

BRANDYWYNE VILLAGE



Overall Theme and Table of Contents

How can we boost community and climate resilience by linking people to nature - physically and socially?

1. Background – Why Brandywyne?
2. Permeability
3. Flood risk management
4. Density and social impact
5. Timeline for these themes

Research and Design



PERMEABILITY

Improve permeability by installing permeable pavement, adding trees, and building green infrastructure



DENSITY and RESILIENCY

Increase amount of housing available while adding green space and ground level amenities to maintain a resilient and welcoming community



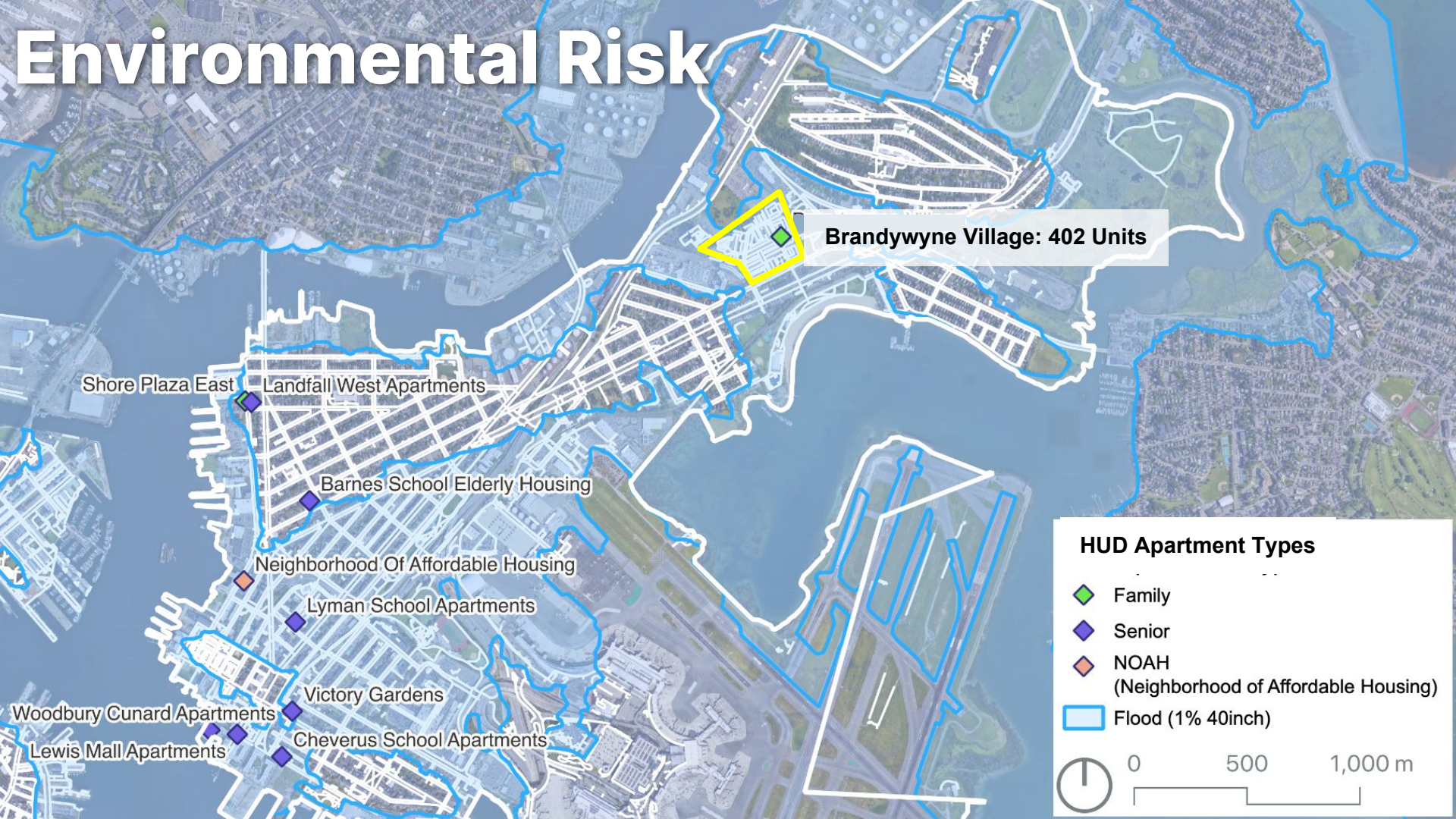
FLOOD MITIGATION

Reduce the risk of flooding damage by designing open green spaces that hold water in the event of a flood

