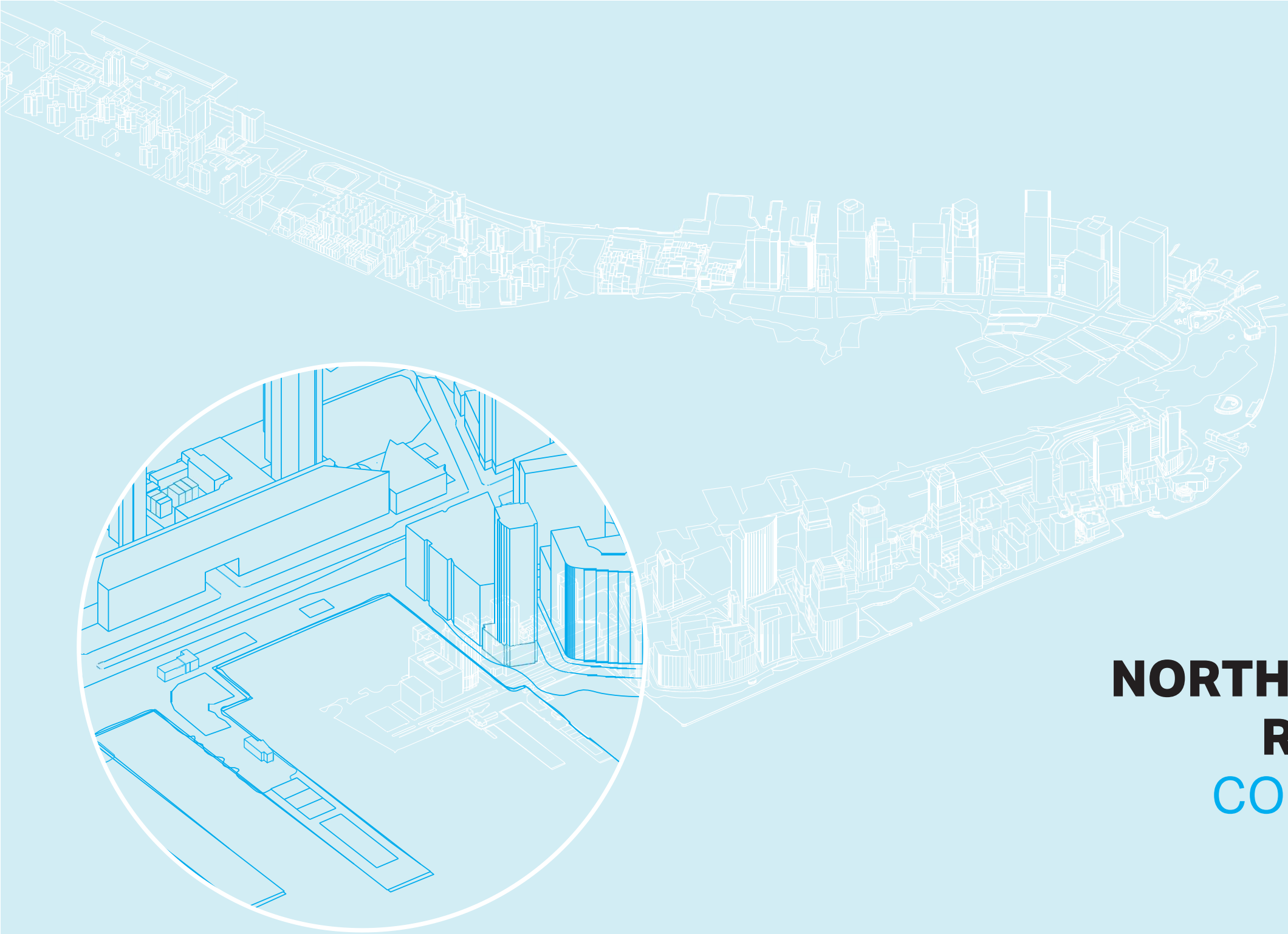




NORTH BATTERY PARK CITY RESILIENCY PROJECT

COMMUNITY MEETING #2

FEBRUARY 27, 2020



AGENDA

1. PROJECT OVERVIEW + PROGRESS UPDATES

2. CONCEPTUAL DESIGN STUDIES

- ZONE 1: THE NORTH ESPLANADE
- ZONE 2: THE STREET ALIGNMENTS

3. NEXT STEPS

4. QUESTIONS + COMMENTS

TEAM MEMBERS



PRESENTER
GARRETT AVERY
AECOM
PROJECT MANAGER



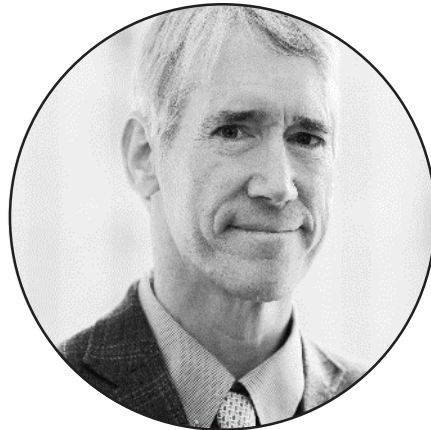
PRESENTER
GONZALO CRUZ
AECOM
DESIGN DIRECTOR



PRESENTER
SUSAN BEMIS
AECOM
PUBLIC REALM
DESIGN LEAD



SERENA DE STEFANO
AECOM
DEPUTY PROJECT
MANAGER

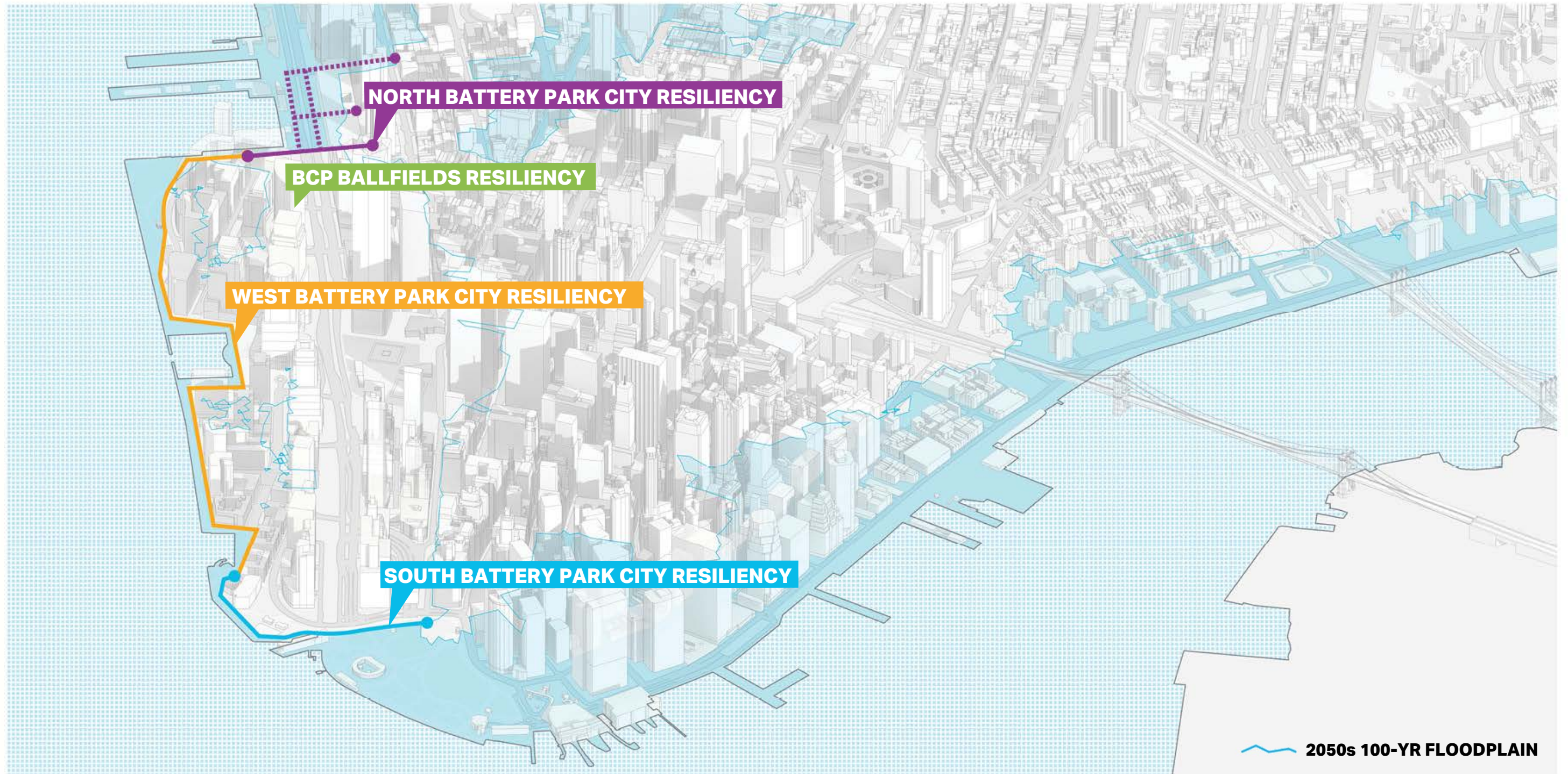


MARK FOSTER
AECOM
ENGINEERING
LEAD

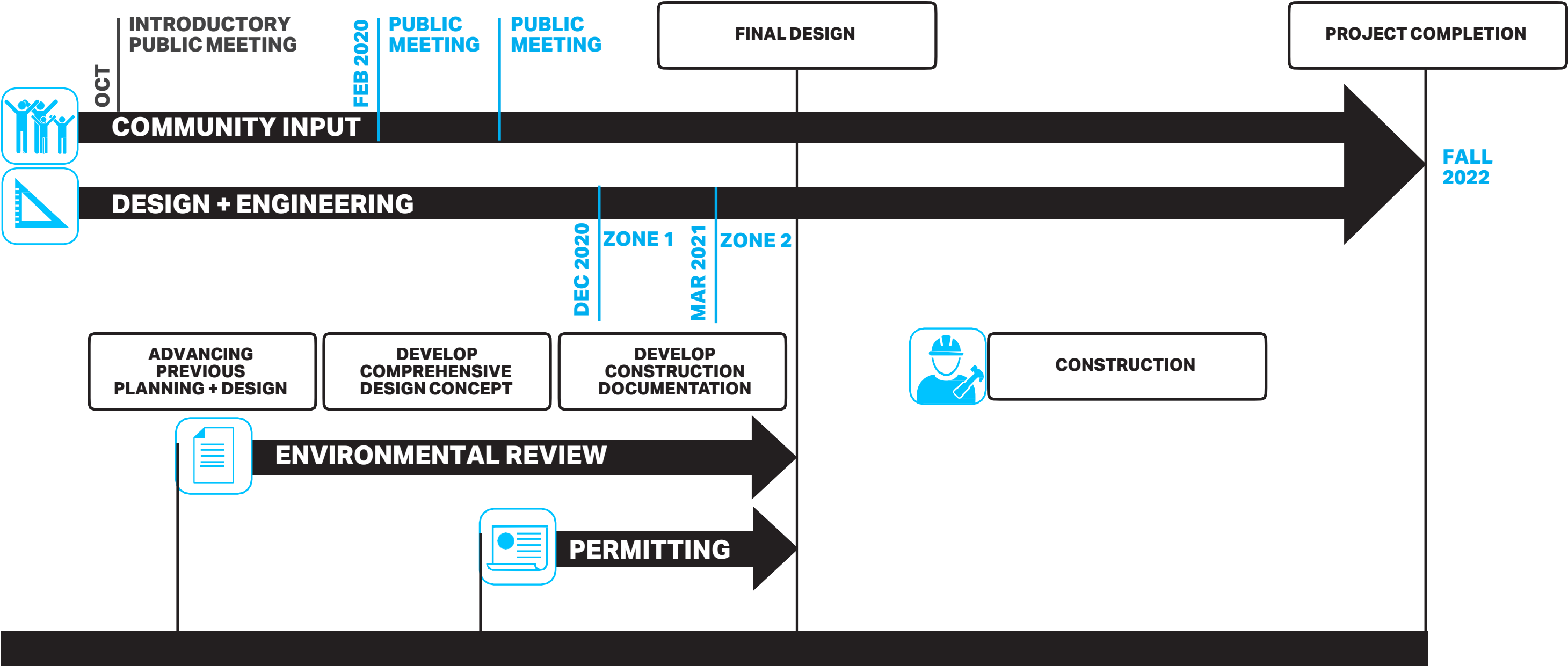


IBRAHIM ABDUL-MATIN
DALYGONZALEZ
PARTNER AND STAKEHOLDER
ENGAGEMENT

RESILIENCY MEASURES | BATTERY PARK CITY



PROJECT MILESTONES



PROJECT UPDATES | PLANNING-LEVEL COORDINATION

CURRENT TASKS

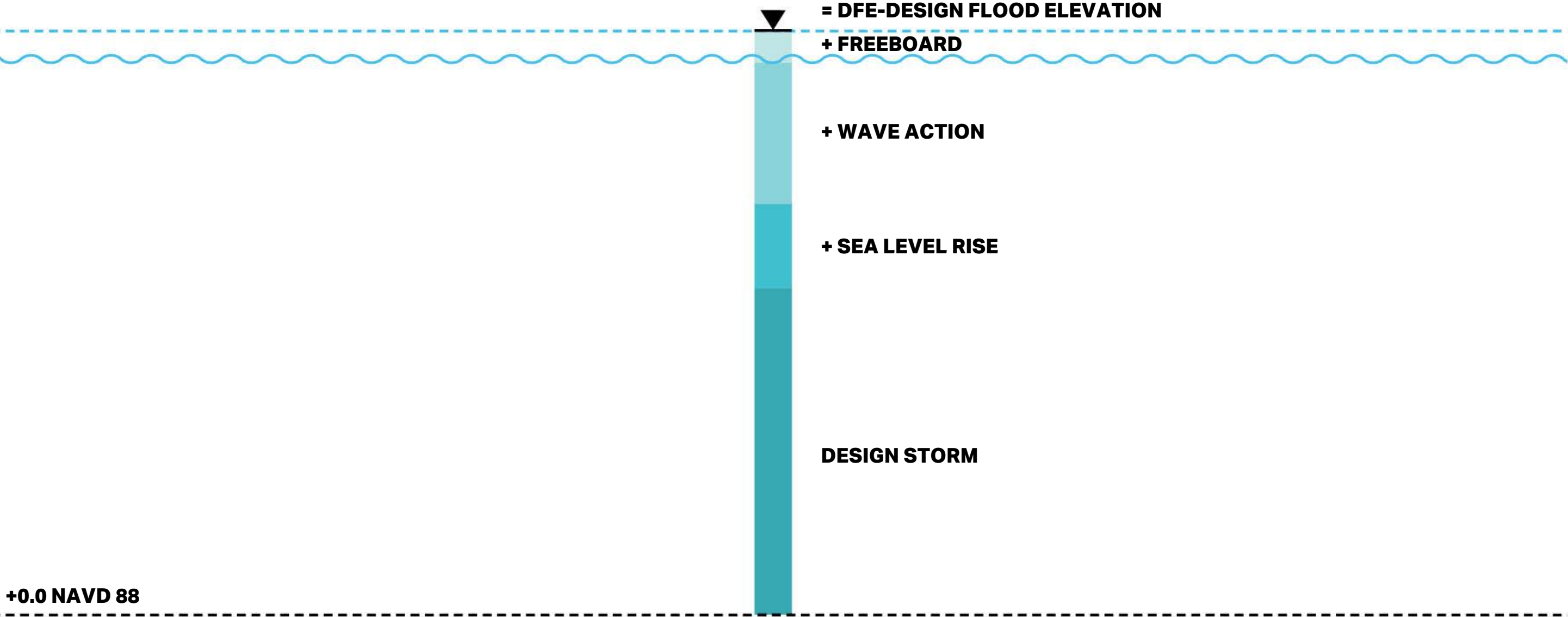
- Topographic, Bathymetric, and Built Environment Surveys: **Complete**
- Initial Coastal and Stormwater Drainage Modeling: **Complete**
- Preliminary Geotechnical Investigations: **Complete**
- Utilities and Sidewalk Vault Surveys: **In-Progress**
- Environmental Review: **In-Progress**

UPCOMING TASKS

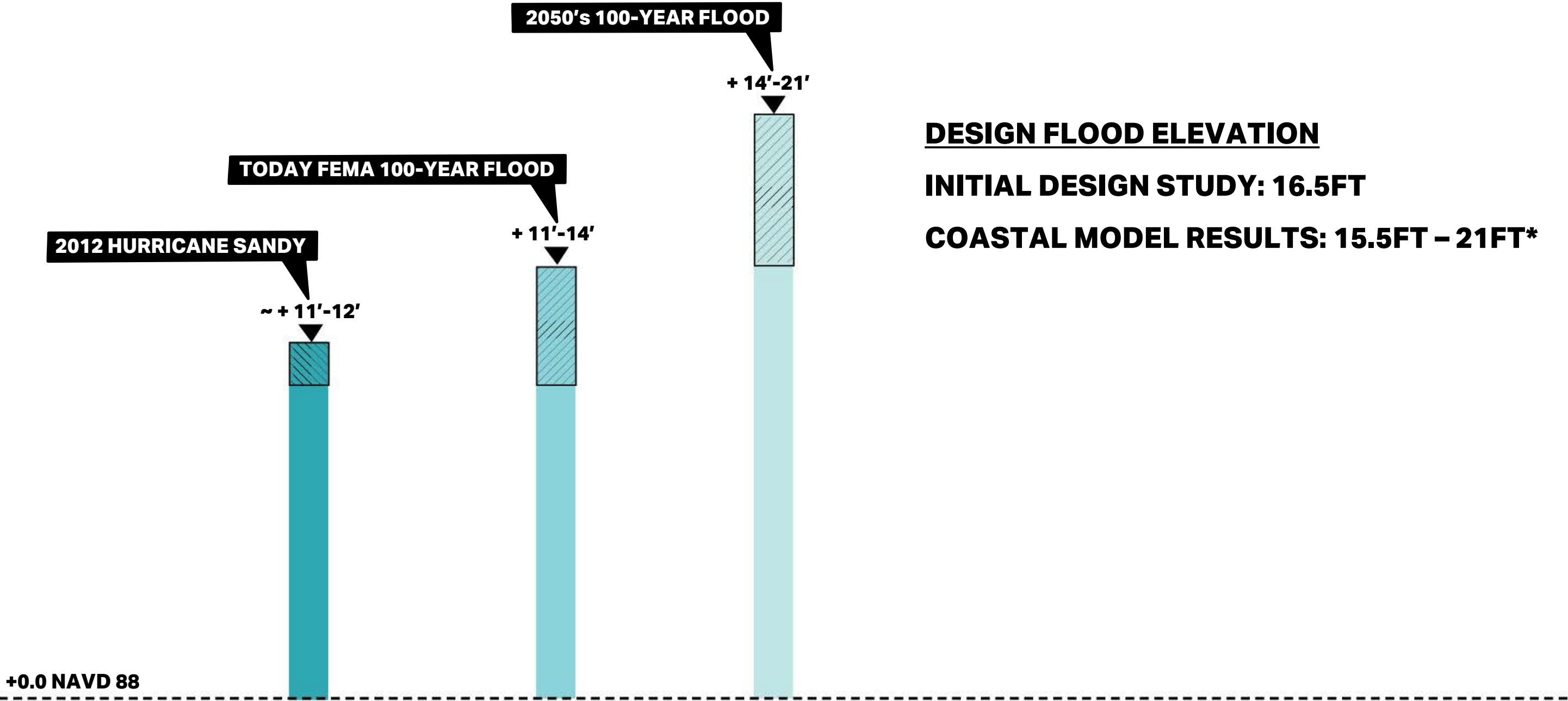
- Agency Design Coordination and Technical Reviews: **On-going**
- Detailed Geotechnical Investigations: **Pending Alignment Selection**
- Regulatory Review and Permitting: **Pending Alignment Selection**
- Final Coastal Modeling and Stormwater Drainage Modeling: **Pending Final Design**

DESIGN FLOOD ELEVATION (DFE)

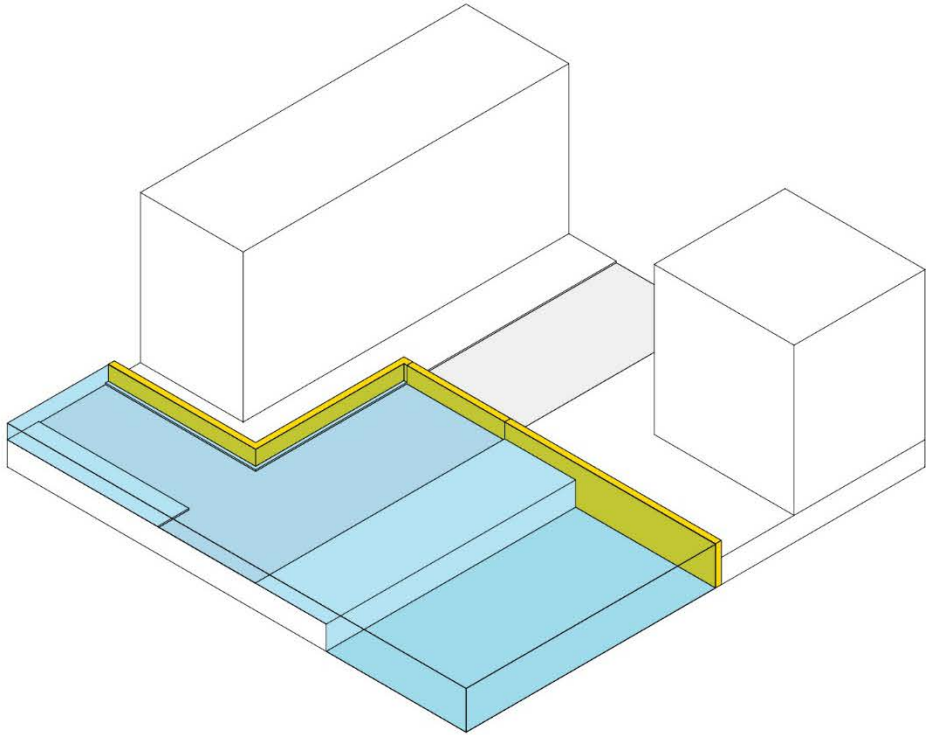
DESIGN STORM : 2050s 100 YEAR FLOOD



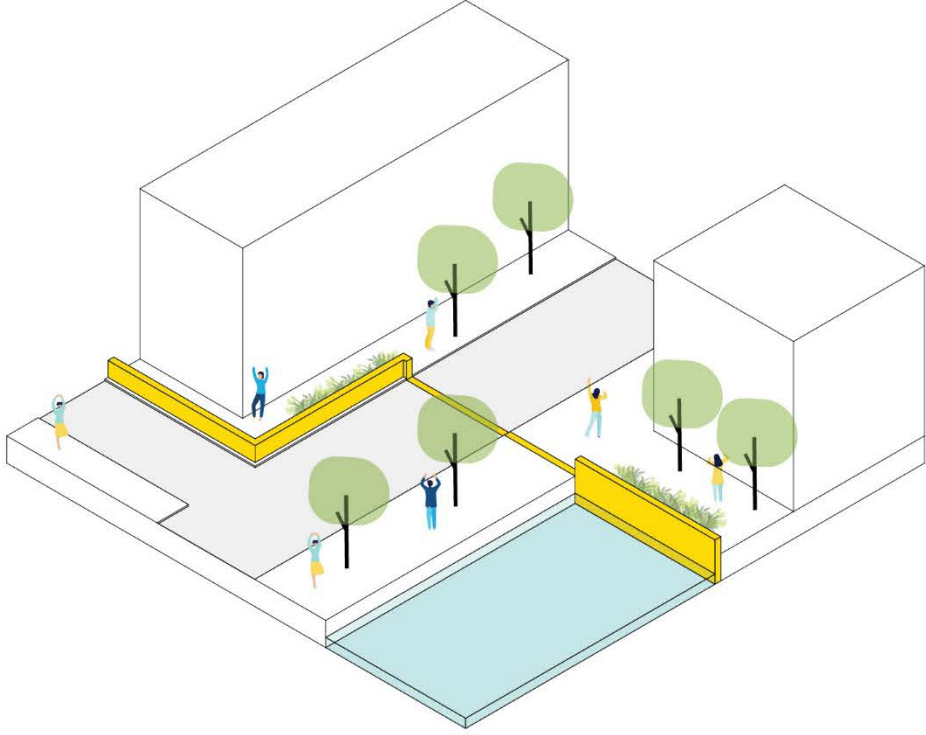
DESIGN FLOOD ELEVATION (DFE)



PROJECT PRIORITIES



RESILIENCY MEASURES

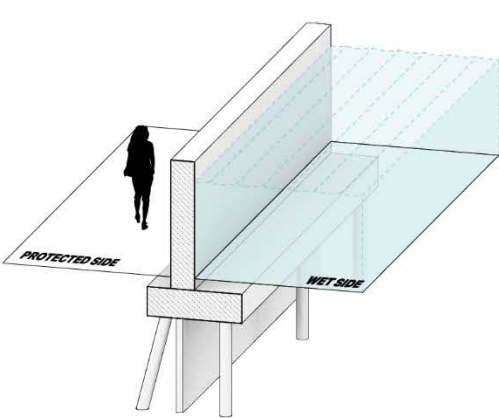


PUBLIC BENEFIT

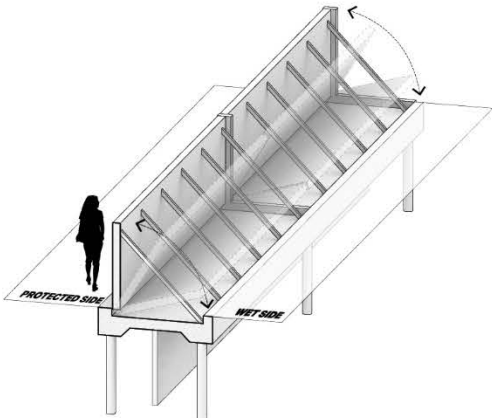
**MULTI-PURPOSE
PERFORMANCE**

FLOOD MITIGATION METHODS

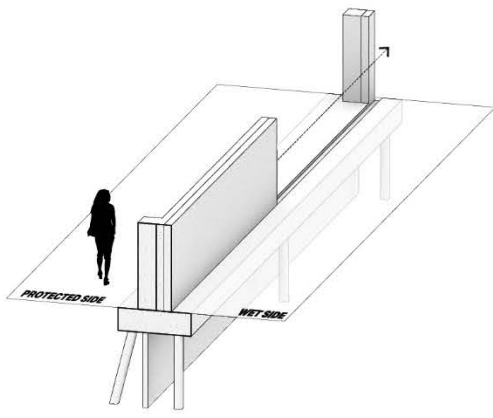
PASSIVE TREATMENT



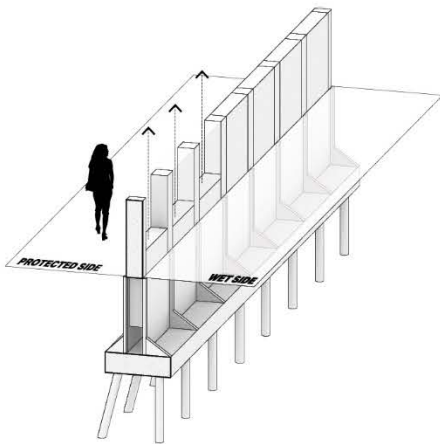
FLIP-UP GATE



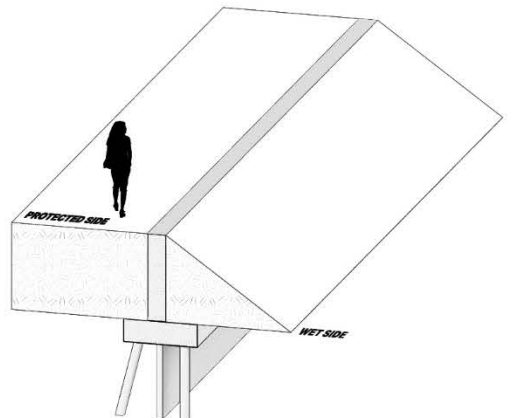
ROLLER GATE



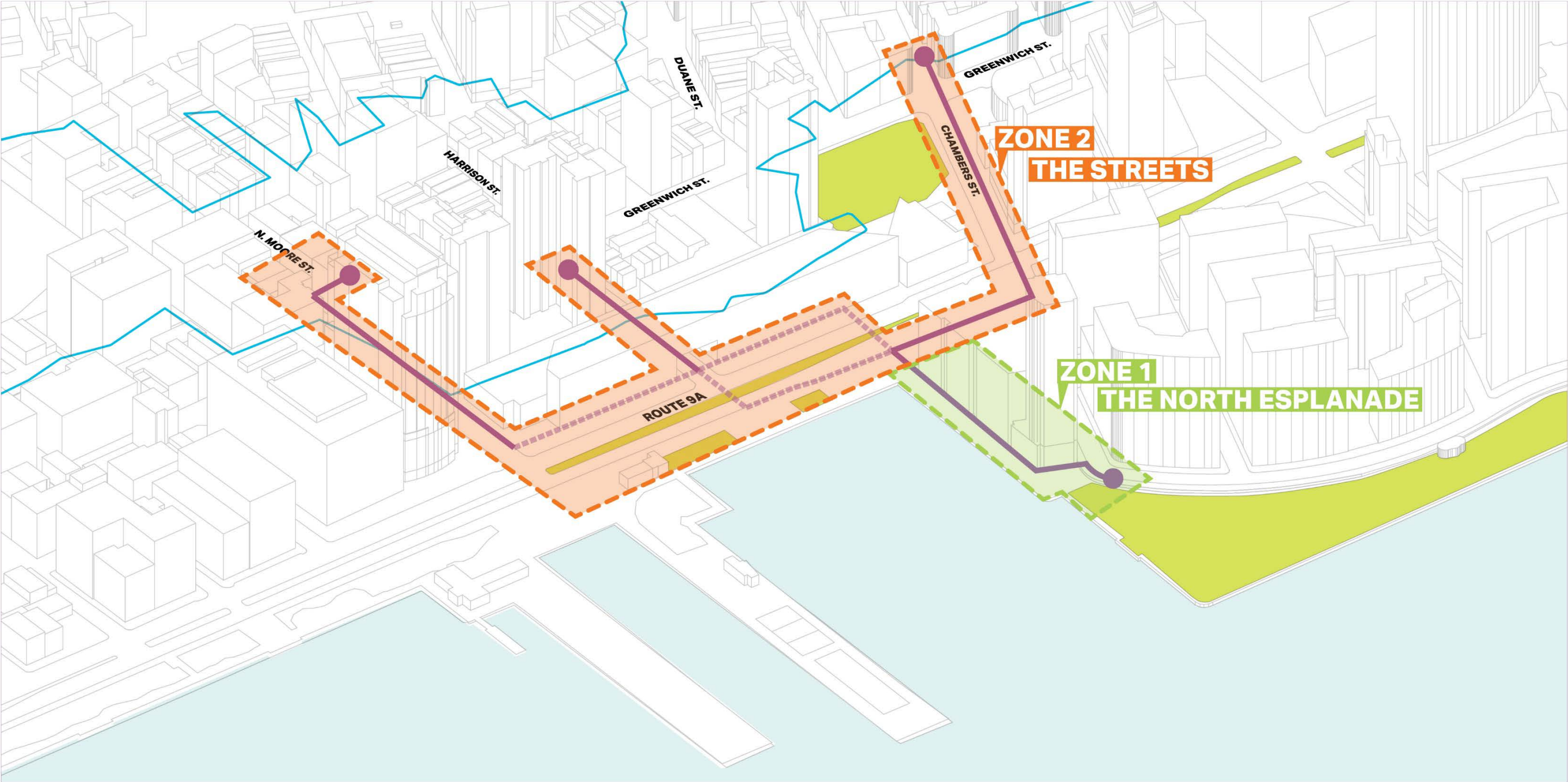
VERTICAL
DEPLOYABLE



BURIED FLOOD
PROTECTION



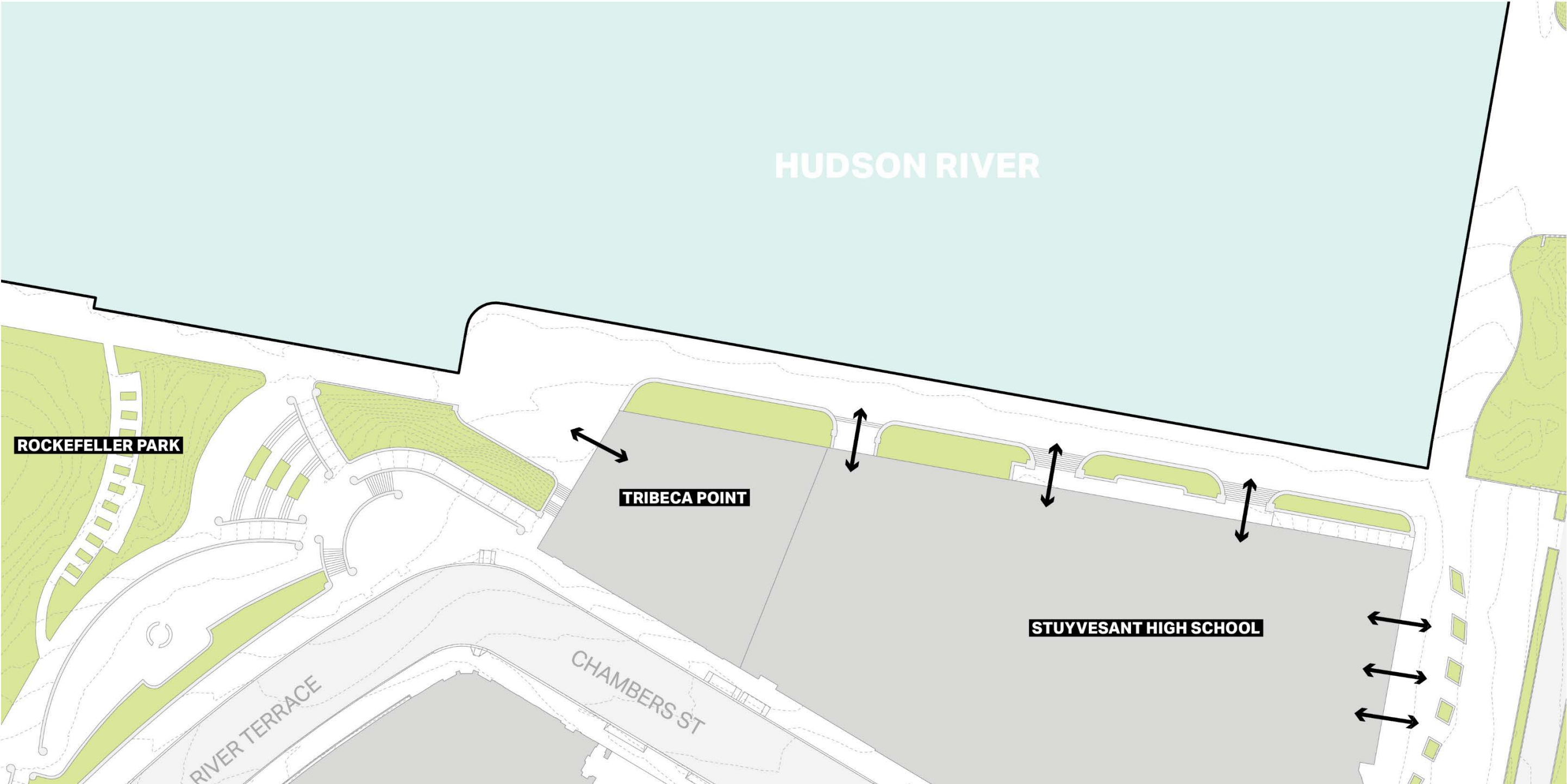
THE ZONES | THE NORTH ESPLANADE & THE STREETS



