

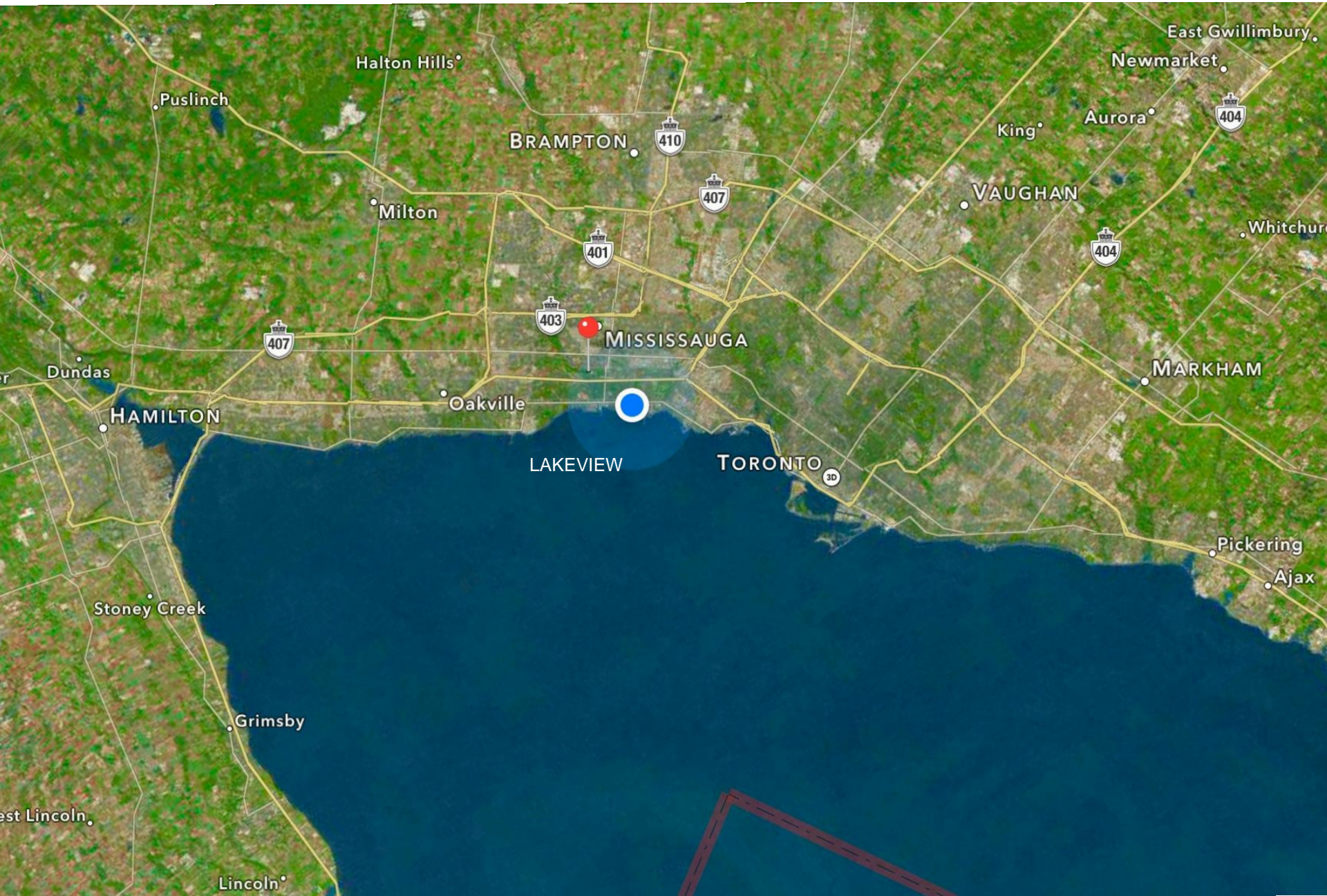
LAKEVIEW WATERFRONT CONNECTION

Great Lakes and St. Lawrence Cities
Initiative

Niagara Falls, New York

Transforming our waterfront

SITE CONTEXT WITHIN THE GOLDEN HORSESHOE



SITE CONTEXT WITHIN THE GTA



THE SITE AS IT IS TODAY 250 ACRES



LAKEVIEW SITE 1942



WOMEN'S HOME GUARD 1914



FIRST AIRPORT IN CANADA 1915

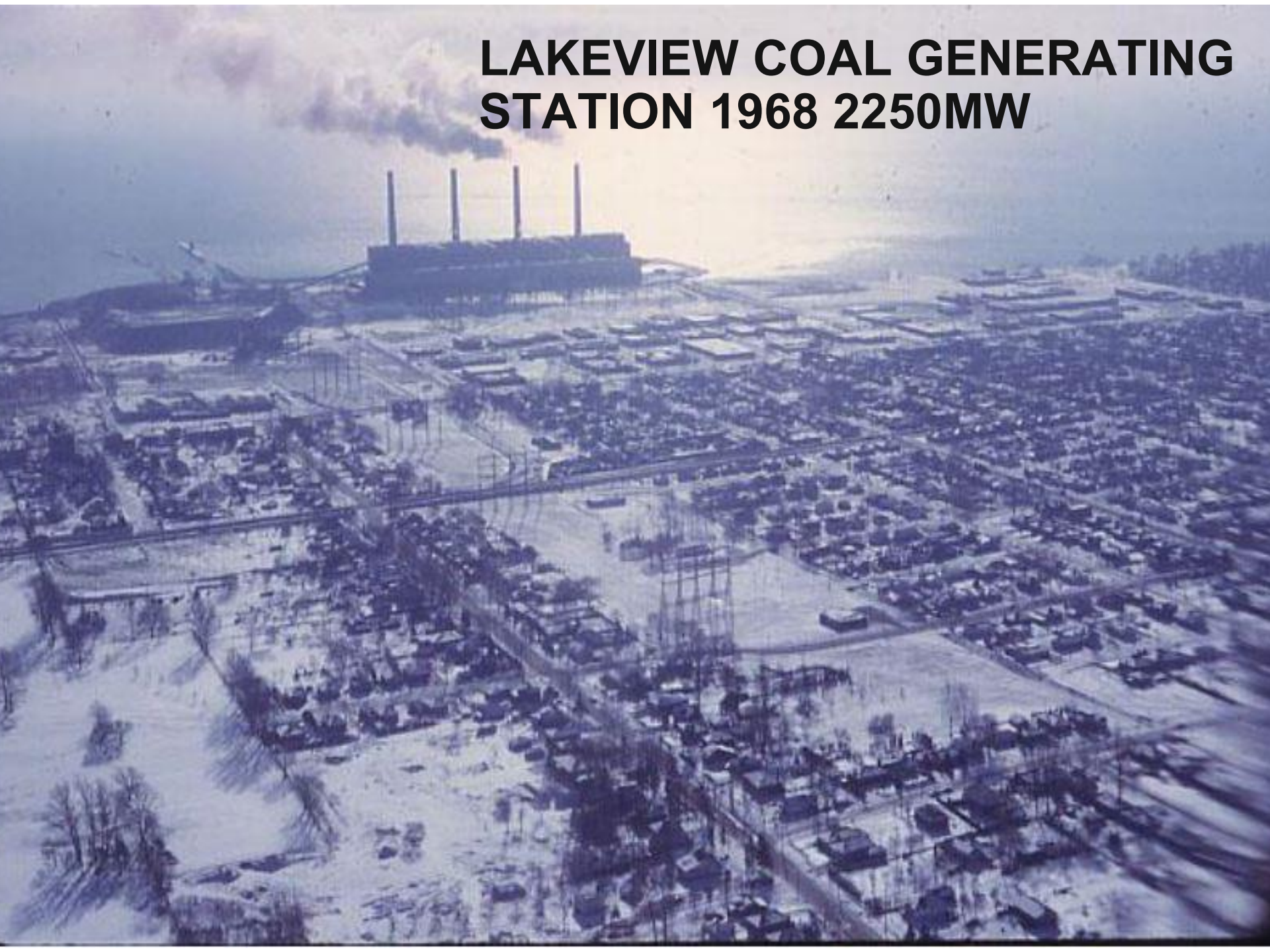


J. A. D. MCURDY GLENN CURTISS



SMALL ARMS WORKERS 1942

LAKEVIEW COAL GENERATING STATION 1968 2250MW



Lakeview Generating Station: Partial Historical Substance Report, 2000/2004

Aluminum	15.30	Tons
Arsenic	51.97	Kgs.
Cadmium	26.95	Kgs.
Carbon Monoxide	8734.23 Tons	
Chromium	.256	Tons
Copper	8.096	Tons
Hydrochloric Acid	5194.24 Tons	
Hydrogen Fluoride	136.89	Tons
Mercury	276.803 Kgs.	
Nitrous Oxide	26190.83	Tons
Sulphur Oxide	79610	Tons
Sulphuric Acid	259.525 Tons	
Zinc	3.835	Tons

Data confirmed, Environment Canada NPRI data search I.D.2844

reversing
120 YEARS
of military, industrial and utility pollution



LAKEVIEW LEGACY PROJECT NORTH AMERICAS FIRST CITIZEN MASTER PLAN TWO NATIONAL AWARDS FOR PLANNING





LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Study Area: Coordinated with Inspiration Lakeview

(Inspiration) Lakeview will provide for a generous landscaped water's edge, open space linkages to the east, west and north and a variety of park functions and programs.