Background

-Why Brandywyne?-

Environmental Risk



Brandywyne Village: 402 Units

Shore Plaza East

Landfall West Apartments

Barnes School Elderly Housing

Neighborhood Of Affordable Housing

Lyman School Apartments

Victory Gardens

Woodbury Cunard Apartments

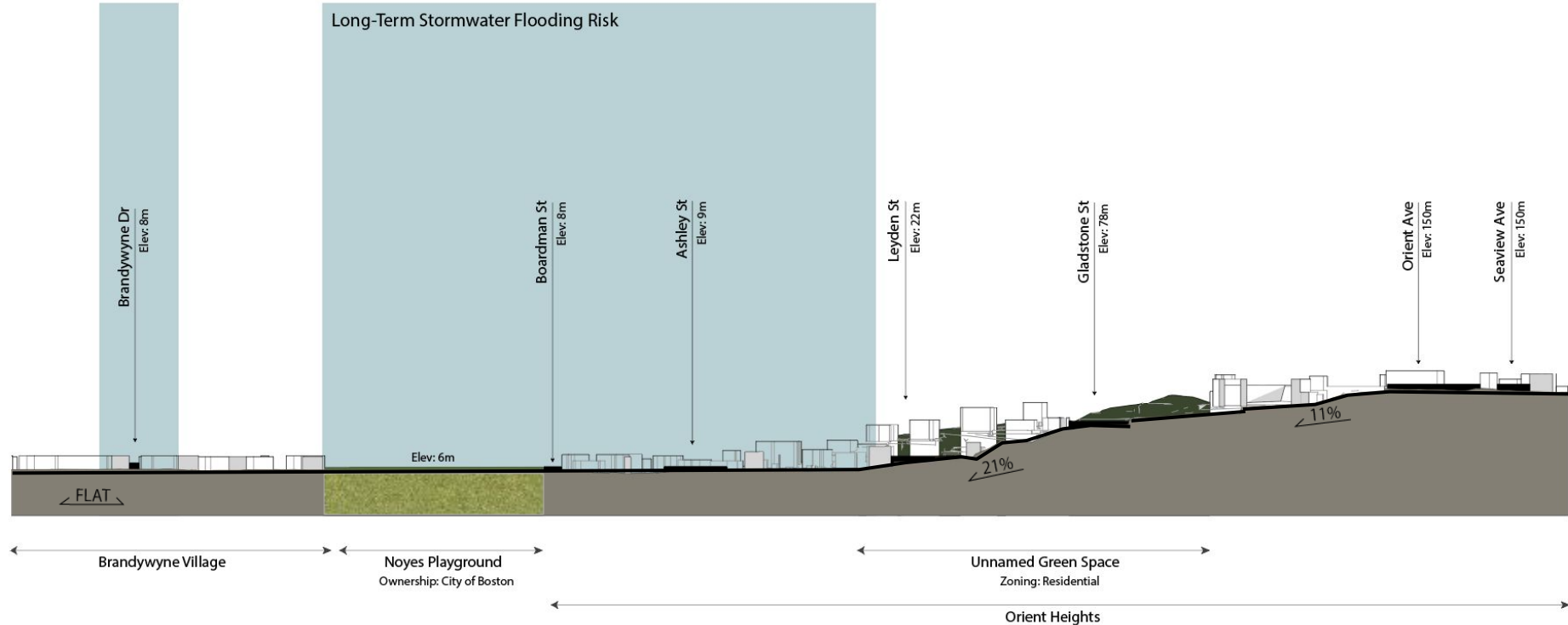
Lewis Mall Apartments

Cheverus School Apartments

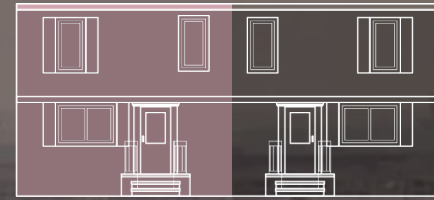
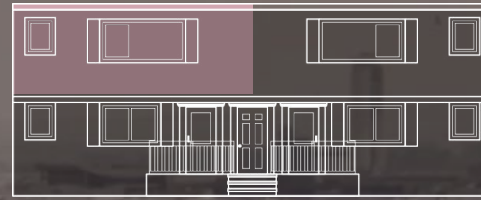
EAST BOSTON

Brandywyne Village NE-SW Transect

Scale: 1" = 100'



Current Brandywyne



— SINGLE UNIT



— IMPERMEABLE
(ROOFS, ROAD)

