



Waterfront Innovation Centre

Schematic Design

January 24, 2018

Project Description & Background

- Deal Details
 - Unproven commercial location (discounted rates to downtown)
 - Targeted tenant requirement (60% innovation uses)
 - Market conditions (no subsidies)
 - Fair market land value
- Innovation and Collaboration
 - Establish tenant-focused building
 - Promote innovation through design, building management and programming
 - Long-term adaptability and flexibility
 - “Smart building” features
- Anchor tenant in lease negotiations
- Submitting SPA this month
- Last presented to DRP in November 2015

Site Context

Waterfront Innovation Centre
Review Stage: Schematic Design

Proponent: Menkes

Design Team: Sweeny & Co



— Design Review Area
— Waterfront Innovation Centre

Site Context

Waterfront Innovation Centre


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- 1. Redpath Sugar Factory
- 2. Sugar Beach Park
- 3. George Brown College
- 4. Corus Quay
- 5. Sherbourne Common Park
- 6. Bayside Developments
- 7. Monde Condominium
- 8. Lakeside Residences
- 9. Daniel's Waterfront I & II
- 10. The Yard Park
- 11. Loblaws Market
- 12. LCBO Tower
- 13. LCBO Blocks
- 14. Pinnacle One Yonge
- 15. Quayside Developments

-  WIC PROJECT SITE
-  TRANSIT STOP
-  PARK

Site Context

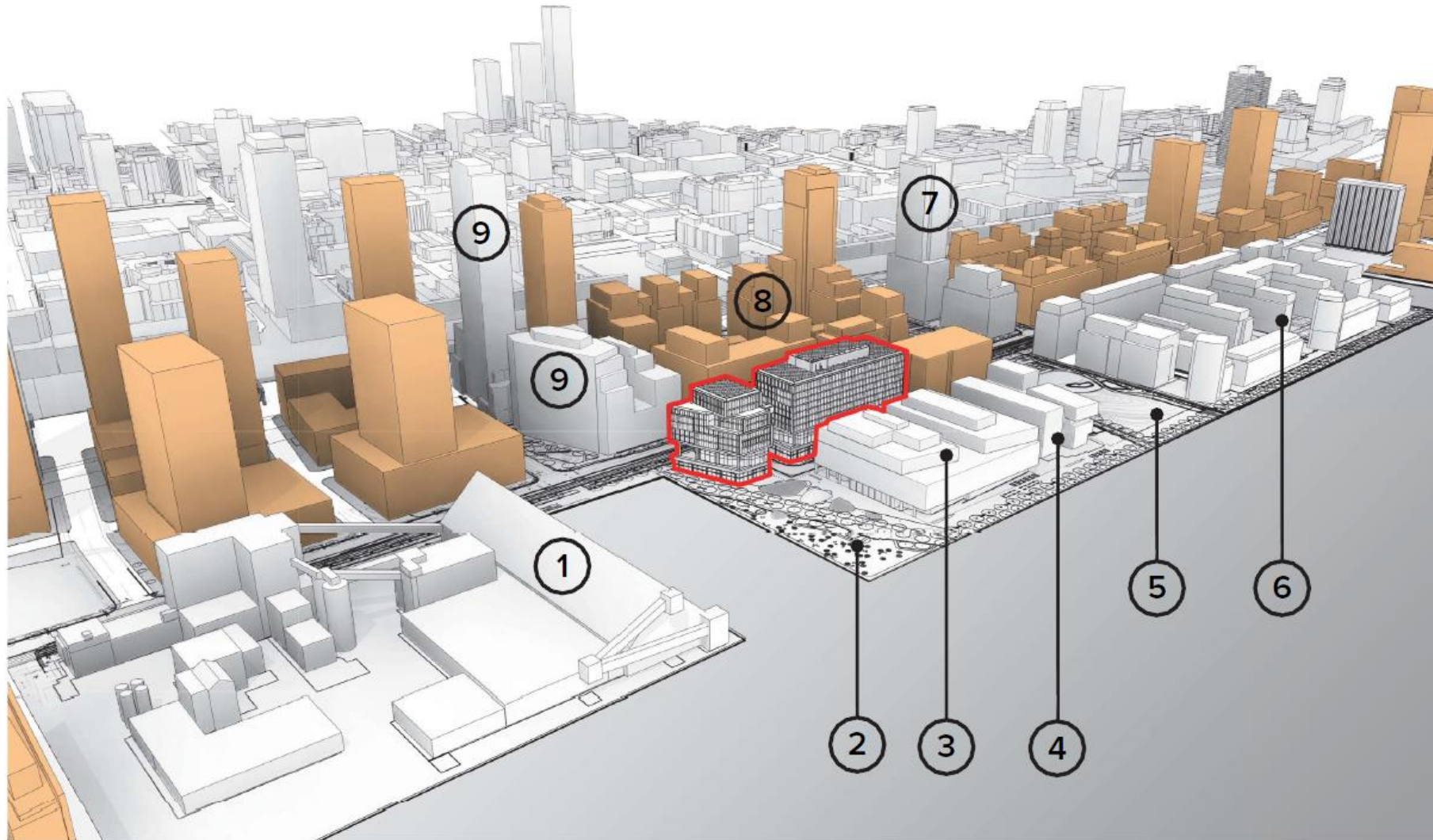
Future Density on Queens Quay

Waterfront Innovation Centre



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1. Redpath Sugar Factory
2. Sugar Beach Park
3. George Brown College
4. Corus Quay
5. Sherbourne Common Park
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7. Monde Condominium
8. Lakeside Residences
9. Daniel's Waterfront I & II

-  EXISTING & UNDER CONSTRUCTION
-  FUTURE DEVELOPMENTS
-  PROPOSED PROJECT

View Looking Northeast

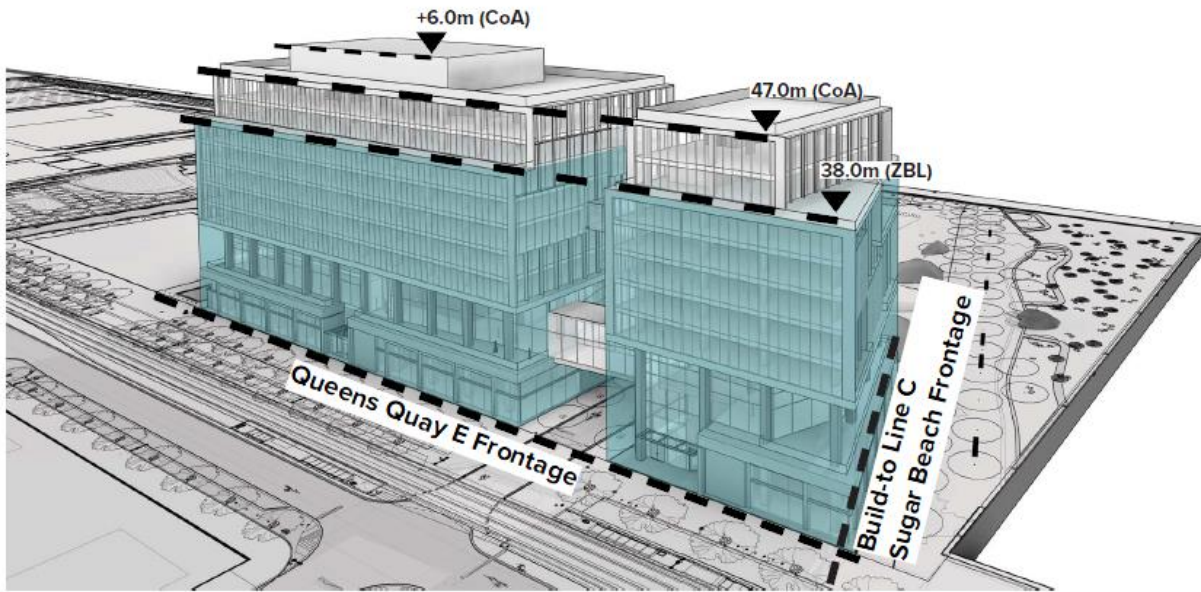
Zoning

Waterfront Innovation Centre

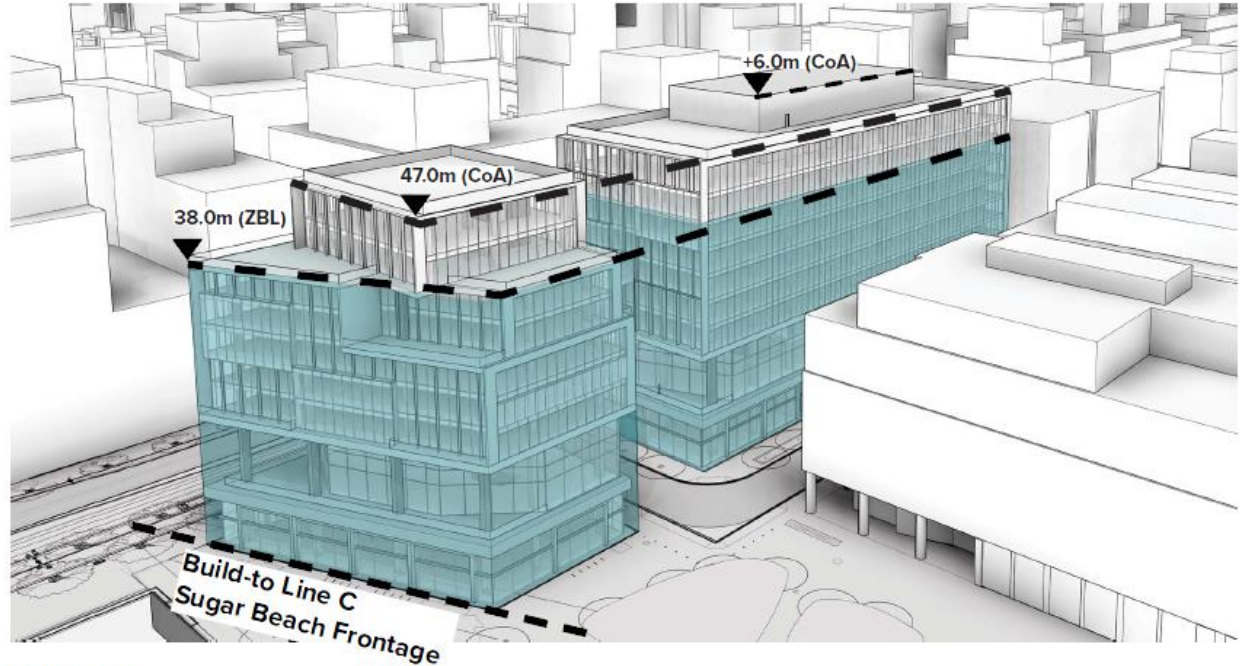
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North Side



South Side

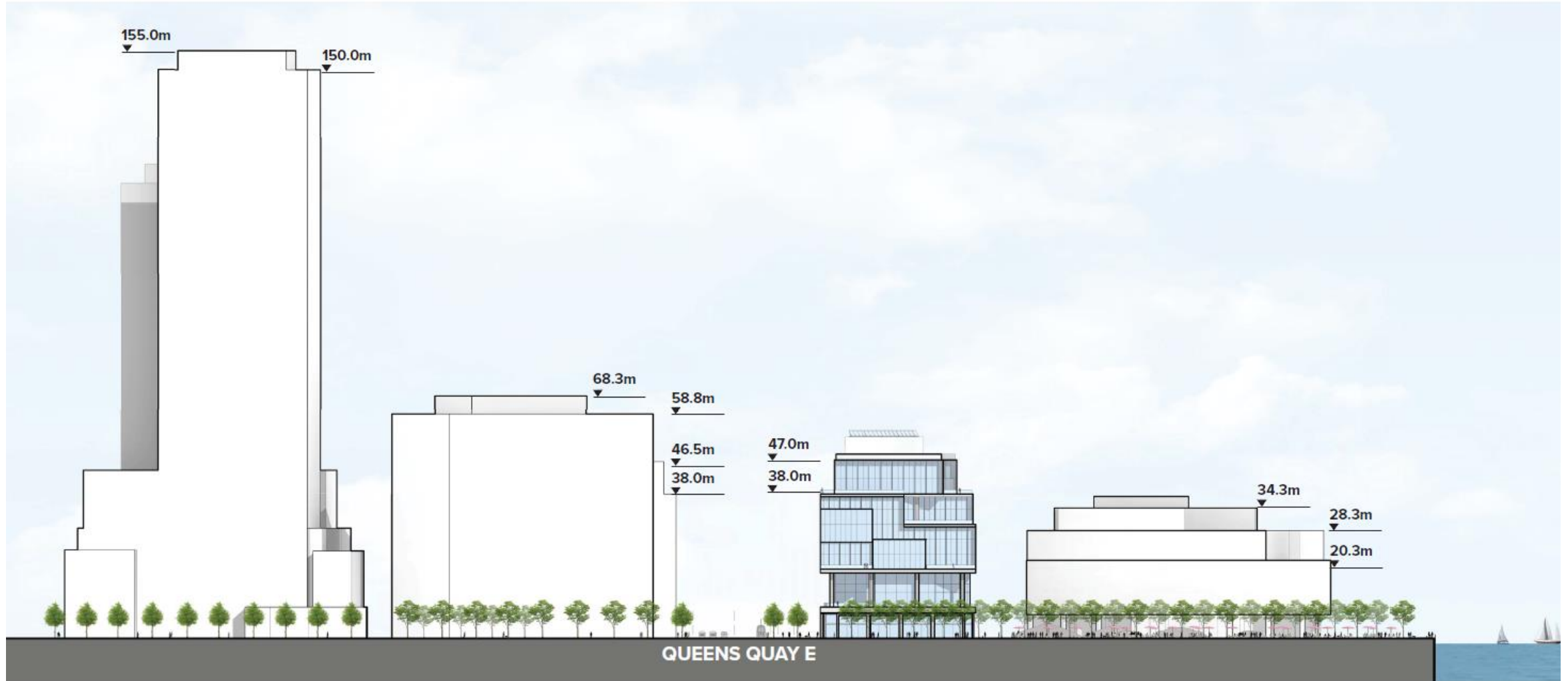
 ZONING ENVELOPE

Committee of Adjustment
Minor Variance Approval

File No.: A0851/16TEY
Zoning: CR 9(h) Site Specific ByLaw 1049-2006 (ZPR)
Date: November 16, 2016

1. Maximum Building Height 47.0m + 6m MPH
2. No colonnade required along Queens Quay and Sugar Beach Frontage
3. Building may be set back more than 0.1m from Build-to Line C
4. Loading provisions (min. 2 of Type "C")
5. Adjustment to bike parking dimensions

Height Transition



143-177 LAKESHORE BOULEVARD EAST

130-132 QUEENS QUAY EAST

WATERFRONT INNOVATION CENTRE

SUGAR BEACH PARK (CORUS QUAY BEYOND)

Policy Context – Central Waterfront Secondary Plan

D24 - THE EAST BAYFRONT, A PROMINENT NEW NEIGHBOURHOOD

The East Bayfront will become a prominent waterfront address for working and living amid the energy and abundance of waterfront activities, including a new water's edge promenade and other public activities in the series of new East Bayfront public spaces. Development adjacent to the water's edge promenade shall consist of low and medium scale buildings that will reinforce the safety and usability of the public spaces.

(P31) **Excellence in the design of public and private buildings**, infrastructure (streets, bridges, promenades, etc.) **parks and public spaces** will be promoted to achieve **quality, beauty and worldwide recognition**.

(P32) New development will be **located, organized and massed to protect view corridors, frame and support the adjacent public realm** and discourage privatization of public spaces. Built form will result in comfortable micro-climates on streets, plazas and other parts of the public realm.

(P10) The design of the public realm will be of a standard of excellence characteristic of the great city waterfronts of the world.

(P11) The public realm will be defined by a coherent framework of streets, parks, plazas, buildings, viewing areas, walkways, boardwalks, promenades, piers, bridges and other public infrastructure and open space elements.