Inspiration Lakeview:
Master Plan, June 2014



Figure 4-3. Bird's eye view of open and green spaces at Inspiration Lakeview

LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Coordination

LWC contributes directly to local, regional, and lakewide conservation and restoration efforts and public accessibility and recreational priorities

Region of Peel
Working for you

2013 Water and Wastewater
Master Plan for the Lake-Based Systems



Credit Valley Conservation
LAKE ONTARIO INTEGRATED
SHORELINE STRATEGY
BACKGROUND REVIEW AND DATA
GAP ANALYSIS

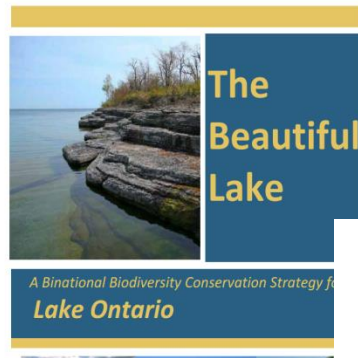
on
art
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Final Report

Prepared By:
AQUAFOR BEECH LIMITED
46-202-2600 Skyway Ave
Mississauga, ON
L4W 5B2

In association with:
Shoreplan Engineering Limited

May 13, 2011
Project No.: 64967



Great Lakes
Water Quality
Agreement

FISH COMMUNITY OBJECTIVES FOR LAKE ONTARIO
2013

Thomas J. Stewart
Ontario Management Unit
ry of Natural Resources, RR #4
ntario, CANADA, K0K 2T0

Andy Todd
Ontario Management Unit
ry of Natural Resources, RR #4
ntario, CANADA, K0K 2T0

Steve LaPan
Lakes Fisheries Section
partment of Environmental Conservation
e Vincent, NY 13616

and S. LaPan. 2013. Fish Community Objectives for
s Fishery Commission Spec. Pub. 13-7 23 p.

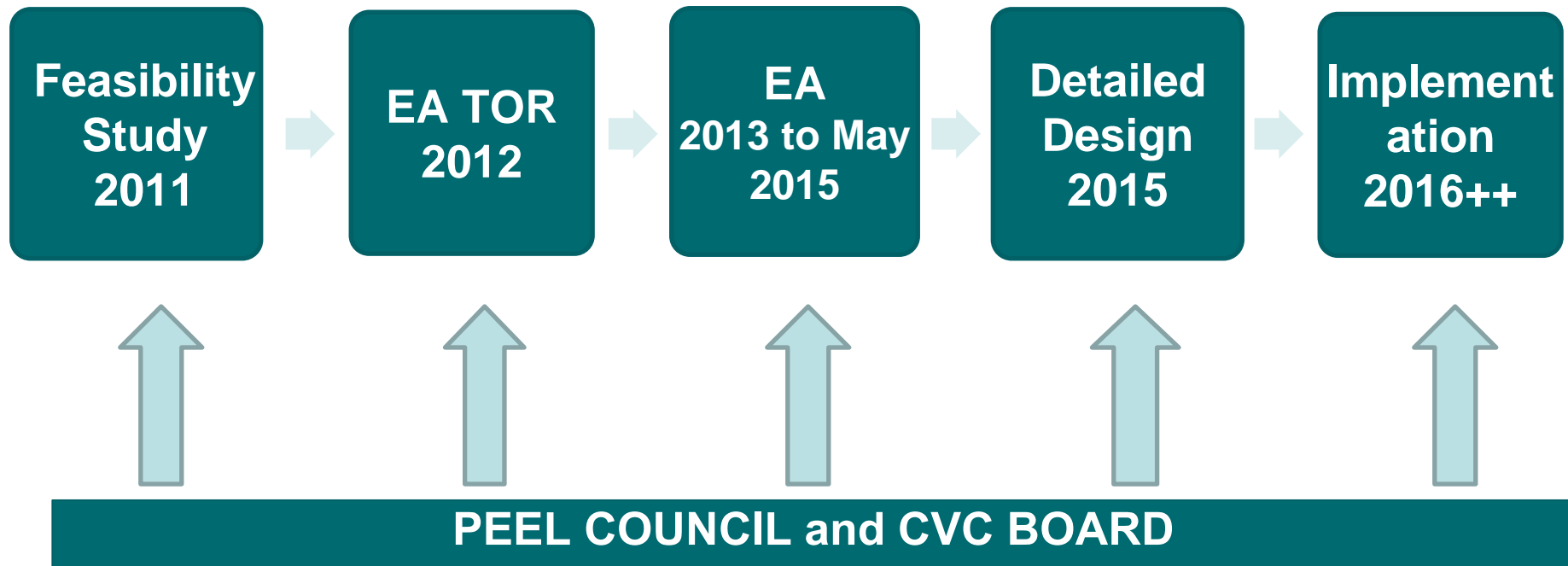
ICIAL PUBLICATION
akes Fishery Commission
mmwealth Blvd. Suite 209
Arbor, MI 481051563



