

**COMMITTEE OF THE WHOLE SEPTEMBER 18, 2006**

**EDGELEY BOULEVARD AND ROMINA DRIVE/FOUR VALLEY DRIVE  
PROPOSED ALL-WAY STOP CONTROL**

**Recommendation**

The Commissioner of Engineering and Public Works recommends:

1. That an all-way stop control be installed at the intersection of Edgeley Boulevard and Romina Drive/Four Valley Drive; and
2. That an advance warning sign – ‘Stop Ahead’ - be installed south of the subject intersection, in the northbound direction.

**Economic Impact**

The cost to install the stop signs and pavement markings would be an initial impact to the 2006 Operating Budget, and the cost to maintain the signs and pavement markings would be a future budget impact.

**Purpose**

To review the feasibility of implementing all-way stop controls at the intersection of Edgeley Boulevard and Romina Drive/Four Valley Drive, in response to requests from area business employees.

**Background - Analysis and Options**

Staff received several requests from business employees in the area of Edgeley Boulevard and Romina Drive/Four Valley Drive to review the need for an all-way stop control due to heavy traffic volumes and intersection sight distances.

Edgeley Boulevard is a major collector roadway with a 26.0 metre right-of-way and a pavement width of 14.0 metres (4 lanes). Romina Drive and Four Valley Drive are industrial roads with 23.0 metre right-of-way and pavement widths of 11.5 metres (2 lanes) The existing speed limit on Edgeley Boulevard is a statutory 50 km/h. The existing stop controls are located on Romina Drive/Four Valley Drive. The area is shown on Attachment No. 1.

Staff conducted a turning movement count on Wednesday, June 7, 2006 at the subject intersection during peak travel periods. The traffic count was conducted from 7:00am to 9:00am and 4:00pm to 6:00pm. On the day of the traffic study the weather was clear and the roads were dry. The collected traffic volumes compared to the Provincial Warrant for All-Way Stop Control are as shown below.

- |   |                |
|---|----------------|
| • Warrant 1 – Minimum Vehicular Volumes | Warranted 89%  |
| • Warrant 2 – Accident Hazard           | Warranted 0%   |
| • Warrant 3 – Sight Restriction         | Warranted 100% |

For an all-way stop control to be warranted, one or more of the 3 warrants must be satisfied 100% or more. The results of the turning movement counts meet the requirements of the Provincial Warrant for All-Way Stop Control. The above results reflect the highest peak traffic hour at the intersection. The collected traffic volumes are close to satisfying Warrant 1, and can vary from day-to-day. There were zero reported vehicle collisions in the past year at this intersection.

The sight distance was reviewed and it was noted that the required minimum sight line distance of 90 metres for arterial and collector roadways was not met. The sight line requirement was not met due to the existing roadway geometrics. South of the intersection there is a horizontal curve on Edgeley Boulevard and there is also a downgrade differential of approximately 2.0 metres. As Edgeley Boulevard is classified as a major collector roadway, a minimum curve radius of 220 metres is required. In this case, the radius is only 210 metres.

Given that the built environment cannot be easily altered physically and in consideration of the Provincial Warrant Criteria being met, it is recommended that an all-way stop control be installed at this intersection. Further, it is suggested that a warning sign, in the form of 'Stop Ahead', be installed south of the subject location to provide advance notice to northbound motorists.

The installation of this stop control will bring this intersection into compliance with all applicable standards.

### **Relationship to Vaughan Vision 2007**

This traffic study is consistent with Vaughan Vision 2007 as to ensure enhanced safety standards are incorporated in community designs (1.1.2).

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

### **Conclusion**

Based on staff's review, it is recommended that an all-way stop control and advance warning signage be installed at the intersection of Edgeley Boulevard and Romina Drive/Four Valley Drive.

