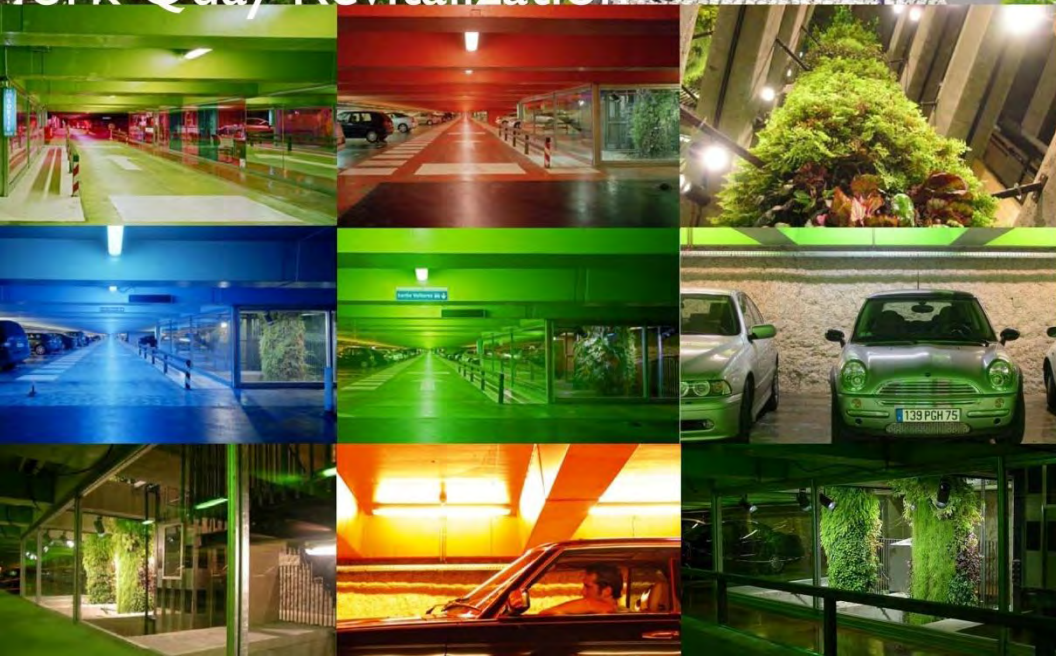
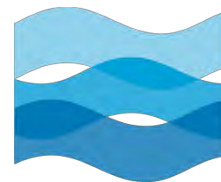




York Quay Revitalization



Stakeholder Meeting #2
January 12, 2010



WATERFRONTToronto

Harbourfront centre

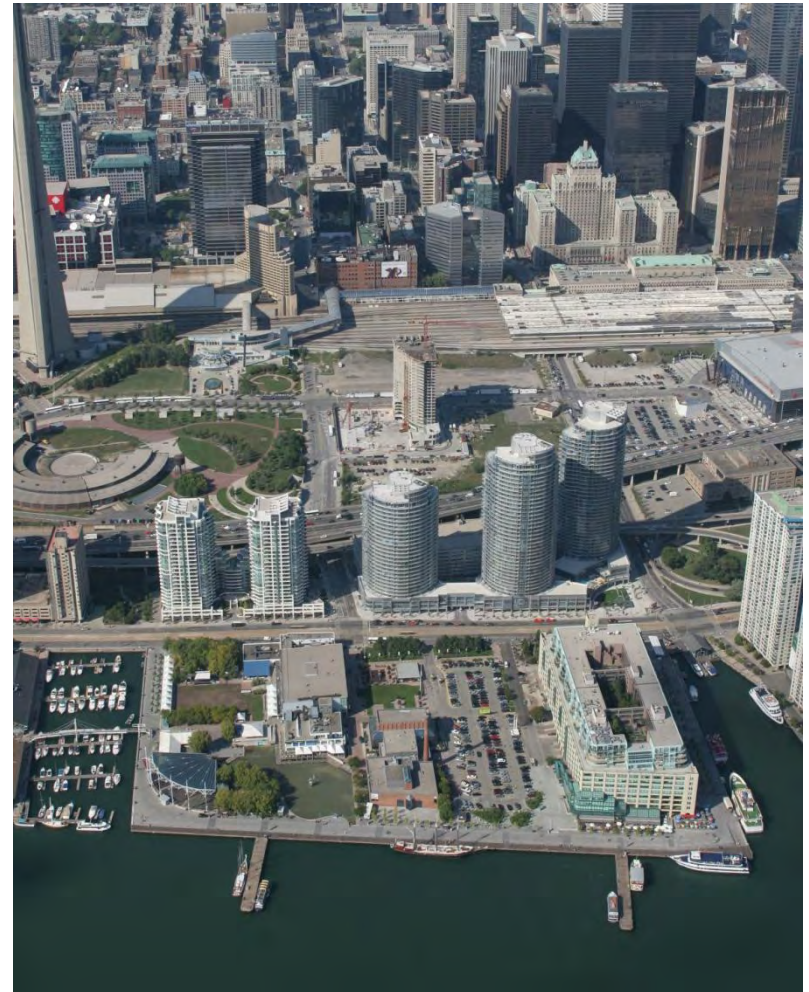
Primary Site

- 1.4 hectares (3.5 acres)
- Surface parking managed by Harbourfront Centre (HFC)
 - 212 car capacity
 - \$1.2 million annual revenue
- Surface area owned by City of Toronto and leased to HFC on a long term lease.
- Sub-surface is owned by the Federal Government
- Zoned as park land (G)



Feasibility Study, 2008

- Federal capital funding of \$25 million had been committed to generate a more stable revenue stream
- Tested the feasibility of the 2000 Harbourfront Centre master plan in the context of the 2006 Central Waterfront master plan
- The goal was to evaluate;
 - a) Urban design,
 - b) Programming, and
 - c) Financial feasibility of replacing 3.5 acres of surface parking with a vibrant mixed-use urban park and cultural and retail cluster on top of a new underground parking garage.



Vision

The York Quay Project will be a vibrant waterfront destination located at the physical and cultural apex of Toronto's Waterfront. Harbourfront Centre embodies, like no other institution, the diversity of the city and the mosaic of creative energy that is Toronto.

- Design components for the York Quay Project could include:
 - a) A *Cultural Village* incorporating retail and cultural uses;
 - b) Two major public squares and public circulation areas;
 - c) Underground parking garage;
 - d) Improvements on current cultural facilities.

Components

Cultural Village

The Cultural Village is a “village-like” fabric of culturally diverse retail and cultural uses adjoining the two major public squares.

Public Squares

Urban Square facing Queens Quay Boulevard
Canada Square facing the lake

Underground Parking Garage

Approximately 300 stall garage that will replace the current surface lot

Cultural Facilities improvements

Improvements to the exterior of the Power Plant, Enwave Theatre, and Sirius Stage area

Cultural Village

The Cultural Village is composed of two primary public squares and is a “village-like” fabric of culturally diverse retail and cultural uses.



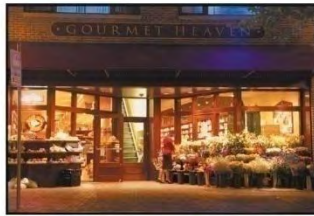
Impression
View over principle square and cultural village looking
south towards the Lake

Conceptual Image





Cultural Village
Retail Character



Framework Plan 2009


- 1 Canada Square
- 2 Cultural Village "Retail/Studio/Commercial" Space
- 3 Underground parking garage (approx. 300 stalls)
- 4 Urban Square
- 5 Ramp to below-grade parking and potential street-related retail
- 6 Future Cultural Uses



York Quay Revitalization Project components

- Phase 1 - York Quay Promenade (Completed 2005)
- ▣ Phase 2 - Underground parking garage (approximately 300 stalls), lake-facing square (Canada Square), and re-zoning for future phases
- Future Phases - Retail/Commercial/Studio Space (Cultural Village) and urban square





*What we've been doing
since September 16th, 2009*

Committee of Adjustment, Minor Variance Application

November 4th, 2009

- **PURPOSE OF THE APPLICATION:** *To relocate the surface parking spaces to an underground parking garage.*
- **REQUESTED VARIANCE(S) TO THE ZONING BY-LAW:** *Section 8(a) and Section 9(c), Zoning By-law 289-93 An underground parking garage is not listed as a permitted use.*
- *It was the decision of the Committee of Adjustment to approve the variance application for the following reasons:*
 - *The general intent and purpose of the Official Plan is maintained.*
 - *The general intent and purpose of the Zoning By-law is maintained.*
 - *The variance(s) is considered desirable for the appropriate development of the land.*
 - *In the opinion of the Committee, the variance(s) is minor.*



MVVA Selected as design lead for the YORK QUAY REVITALIZATION PROJECT – Phase II

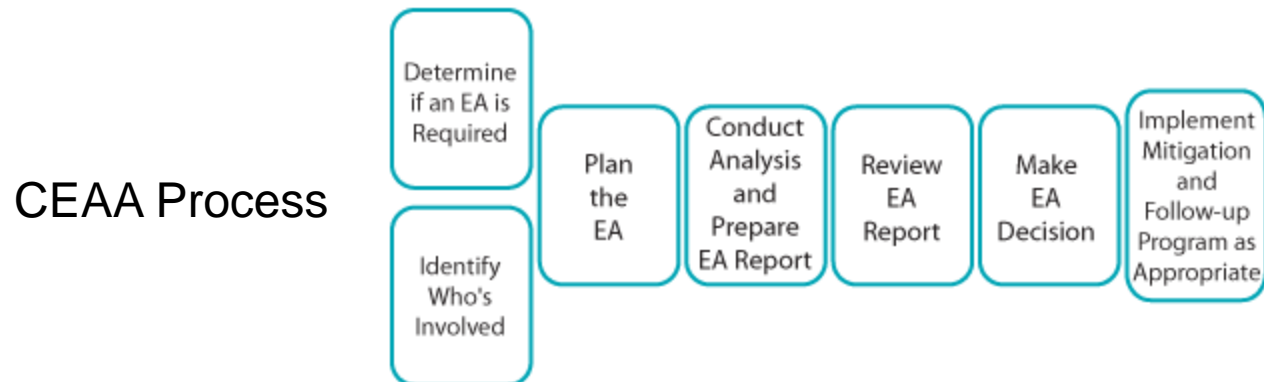
December 7, 2009

- Selected from among 15 submissions during a competitive Request for Proposal (RFP) process, MVVA was chosen to lead the design of the York Quay Revitalization Project (phase two) for Waterfront Toronto and Harbourfront Centre.*
- Michael Van Valkenburgh Associates (MVVA) has been selected in part on their innovative proposal to design an underground parking garage that is an enticing part of the urban experience rather than a grim, unwelcoming and disorienting piece of infrastructure.*

Submission of CEAA Screening Report

December 21st, 2009

- The Federal government, through Finance Canada, has earmarked funding to provide financial assistance to Waterfront Toronto for the implementation of the York Quay Revitalization Project Phase Two, as part of its overall commitment to the Waterfront. As such, CEAA (Canadian Environmental Assessment Act) is triggered due to the anticipated federal financial contribution to this project.
- There are no federal authorizations required for the project and no other triggers under CEAA for this project.





Next Steps

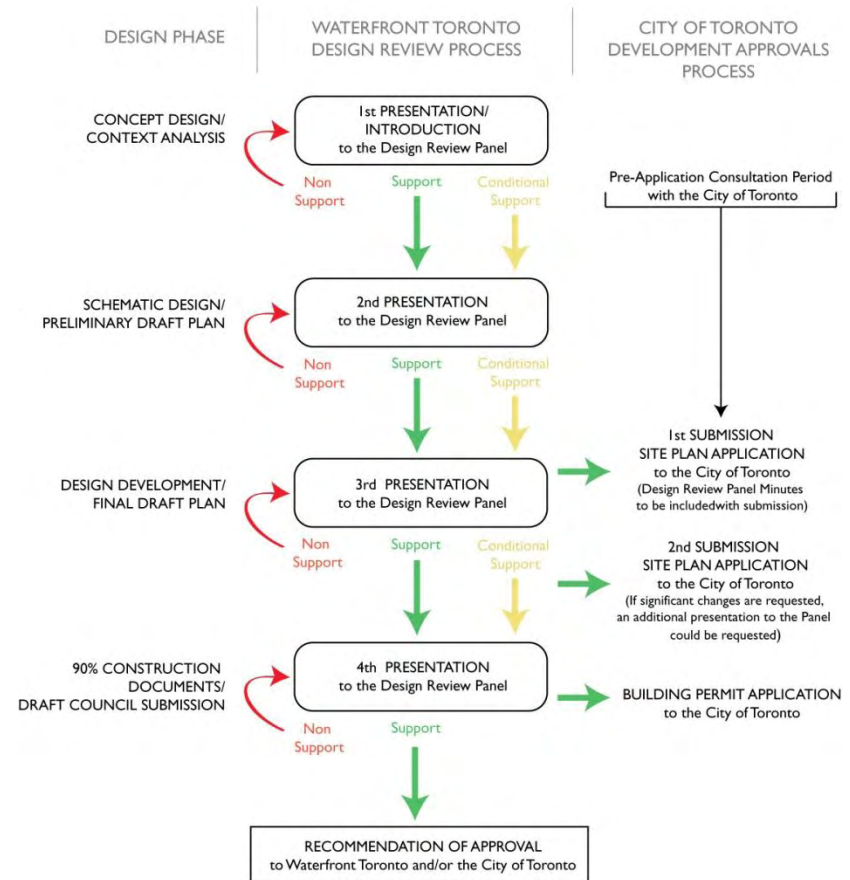
Waterfront Toronto Design Review Panel

January 13th, 2009

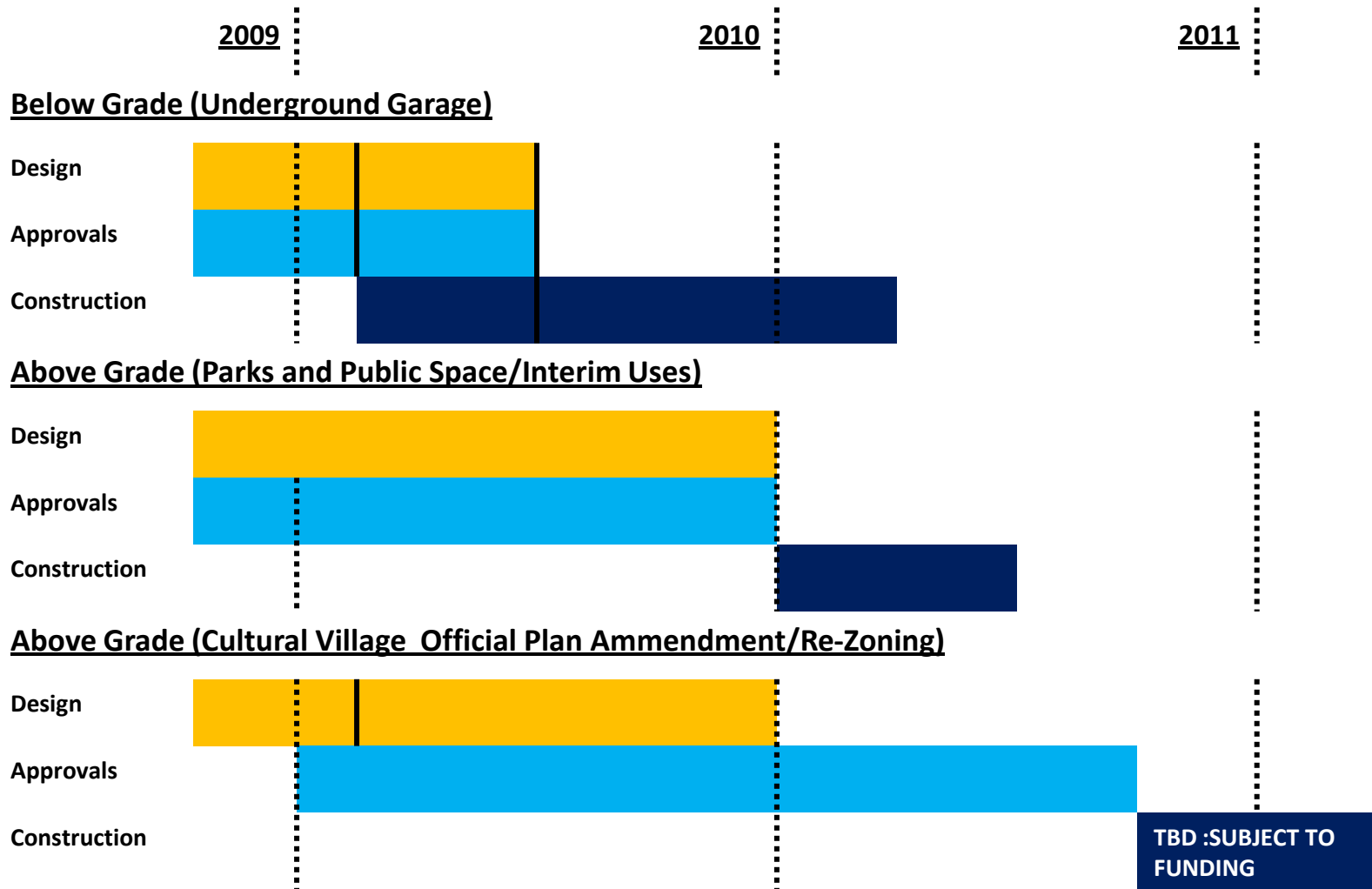
- The WDRP was formed in 2005 by Waterfront Toronto as an independent body to guide and inform the revitalization of the Toronto Waterfront. The Panel is advisory to Waterfront Toronto, and is in no way intended to replace the City's Regulatory approval process.
- The mission of the Panel is to provide objective, professional advice to designers, developers and governments to ensure that high quality design is a critical consideration for all development on Toronto's waterfront.



The Waterfront Design Review Panel Review Process for Buildings, Parks and Public Realm Designs, and Precincts/Master/Subdivision Plans



York Quay Project Phase II Process





WATERFRONTToronto

York Quay Revitalization

Stakeholder Group Presentation, January 2010

CARPENTER NORRIS
CONSULTING (NYC)
Daylighting Analysis

GHK
International (T)
OPA + Zoning

JCDA
(NYC)
Public Art
Integration

MVVA
Urban Designers,
Landscape Architects
& Team Leaders

ADDITIONAL CITY
REVIEWING
AGENCIES

WATERFRONT Toronto
& Harbourfront Centre,
West 8 + DTAH

ARUP
(T + NYC)
Structural, Shoring and
Geotechnical, MEP, and
Traffic Engineering

