REPORT FOR ACTION

All-Way Stop Control - Sorauren Avenue and Grenadier Road

Date: May 2, 2017
To: Toronto and East York Community Council
From: Acting Director, Transportation Services, Toronto and East York District
Wards: Ward 14, Parkdale-High Park

SUMMARY

This staff report is about a matter that Community Council has delegated authority to make a final decision, provided that it is not amended so that it varies with City policy or by-laws.

Transportation Services is requesting approval to install an all-way stop control at the intersection of Sorauren Avenue and Grenadier Road to enhance safety for pedestrians, cyclists and motorists using this intersection. The installation of the all-way stop sign control at this intersection is technically warranted and will enhance operational safety at this intersection.

RECOMMENDATIONS

The Acting Director, Transportation Services, Toronto and East York District recommends that:

1. Toronto and East York Community Council authorize an all-way stop control at the intersection of Sorauren Avenue and Grenadier Road.

FINANCIAL IMPACT

All costs associated with the necessary signage installation are included within the Transportation Services 2017 Operating Budget.

DECISION HISTORY

This report addresses a new initiative.
Transportation Services was requested by Councillor Gord Perk's office to investigate and report on the feasibility of installing a pedestrian crossing protection device including an all-way stop control at the intersection of Sorauren Avenue and Grenadier Road to enhance safety for all road users at this intersection.

Existing Conditions
Sorauren Avenue is a collector, two-way roadway with a daily traffic volume of about 5,000 vehicles and a posted speed limit of 40 km/h north of Grenadier Road and 30 km/h south of Grenadier Road, as speed humps are installed. It has a width of 7.3 metres. No transit service is provided along Sorauren Avenue.

Grenadier Road is a local roadway that intersects the west side of Sorauren Avenue in a “T-type” intersection. It has a stop sign control at Sorauren Avenue. It operates one-way in the eastbound direction, between Lynd Avenue and Sorauren Avenue. It has a daily traffic volume of about 1,800 vehicles, a posted speed limit of 30 km/h and a width of 7.3 metres. No transit service is provided along this roadway.

The nearest pedestrian crossing facility on Sorauren Avenue is located about 140 metres to the north at Dundas Street West.

Analysis
Transportation Services evaluated the intersection of Sorauren Avenue and Grenadier Road against the all-way stop sign control warrants approved by City Council. It applied the results of the vehicle and pedestrian study and the collision records of the Toronto Police Service to the all-way stop control criteria. Based on the review, this intersection met the minimum criteria required for all-way stop control.

Transportation Services also evaluated the feasibility of the installation of pedestrian crossover (PXO) and/or traffic control signals at this intersection. Based on the eight-hour vehicular and pedestrian traffic counts and the collision history, the technical justifications for the installation of traffic control signals or a PXO were not satisfied at this intersection.

In order for an all-way stop control to be justified at an intersection, established warrant criteria must be satisfied. The criteria, as adopted by City Council, include such factors as collision history, total vehicle volume, combined vehicle and pedestrian volumes crossing the major road and ratio of the percentage of traffic on the major and minor roads.

A review of the Toronto Police Service collision records over a three-year period ending December 31, 2016 revealed that five collisions had occurred at this intersection. None of them involved a pedestrian or a cyclist. Further review disclosed that none of collision could be considered to be potentially preventable by the installation of traffic control signals or all-way stop sign control.
The results of the all-way stop control warrant study at the intersection of Sorauren Avenue and Grenadier Road has been summarized in the following table:

<table>
<thead>
<tr>
<th>Total Approach Vehicle Volume (Each of Four Peak Hours)</th>
<th>Combined Crossing Volume (Vehicles &amp; Pedestrians)</th>
<th>Main Street/Side-Street Volume Split</th>
<th>Collision Hazard</th>
<th>All-Way Stop Warrants Satisfied (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required: 375 Vehicles/Hour</td>
<td>Required: 150 Units/Hour</td>
<td>(≤70%/30%)</td>
<td>(≥2/yr.)</td>
<td></td>
</tr>
<tr>
<td>Actual: 478 Vehicles/Hour (Warrant met)</td>
<td>Actual: 194 Units/Hour (Warrant met)</td>
<td>64% / 36%</td>
<td>0.00</td>
<td>(Warrant not met)</td>
</tr>
</tbody>
</table>

Based on the above review, the technical warrants for the installation of all-way stop control at the intersection of Sorauren Avenue and Grenadier Road are satisfied and the installation of an all-way stop control at this intersection is supported.

Councillor Gord Perks has been advised of the recommendation of this staff report.

CONTACT

Ann S. Khan, P. Eng.
Manager, Traffic Operations
Toronto and East York District
Transportation Services
Telephone: (416) 397-5021
Fax: (416) 392-1920
E-mail: Ann.Khan@toronto.ca

SIGNATURE

Dave Twaddle, C.E.T.
Acting Director, Transportation Services
Toronto and East York District

ATTACHMENTS

1. Drawing No. 421G-2504, dated May 2017
SORAUREN AVE AND GRENADIER RD: PROPOSED ALL-WAY STOP CONTROL

O.P.

DWG. NO. 421G-2504 MAY, 2017 TRANSPORTATION SERVICES TORONTO & EAST YORK DISTRICT