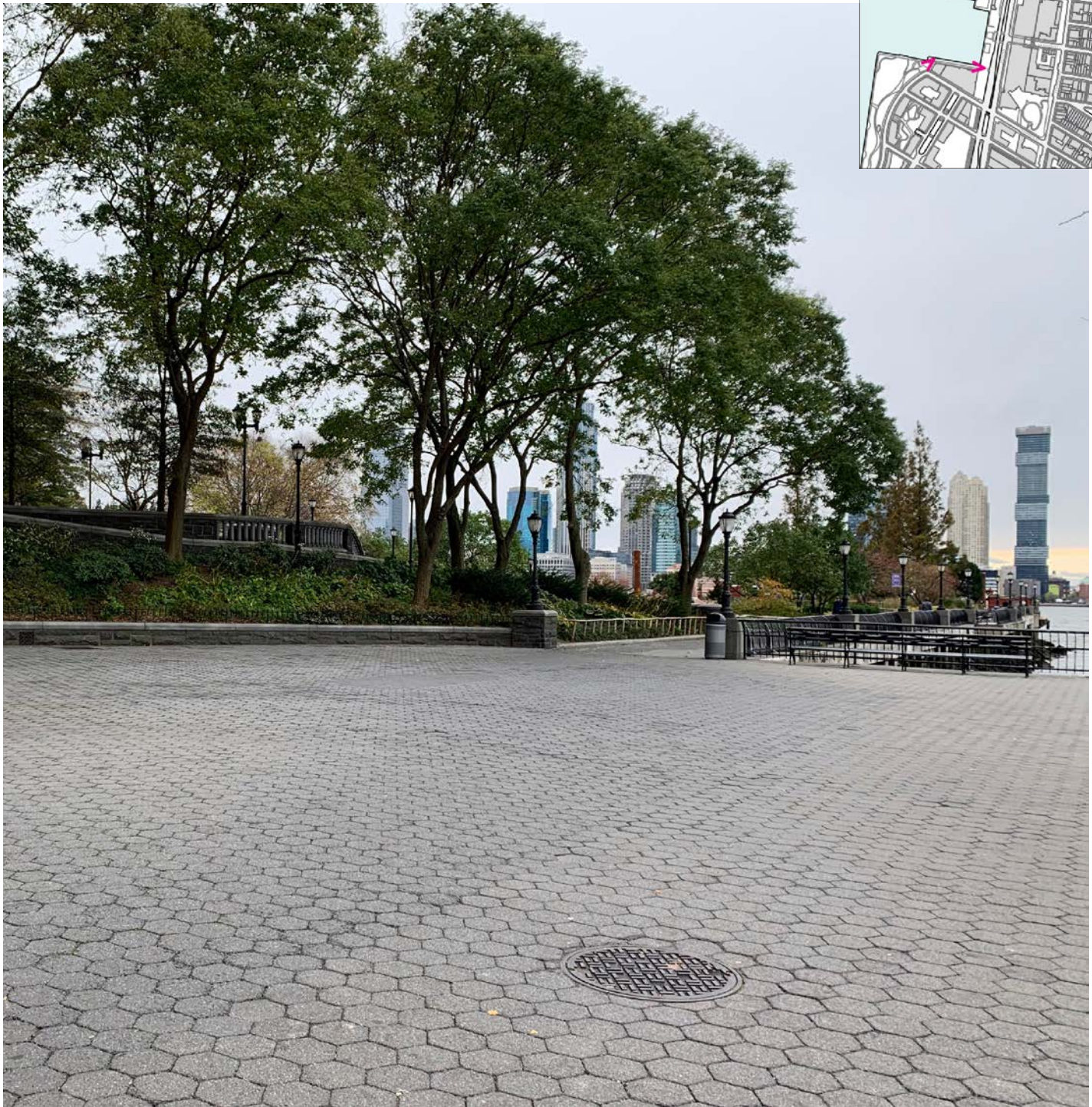
ZONE 1

THE NORTH ESPLANADE

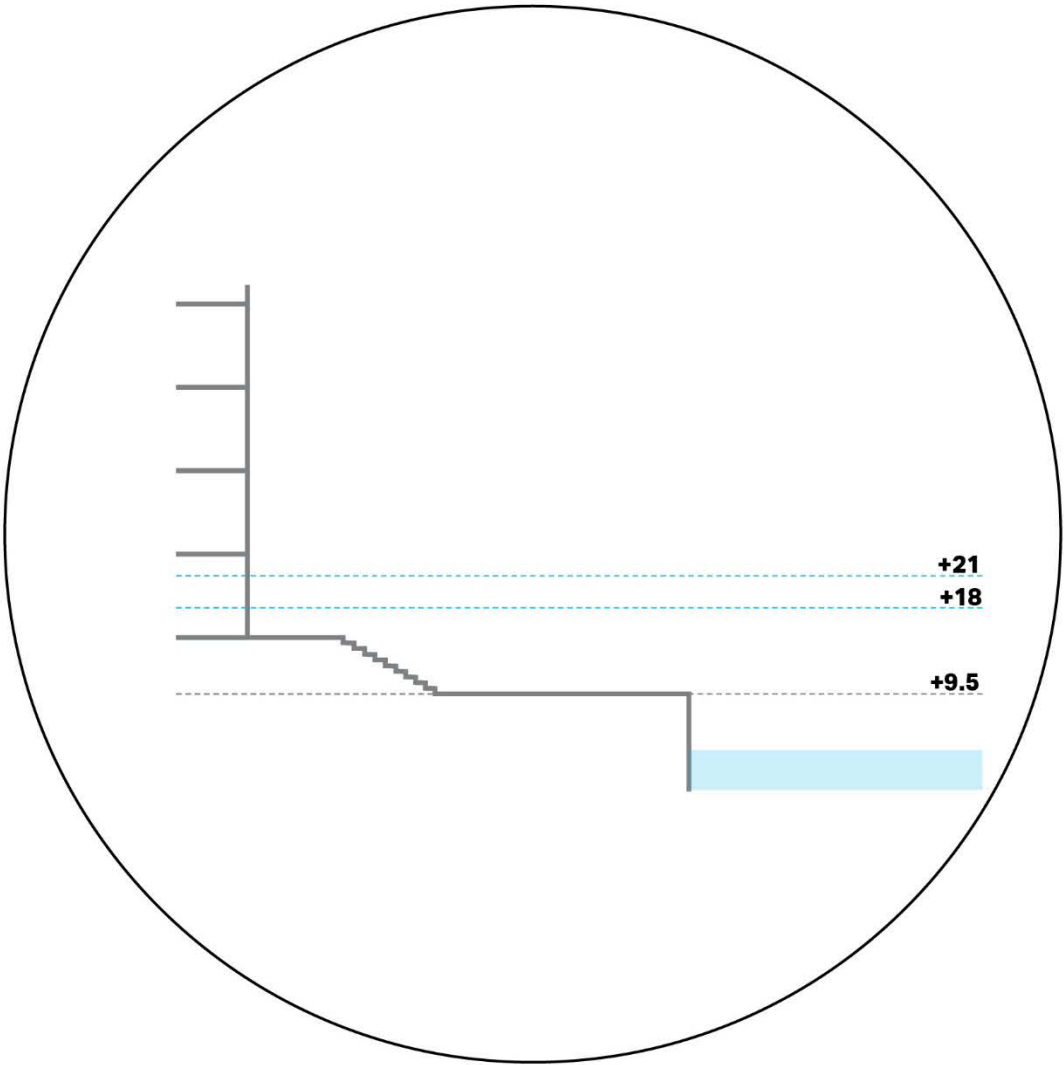
THE NORTH ESPLANADE | EXISTING CONDITIONS



THE NORTH ESPLANADE | EXISTING CONDITIONS

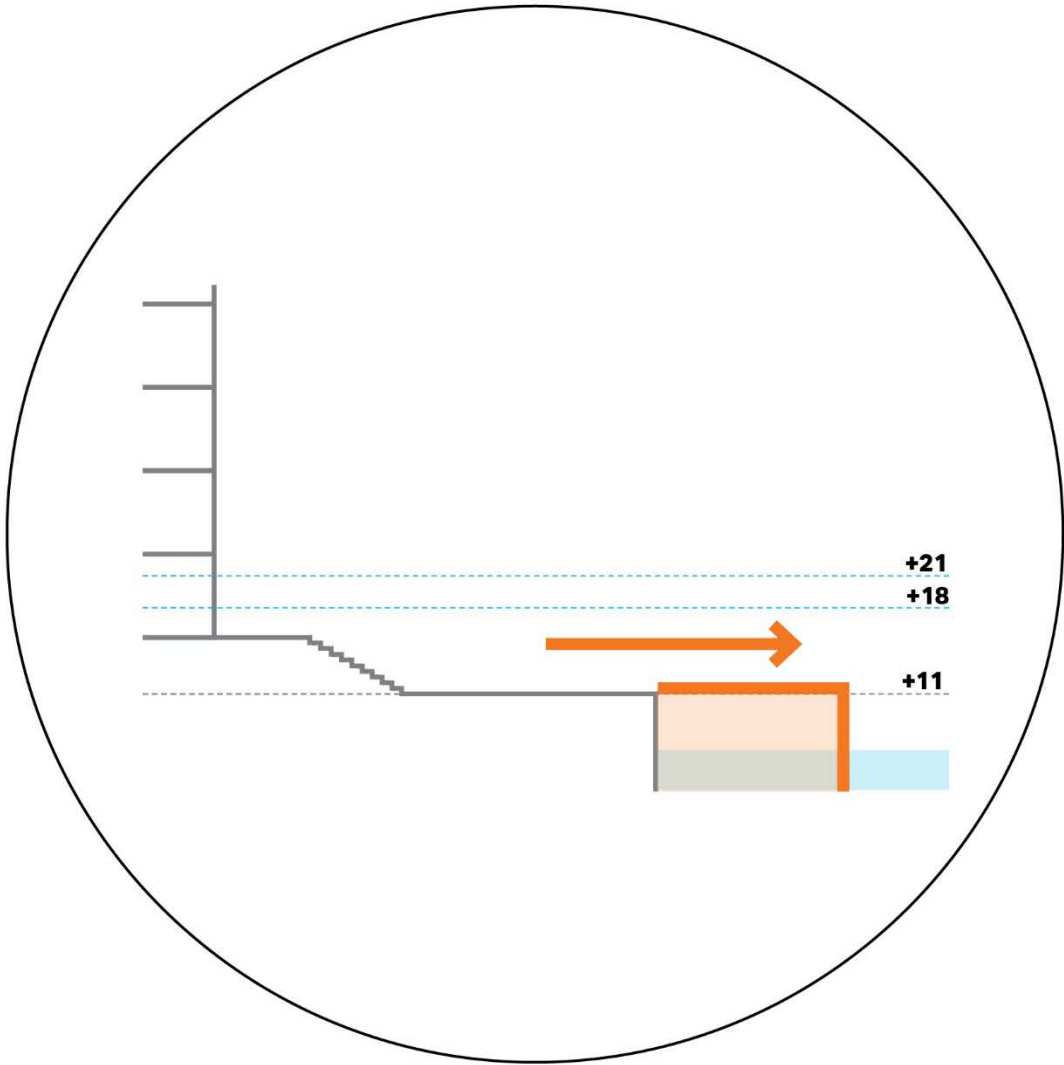


THE NORTH ESPLANADE | THE APPROACH



MAINTAINING THE FOOTPRINT

- ACCESSIBILITY CONSTRAINTS
- DEPLOYABLES REQUIRED

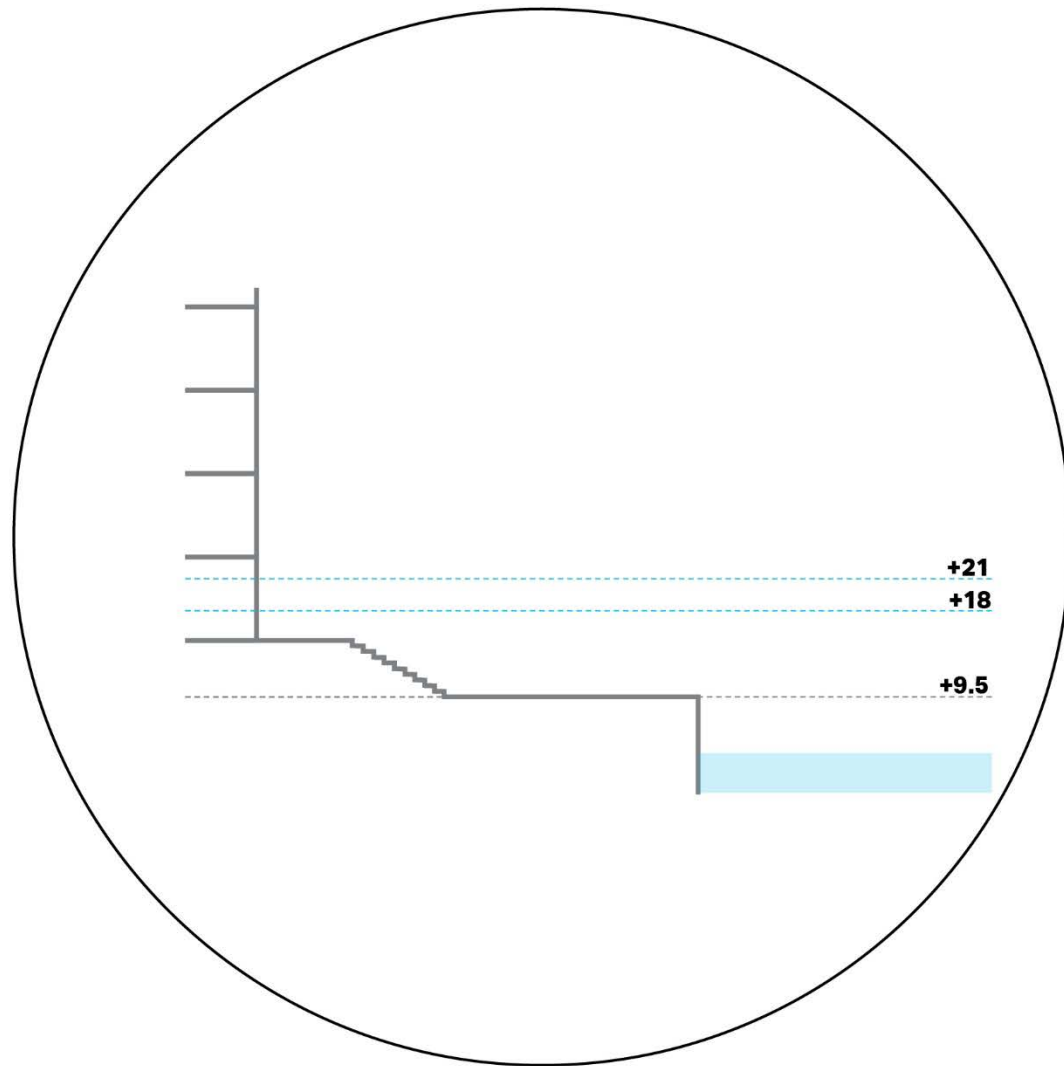


EXTENDING THE FOOTPRINT

- FULL ACCESSIBILITY
- PASSIVE APPROACHES

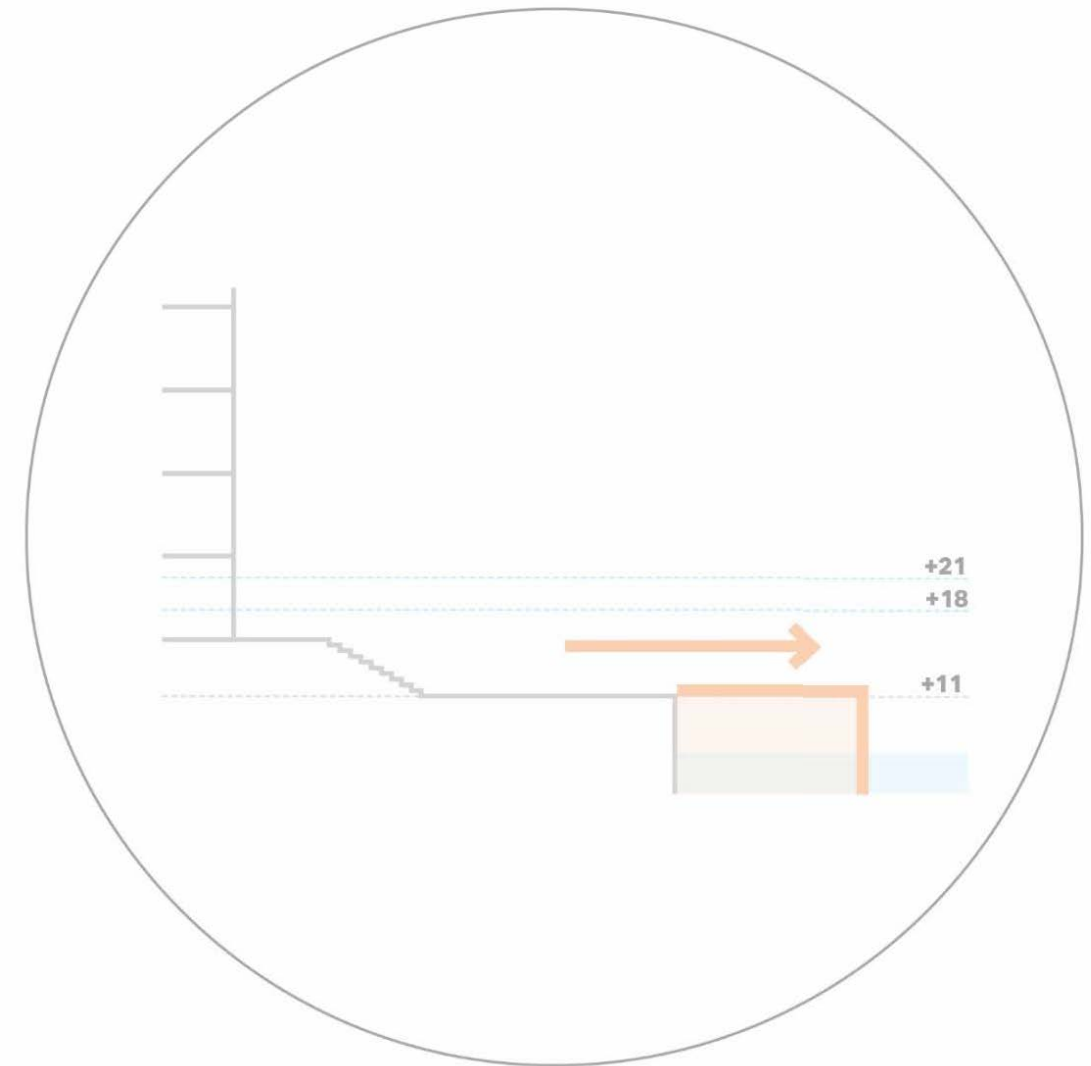
THE NORTH ESPLANADE | THE APPROACH

MAINTAINING THE FOOTPRINT



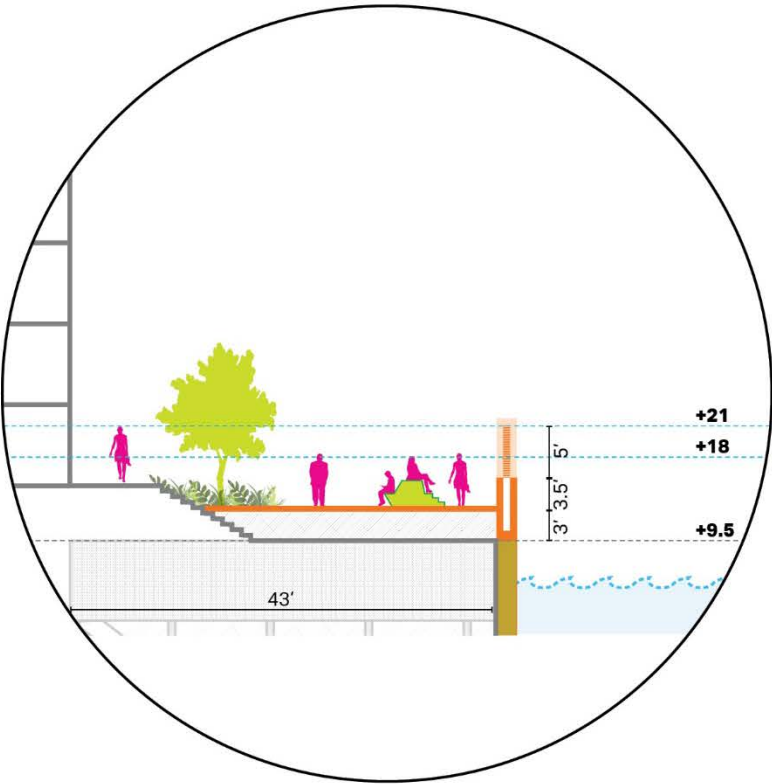
MAINTAINING THE FOOTPRINT

- ACCESSIBILITY CONSTRAINTS
- DEPLOYABLES REQUIRED

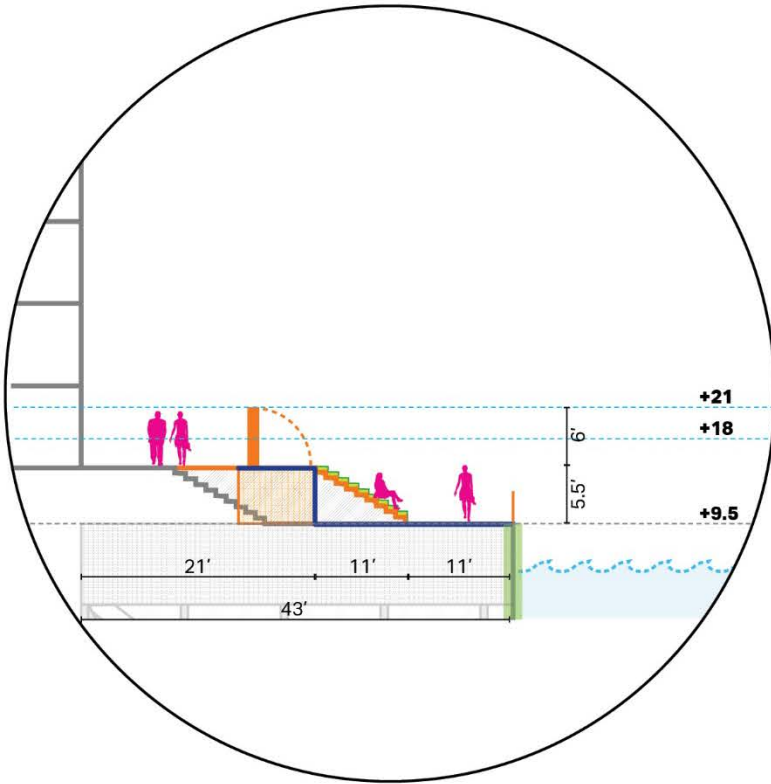


THE NORTH ESPLANADE | THE CONCEPTS

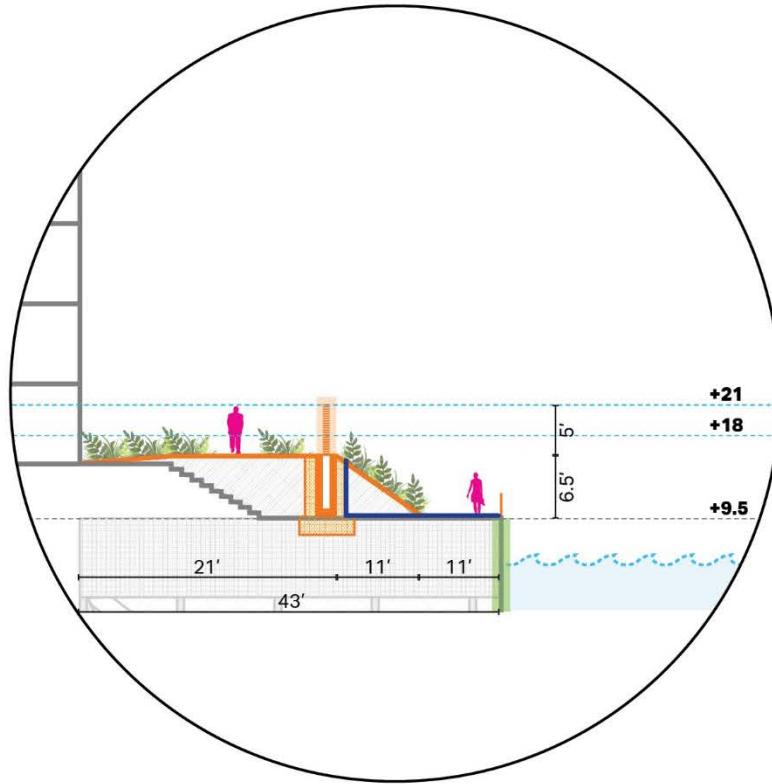
MAINTAINING THE FOOTPRINT



CONCEPT 1
GARDEN TERRACE

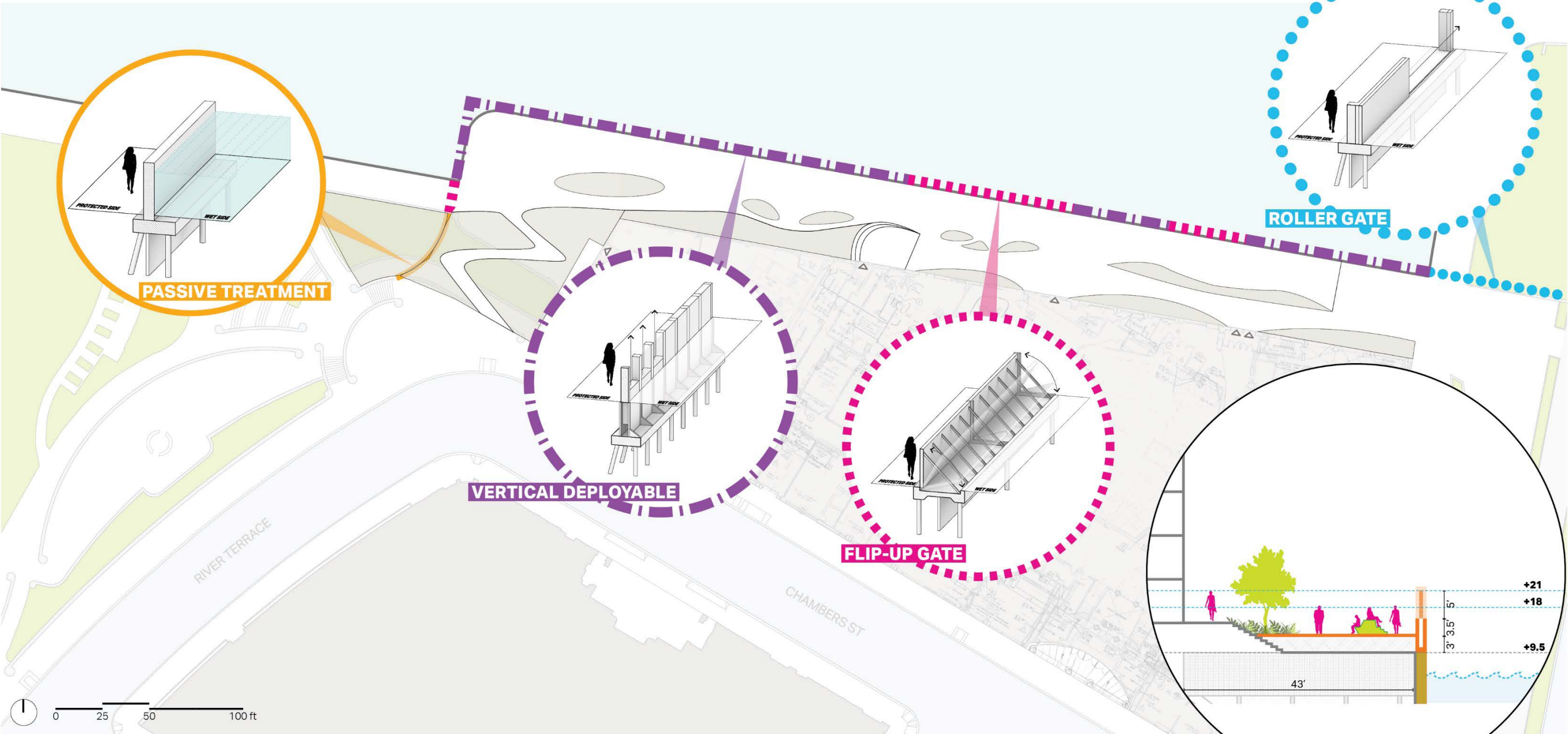


CONCEPT 2
RIVER THEATER



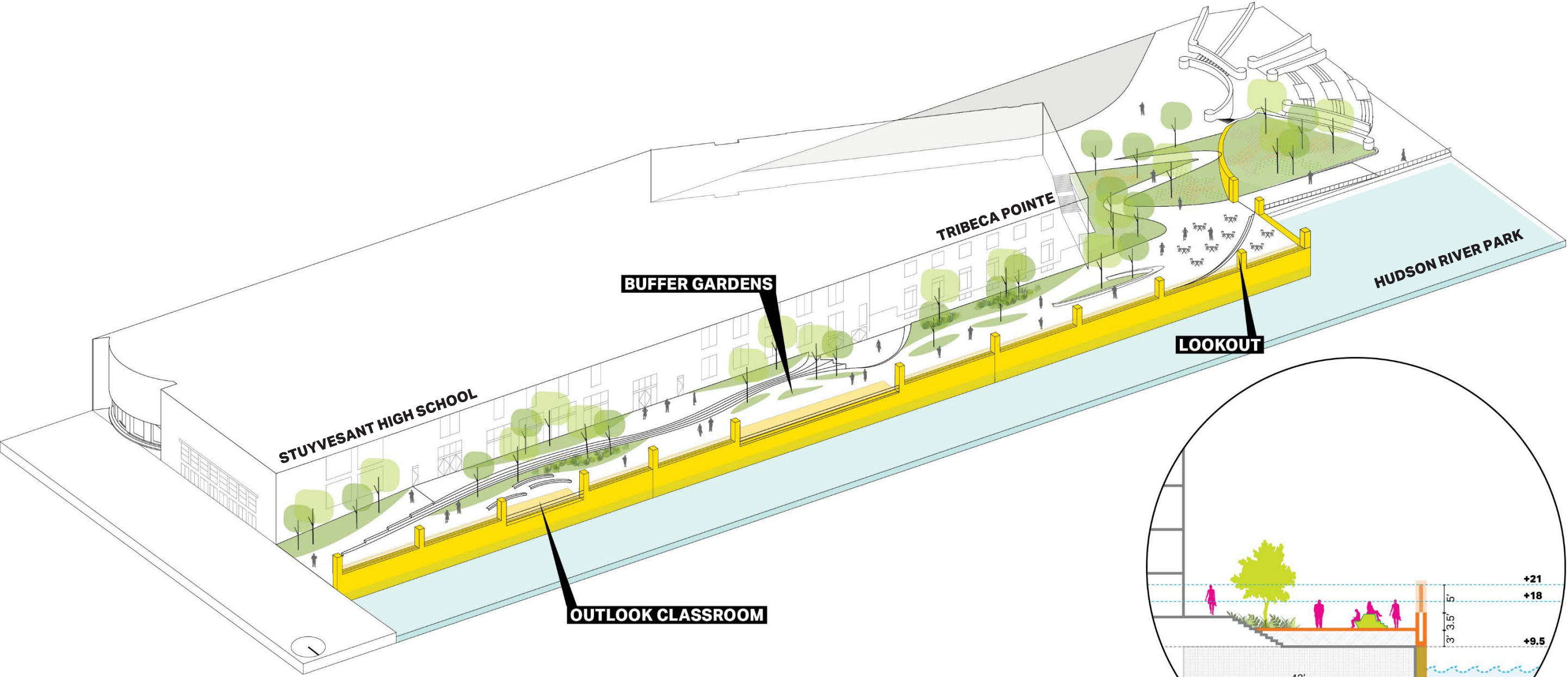
CONCEPT 3
WATERFRONT RIDGE

CONCEPT 1 - GARDEN TERRACE | FLOOD MITIGATION METHODS



Conceptual drawings only. Designs subject to further review & approval.

