

# Maamawi Bridge

KEATING CHANNEL PEDESTRIAN BRIDGE

ENTUITIVE

SEPTEMBER 28, 2023



*Our vision was driven by the desire to provide a **beautiful, modern, accessible and sustainable** structure founded on **Indigenous principles** connecting to the environment that seamlessly transitions the user from the urban environment at the Water's Edge Promenade to the naturalized park setting to the south, while providing multiple experiential opportunities along the way.*

*We have named our bridge **Maamawi'**, an Indigenous term meaning **"connect"**, which captures the essence of our design intent.*

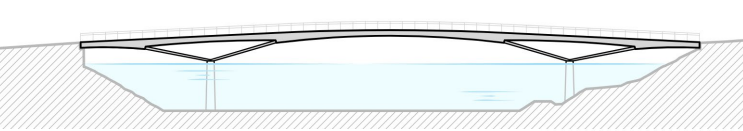
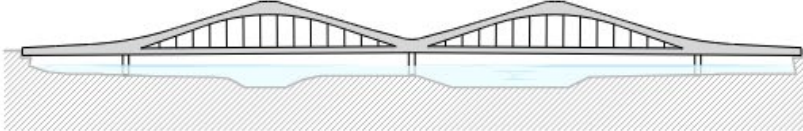
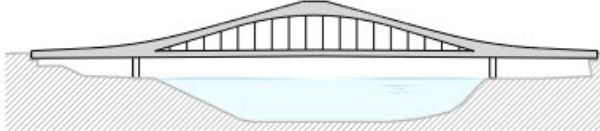
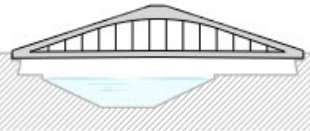


# Three Big Moves

1. Design Based on Indigenous Principles



2. Maamawi' as part of the Port Lands Bridges Family



CHERRY ST. NORTH BRIDGE

CHERRY ST. SOUTH BRIDGE

COMMISSIONER ST. BRIDGE

KEATING CHANNEL PEDESTRIAN BRIDGE

3. An Armature for a 21st C Living Landscape

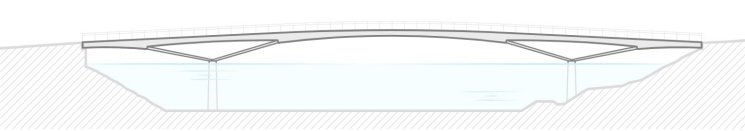
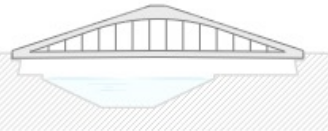


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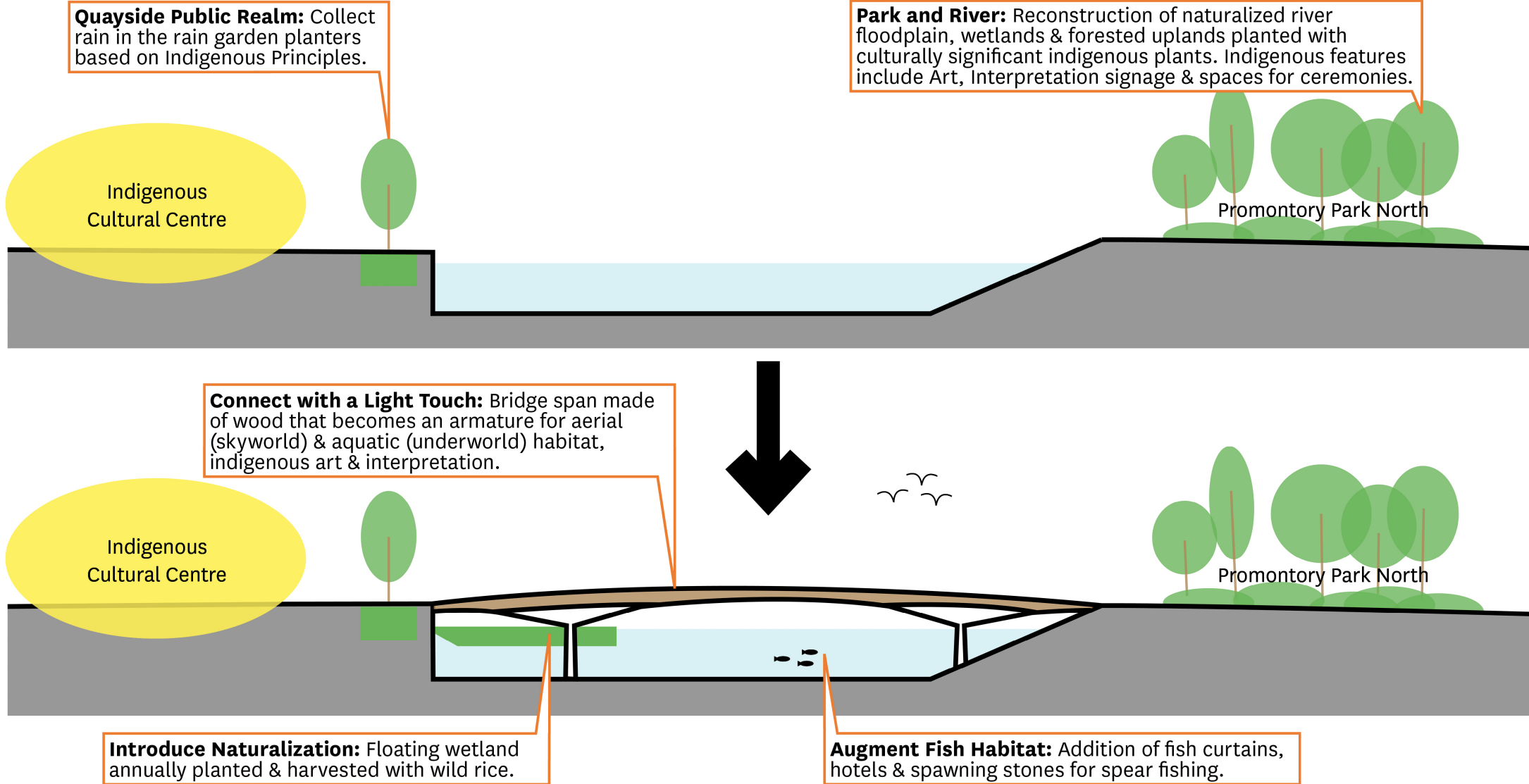
COMMISSIONER ST. BRIDGE

KEATING CHANNEL PEDESTRIAN BRIDGE

## 3. An Armature for a 21st C Living Landscape



# Connecting Indigenous Principles, Features and Programming



# Building on Indigenous Principles

① *All Our Relations*

We are all integrated and interconnected with nature and all that surrounds us.

