



## STAFF REPORT INFORMATION ONLY

### Toronto Parking Authority- Multi-Year Plan for 'Greening' Surface Parking Lots

<b>Date:</b>	January 12, 2015
<b>To:</b>	Budget Committee
<b>From:</b>	President, Toronto Parking Authority
<b>Wards:</b>	All
<b>Reference Number:</b>	

#### SUMMARY

This report serves to outline the Toronto Parking Authority's multi-year plan to retrofit and apply the design guidelines outlined in the *Design Guidelines for 'Greening' Surface Parking Lots* ('Greening Guidelines'). The Toronto Parking Authority ('TPA' or 'the Authority') recognizes the need to incorporate environmentally responsible features in all of its parking facilities, adopting a less conventional approach when designing its surface carparks, where typically maximizing the numbers of parking spaces, maintenance and servicing efficiencies are priority considerations. This report will address the Authority's multi-year plan for 'greening', whereby the TPA will retrofit its existing and future surface parking lots.

The application of the Greening Guidelines at the Toronto Parking Authority will occur with:

- New Development/Acquisition of Surface Parking Lots and Garages
- Major Redevelopment Initiatives
- Retrofitting in conjunction with the Surface Carpark Repaving Program

The majority of existing surface parking lots will require retrofitting in conjunction with the Surface Carpark Repaving Program. TPA has identified about 130 carparks that need 'greening', that is, approximately 7 carparks per year in a 19 year time span between 2015 and 2033. TPA staff has determined that given its existing staff resources a maximum of 7 carparks per year can be retrofitted.

## RECOMMENDATIONS

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The President of the Toronto Parking Authority recommends that:

1. This report be received for information.

### Financial Impact

The following table outlines the expenditures required to retrofit TPA surface parking lots. As indicated, a total of \$1.9M for surface carpark rehabilitation and ‘greening’ is scheduled for 2015, for specifically 6 carparks as identified in the Capital Budget. An additional \$2M per year is planned for the period of 2016-2033. TPA Revenue will pay for the retrofitting of the surface parking lots.

Year	2015	2016-2033		TOTAL 2015-2033
		Per year	18 year period	
Surface Carpark Rehabilitation	\$1.14M	\$1.2M	\$21.6M	\$22.74M
<b>Greening</b>	<b>\$0.76M</b>	<b>\$0.80M</b>	<b>\$14.4M</b>	<b>\$15.16M</b>
<b>TOTAL</b>	<b>\$1.9M</b>	<b>\$2.0M</b>	<b>\$36.0M</b>	<b>\$37.9M</b>

The ‘greening’ premium for retrofitting a surface carpark is estimated at about 40%, although it can vary substantially by location. For 2015, the ‘greening’ premium is estimated at \$0.76M, and over the 2016-2033 life cycle, it is estimated to be \$14.4M of the total cost of \$36M. Overall, a \$15.16M ‘greening’ premium is estimated for the multi-year plan to apply the Greening Guidelines at TPA surface parking lots.

The capital costs in the table above are estimated in constant 2015 dollars. Also, there may be additional operational costs incurred in association with the maintenance of surface parking lots developed in accordance with the Greening Guidelines, however due to the uncertainty associated with these costs, the operating budget has not been adjusted to reflect these costs.

The Deputy City Manager & Chief Financial Officer has reviewed this report and agrees with the financial impact information.

## DECISION HISTORY

In November 2012, City Council approved the item EX25.11 “2013 Rate Supported Budgets- Toronto Parking Authority”, which included the following request: “City Council request the Toronto Parking Authority to develop a multi-year plan for retrofitting and achieving the Greening Guidelines for Surface Parking Lots at all Toronto Parking Authority lots.”

(<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.EX25.11>).

The aforementioned request by Toronto City Council, references *The Design Guidelines for ‘Greening’ Surface Parking Lots*, which were approved for public release by City Council in November 2007 (<http://www.toronto.ca/legdocs/mmis/2007/pg/reports/2007-11-01-pg10-cr.pdf>). The Greening Guidelines are now an approved specification referenced by the Toronto Green Standard.

At its Board Meeting of June 23, 2014, the TPA Board of Director’s approved Policy 6-4, *‘Greening’ Elements in Carparks*, in response to the November 2012 City Council request ([http://parking.greenp.com/documents/board\\_meetings/June%2023-14%20%281-3%29.pdf](http://parking.greenp.com/documents/board_meetings/June%2023-14%20%281-3%29.pdf)) .