STAKEHOLDER
& PUBLIC
PROCESS

ALTUS GROUP (T)
Cost Estimation

BBB
(NYC)
Garage
Architecture

LEBER RUBES (T)
Code Consulting

YOUNG & WILSON
IBI GROUP (T)
Local Architect

(T) Toronto Based Office
(NYC) New York Based Office

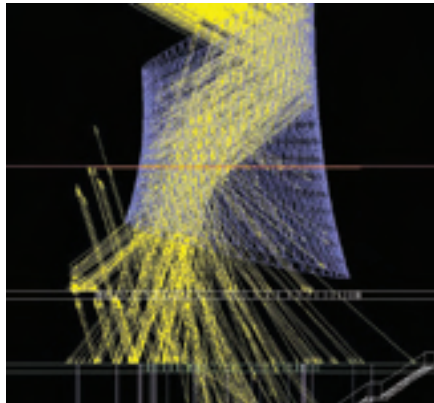
The Parking Garage as Gateway



+



CONSTRUCTION



+



ANIMATION



+

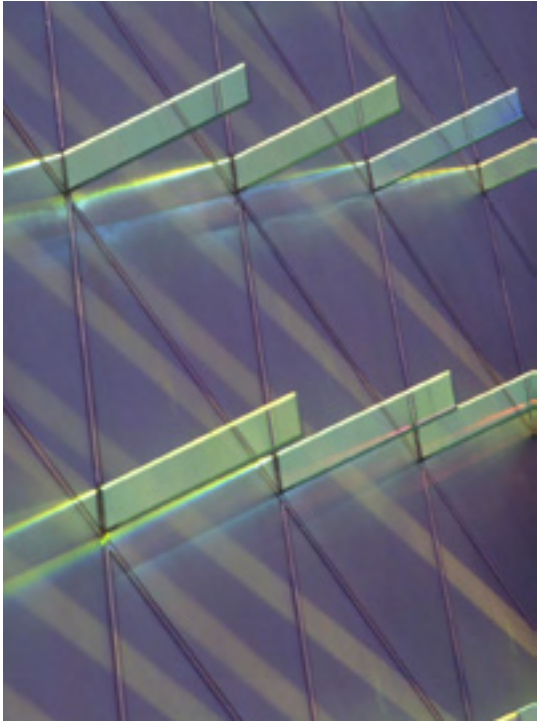


MATERIALITY

Materiality and Climate

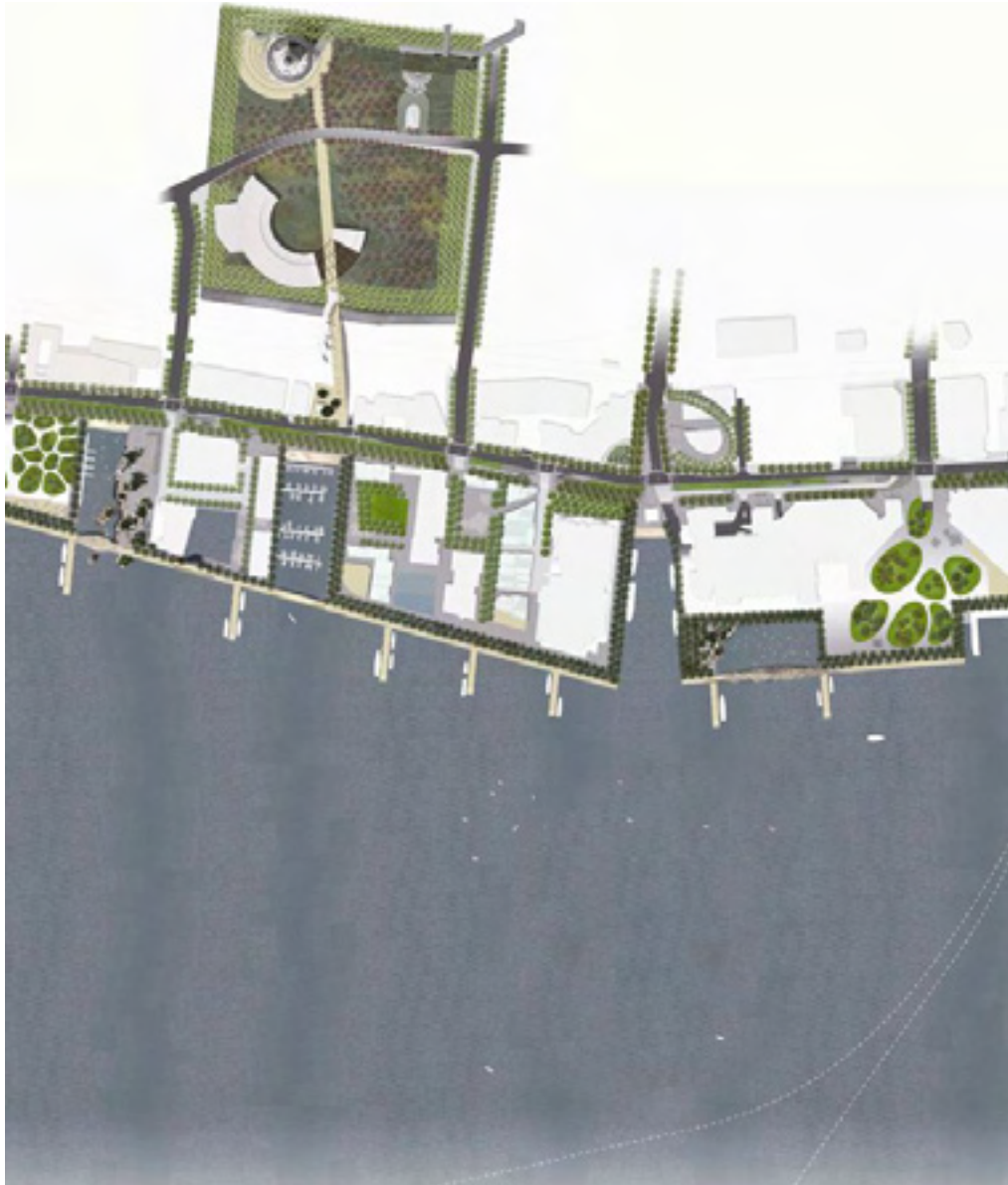


Engineering and Daylight



Planting and Culture





Central Waterfront Master Plan

The Planning Context

1. To sustain and grow **Harbourfront Centre's** program of diversity and culture (below-grade garage = new site)
2. To anticipate the needs for supporting a finely-textured urban fabric--**the Cultural Village**
3. To integrate the plan within the developing waterfront framework:
 - an Urban Square** located at the redevelopment of Queens Quay Boulevard
 - a Lakeside Square** located at the edge of the Central Waterfront Promenade

Refining the Framework Plan



Framework Plan
September 2009

Subgrade Economy related to parking garage excavation and shoring

Vehicular Movements and site servicing

Public Space Framework for the Cultural Village Footprint

Year-Round Programming afforded by two new new public spaces

Definition of an Urban Square

Plaza Major, Madrid



Pedestrian priority

The presence of vehicles is the exception

Perimeter activity is critical

Less management of site programming

Binnenrotte, Rotterdam



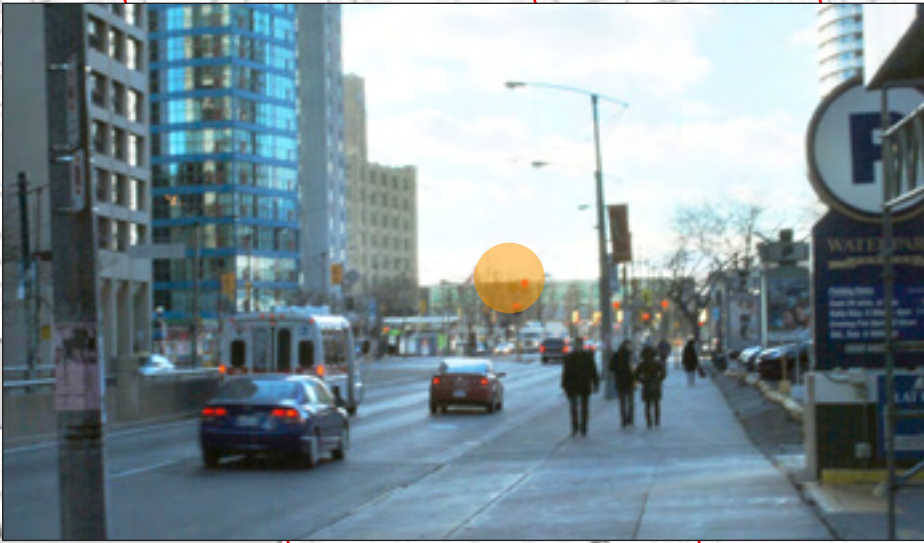
Junction of transportation modes

The presence of vehicles is the rule

Perimeter activity is not as critical

More management of site programming

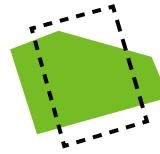
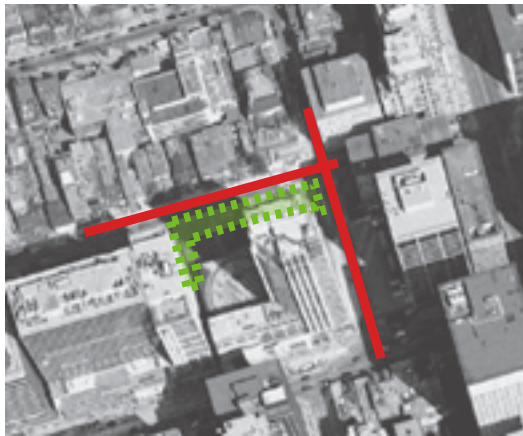
Key Waterfront Site



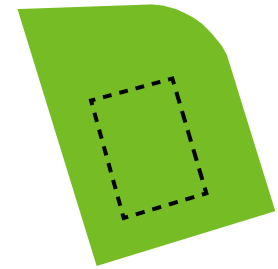
3400 m²



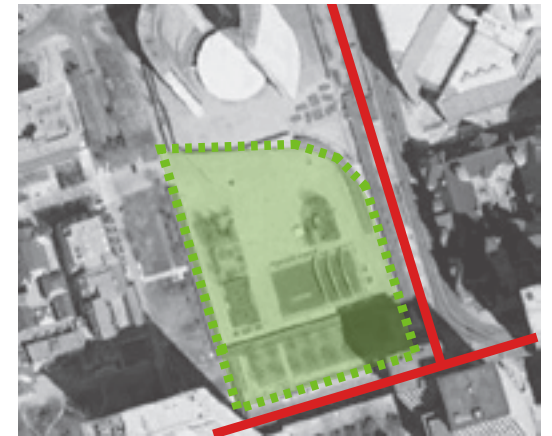
Yorkville Park
1300 m²



Dundas Square
3800 m²

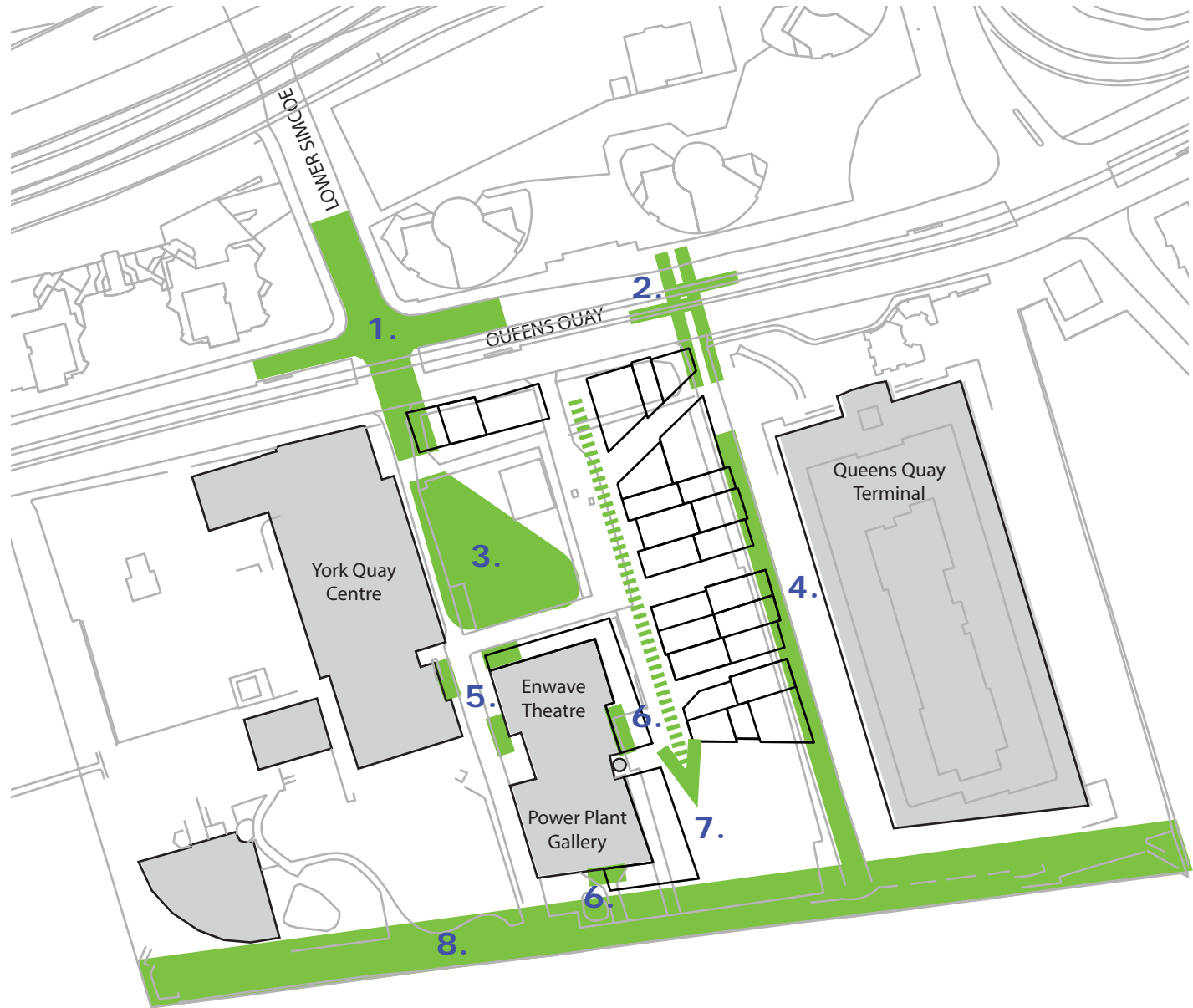


Nathan Phillips Square
16500 m²

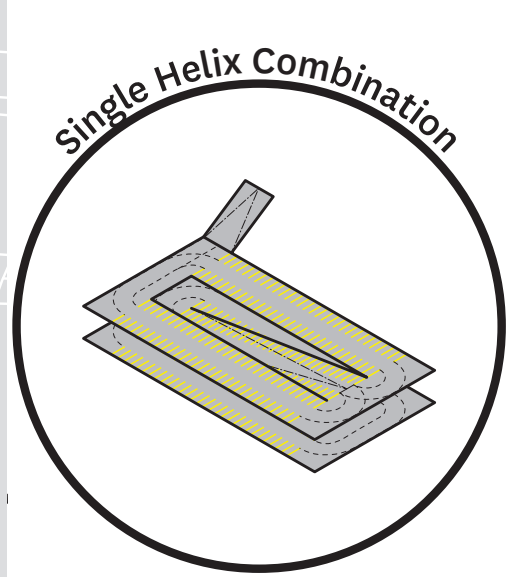
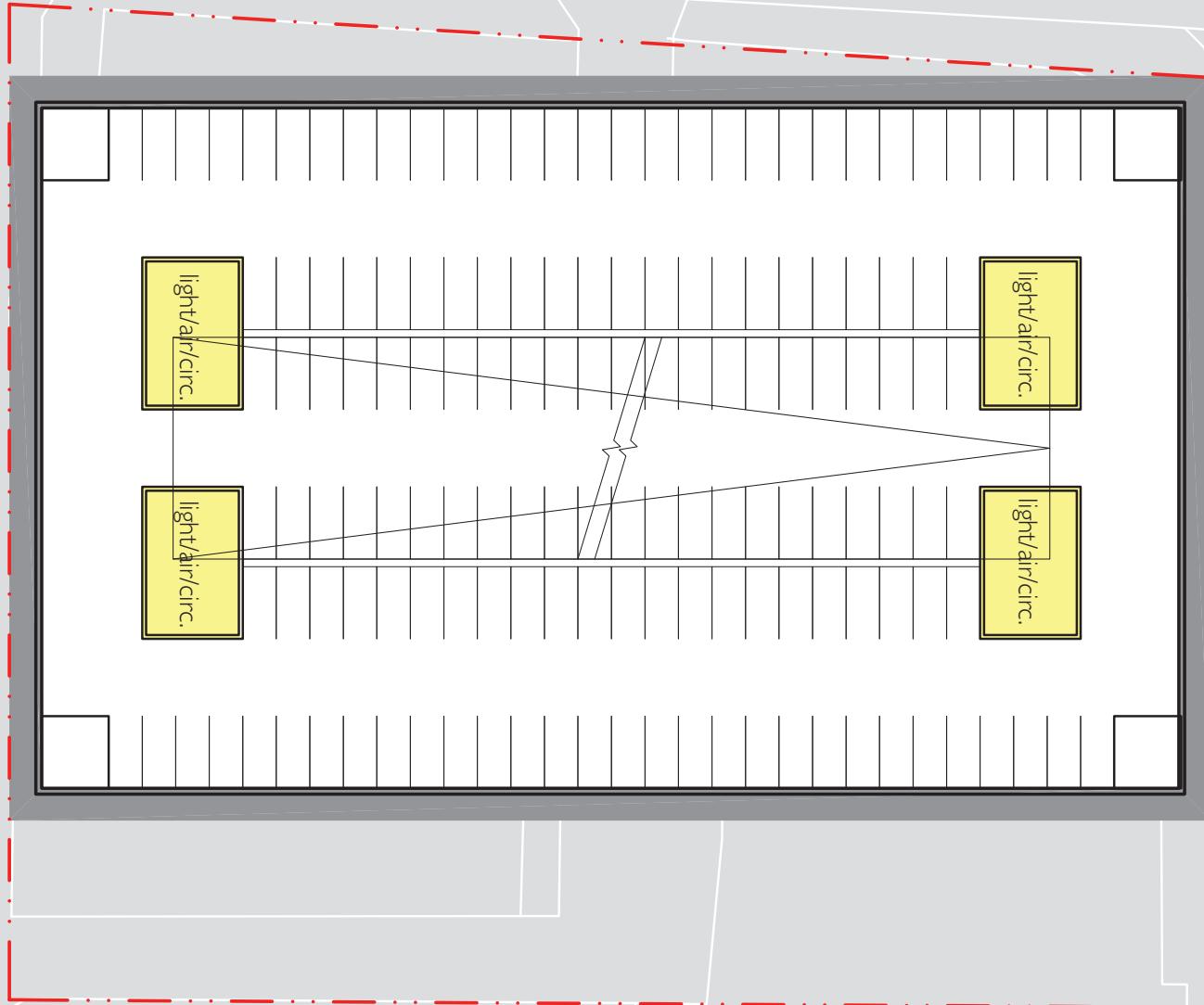


Existing and Future Site Considerations

1. Coordination of future intersection at Simcoe
2. Coordination of future LRT Station and Crosswalks
3. Accommodation of loading 10 Buses on site
4. Existing Queens Quay Terminal Service Lane (Private Property)
5. Existing Loading Docks
6. Existing Power Plant Building Entries
7. Visual axis to Lake
8. Water's Edge Promenade (19m)



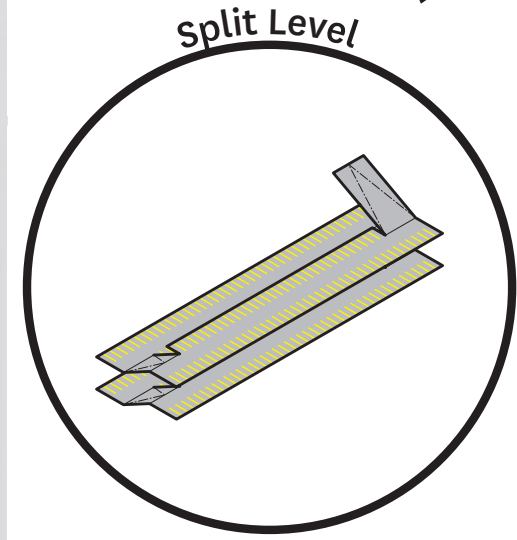
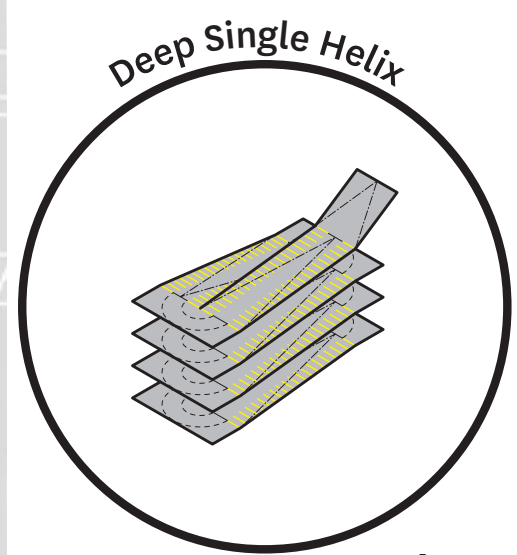
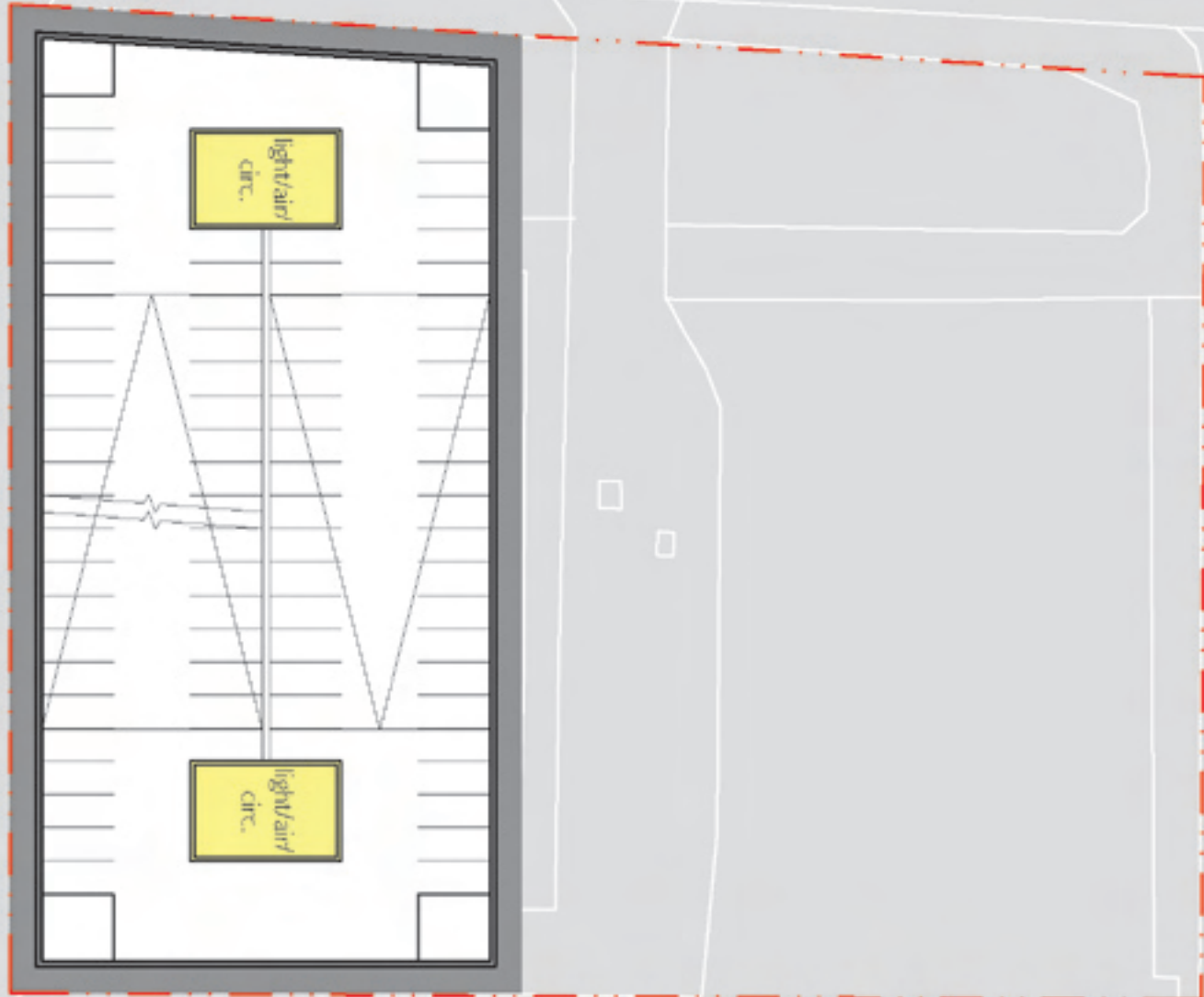
300 Cars



