

Traffic Control Signals – Dundas Street West and Lisgar Street/Rusholme Road

Date: February 21, 2020
To: Toronto and East York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 9, Davenport

SUMMARY

As the Toronto Transit Commission (TTC) operates a transit service on Dundas Street West, City Council approval of this report is required.

Transportation Services is requesting authorization from City Council to replace the existing pedestrian crossover (PXO) at the intersection of Dundas Street West and Lisgar Street/Rusholme Road with traffic control signals. This is recommended based on safety criteria and will provide improved safety for pedestrians, cyclists and motorists at this intersection.

RECOMMENDATIONS

The Acting Director, Traffic Management, Transportation Services, recommends that:

1. City Council authorize the installation of traffic control signals at the intersection of Dundas Street West and Lisgar Street/Rusholme Road.
2. Subject to approval of and in conjunction with the installation of traffic control signals at Dundas Street West and Lisgar Street/Rusholme Road:
 - a. City Council authorize removal of the pedestrian crossover on Dundas Street West immediately east of Lisgar Street/Rusholme Road.
 - b. City Council prohibit parking at all times on the west side of Lisgar Street, between Dundas Street West and a point 15 metres south.
 - c. City Council prohibit parking at all times on both sides of Rusholme Road, between Dundas Street West and a point 15 metres north.

FINANCIAL IMPACT

The estimated cost of removing the PXO and installing traffic control signals at the intersection of Dundas Street West and Lisgar Street/Rusholme Road is \$200,000.00. This installation will be considered in 2021, subject to the availability of funding and competing priorities.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by Councillor Ana Bailão and local residents to investigate the feasibility of replacing the existing pedestrian crossover at the intersection of Dundas Street West and Lisgar Street/Rusholme Road with traffic control signals.

Existing Conditions

Dundas Street West, in the vicinity of Lisgar Street/Rusholme Road, is a minor arterial roadway, operates with two-way traffic on a pavement width of 12.8 metres, has a posted speed limit of 40 km/h and a daily two-way volume of about 20,000 vehicles. TTC service on this section of Dundas Street West is provided by the 505 Dundas route, with TTC stops located at the subject intersection. The 505 Dundas route is currently operated using buses, with regular streetcar service scheduled to resume in April 2020.

The intersecting roads are Rusholme Road north of Dundas Street West and Lisgar Street south of Dundas Street West. Both are classified as local roadways and generally operate one-way away from Dundas Street West, except the portion of Rusholme Road between Dundas Street West and the first lane north, which operates two-way. Both roads have a pavement width of 7.3 metres, a posted speed limit of 30 km/h and a daily traffic volume of about 1,000 vehicles.

There is currently a PXO on the east leg of the intersection of Dundas Street West and Lisgar Street/Rusholme Road. Adjacent traffic control signals are located approximately 165 metres to the east at Dovercourt Road and 245 metres to the west at Gladstone Avenue.

Collision Review

A review of the collision history for the three-year period ending September 30, 2019 did not find any collisions involving pedestrians at the intersection of Dundas Street West and Lisgar Street/Rusholme Road. Over the same time period, two collisions occurred that may have been preventable by the installation of traffic control signals.

Traffic Control Signal Review

In accordance with provincial standards, a system of justifications is used to determine whether existing vehicular and pedestrian volumes warrant installation of traffic control signals to reduce delays and/or collisions. Based on the eight-hour vehicular and pedestrian counts conducted at this intersection on May 8, 2019 and the collision history, the technical justifications for the installation of traffic control signals are satisfied to the following extent:

Justification 1: Minimum Vehicular Volume	1 percent
Justification 2: Delay to Cross Traffic	67 percent
Justification 3: Collision Hazard	13 percent

To meet the technical requirements for the installation of traffic control signals, one of the justifications must be 100 percent satisfied, or any two of the three justifications must be at least 80 percent satisfied. Based on the above results, the existing volumes and collision history do not warrant the installation of traffic controls signals at the intersection of Dundas Street West and Lisgar Street/Rusholme Road.

Pedestrian Safety Review

In addition to the traffic control signal justifications above, an audit was conducted to determine whether traffic control signals are warranted to improve pedestrian safety. While the collision review did not find any recent pedestrian collision at this intersection, other factors may indicate that safety should be improved at an intersection.

In particular, the width and volume of traffic on Dundas Street West, as well as presence of TTC stops and spacing to adjacent signals warrant the installation of traffic control signals to improve safety for pedestrians and other road users. A review of the environmental safety characteristics can be found in Appendix "A". As such, traffic control signals would be a more appropriate form of pedestrian crossing at the intersection of Dundas Street West and Lisgar Street/Rusholme Road.

Amendments to the parking regulations are required in conjunction with this traffic control signal installation. Parking will be prohibited within 30.5 metres of the intersection on Dundas Street West, and within 15 metres of the intersection on the minor streets. This will result in a loss of four pay-and-display spaces on Dundas Street West, which includes permanent loss of one space that was temporarily removed for the 505 Dundas bus operations. There will also be a loss of two permit parking spaces on Lisgar Street and one permit parking space on Rusholme Road. Based on the existing number of permit parking spaces and permits issued for the two streets, the impact will be minimal. The table below summarizes the permit parking situation:

Location	Existing spaces	Permits issued	Loss of spaces
Lisgar St, Dundas St W to Afton Ave Surrounding area (Area 3K)	33 spaces 1005 spaces	18 permits 799 permits	2 spaces lost
Rusholme Rd, Dundas St W to St Annes Rd Surrounding area (Area 3J)	17 spaces 412 spaces	7 permits 326 permits	1 space lost

The TTC has been consulted about this proposal, but as of this writing no response has been received.

