

Scarborough Waterfront Project - Environmental Assessment & Next Steps

Date: May 1, 2018

To: Executive Committee

From: Interim Chief Financial Officer and Chief Executive Officer, Toronto and Region Conservation Authority

Wards: 36, 43 and 44

SUMMARY

This report provides the results of the Scarborough Waterfront Project Environmental Assessment (EA) completed by the Toronto and Region Conservation Authority (TRCA), in partnership with the City of Toronto; and seeks Council authority for TRCA to submit the Scarborough Waterfront Project EA to the Ministry of the Environment and Climate Change (MOECC) for approval, in accordance with the requirements of the Ontario EA Act.

The Scarborough Waterfront Project EA was initiated to study the feasibility of creating a system of publicly accessible and safe greenspaces along the Lake Ontario shoreline, between Bluffer's Park and East Point Park which respects and protects the significant natural and cultural features of the Scarborough Bluffs (see Attachment 1).

The Scarborough Waterfront Project is an Individual EA pursuant to the EA Act and O.Reg 334. Through consultation with City of Toronto staff, a Terms of Reference for the Scarborough Waterfront Project Individual EA was developed for review and approval by MOECC. The Terms of Reference was approved by the MOECC on December 15, 2015. The resultant Draft EA was available for public and agency comment from August 17 to October 2 2017. TRCA is now seeking authorization to submit the final EA to MOECC for review and approval.

The Scarborough Waterfront Project is an opportunity to comprehensively plan for improvements to and management of this area of the Scarborough waterfront, given the pressures on the recreational use of the area, the limited access to and along the waterfront and risks to public safety, while also providing an opportunity to manage and, where possible, enhance habitat integrity. Some of these issues could be solved on a piecemeal or ad hoc basis through current or future City Divisional projects, but this would not permit a holistic and integrated solution and would likely result in inefficiencies. The Scarborough Waterfront Project is a City-wide Project that allows for

a coordinated approach across multiple City Divisions, in partnership with TRCA, to collaboratively manage these issues with an integrated solution.

The planned scope of this Project includes shoreline erosion control and shoreline treatments for habitat creation, infrastructure protection, water quality improvements as well as nature-based recreation and a multi-use trail for pedestrians and cyclists along an 11 km-long stretch of shoreline. Due to the size of the Project Study Area and long length of shoreline considered, the Project Study Area was divided into three shoreline Segments (West, Central and East) to facilitate the 'Alternative Methods' development and evaluation process. This allowed for the selection of Segment-based Preferred Alternatives, and ultimately an overall Preferred Alternative, that meet the Project Vision and Objectives.

Consultation was a core principle of the Scarborough Waterfront Project, with consultation activities initiated early in the process that engaged with a range of interested stakeholders through a variety of forums and avenues. In response to public, agency and stakeholder consultation, the Preferred Alternative was refined to reduce the overall footprint of the proposed shoreline protection, with further enhancements to the aquatic habitat; increase the length of sand shoreline maintained; and minimize the size of cobble required along the proposed cobble beaches.

This report provides preliminary costs based solely on the work completed through the EA process to complete each Segment to support discussions regarding the cost allocation to each Segment of work. This Project will follow a longer capital planning and approval process and further costing analysis to be undertaken through the detailed design will support development of a Class 3 cost estimate (i.e., based on 30 percent or greater design at stage gate 3). As the Preferred Alternative presented in the EA is at a conceptual level of detail, detailed design is required before Project costs can be refined further. Any cost figures used prior to the completion of this due diligence work are for the purposes of addressing the scope and magnitude of work to be undertaken.

The Chief Financial Officer and Chief Executive Officer, Toronto and Region Conservation Authority will report back to City Council on an updated cost estimate and a financing strategy according to funding eligibility as part of stage gate 3, after the final decision from the MOECC is received.

RECOMMENDATIONS

The Interim Chief Financial Officer and the Chief Executive Officer, Toronto and Region Conservation Authority recommend that:

1. City Council endorse the submission of the Scarborough Waterfront Project Environmental Assessment and Preferred Alternative to the Ministry of the Environment and Climate Change for formal review.
2. City Council authorize the Toronto and Region Conservation Authority to submit the Scarborough Waterfront Project Environmental Assessment to the Ministry of the

Environment and Climate Change, in accordance with the requirements of the Ontario Environmental Assessment Act.

3. City Council authorize the Toronto and Region Conservation Authority, in consultation with the City Manager to pursue eligible funding program opportunities from the provincial and federal government for the Scarborough Waterfront Project that would not compromise funding opportunities for other City Council identified infrastructure priorities.

4. Subject to a favourable decision from the Ministry of the Environment and Climate Change, City Council authorize the Toronto and Region Conservation Authority to advance to Stage 2 Work Plan, and request the Chief Financial Officer and Chief Executive Officer, Toronto and Region Conservation Authority to report to the Executive Committee with preliminary costing for Segment design and implementation.

5. City Council request that the cost estimates for the erosion control components, multi-use trail, and the waterfront access, along with any funding eligibility criteria be provided by Toronto and Region Conservation Authority as part of the completed stage-gate 3 class 3 costing and detailed design of each of the three Segments.

FINANCIAL IMPACT

There are no financial implications to the City to formally submit the EA to the MOECC.

