

Future Capital Improvements to the Martin Goodman/Waterfront Trail to Facilitate Winter Maintenance

Date:	November 21, 2008
To:	Executive Committee
From:	General Manager, Transportation Services General Manager, Parks, Forestry and Recreation Division
Wards:	Wards 13, 14, 19, 20, 28, 30 and 32
Reference Number:	P:2008/ClusterB/tra/tim/ec08024tim

SUMMARY

The purpose of this report is to respond to a recommendation by the Parks and Environment Committee, at its meeting on November 19, 2008, requesting the General Managers of Transportation and Parks, Forestry and Recreation to report to the Executive Committee on November 25, 2008 on any future capital expenditures that may be necessary for clearing snow from the Martin Goodman Trail.

This report identifies the short-term measures required to facilitate the provision of winter maintenance on the section of the Martin Goodman Trail, between Windermere Avenue and Stadium Road, for the 2008/2009 winter season in order to provide cyclists convenient east-west access to and from the downtown core along this route. It also recommends that an audit be undertaken to identify what long-term measures will be required to facilitate the provision of winter maintenance for the entire Martin Goodman/Waterfront Trail on a long-term sustainable basis.

Adoption of this report and the 2008/09 pilot winter maintenance program for clearing the portion of the Martin Goodman Trail between Windermere Avenue and Stadium Road, will supersede the pilot bike route from the west area of the City to the downtown core utilizing sections of The Queensway and King Street West described in the October 29, 2008 staff report to Public Works and Infrastructure Committee. The pilot bike route

from the east, also proposed in the report, utilizing a section of the off-street pedestrian/bike trail parallel to Lake Shore Boulevard East from Northern Dancer Boulevard to Lower Sherbourne Street is not affected.

RECOMMENDATIONS

The Transportation Services Division and the Parks, Forestry and Recreation Division recommend that City Council:

1. Direct the General Manager, Transportation Services to provide winter maintenance on the Martin Goodman Trail, between Windermere Avenue and Stadium Road, as a pilot, for the 2008/2009 winter season and undertake whatever measures are necessary to facilitate these operations;
2. Direct the General Manager, Transportation Services to undertake, in consultation with the General Manager, Parks, Forestry and Recreation, an audit in 2009, at a cost of approximately \$75,000.00, to determine the capital improvements necessary to facilitate the provision of winter maintenance of the entire Martin Goodman/Waterfront Trail on a long-term sustainable basis; and
3. Direct the General Manager, Transportation Services, in consultation with the General Manager, Parks, Forestry and Recreation, to report back to the Public Works and Infrastructure Committee, upon completion of the audit referred to in Recommendation No. 2 above, on the capital improvements necessary to facilitate the provision of winter maintenance of the entire Martin Goodman/Waterfront Trail on a long-term sustainable basis and the financial implications of undertaking these capital improvements.

Financial Impact

It is estimated that the pilot winter maintenance program to provide winter maintenance of the Martin Goodman Trail, between Windermere Avenue and Stadium Road, for the 2008/2009 winter season will cost in the order of \$150,000.00. This would have to be absorbed in the Transportation Services Recommended 2009 Operating Budget.

The funds required to undertake an audit, at a cost of approximately \$75,000.00, to determine the capital improvements necessary to facilitate the provision of winter maintenance of the entire Martin Goodman/Waterfront Trail on a long-term sustainable basis, are provided within the Transportation Services Recommended 2009 Capital Budget in the Cycling Infrastructure Account. It may be necessary, however, to defer some elements of the cycling infrastructure program in 2009 in order to accommodate this audit.

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

DECISION HISTORY

The Public Works and Infrastructure Committee, at its meeting of November 12, 2008, in considering the report from the General Manager, Transportation Services, titled “Confirmation of Levels of Service for Roadway and Roadside Winter Maintenance Services” (PW20.10) recommended that City Council confirm the current levels of service for winter maintenance, which does not include winter maintenance of off-street bicycle paths such as the Martin Goodman Trail. The report did, however, detail a plan to provide winter maintenance for two pilot cycling routes, one from the east and one from the west into the downtown core that, for the first time, would encompass a small section of off-street bike trail.