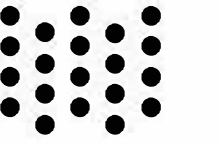
Topics for Panel Consideration

- Overall evolution of the design approach
- Impact of bridge connection on the view corridors
- Reconfiguration of the Nexus/circulation
- Approach to LEED Gold
- Ground floor relationship to the public realm

DRAFT

WATERFRONT
INNOVATION CENTRE
125 Queens Quay East

Waterfront Toronto Design Review Panel
January 24, 2018



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

Developer

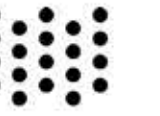


Design Team

Sweeny&Co



AGENDA



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

DRAFT

1. Massing & Design Concept
2. Engaging & Enhancing the Public Realm
3. Building Design
4. Sustainability
5. Q & A
6. Appendix

STATISTICS

BUILDING AND LOT ZONING STATISTICS

Lot Area	4,596.2 m²	49,473 ft² (combined sites)
Zoning	Former General Zoning By-Law 438-86	
Height Limit	38m	
Proposed Building Height	47.0m	
Proposed Penthouse Height	6m	
Proposed Uses	Retail and Office; Underground Public Parking	
Gross Building Area	37,139 m²	399,759 ft²
• Office	34,455 m ²	370,866 ft ²
• Retail	2,684 m ²	28,889 ft ²
Ground Floor Animation Area (North)	112m	(70%+ of Queen's Quay frontage)
Ground Floor Animation Area (West)	41m	(70%+ of Western Frontage)
Proposed Green Roof Area:	147.91 m ² (complimented with solar panels)	

LOADING STATISTICS

Ground Floor	3 Type B loading spaces
	2 Type C loading spaces

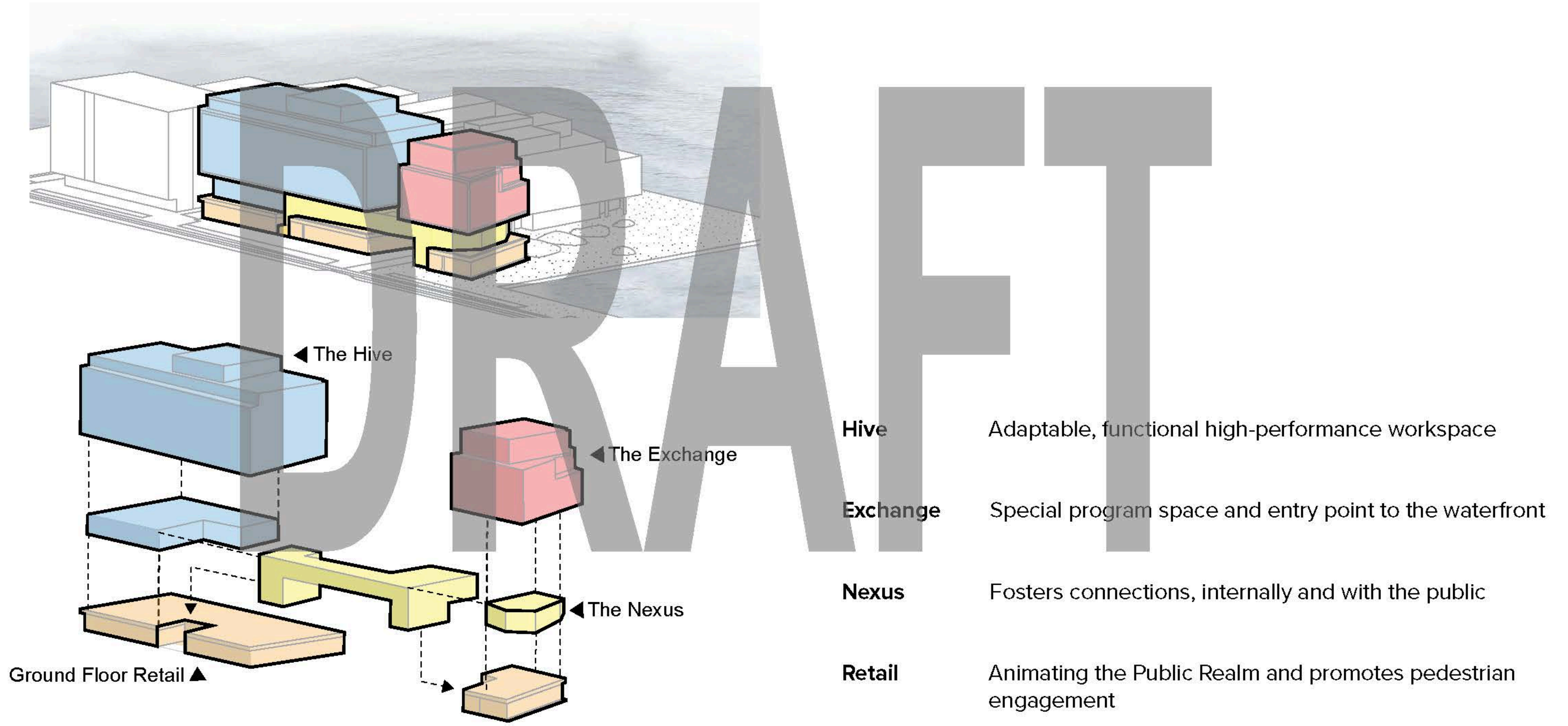
PARKING STATISTICS

P1	65	spaces
P2	80	spaces
P3	79	spaces
Total	224	spaces

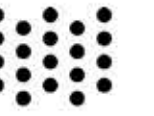
BICYCLE STATISTICS

Visitors / Short Term:	89	spaces
Occupants / Long Term:	87	spaces
Total:	176	spaces
Shower:	4 per gender	

MASSING & CONCEPT



BUILDING DESIGN



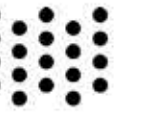
WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



Southeast View
towards Lake Ontario

BUILDING DESIGN



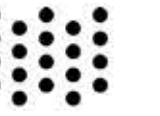
WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



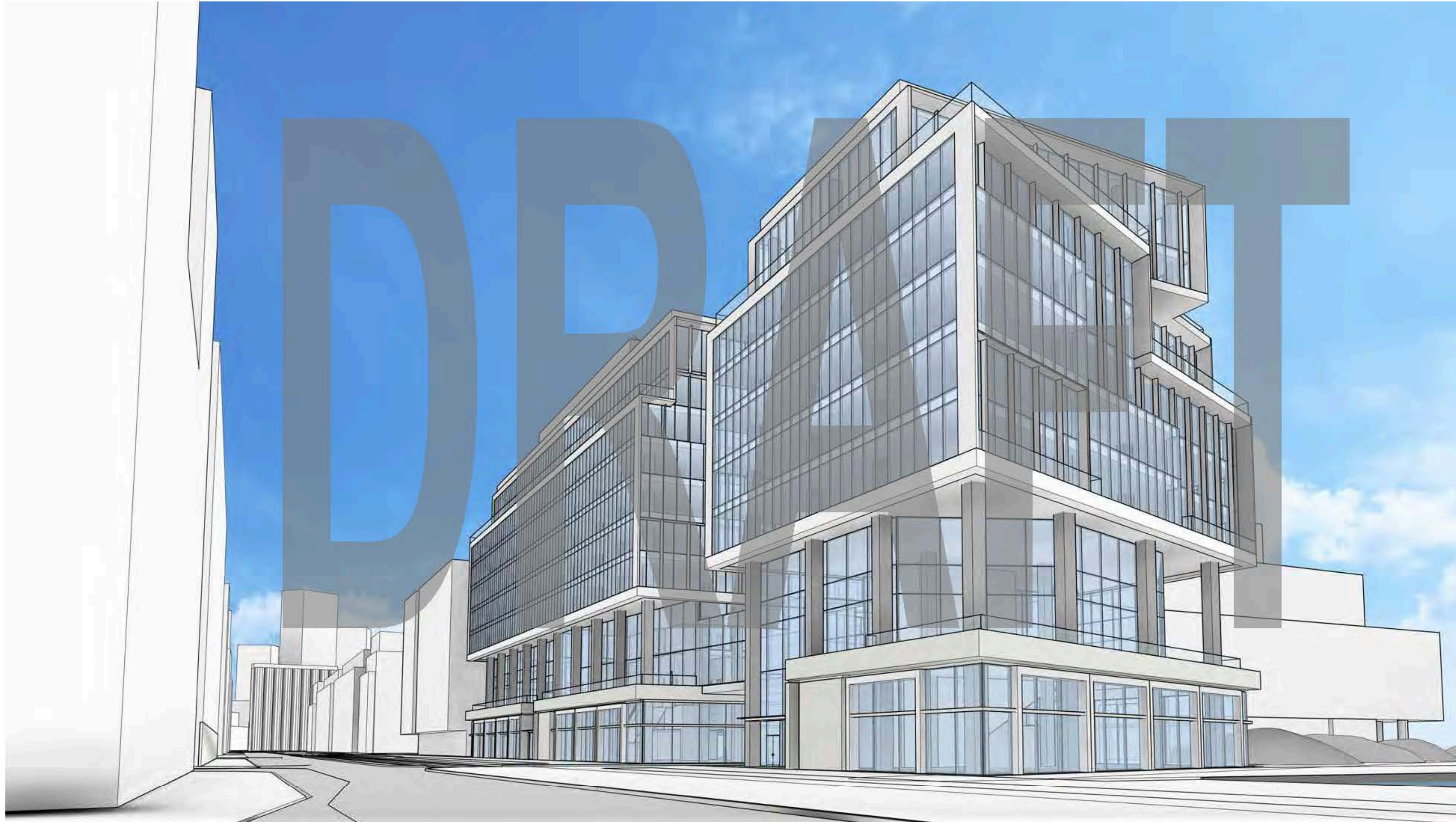
North View
from Sugar Beach Park

BUILDING DESIGN



WATERFRONT
INNOVATION CENTRE

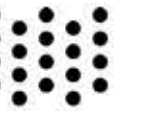
125 Queens Quay East



West View
on Queens Quay East

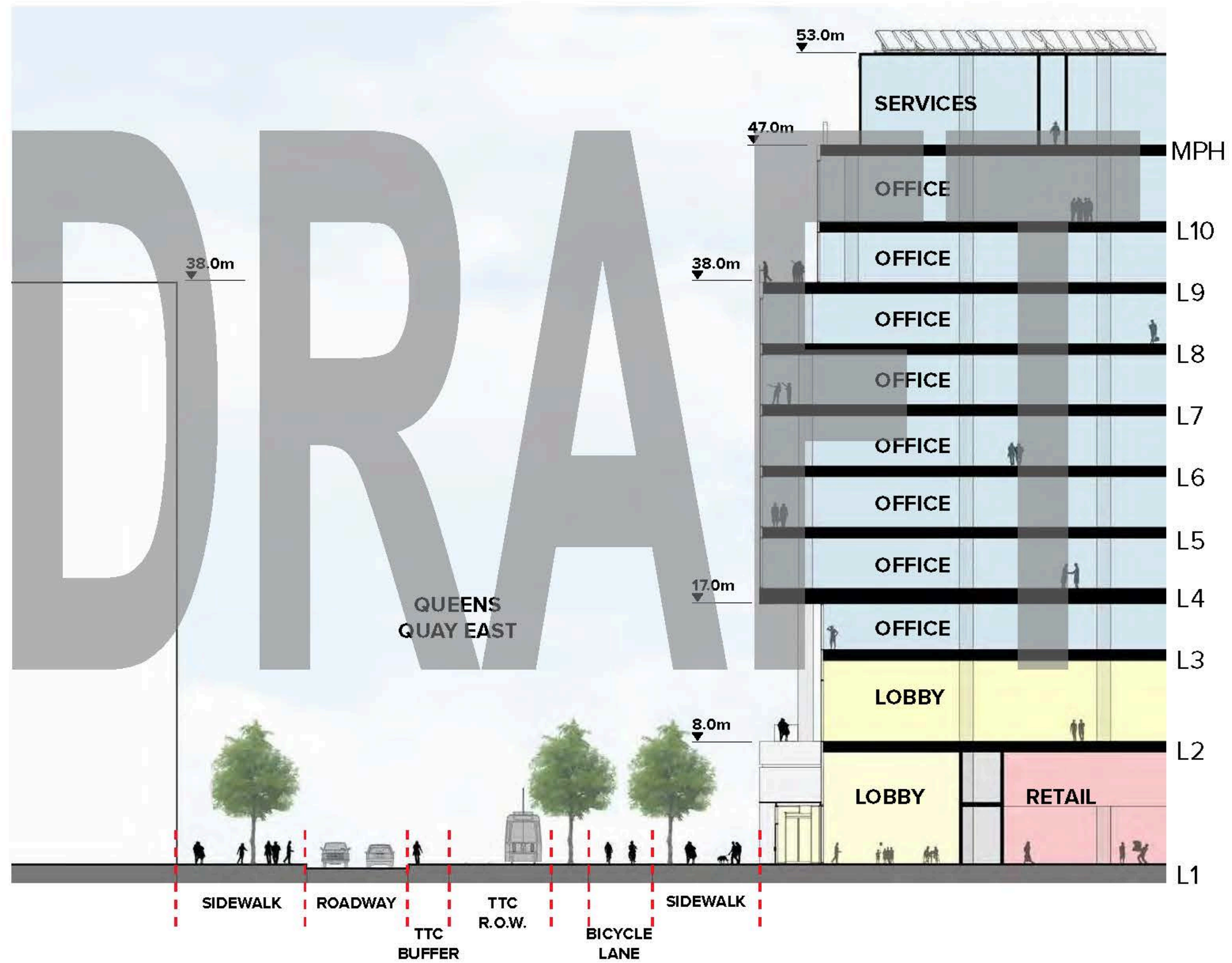
PUBLIC REALM

Street Section



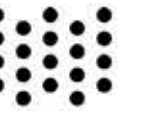
WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