The preliminary capital cost of Scarborough Waterfront Project is estimated to be \$170 million (including inflation), over a 12-year implementation period, including additional costs required for post-implementation reporting and monitoring. This represents approximate estimates for a high-level concept and assumes a TRCA implementation model consistent with the capital delivery of existing TRCA projects approved and funded by the City. This estimate is based on current material and equipment costs, and does not include financing costs, or the pricing of risk.

This Project will follow the Council-approved "stage gate" capital planning and approval process. The work undertaken to date confirms the conceptual feasibility of the Project (Stage 1). Subject to a favourable decision from the MOECC, TRCA staff will undertake the work required to establish preliminary design and costs associated with a second stage of the process. Detailed costs for each Segment of the Project that would identify the eligibility of funding sources, i.e. erosion control separate from waterfront access and environmental enhancements, is not yet available. Confirmation of these cost estimates requires the 30% detailed design to be completed at stage gate 3 in conjunction with relevant City Programs.

As part of the 2019 Budget process, TRCA will be submitting a request for funding of \$3.2 million over 2 years to complete the preliminary design and costing of the entire Project plus detailed design of the West Segment of the Project. While this request will be in advance of the MOECC decision, this work can begin in 2019 and is required in order to refine the cost estimates presented in the EA.

Once the various components of the West Segment are designed and refined cost estimates are assigned, City staff will review the eligible sources of funding that can be applied to the Project. Potential funding sources include appropriate provincial and federal funding, reserve and reserve funds, and other City sources.

Detailed infrastructure timing and funding will need to be prioritized against funded and unfunded City-wide capital projects and operating impacts, with consideration also being given to the City's financial and resource capacity to deliver additional infrastructure works. These considerations will inform and guide future Capital Budget and Operating Budget processes.

Ongoing operation and maintenance costs will be determined as the detailed design of each Segment of the Project is completed. Estimates of the ongoing annual costs for relevant City Divisions will be developed as part of the detailed design phase (stage gate 3).

DECISION HISTORY

At the Toronto and Region Conservation Authority's meeting, held on April 26, 2013, Resolution #A63/13 was approved as follows:

THAT the Authority request the City of Toronto to increase the TRCA annual capital budget contribution, beginning in 2014, by \$6 million dedicated to funding projects including the Scarborough Waterfront Trail, erosion control works, and land acquisition for source water protection.

<http://www.trca.on.ca/dotAsset/161179.pdf>

At its meeting on December 16, 2013, City Council adopted EX36.17 2014 Rate Supported Budgets - Toronto Water and 2015 Water and Wastewater Rates and Service Fees and authorized the inclusion of \$1.5 million for Environmental Assessment work on the Scarborough Waterfront Erosion Control and Access Plan with funding coming from the Toronto Water Capital Reserve.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX36.17>

At its meeting on June 10th, 2014, City Council adopted PW31.14 Co-ordinated Watercourse Management Plan the following recommendations:

2. City Council consider future funding for the Toronto and Region Conservation Authority Erosion Management Program in conjunction with the upcoming report by the Deputy City Manager and Chief Financial Officer, and the General Manager, Toronto Water to the Executive Committee on financing strategies to support Toronto Water's long-term Capital Plan; and

City Council requested the Toronto and Region Conservation Authority, with input from the General Managers of Toronto Water, Transportation Services and Parks, Forestry and Recreation, to report back prior to finalizing the Individual Environmental Assessment for the Scarborough Waterfront Access Plan [Scarborough Waterfront Project] with the cost of erosion control components identified separately from the trail and waterfront access components of the plan.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.PW31.14>

At its meeting on March 15, 2016, City Council adopted EX3.1 2015 Rate Supported Budgets - Toronto Water and 2015 Water and Wastewater Rates and Service Fees and requested that the General Manager, Toronto Water and the Deputy City Manager and Chief Financial Officer, in consultation with the General Manager, Parks, Forestry and Recreation and Chief Executive Officer, Toronto and Region Conservation Authority, to consider as part of the 2016 budget process, funding a further \$ 1.5 million for Scarborough Waterfront projects including the Scarborough Bluffs Waterfront Trail Environmental Assessment. The additional funding was included as part of the Toronto Water Council Approved 2016-2025 Capital Budget and Plan as requested <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.EX3.1>

At its meeting of July 12, 13, 14 and 15, 2016, City Council endorsed the Road Safety Plan (2017-2021) commonly referred to as the “Vision Zero Safety Plan” and endorsed in principle the countermeasures and enhanced Road Safety Plan identified within the supplementary report (July 11, 2016). The Plan addresses safety for the most vulnerable users of the City's transportation system—pedestrians, school children, older adults and cyclists. <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.PW14.1>

At its meeting on December 13, 2016, City Council adopted EX20.4 Federal Infrastructure Funding - Phase 1 and 2 confirming its priority projects for the Public Transit Infrastructure Fund, and authorized the Mayor and the City Manager to negotiate and enter into agreements and amendments as may be required with the Province of Ontario for the Public Transit Infrastructure Fund and the Clean Water Wastewater Fund substantially in accordance with the terms and conditions set out in Attachment 2 to the report (November 17, 2016) from the City Manager and the Deputy City Manager and Chief Financial Officer, and such additional terms and conditions satisfactory to them, and in a form acceptable to the City Solicitor. <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.EX20.4>