The Parks and Environment Committee, at its meeting of November 19, 2008, in considering the report from the General Manager, Parks, Forestry and Recreation, titled “Winter Snow Removal on the Martin Goodman Trail” (PE20.5) directed the General Manager, Transportation Services and General Manager, Parks Forestry and Recreation to report to the November 25, 2008 meeting of the Executive Committee on any future capital expenditures that may be necessary for clearing snow from the Martin Goodman Trail.

These two reports can be found at:

<http://www.toronto.ca/legdocs/mmis/2008/pw/decisions/2008-11-12-pw20-dd.pdf>

<http://www.toronto.ca/legdocs/mmis/2008/pe/bgrd/backgroundfile-17294.pdf>

ISSUE BACKGROUND

The Martin Goodman Trail (MGT) is an east-west facility approximately 4 metres in width and 20 kilometres in length that was constructed as a paved path for seasonal use by pedestrians and cyclists generally along the waterfront. The issue of winter maintenance of the MGT has been examined in the past on several occasions by the Parks, Forestry and Recreation Division, which had jurisdiction over this facility. The two most recent reports dealing with this matter, referenced above, outlined the challenges and constraints related to the provision of winter maintenance of the MGT. These challenges include, among other things, the presence of bollards which preclude access to the trail by mechanical snow-clearing equipment. Furthermore, should measures be taken to facilitate access to the MGT for this snow-clearing equipment, the windrows created by ploughs could result in ponding and icing on the trail which would be hazardous to pedestrians and cyclists.

COMMENTS

With the adoption of the report to the Public Works and Infrastructure Committee noted above (PW20.10) Transportation Services has committed to a pilot project to undertake winter maintenance on the Martin Goodman/Waterfront Trail in the east end, from Northern Dancer Boulevard to Lower Sherbourne Street. This 5.6 km section of the trail has few physical constraints for the snow clearing equipment. At the west limit of this section, cyclists can use the on-street bicycle lanes on Queens Quay East or on Lower Sherbourne Street. There are, however, several physical constraints along west section of the Martin Goodman/Waterfront Trail which make the provision of winter maintenance more challenging.

To address the challenges with respect to the westerly section of the MGT, measures can be implemented both in the short-term and in the long-term to facilitate the provision of winter maintenance of the MGT as described below:

Short Term Measures

It is recommended that short-term measures be implemented only along the section of the MGT between Windermere Avenue and Stadium Road to facilitate the provision of winter maintenance. This section of the MGT, approximately 6.3 km in length, will provide convenient access between the western areas of the city and the central area. Pedestrians and cyclists would be able to safely cross Lake Shore Boulevard West at its signalized intersection with Windermere Avenue to/from the neighbourhoods immediately to the north. At the east limit of the westerly section, cyclists can use the on-street bicycle lanes on Queens Quay West which extend easterly from Stadium Road. In order to provide winter maintenance on this section of the MGT, the following measures are required:

Bollards

There are currently 16 sets of bollards at 8 locations along this section of the MGT. These bollards were installed to prevent motor vehicles from accessing the MGT from abutting driveways and parking facilities. These bollards also encourage cyclists to slow down before crossing the driveways or entering the parking facilities. In each set there are typically 3 bollards aligned in a row spaced approximately 1.5m apart. It will only be necessary to cut and remove the centre bollard in order to provide access to the MGT by sidewalk ploughs, which are approximately 1.3m wide. The stubs left by the bollard would have to be ground so that they do not present a hazard to pedestrians, cyclists, and snow plough operators. In the Spring, these bollards would have to be welded back into place to again prevent access to the MGT by motor vehicles.