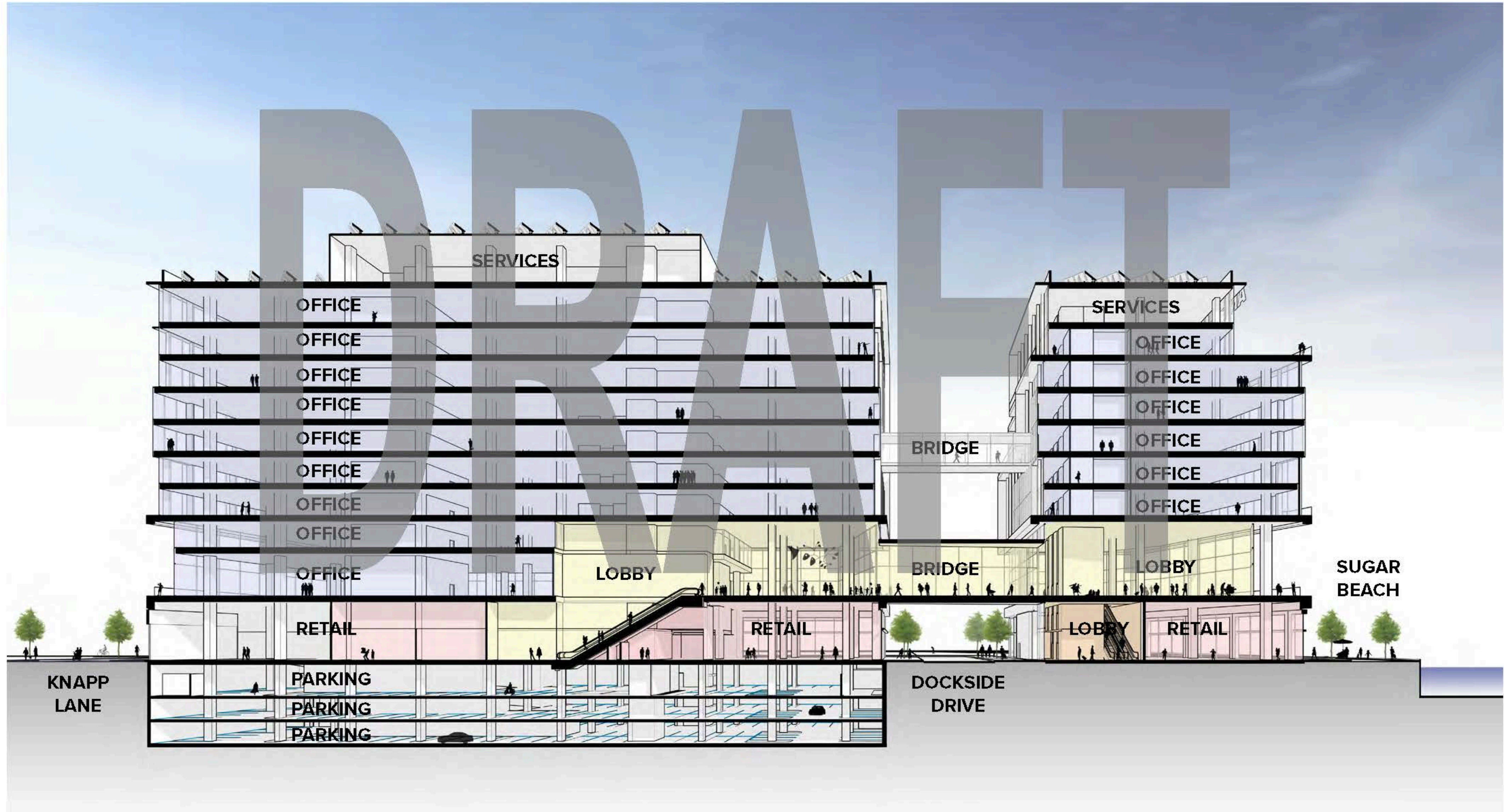
SECTIONAL PERSPECTIVE

Extending the Public Realm

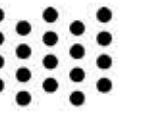


WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

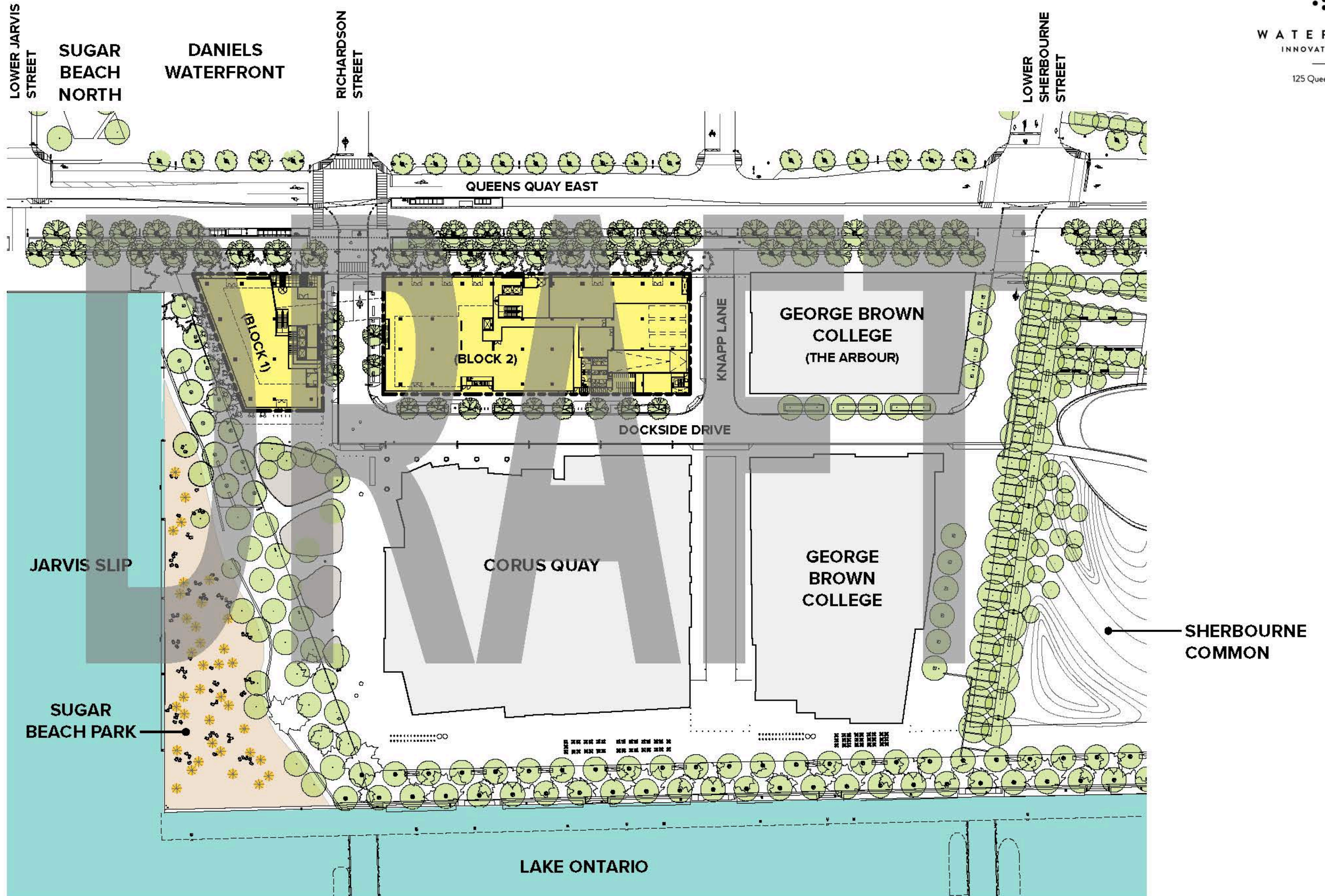


Site Plan

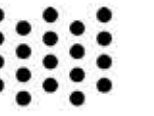


WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



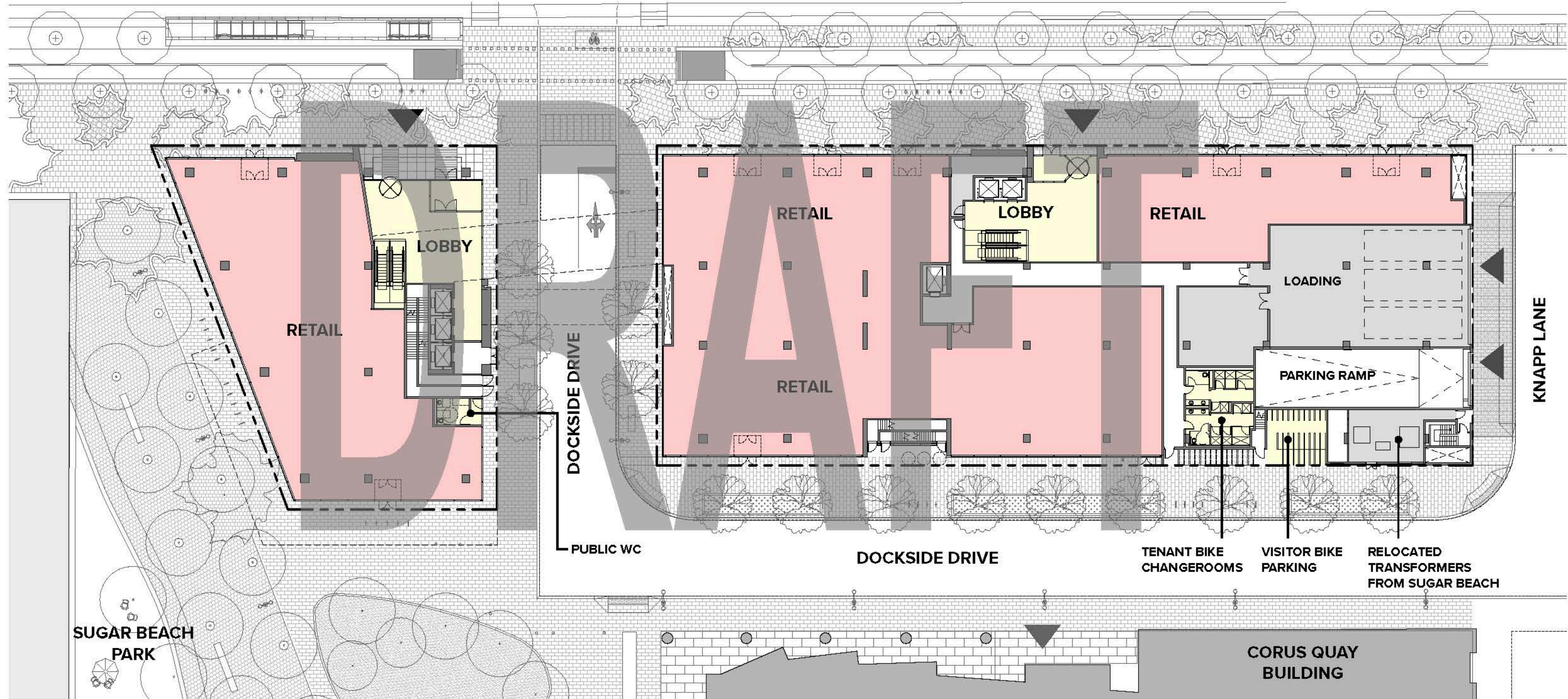
GROUND FLOOR



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

QUEENS QUAY EAST



SUGAR BEACH
PARK

DOCKSIDE DRIVE

PUBLIC WC

DOCKSIDE DRIVE

TENANT BIKE
CHANGEROOMS

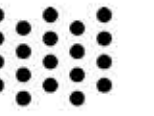
VISITOR BIKE
PARKING

RELOCATED
TRANSFORMERS
FROM SUGAR BEACH

CORUS QUAY
BUILDING

KNAPP LANE

RETAIL ANIMATION



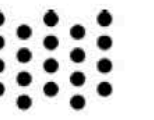
WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



View along
Queens Quay East

RETAIL PRECEDENTS

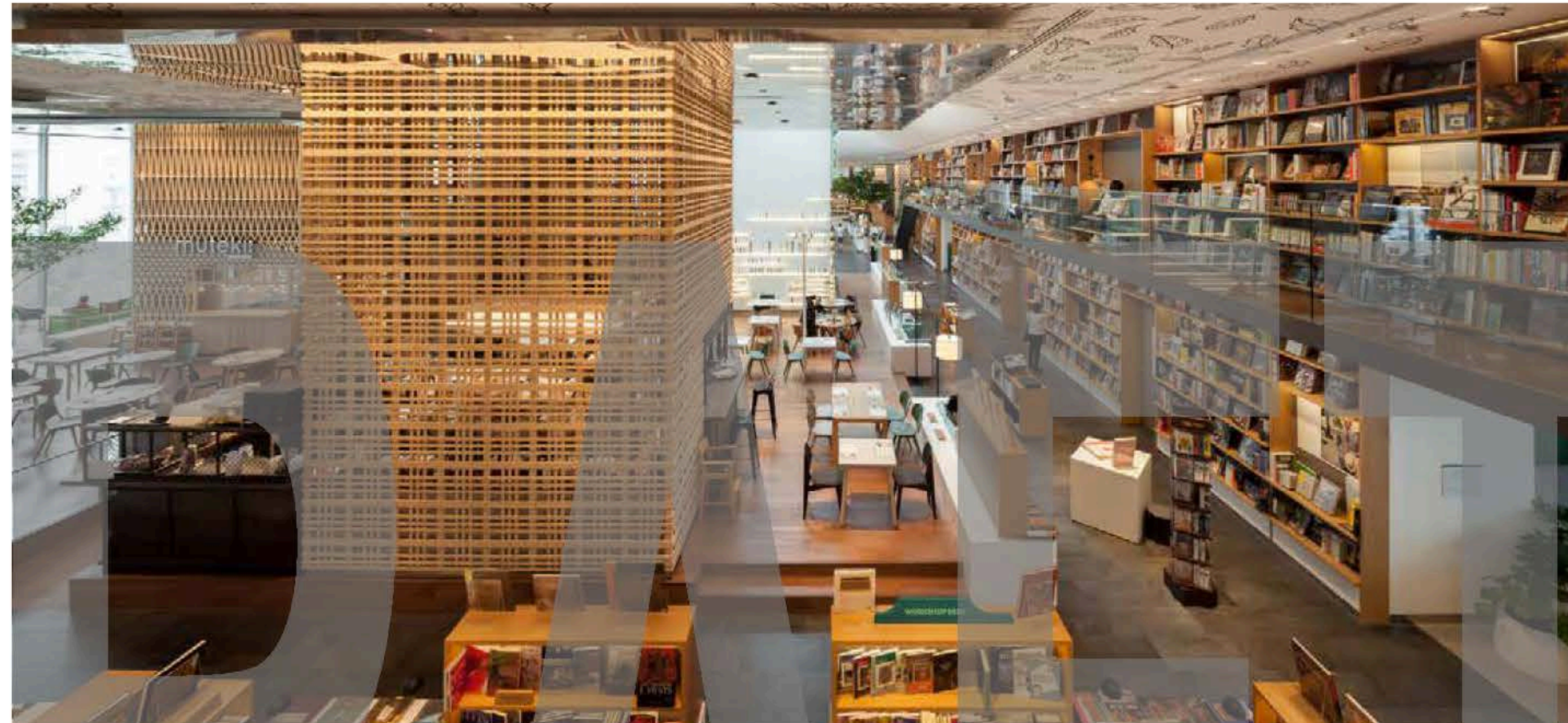


WATERFRONT
INNOVATION CENTRE

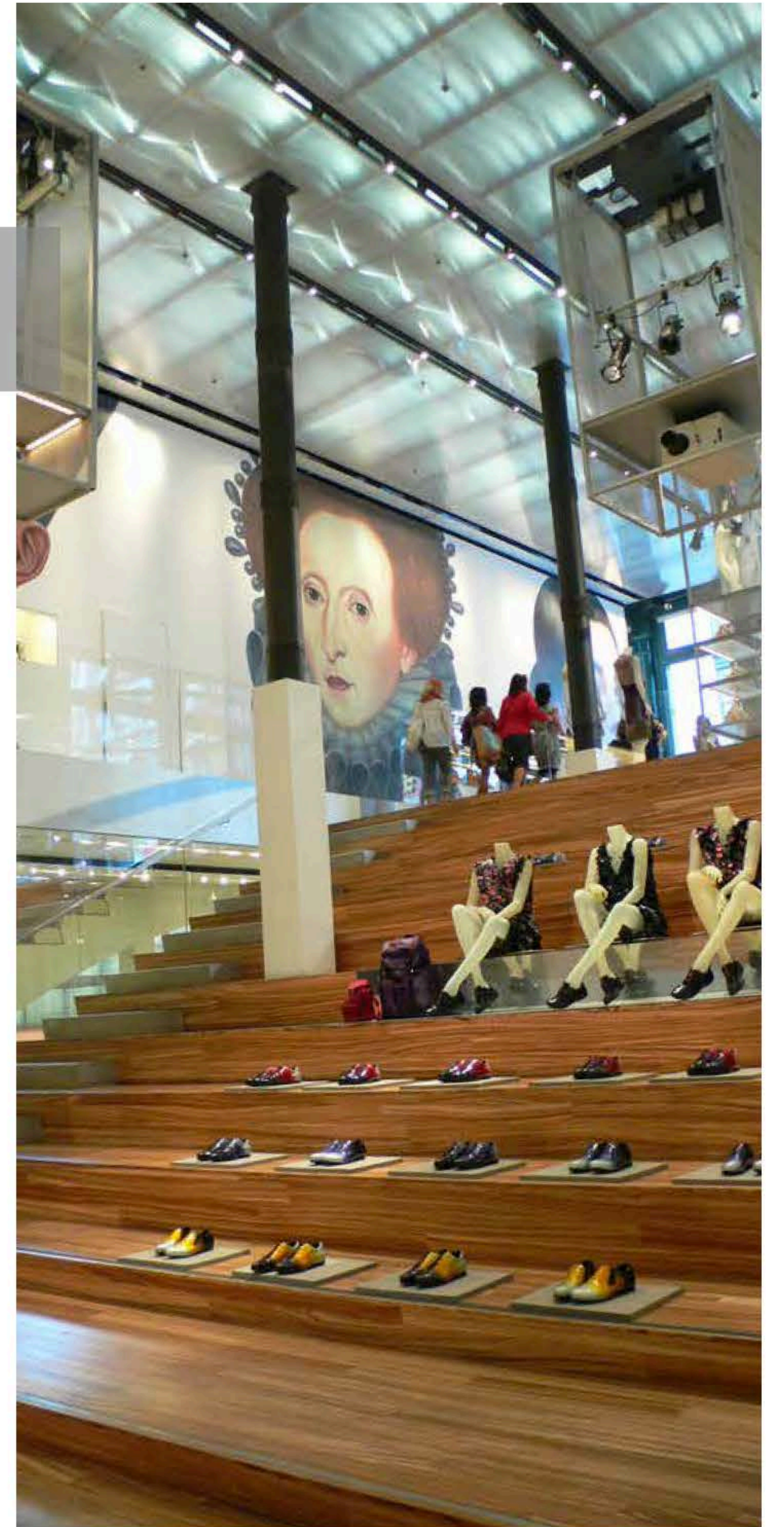
125 Queens Quay East



Restaurant/Dining Amenities



Combined Retail Offerings in Shared Spaces



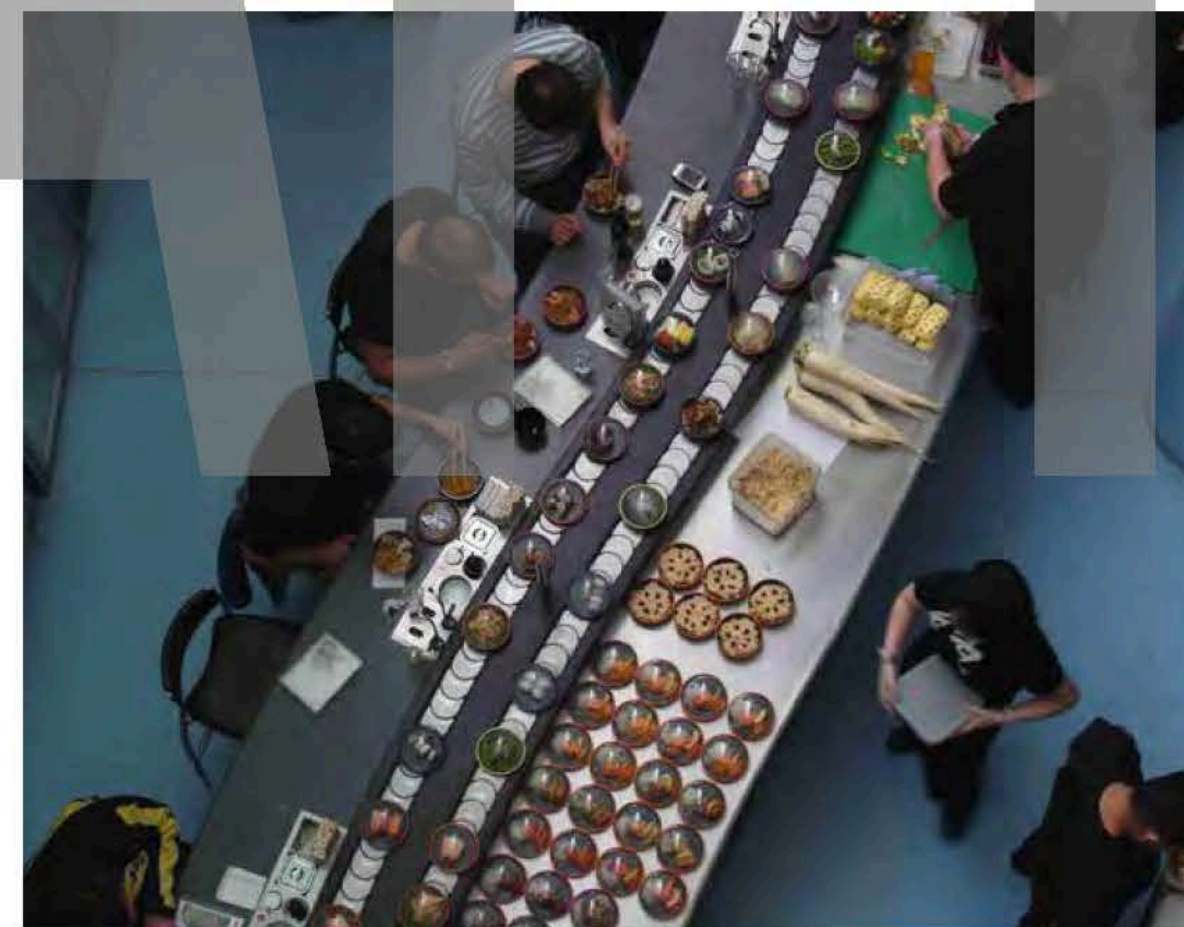
Multi-purpose Retail Features Used for Merchandising & Events