As part of the 2017 Budget Process, City Council requested that, once the Environmental Assessment for the Scarborough Waterfront Project is complete, the Chief Executive Officer of the Toronto and Region Conservation Authority, and the Chief Financial Officer with input from the appropriate City staff will review the elements and requirements according to funding eligibility prior to the 2018 Budget process. <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.EX22.2>

As part of the 2018 Budget process, City Council directed that the General Manager, Transportation Services, to work with Parks, Forestry and Recreation and the Toronto and Region Conservation Authority to assess the timing of the Brimley Road South path project as part of the 2018 Cycling Network Plan review and report back in time for the 2019 Budget process; and that the Chief Executive Officer of the Toronto and Region Conservation Authority, together with the General Managers of Toronto Water, Transportation, and Parks, Forestry and Recreation and the Chief Financial Officer, report back on the results of the Scarborough Waterfront Project Environmental Assessment in the first quarter of 2018 with the costs for erosion control components identified separately from the trail and waterfront access components of the plan; and

A review the elements and requirements of the Scarborough Waterfront Project according to funding eligibility, prior to the 2019 Budget process.
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.EX31.2>

COMMENTS

The Comments section of this report is structured as follows:

- **Section 1** describes the Project background, and the Vision and Objectives, including the preliminary concept and potential enhancements to the area as well as potential environmental, infrastructure and public realm benefits.
- **Section 2** describes the EA process, a summary of comments and findings.
- **Section 3** provides an overview of the project phasing and associated financing strategy to be undertaken to be able to identify the cost of erosion control components separately from the trail and waterfront access components of the plan as requested by Council in 2014
- **Section 4** addresses public safety and traffic management issues with the Scarborough Bluffs including the request by City Council to assess the timing of the Brimley Road South path project as part of the 2018 Cycling Network Plan review
- **Section 5** describes the proposed approach to begin the detailed design on the West Segment.

1.0 Project Overview

1.1 Project Background

TRCA has been implementing shoreline erosion protection and public access projects along the Scarborough Bluffs, on a section by section basis, as funding would allow, over the last 30 years. The historical 30-year TRCA program of shoreline protection through construction of slope toe (i.e., base of bluffs) erosion (Attachment 2) protection projects has provided for a limited amount of safe public access points to a potential trail system created by the toe protection structures. Large segments of the Scarborough Bluffs shoreline are in public ownership; however, there are a limited number of public access points (pedestrian or vehicular) to the water's edge between Bluffer's Park and East Point Park, and much of what is currently available is informal and at risk of slope failures (landslides).

The development of the Scarborough Waterfront Project Vision and Objectives (see Section 1.2 and 1.3) draws from the strategic direction provided by the Official Plan, TRCA policies, the Integrated Shoreline Management Plan (ISMP) and other guiding initiatives and documents.

Early in the Project's development, an access plan was proposed that would provide a system of linked scenic landscapes both along the top of the bluffs and at the water's

edge for the shoreline between Bluffer's Park and East Point Park. However, consultation specifically focused on the Project Vision and Objectives was undertaken as part of the development of the Terms of Reference (i.e., the preliminary document that sets out how the EA will be completed), and this feedback helped refine them. Through this process, the Project's Vision and Objectives were refined to recognize the surrounding community's vision and take into consideration the need for increased public safety at the water's edge, protection and enhancement of the natural environment, and consistency and coordination with surrounding projects and initiatives.

As such, the Project's Vision was expanded beyond improved public access, in order to create a system of green spaces along the Lake Ontario shoreline which respect and protect the significant natural and cultural features of the Bluffs, enhance the terrestrial and aquatic habitat, and provide a safe and enjoyable waterfront experience.

Through the EA and the community consultation process, the Project became formally known as the Scarborough Waterfront Project.

1.1.1 Waterfront Integration

There is a long history of progressive and evolutionary planning for the Toronto Waterfront. The "Waterfront Plan for the Metropolitan Toronto Planning Area" (1967) introduced a shoreline management approach to limit shoreline erosion while creating a number of large parkland areas and public boat basins connected by a Waterfront Trail system. In 1970, TRCA was designated by the Province as the lead implementing agency for the Etobicoke to Ajax shoreline, with the exception of the central harbour sector, and led the creation of waterfront plans and programs based on an integrated shoreline management approach. In 1992, the Royal Commission on the Future of the Toronto Waterfront (Royal Commission) released its final report entitled "Regeneration: Toronto's Waterfront and the Sustainable City," which outlined the lack of a coordinated, ecosystem approach to shoreline regeneration. The Royal Commission recommended that a shoreline regeneration plan be prepared to protect and regenerate the Lake Ontario shoreline from the City of Burlington in the west to the community of Newcastle in the east.

To implement this recommendation, the Ontario Government established the Waterfront Regeneration Trust (WRT) in June of 1992. To fulfill its mandate, the WRT initiated the creation of a Shoreline Management Strategy for the Lake Ontario shoreline from Burlington Bay to the Trent River. The Shoreline Management Strategy became a component of the overall "Lake Ontario Greenway Strategy" released by the WRT in May 1995.