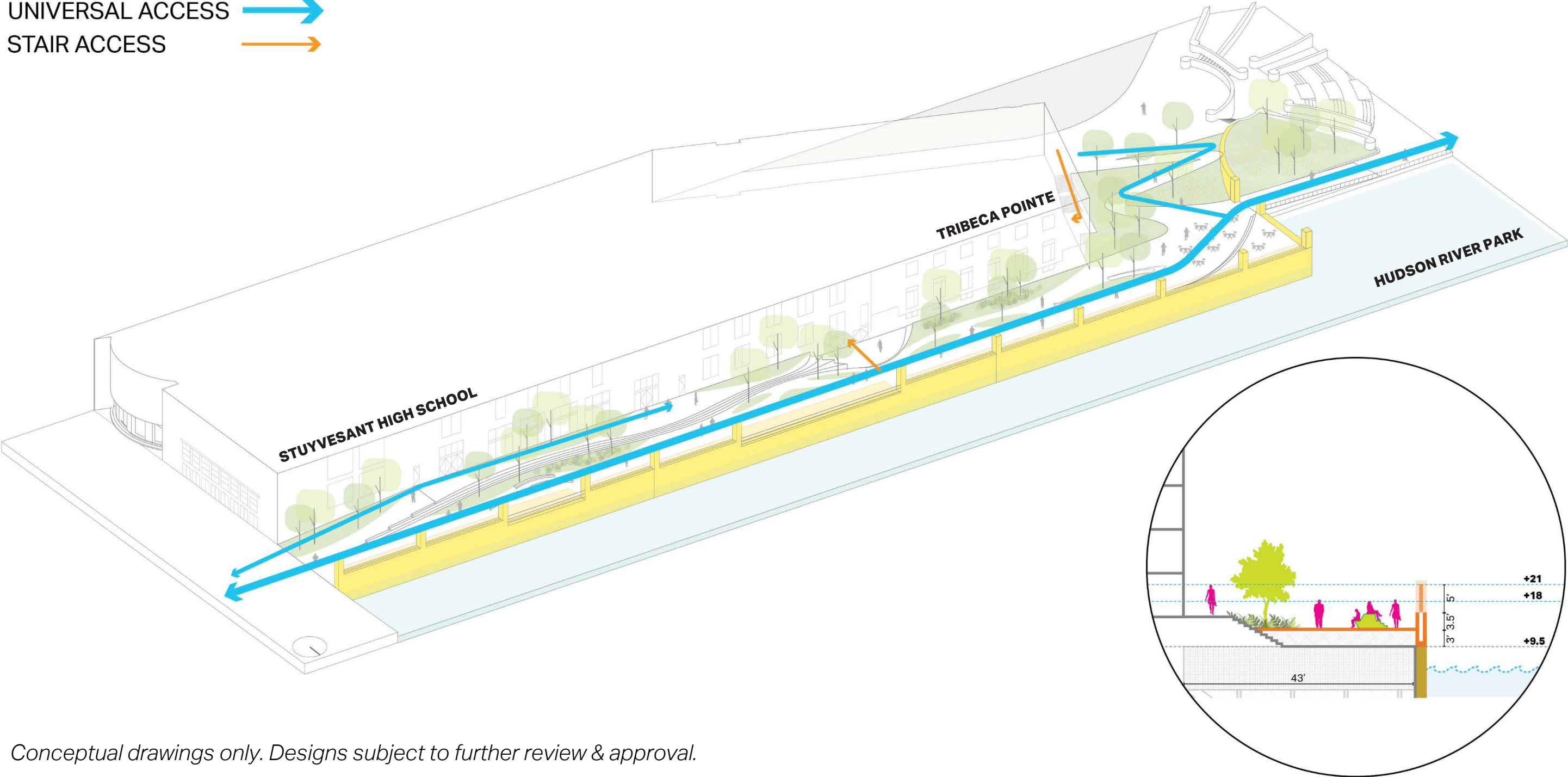
CONCEPT 1 - GARDEN TERRACE | DESIGN CONCEPT



Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 1 - GARDEN TERRACE | DESIGN CONCEPT

UNIVERSAL ACCESS 
STAIR ACCESS 



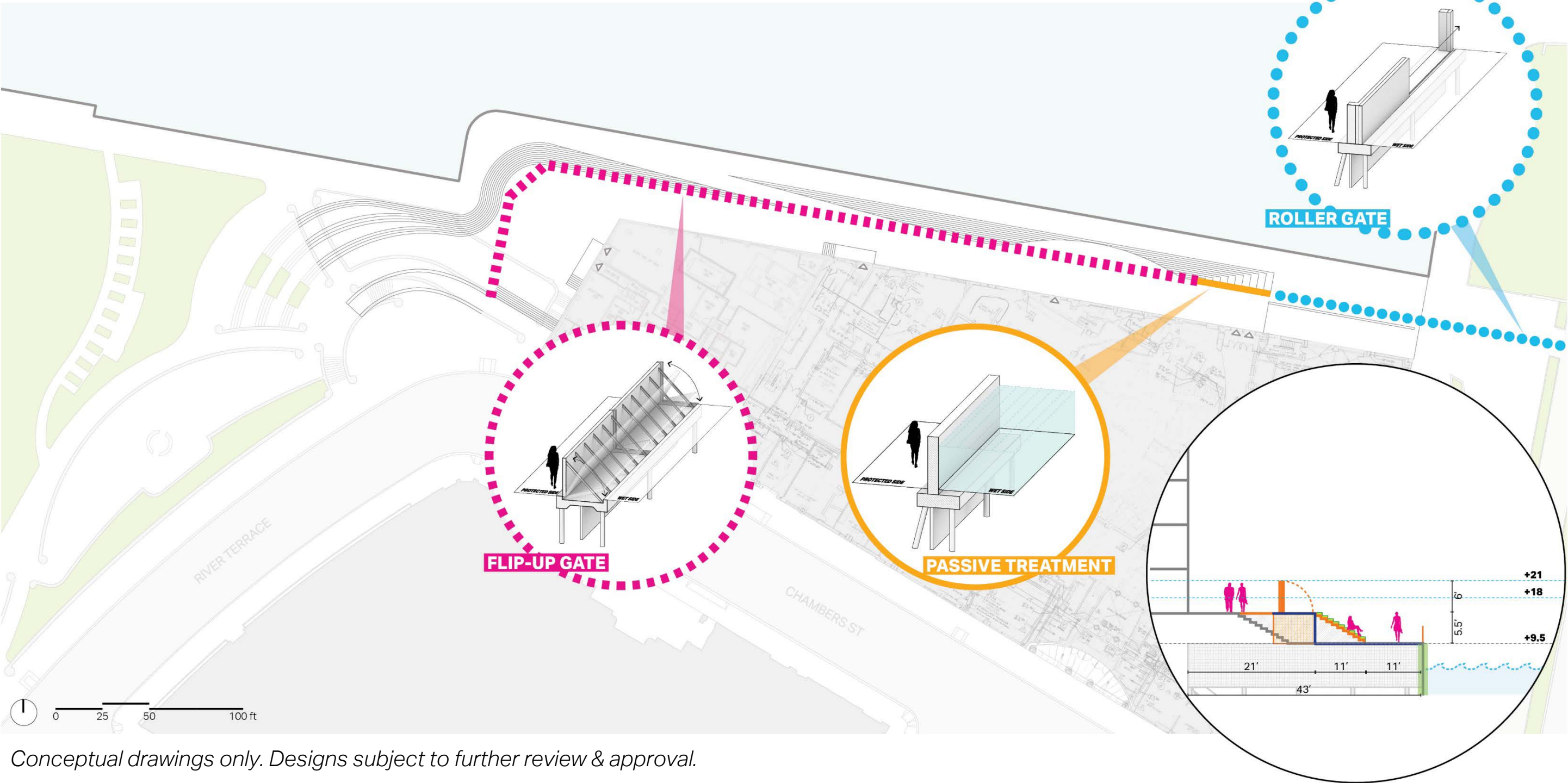
Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 1 - GARDEN TERRACE | LOOK AND FEEL

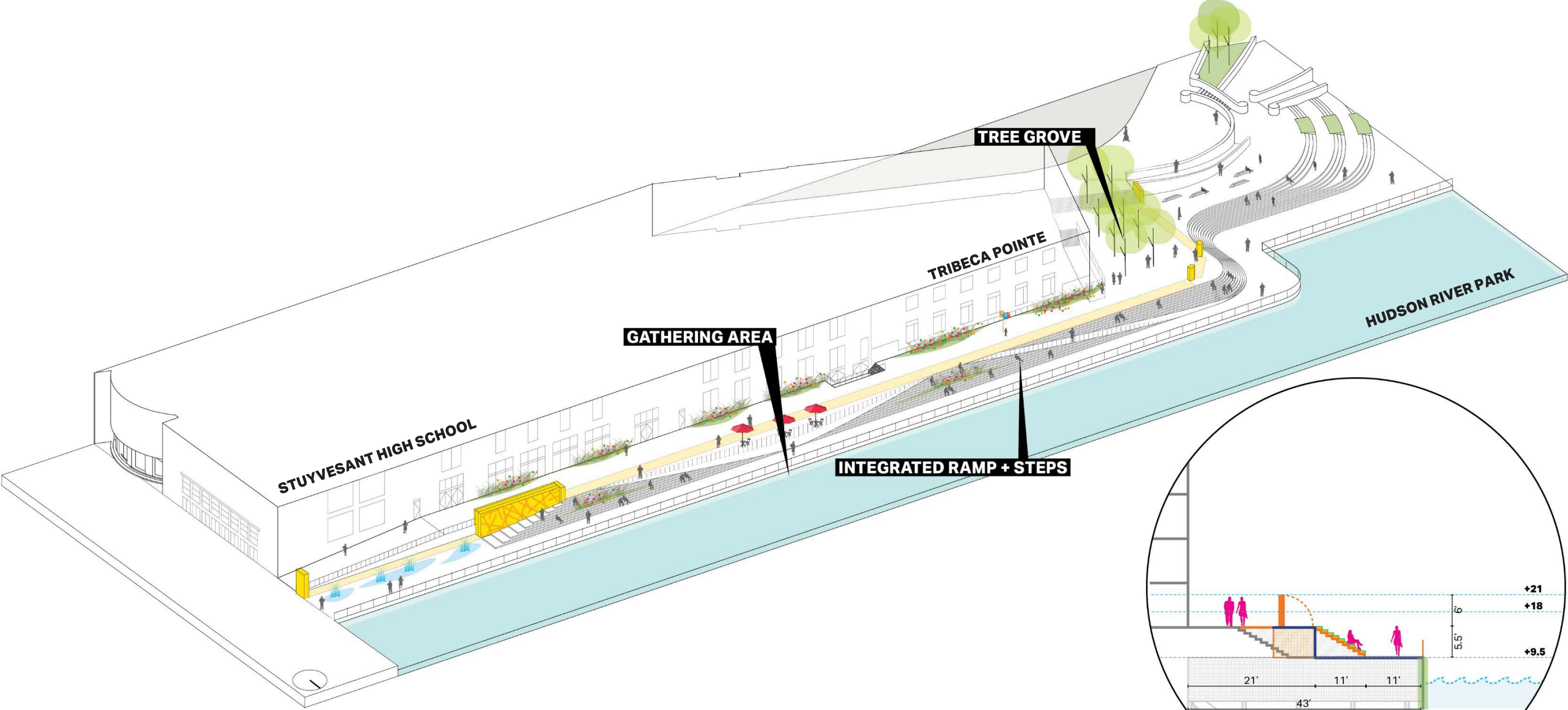


PEACE GARDEN, TORONTO

CONCEPT 2 - RIVER THEATER | FLOOD MITIGATION METHODS



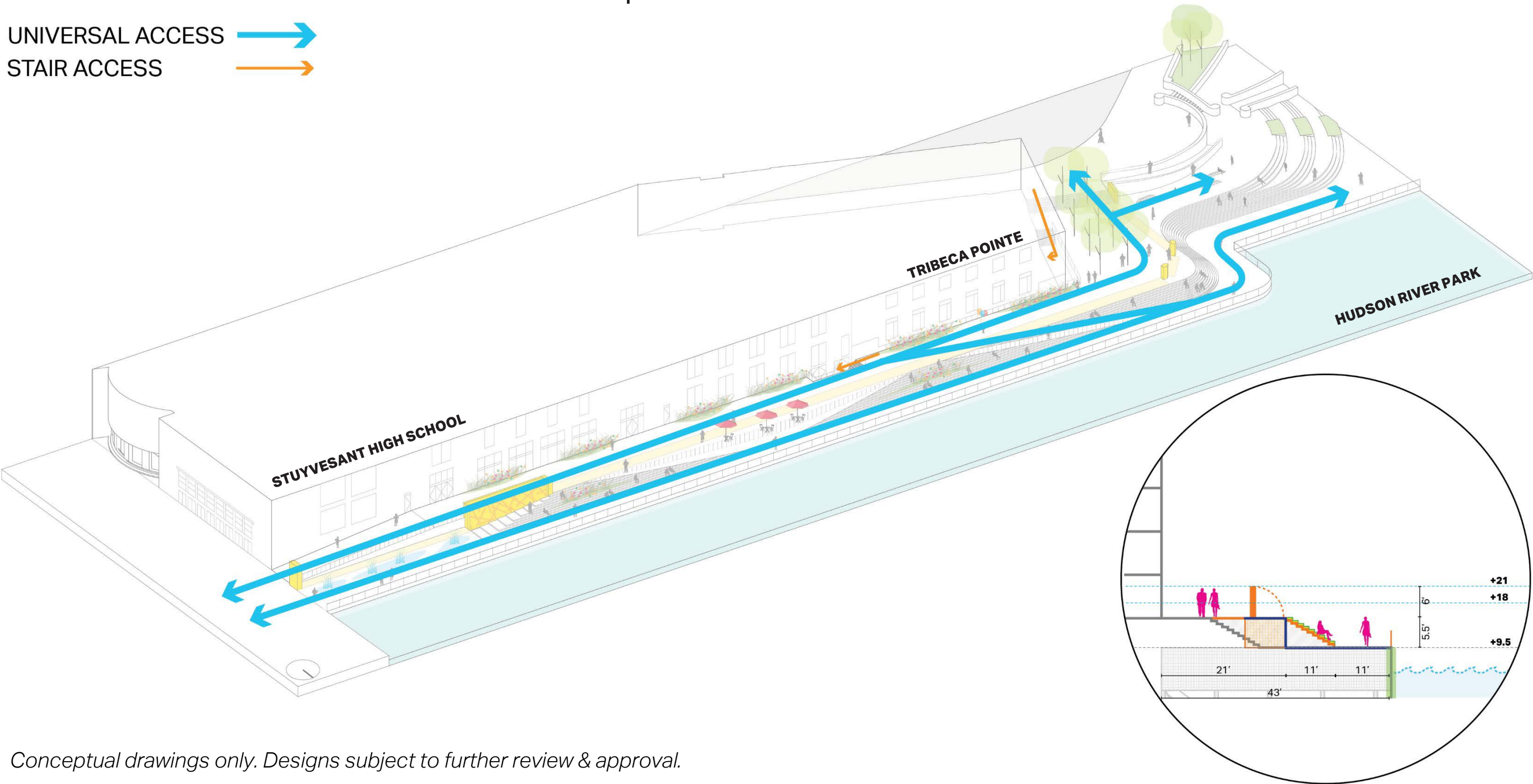
CONCEPT 2 - RIVER THEATER | DESIGN CONCEPT



Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 2 - RIVER THEATER | DESIGN CONCEPT

UNIVERSAL ACCESS 
STAIR ACCESS 



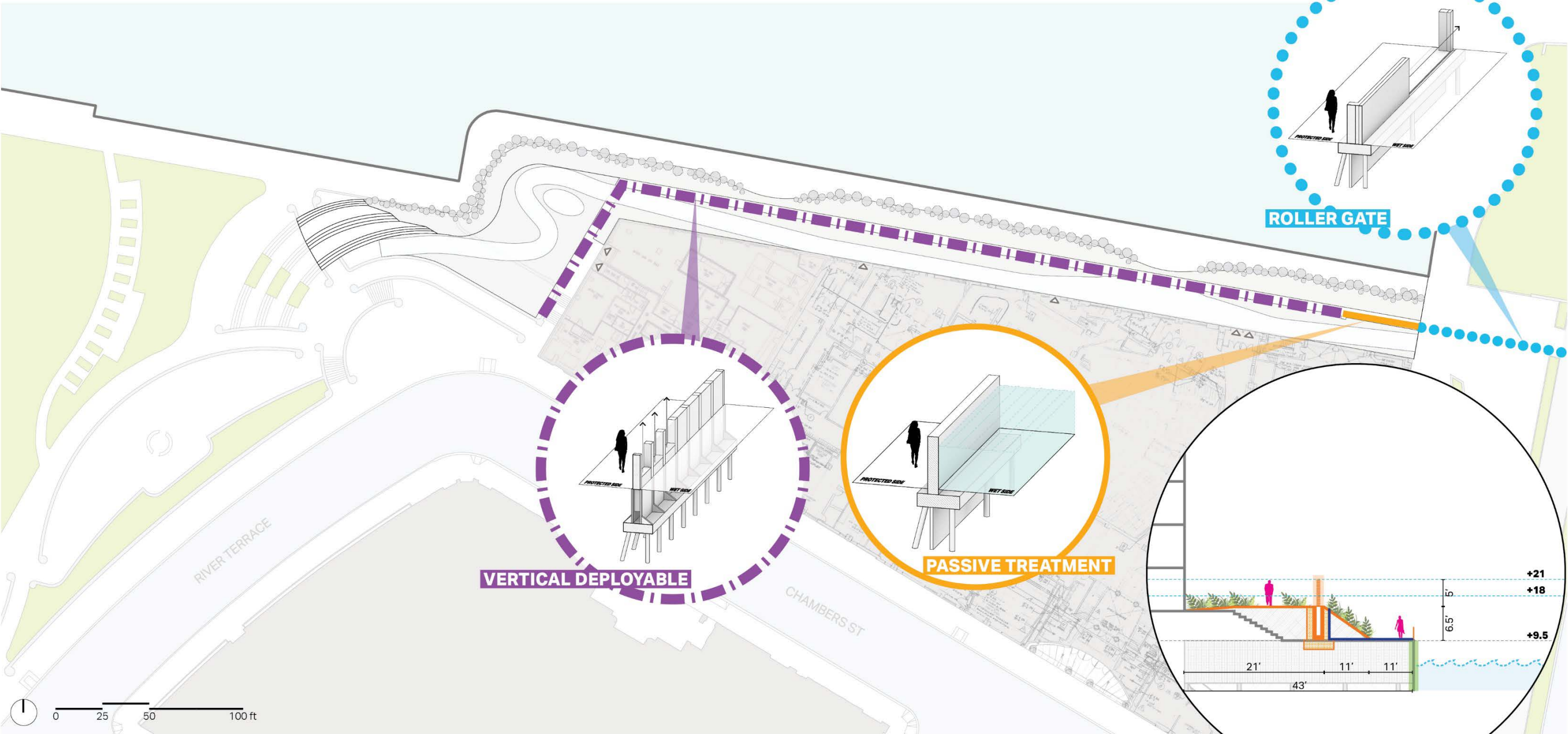
Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 2 - RIVER THEATER | LOOK AND FEEL



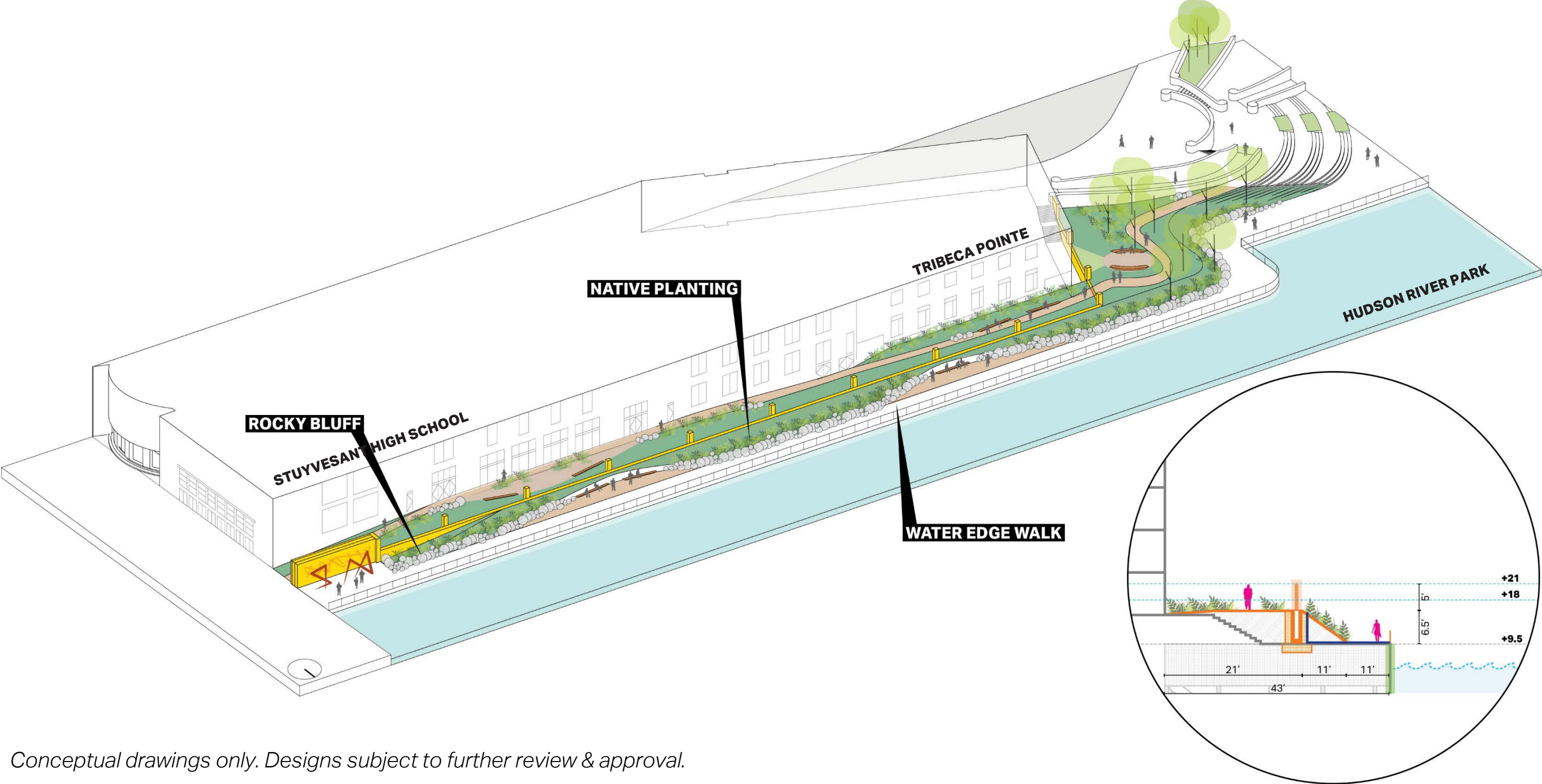
FORT SAINT JEAN, MARSEILLES

CONCEPT 3 - WATERFRONT RIDGE | FLOOD MITIGATION METHODS



Conceptual drawings only. Designs subject to further review & approval.

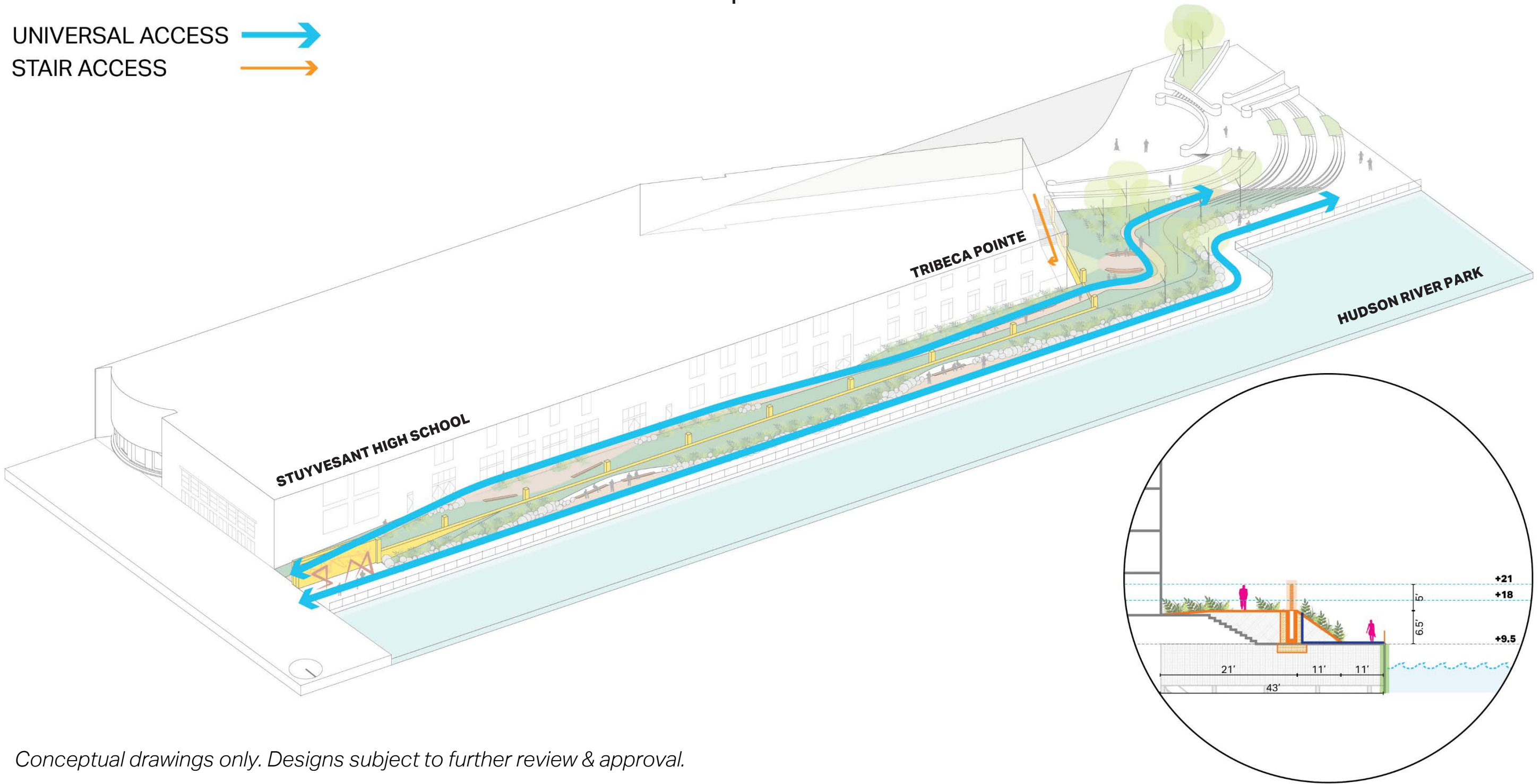
CONCEPT 3 - WATERFRONT RIDGE | DESIGN CONCEPT



Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 3 - WATERFRONT RIDGE | DESIGN CONCEPT

UNIVERSAL ACCESS 
STAIR ACCESS 



Conceptual drawings only. Designs subject to further review & approval.

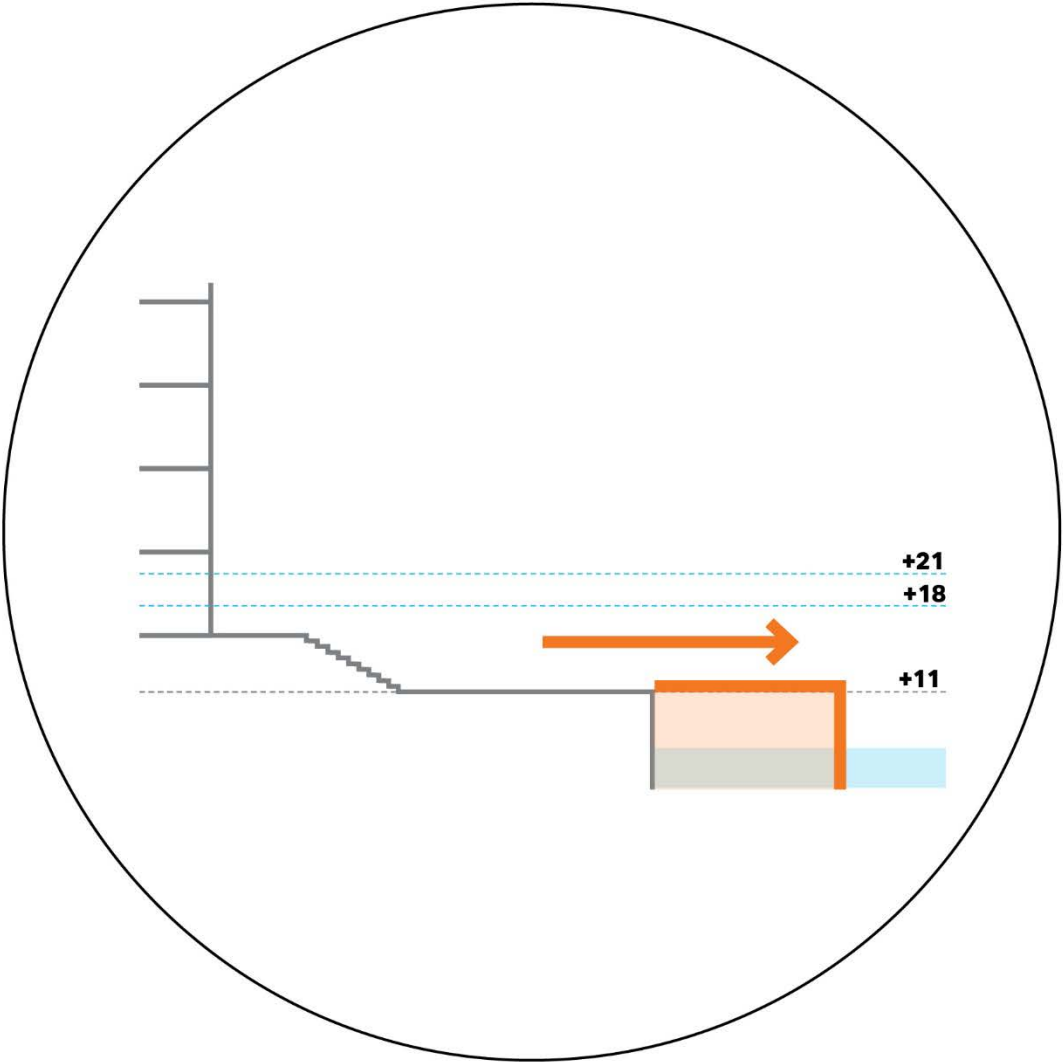
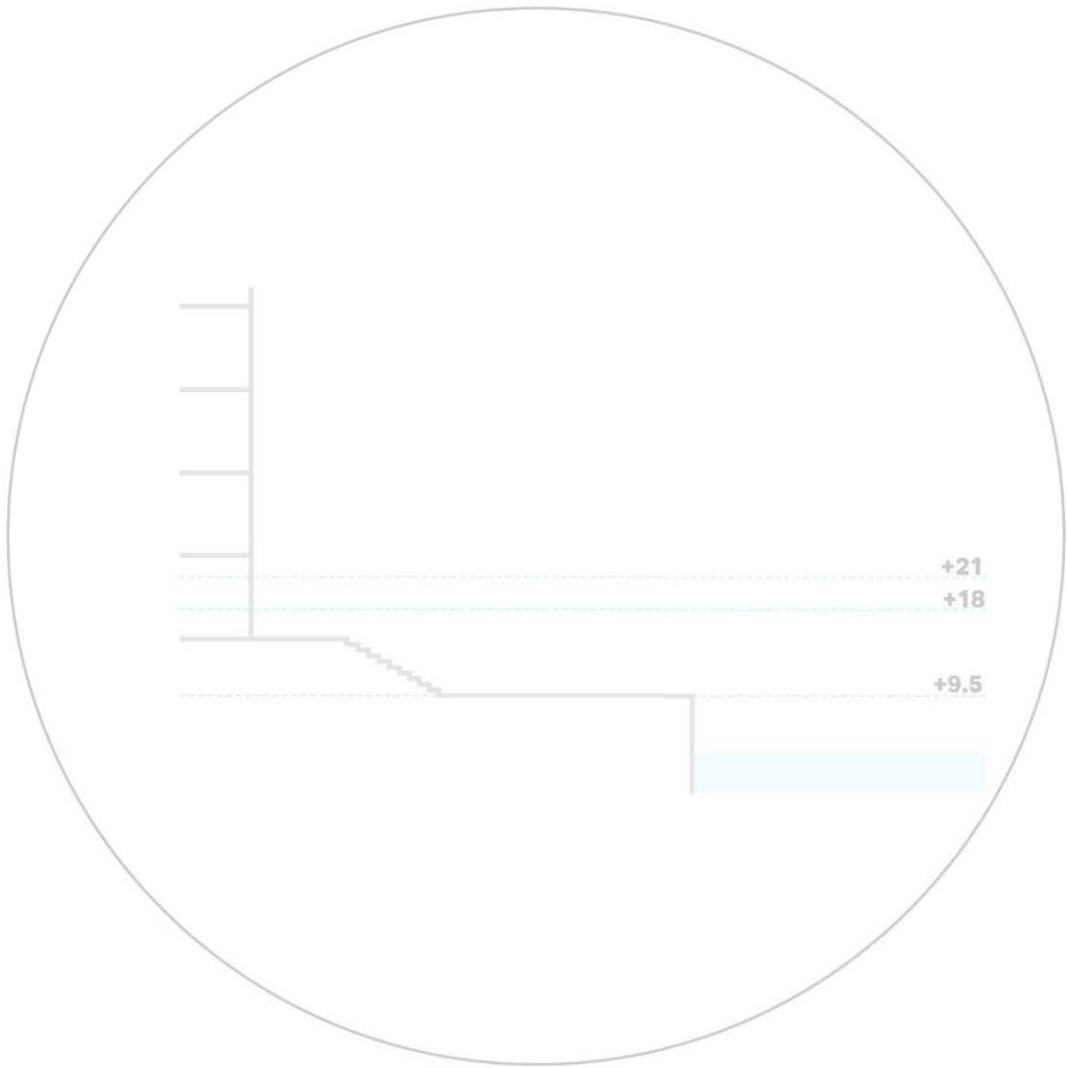
CONCEPT 3 - WATERFRONT RIDGE | LOOK AND FEEL



