

DRAFT

Yonge Slip 60% Design Design Review Panel

May 28, 2025

WEST 8 + dtah

Agenda

1. Introduction

- WaveDeck Legacy and Context

2. The Yonge Slip Experience

- Importance of Yonge St
- Context of the Slip
- Design Vision Overview

3. The Floating World

- Gangway Functionality and Design
- Phasing
- Arrival Sequence
- Water Taxi Usability

4. The WaveDeck and Shader

- Design Evolution
- Concept and Realization
- Shader Functionality
- Furnishing and Signage
- Art and Lighting

5. Technical Delivery

- Key slip dimensions
- Grading and drainage
- Functional access and materiality
- Lighting Strategy
- WaveDeck Details
- Shader Details

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Introduction

The WaveDeck legacy in Toronto

One Waterfront: Central Waterfront Masterplan

Queen's Quay / Water's Edge / Marine + Habitat



Borneo Sporenburg, Amsterdam, Netherlands

Floating worlds





Lifestyle Boating Community

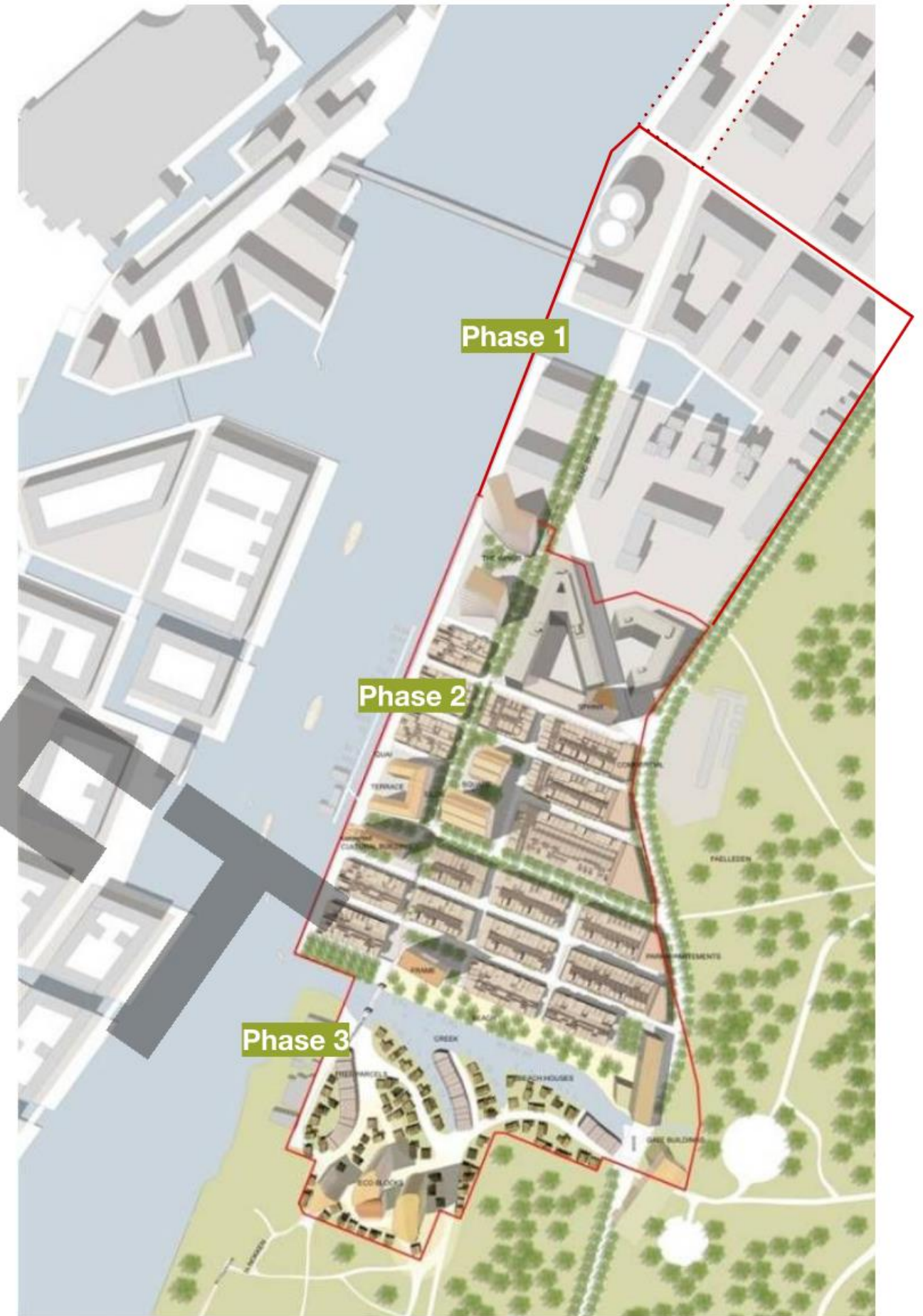
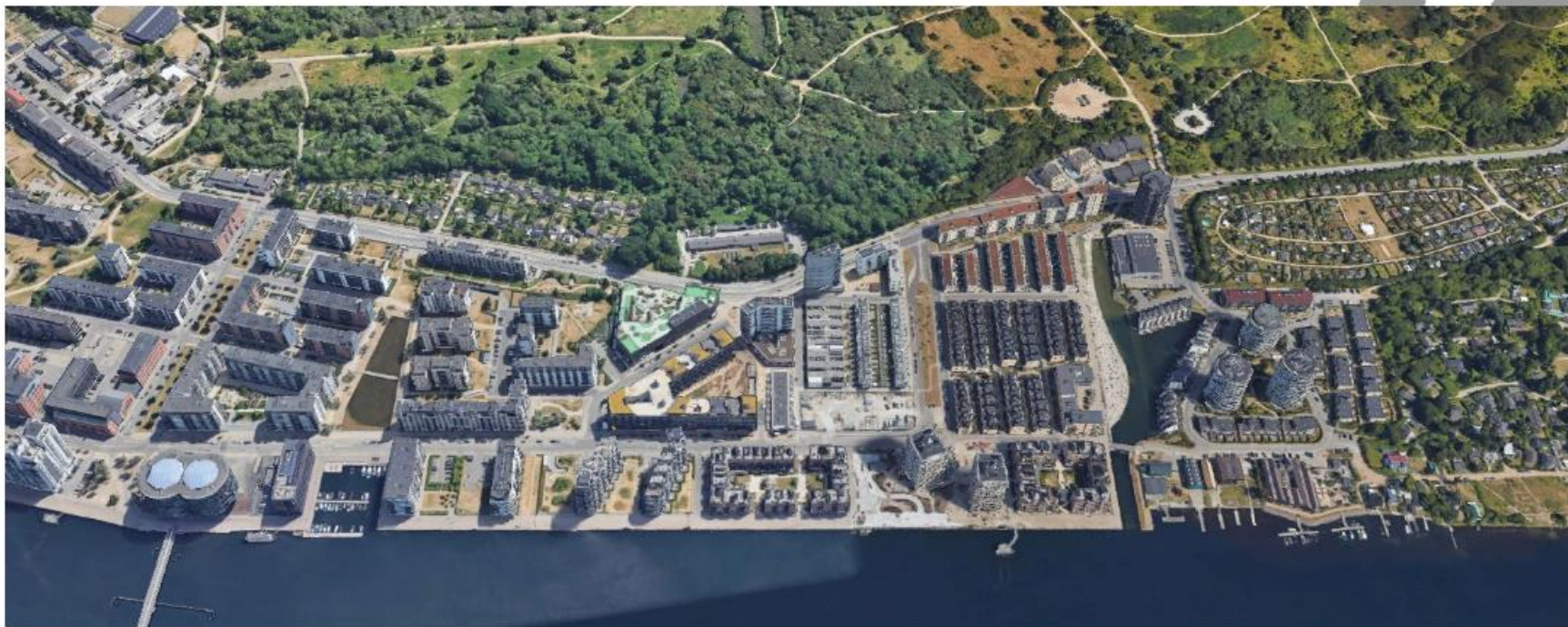
Islands Brygge, Copenhagen, Denmark

Floating worlds





Blue-Green Finger



Master Plan

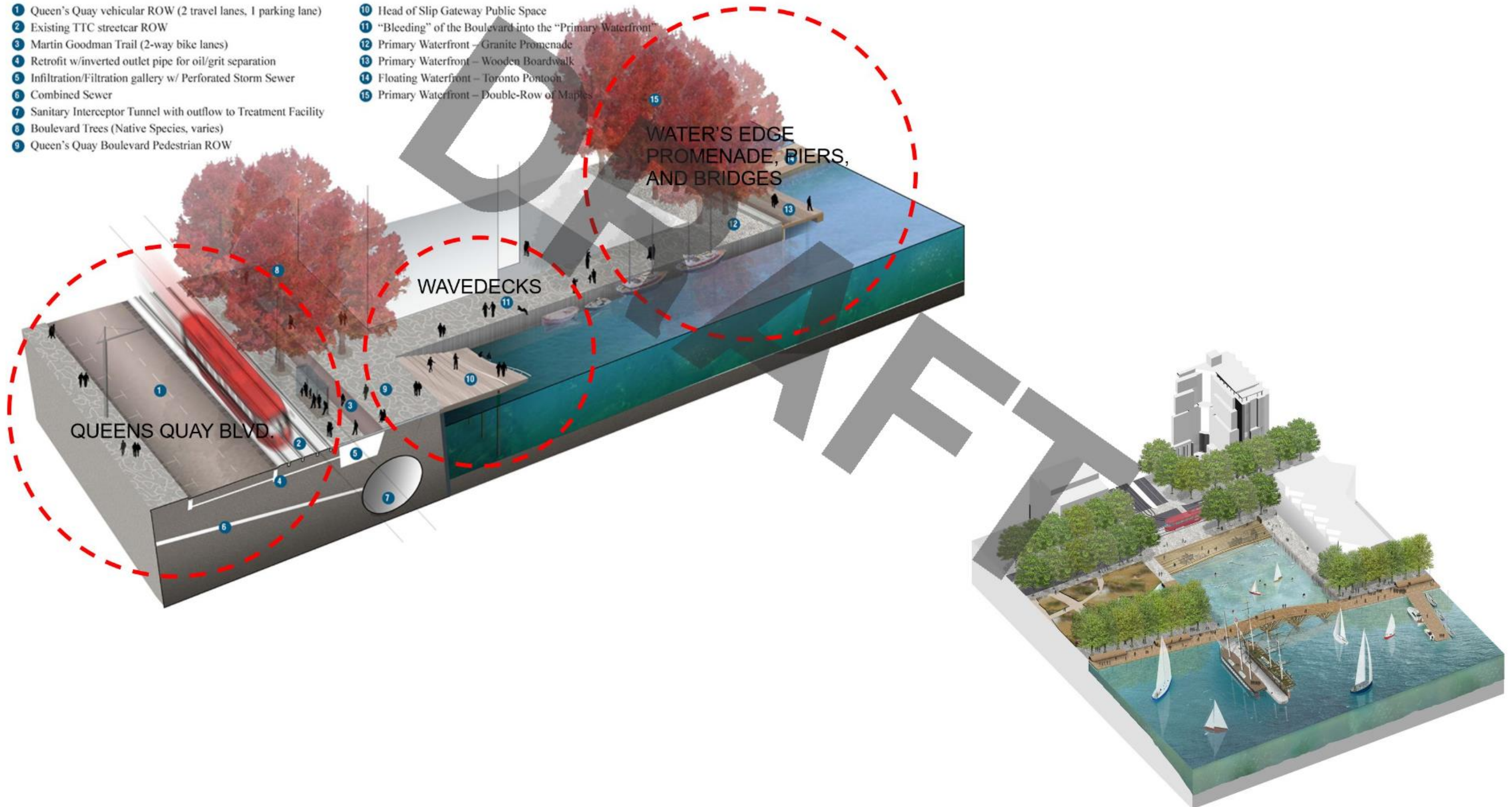
Rijnhaven, Rotterdam, Netherlands

Floating worlds



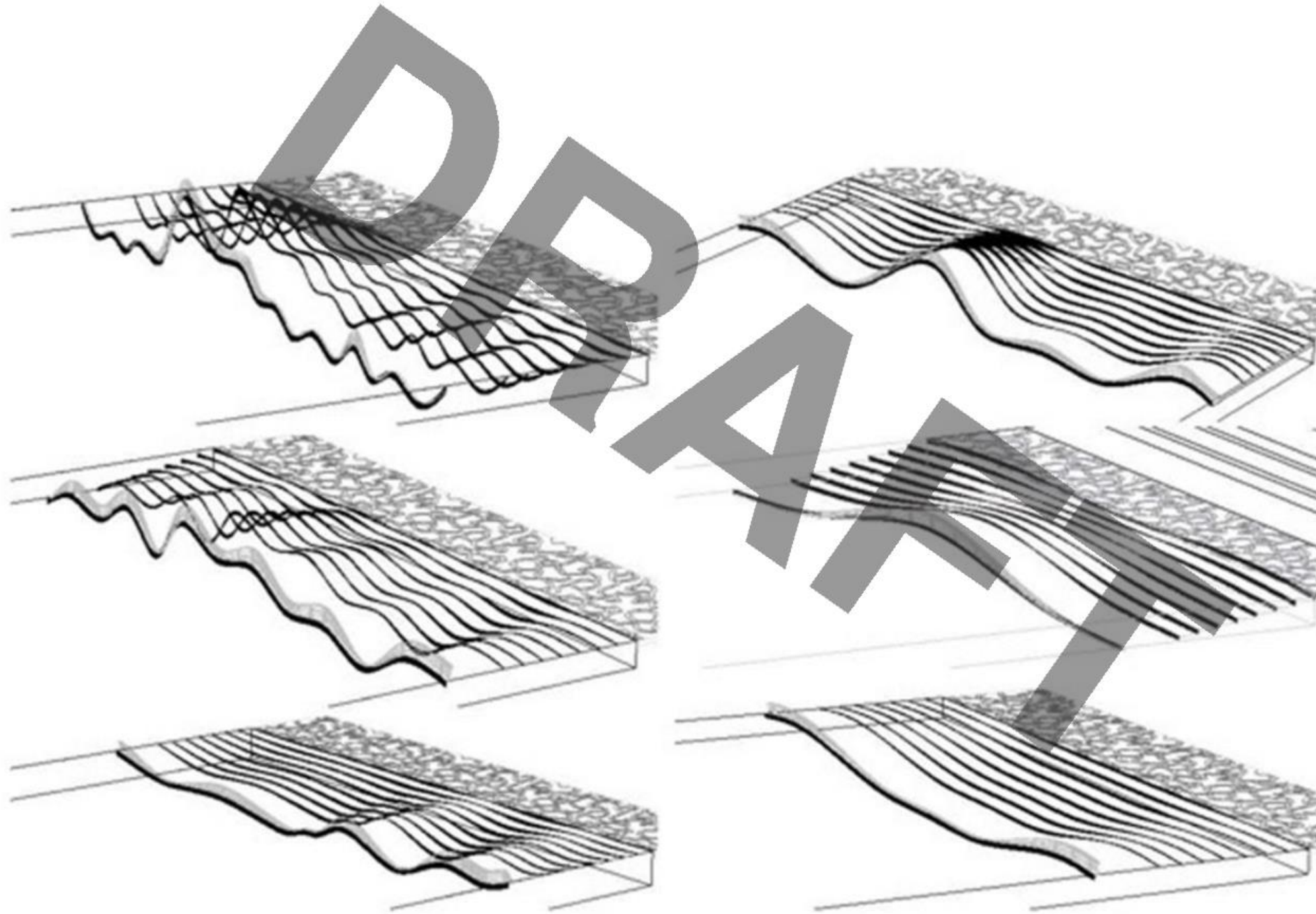
Three components of the head-of-slip typology

Boulevard + WaveDeck + WEP



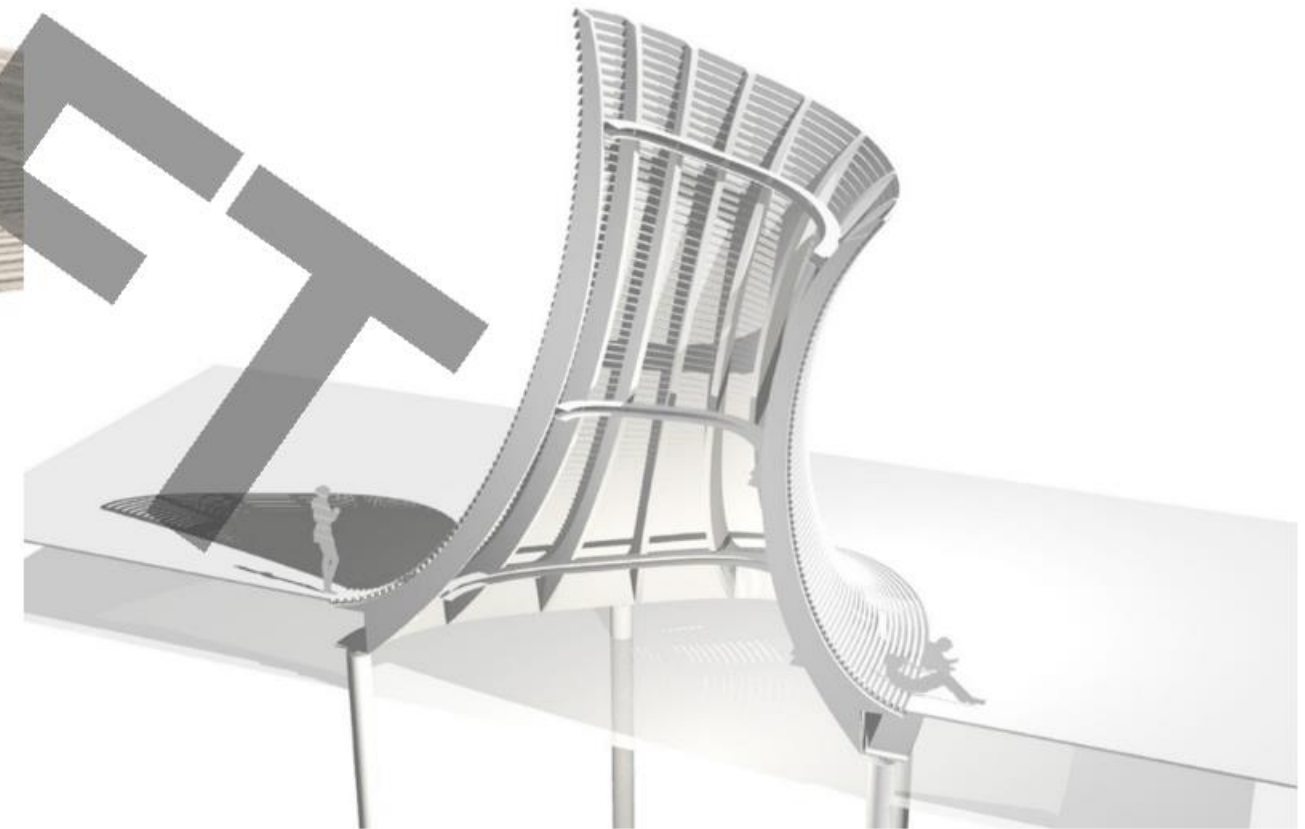
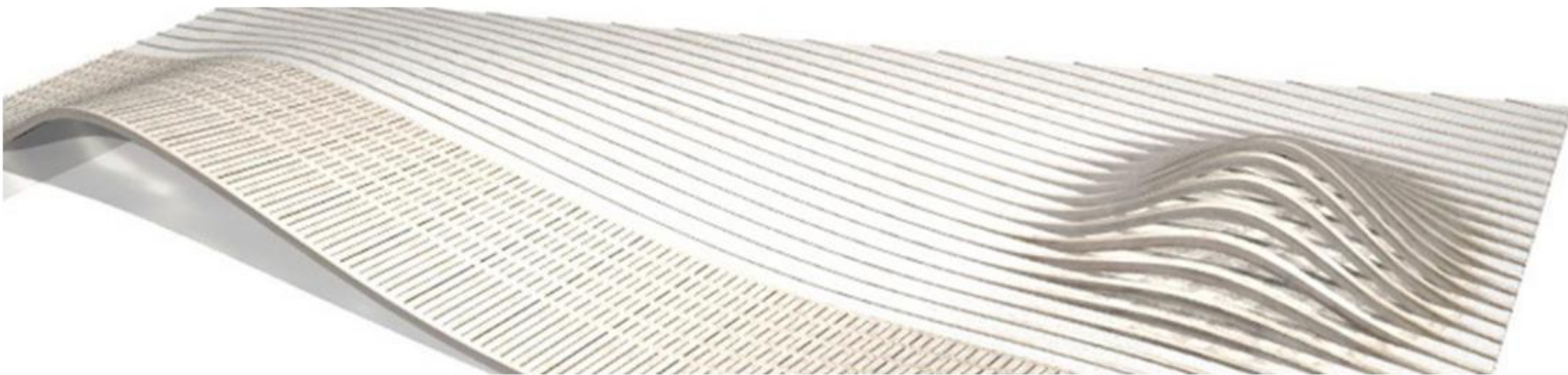
Toronto waterfront identity and recognition

Heads of slip unique silhouettes



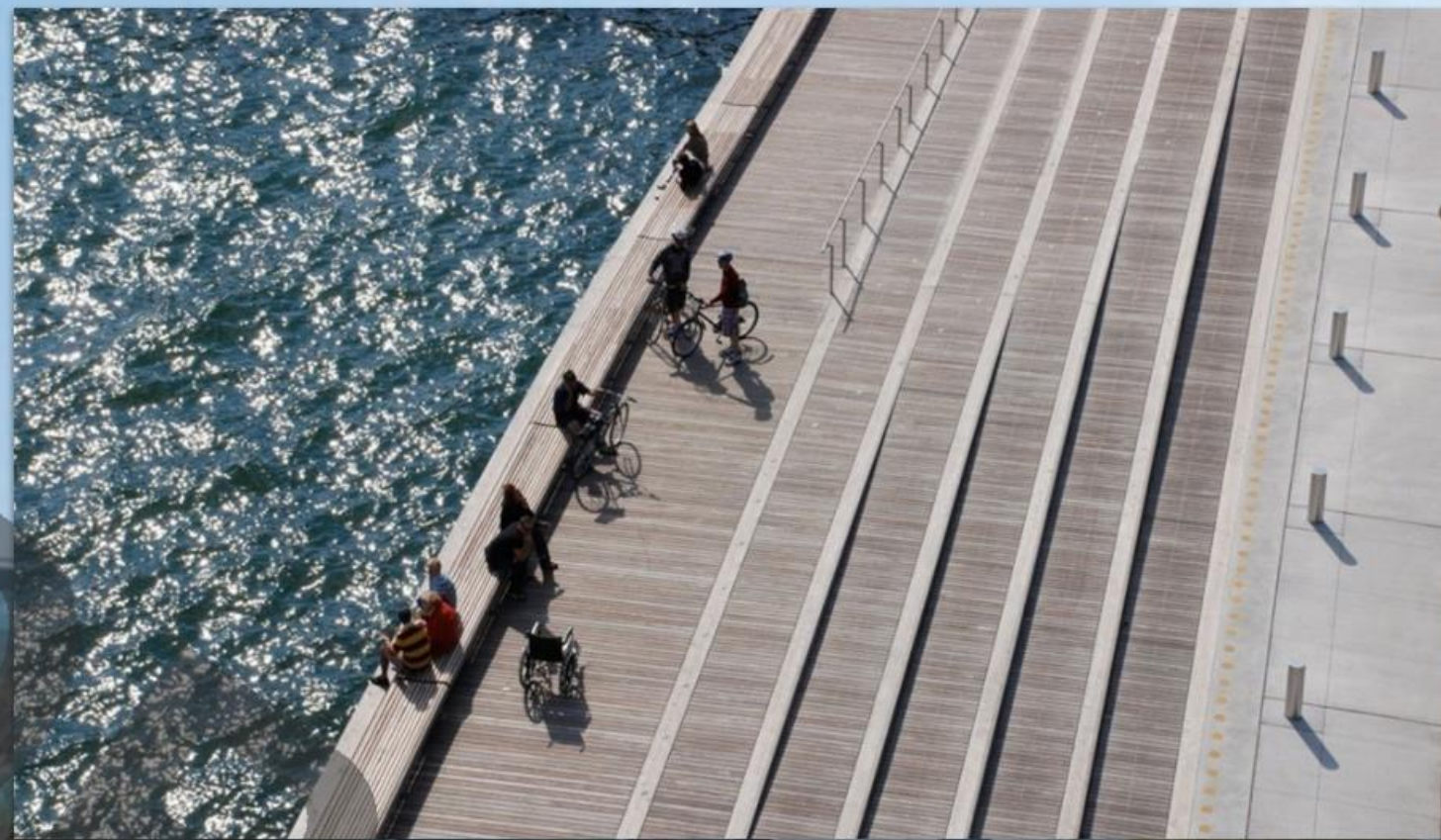
Journey of design research

Waterfront identity





DAVID
MOSES +
HALSALL
ENGINEERING



Building on the history of groundbreaking WaveDecks

Visionaries revitalizing urban culture and communities



Legacy of Toronto WaveDecks

Symbols of the most democratic waterfront in the world

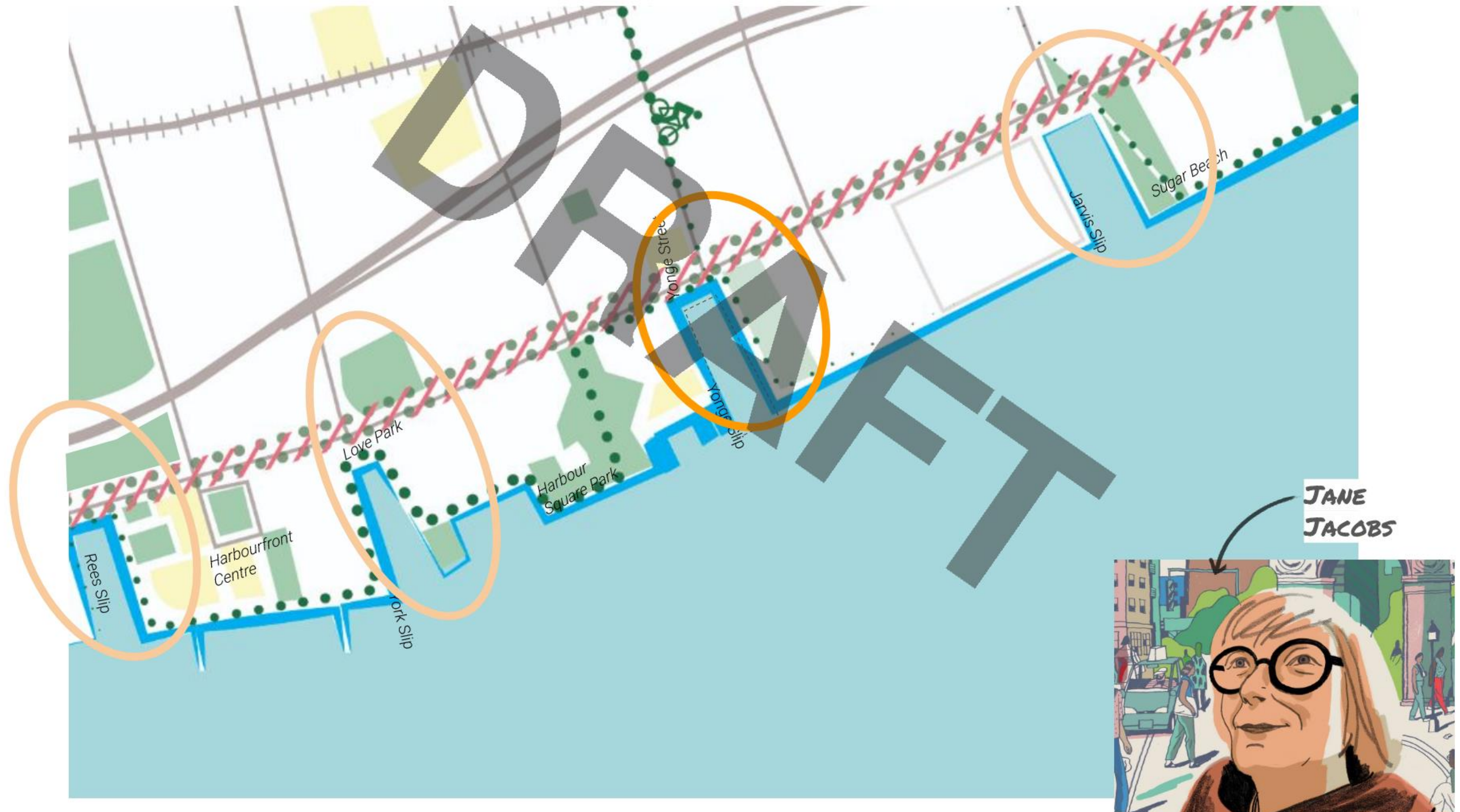


Legacy of Toronto WaveDecks

Aquatic habitat restoration

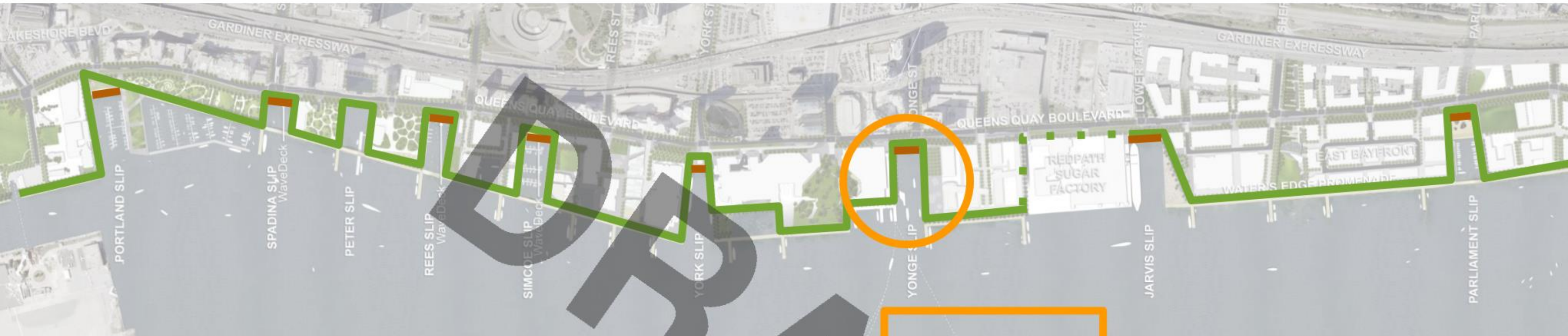


Waterfront Legacy: necklace of public parks and slip heads work together to create a high quality public space network



Waterfront Toronto vision for delivering #4!

