

Adopted by Council at its meeting held February 1, 2016 [CR69/2016]

/AC

Windsor, Ontario February 1, 2016

REPORT NO. 333 of the  
ENVIRONMENT, TRANSPORTATION & PUBLIC SAFETY  
STANDING COMMITTEE  
of its meeting held January 20, 2016

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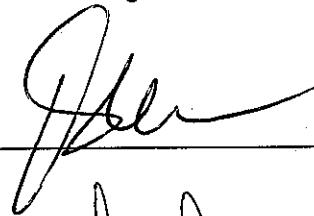
Present: Councillor Fred Francis  
Councillor Chris Holt  
Councillor Bill Marra (Chair)  
Councillor Hilary Payne  
Councillor Paul Borrelli

That the following recommendations of the Environment, Transportation and Public Safety Standing Committee **BE APPROVED**:

Moved by Councillor Francis, seconded by Councillor Holt,  
That the report CQ48-2015 Temporary Traffic Signals During Detours **BE RECEIVED** for information.  
Carried.

S 41/2015 ST2015

Clerk's Note: The report of the Policy Analyst dated November 6, 2015 entitled "CQ48-2015 Temporary Traffic Signals During Detours" is attached as background information.

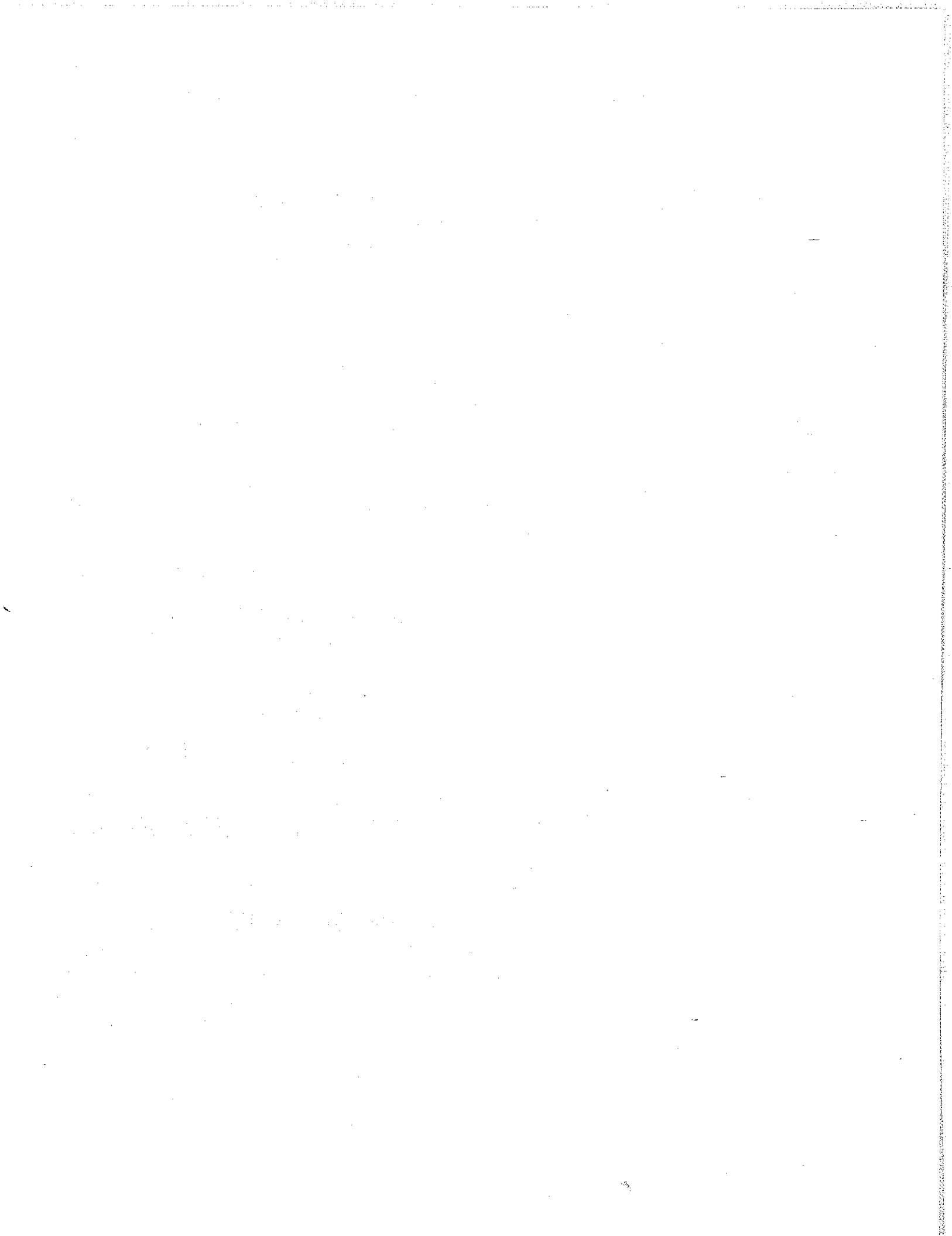


CHAIRPERSON



SUPERVISOR OF COUNCIL SERVICES

NOTIFICATION:	
NAME	CONTACT INFORMATION





## Public Works - Operations

### MISSION STATEMENT

*"Our City is built on relationships – between citizens and their government, businesses and public institutions, city and region – all interconnected, mutually supportive, and focused on the brightest future we can create together"*

<b>REPORT #: S 41/2015</b>	<b>Report Date: 11/6/2015</b>
<b>Author's Contact:</b> Jeff Hagan Policy Analyst 519-255-6247 ext. 6003 jhagan@citywindsor.ca	<b>Date to Council: 12/23/2015</b>
	<b>Clerk's File #: ST2015</b>

**To: Mayor and Members of City Council**

**Subject: CQ48-2015 Temporary Traffic Signals During Detours - City-Wide**

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### **RECOMMENDATION:**

That the report *CQ48-2015 Temporary Traffic Signals During Detours* **BE RECEIVED** for information.

### **EXECUTIVE SUMMARY:**

N/A

### **BACKGROUND:**

At the August 4, 2015 meeting of Council, Councillor Gignac gave the following Council Question:

