ**  
**AECOM**  
STRUCTURAL ENGINEERING

# PROJECT MILESTONES



# 2050s 100-YEAR STORM



IN THE BPC FLOODPLAIN:

**120** BUILDINGS  
**13,800** RESIDENTIAL UNITS

--- BPC FLOODPLAIN  
— 2050s 100-YR FLOODPLAIN

SOURCE: NEW YORK PANEL ON CLIMATE CHANGE (NPCC), PLUTO 16V1 - NYC DCP

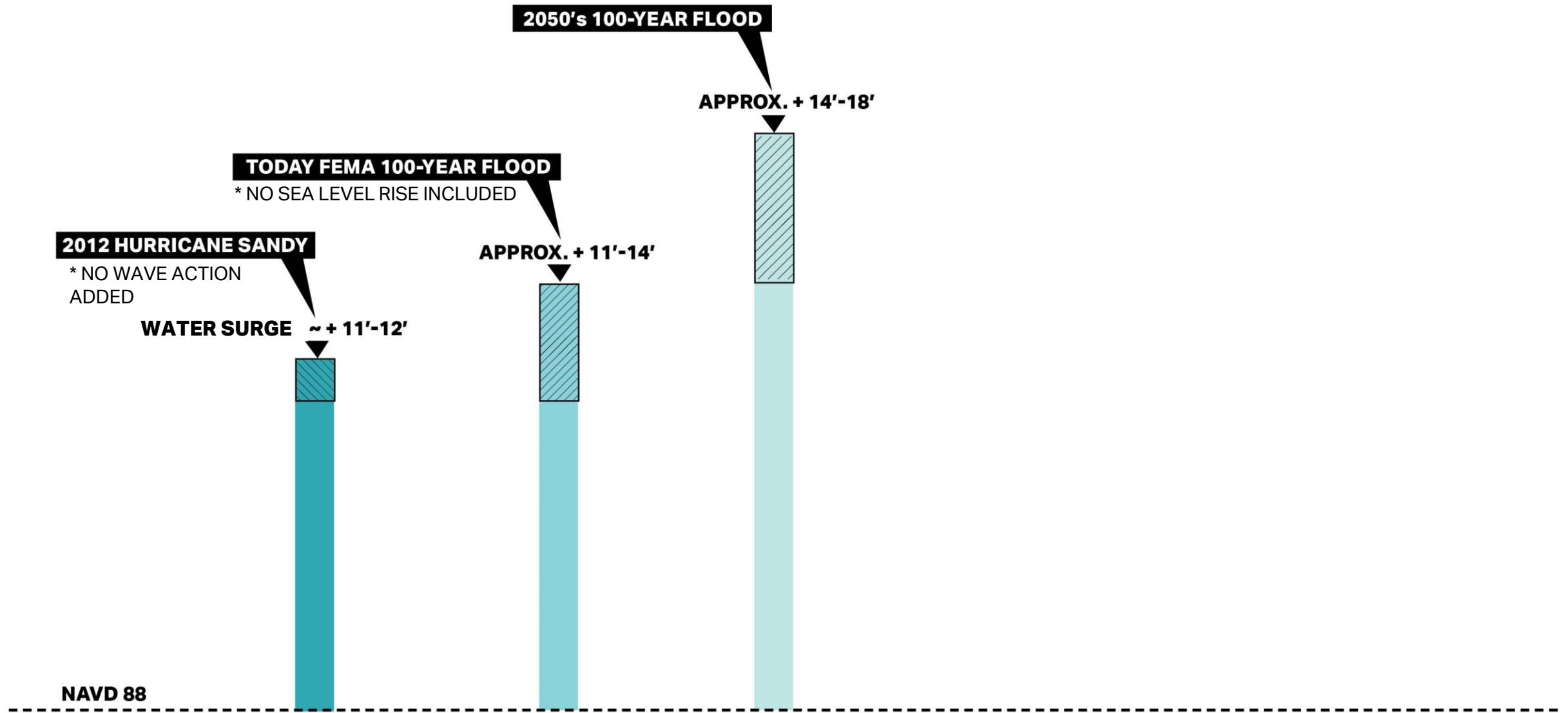


Battery Park  
City Authority

Conceptual Design | June 24<sup>th</sup> 2019



# DESIGN FLOOD ELEVATION (DFE) COMPARISON



NAVD 88

\* 2050 DFE TO BE VERIFIED WITH TOPO

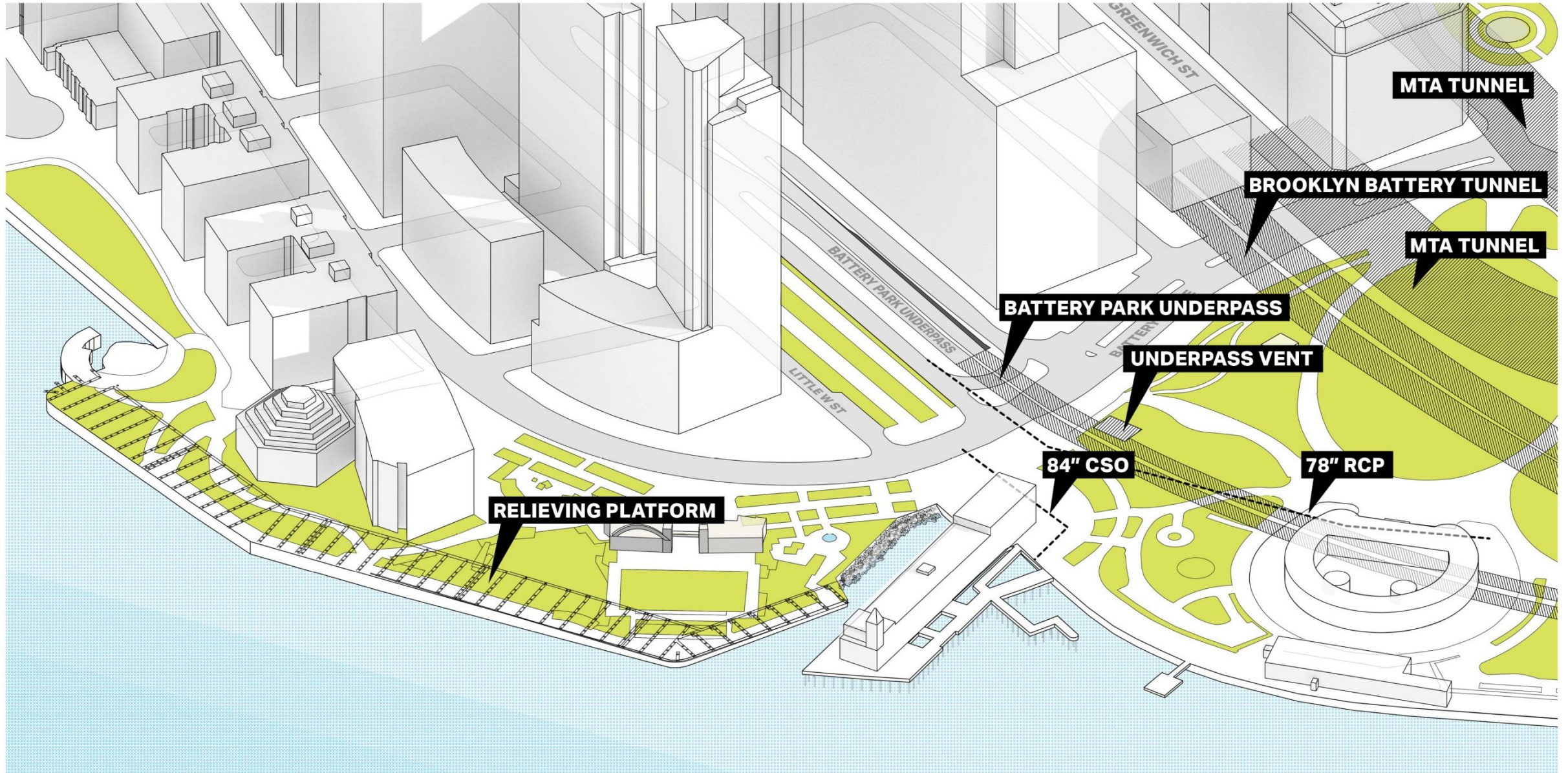


Battery Park  
City Authority

Conceptual Design | June 24<sup>th</sup> 2019



# SUBSURFACE



# HOW WE GOT HERE

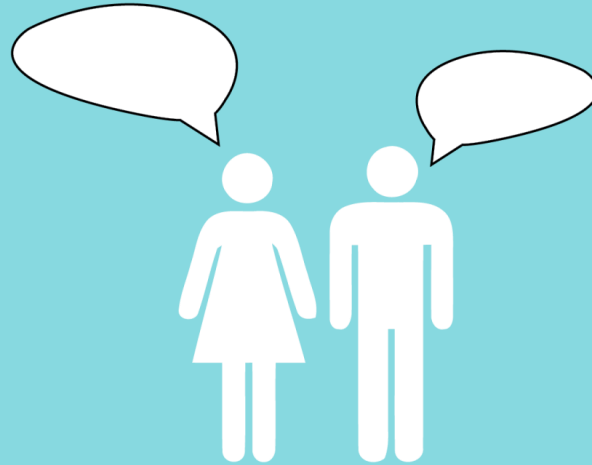
- Resiliency is the driver
- Balance of Decisions (this continues)
- Engineering Feasibility / Preferred Alignment Location
- Priority Programming and Design Excellence follow
- Design Legacy Maintained
- Sustainability
- Determination of existing pavilion



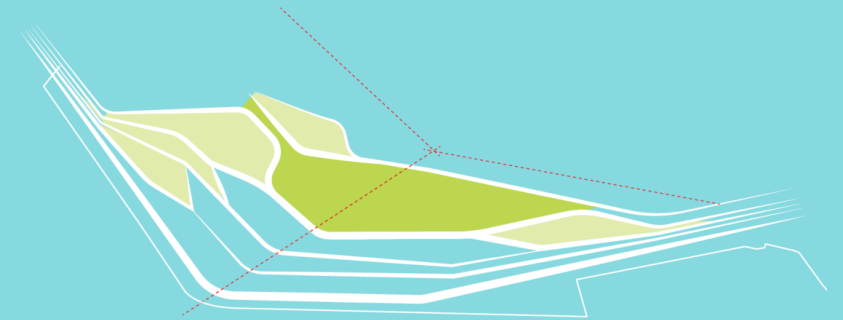
# CONCEPTUAL DESIGN PROCESS



ENGINEERING + FEASIBILITY



PUBLIC + USER GROUP INPUT



CONCEPTUAL DESIGN STUDIES

# UNDERSTANDING THE CONCEPTS (all has to fit...)

- Raising the contours to meet DFEs and HOIs
- Retaining Preferred Alignment Location
  - 1) Effective
  - 2) Passive
  - 3) Deployables where only necessary
- New Building Location = Pushed back to maximize park space
- Retaining Current Priority Programming
- Fitting Future Priority Programming
- Maintaining Design Legacy
- Design Excellence
- Sustainability
  - a) Low carbon, water & energy conservation, enhanced ecological habitats
  - b) Exploring High Performance Certs: LEED, Living Building Challenge, SITES and WEDG
- Universal Access

# UNDERSTANDING THE CONCEPTS

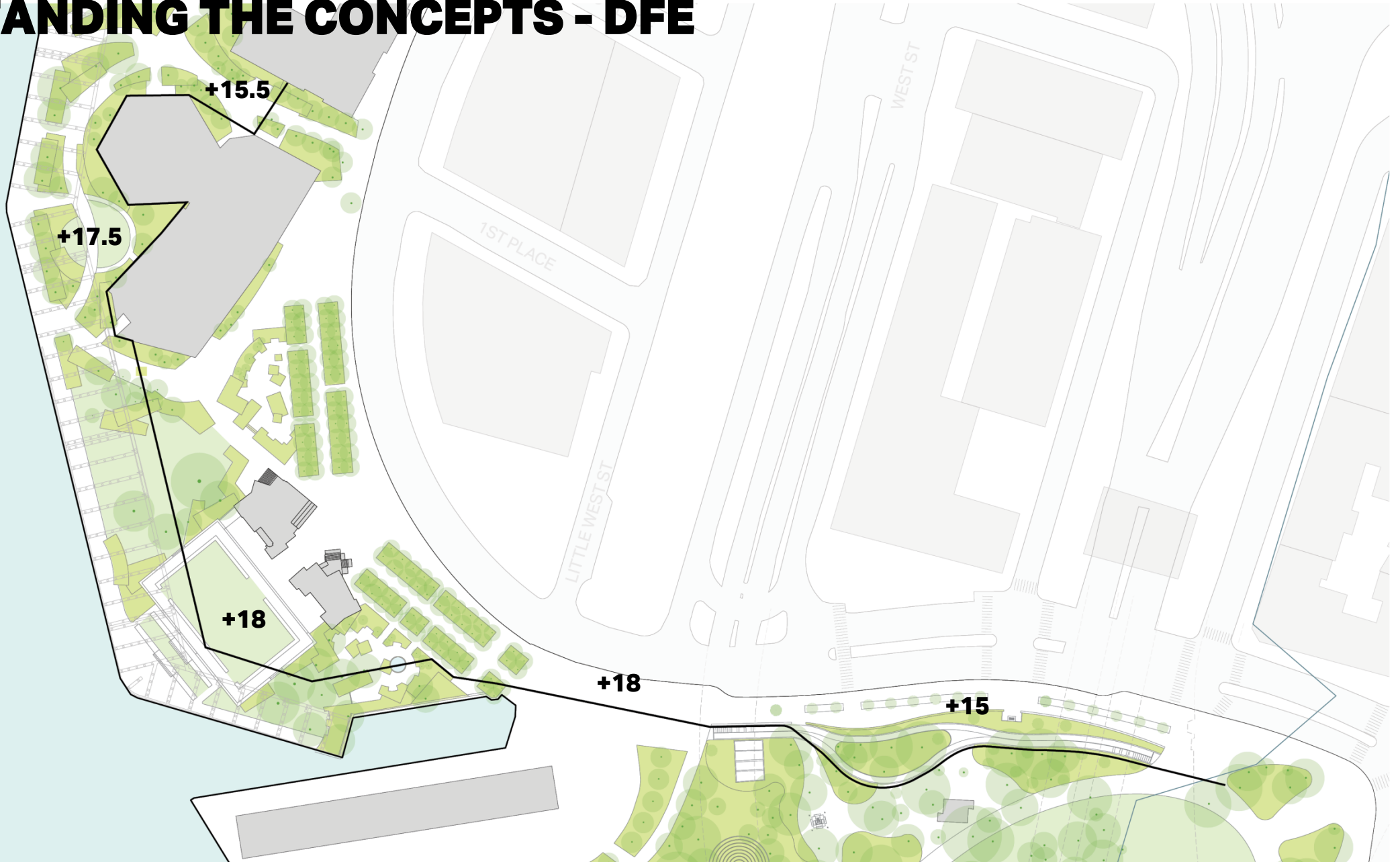
**MUSEUM OF JEWISH HERITAGE**

**WAGNER PARK**

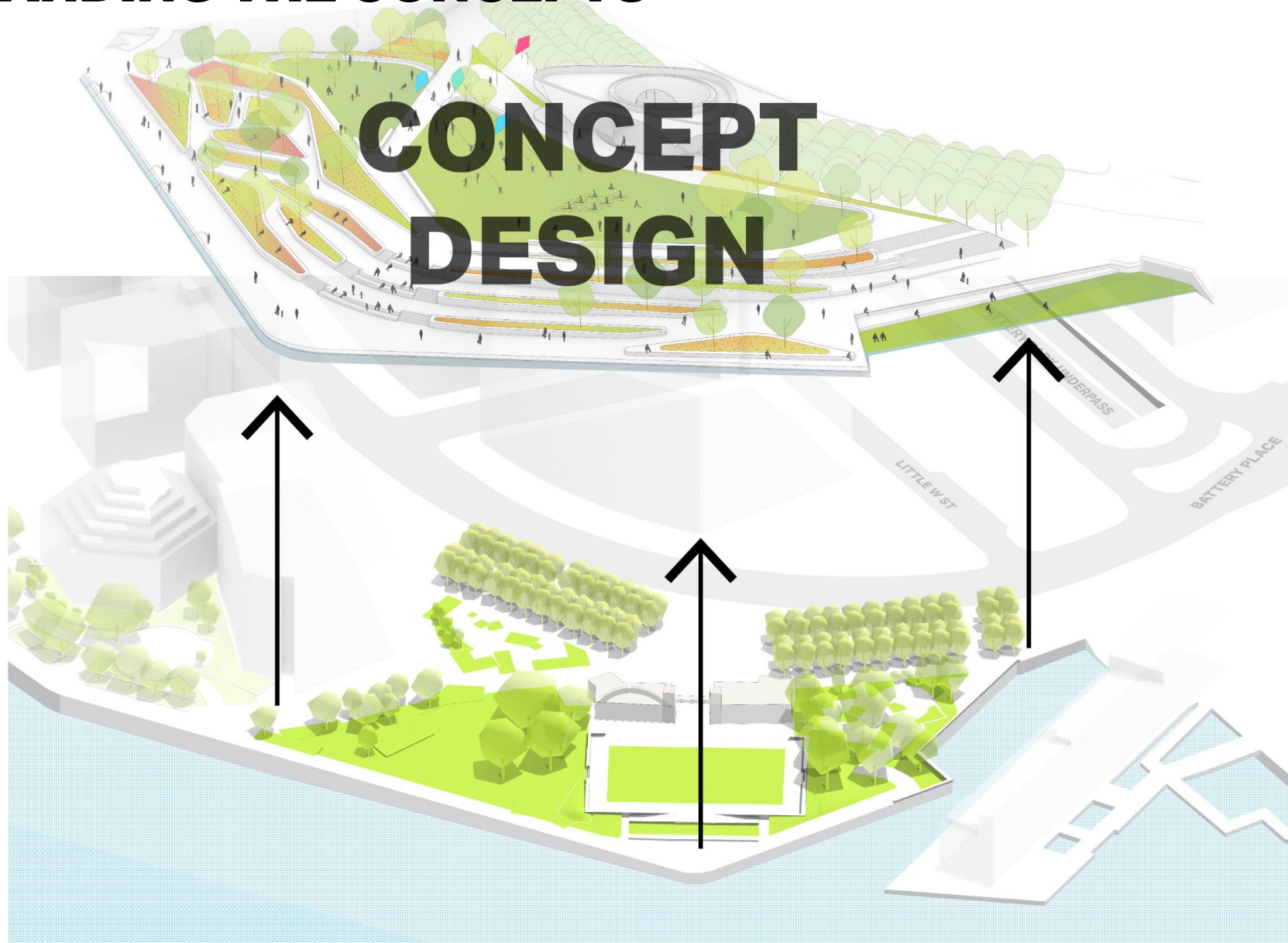
**PIER A PLAZA**

**THE BATTERY**

# UNDERSTANDING THE CONCEPTS - DFE

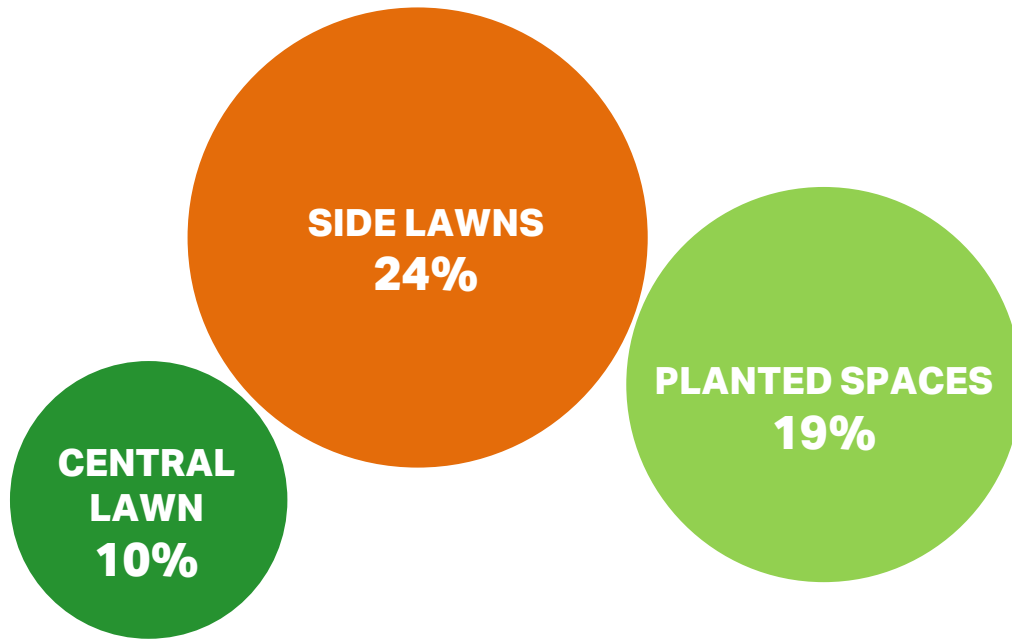


# UNDERSTANDING THE CONCEPTS

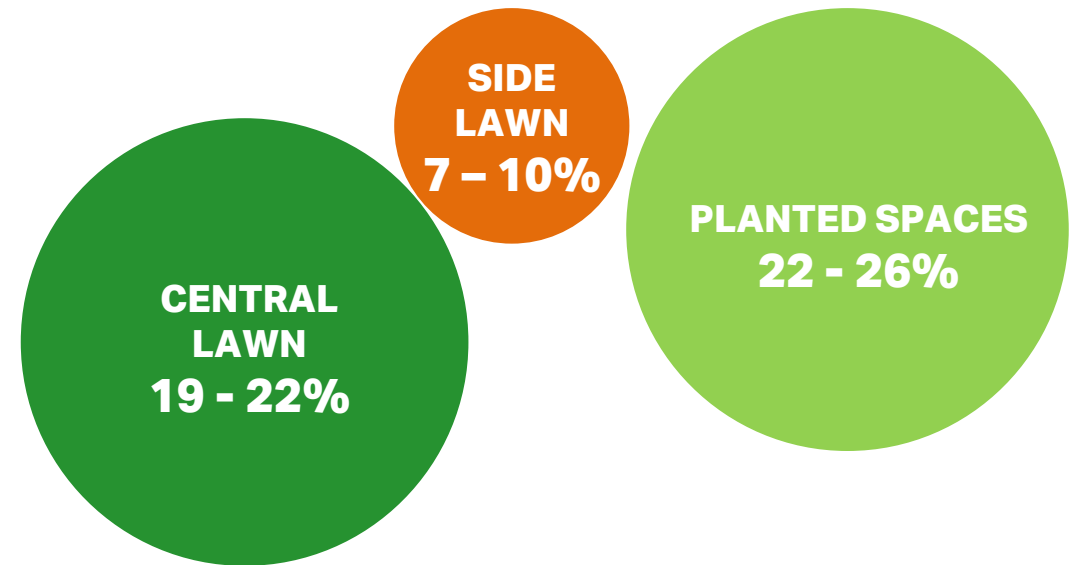


# UNDERSTANDING THE FOOTPRINT

## EXISTING WAGNER PARK



## PROPOSED WAGNER PARK



**EXISTING AND PROPOSED WAGNER PARK HARDSCAPE REMAINS APPROXIMATELY THE SAME (50%)**

**WAGNER PARK**

**MUSEUM OF JEWISH HERITAGE**

**PIER A**

**THE BATTERY**

# WAGNER PARK





# BATTERY PARK CITY HAS LONG BEEN A MODEL FOR PUBLIC OPEN SPACE

IMAGE SOURCE: BPCA



# A WATERFRONT FOR LEISURE



# PARKS WITH EXPERIENCIAL QUALITIES



# A NEIGHBORHOOD DESTINATION

# OUR CHALLENGE...



# CLIMATE CHANGE + SEA LEVEL RISE



# AN ONGOING NEGOTIATION BETWEEN LAND AND WATER

An aerial, black and white photograph of Lower Manhattan, New York City. The image shows a dense grid of skyscrapers and buildings. In the foreground, the waterfront area is visible, featuring several large industrial buildings and a pier with several ships docked. One prominent ship has the text 'GREAT WHITE FLEET UNITED FRUIT CO.' on its side. The Hudson River is visible on the right side of the image. The overall scene depicts a bustling urban environment with a mix of commercial and industrial structures.

# BUT...BATTERY PARK CITY IS A MODEL FOR GROWTH + ADAPTATION



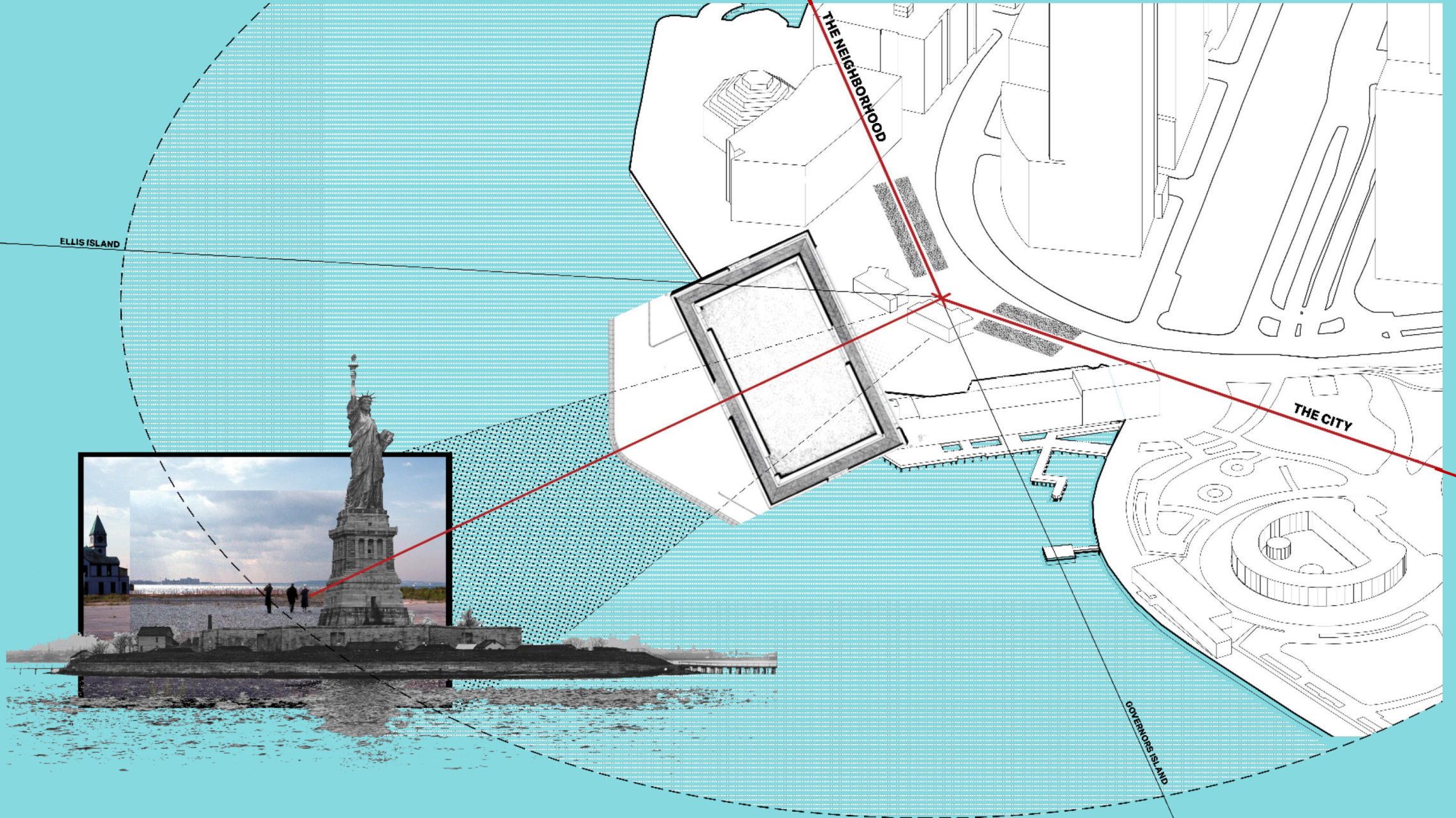


IMAGE SOURCE: NYT



# A LEGACY DESIGN

IMAGE SOURCE: LAURIE  
OLIN





# HOW DO COMMUNITY, LEGACY, AND CLIMATE ADAPTATION CO-EXIST?



# 5 KEY DESIGN PRINCIPLES:

**1. MAXIMIZE PROTECTED AREA**

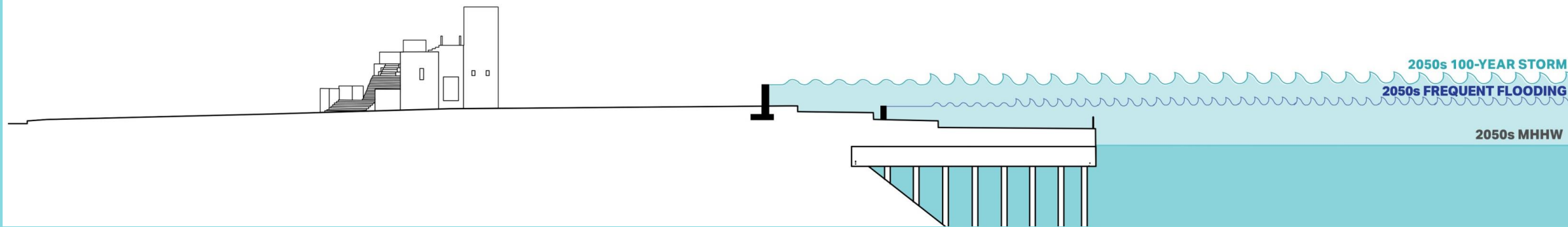
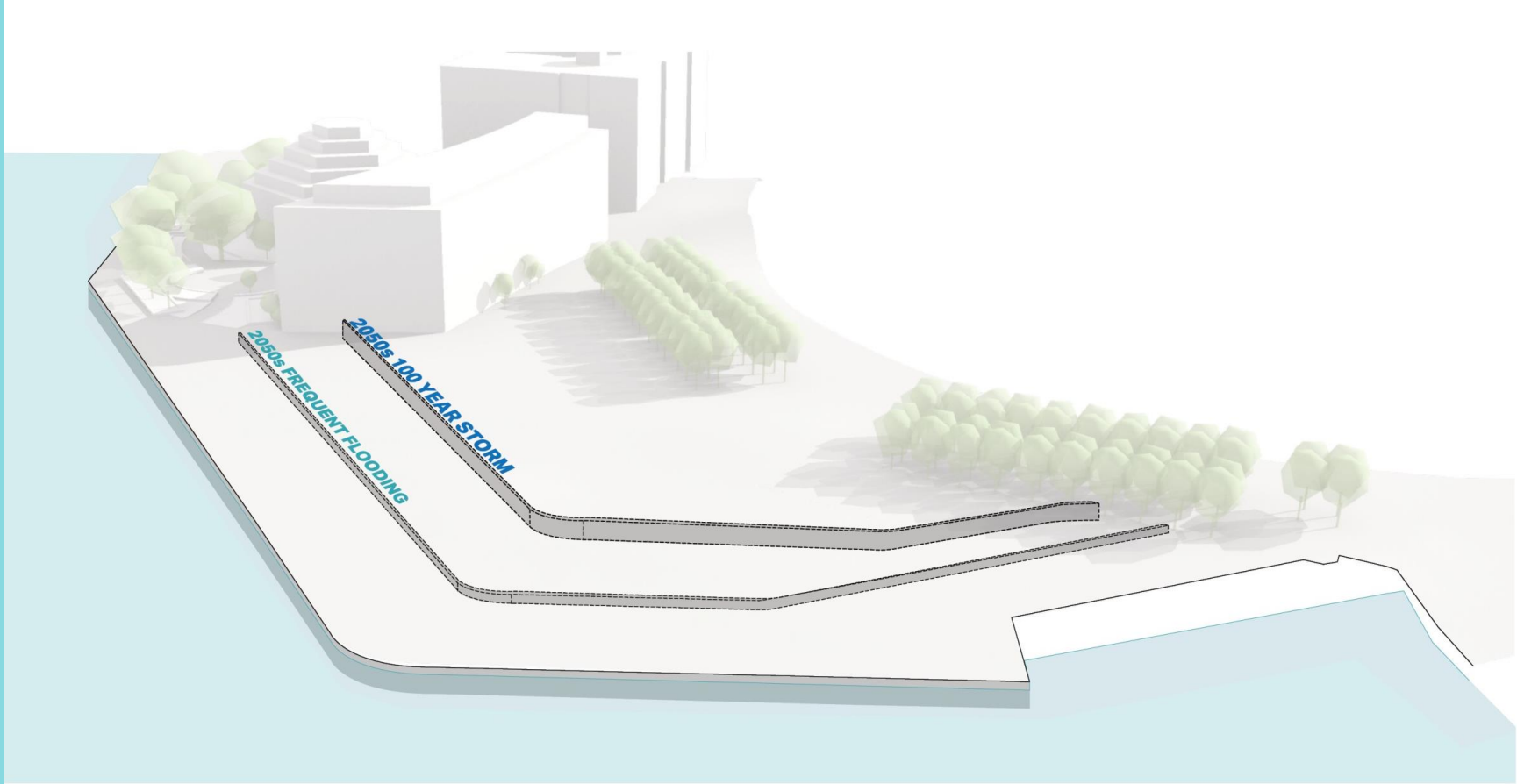
**2. MAXIMIZE PUBLIC SPACE**

