

Traffic Control Signals and Traffic Regulations - 629, 633, and 675 Eastern Avenue

Date: June 19, 2026

To: Toronto and East York Community Council

From: Director, Enforcement and Street Management, Transportation Services

Wards: Ward 14, Toronto-Danforth

SUMMARY

This staff report is about a matter that Community Council has delegated authority from City Council to make a final decision.

The properties located at 629, 633, and 675 Eastern Avenue, bounded by Eastern Avenue to the north and Lake Shore Boulevard East to the south, are planned to be redeveloped as a mixed-use development that includes the construction of a new north-south private road connecting Eastern Avenue and Lake Shore Boulevard East. This new private road will be aligned with Caroline Avenue, an existing north-south local road located north of Eastern Avenue. As conditions of development approval, transportation infrastructure improvements are required to safely accommodate the additional vehicular, pedestrian, and cycling activity generated by the development and to provide appropriate access to and from the site.

Transportation Services is requesting approval to install traffic control signals at the two new intersections of the proposed private road with Eastern Avenue/Caroline Avenue and with Lake Shore Boulevard East. Transportation Services is also requesting approval to prohibit right turns on a red signal at both intersections and southbound through movements at the intersection of Eastern Avenue/Caroline Avenue and the proposed private road. Based on the transportation assessments undertaken in support of the development application, the proposed traffic control signals and associated traffic regulations will improve safety, accessibility and connectivity for all road users.

These changes will address the requirements of the site plan agreement for the 629, 633, and 675 Eastern Avenue development and all costs will be the responsibility of the developer.

RECOMMENDATIONS

The Director, Enforcement and Street Management, Transportation Services recommends that:

1. Toronto and East York Community Council authorize the installation of traffic control signals at the intersection of Eastern Avenue and Caroline Avenue/Private Access.
2. Toronto and East York Community Council authorize the installation of traffic control signals at the intersection of Lake Shore Boulevard East and Private Access approximately 435 metres west of Leslie Street.
3. Toronto and East York Community Council prohibit southbound through movements at all times (bicycles excepted) at the intersection of Eastern Avenue and Caroline Avenue/Private Access.
4. Toronto and East York Community Council prohibit southbound right turns on a red signal at all times (bicycles excepted) at the intersection of Eastern Avenue and Caroline Avenue/Private Access.
5. Toronto and East York Community Council prohibit eastbound right turns on a red signal at all times (bicycles excepted) at the intersection of Eastern Avenue and Caroline Avenue/Private Access.
6. Toronto and East York Community Council prohibit northbound right turns on a red signal at all times (bicycles excepted) at the intersection of Eastern Avenue and Caroline Avenue/Private Access.
7. Toronto and East York Community Council prohibit southbound right turns on a red signal at all times (bicycles excepted) at the intersection of Lake Shore Boulevard East and Private Access approximately 435 metres west of Leslie Street.
8. Toronto and East York Community Council prohibit westbound right turns on a red signal at all times (bicycles excepted) at the intersection of Lake Shore Boulevard East and Private Access approximately 435 metres west of Leslie Street.

FINANCIAL IMPACT

There are no financial implications associated with the adoption of this report as funding has been secured from the proponent of the 629, 633, 675 Eastern Avenue development for the new signals. These funds were secured through Zoning By-law Amendment Application No. 13 195390 STE 30 OZ, the associated Section 37 Agreement (Receipted as Instrument No. AT4227294), Site-Specific Zoning By-law No. 1174-2015, and Site Plan Control Application No. 20 219216 STE 14 SA.

DECISION HISTORY

Through Zoning By-law Amendment Application No. 13 195390 STE 30 OZ, the installation of two traffic control signals was secured for the intersections of the proposed private road with Eastern Avenue/Caroline Avenue and Lake Shore Boulevard East in its November 3 and 4, 2015, decision, City Council approved the development by adopting Item No. TE11.4. The City Council decision can be found at:

[Agenda item History - 2015.TE11.4](#)

COMMENTS

As part of the development application process for the development of 629, 633, and 675 Eastern Avenue, the proponents' transportation consultant undertook Transportation Impact Studies to assess the transportation impacts of the proposed development and identify any required transportation infrastructure improvements. The studies included traffic control signal warrant analyses for the proposed private road intersections with Eastern Avenue/Caroline Avenue and Lake Shore Boulevard East. The findings were subsequently reviewed and accepted by Transportation Services as part of the development approval process.