YANWEIZHOU PARK, CHINA

THE NORTH ESPLANADE | THE APPROACH

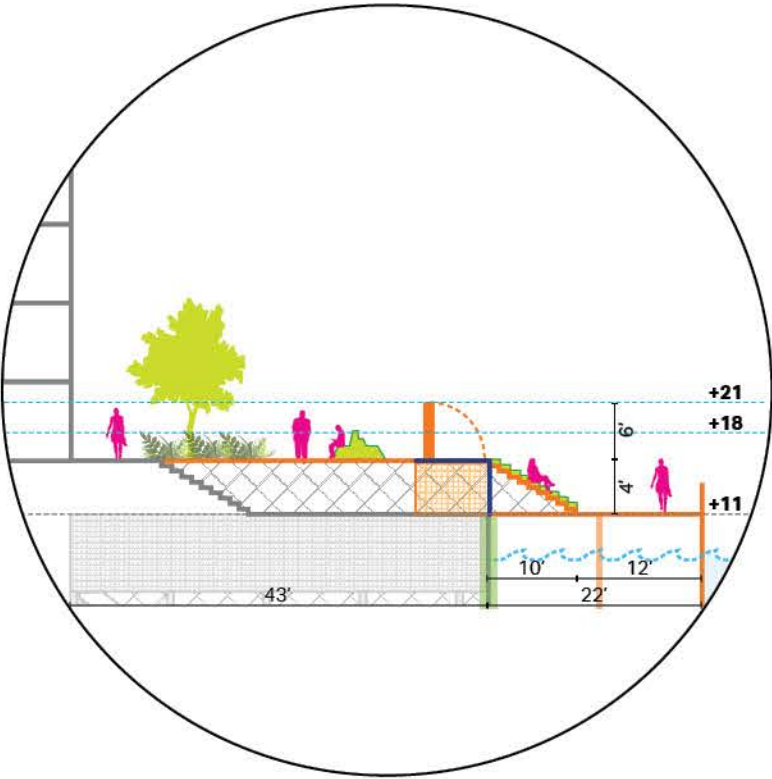
EXTENDING THE FOOTPRINT



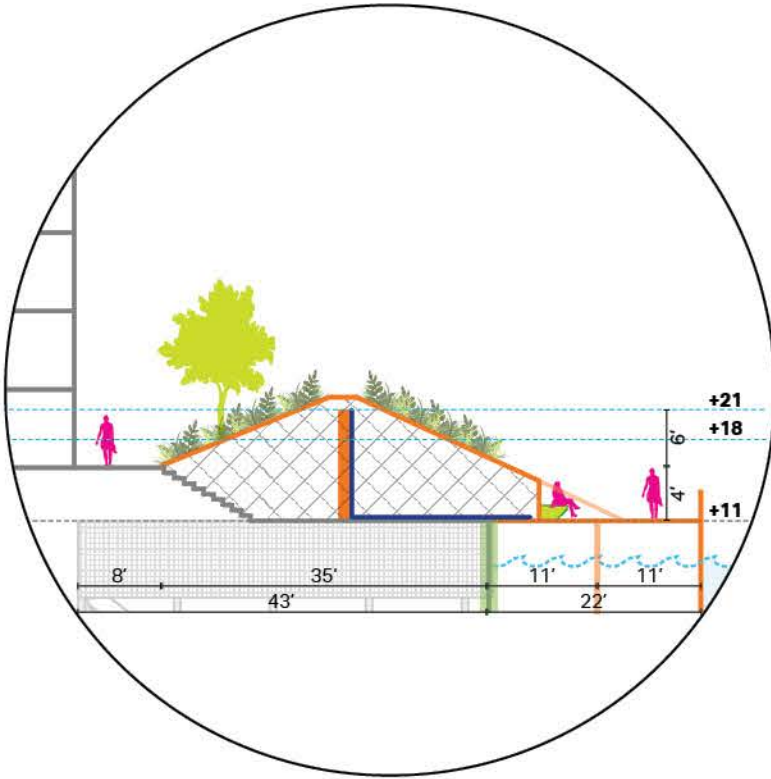
EXTENDING THE FOOTPRINT
- FULL ACCESSIBILITY
- PASSIVE APPROACHES

THE NORTH ESPLANADE | THE CONCEPTS

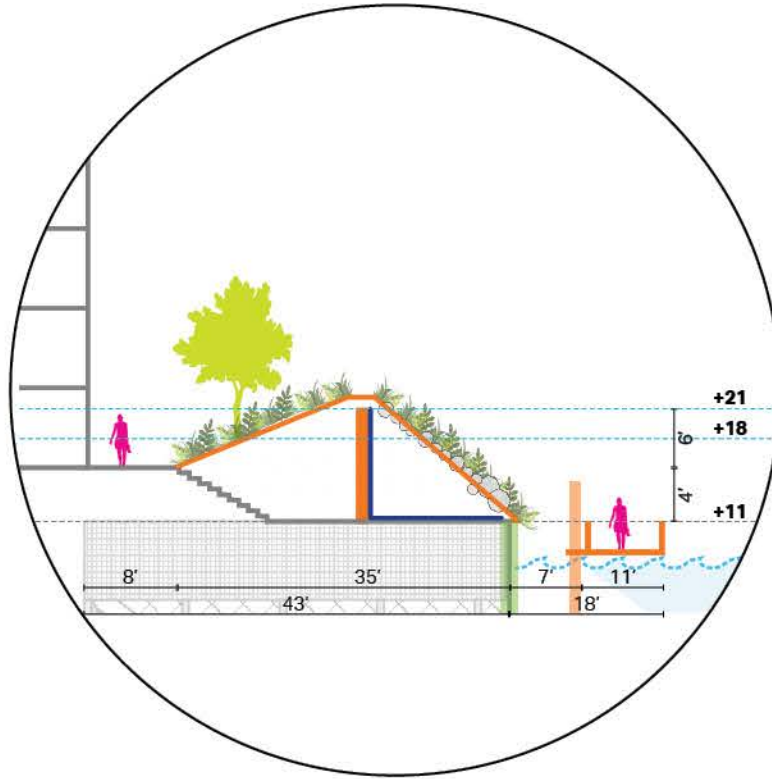
EXTENDING THE FOOTPRINT



CONCEPT 4
URBAN EDGE

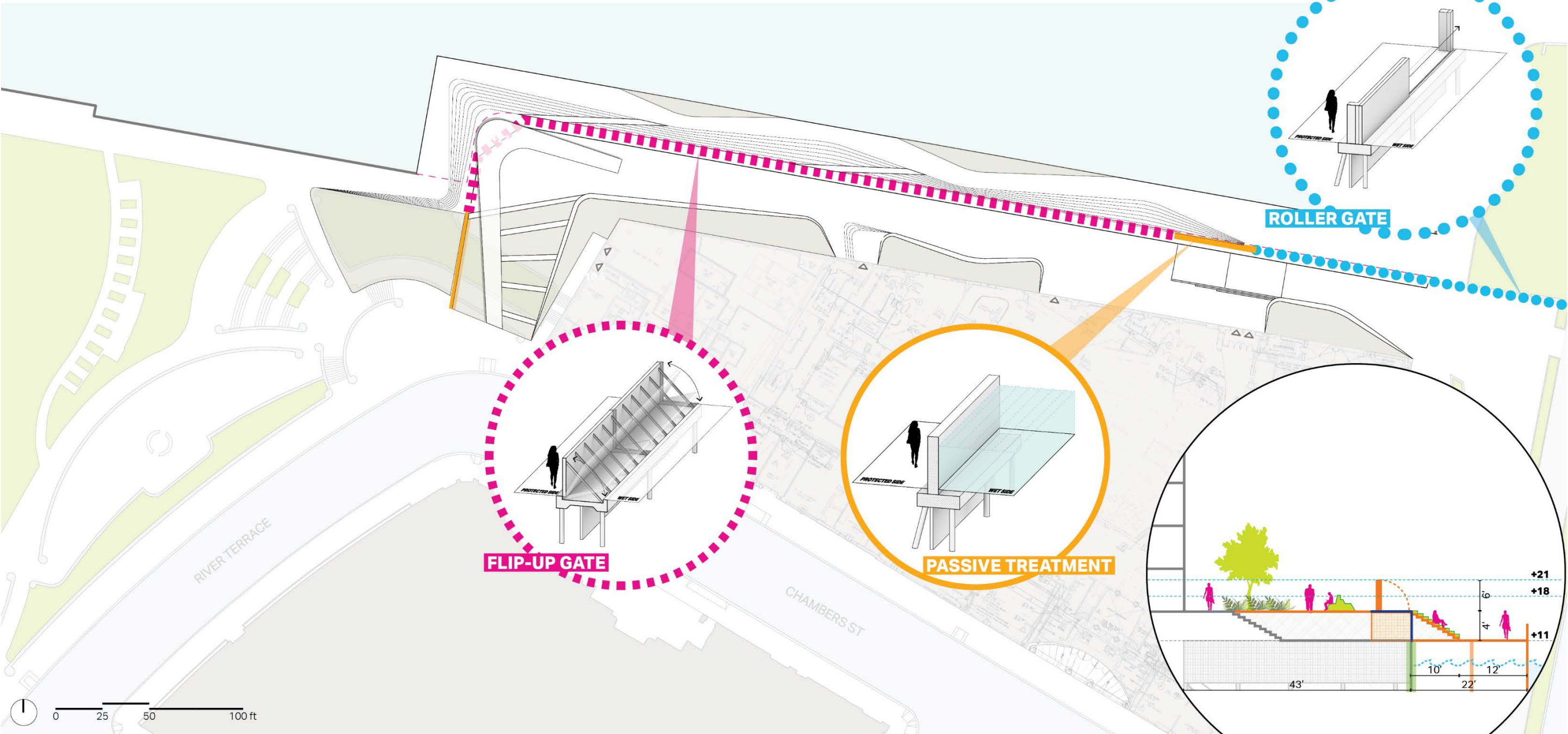


CONCEPT 5
RIVER WALK



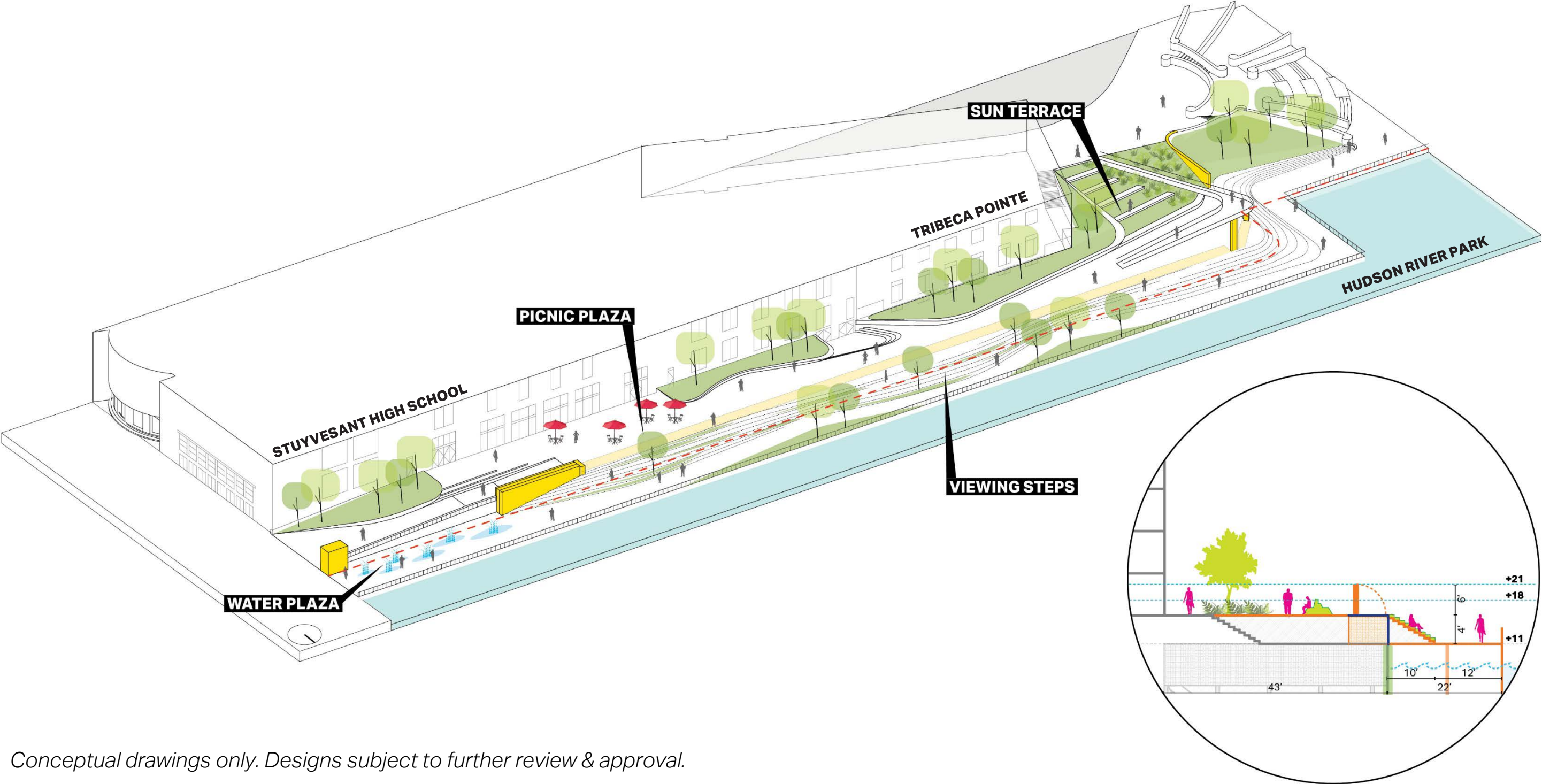
CONCEPT 6
GREEN RIBBON

CONCEPT 4 - URBAN EDGE | FLOOD MITIGATION METHODS



Conceptual drawings only. Designs subject to further review & approval.

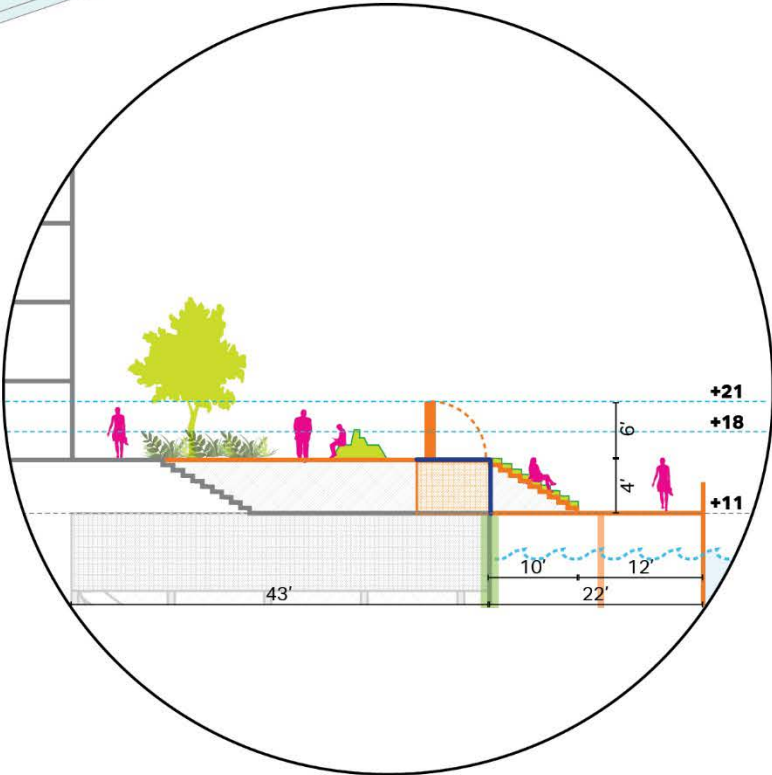
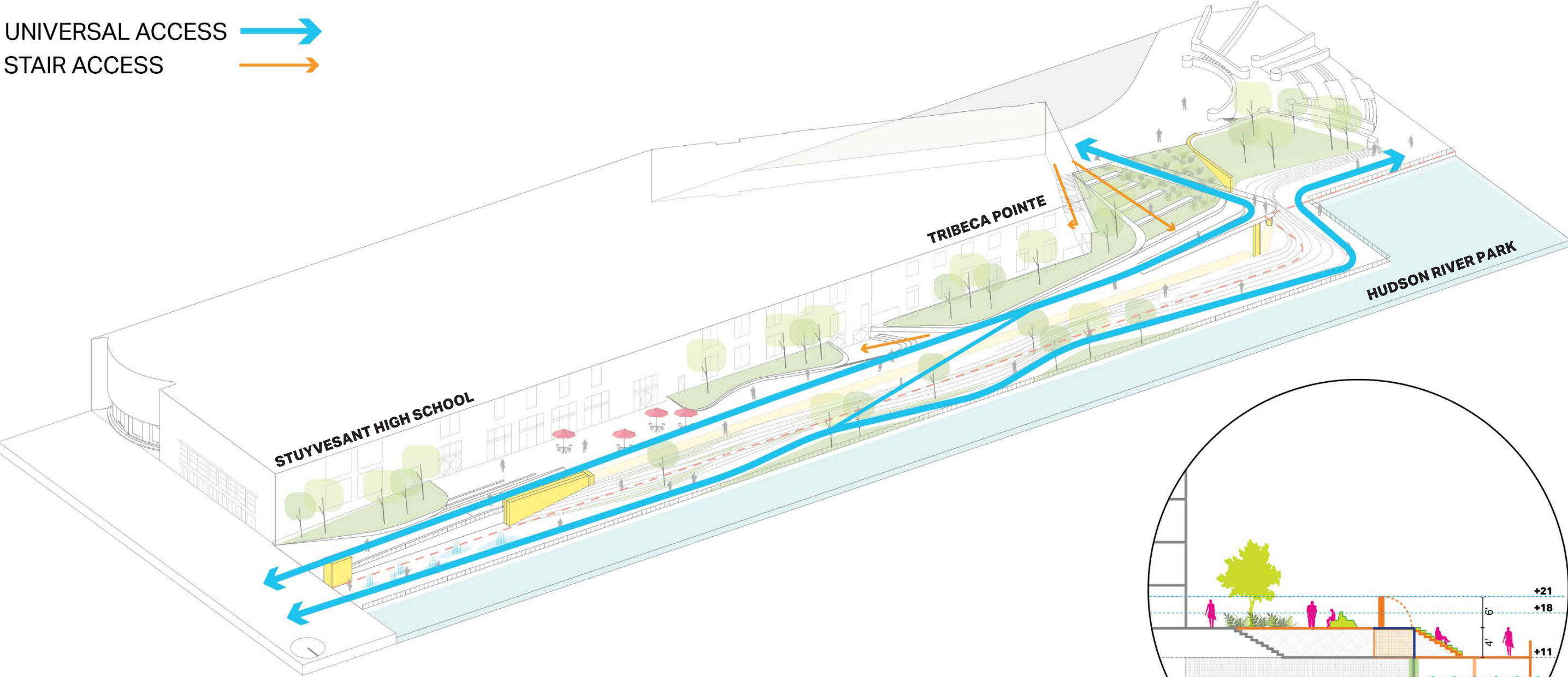
CONCEPT 4 - URBAN EDGE | DESIGN CONCEPT



Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 4 - URBAN EDGE | DESIGN CONCEPT

UNIVERSAL ACCESS 
STAIR ACCESS 



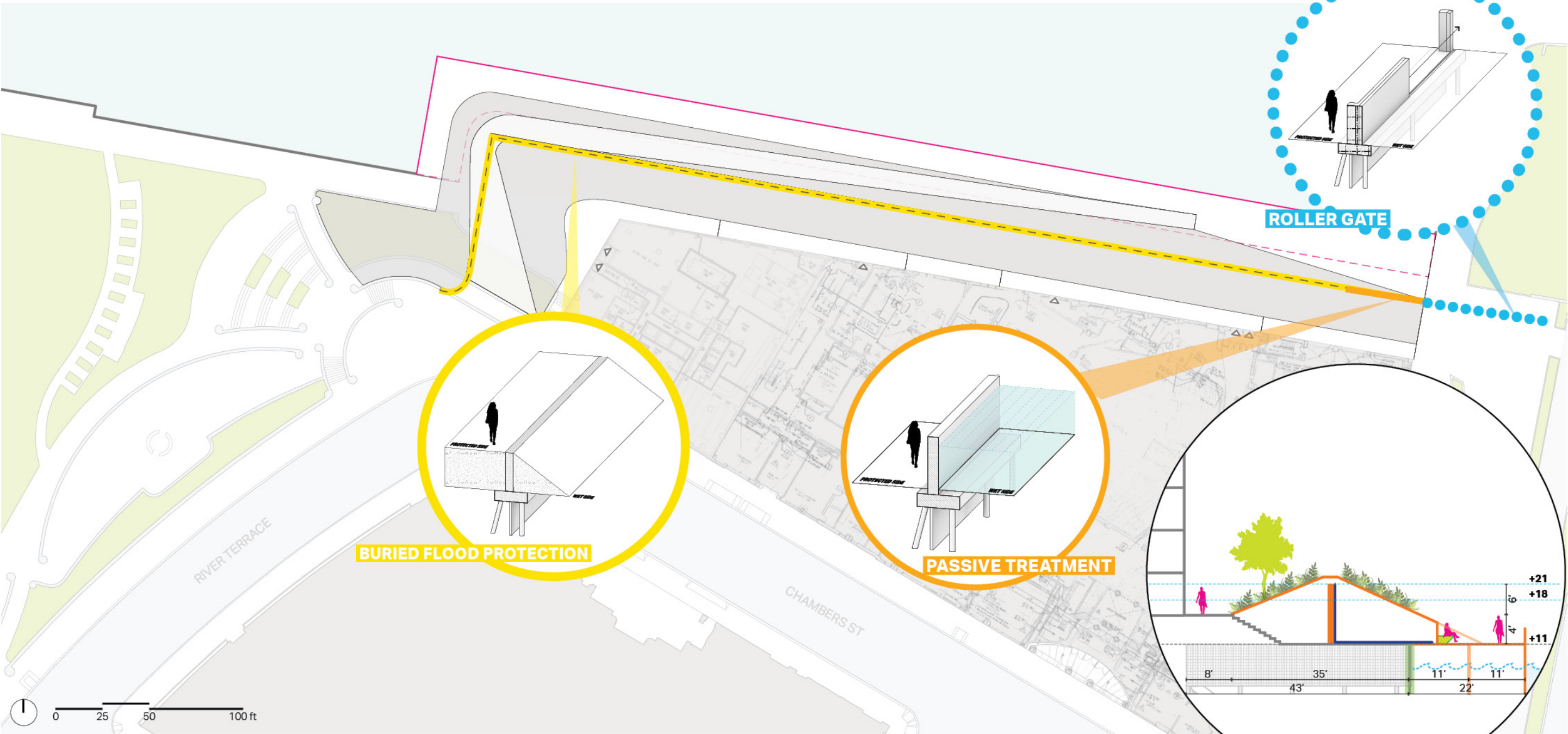
Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 4 - URBAN EDGE | LOOK AND FEEL



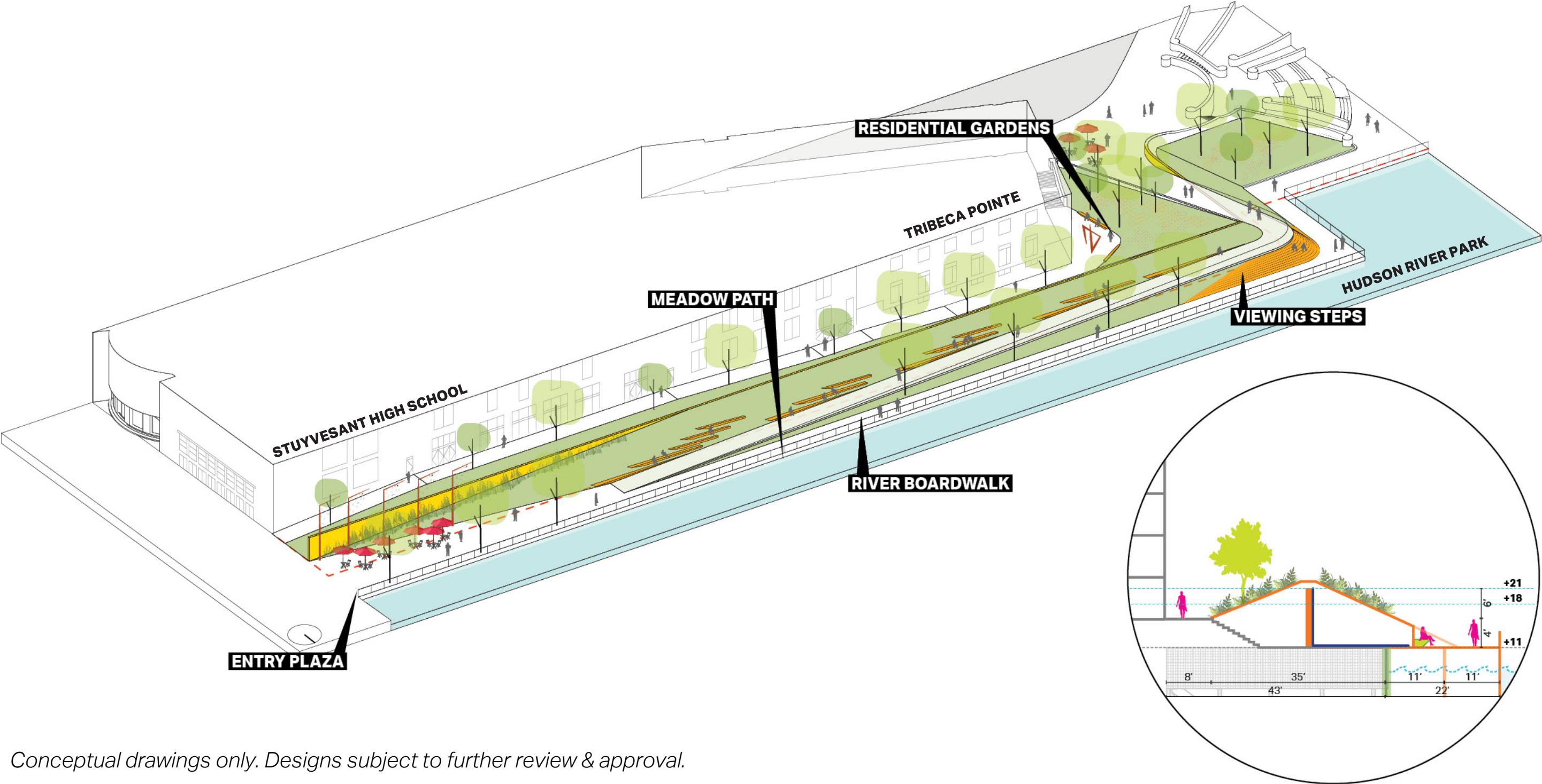
CLIPPERSHIP WHARF, BOSTON

CONCEPT 5 - RIVER WALK | FLOOD MITIGATION METHODS



Conceptual drawings only. Designs subject to further review & approval.

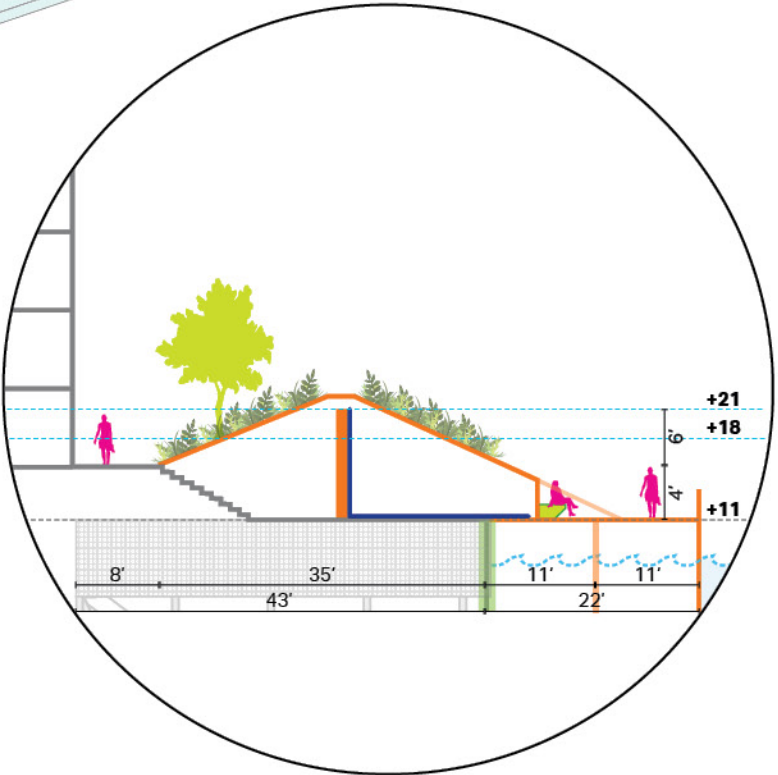
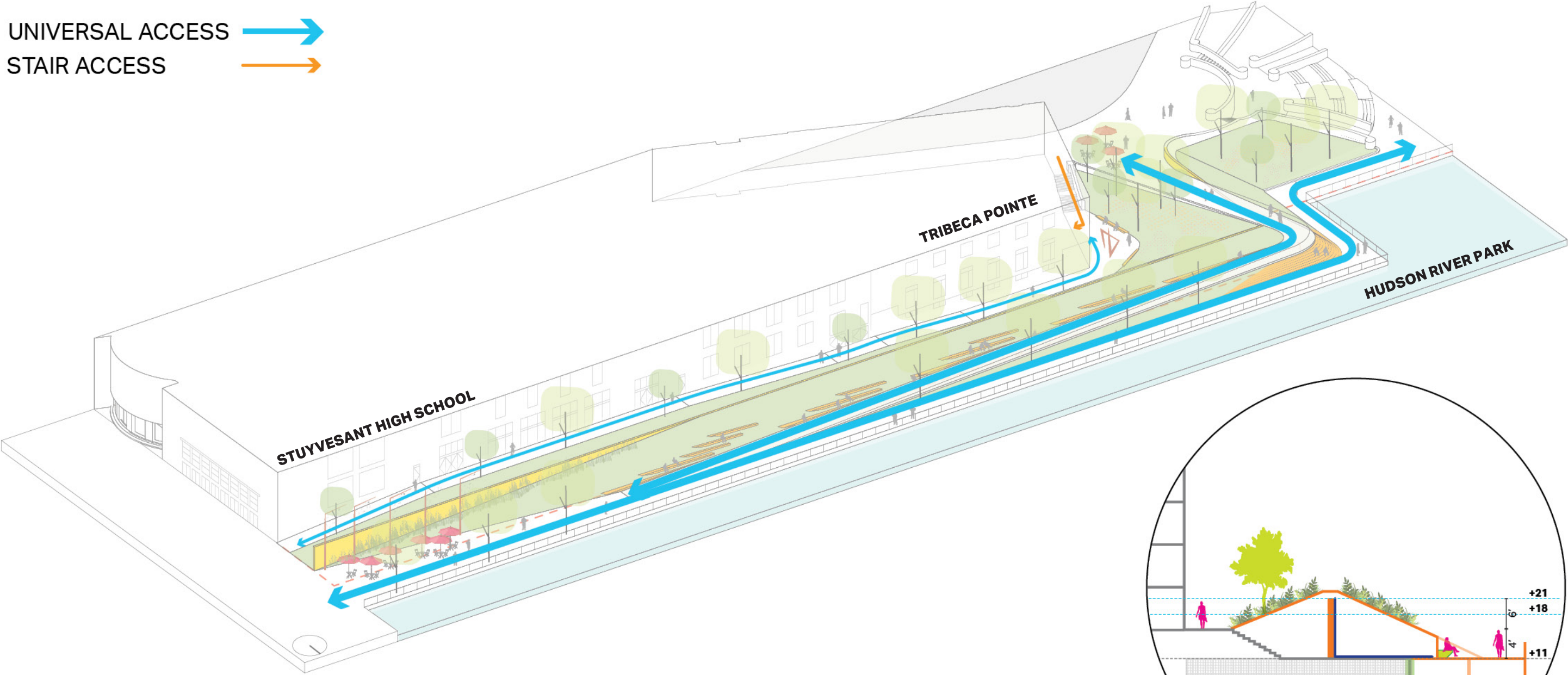
CONCEPT 5 - RIVER WALK | DESIGN CONCEPT



Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 5 - RIVER WALK | DESIGN CONCEPT

UNIVERSAL ACCESS 
STAIR ACCESS 



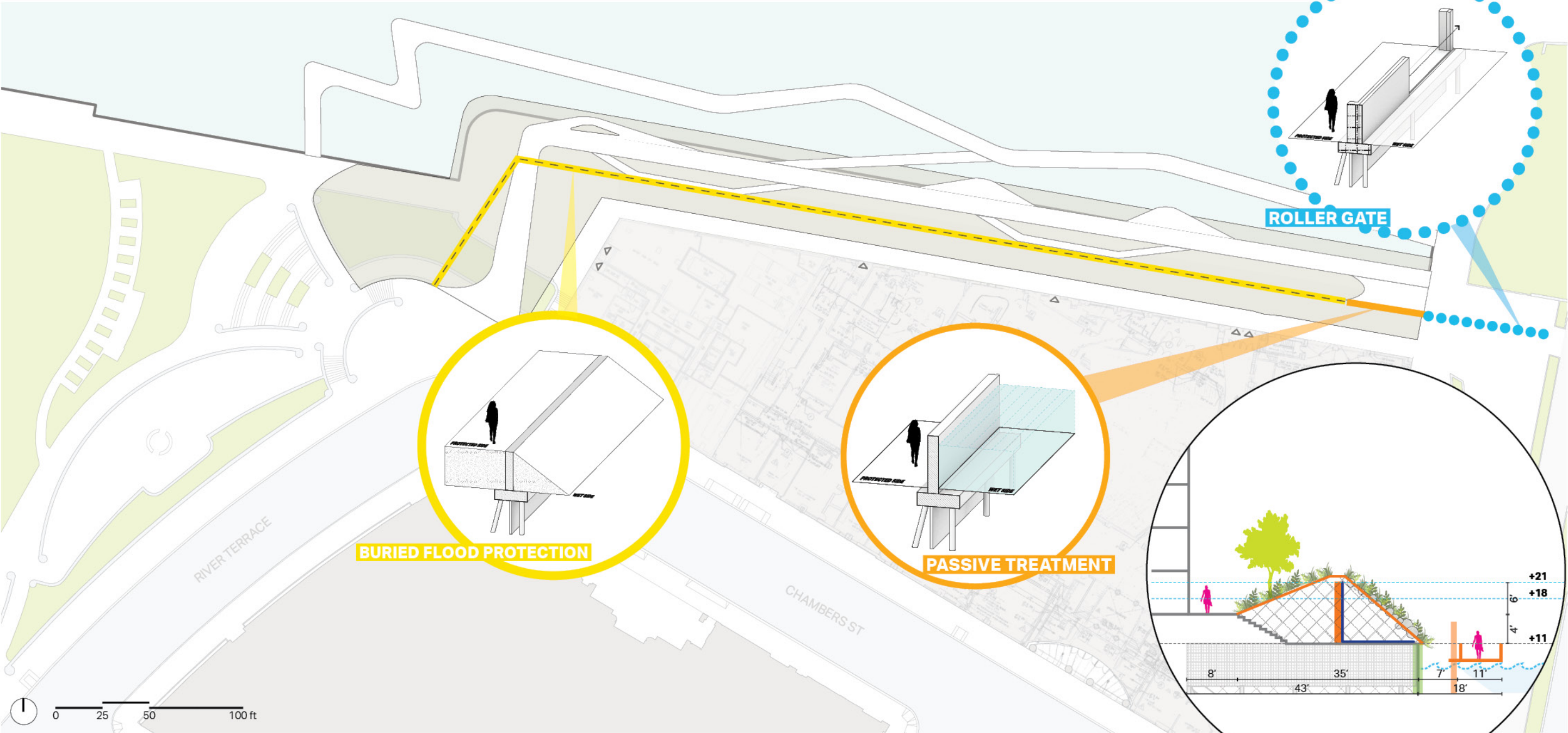
Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 5 - RIVER WALK | LOOK AND FEEL



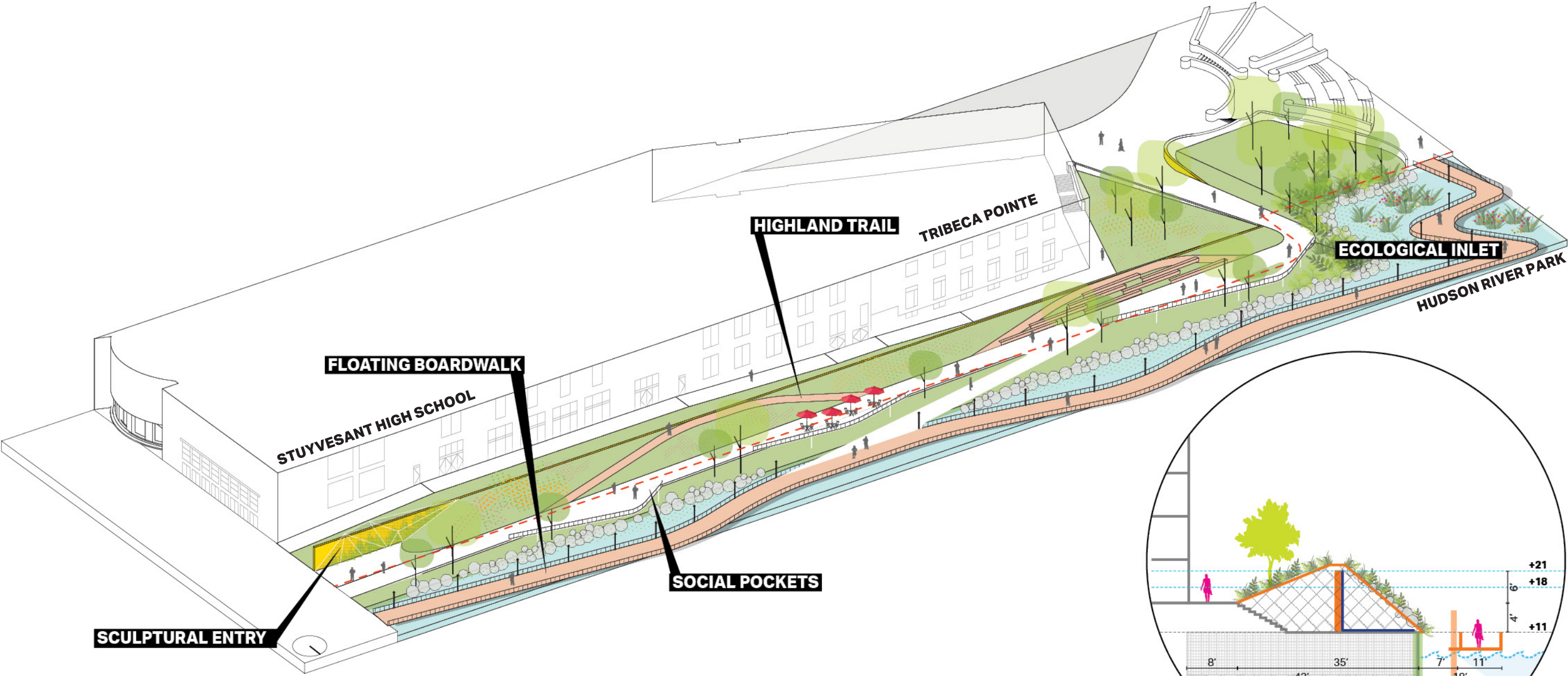
RIVER QUAY, AUSTRALIA

CONCEPT 6 - GREEN RIBBON | FLOOD MITIGATION METHODS



Conceptual drawings only. Designs subject to further review & approval.