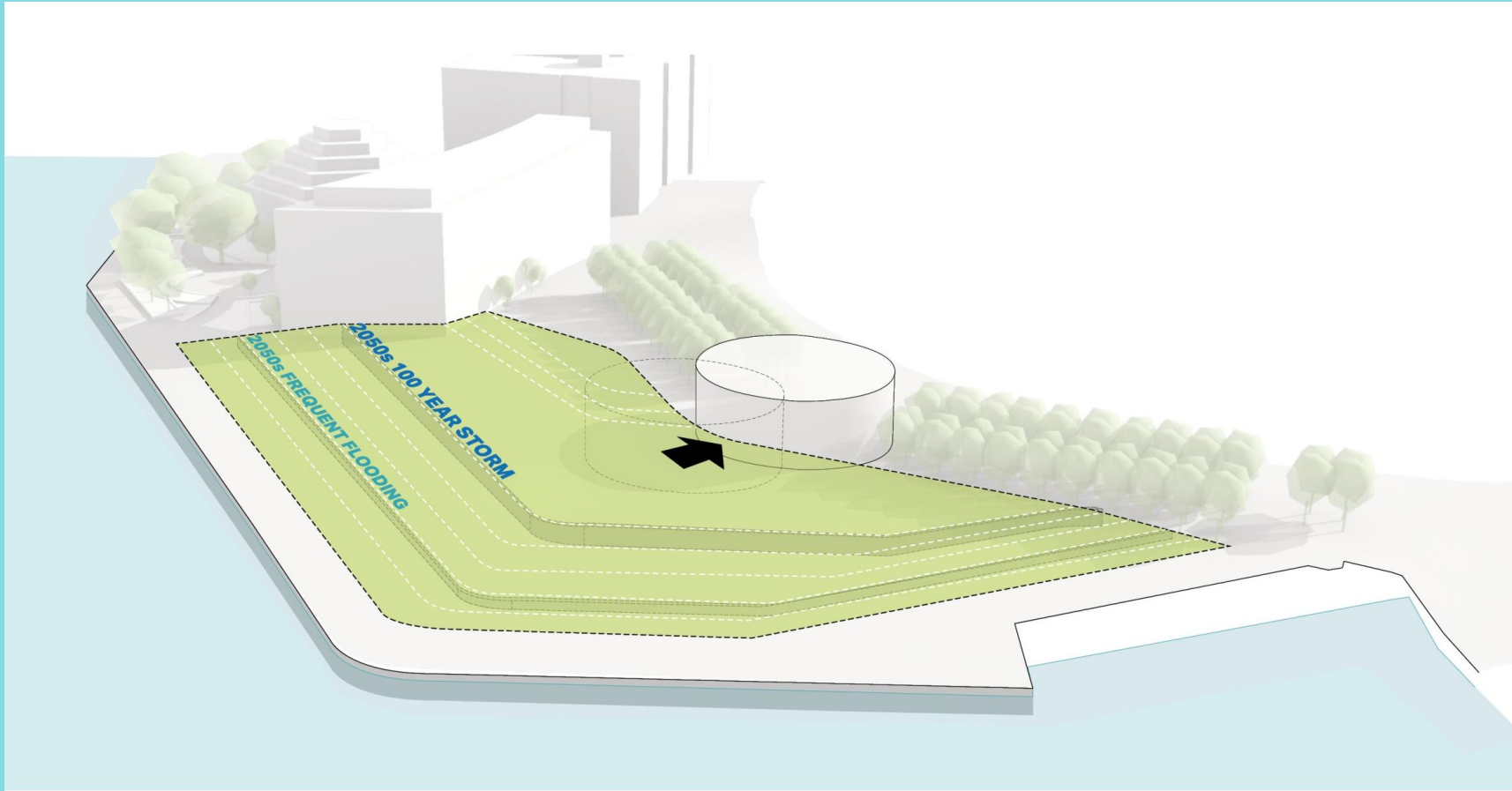
**3. MAINTAIN DESIGN LEGACY**

**4. MAINTAIN VIEWS AND ACCESS TO WATERFRONT**

**5. CREATE AN ADAPTABLE SITE**

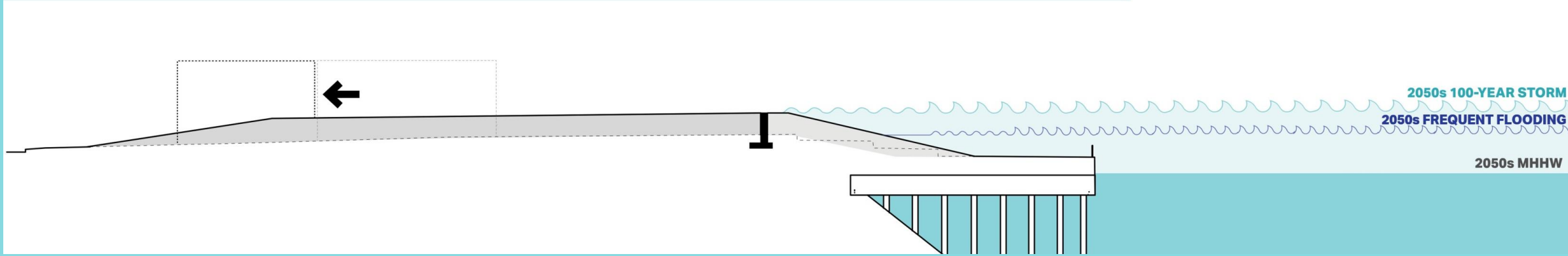
**1 MAXIMIZE PROTECTED AREA**

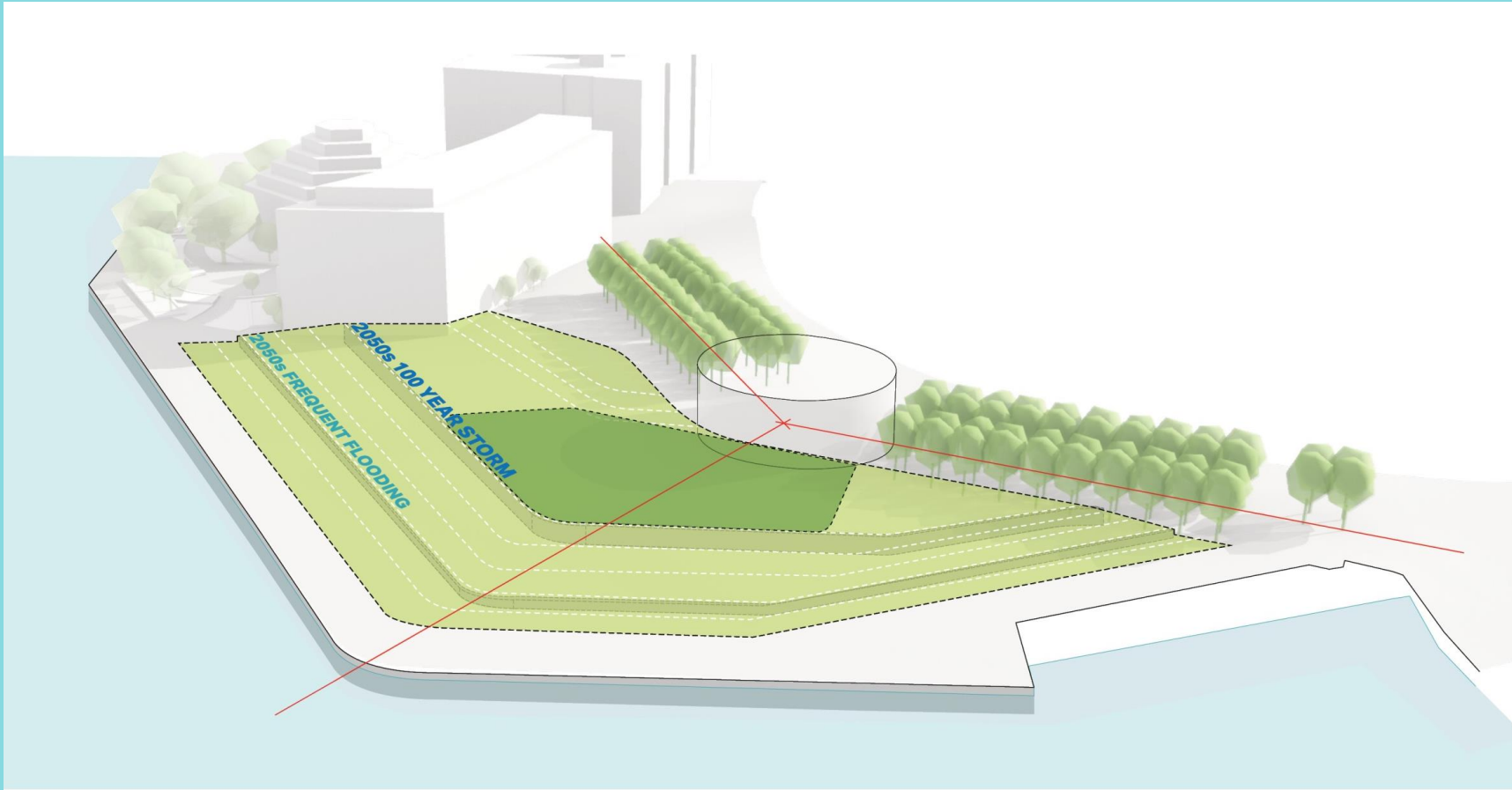




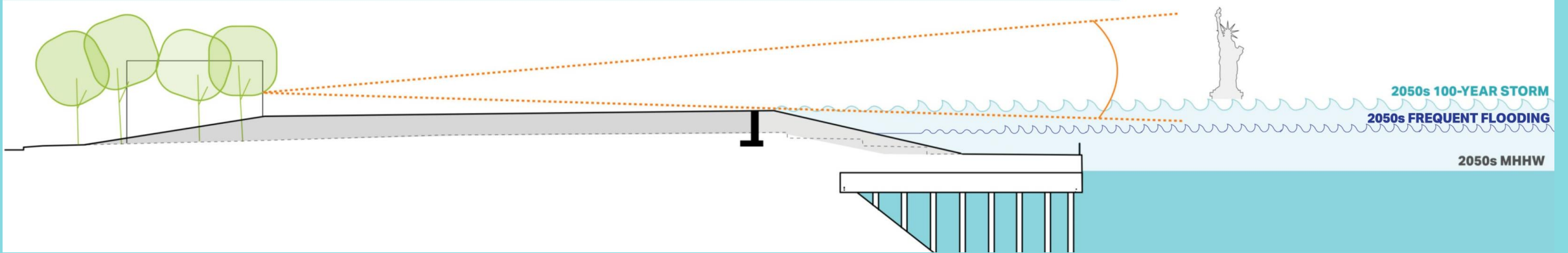
**1 MAXIMIZE PROTECTED AREA**

**2 MAXIMIZE PUBLIC SPACE**

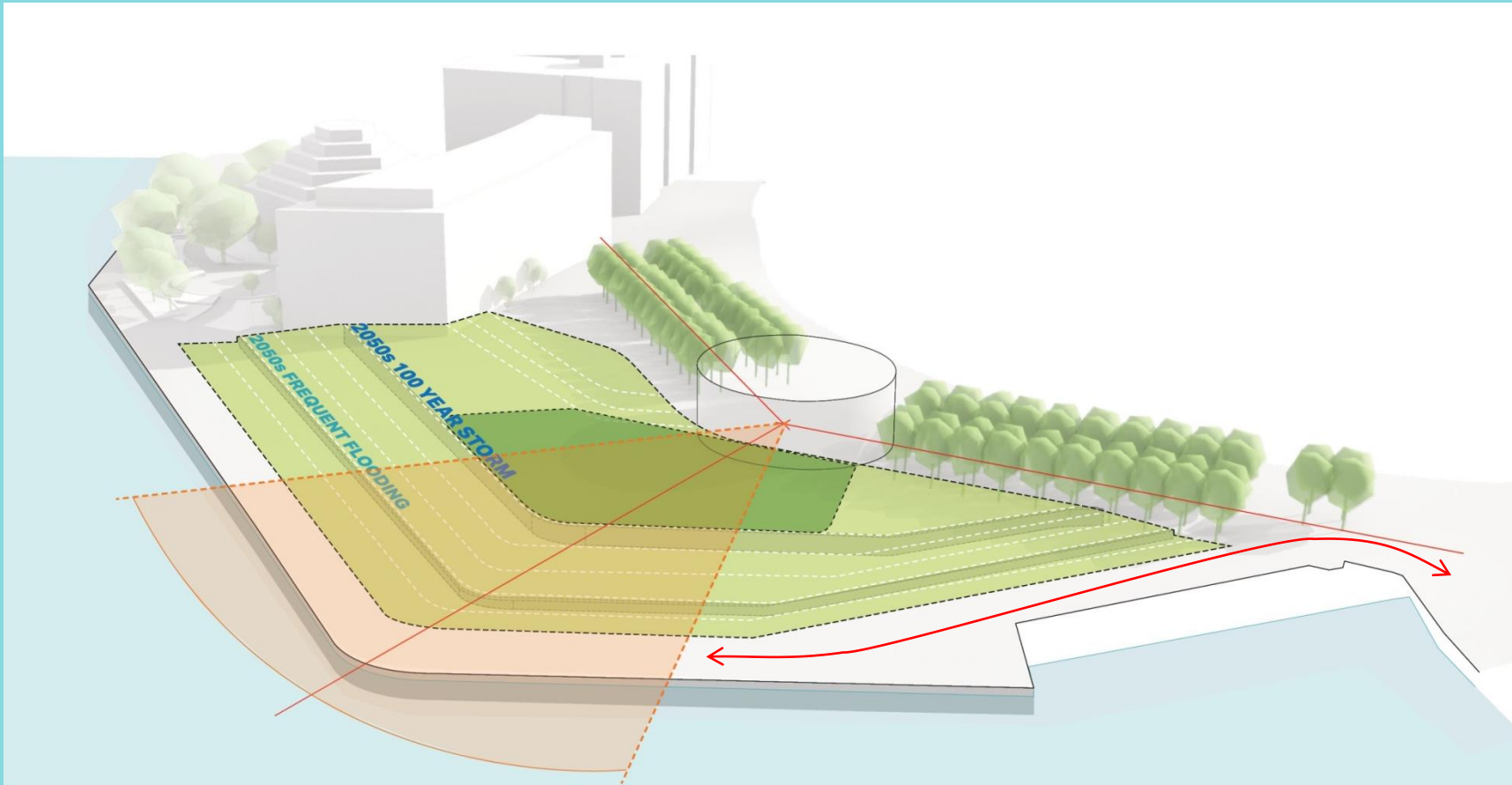




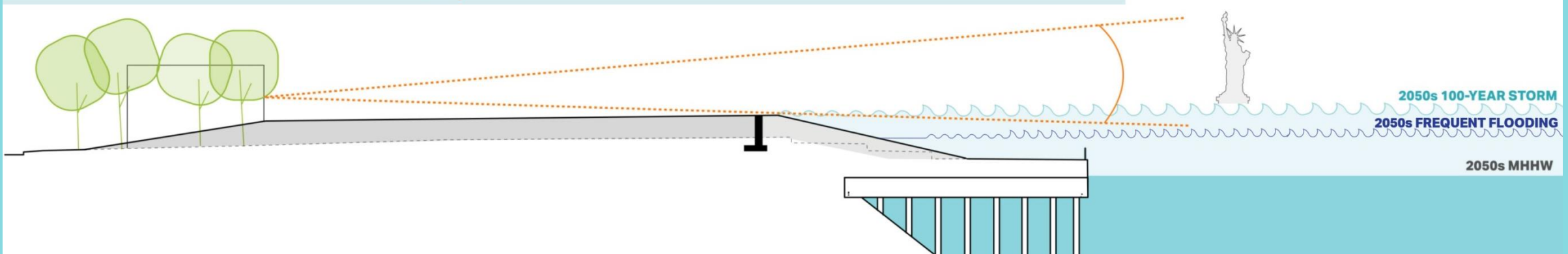
- 1 MAXIMIZE PROTECTED AREA**
- 2 MAXIMIZE PUBLIC SPACE**
- 3 MAINTAIN DESIGN LEGACY**





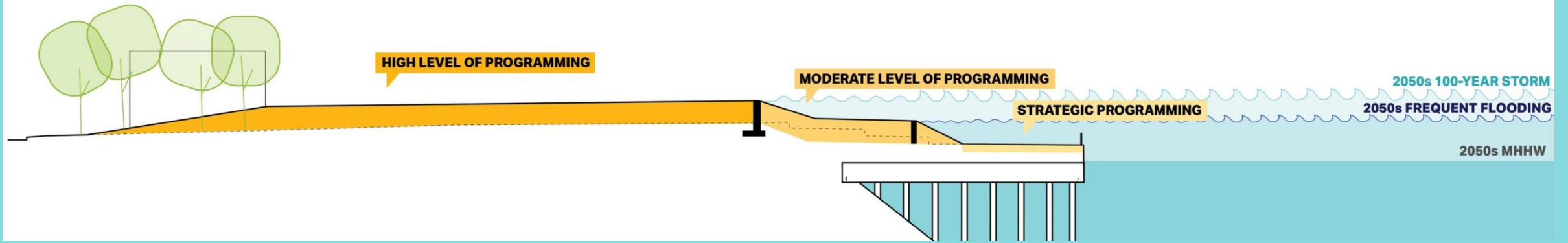


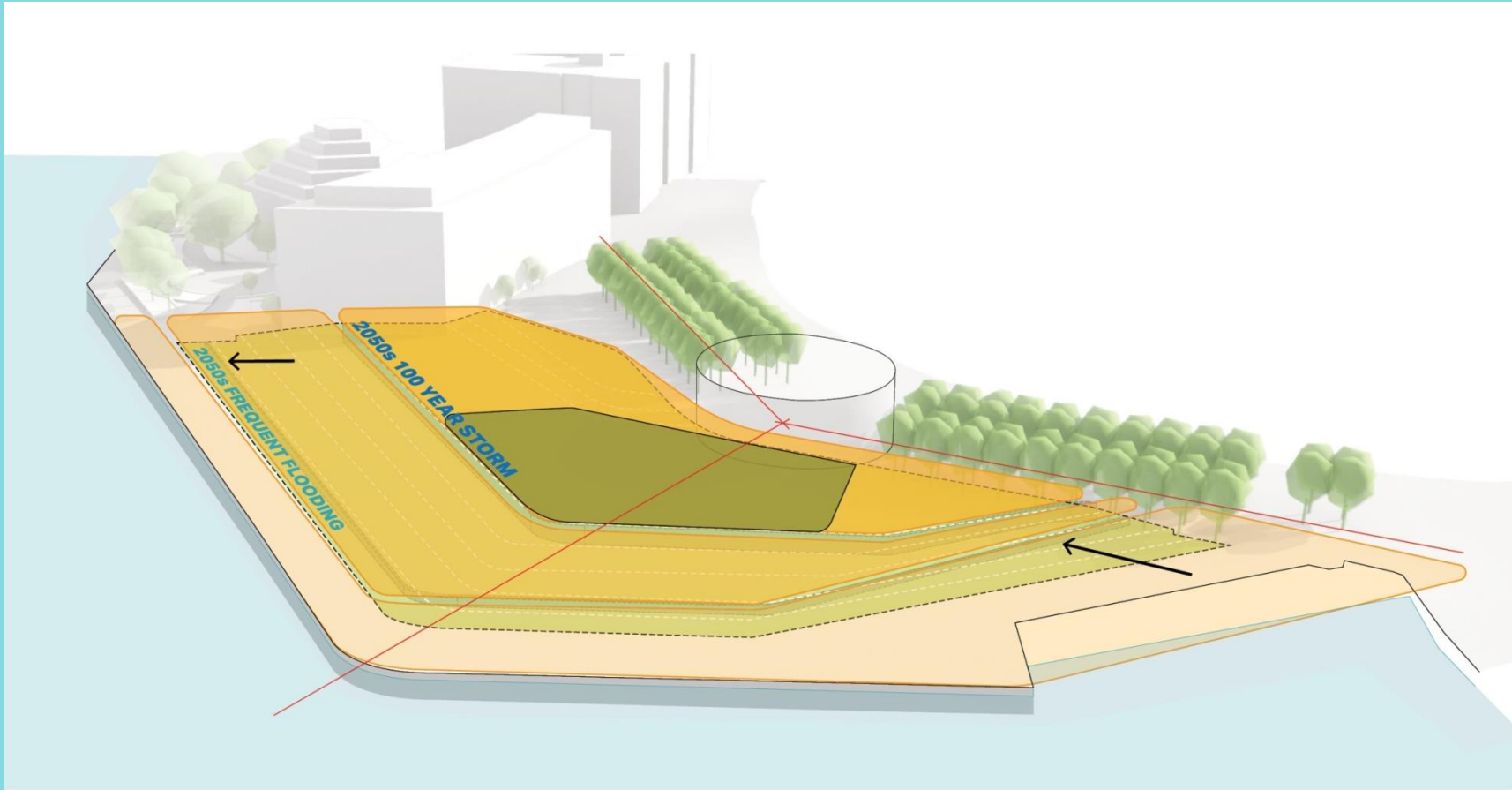
- 1 MAXIMIZE PROTECTED AREA**
- 2 MAXIMIZE PUBLIC SPACE**
- 3 MAINTAIN DESIGN LEGACY**
- 4 MAINTAIN VIEWS AND ACCESS TO WATERFRONT**



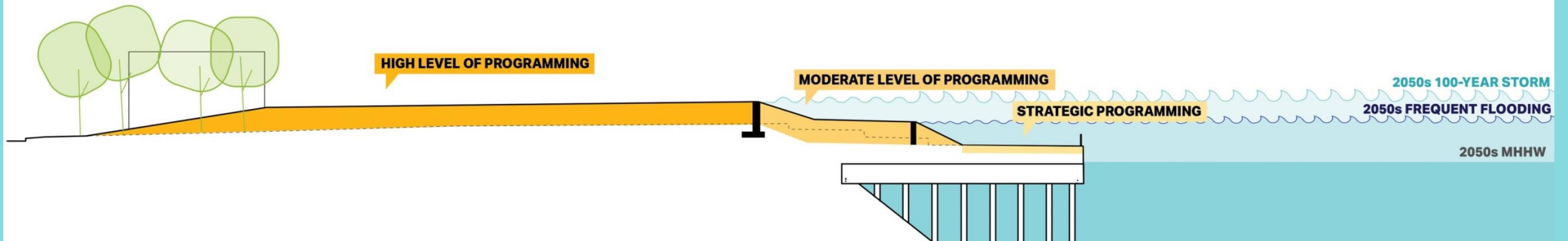


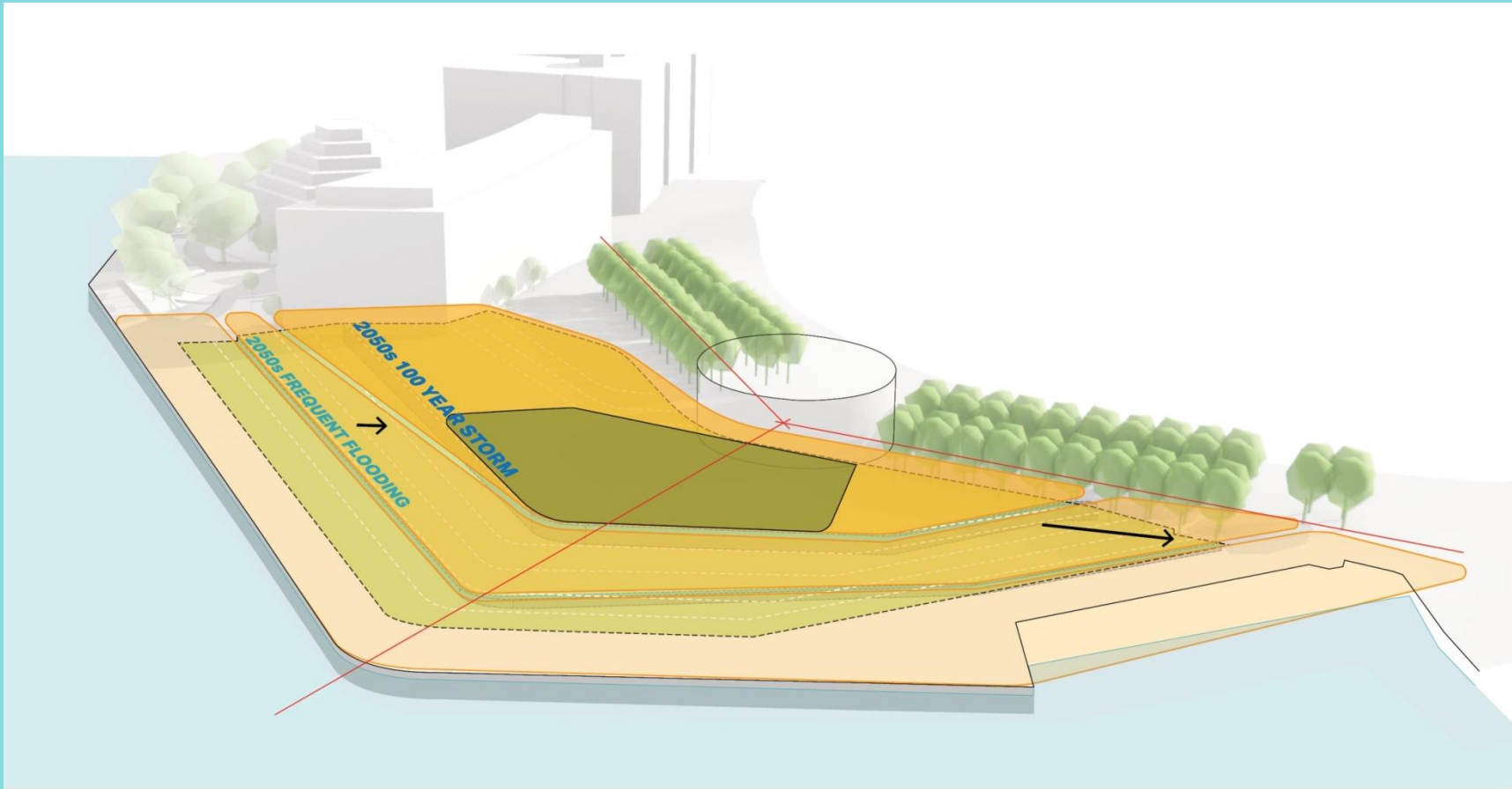
- 1 MAXIMIZE PROTECTED AREA**
- 2 MAXIMIZE PUBLIC SPACE**
- 3 MAINTAIN DESIGN LEGACY**
- 4 MAINTAIN VIEWS AND ACCESS TO WATERFRONT**
- 5 CREATE AN ADAPTABLE SITE**



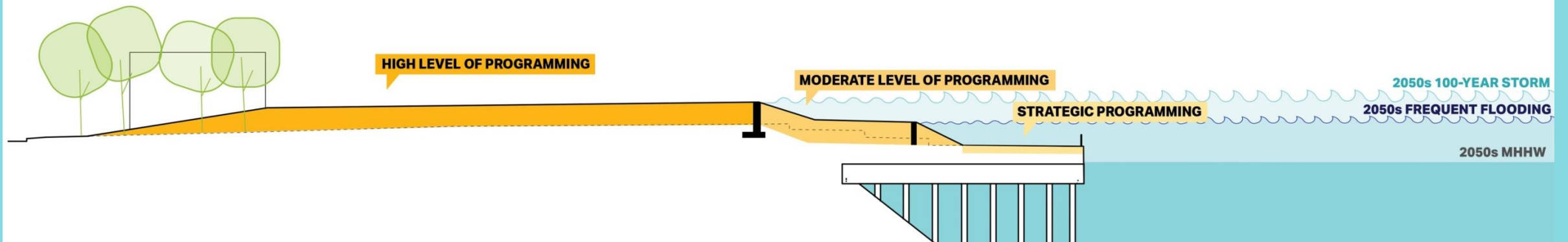


- 1 MAXIMIZE PROTECTED AREA**
- 2 MAXIMIZE PUBLIC SPACE**
- 3 MAINTAIN DESIGN LEGACY**
- 4 MAINTAIN VIEWS AND ACCESS TO WATERFRONT**
- 5 CREATE AN ADAPTABLE SITE**





- 1 MAXIMIZE PROTECTED AREA**
- 2 MAXIMIZE PUBLIC SPACE**
- 3 MAINTAIN DESIGN LEGACY**
- 4 MAINTAIN VIEWS AND ACCESS TO WATERFRONT**
- 5 CREATE AN ADAPTABLE SITE**



# PUBLIC ENGAGEMENT



# 2 PUBLIC MEETINGS



# 1 PUBLIC ACTIVITY WORKSHOP

# PART 3: HOW DO YOU ENVISION THE FUTURE EVOLUTION OF WAGNER PARK?

**OPEN SPACE / LAWN**  
HOW WOULD YOU WANT TO USE THE LAWN?

- ACTIVE RECREATION
- COMMUNITY EVENTS / GROUP ACTIVITIES
- FAMILY / FRIEND GATHERING
- LOUNGING
- SHADED SPACE
- AMPHITHEATER SEATING
- FLEXIBLE PLAZA SPACE
- PLANTED SPACES
- OTHER

# PART 3: HOW DO YOU ENVISION THE FUTURE EVOLUTION OF WAGNER PARK?

**OPEN SPACE / LAWN**  
HOW WOULD YOU WANT TO USE THE LAWN?

- ACTIVE RECREATION
- COMMUNITY EVENTS / GROUP ACTIVITIES
- FAMILY / FRIEND GATHERING
- LOUNGING
- SHADED SPACE
- AMPHITHEATER SEATING
- FLEXIBLE PLAZA SPACE
- PLANTED SPACES
- OTHER

# PART 2: HOW DO YOU USE/EXPERIENCE WAGNER PARK CURRENTLY?

## PARK USES



1 ONLINE ACTIVITY

**INSTRUCTIONS**

1. This sheet asks what park uses you currently enjoy at Wagner Park.
2. For each category, check the boxes for any use that you currently enjoy.
3. You may also type / write-in any uses that have not been listed in the "Other" option.

