Flood Mitigation and Damage Repair Update for Toronto's Waterfront and Toronto Island Park - Supplementary Report

Date: October 28, 2019
To: City Council
From: General Manager, Parks, Forestry and Recreation
Wards: Ward 3, 4, 10, 14, 19, 20, 24 and 25

SUMMARY

This report responds to the Infrastructure and Environment Committee’s recommendation to report directly to City Council on initiating a Class Environmental Assessment for Remedial Flood and Erosion Control (Class EA) in order to advance the next steps associated with the initiation of prioritized long-term flood mitigation alternatives on Toronto Island Park (TIP).

This report also provides an update on projects related to Toronto Island Park (TIP) flood mitigation and damage repair, both short and long term, either funded, scheduled or underway.

RECOMMENDATIONS

That this report be received for information.

FINANCIAL IMPACT

The 10-Year Capital Plan for Parks, Forestry and Recreation (PFR) includes the High Lake Effect and Windstorm Impacts capital project with Council approved project cost and cash flow funding totalling $28.267 million, funded by debt, to address the high priority rehabilitation and repair work to waterfront parks. Of the $28.267 million, $5.490 million has been allocated to projects on TIP while the remaining $22.777 million has been allocated to parks across Toronto's waterfront from Etobicoke to Scarborough.
Table 1 below provides an update on projects related to TIP flood mitigation and damage repair, both short and long term, either funded, scheduled or underway.

**Table 1: Update on projects related to Toronto Island Park**

<table>
<thead>
<tr>
<th>Capital Work Required</th>
<th>Status</th>
<th>Cash Flow Funding Requirements ($000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2018</td>
</tr>
<tr>
<td>Waterfront High Lake Effect Flooding</td>
<td>Completed (TIP Project and installation of sump pits and pumps)</td>
<td>443</td>
</tr>
<tr>
<td>Ward's Island beach curb</td>
<td>Currently underway</td>
<td></td>
</tr>
<tr>
<td>Ward's Island berm</td>
<td>Currently underway</td>
<td></td>
</tr>
<tr>
<td>Centreville erosion control</td>
<td>In planning phase</td>
<td>100</td>
</tr>
<tr>
<td>Paradise Restaurant</td>
<td>In planning phase</td>
<td>50</td>
</tr>
<tr>
<td>Island Park Grandstand Building</td>
<td>In planning phase</td>
<td>50</td>
</tr>
<tr>
<td>Trails and Pathways</td>
<td>Re-allocated to fund Class EA</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total Funding</strong></td>
<td></td>
<td>590</td>
</tr>
</tbody>
</table>
Since 2018, $0.590 million in required Capital Work was completed, including the installation of twelve sump pits and pumps, repairs to Centre Island Park Washroom and the Toronto Islands Flood Characterization and Risk Assessment Project (the "Project"). This Project is described in more detail in the Infrastructure and Environment Committee Report from the General Manager of PFR (IE8.5) that is also before Council. Rehabilitation and repair work at Ward's Island is currently underway while work at Centreville, Island Park Paradise restaurant and Island Park Grandstand Building is in the planning phase. Work on Trails and Pathways throughout TIP has not as yet started.

To implement the Toronto Islands Flood Characterization and Risk Assessment Project, a Class Environmental Assessment for Remedial Flood and Erosion Control (Class EA) is required. It will proceed in two phases, including i) Emergency Road Works and ii) Flood and Erosion Mitigation Works.

Both the initiation of the Class EA and the Emergency Road Works have been identified as immediate priorities. City staff have identified cash flow funding in the amount of $0.500 million for the Class EA through the reallocation of funds from the Trails and Pathways project to the Class Environmental Assessment for Remedial Flood and Erosion Control Projects. This reallocation reflects the urgency to undertake the Class EA and will result in a zero budget and debt impact to PFR's 10-Year Capital Plan.

As the detailed design for the Emergency Road Work progresses and more accurate costing is determined, funding will be reallocated from currently funded capital projects in the 10 Year Capital Plan for PFR based on project prioritization.