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

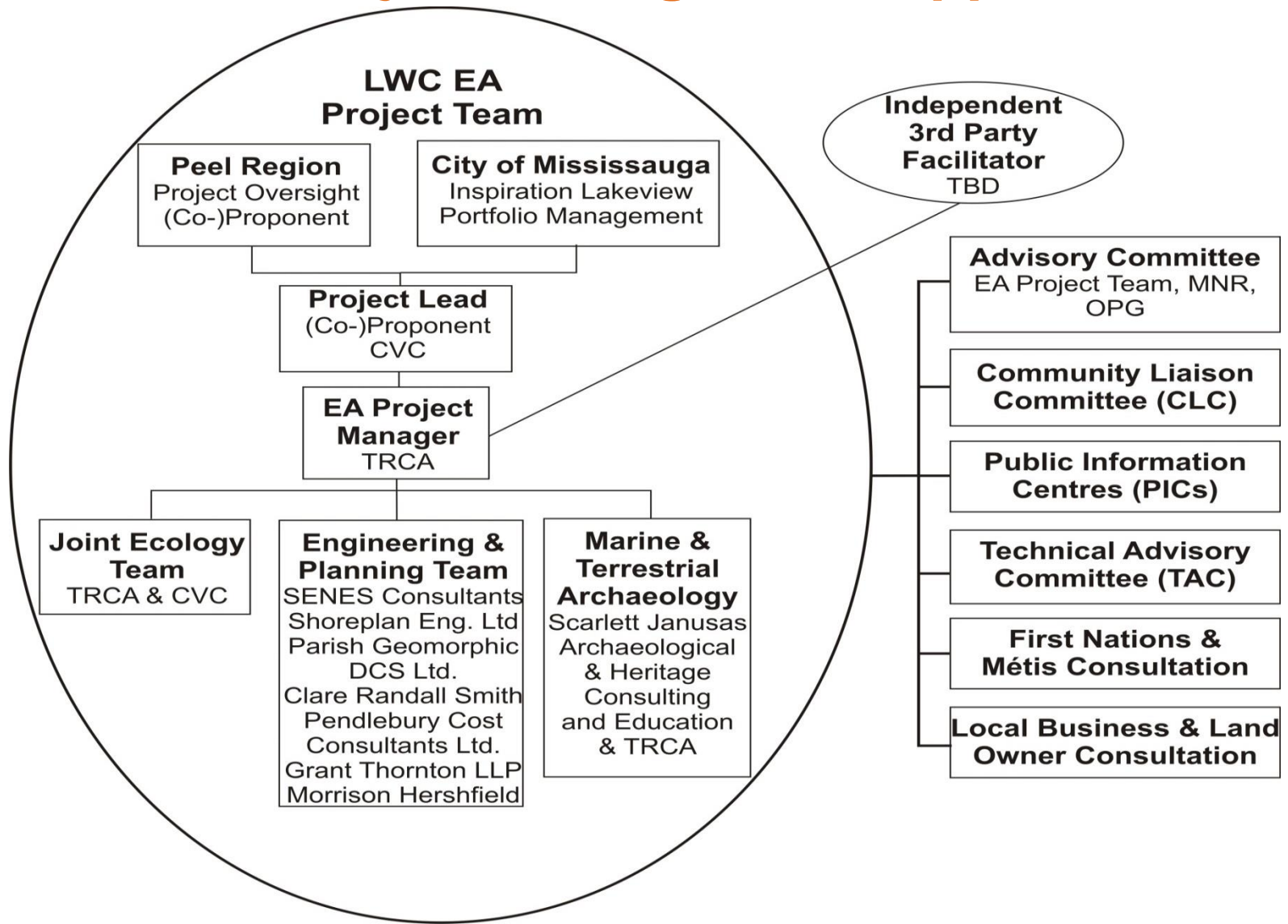
LWC Timeline



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Coordinated Project Management Approach



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

LWC Project Goal and Objectives

Goal

To create a new natural waterfront park that will establish ecological habitat and public linkages on the eastern Mississauga waterfront

Objectives

- 1) Naturalization
- 2) Access
- 3) Compatibility
- 4) Coordination
- 5) Fiscal Viability

LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

SITE CHALLENGES

Serson Creek

- No fish passage north of Lakeshore Rd
- No fish access from Lake Ontario
- Trapezoidal highflow channel
- Buried lowflow channel
- No coastal wetlands
- Urban, flashy flows

Applewood Creek Features:

- No fish passage north of Lakeshore Rd
- 4 Species of Fish
- No coastal wetlands
- Urban, flashy flows

Etobicoke Creek:

