

Environmental Features Considered for the HtO Park Design

Date:	April 18, 2008
To:	Parks and Environment
From:	Brenda Librecz, General Manger, Parks, Forestry and Recreation
Wards:	Ward 20, Trinity-Spadina
Reference Number:	

SUMMARY

The purpose of this report is to provide background and outline the environmental initiatives that were considered in the design and implementation of HtO Park.

Financial Impact

There are no financial implications resulting from the adoption of this report.

The financial impacts of future environmental initiatives will be developed in context with the 2009 Capital Budget and 2010 – 2013 Capital Plan.

DECISION HISTORY

At its meeting on January 16, 2008, the Parks and Environment Committee considered a report from Parks, Forestry and Recreation, (Item PE 12.5), for a Purchase Order Amendment to Somerville Construction P.O. 6017578: HtO Park to cover additional project costs. The Committee recommended to City Council that authority be granted to amend the Purchase Order for an increase in value of \$81,042.33. Council adopted this recommendation at its meeting of January 29 & 30, 2008.

In addition, the Parks and Environment (P&E) Committee, under “Decision Advice and Other Information,” requested the General Manager, Parks, Forestry and Recreation (PF&R) to report

to the April 15, 2008 meeting of the P&E Committee on environmental features that may have been deleted from the HtO contract and strategies for including these features in future projects.

Link to the Decision Document:

<http://www.toronto.ca/legdocs/mmis/2008/pe/decisions/2008-01-16-pe12-dd.pdf>

ISSUE BACKGROUND

The HtO Park project was initiated in 2002 through a design competition and awarded to the HtO Design Team led by Janet Rosenberg and Associates in June 2003. The consultants' response to the Requests for Expressions of Interest discussed several design principles for the park, including various sustainability and environmental initiatives. The project design was vetted through the Harbourfront Steering Committee, led by the Deputy Mayor and comprised of representatives from the local community, members of the design community and City staff.

COMMENTS

Several 'Green Initiatives' were considered for the HtO Park design. The following environmental features were incorporated into the final build out of the park:

Fish Habitat:

Improvements have been made to the Peter Street Slip, to develop a larger, more diverse fish population, and to enhance recreation fishing. Improvements include contouring the lake bed to varying depths and adding materials and elements to provide habitat and nesting opportunities for fish. Approximate Cost: \$60,000.00.

Storm Water Retention:

Storm water runoff is collected and directed into buried infiltration galleries which store and release it into the soil through percolation. This process promotes healthier soil conditions. As a result of this innovative design, the park is not connected to the municipal storm sewer system so it doesn't produce an added load onto the sewer system. Approximate Cost: \$ 32,000.00.

Water Conservation:

The irrigation system at HtO Park uses lake water as the primary water source. Water is pumped directly from the lake to irrigate the park, thereby reducing the consumption of municipal water. Approximate Cost: \$ 25,000.00.

The following environmental features were considered at various stages of project design, but were not incorporated into the final build out of the park:

Constructed Wetland:

The Consultant team also investigated the concept of a constructed wetland to demonstrate a method for lake water purification. Also known as “bio-Remediation islands” and “lake restorers”, the constructed wetland concept consisted of a floating vessel containing colonies of wetland plants selected on the basis of their ability to purify lake water. Estimated Cost: \$ 260,000.00.

This environmental initiative was included in the Consultants’ RFP and in the project budget as a contingency cash allowance. However, adverse site conditions were experienced during the construction phase of the project that required additional demolition, removals, and reconstruction to complete the project. All of the contingency funds had to be reallocated to complete the primary project construction work; therefore, this element could not be implemented.

Photovoltaics and Wind Energy:

Two of the preliminary environmental design concepts that were proposed by the Consultant team during the design competition – photovoltaics (solar panels) and wind energy (wind turbines) to augment the park’s power supply - were not formally presented in their detailed scope of work at the Request for Proposal stage. Although the potential use of solar panels and wind turbines were explored early in the Design Development stage of the project, they were not included in the Consultants’ response to the Request for Proposal for the project, due to budget constraints. Therefore, no cost figures were provided by the consultant for these two environmental initiatives.

CONCLUSION

During the implementation of the project, numerous environmental initiatives were discussed at various stages. Some of these environmental initiatives were implemented in the project and are in place, including the creation of fish habitat, storm water infiltration, and using lake water as the primary source for park irrigation.

On a go-forward basis, PF&R Capital Projects staff will be incorporating “green” initiatives into all of our projects and will be including these associated costs in our 2009 Capital Budget submission and the 5 and 10 year Capital Budget Plan.

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SIGNATURE

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