Masterplan Vision



Portland
Step

Spadina
Rise

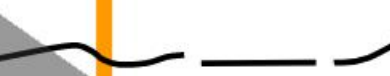
Rees
Dip

Simcoe
Sculptural Icon
Play

Yonge
Wait

Jarvis
Perch

Parliament
Ripple



1

2

3

4!

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The Yonge Slip Context

Yonge Street connects Lake Simcoe and Lake Ontario

North-south transect of Ontario

Toronto Carrying Place Trail

Indigenous trail connection between
Lake Ontario and Lake Simcoe

Yonge Street as new Colonial Road

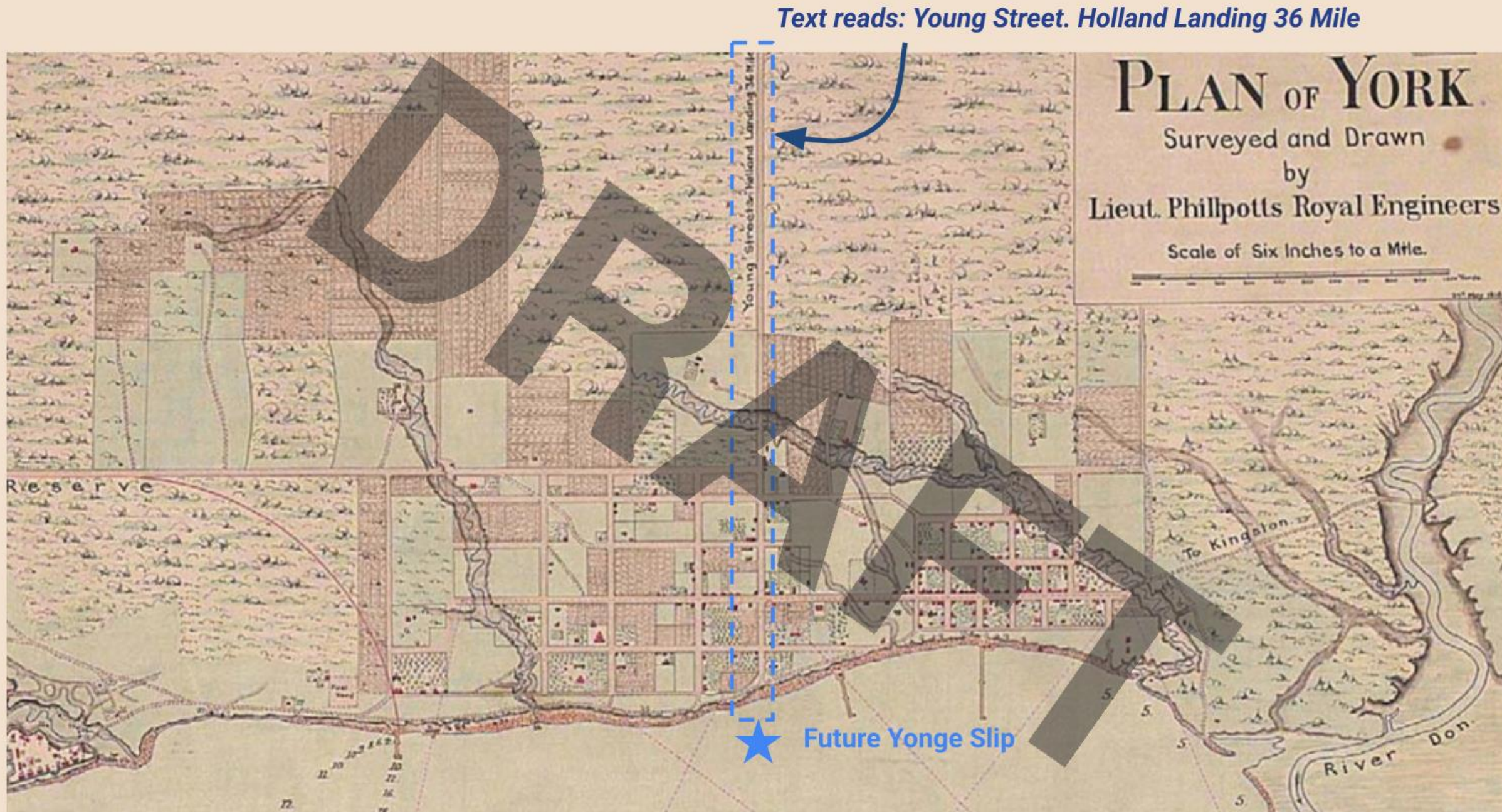
Route to Lake Simcoe after 1793



The pre-colonial history of Toronto shoreline is defined by numerous rivers, creeks and trails connecting to Lake Ontario, which Indigenous people used for meeting, trading and exchanging information. Early maps by French explorers depict Indigenous villages and campsites along the shoreline, attesting to 11,000 thousand years of settlement, with 65,000 people living on the north shore of Lake Ontario.

In 1688 a French explorer Vincenzo Corinelli created a map depicting villages in the now Toronto area: Theyagon and Ganeftikiagon. Theyagon was located just north of Jane and Bloor streets and was overlooking The Carrying Place Trail, and Indigenous equivalent of Yonge street that connected Lake Ontario and Lake Simcoe.

Basis of the colonial concession roads



The origin of Yonge Street dates back to 1793, when it was first designated by Upper Canada's first colonial administrator John Graves Simcoe, honouring his friend and British parliamentarian Sir George Yonge's interest and expertise in ancient Roman roads. The long, straight road was designed as a transportation corridor, accommodating movement of people and goods for sustained success and defence of Town of York – temporary capital of Upper Canada. The street cut through forests, creeks and Indigenous trails and for the most part of 1800s remained as a dirt road, which restrained travel for farmers or craftsmen. Yonge Street is the north-south baseline from which street numbering is reckoned east and west.

Yonge Street as (one of) the longest street(s) in the world

East-west transect of Ontario



Yonge street, south end ...

Source: Paul Bedford, 2007



...north end



Until 1999, Yonge Street was regarded in the Guinness Book of World Record for the longest street in the world due to a conflation of Yonge Street with provincial Highway 11 which went all the way to Rainy River / Baudette, Minnesota.

DRP Chair Paul Bedford drove this entire length of Yonge Street in 2007, reporting to Planning Futures publication on the various state of political and planning challenges and successes along the transect that crosses almost the entire width of the province of Ontario along the Canadian/American border.

According to the Guinness website today, "It is hard to say exactly what the longest street in the world is, as there are many variations in how different types of road are named and classified. The strongest candidates, however, are all located in Ontario, Canada... Yonge Street, Bathurst Street, Simcoe Road (Oshawa), and Airport Road (Mississauga) are all contenders.

Yonge street as a key cultural historic and transportation corridor



Rebels marching on Toronto, 1837

Prohibition Parade, 1916



The Yonge Street Pedestrian Mall at Queen, 1971.



Subway Construction, 1952



High rise developments and metropolitan grandeur, 2020's



Throughout history Yonge Street has further solidified itself as a transportation route with early and ongoing investments in public transportation. Its role as Toronto main street was established by commercial uses locating along it and by the planned and spontaneous cultural celebrations and demonstrations that took place along the corridor. When the city rose up against Upper Canada's British colonial government in 1837, Yonge Street was the hub of the revolt; Mackenzie's Rebellion, which would go on to spur the British North America Act which created the Province of Canada.

Yonge street saw a lot of important historical events throughout its existence like construction of Toronto's first subway, first theater to show motion picture, first shopping mall and first riot to name a few, making it almost like a "city's mirror." Home to the Santa Claus parade, the start line of the Toronto Marathon and 10K, and Pride Parade to name a few. In recent decades a number of very high rise towers have been built and are planned for Yonge Street, building on the corridor's contemporary and historical importance as a cultural and transportation spine.

Yonge Slip & Pier as part of the Toronto Waterfront's defining pattern language of Slips and Piers



City of Toronto Archives, Fonds 2, Series 958, File 111, Item 2

1890

Pier building with steam ships



City of Toronto Archives, Fonds 200, Series 376, File 4, Item 27

1904

View from the pier building towards Yonge Slip



1912

The hustle and bustle of a working waterfront



1927

Pier building with wooden boardwalk



1973

Arrival of the Harbour Castle and Toronto Star



1980's

Captain John's restaurant and commemorative "wavedeck"

Where does the legacy go?

Yonge Street is an incredibly **important street** of national, provincial, and local significance, with a **multiplicity of narratives**.

The **Slip & Park together** mark “the start of Yonge Street”.

The **WaveDeck** is an **iconic public space** that doubles as intuitive wayfinding on the waterfront. She belongs to a **family** of WaveDecks - each specially designed to respond to the unique context and programmatic needs of each Slip.

Park as Celebratory Place

Existing Commemorative Elements reincorporated into Park



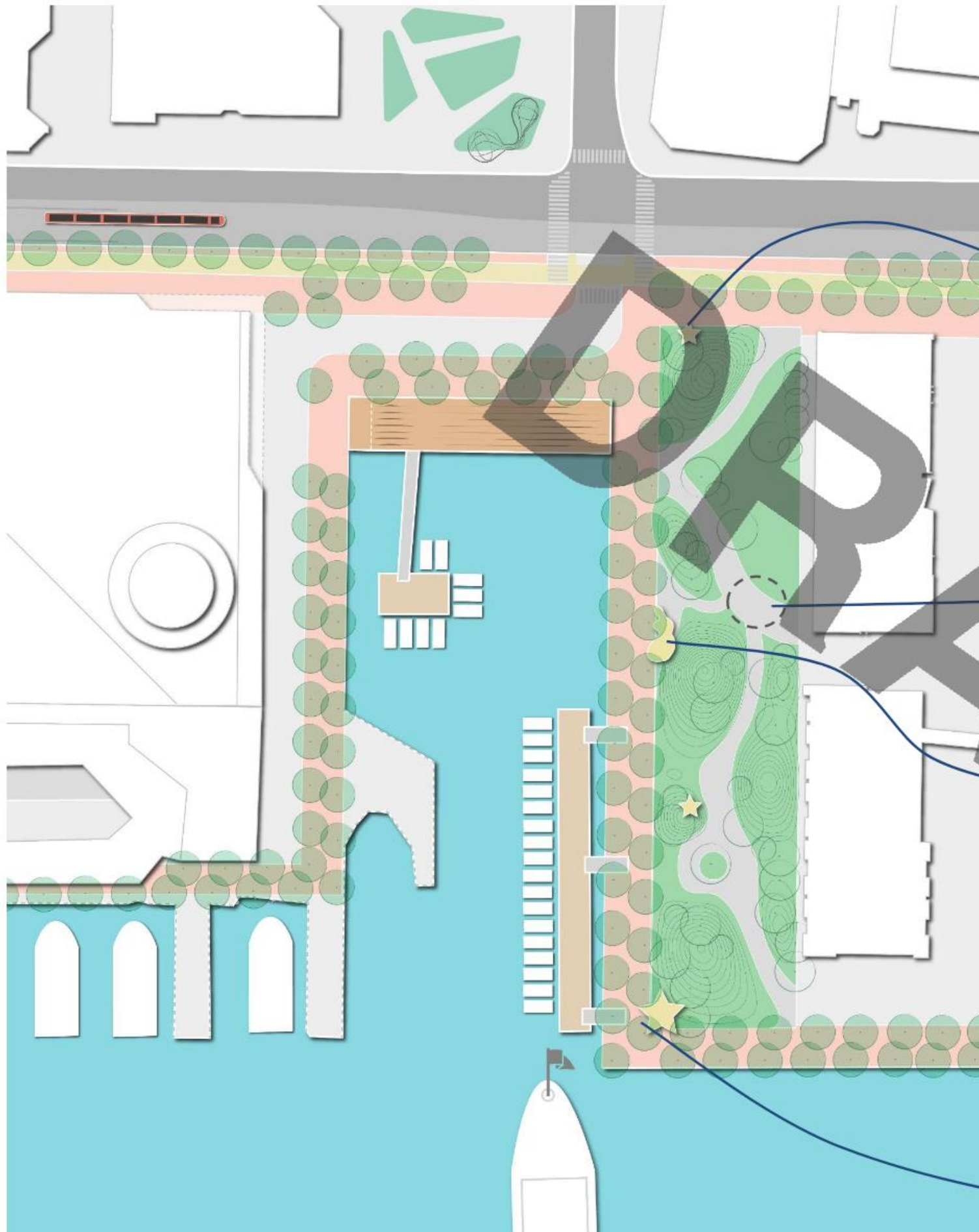
Potential for park pavilion with horeca function and public toilets:



Opportunity for public art and integrated Indigenous design



Ceremonial flagpole and piles to welcome ceremonial visiting ships, extending Yonge Street into the water



Context Research

Architectural characters and planned skyscrapers demand sufficient public space



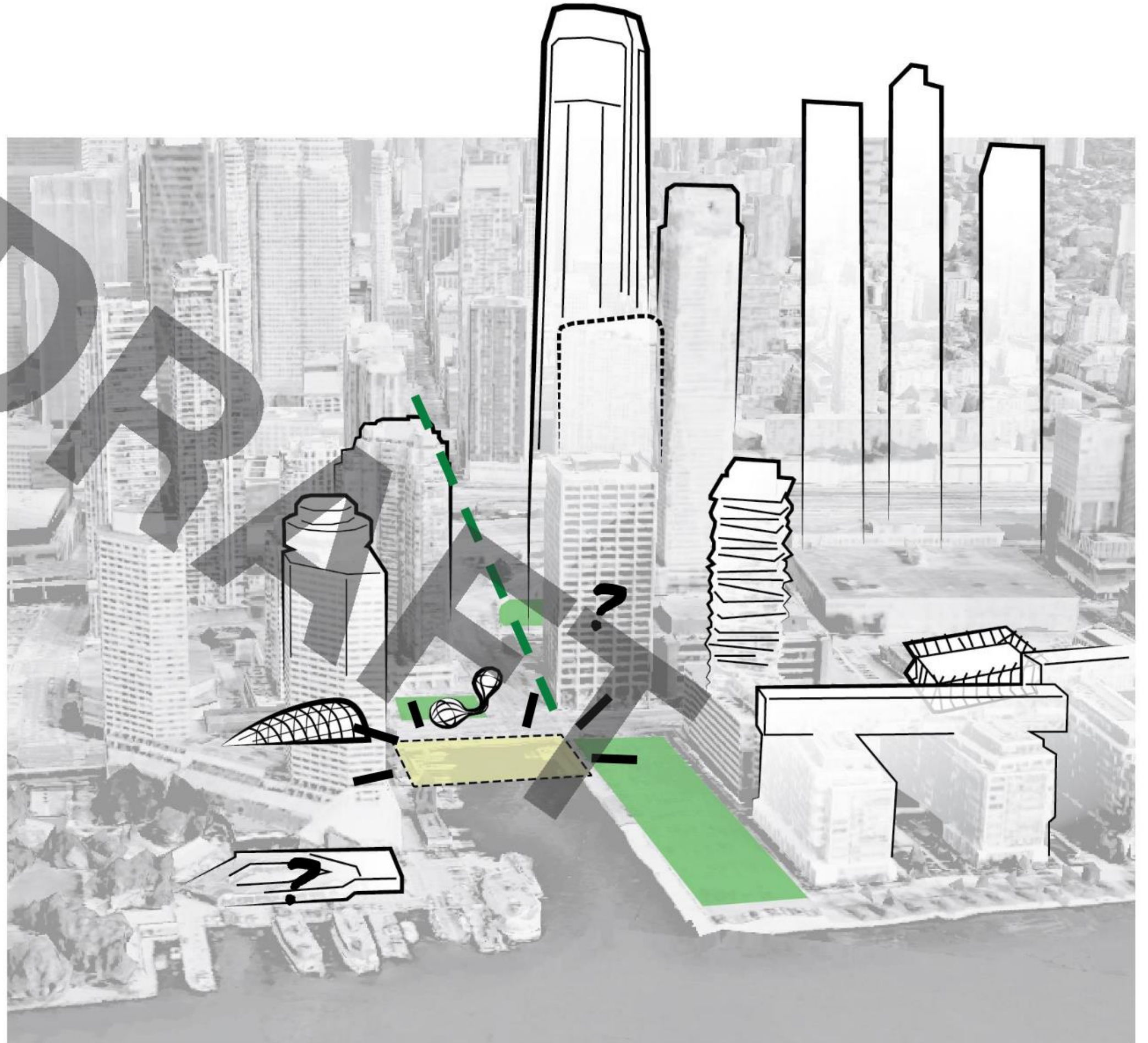
SkyTower at Pinnacle
One Yonge



Sugar Wharf



Pinnacle One Yonge
Commercial



Skyscraper attitude at eye level

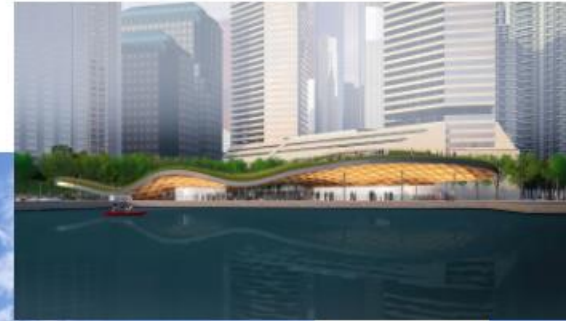
Context Research



Attitude



Known and unknown futures...



Constellation of super tall towers



4-6 storey bunker

Slip seems congested with visual clutter and signage

Context Research



'70s interface of blind and large concrete

Context Research



Nearby urban artifacts in steel and metal

Context Research

Public art 'between two eyes'



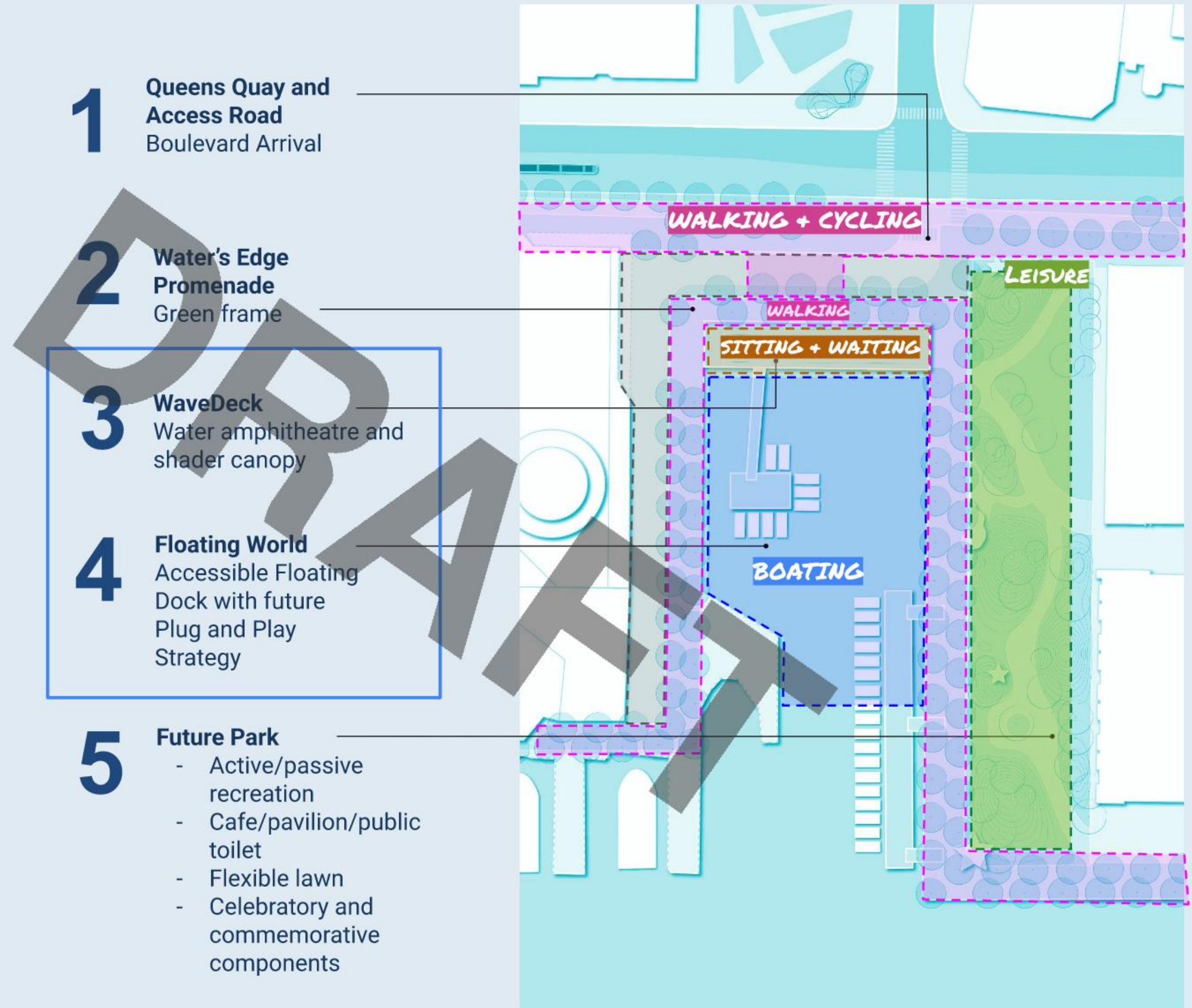
Steel and wire cable spider with 'sails'



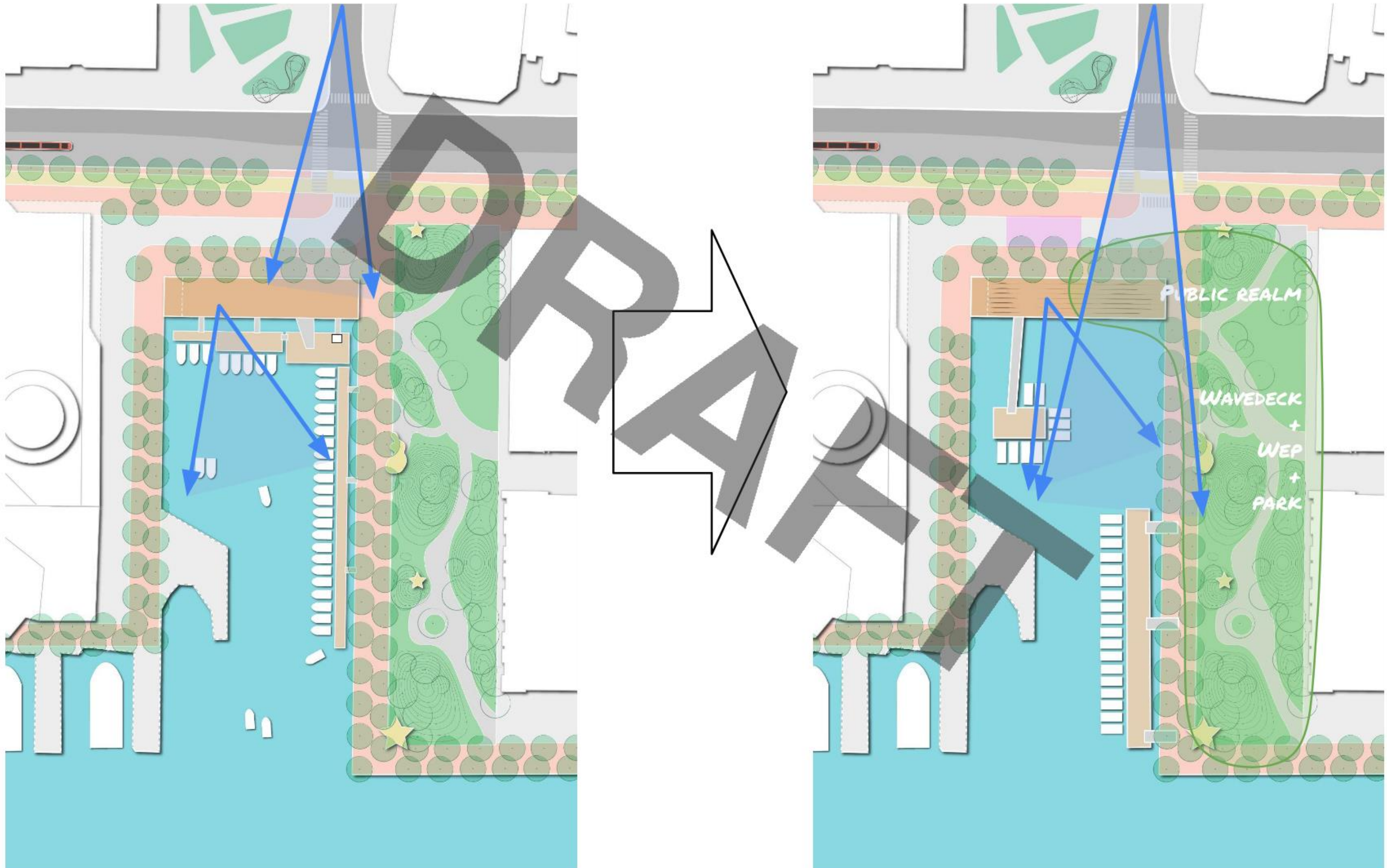
Commercial signage and ventilation in view corridor

