30 Km/h Speed Limit and All-Way Stop Sign Control -
Welland Avenue at Glenrose Avenue

Date: August 21, 2013
To: Toronto and East York Community Council
From: Director, Transportation Services, Toronto and East York District
Wards: Toronto Centre-Rosedale, Ward 27
Reference Number: Ts2013157te.top.doc

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

To address resident concerns on Welland Avenue, Transportation Services staff reviewed requests for a 30 km/h speed limit on Welland Avenue, between St. Clair Avenue East and Inglewood Drive, and for an all-way stop control at Welland Avenue and Glenrose Avenue.

RECOMMENDATIONS
Transportation Services recommends that the Toronto and East York Community Council:

1. Not enact a 30 km/h maximum speed limit on Welland Avenue, between St. Clair Avenue East and Inglewood Drive.

2. Not enact a northbound and southbound stop control on Welland Avenue at Glenrose Avenue.

Financial Impact
Adoption of the above recommendation will not result in any financial impacts.

ISSUE BACKGROUND
At the request of area residents, and in consultation with Councillor Kristyn Wong-Tam, Transportation Services staff has investigated the following:

30 Km/h Speed Limit and All-Way Stop –
Welland Avenue at Glenrose Avenue
- Reducing the speed limit to 30 km/h on Welland Avenue, between St. Clair Avenue East and Inglewood Drive; and

- Installing all-way stop control at Welland Avenue and Glenrose Avenue.

**COMMENTS**

Welland Avenue, between St. Clair Avenue East and Inglewood Drive, is classified as a collector roadway operating two-way, northbound and southbound, with a posted speed limit of 40 km/h and a pavement width of 8.5 metres. There is no TTC service on this section of Welland Avenue.

Glenrose Avenue is classified as a local roadway operating two-way, eastbound and westbound, with a posted speed limit of 40 km/h and a pavement width of 6.9 metres. Welland Avenue and Glenrose Avenue intersect to form a typical four-leg intersection. Right-of-way at the intersection is controlled by stop signs for eastbound and westbound traffic on Glenrose Avenue only.

Toronto Police Service collision records indicate that no collisions were reported on this section of Welland Avenue for a three-year period ending May 31, 2013 that may have been attributed to speeding. In addition, Toronto Police Service collision records indicate that no collisions were recorded at the intersection of Welland Avenue and Glenrose Avenue during the same time period.

**Welland Avenue - 30km/h Speed Limit**

Transportation Services staff considered a request for a 30 km/h speed limit on Welland Avenue, between St. Clair Avenue East and Inglewood Drive. In the City of Toronto, speed limits are not reduced below 40 km/h without the introduction of physical traffic calming measures. Introducing a 30 km/h speed limit alone would not be effective in reducing motorists' speeds. Speed studies on this section of Welland Avenue revealed an operating speed (the speed at which 85 per cent of the motorists travelled at or below) of 44 km/h.

Generally, motorists travel at speeds that they perceive to be safe. The factors that most affect motorists' speeds are related to the roadway geometry, such as pavement width and grades, and activity adjacent to the roadway such as on-street parking and sidewalks. In July 2002, City Council approved "Warrants for Implementing 40 km/h Speed Limit", which considers these factors.

When traffic calming measures, such as speed humps or pinch points, are introduced, the roadway geometry is permanently changed, making it uncomfortable or not possible to travel faster than 30 km/h. In these instances, a posted speed limit of 30 km/h is appropriate. With no physical changes to a local roadway, it is doubtful that signs for 30 km/h alone would have any impact on motorists' speeds.
Welland Avenue, between St. Clair Avenue East and Inglewood Drive, does not have any existing traffic calming measures. The current 40 km/h speed limit is the appropriate speed limit for Welland Avenue.

**Welland Avenue and Glenrose Avenue – All-way Stop Sign Control**

In order for all-way stop sign control to be justified at an intersection, established warrant criteria must be satisfied. The criteria, as adopted by City Council, include such factors as right-of-way conflicts, collision history, vehicular and pedestrian usage of the intersection.

Transportation Services evaluated this location and applied the results of the vehicle and pedestrian study and the collision records of the Toronto Police Service to the all-way stop sign criteria. The results are shown in the following table:

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Present Condition</th>
<th>Minimum Total Vehicle Volume (Each of 4 Peak Hrs)</th>
<th>Combined Crossing Volume (Vehicles &amp; Pedestrians)</th>
<th>Volume Split (= 70% /30%)</th>
<th>Collision Hazard (≥ 2/yr.)</th>
<th>All-way stop Warrants Satisfied (Yes/No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welland Avenue and Glenrose Avenue</td>
<td>Eastbound and Westbound stop signs on Glenrose Avenue</td>
<td>Required 375 Vehicles/hr</td>
<td>Required 150 Units/hr</td>
<td>72% / 28%</td>
<td>0</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Actual 229 Vehicles/hr</td>
<td>Actual 87 Units/hr</td>
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</tbody>
</table>

Based on the above-noted results this intersection does not satisfy the technical warrants as adopted by City Council for the installation of all-way stop control on Welland Avenue at Glenrose Avenue.

**CONTACT**
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**SIGNATURE**

Jacqueline White, P.Eng.  
Director, Transportation Services  
Toronto and East York District

**LIST OF ATTACHMENTS**
(1) Drawing No. 421G-1158, dated August 2013

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