**INSTRUCTIONS**

1. This sheet asks questions about how you under consideration in Wagner Park..
2. For each category in this segment, a seri much you value each feature or use, with and **L** for least value.
3. You may also write-in ideas for other use:



**INSTRUCTIONS**

1. This sheet asks questions about how you would like to use the under consideration in Wagner Park..
2. For each category in this segment, a series of uses is provided much you value each feature or use, with **H** for highest value, **M** and **L** for least value.
3. You may also write-in ideas for other uses in the "Other" option



### GARDENS

- PEACE & QUIET
- EDUCATION
- SENSORY EXPERIENCE
- READING
- ALL OF THE ABOVE
- OTHER

### PAVILION

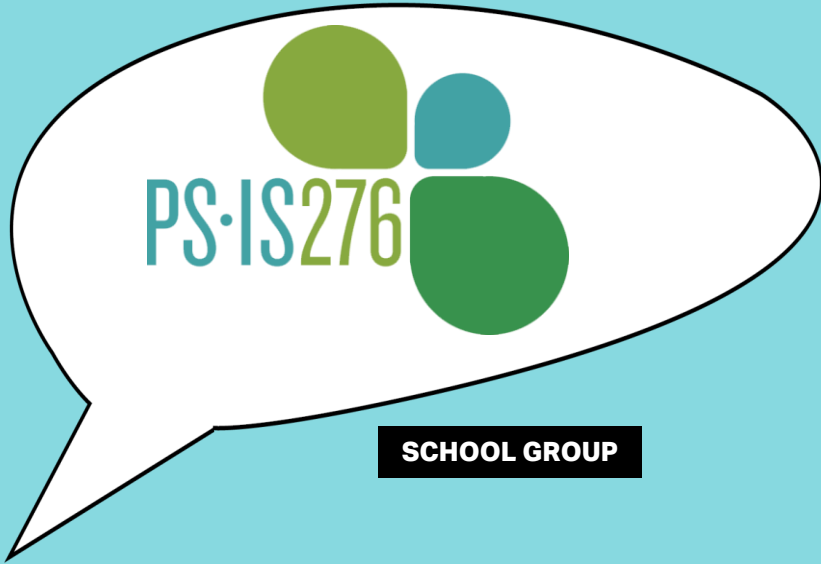
- DINING
- RESTROOMS
- ROOF TOP VIEWS
- PERFORMANCE SEATING
- ALL OF THE ABOVE
- OTHER

### LAWN

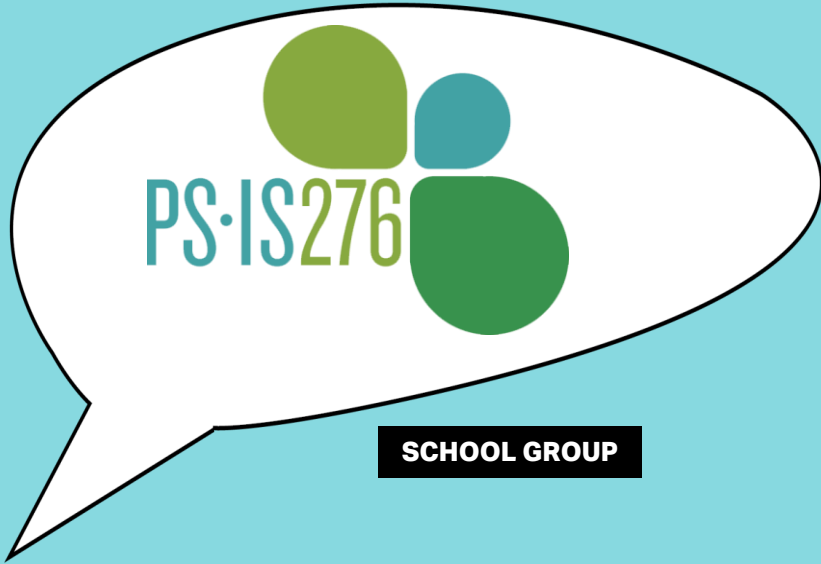
- LOUNGING / SUNBATHING
- PEOPLE WATCHING
- COMMUNITY EVENTS
- FAMILY / FRIEND GATHERING
- CHILDREN'S PLAY
- ACTIVE RECREATION
- PUBLIC ART (EYES, APE & CAT)
- ALL OF THE ABOVE
- OTHER







# USER GROUP INPUT

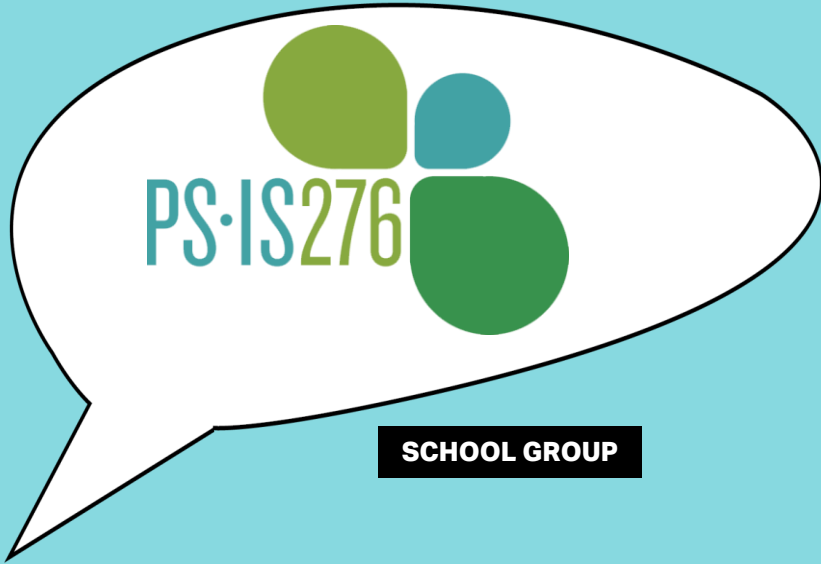


**SCHOOL GROUP**



**SENIOR GROUP**

# USER GROUP INPUT



**SCHOOL GROUP**

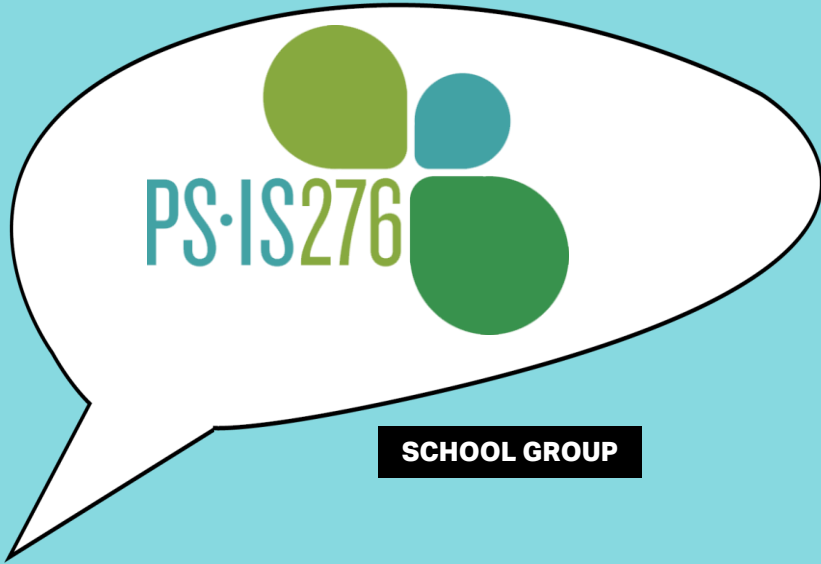


**SENIOR GROUP**

# USER GROUP INPUT



**COMMUNITY BOARD**

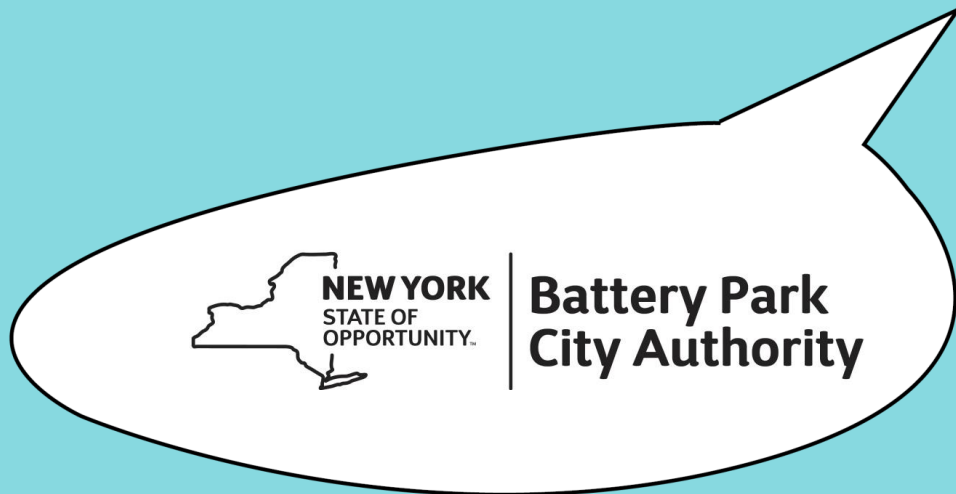


**SCHOOL GROUP**



**SENIOR GROUP**

# USER GROUP INPUT



**BPCA USER GROUPS**



**COMMUNITY BOARD**

**VIEWS**

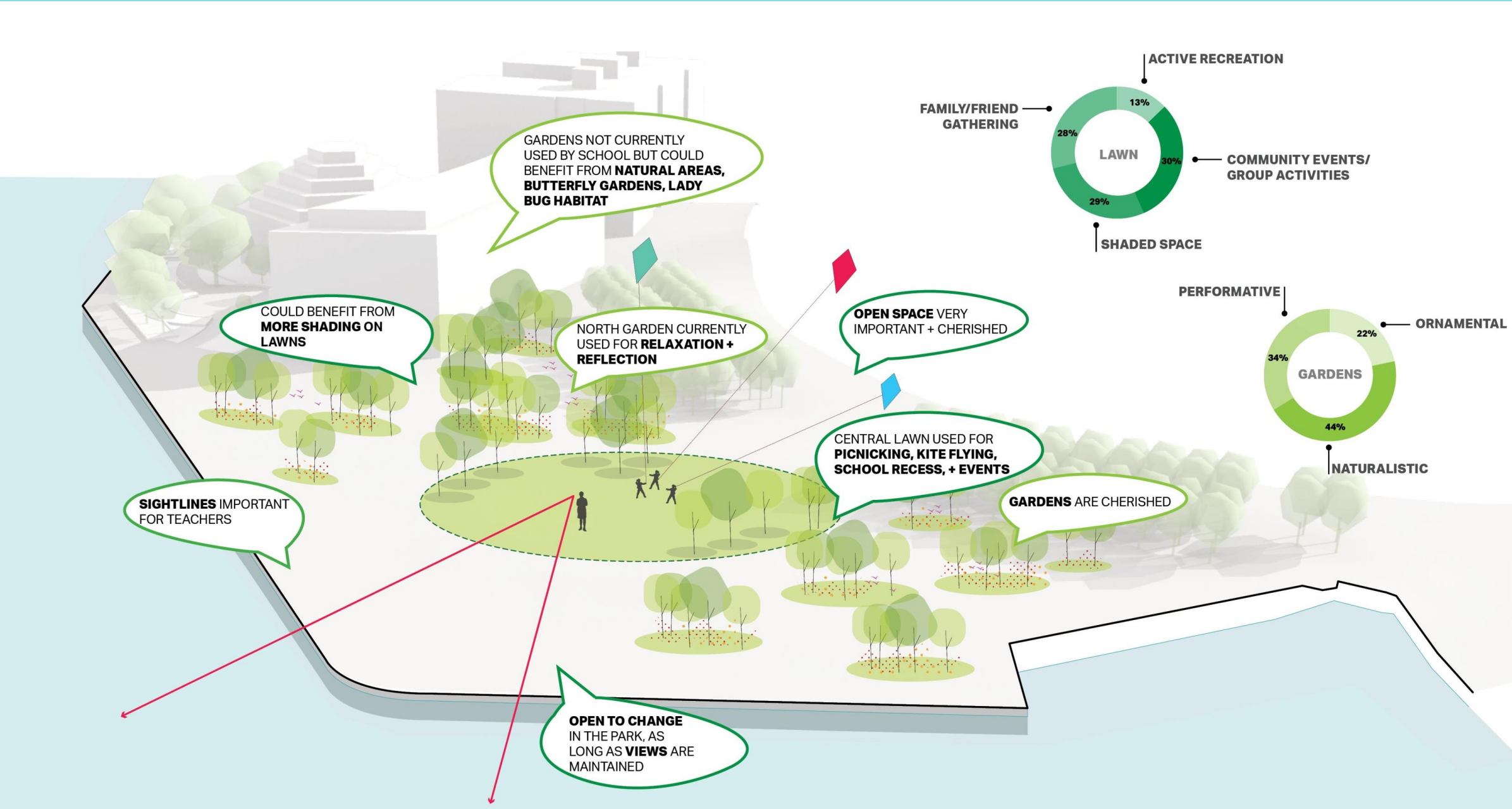
**AN ACCESSIBLE SITE**

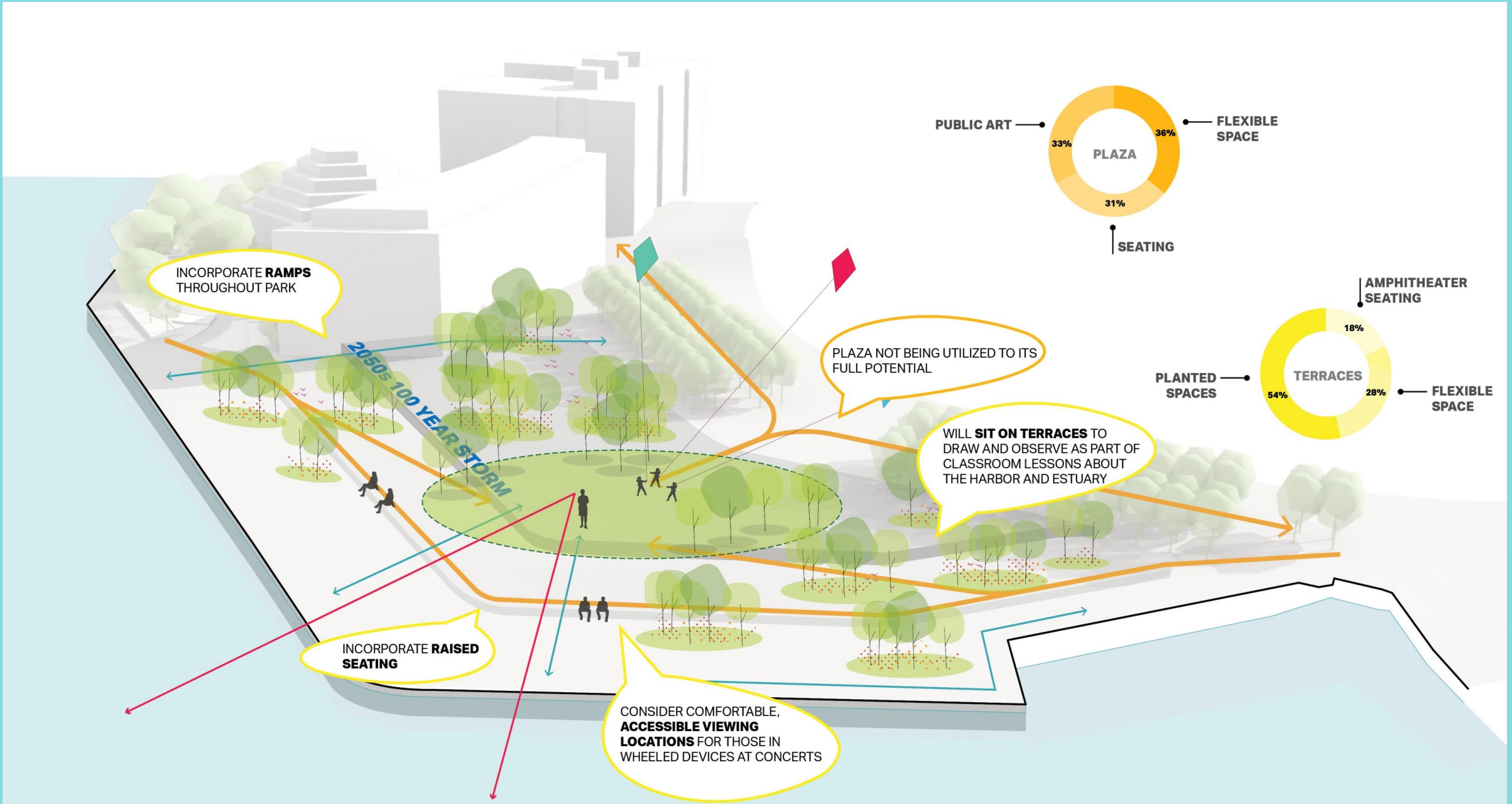
**FLEXIBILITY**

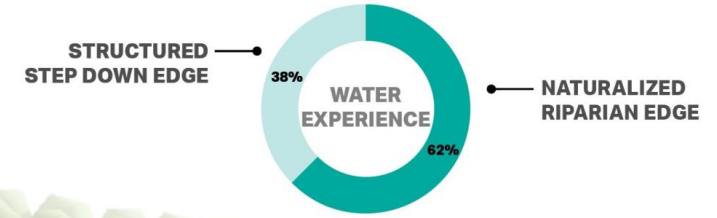
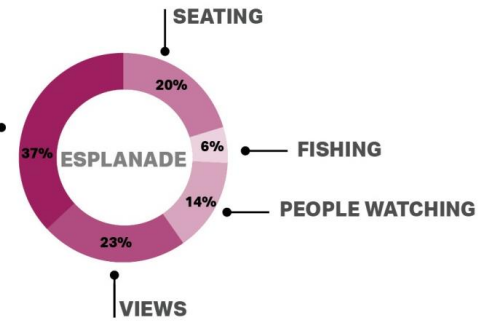
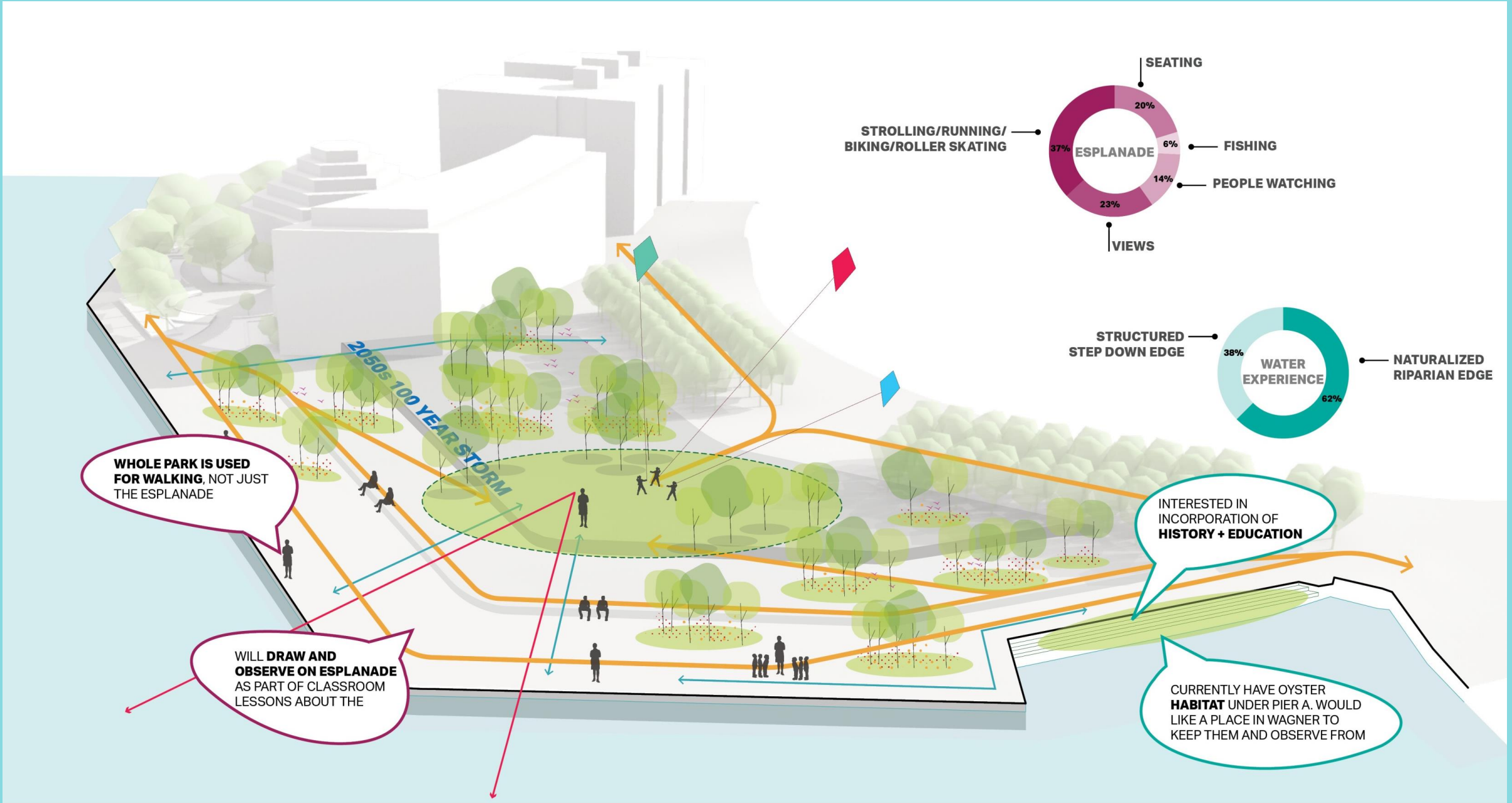
**OPEN LAWN**

**COMMUNITY EVENT SPACE**

**VEGETATION + QUIET SPACES**







WHOLE PARK IS USED FOR WALKING, NOT JUST THE ESPLANADE

WILL DRAW AND OBSERVE ON ESPLANADE AS PART OF CLASSROOM LESSONS ABOUT THE

INTERESTED IN INCORPORATION OF HISTORY + EDUCATION

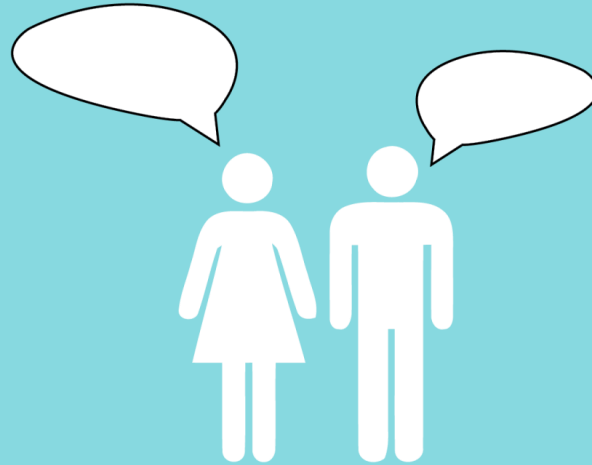
CURRENTLY HAVE OYSTER HABITAT UNDER PIER A. WOULD LIKE A PLACE IN WAGNER TO KEEP THEM AND OBSERVE FROM



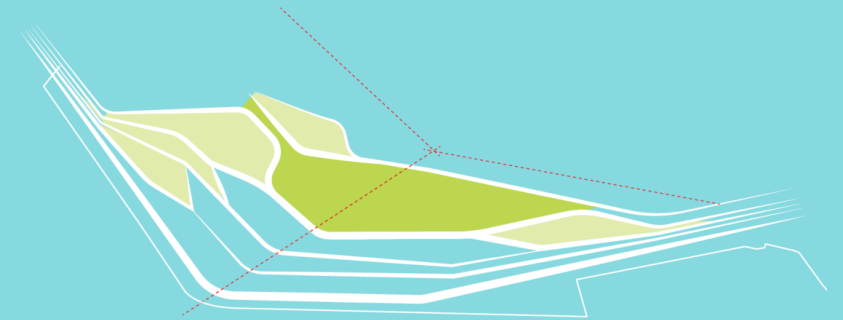
# CONCEPTUAL DESIGN PROCESS



ENGINEERING + FEASIBILITY

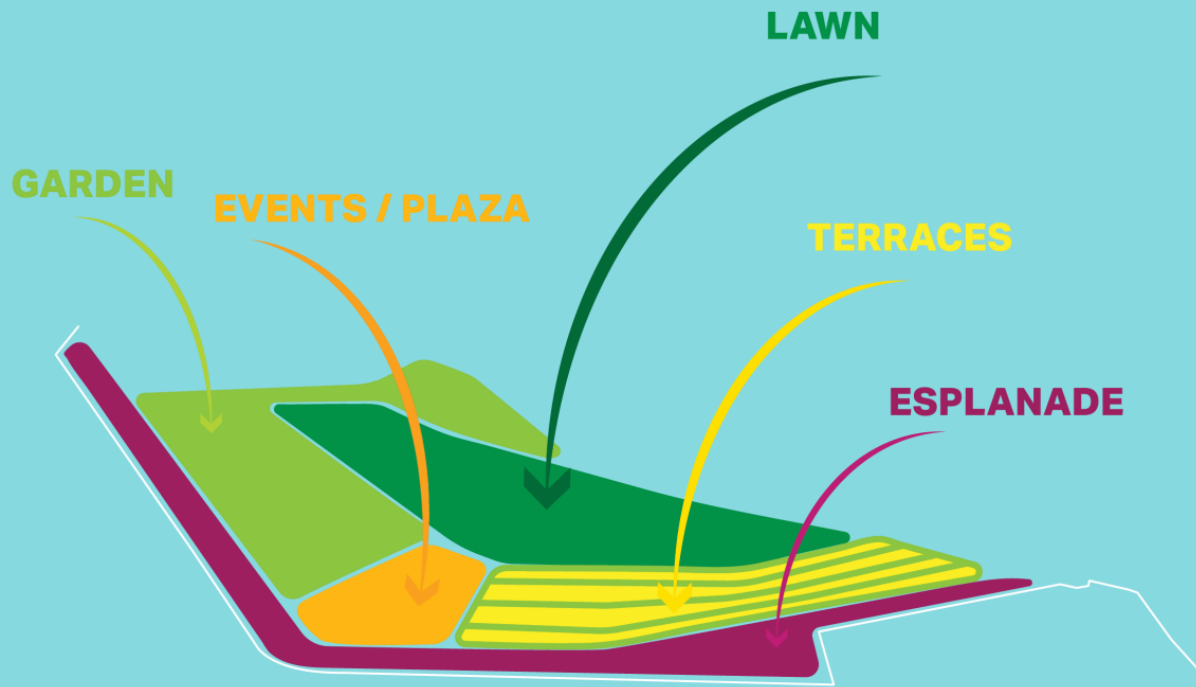


PUBLIC + USER GROUP INPUT



CONCEPTUAL DESIGN STUDIES

# CONCEPTUAL DESIGN ALTERNATIVES



TERRACES SCHEME



ARCHIPELAGO SCHEME

# CONCEPTUAL DESIGN ALTERNATIVES



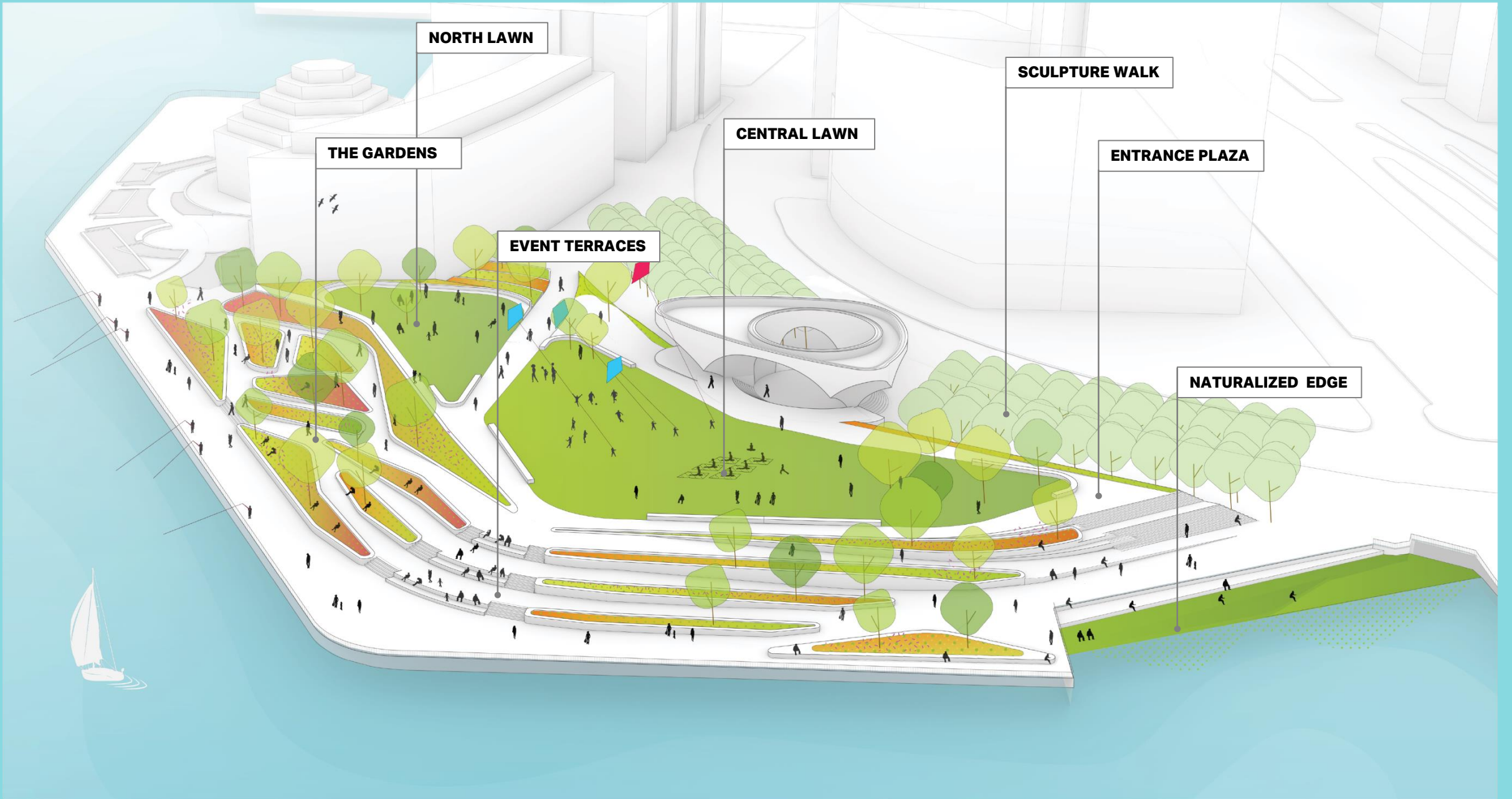
**TERRACES SCHEME**



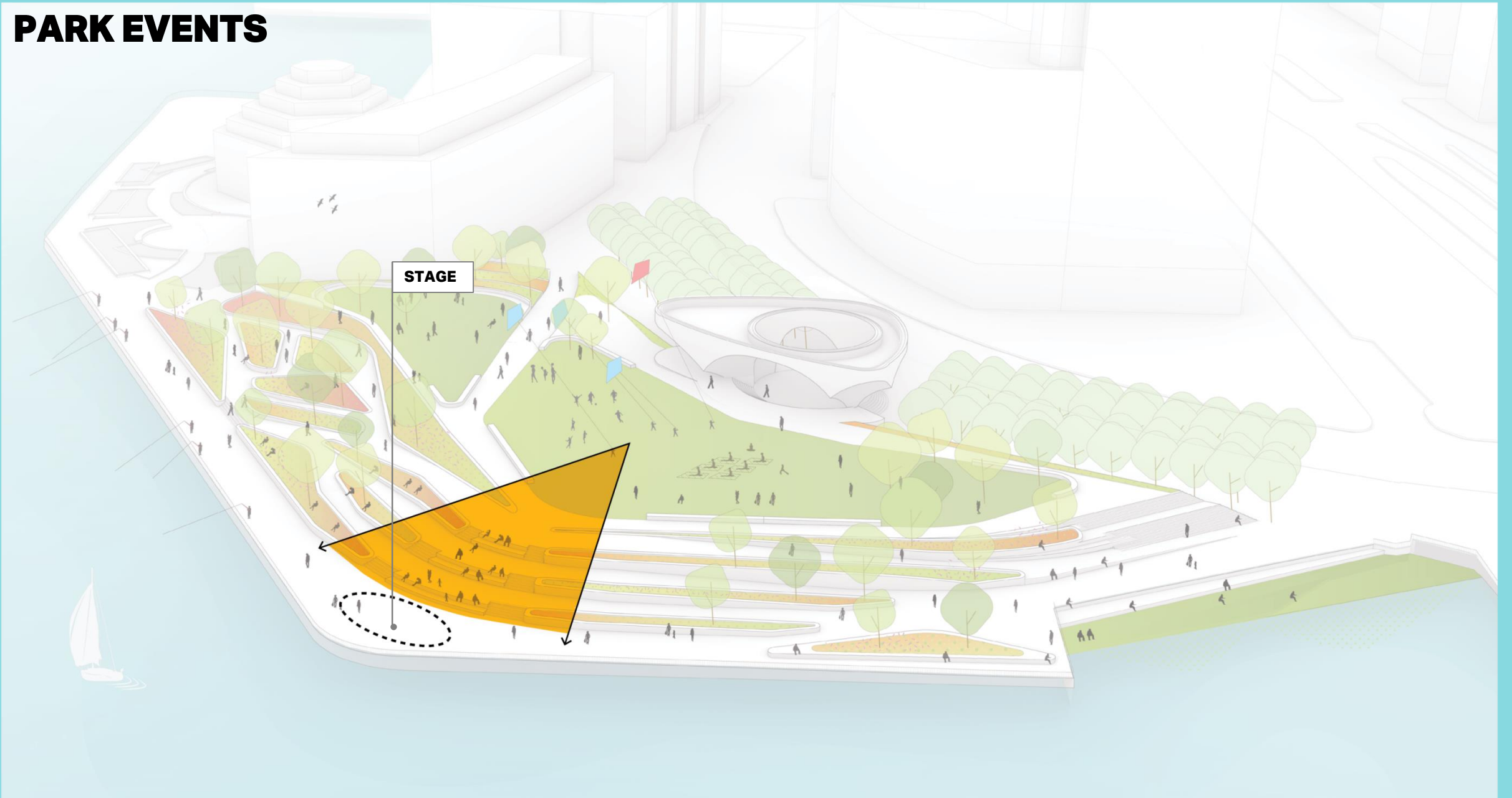
**ARCHIPELAGO SCHEME**

# TERRACES SCHEME





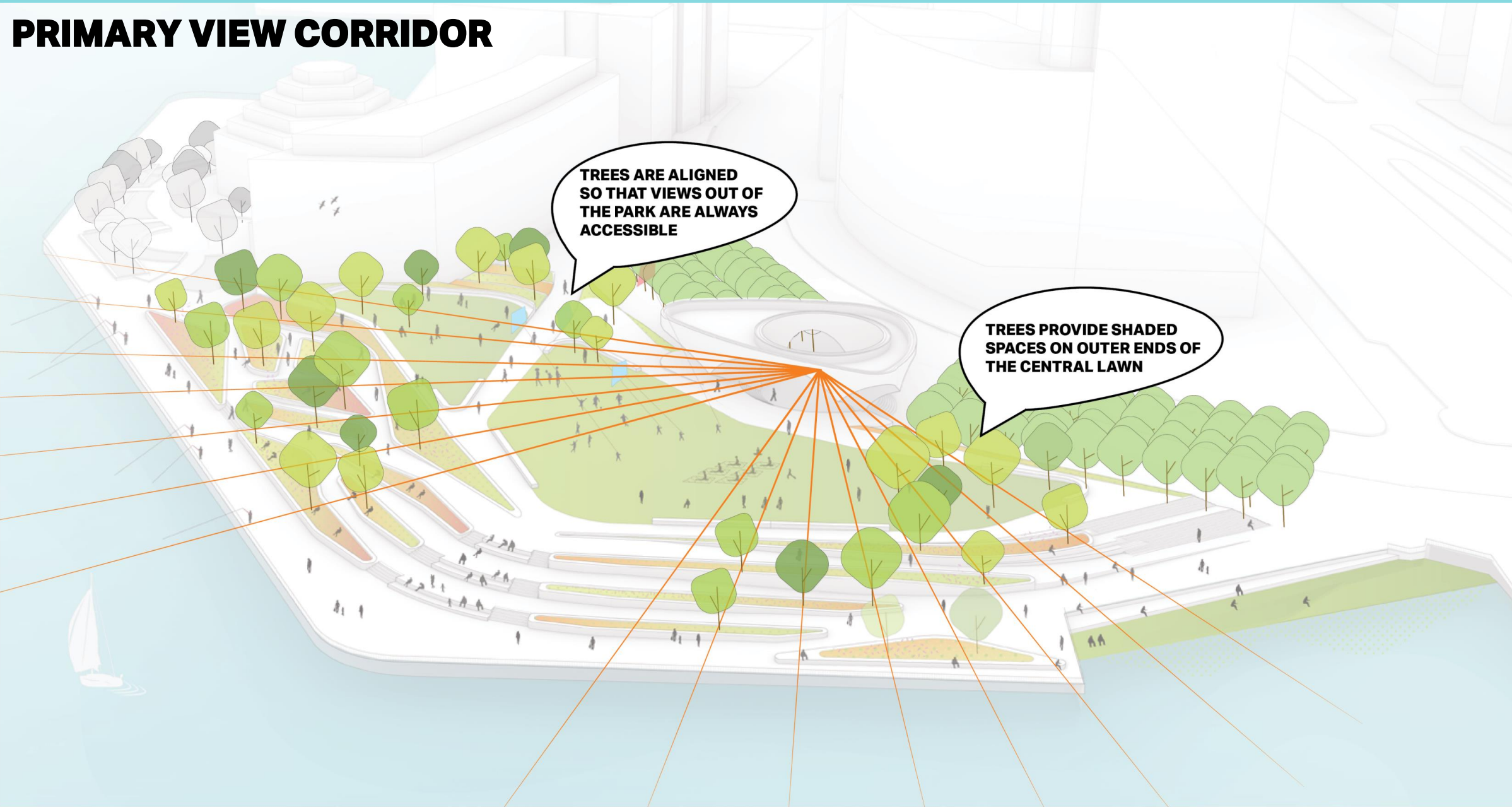
# PARK EVENTS



# PRIMARY VIEW CORRIDOR

TREES ARE ALIGNED SO THAT VIEWS OUT OF THE PARK ARE ALWAYS ACCESSIBLE

TREES PROVIDE SHADED SPACES ON OUTER ENDS OF THE CENTRAL LAWN











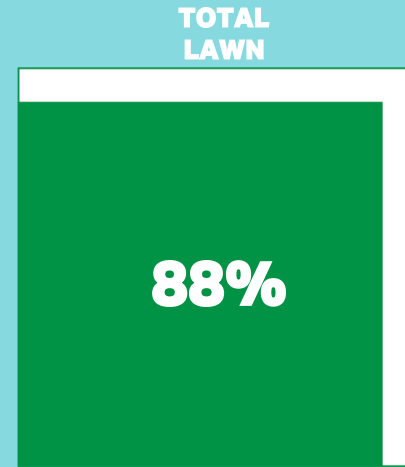
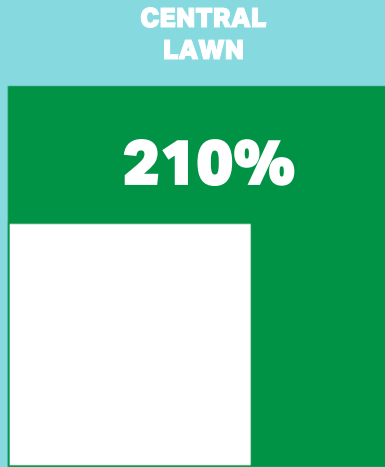