Summary

Transportation Services recommends that the existing PXO at the intersection of Dundas Street West and Lisgar Street/Rusholme Road be replaced with traffic control signals to improve safety for all road users.

Councillor Ana Bailão has been advised of the recommendations of this staff report.

CONTACT

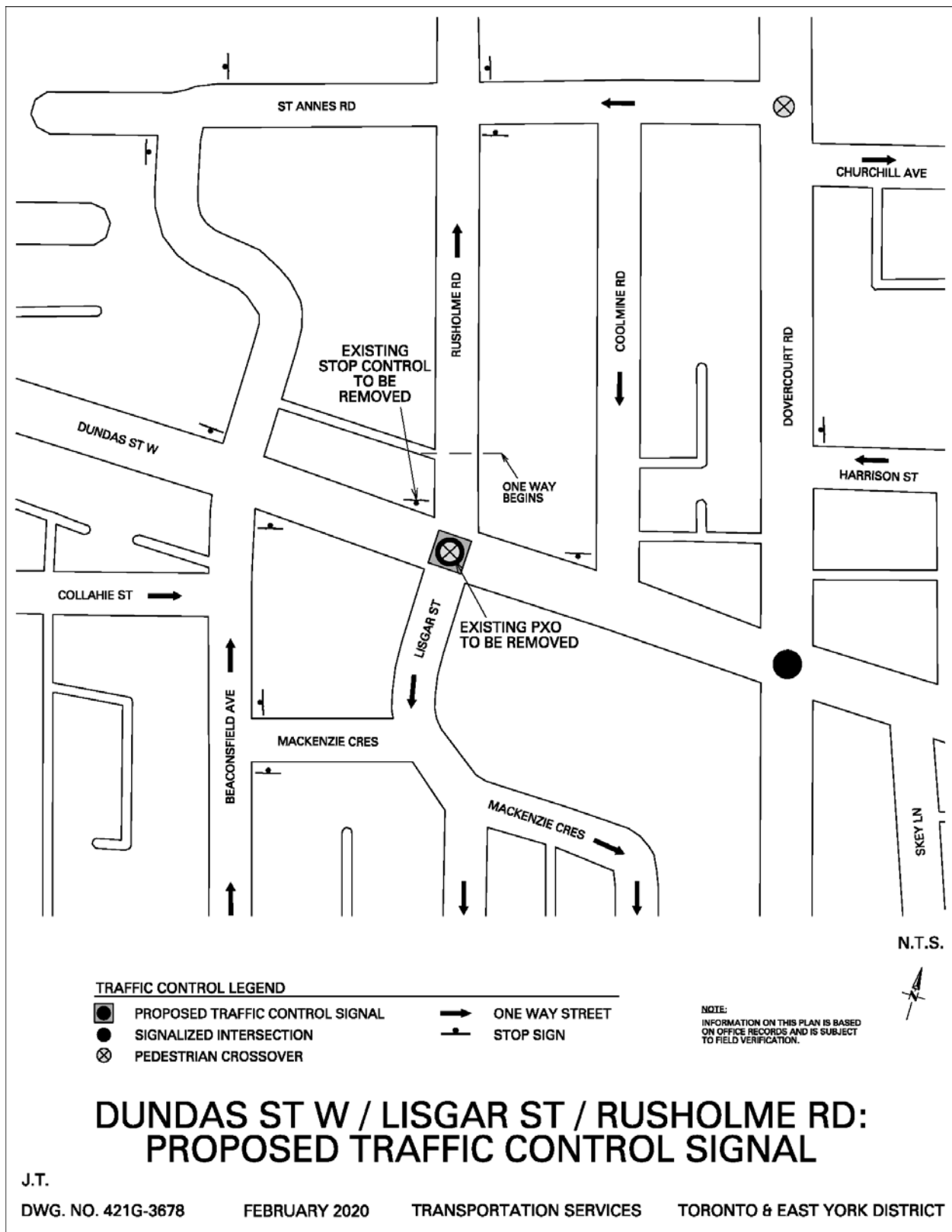
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SIGNATURE

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ATTACHMENTS

1. Drawing No. 421G-3678, dated February 2020
2. Appendix A - Review of Environmental Safety Characteristics



Appendix A - Review of Environmental Safety Characteristics

Dundas Street West and Lisgar Street/Rusholme Road

Standard	Comments	Standard Met / Not Met
Speed - Vehicle operating speed less than 60 km/h	The posted speed limit on Dundas Street West is 40 km/h.	Met
Width - Not more than four lanes wide on a two-way street or more than three lanes wide on a one-way street	Dundas Street West operates with two lanes in each direction.	Not Met*
Volume - Traffic volume not more than 35,000 vehicles per day	Dundas Street West carries approximately 20,000 vehicles per day.	Not Met*
Turns - No significant volume of turning movements	The volume of traffic turning to/from Dundas Street West is moderate (approx. 860 vehicles over busiest eight hours)	Not Met
Visibility - No visibility problems exist for either pedestrians or motorists	No vertical or horizontal curves.	Met
Loading - No loading zones (including TTC) in the immediate area	TTC stops are located on Dundas Street West at Lisgar Street/Rusholme Road.	Not Met
Driveways - No driveways or entrances nearby	No driveways in the vicinity.	Met
Spacing - Not less than 200 metres to another pedestrian crossover or traffic control signal	Dovercourt Rd (TCS) - 170 metres east Gladstone Ave (TCS) - 240 metres west	Not Met

* While the width and volume standards are individually met, pedestrian crossovers are not recommended at sites with this combination of width and volume, as per Ontario Traffic Manual - Book 15 - Pedestrian Crossing Treatments.