OPTION A

No. of stalls per level	148	
Area per level	4,658 m ²	50,138 sqft
Area per stall	31.4 m ²	338 sqft
Area of air/light/circ. zones	368 m ² (8%)	3,961 sqft
Perimeter Length	282 m	925'
Min no. of levels required	2+	
Depth	8.05 m	26'-6"
Volume	37,497 m ³	49,044 cuyd

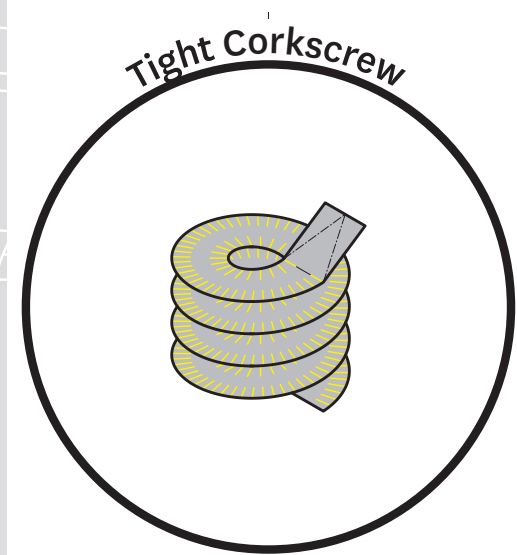
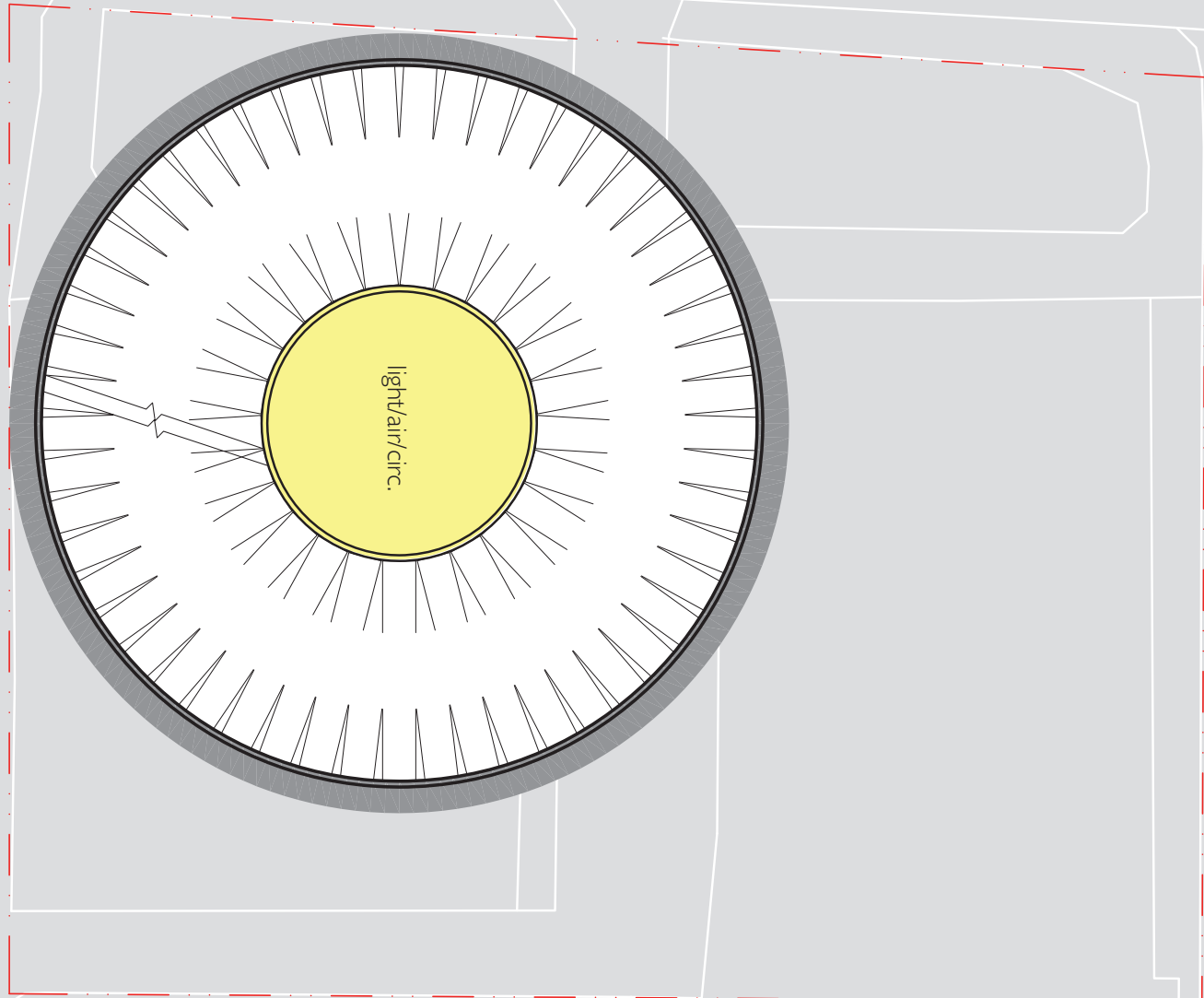
300 Cars



OPTION B

No. of stalls per level	79	
Area per level	2,487 m ²	26,770 sqft
Area per stall	31.5 m ²	339 sqft
Area of air/light/circ. zones	184 m ² (7%)	1,980 sqft
Perimeter Length	212 m	695'-6"
Min no. of levels required	4	
Depth	14.75 m	48'-6"
Volume	36,683 m ³	47,980 cuyd

300 Cars

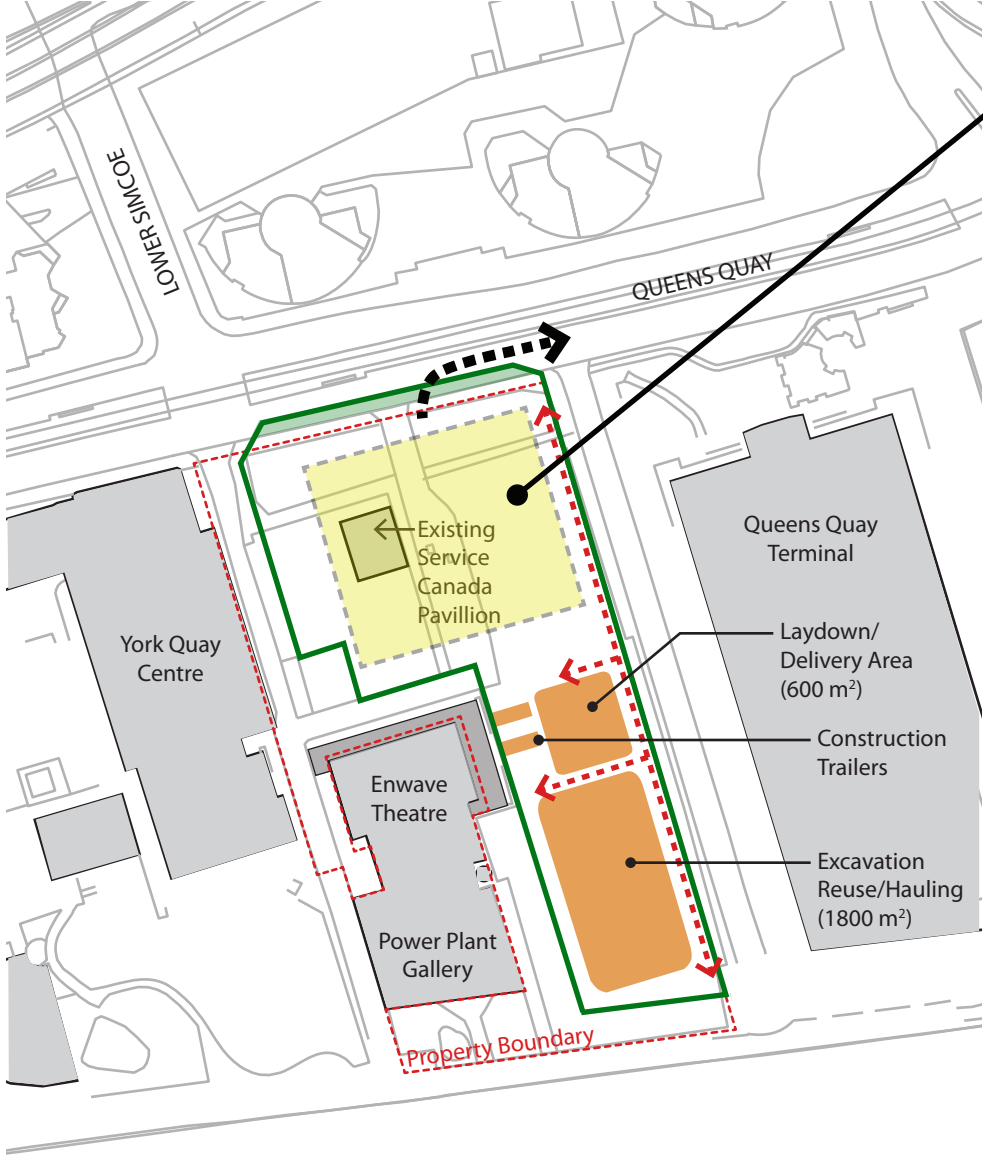


OPTION C.I

No of stalls per level	78	
Area per level	2,454 m ²	26,415 sqft
Area per stall	31.5 m ²	339 sqft
Area of air/light/circ. zones	363 m ² (15%)	3,907 sqft
Perimeter Length	176 m	578'
Min no of levels required	4	
Depth	14.75 m	48'-6"
Volume	36,197 m ³	47,344 cuyd

Subgrade Economy

Construction Access

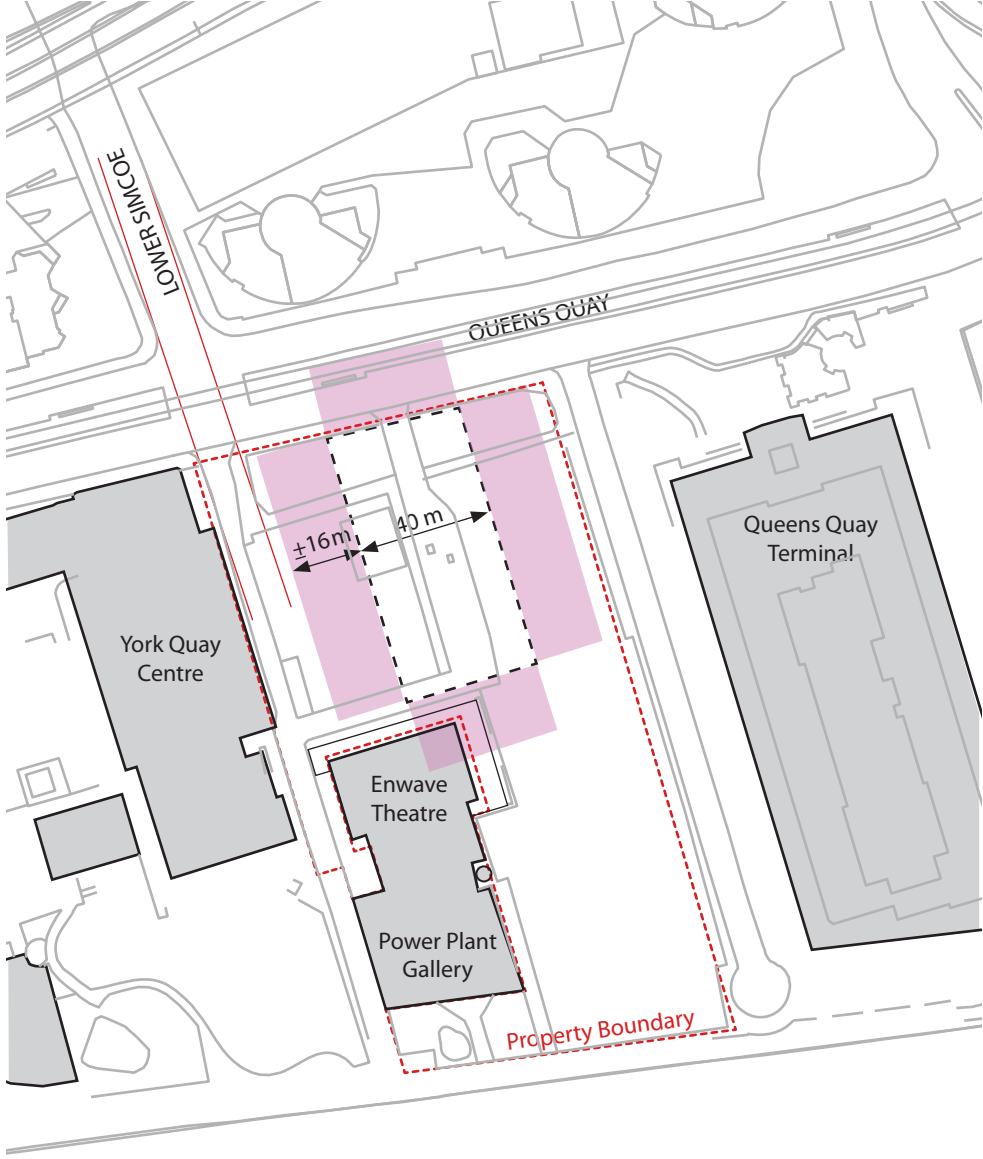


Secant Wall Construction

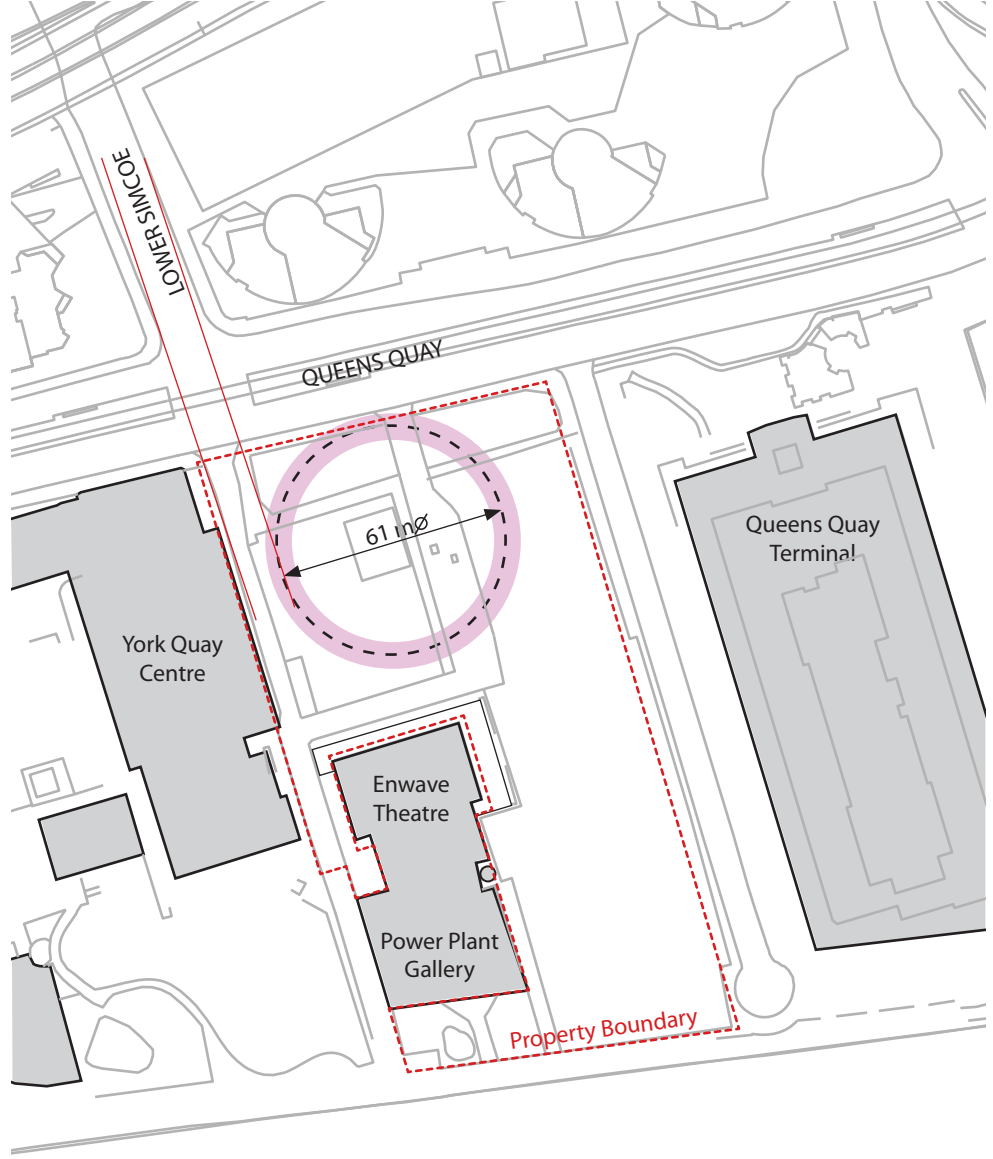


Subgrade Economy

Garage Footprint and Excavation Anchoring



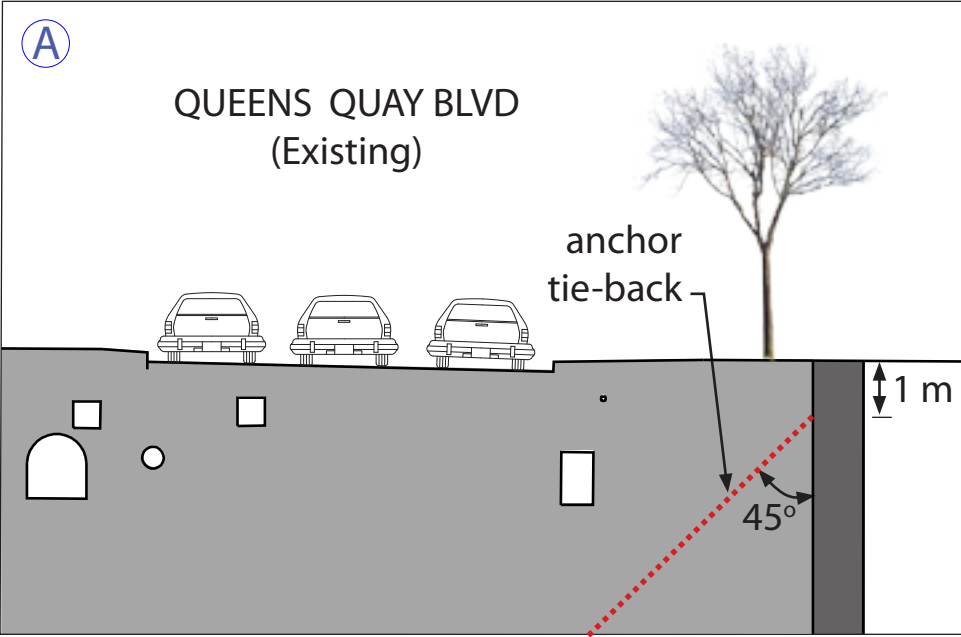
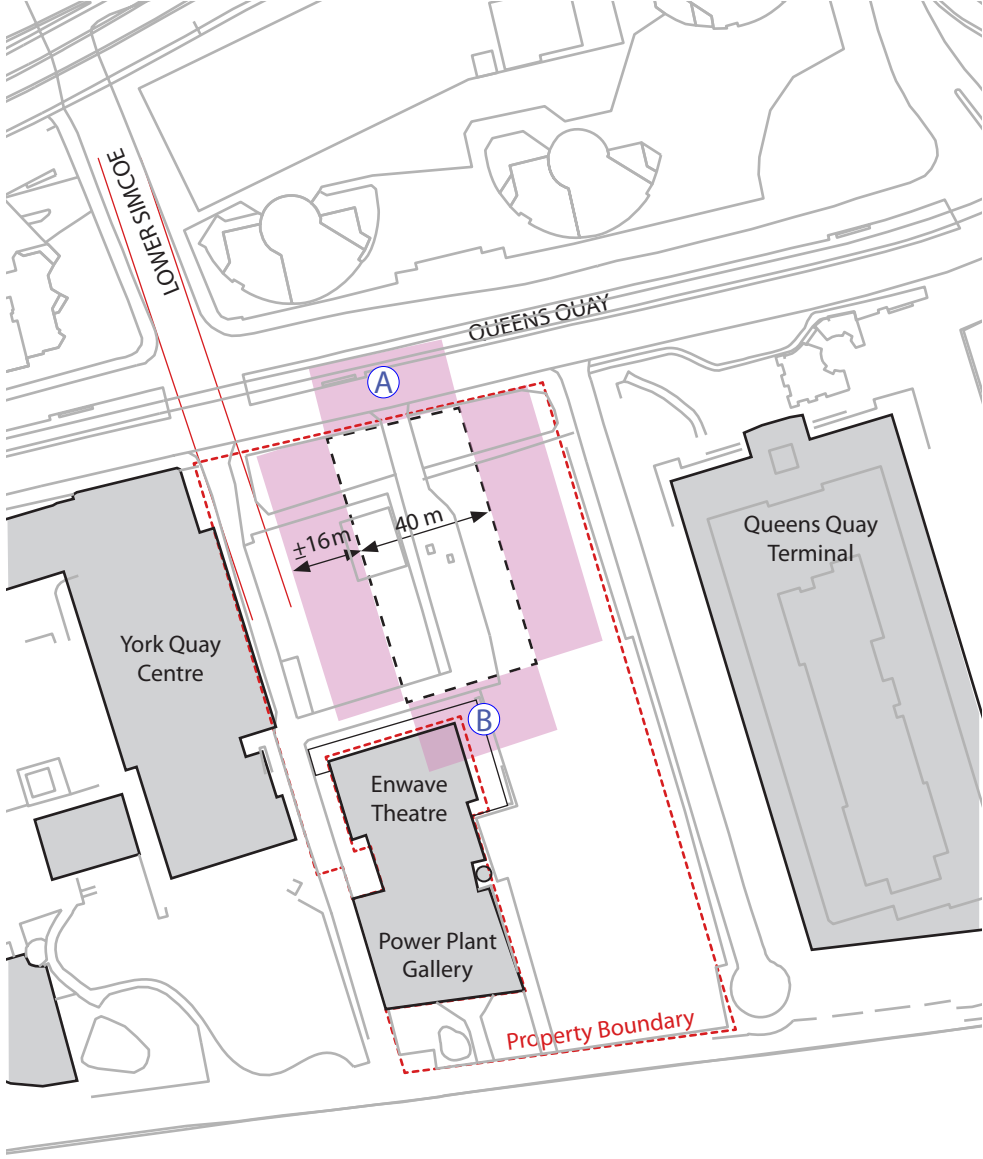
Rectangular Garage Form
(Secant Wall and Anchor Tie-Backs)



