

All-way Stop Control - Poplar Plains Road and Clarendon Avenue (North Intersection)

Date: December 9, 2019
To: Toronto and East York Community Council
From: Acting Director, Traffic Management, Transportation Services
Wards: Ward 12, Toronto - St. Paul's

SUMMARY

This staff report is about a matter that 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 staff is recommending all-way stop control at the north intersection of Poplar Plains Road and Clarendon Avenue, to enhance safety for all road users at this intersection. Our assessment indicates the criteria as set out in the All-way Stop Warrant has been satisfied at this intersection. Therefore, all-way stop control should be installed at the north intersection of Poplar Plains Road and Clarendon Avenue.

RECOMMENDATION

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

1. Toronto and East York Community Council authorize all-way stop control at the intersection of Poplar Plains Road and Clarendon Avenue (north intersection).

FINANCIAL IMPACT

All costs associated with the necessary signage changes are included within the Transportation Services 2020 Interim Operating Budget estimates.

DECISION HISTORY

This report addresses a new initiative.

COMMENTS

Transportation Services was requested by Councillor Josh Matlow, on behalf of area residents, to investigate the feasibility of installing all-way stop control at the north intersection of Poplar Plains Road and Clarendon Avenue.

Existing Conditions

Poplar Plains Road is a collector road that operates one-way in the northbound direction. It consists of a single lane for general traffic and a lane reserved for bicycles. It has a pavement width of 6 metres, a posted speed limit of 30 km/h and a one-way traffic volume of about 3,650 vehicles. Heavy vehicles are prohibited at all times on Poplar Plains Road. Clarendon Avenue is a local road that operates two-way in the eastbound and westbound directions. It has a pavement width of 7.3 metres, a posted speed limit of 30 km/h and a daily two-way traffic volume of about 1,150 vehicles. Heavy vehicles are prohibited at all times on Clarendon Avenue. Clarendon Avenue and Poplar Plains Road form a "T" type intersection. Currently, eastbound traffic is required to stop and northbound traffic is free-flow. There is no TTC service provided on Poplar Plains Road or Clarendon Avenue.

Analysis

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

Transportation Services reviewed the intersection of Poplar Plains Road and Clarendon Avenue and applied the results of the vehicle/pedestrian study and Toronto Police Service collision records to the all-way stop control warrant criteria.

A review of the Toronto Police Service collision records over a three-year period ending December 31, 2018 disclosed that there were no collisions reported at this intersection during this time period. The results of the all-way stop control warrant study, taking into account the new Vision Zero 2.0 warrants, at the north intersection of Poplar Plains Road and Clarendon Avenue is summarized in the following table:

| Warrant A: Collision History | Warrant B-1A: Total Approach Vehicular Volume | Warrant B-1B: Combined Crossing Volume (Vehicles & Pedestrians) | Warrant B-2: Main Street/Side- Street Volume Split | All-way Stop Warrants Satisfied (Yes/No) |
|---|--|--|---|---|
| Required: ≥2 Collisions/Year | Required: 375 Vehicles/Hour | Required: 150 Units/Hour | Required: ≤70%/30% | |
| Actual: 0 Collisions/year (Not Met) | Actual: 461 Vehicles/Hour (Met) | Actual: 159 Units/Hour (Met) | Actual: 68%/32% (Met) | Yes |

In order for the installation of all-way stop control to be warranted, Warrant A, Warrant B-1A or Warrant B-1B must be met in addition to Warrant B-2. Based on the above review, the technical warrants for the installation of all-way stop control at the north intersection of Poplar Plains Road and Clarendon Avenue are satisfied. Therefore, we can support this installation at this intersection.

It is noted that the location of existing driveways on the west side Poplar Plains Road, north and south of the subject intersection, will preclude the installation of pedestrian crossing lines on these legs.

Councillor Josh Matlow has been advised of the recommendation of this staff report.

