All-Way Stop Control –
Denton Avenue and Macey Avenue

Date: October 31, 2013
To: Scarborough Community Council
From: Director, Transportation Services, Scarborough District
Wards: Ward 35 – Scarborough Southwest
Reference Number: P:\2013\Cluster B\TRA\Scarborough\sc1380.docx
D13-5346643 - Denton Avenue and Macey Avenue

SUMMARY

This staff report is about a matter for which the Community Council has delegated authority from City Council to make a final decision.

This report responds to a request to review the feasibility of installing an All-Way Stop Control at the intersection of Denton Avenue at Macey Avenue. The report shows that this intersection meets the required technical warrant for this type of traffic control as per Council Policy.

RECOMMENDATIONS

Transportation Services recommends that Scarborough Community Council:

1. Approve the installation of an All-Way Stop Control on Denton Avenue and Macey Avenue.

2. Rescind the through streets regulation, as identified in Appendix 1 of this report.

3. Enact the compulsory stops and through street regulations, as identified in Appendix 2 of this report.

4. Pass or amend the appropriate by-law(s) accordingly.
Financial Impact
The financial cost of installing the two addition stop signs and associated pavement markings, crossing line and stop bars is approximately $900.00. The funding for these stop signs and markings is available in the Transportation Services 2013 Operating Budget, within Cost Centre TP0397.

ISSUE BACKGROUND
Further to a request from Councillor Michelle Berardinetti, Transportation services staff reviewed the feasibility of installing an All-Way Stop Control at the intersection of Denton Avenue and Macey Avenue. The intersection meets the required technical warrant for an All-Way Stop Control.

COMMENTS
The following characteristics describe the intersection of Denton Avenue and Macey Avenue and the surrounding area:

- This intersection is located east of Victoria Park Avenue, north of Danforth Avenue.
- Denton Avenue is a two-lane east-west collector road with a posted speed limit of 40 kilometres per hour, a daily traffic volume of approximately 4,728 vehicles per day. It has an 85th percentile speed of 54 km/h.
- Macey Avenue is a two-lane, north-south local road.
- It should be noted that 529 pedestrians were recorded crossing Denton Avenue at Macey Avenue in an eight-hour period on the day of our study.
- There are sidewalks on both side of Denton Avenue and on Macey Avenue.
- The land uses in this neighbourhood are single family residential homes and multi-level residential buildings.
- Denton Avenue has a regular revenue TTC route.

All-Way Stop Control Warrant Study
A traffic study conducted at the intersection of Denton Avenue and Macey Avenue during the morning and afternoon peak hours of a typical weekday (Thursday, June 20, 2013) produced the following results:

<table>
<thead>
<tr>
<th>All-Way Stop Control Warrant</th>
<th>A Total Approach Vehicle Volume</th>
<th>B Vehicle/Pedestrian Volume Crossing Major Road</th>
<th>C Unit Volume Split* Major/Minor Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four-Hour Study Period Average</td>
<td>477</td>
<td>126</td>
<td>77/23</td>
</tr>
<tr>
<td>Warrant Requirements For Study Period Average For Local Roads</td>
<td>≥ 375</td>
<td>≥ 150</td>
<td>≥ 30/70 or ≤ 70/30</td>
</tr>
</tbody>
</table>

* “Unit Volume Split”: Major Road Volume – Vehicles only.
  Minor Road Volume – Vehicles plus pedestrians crossing the major road.
For an All-Way Stop Control to be numerically justified, the traffic volume requirements for the “Study Period Average” must be completely satisfied in Categories A and C, or Categories B and C.

Although the vehicle volume split does not specifically meet the warrant, it is relatively close considering the relatively high total approach vehicle volume warrant (127% met). Therefore, the All-Way Stop Control is justified under engineering judgement.

A review of the collision records revealed that there were no collisions reported at this intersection during the five-year period ending December 31, 2012.

CONTACT

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SIGNATURE

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Peter J. Noehammer, P.Eng.
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FJB:pz

ATTACHMENTS

1. Location Plan (All-Way Stop Control-Denton Avenue and Macey Avenue)
Appendix 1

Regulation to be Rescinded
“Through Streets”

(From Column 1 Highway) (From Column 2)

Denton Avenue From West Limit of Patterson Avenue

East Limit of Victoria Park Avenue
Appendix 2

Regulations to be Enacted
“Through Streets”

<table>
<thead>
<tr>
<th>Column 1 Highway</th>
<th>Column 2 (From)</th>
<th>Column 2 (To)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denton Avenue</td>
<td>West Limit of Patterson Avenue</td>
<td>East Limit of Macey Avenue</td>
</tr>
</tbody>
</table>

“Compulsory Stops”

<table>
<thead>
<tr>
<th>Column 1 Intersection</th>
<th>Column 2 Stop Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denton Avenue and Macey</td>
<td>Denton Avenue</td>
</tr>
<tr>
<td>Avenue</td>
<td></td>
</tr>
<tr>
<td>Macey Avenue and Denton</td>
<td>Macey Avenue</td>
</tr>
<tr>
<td>Avenue</td>
<td></td>
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</tbody>
</table>