The "Lake Ontario Greenway Strategy" recommended that Integrated Shoreline Management Plans (ISMPs) be developed to provide a framework for future development and management of the Lake Ontario shoreline. Based on the traditional shoreline hazard management activities undertaken by Conservation Authorities, in accordance with Ontario Regulation 166/06, ISMPs were intended to be more comprehensive in their scope, providing a coordinated ecosystem-based approach, addressing the need to limit high rates of erosion, while enabling safe public access, and the creation of regional scale parkland and waterfront recreation opportunities.

Additionally, the City of Toronto Official Plan recognizes that over time, lands along the water's edge should become part of a network of publicly accessible open spaces offering a range of leisure activities connected by a contiguous Waterfront Trail. However, there is currently no continuous trail providing access along the waterfront through the Scarborough Waterfront Project Area, as the Waterfront Trail that exists is located inland and away from the shoreline and mainly along residential streets and some major arterials (Kingston Road).

Therefore, the Scarborough Waterfront Project is being planned using a rational comprehensive planning approach to resolve the access, safety and habitat integrity issues between Bluffer's Park and East Point Park in an integrated manner, while also contributing the continuation of the Waterfront Trail along the water's edge as recommended in past planning initiatives.

1.2 Vision

The Scarborough Waterfront Project aims to create a system of green spaces along the Lake Ontario shoreline between Bluffer's Park and East Point Park which respect and protect the significant natural and cultural features of the Bluffs, enhance the terrestrial and aquatic habitat, and provide a safe and enjoyable waterfront experience.

This section of the Scarborough waterfront has been the subject of many studies seeking to understand stressors on the ecosystem, public access issues, and the nature of public safety and property risks posed by shoreline erosion. While the Scarborough Bluffs are an iconic feature of the Lake Ontario shoreline, due to limited public access and existing public safety hazards, the water's edge along this section of the waterfront is not formally accessible to the public. Ultimately, the Scarborough Waterfront Project has the potential to provide formal public access along a currently inaccessible area of the Scarborough waterfront between Bluffer's Park and East Point Park, while comprehensively addressing the risks to public safety and public property and enhancing the natural heritage system.

Attachment 3 provides the TRCA Scarborough Project Summary along with illustrations of the West, Central and East Segments.

1.3 Objectives

The Objectives of Scarborough Waterfront Project are set out as follows:

- Protect and enhance terrestrial and aquatic natural heritage features and linkages;
- Manage public safety and property risk;
- Provide an enjoyable waterfront experience;
- Consistency and coordination with other initiatives; and,
- Achieve value for cost.

The Project will fulfill the strategic recommendations of previous planning processes and City Council's direction to address the existing risk to public safety and public infrastructure due to erosion along the shoreline and provide for increased public space

while improving and enhancing the natural heritage system. It also supports and advances the City of Toronto Official Plan and TRCA's Living City Policies, which recognize the need to balance waterfront revitalization and public access, natural heritage and natural hazard protection and management.

Both the Official Plan and TRCA's Living City Policies can be viewed online at the following weblinks:

The Official Plan → <https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/official-plan/>

TRCA's Living City Policies → <https://trca.ca/planning-permits/living-city-policies/>

City of Toronto Official Plan recognizes that over time, lands along the water's edge should become part of a network of publicly accessible open spaces offering a range of leisure activities connected by a contiguous Waterfront Trail. Policies in the Official Plan support actions that will improve, preserve and enhance these lands by improving public access and enjoyment of lands under public ownership; maintaining and increasing public access to privately owned lands, where appropriate; and restoring, creating and protecting a variety of landscapes.

TRCA's Living City Policies recognize that public ownership of waterfront lands is a key means of managing natural hazards while providing accessible open space integrated with opportunities for public enjoyment, and aquatic and terrestrial enhancements. The TRCA's Living City Policies further supports the Official Plan framework described above, and lays out a strategic direction for "preventing, eliminating, or reducing the risk of flood and erosion hazards to life and property" and "promoting an integrated approach to revitalization of the waterfront" through "increased public access, recreational opportunities and continuous trail system"; while enhancing the terrestrial and aquatic natural habitats of the shoreline.

The EA explored opportunities for improved access to and along the shoreline between Bluffer's Park and East Point Park, while providing multiple benefits for public use, and improvements to public safety, shoreline erosion protection, and environmental sustainability. With a growing interest in the use of trails for recreation, exercise and active transportation, and the population increase projected for Toronto, there is a demand for an accessible continuous water's edge trail that reduces the hazard risk associated with bluff erosion.

Should the Project Study Area remain in its current state, there will be a series of long-term costs associated with emergency protection works required to prevent the loss of the tablelands and critical public infrastructure (e.g., the road north of Grey Abbey Park) within the timeframe of the Project, as well as to protect the public using the informal shoreline below from the risk of continued slope failures (landslides). In addition, the public will continue to access the waterfront inappropriately causing damage to fragile vegetation, increasing the risk of erosion, and potentially ending up in dangerous situations requiring the assistance of Emergency Services resources for rescue.

As such, the Project provides the opportunity for the long-term stabilization of the bluffs along this area of the waterfront, thereby minimizing erosion risk and increasing public safety in correspondence with regulated Ministry natural hazard policies and guidelines.

Implementation of the Project is expected to impact a number of City Divisions and agencies.