Circular Garage Form
(Secant Wall and Internal Compression Rings)

Subgrade Economy

Garage Footprint and Excavation Anchoring



Rectangular Garage Form
(Secant Wall and Anchor Tie-Backs)

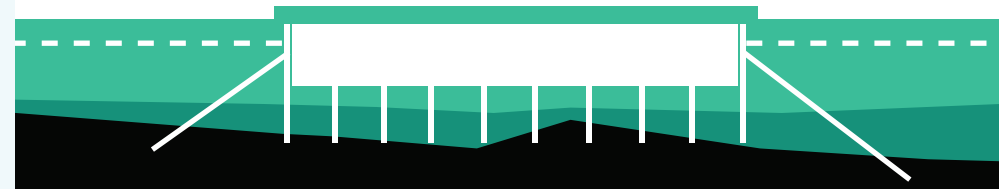
Subgrade Economy

Greater Economy = More Project



Deep Excavation

- Higher Uplift Forces
- Potential for Direct Bearing on Bedrock
- More Anchoring Relative to Depth
- May Require Excavation of Bedrock

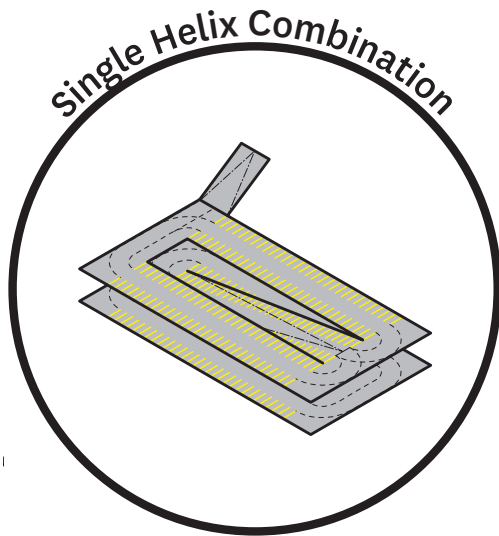


Shallow Excavation

- Lower Uplift Forces
- Drilled Piers Required to Bear on Bedrock
- More Anchoring Relative to Surface Area
- May Require Need for RARM Protocol

Subgrade Economy

Greater Economy = More Project

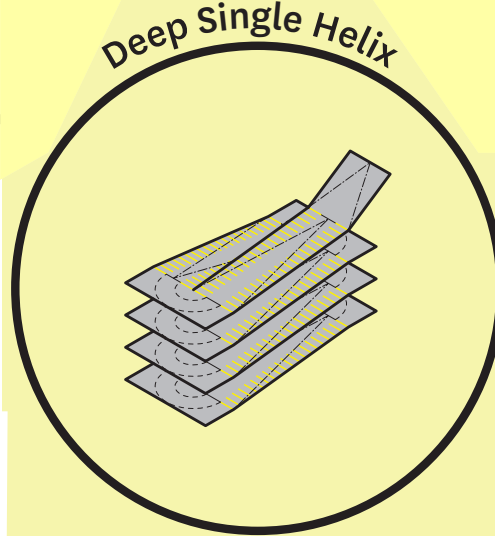


Too large relative to site access

Parking on ramps

Limited plan flexibility

Awkward condition at bottom level

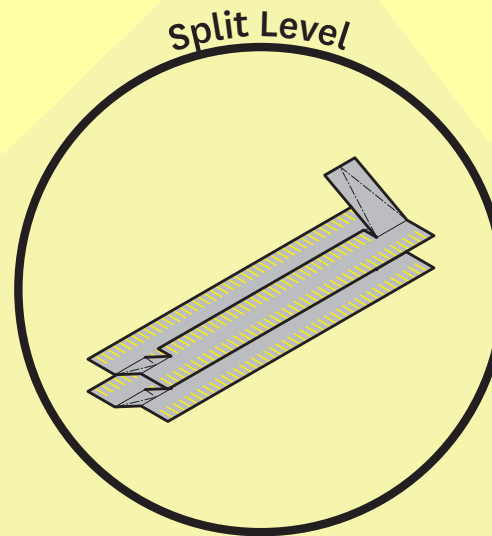


Efficient stacking section relative to depth

Parking on ramps

High degree of plan flexibility

Awkward condition at bottom level

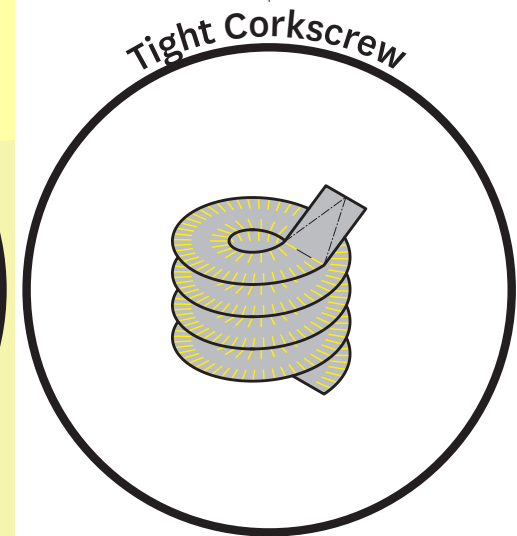


Most efficient stacking section relative to depth

Speed ramps cannot accommodate parking

Good plan flexibility

Level condition at bottom level



Requires too much excavation into bedrock

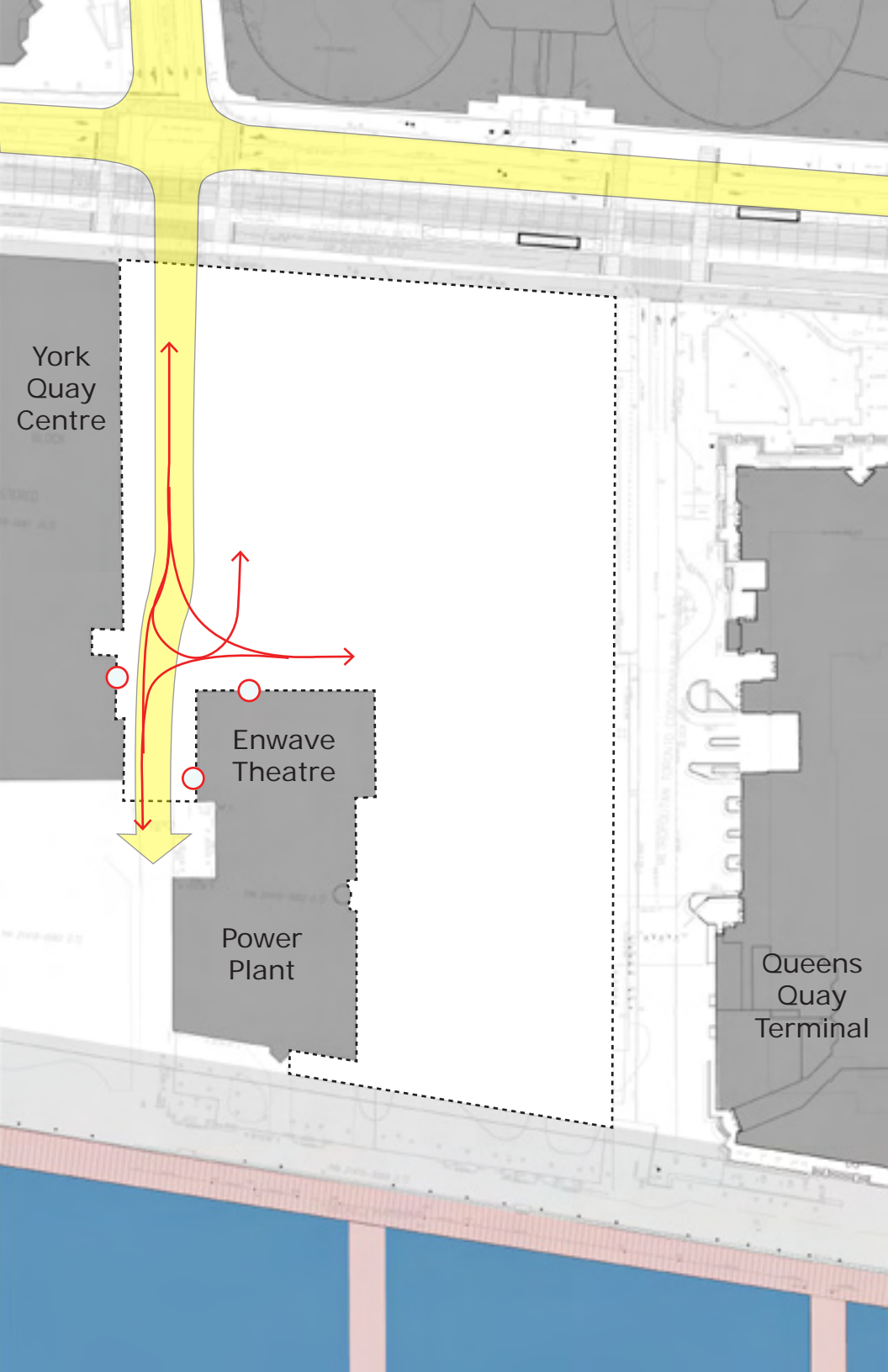
Integration of vertical elements compromise efficiency