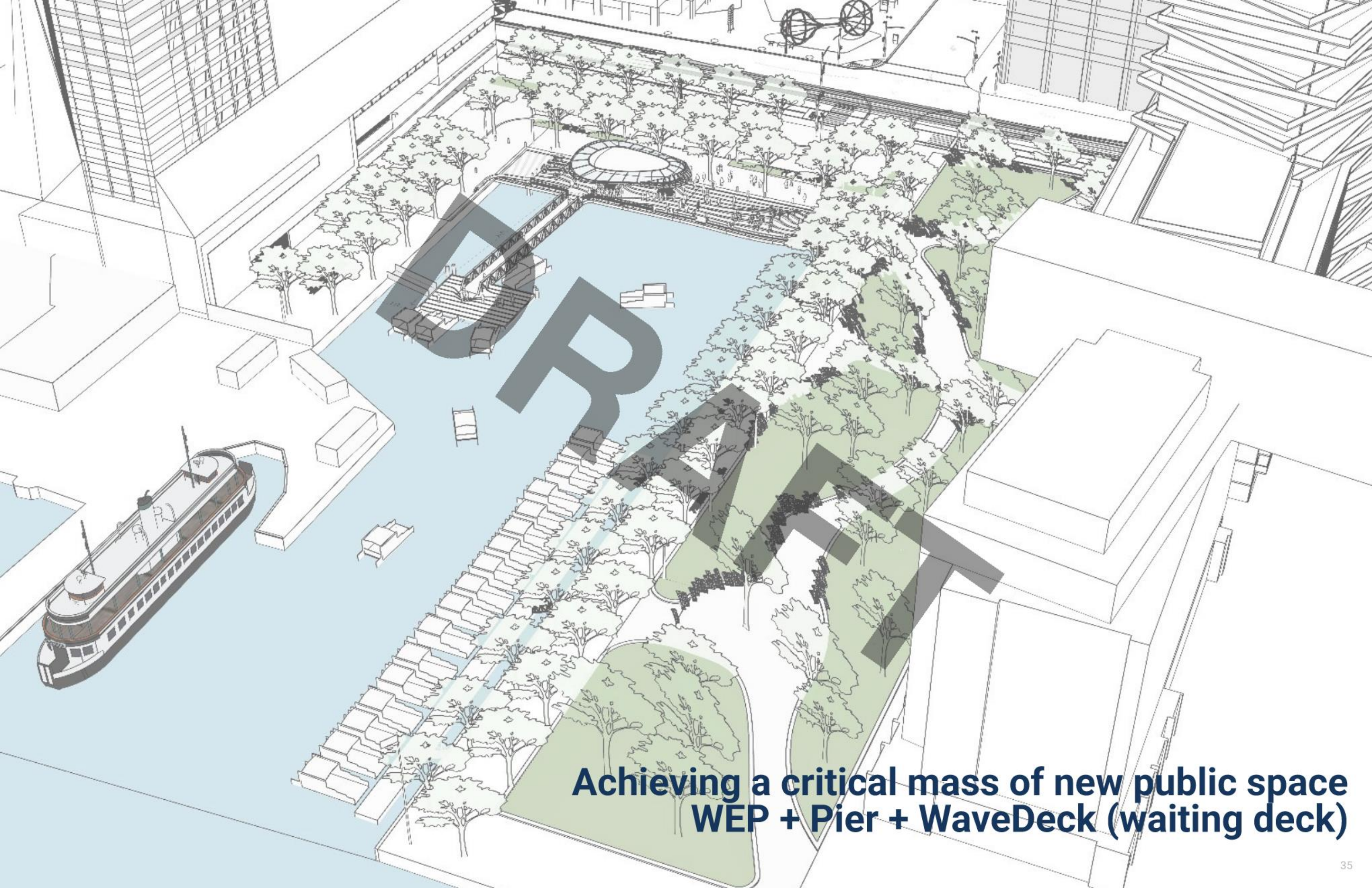


Yonge Slip Experience made from 5 components



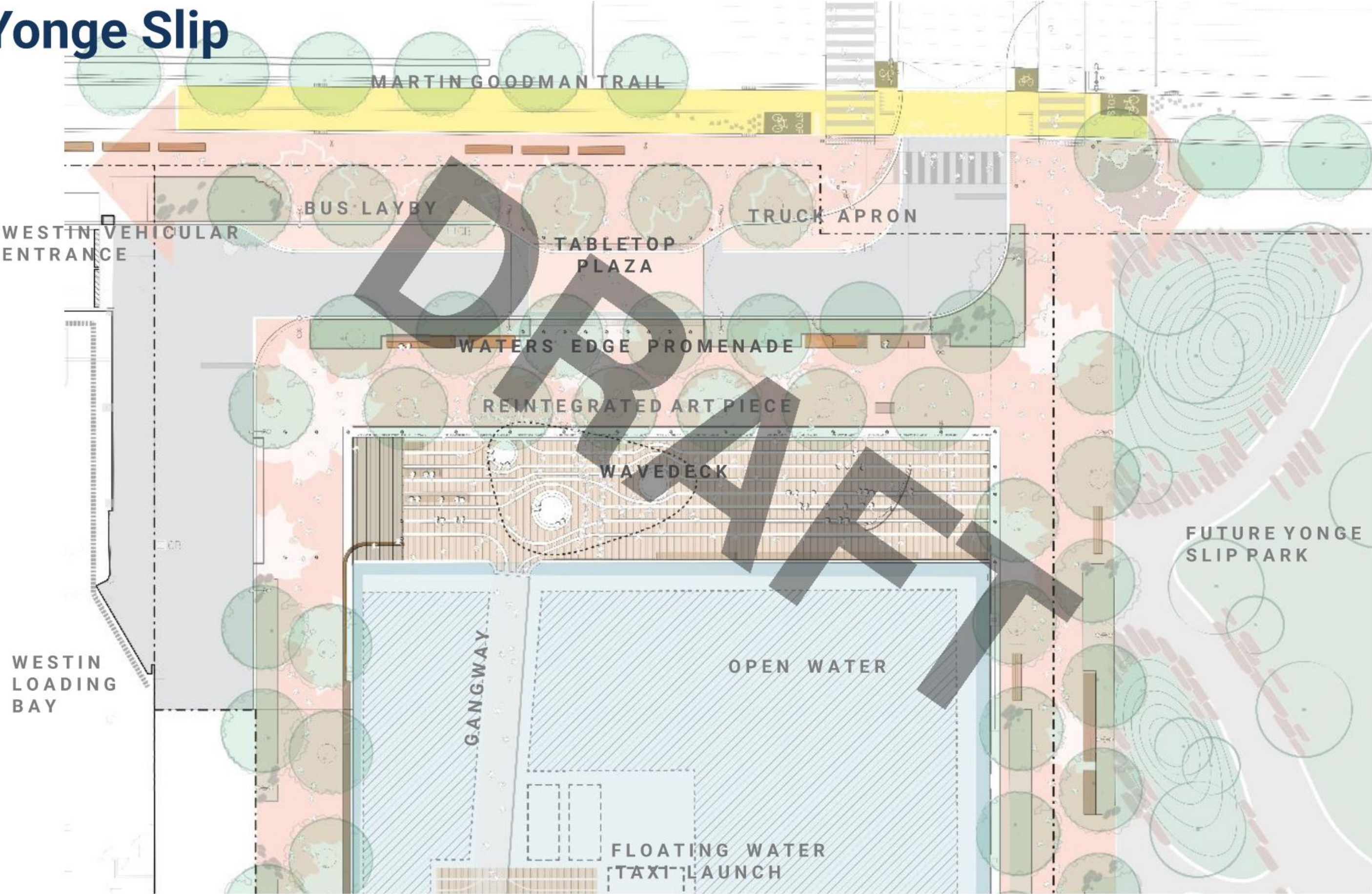
Shifting shader and marine access westward to open view corridor





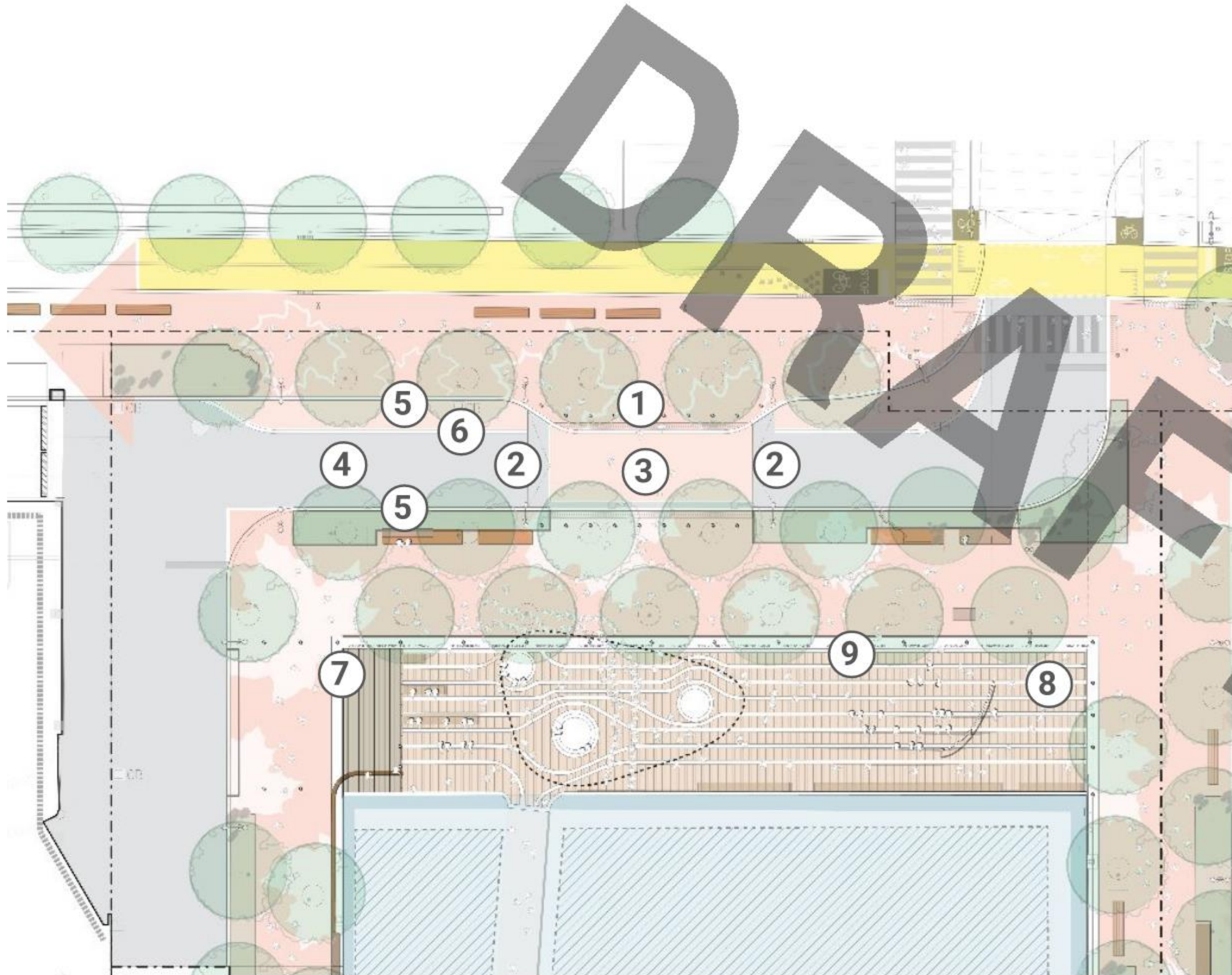
**Achieving a critical mass of new public space
WEP + Pier + WaveDeck (waiting deck)**

Yonge Slip



Common material language

Materiality of the slip and welcome landscape



① Bump Out with Flush Curb and TWSI



④ Enhanced Paving at Driveway



② Ramp Up at Crossing



⑤ Barrier Curbs



③ Pedestrian Paving at Crossing



⑥ Flush Curbs



⑦ Glulam Deck



⑧ Thermory Timber



⑨ Glulam Beams

A passenger's journey down the gangway

Managing day-to-day water taxi use

1 - Arrive

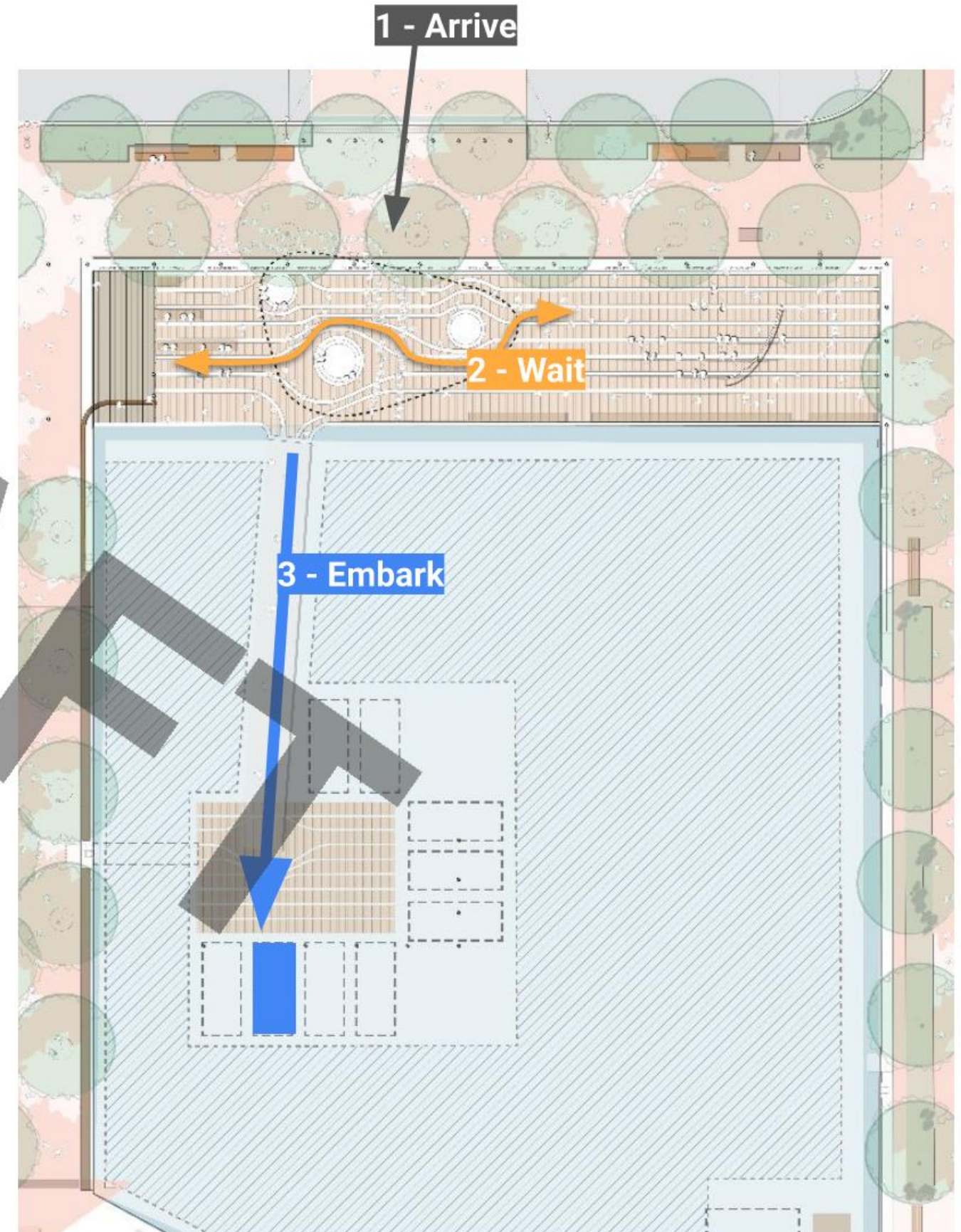
Passengers cross the tabletop and arrive at Yonge Slip

2 - Wait

Passengers wait to be called, under the shader or along the WaveDeck

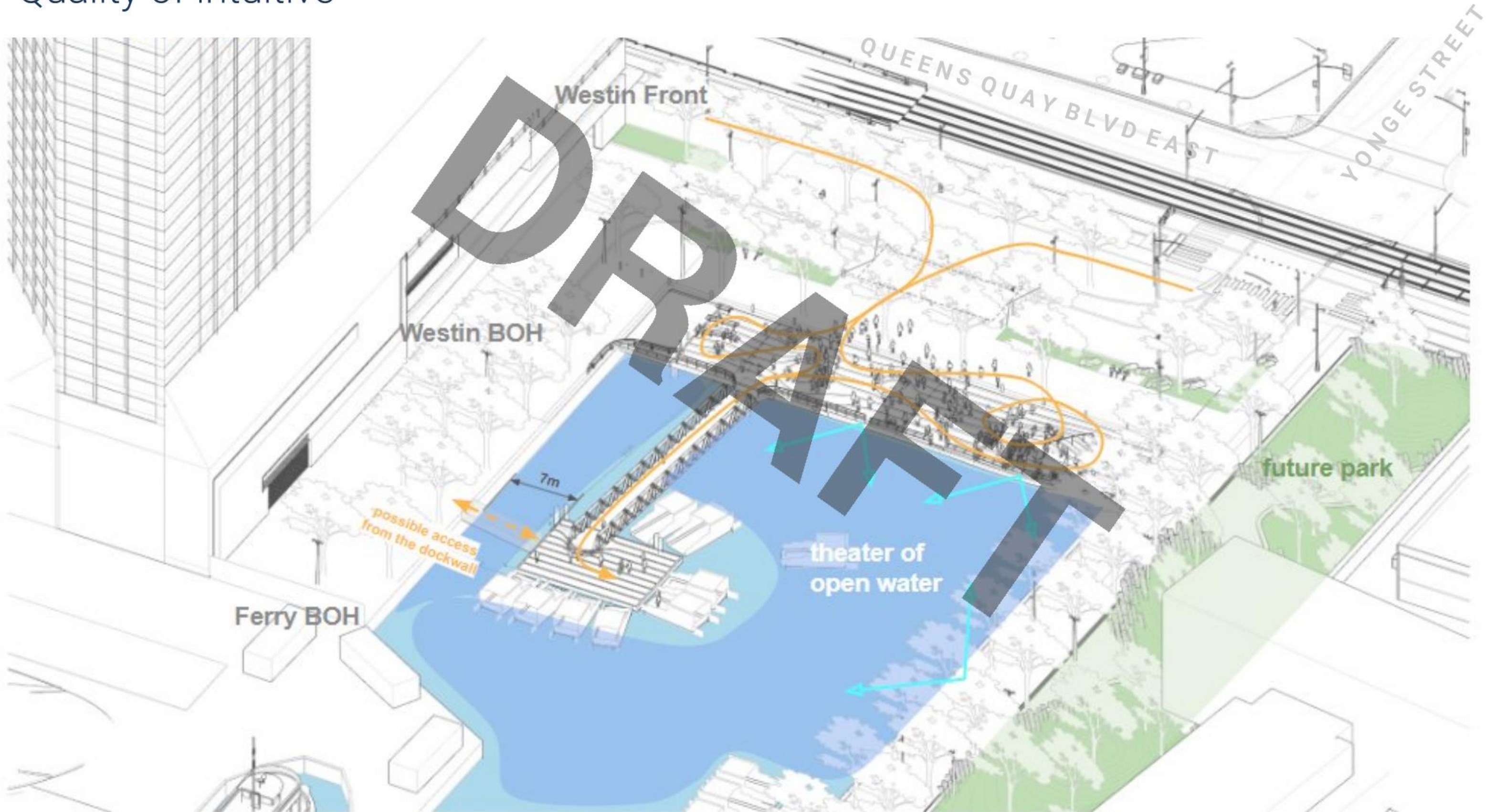
3 - Embark

When their taxi has arrived, passengers get a digital or physical flag to signal that it's time to embark via the gangway

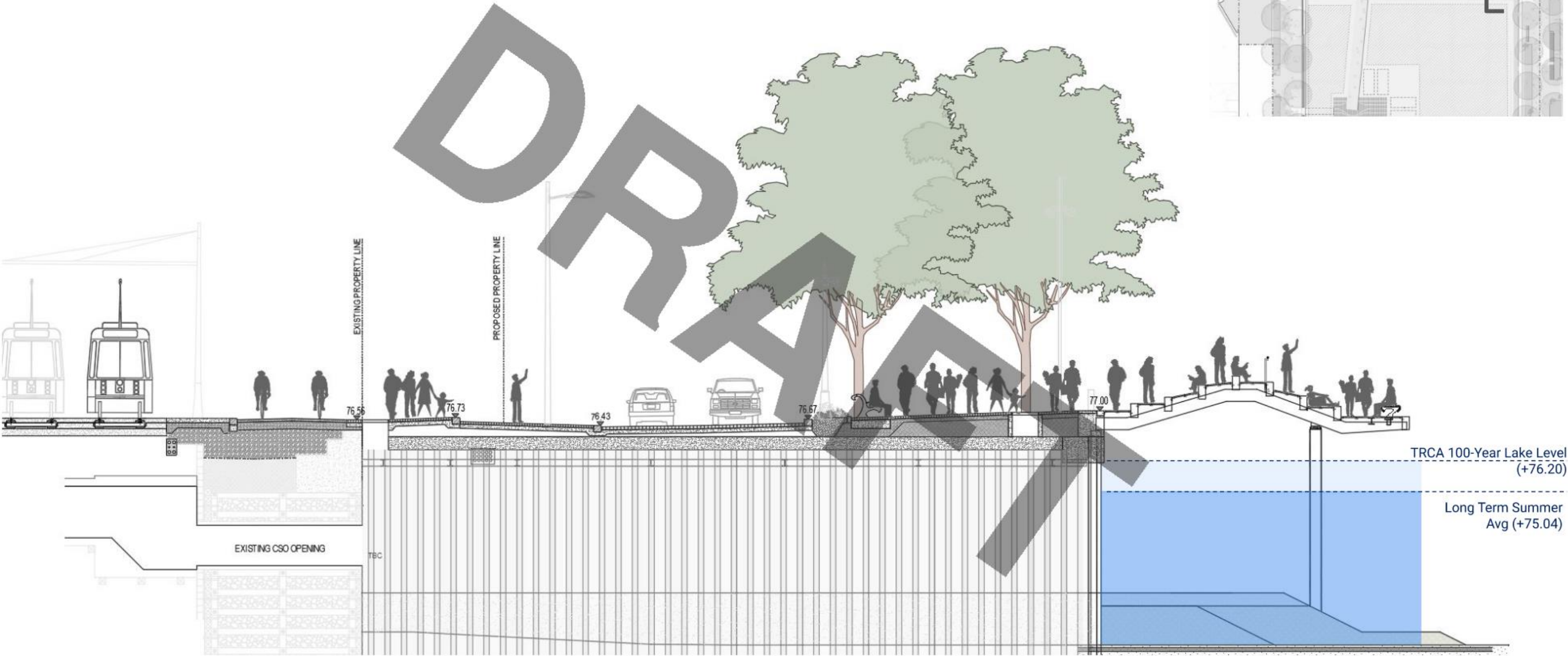
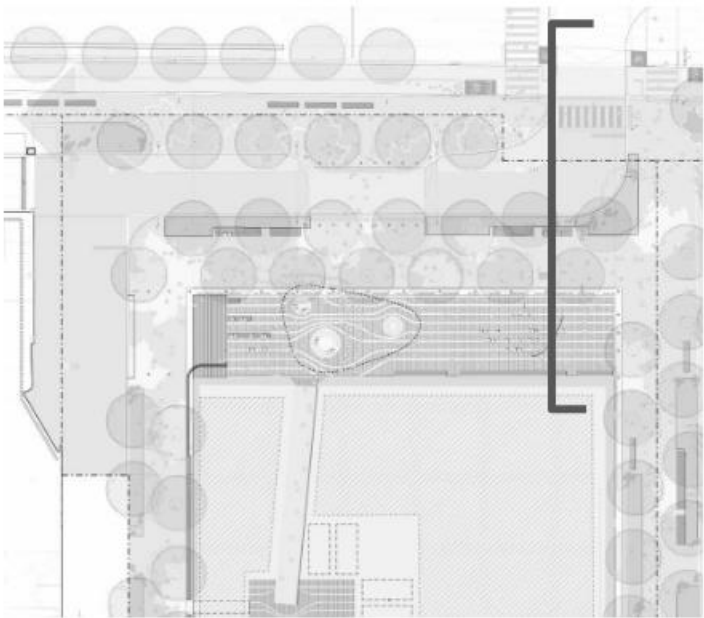


Efficient public flow, intuitive, understandable

Quality of intuitive



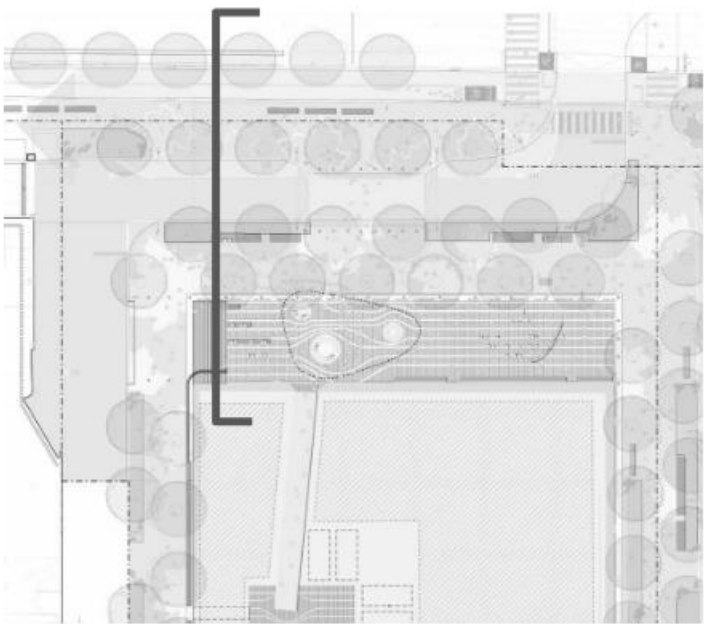
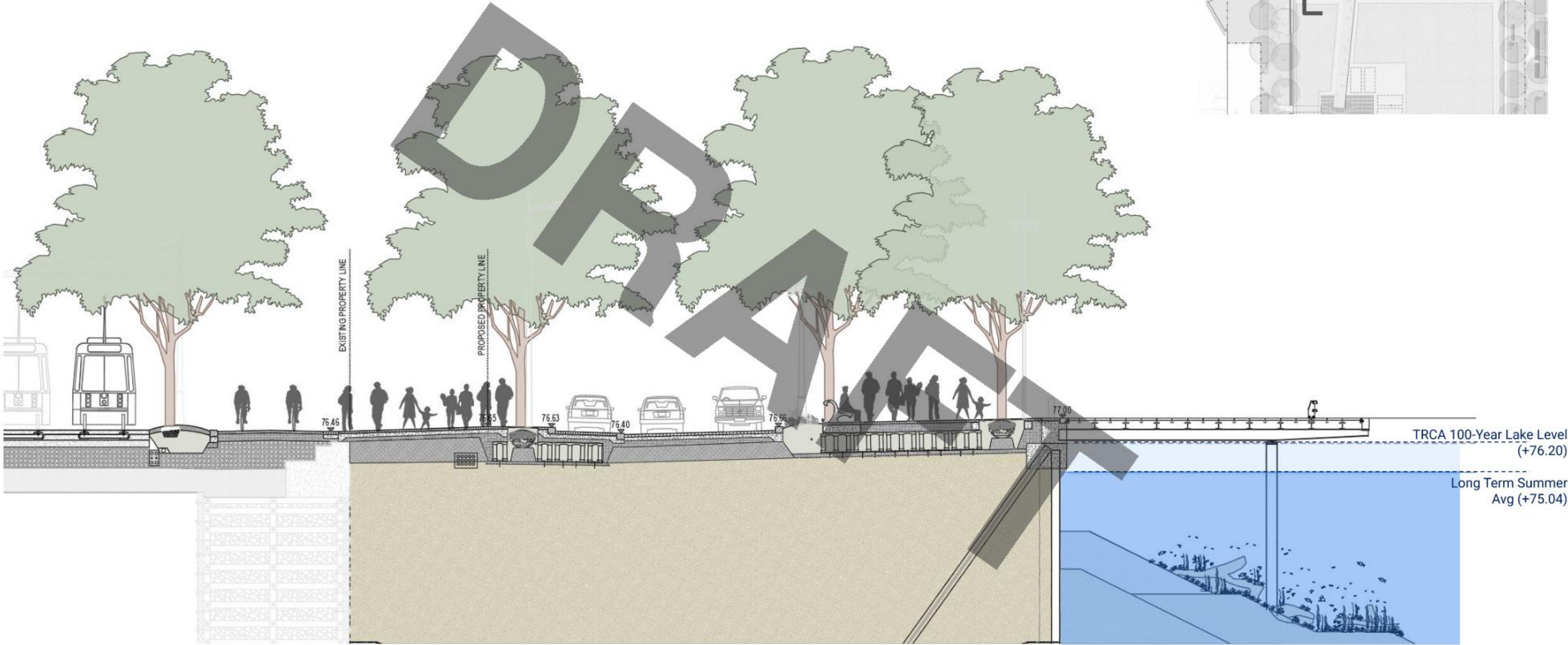
Queen's Quay: Arrival at open water