#### **CQ48-2015**

*"Asks how the use of temporary traffic signals during detours for major roadwork are determined. The use of Jefferson for a bus route during Wyandotte reconstruction is concerning for residents that are really worried that when school begins and school buses are added the congestion at Riverside Drive is going to be even more dangerous."*

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This report provides the requested information.

Council Questions CQ40-2015 and CQ57-2015 also deal with the use of Jefferson Boulevard as a Transit Windsor detour route during the Wyandotte reconstruction. Transit Windsor responded to these related Council Questions in a separate report (*Council Questions CQ40-2015 and CQ57-2015 – Transit Windsor Detours*, Live Link No. 17944).

## **DISCUSSION:**

The Council Question refers to two specific issues:

- The use of temporary traffic signals generally;
- The suitability of the Jefferson Boulevard and Riverside Drive intersection for temporary traffic signals.

These issues are addressed separately below.

### **The Use of Temporary Traffic Signals**

The *Ontario Traffic Manual* describes temporary traffic signals as follows:

#### ***Temporary Traffic Signals***

*“Temporary traffic signals typically consist of traffic signal heads positioned on span wires or temporary poles. Temporary signals are intended to be used as an alternative to permanent traffic signals for limited periods before or during the re-construction of roadways.”*

In the City of Windsor, temporary traffic signals are used in two general cases:

1. To replace the permanent signals at an existing signalized intersection when the permanent signal infrastructure must be removed to facilitate construction works. This case is the most typical;
2. To signalize an existing unsignalized intersection on a temporary basis to accommodate large volumes of detour traffic over a long period of time. This case is generally rare.

