

## **Traffic Control Signals and Turn Prohibitions - Pape Avenue and Lipton Avenue/TPA Access**

**Date:** April 4, 2017  
**To:** Toronto and East York Community Council  
**From:** Acting Director, Transportation Services, Toronto and East York District  
**Wards:** Ward 29, Toronto-Danforth

### **SUMMARY**

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As the Toronto Transit Commission (TTC) operates a transit service on Pape Avenue and Lipton Avenue, City Council approval of this report is required.

Transportation Services is requesting approval to install traffic control signals at the intersection of Pape Avenue and Lipton Avenue/TPA access. The installation of pedestrian crossing protection is technically justified and will provide safe and convenient access for pedestrians crossing Pape Avenue. This installation will require the prohibition of northbound left-turns from Pape Avenue to the Toronto Parking Authority's parking lot access on the west side of the road, roughly opposite to Lipton Avenue.

### **RECOMMENDATIONS**

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The Acting Director, Transportation Service, Toronto and East York District recommends that:

1. City Council authorize the installation of traffic control signals at the intersection of Pape Avenue and Lipton Avenue/TPA access.
2. City Council prohibit northbound left turn movements at all times on Pape Avenue at Lipton Avenue/TPA access in conjunction with the installation of traffic control signals at the intersection of Pape Avenue and Lipton Avenue/TPA access.
3. City Council rescind the existing parking prohibition on the south side of Lipton Avenue, between Pape Avenue and a point 59.4 metres east.

## **FINANCIAL IMPACT**

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The estimated cost of installing traffic control signals at the intersection of Pape Avenue and Lipton Avenue/TPA access is \$200,000.00. This installation would be subject to the availability of funding and competing priorities.

## **DECISION HISTORY**

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Toronto and East York Community Council, at its meeting on April 5, 2016, approved a motion from Councillor Mary Fragedakis requesting Transportation Services undertake a study of vehicular, transit and pedestrian movements around the Pape subway station to examine additional ways to improve safety and reduce conflict of uses, including the installation of traffic control devices on Pape Avenue, north of Danforth Avenue. The Council decision can be found at:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.TE15.76>

## **COMMENTS**

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### **Existing Conditions**

Pape Avenue, north of Danforth Avenue, is a north-south major arterial roadway which operates two-way traffic on a pavement width of about 18.3 metres. It has a daily two-way traffic volume is about 15,000 vehicles and a regulatory speed limit of 50 km/h. It should be noted that the by-lawed speed limit on Pape Avenue was recently reduced to 40 km/h as part of the Road Safety Plan (Item PW14.1) and the signage changes have been scheduled.

There are no exclusive turn lanes provided on this section of Pape Avenue and all vehicle movements are permitted. The north-south curb lanes on Pape Avenue are reserved for buses, taxis, bicycles, motorcycles and HOV's between the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., Monday to Friday. Heavy trucks are permitted at all times on Pape Avenue and TTC service is provided by the '25 Don Mills' bus, '72 Pape' bus, '81 Thorncliffe' bus, '185 Don Mills Rocket' and the '325 Don Mills' night bus.

Lipton Avenue intersects the east side of Pape Avenue in a stop controlled intersection, about 70 metres north of Danforth Avenue. This intersection is located on the south side of the TTC's Pape Station. Lipton Avenue is a local road that operates two-way traffic with a regulatory speed limit of 50 km/h and a pavement width of about 13.4 metres. Heavy trucks are prohibited at all times on Lipton Avenue. The above-noted TTC routes accessing the TTC's Pape Station exit via westbound Lipton Avenue.

The Toronto Parking Authority's (TPA) parking lot access intersects the west side of Pape Avenue, a short distance north of Lipton Avenue. This access is uncontrolled and operates with two-way traffic.

Gertrude Place intersects the east side of Pape Avenue in a stop controlled intersection, about 75 metres north of Lipton Avenue. Gertrude Place is a local roadway that operates one-way westbound traffic on a pavement width of about 7.3 metres. The daily one-way traffic volume is about 200 vehicles and the regulatory speed limit is 50 km/h. Heavy trucks are prohibited at all times and the TTC does not provide transit service on Gertrude Place.

### **Pedestrian Crossing Protection**

The volumes of motorists on entering/exiting Lipton Avenue and Gertrude Place at Pape Avenue are relatively low and would not justify traffic controls on their own. Accordingly, Transportation Services' studies focused on the pedestrian crossing activity within this section of Pape Avenue.