1.4 Preliminary Design and Concept

Overall the Scarborough Waterfront Project concept provides the following:

- Addresses the existing risk to public safety by providing continuous formal public access outside of the risk line, along the water's edge between Bluffer's Park and East Point;
- Facilitates improved Emergency Services access, enabling the required Emergency Services response time to be met along the shoreline;
- Formalizes long-term shoreline protection along areas of the shoreline currently protected by interim works (e.g., base of Doris McCarthy Trail / Bellamy Ravine and Guild Park and Gardens shoreline);
- Addresses the risk from erosion to Grey Abbey Park and the public infrastructure along Greyabbey Trail;
- Provides public access in the form of multi-use trails and parkland along the shoreline in sections where it is currently restricted by private property and critical infrastructure;
- Contributes to minor improvements in water quality by reusing flows from existing stormwater outfalls in the creation of backshore wet features;
- Delivers 17.6 ha of new naturalized habitat and enhancement of nearshore aquatic habitat along the shoreline;
- Provides a net benefit to the sensitive habitats at East Point Park by decommissioning approximately 8 km of informal trails, which are currently fragmenting the ecosystem and resulting in trampling and other impacts from unmanaged use;
- Addresses the ongoing need for annual dredging at the Bluffer's Park marina entrance, by reducing the sedimentation through the proposed headland expansion and thus, cutting increasing annual dredging costs; and
- Improves access to and along the shoreline for all abilities.

For more information on the Scarborough Waterfront Project:

<https://trca.ca/conservation/green-infrastructure/scarborough-waterfront-project/>

2.0 Environmental Assessment

2.1 Summary of EA Process

Several City Programs were integrated throughout EA planning for the Project with representatives included on a Technical Advisory Committee, an Agency Review Team, and on the Project Team. These City Programs include: Parks Forestry & Recreation, Transportation Services, Toronto Water, City Planning, the Waterfront Secretariat, Toronto Transit Commission (TTC), Toronto Fire Services, Toronto Police Services, Toronto Paramedic Services (EMS), Solid Waste Management, and Municipal Licensing & Standards. Moving forward, the relevant City Programs will continue to be integrated through the detailed design phase of the Project.

The EA for the Scarborough Waterfront Project was completed in two stages as required by the EA Act. Stage one included the completion and approval of a Terms of Reference. The purpose of the Terms of Reference was to describe how the EA should be carried out and to provide the public, agencies and Aboriginal communities with an opportunity to comment prior to proceeding with the study. TRCA completed the Terms of Reference and it was approved by the Minister of the Environment and Climate Change on December 15, 2015. Stage two of the Project included the completion of the EA and preparation of the EA Report in accordance with the approved Terms of Reference.

The study was undertaken in accordance with the Ontario EA Act (1990), as an objectives-based Individual EA, where the Project Vision and Objectives were established early in the planning process through extensive public and stakeholder consultation, and are used to structure the development and evaluation of Alternatives. The Scarborough Waterfront Project requires an Individual EA given both its complexity and its anticipated cost.

The consideration of 'Alternative Methods' for the Project was extensive. Due to the size of Project Study Area and long length of shoreline considered (11 km), the Project Study Area was divided into three shoreline Segments (West, Central and East) to help facilitate the 'Alternative Methods' development and evaluation process. This allowed for the selection of Segment-based Preferred Alternatives from a total of nine (9) Alternatives for West Segment, three (3) Alternatives for Central Segment and ten (10) Alternatives for East Segment, all of which included a 'Do Nothing' Alternative. Impacts to, or ability to enhance, the natural environment, mitigation of public risk, improvement to public access, consistency with other initiatives, and high-level estimated capital and operations/maintenance costs were all considered for every Alternative as part of the evaluation process when selecting the Preferred Alternative.

Ultimately, a Preferred Alternative was identified (i.e. the combination of the three Segment-based Preferred Alternatives), which best meets the Vision and Objectives (the 'Preferred Alternative') and subsequently refined through further public, agency and stakeholder consultation. It should be noted that the conceptual Preferred Alternative is designed with the greatest footprint or impact in mind, and it is anticipated that various features, such as shoreline erosion protection infill areas or tableland trail connections, may be scaled down in size/impact as part of the refinement process during detailed design.

Toronto Water provided funding of \$1.5 million in 2014 to begin the EA work and further funding of \$1.5 million was approved in 2016 to complete the EA.

2.2 Summary of Consultation

Consultation is an integral component of the EA process, and was a core principle of the Scarborough Waterfront Project. Consultation activities were initiated early in the process and engaged with a range of interested stakeholders through a variety of forums and avenues. A Stakeholder Committee, representing the various recreational users, interests, community groups, associations, and local residents from across the

Project Study Area, was established early in the process. The purpose of the Stakeholder Committee was to assist the Project Team in identifying and understanding potential opportunities and concerns, in order to consider them early in the process. A total of 12 Stakeholder Committee meetings were held, with four (4) as part of the ToR phase, and eight (8) as part of the EA phase.

In addition to the Stakeholder Committee, a total of five (5) Public Information Centres (PICs) were held, with two (2) as part of the ToR phase, and three (3) as part of the EA phase. PICs were held at key milestones to present information, and seek feedback from the broader public.

Further, many direct community engagement activities were undertaken, which included individual meetings with landowners, community associations and groups, interested stakeholders, as well as outreach at Bluffer's Park and East Point, organized events (including shoreline tours), and attendance at local community events.

A robust consultation program has been undertaken to date, and all comments and feedback received were considered and are documented as part of the EA.