Experienced Based Retail Opportunities

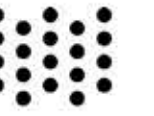


Local Artisan Shops & Producers



Flexible Space for Programs & Events

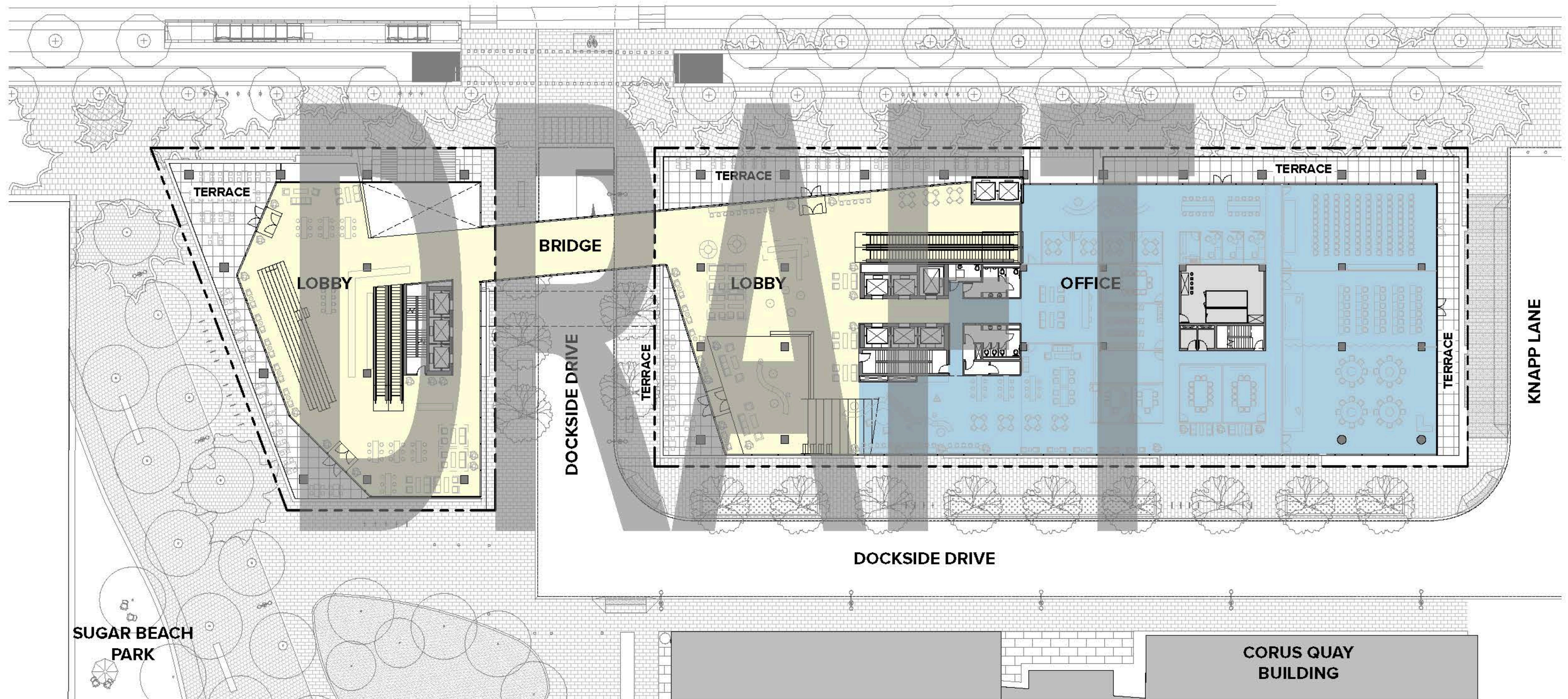
SECOND FLOOR



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

QUEENS QUAY EAST



SUGAR BEACH
PARK

CORUS QUAY
BUILDING

TERRACE

LOBBY

BRIDGE

DOCKSIDE DRIVE

TERRACE

LOBBY

TERRACE

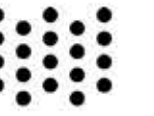
OFFICE

TERRACE

TERRACE

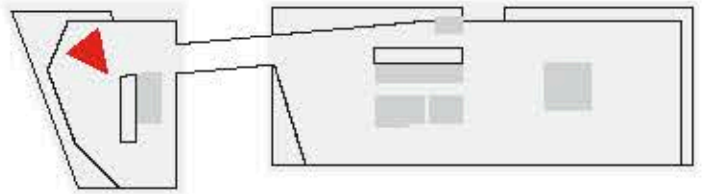
KNAPP LANE

DOCKSIDE DRIVE

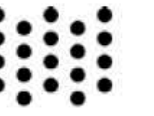


WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

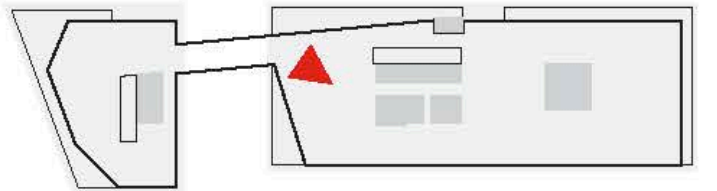


View
BLOCK 1 NEXUS



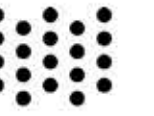
WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



View
BLOCK 2 NEXUS

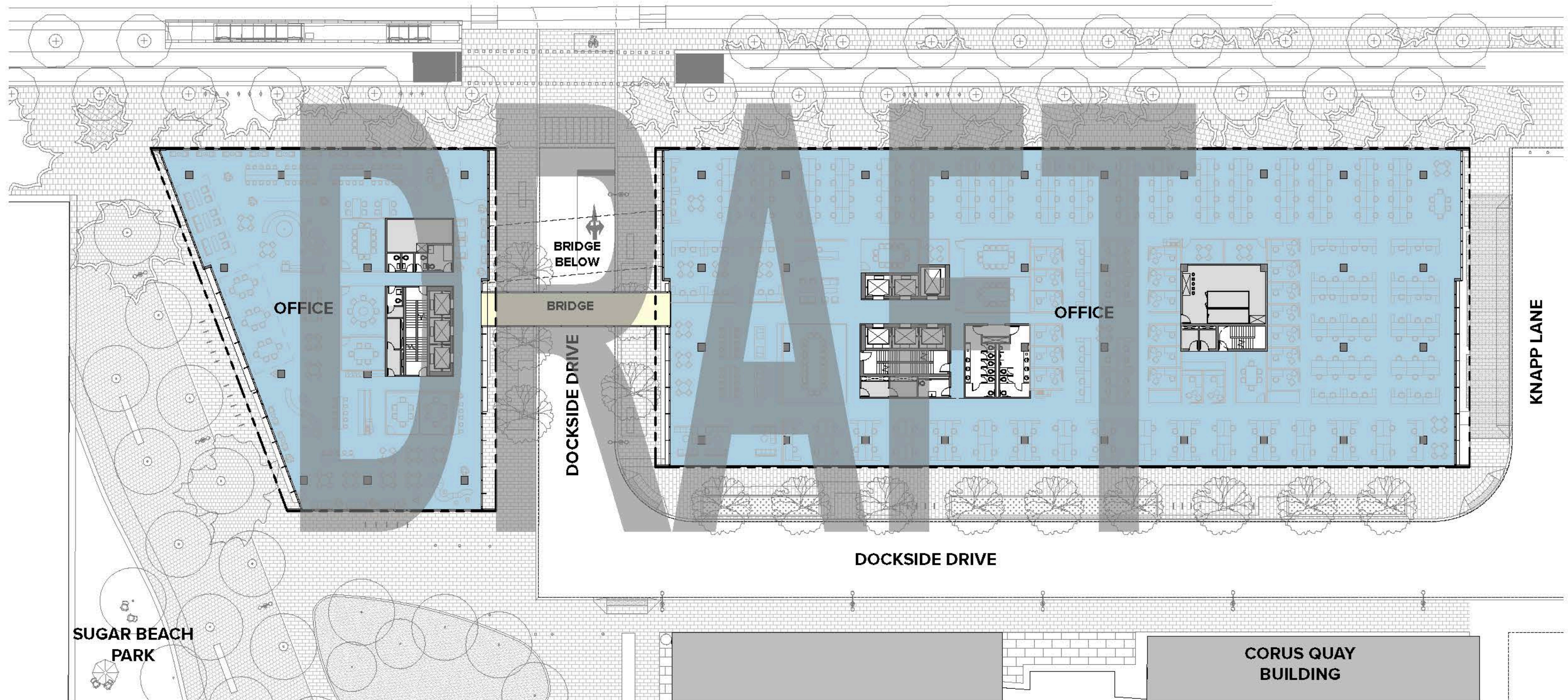
TYPICAL OFFICE FLOOR



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

QUEENS QUAY EAST



OFFICE

BRIDGE
BELOW

BRIDGE

DOCKSIDE DRIVE

OFFICE

KNAPP LANE

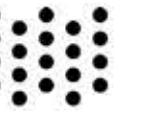
DOCKSIDE DRIVE

SUGAR BEACH
PARK

CORUS QUAY
BUILDING

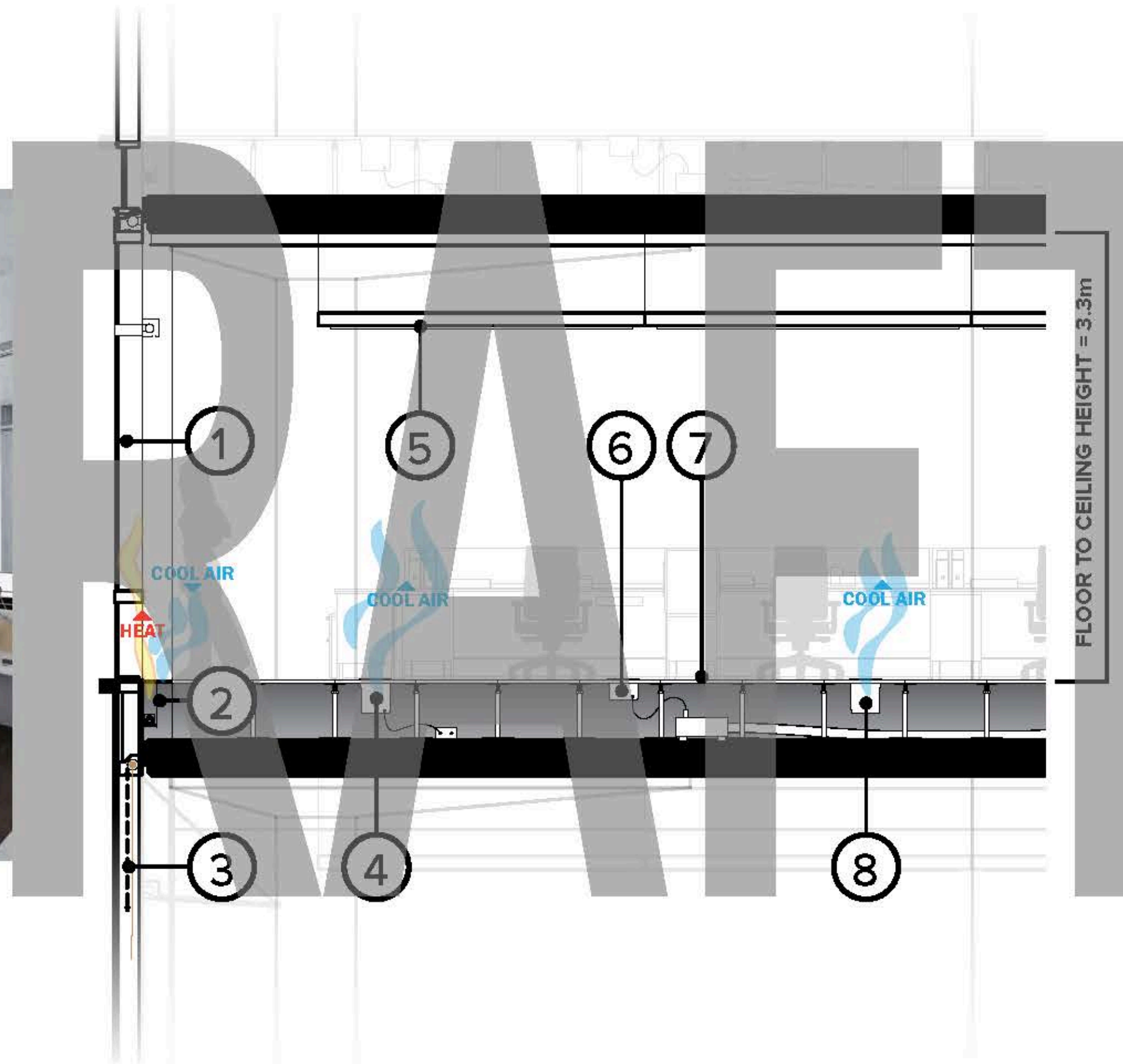
TYPICAL OFFICE FLOOR

High-Performance Workspace



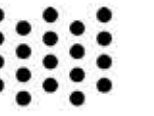
WATERFRONT
INNOVATION CENTRE

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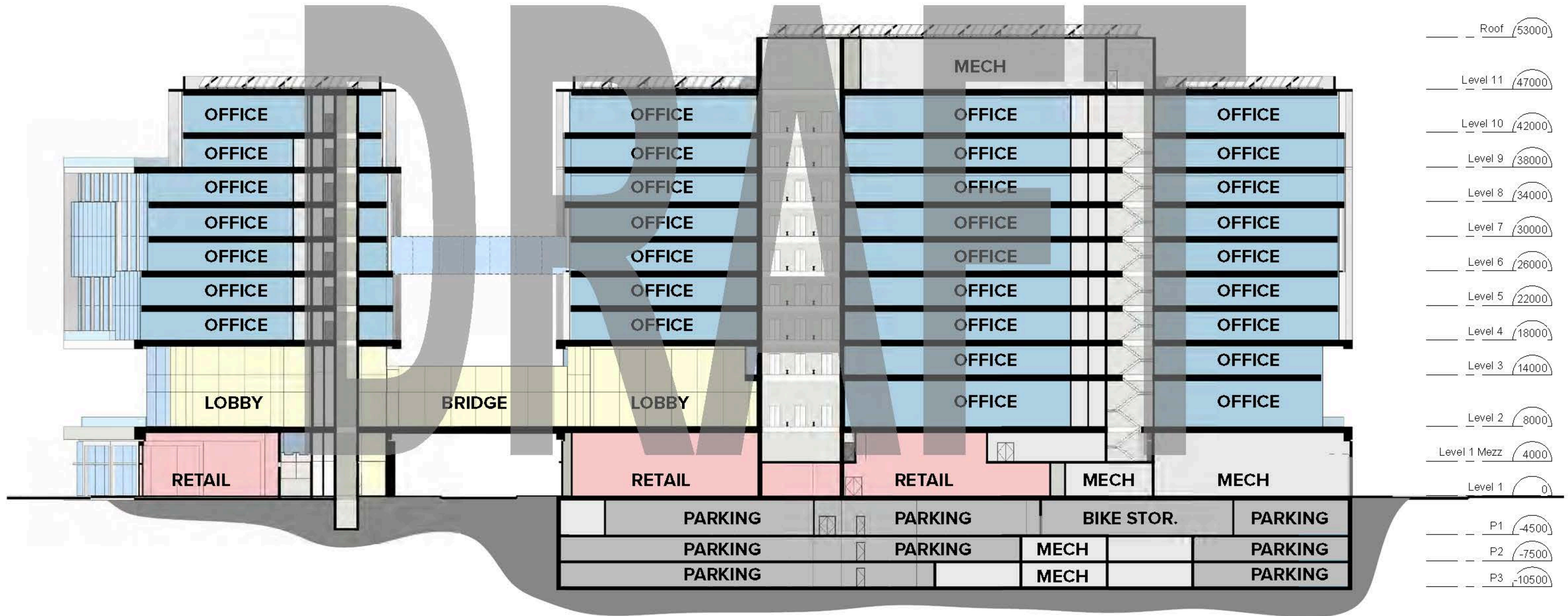
1. High-performance glazing
2. Perimeter heating flush with raised floor
3. Automated motorized blinds lower when incoming sun angle creates glare (optional)
4. Automated dampered floor diffuser
5. Perimeter fixtures stay off when daylight is adequate
6. Relocatable Plug 'n' Play for personal power, voice and data box
7. Removable floor panels for relocating diffusers and electrical terminals
8. Personal control of temperature & air via manual diffusers