PERMEABLE GREEN SPACE: 31% // HOUSING DENSITY: 402 UNITS

Permeability

-Capturing the First .5" of Rainfall-

Permeability: Methods

**Stormwater
Planters and
Parkway Bioswales**



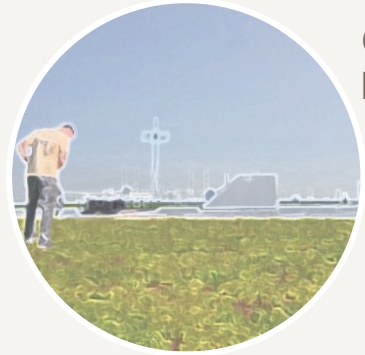
**Street
Trees**



**Storm-water
Parks**



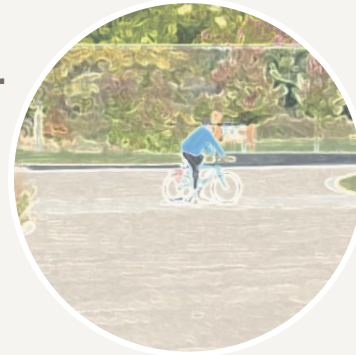
**Green
Roofs**



**District
Stormwater
Management**



**Permeable
Pavement**



Study: Permeable Pavement



100%

31%

100%

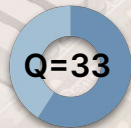
Q=56

402

Study: Permeable Pavement



59%



52%



100%







Flood Risk Management

-Preparing for Storm Events-

Flood risk management: Methods

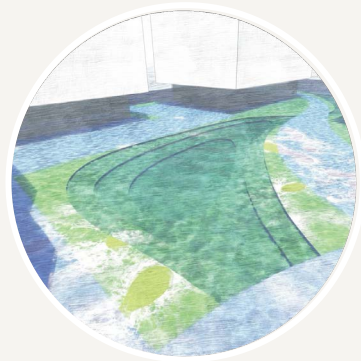
**GROUND
FLOOR PLANNING**



**GREEN
INFRASTRUCTURE**

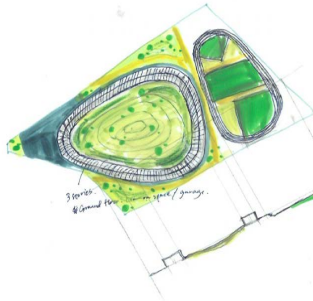


**FLOOD WATER
STORAGE**

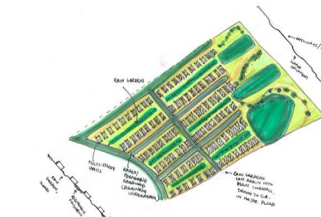


**DRAINAGE
CHANNELS**

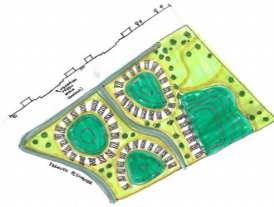
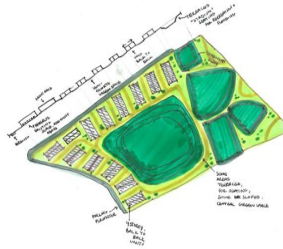




KEY FEATURES:
 CENTRAL 'SQUARE' AND PARK
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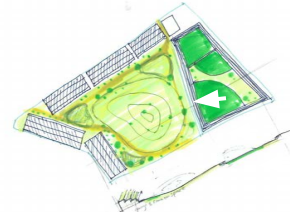
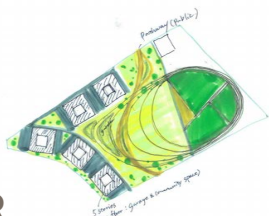


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1:1000

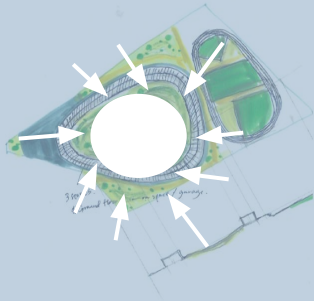


1:1000

FLOOD WATER STORAGE SCHEMES

Imp: 100000

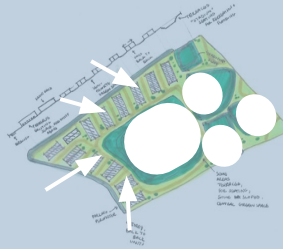




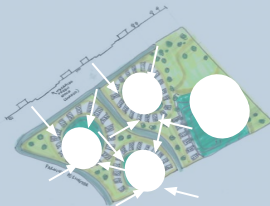
KEY FEATURES:
 CENTRAL 'SQUARE' AND PARK
 COURSE
 FLEXIBLE COMMUNITY
 FACILITIES WITH ACCESS
 TO THE WIDE SURROUNDING AREA



KEY FEATURES:
 BUILDINGS THAT HOUSE, SHELTER, AND PROTECT
 THE COMMUNITY. BUILDINGS INTEGRATED AS PART
 OF THE LANDSCAPE - WALK & RIDEWAYS, WALKERS
 FROM THE STREET - INTEGRATED INTO THE PLAN OF THE

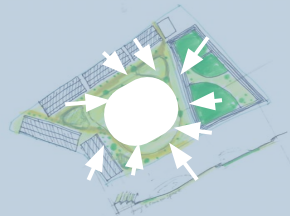
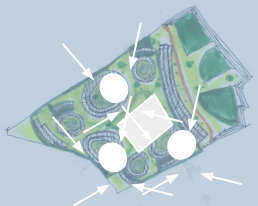
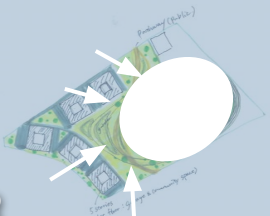


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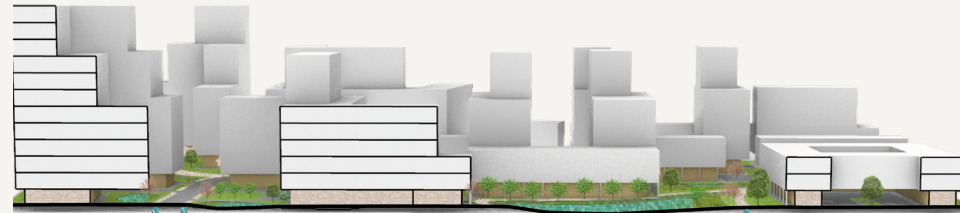
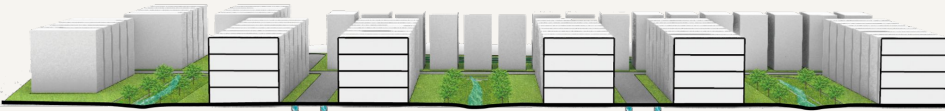
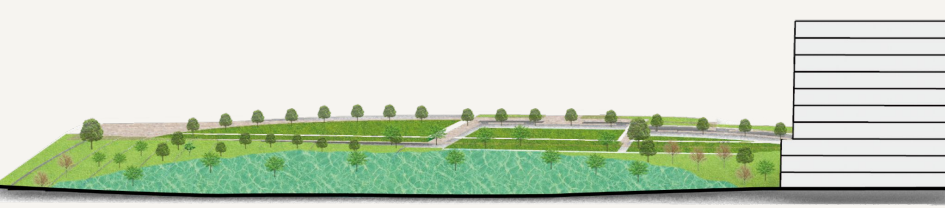
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FLOOD WATER MOVEMENT AND STORAGE



