

Chief Executive Officer



October 18, 2023

Anjala Puvananathan
Director
Impact Assessment Agency of Canada
600-55 York Street
Toronto, ON M5J 1R7

VIA EMAIL

designationontario@iaac-aeic.gc.ca

Re: Reference 85951 - Proposed Ontario Place Spa Complex and Ontario Place Underground Parking Garage Project

Toronto and Region Conservation Authority (TRCA) understands that on September 18, 2023, the Minister of Environment and Climate Change received a request to designate the proposed Ontario Place Spa Complex and the Underground Parking Garage, under subsection 9(1) of the Impact Assessment Act (IAA).

TRCA is in receipt of the Impact Assessment Agency of Canada's (IAAC) October 3, 2023 requests for TRCA input on these two projects at Ontario Place, which identify the proposed work as:

- Spa Complex: Construction of a 61,000 m² spa facility on the West Island, a 22,000 m² reception building on the mainland, a 12-acre extension of the footprint of the West Island through near-shore lake infilling, a multipurpose bridge connecting the island to the mainland, private outdoor space, publicly accessible walking paths, and a connection to an underground parking garage.
- Underground Parking Garage: Located on the mainland beneath the proposed relocated Ontario Science Centre the parking garage will provide 2,118 parking spaces primarily below lake level and will connect to the spa complex via a footpath.

Our responses to the questions enclosed in the IAAC request for input, for both the spa and the parking garage, are provided below.

1. **In general terms, please confirm and describe your organization's role (if applicable) in the review of the Project.**

Planning and Permitting

TRCA is a commenting body under the Environmental Assessment (EA) Act and Planning Act and is a regulator of development under section 28 of the Conservation Authorities Act (O. Reg. 166/06 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses), which includes development along the Lake Ontario shoreline. The text of O. Reg. 166/06 prescribes the areas and activities regulated by TRCA. Proposed works that fall within the TRCA regulated area are circulated to TRCA by proponents.

Through our commenting roles under the EA Act and Planning Act, TRCA has provided comments to Infrastructure Ontario (IO) on the Category C Draft Environmental Study Report (ESR), the Category B Consultation and Documentation (C&D) Report, and to the City of Toronto on the proposed Official Plan Amendment (OPA) and Zoning By-law Amendment (ZBA). Copies of our comment letters are attached for your reference. After consideration and/or approval of the OPA and ZBA by an approval authority (City or Ontario Land Tribunal) it is expected that TRCA would

also be circulated on future Site Plan applications under the Planning Act, associated with the various projects.

At the detailed design stage, TRCA permits under Ontario Regulation 166/06 are not required, as this site falls within the Central Toronto Waterfront Screening area and is exempt from our regulatory approvals under the Conservation Authorities Act. However, reviews through our Voluntary Project Review (VPR) process are available as appropriate, should the proponent choose to undertake this process.

Restoration and Coordination

TRCA staff have a suite of expertise related to ecological/aquatic restoration, shoreline erosion mitigation, remediation, and monitoring, and have offered our assistance to the province at the implementation phase if needed. TRCA has also facilitated collaboration efforts among federal, provincial and municipal staff involved with this project, through our monthly Aquatic Habitat Toronto (AHT) meetings and through site-specific meetings with IO.

2. Please provide the contact information of the person or persons responsible for managing your organization's oversight of the Project (if different from lead contact above).

Sharon Lingertat
Senior Manager, Infrastructure Planning and Permits (Toronto/Durham)
TRCA
101 Exchange Ave.
Vaughan, ON L4K 5R6
T: 437-880-2435
E: sharon.lingertat@trca.ca

3. Describe the by-laws, programs or additional authority that may be relevant and could serve as a means to address concerns expressed about the Project. For each mechanism or approval, please provide information regarding the following:

- **Name of the process or authorization (e.g. certificate, licence, permit or approval) and the associated legislative framework;**
 - Planning Act and EA Act: Pursuant to the Planning Act, TRCA is a public commenting body and has a delegated responsibility to represent the provincial interest on natural hazards under Section 3.1 of the Provincial Policy Statement (PPS) requiring conservation authorities' (CAs) to review and comment on municipal policy documents and applications submitted under the Planning Act. Through the introduction of Bill 23, More Homes Built Faster Act, 2022, and resulting amendments to the Conservation Authorities Act and regulations under the Act, there have been recent changes in CA's commenting roles as it relates to certain Acts prescribed under O. Reg. 596/22, including the Planning Act and EA Act. In accordance with O. Reg. 686/21: Mandatory Programs and Services, effective January 1, 2023, TRCA's comments through EA Act and Planning Act reviews must focus on the risks related to natural hazards. As a result, TRCA's comments have primarily focused on Lake Ontario shoreline hazard management, including potential opportunities for shoreline restoration. It is expected that TRCA's comments on the applications subject to the Planning Act would be incorporated into City staff recommendations regarding these proposals and that comments under the EA Act would be incorporated into the ESR.

- Conservation Authorities Act: TRCA is a regulator under section 28 of the Conservation Authorities Act (O. Reg 166/06). While the shorelines around Ontario Place and along the mainland fall within TRCA's regulated area, because these sites fall within the Central Toronto Waterfront Screening area, they are exempt from our regulatory approvals under the Conservation Authorities Act. At the design stage, permits are not required from TRCA. Reviews through our VPR process are available as appropriate based on the proposed work to ensure the tests of our regulation are met (flooding, erosion, dynamic beaches, pollution, and conservation of land). Review at the design stage for works undertaken by the province would be strictly on a voluntary basis.
 - **Whether (for each) the authorization would set conditions and if yes, what issues would those conditions address;**
 - Permits are not required from TRCA for any of this work. The province has been advised that they may pursue a VPR that follows requirements and conditions typical of a permit application to ensure the project(s) meet the tests of O. Reg. 166/06. However, it would be expected that TRCA's input on the Planning Act applications would be reflected in the City staff recommendations regarding the OPA policies and ZBA provisions and schedules. In the future, TRCA input, including any additional comments arising from a Site Plan application review would need to be reflected in conditions of Site Plan approval as part of future Planning Act processes that follow the OPA and ZBA approval.
 - **Whether (for each) the authorization would require public and/or Indigenous consultation and if yes, provide information on the approach to be taken; and**
 - It is our understanding that the Duty To Consult is applicable to the Province's environmental assessment undertaking being conducted by IO. As TRCA is not a Crown agency and no TRCA-owned lands will be impacted, Indigenous consultation is not a legislated requirement for TRCA. TRCA has worked closely with other federal and provincial departments, as well as the City of Toronto in reviewing the proposals. TRCA is a member of and facilitates the AHT meetings, and this project has been discussed in this forum.
 - **Whether (for each) your ministry has guidance material that would be helpful to the Proponent or the Agency (please provide these as attachments or hyperlinks in your response).**
 - TRCA's [The Living City Policies \(November 2014\)](#) (LCP) is issued under the authority of Section 20 of the Conservation Authorities Act and identifies requirements for development activities within the flood, erosion and dynamic beach hazards of the Lake Ontario Shoreline, amongst others. The LCP serves as our foundation for principles and policy as a public commenting body, service provider, resource management agency and representative of the provincial interest for natural hazards, a regulator, and a landowner. TRCA's [Guideline for Determining Ecosystem Compensation](#) provides further useful information to inform compensation for impacted ecosystem features.
- 4. Confirm whether any authorization listed above would contemplate the following matters and if yes, discuss, in general, the benchmarks or standards to which a project of this nature may be held (be specific in relation to each point below that may be applicable to your organization's mandate):**

- fish and fish habitat, including matters related to surface and groundwater,
- migratory birds, including matters related to vegetation and habitat,
- federally listed species at risk, including matters related to vegetation and habitat,
- effects on Indigenous people of Canada, including on physical and cultural heritage, the current use of lands and resources for traditional purposes, or any structure, site or thing that is of historical, archaeological, paleontological, or architectural significance, or on communities' health, social or economic conditions,
- adverse changes to the environment that would occur on federal lands, including federal water-lots, and lands outside Ontario or Canada, including transboundary effects of greenhouse gas emissions as well as air emissions.