EAST - WEST SECTION



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



VIEW CORRIDOR STUDY



Existing View
Queens Quay and
Dockside Drive

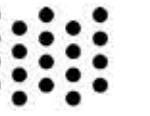
VIEW CORRIDOR STUDY



Proposed View
Queens Quay and
Dockside Drive

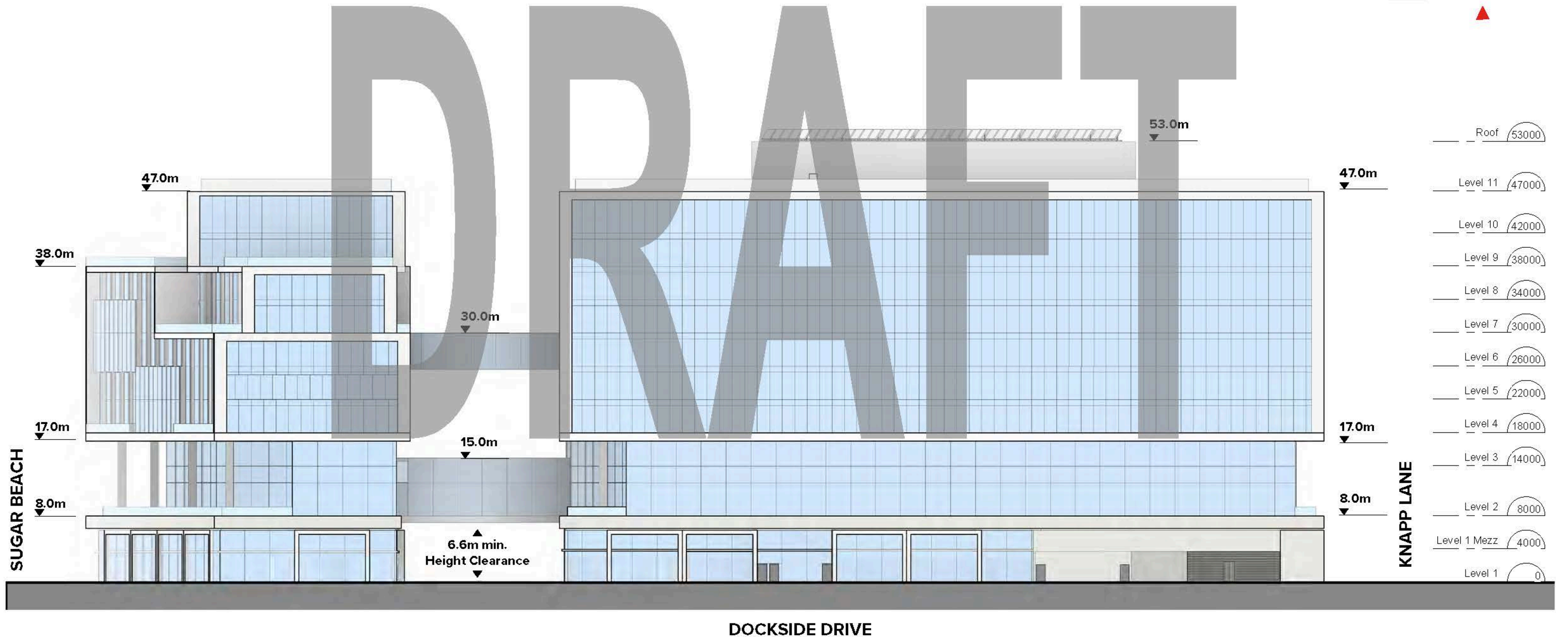
ELEVATIONS

South Elevation at Dockside Drive



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



ELEVATIONS

North Elevation at Queens Quay East



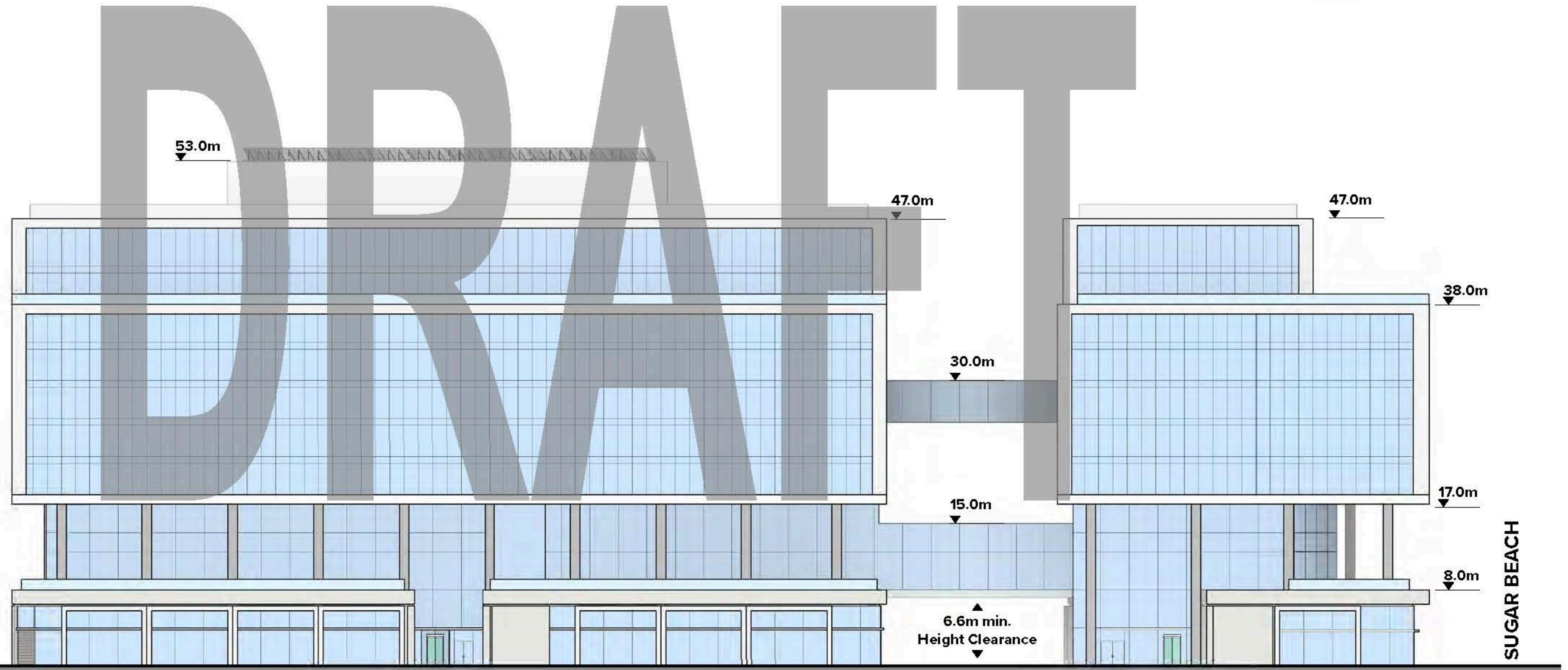
WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



- 53000 Roof
- 47000 Level 11
- 42000 Level 10
- 38000 Level 9
- 34000 Level 8
- 30000 Level 7
- 26000 Level 6
- 22000 Level 5
- 18000 Level 4
- 14000 Level 3
- 8000 Level 2
- 4000 Level 1 Mezz
- 0 Level 1

KNAPP LANE

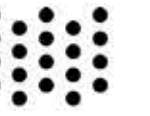


SUGAR BEACH

QUEENS QUAY EAST

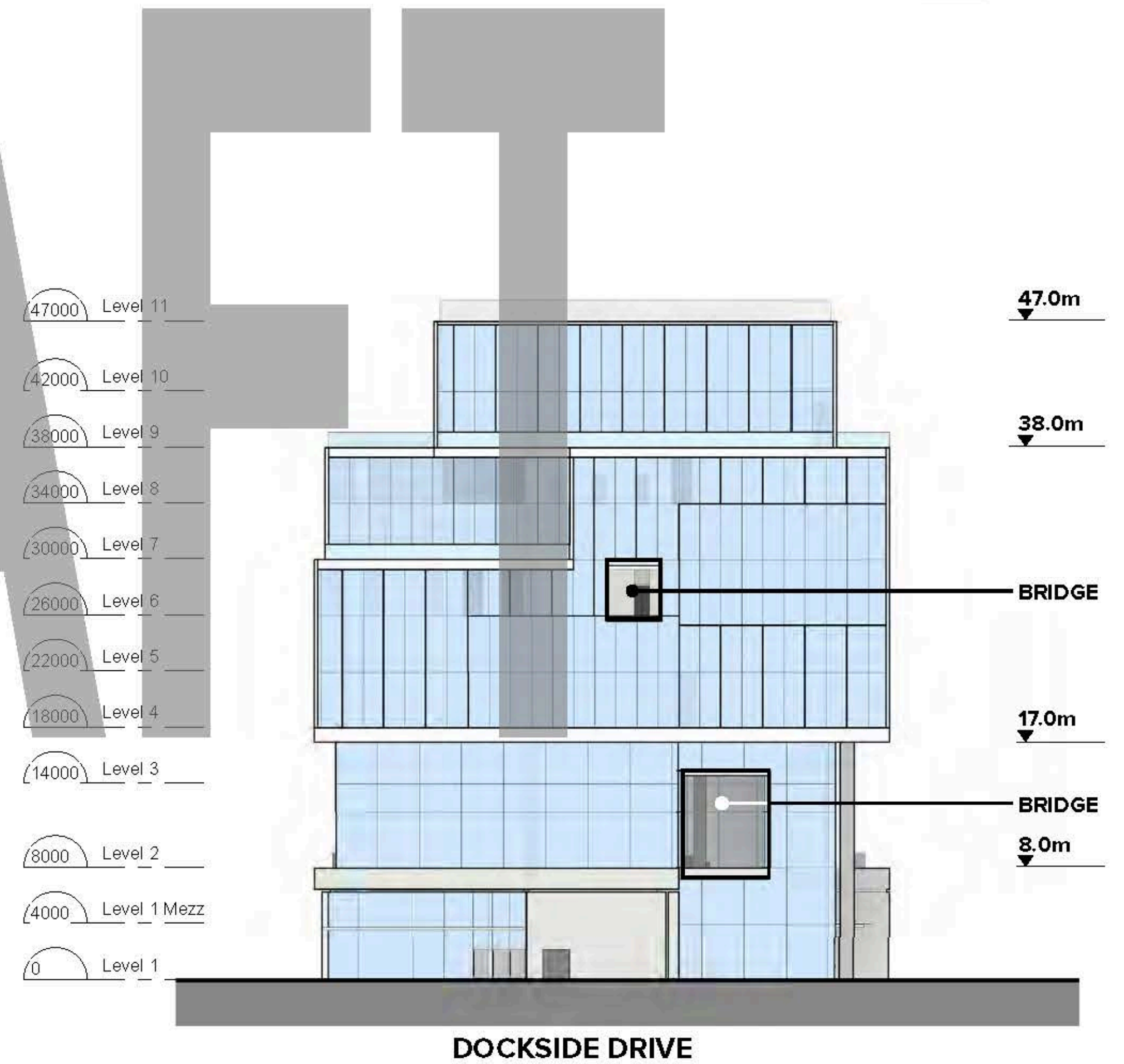
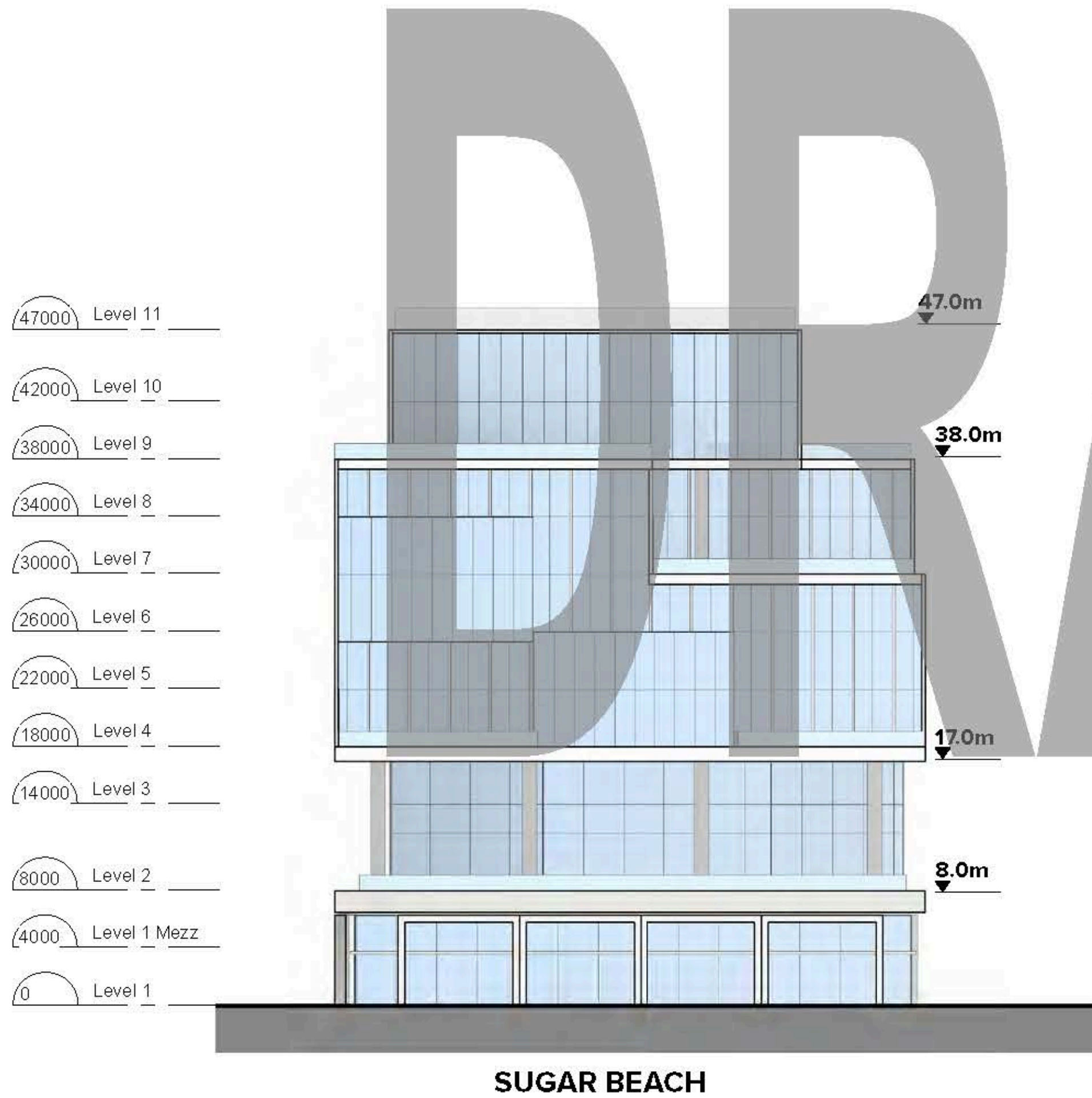
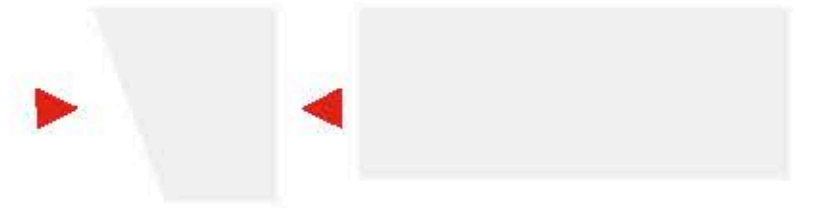
ELEVATIONS - BLOCK 1

West and East Elevation



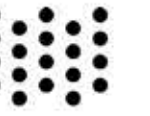
WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



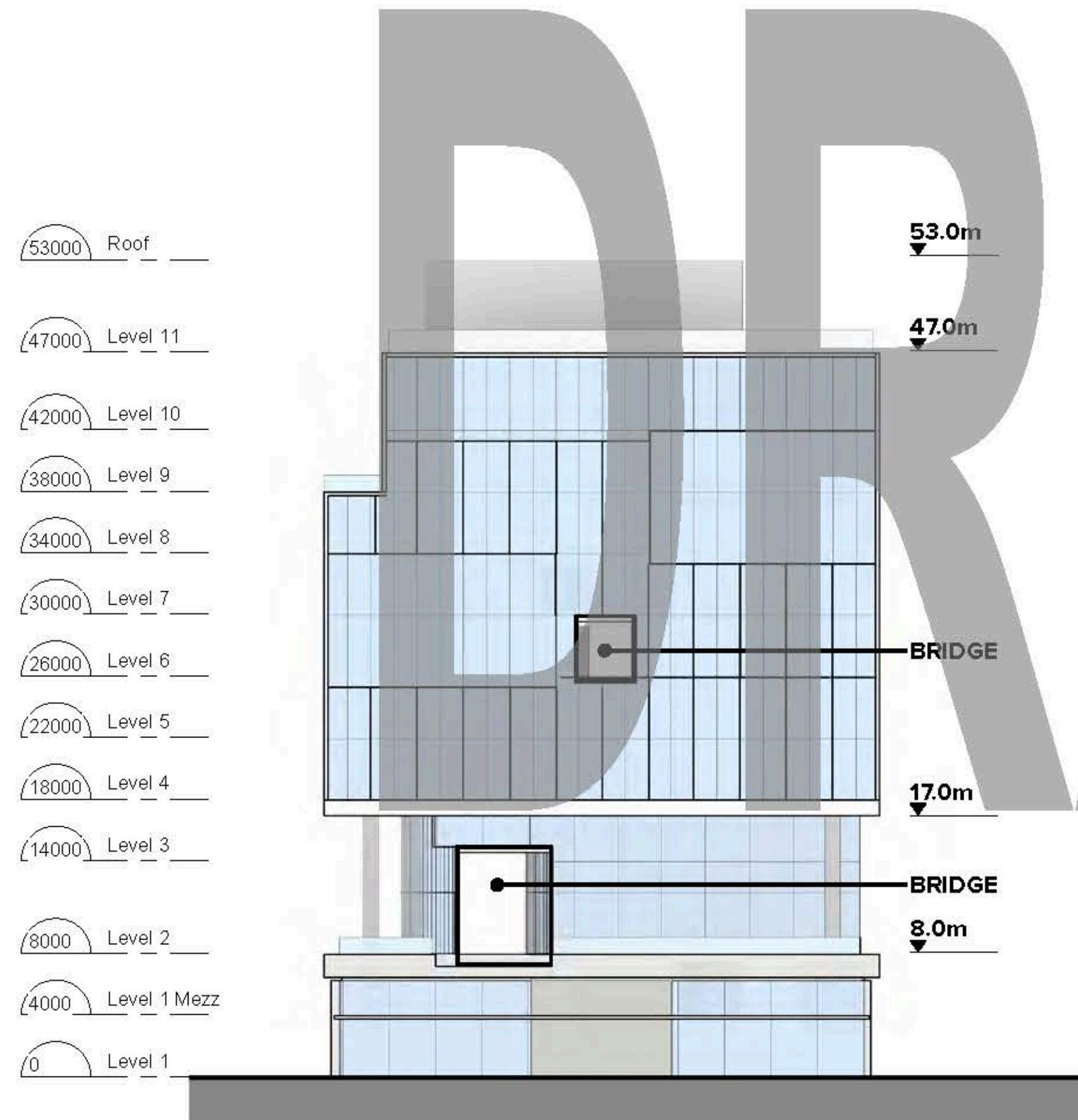
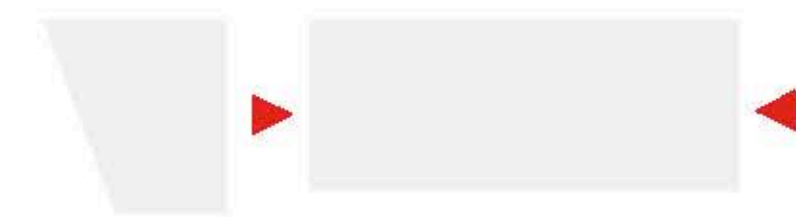
ELEVATIONS - BLOCK 2