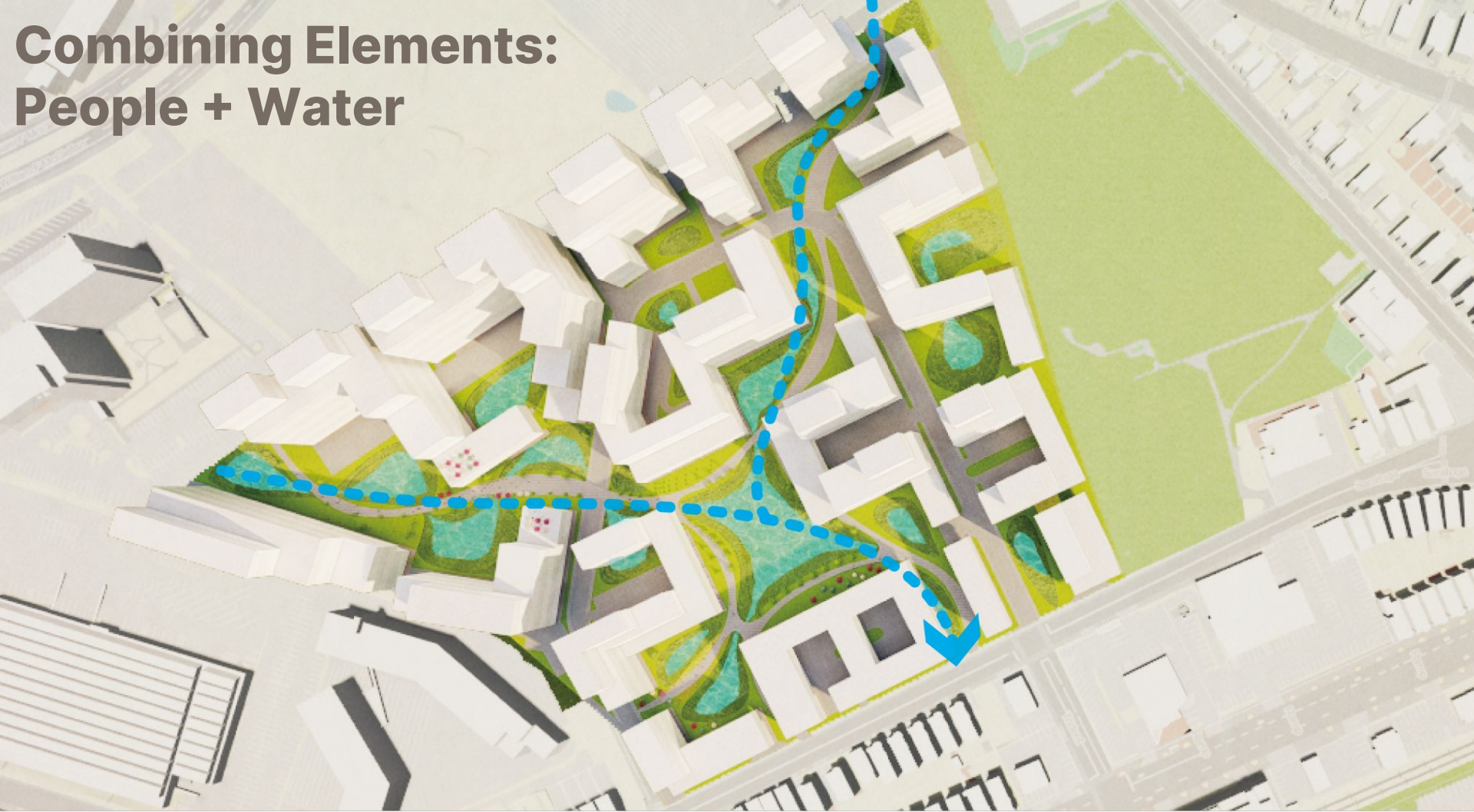
Transections



Combining Elements: People + Water



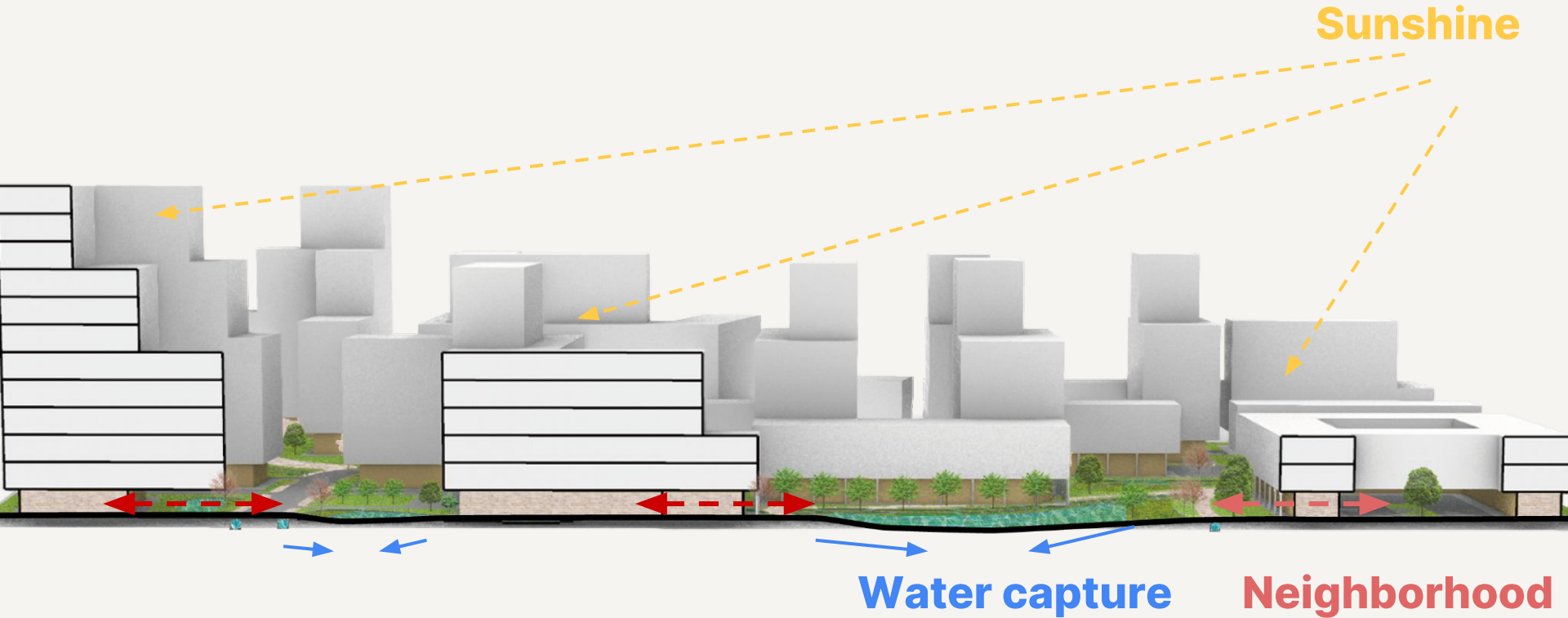
Combining Elements: People + Water



Combining Elements: People + Water



Transection

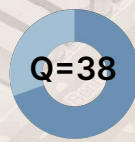




70%

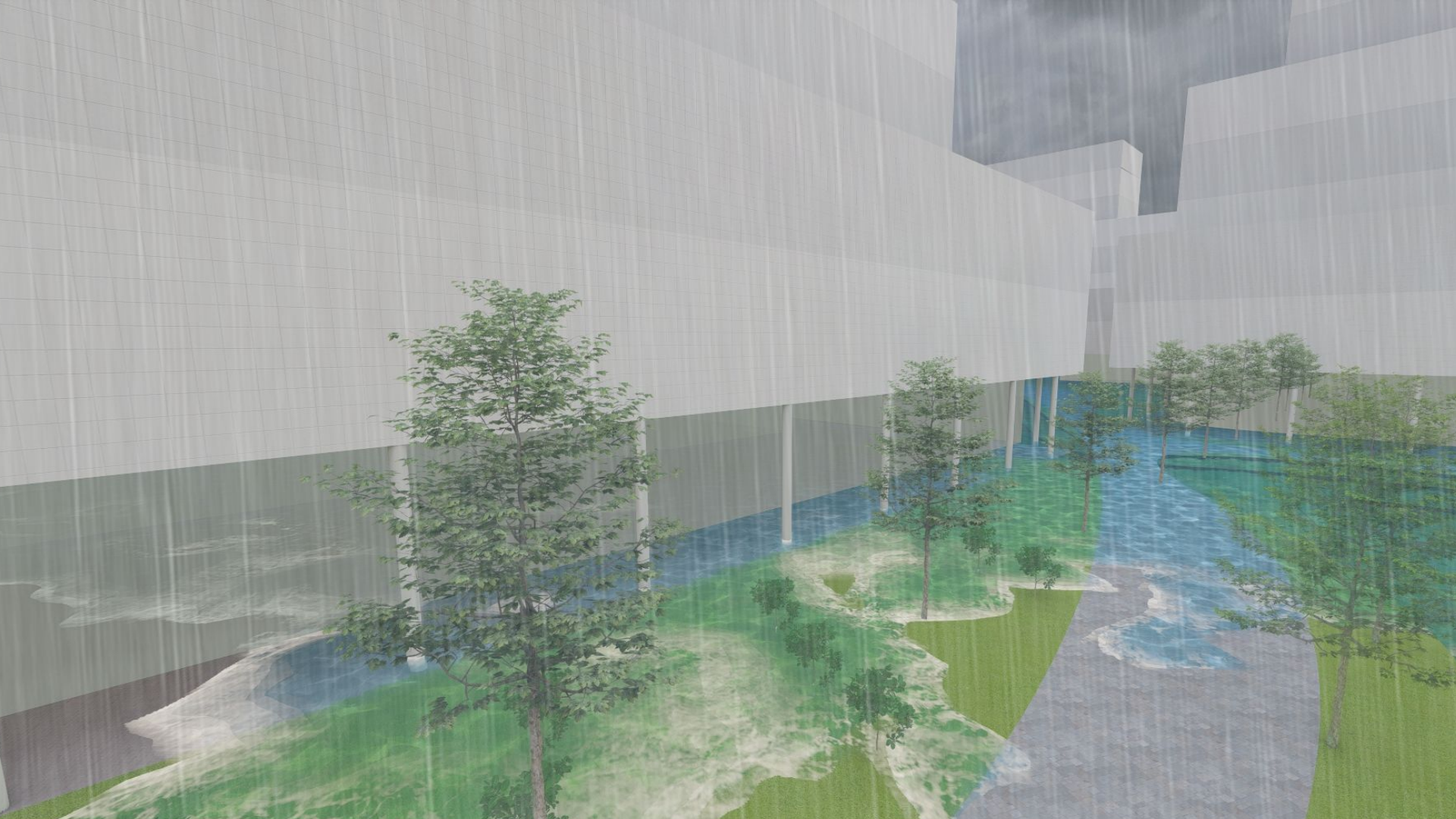
49%

499%





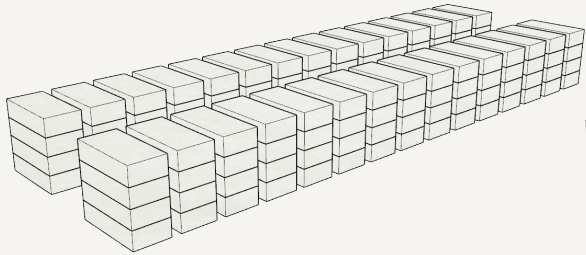




