TORONTO

REPORT FOR ACTION

All-Way Stop Control – Dufferin Street and Waterloo Avenue

Date: October 26, 2017

To: North York Community Council

From: Acting Director, Transportation Services, North York District

Wards: Ward 10 - York Centre

SUMMARY

This staff report is about a matter for which 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 North York Community Council to authorize the installation of all-way stop control at the intersection of Dufferin Street and Waterloo Avenue.

The installation of all-way stop control is warranted at this intersection and will enhance safety for all road users, including pedestrians destined to/from an adjacent secondary school.

RECOMMENDATIONS

The Acting Director, Transportation Services, North York District recommends that North York Community Council:

1. Authorize all-way compulsory stop control at the intersection of Dufferin Street and Waterloo Avenue.

FINANCIAL IMPACT

All costs associated with the installation of the all-way stop control at the intersection of Dufferin Street and Waterloo Avenue, estimated at \$800.00 are included within the Transportation Services 2017 Operating Budget. No new pedestrian ramps are required to be installed as part of the all-way stop control installation.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by Councillor James Pasternak, on behalf of local residents, to review the need for all-way stop control at the intersection of Dufferin Street and Waterloo Avenue.

Dufferin Street is a two-way local street that runs north/south, between Sheppard Avenue West and Clifton Avenue. It has a pavement width of 8.5 metres, a regulatory speed limit of 50 km/h and a daily two-way traffic volume of approximately 550 vehicles. Municipal sidewalks are provided on the east side of the road. There is no pedestrian crossing protection in this section of Dufferin Street and the entire length of the street operates with free-flow traffic. There is no TTC service provided on this section of Dufferin Street.

Waterloo Avenue is a two-way local street that runs east/west, between Dufferin Street and Bathurst Street. It intersects the east side of Dufferin Street in a stop controlled, 'T' type intersection. It has a regulatory speed limit of 50 km/h and there are municipal sidewalks provided on the south side of Waterloo Avenue.

This section of Dufferin Street is generally residential, although there are some significant pedestrian generators in the area, including the Downsview TTC station and William Lyon Mackenzie Collegiate Institute at the south end of the street and a mosque at the north end of the street.

A review of Toronto Police Service collision records for the three-year period ending June 30, 2017 revealed two collisions were reported at the intersection of Dufferin Street and Waterloo Avenue. Neither collision was of a type susceptible to correction by the installation of an all-way stop control or involved a pedestrian.

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

Transportation Services undertook studies during the weekday morning and evening peak periods at Dufferin Street and Waterloo Avenue on June 8, 2017 to assess the feasibility of installing all-way stop control. The studies disclosed that this installation was not justified, based on the relatively low pedestrian crossing volumes. However, Transportation Services were subsequently advised that the pedestrian volumes can be much higher during the weekday mid-day periods, due to the high percentage of secondary school students.

Accordingly, a follow-up vehicle and pedestrian study was undertaken at Dufferin Street and Waterloo Avenue on October 24, 2017 during the mid-day periods. Transportation Services applied the follow-up study findings, as well as the collision history, to the all-way stop control warrant criteria. The results are summarized below:

Table 1: All-Way Stop Control at Dufferin Street and Waterloo Avenue (October 24, 2017)

	Dufferin Street and Waterloo Avenue	Actual	Required	Satisfied (YES/NO)
Α	Collision History	0/3yrs	6/3yrs	NO
B1	Total Vehicle Volumes	63	250/avg hr	NO
B2	Combined Vehicle & Pedestrian Volumes	101	100/avg hr	YES
	Crossing Major Road			
В3	Percentage of traffic on major road	29	≤70	YES
	Overall Warrant			YES

In order for all-way stop control to be justified either Warrant A must be met or Warrants B1 or B2 combined with Warrant B3 must be met. Our study results indicate all-way stop control is justified as warrants B2 and B3 are satisfied.

It is noted that a greater percentage of traffic at this intersection was entering from the stop controlled side-street. Typically, the street with more traffic operates free flow and the lower volume street is stop controlled. The majority of the side-street traffic at this intersection is pedestrians crossing Dufferin Street.

It is acknowledged that there is no sidewalk provided or destinations on the west side of Dufferin Street, in the vicinity of Waterloo Avenue, that would require pedestrians to cross the street. The west side of the street generally consists of a treed boulevard that is adjacent to a large berm that provides separation from the William R. Allen Road.

Notwithstanding, observations have confirmed that many pedestrians, the majority of which are secondary school students, walk on the boulevard or on Dufferin Street as they travel to/from restaurants and other destinations on the northwest corner of William R. Allen Road and Rimrock Road. This area is accessed via a path on the west side of Dufferin Street, opposite at Combe Avenue. It is not clear why pedestrians choose to walk on the west side of the road when a sidewalk is available on the east side. The shade provided by the adjacent trees on the west side of the street, as well as the relatively low volumes of vehicular traffic of Dufferin Street, may be contributing factors.

Therefore, all-way stop control is recommended at Dufferin Street and Waterloo Avenue in view of the above-noted traffic distribution and to provide a centralized and protected crossing for pedestrians travelling to/from Downsview Subway, William Lyon Mackenzie Collegiate Institute and the mosque.

The Ward Councillor is aware of the recommendations of this staff report.

CONTACT

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SIGNATURE

Peter K. Hillier Acting Director

ATTACHMENTS

Attachment 1: Map - All-Way Stop Control: Dufferin Street and Waterloo Avenue