Traffic Control Signals – Dufferin Street and Rosemount Avenue

Date: November 30, 2017
To: Etobicoke York Community Council
From: Director, Transportation Services, Etobicoke York District
Wards: Ward 17 – Davenport

SUMMARY

The purpose of this report is to obtain approval for the installation of a traffic control signal at the intersection of Dufferin Street and Rosemount Avenue.

The installation of traffic control signals is technically justified and will enhance safety for pedestrians and motorists at the intersection. However, the installation may increase delays for northbound and southbound motorists, as these movements will no longer operate with free flow.

As the Toronto Transit Commission (TTC) operates bus service on Dufferin Street, City Council approval of this report is required. TTC has been advised on the matter.

RECOMMENDATIONS

The Director, Transportation Services, Etobicoke York District recommends that:

1. City Council approve the installation of traffic control signals at the intersection of Dufferin Street and Rosemount Avenue.

FINANCIAL IMPACT

The estimated cost for the installation of traffic control signals at Dufferin Street and Rosemount Avenue is $180,000.00. Potential removal of existing hedges and retaining walls that are on the city's right-of-way may result in added costs. These funds are included within the Transportation Services 2018 Operating Budget subject to the availability of funding and competing priorities.
DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services staff received a request from the Ward Councillor, on behalf of an area resident, to assess the safety of the intersection for both pedestrians and motorists on Dufferin Street and Rosemount Avenue and to investigate the feasibility of installing a traffic control signals at this location. A map of the area is shown on Attachment 1.

According to the City of Toronto’s road classification system, Dufferin Street, between Davenport Road and St. Clair Avenue West is classified as a ‘Major Arterial’ roadway. Dufferin Street has a four lane cross section, with a 12.8 metres wide road width and has a 50 km/h speed limit. Sidewalks exist on both sides of the road. Rosemount Avenue, between Dufferin Street and Greenlaw Avenue is a 7.3 metre wide road that operates one-way westbound, with sidewalks on both sides of the street, with a speed limit of 40 km/h. Rosemount Avenue, between Dufferin Street and Oakwood Avenue is an 8.5 metre wide two-lane roadway, with sidewalks on both sides of the street and a speed limit of 30 km/h with traffic calming (speed humps). Rosemount Avenue is designated in the City’s Road Classification System as a "Local" road. Traffic control signals exist at Dufferin Street and Auburn Avenue approximately 90 metres south of the subject location and at Dufferin Street and St. Clair Avenue West, approximately 175 metres north of the subject location.

The Toronto Transit Commission (TTC) operates transit service on Dufferin Street with bus stops currently located at the intersection of Dufferin Street and Ashburn Avenue, 90 metres south of the subject location.

Traffic counts were undertaken at Dufferin Street and Rosemount Avenue in June 2017. Based on the eight-hour vehicular and pedestrian traffic count, and the collision history, the technical justification for the installation of traffic control signals are satisfied to the following extent:
<table>
<thead>
<tr>
<th>Warrant</th>
<th>Actual Hourly Average (A)</th>
<th>Minimum Required (B)</th>
<th>Warrant % (A/B)</th>
<th>Criteria 1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warrant 1: Minimum Vehicular Volume Warrant (8 Hrs)</td>
<td>55</td>
<td>170</td>
<td>32%</td>
<td>100%</td>
<td>&gt;80%</td>
<td>NOT MET</td>
</tr>
<tr>
<td>Warrant 2: Delay to Cross Traffic Warrant (8 Hrs)</td>
<td>106</td>
<td>75</td>
<td>100%</td>
<td>100%</td>
<td>&gt;80%</td>
<td>*MET</td>
</tr>
<tr>
<td>Warrant 3: Collision Hazard Warrant (3 Years)</td>
<td>17</td>
<td>15</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>*MET</td>
</tr>
</tbody>
</table>

*In order to meet the warrants, 100 percent compliance is required in one of the three warrants or a minimum of 80 percent in both of the first two warrants. The Collision Hazard warrant is based on the number of collisions susceptible to correction by the installation of traffic control signals and must be 100 percent satisfied.

Based on the above review, Transportation Services recommends the installation of the traffic control signals at the intersection of Dufferin Street and Rosemount Avenue. This installation is technically justified and will enhance safety for pedestrians and motorists at the intersection.

With the installation of traffic signal poles, handwells and ducts, this will require the removal of some or all of the hedges and retaining walls located at the properties on the southwest and southeast corners. The retaining walls and hedges are located on the City's right-of-way and the installation will affect the properties current landscaping.

The installation of traffic control signals may result in increased delays for traffic on Dufferin Street since the north-south traffic will no longer operate free flow. However, to mitigate delays along Dufferin Street, the proposed traffic control signals will be semi-actuated and will only change from a green on Dufferin Street when a vehicle or a
A pedestrian is waiting to cross from Rosemount Avenue. Pedestrians and vehicles arriving from Rosemount Avenue will experience a reasonable amount of waiting time to receive their green displays as the traffic controls signals will not respond immediately due to main street coordination. When developing the proposed signal timings, the need for coordination with the signals at Dufferin Street and Ashburn Avenue, as well as any signal priority features, will be reviewed to mitigate these potential delays.

The Ward Councillor is aware and supports the recommendation in this staff report.

CONTACT

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SIGNATURE

Steven T. Kodama, P.Eng.  
Director, Transportation Services - Etobicoke York District

ATTACHMENTS

1. Location Plan - Dufferin Street and Rosemount Avenue