Should the proponent choose to undertake design review through the TRCA VPR process, TRCA will review the application to ensure it meets the tests for flooding, erosion, dynamic beaches, pollution, and conservation of land within the TRCA regulated area, generally located along the shorelines of Ontario Place and the mainland. TRCA does not have jurisdiction over fish/fish habitat, migratory birds, species at risk or the effects on Indigenous people of Canada (TRCA-owned lands are not impacted as a result of this work).

Notwithstanding, TRCA staff have offered to assist with the implementation of associated habitat/shoreline restoration/work and monitoring as needed, and are available to continue coordination efforts with federal, provincial, and municipal partners through AHT meetings and others as needed.

5. Have you received public comments/concerns in relation to the Project? If yes, provide an overview of the key issues and the way in which (in general terms) your organization intends to address (or would normally manage) these matters.

Yes, TRCA has been contacted. Key issues included:

- Concerns regarding protected bird and aquatic species and whether an EA was or will be completed for the tenant-led development areas on the west and centre islands at Ontario Place. We recommended that they reach out to IO directly regarding how they have involved the federal and provincial agencies to date. We also clarified our role and noted work is exempt from the regulatory approvals under the Conservation Authorities Act and that our reviews through the EA Act and Planning Act processes focused on natural hazards.
- Media inquiry regarding bats and how the provincial population may be impacted by the upcoming development. TRCA communications and media specialists redirected the reporter to the Ontario Ministry of the Environment, Conservation and Parks.
- Request from a public environmental group for a meeting with TRCA to discuss Ontario Place. TRCA staff declined and noted that we will provide comments through our review of the available materials and respond directly to the proponent.

6. Have you received Indigenous community comments/concerns in relation to the Project? If yes, provide an overview of the key issues and the way in which (in general terms) your organization intends to address (or would normally manage) these matters.

There have been three discussions with Mississaugas of the Credit First Nation Chief Laforme and CEO of TRCA, John MacKenzie, from August to October 2023 on the shared interest and potential of achieving improved aquatic habitat conditions in this part of Lake Ontario if, and/or when, any shoreline works or redevelopment project proceeds.

7. Do you have any other information about the Project in relation to potential adverse effects or impacts to the public, or Indigenous peoples and their rights as protected under section 35 of the *Constitution Act, 1982*?

No additional information. Refer to the attached TRCA correspondence for a record of comments recently submitted.

Should you have any questions, require clarification, or wish to meet to discuss any of the above remarks, please contact the undersigned at 416.667.6920 or at john.mackenzie@trca.ca.

Sincerely,

<Original signed by>

John MacKenzie, M.Sc.(PI) MCIP, RPP
Chief Executive Officer

Attached: Category C – Response to Notice of Completion (August 31, 2023)
Category B – Response to Notice of Study Completion (June 13, 2022)
Official Plan Amendment and Zoning By-Law Amendment (February 13, 2023)

Cc: IAAC: Ella Myette, Project Manager
Toronto: Colin Wolfe, Senior Planner, Community Planning
TRCA: Sameer Dhalla, Director, Development and Engineering Services
Anil Wijesooriya, Director, Restoration & Infrastructure
Laurie Nelson, Director, Policy Planning
Beth Williston, Associate Director, Infrastructure Planning and Permits
Sharon Lingertat, Senior Manager, Infrastructure Planning and Permits

Chief Executive Officer



August 31, 2023

VIA EMAIL

EngageOP@Jacobs.com

Tom McDonnell
Manager, Planning and Development
Ontario Place Redevelopment Secretariat, Ministry of Infrastructure
777 Bay Street, 2nd Floor
Toronto, ON M7A 2J3

Re: ERO 019-7311 – Notice of Completion: Ontario Place Redevelopment under the Class Environmental Assessment for Public Works

Toronto and Region Conservation Authority (TRCA) understands that as part of the redevelopment of Ontario Place, the Ministry of Infrastructure has completed the Category C Public Work Class Environmental Assessment (EA) for government-led development activities including future public spaces and parkland (the public realm) on non-tenanted lands and have released a Draft Environmental Study Report (ESR) for a 60-day comment period.

In TRCA's experience as a technical advisor in the development and infrastructure planning processes, as a regulator under section 28 of the *Conservation Authorities Act*, a proponent or co-proponent under the *Environmental Assessment Act*, and as a landowner, TRCA is pleased to offer our expertise on this major public redevelopment project on the Lake Ontario shoreline.

TRCA was informed of the Environmental Registry of Ontario (ERO) posting of the draft ESR and Notice of Study Completion through the Ministry's EA Project Team on July 5, 2023. Throughout the EA process, virtual meetings have been held with TRCA staff and the Project team, with feedback provided at key milestones. In addition, many of the TRCA comments provided through the Official Plan Amendment (OPA)/Zoning By-Law Amendment (ZBA) review dated February 13, 2023, also apply to the areas covered under this ESR. Our comments and recommendations on the ERO posting are followed by more detailed comments particular to sections in the ESR, which can be found in Appendix A of this letter.

COMMENTS

TRCA Commenting and Regulatory Roles

Through the introduction of Bill 23, *More Homes Built Faster Act*, 2022 and resulting amendments to the *Conservation Authorities Act*, there have been recent changes in conservation authorities' (CA) commenting role as it relates to the *Planning Act* and *Environmental Assessment Act*. While we appreciate that TRCA's roles prior to the introduction of Bill 23 are documented in the ESR, sections within the report pertaining to CA commenting roles should be updated to reflect amendments to the *Conservation Authorities Act* that restrict conservation authorities from providing non-mandatory review and comments (e.g., natural heritage conformity) on applications under a prescribed Act (including the *Planning Act* and *EA Act*). On this basis, comments on impacts related to natural heritage systems and losses, including existing natural heritage conditions, evaluation criteria, ecological impact assessments, effectiveness of proposed

mitigation, and/or ecological offsetting, have not been provided through this review. In accordance with Ontario Regulation 686/21: Mandatory Programs and Services, TRCA's comments provided on the ESR primarily focus on Lake Ontario shoreline hazard management, including potential opportunities for shoreline restoration.

As a regulator under section 28 of the *Conservation Authorities Act* (O. Reg 166/06) for development near wetlands and the Lake Ontario shoreline, and as a conservation land manager for TRCA-owned lands, with experience in ecological restoration and shoreline erosion mitigation and remediation works, TRCA can offer its full suite of expertise at the detailed design stage of the project, under our Voluntary Project Review (VPR) program. Additional information about this process can be provided as needed at the design stage.

TRCA recommends that the ESR be updated to reflect TRCA commenting roles under the *Planning Act* and *Environmental Assessment Act* in accordance with the Mandatory Programs and Services regulation under the *Conservation Authorities Act*, Ontario Regulation 686/21.

TRCA recommends that TRCA expertise continue to be leveraged throughout the project from the EA/planning stages to detailed design and VPR in accordance with legislation and regulations governing conservation authority roles.