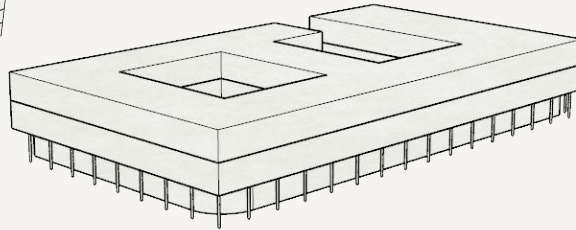
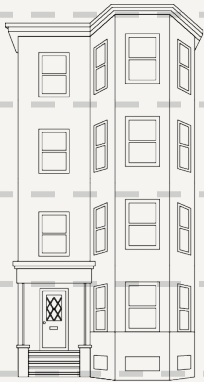
Density

-Social and Physical Resilience-

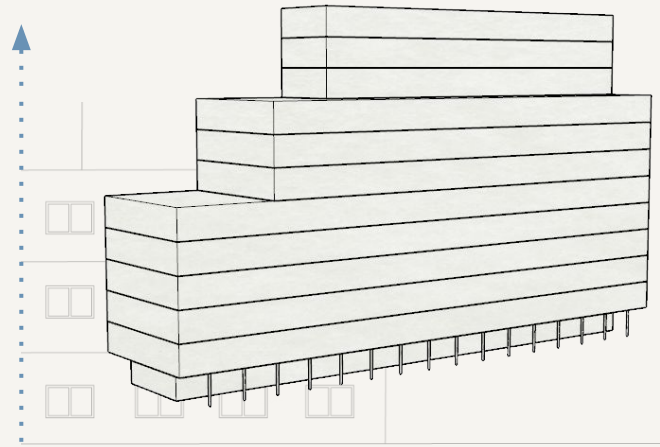
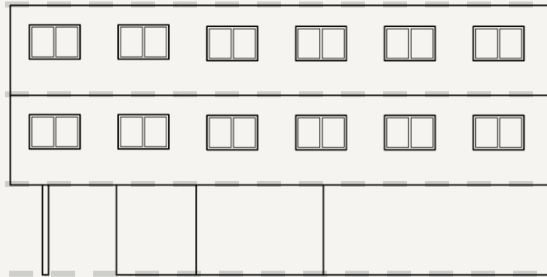
Housing Typologies



Classic Boston
Residence



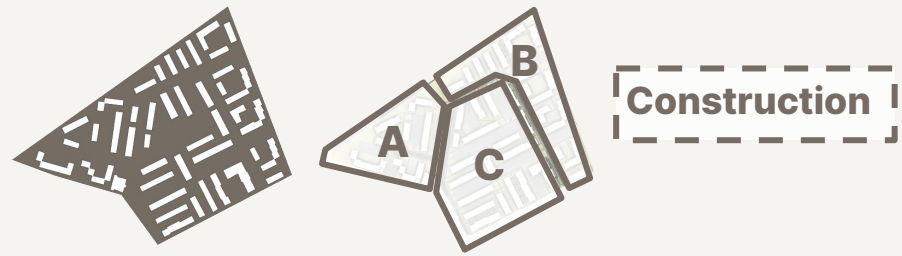
Low-Rise Communal
Apartments



High-Rise Apartments



Phasing Study



Phase 1