② *Planning for the Seventh Generation*

We are mindful that the decisions we make today affect future generations after we are gone, and must be durable and maintainable.

③ *The Presence of Craft*

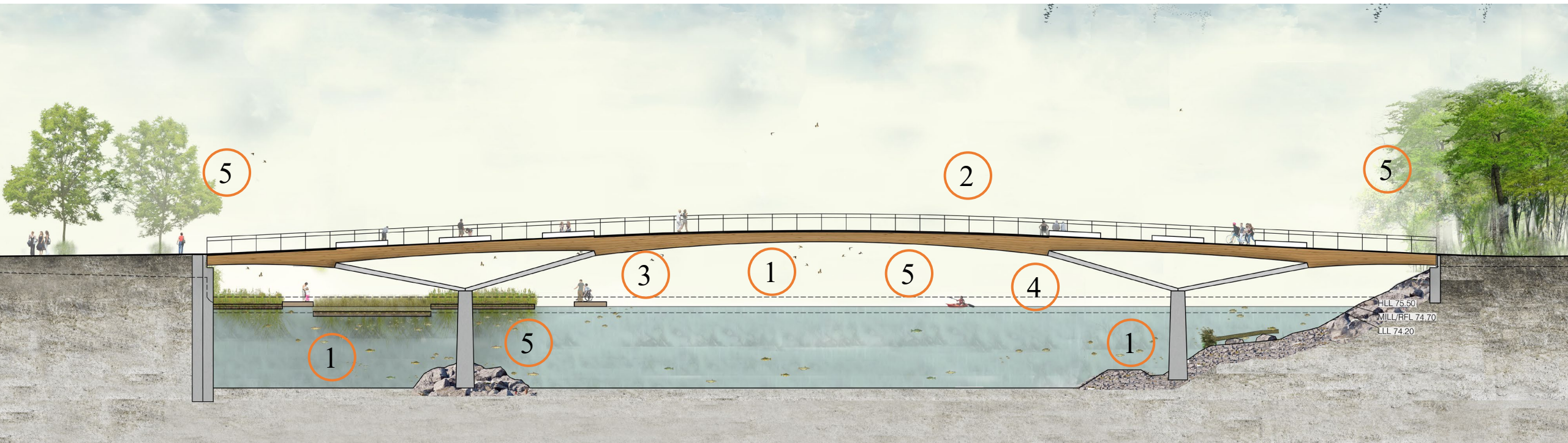
We create beautiful structures with superior craftsmanship, apparent from the way in which they are made, celebrating material joinery.

④ *Take Only What is Needed*

We select and configure materials for their inherent strengths, achieving high strength:weight ratios so as to minimize waste.

⑤ *Celebration of Indigenous Culture*

We celebrate the seasons as reflected in the migratory patterns of birds and fish, planting and harvesting, and the changing landscape.

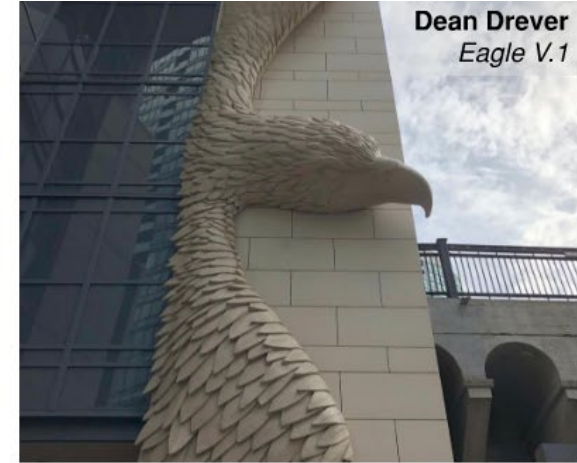


# Creating Opportunities for Public Art and Interpretation

- ✔ Feature the work of a local Indigenous artist to present their work in a meaningful and impactful way.
- ✔ Focuses on points of connection and intersection as key public art sites.