# DESIGN STUDY 1 | SIZE COMPARISON

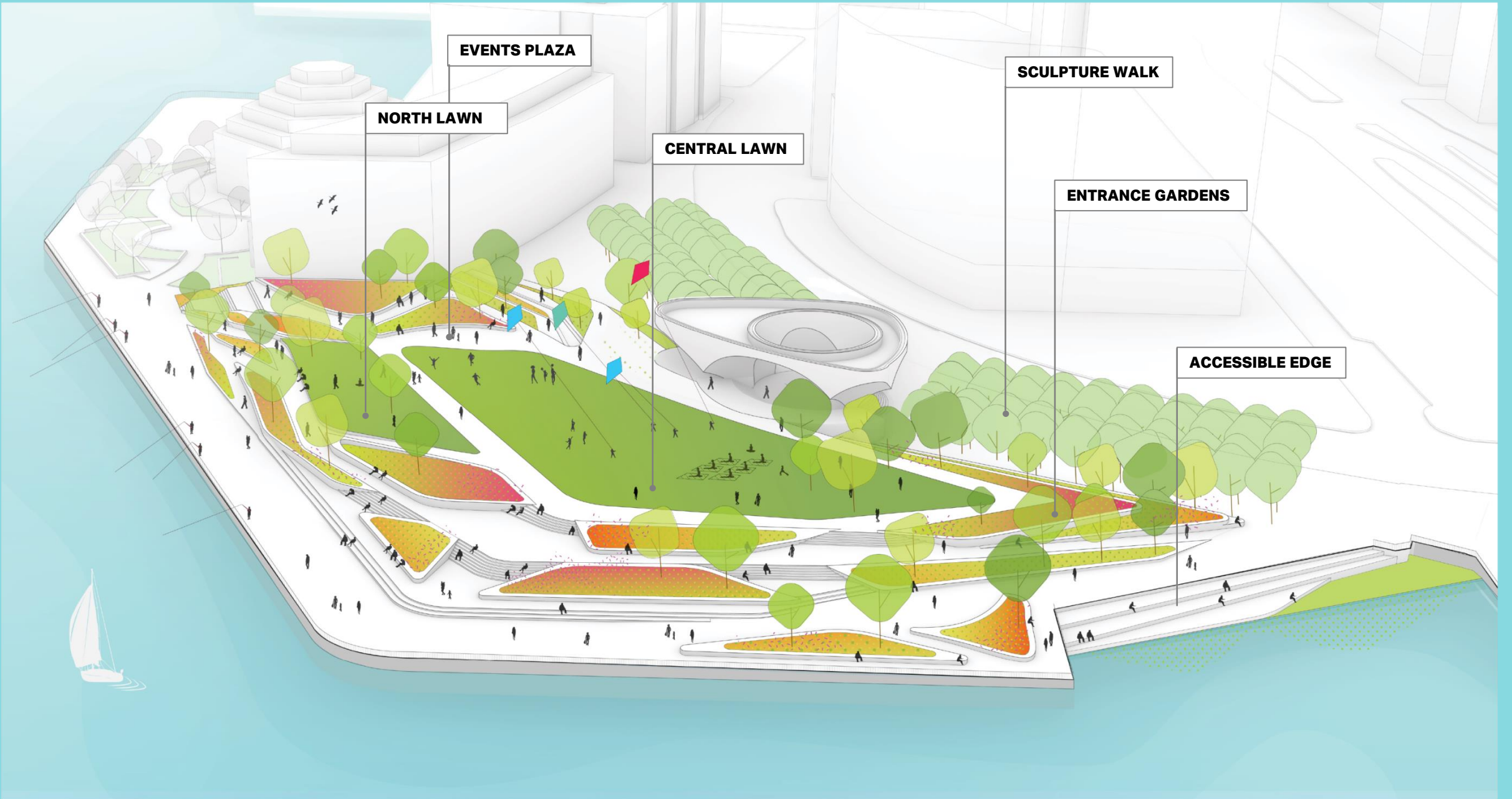


EXISTING  
PROPOSED

# ARCHIPELAGO SCHEME

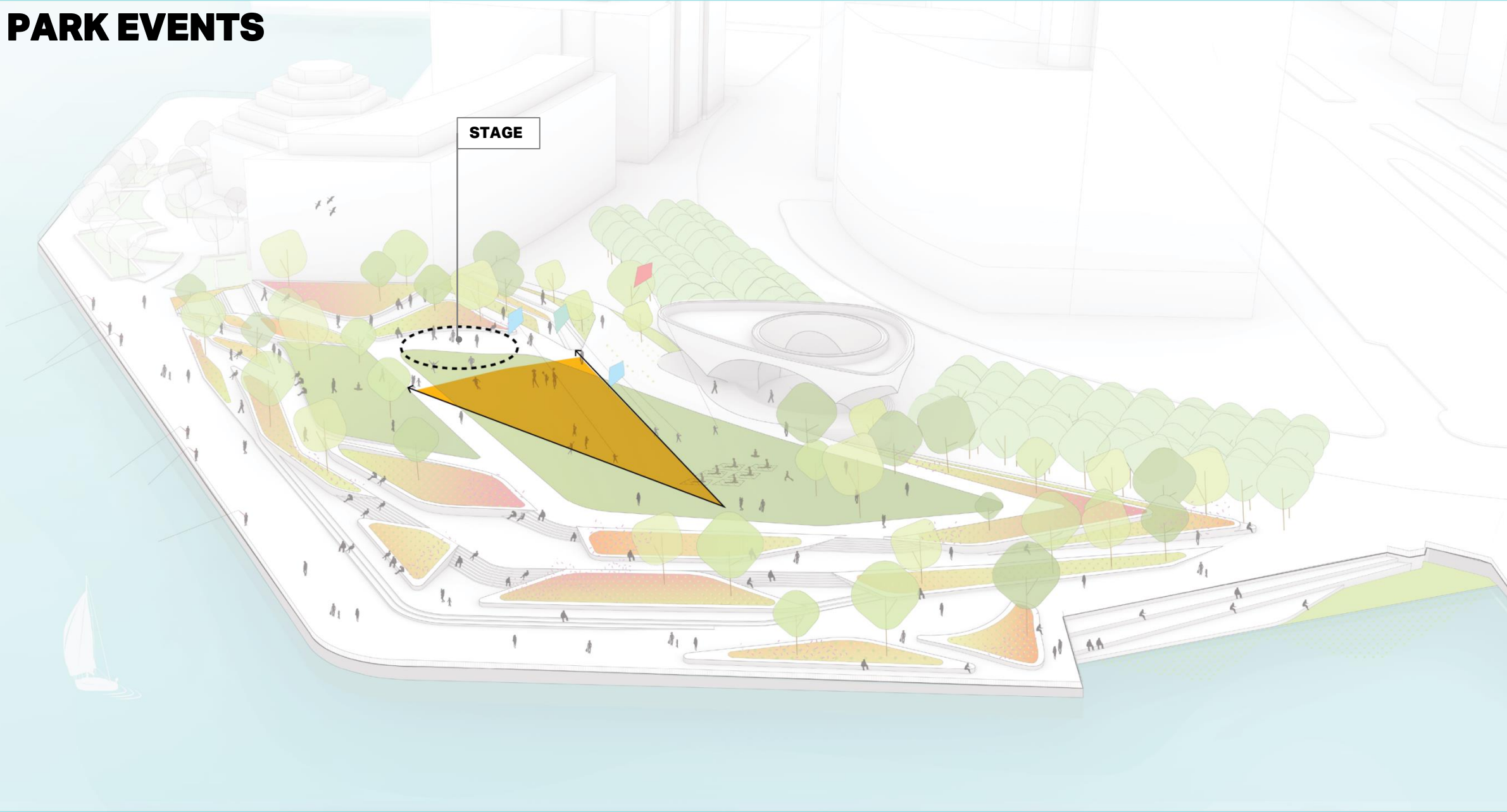






# PARK EVENTS

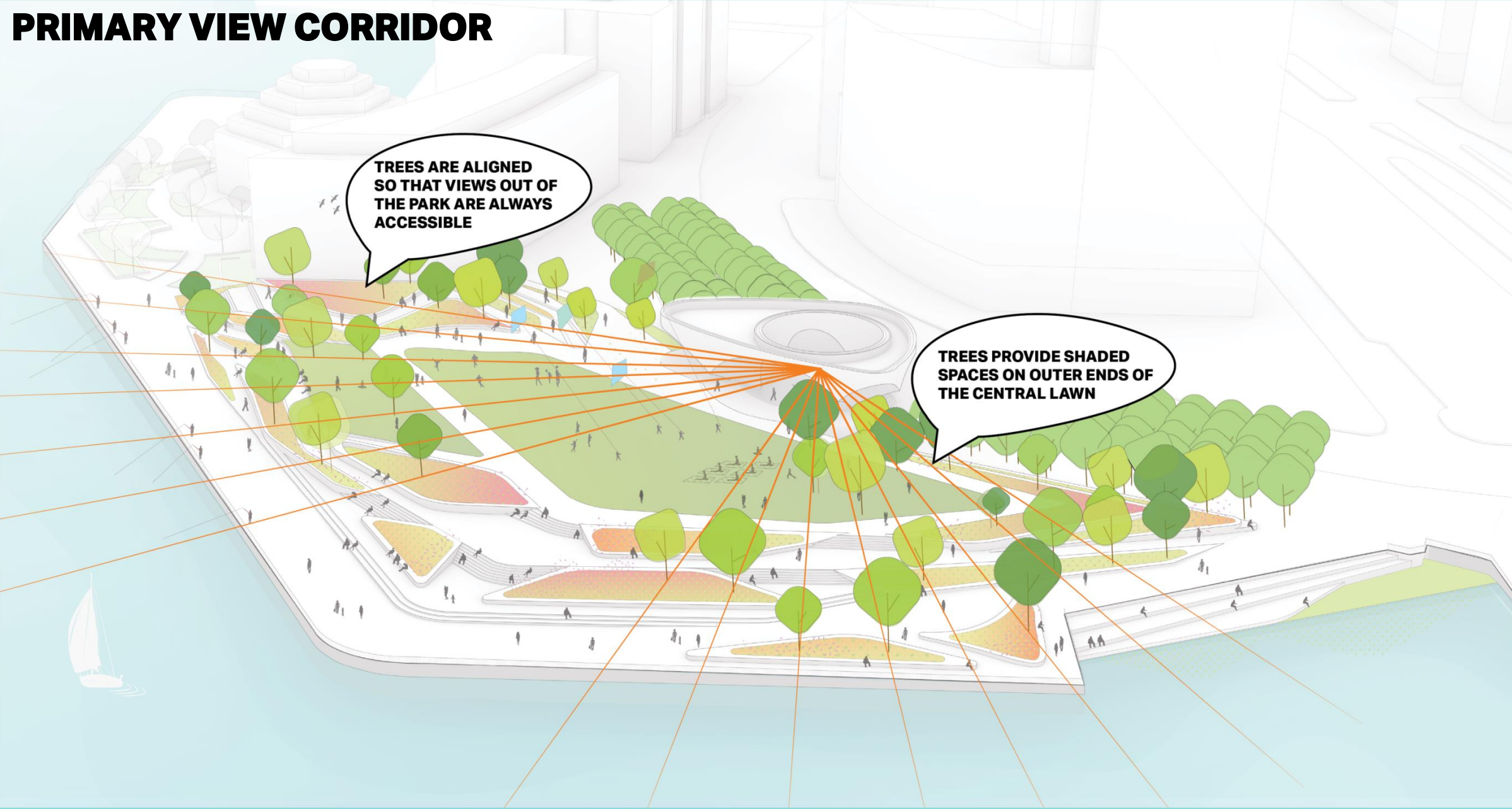
STAGE



# PRIMARY VIEW CORRIDOR

TREES ARE ALIGNED SO THAT VIEWS OUT OF THE PARK ARE ALWAYS ACCESSIBLE

TREES PROVIDE SHADED SPACES ON OUTER ENDS OF THE CENTRAL LAWN









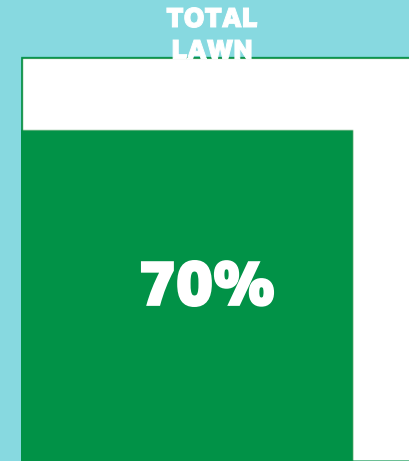
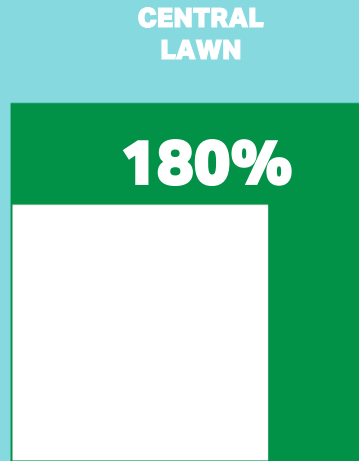
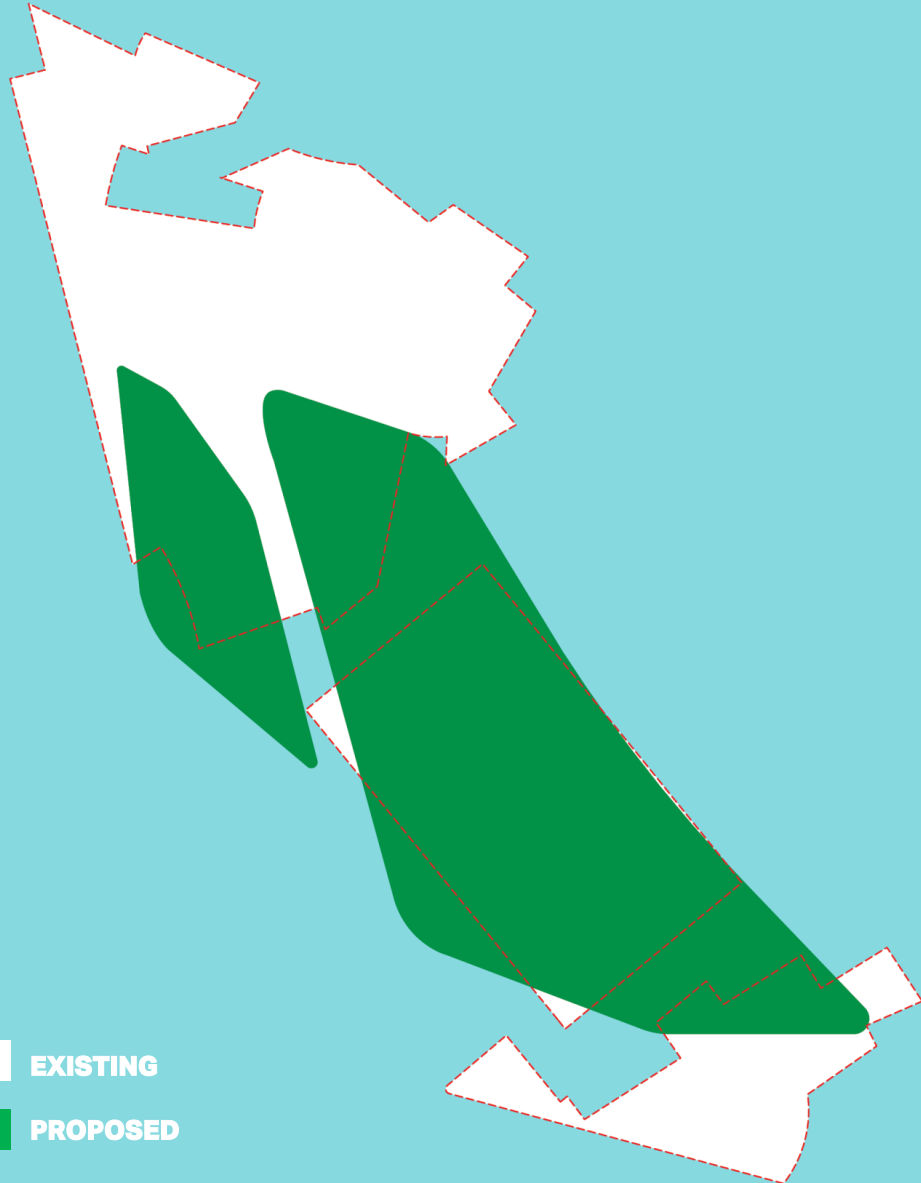