Pedestrian crossing activity along Pape Avenue, within the vicinity of the TTC's Pape Station, was observed during the morning peak and afternoon peak hours on October 6th and October 5th, 2016, respectively. During the morning peak hour, a total of 135 pedestrians were observed crossing Pape Avenue. During the afternoon peak hour, a total of 177 pedestrians were observed crossing Pape Avenue.

Based on the observed volume of pedestrians crossing Pape Avenue, a pedestrian crossover would be technically justified in this section of road as the warrant for a pedestrian crossover requires a minimum of 200 pedestrians crossing in an eight hour period has been met. However, pedestrian crossovers are generally no longer installed on arterial roadways in the City of Toronto. Accordingly, traffic control signals would be recommended on this section of Pape Avenue.

### **Collision Review**

Collision statistics provided by the Toronto Police Service for the three-year period ending December 31, 2016 disclosed that 13 collisions were reported within the segment of Pape Avenue, between Danforth Avenue and Gertrude Place. Of these 13 collisions, two involved a pedestrian and two were considered to be potentially preventable by the installation of traffic control signals.

### **Impacts to TTC**

Comments were requested from the Toronto Transit Commission (TTC) in regards to the proposed traffic control signal installation on Pape Avenue, north of Danforth Avenue. The TTC have indicated that their preferred location for traffic control signals would be the intersection of Pape Avenue and Lipton Avenue/TPA Access. This location would have the least negative impact on transit service and could potentially improve transit service by allowing gaps in north-south traffic for westbound buses to turn.

Based on Transportations Services' review, there are no objections to this installation, provided the following conditions are in place:

The signals are inter-connected to the existing traffic control signals at Danforth Avenue and Pape Avenue to maintain signal co-ordination; and

- Northbound left-turns are prohibited at all times from Pape Avenue to the TPA's parking lot access on the west side of Pape Avenue. This restriction will ensure northbound queue lengths do not extend to the traffic control signals at Danforth Avenue. Additionally, due to the offset with Lipton Avenue, this prohibition will prevent "interlocking" lefts, where northbound and southbound left-turning motorists turn behind each other.

### **Impacts to TPA**

The proximity of the TPA's parking lot on the west side of Pape Avenue will require its inclusion in the proposed traffic control signals at Pape Avenue and Lipton Avenue. It is also recommended that northbound left turns be prohibited at all times from Pape Avenue to the TPA's parking lot access concurrent with the installation of traffic control signals. There is another TPA parking lot located on the north side of Lipton Avenue, east of Pape Avenue, that motorists can use as an alternative.

Comments on the forgoing proposals were requested from the TPA, however, they have not provided any response to Transportation Services.

### **Summary**

Transportation Service supports the installation of traffic control signals at Pape Avenue and Lipton Avenue/TPA Access based on the observed pedestrian crossing activity within the vicinity of the TTC's Pape Station. The installation will provide pedestrians a protected crossing but will also result in the following negative impacts:

- The short spacing between the adjacent traffic signals at Danforth Avenue and Pape Avenue (about 70 metres) may result in vehicle queues exceeding the available storage;
- Due to the short intersection spacing, the traffic control signals on Pape Avenue at Danforth Avenue and at Lipton Avenue will need to be co-ordinated to avoid motorist confusion. As a result, the same north-south and east-west signal displays will be displayed concurrently at both intersections, regardless of side-street demand. This will result in increased delays to north-south traffic; and
- The installation of traffic control signals will result in the loss of about 11 Sunday only parking spaces on the west side of Pape Avenue. There will be no loss of parking spaces recommended on the south side of Lipton Avenue, as the existing corner parking prohibitions are sufficient to maintain a safe intersection operation.

### **House-keeping Issues**

The staff review also detected inconsistencies in the traffic by-law related to the current signed parking regulations on Lipton Avenue. These inconsistencies will be resolved with the approval of Recommendation 3.

Councillor Mary Fragedakis has been advised of the recommendations of this staff report.