## ISSUE BACKGROUND

In 2007, the Toronto Parking Authority participated in the development of the report, *The Design Guidelines for ‘Greening’ Surface Parking Lot*, with City Planning. ‘Greening’ a surface parking lot can include planting trees, providing good quality soil and generous landscaped areas, enhancing pedestrian and cycling infrastructure, managing stormwater on-site, reducing the urban heat island effect, and using sustainable materials and technologies. Minor updates to the Guidelines were adopted in January of 2013.

Prior to the establishment of the Guidelines, TPA’s existing practices incorporated many of the elements of the Guidelines, particularly regarding the use of energy efficient lighting, the retention of existing trees, and the inclusion of landscaped areas into its surface carparks. In addition, pedestrian comfort and safety have always been key components of TPA surface parking lot design.

TPA Policy 6-4, *‘Greening’ Elements in Carparks*, establishes a process for incorporating ‘greening’ practices, to the extent practical, when planning, developing and retrofitting carparks, as outlined in *The Design Guidelines for ‘Greening’ Surface Parking Lots* and the *Toronto Green Standards*, and any other best practices that may emerge from time to time, including elements that support and enhance the vibrancy and liveability of the communities in which the facilities are located.

## **COMMENTS**

The application of the practices outlined in the *Design Guidelines for 'Greening' Surface Parking Lots* is essential to achieving the policies of the the Official Plan, and the Toronto Parking Authority's priority of enhancing pedestrian safety and comfort, achieving higher quality landscaping and increased shade, improving on-site storm water management, increasing its use of sustainable material, and reducing the urban heat island effect. Through the identified points of integration as outlined in this report, that is, New Development/Acquisition of Surface Parking Lots, Major Redevelopment Initiatives, and Retrofitting in conjunction with the Repaving Program, the Toronto Parking Authority will retrofit and apply the Greening Guidelines on an ongoing basis to its parking facilities.

With the Toronto Parking Authority's Board of Director's approval of Policy 6-4, the Authority will review carparks already identified as a Capital Works project for 'greening' consideration on an ongoing annual basis, and will continue to do so for the remaining surface parking lots across the City of Toronto.

### **New Development/Acquisition of Surface Parking Lots and Garages, and Major Redevelopment Initiatives**

The TPA has and continues to be diligent in the quality and standards at all of its surface parking lots and garages. Any new developments, redevelopments of surface parking lots into garages and acquisition of already existing surface lots must adhere to TPA specifications. The *Design Guidelines for 'Greening' Surface Parking Lots* as well as the Toronto Green Standard are functional design requirements in the Toronto Parking Authority's *Outline Specifications for a Typical Proposed Surface Municipal Carpark* report.

Consideration for parking lot location & layout, lighting, and vehicle access and circulation are essential to the design of all surface parking lots at the Toronto Parking Authority. In addition to the standard design considerations, site-specific designs are incorporated on a case-by-case basis to the TPA's surface parking lots.

### **Retrofitting in conjunction with the Surface Carpark Repaving Program**

On an annual basis, the TPA undertakes its' Surface Carpark Repaving Program which identifies a number of surface carparks where pavement surfaces have reached the end of their lifecycle and need to be replaced. The Surface Carpark Repaving Program is undertaken during spring, summer and fall months across the City of Toronto.

Generally the Surface Carpark Paving Program consists of the following:

- Asphalt replacement
- Adjusting existing catchbasins and cleaning drainage pipes.
- Repainting of Carpark layout/ Surface line markings
- Replacement of landscape material/ Improving planter beds
- Replacement of board and bumper fences

- Replacement of interlocking bricks and base material for improved drainage
- Electrical service and lighting upgrade work.

The Surface Carpark Paving Program is the most cost and time effective means to retrofit and apply the design guidelines outlined in the report, *Design Guidelines for 'Greening' Surface Parking Lots* at its surface parking lots, as the Program already functions to identify the surface parking lots in need of improvement. The additional infrastructure needed to achieve the Greening Guidelines can be implemented into work already underway without requiring a separate tender and contracting process, and also minimizes disruption to the operation of the carpark.

A major retrofit to an existing surface carpark generally occurs on an approximate 20 to 25 year life cycle. This report sets out the practice required to ensure that the remaining TPA inventory of surface carparks are retrofitted to conform to the Greening Guidelines within a 19 year timeframe.

## **CONTACT**

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## **SIGNATURE**

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