Lake Ontario Shoreline Hazard

The ESR indicates that appropriate setbacks from coastal hazards should be examined and that this will be further investigated at the design stage. It is important to ensure that the Lake Ontario shoreline hazard limits are accurately identified and reflected in the ESR and on future design plans, and that plans take into account shoreline alterations that may impact the hazard limits. TRCA recently updated its regulation mapping and incorporated the latest shoreline hazard based on a recently completed shoreline study. The shoreline hazard at this location is driven by both shoreline flooding and erosion (refer to Figure 1). The shoreline study and the mapping are available upon request to inform work in this area.

Further, TRCA does not employ a coastal engineer and as such cannot provide engineering review/signoff of the coastal reports. Accuracy of that information will be the responsibility of the Province at the planning and design stages. In accordance with the Provincial Policy Statement 2020 (and the proposed Provincial Planning Statement), the redevelopment should not create new hazards, should not aggravate existing hazards, and should be directed outside of the Lake Ontario shoreline hazard areas and setbacks applied.

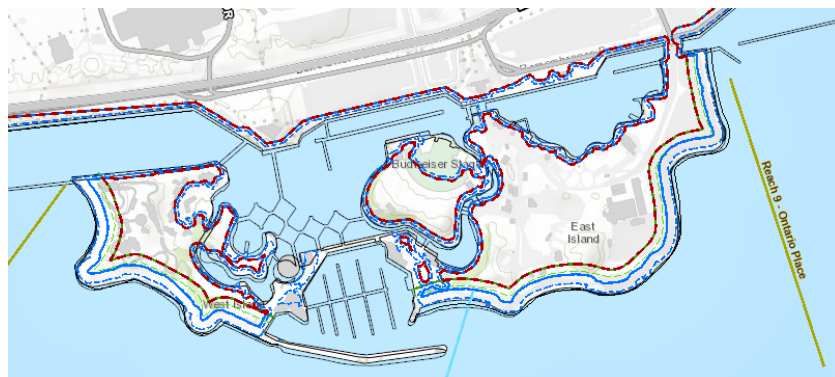


Figure 1: Lake Ontario Shoreline Hazards (TRCA)

TRCA recommends that coastal assessments be completed to ensure shoreline stability and to inform locations where increased risk to life and property from shoreline flood, erosion and dynamic beach hazards may occur, both based on existing conditions and where shoreline works are proposed. This would include demonstrating how those hazards are mitigated to the extent practically and technically feasible based on the proposed redevelopment works at Ontario Place.

Shoreline Restoration

Over the past 20 years, TRCA staff have completed and supported a number of shoreline projects at Ontario Place including but not limited to fisheries improvement, wetland and shoreline restoration projects, and fisheries and sediment monitoring. The shorelines of Ontario Place are some of the highest priority opportunities in the Toronto Waterfront Aquatic Restoration Strategy (TWARS) and the recently completed Toronto Waterfront Integrated Restoration Plan (TWIRP). Re-creation of the shoreline will not only enhance user experience at Ontario Place and along the “blue trail” network within the Toronto Harbour and surrounding watershed but must also provide additional protection against coastal hazards.

TRCA staff are available to assist with the implementation of associated aquatic habitat/shoreline work and monitoring as needed including design, approvals, and construction. Incorporating aquatic habitat improvements along this section of the Toronto waterfront will be extremely important to fully capture not only the ultimate vision for Ontario Place, but also provide improved ecological and aquatic habitat for the wildlife and aquatic species in this area. Staff are also available to continue to assist with collaboration efforts among other agencies through Aquatic Habitat Toronto (AHT) to meet the ultimate vision for an improved habitat and a resilient shoreline.

Should the Province choose to engage TRCA at the design and implementation stages, a boat tour of the Toronto Harbour can be arranged to discuss existing shoreline projects, proposed shoreline work, and the services TRCA restoration staff can offer to support the broader vision for Ontario Place.

TRCA recommends that the Province consider working in partnership with TRCA restoration staff to facilitate the coordination and implementation of these shoreline projects while improving the shoreline habitats on this part of the Toronto Waterfront.

Should you have any questions, require clarification, or wish to meet to discuss any of the above remarks, please contact the undersigned at 416.667.6920 or at john.mackenzie@trca.ca.

Sincerely,

<Original signed by>

John MacKenzie, M.Sc.(PI) MCIP, RPP
Chief Executive Officer

Attached: *Appendix A - TRCA comments on the Draft ESR*

Cc: IO: Jordan Erasmus, Director, Development (Landmark Projects)
Eric Pitre, Senior Advisor, Development (Landmark Projects)
Jacobs: Anna Fawcett, Environmental Planner
Toronto: Meg St John, Waterfront Project Manager
TRCA: Sameer Dhalla, Director, Development and Engineering Services
Anil Wijesooriya, Director, Restoration and Infrastructure
Laurie Nelson, Director, Policy Planning
Beth Williston, Associate Director, Infrastructure Planning and Permits
Sharon Lingertat, Senior Manager, Infrastructure Planning and Permits

Appendix A - TRCA Comments on the Draft ESR

ITEM	ESR SECTION	TRCA COMMENTS (August 29, 2023)	PROPONENT RESPONSE (DATE)
1	Page viii	The report notes that mitigation and monitoring plans will be refined based on the detailed design plans. TRCA staff are available to discuss our assistance with any environmental mitigation or monitoring requirements, if needed.	
2	Section 3.1.9 – Floodplains and Shoreline	The report notes that, “The Project footprint is not within TRCA-regulated floodplain limits.” For clarification, the shoreline around the islands and along the mainland fall within TRCA’s regulated area due to the Lake Ontario Shoreline hazard. The area also falls within the “Toronto Waterfront Screening Area”, which is exempt from our regulation at this location. While there is no riverine floodplain at this site, the shoreline is subject to coastal flooding and erosion. To ensure these hazards are appropriately addressed through the proposed redevelopment, it is recommended that the Province continue working with TRCA through the EA and future design/VPR processes. TRCA is available to discuss this as needed.	
3	Section 4.1.6 – Ontario Science Centre	The future location for the Ontario Science Centre is shown in this ESR. It is unclear what the setbacks are from the Lake Ontario shoreline hazard for this building, as well as other buildings and structures proposed throughout the ESR. It is recommended that the Province work with TRCA through the EA and VPR processes.	
4	Section 4.3.5 – Parking Evaluation	On-site surface parking and below ground parking are identified as the preferred parking alternatives. It is unclear at this time how far entrances to underground parking areas will be located from the Lake Ontario shoreline hazard. Designs will need to ensure entrances (and buildings/structures) are appropriately set back from the shoreline hazard.	
5	Section 5.4.1.2 - Soil	This section indicates that soil erosion is reversible. Soil erosion is not easily reversible and could require significant additional quantities of imported clean topsoil to reverse soil loss due to erosion. Effective soil management and erosion and sediment control (ESC) strategies should be implemented during construction. Please refer to TRCA’s Erosion and Sediment Control Guide for Urban Construction (2019) when developing ESC strategies. Please also refer to TRCA’s Preserving and Restoring Healthy Soil: Best Practices for Urban Construction for direction around appropriate post construction soil requirements that will ensure effective growth and survival of planted species providing long term soil stabilization.	
6	Section 5.4.1.7.1 – Floodplain Conditions and Alteration of Shoreline	The first paragraph notes that redevelopment activities “will enhance shoreline protection and rehabilitate structures to above the required 74-m elevation.” TRCA suggests revising this to read, “... <i>Ontario Place Existing Shoreline Conditions Report</i> (Shoreplan 2022) will enhance shoreline protection and rehabilitate structures to above the 100-year Lake Ontario Flood Level (of 76.2 m IGLD85 plus minimum 0.3 m freeboard) and protect against all shoreline hazards including the flooding hazard, erosion hazard and dynamic beach hazard as determined by a professional coastal engineer.” Also refer to previous comments regarding lake elevations submitted in the TRCA letter dated February 13, 2023 located in the ESR, Appendix A –	