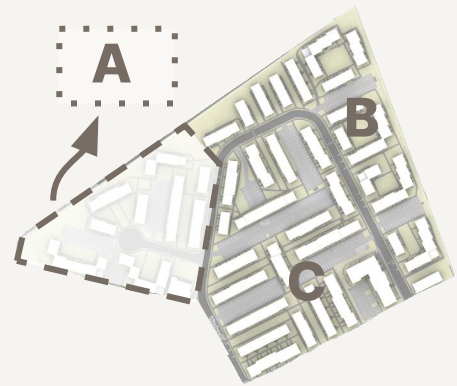
Phase 2



Phase 3



Phase 4



Prepare temporary housing outside the village for residents in block A



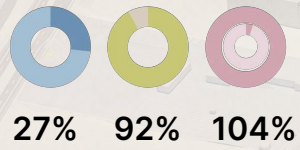
Residents in Blocks A and B can move back into the site A



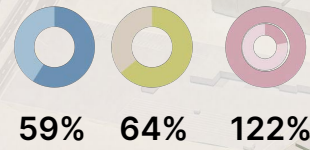
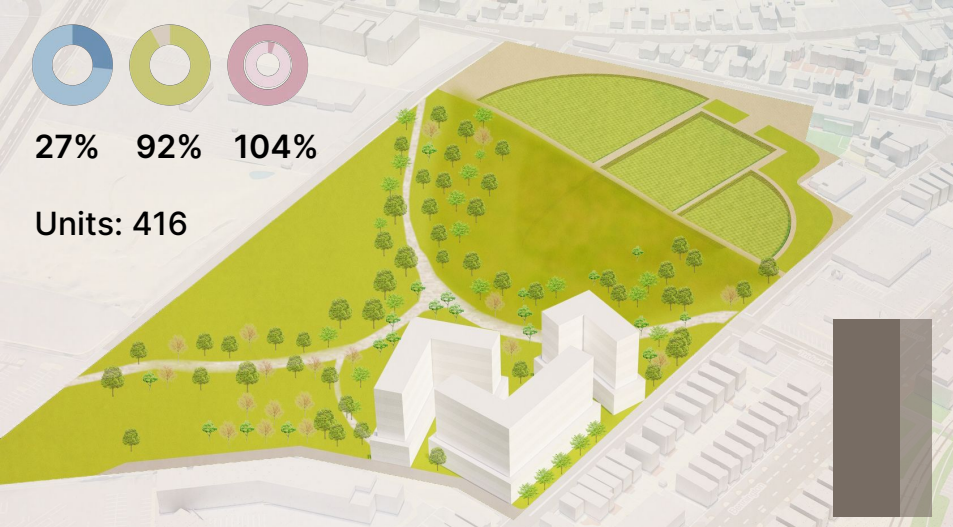
Residents in Block C can move in to either site A or B