- Limited fish and riparian habitat function
- Urban, flashy flows



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

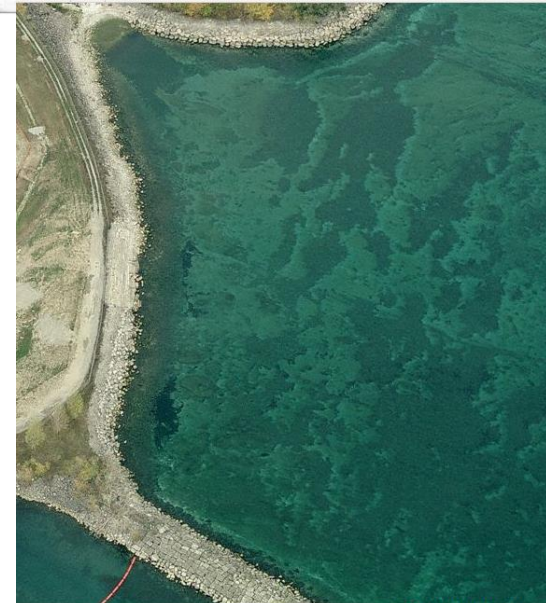
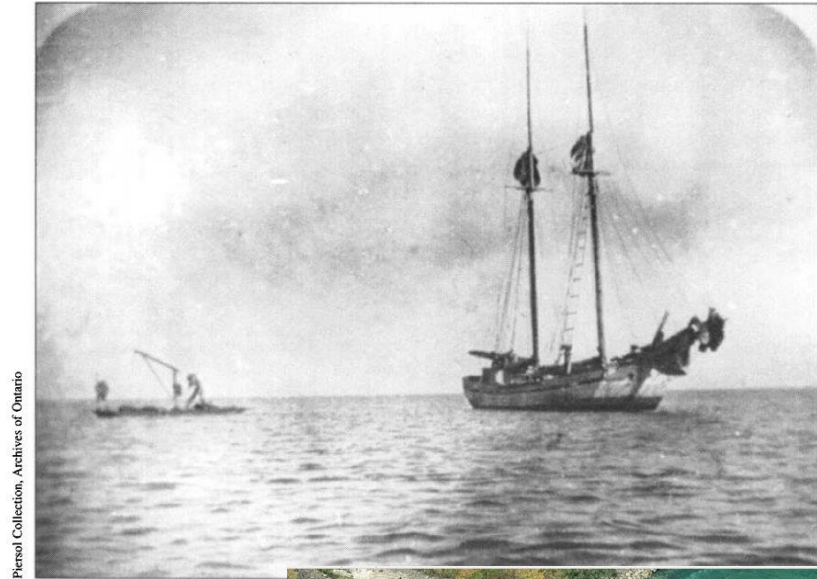
CHALLENGES

Aquatic Habitat Degradation

- Stonehooking: historical lakebed mining
- Lakefilling: industrial development
- Shoreline hardening: erosion control

Terrestrial Habitat Degradation

- Natural and cultural habitat
- Invasive floral vegetation
- Limited forest regeneration and restoration



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Access

- Waterfront Trail is a 780km long, multi-use recreational trail that now extends from Niagara-on-the-Lake to the Quebec border and benefits all residents of Ontario
- LWC presents an opportunity to put “**Water**” back into “Waterfront Trail” by bringing it back down to Lake Ontario in this part of the waterfront



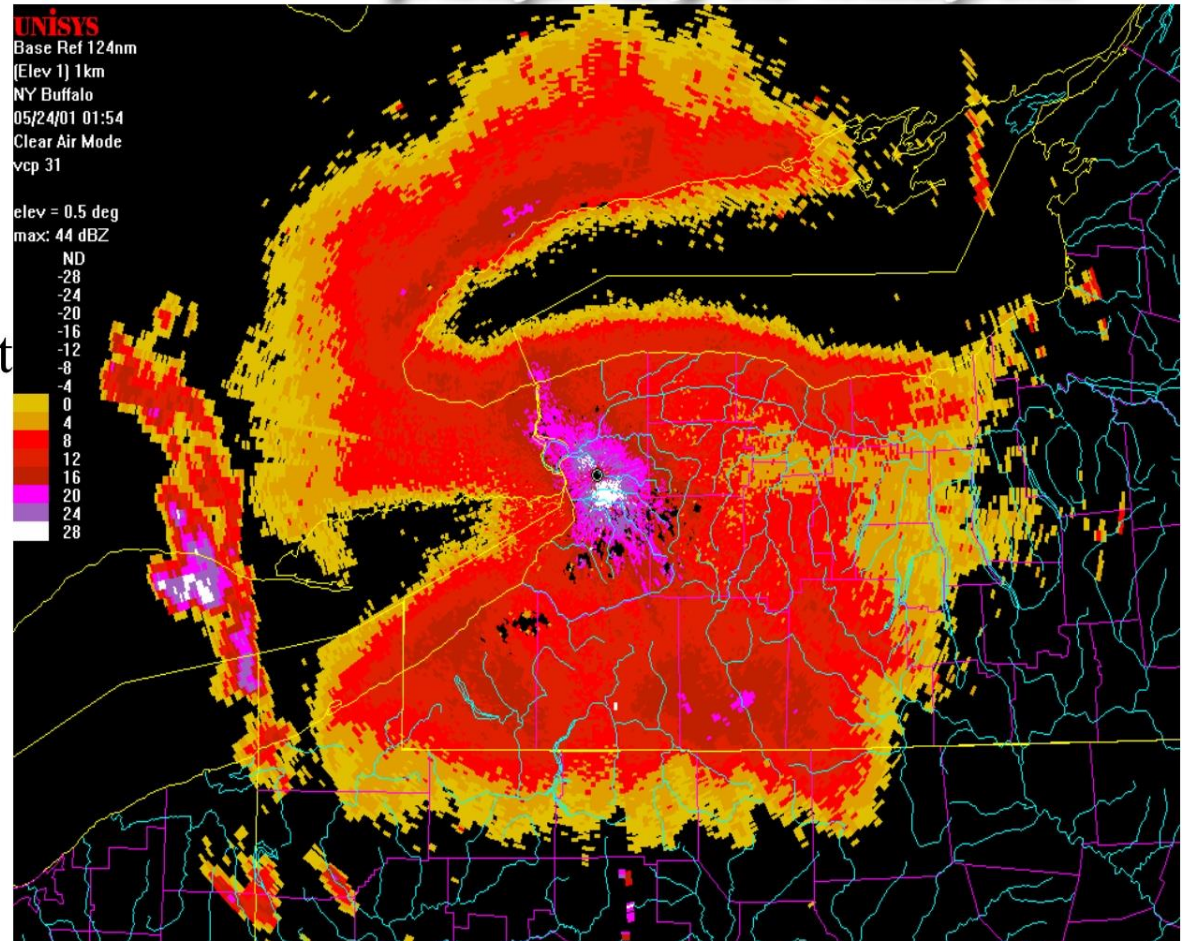
LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Naturalization

Proposed creation of about
25 - 35 ha of:

- Meadow
- Forest
- Wetland
- Beach
- Rocky islands



LWC is found within the Mississippi Flyway where millions of birds migrate through annually

LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

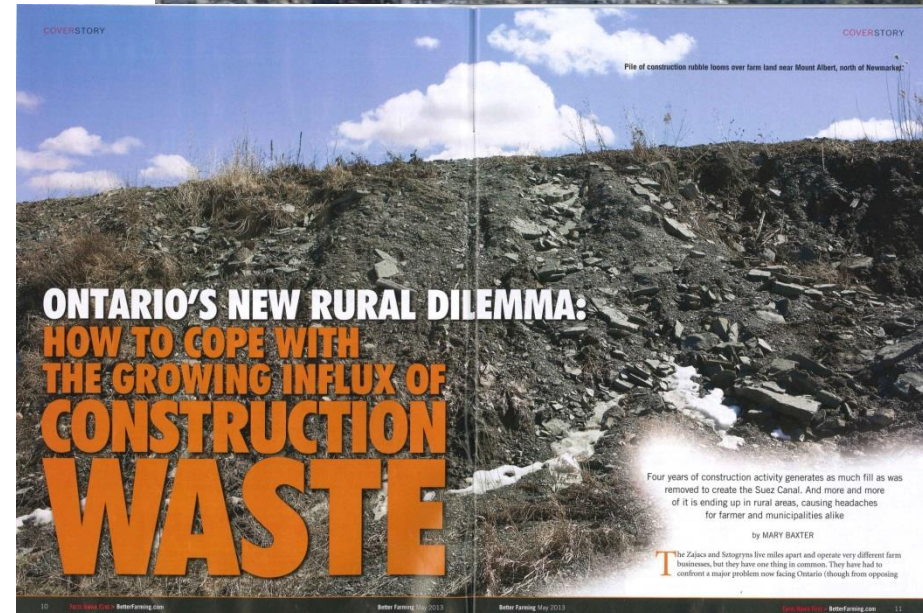
Compatibility

Providing a long-term strategy and a made in Peel solution that reduces impacts on neighbouring communities

Sustainable reuse of fill and reduced burden on landfills

Support's Public Works extensive capital plan

Aligning RoP practice with MOE's BMP by managing fill from source to final destination



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Fiscal Viability

- Estimated 1 km² of soil 25 metres high being generated annually
- Provincial practices encourage local reuse of soil
- Opportunity to reallocate cost savings from reuse of locally generated fill to create a regionally significant greenspace
- Anticipated to increase property values in adjacent neighbourhoods by 2.4 to 3.6%
- Estimated to produce \$2M in Ecosystem Goods and Services annually

LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

CONSULTATION (2012 – 2015)

- Agencies
- First Nations and Metis
- Businesses
- Landowners
- Utilities
- Community Liaison Committee
- Technical Advisor Committee
- General Public



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

CONSULTATION (2012 – 2015)

- Meetings
- Workshops
- Public Information Centres
- Mailouts
- News Releases
- In-Park Outreach
- Community Meetings
- Conferences



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

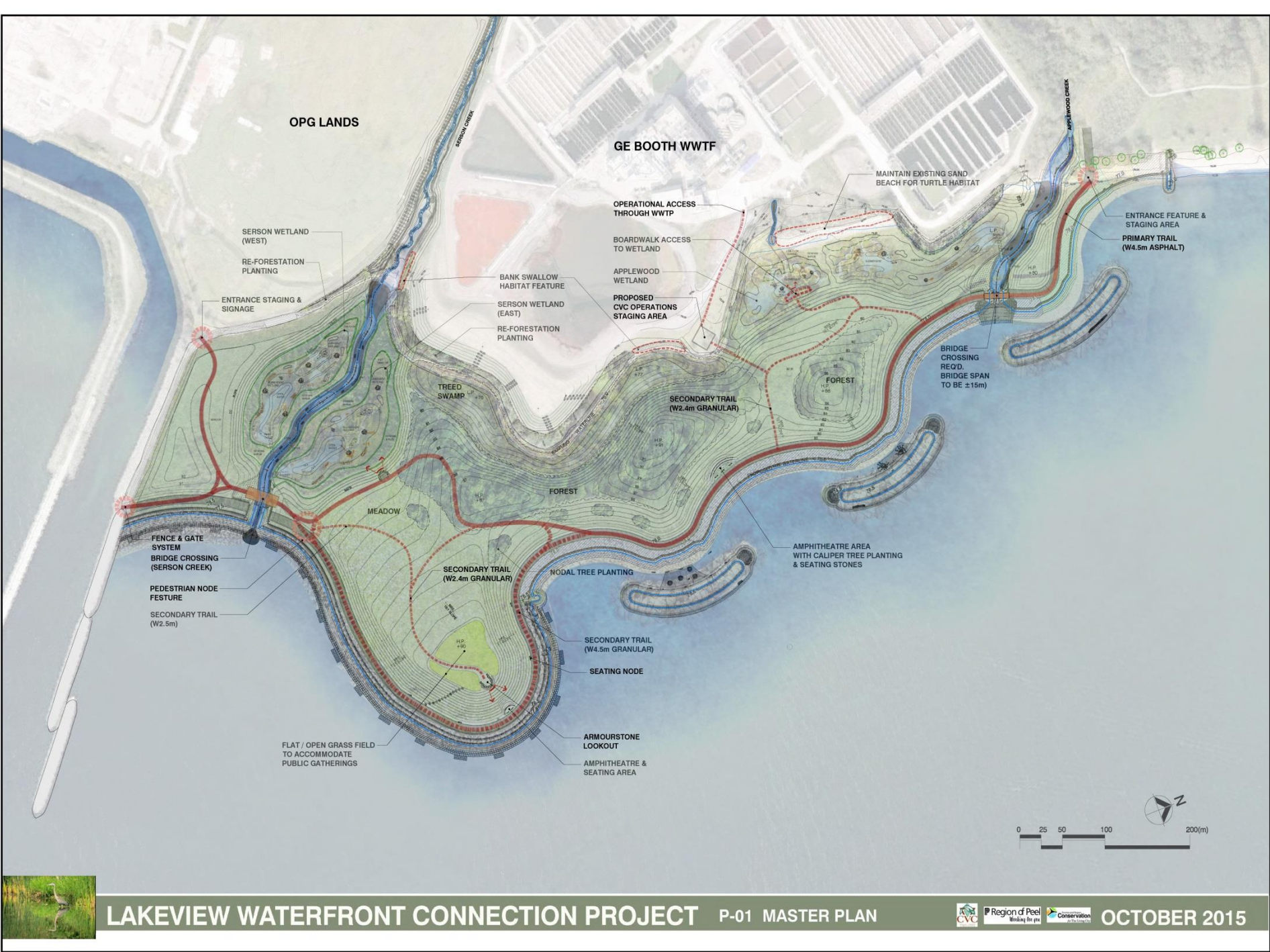
Summary of Evaluation

Objective	Revetment	Headland	Island A	Island B	Island C
Naturalization	Least preferred	Moderately preferred	Most preferred	Most preferred	Most preferred
Access	Least preferred	Moderately preferred	Most preferred	Moderately preferred	Most preferred
Coordination	Least preferred	Moderately preferred	Most preferred	Most preferred	Most preferred
Fiscal Viability	Most preferred	Moderately preferred	Least preferred	Least preferred	Moderately preferred
OVERALL	<i>Least preferred</i>	<i>Moderately preferred</i>	<i>Moderately preferred</i>	<i>Moderately preferred</i>	<i>Most preferred</i>