2.3 Summary of Comments

The Project has received significant public interest, with 150+ participants at each of the Public Information Centres, and over 2,400 public comments received through 400+ submissions and the Public Information Centres. Comments received reflect a wide range of viewpoints, including a desire for a formal, continuous trail along the full length of the shoreline, a desire for no additional formal access along the waterfront, and support for the Refined Preferred Alternative as presented at the third PIC on June 28, 2017.

The draft EA submitted to the MOECC in mid-August 2017 for a 45-day public and agency review period. Comments received as part of the draft review period have informed the finalization of the EA Report.

There are proponents advocating for maintaining the existing sandy shoreline in its current state within East Segment, east of the Guild construction access route. This section of shoreline is a combination of publicly and privately owned lots that can only be accessed by crossing private property or by informal trail down the bluff face. The Scarborough Waterfront Project seeks to manage this inappropriate use such that those who wish to access the shoreline can do so in a safe way that minimizes damage to the sensitive ecosystem of the bluff face and is respectful of the local communities. In contrast, there are also proponents for a continuous, formal, trail along the full base of the bluffs. Both of these perspectives were considered in the range of Alternatives put forward early in the EA process, and were determined to not achieve the Vision and Objectives to the same extent as the Preferred Alternative.

Recently, concern regarding potential impacts to one of the identified surfing locations at Bluffer's Park has been received. The Project Team has committed to continuing to

engage with the surfing community, and other stakeholders, through the detailed design process once the City receives approval of the EA.

2.4 Overview of the Preferred Alternative

The Refined Preferred Alternative was identified as meeting the Project Vision and Objectives to the best extent. Overall, the Scarborough Waterfront Project results in improvements to aquatic and terrestrial habitat, improved public access to the water's edge, for which there will be engineered features to reduce the hazard risk associated with bluff erosion, a waterfront experience accessible to more people of all abilities, and a project compatible with local, regional and lake wide plans and policies related to the natural and human environment.

In response to public, agency, and stakeholder consultation, refinements were undertaken to the shoreline protection which reduced the overall footprint; further enhanced the aquatic habitat; increased the length of sand shoreline maintained; and minimized the size of cobble required along the proposed cobble beaches.

In order to maximize the extent of sandy shoreline left in its existing condition in the East Segment, a transition to the tablelands is proposed to the east side of Grey Abbey Ravine. This transition will be achieved through the use of a free-standing structure, such as a corkscrew ramp or staircase, to be explored further at detailed design. Moving the formal access from the shoreline in this area necessitates the need for private property tableland acquisition from the adjacent industrial facility. All potentially affected private property owners have been engaged during the EA process.

Representatives of the industrial facility in the vicinity of East Point Park have raised concern regarding the proximity of the industrial facility to the proposed trail, and have noted difficulties in making trail users safe in the event of an upset condition (e.g., a chemical release). Staff have reviewed this issue and feel that this concern can be addressed through detailed design of the trail in this location.

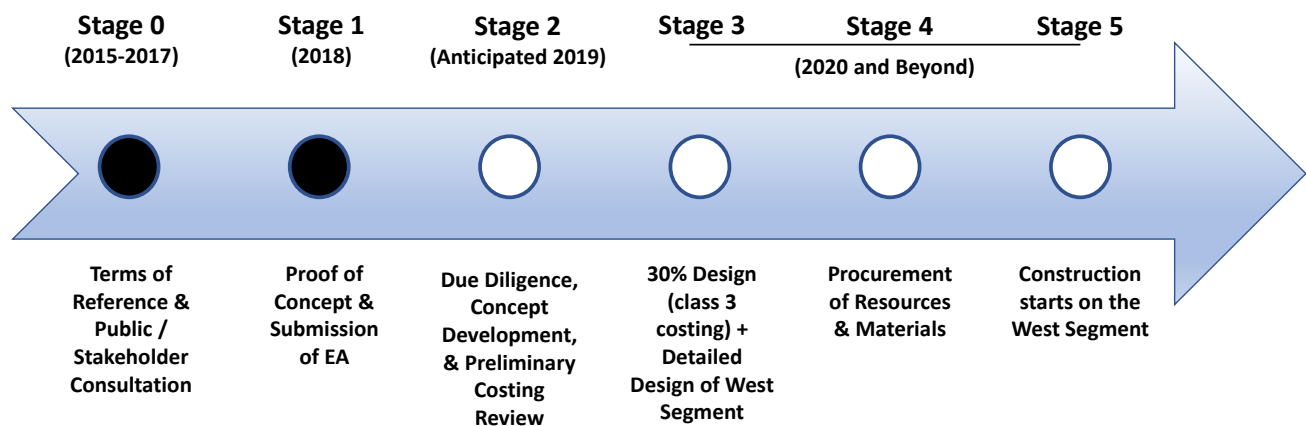
It should be noted that property acquisition discussions cannot be finalized until a positive decision from MOECC has been achieved. The Project Team will continue to engage with the private landowners throughout the detailed design and construction phases of the Project.