	2.4m	4.2m	6.0 - 8.0 m	2.7 - 5.0 m	6.0 m	10.5m	12m
Tram Guideway	Pedestrian Walkway	Wider MGT	Pedestrian Walkway	Truck apron + Bus Loading	Vehicular Access Driveway	WEP	WaveDeck

Driveable portion of WaveDeck

Dockwall Extended +1m to provide sufficient soil volume and waiting space



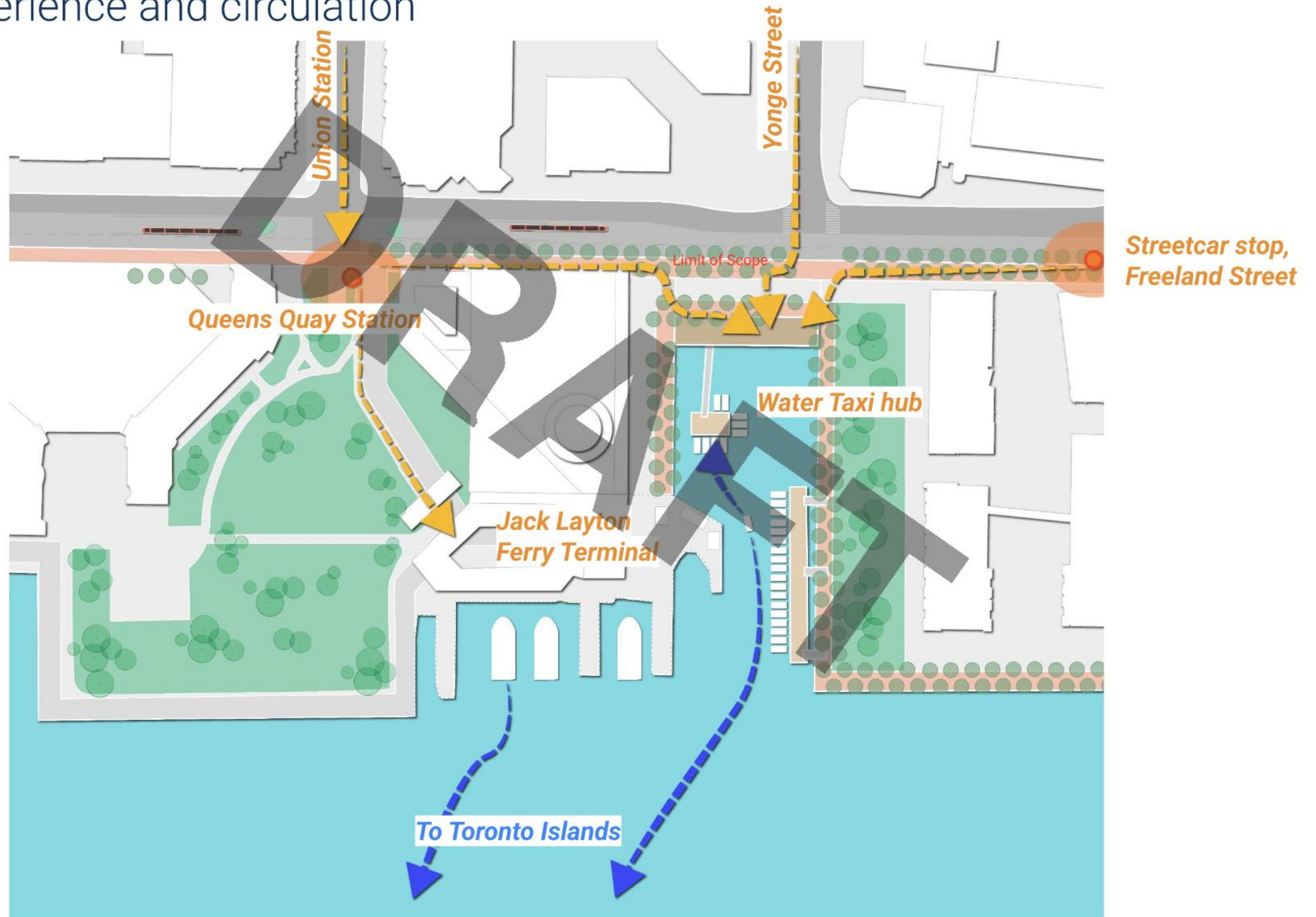
Tram Guideway	2.4m	4.2m	8.3m	2.7m	8.7m	10.5m	12m
Tram Guideway	Planter	Wider MGT	Pedestrian Walkway	Layby	Roadway	WEP	WaveDeck

Components of the Experience

The Floating World, WaveDeck, and Shader

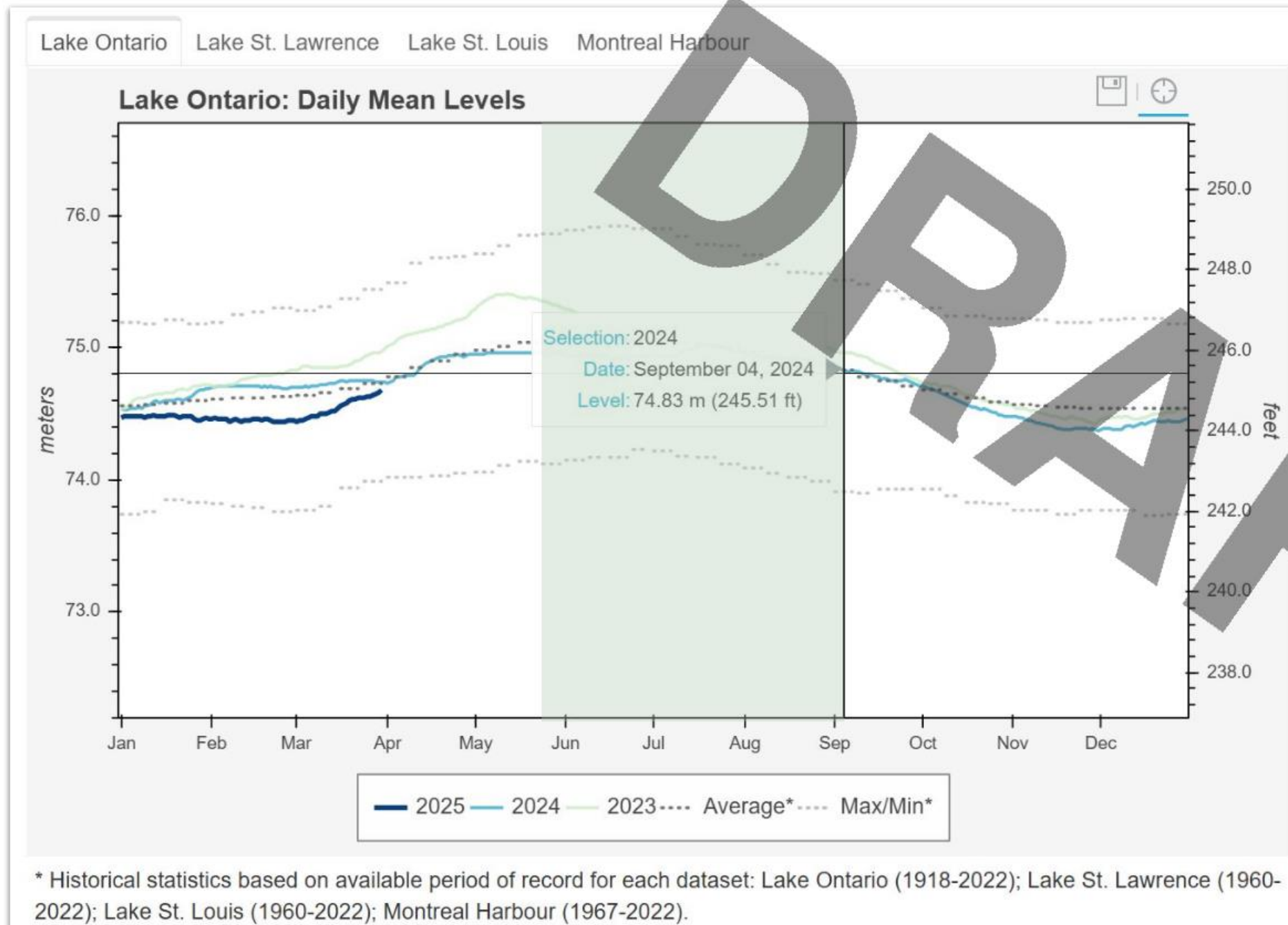
Holiday on Toronto Islands begins at Yonge Slip

Visitor experience and circulation



Lake Ontario water levels - basis of design

Waterfront Accessibility Design Guidelines



"Gangway slope must be calculated on the lowest water level mark typically expected in the summer season."

Typically Expected = Historical Average

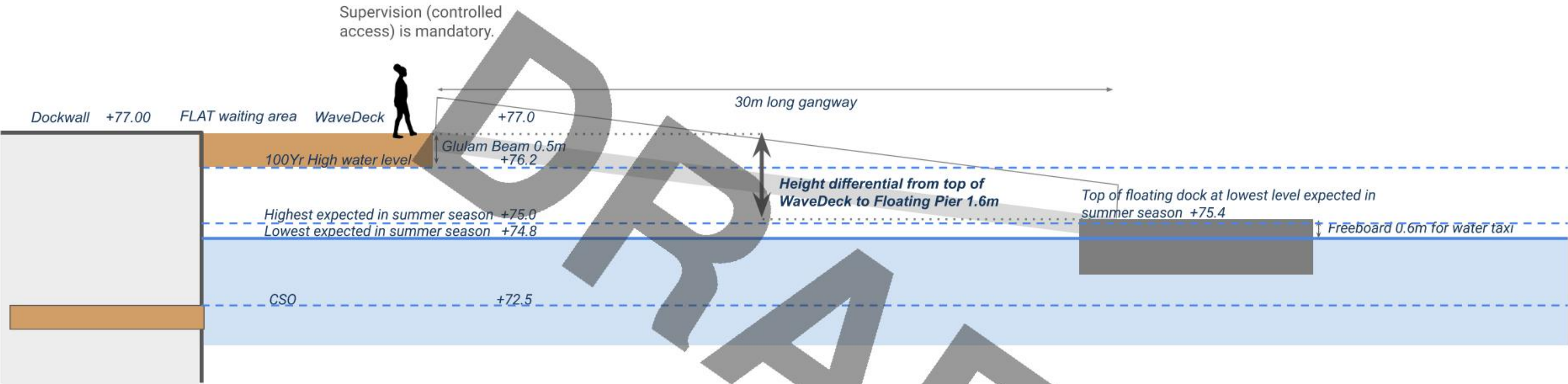
Summer Season = last week of May to first week of September

Lowest historical average in the summer season occurs in September =

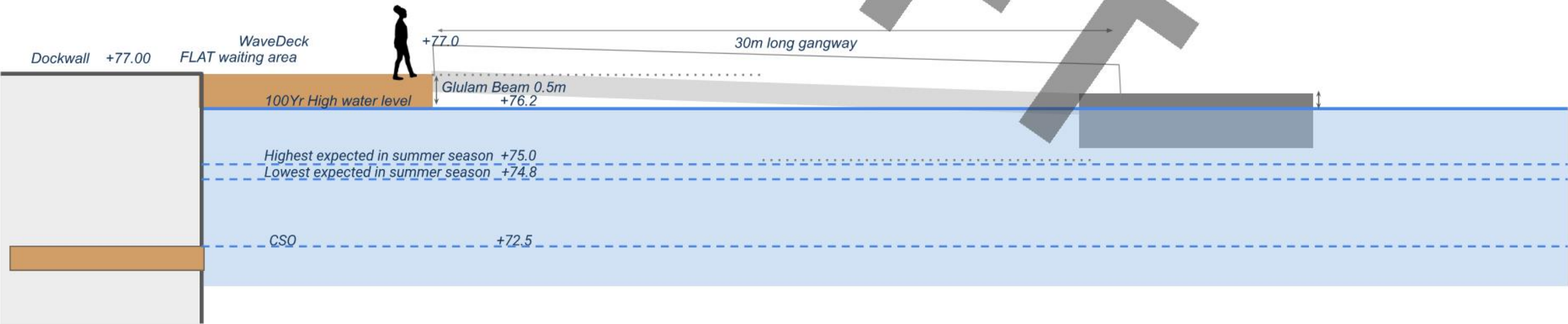
74.83m

Access to water - basis of design

Waterfront Accessibility Design Guidelines



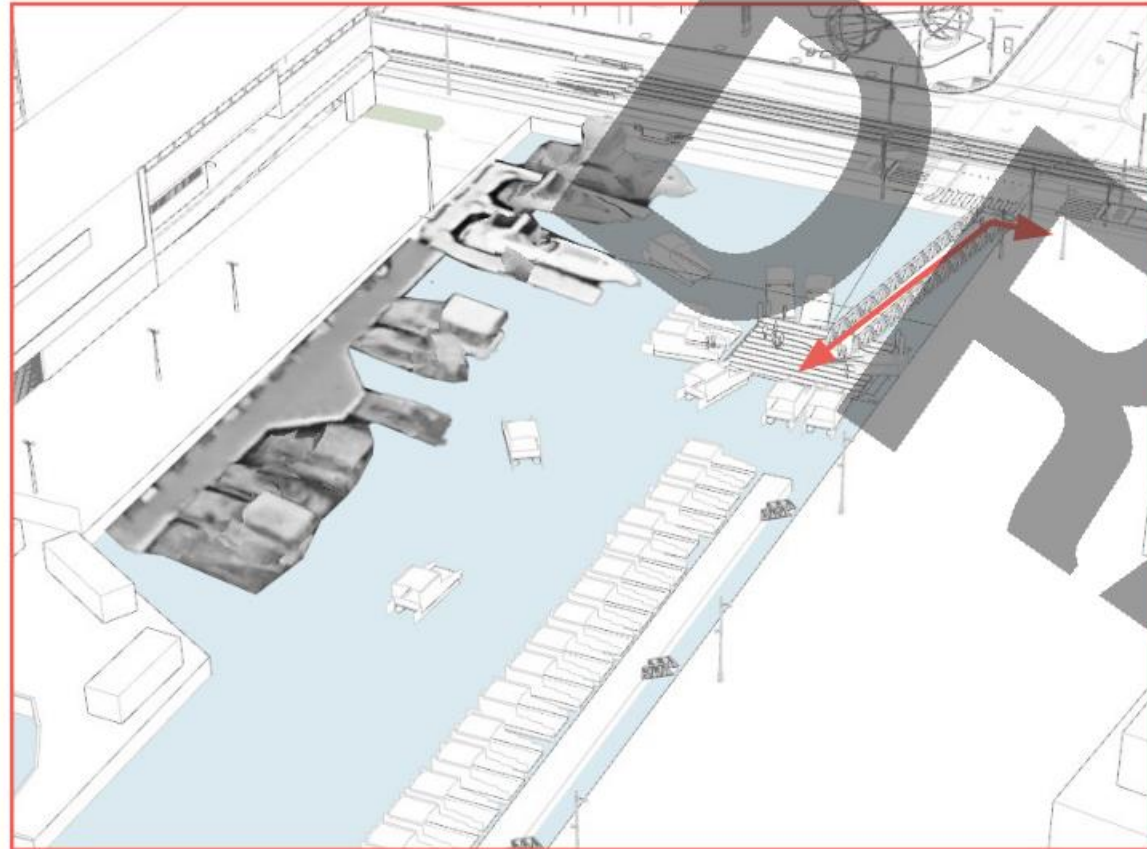
Lowest expected summer level: 5% slope



100yr high water level: 0.6% slope

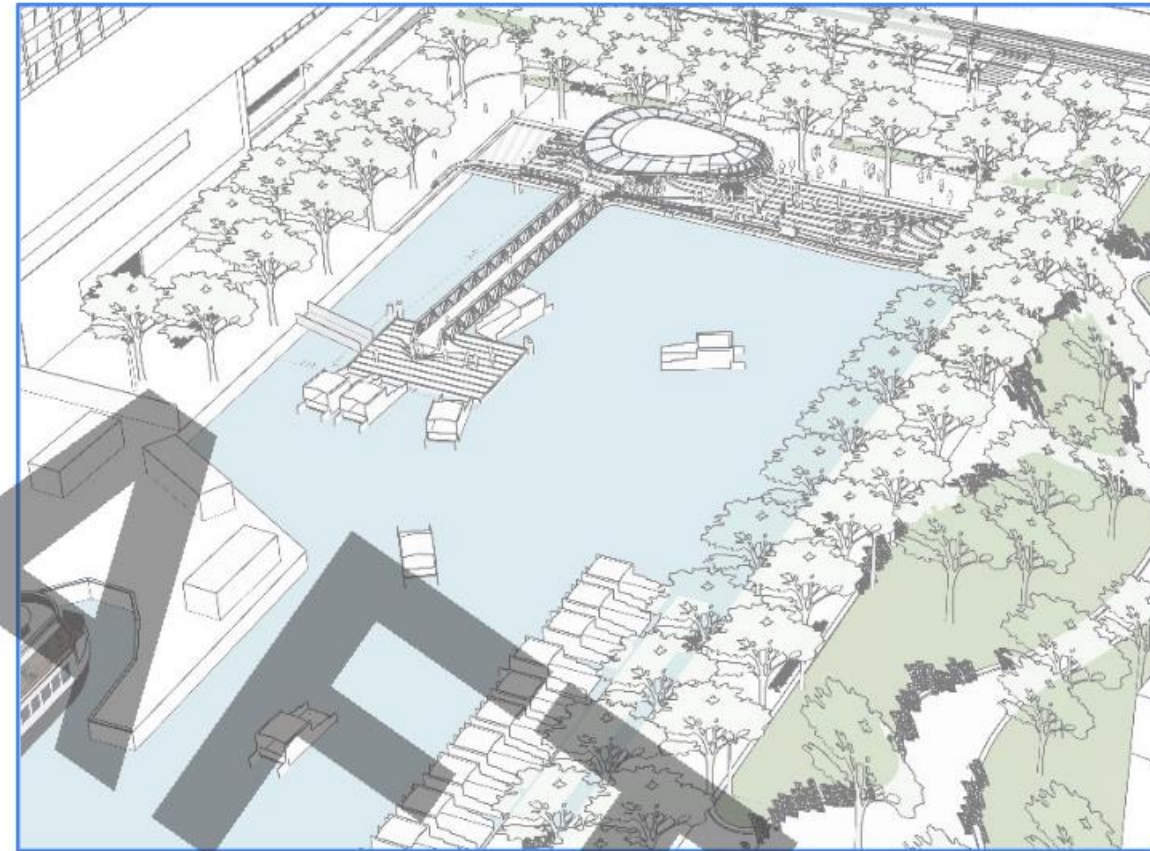
Phasing: Gangway and Slip

Phased approach is possible with current design if desired



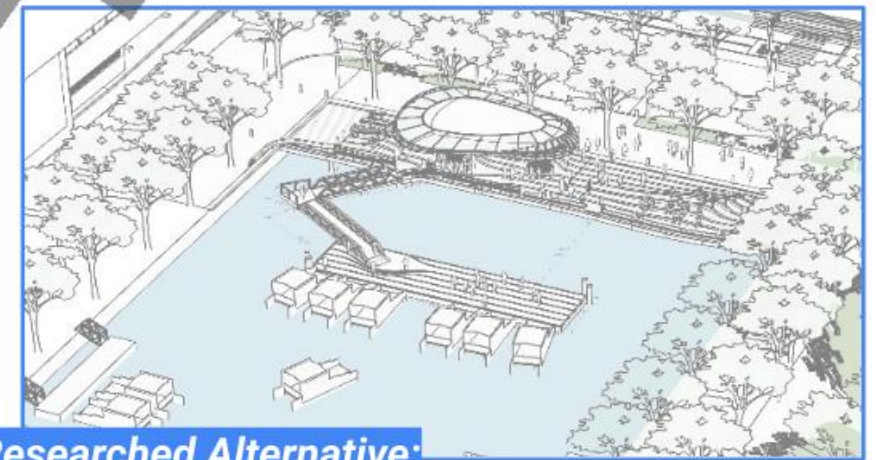
Phase 1

*Immediate buildout of gangway
under current ownership schemes*



Phase 2

*Gangway moves to
long-term location
following buildout of slip*



**Researched Alternative:
Articulated Gangway**

Arrival at Yonge Slip



Arrival at Yonge Slip



Arrival at Yonge Slip



Arrival at Yonge Slip

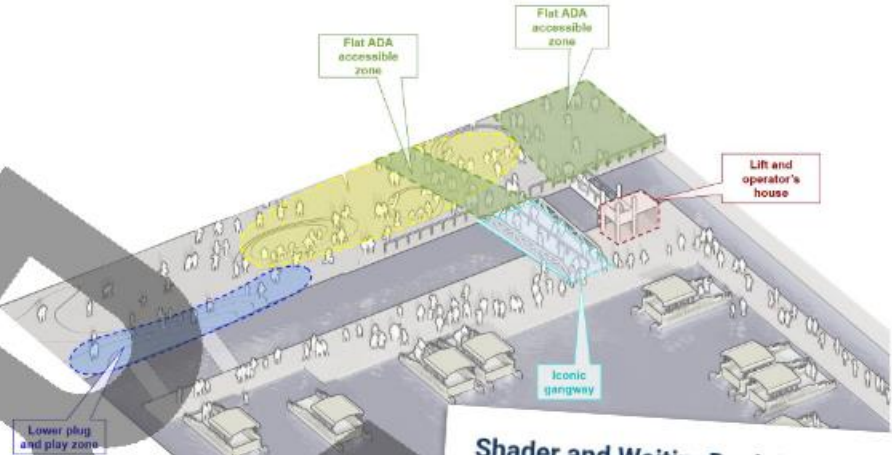


WaveDeck design evolution

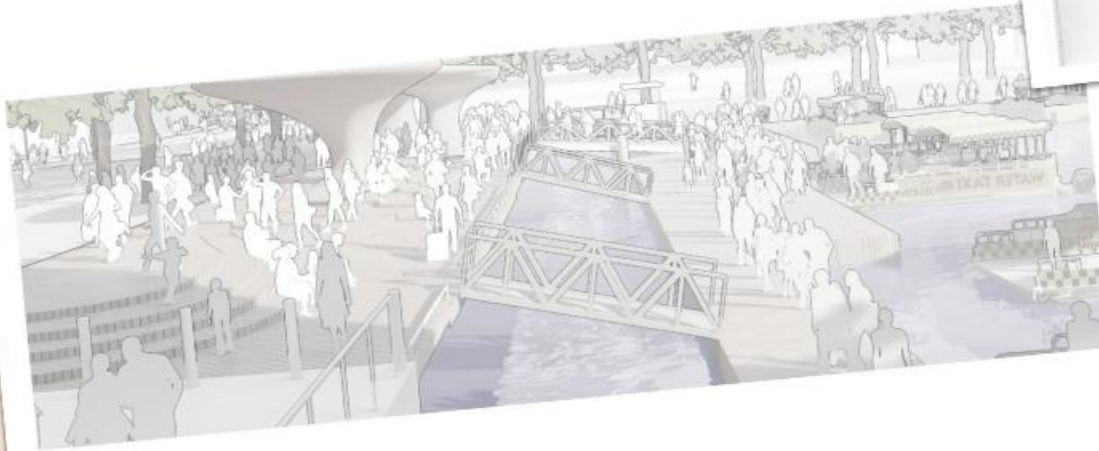
Ambition: waiting for the water taxi in the shade



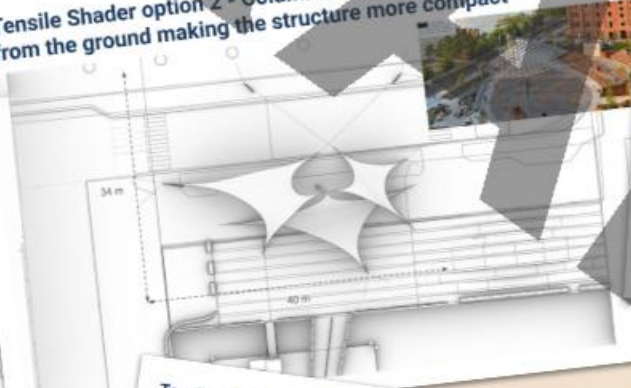
WaitingDeck main ingredients are what makes it iconic and accessible



Vision for celebratory marine hub and WaitingDeck



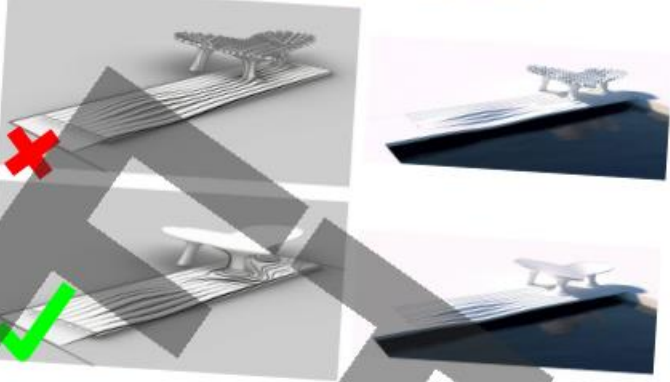
Tensile Shader option 2 - Columns are used to elevate the sails from the ground making the structure more compact



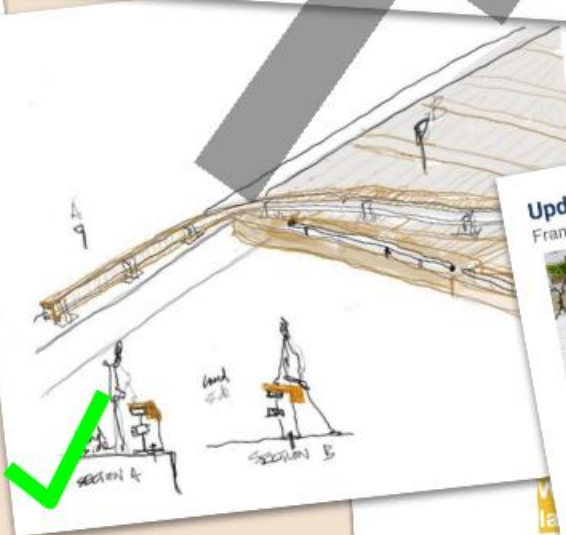
Tensile Shader - Columns are used to elevate the sails from the ground making the structure more compact



Shader and WaitingDeck integration studies

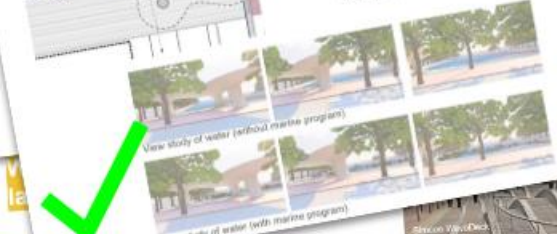


could provide WaitingDeck and foot of Yonge with orn from wavy timber DNA



Updated Shader Layout

- Framed arrival experience with one shader column joining the WEP trees
- Goals
 - Compact and efficient to deliver on structure and cost
 - Frame view of the water and marine access in arrival sequence