Compromises utility of plaza area

Awkward condition at bottom level

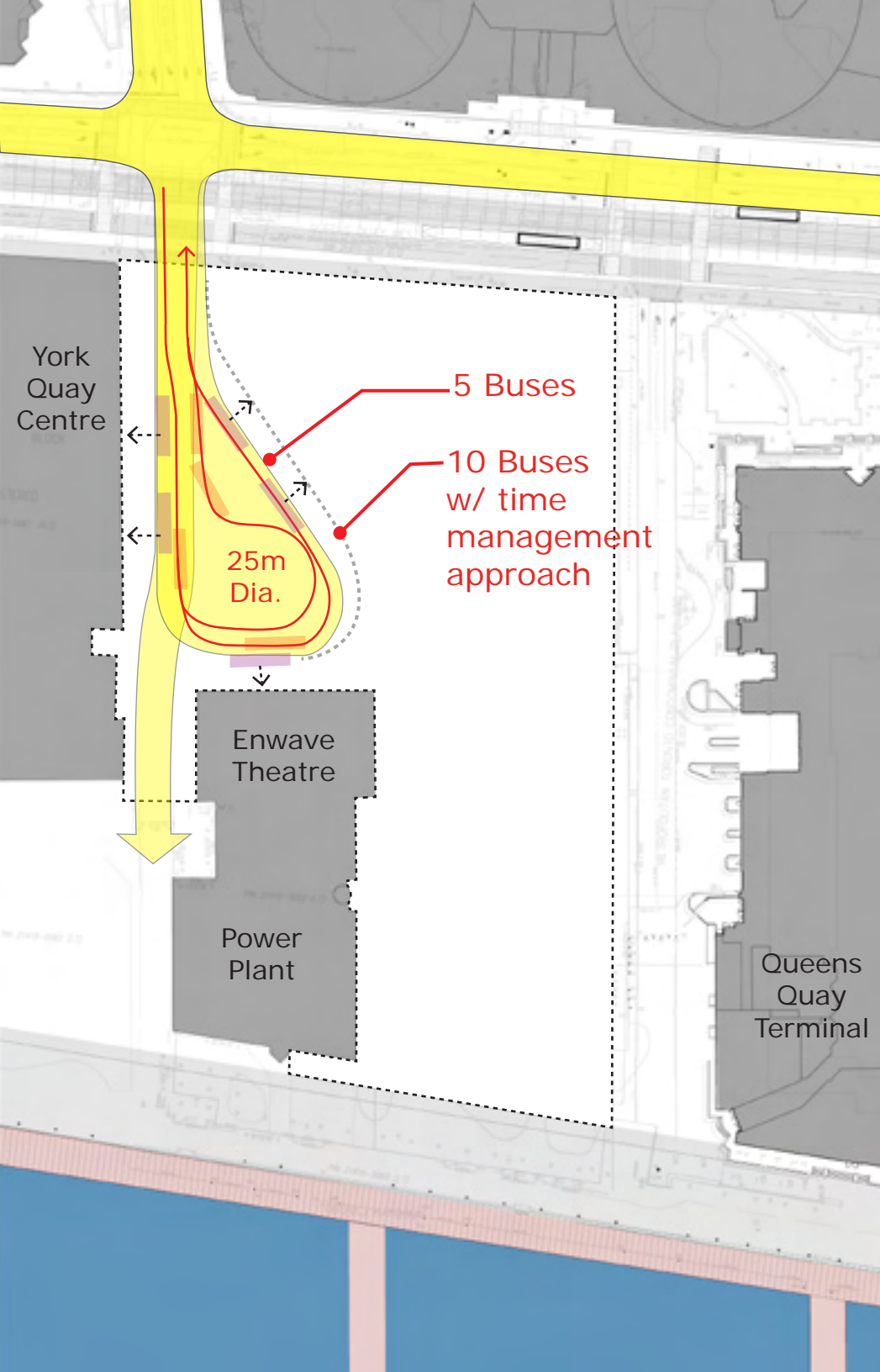
Vehicular Movements

Existing Loading Docks



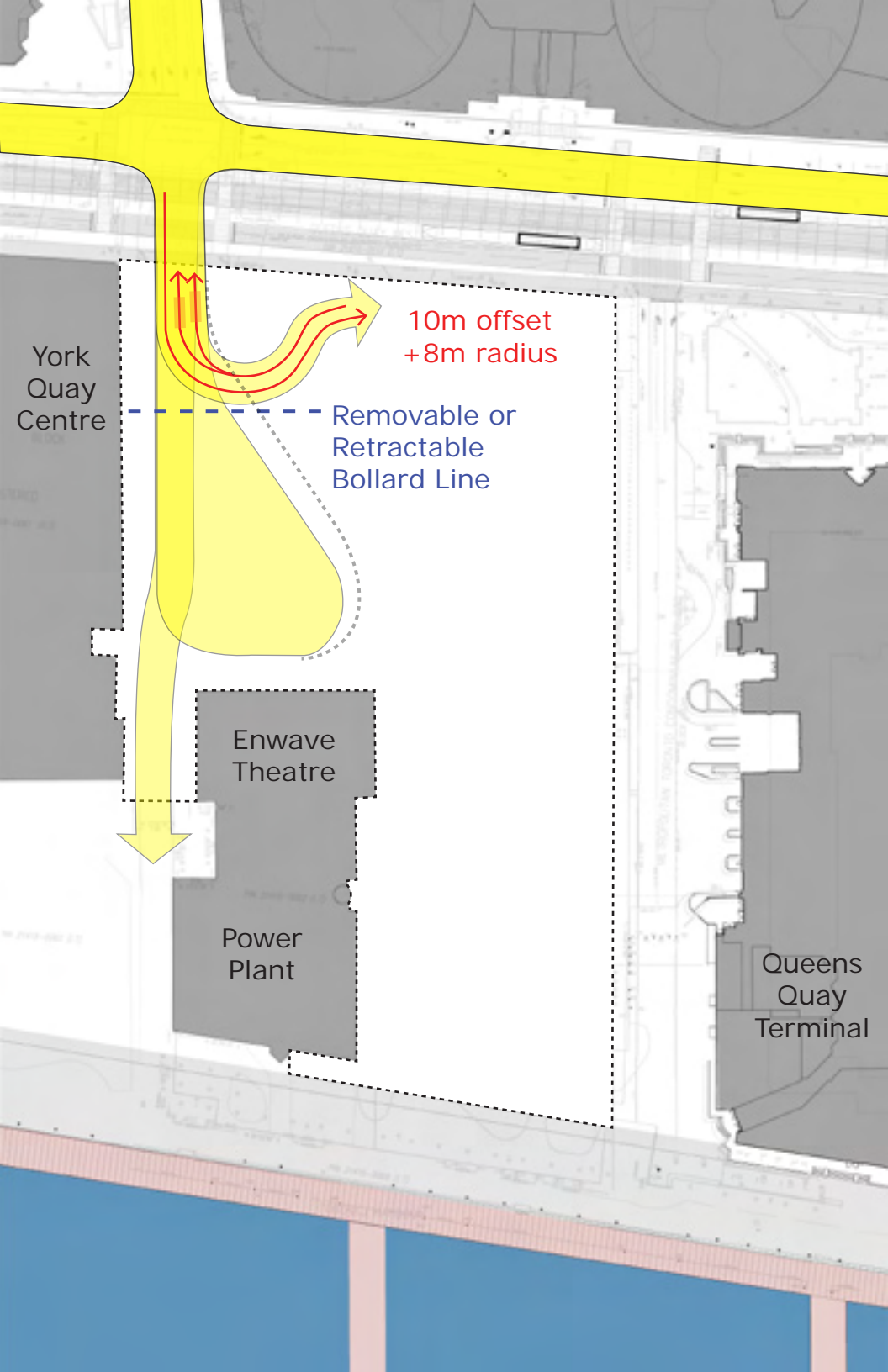
Vehicular Movements

School Bus Drop-off



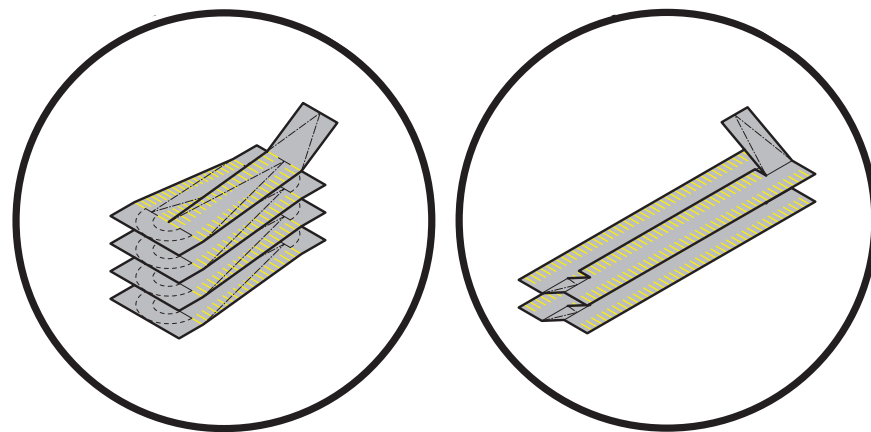
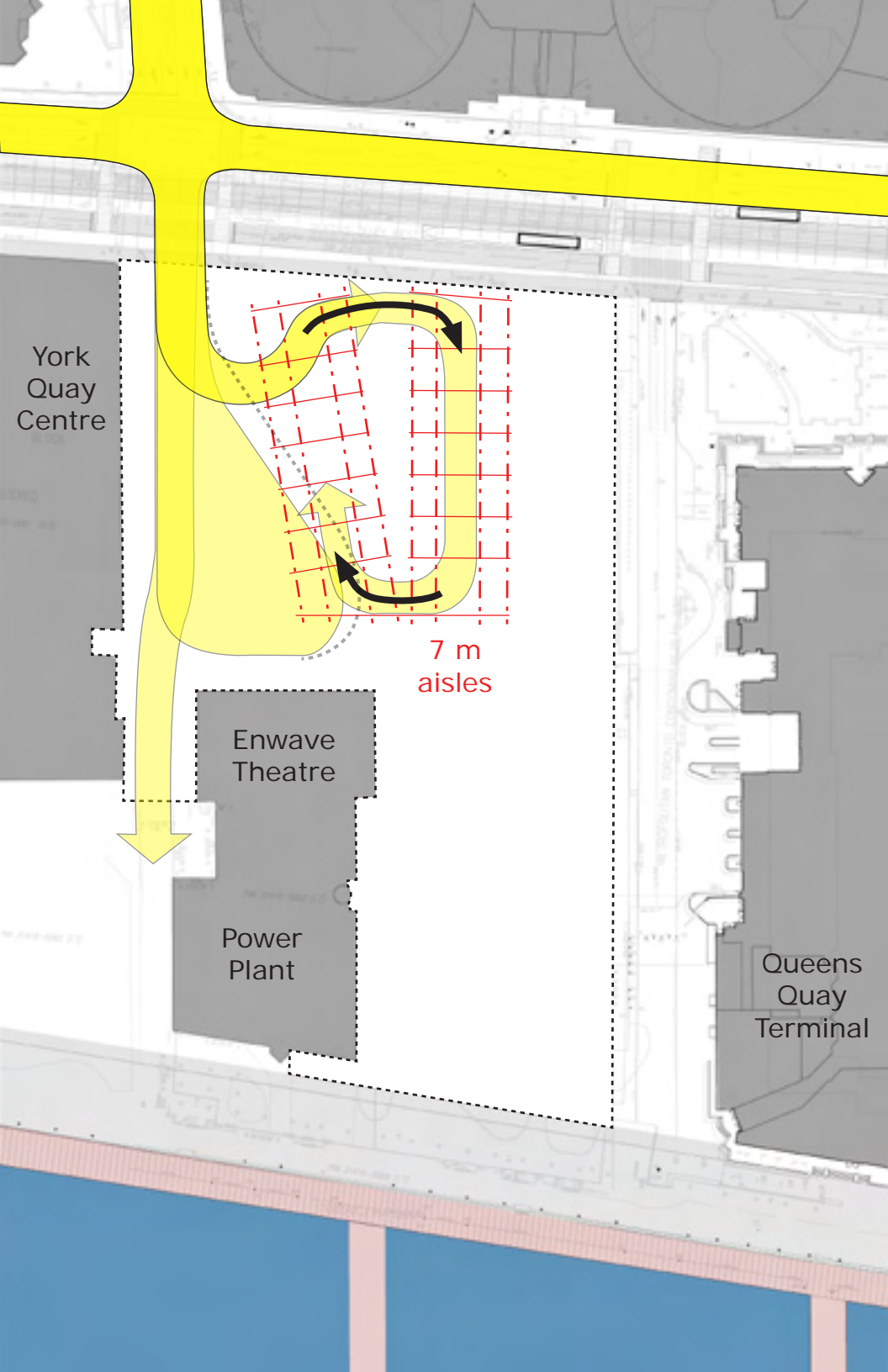
Vehicular Movements

Parking Garage Queuing



Vehicular Movements

Split-Level/ Helix Ramp-Turns



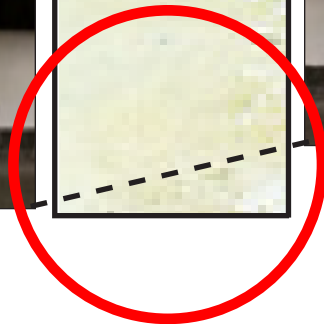
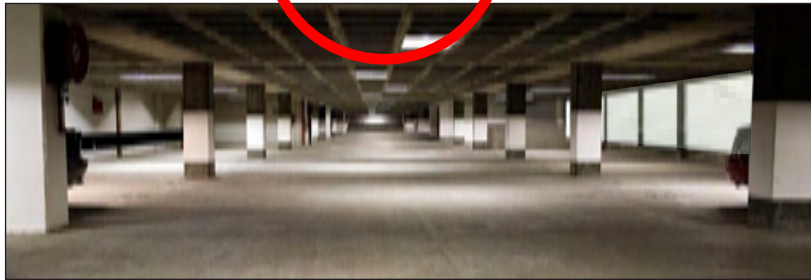
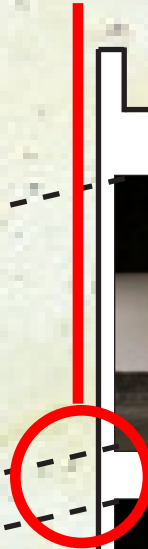
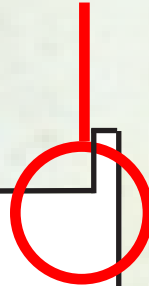
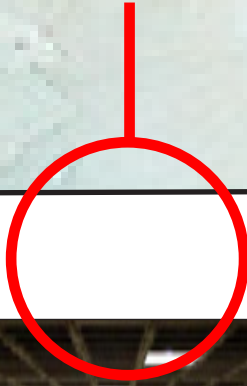
Design Considerations

Sectional Changes
Over Structure

Overlook
Condition

Edge Condition
and Egress

Future Buildings
Over Structure

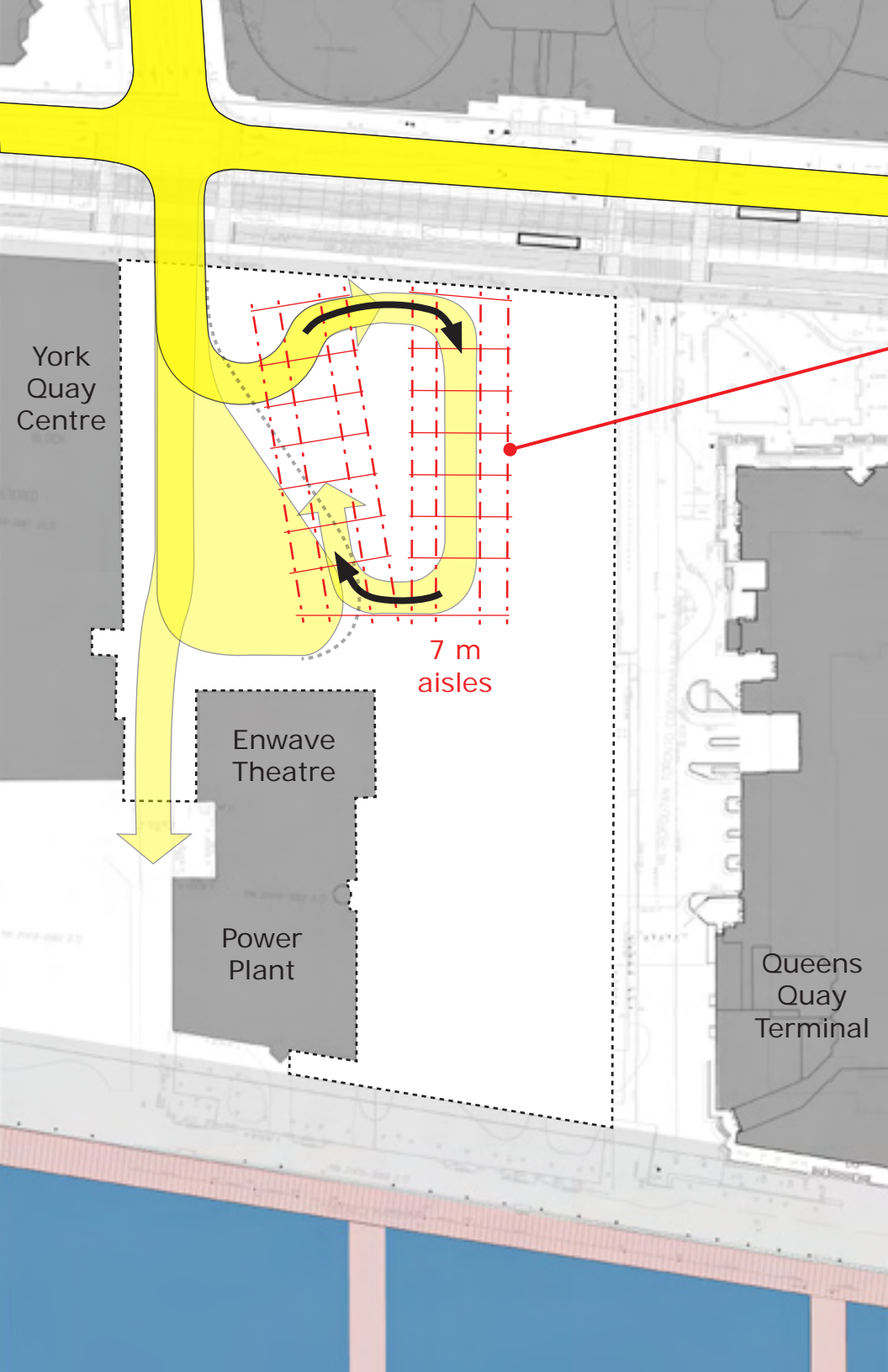


Liner Wall Condition

Floor Condition and
Landscape Elements

Vehicular Movements

Split-Level/ Helix Ramp-Turns



5 parking levels deep
(~5.0 m of hard rock excavation)

York
Quay
Centre

Enwave
Theatre

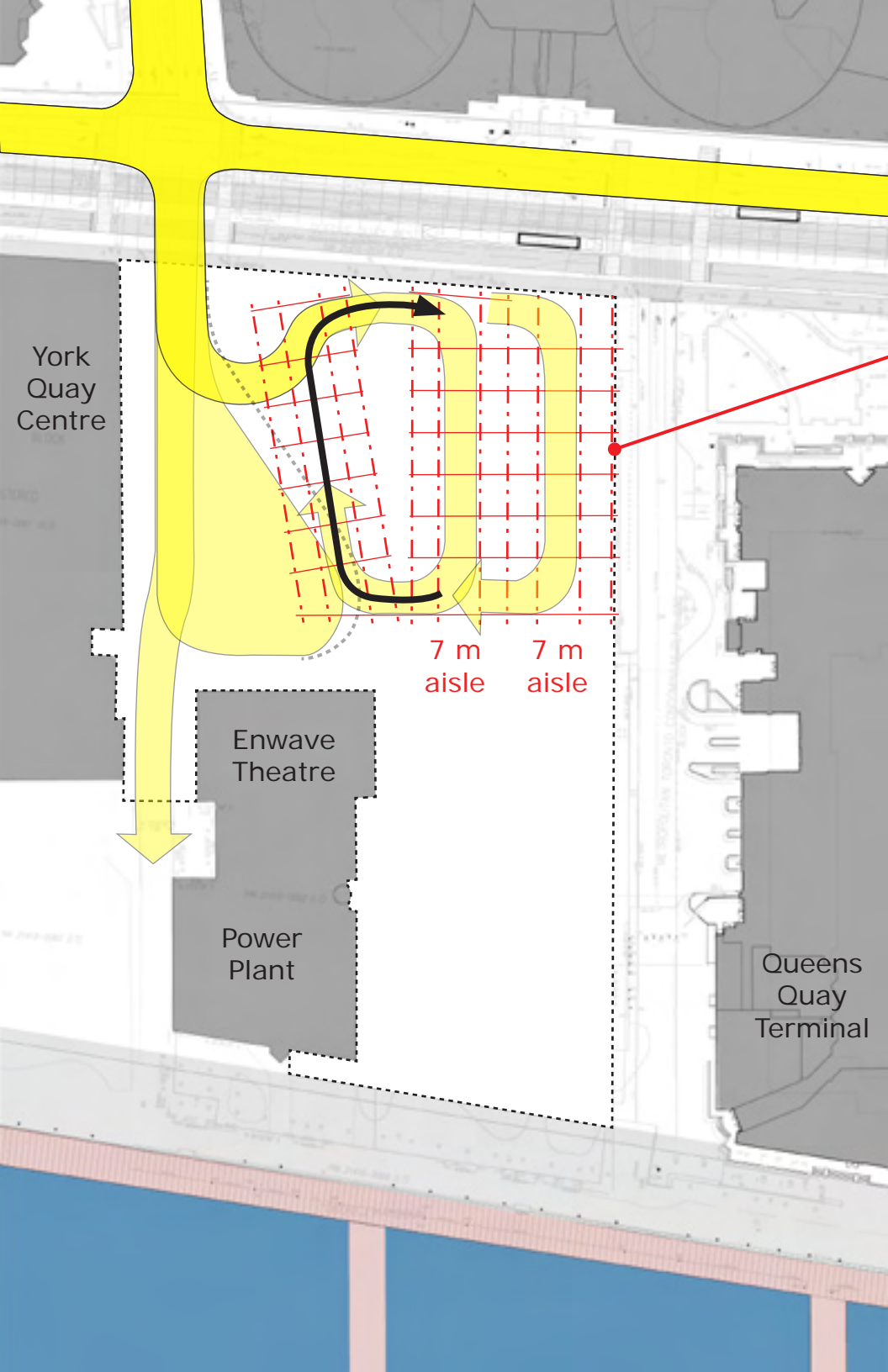
Power
Plant

Queens
Quay
Terminal

7 m
aisles

Vehicular Movements

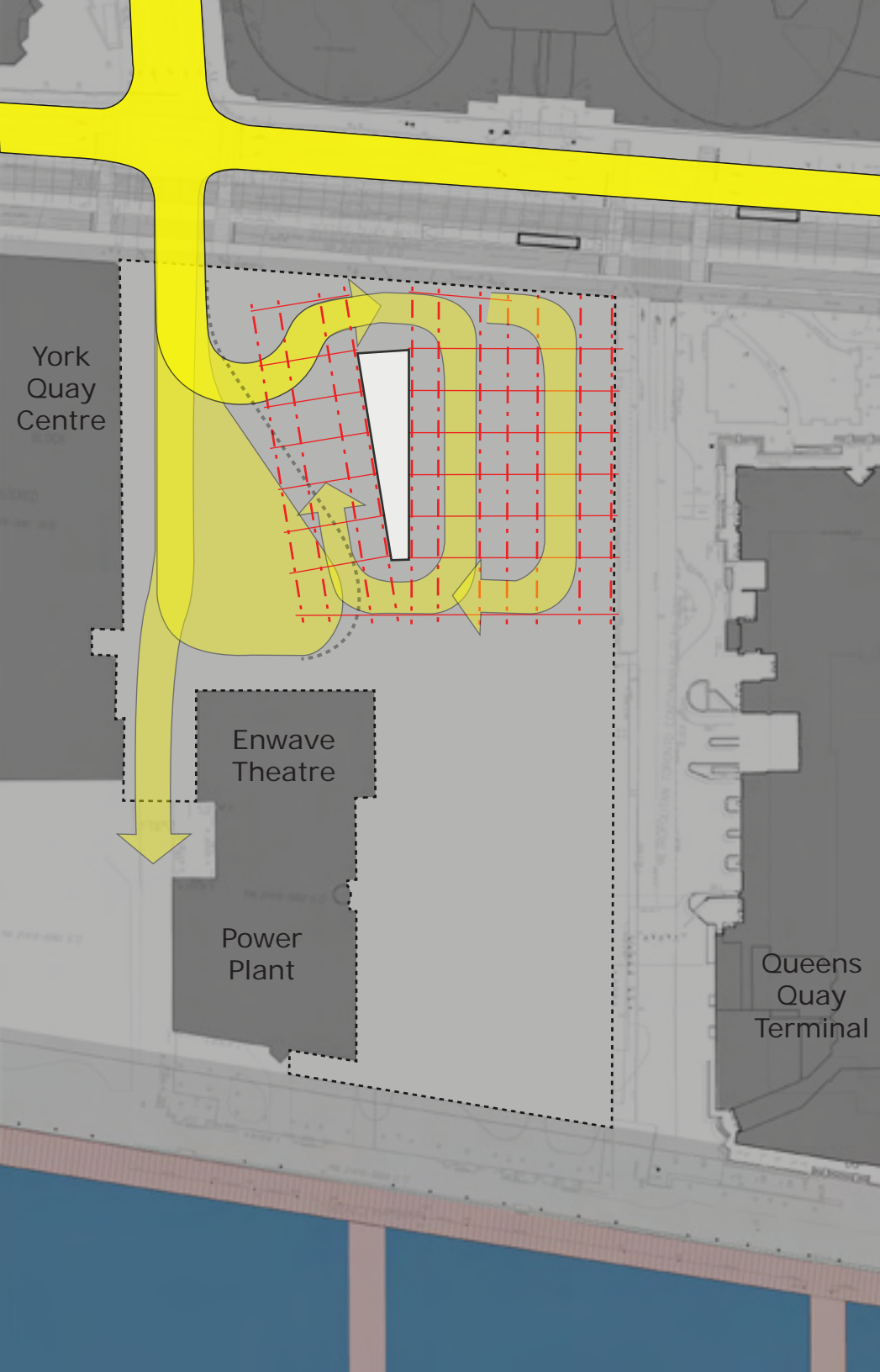
Shallower Section



3 parking levels deep
(~0.5 m of hard rock excavation)