Temporary traffic signals are subject to the same approval requirements as permanent signals. The Highway Traffic Act requires the approval of all municipal traffic signal installations, whether temporary or permanent, by a person identified by the municipality. Traffic By-Law 9148 delegates this authority to the Executive Director of Operations. Additionally, signals on connecting links and on municipal roadways under provincial jurisdiction (e.g. at ramp terminal intersections on provincial highways) also require approval of the Ministry of Transportation.

### *Traffic Control Plans for Construction*

Typically, a traffic control plan is prepared by the project contractor in consultation with Administration and signed by the approving authorities. For larger or more complex projects, the development of the traffic control plan, detour route, and required traffic controls (including changes to signals, if required) will involve collaboration by a number of City departments, the contractor, and emergency services.

For road reconstruction projects, the consultant will normally suggest a detour plan during the design phase. At this time, information is reviewed to determine whether new temporary signals are warranted. Traffic control needs, including the need for temporary signals, are reviewed and confirmed during the tender preparation phase of the project.

### *Temporarily Signalizing Intersections*

Temporarily signalizing an intersection involves significant cost and logistical complexity. For this reason, Administration generally strives to identify methods or routes to accommodate detour traffic without necessitating temporary traffic signals, and only recommends temporary traffic signals in cases where they are warranted and other measures would be unsuitable.

Some intersections are unsuitable for signalization due to their geometric layout or other factors. If a field review finds that it would be unfeasible or unconstructable to provide signals at an intersection on a proposed detour route, Administration will identify other methods or routes to accommodate detour traffic.

### **Jefferson Boulevard and Riverside Drive – Suitability for Temporary Traffic Signals**

Wyandotte Street East between Raymo Road and George Avenue was closed for watermain and road reconstruction on June 29, 2015; work ended on November 20, 2015 and is planned to recommence in spring 2016. No specific detour route for general traffic was identified, since lane restrictions used on the project allowed for single lane traffic in both directions on Wyandotte Street East. Transit Windsor selected and implemented a detour route for Crosstown 2 service using Riverside Drive; this route was revised over the course of the project.

In and of itself, the detour of a transit route onto an alternate route is not normally sufficient to cause an intersection that did not warrant traffic control signals before construction to warrant temporary signals during construction.

The City of Windsor follows the methods in the *Ontario Traffic Manual* when establishing warrants for signals. These warrants require a consistently high, sustained volume of vehicle traffic (or combination of vehicle and pedestrian traffic) to justify traffic control signals. Normally, the volume of vehicles associated with even high-frequency

transit service is very small relative to the volume thresholds in the signal justification warrants.

The Crosstown 2 route (the route detoured onto Jefferson) operates with 10-minute headways (i.e. 6 buses per hour per direction) at peak times. This increase in volumes did not result in traffic control signals being justified at the Jefferson Boulevard/Riverside Drive intersection.

### **RISK ANALYSIS:**

All construction projects have inherent risks. Proper project design, planning and administration minimize and/or eliminate the risk.

### **FINANCIAL MATTERS:**

N/A

### **CONSULTATIONS:**

John Wolf, Traffic Operations

Wade Bondy, Engineering

Stephan Habrun and Jason Scott, Transit Windsor

### **CONCLUSION:**

For major road construction projects, Administration works with the contractor as well as the Windsor Police Service, other departments, agencies, and stakeholders as appropriate to develop detour routes and traffic control plans that accommodate road users as efficiently and cost-effectively as possible. In rare cases, these traffic control plans may involve temporarily signaling an unsignalized intersection.

The detour of Transit Windsor buses to the Jefferson Boulevard/Riverside Drive intersection did not cause traffic control signals to be warranted during the Wyandotte Street reconstruction.

### **PLANNING ACT MATTERS:**

N/A

### **APPENDICES:**

N/A