Building on engineering legacy with Moses: Timber shader born from the WaveDeck vertical structure, glulam beams

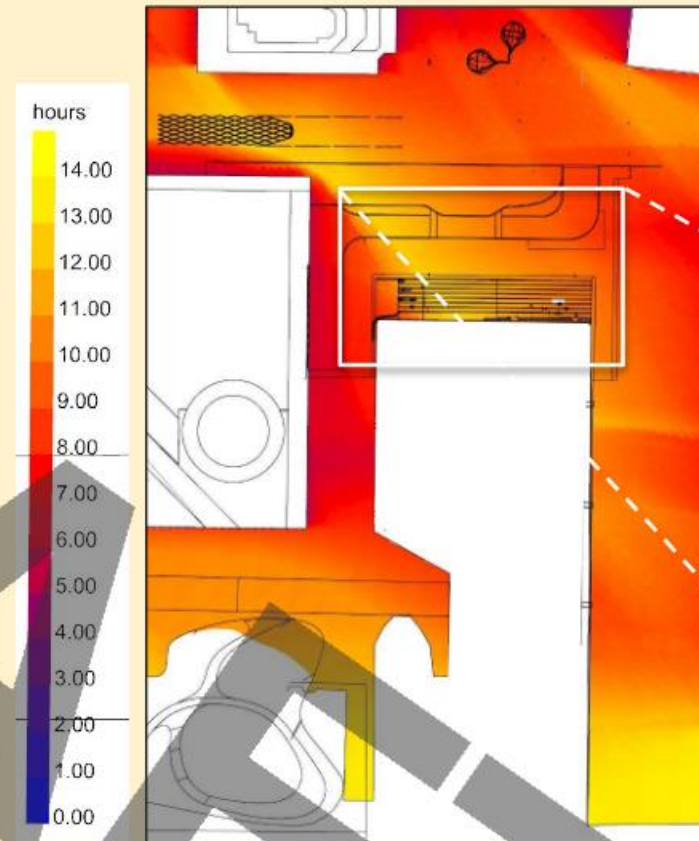


Shader delivers necessary refuge from sun

Sun Studies



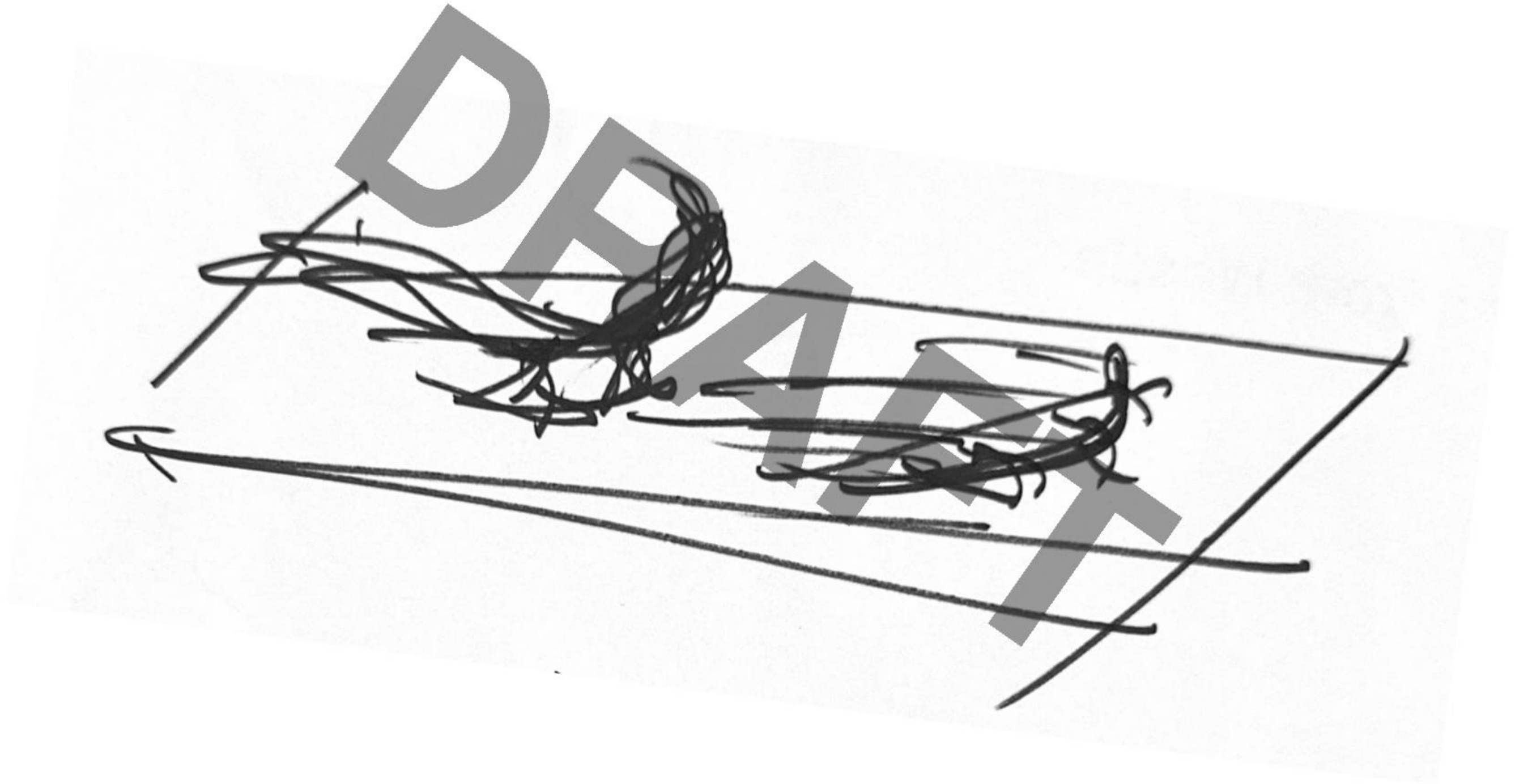
Spring Equinox



Summer Solstice

Shader and WaveDeck in dialogue

Wave, wind, and ripple



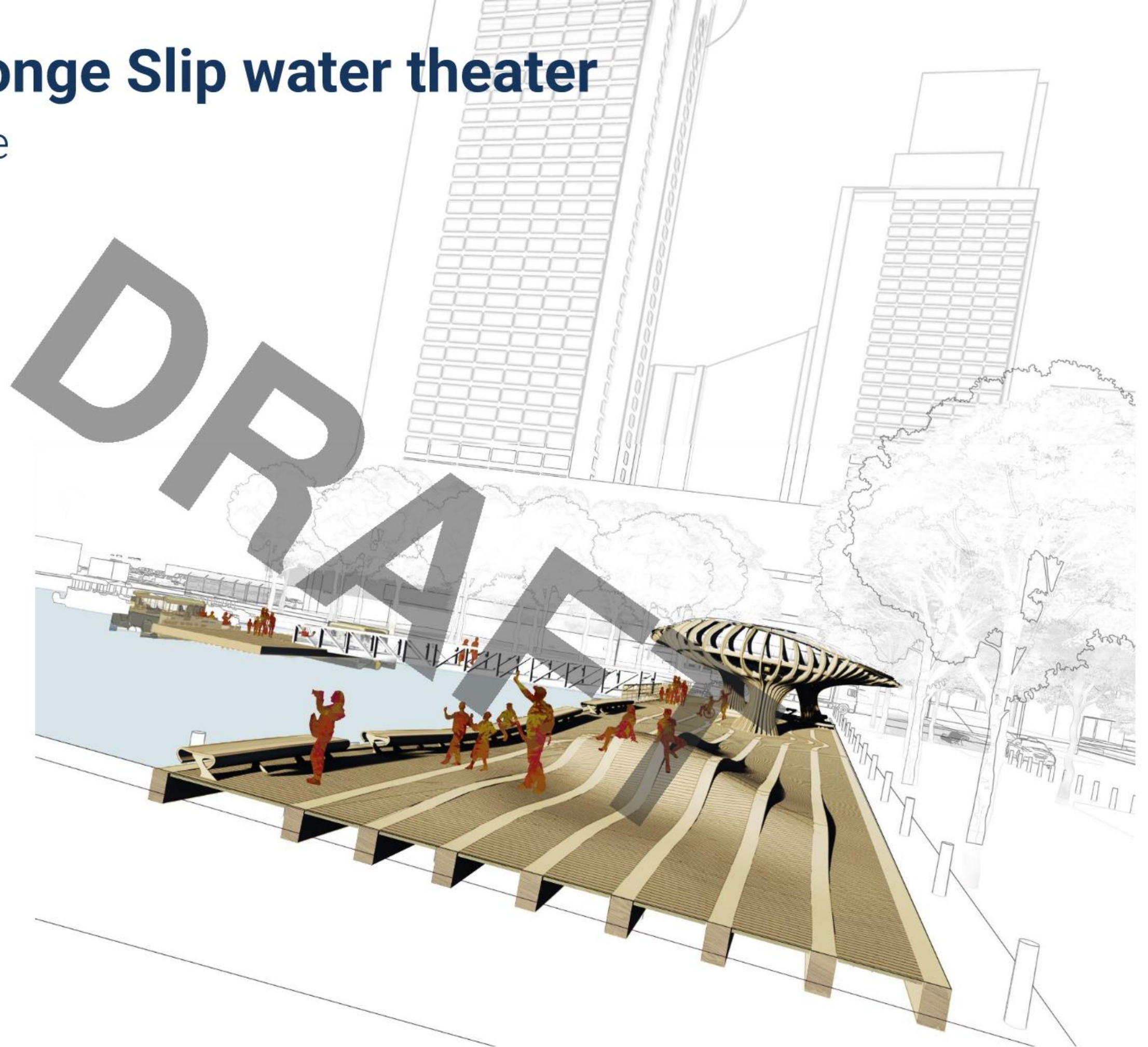
Shade, breeze, the theatre of water

Under the shader

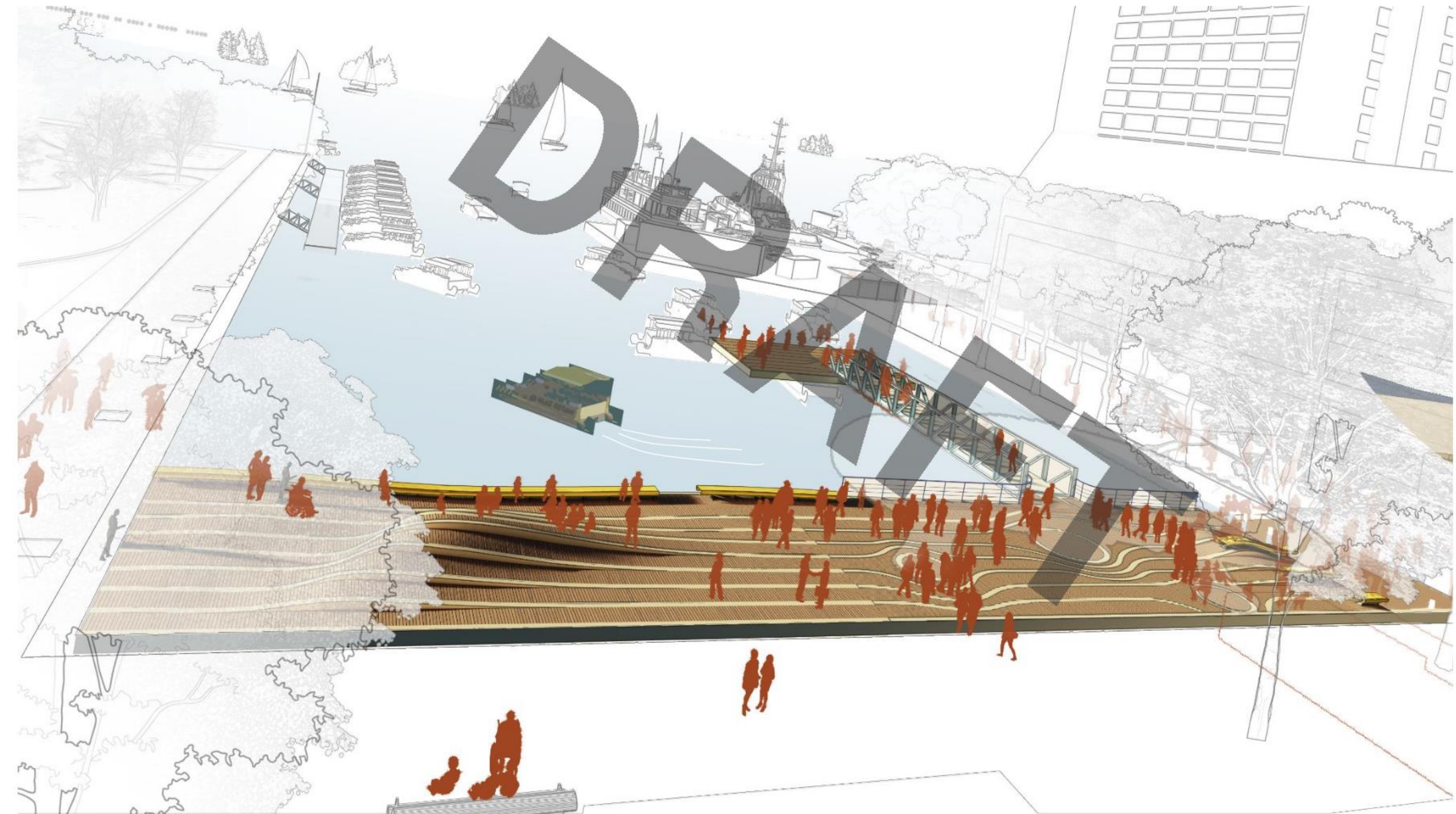


Ripple as the Yonge Slip water theater

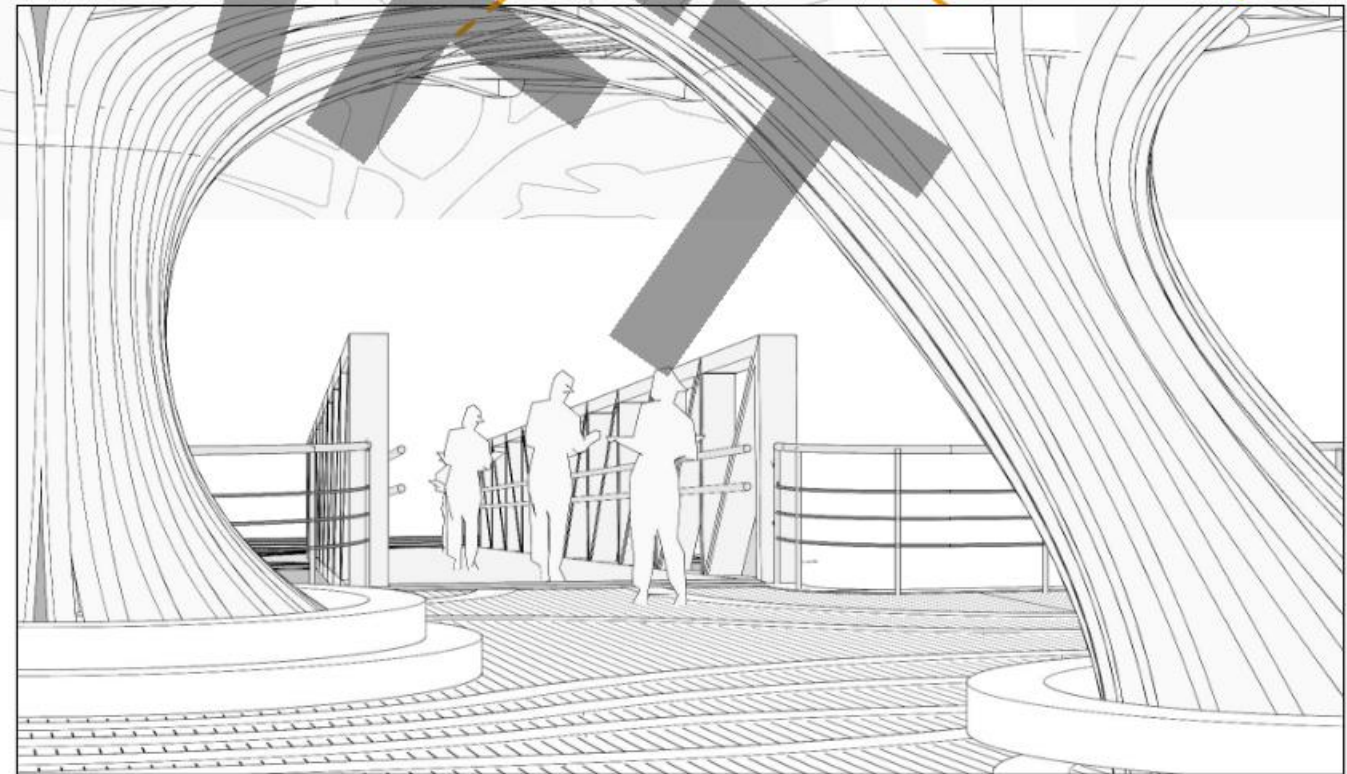
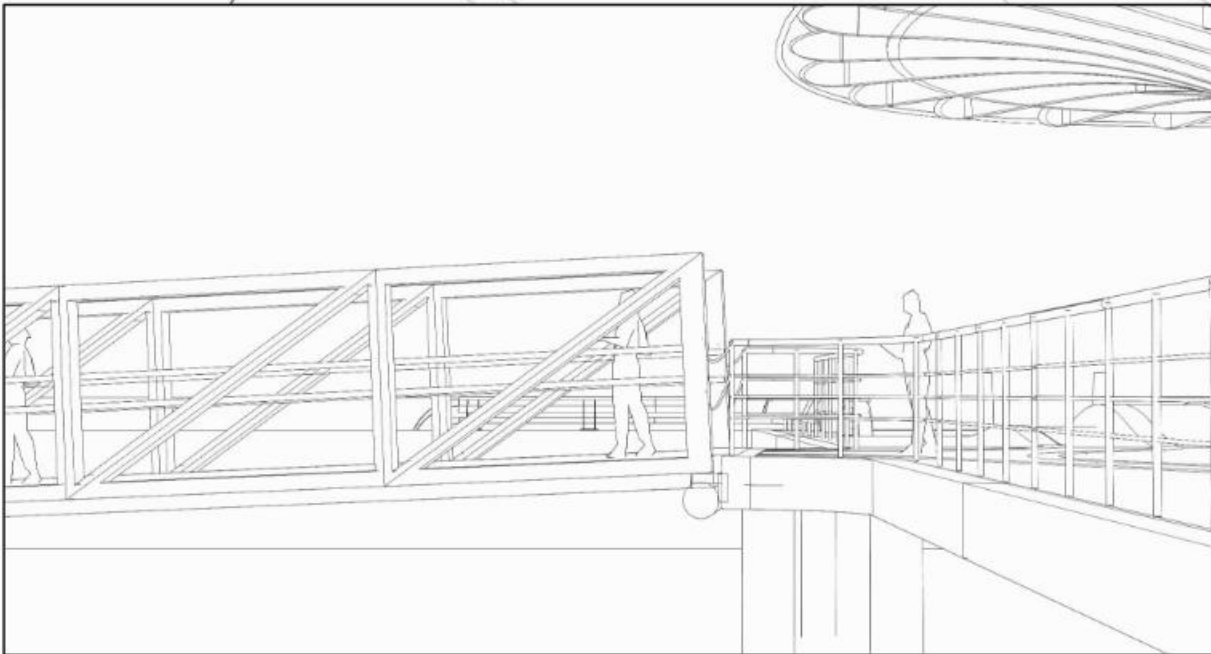
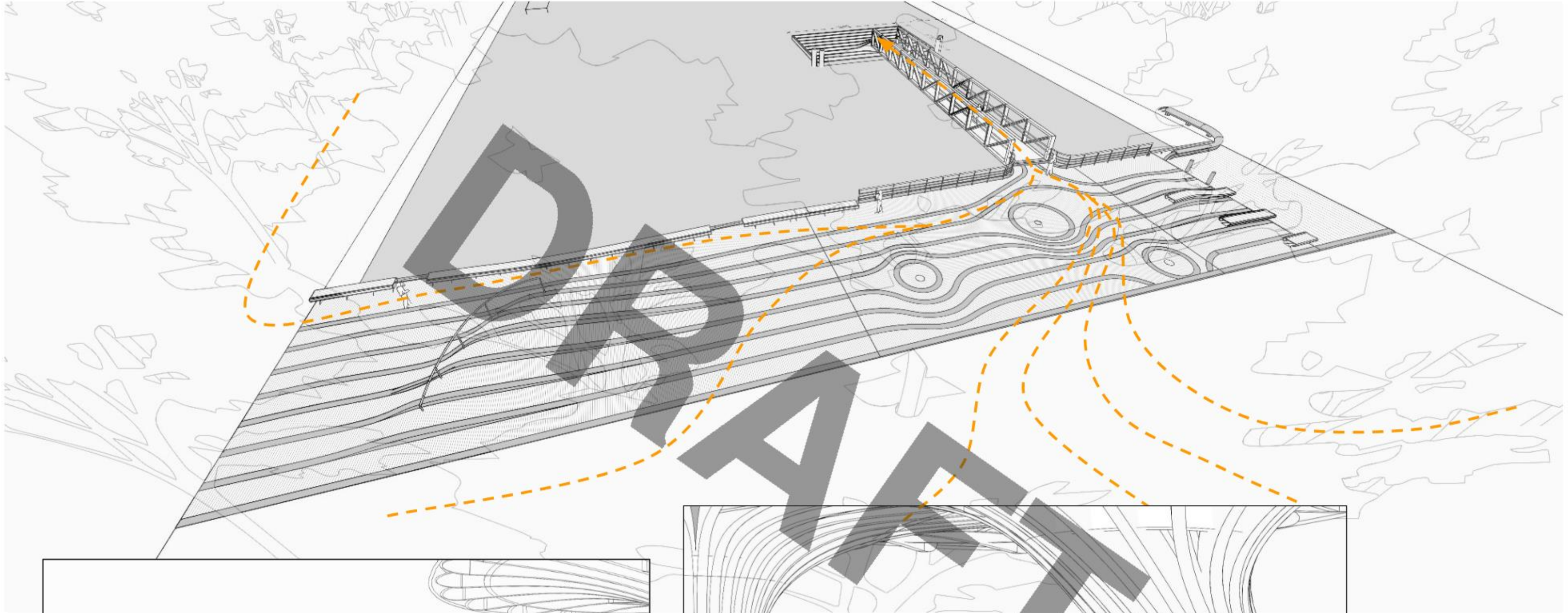
Wave, wind, and ripple



Two domains: relaxation & engaging yourself with water taxi

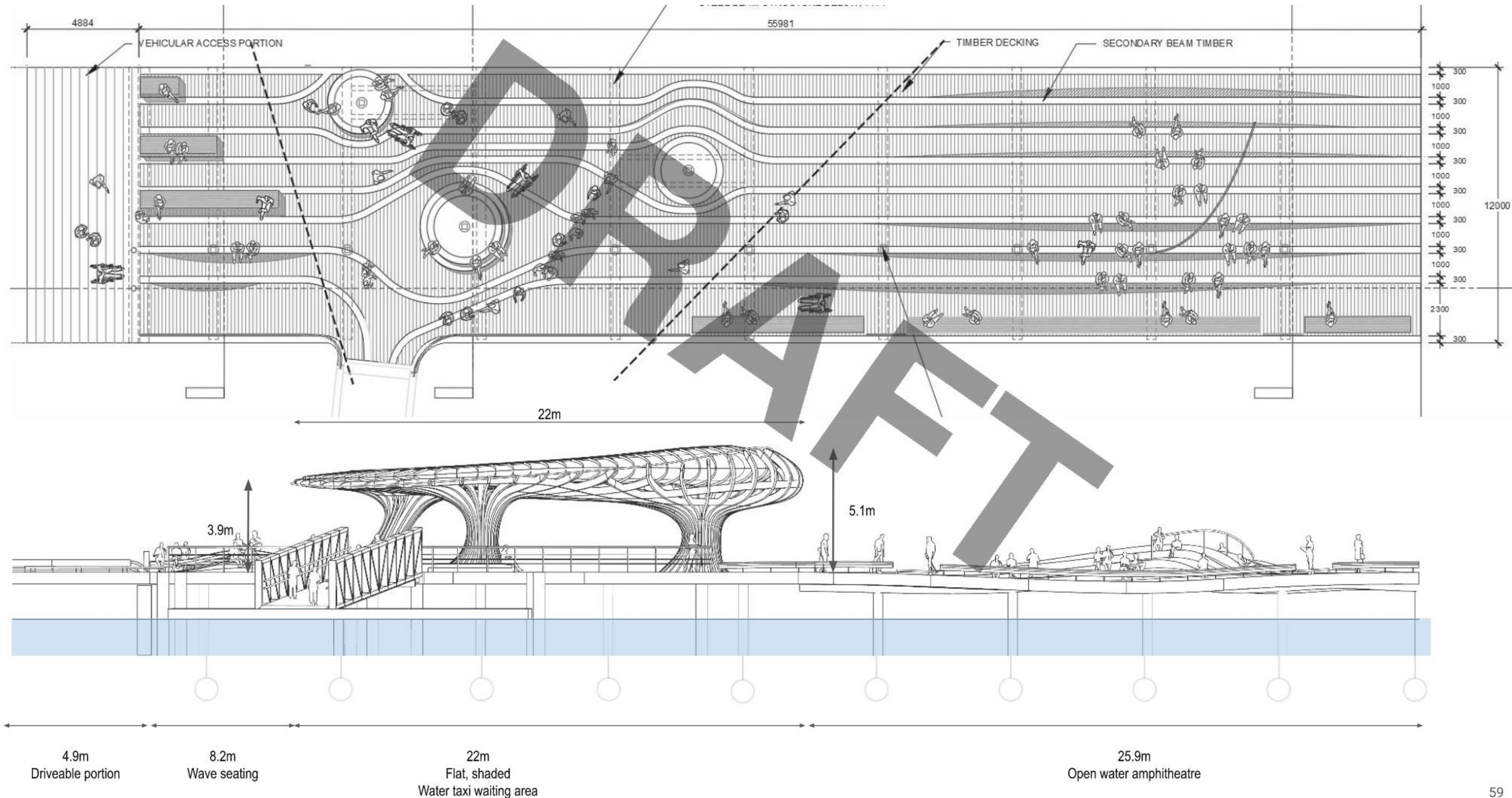


Relationship WaveDeck, shader, gangway



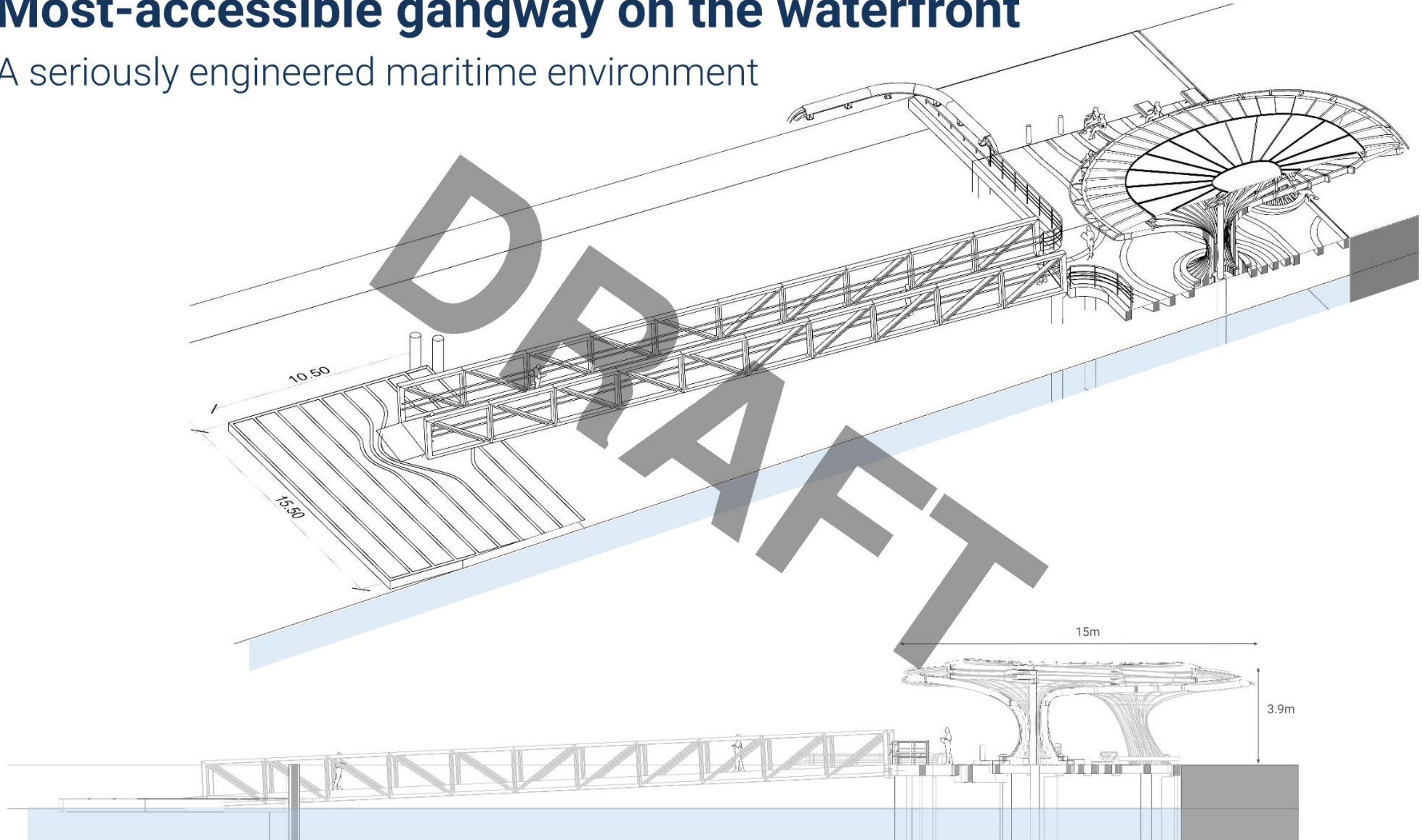
Solving for program and pragmatism with delight