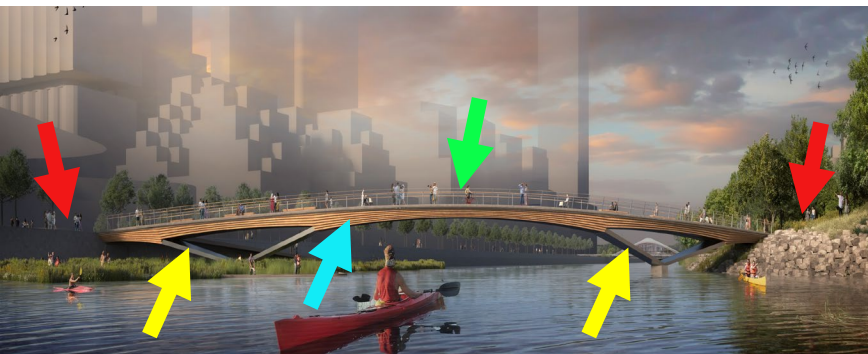


**Rolande Souliere**  
*Frequent Stopping*

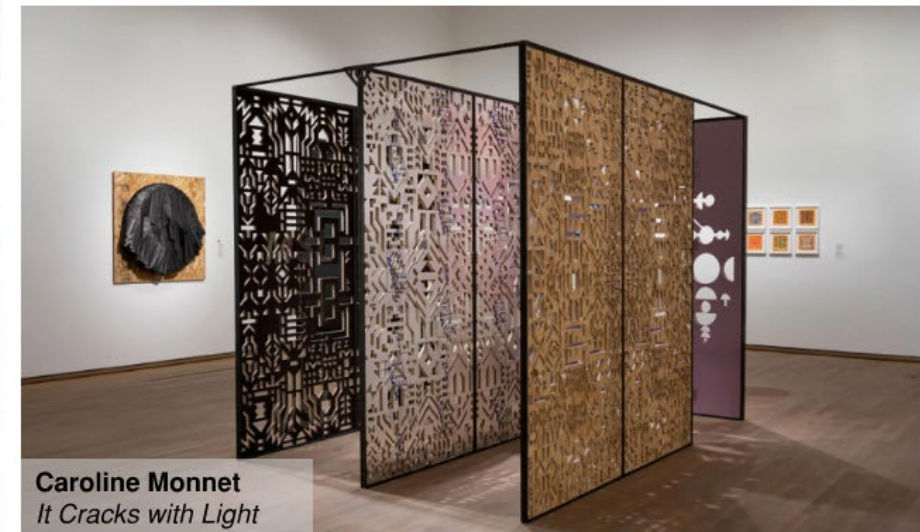


**Dean Drever**  
*Eagle V.1*

## Key Opportunities for Public Art:



**NADI**  
*Double Gazebo*



**Caroline Monnet**  
*It Cracks with Light*





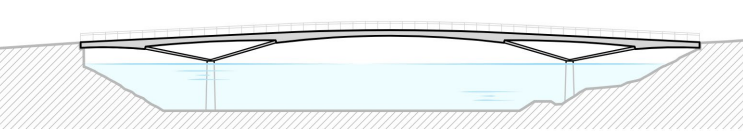
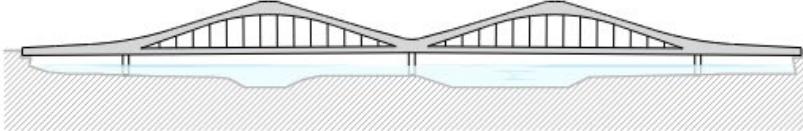
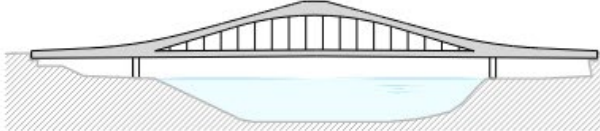
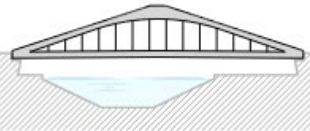
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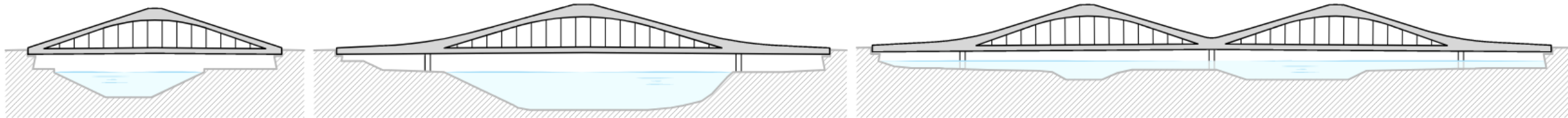
3. An Armature for a 21st C Living Landscape



# Beautiful, Distinct and Compliments the Existing Family of Bridges

*Our proposed bridge has been designed as an inversion of the Port Lands bridges' typology of an above deck superstructure with a timber superstructure below deck.*

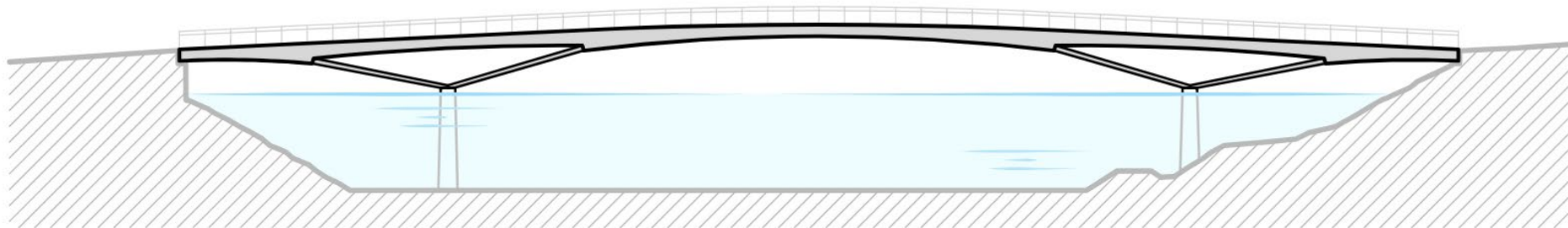
The elegant, smooth and modern form is consistent with the 'City of the Future' design mandate for the Port Lands bridges.



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KEATING CHANNEL PEDESTRIAN BRIDGE - MAAMAWI'