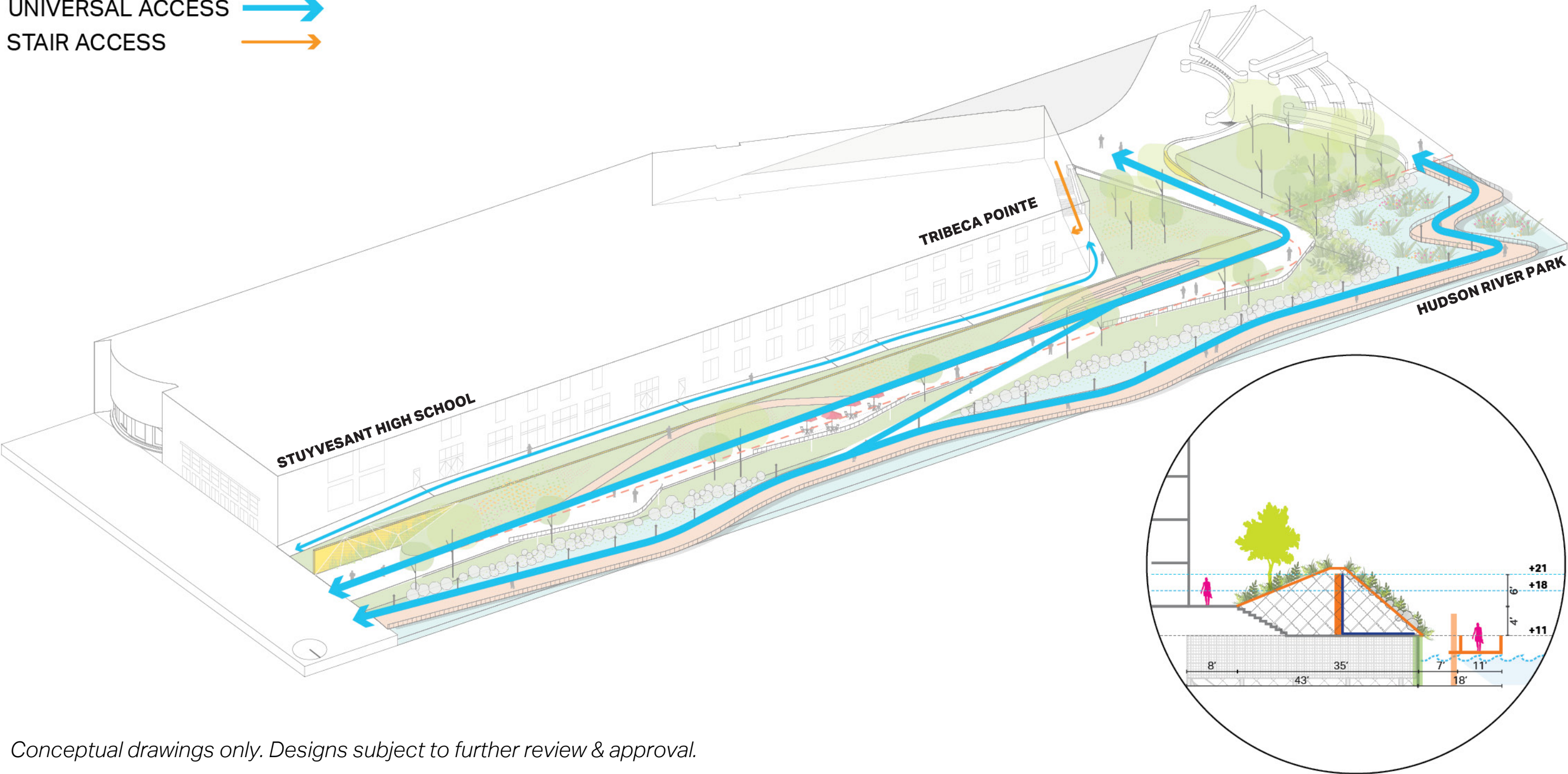
CONCEPT 6 - GREEN RIBBON | DESIGN CONCEPT



Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 6 - GREEN RIBBON | DESIGN CONCEPT

UNIVERSAL ACCESS 
STAIR ACCESS 



Conceptual drawings only. Designs subject to further review & approval.

CONCEPT 6 - GREEN RIBBON | LOOK AND FEEL



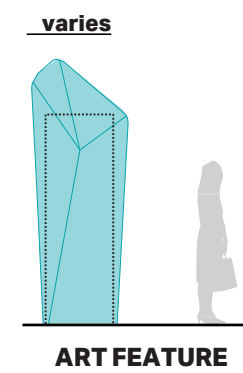
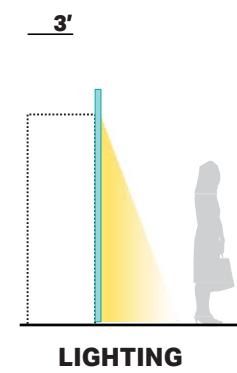
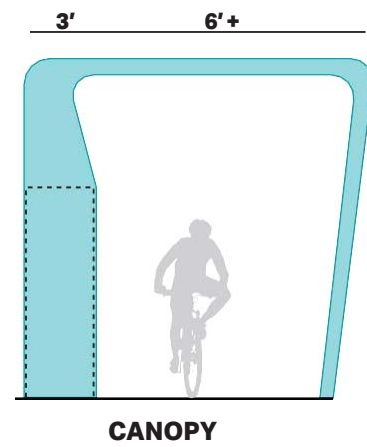
ERIE STREET PLAZA, MILWAUKEE

ZONE 2

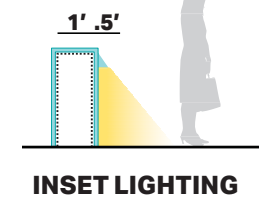
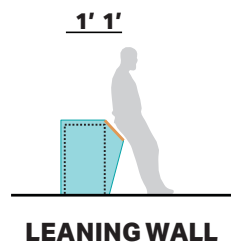
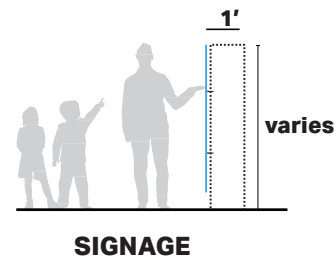
THE STREET

STREET DESIGN TOOLKIT

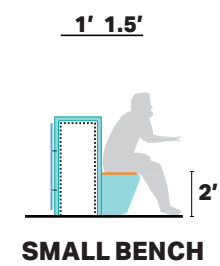
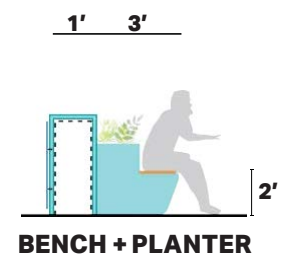
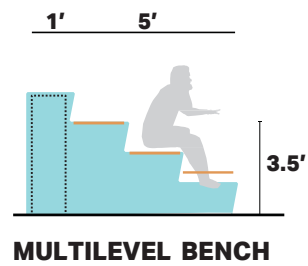
SCULPTURE



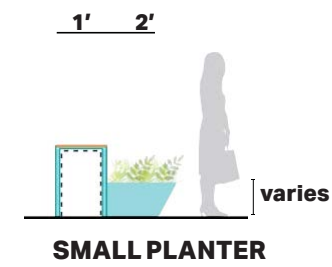
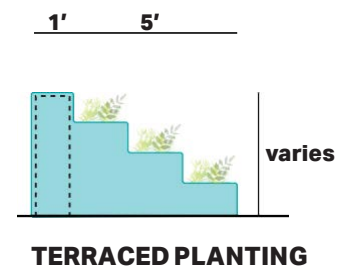
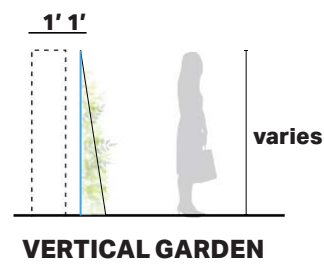
VERTICAL ELEMENTS



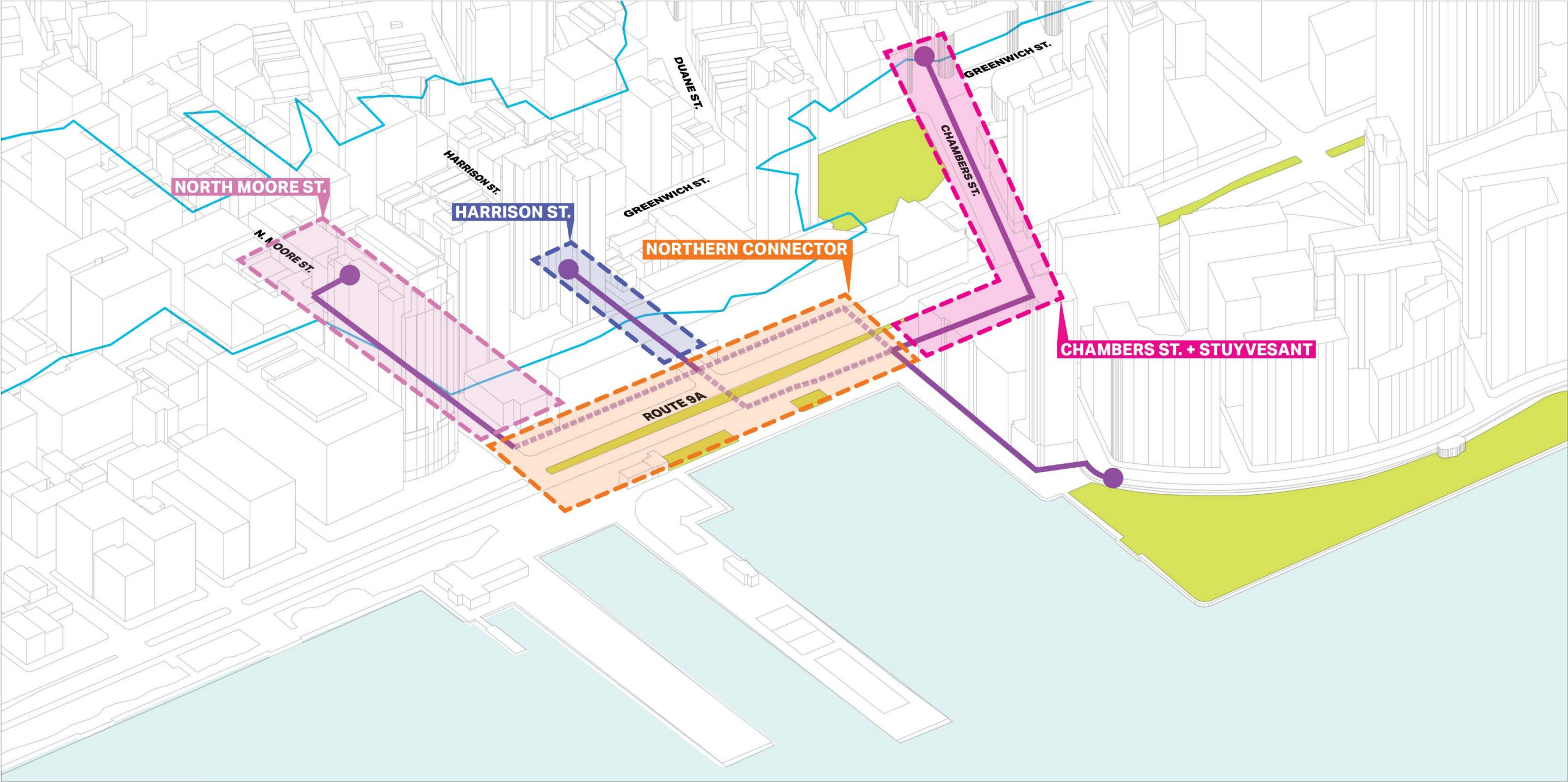
SITTING



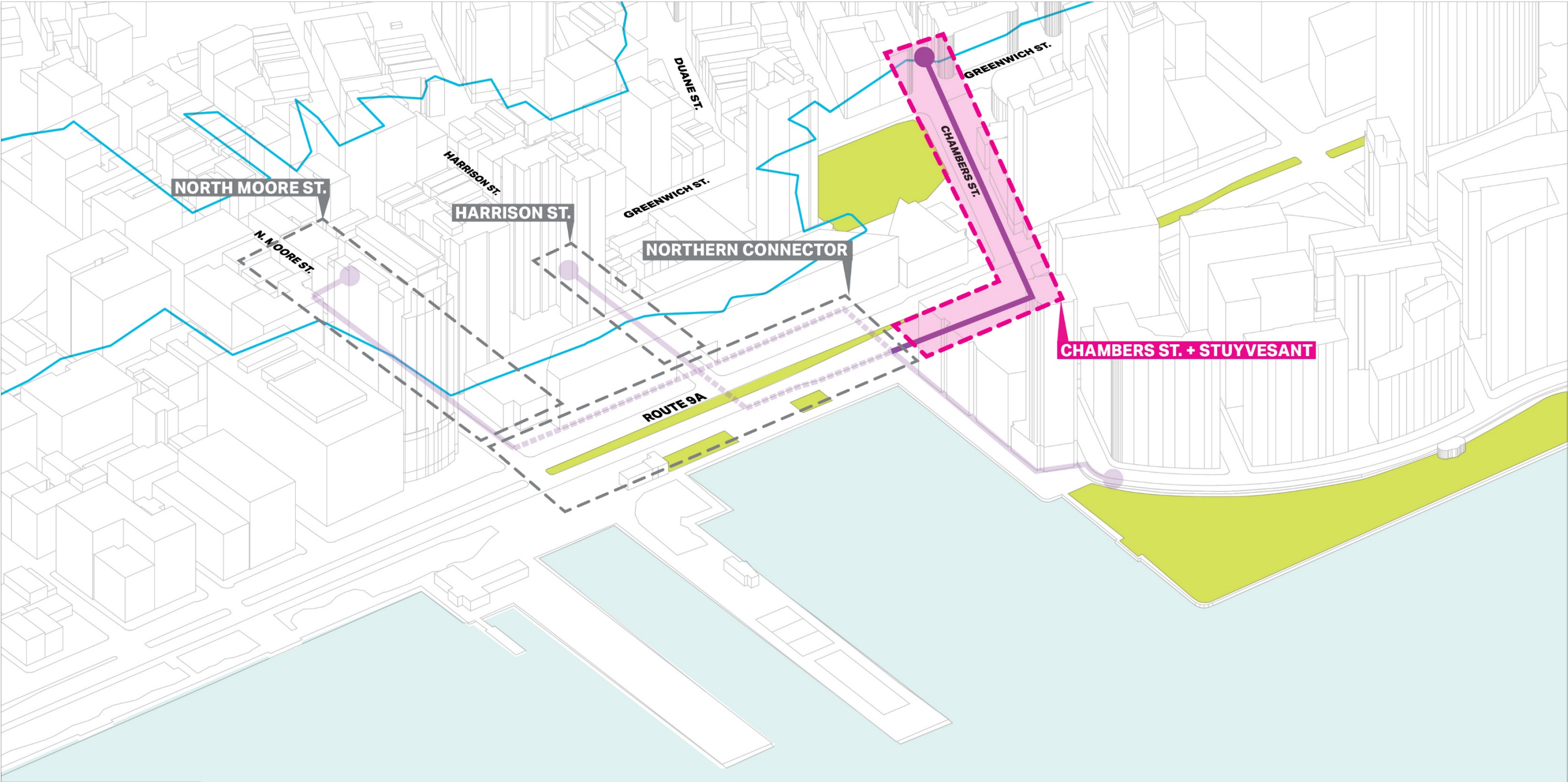
PLANTING



THE ALIGNMENTS



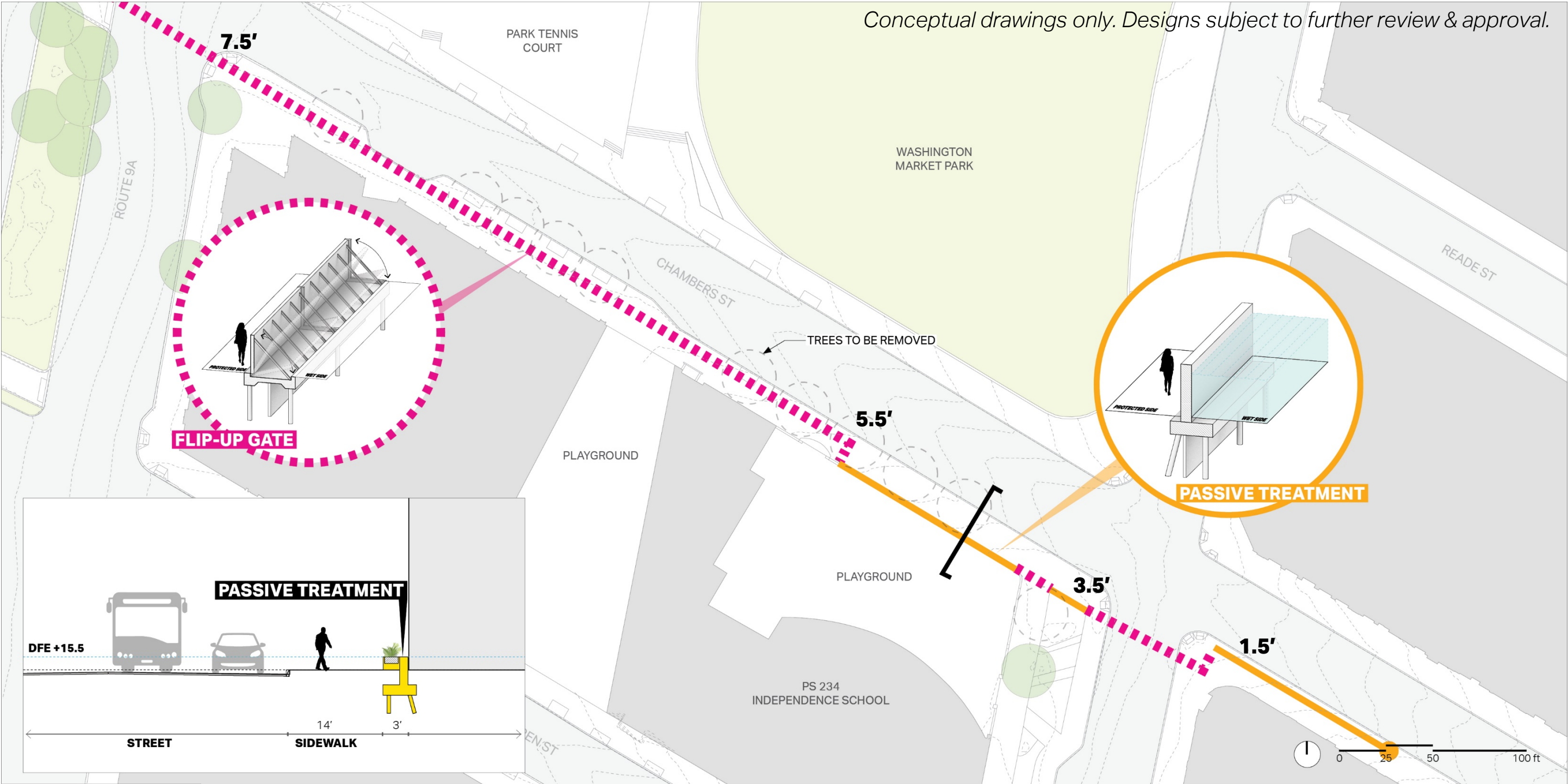
THE ALIGNMENTS | CHAMBERS ST. + STUYVESANT



CHAMBERS ST. | EXISTING CONDITIONS

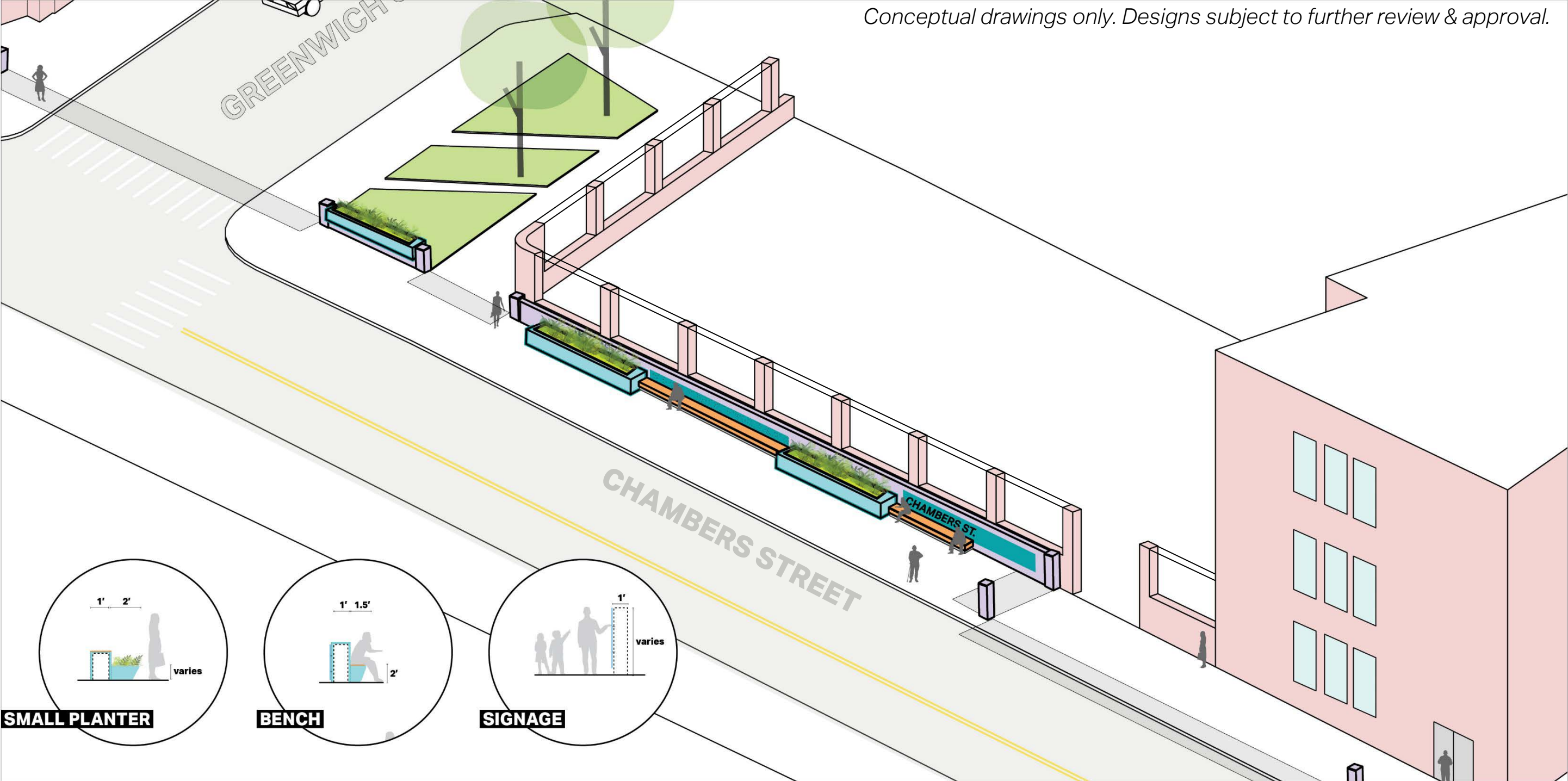


CHAMBERS ST. | REPLACING EXISTING FENCE



CHAMBERS ST. | BOLSTERING THE WALL

Conceptual drawings only. Designs subject to further review & approval.



CHAMBERS ST. | LOOK & FEEL

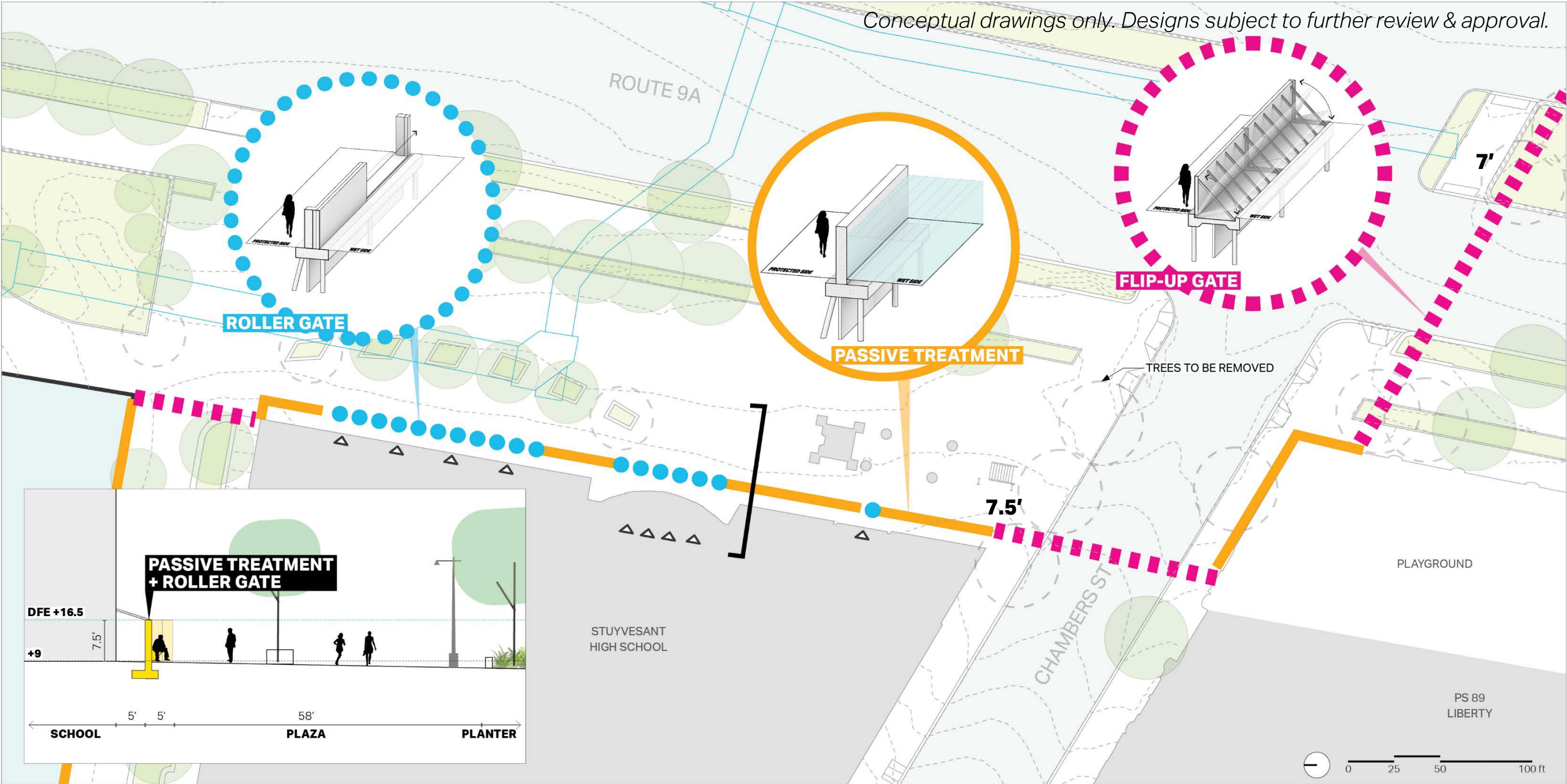


BILL & MELINDA GATES FOUNDATION CAMPUS, SEATTLE

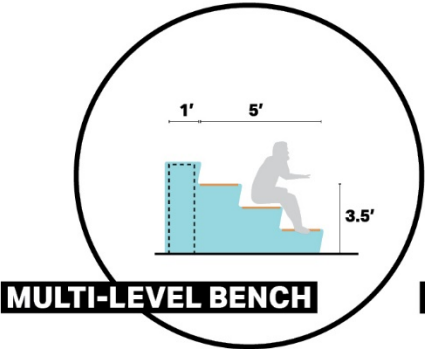
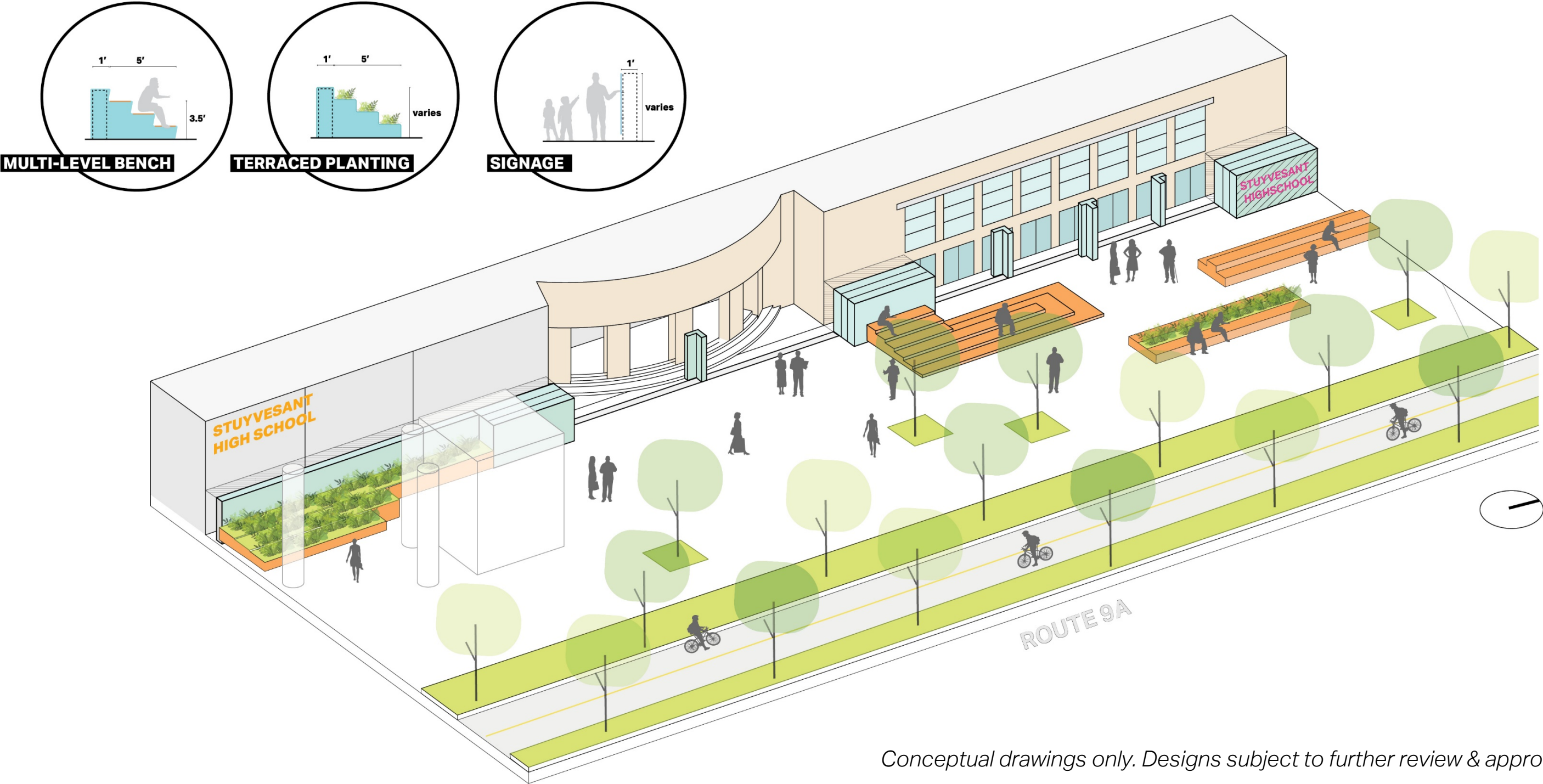
STUYVESANT | EXISTING CONDITIONS



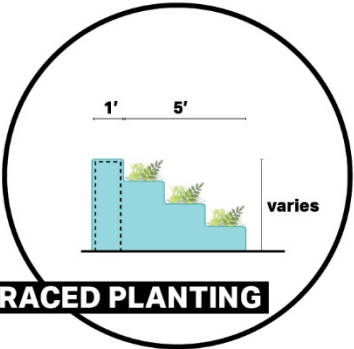
STUYVESANT | ROLLER GATE



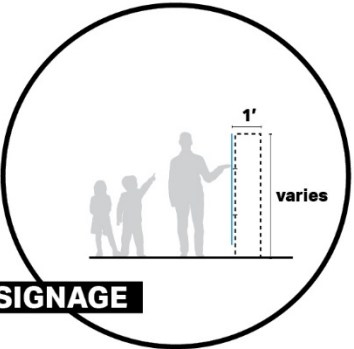
STUYVESANT | ROLLER GATE



MULTI-LEVEL BENCH



TERRACED PLANTING



SIGNAGE

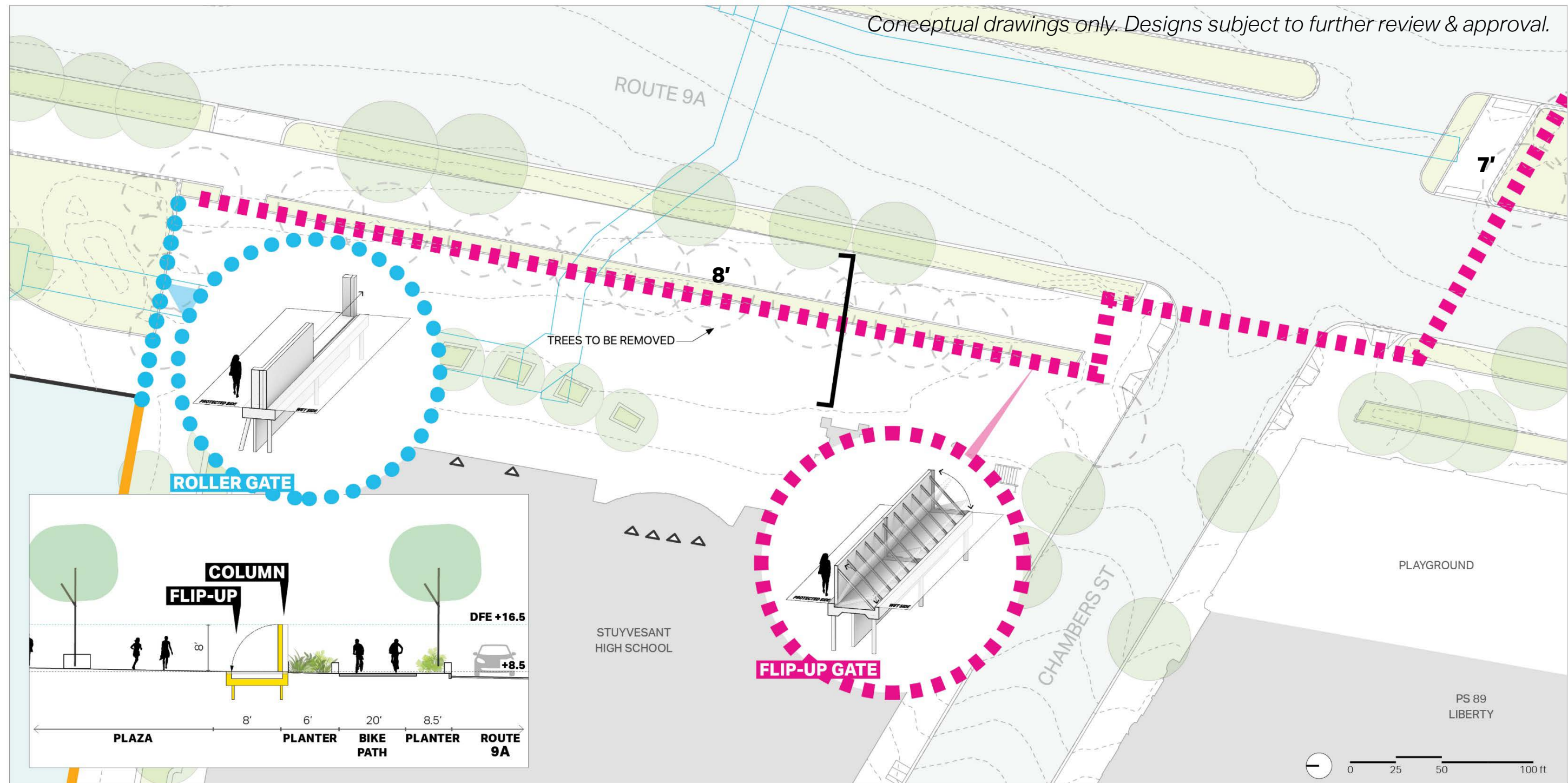
Conceptual drawings only. Designs subject to further review & approval.