Working from the efficient detail we already used

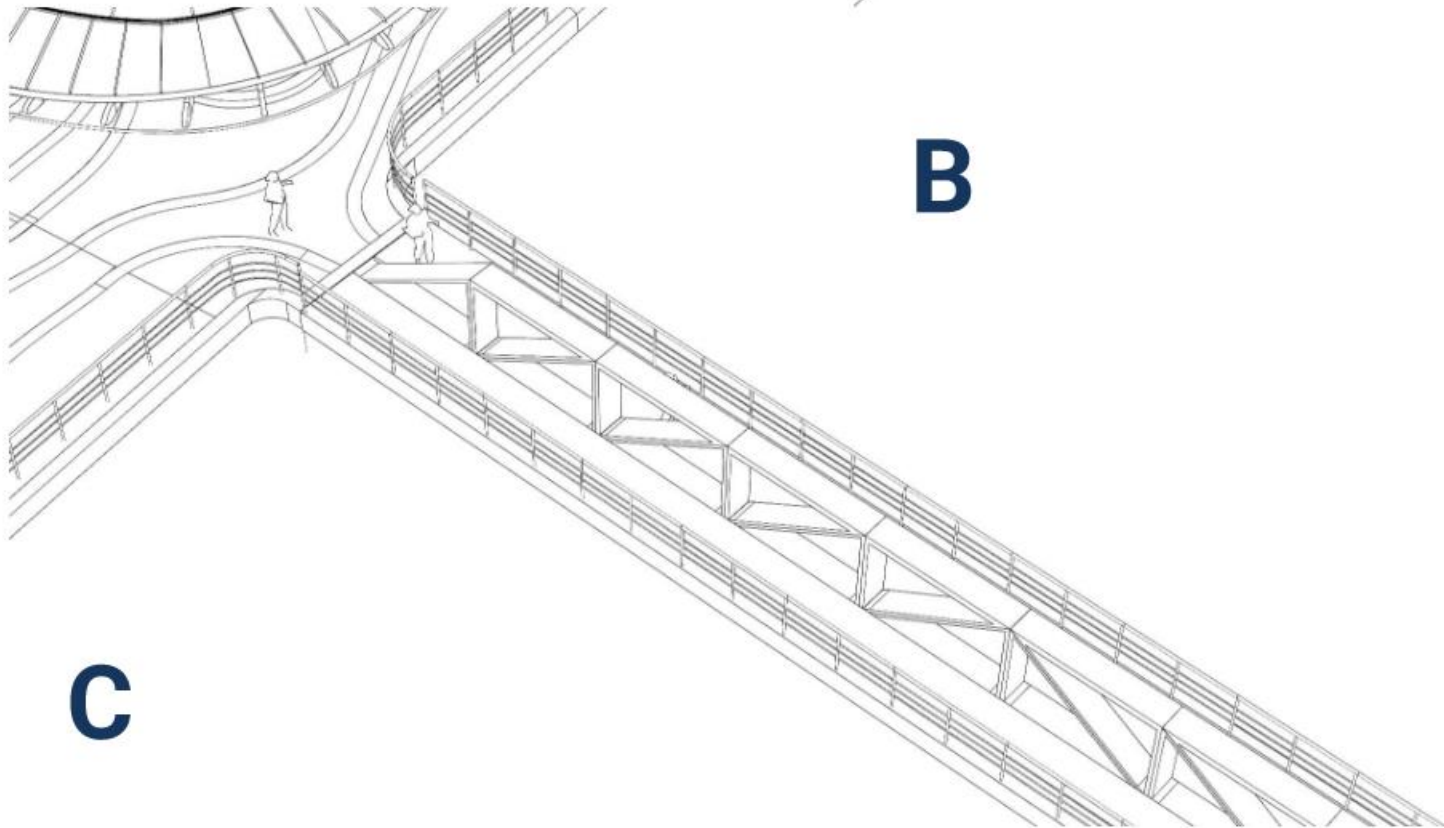
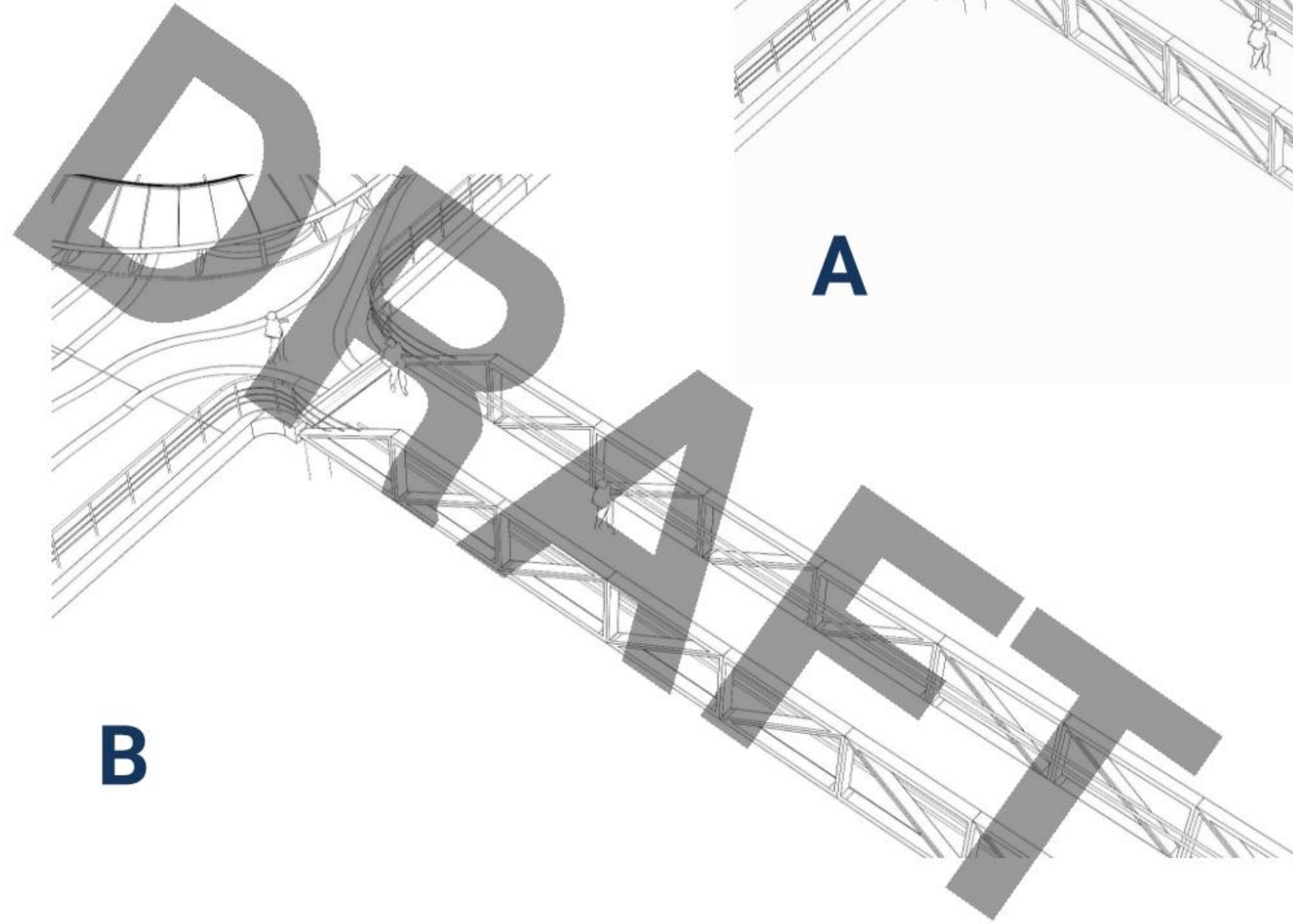
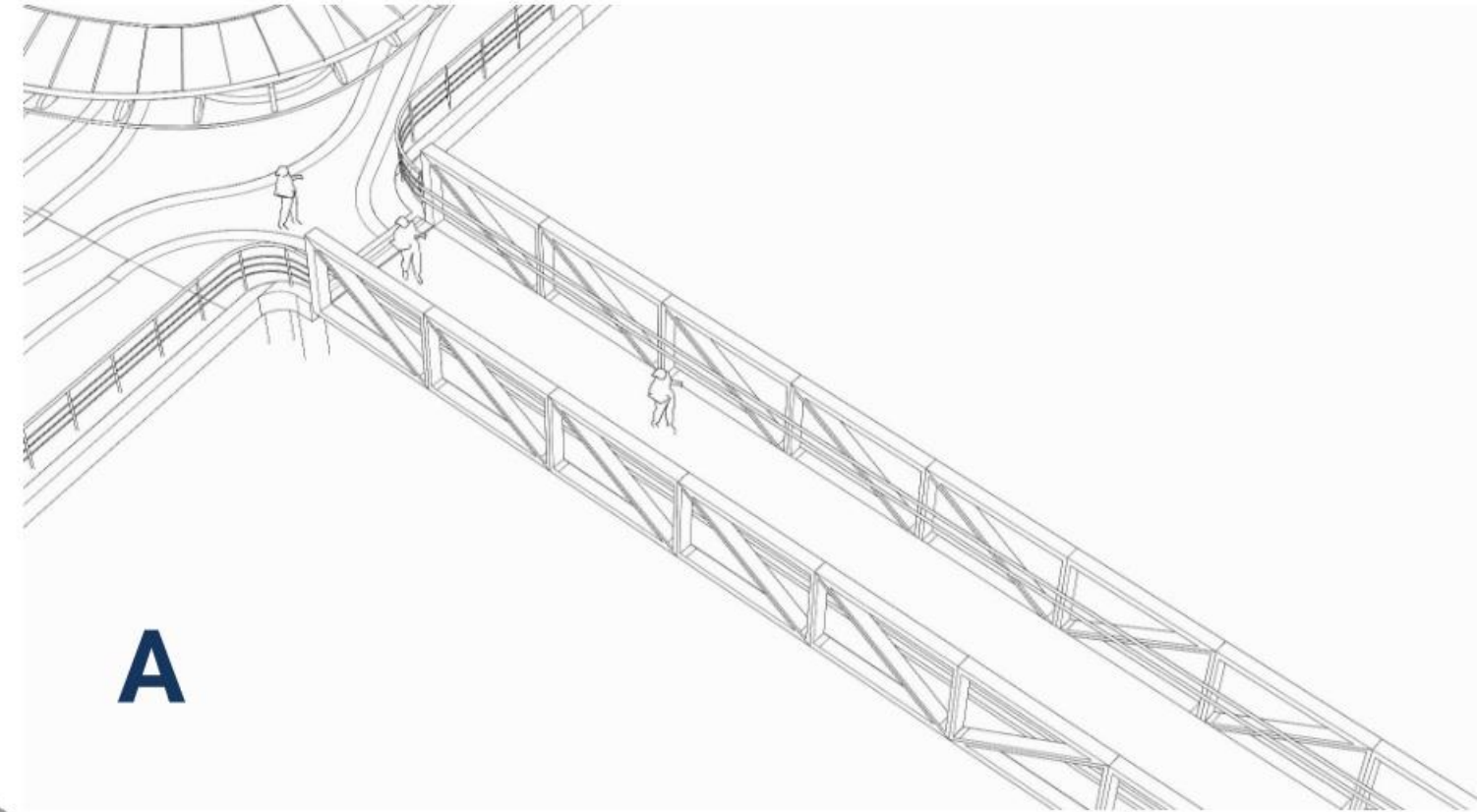


Most-accessible gangway on the waterfront

A seriously engineered maritime environment

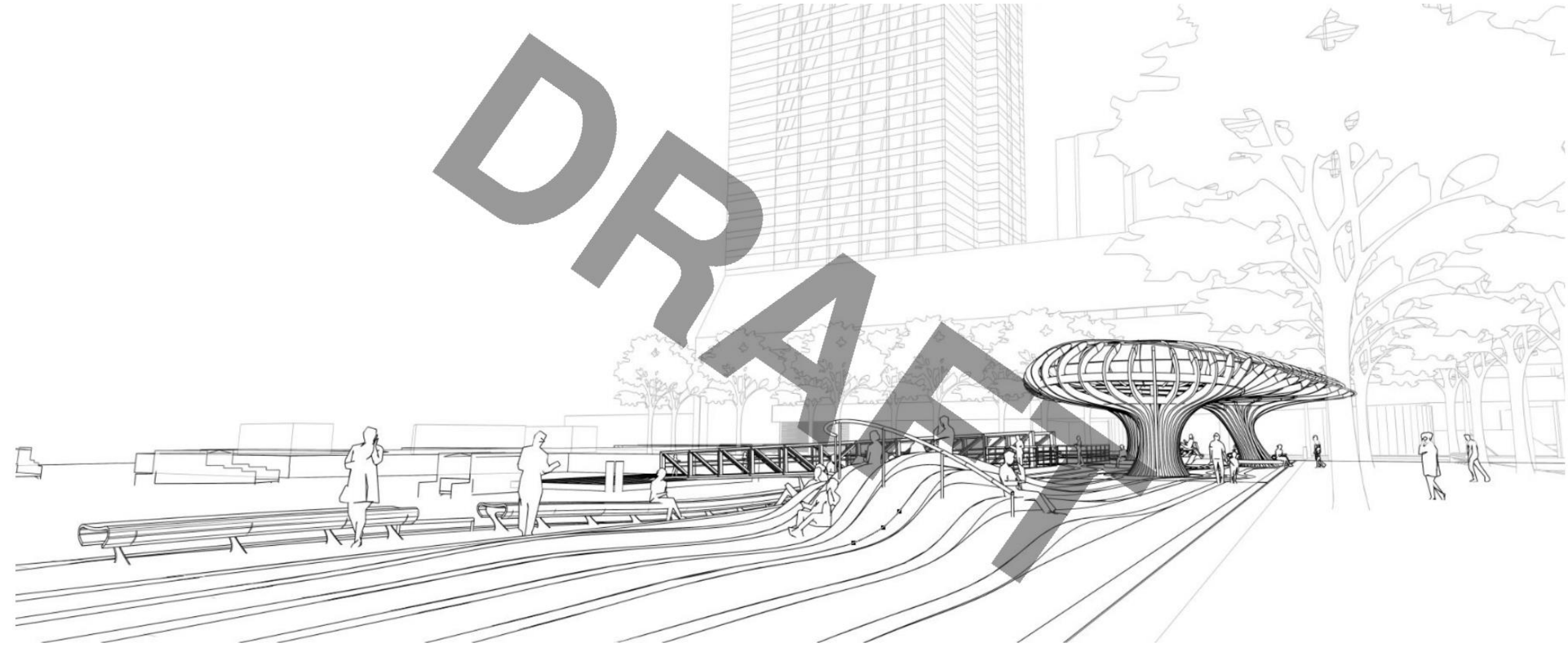


Working towards an efficient and beautiful gangway



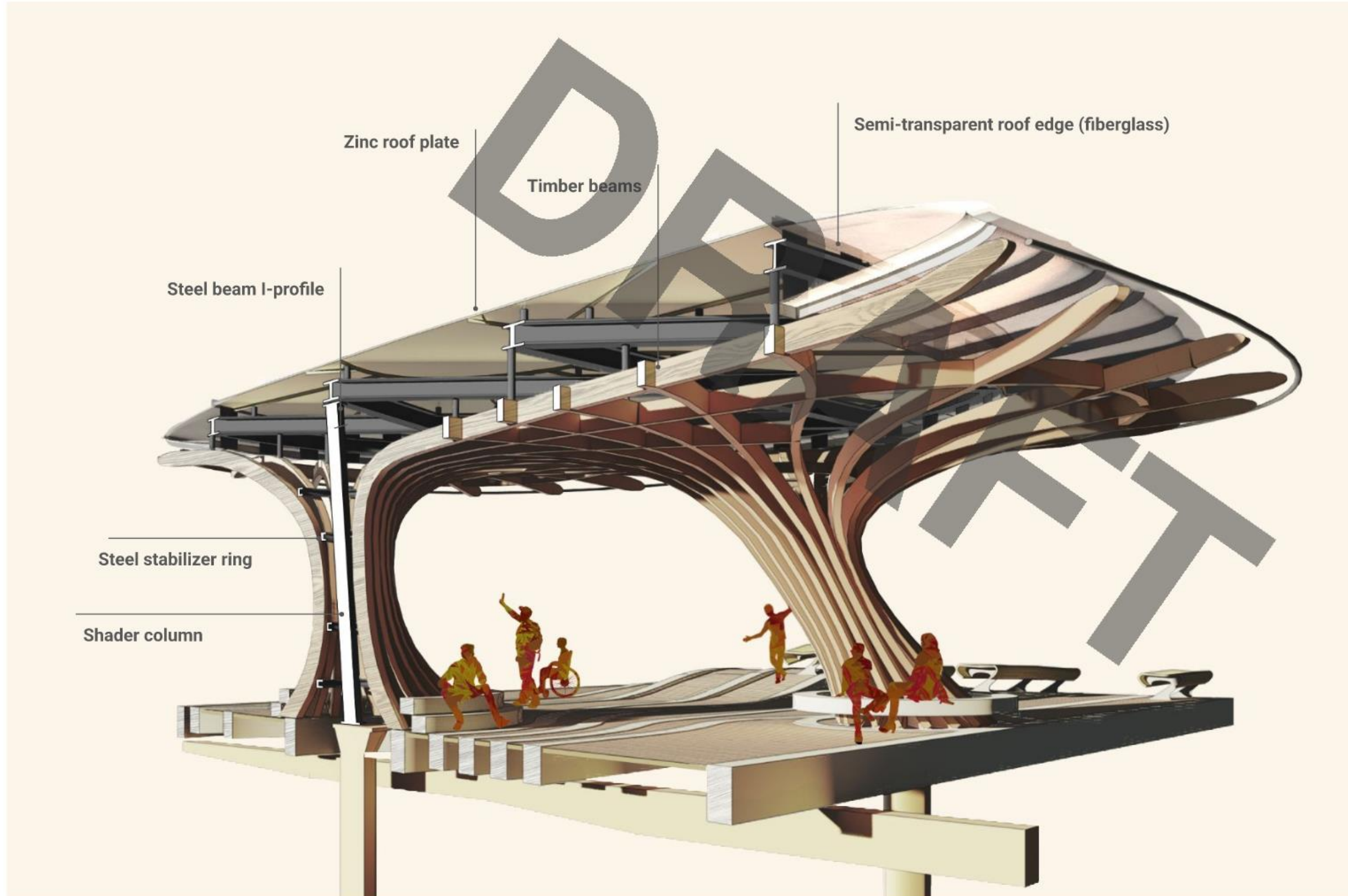
C

The ripple as amphitheatre on the water



Tripod shader: light, transparent, efficient

Shader provides dappled shade and filtered light



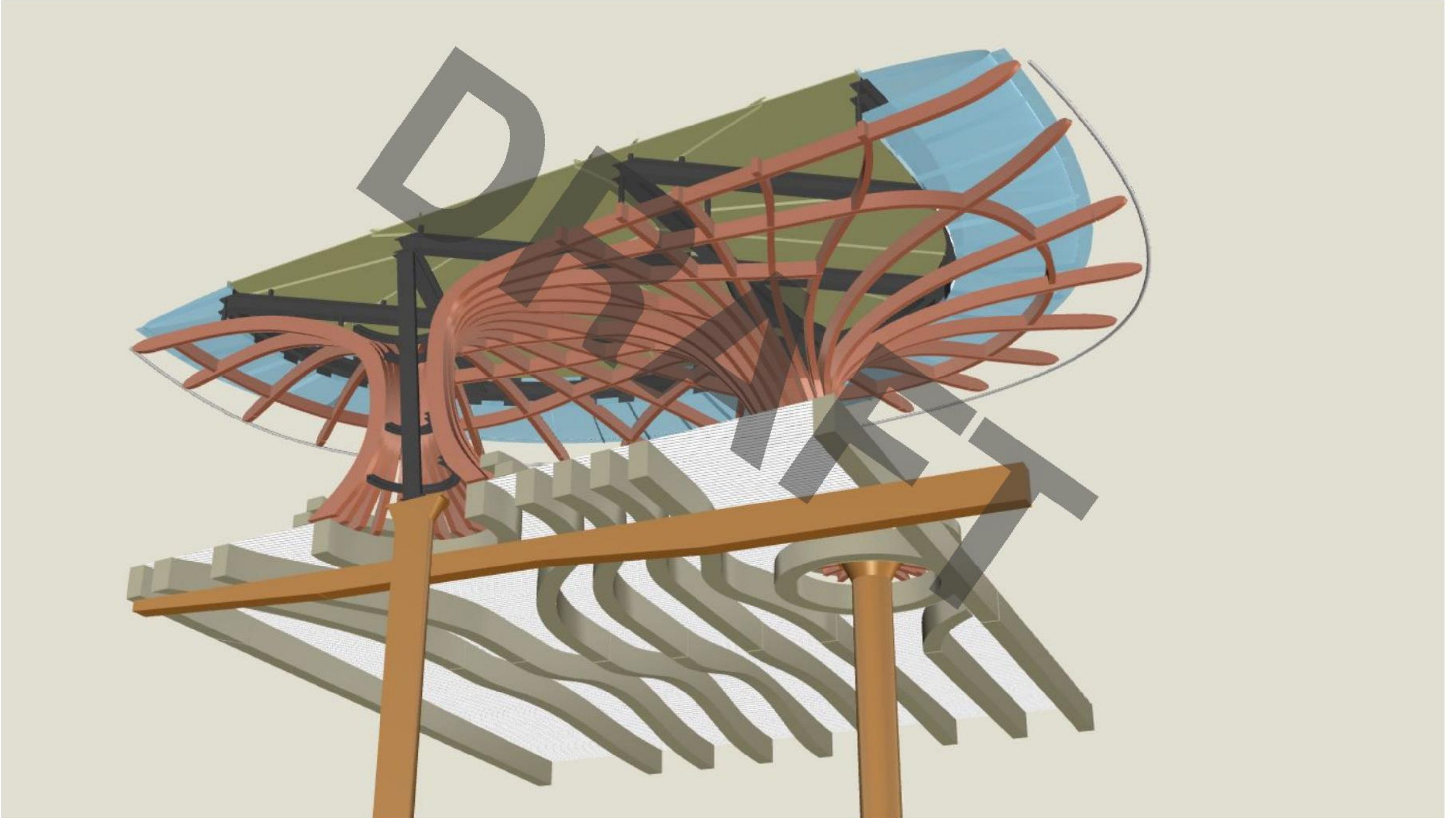
Structural armature

Steel I-Beam structural support



Complete WaveDeck + Shader Construction

Shared language of beams and structural supports



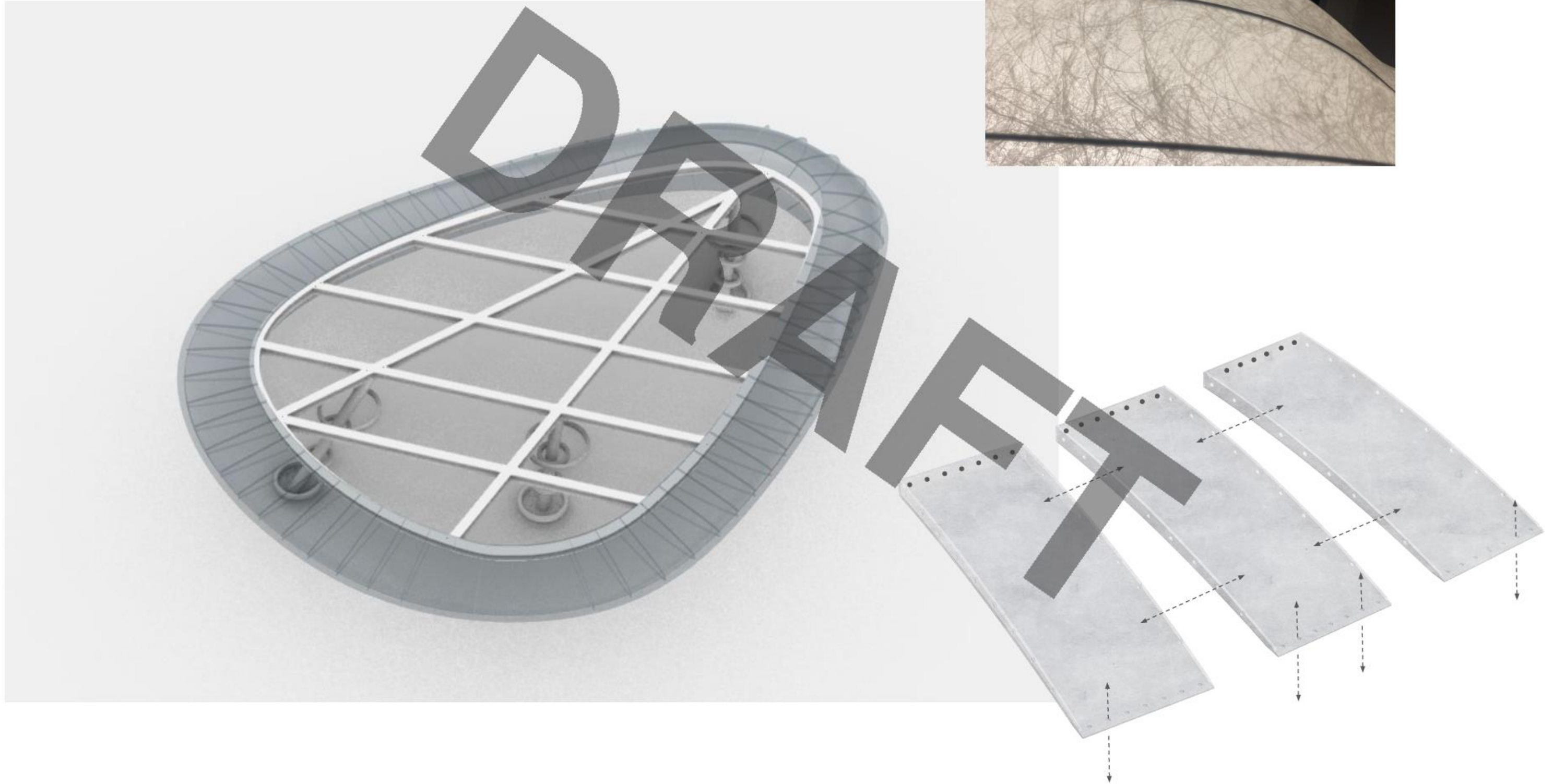
Glowing beacon precedent

Shader glows softly with translucent material



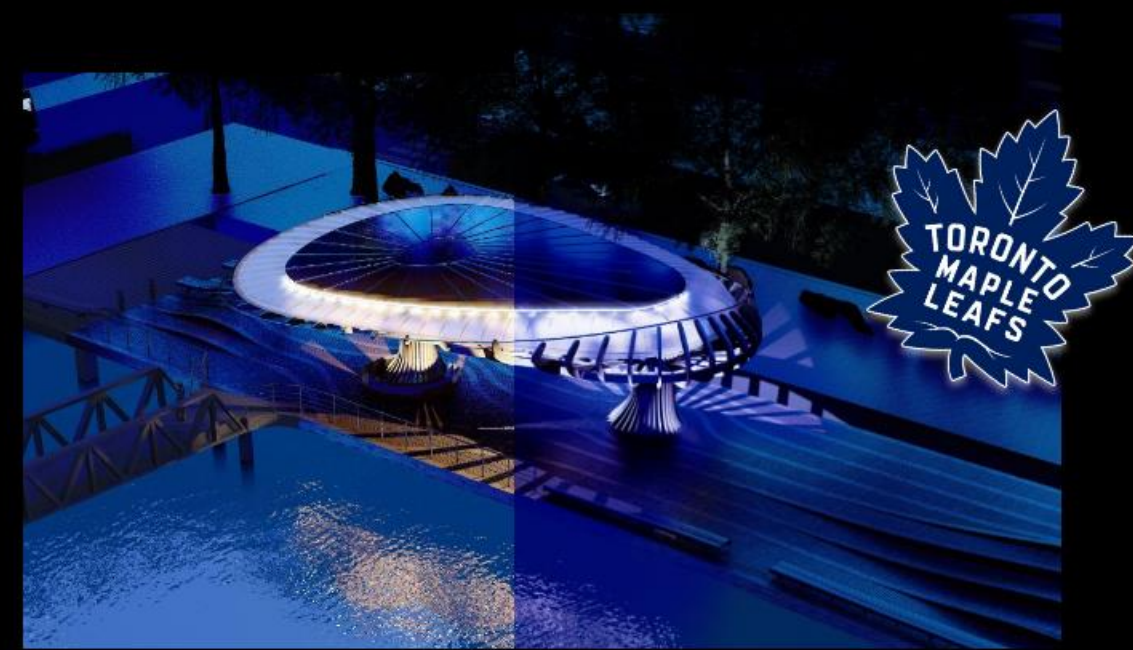
Translucent roof “ring” provides dappled shade + lighting