3.0 Phasing and Financial Strategy

3.1 Phasing of the Segments and Implementation Timeline

This Project is expected to be completed over a 12 year period and will advance through a "stage gate" capital planning and approval process, based on a 5 stage approach established for other major capital projects undertaken in the City. City Council would be provided with specific decision points related to project planning and commitments prior to proceeding with each project stage as follows:

Figure 1 - Stages for the Scarborough Waterfront Project



The work undertaken to date represents completion of the Project up to Stage 1 (2017/2018). This involved extensive public, agency and other stakeholder consultation and the completion and approval of a Terms of Reference, where the Project Vision and Objectives were developed and refined and the methodology for carrying out the EA was defined (Stage 0).

Following approval of the Terms of Reference of December 15, 2015, the Project advanced to Stage 1 through the completion of an EA study, which was documented within an EA Report. As part of this process, a series of 'Alternative Methods' for completing the Project were developed, and subsequently evaluated to select the Preferred Alternative. Public and agency consultation was an integral part of the EA process, which helped to shape development of the 'Alternative Methods', the evaluation process, and the selection and refinement of the Preferred Alternative. The Preferred Alternative concept was refined and high-level preliminary costing for the Project as a whole was developed, based on the conceptual level of detail presented in the EA. Following a public and agency review of the draft EA, the EA document has been finalized and is ready for submission to MOECC for formal review.

Once the decision from the MOECC is received, anticipated by mid-2019, TRCA will report back to City Council with preliminary costing for all Segments of work to meet stage 2 requirements. The stage 3 detailed costing for this project will move forward in three Segments -- West, Central, and East -- with implementation following the qualification and funding of each Segment.

Prior to a decision from MOECC, TRCA is expected to submit a request of \$3.2 million in the 2019 Budget process to fund the additional engineering analysis, technical studies and modeling, to develop detailed design and class 3 costing to advance the West Segment of this project to Stage 3 (2019).

Once West Segment detailed design and class 3 costing has been developed and Stage 3 achieved, conditional on Council approval, the first priority should be given to the Brimley Road South multi-use trail. This would include a more detailed level of design (i.e., at least a 30 percent level) and costing (Class 3), as although part of the

EA, it is expected to be delivered as a separate but coordinated project in conjunction with Transportation Services.

3.2 Preliminary Cost Estimates

As part of the 'Alternative Methods' evaluation process, all 22 Alternatives were costed to identify order of magnitude capital, operating, and maintenance costs, based on the conceptual level of detail available to allow for a relative comparison of costs to determine the Preferred Alternative. As the Preferred Alternative presented in the EA is still at a conceptual level, refined preliminary costing (stage 2) will be brought forward once the EA approval has been received followed by the start of the detailed design phase work for the West Segment in the latter part of 2019. Ongoing operating and maintenance costs will also be generated through the development of an operations and maintenance plan with relevant City divisions during the detailed design phase of work.

The total capital investment for the Scarborough Waterfront Project is estimated at approximately \$170 million, inclusive of property acquisitions and based on TRCA implementation. A total of \$8.4 million will be required to complete the detailed design of all three Segments. Although part of the \$170 million, it will be requested in segments to prepare stage 3 detailed design for each Segment. \$3.2 million of this will be requested as part of the 2019 Capital Budget process, in order to complete the detailed design work for the West Segment.

Given the conceptual level of detail considered in the EA, and annual inflation over the course of the Project, the estimated capital investment of \$170 million includes a substantial contingency of 50%. The total capital investment will continue to be refined during the detailed design process, as concepts are further advanced.

One fully implemented, future maintenance (renewal) requirements can be anticipated at approximately 25 year intervals maintain the proposed new shoreline works. As well, ongoing operating costs must be forecasted for post-implementation reporting and monitoring.

3.3 Sources of Funding

TRCA capital projects that are geographically located within the City of Toronto are fully funded by the City. Historically, the TRCA capital projects are funded from a combination of tax supported debt and the water rate.

The Scarborough Waterfront Project is included on the TRCA's list of capital unmet needs and is currently unfunded. Subject to the approval of the EA by the MOECC, TRCA will submit overall preliminary costs (Stage 2) and proceed to develop class 3 costing detailed design for the West Segment for consideration at stage gate 3 for that Segment. Stage gate 3 detailed design costing will proceed for the Central and East Segments will proceed following implementation of the West Segment.

City staff will explore all potential funding sources that can be applied, as each Segment moves forward, based on the components of work to be delivered and associated funding eligibility criteria. Appropriate sources of funding will be explored for the components of each Segment of the Project. These include critical lakefront erosion mitigation, the development of trails, parkland and public spaces, restoration of wildlife and aquatic habitat and public safety including both vehicular and bike access. The following capital financing options will be considered:

- Third-party financing including Provincial and Federal Grants
- Funding from reserves including the Public Realm Reserve, and Parkland Development Reserve
- Other development related sources as appropriate
- Water rate funding, where appropriate
- Debenture financing

The City Manager's Office, in consultation with Financial Planning is coordinating the City's application process for Phase 2 federal infrastructure funding. The Scarborough Waterfront Project may be eligible for provincial and federal infrastructure funding subject to program details and the application intake process being finalized in consultation with intergovernmental partners. City Council identified its priorities for Phase 2 federal funding in December 2016 through the report EX20.4 Federal Infrastructure Funding- Phase 1 and 2. As details on federal and provincial funding become available, a coordinated approach to the submission process will be implemented to ensure that appropriate intergovernmental funding programs are leveraged and funding for City Council identified infrastructure priorities is not compromised.