STUYVESANT | LOOK & FEEL

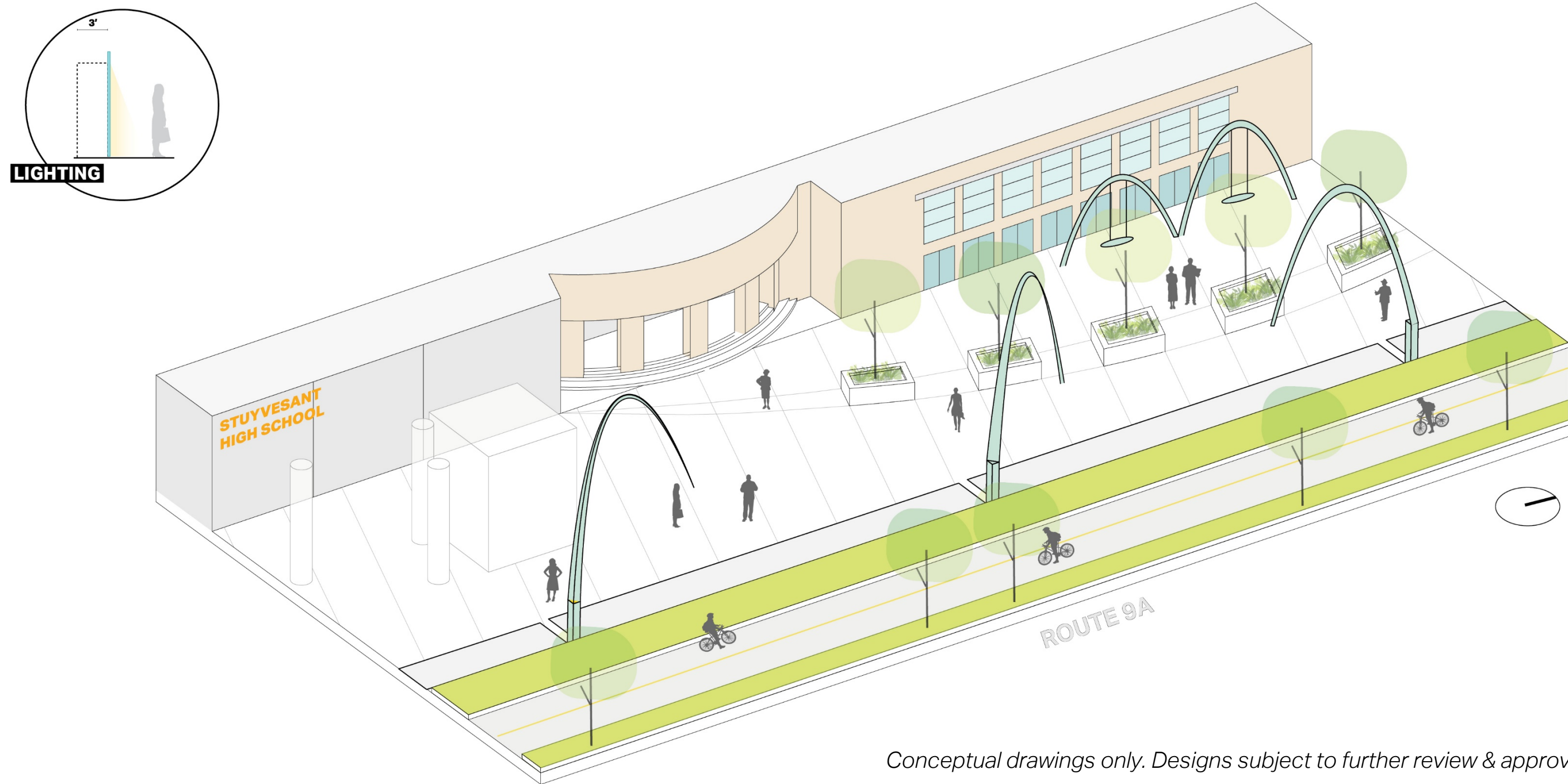


THE CITYDECK, GREEN BAY

STUYVESANT | FLIP-UP GATES



STUYVESANT | FLIP-UP GATES



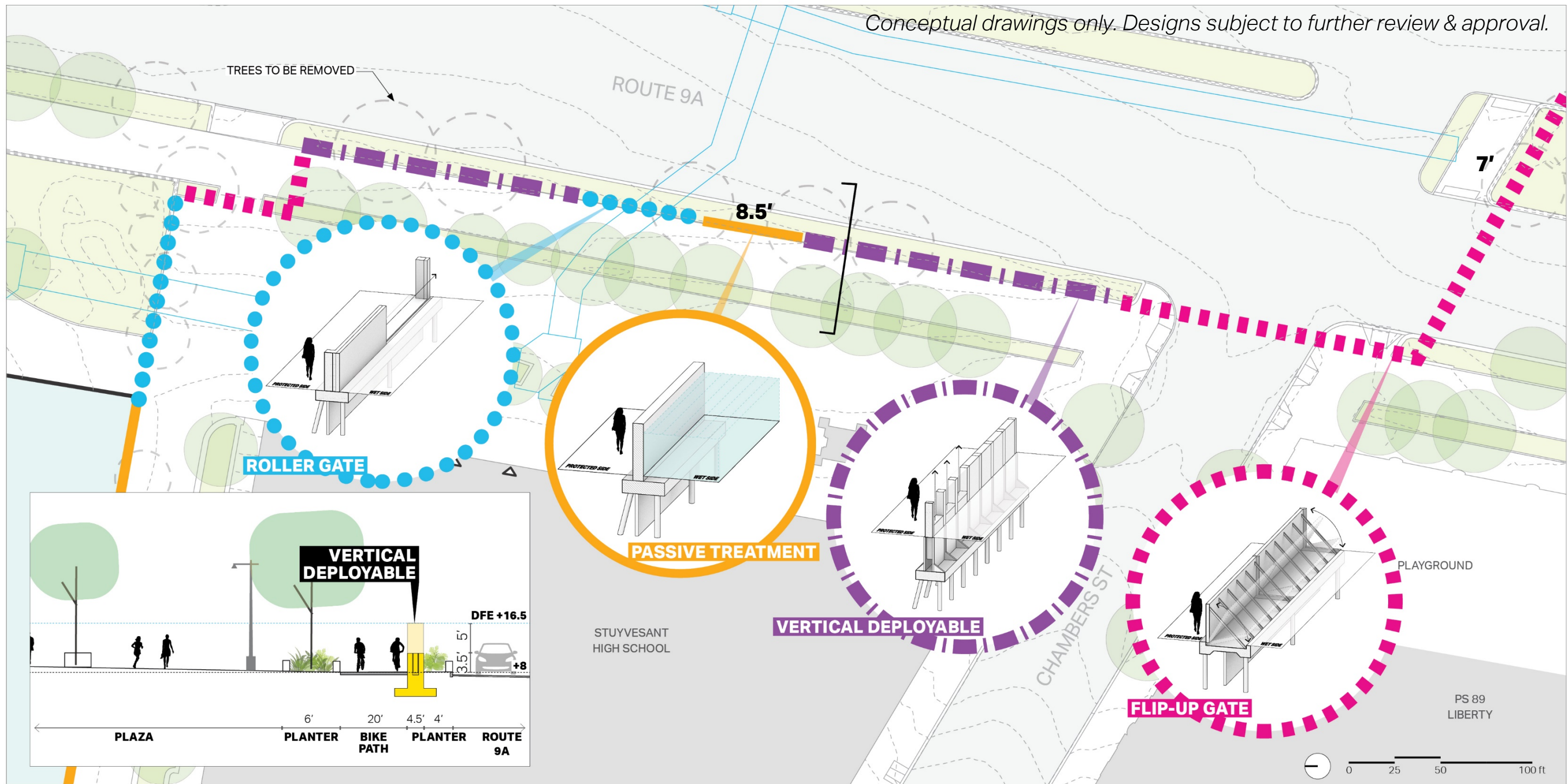
Conceptual drawings only. Designs subject to further review & approval.

STUYVESANT | LOOK & FEEL

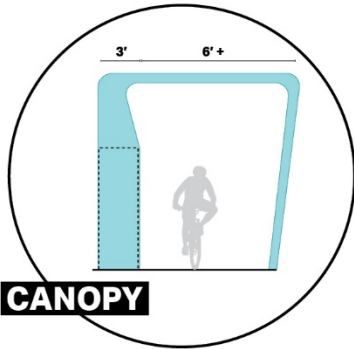


CITY THREAD, CHATTANOOGA

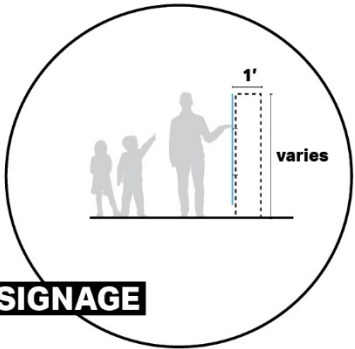
STUYVESANT | VERTICAL DEPLOYABLE



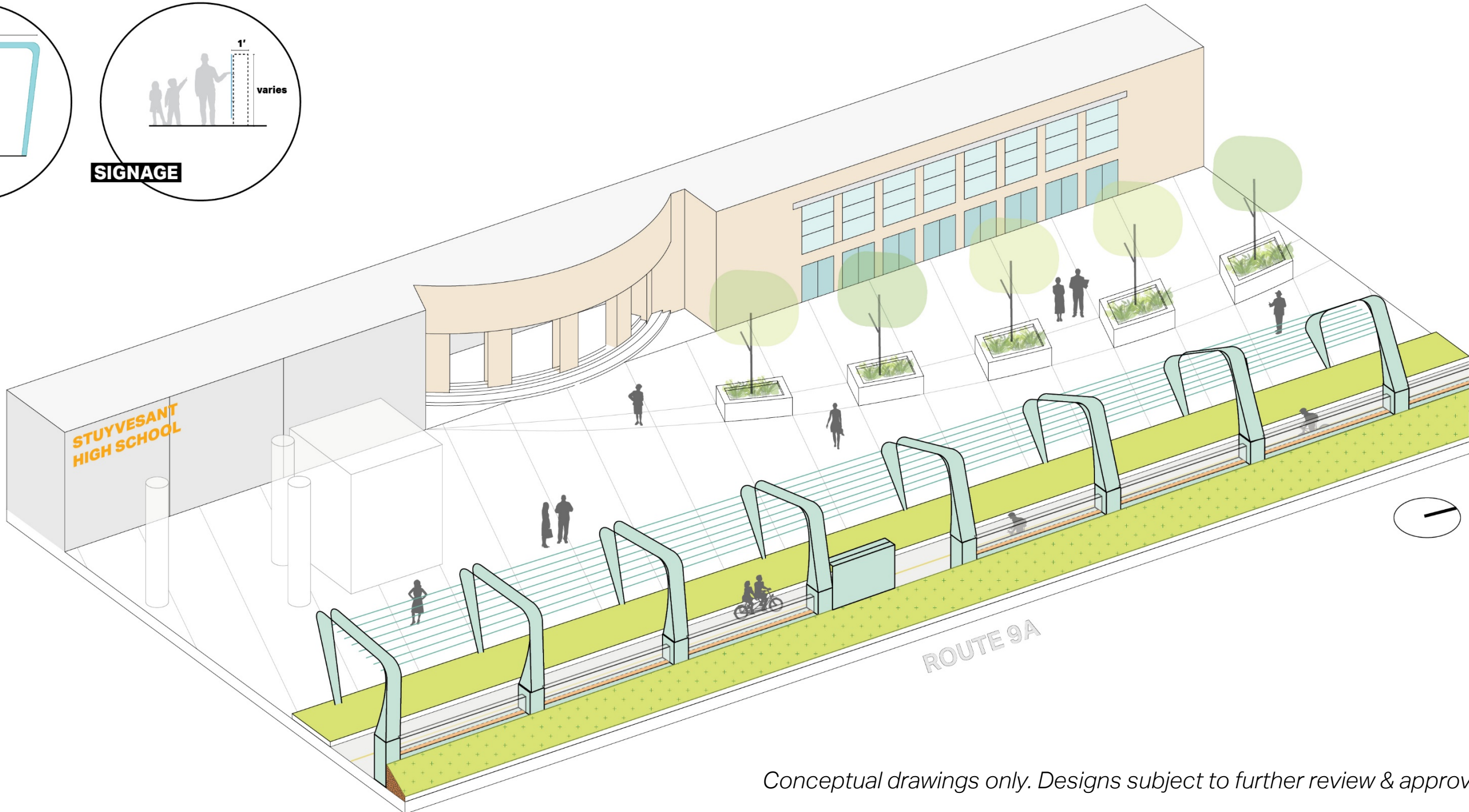
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CANOPY



SIGNAGE



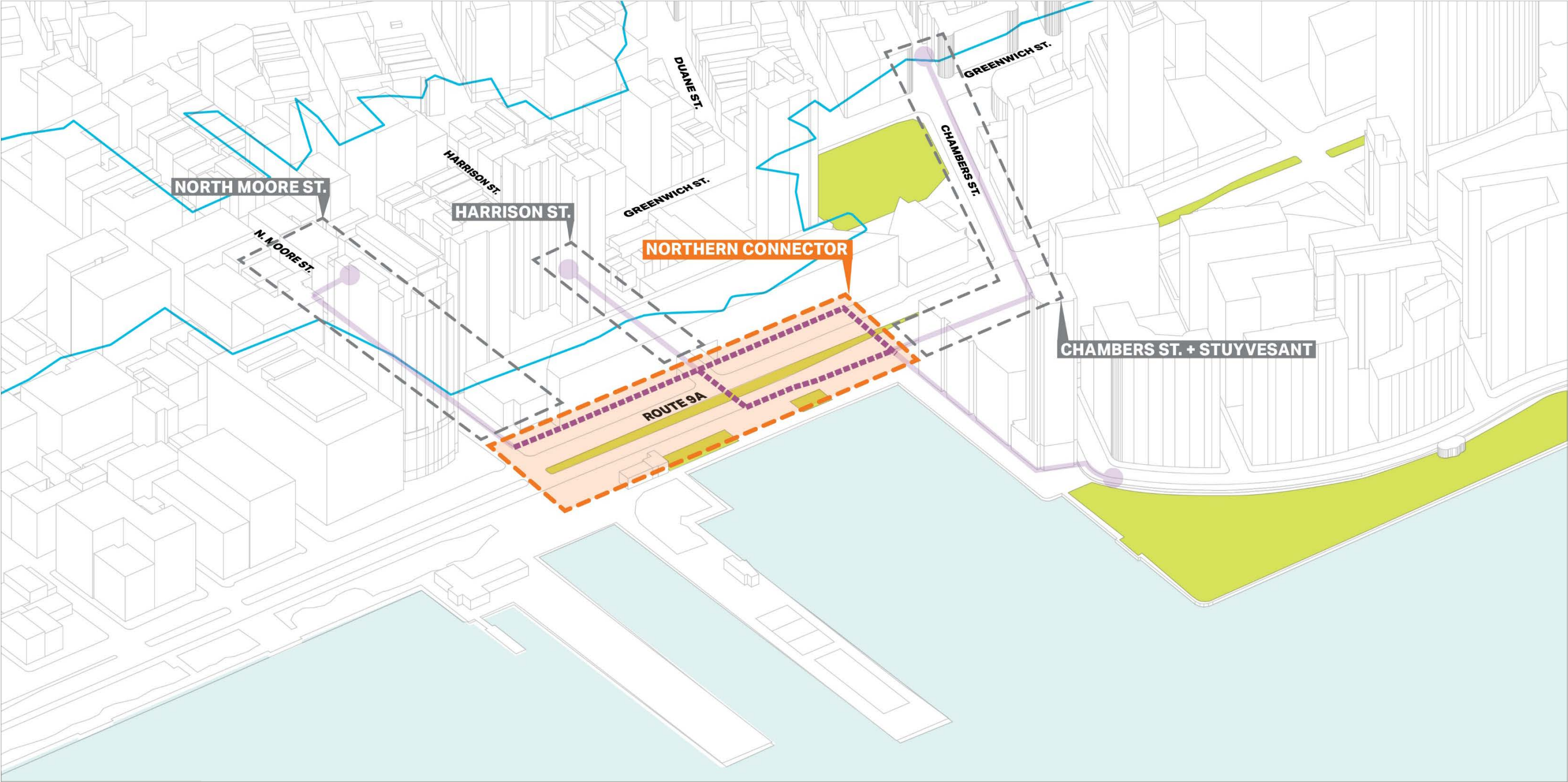
Conceptual drawings only. Designs subject to further review & approval.

