



COMMITTEE OF THE WHOLE

June 16, 2015

SRPRS 15.091

Planning and Regulatory Services Department
Development Engineering Division

**SUBJECT: Red Maple Road and High Tech Road Operations Study
(SRPRS.15.091)**

PURPOSE:

To provide information on key findings and recommendations from the Red Maple Road and High Tech Road Operations Study.

RECOMMENDATION(S):

- a) That staff report SRPRS.15.091 and the attached executive summary be received for information purposes;
- b) Staff be directed to begin discussions with affected property owners and stakeholders regarding the implementation of the recommendations for Red Maple Road, from High Tech Road to Highway 7, as set out in the Red Maple Road and High Tech Road Operations Study;
- c) Staff be directed to report back to Council on the outcome of those discussions and next steps for implementation; and
- d) Staff request LEA Consulting to provide further detail with respect to a signalized intersection at High Tech Road and the Silver City theater driveway, and to further investigate other alternative options for this location.

Contact: Dan Terzievski, Director, Development Engineering ext. 3510

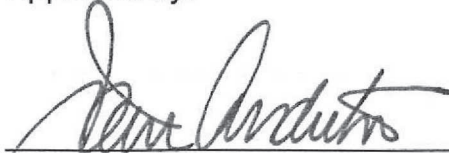
Submitted by:



Ana Bassios

Commissioner of Planning and Regulatory Services

Approved by:



M. Joan Anderton

Chief Administrative Officer

BACKGROUND:

Over the past few years, staff has received numerous complaints with respect to traffic operations and safety from motorists, cyclists and pedestrians travelling along Red Maple Road, between Highway 7 and High Tech Road, and along High Tech Road, between Yonge Street and Red Maple Road. The complaints have been primarily focused on the operation and safety challenges faced by motorists as they turn left into and out of the commercial driveways, as well as the safety challenges faced by cyclists and pedestrians as they cross these driveways and these roads. Specific complaints have also been received from GO Rail patrons about long queues and delays experienced when entering or exiting the GO Station parking lot.

In response to the complaints, staff undertook a review of the historical traffic data for the two sections of road and agreed that the current traffic control arrangements need to be addressed. As a result, Lea Consulting Ltd was retained by the Town of Richmond Hill in the fall of 2013 to undertake a traffic operations and safety review of Red Maple Road, from Highway 7 to High Tech Road, and of High Tech Road, from Yonge Street to Red Maple Road. The main objective of the study was to review all of the existing intersection, driveway, and roadway operations along these two sections and provide recommendations on how to enhance the traffic safety and operations for drivers, pedestrians and cyclists in the short term, without precluding the long term vision for the Regional Centre and the envisioned road network.

In addition to reviewing a number of policy documents that pertain to the study area and future Regional Centre, the consultant also collected vehicular, pedestrian and cycling data at all signalized and unsignalized intersections in the study area. The consultant also conducted a review of historical collision data for both segments of road.

SUMMARY OF ANALYSIS:

Within the study area, only three intersections are controlled by traffic signals: Red Maple Road and Highway 7; High Tech Road and Red Maple Road; and High Tech Road and Yonge Street. Of the three traffic signals noted, only one is under the jurisdiction of the Town of Richmond Hill (High Tech Road and Red Maple Road). The other two fall under the jurisdiction of the Regional Municipality of York.

All of the unsignalized driveways along both road segments fall under the jurisdiction of the Town of Richmond Hill.

Overall, the three signalized intersections operate at an acceptable level of service. However, there are specific traffic movements at the two Region controlled intersections that operate above their theoretical capacity during both the a.m. and p.m. peak hours. The findings of this study are being shared and discussed with York Region staff to see if the signal timings can be adjusted for the specific movements to reduce the frequency and length of queuing.

Red Maple Road Traffic Operation

LEA Consulting's review of historical collision data for Red Maple Road, between Highway 7 and High Tech Road, reveal a high incidence of right angle collisions occurring along this segment of road and in particular at the unsignalized driveways. This is partially related to roadway geometry and interlocking of inbound left turn movements, but also because the outbound left turn movements at the driveways experience long delays, forcing motorists to make aggressive and unsafe turns.

Operationally, several of the southbound movements at Highway 7 and Red Maple Road experience heavy queuing during the peaks, which result in operational impacts at the GO Station driveway.

As a result, LEA consulting has recommended that a new traffic signal be installed along Red Maple Road at approximately the midway-point between Highway 7 and High Tech Road, and that all outbound left turn and through movements at the unsignalized driveways along Red Maple Road be restricted.

This new traffic signal will consolidate all the outbound left turn and through movements from the commercial properties as well as the GO Rail parking lot. This will reduce interlocking turning movements, vehicular collision points, and pedestrian conflict points at the unsignalized driveway and provide a controlled intersection crossing for pedestrians, thus improving overall traffic safety along this section of Red Maple Road.

The recommended traffic signal on Red Maple Road will require discussion with and collaboration between the three property owners along this section of Red Maple Road (Yonge-Bayview Holdings Inc, Metrolinx, and Infrastructure Ontario) and the various stakeholders (including the local businesses and York Region). In addition, cross easements will be required between several of the properties to enable access to the joint traffic signal.

High Tech Road Traffic Operation

The consultant has also recommended that a new traffic signal be installed on High Tech Road at the Silver City Movie Theatre driveway. However, given the near 6 percent grade on High Tech Road, less than ideal sight lines for westbound traffic coming over the bridge, and the close proximity to the Regional traffic signal on Yonge Street, staff will be requesting the consultant to undertake a further detailed assessment of this recommendation and explore alternative options to this traffic signal.

An executive summary of the Red Maple Road and High Tech Road Operations Study has been appended to staff report SRPRS.15.091 as Exhibit 1 for information purposes.

FINANCIAL/STAFFING/OTHER IMPLICATIONS:

There are no financial or staffing implications at this particular time. There are sufficient funds allocated in the budget for the consultant to undertake additional analysis on the High Tech Road option and to provide support to staff during discussion on the Red Maple Road traffic signal option with the affected property owners and stakeholders.

Follow up reports will be prepared regarding any financial and legal implications resulting from discussions with the affected property owners.

RELATIONSHIP TO THE STRATEGIC PLAN:

The recommendation of this report is consistent with the Town's Strategic Plan to "enhance community safety". It also demonstrates responsible municipal management of Town's road network. Also, the recommendations are consistent with the Strategic Plan's Objectives of building "Stronger connections in Richmond Hill" and "Providing better choices for Town residents," that help improve their lives and meet their changing needs. The recommendations meet Goal One of the Town's Strategic Plan of providing "Stronger connections in Richmond Hill by improving the function of buildings, streets and neighbourhoods."

CONCLUSION:

Staff support the recommendations presented by LEA Consulting to address the current traffic operational and safety concerns along Red Maple Road, including the installation of a traffic signal and the proposed restriction of turning movements at the unsignalized driveways.

Staff recommends engaging the various property owners and stakeholders along Red Maple Road to discuss the implementation of these recommendations.

With respect to High Tech Road, staff require additional analysis of the proposed solution and a further investigation other alternatives before they can support any recommendation for this section of road.

Attachments: Appendix 1