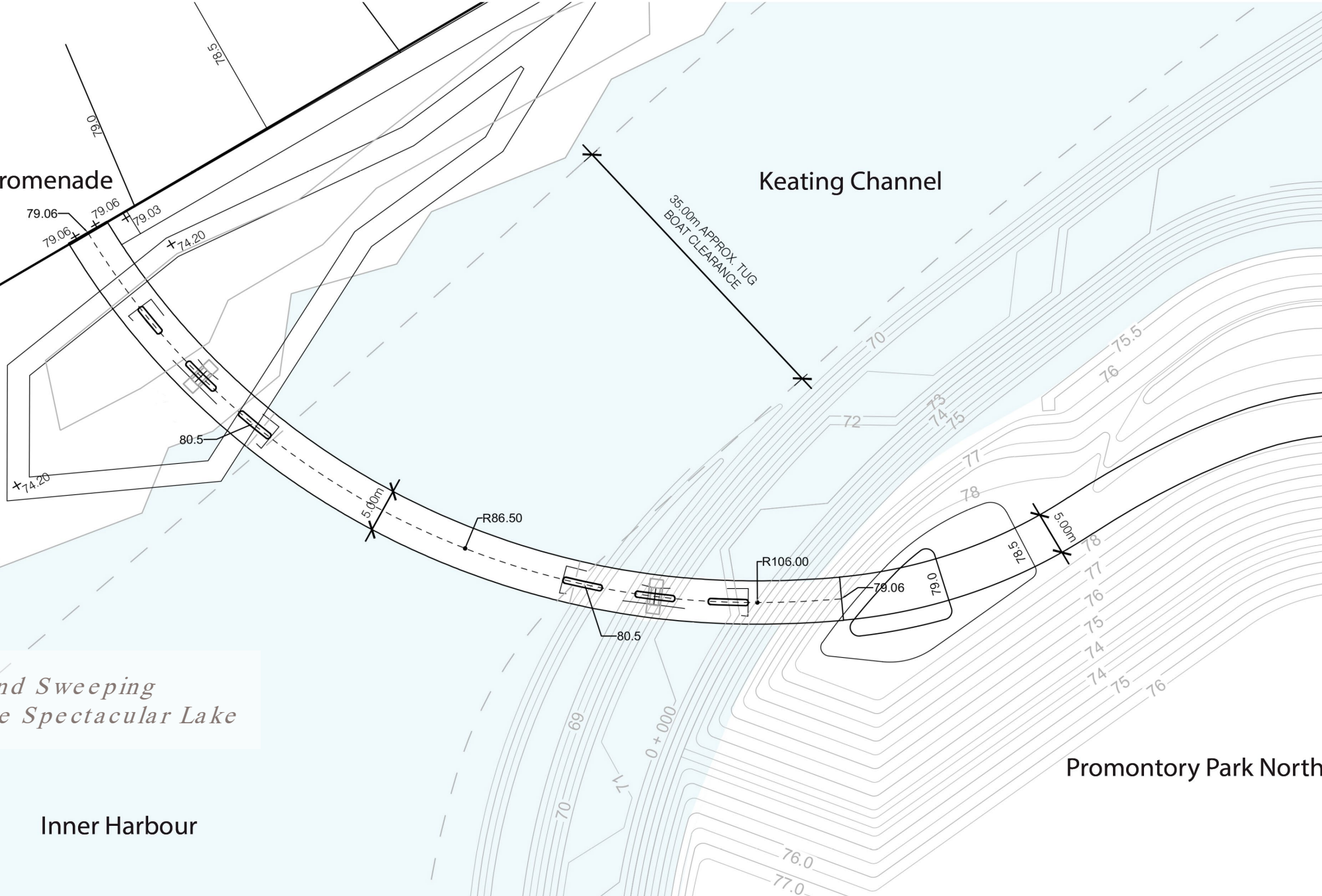
# Layout Plan



Water's Edge Promenade

Keating Channel

Parliament Slip



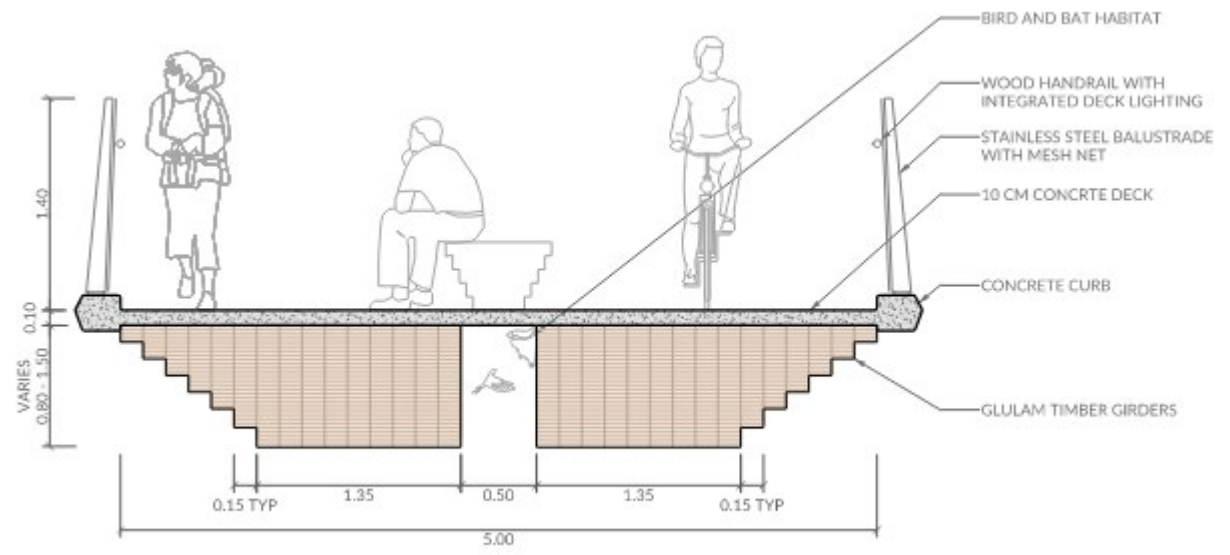
*Westerly North Landing and Sweeping Curved Alignment Promote Spectacular Lake Views.*