ITEM	ESR SECTION	TRCA COMMENTS (August 29, 2023)	PROPONENT RESPONSE (DATE)
		Consultation Record (e.g., comments 8, 10). Please also see our comments and recommendations on the Lake Ontario Shoreline Hazard in the letter above.	
7	Table 5.8 – Change in floodplain	It is noted in the ESR that geotechnical studies are required by TRCA to confirm hazards and that this work should be completed to satisfy TRCA permit requirements. For clarification, this work is not a requirement of TRCA given that work at this site is exempt from our permitting process. However, it is recommended that these studies be completed to ensure shoreline stability and to inform setback requirements for new infrastructure and buildings. It is recommended that the Province work with TRCA through the EA and VPR processes as mentioned above. Please also see our comments and recommendations on the Lake Ontario Shoreline Hazard in the letter above.	
8	Section 6.2.3.2 – Toronto and Region Conservation Authority	This section indicates that TRCA implements “Natural Systems Programs and Policies” and that TRCA staff have been consulted and will continue to be consulted related to Natural Systems. Changes to CA roles under prescribed Acts, including the <i>Planning Act</i> and <i>Environmental Assessment Act</i> warrant revisions to this section. Refer to the “TRCA Commenting and Regulatory Roles” section in the body of this letter and update Section 6.2.3.2 of the ESR accordingly.	
9	Section 6.3.3 – TRCA Feedback	As noted above, while our initial response to the Notice of Commencement sent April 2022 did note these items, our roles and responsibilities at the EA stage have since changed. It is our recommendation that the text in this section be revised, with the exception of the last sentence starting with, “Throughout the EA process, the TRCA...” which can remain. Refer to the “TRCA Commenting and Regulatory Roles” section of this letter and updated Section 6.3.3 of the ESR accordingly.	
10	Table 6-4 – TRCA Meetings Summary	This section notes that the parking entrances should be above the 100-year flood hazard level. As per Section 7.4.3.4 of TRCA’s LCP document, any proposed development should be located outside of the Lake Ontario shoreline hazard which is determined by delineating the farthest combined landward extent of the three key shoreline hazards: 1) flooding hazard; 2) erosion hazard; and 3) dynamic beach hazard. It is therefore recommended that this section be revised to read, “Parking entrances should be floodproofed to a combination of the Lake Ontario flood level (plus minimum 0.3 m freeboard), Lake Ontario shoreline erosion hazard and Lake Ontario shoreline dynamic beach hazard, where applicable.” Also refer to the TRCA comment letter dated February 13, 2023 for Lake Ontario shoreline and coastal hazard information, located in the ESR, Appendix A – Consultation Record. Finally, please also refer to TRCA comments and recommendations on coastal reports required to assess shoreline hazards in the general comments section above under “Lake Ontario Shoreline Hazard”.	
11	Various sections	The preferred design for the water’s edge includes planted trees. Given that the surrounding landscape will be hardened significantly, the proposed trees may not survive or may be unlikely to thrive. While the habitat, biodiversity and shade value of trees (due to limited growth potential) in these circumstances may be limited, consideration should be given to the impacts this approach may have on long term maintenance of the	

ITEM	ESR SECTION	TRCA COMMENTS (August 29, 2023)	PROPONENT RESPONSE (DATE)
		extensively hardened shoreline as it relates to managing the shoreline hazard. Consideration should also be given to whether this would impact the evaluation.	
12	Various sections	Floating wetlands are proposed to be integrated into the design. TRCA staff experience is that floating wetlands are not viable in TRCA's jurisdiction and floating wetlands are highly unlikely to persist overtime. In TRCA staff's experience, resources directed to floating wetlands are always better directed to more traditional wetland restoration. Given the likelihood that these floating wetlands will not persist on the landscape, please ensure that any hazard mitigation provided by these wetlands is offset in other ways.	
13	Appendix A – Consultation Record	The TRCA contact table should be updated to remove Nancy Gaffney and replaced with Johanna Kyte, Senior Manager, Government and Community Relations (Toronto/Durham).	
14	Appendix B – Natural Heritage Impact Study – (6.1.3, 9.3, Table 1 and other applicable sections)	There are references throughout the report noting that fish timing windows for in-water works will be confirmed through MNRF or TRCA. Reference to TRCA should be removed as TRCA has no jurisdiction over timing windows.	
15	Appendix B – Natural Heritage Impact Study – (6.1.3)	It is noted that turbidity measures will be designed in consultation with DFO and TRCA. Further input as related to appropriate ESCs can be provided if the Province decides to involve TRCA at the detailed design stage as a reviewer through a VPR process or in partnership through shoreline restoration projects.	
16	Appendix C - Hydrogeology	For future engineering design submissions, TRCA staff typically require a minimum separation of 1 m from the base of any proposed infiltration facilities and the seasonally high-water table. Due to the variable groundwater levels observed on site, staff recommend a monitoring well be installed in the footprint of any proposed infiltration facilities with the screened interval coinciding with the base elevation of the proposed LID's. Additionally, it is recommended that in-situ infiltration testing be completed at the base elevation of any proposed infiltration facilities. For further information please refer to TRCA's Stormwater Management Criteria, Appendix C– August 2012.	

June 13, 2022

CFN 66003
XREF CFN 66943, 66962

BY E-MAIL ONLY (pbecker@pathcom.com)

Pat Becker
Environmental Planner
Jacobs Engineering Group
245 Consumers Road, Suite 400
Toronto, ON M2J 1R3

Dear Pat Becker:

**Re: Response to Notice of Study Completion
Proposed Site Servicing at Ontario Place (955 Lakeshore Boulevard West)
Ministry of Infrastructure Public Work Class Environmental Assessment (Category B)
Lake Ontario Shoreline; City of Toronto**

Toronto and Region Conservation Authority (TRCA) staff received the Notice of Completion along with a link to the Consultation and Documentation (C&D) Report, on April 28, 2022. We also received a revised Notice of Completion on May 26, 2022, extending the commenting period to June 30, 2022.

PROJECT OVERVIEW

It is our understanding that Jacobs, on behalf of the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) has completed the C&D Report for the proposed site servicing and upgrades located at Ontario Place (955 Lakeshore Boulevard West). MHSTCI is planning to reconfigure and update the aging site services to meet current code by replacing, reconfiguring and/or upgrading the existing on-site underground services including water, wastewater, gas, stormwater, electrical and telecom structures. These works have been assessed under the requirements of the Ministry of Infrastructure Public Work Class Environmental Assessment (EA), Category B process.

Work will include:

- **Water:** Addition of watermains to support the current site including a second water service connection on the East Island and replacement of aging underground water infrastructure.
- **Wastewater:** Refurbishment, replacement or addition of sewage pumping stations (SPS), addition of a new centralized SPS and replacement of aging underground infrastructure.
- **Stormwater Management:** Implementation of low impact development (LID) technologies and water quality treatment devices.
- **Electrical/Telecommunication Servicing:** Extend direct connections to the Toronto Hydro system, addition of new electrical loops and upgrade site-wide telecommunications networks.
- **Gas Servicing:** Extend and increase gas mains to meet future demand at the site.
- **Other Servicing:** Addition of security system terminals and supervisory control and data acquisitions system for real time data collection of site services.