LAKEVIEW

Preferred Alternative – Island C





OPG LANDS

GE BOOTH WWTF

SERSON WETLAND
(WEST)
RE-FORESTATION
PLANTING

ENTRANCE STAGING &
SIGNAGE

FENCE & GATE
SYSTEM
BRIDGE CROSSING
(SERSON CREEK)
PEDESTRIAN NODE
FEATURE
SECONDARY TRAIL
(W2.5m)

FLAT / OPEN GRASS FIELD
TO ACCOMMODATE
PUBLIC GATHERINGS

BANK SWALLOW
HABITAT FEATURE
SERSON WETLAND
(EAST)
RE-FORESTATION
PLANTING

SECONDARY TRAIL
(W2.4m GRANULAR)

NODAL TREE PLANTING

SECONDARY TRAIL
(W4.5m GRANULAR)

SEATING NODE

ARMOURSTONE
LOOKOUT
AMPHITHEATRE &
SEATING AREA

OPERATIONAL ACCESS
THROUGH WWTP

BOARDWALK ACCESS
TO WETLAND

APPLEWOOD
WETLAND

PROPOSED
CVC OPERATIONS
STAGING AREA

SECONDARY TRAIL
(W2.4m GRANULAR)

MAINTAIN EXISTING SAND
BEACH FOR TURTLE HABITAT

ENTRANCE FEATURE &
STAGING AREA
PRIMARY TRAIL
(W4.5m ASPHALT)

BRIDGE
CROSSING
REQ'D.
BRIDGE SPAN
TO BE ±15m)

AMPHITHEATRE AREA
WITH CALIPER TREE PLANTING
& SEATING STONES

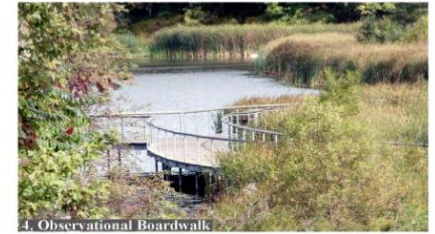
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LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