Inner Harbour

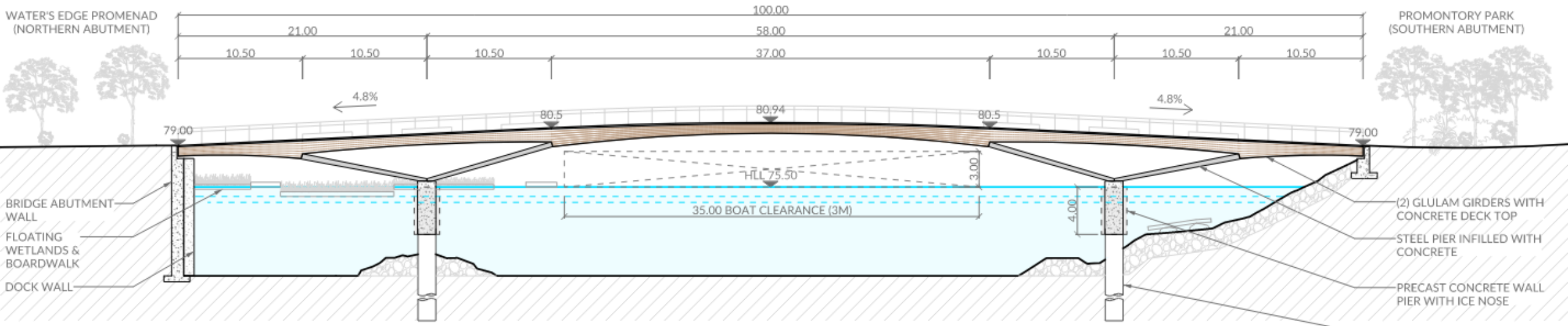
Promontory Park North

# Bridge Sections

*Laminated Timber Elegantly Shaped to Efficiently Span the Channel*



CROSS SECTIONS 1:50



PROFILE SECTION 1:350

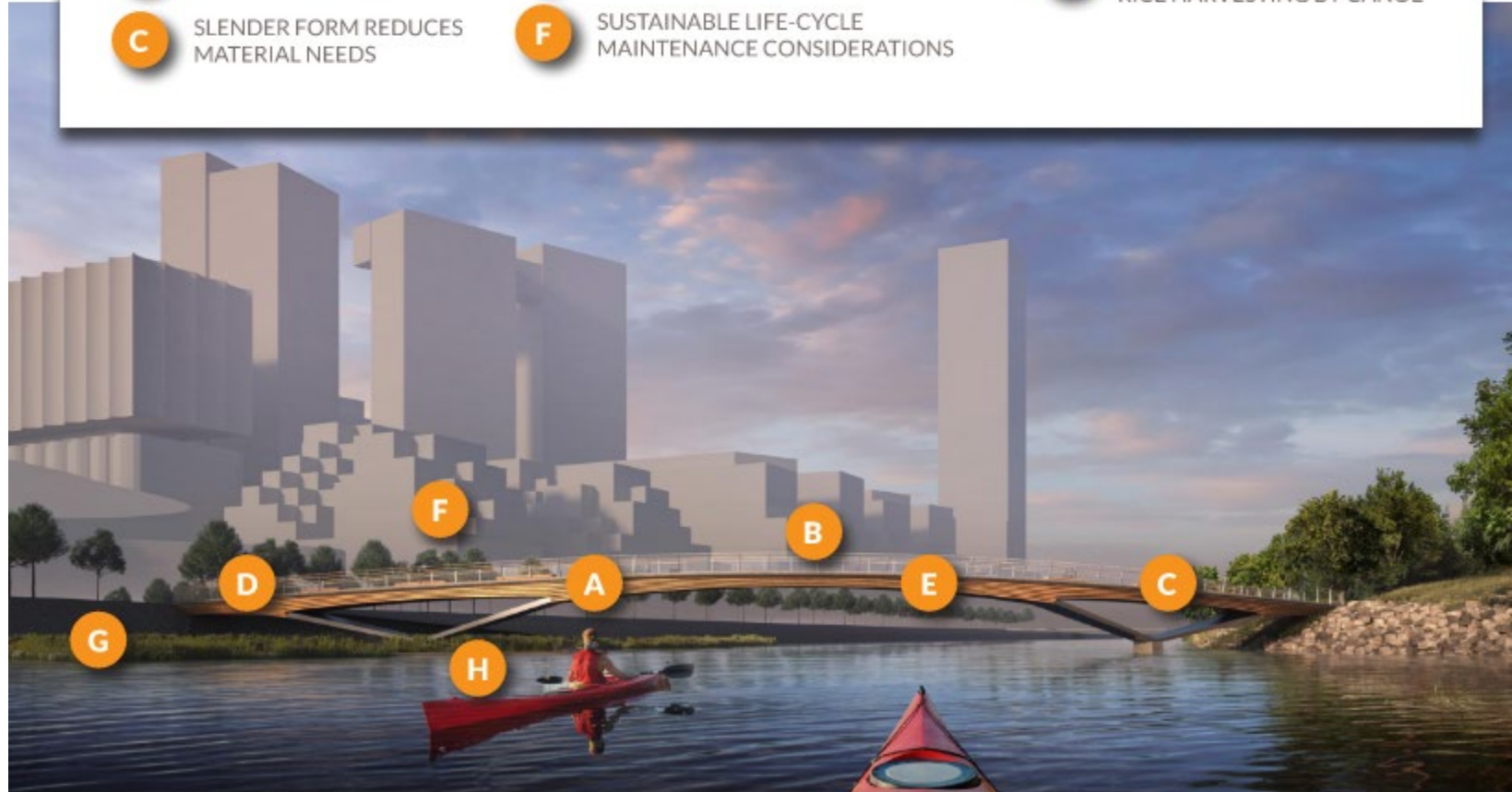
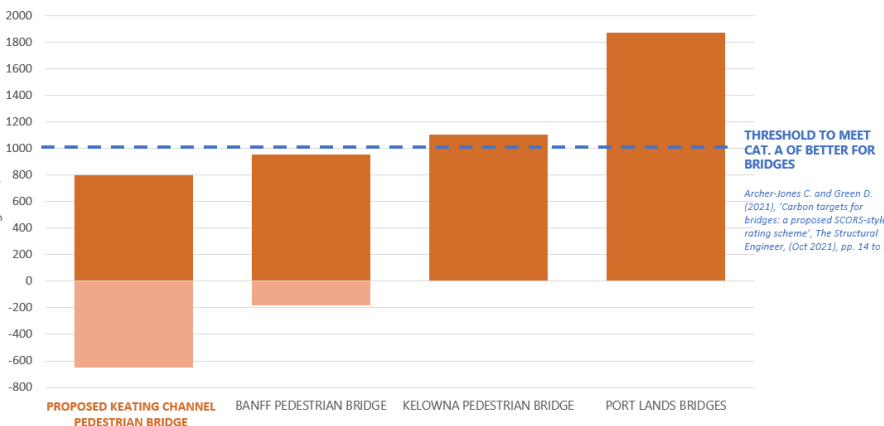
# Sustainability Integral to Every Aspect

✓ By intertwining Indigenous teachings and modern innovation, Maamawi' demonstrates sustainability that is integrated into each aspect of the design.

