

<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MARCH 27, 2017</b>
<b>FROM:</b>	<b>KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>NEW 2017 TRAFFIC SIGNALS</b>

<b>RECOMMENDATION</b>
-----------------------

That on the recommendation of the Managing Director, Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to new traffic signals:

- a) The installation of an intersection pedestrian signal on Sarnia Road at Brescia Lane **BE APPROVED**; and
- b) The installation of a traffic signal at the intersection of Southdale Road W and Boler Road **BE APPROVED**.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
--

- Civic Works Committee – August 25, 2014 – Southdale Road and Boler Road Intersection Improvements Environmental Assessment Appointment of Consulting Engineer; and
- Civic Works Committee – July 18, 2016 – Southdale Road West Environmental Assessment, Boler Road to Wickerson Road, Appointment of Consulting Engineer

<b>2015-19 STRATEGIC PLAN</b>
-------------------------------

The following report supports the Strategic Plan through the strategic focus areas of **Strengthening Our Community and Building a Sustainable City** by improving traffic flow to ensure the safe and efficient movement of goods, services and people.

<b>BACKGROUND</b>
-------------------

The Roadway Lighting & Traffic Control Division receives numerous requests throughout the year for the installation of Traffic Control Signals. As per Council's policy, this report addresses the signals that are recommended for installation in 2017.

## DISCUSSION

Traffic signals are designed to ensure a safe and orderly flow of traffic, provide safety for pedestrians and/or vehicles while crossing a busy intersection and help lessen the severity and frequency of collision between vehicles entering intersections from different directions. However, traffic signals can be detrimental to the operational efficiency of our roadway system and can increase some types of traffic collisions.

The installation of traffic control signals are recommended at intersections where the traffic/pedestrian volume or collision data indicates that their installation is needed to address operational and/or safety issues. The Ontario Traffic Manual (OTM) specifies the warrant process to be followed by the City of London. This process takes into consideration the volume of traffic/pedestrians using the intersection, the delay experienced by side street traffic/pedestrians and the collision history of the intersection while still acknowledging that traffic control signals can be detrimental to the operational efficiency of our roadway system.

### **Sarnia Road at Brescia Lane**



Sarnia Road is a four-lane arterial road with an Average Annual Daily Traffic (AADT) of 23,000. A large number of pedestrians cross Sarnia Road near Brescia Lane and Coombs Avenue to access transit stops, Brescia University College to the north or Althouse College to the south. This location meets the pedestrian volume warrant but not the traffic volume warrant; therefore, an Intersection Pedestrian Signal (IPS) is recommended to facilitate the pedestrian crossings.

## **Southdale Road W at Boler Road**



Southdale Road W and Boler Road are both two lane arterial roads with AADTs of 14,000 and 11,000 respectively. The intersection is currently controlled by an all-way stop and development in the area has seen traffic volumes increase significantly. In 2014 Dillon Consulting Limited (Dillon) was retained by the City of London to complete a Class Environmental Assessment (Class EA) to develop and evaluate alternatives for a first phase of improvements to this area of Southdale Road W; improving the Southdale and Boler Road intersection. All options were considered for this Intersection Improvement Study, from traffic signalization to a roundabout. The Study was completed in 2016 and established that traffic signals will provide the best operational level of service and recommended the installation of traffic signals with no additional roadworks. A traffic study shows that this intersection satisfies 100% of the vehicular volume and 87% of the traffic delay OTM warrant. It should be noted that a Class EA is currently underway for improvements to Southdale Road W from Wickerson Road to Boler Road. The traffic signal will be designed and constructed to remain in place when Southdale Road W improvements are made west of Boler Road.

### **Development Signals**

Two traffic signals on Wonderland Road S at the new Lowe's development were commissioned earlier this year. These traffic signals were previously approved by Council as part of the development process.

## **CONCLUSION**

The installation of an intersection pedestrian signal on Sarnia Road at Brescia Lane and a traffic signal at the intersection of Southdale Road W and Boler Road is recommended to address capacity and efficiency concerns; noting that the intersections meet the requirement of a traffic signal as identified in the OTM.

<b>PREPARED BY:</b>	<b>REVIEWED &amp; CONCURRED BY:</b>
<b>SHANE MAGUIRE, P. ENG. DIVISION MANAGER ROADWAY LIGHTING &amp; TRAFFIC CONTROL</b>	<b>EDWARD SOLDI, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION</b>
<b>RECOMMENDED BY:</b>	
<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>	

Y:\Shared\Administration\COMMITTEE REPORTS\Civic Works\2017\DRAFT\03-27\CWC - 2017-04-11 - New 2017 Traffic Signals ver 1.docx

March 13, 2017/SM