Furthermore, in support of the development, southbound through movements at the intersection of Eastern Avenue/Caroline Avenue and the proposed private road, as well as right turns on a red signal at the intersections of the proposed private road with Eastern Avenue/Caroline Avenue and Lake Shore Boulevard East are proposed. These measures are intended to support the safe and efficient operation of the new signalized intersections, enhance safety for pedestrians and cyclists using the active transportation facilities proposed on the private road and connecting street network, and discourage traffic infiltration through the surrounding local road network while maintaining appropriate access to and from the development site.

Existing Conditions

Eastern Avenue is characterized by the following conditions:

- It is a four-lane, east-west, minor arterial roadway
- It operates two-way traffic on a pavement width of approximately 12.8 metres
- The daily two-way traffic volume is approximately 20,000 vehicles
- The speed limit is 40 km/h
- Heavy trucks are permitted at all times
- There is no Toronto Transit Commission (TTC) service provided
- There are sidewalks located on both sides of the street
- There are bike lanes on both sides of the street

Caroline Avenue is characterized by the following conditions:

- It is a one-lane, north-south local roadway
- It operates one-way southbound traffic on a pavement width of approximately 7.3 metres
- The daily one-way traffic volume is approximately 700 vehicles
- The speed limit is 30 km/h
- Heavy trucks are prohibited at all times
- There is no TTC service provided
- There are sidewalks located on both sides of the street
- Traffic calming measures (speed humps) are installed

The intersection of Eastern Avenue and Caroline Avenue is a "T" type intersection. There are stop controls on the Caroline Avenue approach and free-flow on Eastern Avenue.

Lake Shore Boulevard East is characterized by the following conditions:

- It is a six-lane, east-west, major arterial roadway
- It operates two-way traffic on a pavement width of approximately 12 metres in each direction separated by a raised median
- The daily two-way traffic volume is approximately 26,000 vehicles
- The speed limit is 60 km/h
- Heavy trucks are permitted at all times
- There is no TTC service provided
- There are sidewalks located on both sides of the street
- Lake Shore Boulevard East Trail is located on the north side of the street

The development site is planned as a mixed-use commercial and industrial. The development will be connected by a network of internal streets, pedestrian and cycling facilities, including the subject north-south private road connecting to Eastern Avenue at Caroline Avenue and to Lake Shore Boulevard East.

A map of the area is included in Attachment 1.

Traffic Control Signals

As part of the conditions of approval for the development of 629, 633, and 675 Eastern Avenue, the installation of two traffic control signals are proposed at the two new intersections of the proposed private road with Eastern Avenue/Caroline Avenue and with Lake Shore Boulevard East.

To determine the need for traffic control signals at the two intersections above, staff rely on the justification criteria as outlined in the Ontario Traffic Manual (OTM) Book 12. The OTM justification criteria includes factors such as volume of vehicles and pedestrians, delay to cross traffic, and collision history. In addition to these technical justifications, staff consider an environmental checklist which includes consideration of road width, posted speed limit, operating speeds, adjacent land uses, pedestrian desire lines and demographics, presence of a transit stop, sight lines, and distance between existing crossing opportunities.

The results of the counts are summarized below. The "Collision hazard" criterion is part of the warrants and is based on the number of collisions potentially preventable by the installation of traffic control signals. However, as the construction of the two intersections are planned, the collision history does not exist and is not available for inclusion in the analysis.

Traffic signal warrant analysis was conducted by the proponents' transportation consultant, as per the submitted Urban Transportation Considerations report dated March 2015, which includes projected traffic generated by the development, vehicle and pedestrian counts, delay to cross traffic.

Eastern Avenue and Caroline Avenue/Private Access

Eastern Avenue and Caroline Avenue currently form a "T" type intersection. It is planned that the proposed private road, connecting to Lake Shore Boulevard East, would be constructed to form the south leg of the intersection.

The closest adjacent traffic controls on Eastern Avenue are located approximately 80 metres to the east, at Larchmount Avenue, and 400 metres to the west, at Carlaw Avenue, both in the form of traffic control signals.