- A** LOW CARBON TIMBER GIRDERS
- B** LOW CARBON DURABLE CONCRETE TOPPING
- C** SLENDER FORM REDUCES MATERIAL NEEDS
- D** DURABLE DETAILS - FAST DRYING & MOISTURE PROTECTION
- E** CLIMATE RESILIENT FLOOD LEVEL HEIGHT
- F** SUSTAINABLE LIFE-CYCLE MAINTENANCE CONSIDERATIONS
- G** WETLAND SPACE FOR HABITAT
- H** CULTURAL CONNECTION ENABLES TRADITIONAL WILD RICE HARVESTING BY CANOE

EMBODIED CARBON ANALYSIS AS COMPARED WITH THREE PEDESTRIAN BRIDGES

■ BIOGENIC CARBON INTENSITY  
■ A1 - C4 EMBODIED CARBON INTENSITY



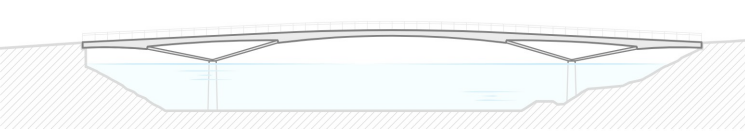
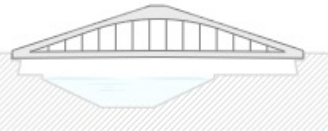
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# Delivering an Integrated Landscape Plan



Cultural/Institutional Building

Future Development

Street D

Parliament Slip

Future Pedestrian Bridge

Overlook Plaza

Water's Edge Promenade

Raised Dockwall

Floating Ramp

Barrier Wetland

Floating Boardwalk

Submergent Wetland

Riverside Kayak Mooring

Viewing Point

Keating Channel

Pedestrian Bridge

Future Water Taxi Dock

Timber Seating

Stone Revetment

Inner Harbour

Park Pavilion

North Cove

Main Park Path

Water's Edge Path

Water's Edge Path

Promontory Park North

0 5 10 25

# A Forward-Thinking Approach to the Future Context

Phase 1



Phase 2



Phase 3

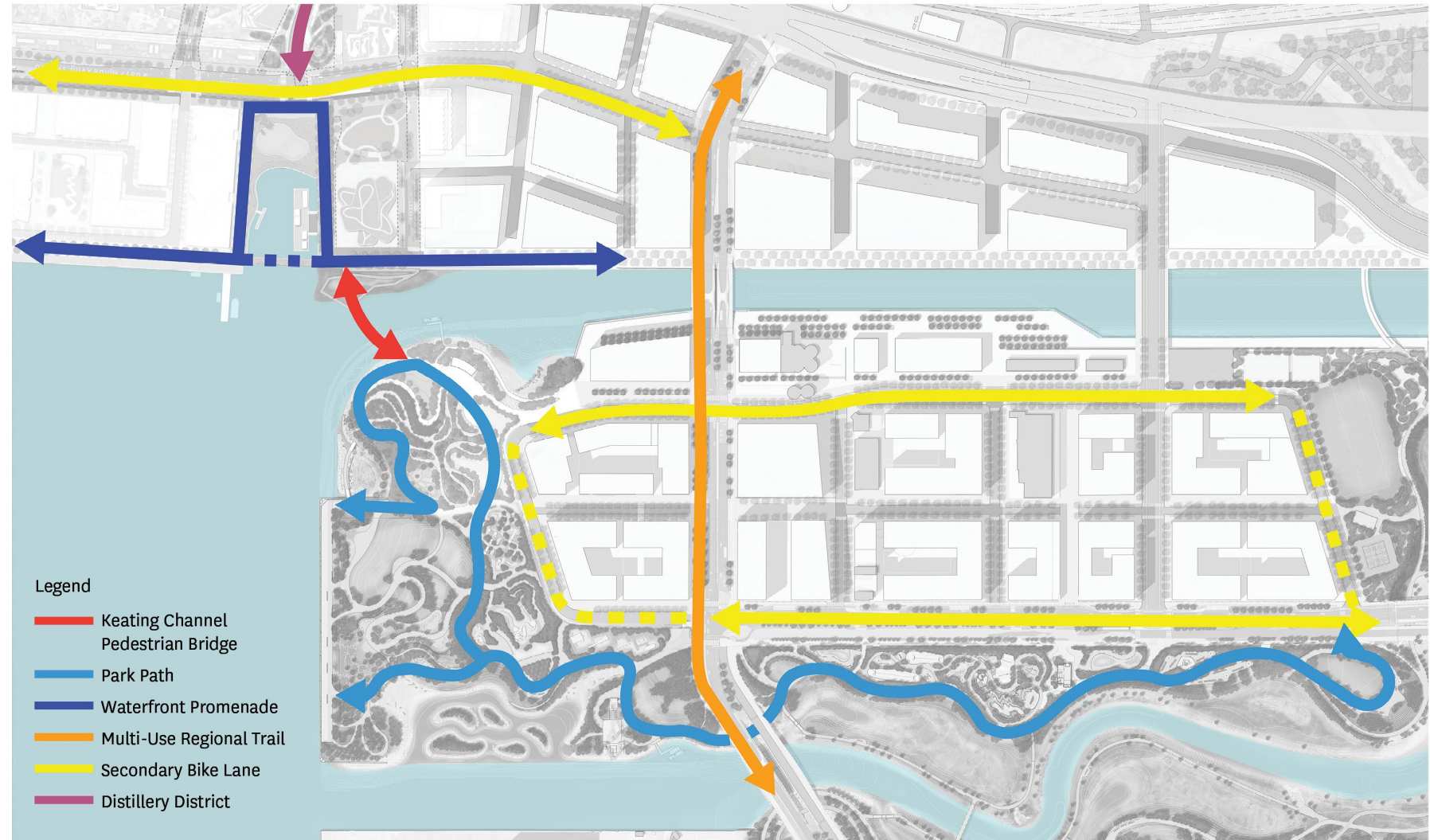




# Provides Safe, Direct and Equitable Access between the City and Villiers Island

- ✓ Landing site shifted west to effortlessly link Promontory Park North with the Indigenous Cultural Center plaza and Water's Edge Promenade.
- ✓ Graceful curve and 5m width naturally slow cyclists to provide a safe and comfortable experience for all visitors.