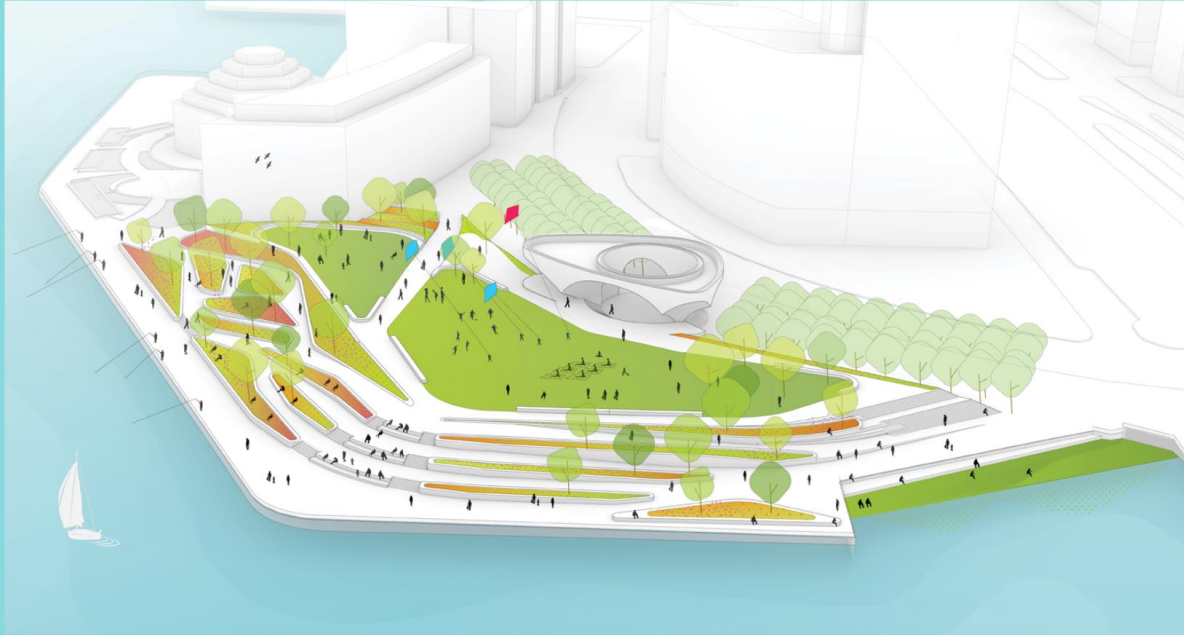


# DESIGN STUDY 1 | SIZE COMPARISON



EXISTING  
PROPOSED

# CONCEPTUAL DESIGN ALTERNATIVES

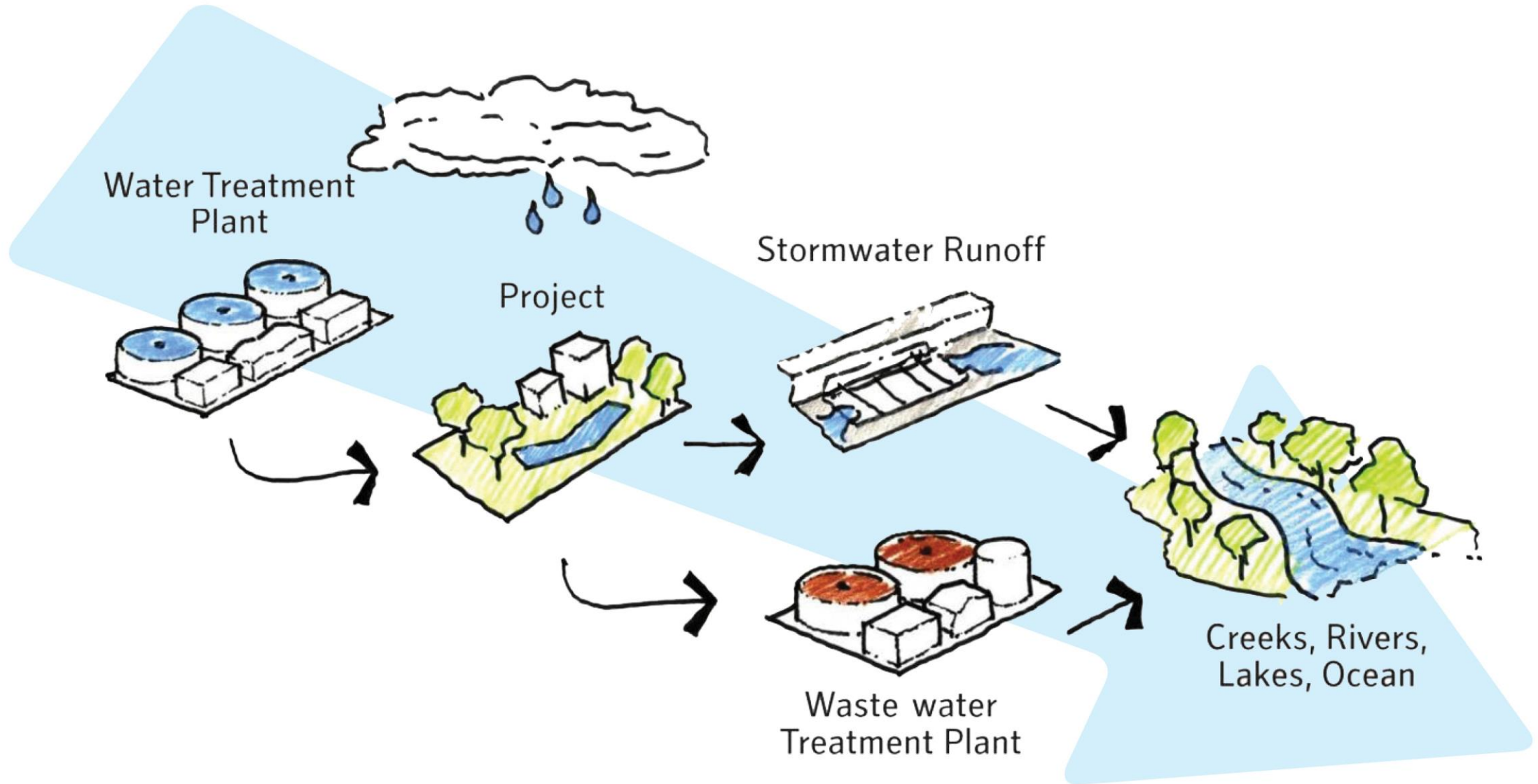


TERRACES SCHEME

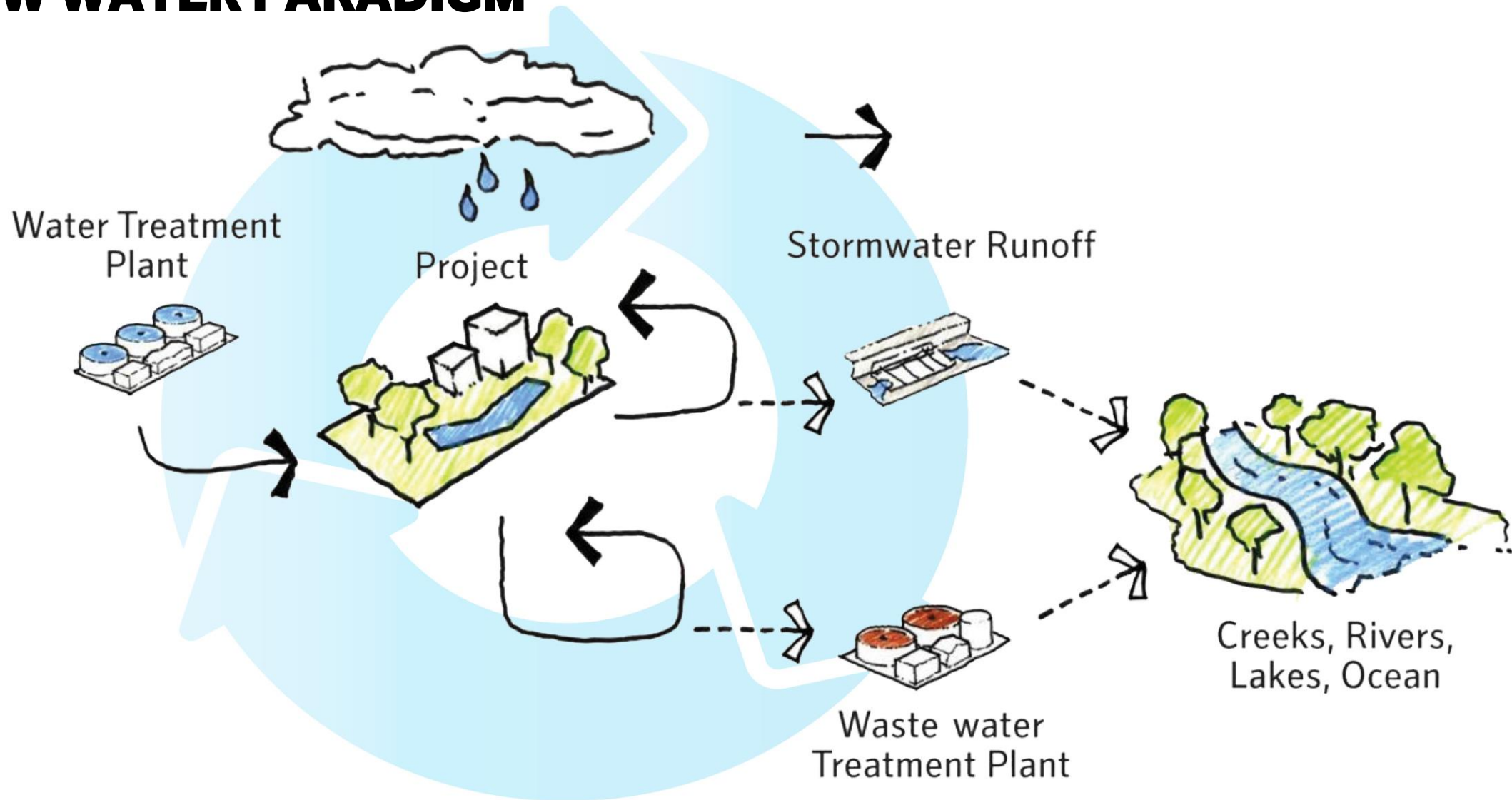


ARCHIPELAGO SCHEME

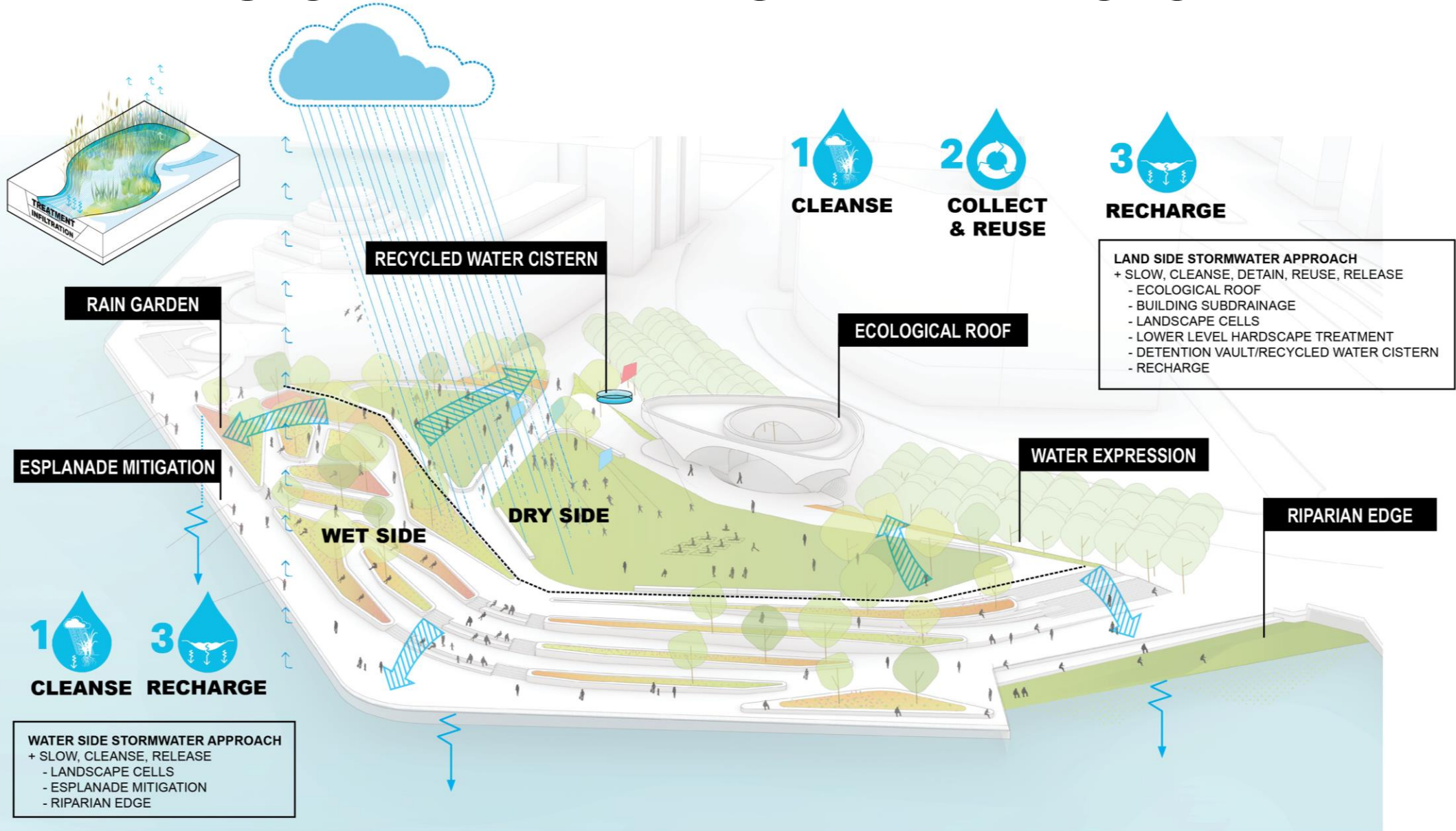
# OLD WATER PARADIGM



# NEW WATER PARADIGM

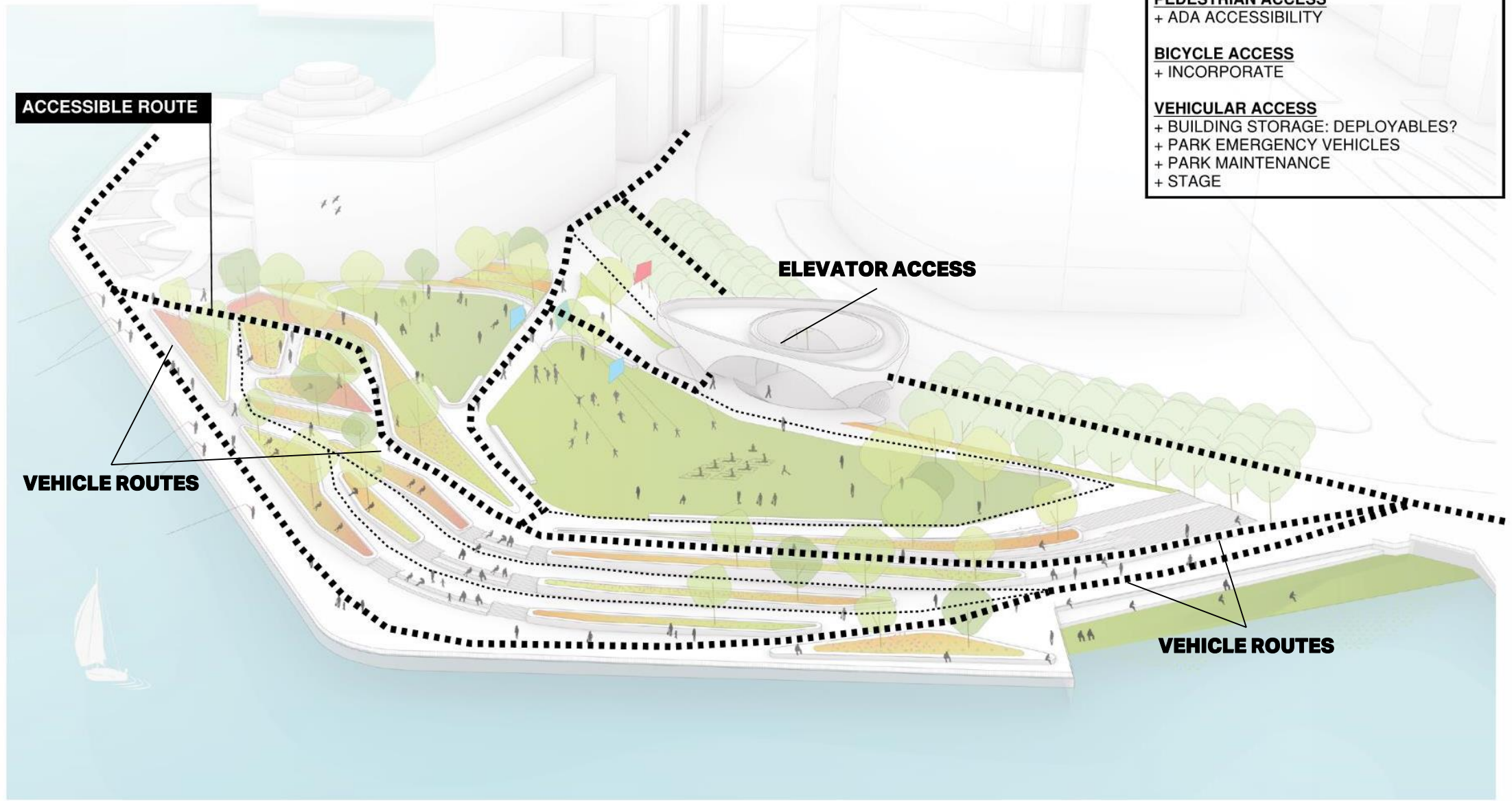


# PRELIMINARY STORMWATER MANAGEMENT APPROACH

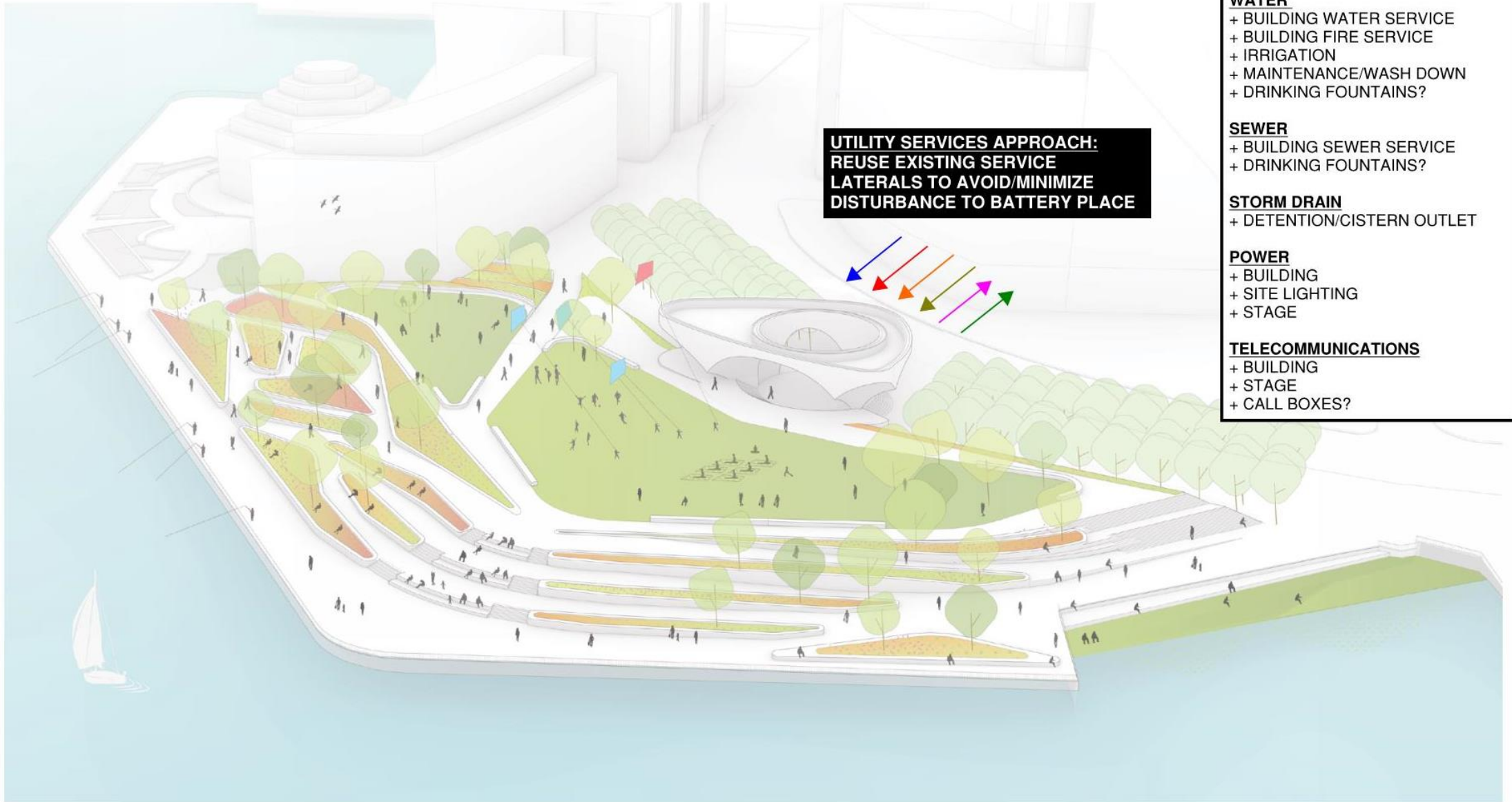


# ACCESS CONSIDERATIONS

- PEDESTRIAN ACCESS**
  - + ADA ACCESSIBILITY
- BICYCLE ACCESS**
  - + INCORPORATE
- VEHICULAR ACCESS**
  - + BUILDING STORAGE: DEPLOYABLES?
  - + PARK EMERGENCY VEHICLES
  - + PARK MAINTENANCE
  - + STAGE



# UTILITY PROVISIONING



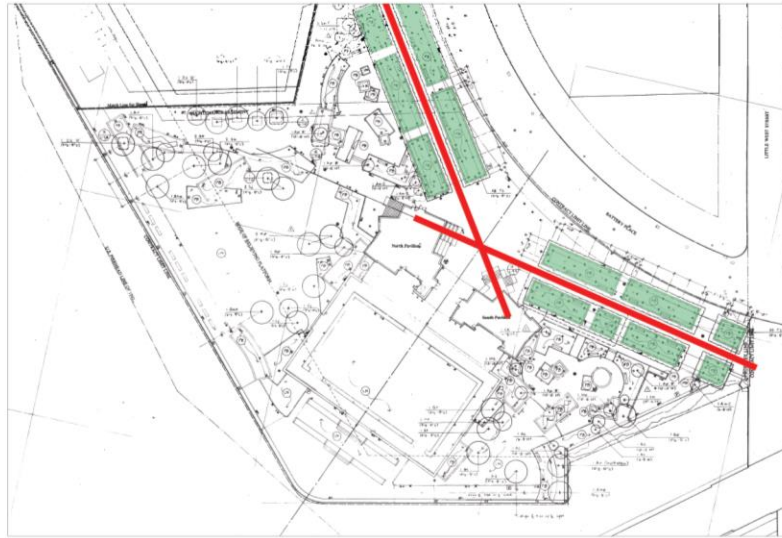


# PAVILION STUDIES

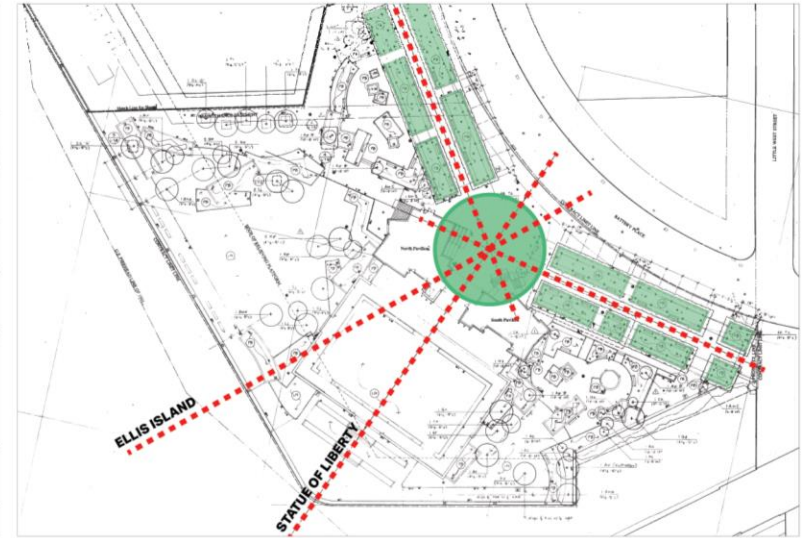
# DESIGN LEGACY | CORE VALUES



**1. FRAME VIEW TO STATUE OF LIBERTY**



**2. ALIGN APPROACH AXES WITH TREE ALLÉES + PRESERVE TREES**



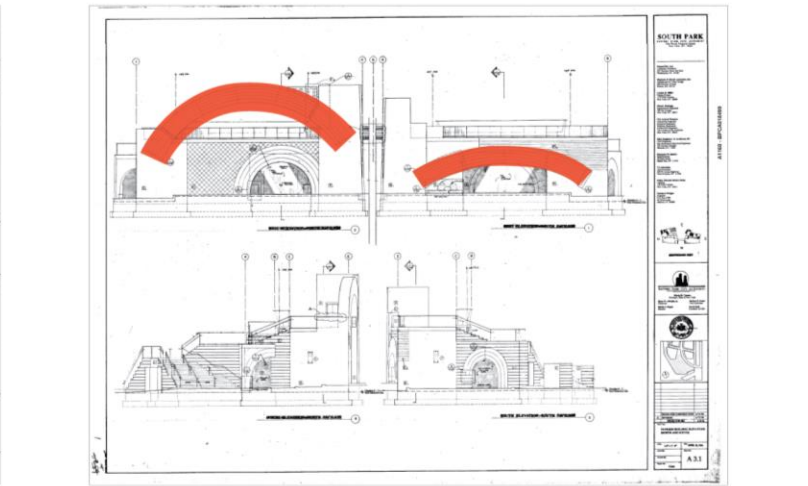
**3. ESTABLISH CENTRAL GATHERING SPACE**



**4. MAXIMIZE PROTECTED GREEN SPACE**



**5. ENHANCE PROCESSION FROM STREET TO PARK LEVEL**



**6. RECALL VAULTING OF EXISTING PAVILION**

# SUSTAINABLE DESIGN | PAVILION BUILDING

## PRINCIPAL TARGET AREAS FOR SUSTAINABLE DESIGN:



NET-ZERO READY



LOW CARBON DESIGN



WATER HARVESTING + WATER REUSE



HEAT ISLAND EFFECT REDUCTION



LOW IMPACT MATERIALS



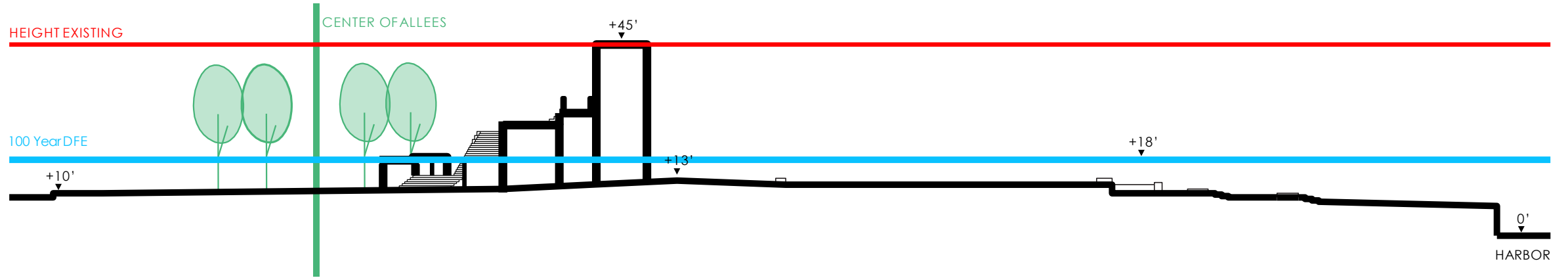
INDOOR AIR QUALITY + GOOD THERMAL COMFORT

# INITIAL STUDY

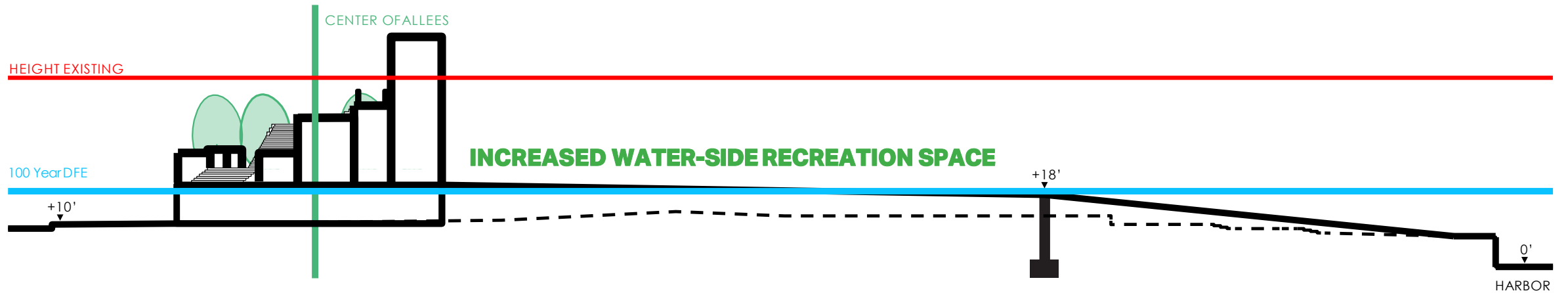
REPLICATE AND RELOCATE A SITE-SPECIFIC BUILDING

# INITIAL STUDY | REPLICATE AND RELOCATE A SITE-SPECIFIC BUILDING

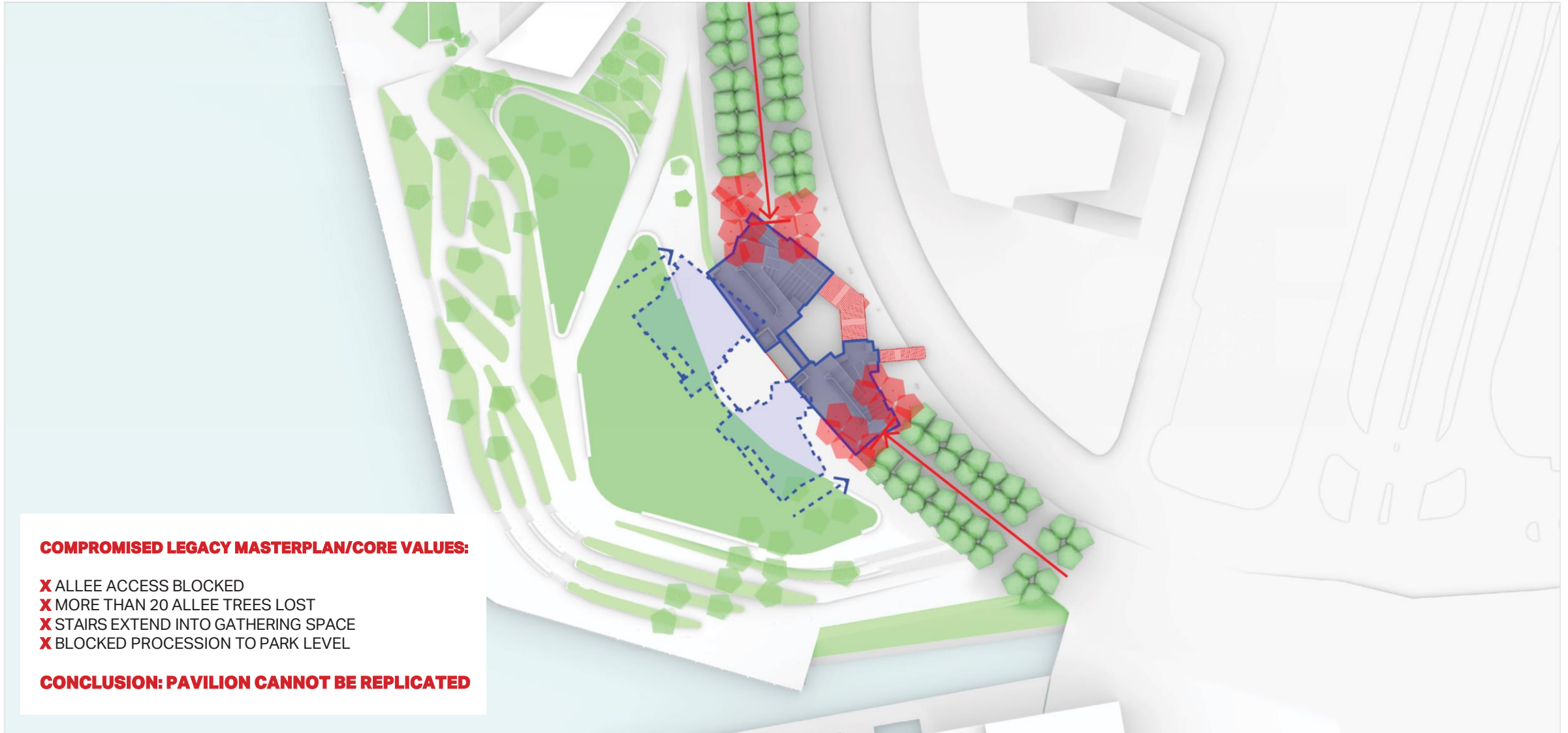
## EXISTING



## PAVILION REPLICATED AT HIGHER ELEVATION



# INITIAL STUDY | REPLICATE AND RELOCATE A SITE-SPECIFIC BUILDING



**COMPROMISED LEGACY MASTERPLAN/CORE VALUES:**

- X** ALLEE ACCESS BLOCKED
- X** MORE THAN 20 ALLEE TREES LOST
- X** STAIRS EXTEND INTO GATHERING SPACE
- X** BLOCKED PROCESSION TO PARK LEVEL

**CONCLUSION: PAVILION CANNOT BE REPLICATED**

# INITIAL STUDY | REPLICATE AND RELOCATE A SITE-SPECIFIC BUILDING

## COMPROMISED LEGACY MASTERPLAN/CORE VALUES:

- X ALLEE ACCESS BLOCKED
- X MORE THAN 20 ALLEE TREES LOST
- X STAIRS EXTEND INTO GATHERING SPACE
- X BLOCKED PROCESSION TO PARK LEVEL

## CONCLUSION: PAVILION CANNOT BE REPLICATED

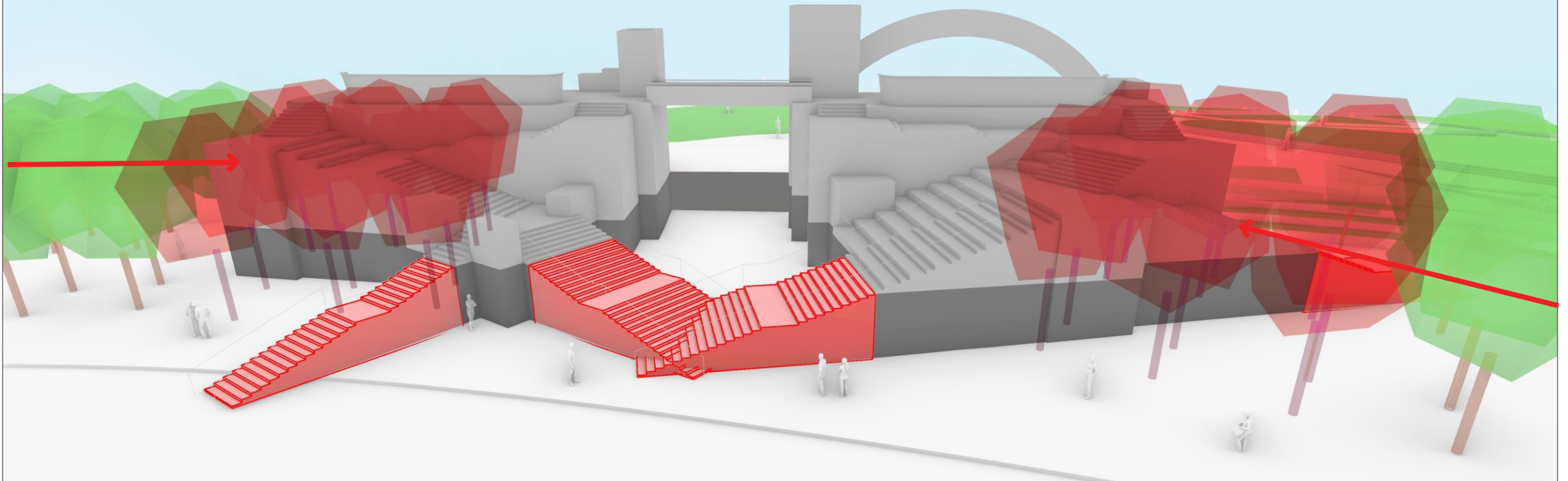


# INITIAL STUDY | CONFLICTS WITH ORIGINAL DESIGN INTENT

## COMPROMISED LEGACY MASTERPLAN/CORE VALUES:

- X ALLEE ACCESS BLOCKED
- X MORE THAN 20 ALLEE TREES LOST
- X STAIRS EXTEND INTO GATHERING SPACE
- X BLOCKED PROCESSION TO PARK LEVEL

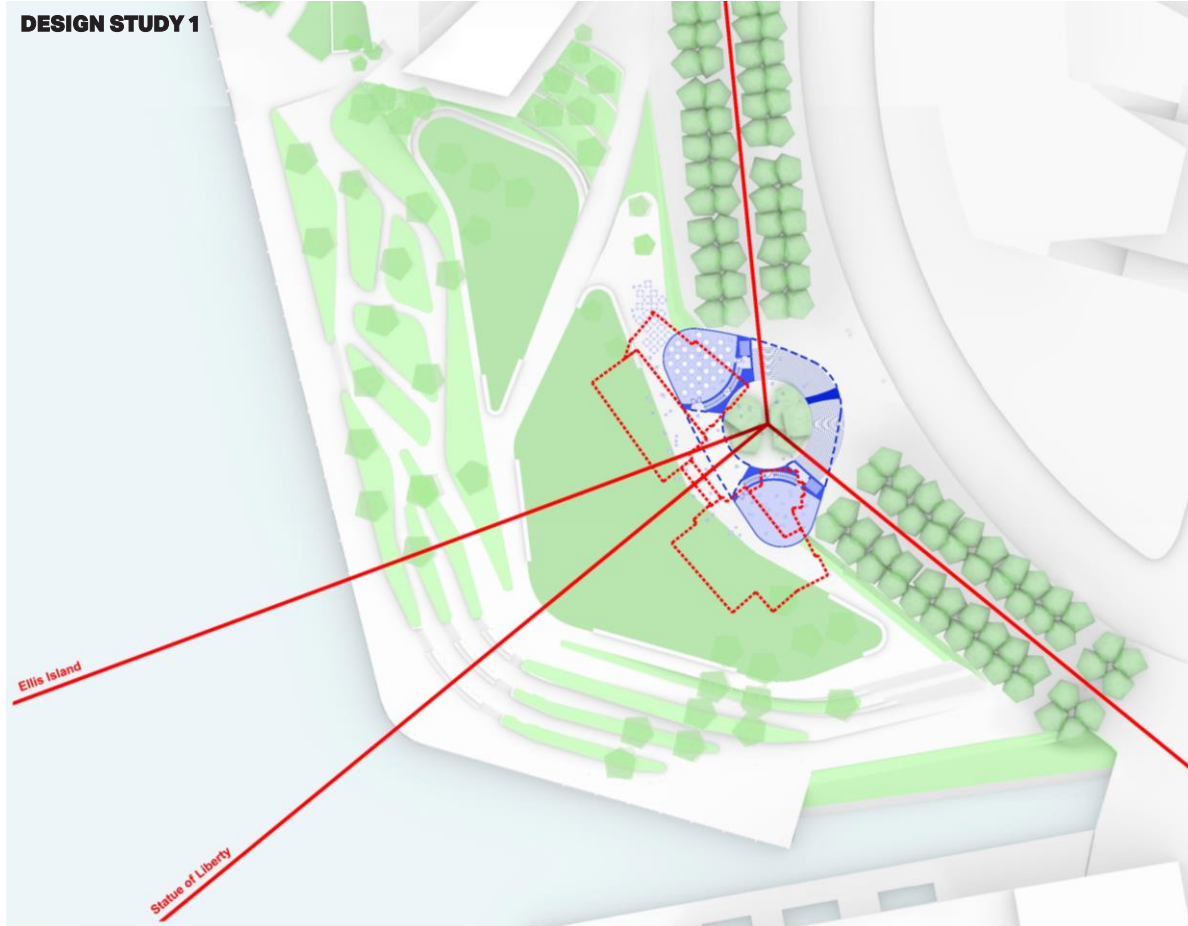
## CONCLUSION: PAVILION CANNOT BE REPLICATED



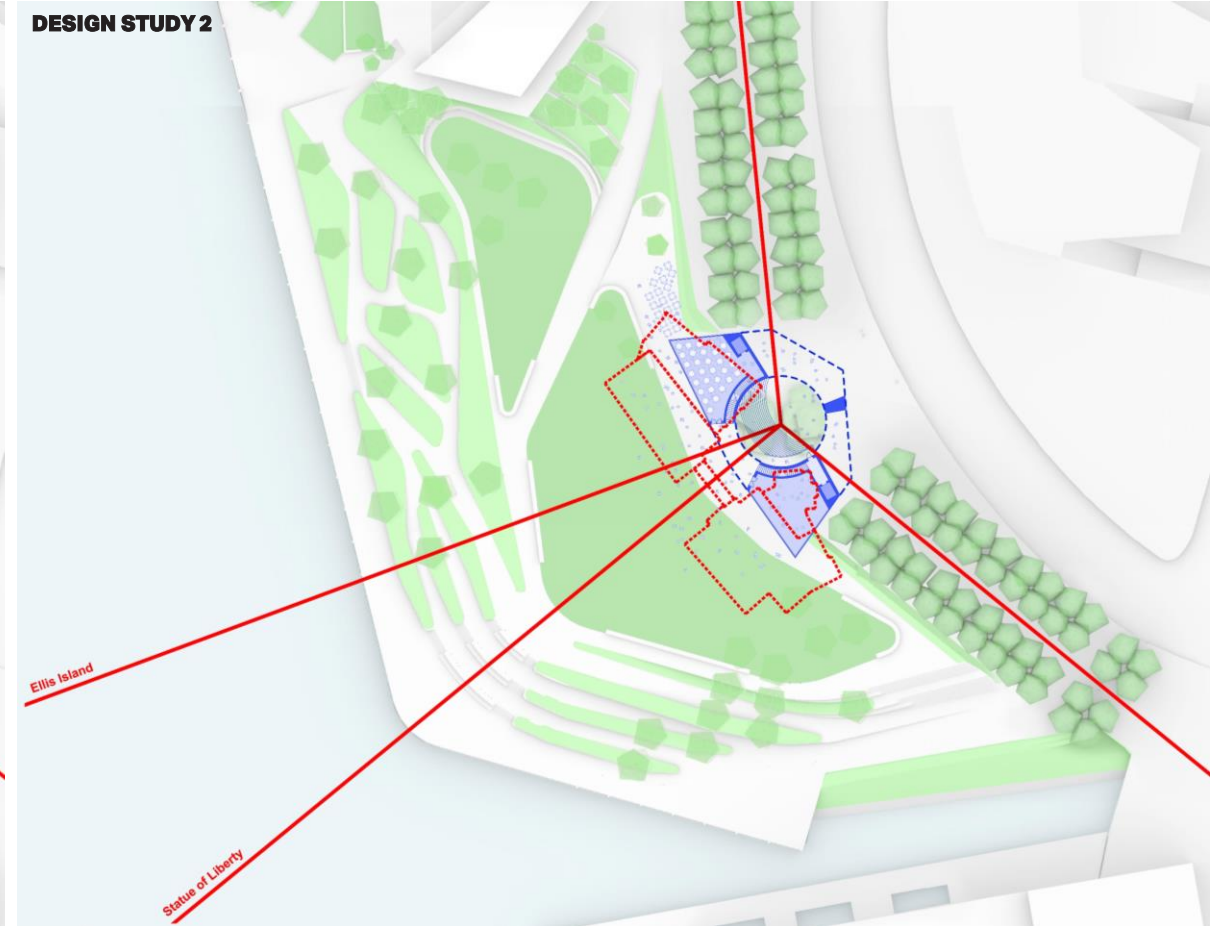


# DESIGN STUDIES

DESIGN STUDY 1



DESIGN STUDY 2



## DESIGN LEGACY CORE VALUES

1. FRAME VIEW TO STATUE OF LIBERTY
2. PRESERVE ALLEE AND TREES
3. RECREATE CENTRAL GATHERING SPACE
4. MAXIMIZE RESILIENT GREEN SPACE
5. ENHANCE PROCESSION FROM STREET TO PARK LEVEL

## NEW DESIGN CONSIDERATIONS

1. RESTAURANT AT PARK LEVEL
2. NEW COMMUNITY PROGRAM AT PARK LEVEL
3. SMALLER BUILDING FOOTPRINT, INCREASED USABLE AREA
4. LARGER ROOF TERRACE
5. SUSTAINABLE DESIGN - NET ZERO READY