West and East Elevation

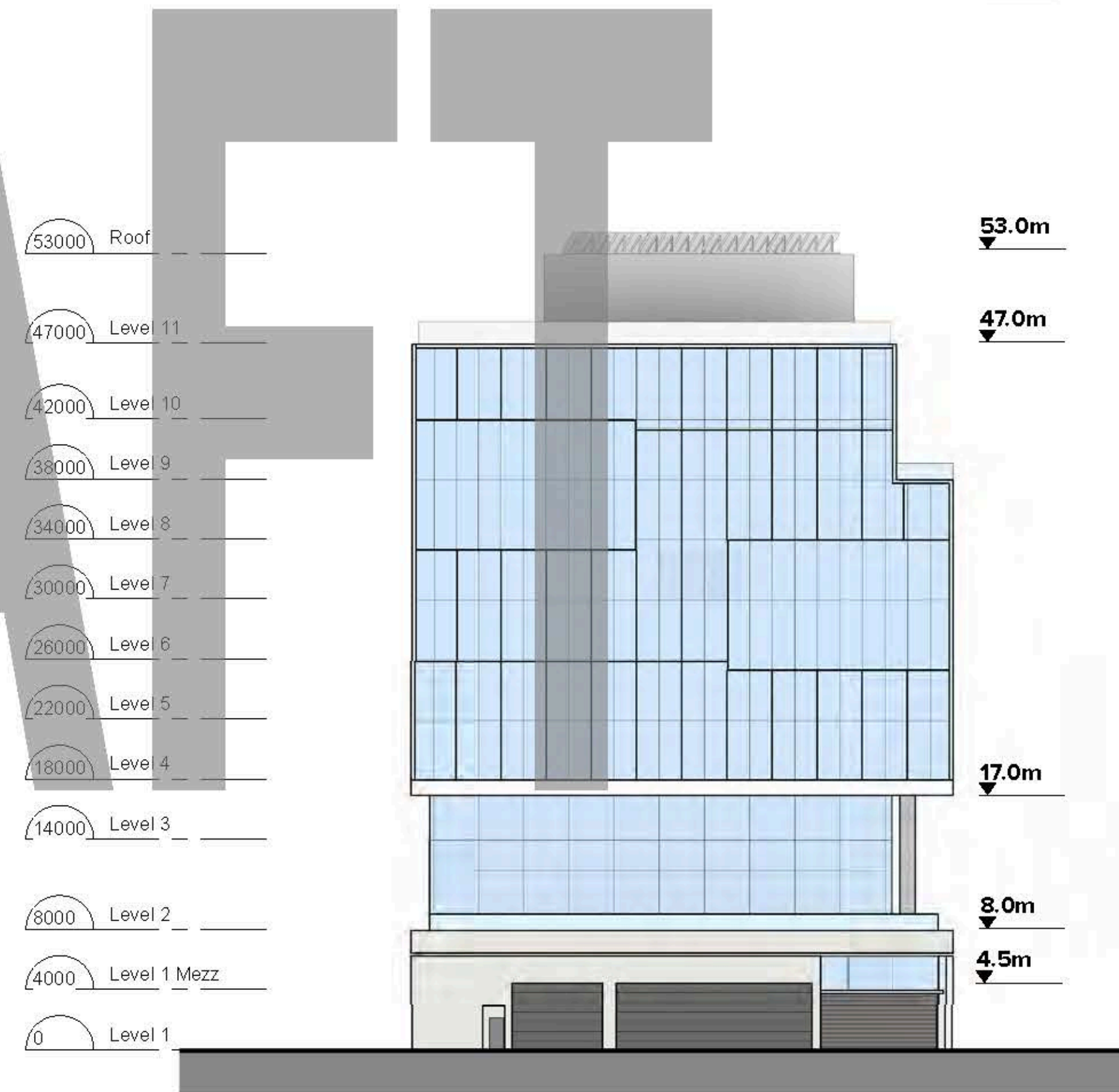


WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



DOCKSIDE DRIVE



KNAPP LANE

SUSTAINABILITY

Minimum Green Building Requirements (MGBR)

LEED	<ul style="list-style-type: none"> LEED v.4 BD+C (Core & Shell) - Gold 	District Energy	<ul style="list-style-type: none"> Under Review
Smart Building	<ul style="list-style-type: none"> Infrastructure to support WTIC network Base building & tenant M&V Plan MGBR data reporting commitment 	Community Integration	<ul style="list-style-type: none"> Seamless integration of urban design elements, landscaping and materials consistent with Queens Quay Revitalization Direct or close access to Sugar Beach, Martin Goodman Trail, and Sherbourne Common with easily accessible bike parking facilities and public washrooms Retail interface and pedestrian-scaled street animation to all adjacent major public roads and Sugar Beach Primary building entrances on both Block 1 and 2 facilitating access from both the east and west Respecting existing view corridors south towards the water with light and transparent linkages
Electric Vehicles Infrastructure	<ul style="list-style-type: none"> 2% EV provision (min.) & supporting infrastructure EV-Ready rough-in to remaining stalls Allowance for future EV infrastructure upgrades 	Long-term Flexibility	<ul style="list-style-type: none"> Slab & column structure; live load capacity @ 4.8kPa (min.) Typical slab to slab > 2.75m clear Ground floor slab to slab > 7.0m clear
Green Roof	<ul style="list-style-type: none"> Block 1 - Green Roof w/ Rooftop Renewable Energy Production Block 2 - Rooftop Renewable Energy Production 	Progress Tracking System	<ul style="list-style-type: none"> Future reporting as per MGBR Reporting requirements
Engagement and Support	<ul style="list-style-type: none"> Base building & tenant O&M manual Tenant Design & Construction Guidelines Green Building Education, Green Cleaning, and Green Team 		
Bicycle Parking & Storage	<ul style="list-style-type: none"> Bicycle parking & storage ≥ TGS Tier 1 		
Waste Management	<ul style="list-style-type: none"> Segregated waste disposal and HHW bins, including batteries and e-waste 		
High Efficiency Appliances	<ul style="list-style-type: none"> All appliances to be Energy Star compliant (where applicable) 		

SUSTAINABILITY

Minimum Green Building Requirements (MGBR)

Integrated Design Process (IDP)

Our Approach:

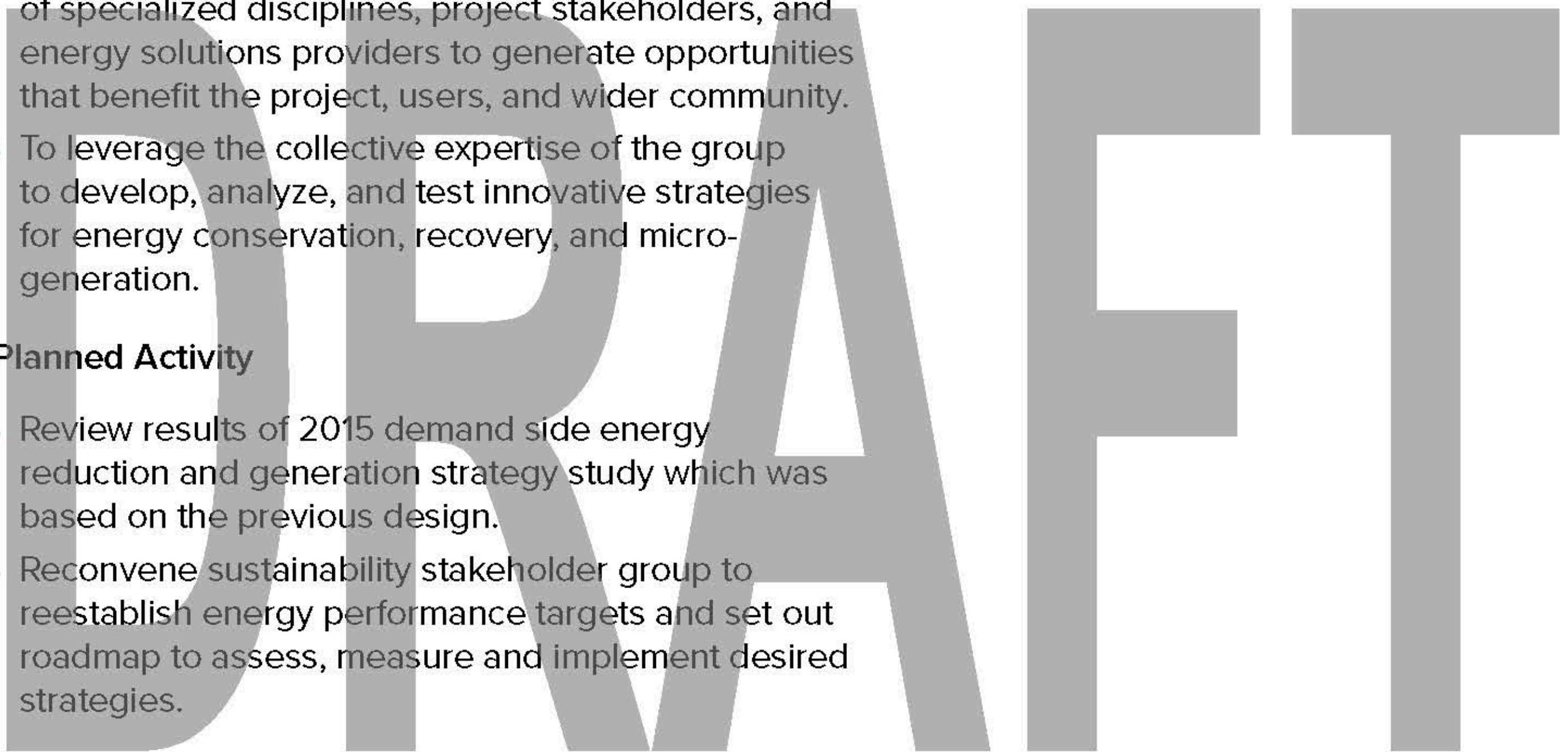
- To create and continue to develop a working group of specialized disciplines, project stakeholders, and energy solutions providers to generate opportunities that benefit the project, users, and wider community.
- To leverage the collective expertise of the group to develop, analyze, and test innovative strategies for energy conservation, recovery, and micro-generation.

Planned Activity

- Review results of 2015 demand side energy reduction and generation strategy study which was based on the previous design.
- Reconvene sustainability stakeholder group to reestablish energy performance targets and set out roadmap to assess, measure and implement desired strategies.

Expected Outcome:

- Development and integration of building envelope and services equipment performance specifications.
- Revised energy model.



SUSTAINABILITY



LEED v.4 BD+C (Core & Shell) - Gold

Location & Transportation

- Brownfield remediation
- Access to bike network, storage and change facilities
- Bicycle infrastructure
- 2% EV provision (min.) & supporting infrastructure

Sustainable Sites

- Enhanced control of storm water with reduced contaminants
- High-albedo surface material and/or green roof to all roof areas
- Tenant Design & Construction Guidelines
- Light pollution reduction

Water Efficiency

- Rainwater harvesting to reduce water use for irrigation and WCs
- Low-flow & flush plumbing fixtures
- Individual metering to selected water subsystems

Energy & Atmosphere

- Enhanced commissioning
- High performance building envelope
- Underfloor heating and high efficiency mechanical systems
- PV array
- Regenerative braking elevators
- LED Lighting & Daylight Harvesting
- Energy metering for base building & individual tenants

Materials and Resources

- Construction Waste Management
- Responsible material selection

Indoor Environment Quality

- Entryway system installed at all entrances
- CO2 monitoring
- 75% day-lit floor areas
- Low emitting materials

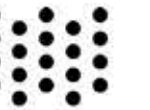
Under consideration:

- Ground Source Heat Pump (GSHP)
- Low-temperature Perimeter Heating
- Capture stratified heat for perimeter heating
- Replace air-side cooling with Radiant Cooling or Chilled Beam
- Consolidate storm and groundwater collection and reuse across Blocks 1 & 2
- Switchable Glass
- Automatic Interior Shading (Automatic Blinds)
- Room-side Low-E Coatings
- Vacuum Insulated Panel (VIP) Spandrel
- Building Life-Cycle Assessment
- Envelope Commissioning

SUSTAINABILITY



LEED v.4 BD+C (Core & Shell) - Gold



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



LEED v4 for BD+C: Core and Shell

Preliminary Project Assessment
Project Name: Waterfront Innovation Centre
Date: 15/01/2018

Y ? N

1 Credit Integrative Process 1

14 6 0 Location and Transportation 20

20	Credit	LEED for Neighborhood Development Location*	20	
2	Credit	Sensitive Land Protection	2	
3	Credit	High Priority Site	3	
6	Credit	Surrounding Density and Diverse Uses	6	
1	5	Credit	Access to Quality Transit	6
1		Credit	Bicycle Facilities	1
1		Credit	Reduced Parking Footprint	1
1		Credit	Green Vehicles	1

* Other points under Location and Transportation cannot be achieved if LEED ND points are achieved

5 5 1 Sustainable Sites 11

	Prereq	Construction Activity Pollution Prevention	Required	
1	Credit	Site Assessment	1	
1	1	Credit	Site Development - Protect or Restore Habitat	2
1		Credit	Open Space	1
2	1	Credit	Rainwater Management	3
1	1	Credit	Heat Island Reduction	2
1		Credit	Light Pollution Reduction	1
1		Credit	Tenant Design and Construction Guidelines	1

4 6 1 Water Efficiency 11

	Prereq	Outdoor Water Use Reduction	Required		
	Prereq	Indoor Water Use Reduction	Required		
	Prereq	Building-Level Water Metering	Required		
1	1	Credit	Outdoor Water Use Reduction	2	
2	3	1	Credit	Indoor Water Use Reduction	6
2		Credit	Cooling Tower Water Use	2	
1		Credit	Water Metering	1	

21 7 5 Energy and Atmosphere 33

	Prereq	Fundamental Commissioning and Verification	Required		
	Prereq	Minimum Energy Performance	Required		
	Prereq	Building-Level Energy Metering	Required		
	Prereq	Fundamental Refrigerant Management	Required		
4	2	Credit	Enhanced Commissioning	6	
12	2	4	Credit	Optimize Energy Performance	18
1		Credit	Advanced Energy Metering	1	
2		Credit	Demand Response	2	
3		Credit	Renewable Energy Production	3	
1		Credit	Enhanced Refrigerant Management	1	
1	1	Credit	Green Power and Carbon Offsets	2	

5 5 5 Materials and Resources 14

	Prereq	Storage and Collection of Recyclables	Required		
	Prereq	Construction and Demolition Waste Management Planning	Required		
3	3	Credit	Building Life-Cycle Impact Reduction	6	
1	1	Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2	
1	1	1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1	1	1	Credit	Building Product Disclosure and Optimization - Material Ingredients	2
2		Credit	Construction and Demolition Waste Management	2	

5 5 0 Indoor Environmental Quality 10

	Prereq	Minimum Indoor Air Quality Performance	Required	
	Prereq	Environmental Tobacco Smoke Control	Required	
1	1	Credit	Enhanced Indoor Air Quality Strategies	2
2	1	Credit	Low-Emitting Materials	3
1		Credit	Construction Indoor Air Quality Management Plan	1
1	2	Credit	Daylight	3
1	1	Credit	Quality Views	1

4 2 0 Innovation 6

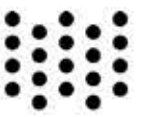
3	2	Credit	Innovation	5
1		Credit	LEED Accredited Professional	1

3 1 0 Regional Priority 4

1		Credit	Regional Priority: High Priority Site (min. 2 pts)	1
1		Credit	Regional Priority: Rainwater Management (min. 2 pts)	1
1		Credit	Regional Priority: Optimize Energy Performance (min. 10 pts.)	1
1	1	Credit	Regional Priority: Indoor Water Use Reduction (min. 4 pts.)	1

62 37 12 TOTALS Possible Points: 110

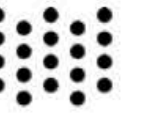
Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