PROJECT REVIEW

TRCA staff have reviewed the C&D report which provides a high-level screening of the site. Details regarding the location of proposed underground works have not been provided at this time. As such it remains unclear as to whether underground works will require construction near shorelines, under waterways, through restored areas and natural habitats and whether the proposed infrastructure and servicing will avoid the shoreline hazards. The report does however identify that where possible site servicing will be situated to reduce or avoid vegetation clearing, no in-water or infilling is planned for this work, and that appropriate setbacks and buffers from critical areas are being incorporated into the site servicing design. Detailed comments are provided in **Appendix A**.

Voluntary Project Review

While a permit is not required under Ontario Regulation 166/06 given that this site falls within the jurisdiction of PortsToronto, should the province decide that they would like to pursue the VPR process, TRCA will review the design based on its expertise as a watershed management agency, and its interests related to natural hazards, water management and natural heritage, including aquatic and terrestrial species and habitats. Should the province decide to pursue a VPR from TRCA, please contact the undersigned at the design stage to setup a pre-consultation meeting prior to submission of the supporting information for review.

Draft Service Level Agreement

Please also be advised that TRCA is currently in discussions with the province regarding a potential Service Level Agreement (SLA). The SLA lays out TRCA staff, service and funding commitments specific to the redevelopment of Ontario Place through the development planning, EA planning and VPR stages. This SLA is intended to summarize TRCA's expected role as a review agency. The draft SLA also identifies services that our Restoration and Resource Management Group can provide including guidance and assistance related to protecting, enhancing, restoring and monitoring natural habitats.

REVIEW FEE

As previously advised, an application review fee of **\$9,260** is required as per TRCA's [Fee Schedule](#). At the time this letter was prepared, TRCA staff received confirmation that the fee for TRCA staff's review was being processed. Please submit as soon as possible.

We look forward to further engagement with Jacobs and the province as this and the Category C EA (CFN 66962) move forward. Should you have any questions, please contact me at extension 5717 or at sharon.lingertat@trca.ca.

Regards,

<Original signed by>

Sharon Lingertat
Senior Manager, Infrastructure Planning and Permits
Development and Engineering Services

Attached: Appendix A: TRCA Comments on Final Category B EA

BY E-MAIL

Cc: MHSTCI: Elaine Shin (Elaine.Shin@ontario.ca)
Dan Delaquis (Dan.Delaquis@ontario.ca)
IO: Joanna Brown (joanna.brown@infrastructureontario.ca)
Jacobs: Maegan Rodrigues (Maegan.Rodrigues@jacobs.com)
TRCA: Anil Wijesooriya, Director, Restoration and Infrastructure
Beth Williston, Associate Director, Infrastructure Planning and Permits
Steve Heuchert, Associate Director, Development Planning and Permits
Nancy Gaffney, Government and Community Relations Specialist

APPENDIX A: TRCA COMMENTS ON FINAL CATEGORY B EA

1. It is unclear if the shoreline hazard should also be identified in Part III “Existing Land Use Status” or another section of the report. It is suggested that this be added to the report as the shoreline hazard will need to be considered in the design stages.
2. Please ensure that the Lake Ontario hazard limits are determined and used as part of the concept design for applicable proposed works to the degree technically feasible to safeguard from the Lake Ontario Flood Hazard, the Lake Ontario Shoreline Erosion Hazard, and the Lake Ontario Dynamic Beach Hazard Limit as noted further in this comment. As per Section 7.4.3.4 of TRCA’s The Living City Policies (LCP) document, any proposed infrastructure should be located outside of the Lake Ontario shoreline hazard which is determined by delineating the farthest combined landward extent of the three key shoreline hazards: flooding hazard, erosion hazard and dynamic beach hazard described below.
 - a) Lake Ontario Flood Hazard includes a combined effect of the following:
 - i. The 100-year Lake Ontario Flood Level (76.2m in IGLD85, please note - datum needs to be converted to the appropriate elevation for the datum the proponent is using);
 - ii. The appropriate wave uprush allowance; and
 - iii. The appropriate allowance for other water related hazards.
 - b) Lake Ontario Shoreline Erosion Hazard includes a combined effect of the following:
 - i. A stable slope allowance projected from the stable toe of slope; and
 - ii. The 100-year recession rate or an erosion allowance of 30m.
 - c) The Lake Ontario Shoreline Dynamic Beach Hazard includes a combined effect of the following:
 - i. The Lake Ontario Shoreline Flood Hazard (as per sub-bullet no.1); and
 - ii. A dynamic beach allowance of 30m.
3. TRCA staff encourage development of a comprehensive and coordinated restoration strategy that will provide improved habitat function balanced with the new and existing uses at the design/VPR stage. Staff are available to further discuss at the design stage as needed.
4. If site specific hydrogeology information is available in future submissions (design) please provide.
5. The submission indicates that the Site (995 Lakeshore Blvd West, Toronto) is within the Wellhead Protection Area (WHPA) and surface water Intake Protection Zone (IPZ). Please note that this information should be updated moving forward. Based on CTC Source Protection Region mapping, the site does not fall within WHPA or IPZ 1 & 2. Please revise throughout the document.
6. Section 3 (b) – Please revise the contact for EA’s and infrastructure permits to Sharon Lingertat. Steve Heuchert will be the main contact for development planning applications at the site.

February 13, 2023

CFN 66416.05

BY E-MAIL ONLY (Colin.Wolfe@toronto.ca) (eric.pitre@infrastructureontario.ca)

Colin Wolfe
Senior Planner, Community Planning
City of Toronto
100 Queen Street. W., 18th Flood E.
Toronto, ON M5H 2N2

Eric Pitre
Senior Advisor, Development (Landmark Projects)
Infrastructure Ontario
1 Dundas St. W., Suite 2000
Toronto, ON M5G 1Z3

Dear Colin Wolfe and Eric Pitre,

**Re: Ontario Place Official Plan Amendment and Zoning By-law Amendment – 1st Submission
955 Lake Shore Boulevard West – City Application No. 22 233864 STE 10 OZ
City of Toronto**

These comments respond to the above noted circulation of the first submission for Official Plan Amendment (OPA) and Zoning By-Law Amendment (ZBA) applications. Toronto and Region Conservation Authority (TRCA) staff received the OPA and ZBA applications along with supporting planning documents, background reports and drawings from the City of Toronto, on December 6, 2022.

OVERVIEW

Zoning and OPA

The OPA is intended to provide long-term direction for the revitalization of the site and considers the Ontario Place site as a whole including the existing parking areas on the mainland, but excluding Trillium Park. The ZBA is meant to provide direction for the comprehensive renewal of the public realm across the site while providing detailed permission for the first phase of development on the West Island including public outdoor spaces, the Therme facility and the proposed parking structure on the mainland. Rezoning for the Therme development includes the proposed family entertainment complex, wellness area, restaurant and other supporting uses for a total of 64,372 m² of non-residential gross floor area. TRCA staff also understand that this zoning amendment is required to update the historically permitted uses like the existing Live Nation site. Separate development applications will be required for future major facilities including the potential science entrance pavilion on the mainland and redevelopment of the Live Nation Amphitheatre for example. Site plan applications will be submitted for all tenanted and non-tenanted areas in the future.

Environmental Assessment (EA)

A Category C EA is also underway for the non-tenanted areas to evaluate options for government-led development activities such as shoreline work, and to identify a preferred design for the public realm areas, outside of the tenanted lands. Design concepts for the public realm areas continue to be evaluated through the EA process and will inform updates to the public realm designs, included in future resubmissions of the OPA and ZBA materials. TRCA staff understands that the scope of the EA currently does not cover work on the West Island.