# DESIGN STUDY 1

RESPONDING TO CORE DESIGN VALUES AND THE LEGACY MASTERPLAN

# DESIGN STUDY 1 | PARK LEVEL PLAN



**PARK LEVEL (+20')**

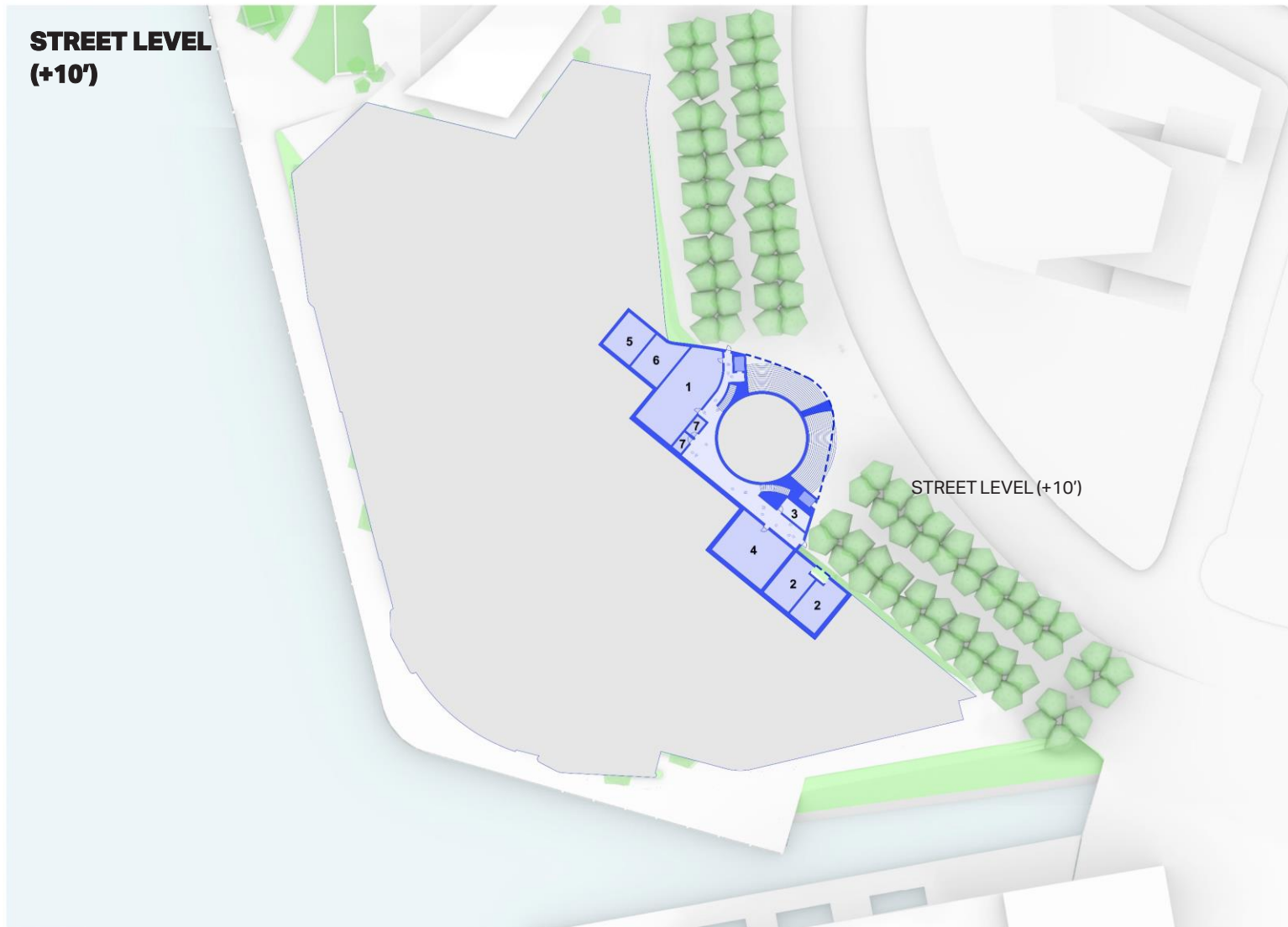
**LEGEND:**

- PARK LEVEL (+20')**
- 1 INDOOR DINING
  - 2 OUTDOOR DINING
  - 3 COMMUNITY ROOM
  - 4 GATHERING SPACE

- STREET LEVEL (+10')**
- 1 KITCHEN
  - 2 PUBLIC RESTROOMS
  - 3 SECURITY OFFICE
  - 4 STORAGE
  - 5 PROGRAM STORAGE
  - 6 MAINTENANCE STORAGE
  - 7 RESTAURANT RESTROOMS

- ROOF (+38'6")**
- 1 ROOF DECK

# DESIGN STUDY 1 | STREET LEVEL PLAN



## LEGEND:

### PARK LEVEL (+20')

- 1 INDOOR DINING
- 2 OUTDOOR DINING
- 3 COMMUNITY ROOM
- 4 GATHERING SPACE

### STREET LEVEL (+10')

- 1 KITCHEN
- 2 PUBLIC RESTROOMS
- 3 SECURITY OFFICE
- 4 STORAGE
- 5 PROGRAM STORAGE
- 6 MAINTENANCE STORAGE
- 7 RESTAURANT RESTROOMS

### ROOF (+38'6")

- 1 ROOF DECK

# DESIGN STUDY 1 | ROOF TERRACE PLAN



## LEGEND:

### PARK LEVEL (+20')

- 1 INDOOR DINING
- 2 OUTDOOR DINING
- 3 COMMUNITY ROOM
- 4 GATHERING SPACE

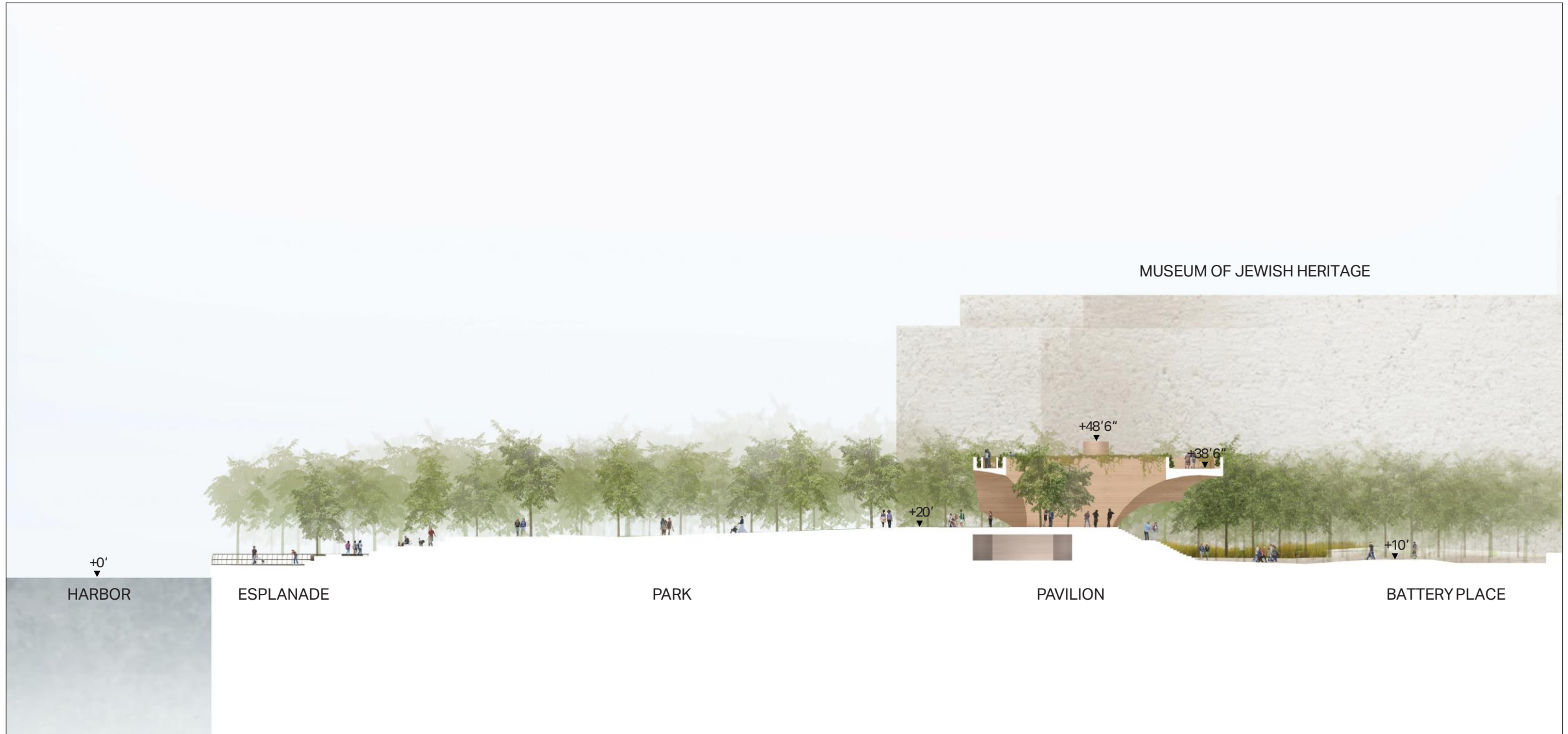
### STREET LEVEL (+10')

- 1 KITCHEN
- 2 PUBLIC RESTROOMS
- 3 SECURITY OFFICE
- 4 STORAGE
- 5 PROGRAM STORAGE
- 6 MAINTENANCE STORAGE
- 7 RESTAURANT RESTROOMS

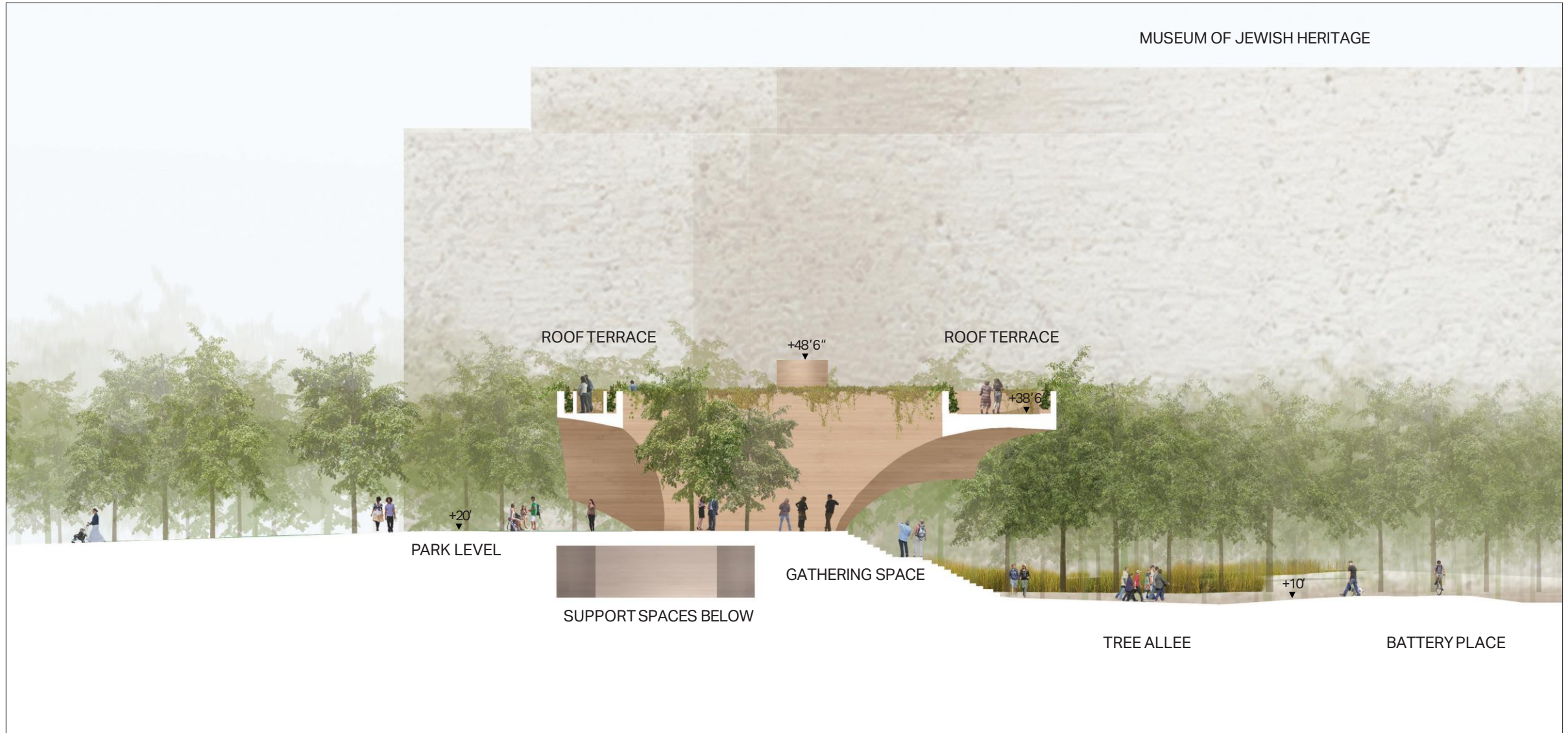
### ROOF (+38'6")

- 1 ROOF DECK

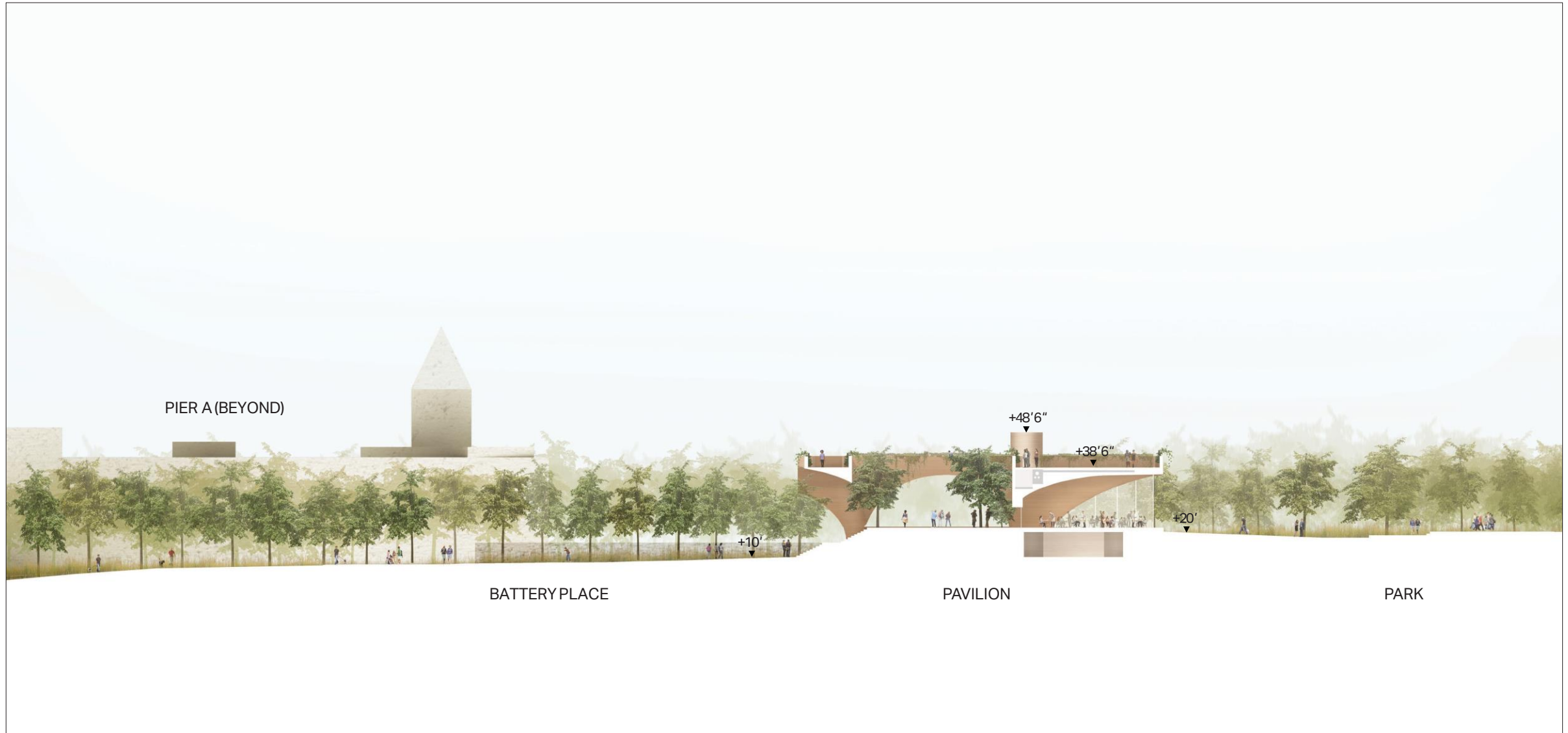
# DESIGN STUDY 1 | SECTION LOOKING NORTH



# DESIGN STUDY 1 | SECTION LOOKING NORTH - PAVILION DETAIL

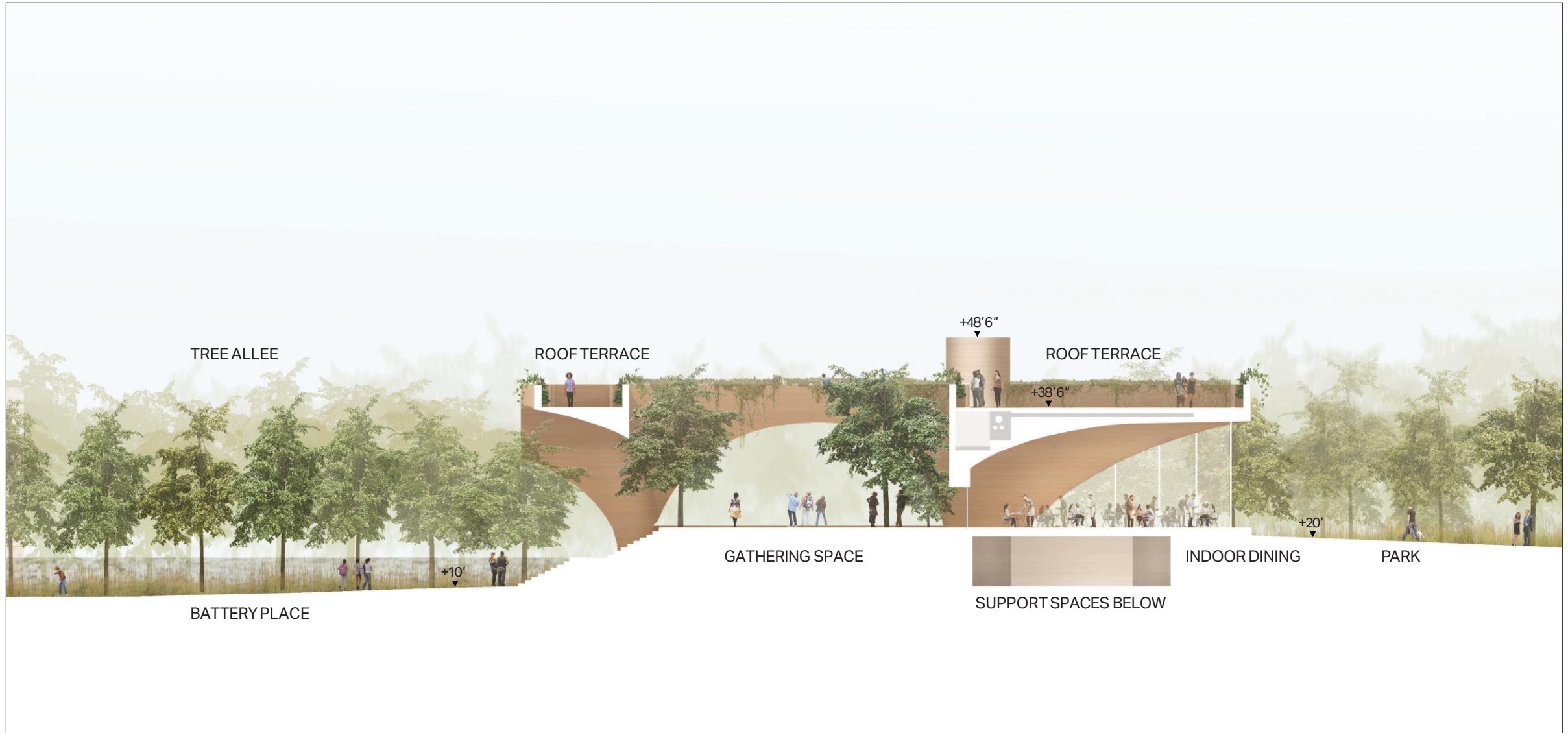


# DESIGN STUDY 1 | SECTION LOOKING WEST

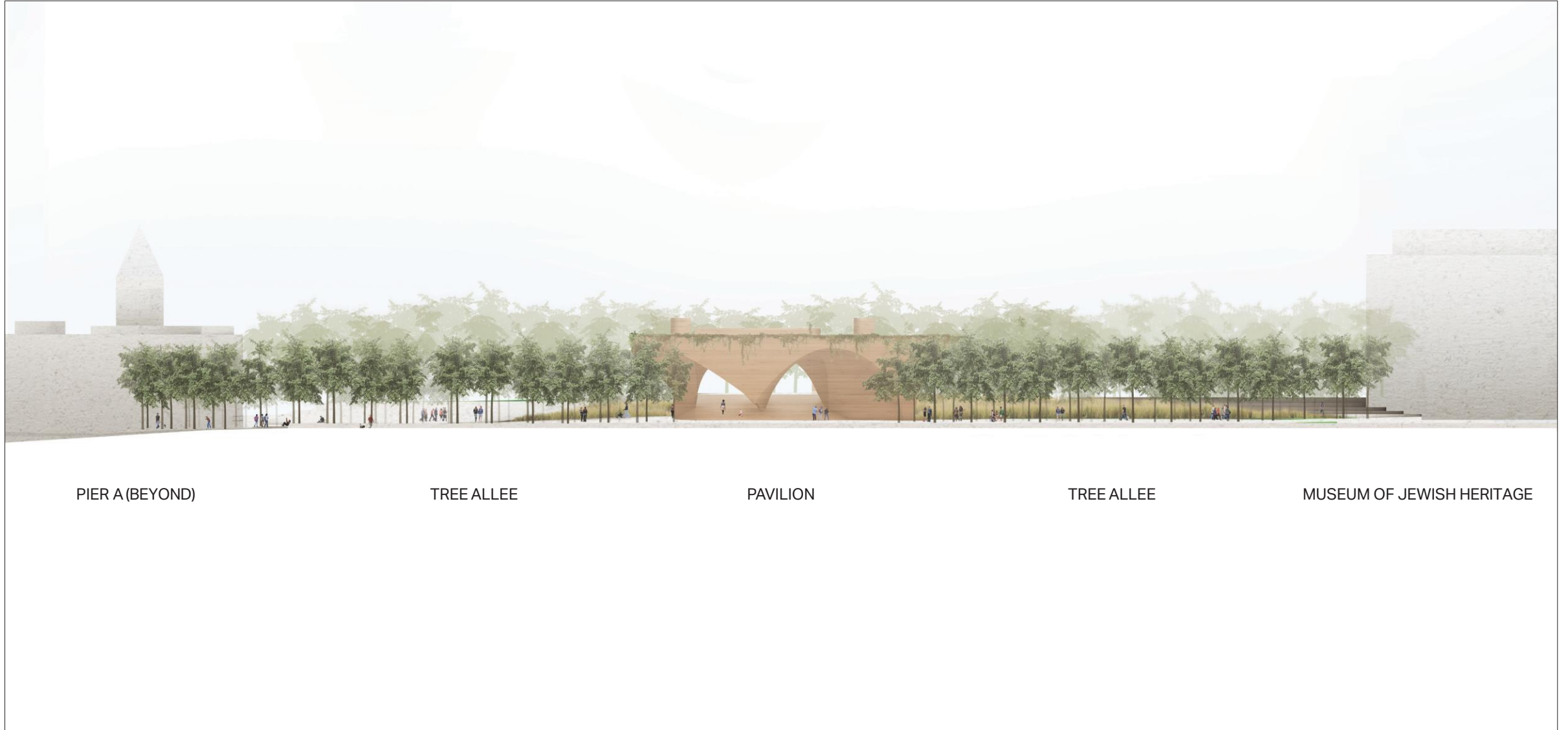




# DESIGN STUDY 1 | SECTION LOOKING WEST - PAVILION DETAIL



# DESIGN STUDY 1 | ELEVATION FROM BATTERY PLACE



# DESIGN STUDY 1 | ELEVATION FROM BATTERY PLACE - PAVILION DETAIL

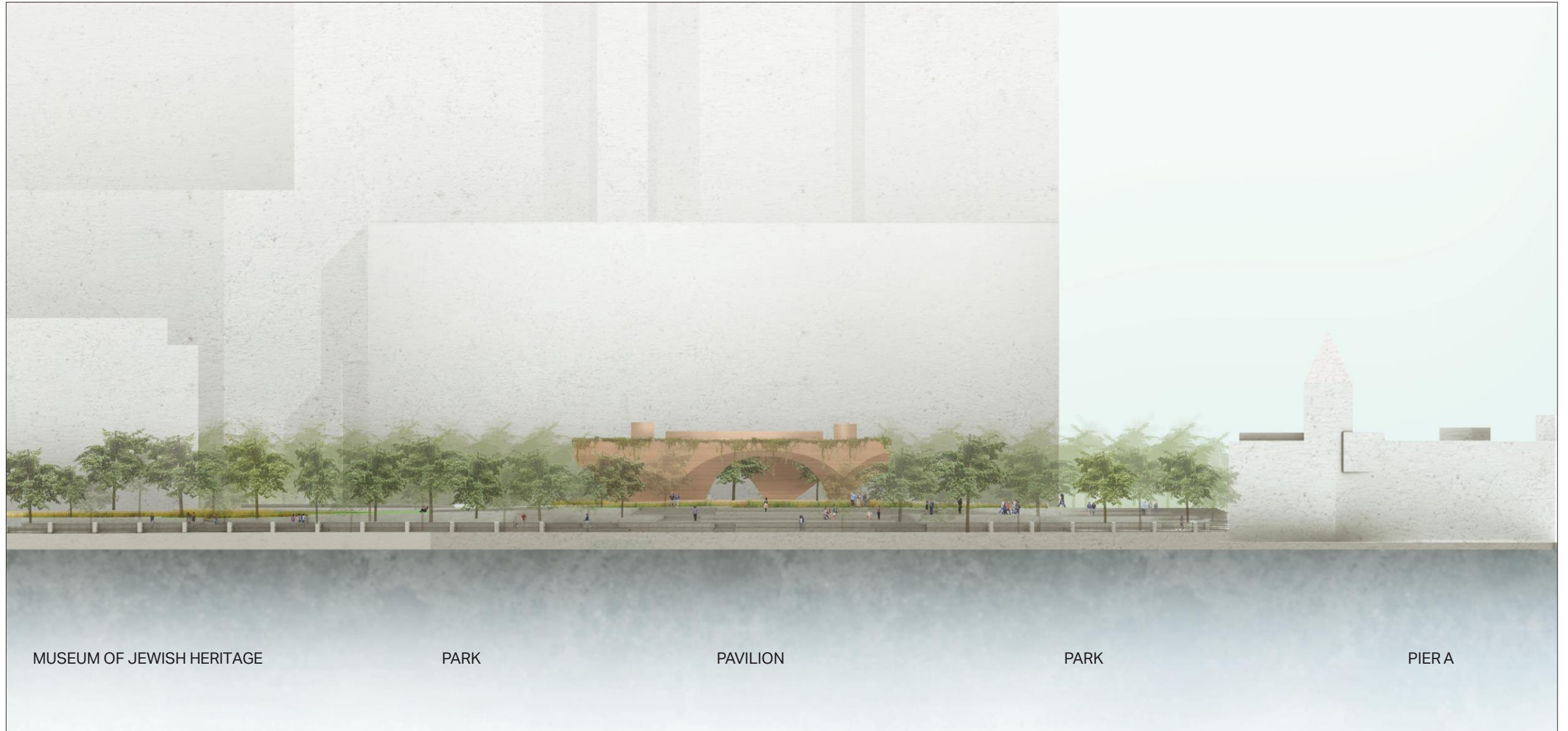


TREE ALLEE

GATHERING SPACE

TREE ALLEE

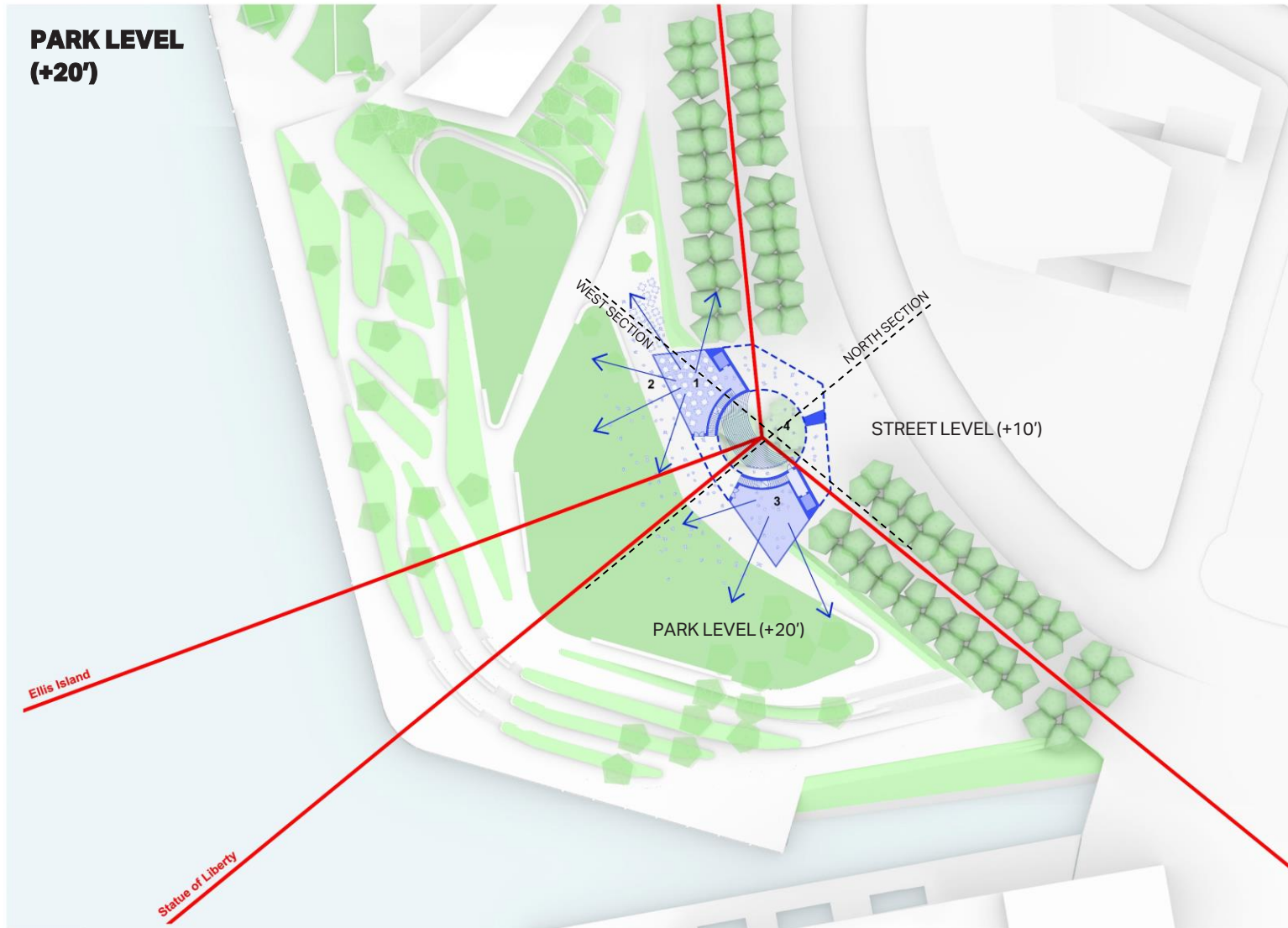
# DESIGN STUDY 1 | ELEVATION FROM NEW YORK HARBOR



# DESIGN STUDY 2

RESPONDING TO CORE DESIGN VALUES AND THE LEGACY MASTERPLAN

# DESIGN STUDY 2 | PARK LEVEL PLAN



## LEGEND:

### PARK LEVEL (+20')

- 1 INDOOR DINING
- 2 OUTDOOR DINING
- 3 COMMUNITY ROOM
- 4 GATHERING SPACE

### STREET LEVEL (+10')

- 1 KITCHEN
- 2 PUBLIC RESTROOMS
- 3 SECURITY OFFICE
- 4 STORAGE
- 5 PROGRAM STORAGE
- 6 MAINTENANCE STORAGE
- 7 RESTAURANT RESTROOMS

### ROOF (+38'6")

- 1 ROOF DECK

# DESIGN STUDY 2 | STREET LEVEL PLAN



## LEGEND:

- PARK LEVEL (+20')**
- 1 INDOOR DINING
  - 2 OUTDOOR DINING
  - 3 COMMUNITY ROOM
  - 4 GATHERING SPACE

- STREET LEVEL (+10')**
- 1 KITCHEN
  - 2 PUBLIC RESTROOMS
  - 3 SECURITY OFFICE
  - 4 STORAGE
  - 5 PROGRAM STORAGE
  - 6 MAINTENANCE STORAGE
  - 7 RESTAURANT RESTROOMS