### **Attachments**

1. Location Map

### **Report prepared by:**

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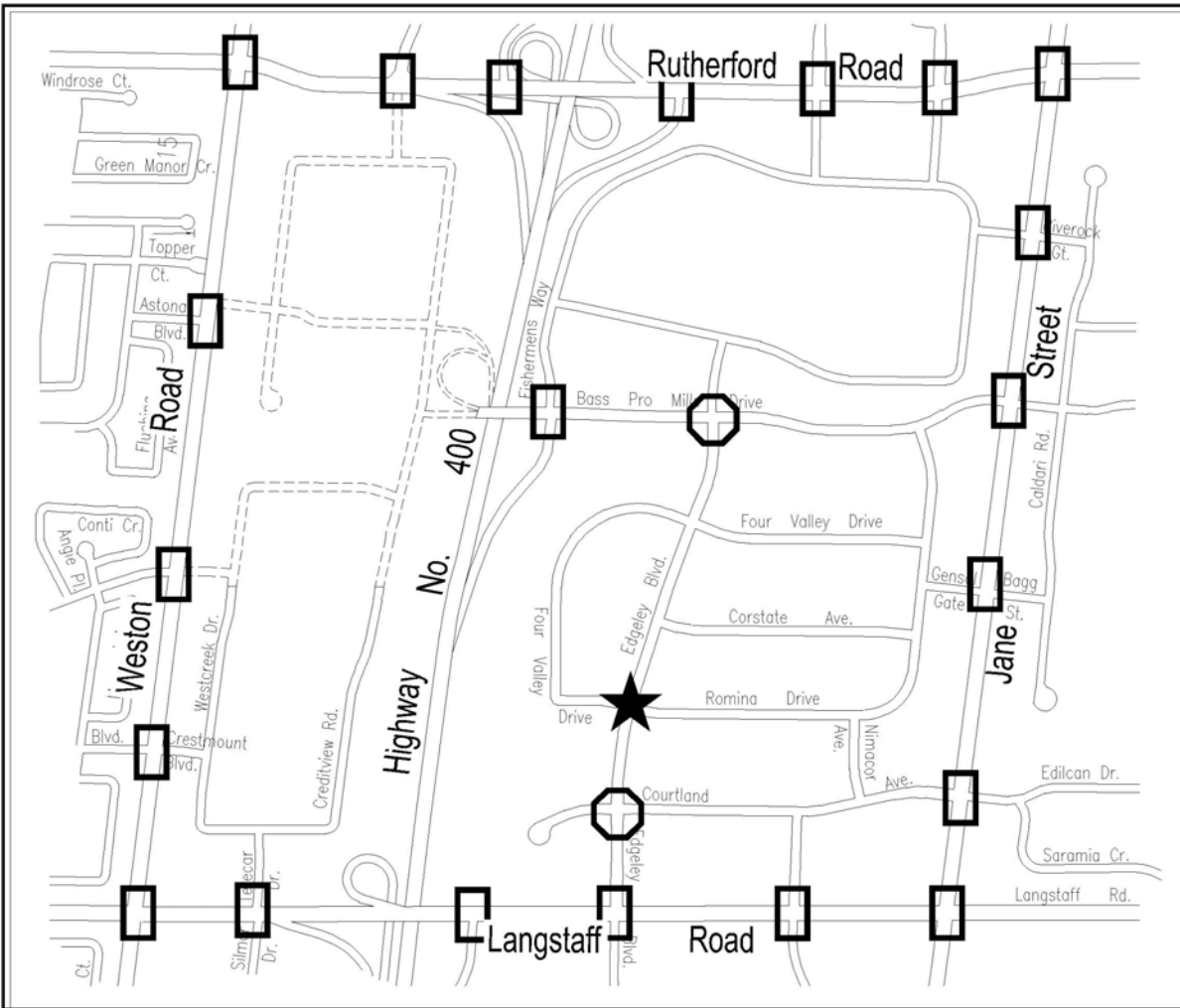
Respectfully submitted,

Bill Robinson, P. Eng.,  
Commissioner of Engineering and Public Works

Gary Carroll, P. Eng.,  
Director of Engineering Services




:MR

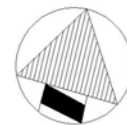
# ATTACHMENT No. 1



## EDGELEY BOULEVARD & ROMINA DRIVE/ FOUR VALLEY DRIVE PROPOSED ALL-WAY STOP CONTROL

### LEGEND

-  INTERSECTION UNDER REVIEW
-  EXISTING TRAFFIC SIGNALS
-  EXISTING ALL-WAY STOP CONTROL



NOT TO SCALE