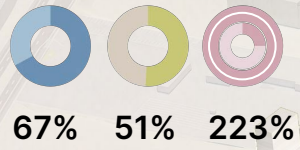
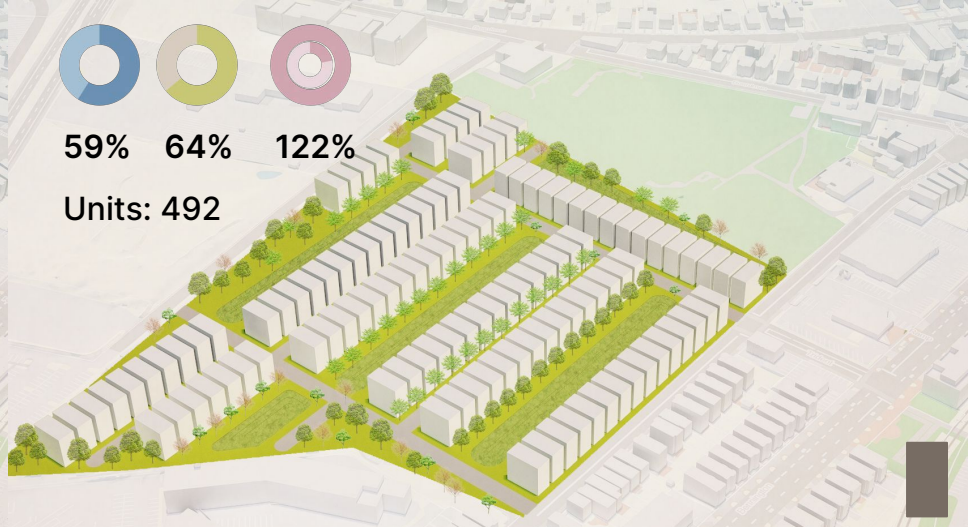
Construction is complete and all the residents can move into new units



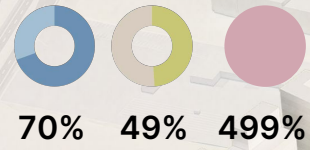
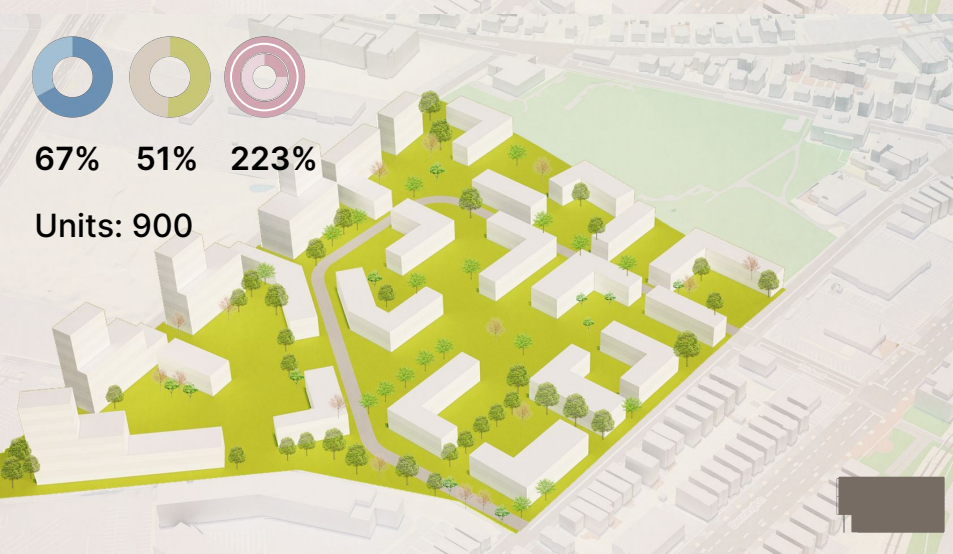
Units: 416