STUYVESANT | LOOK & FEEL

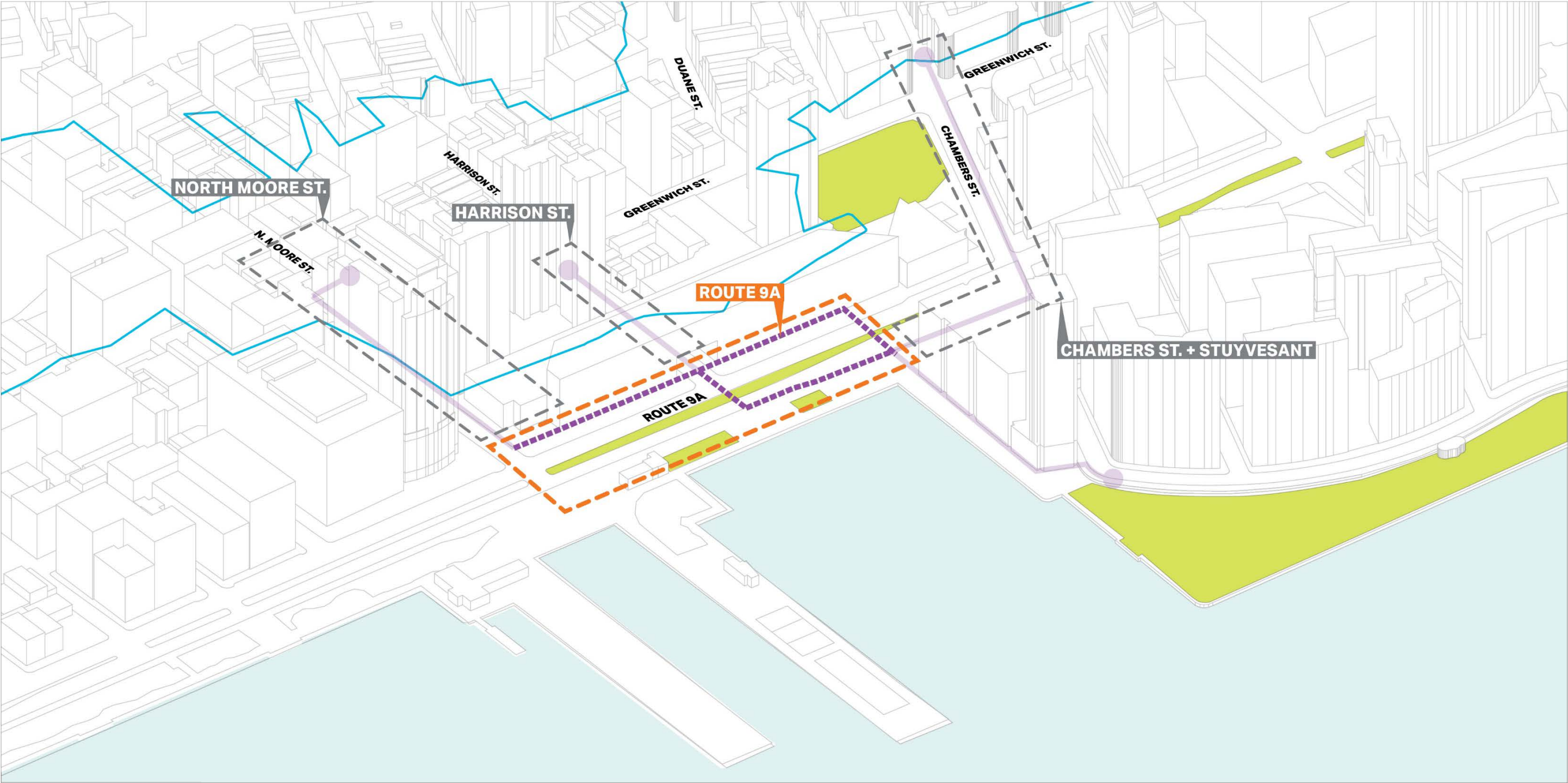


REPSOL, SPAIN

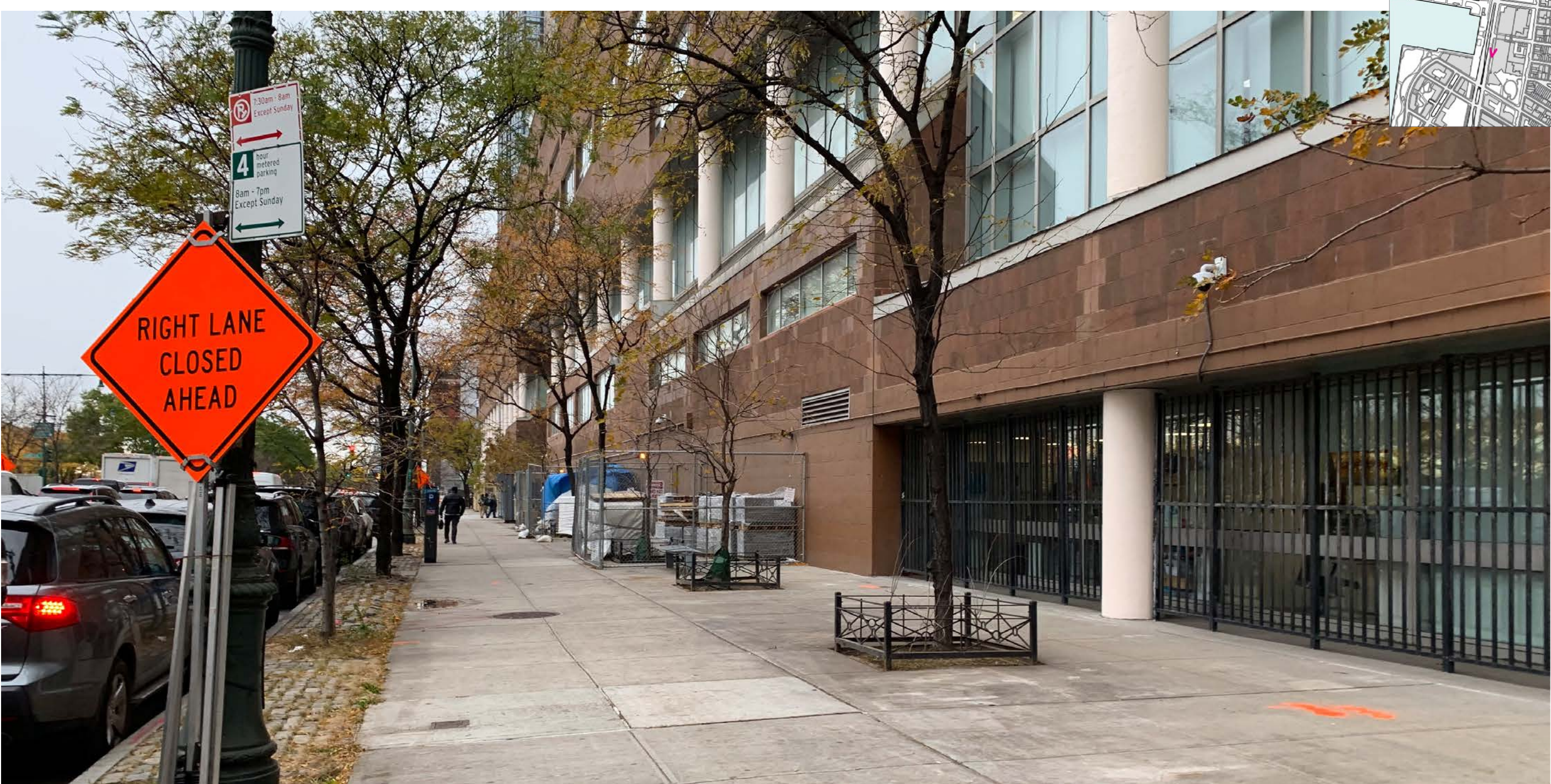
THE ALIGNMENTS | THE NORTHERN CONNECTOR



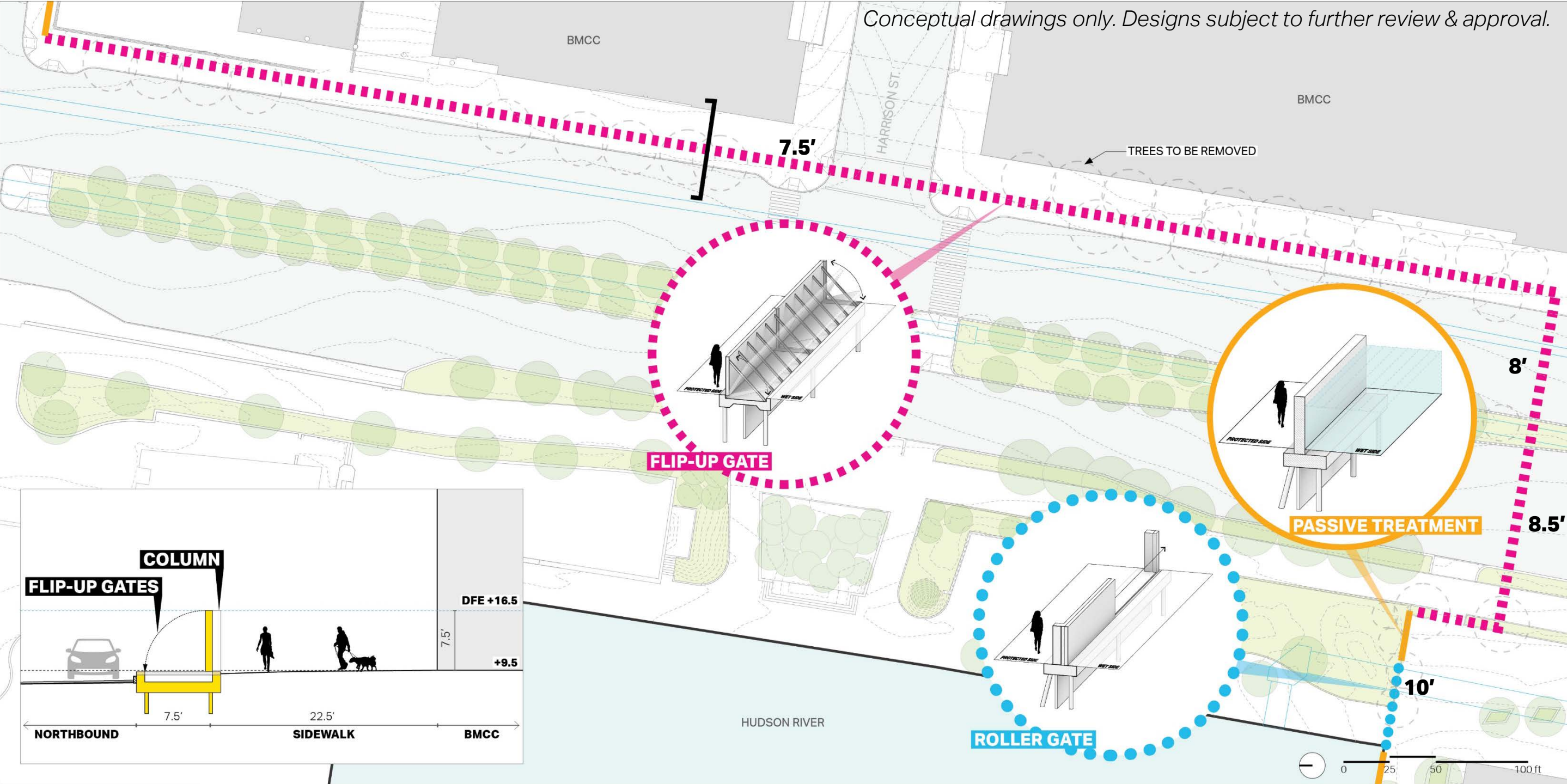
THE NORTHERN CONNECTOR | ROUTE 9A



ROUTE 9A | EXISTING CONDITIONS

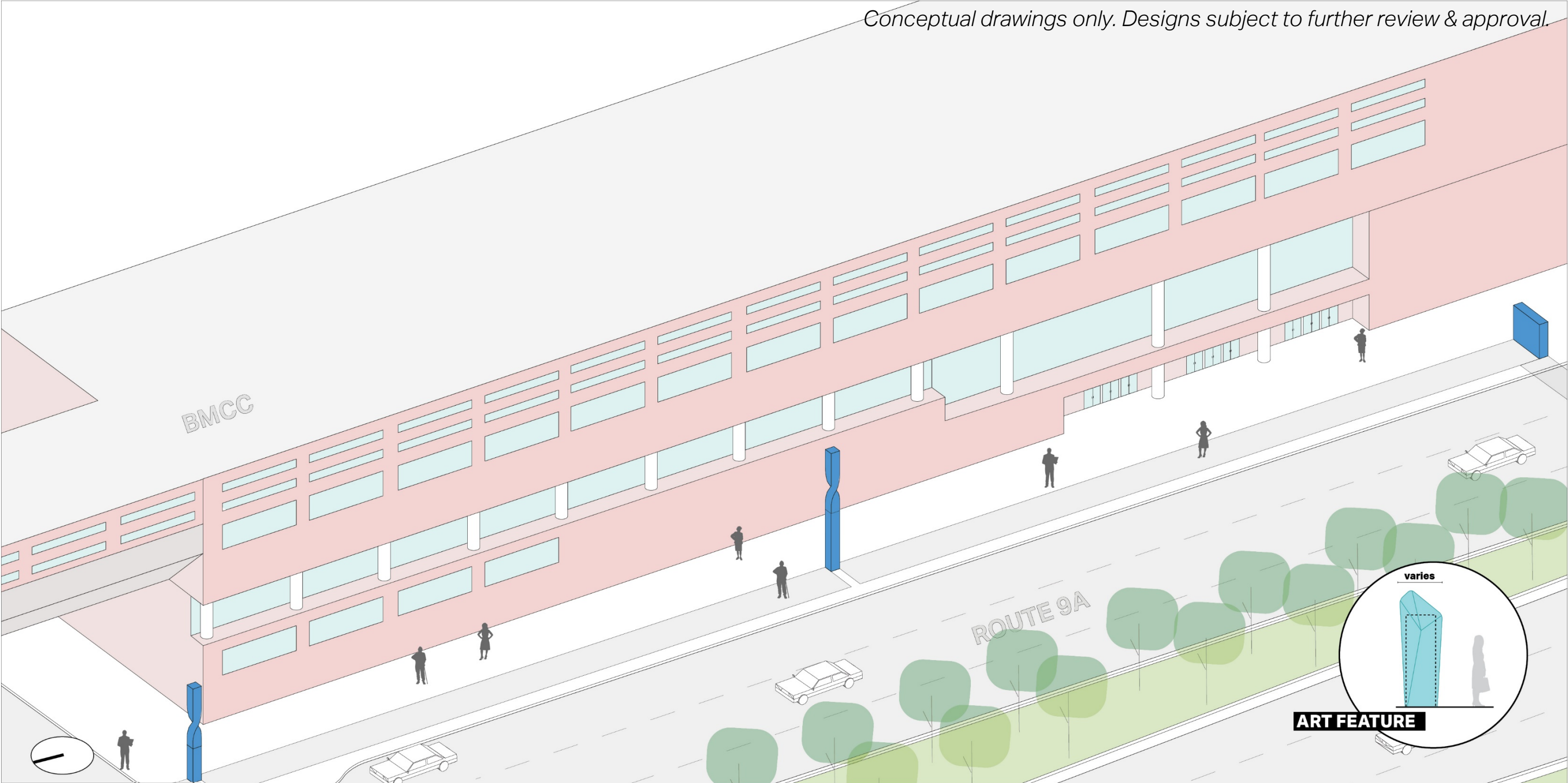


ROUTE 9A | FLIP-UP GATES



ROUTE 9A | FLIP-UP GATES

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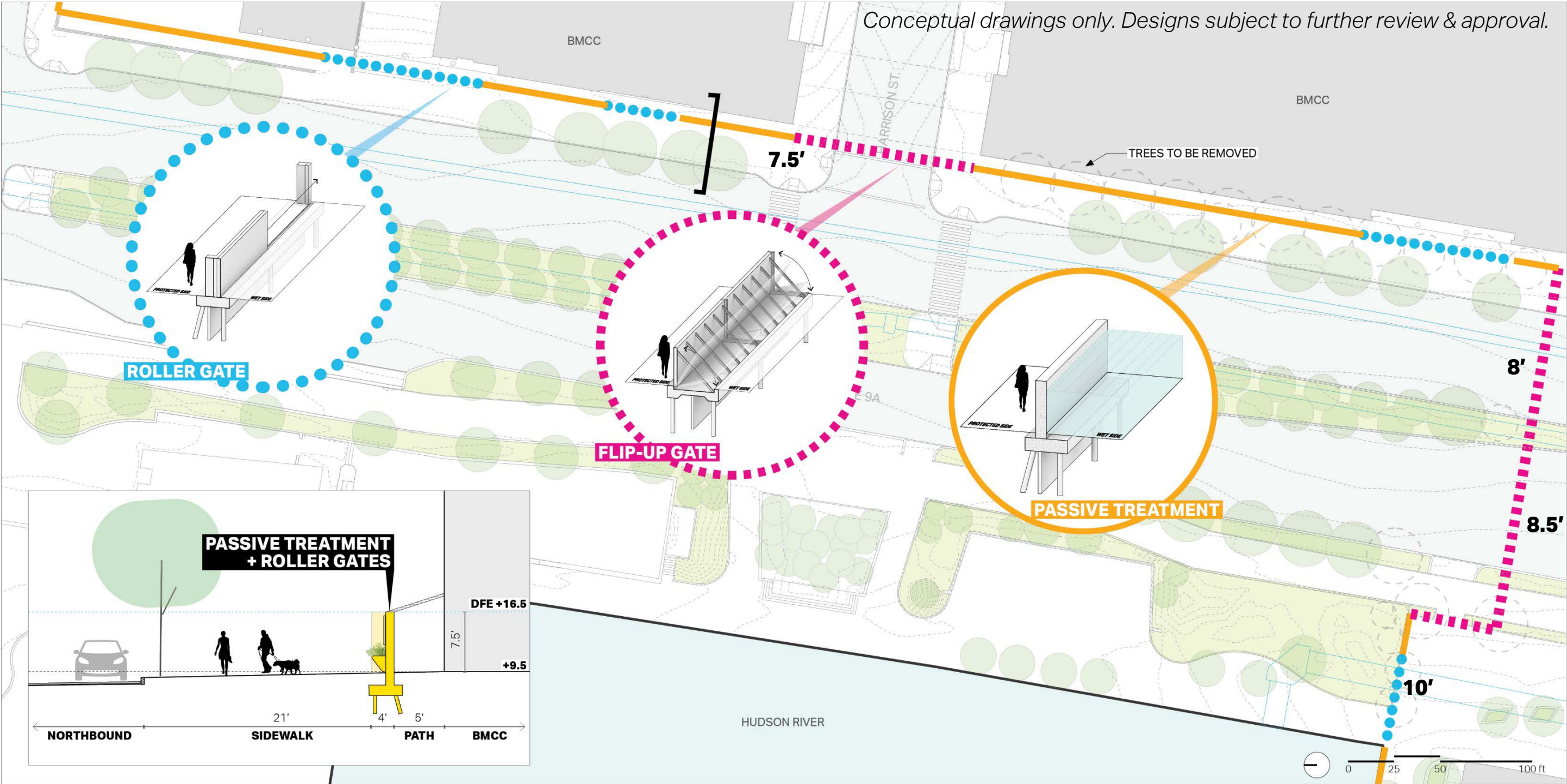


ROUTE 9A | LOOK & FEEL



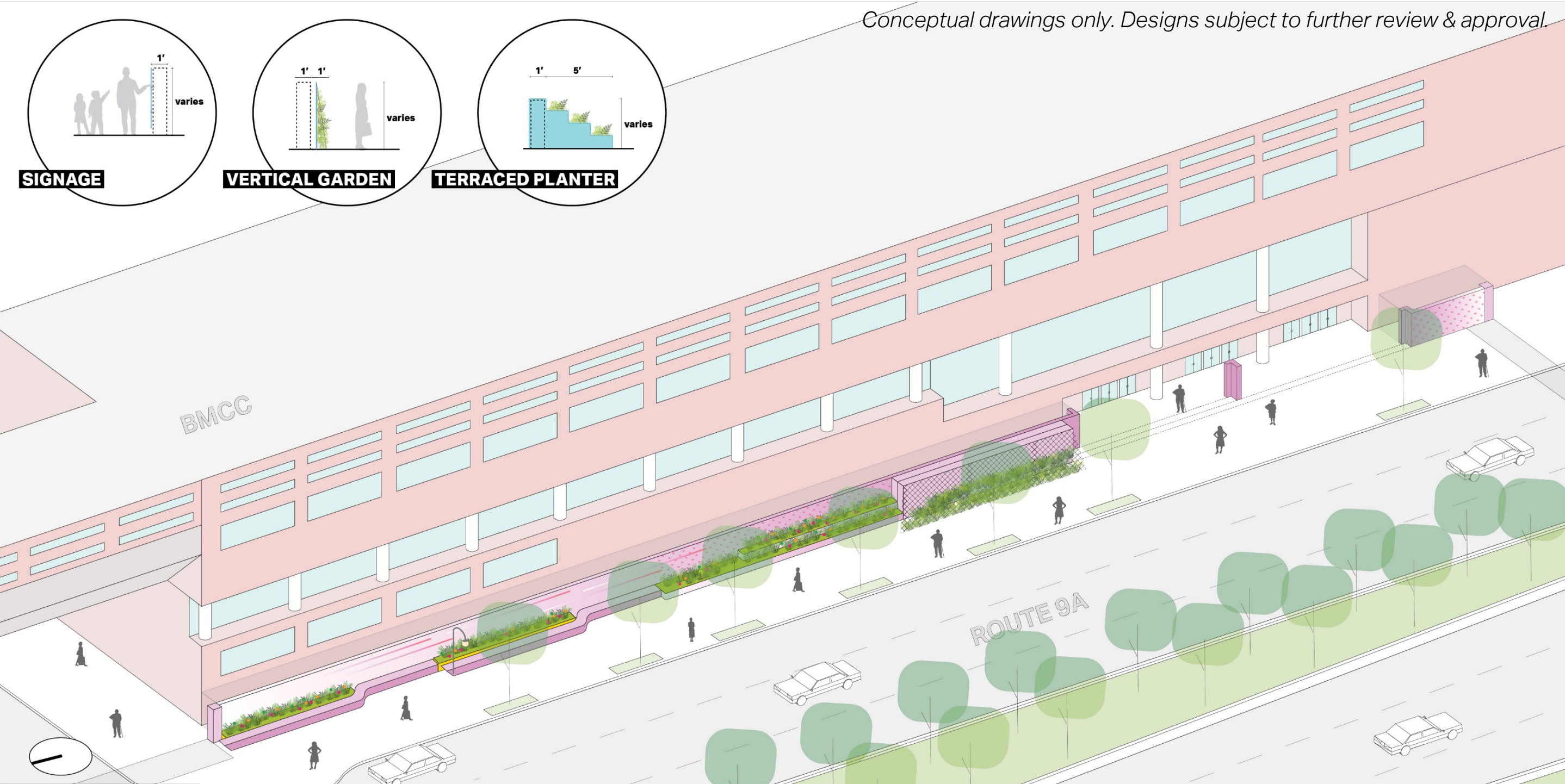
HOTEL W, SPAIN

ROUTE 9A | ROLLER GATES



ROUTE 9A | ROLLER GATES

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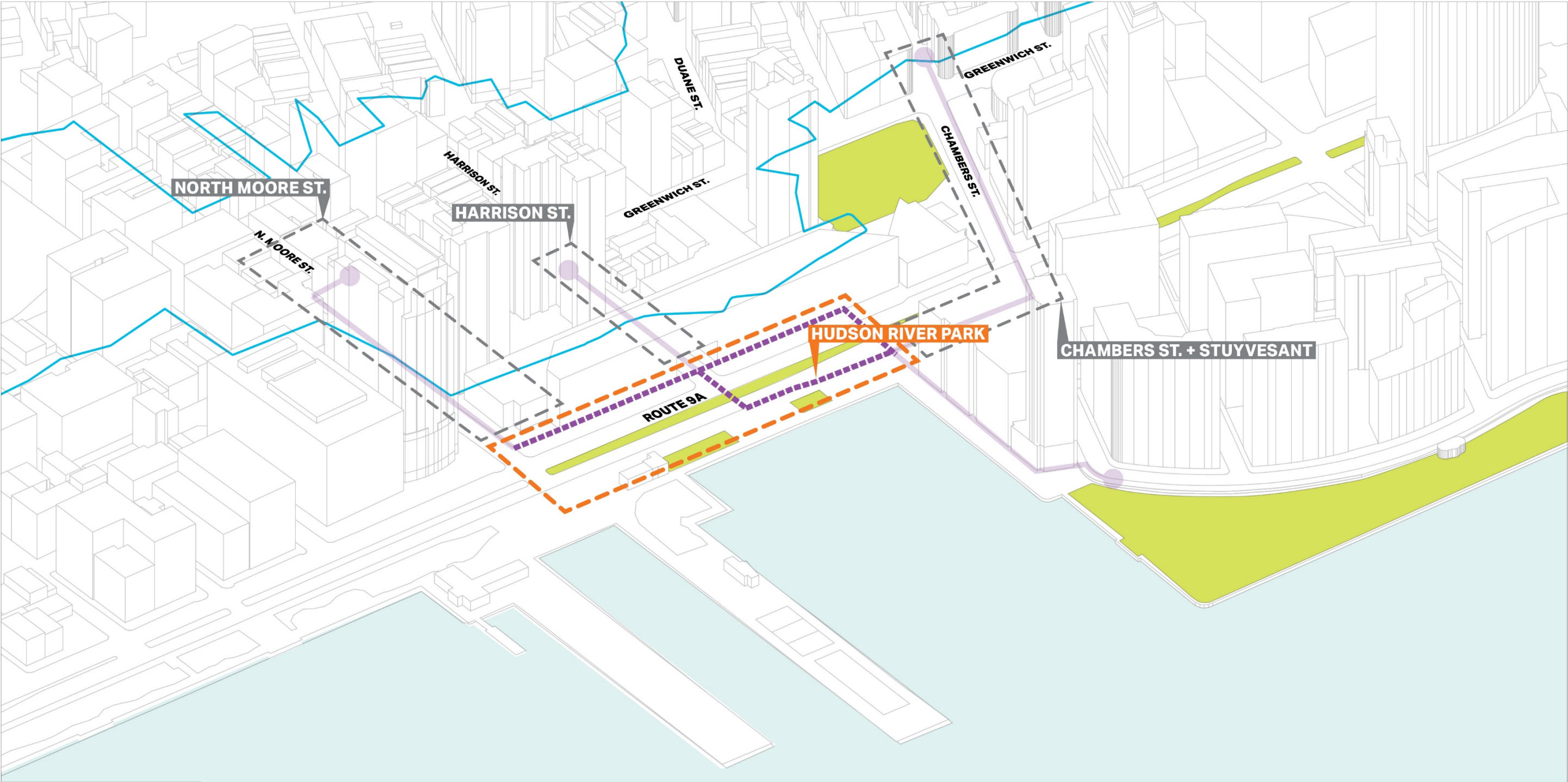


ROUTE 9A | LOOK & FEEL



717 BOURKE STREET, AUSTRALIA

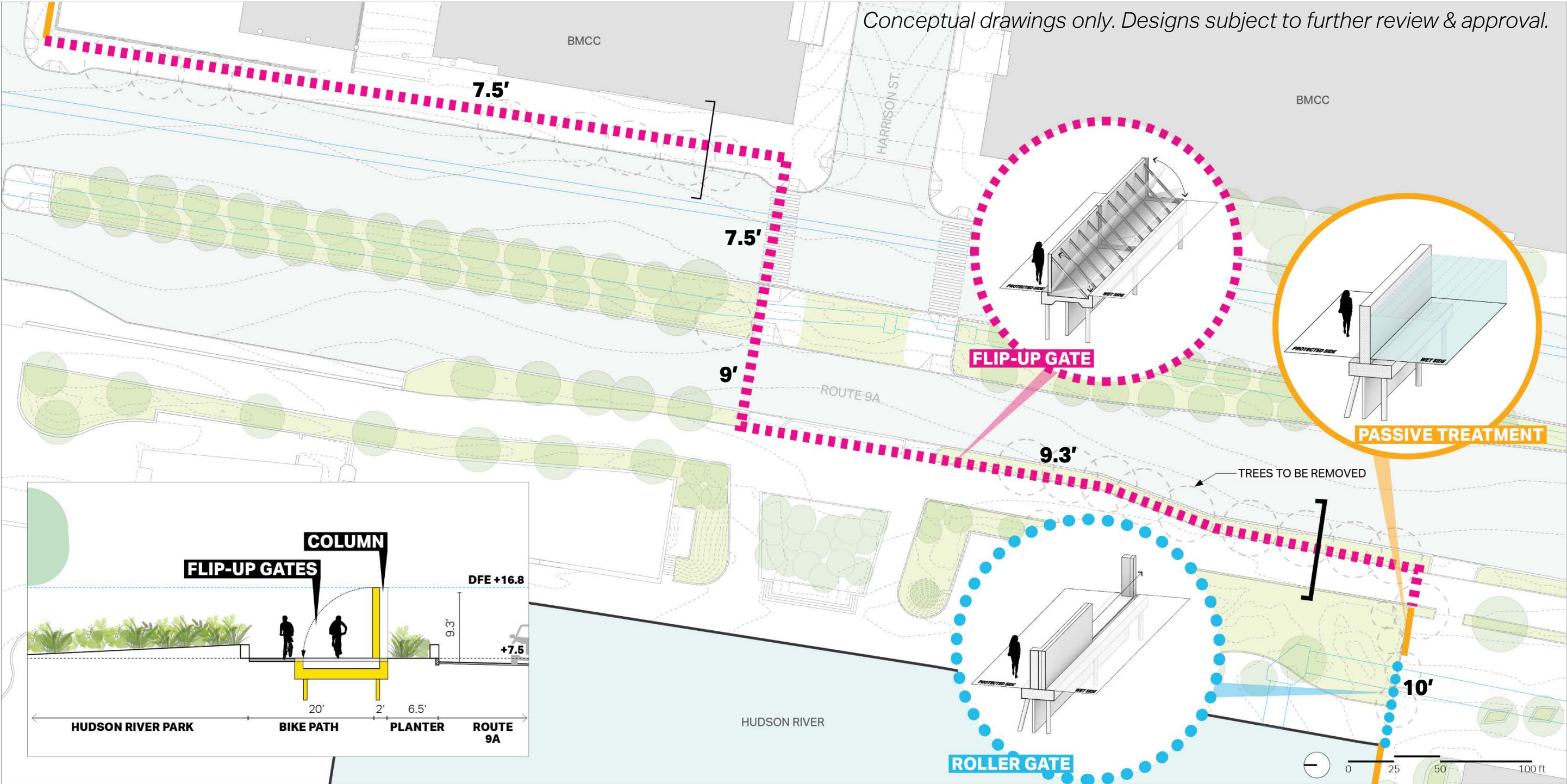
THE NORTHERN CONNECTOR | HUDSON RIVER PARK