Paneled translucent construction



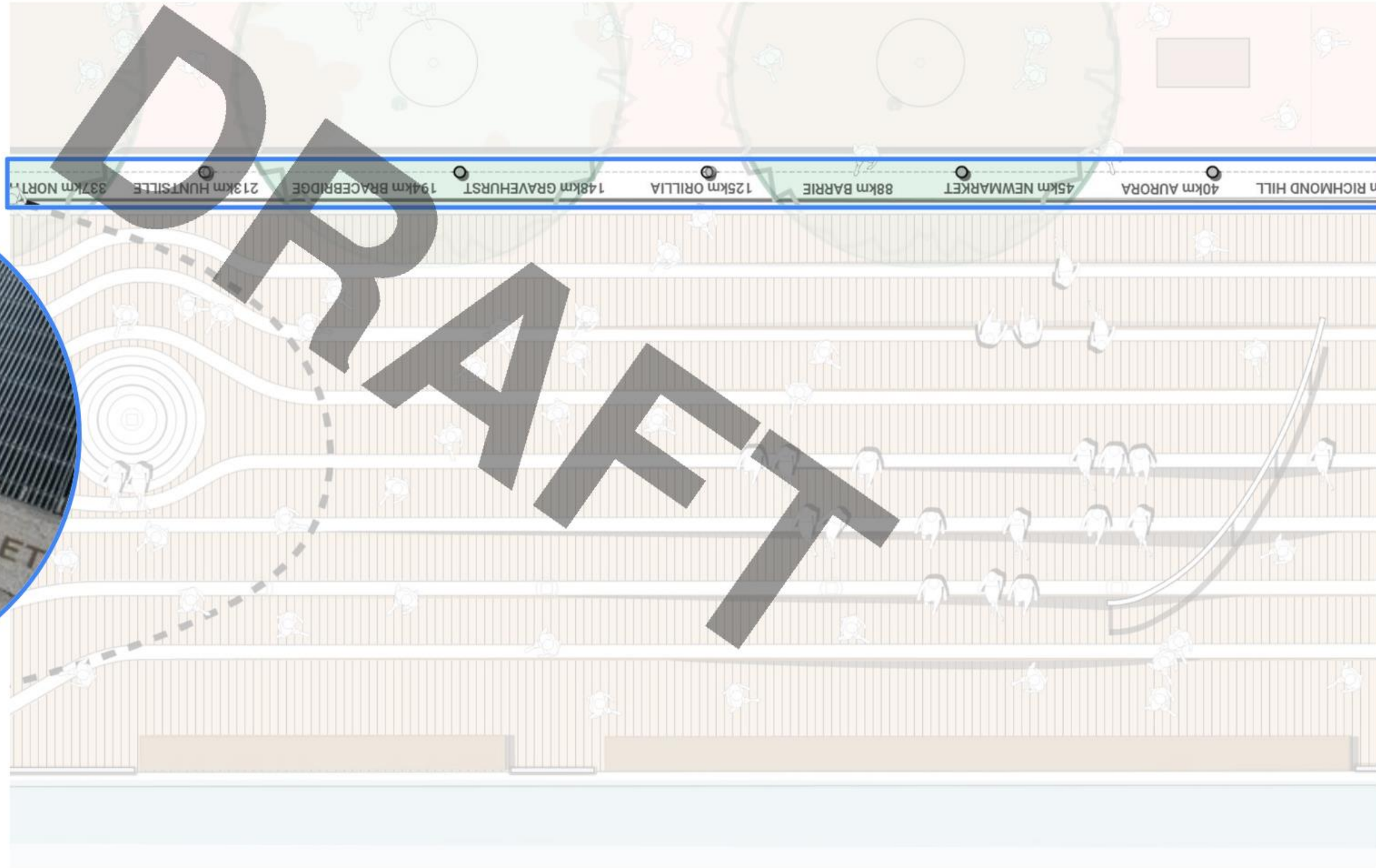
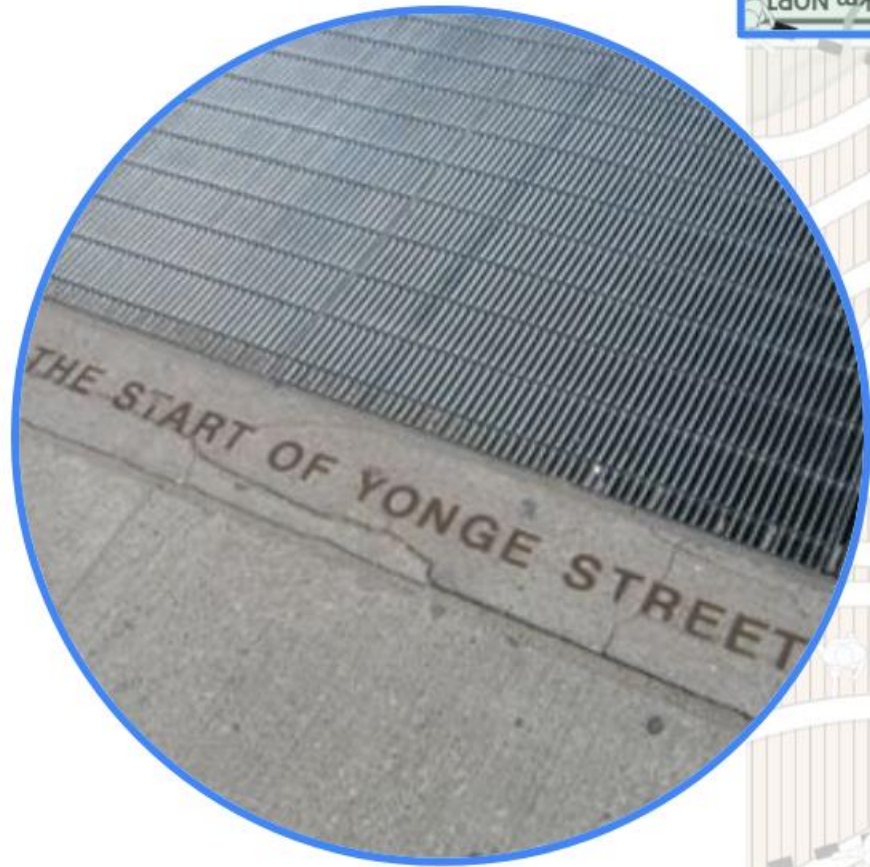
Seasonal interest, day and night

The WaveDeck and Shader as wintertime beacons



Art salvaged and reintegrated into new dock wall cap

Historic commemorative quality

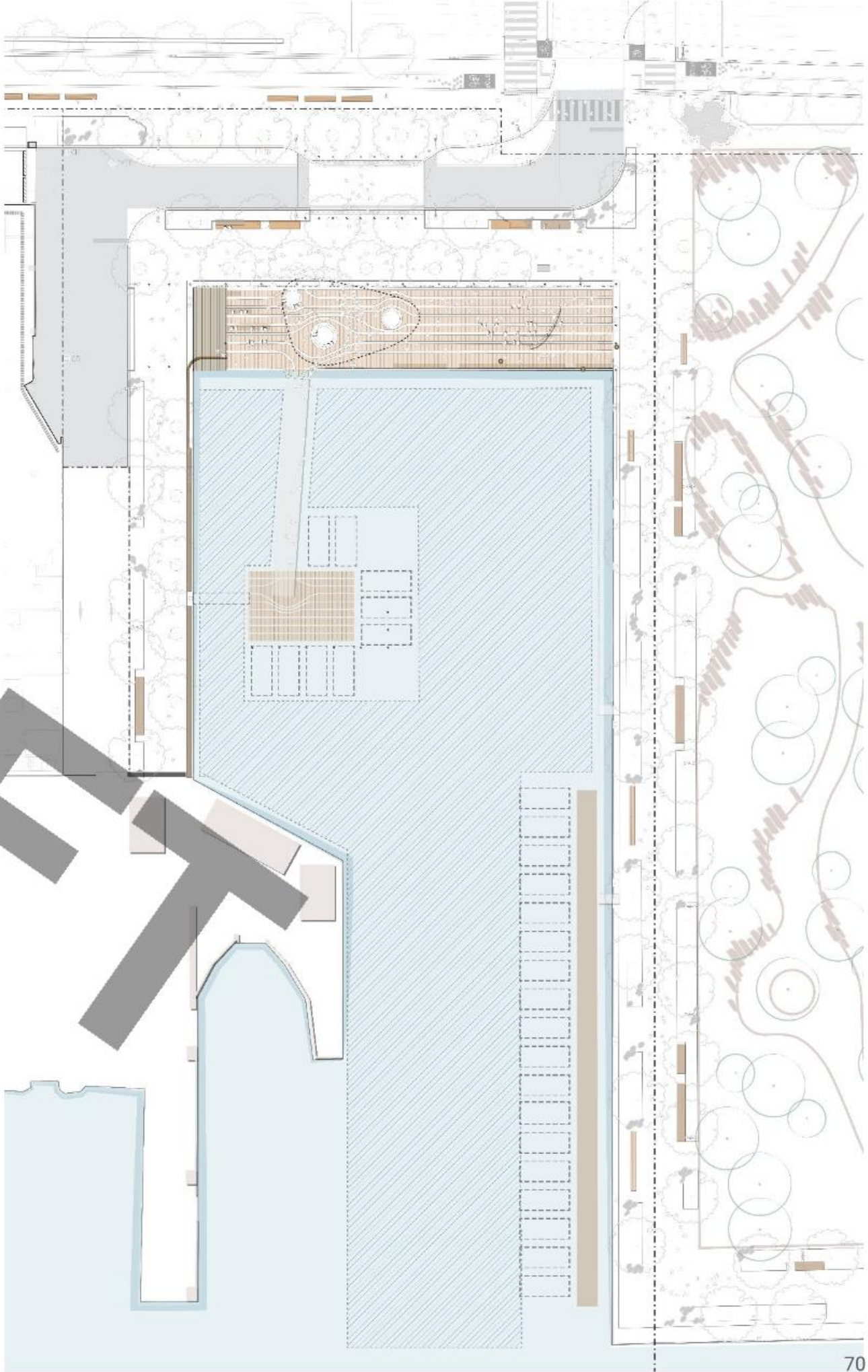


Furnishing and Signage

Consistent palette builds on legacy success

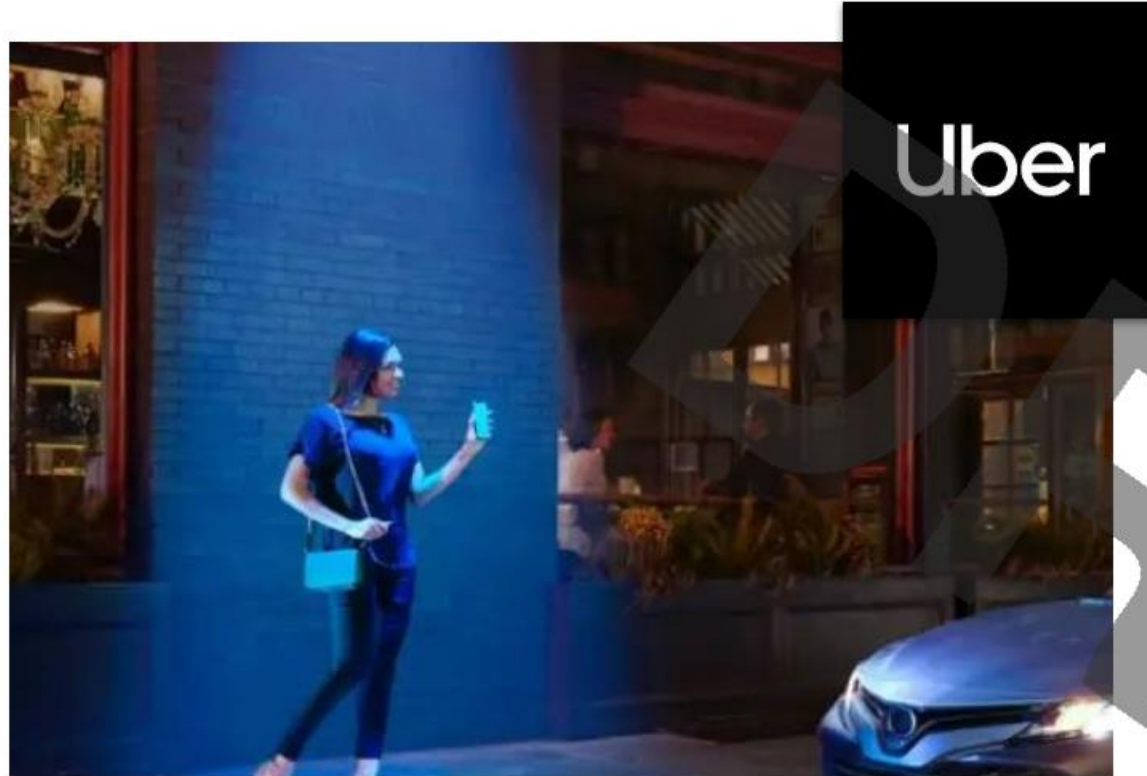


- Legend**
- WEP Bench
 - Double sided WEP light pole
 - Seating Edges on WaitingDeck
 - Bollards
 - Shader uplights



Cutting down on visual clutter

Taxis can signal to passengers safely without relying on commercial signage



Passengers can receive a digital “flag” to tell them it’s time to go down the gangway

Precedent: Uber Spotlight System

Taxi drivers can use typical maritime motifs to physically flag down passengers and usher them aboard

Precedent: Semaphore maritime flags





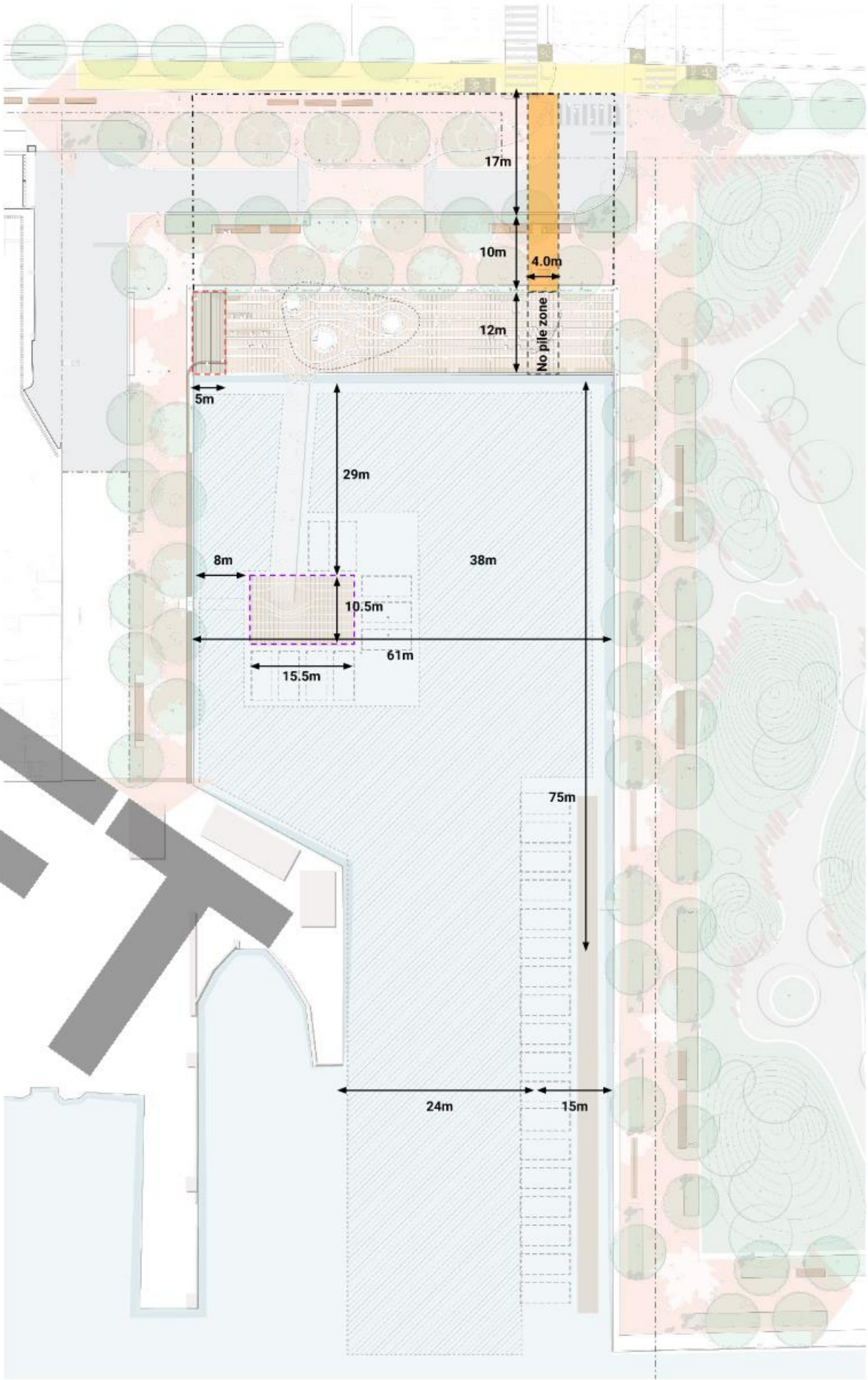
Technical Delivery

Appendix

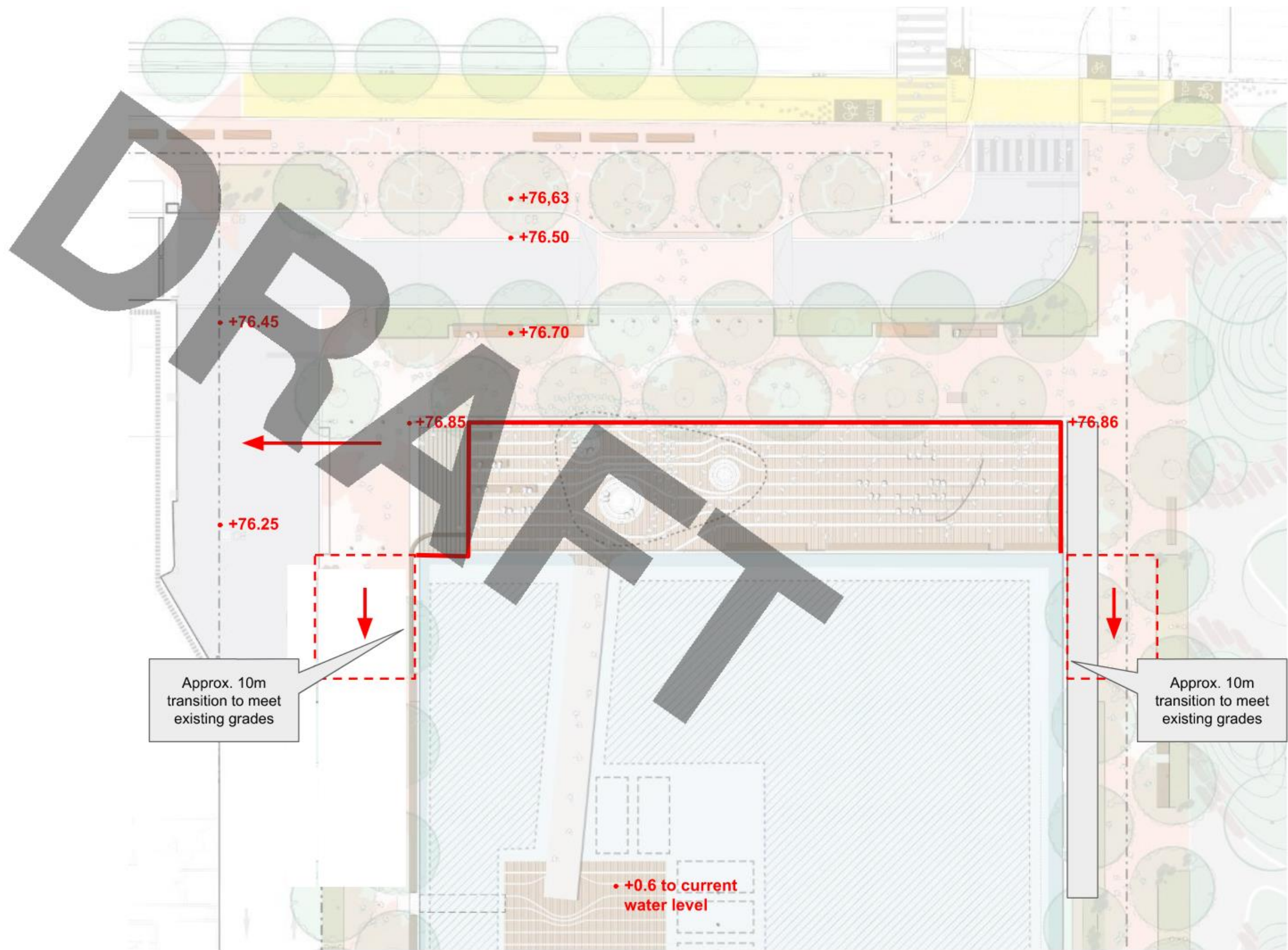
Key Dimensions

DRAFT

- Legend**
- Proposed Lake Fill Area
 - Dock Wall extension
 - CSO
 - WaitingDeck
 - Floating Dock
 - Operators Docks

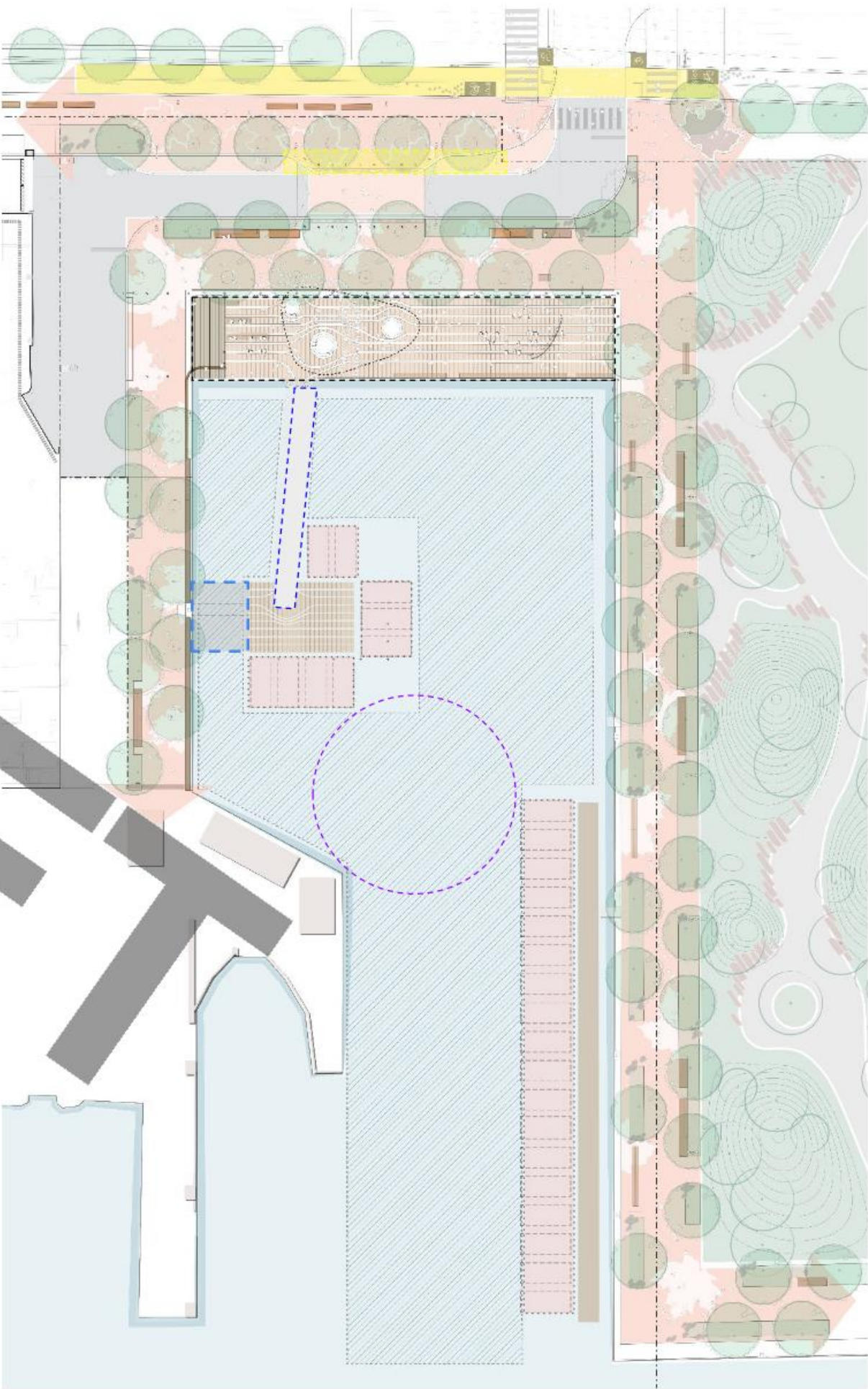


Grading and Drainage



Functional access & materiality




- Legend**
- Turning template: Heavy Single Unit (HSU) truck
 - Turning template: Bus
 - Queueing area for 1 bus and 2 taxis
 - Water Taxis (25)
 - Marine functionality turning area
 - Hostile Vehicle Mitigation
 - Interlocking concrete unit pavers
 - Granite barrier curb
 - Granite Setts - Queens Quay pattern
 - Granite Setts - WEP pattern
 - WaveDeck - Thermally treated Canadian lumber
 - Aluminium gangway
 - Aluminium lift
 - No Wake Zone
 - Water Taxi BOH and servicing area