The cost of Flood and Erosion Mitigation works will be identified through the Class EA approval and the development of detailed designs. These will be submitted for consideration in future capital budget submissions.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

City Council, at its meeting of July 4, 5, 6 and 7, 2017, directed the General Manager, Parks, Forestry and Recreation to report to the Executive Committee in the third quarter of 2018 with a comprehensive inventory of all capital costs associated with the Spring flooding of 2017, including repair of existing infrastructure and mitigation strategies. http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.CC31.4

At its meeting of January 31 and February 1, 2018, City Council directed the General Manager, Parks, Forestry and Recreation to submit outstanding short term Capital repair and mitigation projects and longer term capital projects, arising from high lake levels, for priority consideration in the 2019 Capital Budget process. http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.EX30.7
City Council, at its meeting of February 12, 2018, adopted the 2018 Capital Budget for Parks, Forestry and Recreation through item EX31.2 (20 a.i.) and a total project cost and 2018 cash flow of $2.000 million for the Waterfront High Lake Effect Flooding Rehab sub-project.

Executive Committee, at its meeting of July 17, 2018, received the report Capital Repair and Remediation Cost of 2017 Flooding of Waterfront Parks.

At its meeting of March 7, 2019, City Council adopted PF&R's 2019 Capital Budget through item EX2.5 (199.a.i.), including $24.706 million for the 2018 Windstorm Damage and 2017 High Lake Effect Flooding sub-projects.

City Council, at its meeting of June 18 and 19, 2019, directed the General Manager, Parks, Forestry and Recreation to report to the Infrastructure and Environment Committee in September 2019 through Member Motion MM8.9 with respect to protecting Toronto Island Park, long-term flooding mitigation and Adaptation.

At its meeting of June 18 and 19, 2019, City Council authorized the City Manager to apply for federal funding under the Disaster Mitigation and Adaptation Fund for approved City Council capital projects that meet the funding eligibility criteria; granted approval to receive the funds; and for the Mayor to enter into and execute any agreements with the Government of Canada as required.

At its meeting of October 17, 2019, the Infrastructure and Environment Committee directed the General Manager, Parks, Forestry and Recreation, in consultation with TRCA to report to City Council on October 29, 2019 with respect to an outline of next steps and timelines associated with the long-term flood mitigation alternatives, including required Class Environmental Assessment for Remedial Flood and Erosion Control as well as an update on projects related to mitigation and damage repair both short and long term for Toronto Island Park.

**COMMENTS**

In response to continually rising Lake Ontario water levels, TRCA in collaboration with the City of Toronto undertook the Toronto Islands Flood Characterization and Risk Assessment Project (the "Project"). The Project consisted of the following four major components: i) Flood Characterization Report, ii) Flood Risk Assessment Report, iii) Flood Mapping, and iv) Flood Mitigation Alternatives Report.

Supplementary Report - Update to Flood Mitigation and Damage Repair
To implement the Project, a Class Environmental Assessment for Remedial Flood and Erosion Control (Class EA) led by TRCA is required. To inform the Class EA, TRCA and PFR staff are in the process of initiating a third party estimate that will factor in the 2019 flood event and additional study, planning and design-related costs.

The Class EA will have two critical phases, including i) Emergency Road Works and ii) Flood and Erosion Mitigation Works.

**Emergency Road Works**

Emergency road works on Toronto Island Park, which include elevating arterial roads along critical sections of TIP are required to ensure continued access for emergency service vehicles and access to essential island infrastructure. The design for this work is targeted for summer 2020.

**Flood and Erosion Mitigation Works**

Flood and erosion mitigation works will be developed in accordance with the full Class EA process and updated to reflect 2019 high water levels, in addition to the design work for road elevation. Conceptual designs will be developed to protect low-lying residential areas, increase the crest elevation of shore protection structures, and direct surface drainage to existing sumps.

The proposed timeline for this work includes initiating the Class EA in early 2020 with final approval in early 2021. Following Class EA approval, detailed designs will be developed throughout 2021 followed by the permitting process in early 2022. Phased implementation of flood and erosion mitigation works are targeted to begin in summer 2022. Public and stakeholder consultation are an integral component of the Class EA work and will be built into the study process.

Parks, Forestry and Recreation is in the process of hiring a temporary Senior Project Coordinator to manage the capital work at Toronto Island Park as well as the work across Toronto's waterfront in coordination with TRCA. This position is included in the 10-Year Capital Plan for Parks, Forestry and Recreation, High Lake Effect and Windstorm Impacts capital project at a cost of $0.558 million over four years.
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SIGNATURE

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ATTACHMENTS