- ROOF (+38'6")**
- 1 ROOF DECK

# DESIGN STUDY 2 | ROOF LEVEL PLAN



## LEGEND:

### PARK LEVEL (+20')

- 1 INDOOR DINING
- 2 OUTDOOR DINING
- 3 COMMUNITY ROOM
- 4 GATHERING SPACE

### STREET LEVEL (+10')

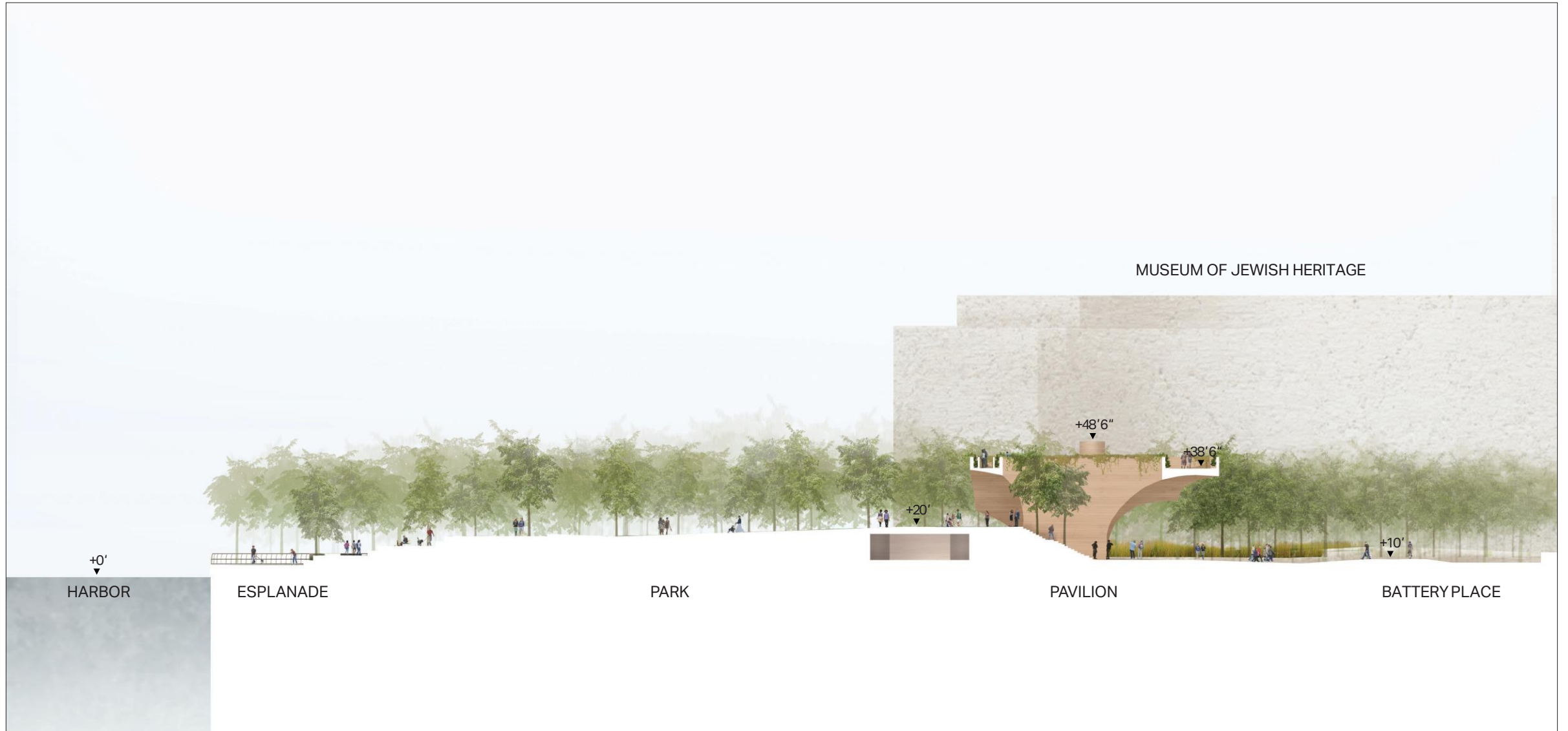
- 1 KITCHEN
- 2 PUBLIC RESTROOMS
- 3 SECURITY OFFICE
- 4 STORAGE
- 5 PROGRAM STORAGE
- 6 MAINTENANCE STORAGE
- 7 RESTAURANT RESTROOMS

### ROOF (+38'6")

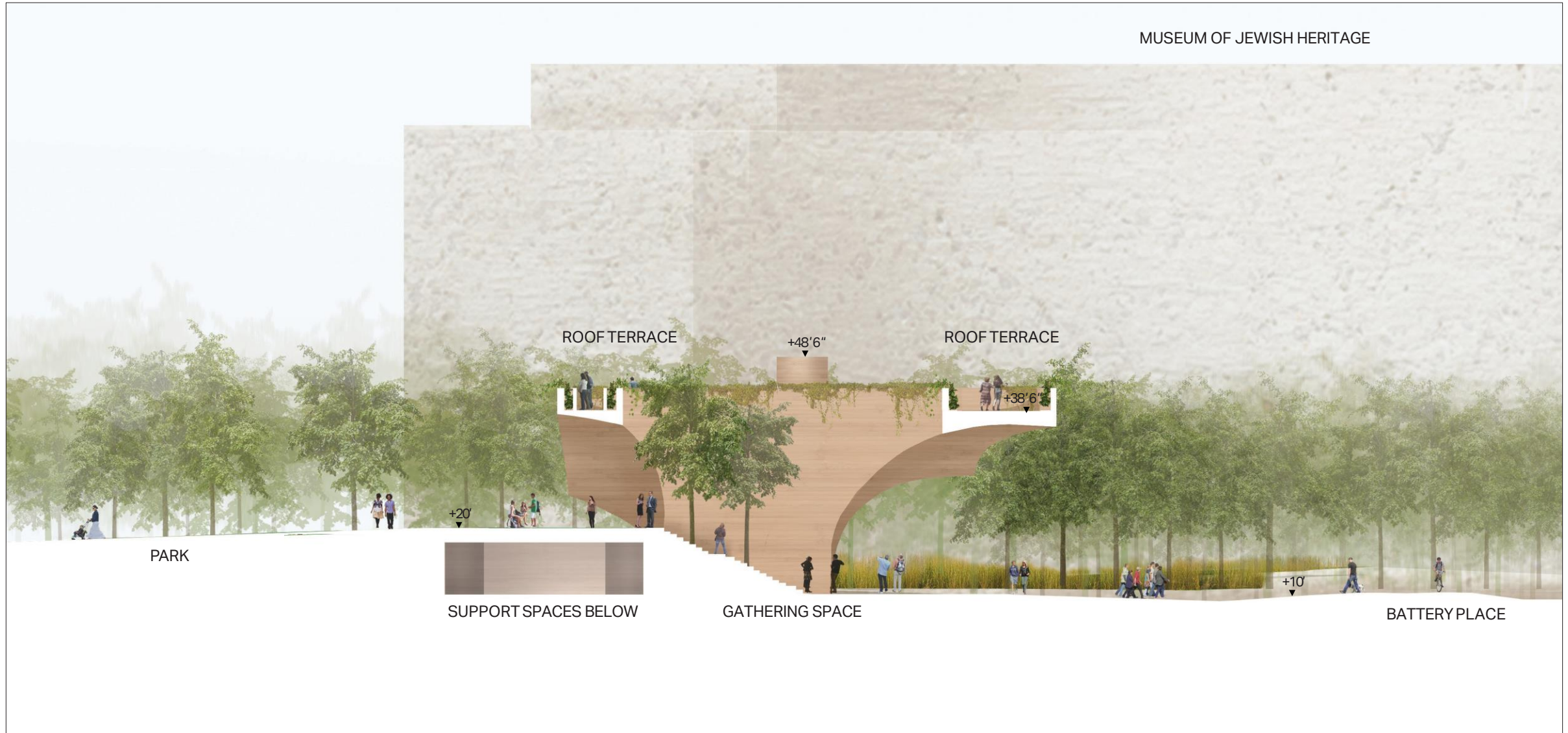
- 1 ROOF DECK



# DESIGN STUDY 2 | SECTION LOOKING NORTH



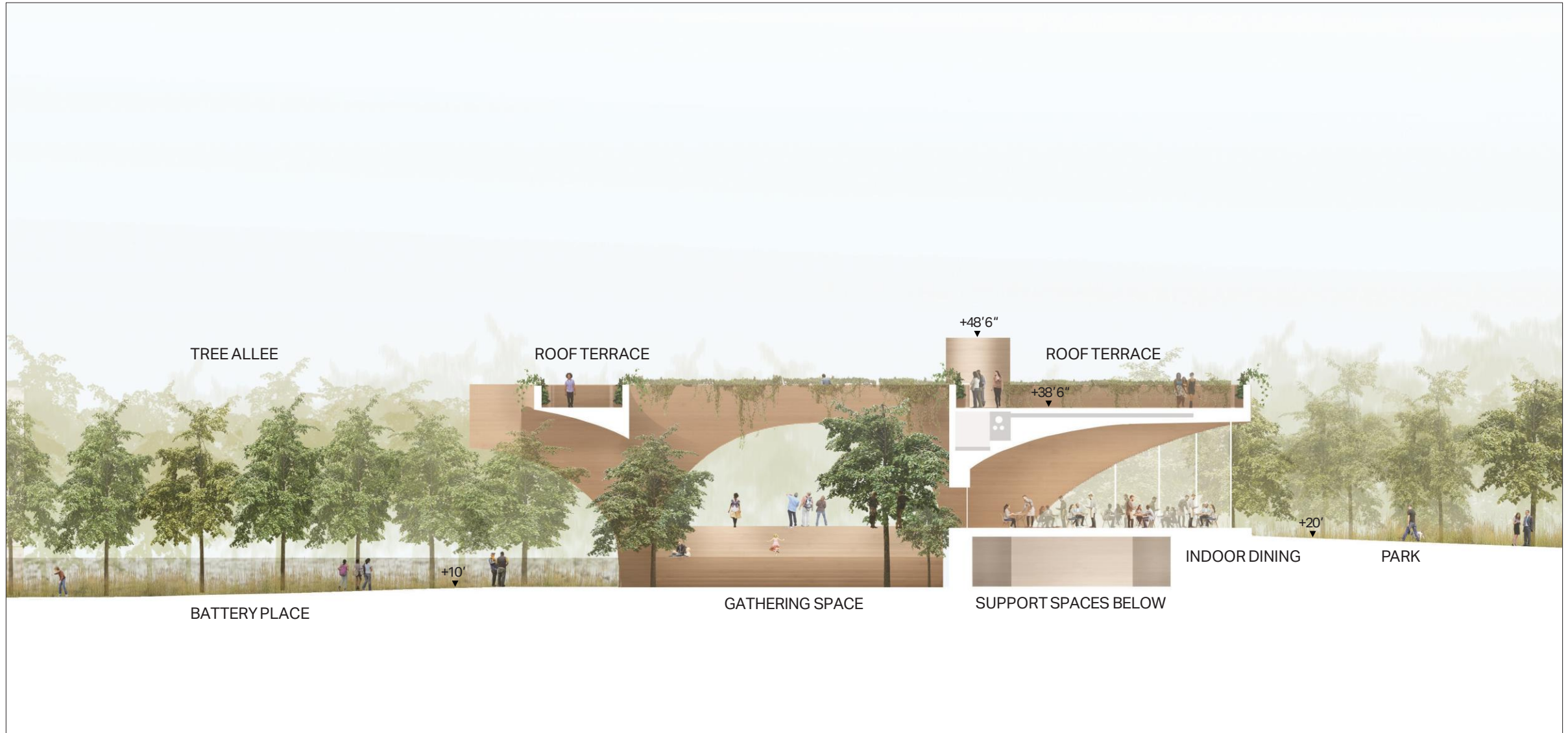
# DESIGN STUDY 2 | SECTION LOOKING NORTH - PAVILION DETAIL



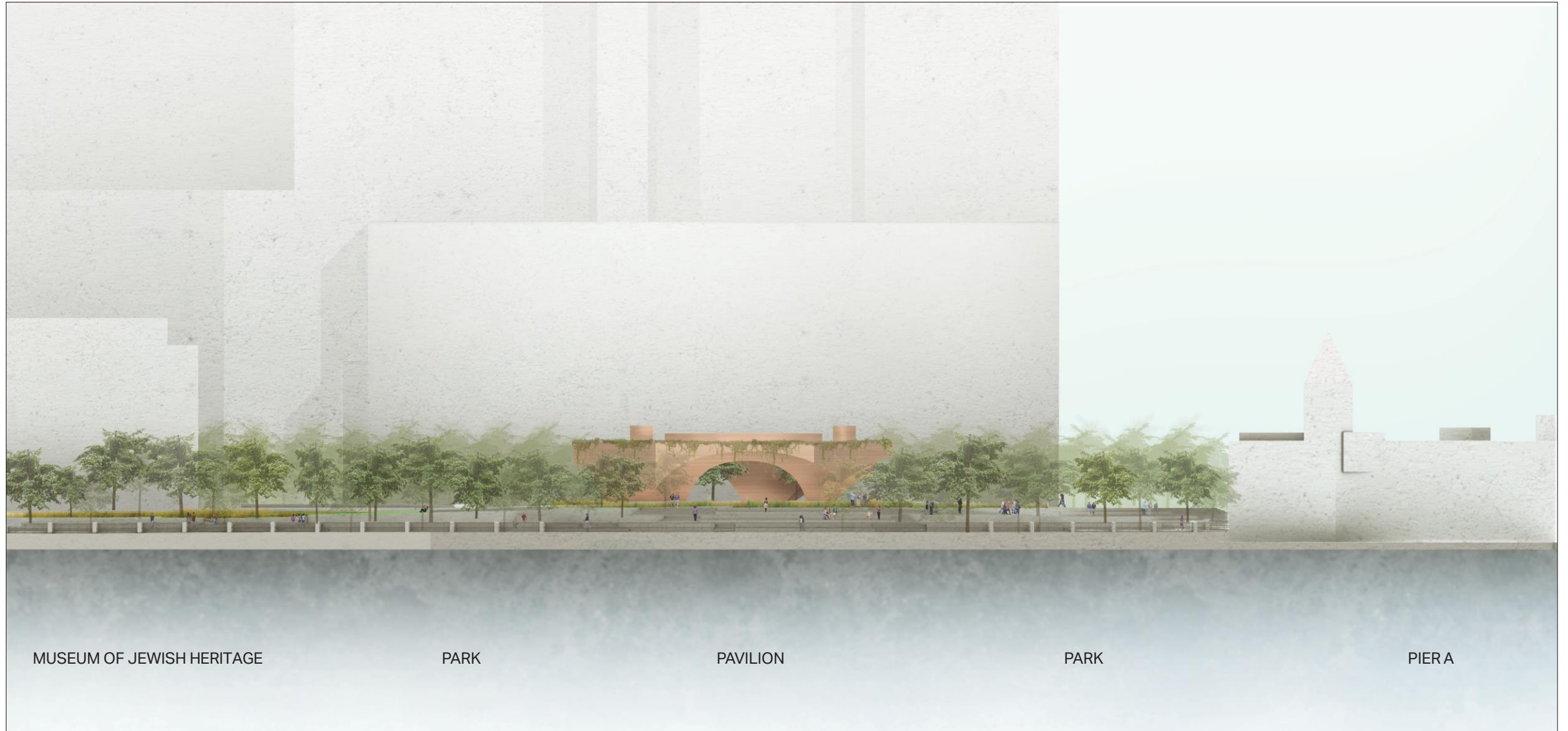
# DESIGN STUDY 2 | SECTION LOOKING WEST



# DESIGN STUDY 2 | SECTION LOOKING WEST - PAVILION DETAIL



# DESIGN STUDY 2 | ELEVATION FROM NEW YORK HARBOR







# WAGNER PARK Q&A



# MUSEUM OF JEWISH HERITAGE

# UNDERSTANDING THE CONCEPTS

**MUSEUM OF JEWISH HERITAGE**

DFE: 15.5' – 17.5'  
HOI: 4.5' – 7'

**WAGNER PARK**

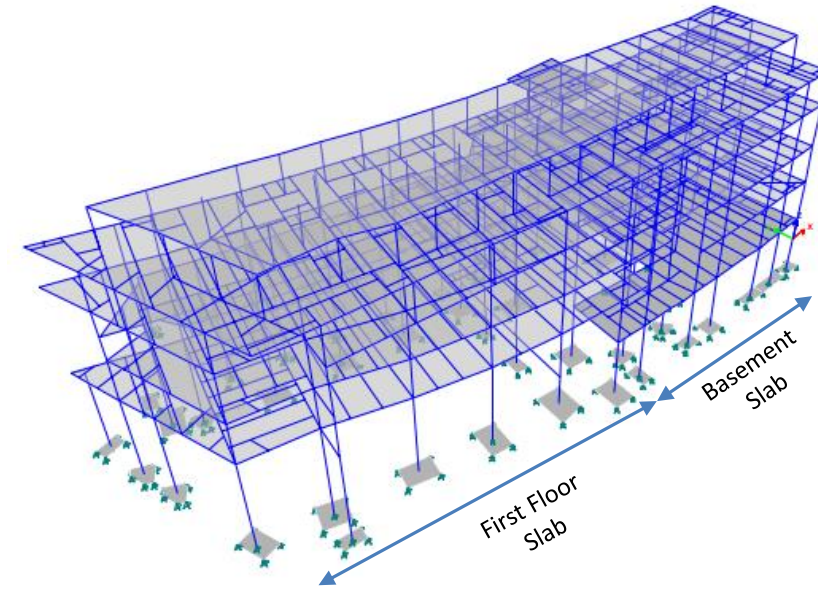
**PIER A PLAZA**

**THE BATTERY**

# MUSEUM OF JEWISH HERITAGE | PRELIMINARY ANALYSIS

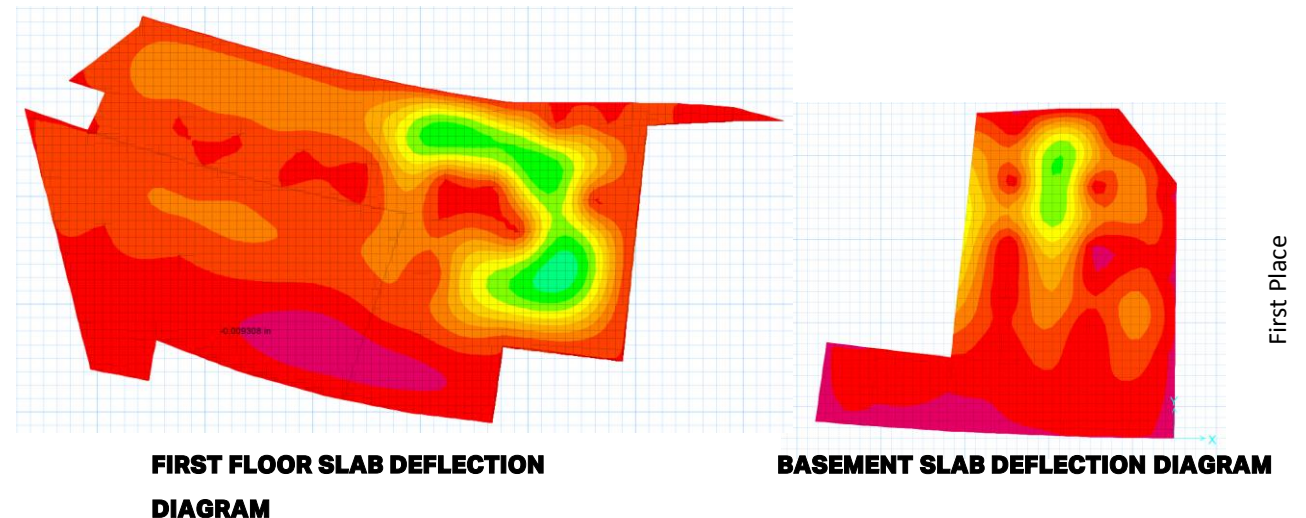
## PRELIMINARY STRUCTURAL ANALYSIS

- Evaluated the feasibility of including the museum, or portions of the museum, in the flood alignment
- Developed preliminary design criteria based on Design Flood Elevation and Wind and Wave loads.
- Considered uplift on the floor and basement slabs caused by buoyancy pressures

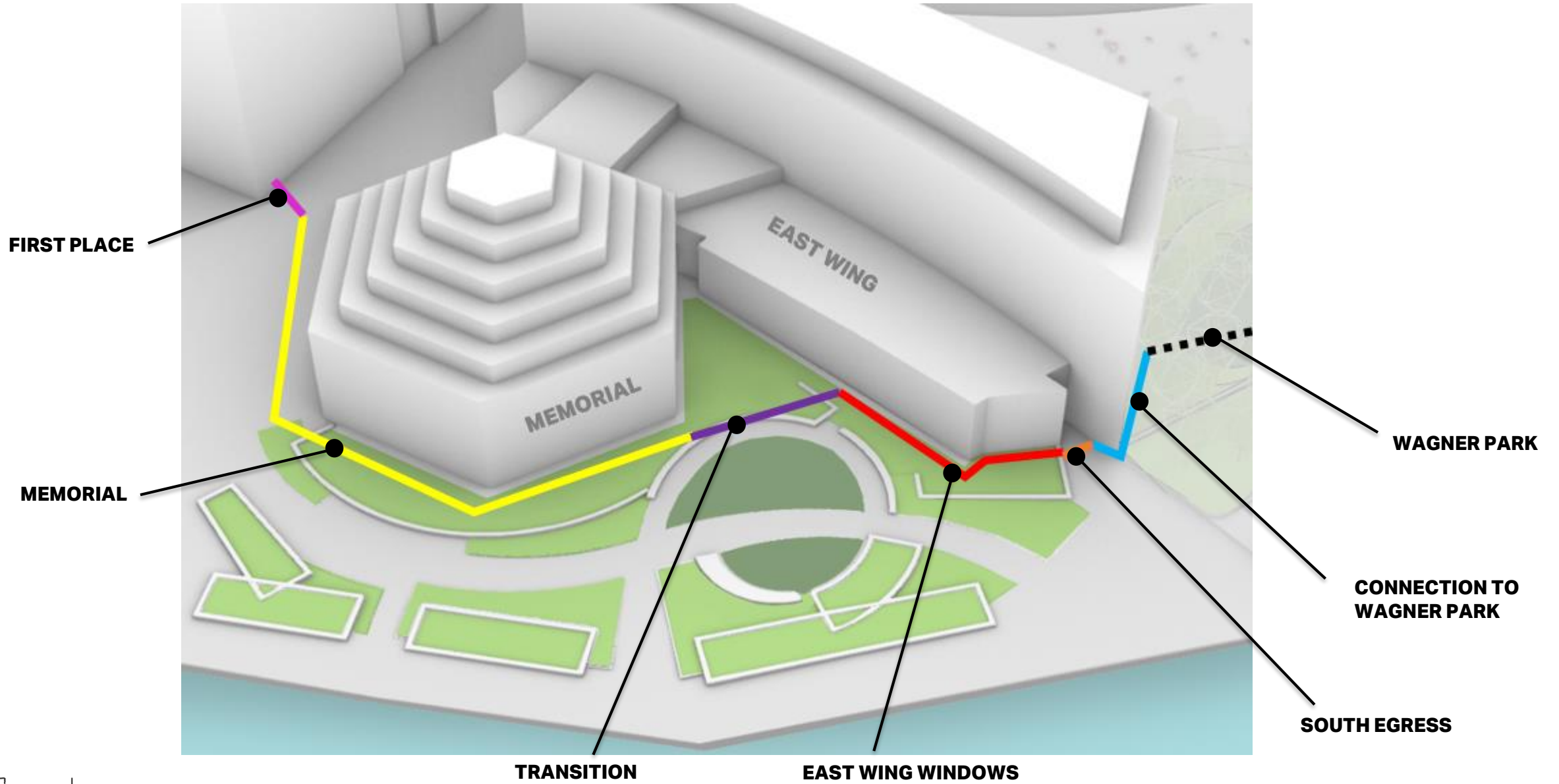


## PRELIMINARY RESULTS

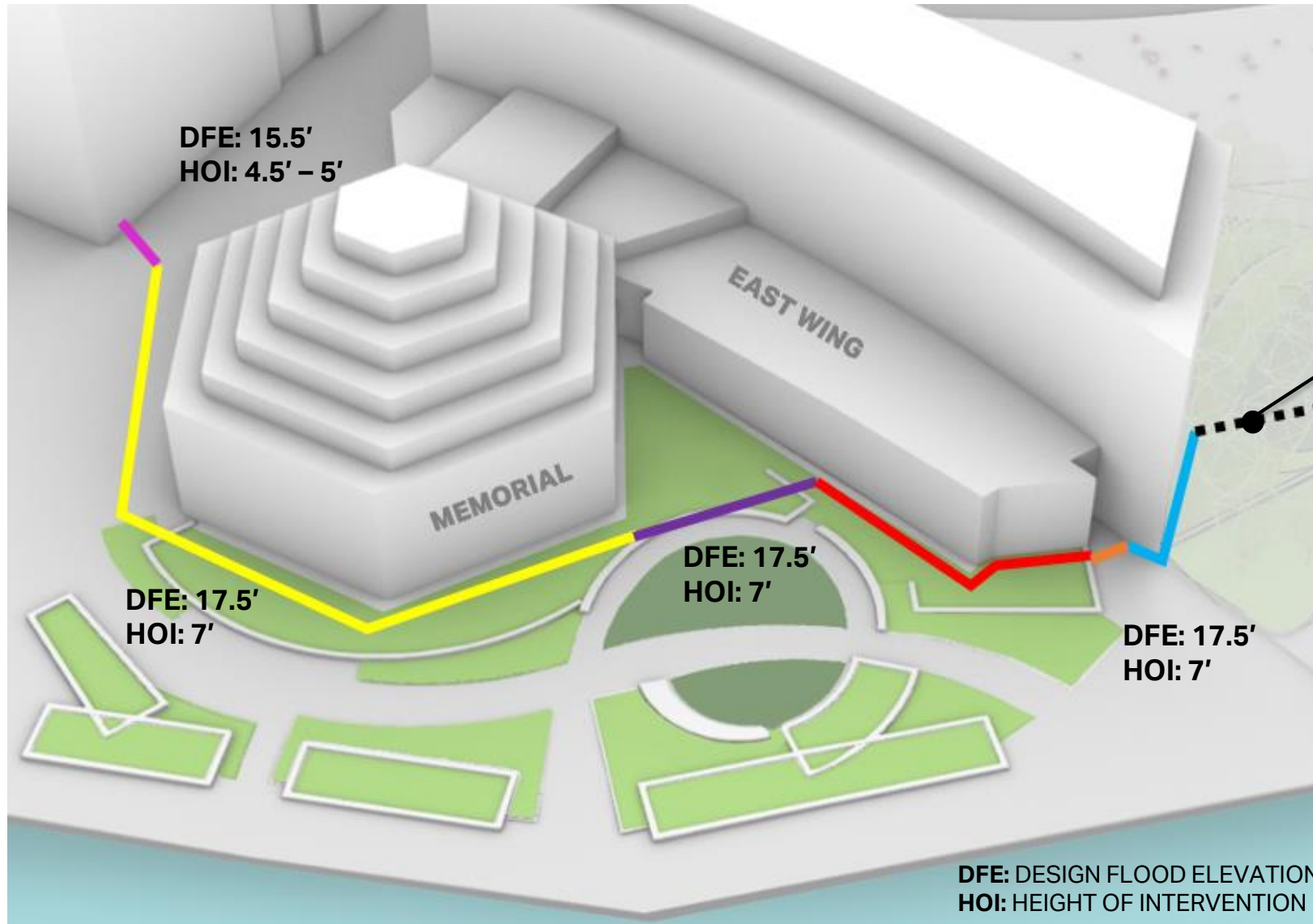
- The walls and foundation have some capacity to resist flood loads; however in order to achieve the Design Criteria of 2050 100-year storm, retrofits are needed
- Other options to reduce the loads include seepage cut-off barriers, and wave attenuation



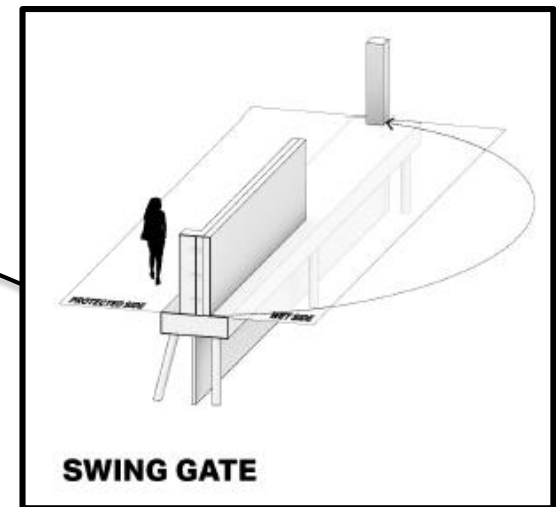
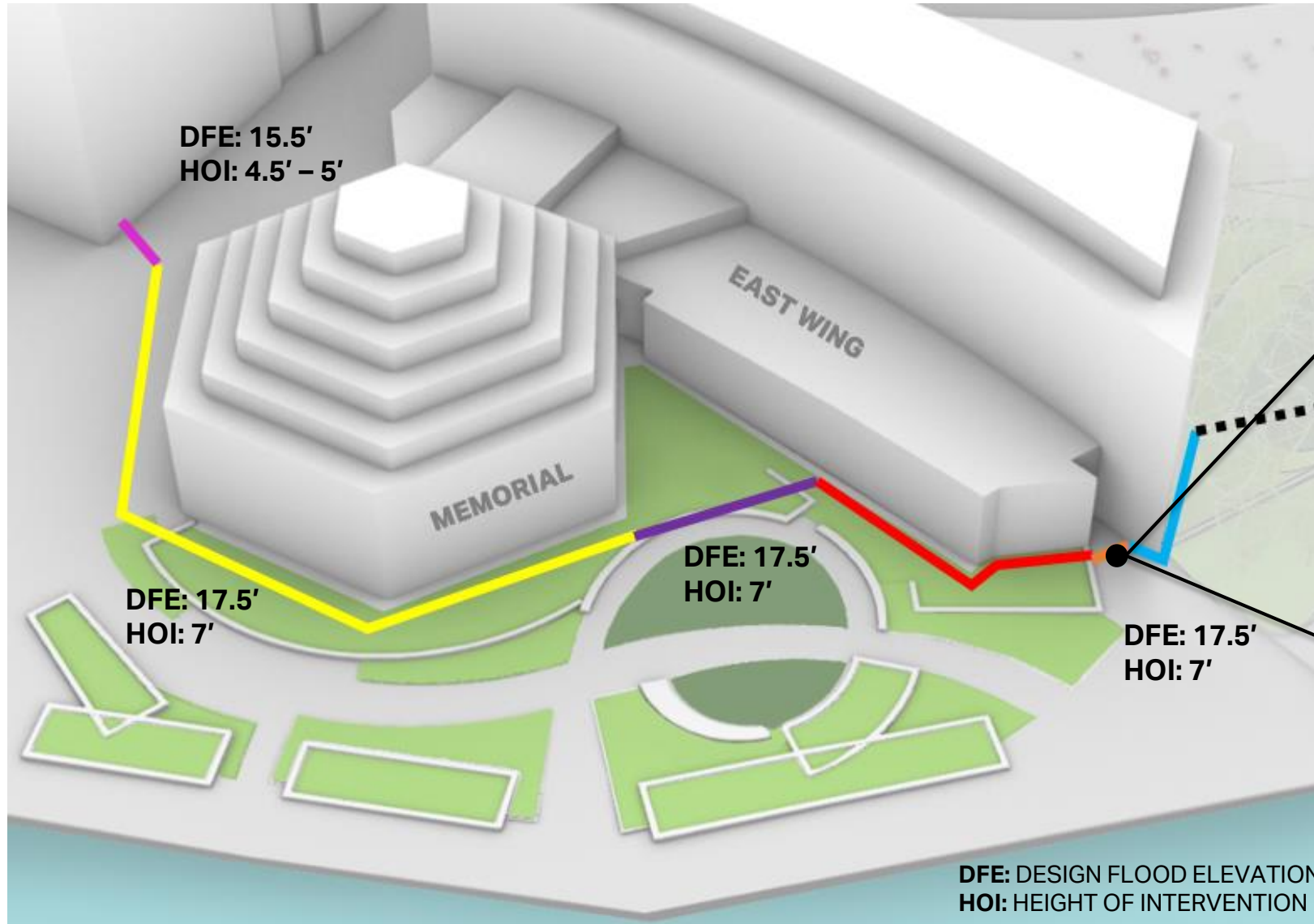
# MUSEUM OF JEWISH HERITAGE | FLOOD ALIGNMENT ZONES