TRCA STAFF REVIEW

To address long-term flood and erosion issues a significant amount of lake-filling is proposed to raise the existing land-base around the periphery of the site, primarily on the West Island. These areas will be used for the public realm. Shoreline improvements will introduce new aquatic habitat including, but not limited to, a submerged reef at the West Headland and wetland improvements along Brigantine Cove. On the mainland the existing parking lot will be reconfigured and consolidated into a below-grade parking structure that will facilitate bus drop-off and pick-up. A new science pavilion as well as a new Therme entrance pavilion are being proposed on the mainland.

Conservation authorities have the delegated responsibility of representing the provincial interest on natural hazards encompassed by Section 3.1 of the **Provincial Policy Statement, 2020 (PPS)**. TRCA recognizes that Crown agencies are exempt from review under the Conservation Authorities Act and may request Voluntary Project Review (VPR) at the design stage.

Staff have completed a comprehensive review of the above-noted submission and detailed comments are provided in **Appendix A**.

Review Comments

Limits of Development and Setbacks

The ZBA focuses on new development specific to the West Island, as well as updates to the entire site to bring it into conformity with historically permitted uses. The development limits for the tenanted lands are subject to the results of the shoreline work which is expected to raise grades and provide for additional land base. It is unclear whether the development limits and setbacks as shown in the ZBA application have been informed by the shoreline hazard (flooding, erosion and dynamic beach) and the new shoreline. As such, it is unclear whether the applications provided meet TRCA policies at this time. TRCA recommends that updated mapping (e.g., Diagram 5 in the ZBA application) and text be provided to clarify setbacks and reflect the proposed public realm spaces, natural hazard and development areas.

Lake Ontario Shoreline Hazard

A significant amount of lakefill and shoreline work is proposed to raise portions of Ontario Place that are currently flood prone. Typically, TRCA encourages a peer review of the coastal report; however, TRCA understands, based on past discussions with IO, that accuracy of the coastal report(s) as they relate to existing and proposed conditions will be deferred to IO to manage.

Notwithstanding the above, and as per TRCA's The Living City Policies (LCP), the coastal assessment should:

1. Delineate the shoreline hazard which is the combined extent of the flooding, erosion and dynamic beach hazards based on:
 - i) existing shoreline conditions where no lakefilling is required; and
 - ii) future proposed shoreline conditions, where alterations to the shoreline are expected.
2. Ensure new development is located outside of the shoreline hazard plus an appropriate buffer/setback.
3. Support proposed shoreline design to ensure long-term resilience of the project.
4. Consider climate change forecasts for Lake Ontario water levels to determine if additional floodproofing requirements need to be incorporated into the design and siting of buildings and infrastructure.
5. Note that this hazard limit will inform future maintenance requirements and costs for any infrastructure located within the hazard limits (e.g., pedestrian paths, underground infrastructure).

As noted above, development should be directed outside of the hazard areas subject to flooding, erosion and dynamic beach limitations (if any). Where appropriate, submitted reports should clearly outline and incorporate requirements as it relates to natural hazards. For example, the Planning Justification Report (Section 5.3) ends at Section 2: Wise Use and Management of Resources and does not include the Natural Hazards (3.1) and Human-Made Hazards (3.2) sections of the Provincial Policy Statement (PPS).

Restoration Projects

TRCA restoration staff are available to assist with the implementation of associated habitat re-creation in and around Ontario Place. Should IO engage TRCA restoration staff, and in anticipation of further discussions regarding lakefill and habitat creation opportunities, staff have provided recommendations related to the restoration work for consideration and discussion at future stages in **Appendix B**.

RESUBMISSION REQUIREMENTS

In order to facilitate the review of the next submission, please:

1. Provide a covering letter with Central File Number (CFN) 66416.05 quoted, summarizing how TRCA comments have been addressed.
2. Update Appendix A table to include detailed responses for each TRCA comment. For your convenience, an MS WORD version of Appendix A is enclosed.
3. Ensure all supporting materials are submitted in PDF format, with drawings pre-scaled to print on 11"x17" pages.
4. Materials submitted through e-mail must be less than 5 MB.
5. Materials submitted through a file transfer protocol (FTP) site must be posted for a minimum of two weeks.

Should you have any questions, if you would like to setup a meeting or if you require any additional information please contact me at (437) 880-2435 or at sharon.lingertat@trca.ca.

Regards,

<Original signed by>

Sharon Lingertat
Senior Manager, Infrastructure Planning and Permits
Development and Engineering Services

Attached: Appendix A: TRCA Comments and Proponent Responses (pdf)
Appendix B: TRCA Comments – Shoreline Hazard Restoration (pdf)
Appendix A and Appendix B: MS WORD file for responses

BY E-MAIL

cc: Toronto: Meg St John, Waterfront Project Manager
IO: Jordan Erasmus, Director, Development (Landmark Projects)
TRCA: Beth Williston, Associate Director, Infrastructure Planning and Permits
Steve Heuchert, Associate Director, Development Planning and Permits
Sameer Dhalla, Director, Development and Engineering Services
Anil Wijesooriya, Director, Restoration & Infrastructure
Johanna Kyte, Government and Community Relations Specialist

APPENDIX A: TRCA COMMENTS AND PROPONENT RESPONSES

ITEM	DOCUMENT	TRCA COMMENTS (February 13, 2023)	PROponent RESPONSE (INSERT DATE)
OPA and ZBA Comments			
1	Planning Justification Report – pg 4, pg 92, pg 37	<p>TRCA understands that the ongoing Category C EA will be assessing design concepts for the public realm work for the entire site.</p> <p>a) Please clarify whether the EA will be addressing fill placement and shoreline work for the entire site, including the West Island? If the EA is meant to include the West Island, because there will be significant lakefill required to raise the site and accommodate future development and infrastructure, it seems premature to be revising the OP and zoning given that the EA is ongoing which will inform new hazard and public realm areas. This section also notes that "...the materials submitted in support of the OPA and ZBA application articulate a specific design for these public realm areas. However, multiple design concepts for the public realm continue to be considered through the EA process and are subject to further assessment."</p> <p>b) Landscape plans for the West Island are being advanced by Therme's design process. However, TRCA understands that the broader public realm is being lead and advanced through an EA process. Depending on the response to item (a) above, since the EA has not been finalized, will the designs change and therefore impact information related to these planning applications. Please clarify.</p> <p>c) Does this process meet City requirements?</p>	
2	Planning Justification Report – pg 44	The new Science Entrance Pavilion and Therme pavilion appear to be located within the Toronto Waterfront Screening area for shoreline hazard. Please ensure all new buildings have appropriate setbacks based on the coastal report which should incorporate any new shoreline work, plus applicable buffers for all proposed buildings. Additional comments regarding the coastal report are provided below.	
3	Planning Justification Report – pg 46	New garage entrances are proposed within the existing parking lot south of Lake Shore Boulevard. It is unclear at this time how far from the Lake Ontario hazard these will be located. Designs will need to ensure entrances (and buildings/structures) are appropriately set back from flood hazards.	
4	Planning Justification Report – PPS Section 5.3	The report does not seem to include the Natural Hazards (3.1) and Human-Made Hazards (3.2) sections of the PPS, although it does reference natural hazards on page 105 (this section ends at Cultural Heritage and Archaeology, Section 2.6 of PPS). Given the proximity to the Lake Ontario shoreline hazard around this entire site and because development will need to be directed outside of the hazardous lands subject to flooding, erosion and dynamic beach limitations, where appropriate please ensure the report clearly outlines requirements under the PPS as it relates to natural hazards. If this is located in another section of the report, then please indicate where.	
5	ZBA	<p>TRCA understands the ZBA will permit the existing uses on site and set permissions for the first phase of Ontario Place revitalization including public realm improvements, the Therme facility and proposed parking structure on the mainland.</p> <p>a) Will an updated schedule be provided showing the revised land use designation to account for new buildings versus the public realm and natural hazard areas associated with the Lake Ontario shoreline?</p> <p>b) Are the distances shown on Diagram 5 (eg, 48.6, 36.5) the distance in metres from the existing or newly created physical shoreline, and is this distance to the proposed development? Also what buffers have been applied to the</p>	