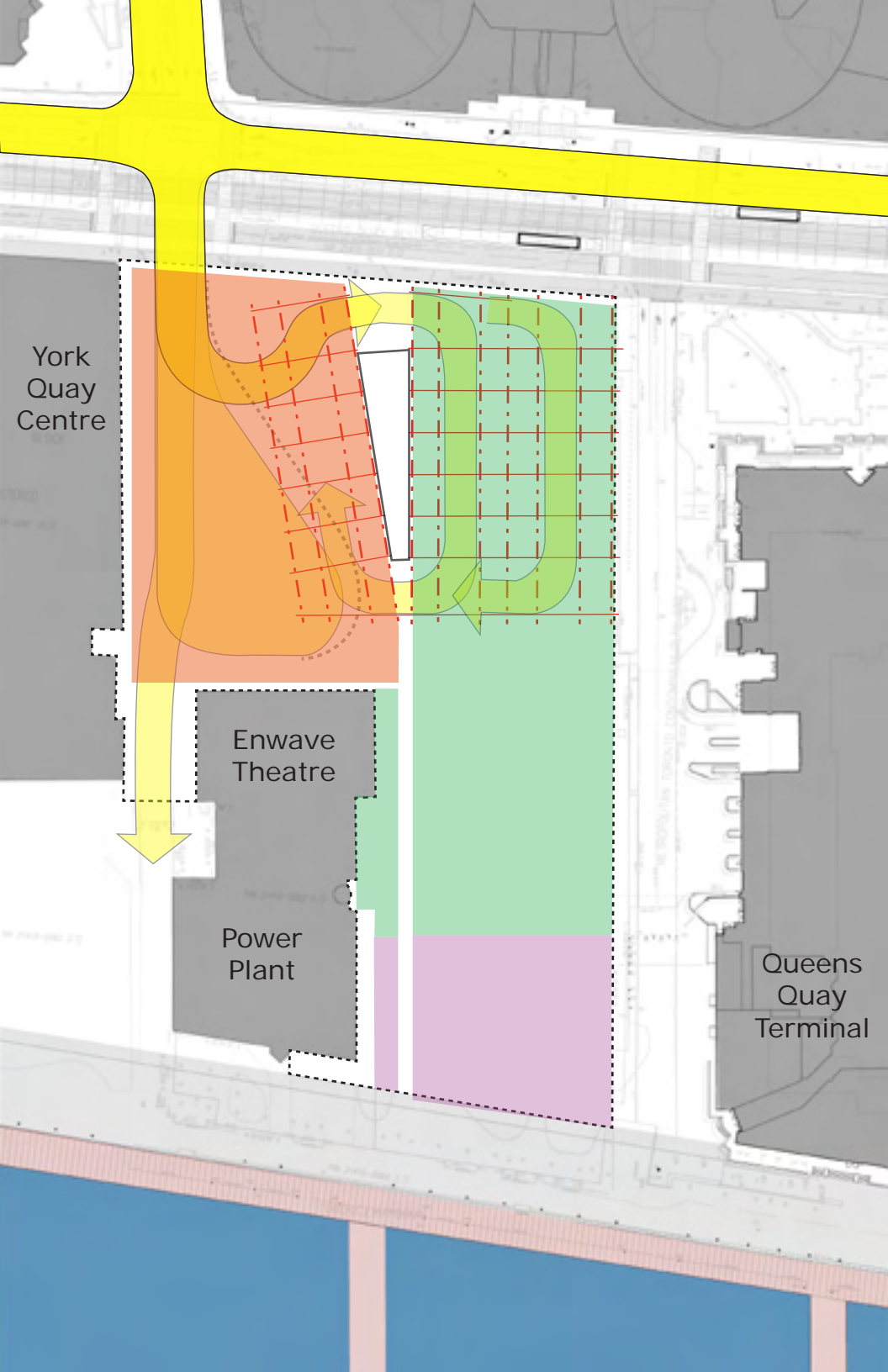
Pedestrian Movements

Circulation as Theater



Pedestrian Movements

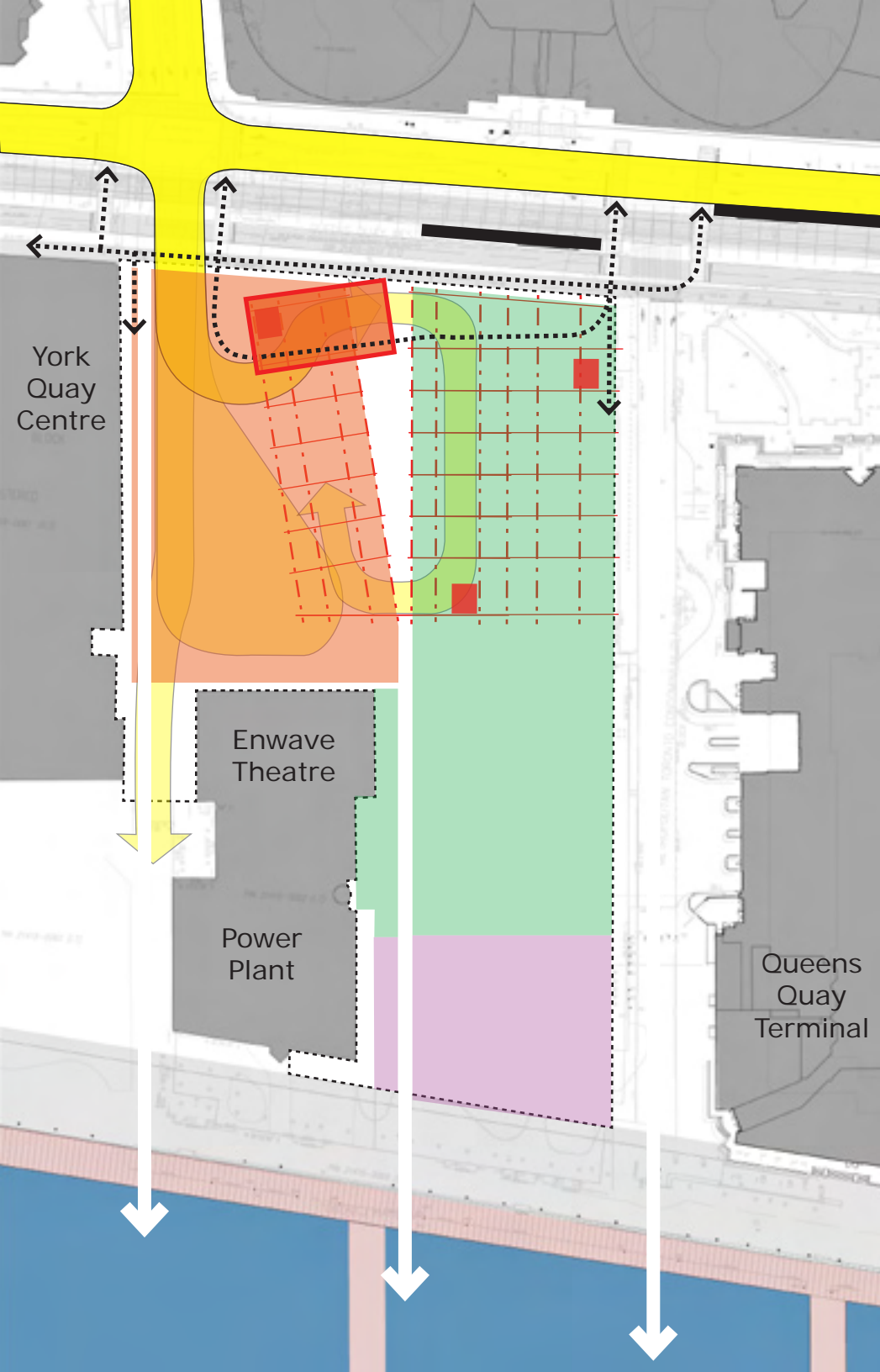
Circulation as Theater



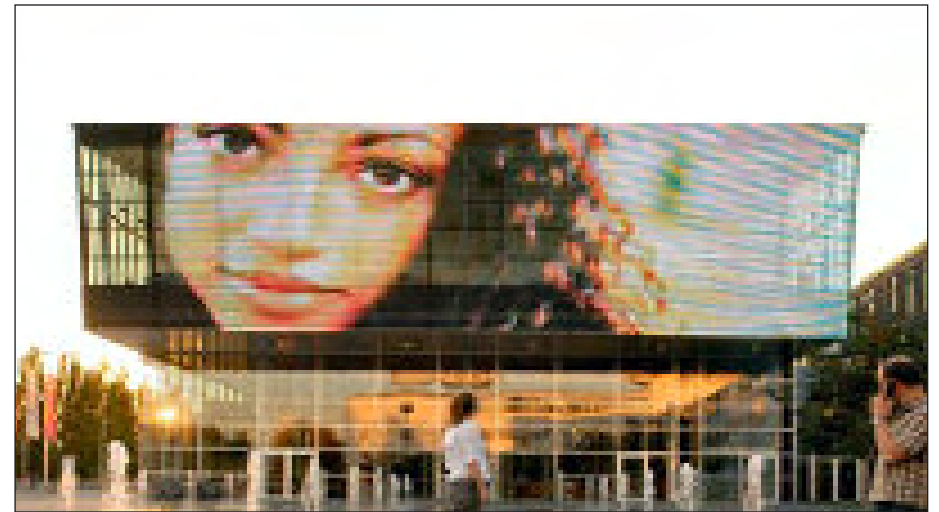
- Urban Square
- Cultural Village
- Canada Square