The results using the projected traffic counts are summarized in Table 1.

Table 1: Warrant Compliance - Eastern Avenue and Caroline Avenue/Private Access

Justification	Compliance level
Minimum vehicular volume	100%
Delay to cross traffic (pedestrians and vehicles)	100%

To meet the justification criteria for the installation of traffic control signals, one of the justifications must be 100 percent satisfied or both the minimum vehicular volume and delay to cross traffic justifications must be at least 80 percent satisfied. Based on the results in Table 1, the installation of traffic control signals is justified.

In regard to the environmental checklist, staff also noted the following environmental factor:

- the pedestrian generators in the immediate area, including residential areas and existing and proposed active transportation facilities, such as cycling and pedestrian infrastructure and the Lake Shore Boulevard East trail network, that attract vulnerable pedestrians to cross the street

In considering the above environmental factors, Transportation Services recommends the installation of traffic control signals at Eastern Avenue and Caroline Avenue/Private Access as it will provide enhanced safety for all road users.

Lake Shore Boulevard East and Private Access

Lake Shore Boulevard East and the proposed private road, connecting to Eastern Avenue, would form a "T" type intersection, with the private road operating as the north leg of the intersection.

The closest adjacent traffic controls on Lake Shore Boulevard East are located approximately 445 metres to the east, at Leslie Street, and 400 metres to the west, at Carlaw Avenue, both in the form of traffic control signals.

The results using the projected traffic counts are summarized in Table 2.

Table 2: Warrant Compliance - Lake Shore Boulevard East and Private Access

Justification	Compliance level
Minimum vehicular volume	76%
Delay to cross traffic (pedestrians and vehicles)	100%

To meet the justification criteria for the installation of traffic control signals, one of the justifications must be 100 percent satisfied or both the minimum vehicular volume and delay to cross traffic justifications must be at least 80 percent satisfied. Based on the results in Table 2, the installation of traffic control signals is justified.

In regard to the environmental checklist, staff also noted the following environmental factors:

- the long spacing between pedestrian crossing protection on Lake Shore Boulevard East
- the pedestrian generators in the immediate area, facilities such as Lake Shore Boulevard East trail network, that attract vulnerable pedestrians to cross the street
- the six-lane cross-section on Lake Shore Boulevard East, as well as the speed and volume of traffic

In considering the above environmental factors, Transportation Services recommends the installation of traffic control signals at Lake Shore Boulevard East and Private Access as it will provide enhanced safety for all road users.

Proposed Traffic Regulations

The proposed private road construction and the associated signalization proposals require implementing operational restrictions. These are as follows:

- prohibiting southbound straight-through movements (bicycles excepted) at the intersection of Eastern Avenue/Caroline Avenue and the proposed private road
- prohibiting southbound, eastbound and northbound right turns on a red signal (bicycles excepted) at the at the intersection of Eastern Avenue/Caroline Avenue and the proposed private road

- prohibiting southbound and westbound right turns on a red signal (bicycles excepted) at the intersection of Lake Shore Boulevard East and the proposed private road

These measures are intended to support the safe and efficient operation of the new signalized intersections, enhance safety for pedestrians and cyclists using the active transportation facilities along the private road and connecting network, and discourage traffic infiltration through the surrounding local road system while maintaining appropriate access to and from the development site.

Other Considerations

It should be noted that the installation of traffic control signals will have the following additional impacts:

- There will be an increase in delays to motorists on Eastern Avenue and Lake Shore Boulevard East as a result of the traffic control signal installations.
- The short spacing to the traffic control signals on Eastern Avenue and the existing traffic control signals at Larchmount Avenue is a potential concern with regards to queue storage. Traffic signals that are located very close together require settings that manage queues. During the design stage, consideration will be given to strategies to minimize queue backup.
- The installation of traffic control signals would result in the loss of about four on-street parking spaces on Caroline Avenue, north of Eastern Avenue.
- There may be an increase in traffic on Caroline Avenue.

The Ward Councillor has been advised of the recommendations in this report.

CONTACT

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SIGNATURE

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Director, Enforcement and Street Management, Transportation Services

ATTACHMENTS

Attachment 1: Map - Traffic Control Signals and Turn Prohibitions - 629, 633, and 675
Eastern Avenue

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