*As a pair, the Keating Channel and Cherry Street bridges give visitors flexibility to choose a pace that works for them.*

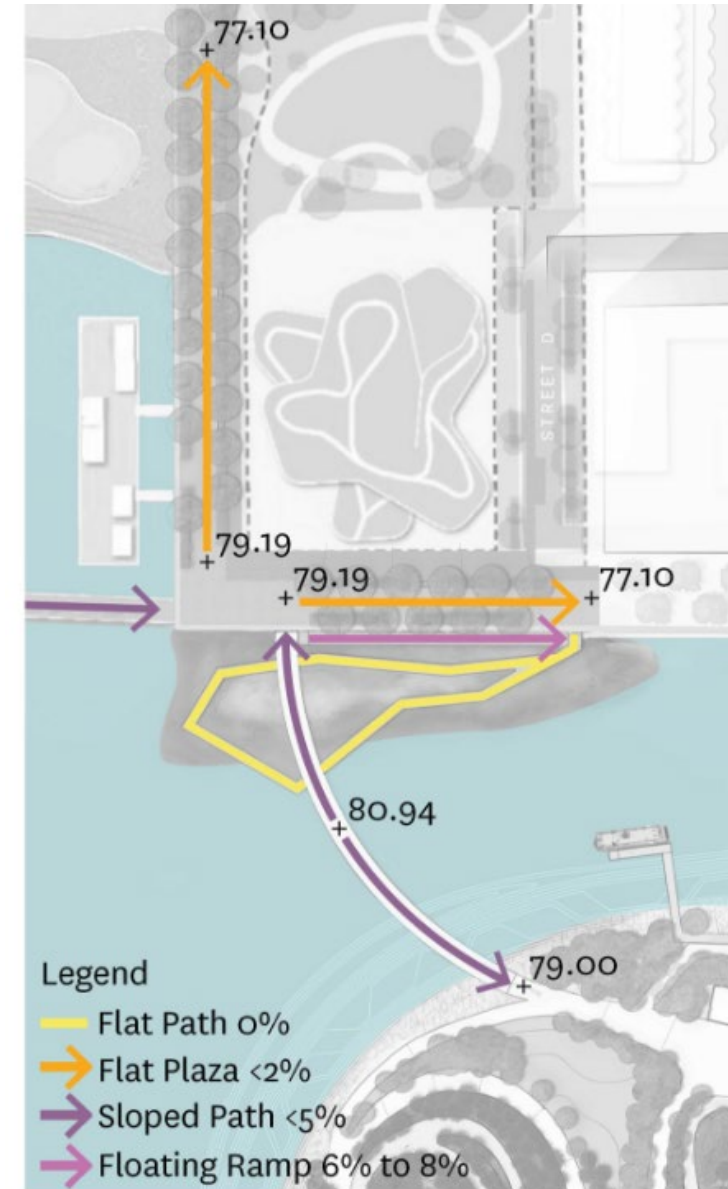
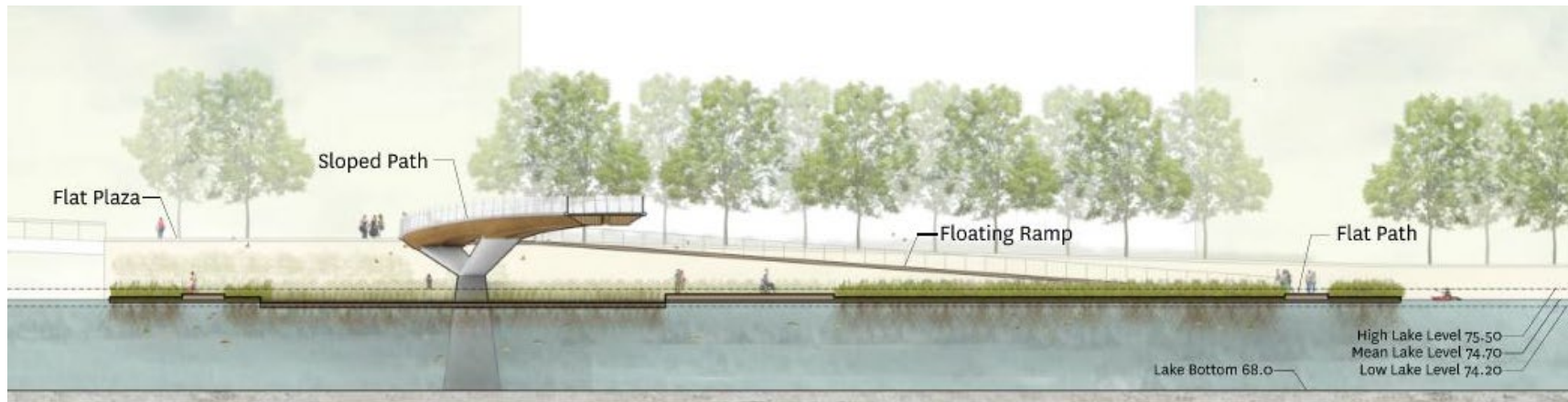