Public Space Framework




Platform/ Sign



elevated platform as public event space

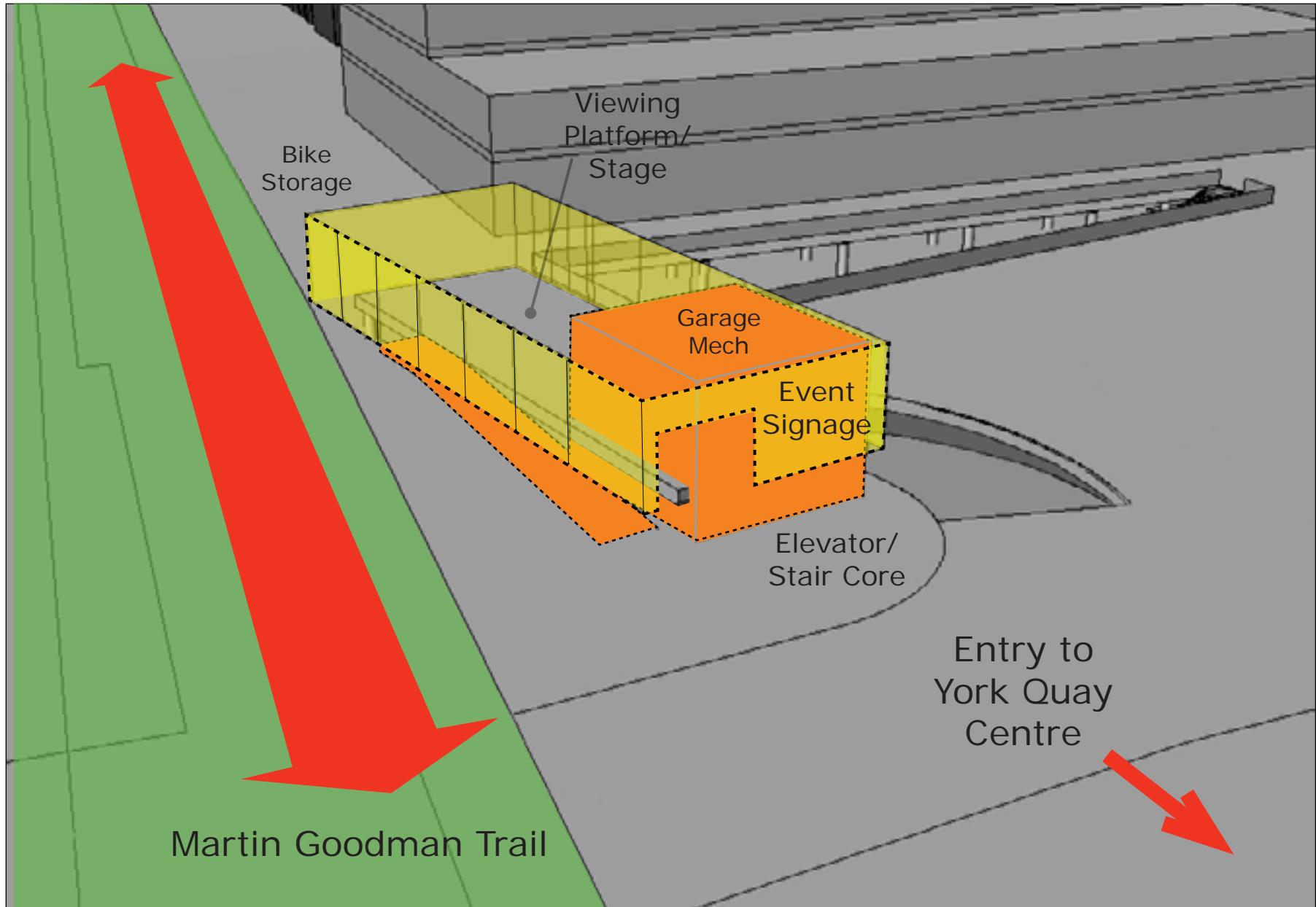


media mesh

-  Urban Square
-  Cultural Village
-  Canada Square

Public Space Framework

Platform/ Sign



Public Space Framework

Platform/ Sign



Public Space Framework

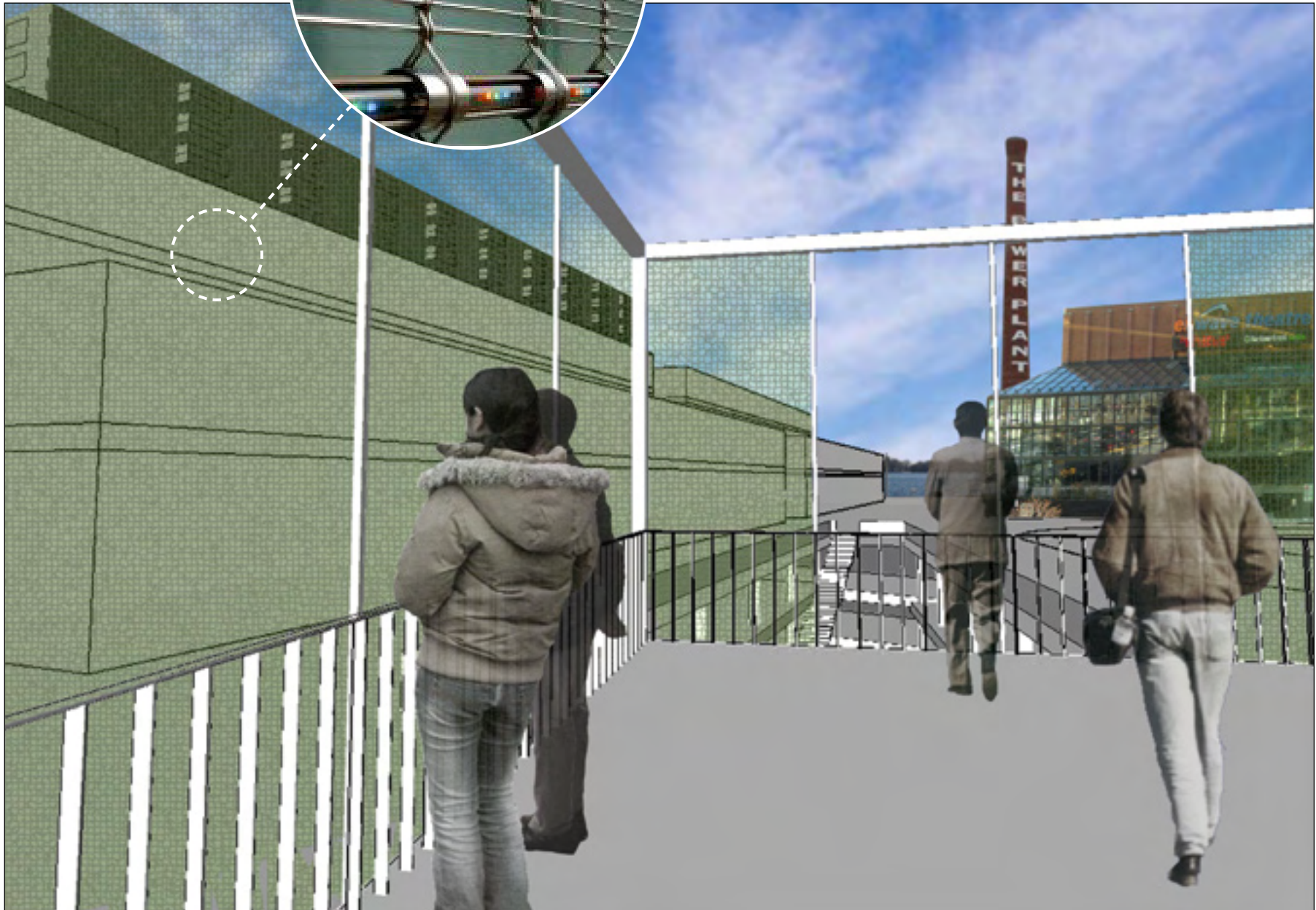
Platform/ Sign



*see-through
media mesh*

Public Space Framework

Platform/ Sign



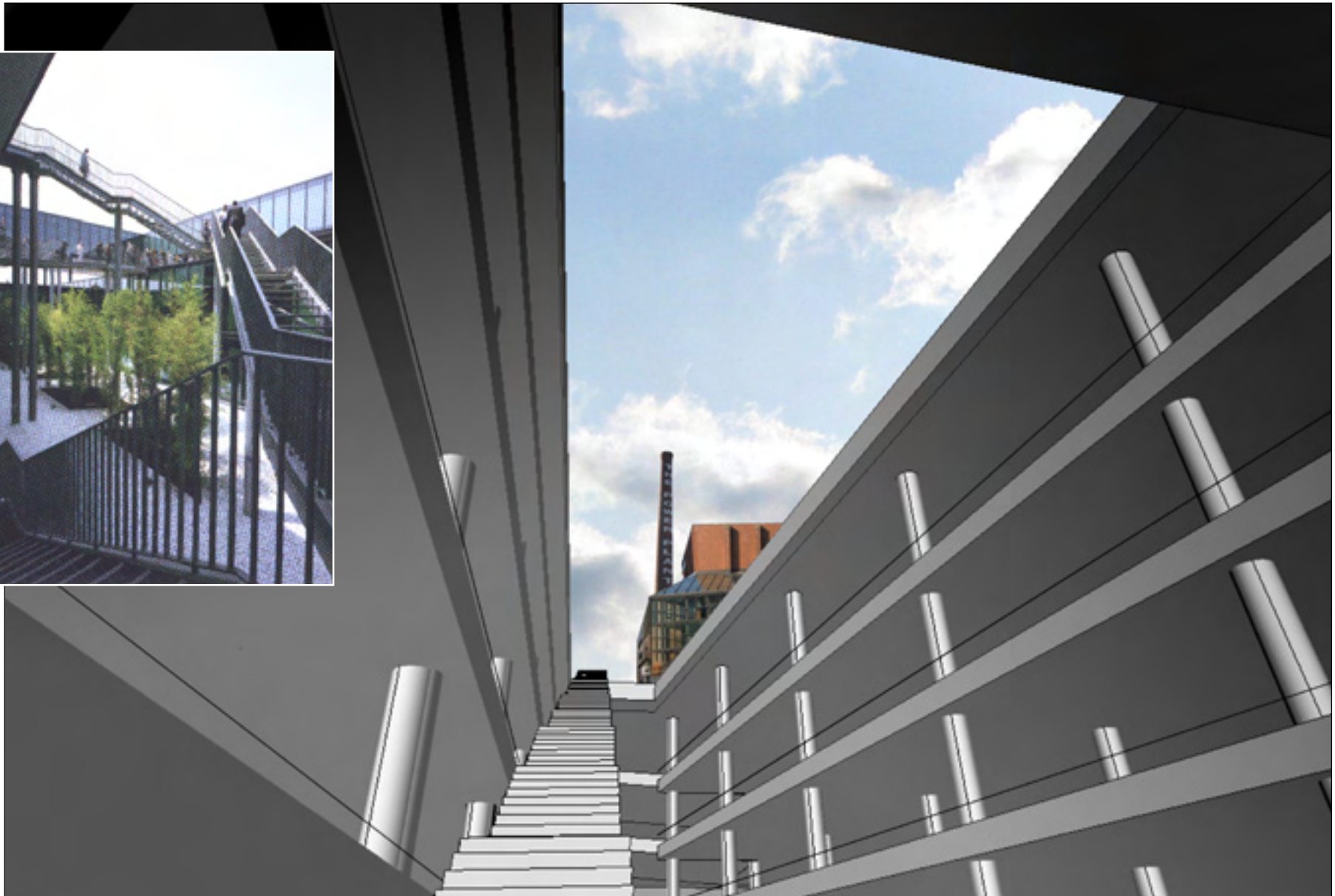
Public Space Framework

Garage Aperture



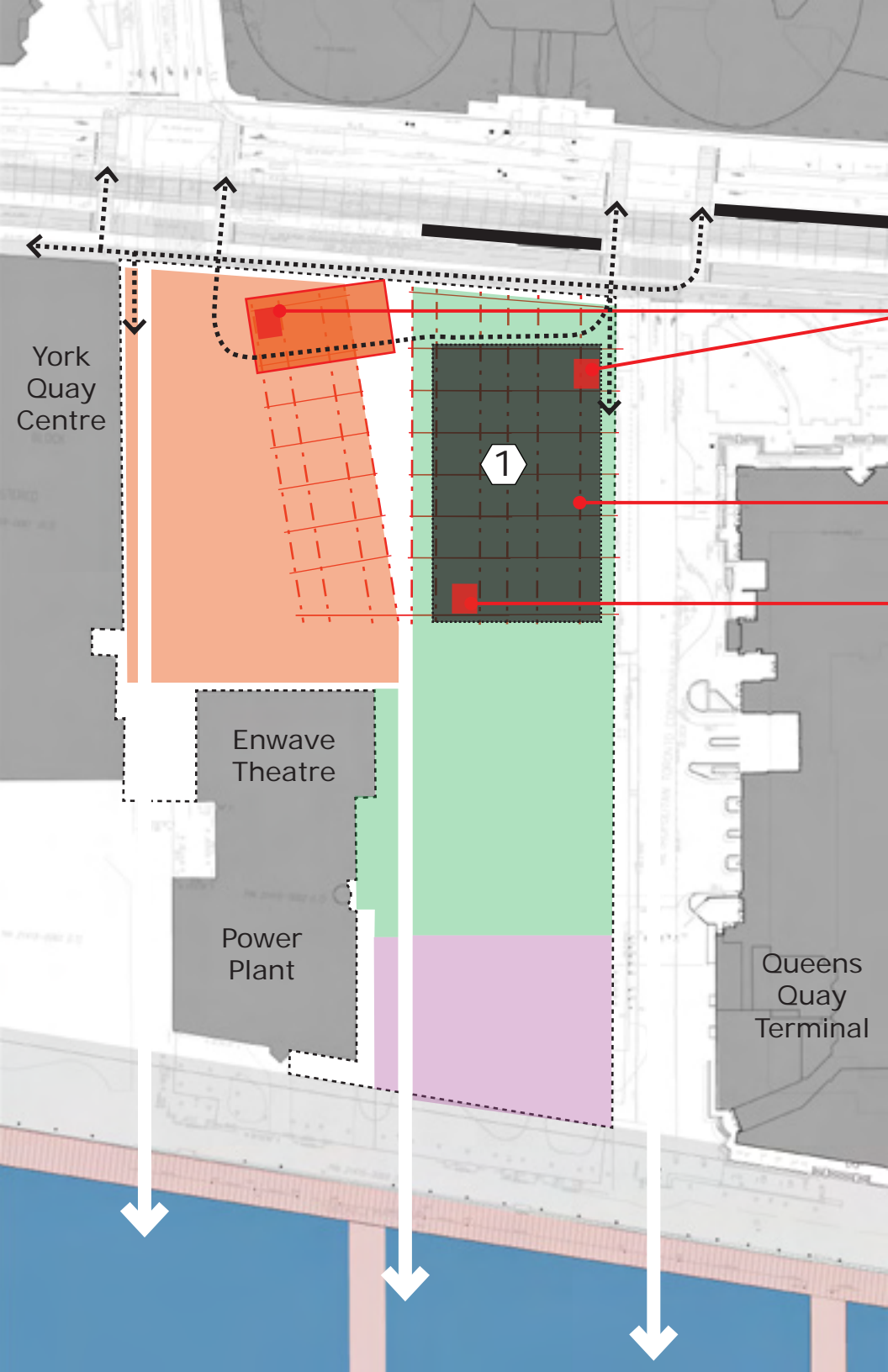
Public Space Framework

Garage Aperture



Public Space Framework

Cultural Village Buildings over Garage



Stair/ Elevator
from Garage

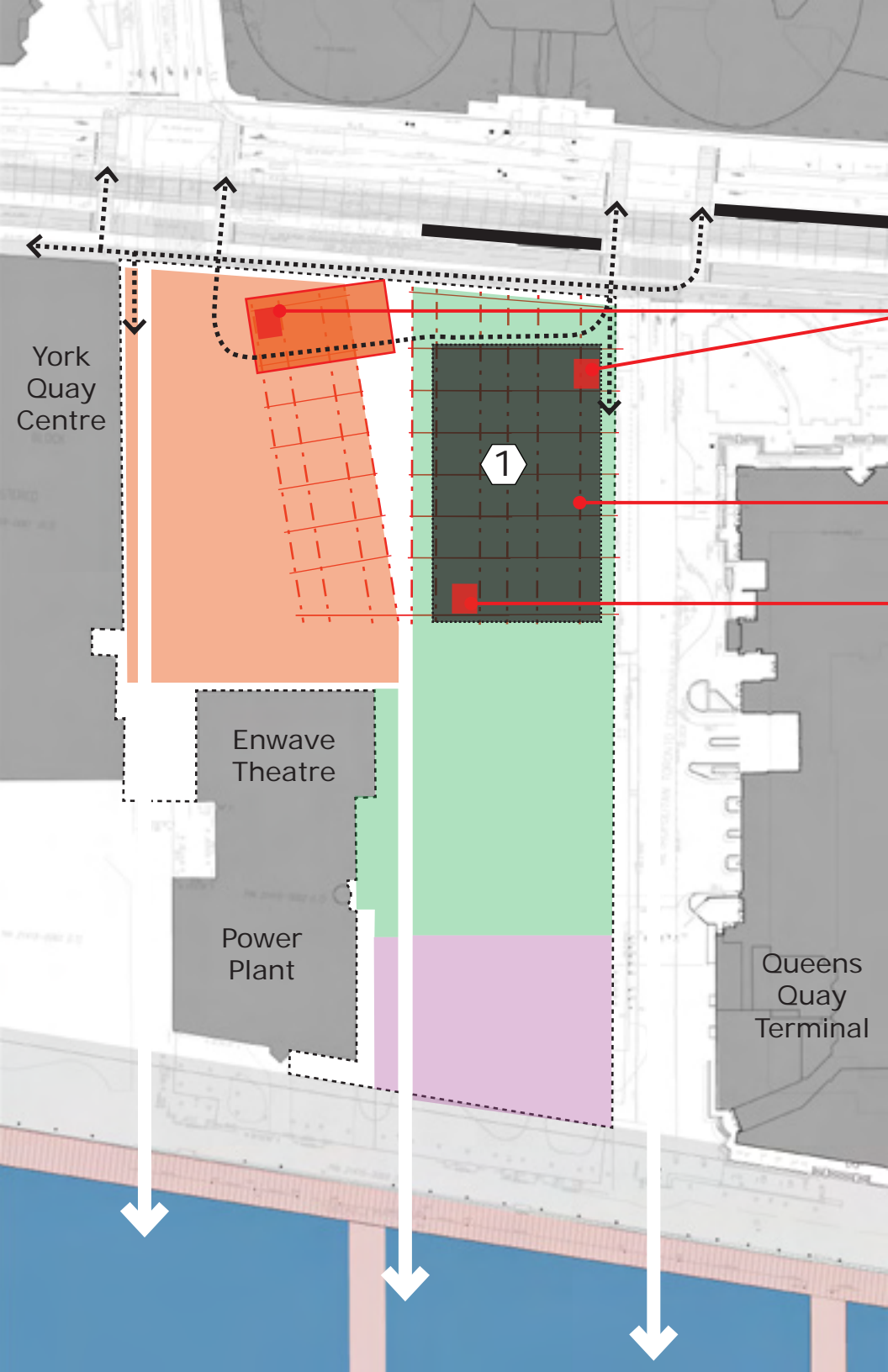
Zoning Envelope

Stair/ Elevator
from Garage

- Urban Square
- Cultural Village
- Canada Square
- Area for Development

Public Space Framework

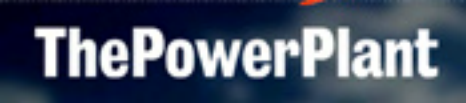
Cultural Village Buildings over Garage



Stair/ Elevator from Garage

Zoning Envelope

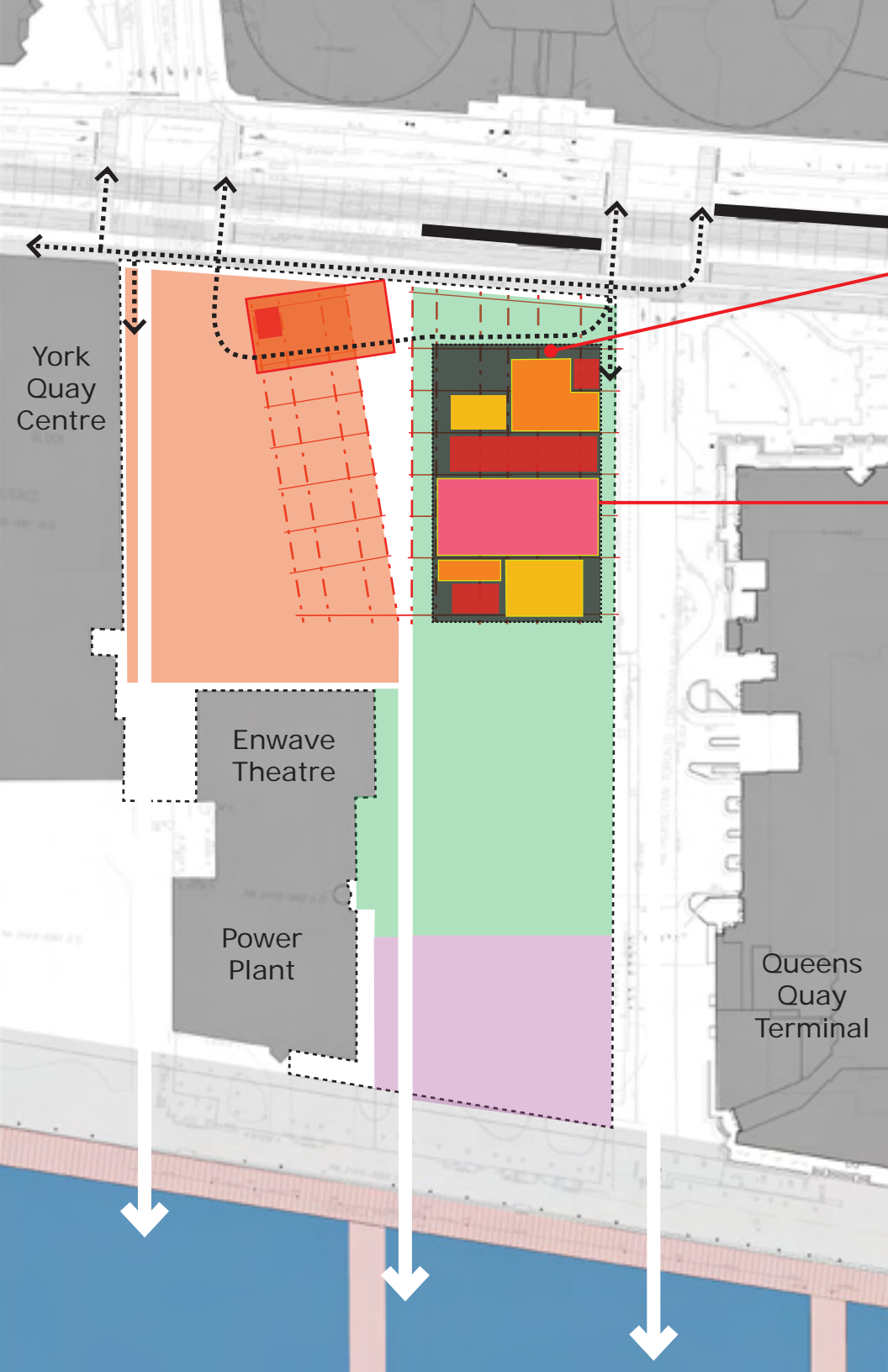
Stair/ Elevator from Garage



- Urban Square
- Cultural Village
- Canada Square
- Area for Development

Public Space Framework

Cultural Village Buildings over Garage



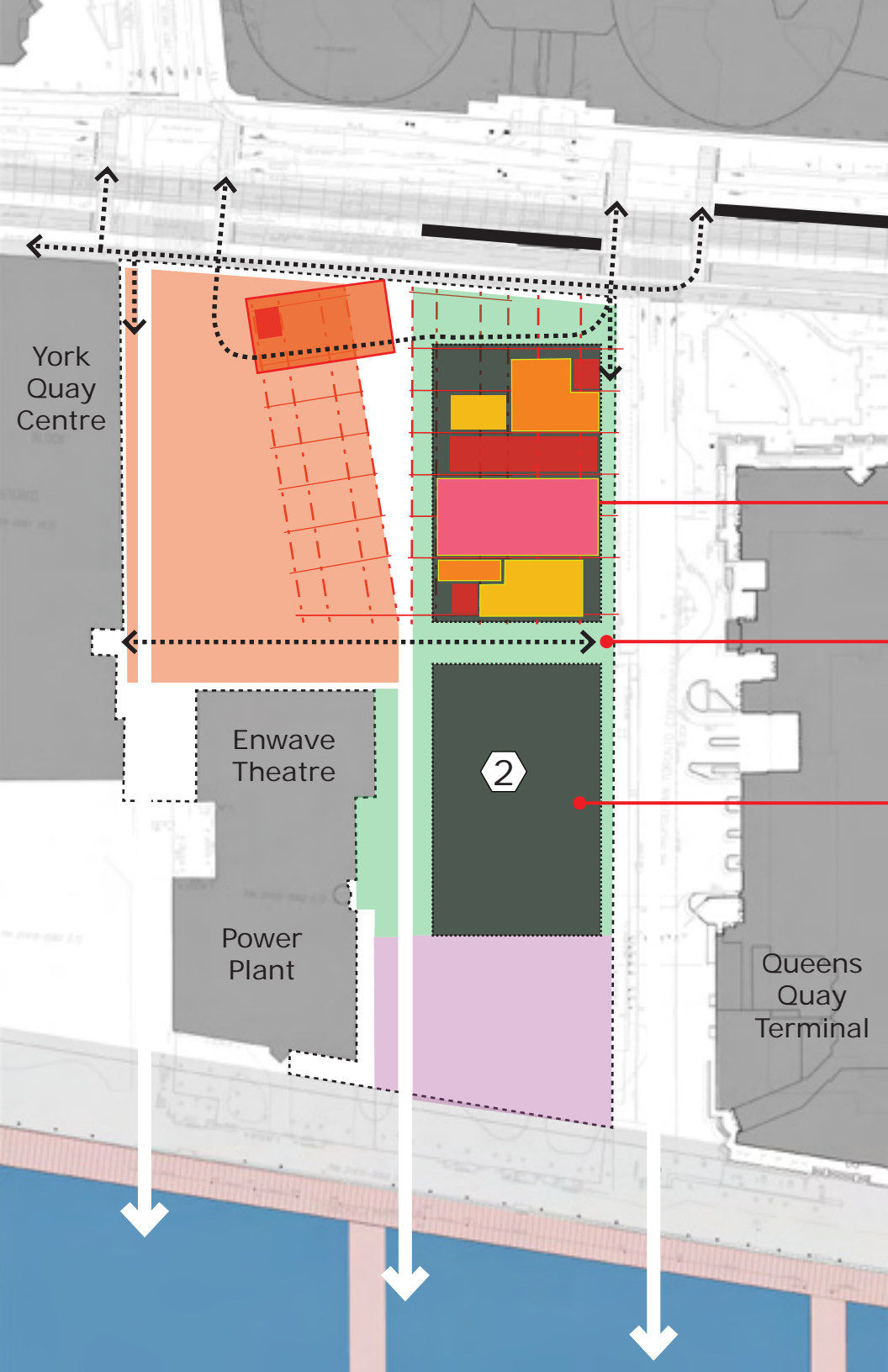
Consider build-to lines in zoning to acknowledge visual axis into site

Future Cultural Village Buildings

- Urban Square
- Cultural Village
- Canada Square
- Area for Development

Public Space Framework

Cultural Village Buildings



Future Cultural Village Buildings

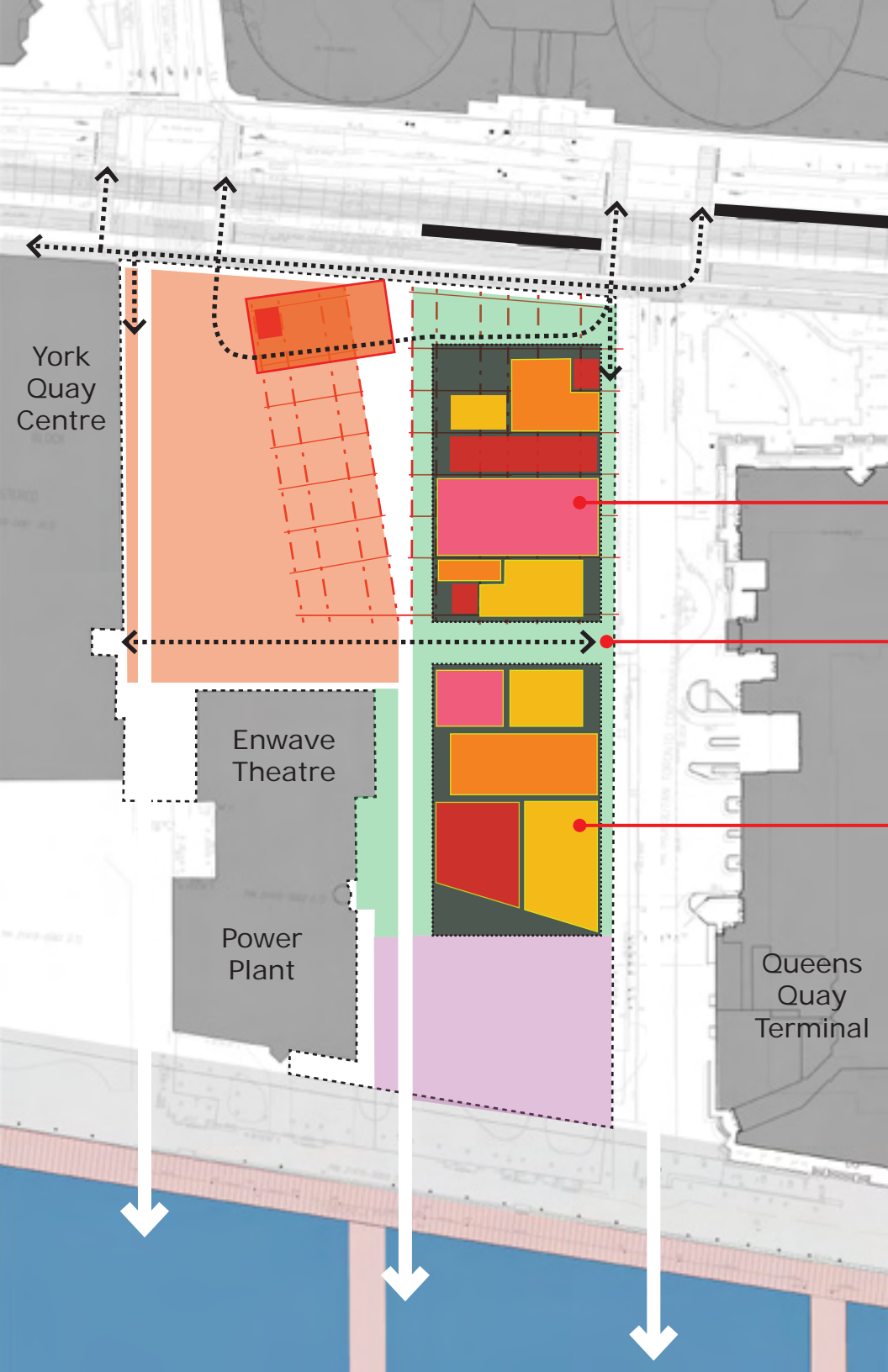
Pedestrian Axis

Zoning Envelope

- Urban Square
- Cultural Village
- Canada Square
- Area for Development

Public Space Framework

Cultural Village Buildings



Future Cultural Village Buildings

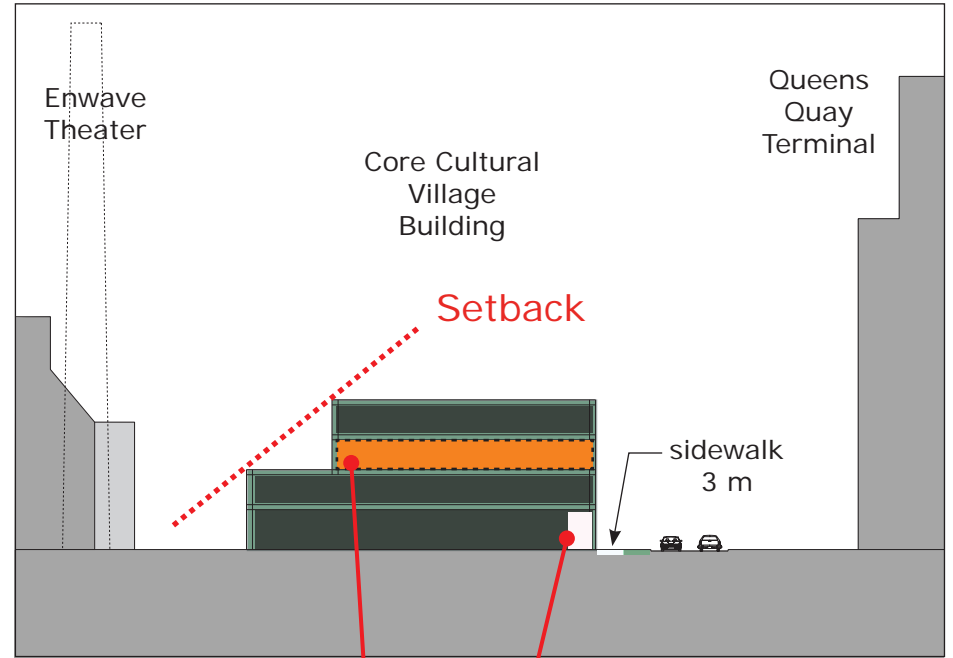
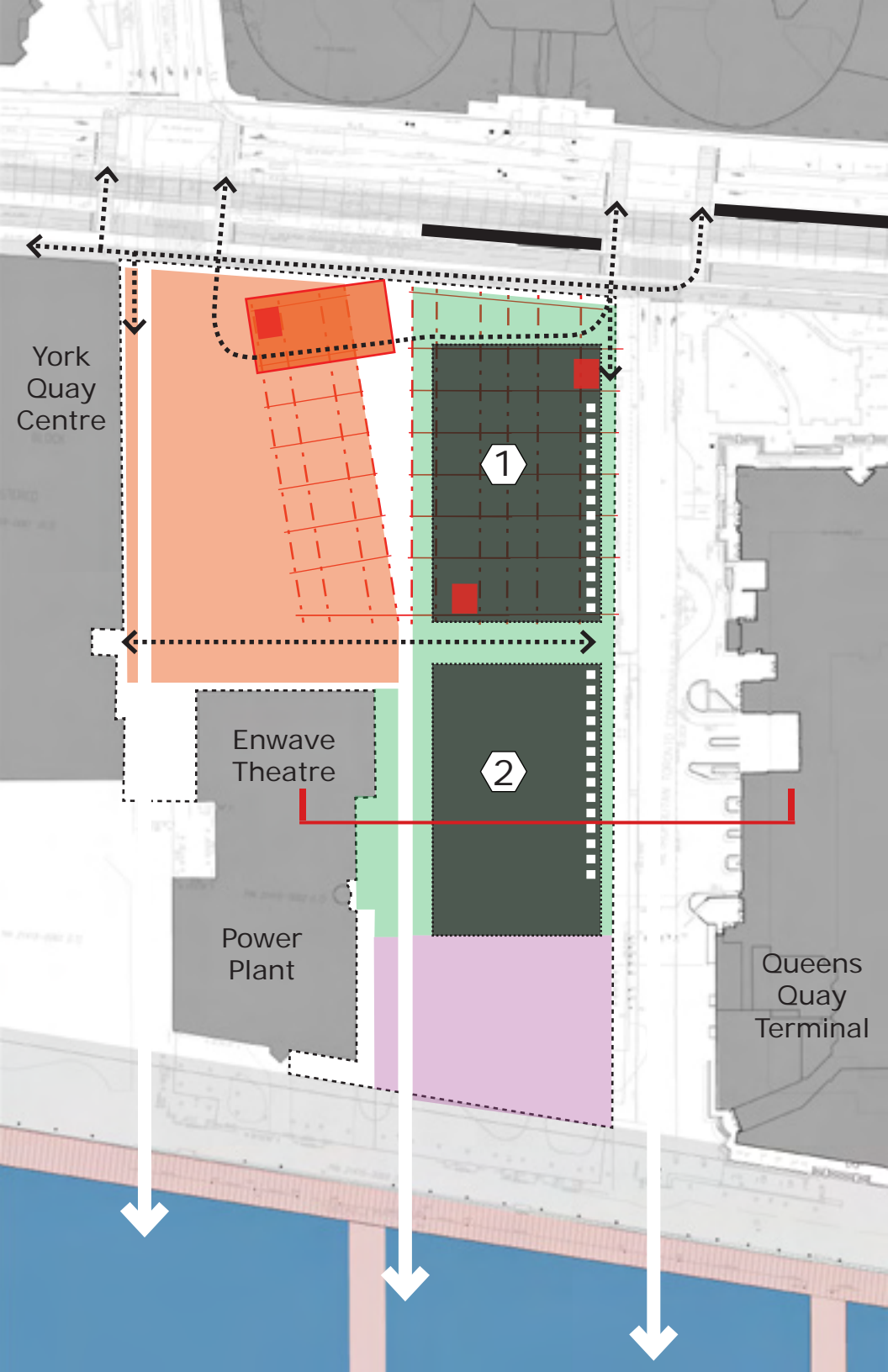
Pedestrian Axis