View
Northwest corner
towards Sugar Beach

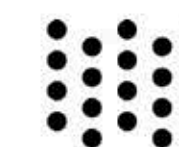


WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



View
Southwest Corner
looking north

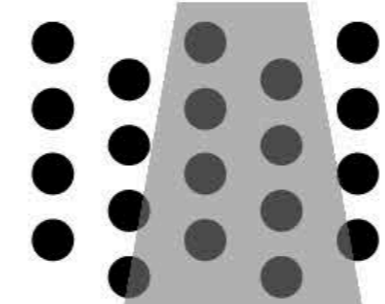


WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

Q+A

DRAFT

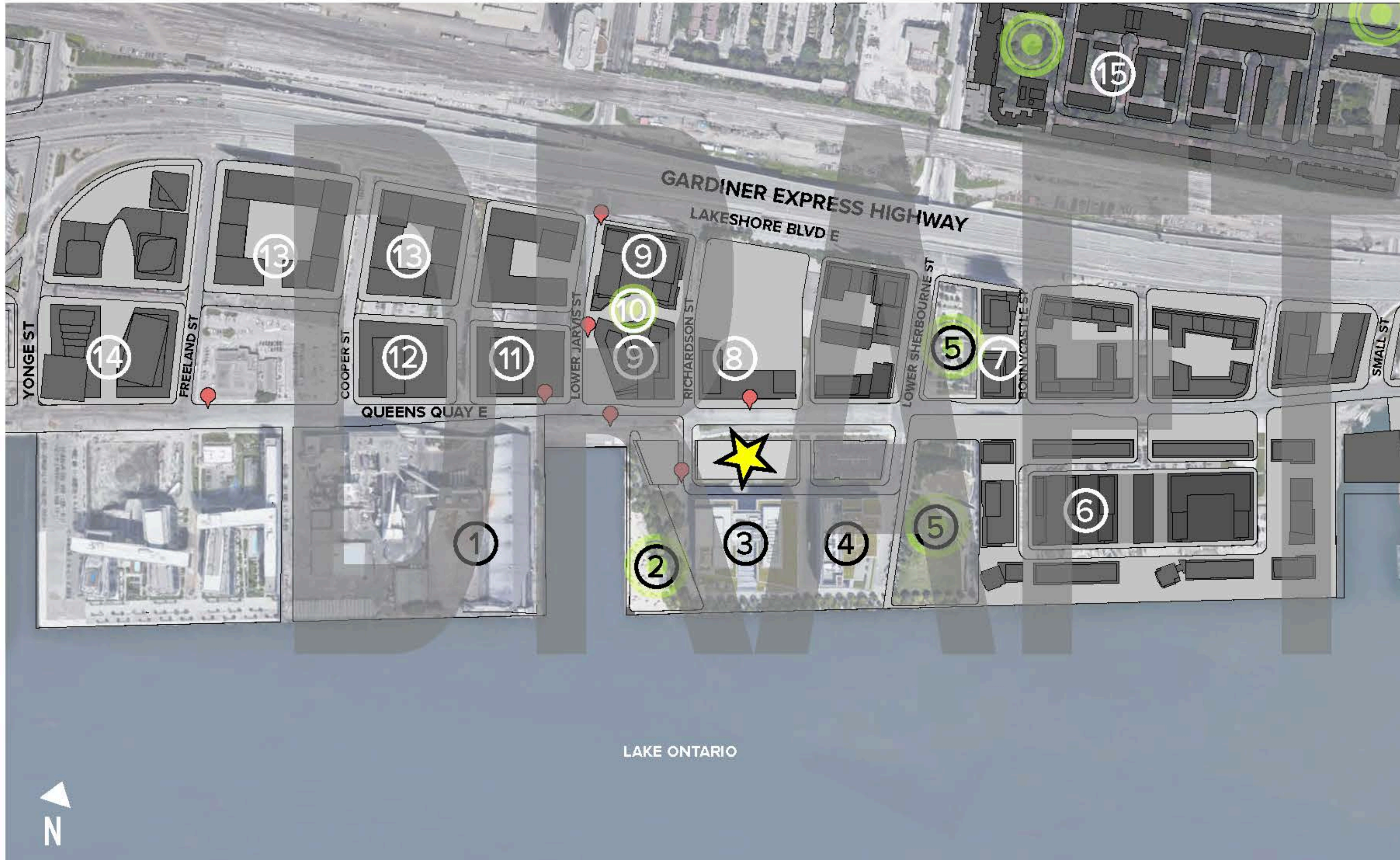


WATERFRONT
INNOVATION CENTRE

125 Queens Quay East

APPENDIX

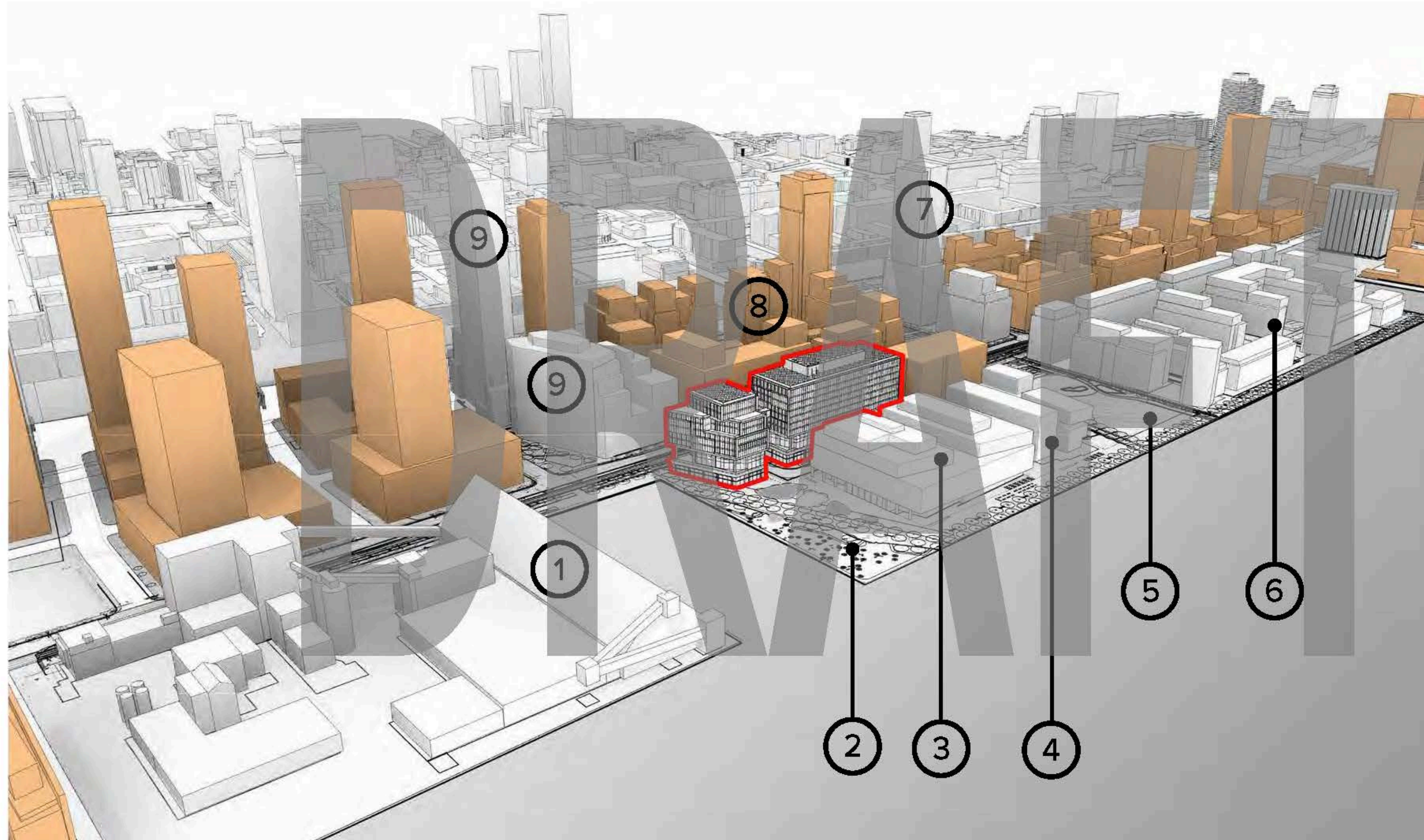
SITE CONTEXT






1. Redpath Sugar Factory
2. Sugar Beach Park
3. George Brown College
4. Corus Quay
5. Sherbourne Common Park
6. Bayside Developments
7. Monde Condominium
8. Lakeside Residences
9. Daniel's Waterfront I & II
10. The Yard Park
11. Loblaws Market
12. LCBO Tower
13. LCBO Blocks
14. Pinnacle One Yonge
15. Quayside Developments

-  WIC PROJECT SITE
-  TRANSIT STOP
-  PARK

FUTURE DENSITY ON QUEENS QUAY

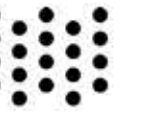


1. Redpath Sugar Factory
2. Sugar Beach Park
3. George Brown College
4. Corus Quay
5. Sherbourne Common Park
6. Bayside Developments
7. Monde Condominium
8. Lakeside Residences
9. Daniel's Waterfront I & II

-  EXISTING & UNDER CONSTRUCTION
-  FUTURE DEVELOPMENTS
-  PROPOSED PROJECT

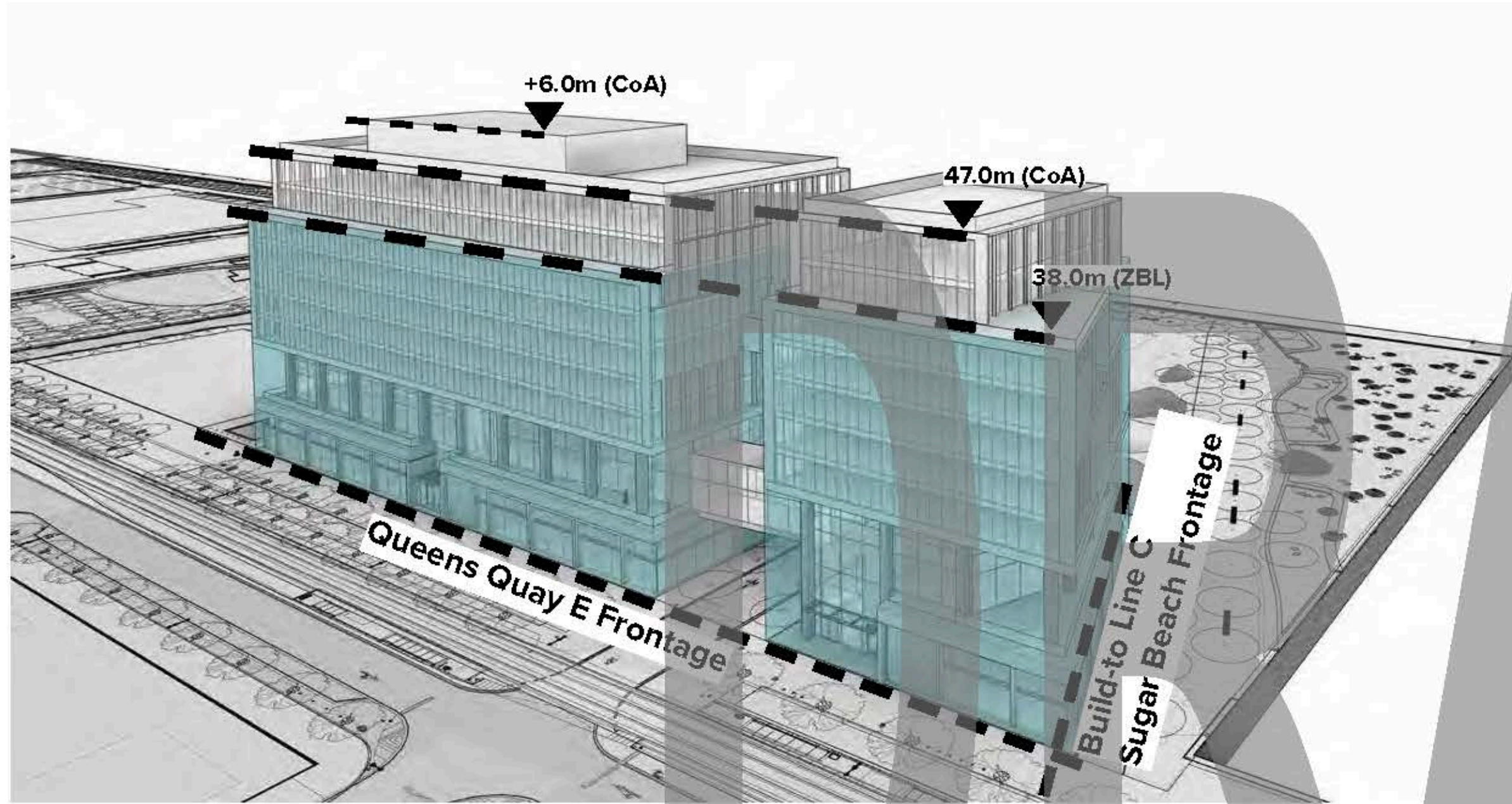
View Looking Northeast

ZONING

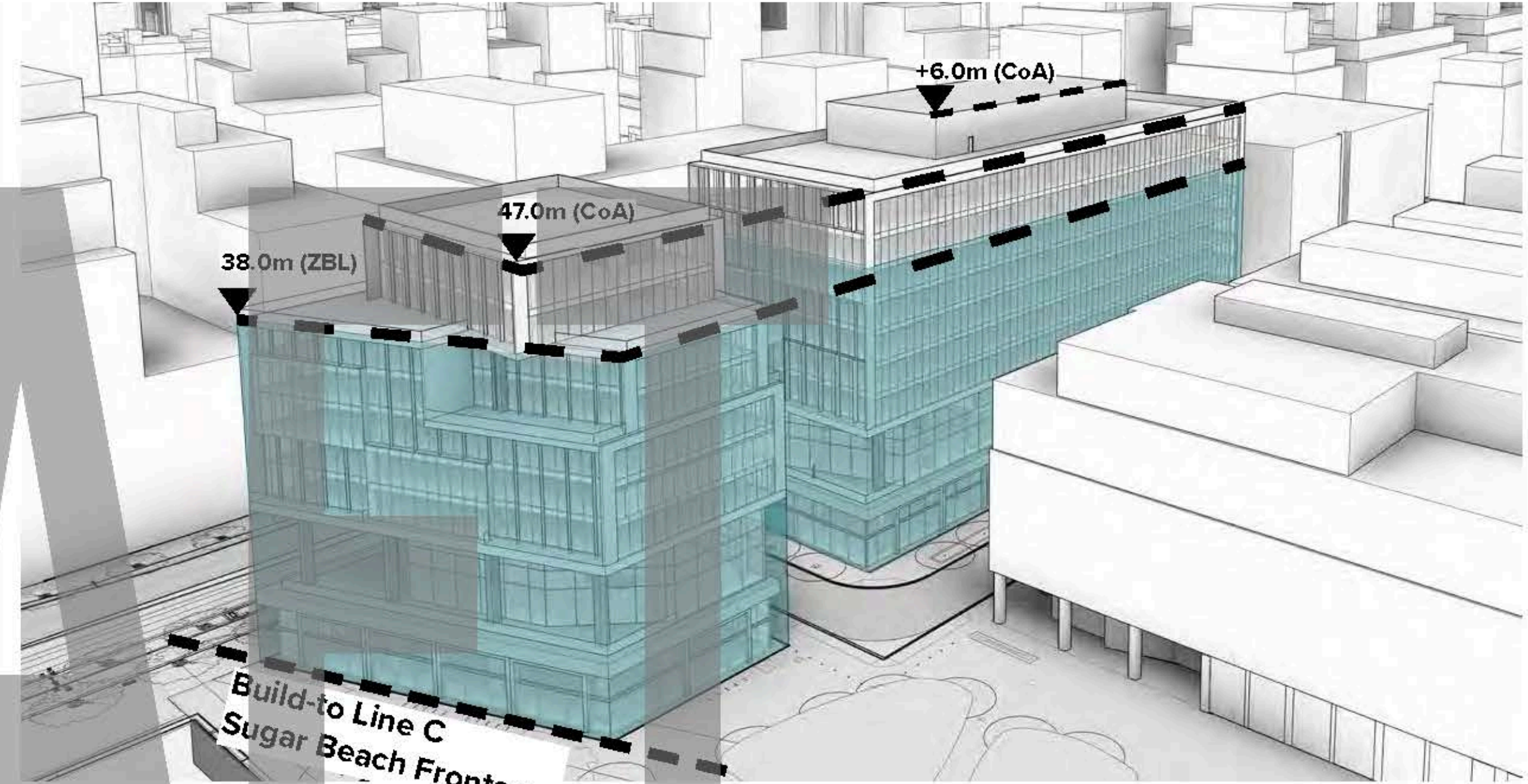


WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



North Side



South Side

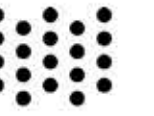
 ZONING ENVELOPE

Committee of Adjustment
Minor Variance Approval

File No.: A0851/16TEY
Zoning: CR 9(h) Site Specific Bylaw 1049-2006 (ZPR)
Date: November 16, 2016

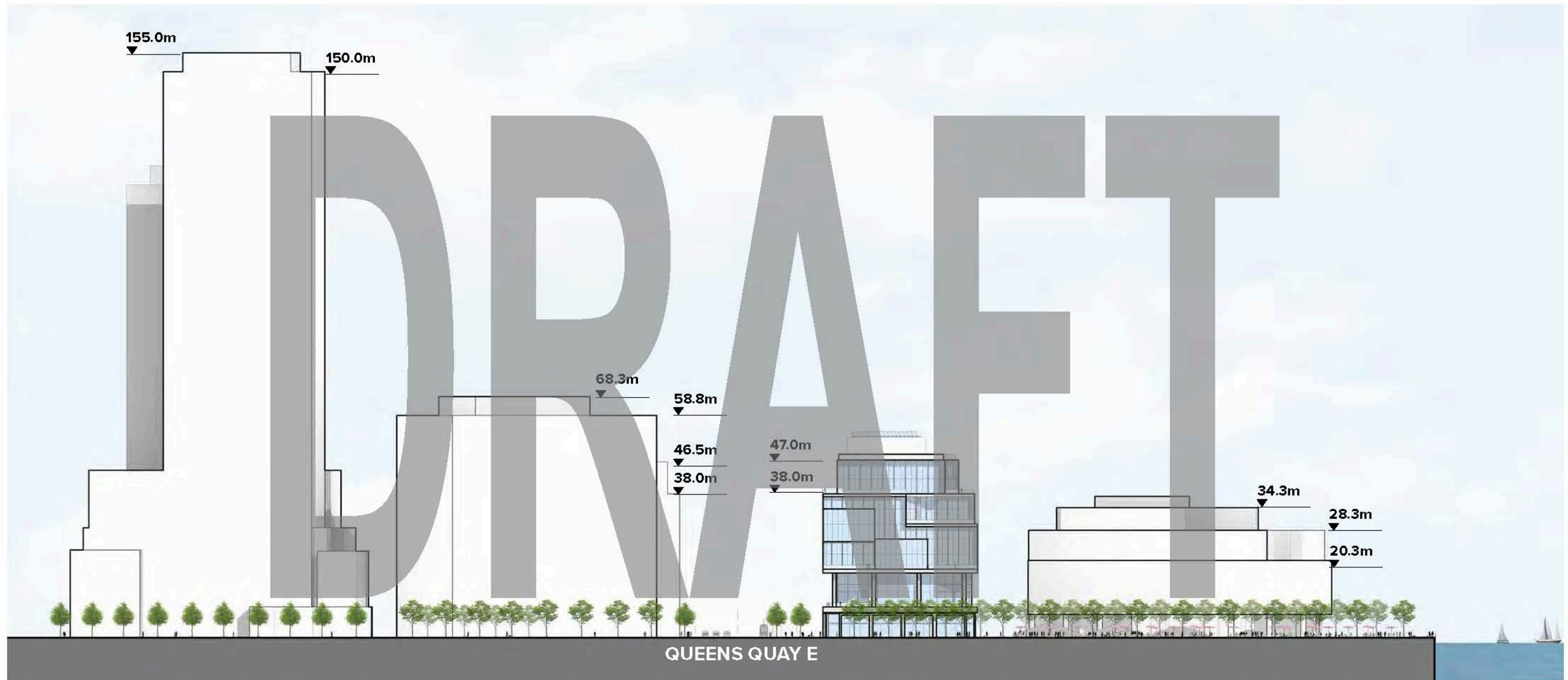
1. Maximum Building Height 47.0m + 6m MPH
2. No colonnade required along Queens Quay and Sugar Beach Frontage
3. Building may be set back more than 0.1m from Build-to Line C
4. Loading provisions (min. 2 of Type "C")
5. Adjustment to bike parking dimensions

HEIGHT TRANSITION



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



143-177 LAKESHORE
BOULEVARD EAST

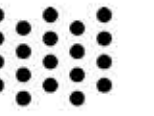
130-132 QUEENS QUAY
EAST

WATERFRONT
INNOVATION CENTRE

SUGAR BEACH PARK
(CORUS QUAY BEYOND)