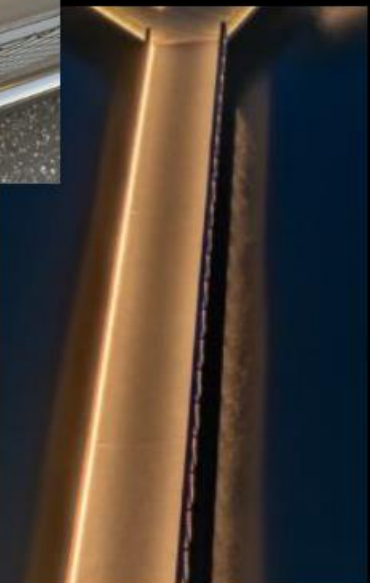


Lighting Strategy

fixtures

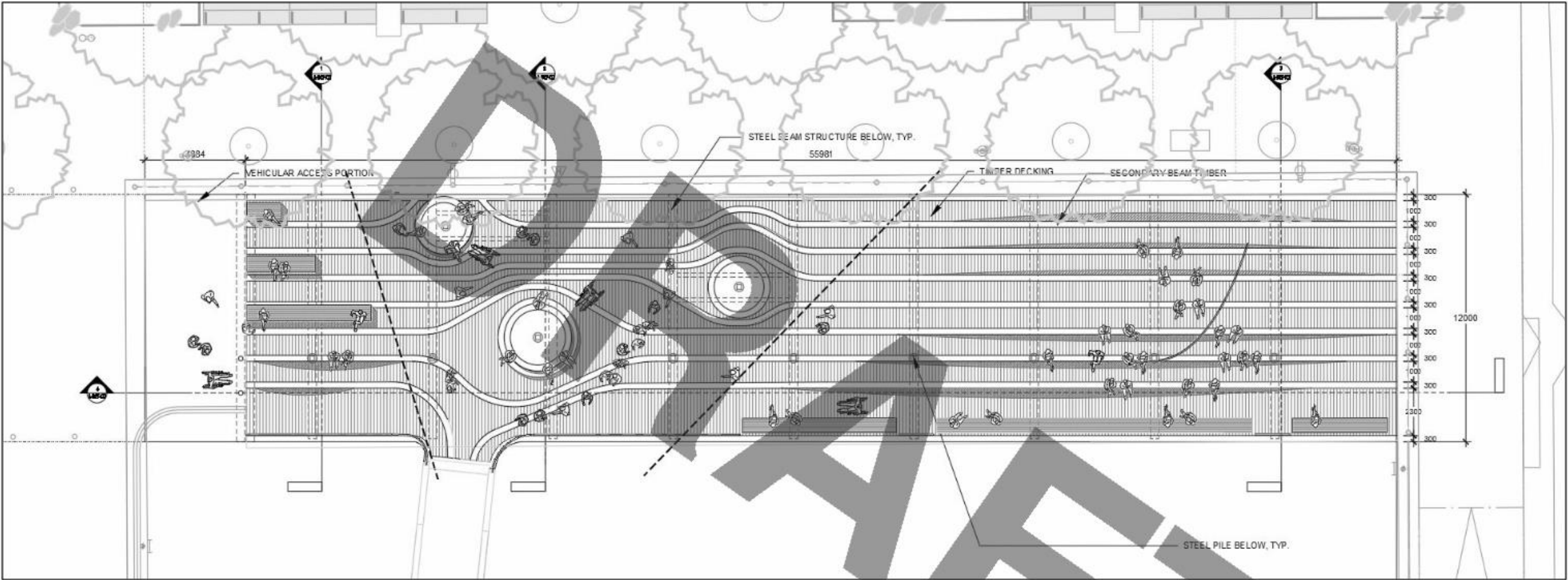
Legend

-  Walkway (uniform, high elevation)
-  Primary circulation
-  Moments (wayfinding, decorative)



WaveDeck Construction

Ref. to 60% submission drawing set



LEGEND

	LIMIT OF WORK LINE		EXPANSION JOINT - SEE SPECIFICATIONS
	PROPERTY LINE		CONTROL JOINT - SEE SPECIFICATIONS
	FIRE HYDRANT		CHAIN FOR WINTER CLOSURE
GRADING			
	PROPOSED ELEVATION		EXISTING ELEVATION
	EXISTING ELEVATION		EXISTING ELEVATION
PAVING			
	CONCRETE PAVEMENT		CONCRETE UNIT PAVERS
URBAN FURNITURE AND FIXTURES			
	PERMANENT STAINLESS STEEL BOLLARD		LIFE SAVING STATION - SEE SPECIFICATIONS
	LADDER		

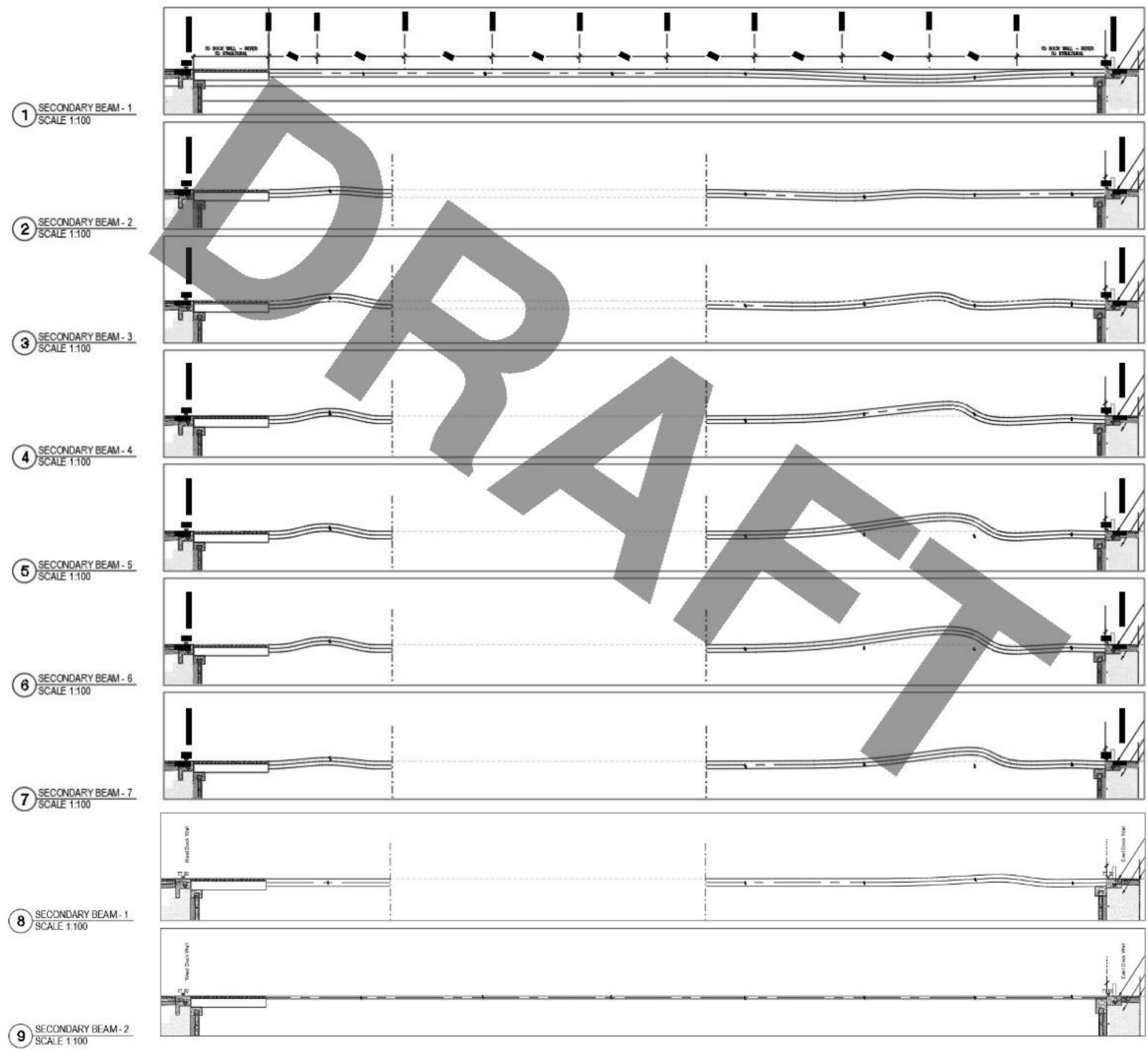
GRADING NOTES

- EXISTING CONDITIONS ARE FROM TOPOGRAPHIC SURVEY BY:
JD BARNES LIMITED
152 PARLIAMENT STREET
TORONTO, ON M5A 2Z1
T. (416) 368-3737
- CONTRACTOR SHALL VERIFY ALL EXISTING GRADES IN THE FIELD AND SHALL REPORT ANY DISCREPANCIES BETWEEN EXISTING AND PROPOSED CONDITION TO THE LANDSCAPE ARCHITECT.
- ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT NO COST TO THE OWNER.
- COMPACT SUBGRADE PRIOR TO ANY FINISH GRADING. REMOVE ALL SOFT SPOTS OBSERVED OR IDENTIFIED IN FIELD.
- PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM SLOPE OF 1%. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE ARCHITECT PRIOR TO CONTINUING WORK.
- ALL EXISTING UTILITY RIMS SHALL MAINTAIN EXISTING ELEVATIONS UNLESS SHOWN OTHERWISE ON THE PLAN.
- CATCH BASIN AND RIM ELEVATIONS PROVIDED FOR REFERENCE ONLY. FOR ALL DRAINAGE STRUCTURES, SEE CIVIL DRAWINGS.
- EXCAVATION REQUIRED WITHIN PROXIMITY OF UTILITY LINES AND WITHIN DRIP LINE OF TREES DESIGNATED TO REMAIN SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE UTILITY COMPANIES OR THE OWNER.
- ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADS OR ADJUTING PROPERTY.
- WHERE NEW PAVING OR EARTHWORK MEETS EXISTING PAVING OR EARTHWORK, SMOOTHLY BLEND LINE AND GRADE OF EXISTING WITH NEW.
- ADJUST M.H. FRAMES TO NEW PAVING SURFACES WHERE NECESSARY.

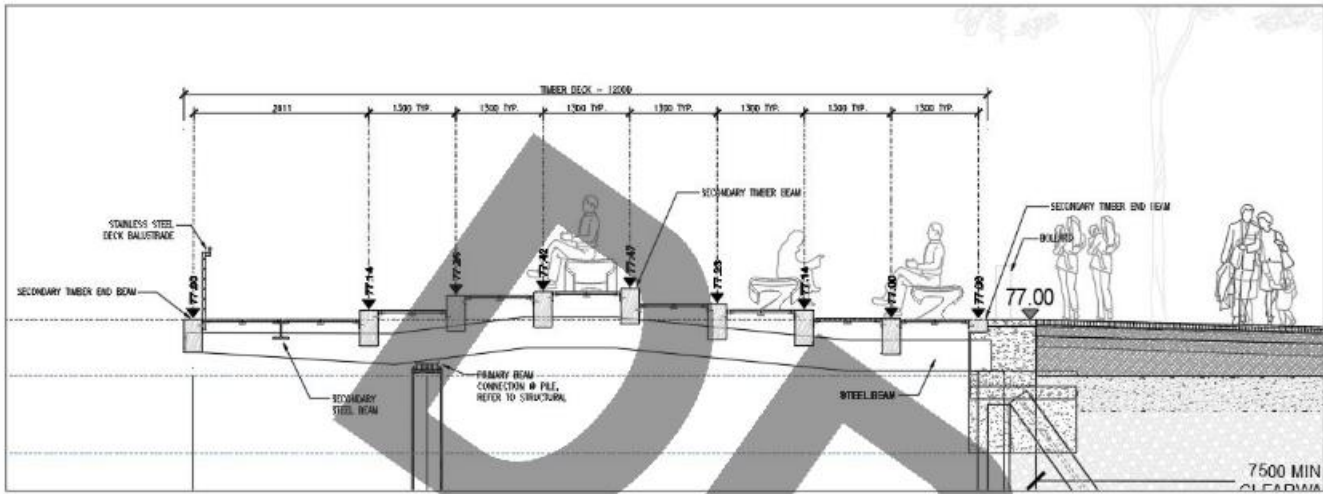
LAYOUT AND MATERIALS NOTES

- EXISTING CONDITIONS ARE FROM TOPOGRAPHIC SURVEY BY:
JD BARNES LIMITED
152 PARLIAMENT STREET
TORONTO, ON M5A 2Z1
T. (416) 368-3737
- THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE TOTAL SCOPE OF WORK AND ALL REQUIRED COORDINATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR A THOROUGH SITE EXAMINATION TO SATISFY HIM OR HERSELF AS TO THE ACTUAL SITE CONDITIONS PRIOR TO SUBMISSION OF BIDS.
- CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS PRIOR TO EXCAVATION.
- ALL LINES ARE PARALLEL, OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING THE LOCATIONS OF ALL SITE ELEMENTS TO BE RESET IN THEIR SAME HORIZONTAL LOCATION.
- ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT NO COST TO THE OWNER.
- REQUIRED SHOP DRAWINGS SHALL BE BASED ON FIELD MEASUREMENT AND LAYOUT VERIFICATION BY THE CONTRACTOR.
- ALL LINE AND GRADE WORK PER DRAWINGS AND SPECIFICATIONS SHALL BE LAID OUT BY A REGISTERED CIVIL ENGINEER OR SURVEYOR ENGAGED BY THE CONTRACTOR.
- STORAGE AREAS FOR CONTRACTOR'S EQUIPMENT AND MATERIALS SHALL BE IN AND WITHIN LIMITS OF WORK AS SHOWN ON PLANS AND AS APPROVED BY THE LANDSCAPE ARCHITECT/CLIENT.
- DIMENSION ON ROADS, SIDEWALKS ARE FROM FACE OF CURB UNLESS OTHERWISE NOTED. DIMENSIONS TO SITE FROM BUILDING ARE FROM OUTSIDE (EXPOSED) FACE OF WALL UNLESS OTHERWISE NOTED.
- EXPANSION JOINT FILLER AND SEALANT SHALL BE PLACED WHERE PAVEMENT MEETS STRUCTURES, INCLUDING WALLS, LIGHT POLES, HYDRANTS, BUILDINGS AND BUILDING COLUMNS, STAIRS AND AT OTHER CONDITIONS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL REQUEST THE PRESENCE OF THE LANDSCAPE ARCHITECT TO REVIEW THE LAYOUT OF EXPANSION JOINTS AND CONTROL JOINTS PRIOR TO PLACING FINISHED WORK.
- SEE CIVIL DRAWINGS FOR UNDERGROUND UTILITIES.

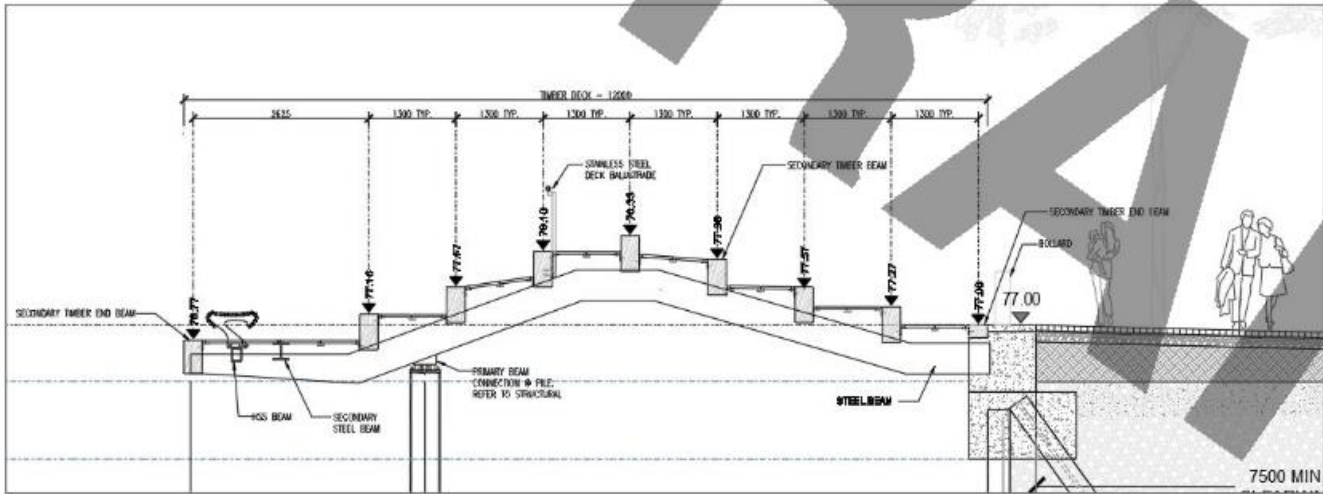
WaveDeck sectional construction



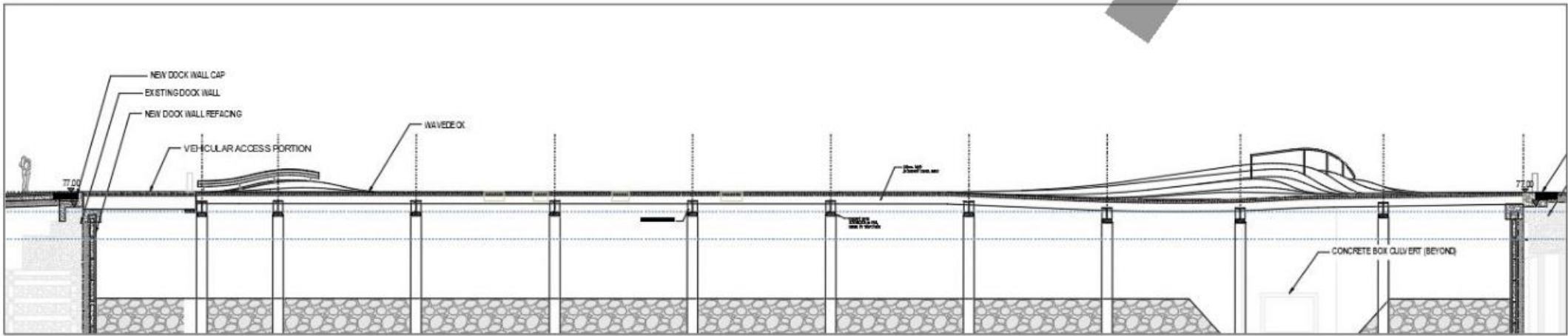
WaveDeck sectional construction



1 SECTION, BEAM @ CREST
SCALE 1:50



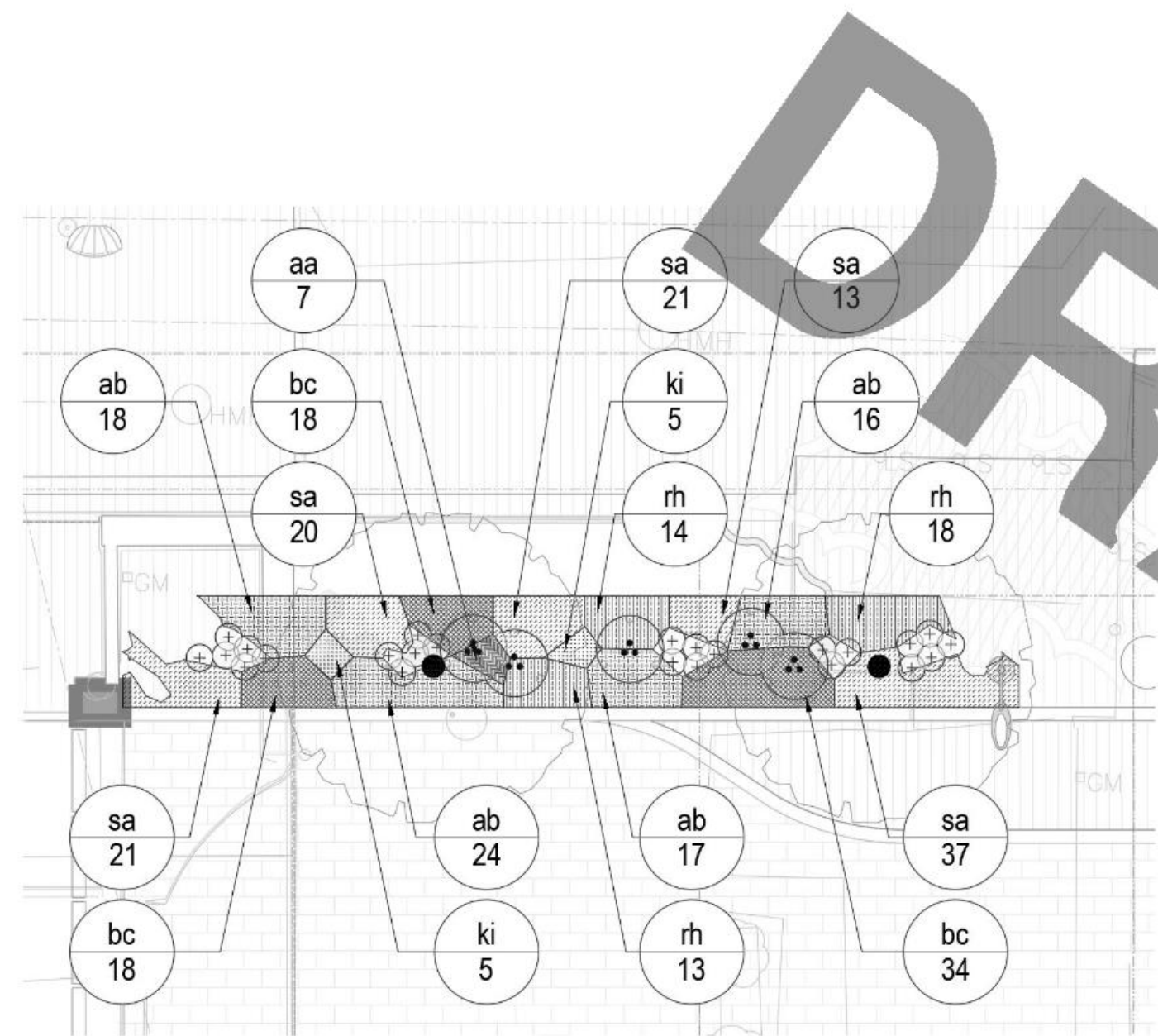
3 SECTION, BEAM @ CREST
SCALE 1:50



4 SECTION
SCALE 1:100

Planting details

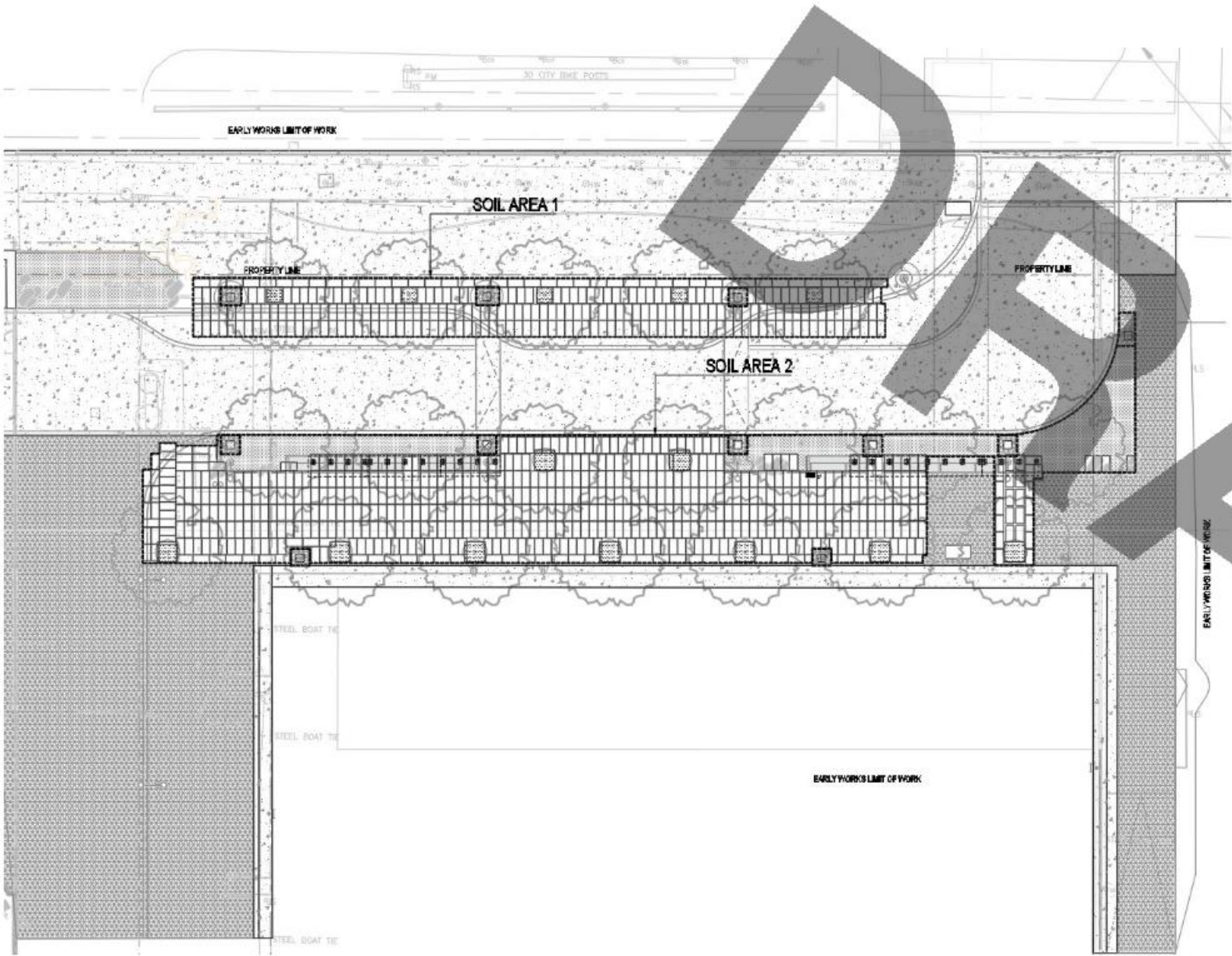
Consistent with larger Queen's Quay approach



PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME
GROUND COVERS			
aa	60	<i>Ageratina altissima</i>	White Snakeroot
ab	231	<i>Amsonia</i> x 'Blue Ice'	Blue Ice Bluestar
bc	343	<i>Blephilia ciliata</i>	Downy Wood Mint
ki	74	<i>Kalimeris incisa</i> 'Blue Star'	Blue Star Japanese Aster
mb	100	<i>Monarda bradburiana</i>	Eastern Bee Balm
rh	110	<i>Ruellia humilis</i>	Wild Petunia
sa	462	<i>Sesleria autumnalis</i>	Autumn Moor Grass

Soil cell plan



LEGEND

- PROPERTY LINE
- EARLY WORK LIMIT OF WORK
- PLANTING, FURNITURE, FIXTURES AND TRANSIT ELEMENTS
- PROPOSED TREE
- PEDESTRIAN LIGHT
- BENCH
- TREE GRATE
- ERRATICS OUTCROP
- SUBSURFACE
- SOIL CELL SYSTEM
- PLANTING SOIL MIX
- GRANULAR FILL
- STRUCTURAL SOIL
- 8" (200mm) CONCRETE FOUNDATION
- BENCH FOUNDATION

Toronto Sample Statistics Template
Toronto Green Standard Version 3.0
Soil volume for Tree Planting

Soil Area	Soil Area (m ²)	Soil Depth (m)*	Soil Volume (m ³)	Tree Quantity	Soil Volume per tree (m ³)	Irrigation provided (Yes/No)
1	217	0.75	163	5	33	Yes
2	624	0.75	468	14	33	Yes
Totals	841	-	631	19	-	-