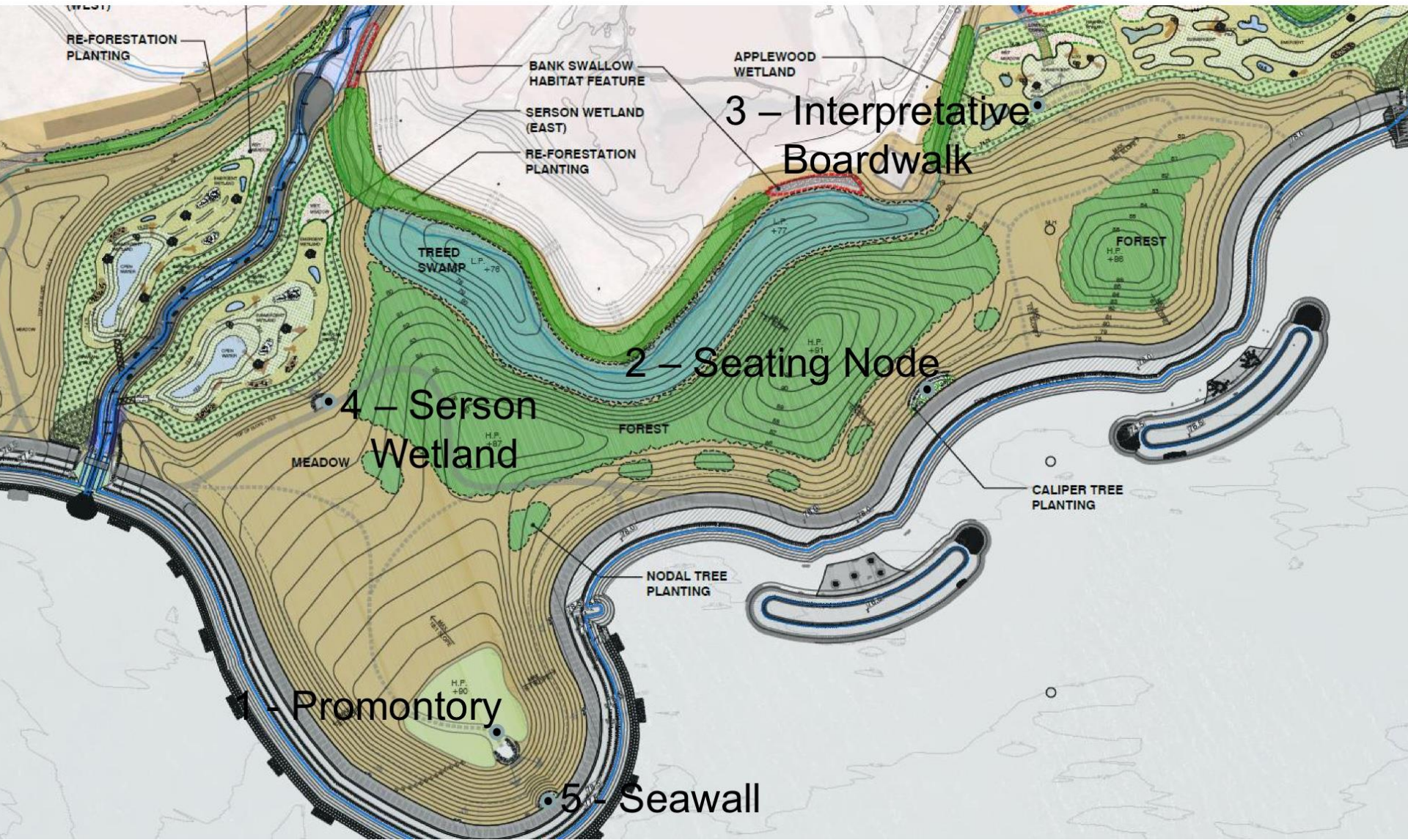
Design Features



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

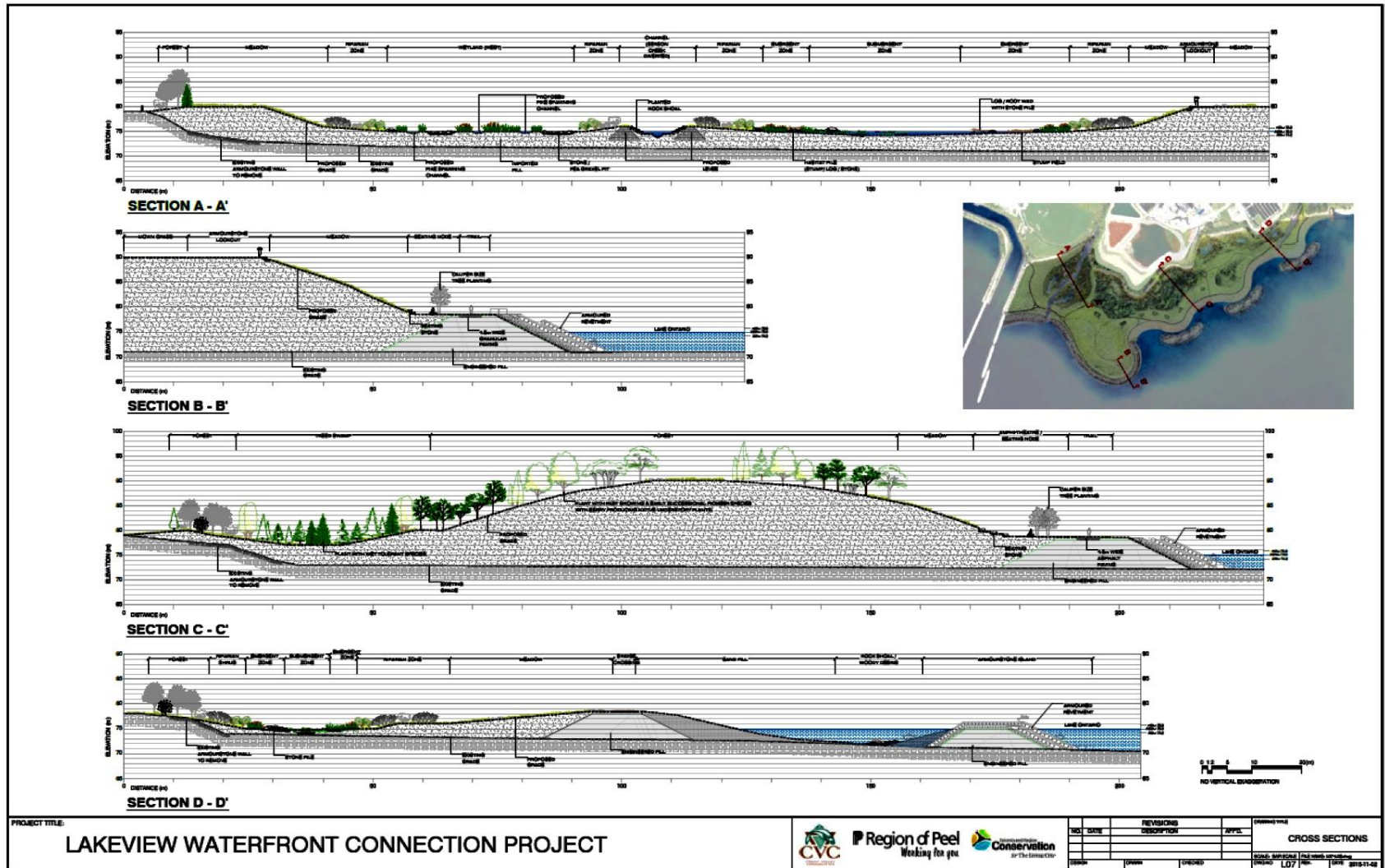
OUTLOOKS



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Transforming our waterfront

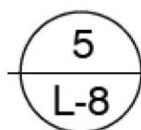
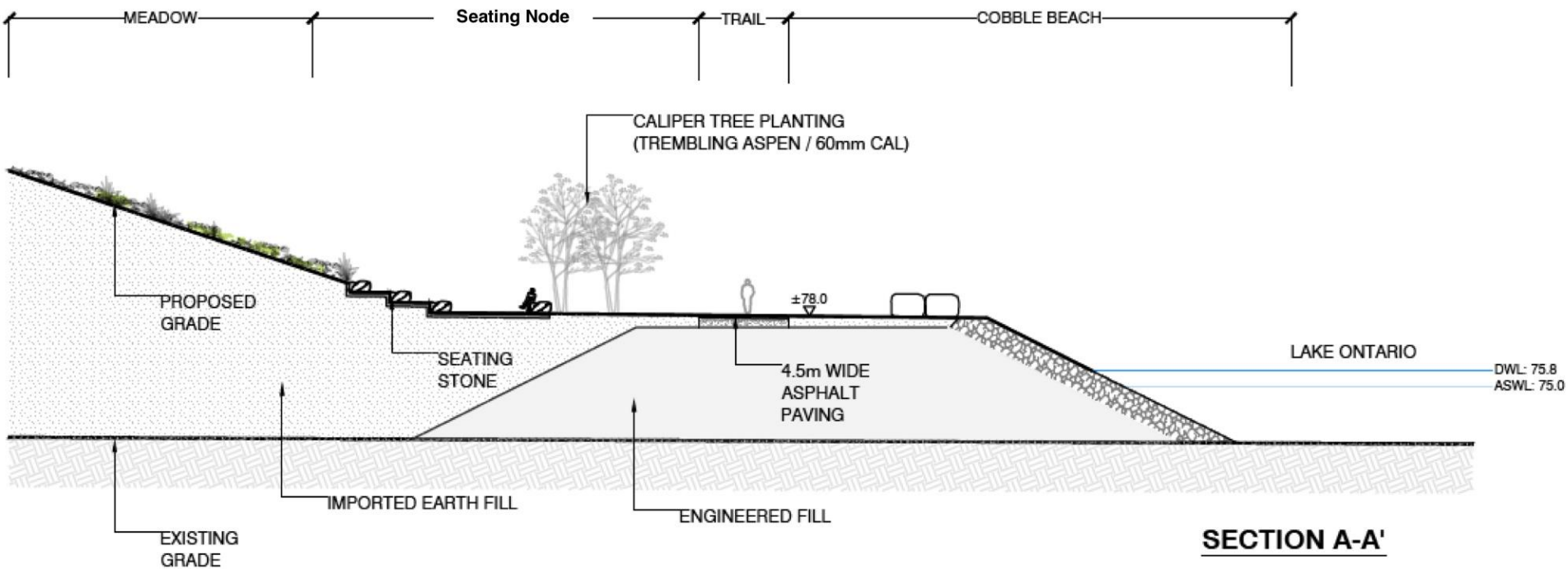
CROSS SECTION DETAILS



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Cross-Section of Seating Node & Trail