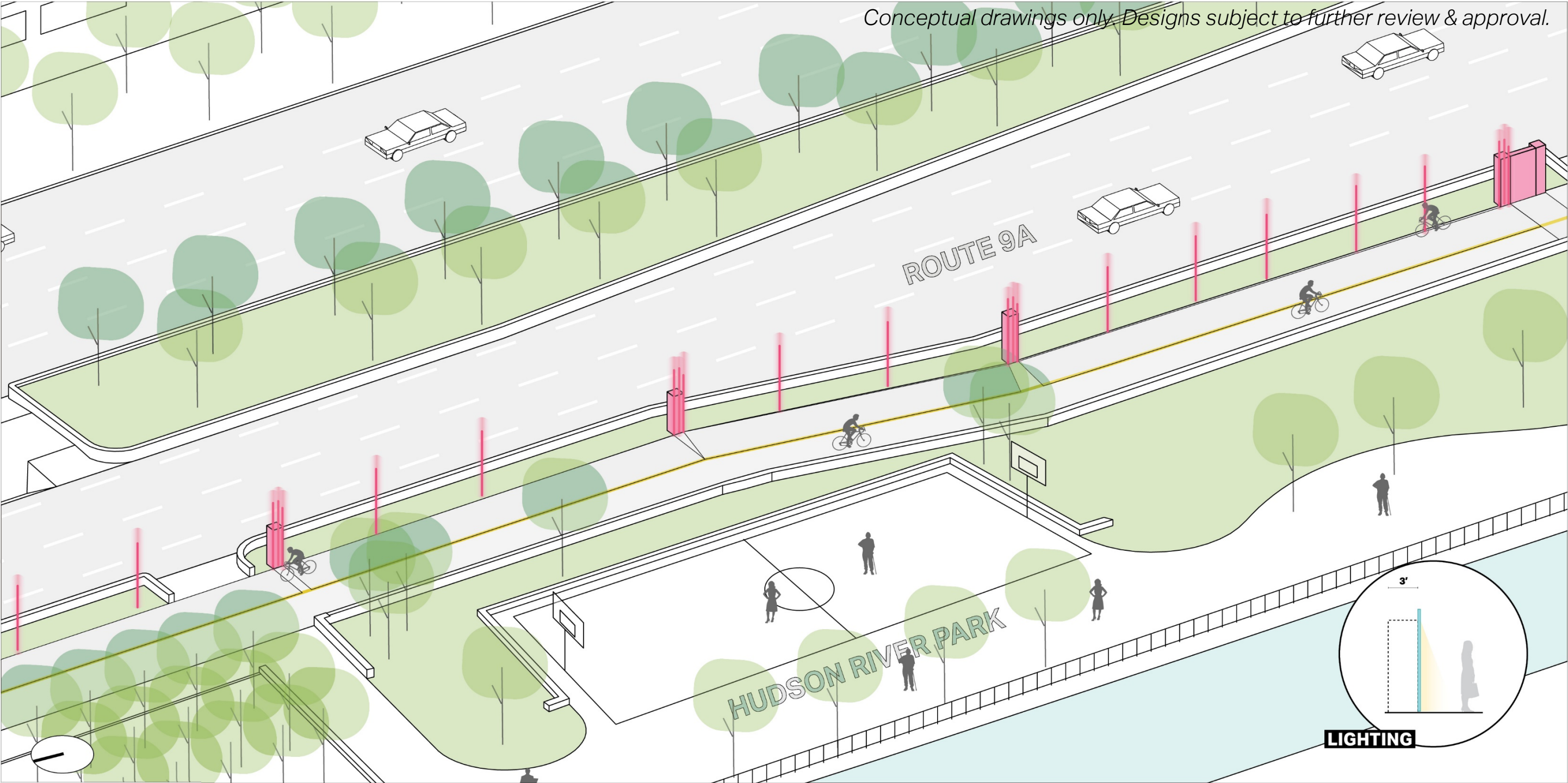
HUDSON RIVER PARK | EXISTING CONDITIONS



HUDSON RIVER PARK | FLIP-UP GATES



HUDSON RIVER PARK | FLIP-UP GATES

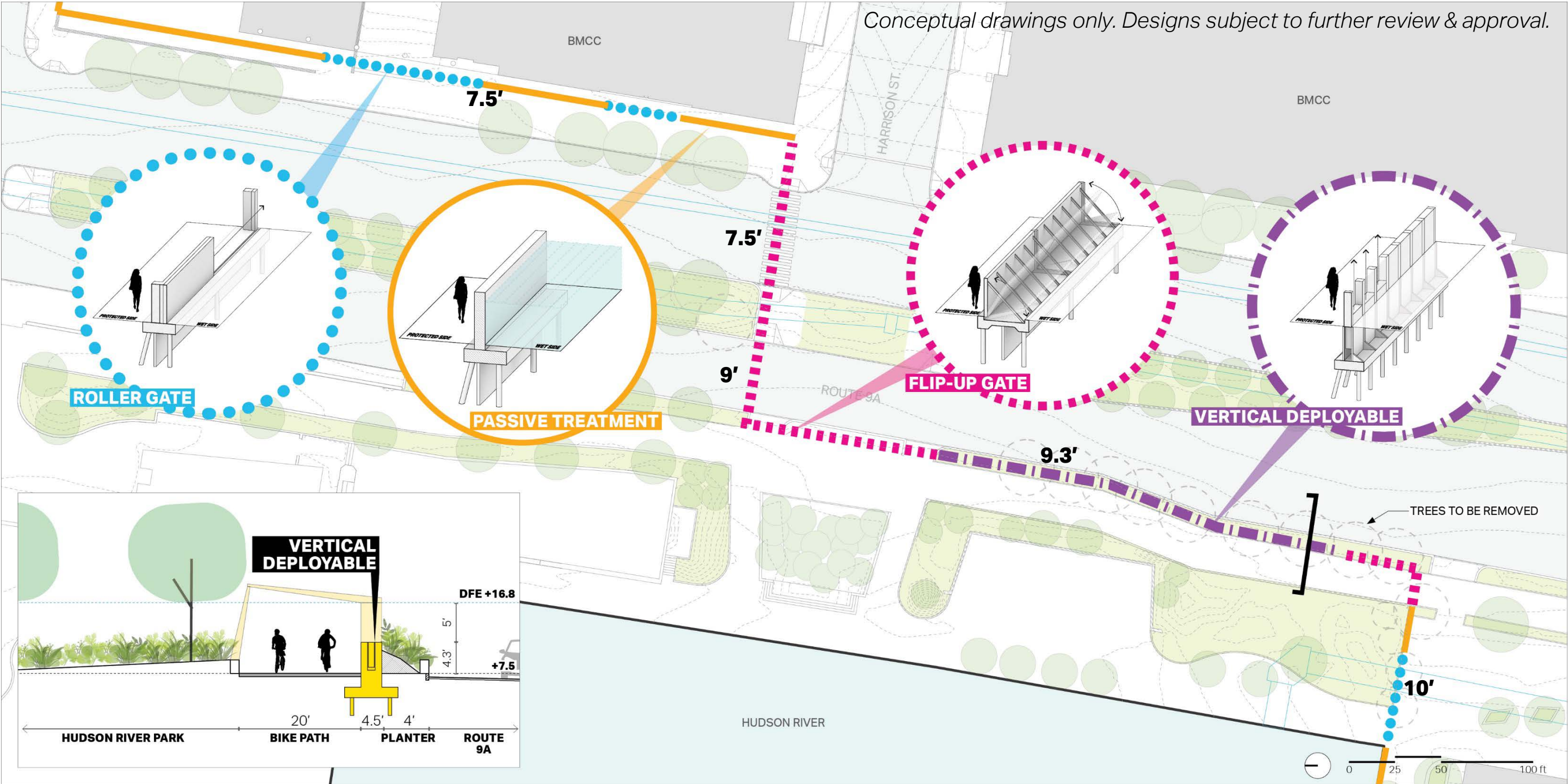


HUDSON RIVER PARK | LOOK & FEEL

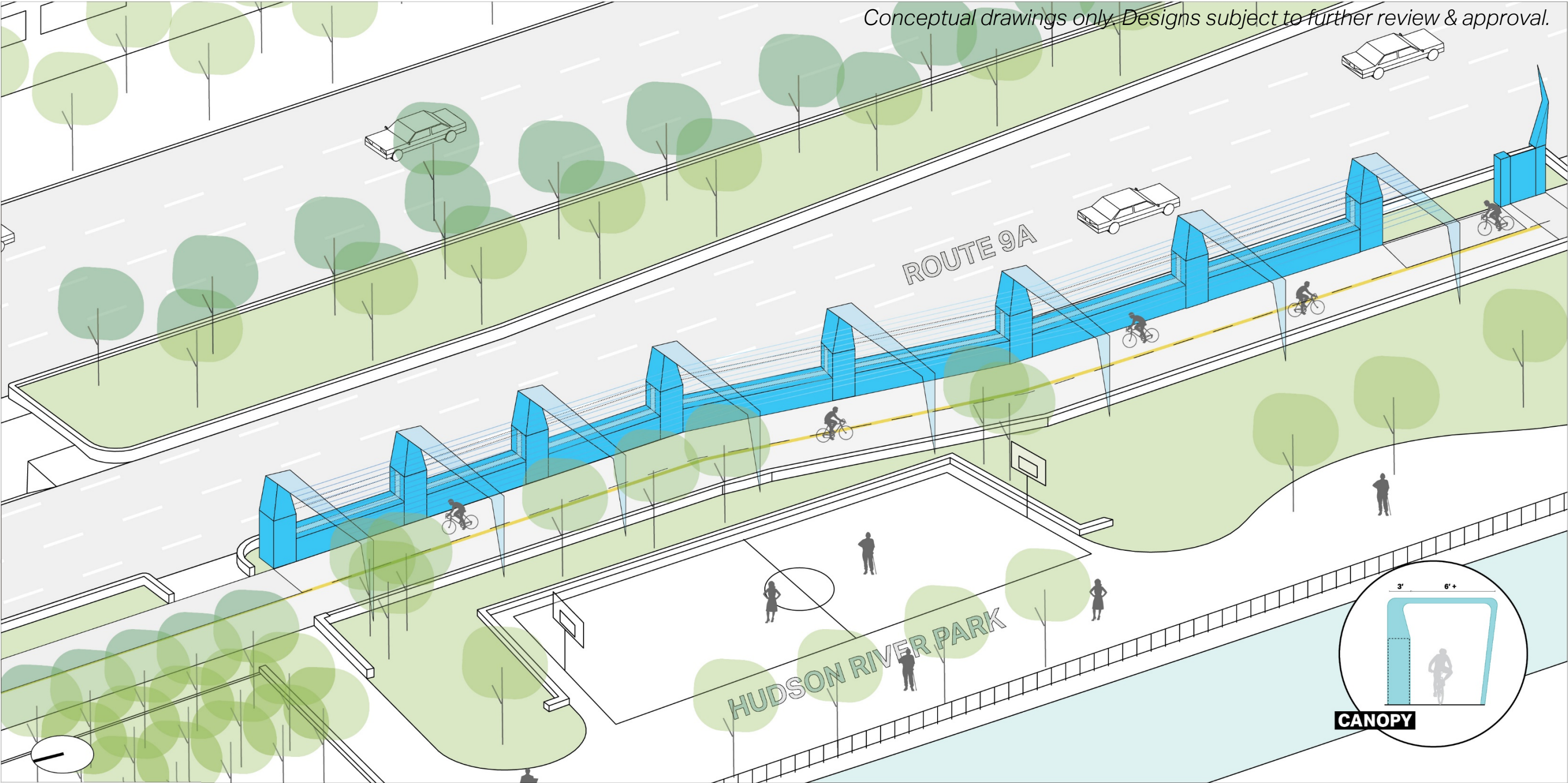


FALSE CREEK, CANADA

HUDSON RIVER PARK | VERTICAL DEPLOYABLE



HUDSON RIVER PARK | VERTICAL DEPLOYABLE

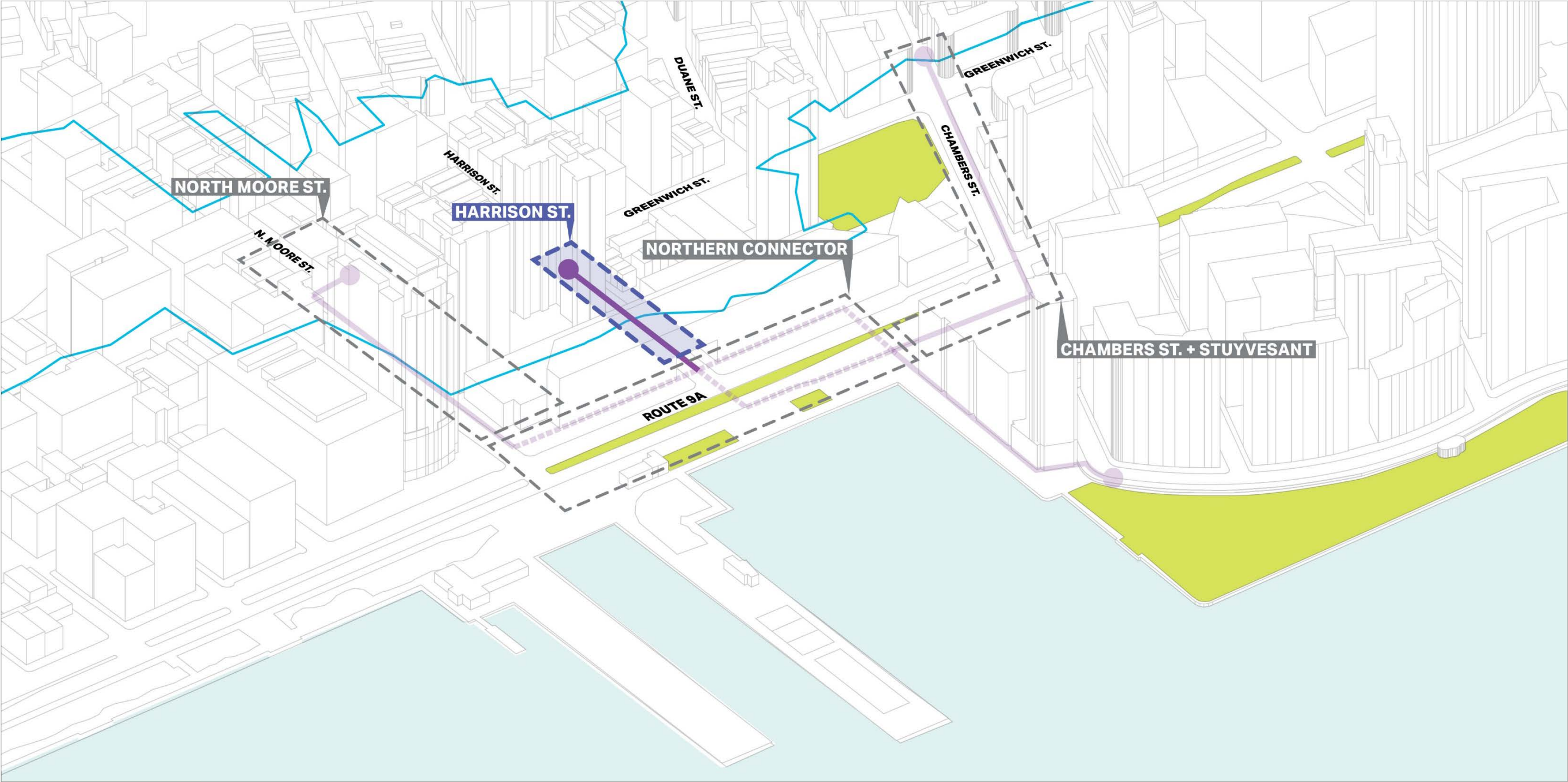


HUDSON RIVER PARK | LOOK & FEEL



PUERTITO DE GUIMAR, SPAIN

THE ALIGNMENTS | HARRISON STREET

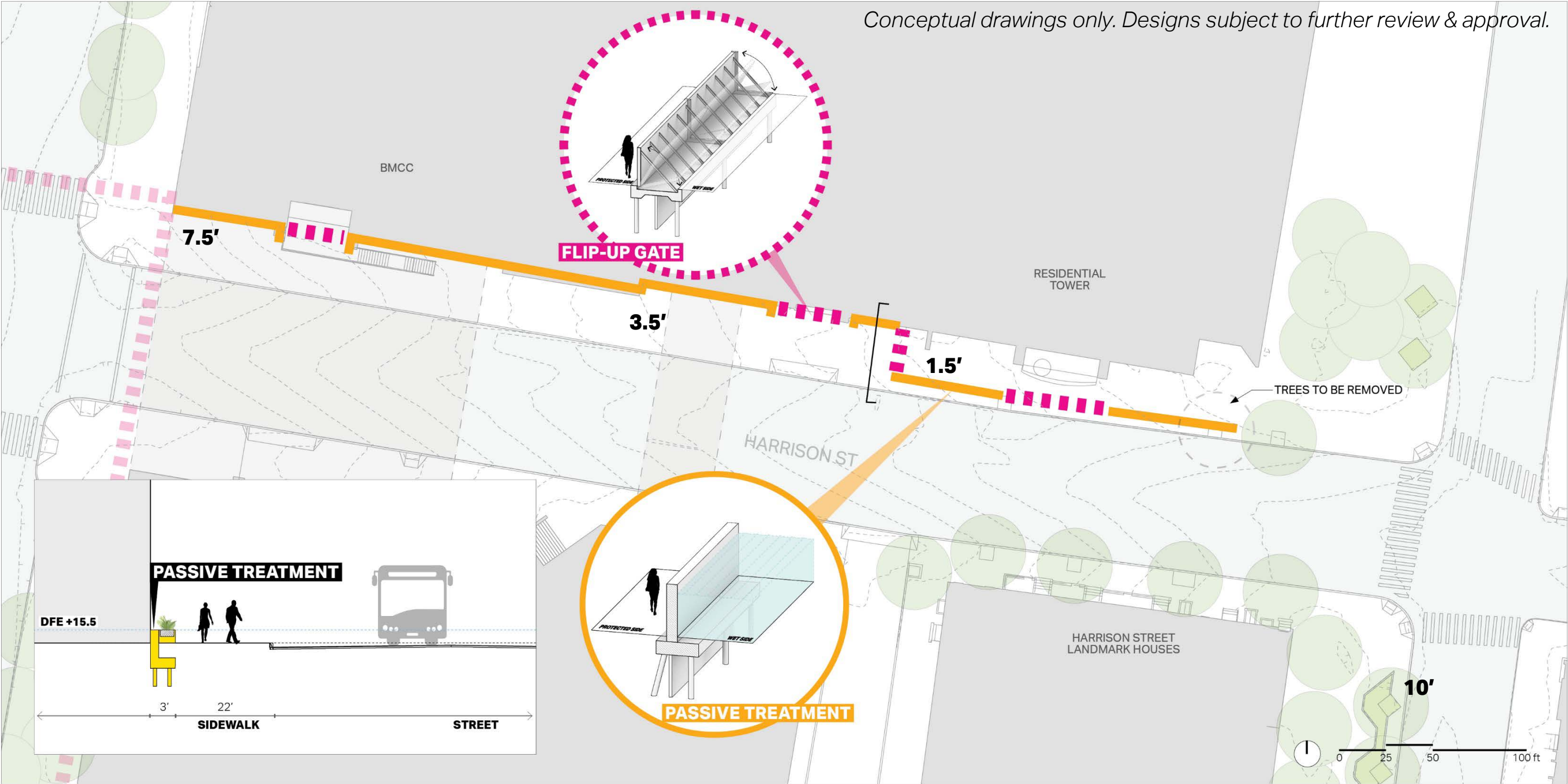


HARRISON ST. | EXISTING CONDITIONS



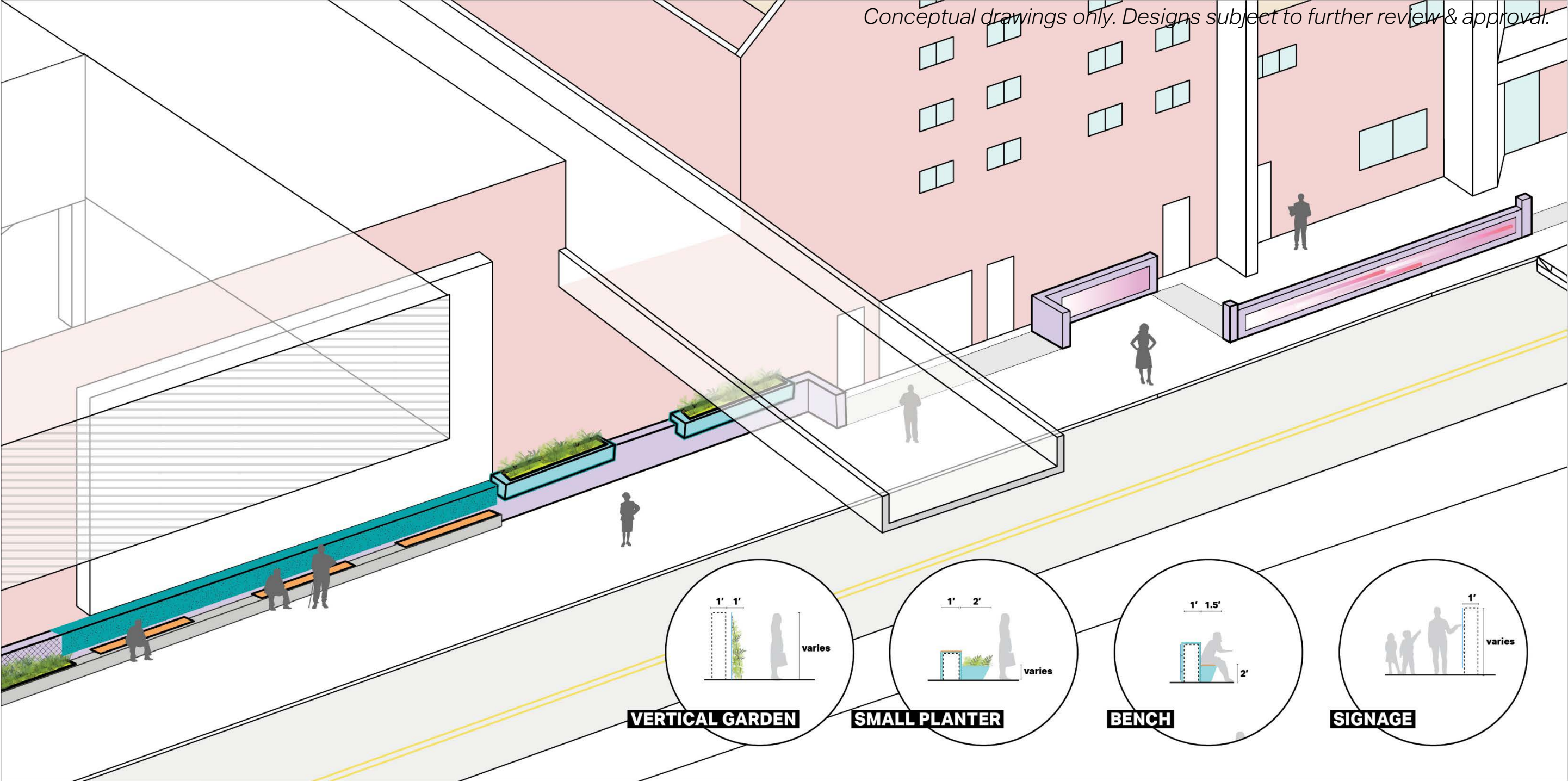
HARRISON ST. | PASSIVE TREATMENT

Conceptual drawings only. Designs subject to further review & approval.



HARRISON ST. | PASSIVE TREATMENT

Conceptual drawings only. Designs subject to further review & approval.

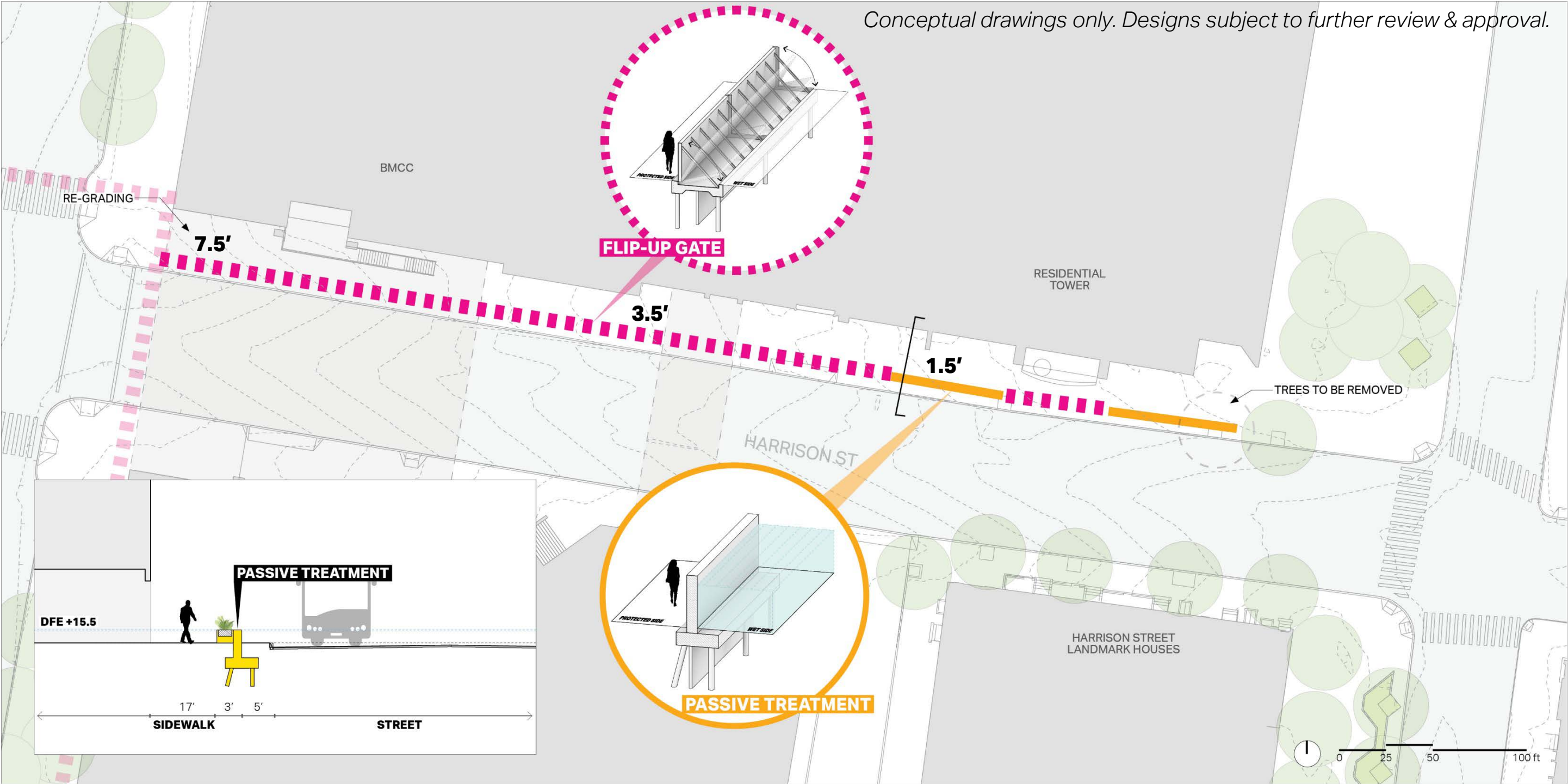


HARRISON ST. | LOOK & FEEL



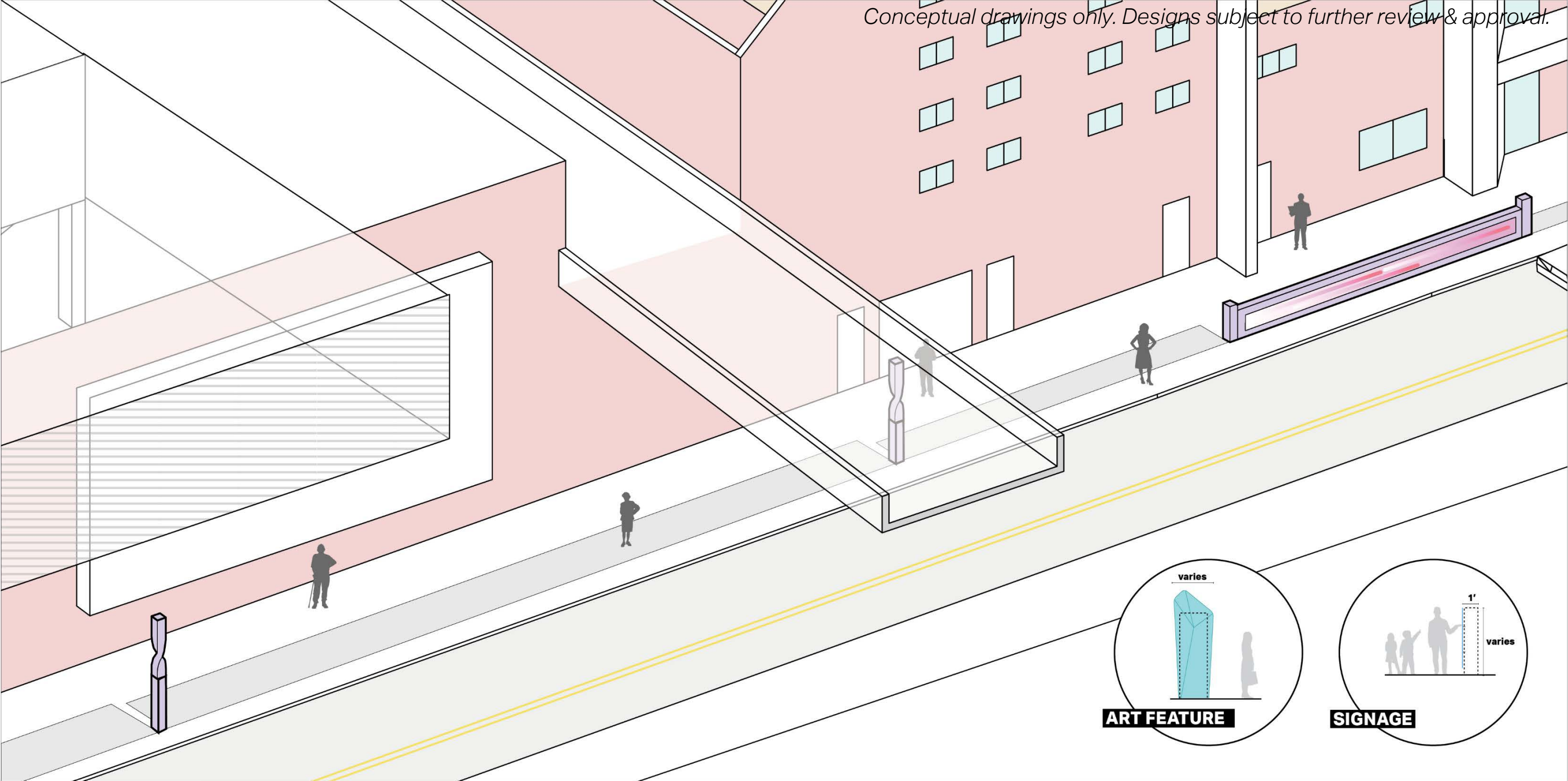
GRON BULLERSKARM, SWEDEN

HARRISON ST. | FLIP-UP GATES



HARRISON ST. | FLIP-UP GATES

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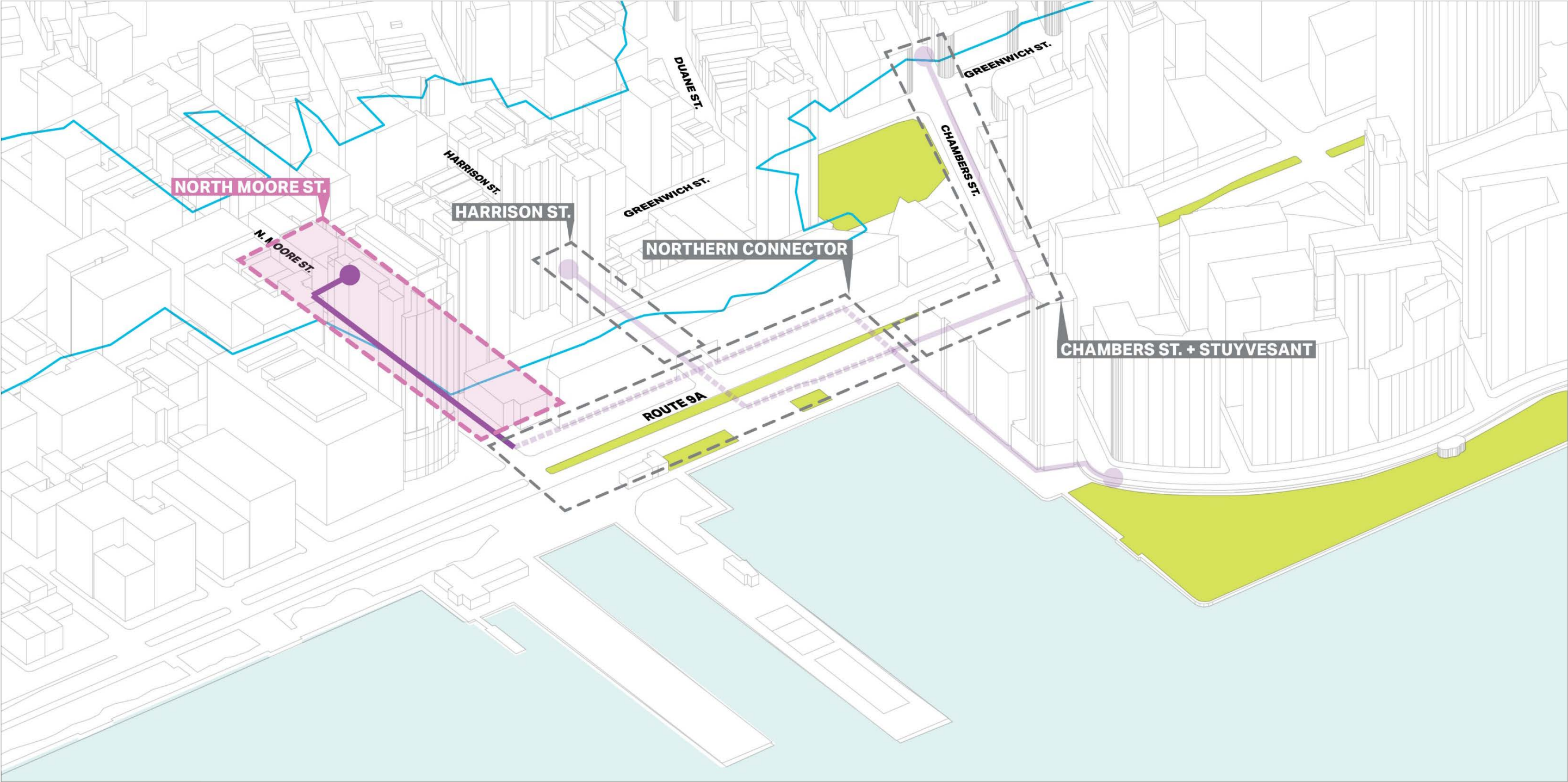


HARRISON ST. | LOOK & FEEL



MARLBOROUGH PRIMARY SCHOOL, UNITED KINGDOM

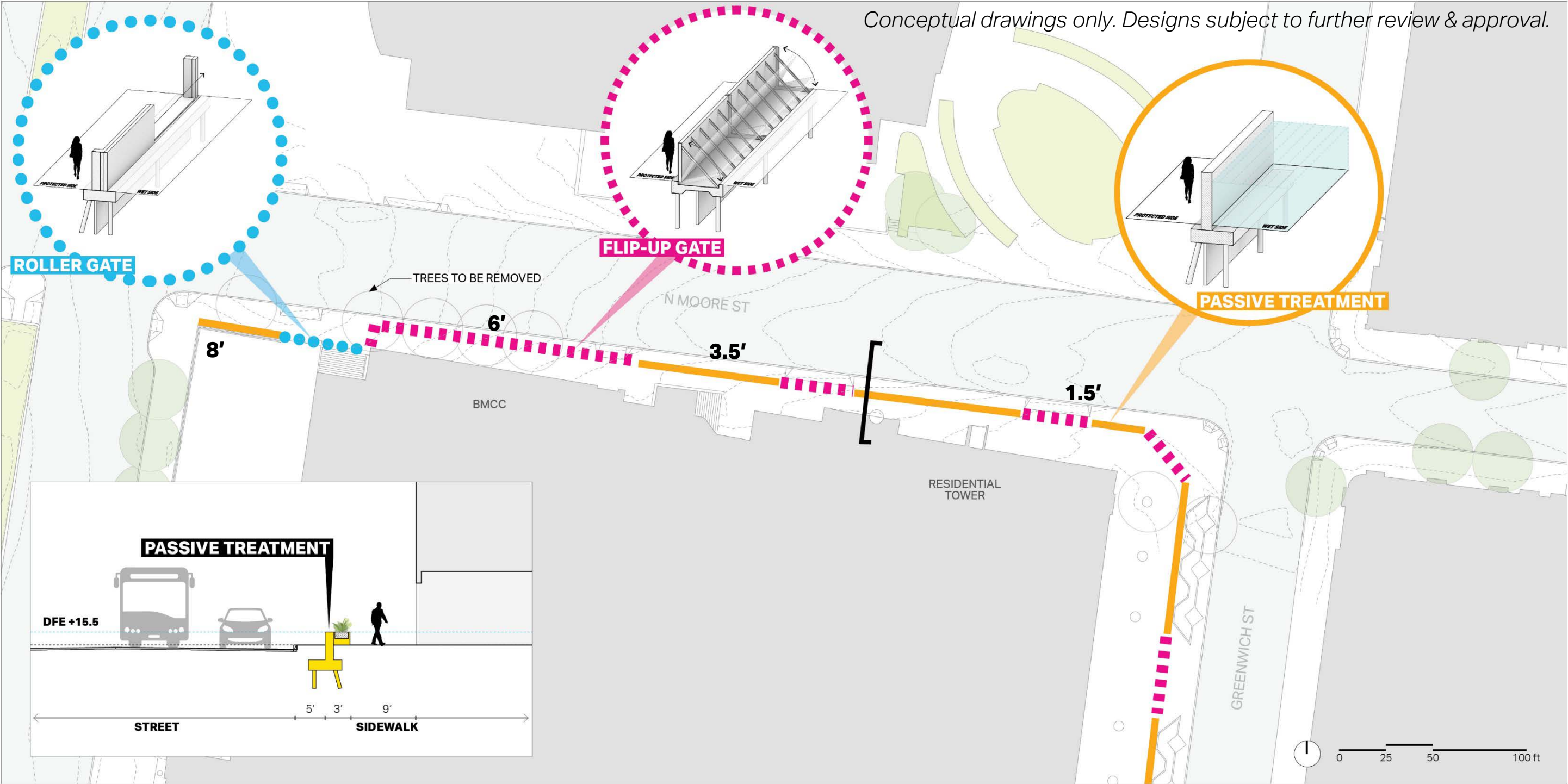
THE ALIGNMENTS | N. MOORE STREET



N. MOORE ST. | EXISTING CONDITIONS

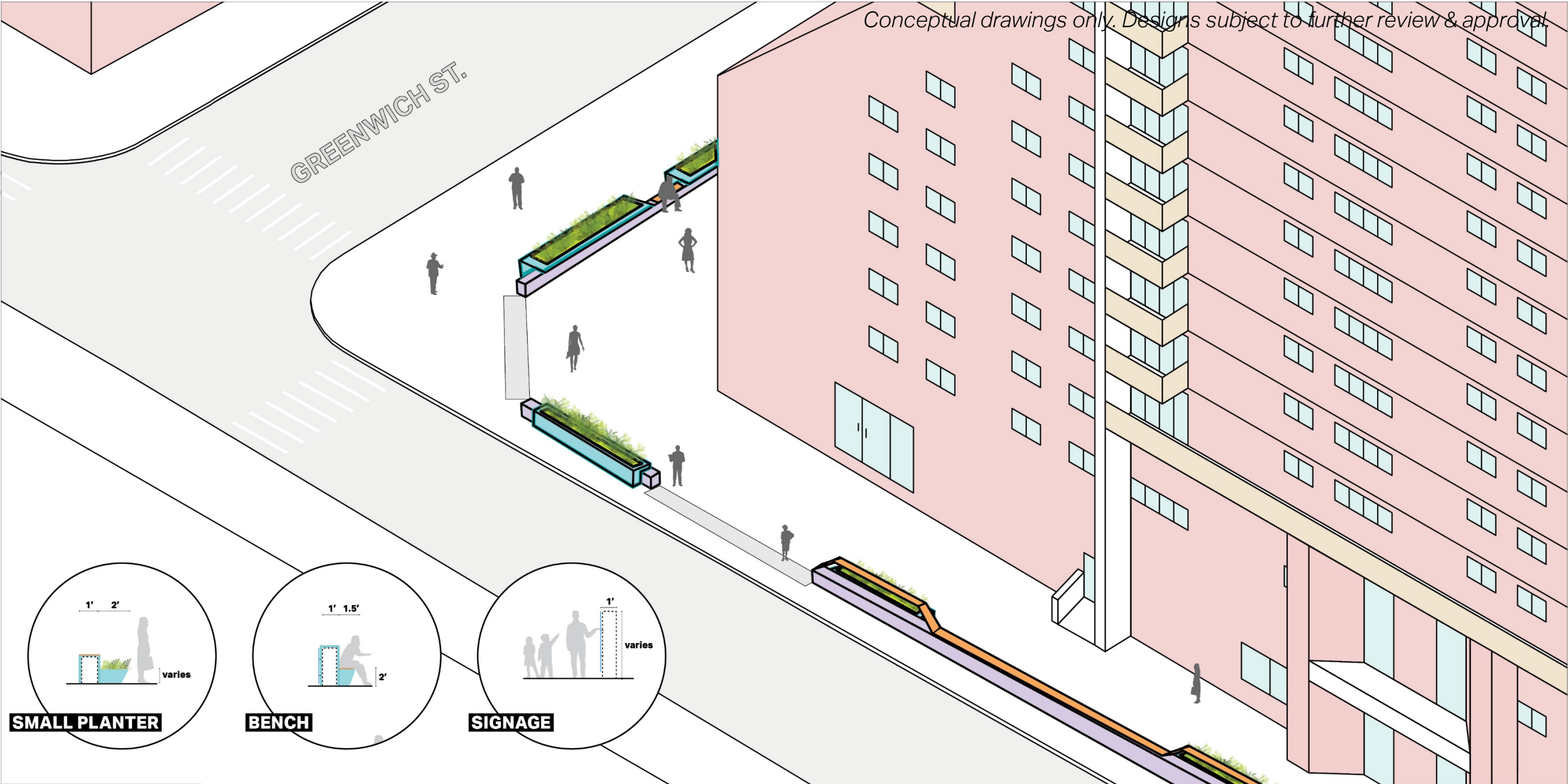


N. MOORE ST. | NEAR CURB LINE



N. MOORE ST. | NEAR CURB LINE

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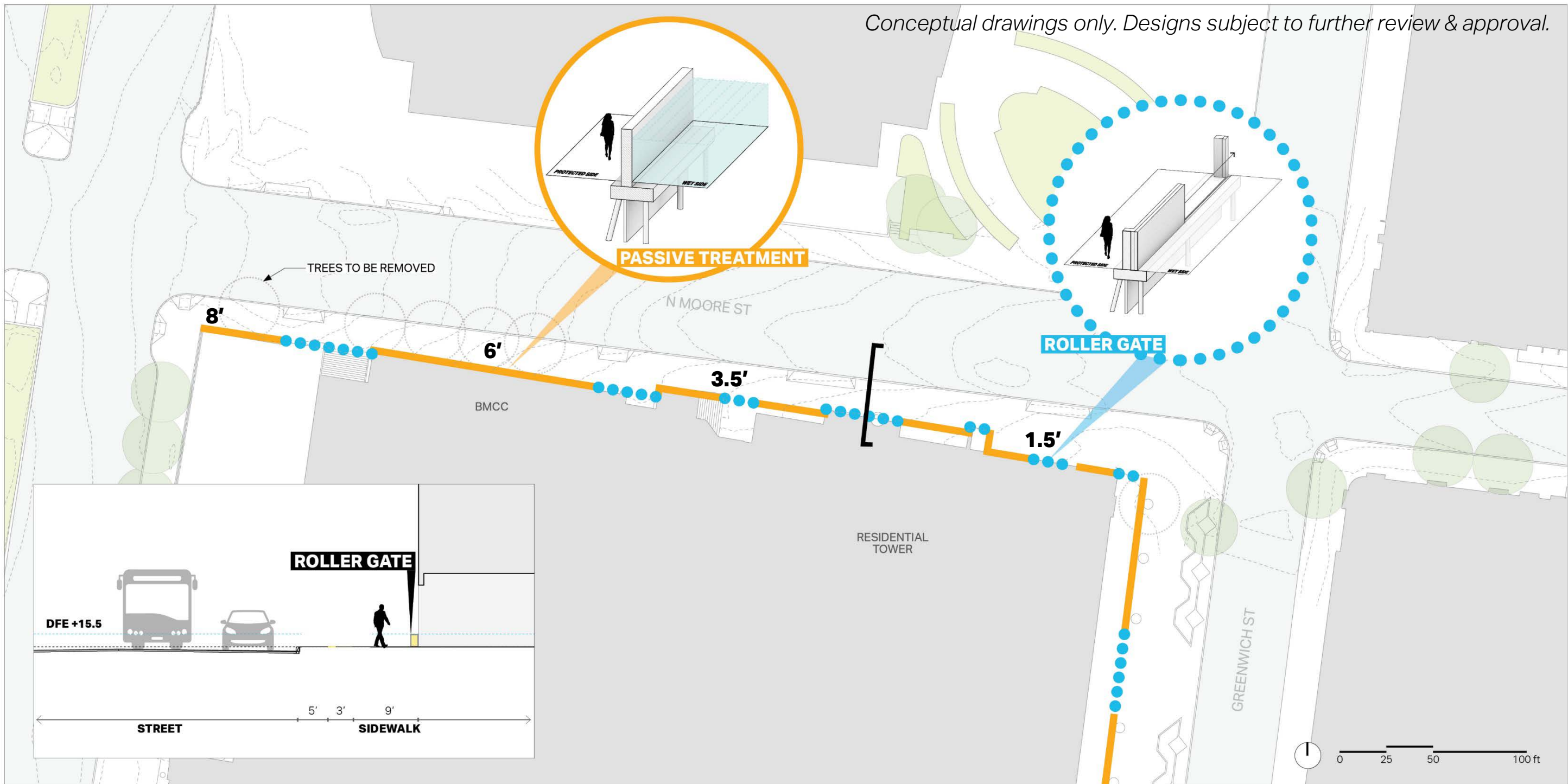


N. MOORE ST. | LOOK & FEEL

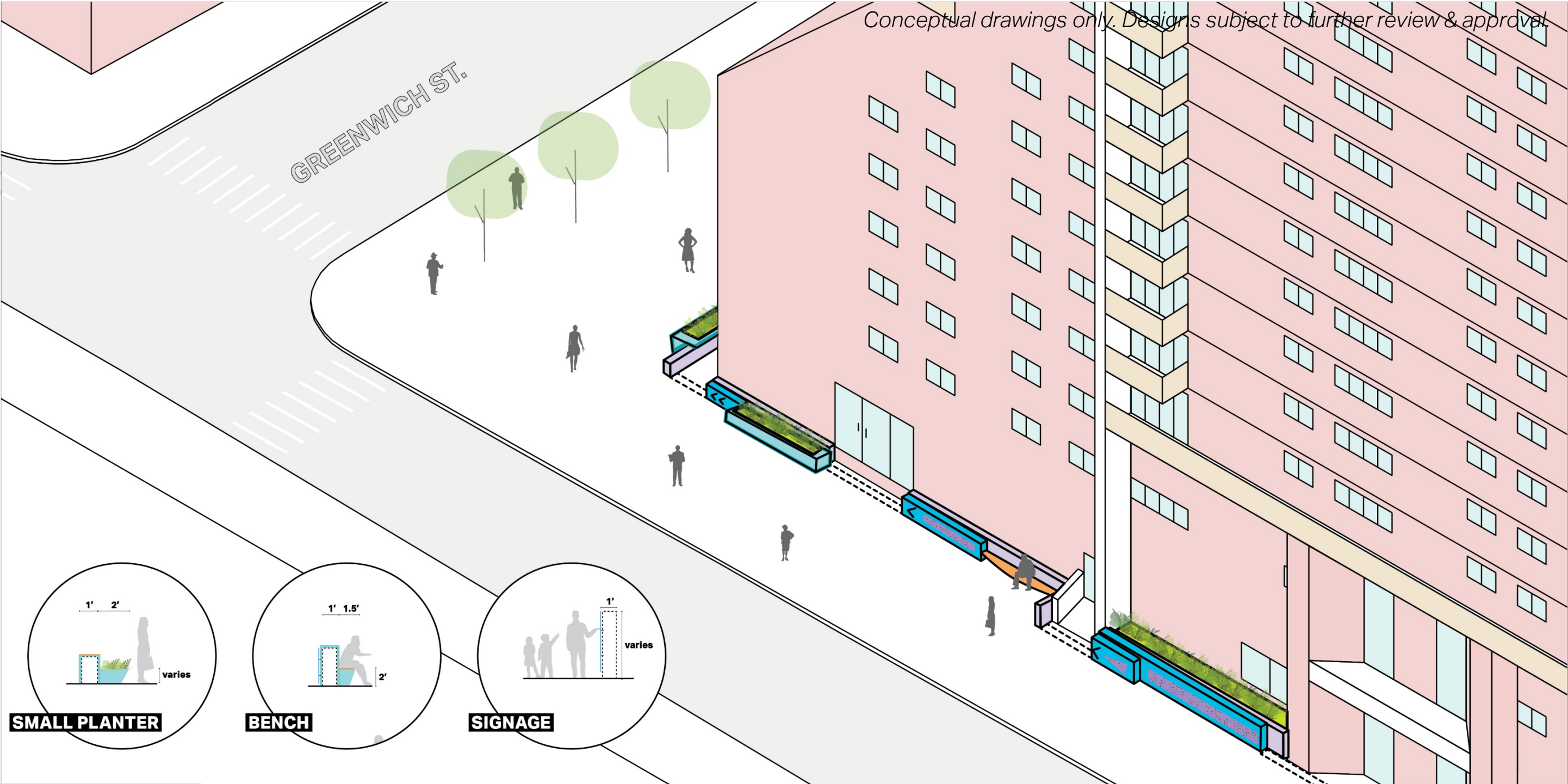


LONSDALE STREET DANENONG, AUSTRALIA

N. MOORE ST. | PASSIVE TREATMENT



N. MOORE ST. | PASSIVE TREATMENT



N. MOORE ST. | LOOK & FEEL

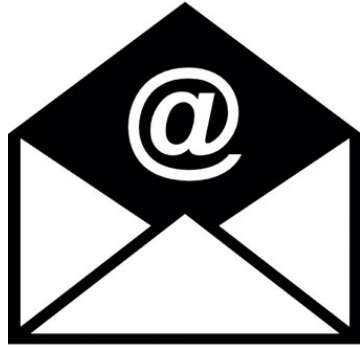


GRON BULLERSKARM, SWEDEN

NEXT STEPS

- Agency Design Coordination and Technical Reviews
- Alignment Selection and Detailed Project Design
- Detailed Geotechnical Investigations
- Final Environmental Impact Assessment + Regulatory Reviews / Permitting
- Final Coastal Modeling and Stormwater Drainage Modeling

QUESTIONS + COMMENTS?



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646-531-2276