ITEM	DOCUMENT	TRCA COMMENTS (February 13, 2023)	PROPONENT RESPONSE (INSERT DATE)
		<p>furthest inland natural hazard? This figure should be updated based on approved shoreline works and the ultimate limits of the shoreline hazard plus applicable buffer.</p>	
6	OPA	<p>The OPA application notes: “ff) Policies 3.4.9 and 3.4.17 a) and b) of the Official Plan and policy P28 of the Central Waterfront Secondary Plan, shall not apply to the redevelopment of Ontario Place, which may include but is not limited to: lake filling, shoreline repair, shoreline stabilization and protection improvements, flood and erosion mitigation, habitat creation, new open space and recreation areas, and construction or expansion of buildings, subject to the submission of a shoreline conditions assessment, hydrogeological study, geotechnical study, natural heritage impact study, and arborist report.”</p> <p>The CWSP Policy P28 states, "(P28) Lakefilling will be considered only for stabilizing shorelines, improving open spaces, creating trail connections, preventing siltation and improving natural habitats and is subject to Provincial and Federal Environmental Assessment processes. Consideration will be given to the impact of such lakefilling on recreational uses and fish habitat."</p> <p>Please confirm that an EA is not required or clarify whether the on-going Category C EA will capture all proposed lakefilling. We defer this to the City and proponent to confirm requirements with the province.</p>	
7	OPA	<p>Suggest adding a section that speaks to natural hazard awareness, perhaps under “Ensure long-term resilience, environmental performance and sustainability”</p>	
8	Coastal Hazards – Baird Report	<p>TRCA does not employ a coastal engineer and as such cannot provide engineering review of the coastal reports submitted. Typically, TRCA would encourage a peer review of the coastal report to ensure accuracy of the information. However, TRCA understands based on conversations with IO in 2022 that IO will take the lead to determine whether a peer review is required given that both Baird and Shoreplan are working on various components of this project. TRCA defers the accuracy of the coastal review to IO.</p> <p>Notwithstanding the above, and as per TRCA’s LCP an assessment should be completed by a professional coastal engineer that considers the Lake Ontario flooding, erosion and beach hazards as described below. Please also demonstrate with figures and supporting information how these hazards are mitigated to the extent practically and technically feasible with the proposed upgrades to Ontario Place. As per Section 7.4.3.4 of TRCA’s LCP document, any proposed development should be located outside of the Lake Ontario shoreline hazard which is determined by delineating the farthest combined landward extent of the three key shoreline hazards: 1) flooding hazard; 2) erosion hazard; and 3) dynamic beach hazard described below. Once this has been delineated appropriate buffers/setbacks will need to be applied to proposed buildings/structures and to inform future maintenance requirements and costs for any infrastructure (eg, pedestrian paths, pumping stations, underground infrastructure, etc) that may be located within the shoreline hazard (existing shoreline if not altered and new shoreline if proposed for alteration).</p> <p>(1) Lake Ontario Flood Hazard includes a combined effect of the following:</p> <p>a) The 100-year Lake Ontario Flood Level (76.2m in IGLD85, please note - datum needs to be converted to the appropriate elevation for the datum the proponent is using)</p>	

ITEM	DOCUMENT	TRCA COMMENTS (February 13, 2023)	PROPONENT RESPONSE (INSERT DATE)
		<ul style="list-style-type: none"> b) The appropriate wave uprush allowance; and c) The appropriate allowance for other water related hazards. (2) Lake Ontario Shoreline Erosion Hazard includes a combined effect of the following: <ul style="list-style-type: none"> a) A stable slope allowance projected from the stable toe of slope; and b) The 100-year recession rate or an erosion allowance of 30m. (3) The Lake Ontario Shoreline Dynamic Beach Hazard includes a combined effect of the following: <ul style="list-style-type: none"> a) The Lake Ontario Shoreline Flood Hazard (as per sub-bullet no.1); and b) A dynamic beach allowance of 30m. 	
9	Coastal Hazards – Baird Report	Staff note that floating canoe/kayak finger docks are proposed to extend perpendicular to a floating walkway. Are there any concerns regarding safety or maintenance? If infrastructure (walkways, underground infrastructure, pumping stations, etc) will be located within the shoreline hazard, regular maintenance may be required. This is deferred to IO.	
10	Coastal Hazards – Baird Report	Please ensure the shoreline hazard also considers climate change and potential future changes to lake levels. A professional coastal engineer should determine if additional floodproofing is required above the 100-year Lake water levels of 76.2IGLD85 plus 0.3 m freeboard based on conservative climate change forecasts. Please ensure that all proposed floodproofing designs consider conservative climate change forecasts for Lake Ontario water levels, wave uprush and other water related hazards such as shoreline erosion and shoreline dynamic beach hazards with supporting calculations and results. This should be factored into considerations for development setbacks and is deferred to the coastal engineer and IO.	
11	General Shoreline Information	Existing background information on the TRCA’s Lake Ontario Shoreline Hazard Assessment can be requested via a formal data request form, if needed.	
Additional Comments			
Note: These comments apply to future phases of work including but not limited to EA, future ZBAs, Design, Site Plan			
12	Planning Justification Report – pg 49	The marina will be upgraded with new flood protection. Please clarify what this refers to.	
13	Comprehensive Plan – pg 57	A children’s play village is proposed at Brigantine Cove. Is this located outside of the hazard area? It is recommended that the limits of the shoreline hazard be determined and buffers applied to the future site.	
14	Civil Dwgs 3– D,	A new sanitary line is proposed under the lake. There are also subsurface storage systems proposed along with other types of infrastructure to service the new development. It is unclear if engineered construction plans will be provided to TRCA for VPR signoff. Please clarify.	
15	Stormwater Management	TRCA water resources staff are in support of the stormwater management criteria provided in the Functional Servicing and Stormwater Management Report dated November 25, 2022. TRCA looks forward to receiving the conceptual stormwater management designs with updated supporting calculations, report and drawings for review and comment as the project progresses forward into the next design iteration.	
16	Coastal Hazards	Please ensure that any upgrades to existing outfalls or new outfalls are designed with erosion protection supported by a professional coastal engineer.	

