

Road Alterations/Turn Restrictions: Sheppard Avenue West and Wilson Heights Boulevard

Date:	May 22, 2012
То:	North York Community Council
From:	Acting Director, Transportation Services, North York District
Wards:	Ward 10 – York Centre
Reference Number:	ny12060

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Sheppard Avenue West and Wilson Heights Boulevard, City Council approval of this report is required.

To obtain approval to reconfigure the intersection of Sheppard Avenue West and Wilson Heights Boulevard as follows:

- Reduce the existing curb radii on the northwest and southeast corners of the intersection;
- Undertake median cut back modifications on all four approaches to the intersection; and
- Extend the raised median on the west leg of Sheppard Avenue West, westerly to the west limit of the driveway to 901 Sheppard Avenue West.

In addition to the above, approval to amend the existing traffic by-laws is required to prohibit:

- Northbound left turns from the west driveway access at 901 Sheppard Avenue West; and
- Westbound left turns from Sheppard Avenue West to the west driveway access to 901 Sheppard Avenue

A Road Alteration By-law for the intersection modifications will also be required.

The proposed radii modifications and median cut backs at the intersection will reduce the pedestrian crossing distance at the intersections, and also eliminate the encroachment of the centre medians into the pedestrian crossing path. The introduction of the northbound and westbound left turn prohibition at the west driveway to 901 Sheppard Avenue West will address the conflict point that currently exists between inbound and outbound motorists at this driveway.

RECOMMENDATIONS

Transportation Services, North York District recommends that City Council:

- 1. Approve the installation of a westbound left turn prohibition on Sheppard Avenue West at the west driveway to 901 Sheppard Avenue West;
- 2. Approve the installation of a northbound left turn prohibition on Sheppard Avenue West at the west driveway to 901 Sheppard Avenue West; and
- 3. Approve this Division's request to direct the City's Legal Division to introduce the appropriate "Road Alteration By-Law" to permit the reconfiguration of the Sheppard Avenue West and Wilson Heights.

Financial Impact

All costs associated with the reconfiguration of the intersection of Sheppard Avenue West and Wilson Heights Boulevard, estimated at \$175,000, have been included as part of Transportation Services 2012 Capital Works Program, Transportation Safety and Local Improvements Program.

ISSUE BACKGROUND

Transportation Services, North York District, has reviewed a request from the Transportation Services, Urban Traffic Control Systems (UTCS), regarding undertaking intersection modifications on all corners and approaches to the intersection in order to improve the safety for pedestrians and improve traffic flow at the intersection of Sheppard Avenue West and Wilson Heights Boulevard.

It should also be noted that UTCS had installed Accessible Pedestrian Signals (APS) at this location in April of 2009 and a Red Light Camera on the northwest corner of the intersection of Sheppard Avenue West and Wilson Heights Boulevard for westbound motorists is also present. They have indicated that the existing curb radii are greater than required to facilitate turning movements.

COMMENTS

Sheppard Avenue West is a four-lane major arterial roadway with a posted speed limit of 60 km/h, a pavement width of approximately 15.6 metres and sidewalks on both sides. Wilson Heights Boulevard north of Sheppard Avenue West is a four-lane collector roadway with a regulatory speed limit of 50 km/h, a pavement width of approximately 16.2 metres and sidewalks on both sides. However, Wilson Heights Boulevard south of Sheppard Avenue West is a four-lane minor arterial roadway with a posted speed limit of 60 km/h, a pavement width of approximately 16.2 metres and sidewalks on both sides.

Accordingly, Staff has reviewed the intersection and has determined that there are several road design/geometrics issues/concerns that should be addressed in order to improve pedestrian and vehicular flow. The issues are as follows:

- Raised medians on all approaches protrude into the crosswalk, which can potentially be problematic for all pedestrians, particularly for those with a visual impairment;
- Curb radii on all approaches are larger than required resulting in longer crossing distances and potentially high speed right turns; and
- The raised median on the west leg of the intersection is to short, thereby facilitating westbound left turns into the Petro Canada Station/Tim Horton's site on the southwest corner of the intersection resulting in an increased potential for rear-end and sideswipe collisions.

In order to assess the operating characteristics and driver behaviour at the intersection of Sheppard Avenue West and Wilson Heights Boulevard, a review of the Toronto Police Services Collision Statistics for the period from November 30, 2006 until November 30, 2009 was undertaken. The results are summarized in the table below:

Sheppard Avenue west at wilson neights boulevard (intersection related)					
Collisions involving Pedestrians	Collisions Involving Vehicles Turning	Total Collisions			
1 cuesti ialis	1 ui ning				
2	14	51			

Sheppard Avenue West at Wilson Heights Boulevard (Intersection related)

Sheppard Avenue West, west of Wilson Heights Boulevard (Driveway Access)

WB left Turns/EB	WB Left Turns/WB	NB left Turns/EB	
Through	Through	Through	Total
(right-angle)	(rear-ends)	(right-angle)	
0	3	4	7

During the above-noted review period, there have been a total of 51 reported collisions at the intersection and 7 collisions at the driveway access. Of the total intersection related collisions, two have involved pedestrians crossing the intersection with turning traffic.

Therefore, in order to improve pedestrian safety, it is this Division's opinion that the current intersection be modified by undertaking various improvements such as the radii on the northwest and southeast corner of the intersection, cutback the medians on all the approaches, and relocate the pedestrian crossing areas (crosswalks), as outlined in the attached drawing NY-1592.

Given the above data, it would also be appropriate to extend the median on the west leg of the intersection thereby physically prohibiting westbound left turns and northbound left turns at the westerly driveway of the Petro Canada Station/Tim Horton's. Staff of Transportation Services had notified the Owner/Operator of the Petro Canada Station/Tim Horton's of our intentions in a letter dated September 28, 2008. It should be noted that the City has had no reply to its letter dated September 28, 2008 to the Owner/Operator of the Petro Canada Station with regards to our intention to extend the median westerly beyond the west limit of their driveway. Therefore, in our opinion as an interim measure and to mitigate any potential claims for injurious affection, turn restrictions be implemented in advance of the extension of the median being constructed later this year.

The Ward Councillor has been advised of the recommendations contained within this staff report.

CONTACT

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SIGNATURE

Pascoal D'Souza Acting Director

ATTACHMENTS

- Attachment 1: Map Sheppard Avenue West at Wilson Heights Boulevard: Road Alterations
- Attachment 2: Map Sheppard Avenue West at Wilson Heights Boulevard: NY-1592