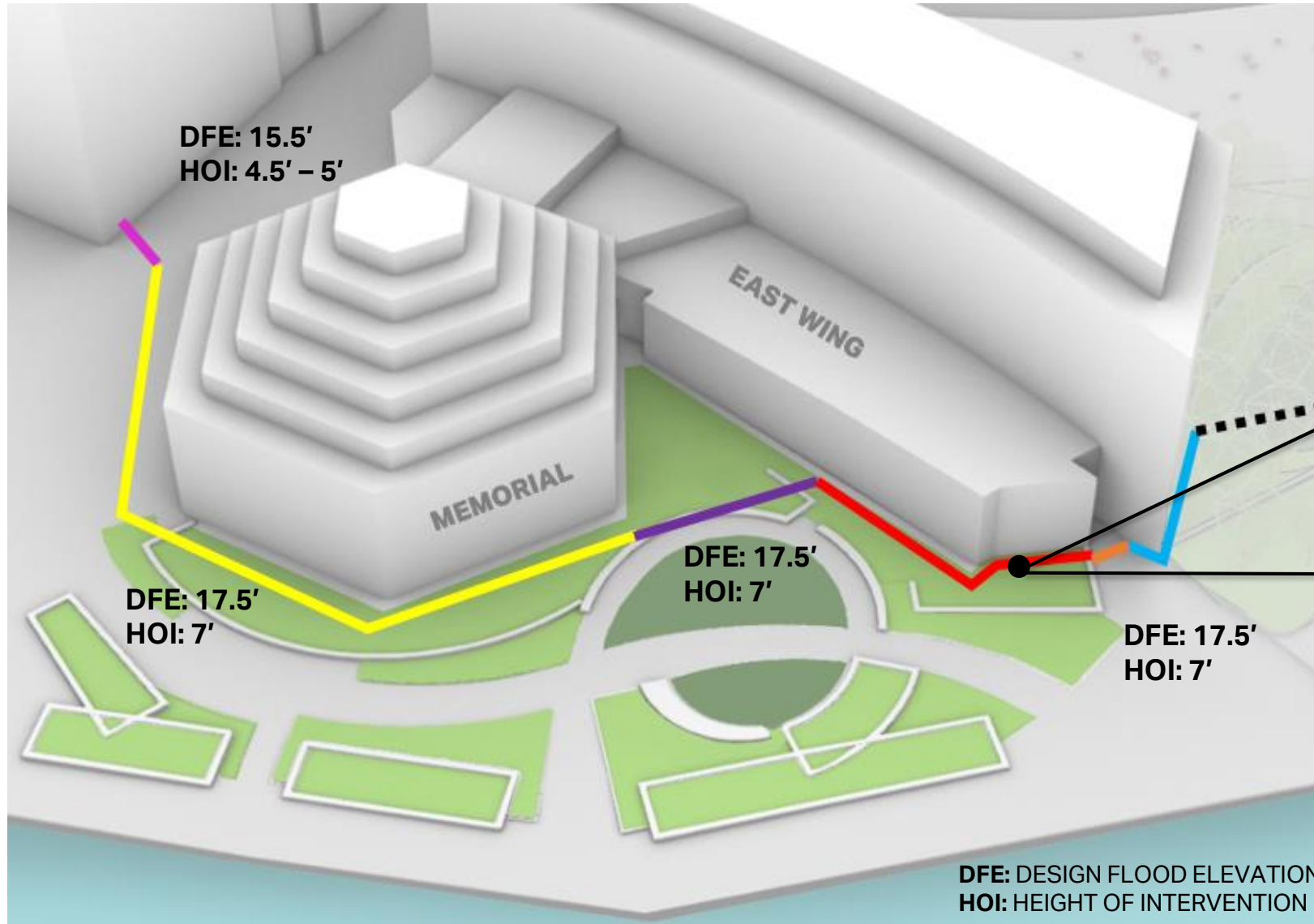
# MUSEUM OF JEWISH HERITAGE | CONNECTION TO WAGNER PARK



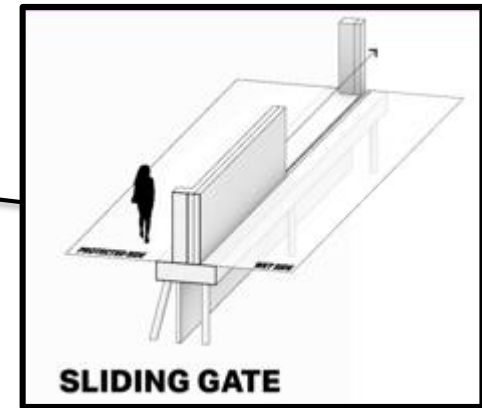
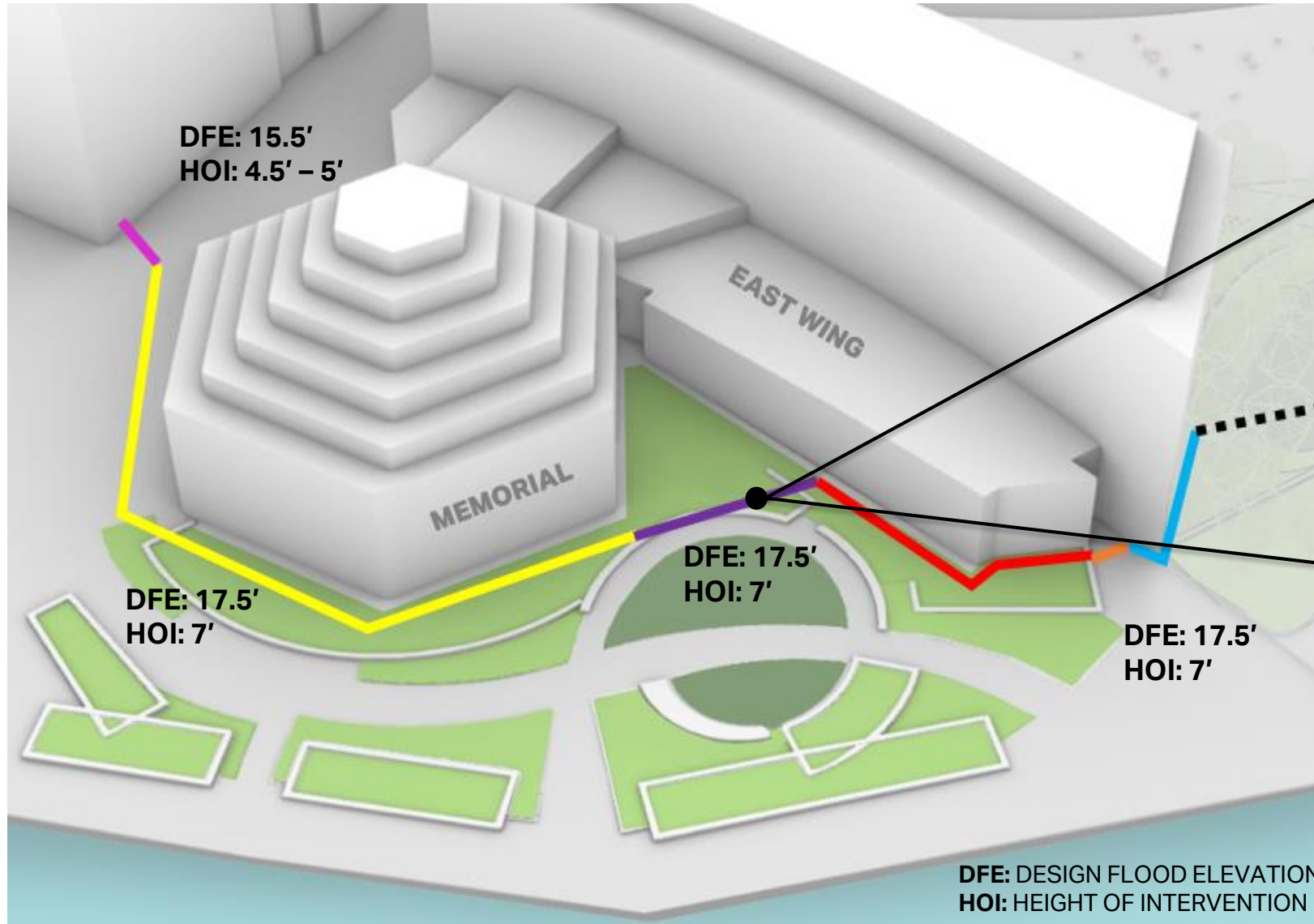
# MUSEUM OF JEWISH HERITAGE | SOUTH EGRESS



# MUSEUM OF JEWISH HERITAGE | EAST WING WINDOWS

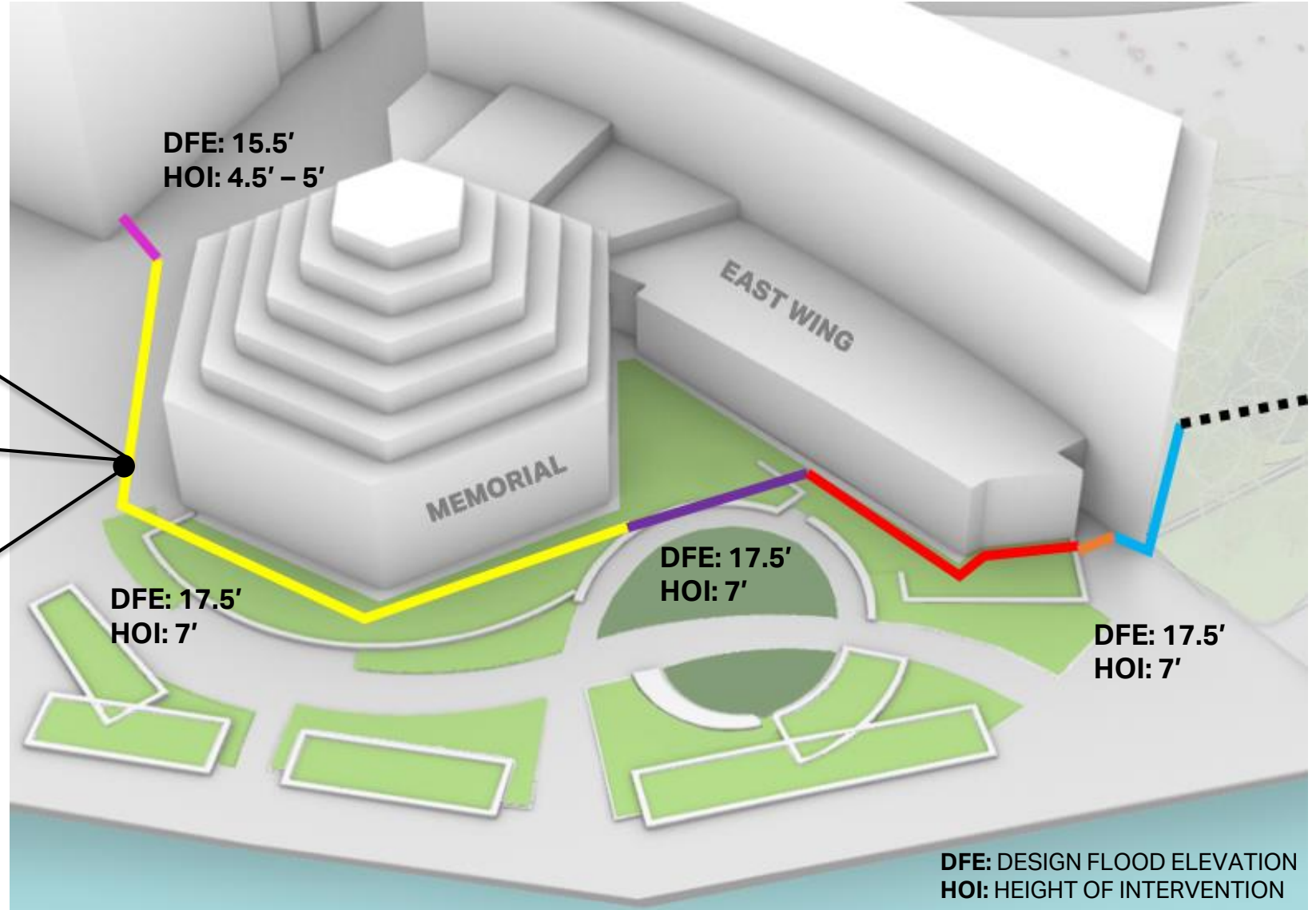
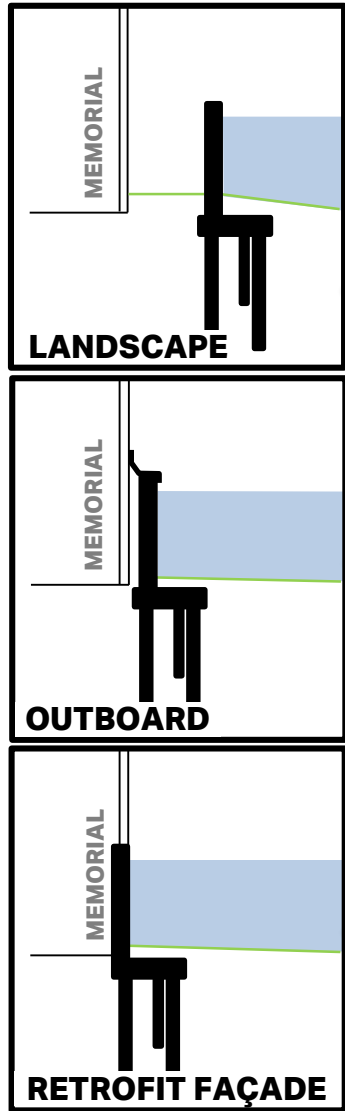


# MUSEUM OF JEWISH HERITAGE | TRANSITION

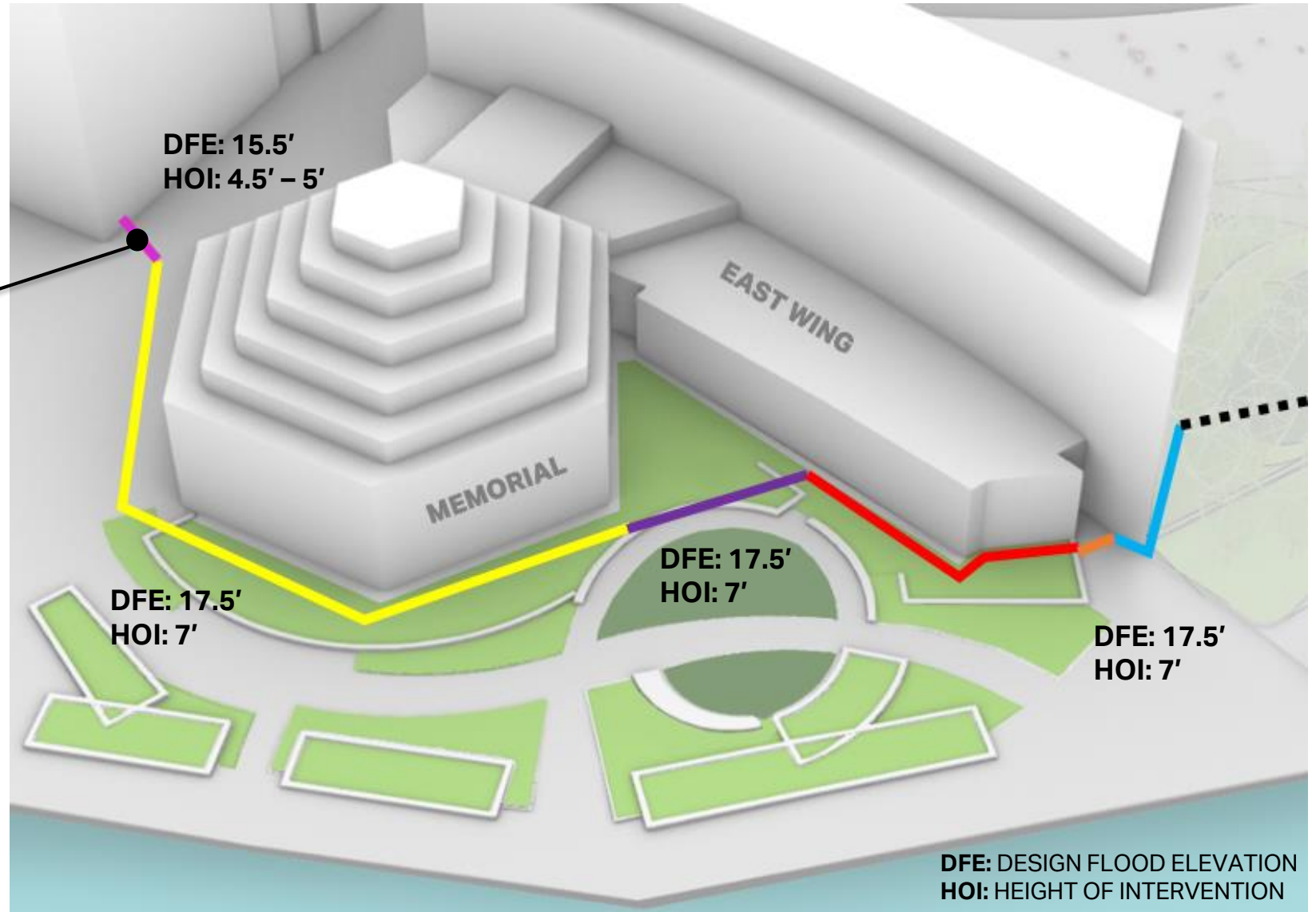




# MUSEUM OF JEWISH HERITAGE | MEMORIAL



# MUSEUM OF JEWISH HERITAGE | FIRST PLACE



# PIER A

# UNDERSTANDING THE CONCEPTS

**MUSEUM OF JEWISH HERITAGE**

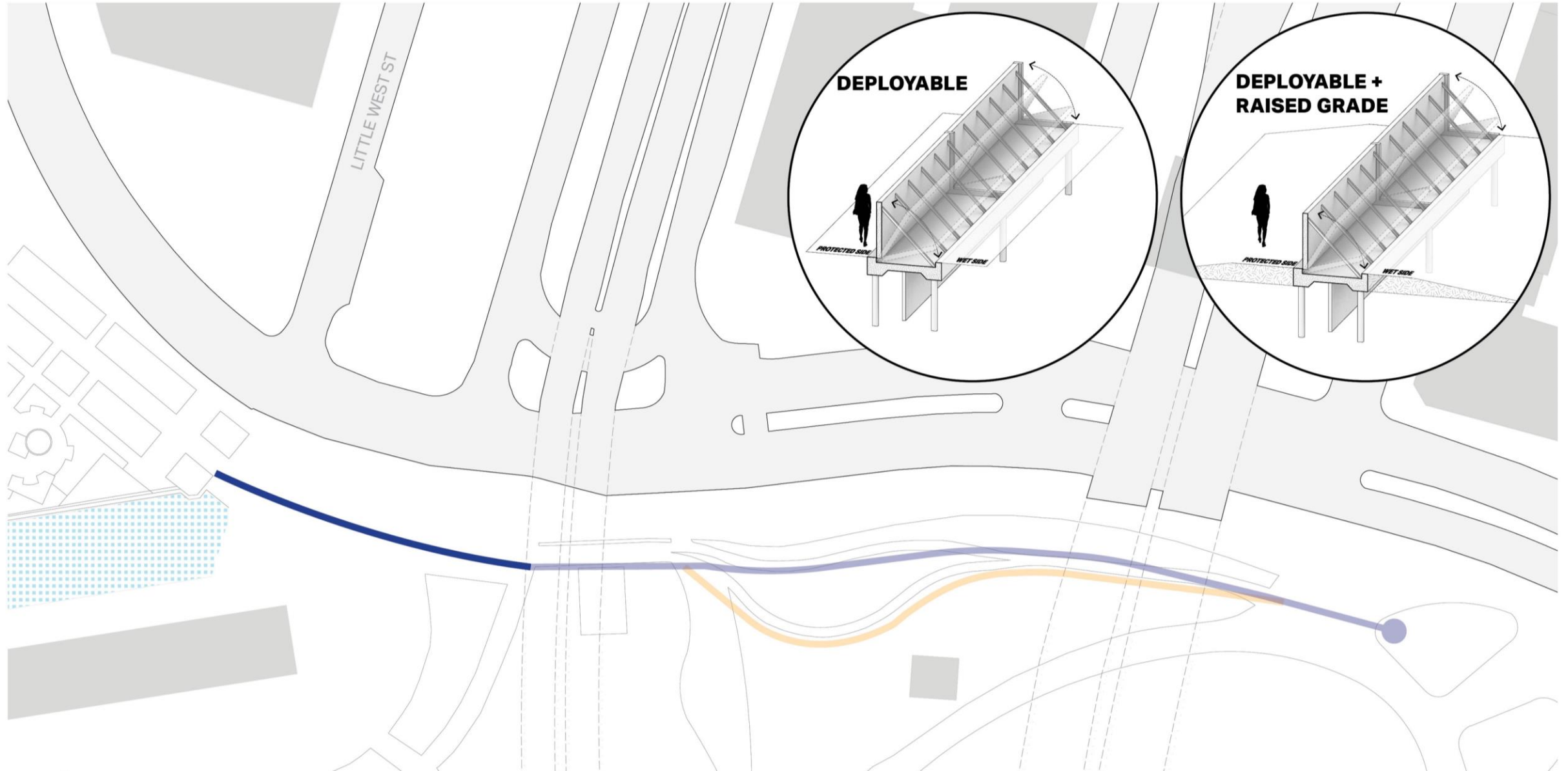
**WAGNER PARK**

DFE: 18'  
HOI: 6' - 14'

**PIER A PLAZA**

**THE BATTERY**

# PIER A PLAZA SEGMENT



# THE BATTERY

# UNDERSTANDING THE CONCEPTS

**MUSEUM OF JEWISH HERITAGE**

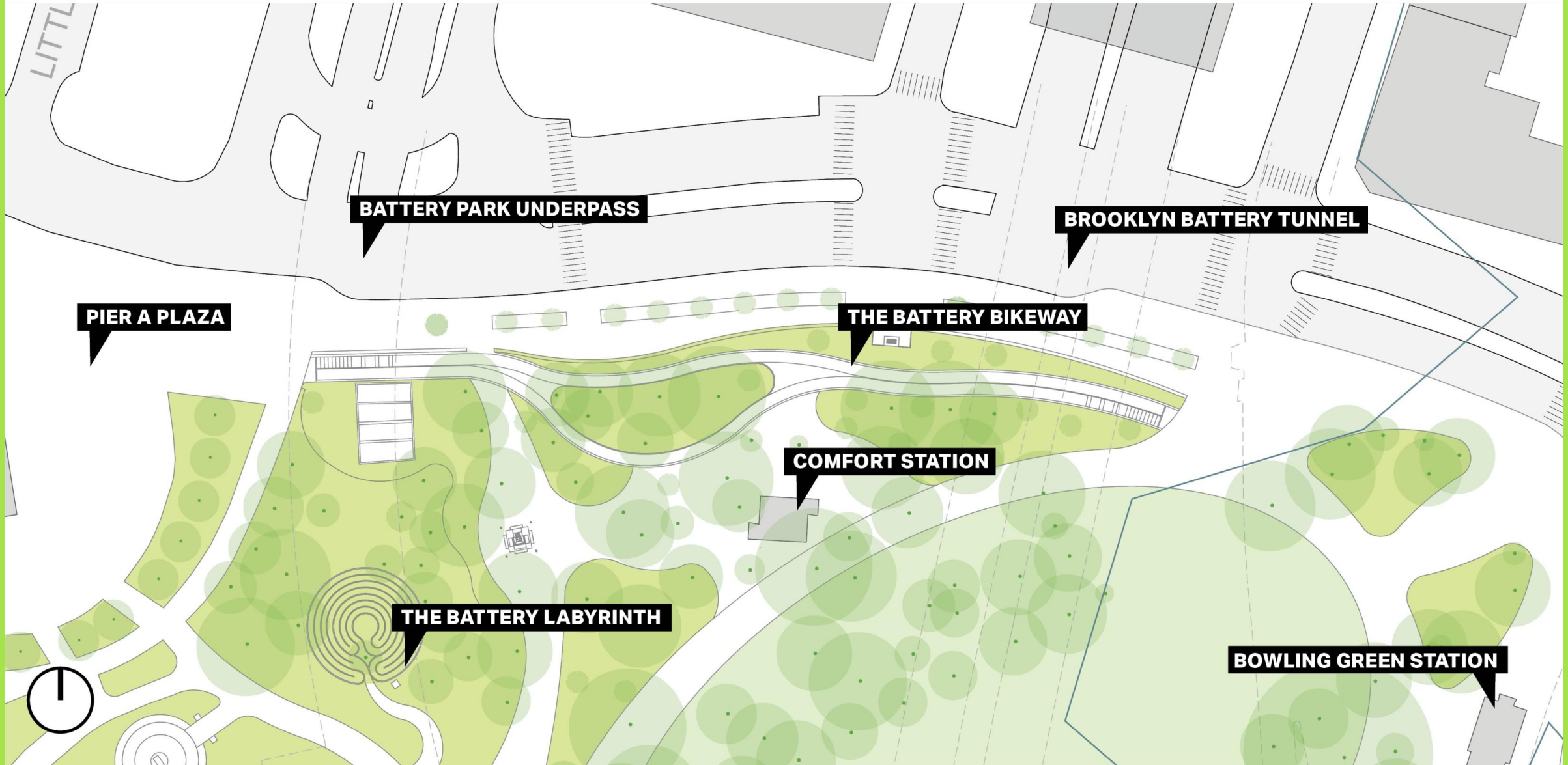
**WAGNER PARK**

**PIER A PLAZA**

**THE BATTERY**

**DFE: 15'  
HOI: 0'-8'**

# THE BATTERY BIKEWAY | EXISTING CONDITIONS

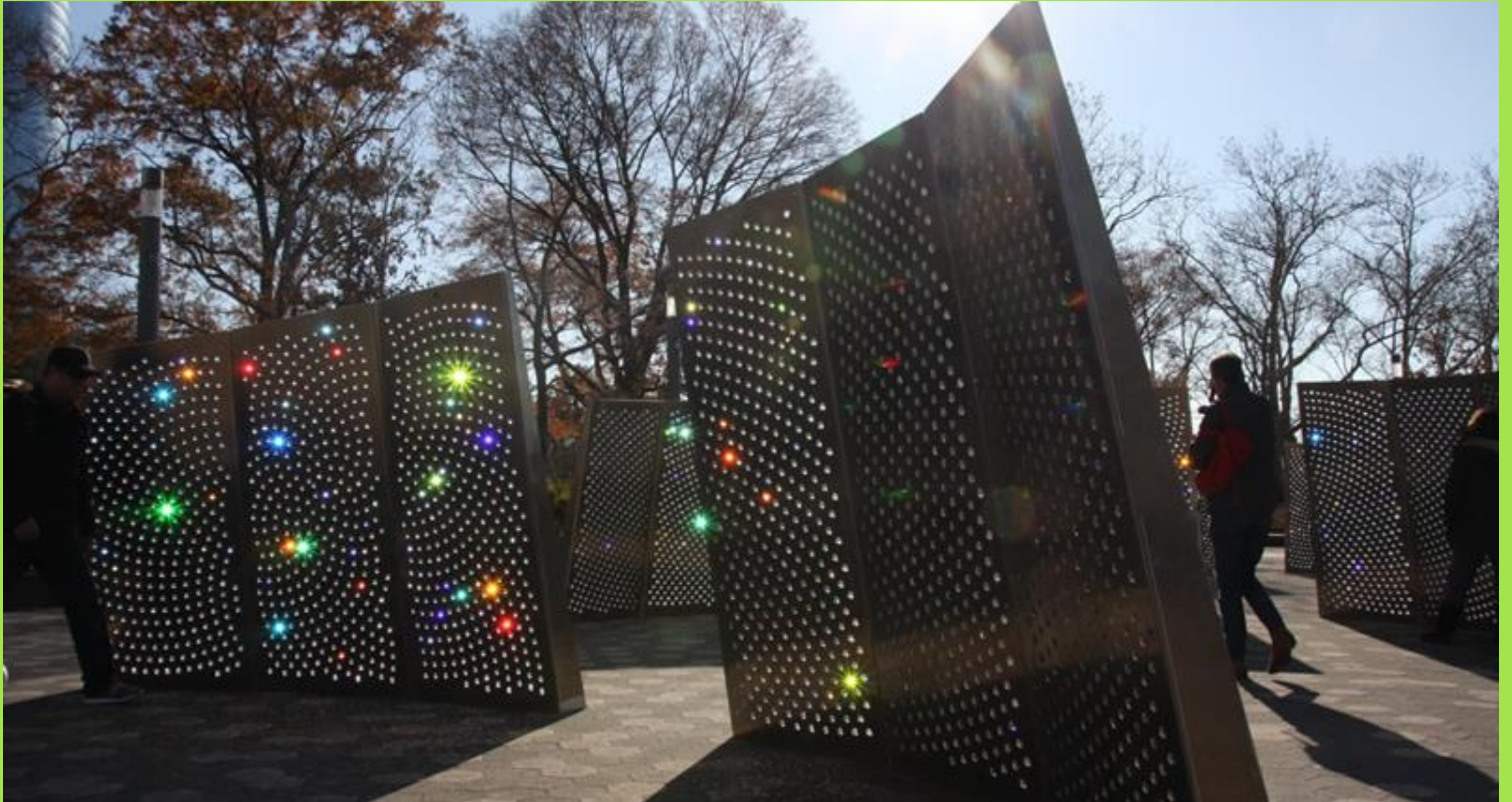






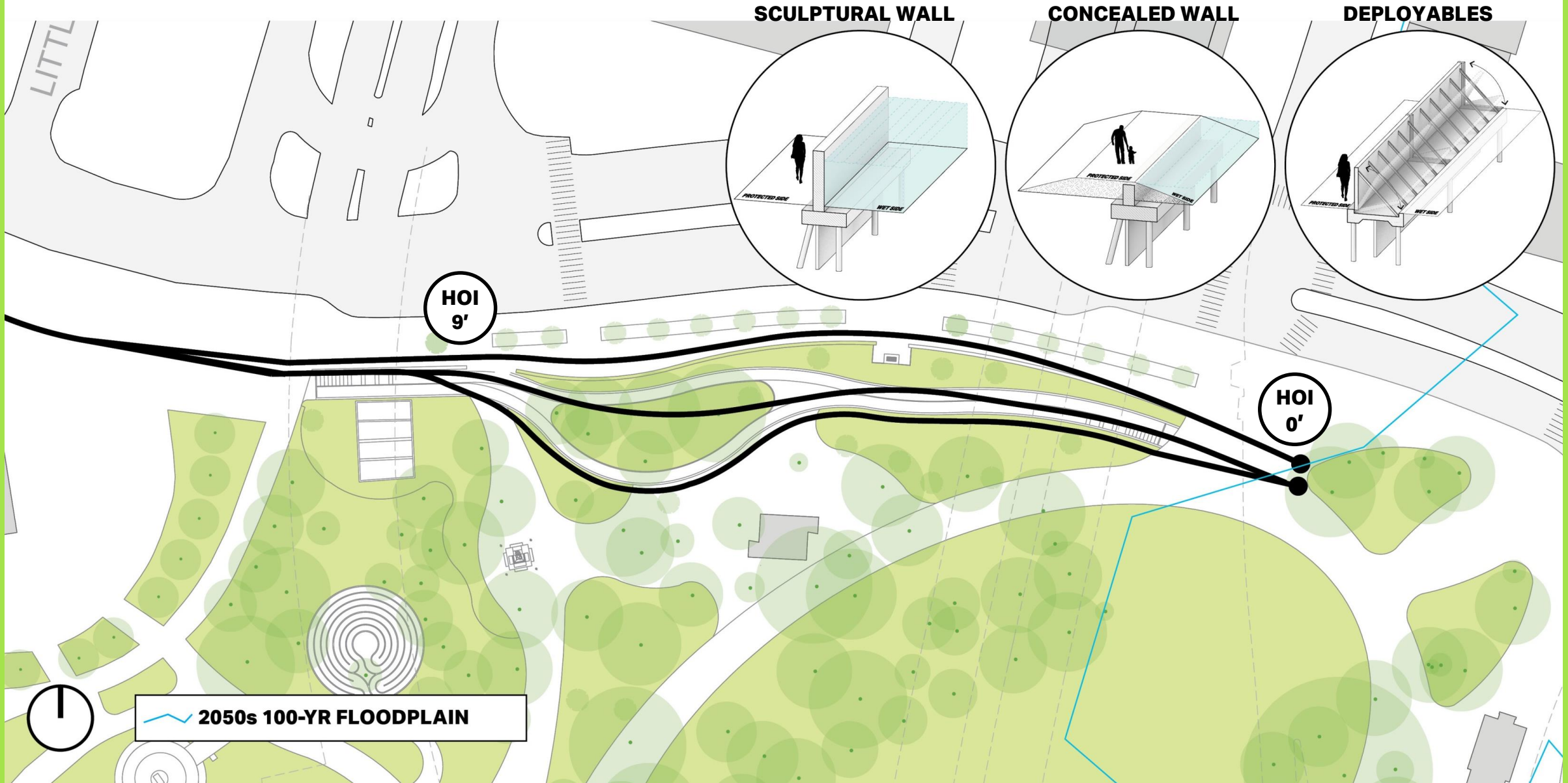








# THE BATTERY BIKEWAY | ALIGNMENT STUDIES



# Q&A

PLEASE ADDRESS COMMENTS BY **JULY 15** TO

**[sbpcr@bpca.ny.gov](mailto:sbpcr@bpca.ny.gov)**