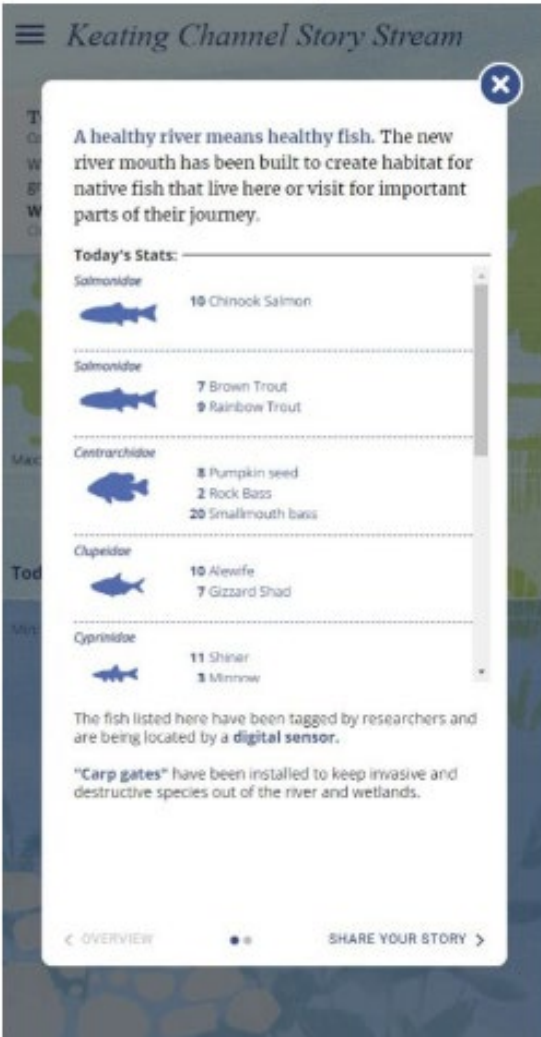
# Inclusive, Accessible, Comfortable Experience for all People of all Ages and Abilities

*A universal and equitable approach is one that does not differentiate between members of the public – everyone is welcome to the bridge in the same way.*

- ✓ Singular, barrier-free path of travel along the bridge unites the community in shared experience.
- ✓ Lifting of dock wall and Water's Edge Promenade to meet the bridge landing provides a universally accessible transition onto north landing site and a seamless transition to a gently sloped Parliament Slip bridge to the west.
- ✓ Seating is placed strategically along the bridge to provide places for rest and relief.
- ✓ Integrated lighting in the handrails provides high indication of the path of travel.

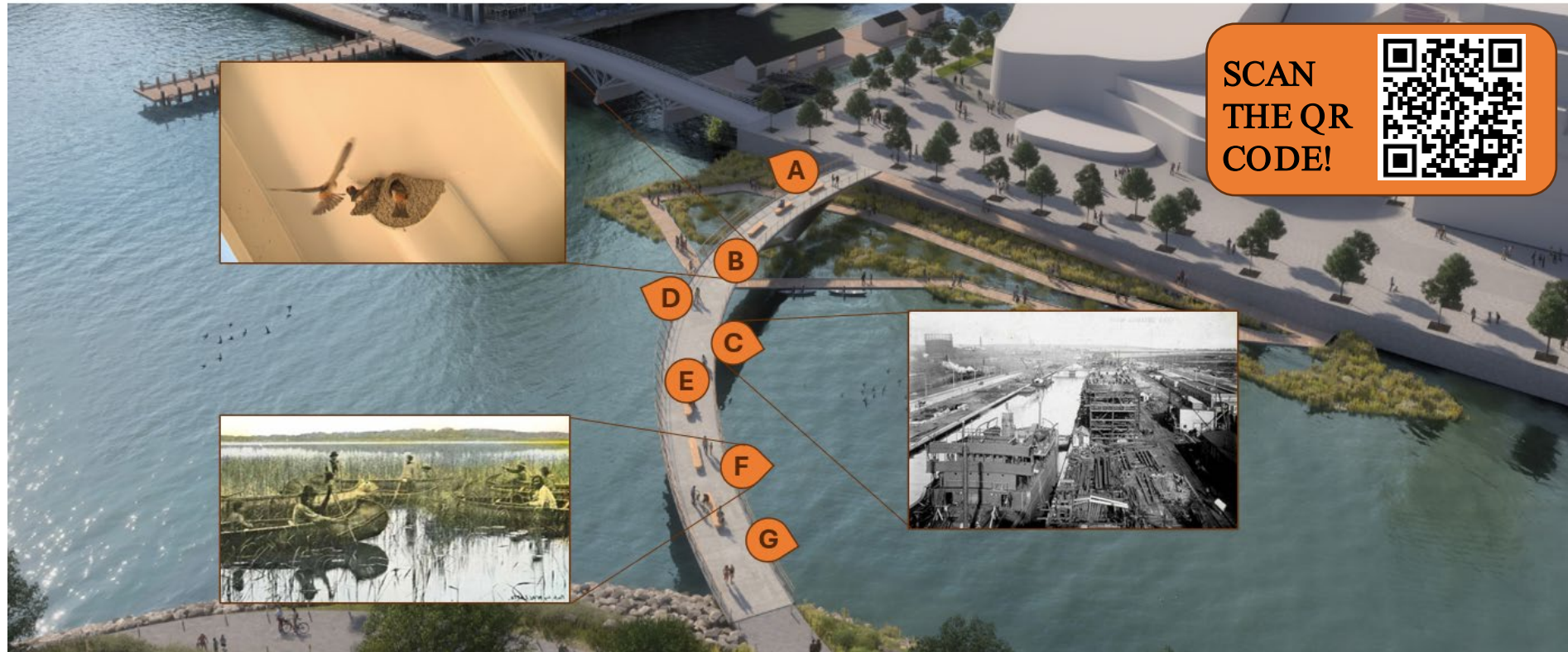


# Innovative Approaches to Creating Connection



## SCAN THE QR CODE TO SEE:

- A** HISTORIC DEVELOPMENT OF THE TORONTO SKYLINE
- B** LIVE CAMERA FEED OF BARN & CLIFF SWALLOW NESTING BENEATH DECK
- C** HISTORY OF THE FORMATION OF THE KEATING CHANNEL
- D** HISTORIC DEVELOPMENT OF THE TORONTO ISLANDS
- E** LIVE CAMERA FEED OF THE FISH NESTING HABITAT AT THE BRIDGE PIER
- F** ACCOUNT OF AREA AS HISTORIC HUNTING & FISHING TERRITORY OF INDIGENOUS PEOPLES
- G** DEVELOPMENT OF THE VARIOUS PORTS AND THEIR HISTORICAL USES



**SCAN THE QR CODE!**

# Incorporates and Integrates with Landscape, Biodiversity, and Ecosystem Resilience