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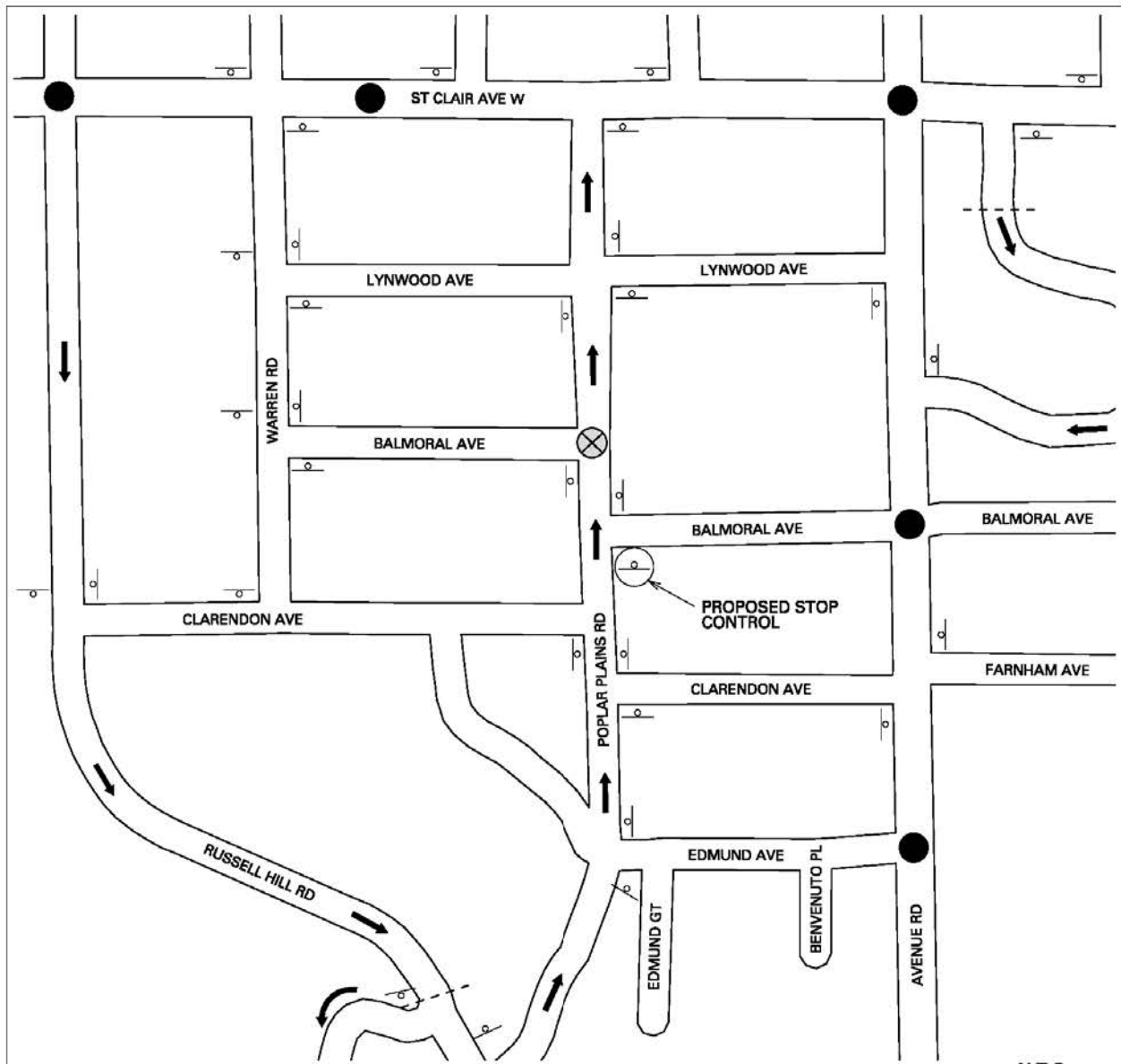
SIGNATURE

Roger Browne, M.A.Sc., P.Eng.,
Acting Director,
Traffic Management
Transportation Services

ATTACHMENTS

1. Drawing No. 421G-3604, dated November 2019.

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N.T.S.

LEGEND

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|--|------------------------|--|------------------------|
| | PROPOSED STOP CONTROL | | PEDESTRIAN CROSSOVER |
| | EXISTING STOP CONTROL | | ONE WAY TRAFFIC |
| | TRAFFIC CONTROL SIGNAL | | ONE WAY TRAFFIC BEGINS |

NOTE:

INFORMATION ON THIS PLAN IS BASED ON OFFICE RECORDS AND IS SUBJECT TO FIELD VERIFICATION.

POPLAR PLAINS RD & CLARENDON AVE: PROPOSED ALL-WAY STOP CONTROL



J.T.

DWG. NO. 421G-3604

NOVEMBER, 2019

TRANSPORTATION SERVICES

TORONTO & EAST YORK DISTRICT