Seating Node

BAR SCALE

LAKEVIEW WATERFRONT CONNECTION

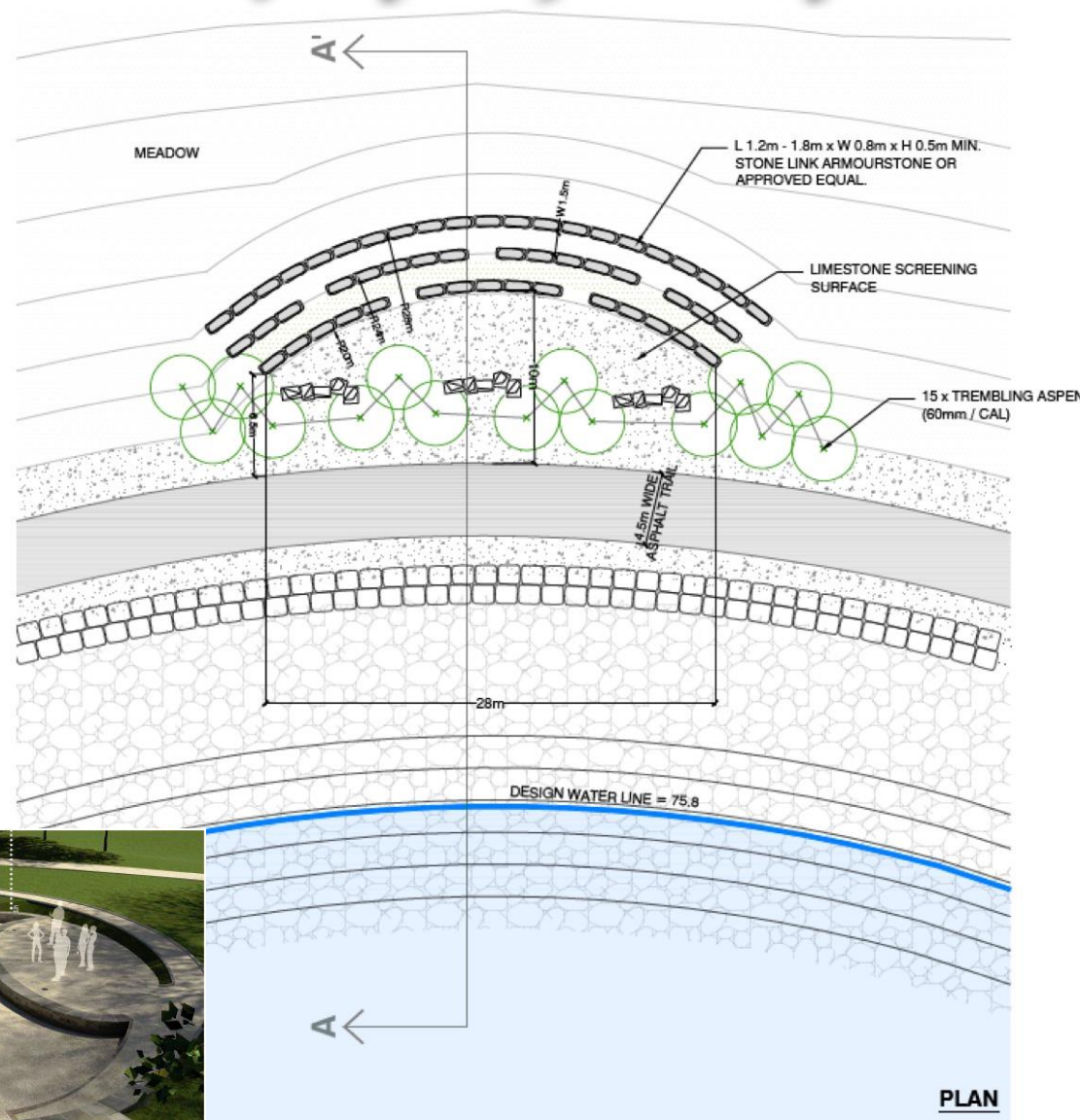
Transforming our waterfront

Seating Node

Key Features:

Three tiers of armourstone seating

Grass between tiers and natural
viewscape



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

LOOKING DOWN SERSON



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

ISLAND BEACH VIEWS



**Looking East, over the mouth of
Serson Creek- View One**



LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Benefits



Greenspace

Creation of large wetlands, meadow, beach and forest

Restoration of habitat for fish, birds



Recreational Amenity/Healthy Lifestyle

Surveys have shown greenspaces are inadequate and lakeshore parks overcrowded

Studies linking human health to greenspace

Greenspace as a natural and recreational amenity



Lake Ontario and Region of Peel

Wetlands and other habitat improvements proposed under LWC have been identified by the Great Lakes Commission as high priority items

LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Benefits



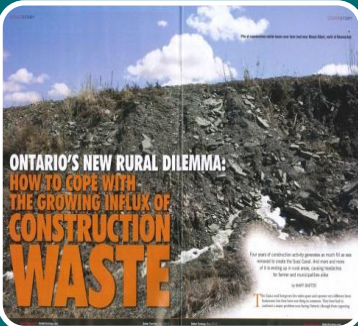
Great Lakes Initiatives

Complements Great Lakes Water Quality Agreement; Great Lakes Protection Act; and Great Lakes St. Lawrence Cities Initiative



Flow Conveyance

Serson Creek Improvement



Fill Management

Beneficial reuse and secure management of clean fill within Peel for 7-10 years

Reduces negative impacts of excess truck traffic to neighbouring rural communities and farmlands

LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Habitat Gains with LWC

	Existing Habitat (ha)	% Habitat	Lakeview Waterfront Connection	% increase in habitat from LWC
Meadow	225.47	6.0%	11.8 ha	4.97%
Cobble beach	1.7	0.0005%	1.0 ha	58.5%
Forest	485.26	12.9%	4.6 ha	1.02%
Wetlands	18.4	0.5%	6.2 ha	20.2%
Swamp	12.07	0.3%	1.5 ha	11.05%
Rocky islands	0 ha	0	0.8 ha	
Total	742.9		26 ha	
LOISS Study Area = 3764.97 ha				

LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

Project Costs

LWC Cost Components	2013	2015
*Design	-	\$1,200,000
Property Acquisition and Access Road Construction	\$1,289,000	\$2,908,000
Construction	\$34,111,000	\$42,952,000
*TRCA/CVC Project Management Cost	\$6,300,000	\$7,200,000
Contingency	\$12,500,000	\$5,432,000
Recovery	-\$23,600,000	-\$23,600,000
Total	\$30,600,000	\$36,100,000

LAKEVIEW WATERFRONT CONNECTION

Transforming our waterfront

THANK YOU