### **CONTACT**

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### **SIGNATURE**

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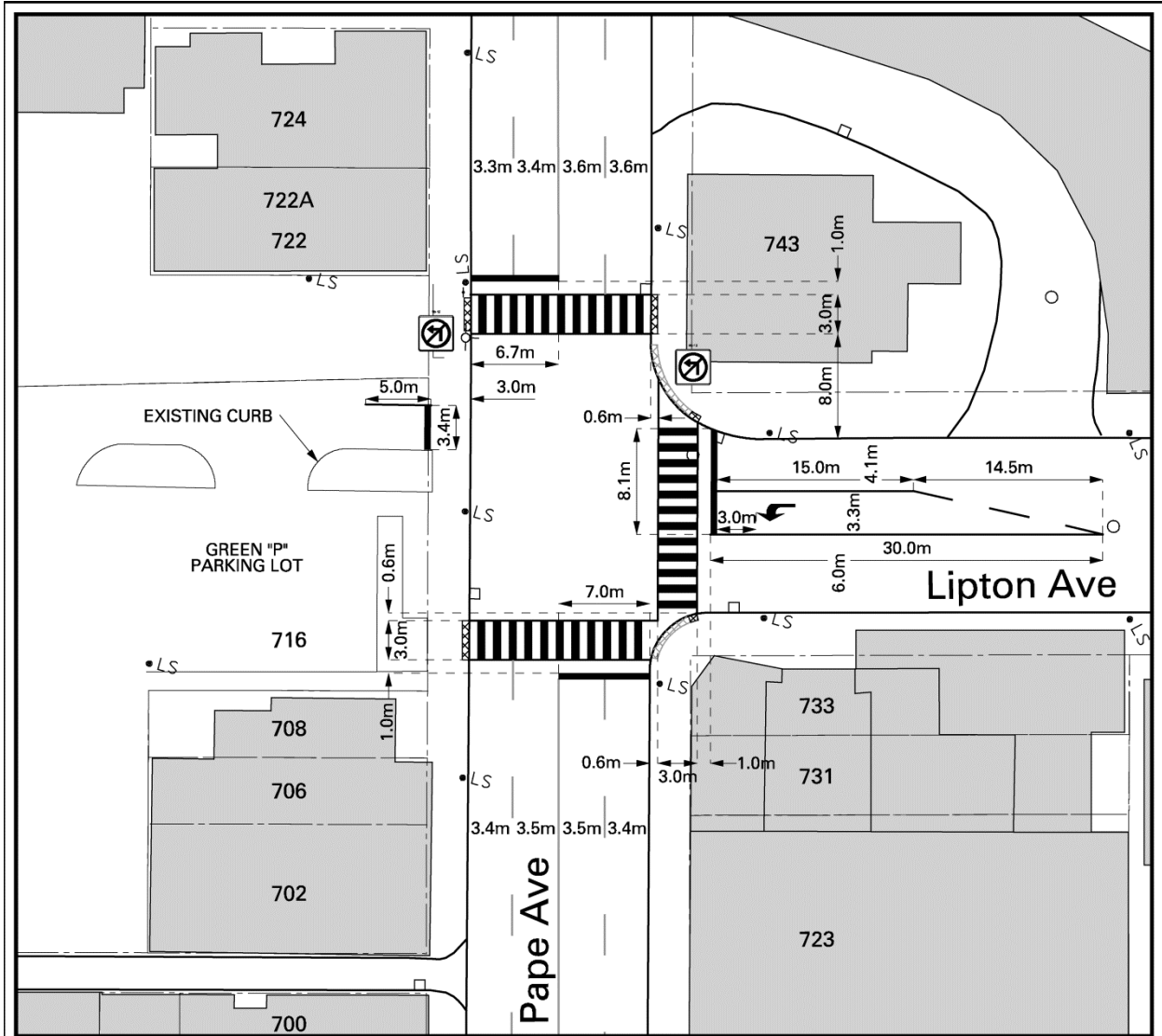
Dave Twaddle, C.E.T.  
Acting Director, Transportation Services  
Toronto and East York District

### **ATTACHMENTS**

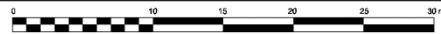
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1. Drawing No. 421G-2462, dated April 2017




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



**LEGEND**

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|---|-------------------------------------|------|----------------------|
|  | PROPOSED RAMP                       | • LS | LIGHT STANDARD       |
|  | PROPOSED LEFT TURN PROHIBITION SIGN | □    | CATCH BASIN          |
|  | EXISTING RAMP                       | ○    | FIRE HYDRANT         |
|   |                                     | ◆    | BICYCLE LOCKING RING |



**PAPE AVE & LIPTON AVE:  
 PROPOSED TRAFFIC CONTROL SIGNALS**

J.T.

DWG. NO. 421G-2462

APRIL, 2017

TRANSPORTATION SERVICES

TORONTO & EAST YORK DISTRICT