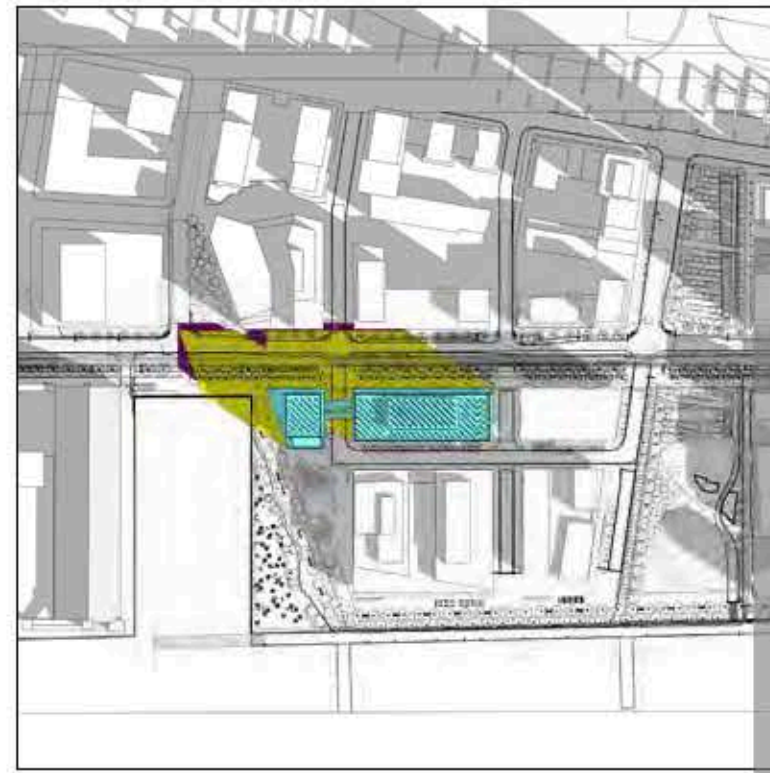
SHADOW STUDIES

Spring / Fall Equinox



WATERFRONT
INNOVATION CENTRE

125 Queens Quay East



9:18 AM



10:18 AM



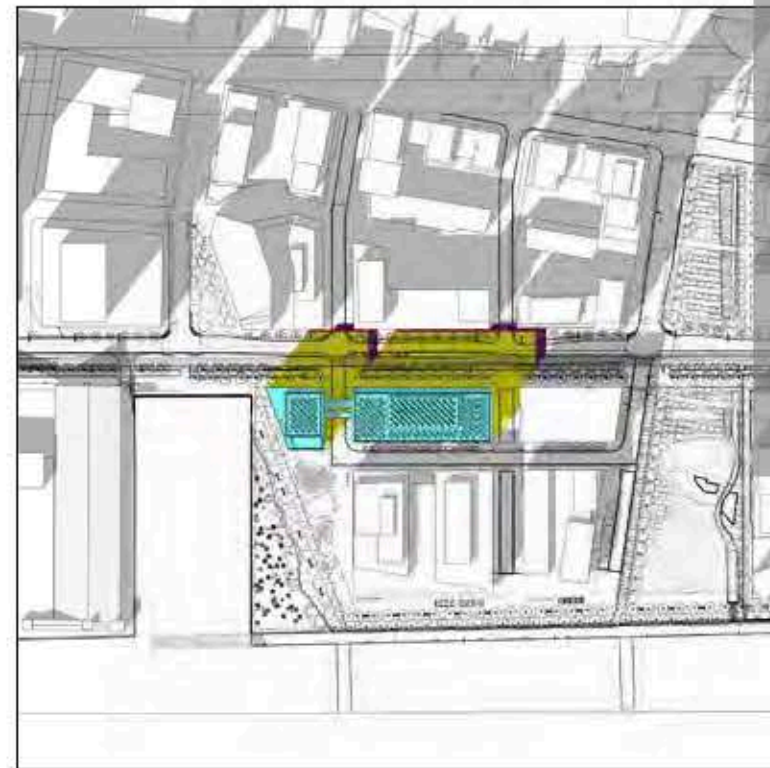
11:18 AM



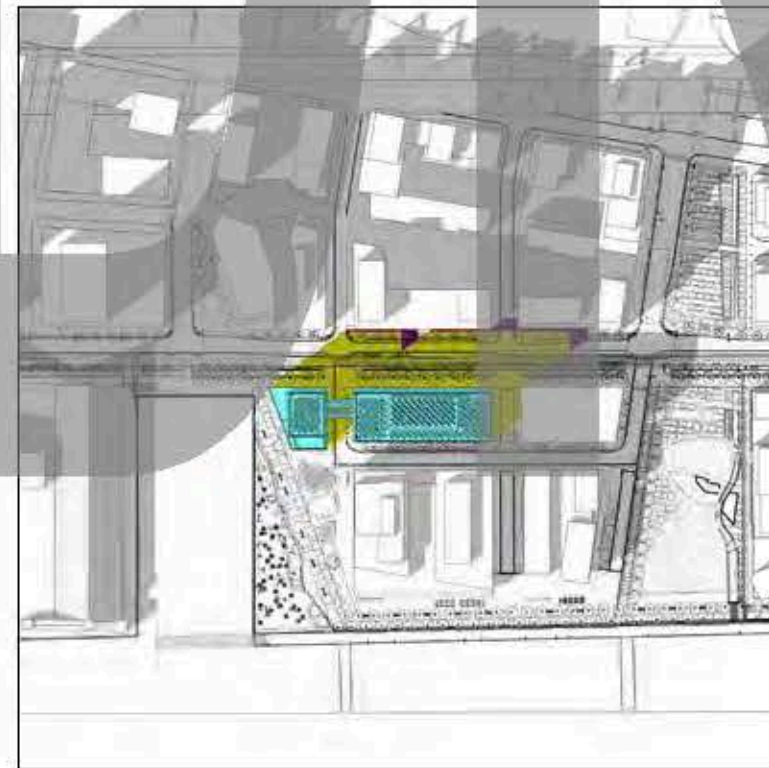
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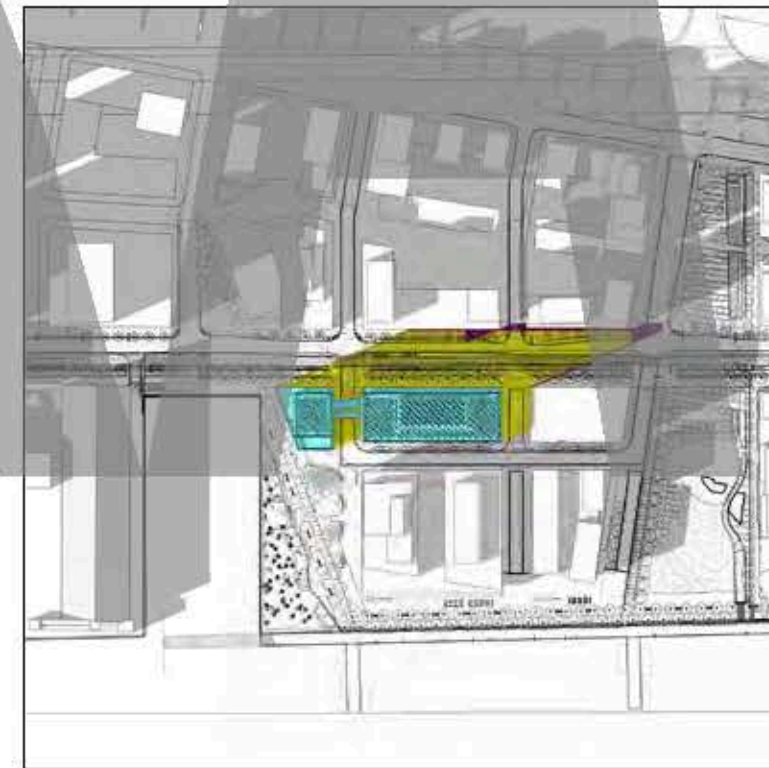
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3:18 PM



4:18 PM



5:18 PM



6:18 PM



PROPOSED BUILDING

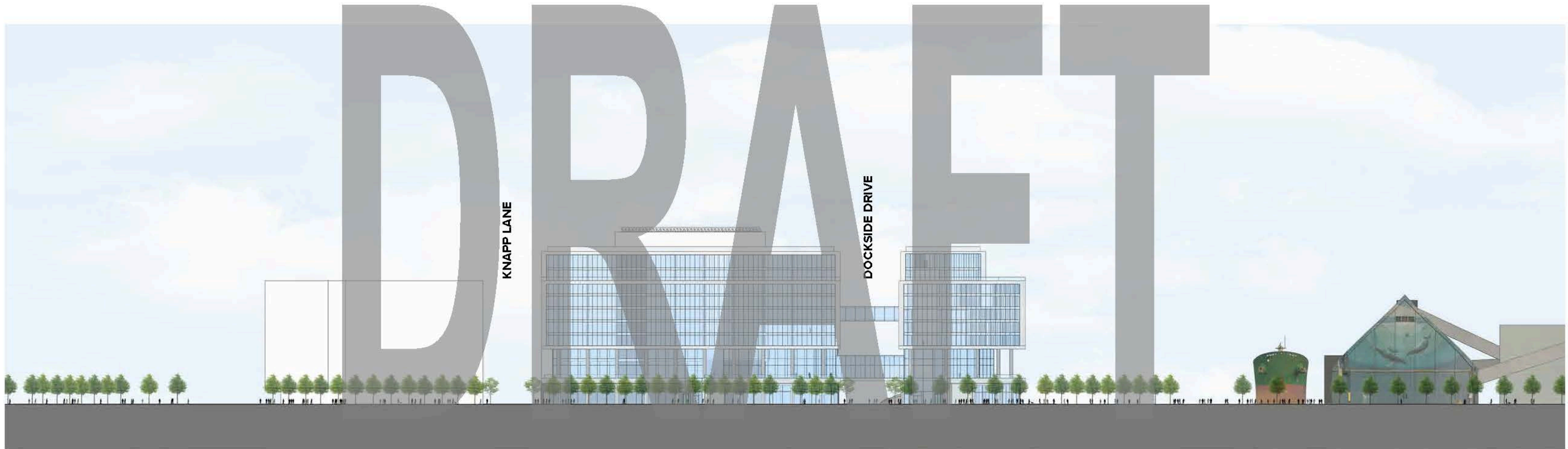


AS-OF-RIGHT SHADOW



PROPOSED BUILDING SHADOW

STREET ELEVATION



SHERBOURNE
COMMON

GEORGE BROWN
COLLEGE
(THE ARBOUR)

WATERFRONT
INNOVATION CENTRE
(BLOCK 2)

WATERFRONT
INNOVATION CENTRE
(BLOCK 1)

JARVIS SLIP/
SUGAR BEACH
PARK

REDPATH SUGAR
FACTORY

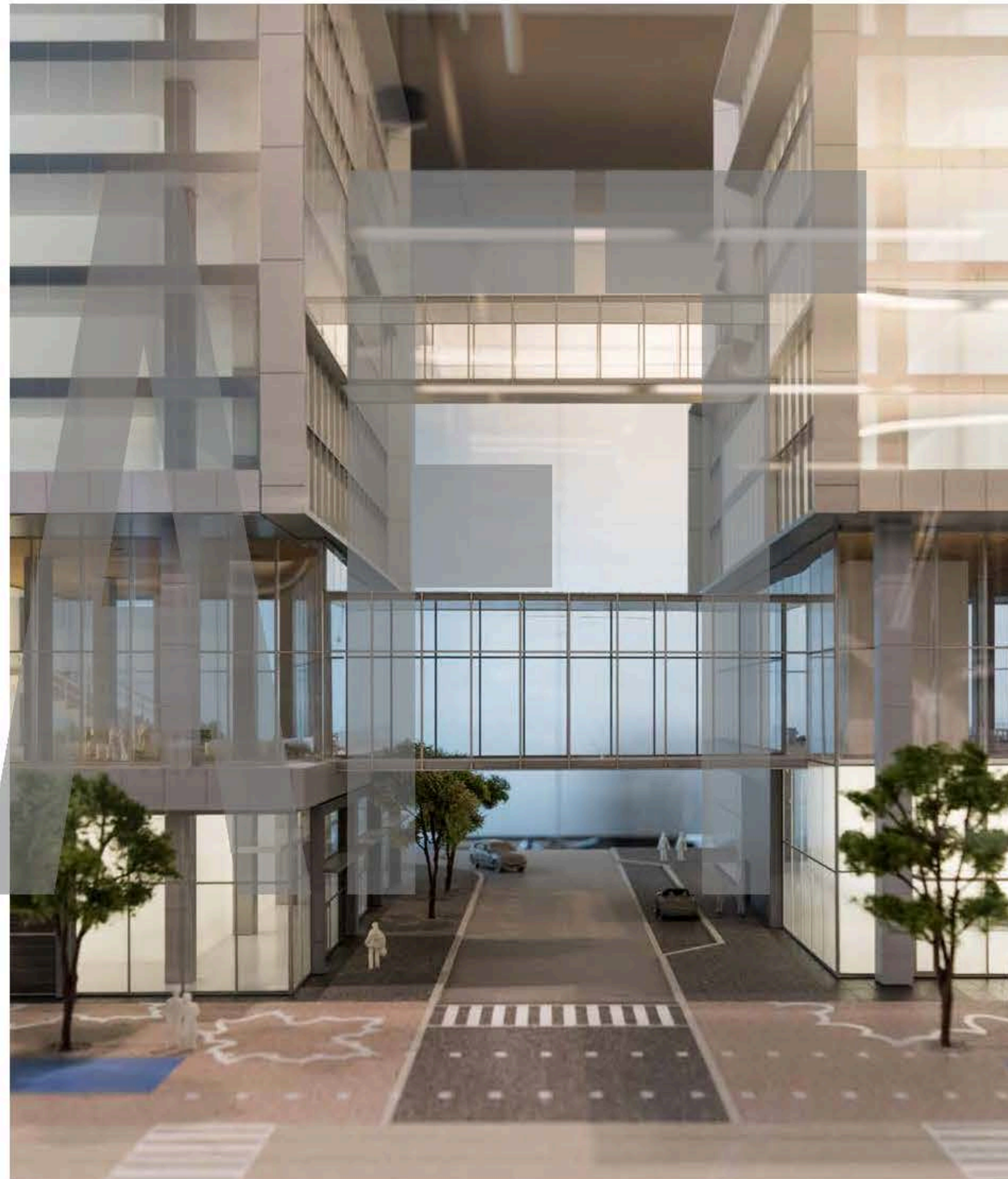
MODEL PHOTOGRAPHS



Facade along Queens Quay East



Detailed View - Block 1 Entrance



Detailed View South - Bridge across Dockside Drive

MODEL PHOTOGRAPHS



Detailed View North - Bridge across Dockside Drive



Detailed View of Lobby overlooking Sugar Beach



Detailed View - North Facade Along Queens Quay East

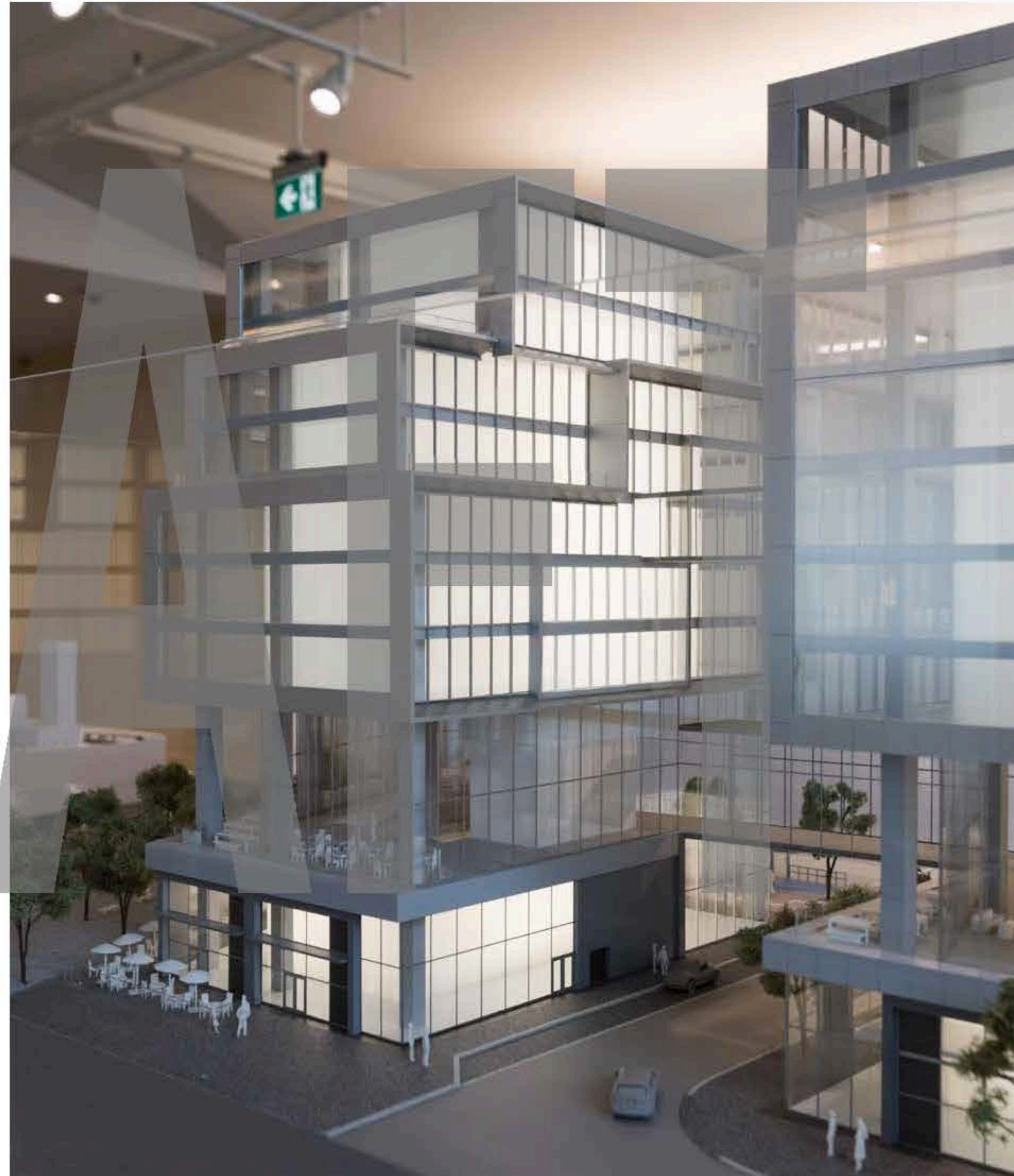
MODEL PHOTOGRAPHS



Southwest Corner facing Sugar Beach



Detailed View of Lobby & Retail facing Sugar Beach



Detailed View of South & East Facades of Block 1