TRCA will also explore fundraising opportunities with the Living City Foundation and private sector partners.

A strategy for implementation of the Project will be developed with the advancement of the Stage 3 detailed design work and will take into consideration the development of the City's future 10-year Capital Plans, in the context of the City's overall capital strategy. The timeline for implementing the three Segments of the Scarborough Waterfront Project is based on affordability and financial capacity, including the projected funding sources available. Detailed implementation timelines and financing sources will be considered in the overall context of City Capital and Operating Plans and priorities.

4.0 Public Safety & Traffic Management Issues

4.1 Public Safety

Access along the water's edge through much of the Project Study Area is informal and at risk of slope failures (landslides), with the existing informal shoreline routes predominantly situated within the risk line. The shoreline is also characterized by steep bluffs which create challenging access to the water's edge. While approximately 90% of the water's edge within the Project Study Area is publicly owned, there are few formal public access points to the shoreline through most of the length of the Project Study

Area, and those that exist are constrained by steep grades, erosion hazards and/or vehicular traffic. Existing access points are heavily used at peak periods and informal, at risk access points are regularly used. As a result, many informal trails down to the shoreline exist, which not only negatively impact sensitive bluff vegetation communities, but also pose a risk to users who can become trapped requiring rescue by EMS. Additionally, continuous access along the shoreline is not possible at various times throughout the year when lake levels rise, reaching the toe of the bluffs below Cudia Park in the West Segment, and along the unprotected sand shoreline through the East Segment.

Within the East Segment where no shoreline erosion protection exists (just east of Morna Avenue), Greyabbey Trail (e.g., road and associated infrastructure) would be at risk from erosion within the planning timeframe of the Project (approximately 60 years). This evaluation of risk was determined through the calculation of the erosion hazard limit (i.e., 100-year risk), in correspondence with the regulated Ministry of Natural Resources and Forestry's Understanding Natural Hazards policies and guidelines. Should no shoreline erosion protection be implemented, the bluff would continue to erode and tablelands, including eventually the road, would be slowly lost through ongoing crest migration.

It has been shown that Torontonians are shifting towards informal and individualized activities, with a growing interest in the use of trails for recreation, exercise and active transportation. Given the projected population increase in Toronto, there is a demand for a continuous water's edge trail separated from the road system which will assist in managing the informal trails which are degrading sensitive ecosystems.

4.2 Brimley Road South Multi-Use Trail

A multi-use trail along Brimley Road South would improve the safety of pedestrians and cyclists who currently access Bluffer's Park along a narrow roadway with a steep grade. Council has directed staff to assess the timing of the Brimley Road South multi-use trail project as part of the Cycling Network Plan update, which is anticipated to be reported to Council in early 2019.

As the Brimley Road South trail is included within the larger Scarborough Waterfront Project, this component cannot proceed until after the Scarborough Waterfront Project EA approvals have been received. The Cycling Network Plan update will review opportunities to include this project within the Transportation Services Capital Program, subject to the approval of the Scarborough Waterfront Project EA, approval of stage 3 detailed design, and capital coordination opportunities.

Completion of this component of the EA would address concerns with pedestrian and cyclist safety that currently exist along Brimley Road South, in alignment with the goals and objectives detailed in the Vision Zero Road Safety Plan. As road safety for pedestrians and cyclists is a key priority for the City, the first efforts of the Scarborough Waterfront Project would be to start design and construction on the Brimley Road South multi-use trail project to provide safe access down to Bluffer's Park.

5.0 Detailed Design for West Segment

Once MOECC approval has been received, during 2019, TRCA will report to the City with preliminary overall costing for the entire Project for stage 2 stage gating review. As part of the 2019 Budget process, TRCA will be submitting a request for funding of \$3.2 million over 2 years to complete the detailed design (stage 3, class 3 costing) of the West Segment of the Project. While this request will be in advance of the MOECC decision, this work can proceed in 2019 and is required in order to refine the cost estimates presented in the EA.

This work will include detailed design through additional engineering and technical analysis, as well as and construction phasing and costing for the following components: the proposed expanded headlands at Bluffer's Park and Meadowcliffe, the expansion of Bluffer's Park Beach, and a multi-use trail through the Segment, including improvements to Brimley Road South and construction of a separated multi-use trail along the east side of Brimley, south of Barkdene Hills to Bluffer's Park. Given the necessity to improve pedestrian and cyclist safety along Brimley Road, the Brimley Road South multi-use trail work will be a first priority in the West Segment detailed design process.

Next Steps

Should the recommendation to submit the EA be approved by City Council in May 2018, the final Scarborough Waterfront Project EA submission to MOECC is anticipated in mid-June 2018. MOECC's review and final decision may take up to 12-15 months.

Once a decision by the MOECC has been received, TRCA will report back to Council with preliminary costing for all three Segments of the Project for stage gate 2 approval. Following that step, and assuming funds are approved in the 2019 Capital Budget process, the detailed design work for the West Segment will then proceed in late 2019 and early 2020. Approval of the class 3 (stage gate 3) West Segment detailed design will provide the basis for the development of the detailed funding and time line for execution of that Segment.

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ATTACHMENTS

Attachment 1 - Project Study Area map
Attachment 2 - Shoreline erosion diagram
Attachment 3 - TRCA Scarborough Waterfront Project Summary, including Segment maps