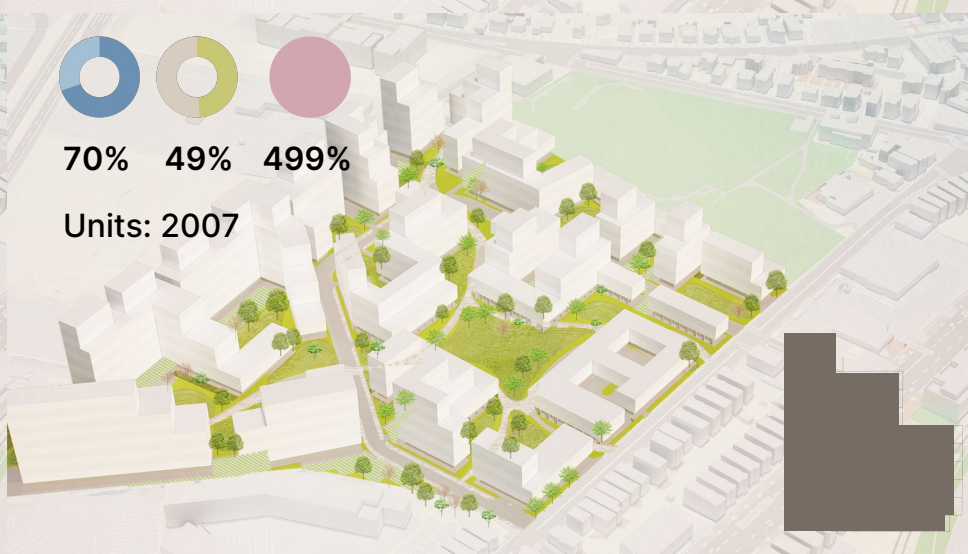
Units: 492



Units: 900

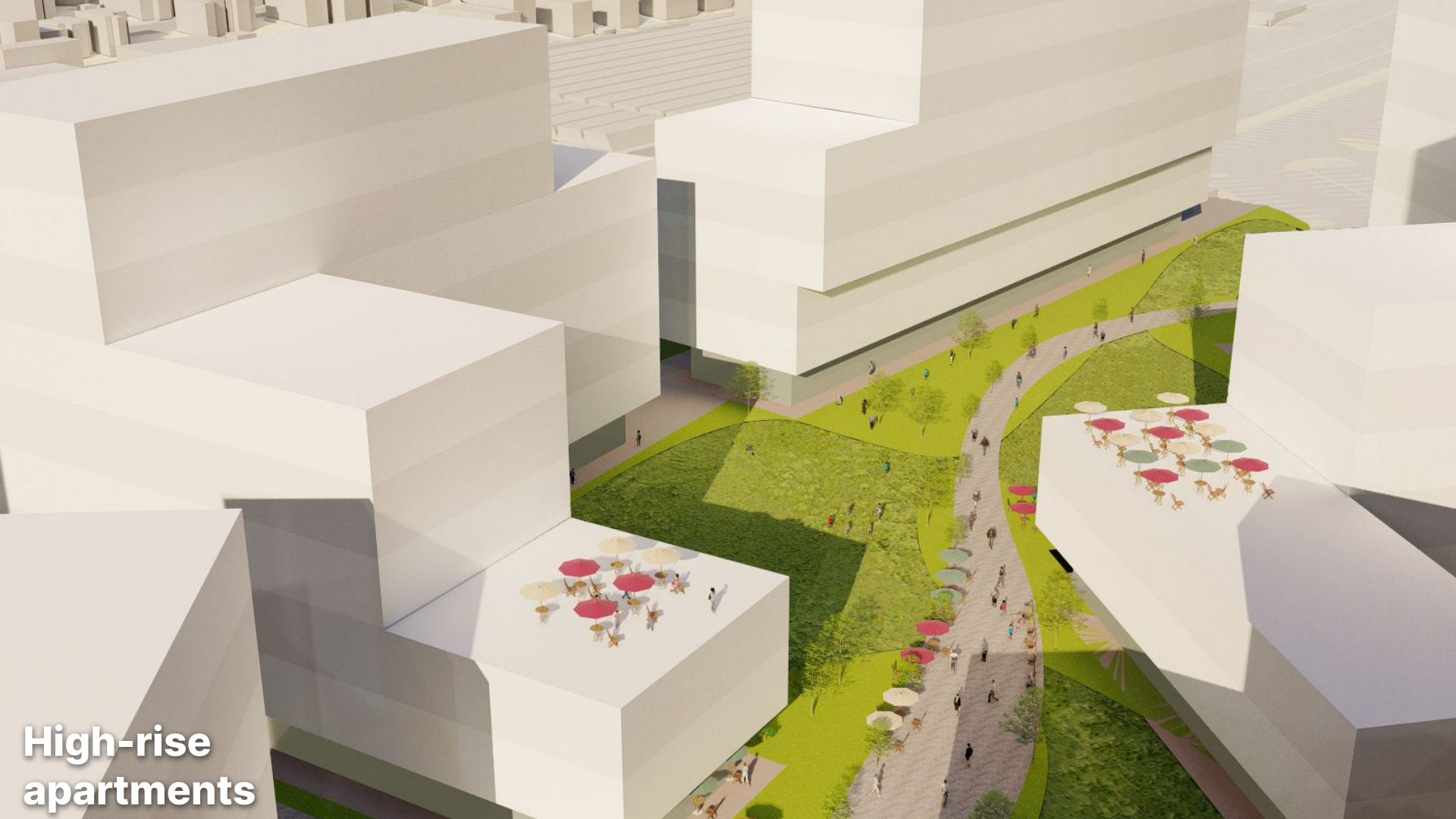


Units: 2007





**Boston Neighborhood
Typology**



**High-rise
apartments**



**Low-rise
apartments**

Bringing it all Together

HABITABLE GREEN SPACE



COMMUNAL AMENITIES



EDUCATION AND FAMILY ORIENTED



Ambitious Idea

-Speculative Coast to Coast Planning-





Bennington

Timeline for Implementation

CURRENT

5 YEARS

30 YEARS

100 YEARS

PERMEABILITY
Changing Pavements

FLOOD MANAGEMENT
Green Infrastructure and Nature based solutions

HOUSING RENOVATION
Balancing Social Resilience and Density

SPECULATIVE PLAN
Connecting the Creek and the Beach

Thank you!