Warning Signs

It is more difficult to maintain clear dry pavement on a bicycle lane or path than it is on a roadway. On a roadway, motor vehicles assist in spreading salt and breaking down ice and snow after ploughing operations. Bicycles, due to their narrow tires, light weight and relatively lower volumes, do not have the same effect of breaking down ice and snow. Therefore, despite enhanced winter maintenance, the bicycle paths will be susceptible to ice patches due to the freeze/thaw cycles. Therefore, it is recommended that warning signs be erected along the portions of the MGT that will be cleared during the 2008/09 winter season advising users of the MGT of potentially hazardous conditions.

Lighting

The sections of the trail which are immediately adjacent to Lake Shore Boulevard West benefit from ambient street lighting, however, other sections do not have adequate lighting for night-time use. Given that the early evening commute times are generally dark during the winter months, the lighting should be improved if the trail is intended for year-round use by bicycle commuters. It is not practical or feasible at this time to install pedestrian-scale lighting along the length of the section of the MGT that will be cleared of snow during the 2008/09 winter season. However, it may be necessary to install temporary flashing warning lights on the bollards that remain in place to warn cyclists and snow plough operators of these obstructions.

Delineation

Portions of the MGT, particularly in the section between Ellis Avenue and Colborne Lodge Drive, do not follow a straight alignment. As a result, in snowy conditions, it will be extremely difficult for the snow plough operators to know precisely the location and alignment of the MGT. It will be necessary, therefore, to delineate the limits of the MGT through these sections using flags, deflectors or other demarcation to assist snow plough drivers in their operations. Transportation Services staff will consider alternatives and install the appropriate measures accordingly.

Funds required for the removal of bollards (and their reinstallation in the Spring) and the installation of the necessary warning signage, temporary warning lights and delineation as short-term measures to facilitate the provision of winter maintenance of the MGT between Windermere Avenue and Stadium Road, can be accommodated in the Transportation Services Recommended 2009 Operating Budget.

Funds required for the provision of the winter maintenance of this section of the MGT for the 2008/2009 winter season only, are estimated to be approximately \$150,000.00. This includes the application of a de-icing agent immediately following the ploughing operations which is necessary to minimize the potential formation of ice patches caused as a result of the ponding problems. It is noted that standard road salt would be ineffective in this situation, and a more costly and environmentally-sensitive de-icing material will have to be deployed. These products and operations represent a service

level enhancement to the Division's existing winter maintenance services and practices. Nevertheless, the maintenance of this section of the MGT will be given high priority for de-icing and for ploughing after significant snowfalls.

Long-Term Measures

The above-noted measures are not practical or sustainable over a long period. Instead, capital improvements to the MGT and the Waterfront Trail will be necessary, not only in the section between Windermere Avenue and Stadium Road but along its entire length, to facilitate cost-effective and efficient winter maintenance operations. In order to determine the nature and extent of these capital improvements to the Martin Goodman/Waterfront Trail it is recommended that an audit be undertaken to identify deficiencies, mitigating measures, changes to the trail design and alignment, lighting and other enhancements, etc. and the associated costs. This audit should include, but not be limited to, the following:

- Replacement of the existing bollards with, possibly, a collapsible bollard system or, alternatively, development of appropriate intersection treatments or enhancements, where the trail crosses driveways and parking areas, in order to reduce the need for bollards.
- Installation of permanent warning signage, lighting and delineation.
- Reconstruction of the cross-section to improve drainage and minimize the amount of ponding.
- Reconstruction of the pavement structure to support heavy equipment on a long-term ongoing basis.
- Determination of an appropriate de-icing agent to minimize the environmental impact on the abutting parkland, natural areas and the lake.

The funds required to undertake this audit, at a cost of approximately \$75,000.00, are provided within the Transportation Services Recommended 2009 Capital Budget in the Cycling Infrastructure Account. It may be necessary, however, to defer some elements of the cycling infrastructure program in 2009 in order to accommodate this audit.

Staff of the two Divisions will report back on the findings of this audit and the financial implications of implementing any recommended capital improvements.

It should be noted that improvements to the MGT through the western beaches area are being considered as part of the Western Beaches Master Plan currently being undertaken by the Waterfront Secretariat. The report outlining the findings of the audit will reflect the findings and conclusions of this Master Planning exercise.

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