Future Cultural Village Buildings


- Urban Square
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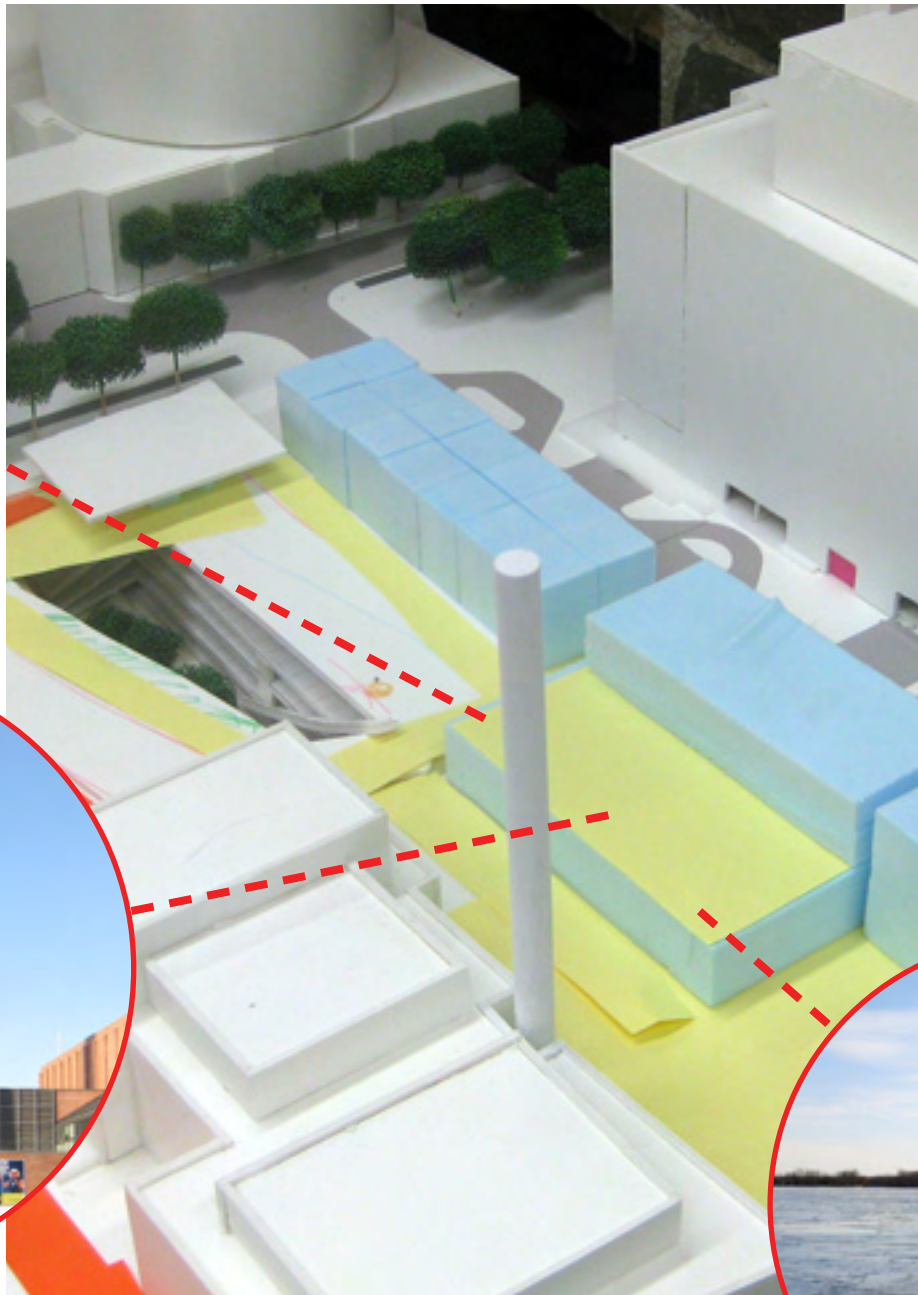
Public Space Framework

Cultural Village Buildings



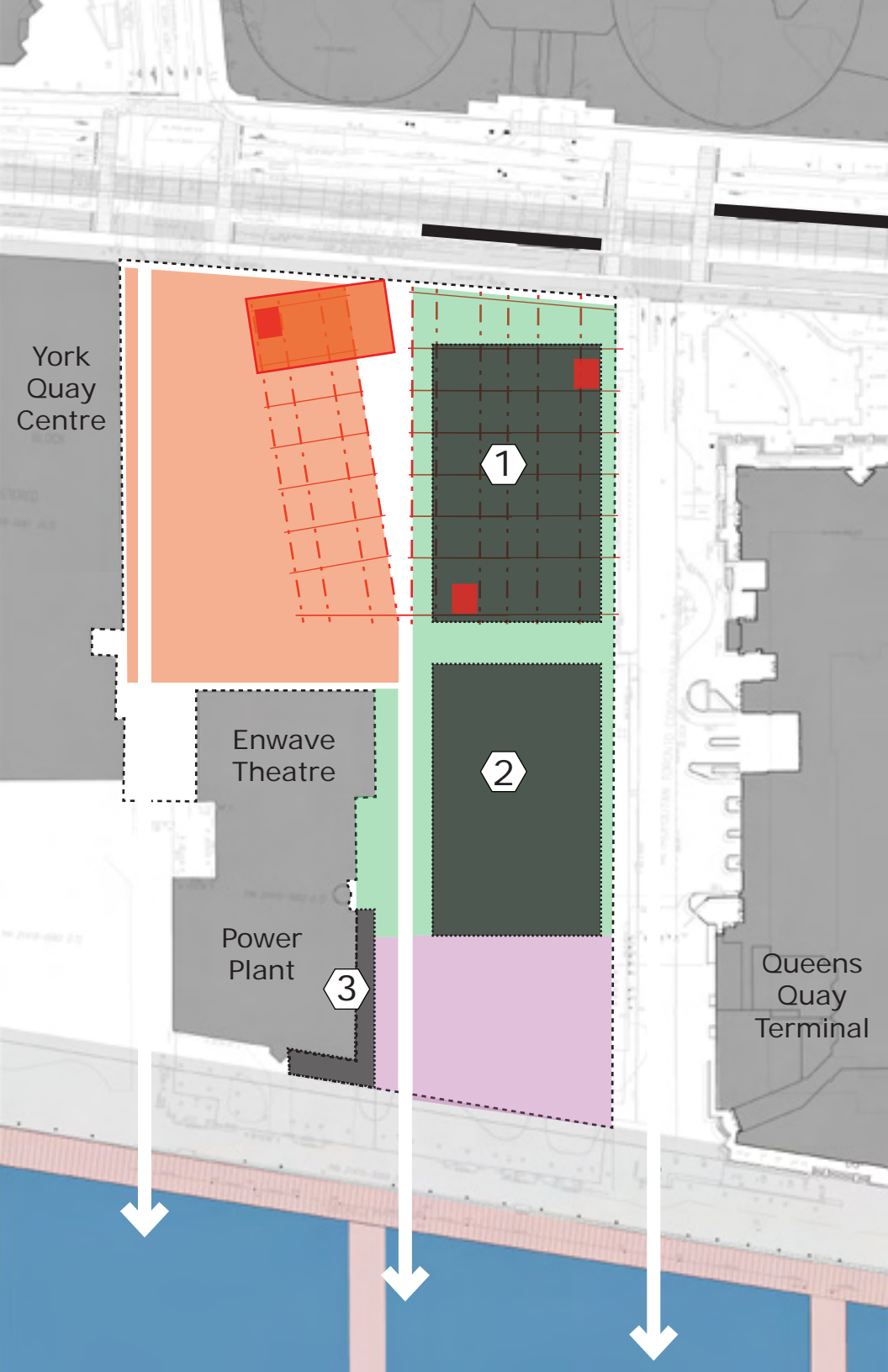
Strengthen feasibility for 3rd floor retail with restaurant terraces


-  Urban Square
-  Cultural Village
-  Canada Square
-  Area for Development



Public Space Framework

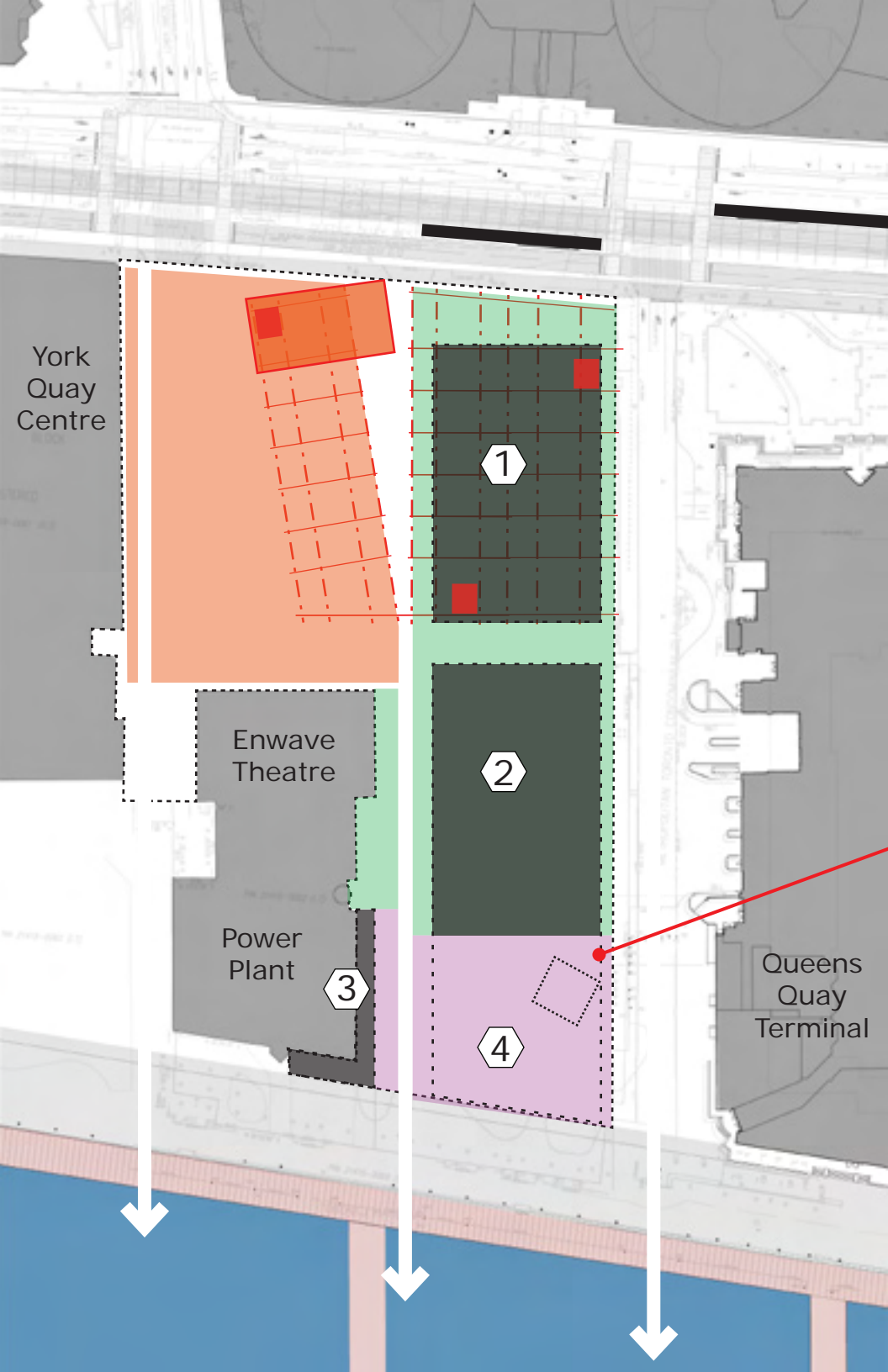
Canada Square Addresses



-  Urban Square
-  Cultural Village
-  Canada Square
-  Area for Development

Public Space Framework

Canada Square Pavilion



Create potential for a limited footprint pavilion within Zoning

- Urban Square
- Cultural Village
- Canada Square
- Area for Development

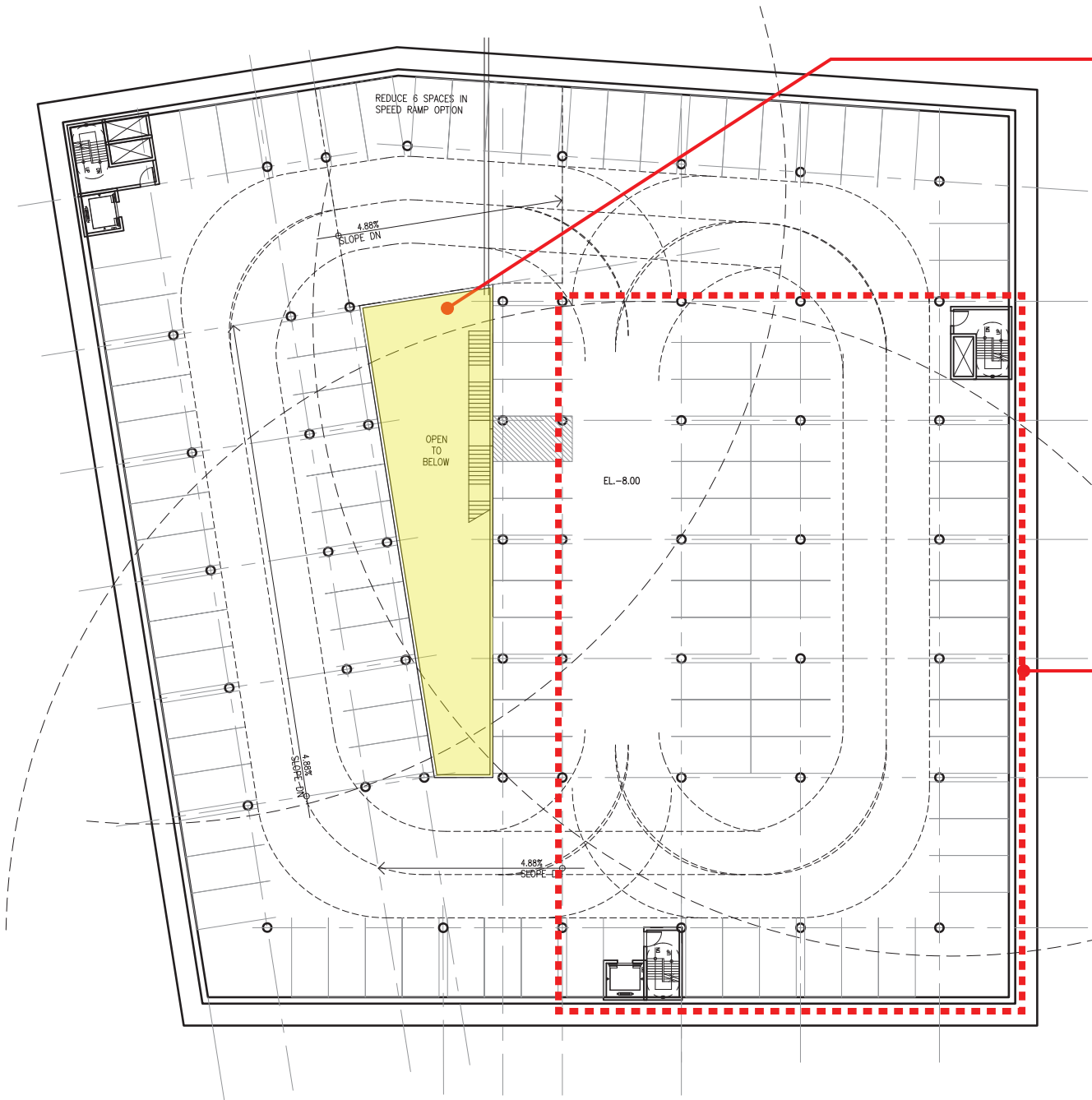
Public Space Framework

Canada Square Pavilion



Public Space Framework

Garage Parti

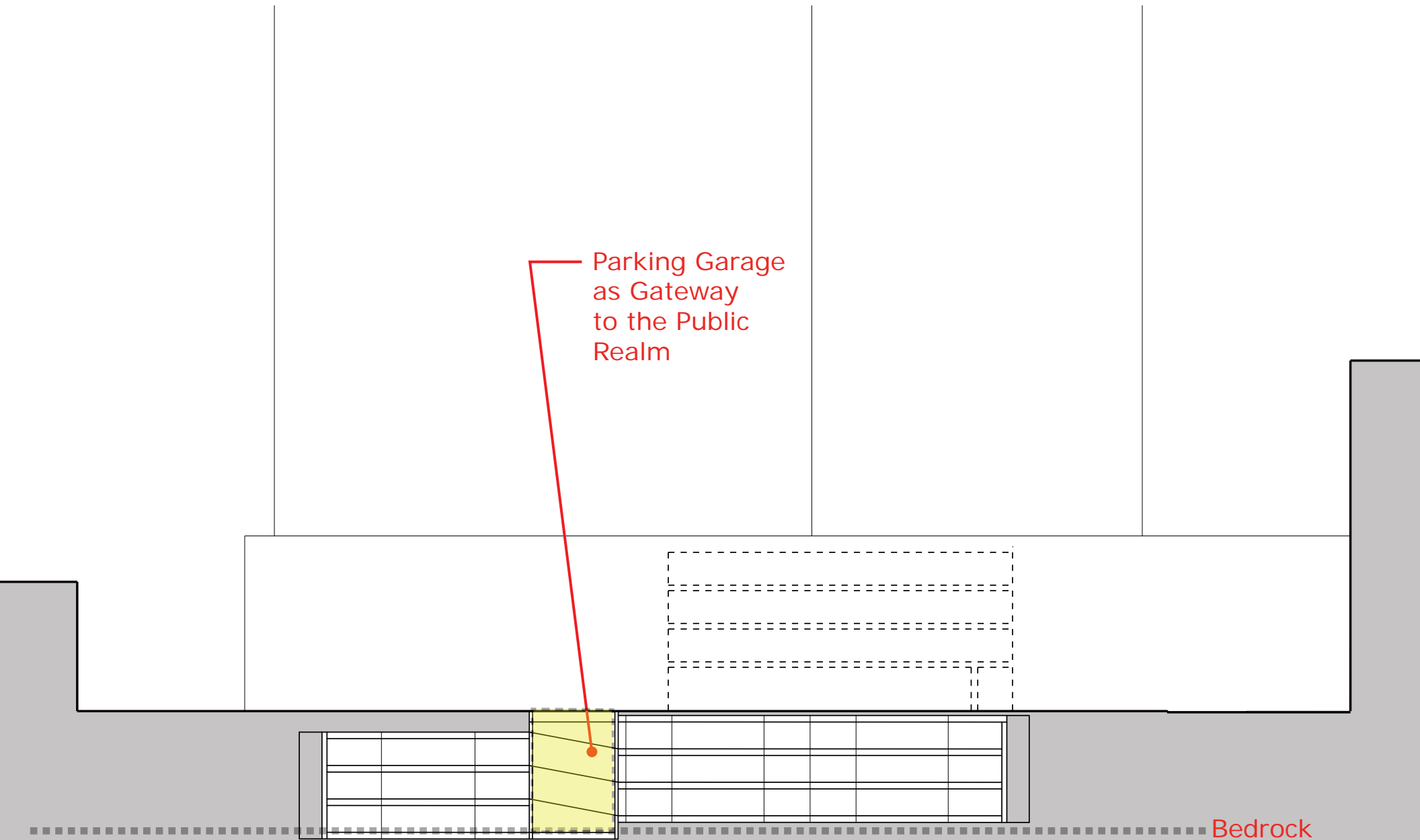


Parking Garage as
Gateway to the
Public Realm

Future Cultural
Village Buildings
Over Structure

Public Space Framework

Garage Parti



Parking Garage
as Gateway
to the Public
Realm

Bedrock