ITEM	DOCUMENT	TRCA COMMENTS (February 13, 2023)	PROPONENT RESPONSE (INSERT DATE)
17	General comment for detailed design or to inform the EA	<p>a) The submitted geotechnical studies are all preliminary and should be accompanied by supplementary detailed geotechnical studies in support of the design recommendations or to inform the on-going EA.</p> <p>b) A geotechnical and stability review prepared by a geotechnical engineer should be provided to confirm that the grading and earthworks are appropriate. The restoration of those areas will need appropriate geotechnical and stability recommendations to ensure stability of the restored areas</p> <p>c) Since the site is on significant previous lakefill with a potentially heterogenous nature, further assessments will be needed to determine if ground improvement is required to minimize future settlement. This will also apply to all settlement sensitive structures as well as those earthworks, to ensure the required elevation for flood and coastal protection purposes is maintained.</p> <p>d) Since there are several existing coastal protection measures which need rehabilitation and/or maintenance including some walls, a geotechnical and stability review prepared by a geotechnical engineer should be provided to confirm that the proposed coastal protection and/or remedial works are appropriate from a geotechnical perspective.</p> <p>e) The proposed trail and associated earthworks and structures will need geotechnical design and recommendations, All mitigative measures, ground improvement provisions, and stabilization works should be reviewed and approved by qualified engineer(s).</p>	
18	General	<p>Changes in climate can impact risks from natural hazards of flooding and erosion. As such, TRCA has an interest in reducing GHG emissions so as to minimize climate impacts and associated increased risks from natural hazards, to the extent possible. Staff are pleased to see that green infrastructure is being examined for the main structures. The only gap staff see is in the land development side. The GHG emissions associated with the land filling and excavation as well as the construction of outdoor spaces and underground infrastructure should also be considered. Suggest considering life cycle assessments of the various materials and the use of renewable diesel for construction vehicles and equipment on site during the development stage. This latter option would be dependent on the supply of renewable diesel being available at the time of construction. Staff also note that Envision is an effective project planning and design tool where the verification process can be used to confirm that the project meets sustainability criteria of the Envision framework.</p>	

APPENDIX B: TRCA COMMENTS – SHORELINE HAZARD RESTORATION

ITEM	DOCUMENT	TRCA COMMENTS (February 13, 2023)	PROPONENT RESPONSE (INSERT DATE)
1	General Recommendations	<ul style="list-style-type: none"> a) It is recommended that restoration opportunities should be directed to maximize vegetated shorelines. b) Open coast and interior deepwater areas, especially along revetments, should be surcharged to create structural diversity using a variety of Toronto Waterfront Aquatic Habitat Restoration Strategy (TWAHRS) techniques. These areas should aim to increase shoreline irregularity, substrate sizing and topographical variability. 	
2	Trillium Park Bridge	<p>Is the intent to open up the area to water exchange and fish access or are there other intended outcomes? Could a carp gate be incorporated into the design to protect future shoreline vegetation?</p>	
3	Brigantine Cove	<ul style="list-style-type: none"> a) The boardwalk feature in Brigantine cove should be utilized to support shoreline improvements. b) In previous meetings floating wetland vegetation was proposed which TRCA have seen mixed results from in the past. Our preference would be to see grade changes to the shoreline to accommodate shallow grades for emergent vegetation and structure (stone and wood) which may also provide further erosion protection. c) It is recommended that the design focus on implementing self-sustaining features that do not require maintenance (i.e. shoreline re-grading over floating vegetation mats). d) This area is an important connection point and would support a natural vegetated terrestrial connection wherever possible. 	
4	Wetland Innovation Zone	<ul style="list-style-type: none"> a) Will existing sheltered embayment areas be removed and potential wetland restoration areas implemented? Is this area being replaced with SWM, LID features? b) Sheltered areas where shoreline restoration/stabilization is possible should be maximized. c) Our preference would be to see grade changes to the shoreline to accommodate shallow areas for emergent vegetation and structure (stone and wood). Deeper water sunken structures, shoals, etc. could also be incorporated. This is reflected in some of the renderings in the package. d) Carp gates are recommended to minimize damage to wetland plants and vegetated shorelines. 	
5	Section and Key Elevations	<ul style="list-style-type: none"> a) Clarification is requested at the implementation stage to show where fish habitat features have been noted on the plans. b) A TWAHRS and shoreline restoration typical can be provided by TRCA restoration staff to help guide detailed design, if needed. c) TRCA recommends the following opportunities be incorporated: <ul style="list-style-type: none"> i. Structure, wood and stone under docks ii. In water stone (mix of aggregates) as surcharged revetments, groins and shoal features along the South Shoreline iii. Shoreline restoration in embayment areas to create undulating, shallow emergent areas with wood and stone structure iv. Carp gates 	
6	OP Landscape Set 1 Therme 2022 11 25	<ul style="list-style-type: none"> a) TRCA restoration staff support the concept of a reef and can provide suggestions on details and design, if needed. There is an opportunity to continue in-water open coast stone treatment into the terraced area to the east of the reef. b) Wetland Innovation Zone – same as above. 	

ITEM	DOCUMENT	TRCA COMMENTS (February 13, 2023)	PROPONENT RESPONSE (INSERT DATE)
7	OP Landscape Set 2 Therme 2022 11 25	<ul style="list-style-type: none"> a) The landscape cross sections have identified aquatic habitat creation areas (Cross Section 1.1, 2.4, 2.5, 2.7, 2.9) but with no detail on what that looks like. Should TRCA be involved with implementation, clarification will be required. b) TRCA can provide design typicals for the Reef area and in-water shoreline habitat along the open coast and embayment areas, if needed. c) Section 3.7 identified wetland area: suggest improvement to structure and grades to promote aquatic vegetation. Staff are not familiar with Fabric Encapsulated Soil lifts. Should TRCA be involved with implementation, clarification will be required. 	
8	OP Landscape Set 3 Therme 2022 11 25	The wetland innovation area does not seem the same as the cross sections provided. Recommend working with TRCA to finalize the details around this area should TRCA be involved with implementation.	
9	Shoreline Restoration	<p>Suggest to maximize functional fish habitat to compensate for lake filling impacts:</p> <ul style="list-style-type: none"> a) Maximize the depths of less than 1.5 m. b) Re-examine floating wetland mats and possibly replace with permanent features (see comments above). 	
10	Wildlife and Biodiversity Planting Info - OPPR Plant List	<p>OPPR Plant List suggestions:</p> <ul style="list-style-type: none"> a) At the November 3, 2022 AHT meeting consultants described different zones for the planting palette. It is recommended that the planting list by zone be identified, as the AHT presentation indicated that some zones would reflect vegetation communities native to Ontario and the Great Lakes Zone. b) In the AHT presentation some of the plants identified for planting to represent Ontario and the Great Lakes are not native to Ontario or Canada. Suggest removing these plants from these planting zones, or altering the description of what these zones are. c) Avoid the use of invasive plants, regardless of what zone they will be planted in: <ul style="list-style-type: none"> i. Black locust, Salix alba sp., osage orange, common caragana, wayfaring tree, sundial lupine, Miscanthus sp., and creeping thyme. ii. Note that speckled alder that has not hybridized with European alder is difficult to source. If a verified source cannot be found, suggest replacing it with a native plant, such as buttonbush and/or grey dogwood. iii. Most of the herbaceous plants listed are native. To make it a fulsome native list, suggest removing the non-native species (even if they aren't invasive): wild bleeding heart, autumn fern, white clover and great mullein d) Note that Kalm's St. John Wort is a shrub (currently listed as herbaceous). e) Note that TRCA has planted wild rice in the past but has not had it return in subsequent years. We speculate that this is because it is an annual plant, and the seeds get eaten by waterfowl leaving none to recolonize the area. f) Suggest replacing Princeton Red Maple with Freeman Maple. g) Consider adding: bush honeysuckle (Diervilla lonicera), ninebark (Physocarpus opulifolius), grey dogwood (Cornus racemose), etc. 	
11	Wildlife and Biodiversity Planting Info	<ul style="list-style-type: none"> a) Will targeted wildlife habitat be included in the site restoration? Songbird boxes are likely to only attract invasive species (house sparrows and European starlings), however a well-managed purple-martin house could be successful and an attraction for visitors. 	

ITEM	DOCUMENT	TRCA COMMENTS (February 13, 2023)	PROPONENT RESPONSE (INSERT DATE)
		b) Bat boxes would also be a good addition to the site (free standing rocket boxes or attached to the sides of buildings). c) Buildings could be designed to accommodate barn swallow nesting in areas where people do not frequent (shelves/nesting cups under eaves). Be aware of the need to annually clean guano from the area and ensure they are situated away from entrances/exits.	