

COMMITTEE OF THE WHOLE – NOVEMBER 3, 2008

EDGELEY BOULEVARD AND BASS PRO MILLS DRIVE TRAFFIC REVIEW

Recommendation

The Commissioner of Engineering and Public Works recommends:

That Engineering Services staff monitor the intersection in the Spring 2009 to determine the traffic signal warrant values and report to a Committee of the Whole meeting with this information.

Economic Impact

There are no economic impacts stemming from the recommendations of this report for the 2008 Budget Year. There will be future impacts on the 2009 Capital Budget for the installation of the traffic signals and Operating Budgets for the maintenance of the traffic signals, if the Provincial warrants are met.

Communications Plan

Staff will contact the area businesses on the outcome of Council's decision in this matter.

Purpose

To report on the feasibility of installing traffic signals at the intersection of Edgeley Boulevard and Bass Pro Mills Drive.

Background - Analysis and Options

At its meeting on May 26, 2008, Council adopted without amendment:

- “1. That this report be received for information;**
- 2. That the required budget sheets be submitted for consideration in the 2009 Capital Budget process; and**
- 3. That Engineering Services staff monitor the intersection in the Fall 2008 to determine the traffic signal warrant values and report to a Committee of the Whole meeting with this information.”**

Several business employees on Four Valley Drive expressed concerns regarding the intersection of Edgeley Boulevard and Bass Pro Mills Drive. Their concerns relate to the number of accidents and heavy traffic volumes, especially during the peak time periods.

Edgeley Boulevard is designed as a 26.0 metre collector road with an existing posted speed limit of 40 km/h. Bass Pro Mills Drive is designed as a 30.0 metre arterial road with an existing 50 km/h statutory speed limit. There is an existing all-way stop control at the intersection. Refer to Attachment No. 1.

Engineering Services staff conducted an intersection turning movement count at the intersection on March 27, 2008. The studied time periods were 7:00am to 9:00am, 11:00am to 2:00pm and 3:00pm to 6:00pm. On the day of the study the weather was clear and sunny. The results of the study are summarized below.

Warrant #1 – Minimum Vehicular Volumes		
Part A – All Approaches	-	95%
Part B – Minor Street Both Approaches	-	100%
Percentage Warrant (lowest of the two above)	-	95%
Warrant #2 – Delay to Cross Traffic		
Part A – Major Street Both Approaches	-	67%
Part B – Traffic Crossing Major Street	-	100%
Percentage Warrant (lowest of the two above)	-	67%
Warrant #3 – Accident Experience		
Part A – Reportable Accidents Correction by a Traffic Signal	-	70%
Part B – Adequate trial of less restrictive remedies	-	100%
Part C – Warrant 1 or Warrant satisfied 80% or more	-	100%
Warrant #4 – Combination Warrant		
Two Warrants Satisfied 80% for Traffic Signals	-	NO

In order to meet the Provincial Traffic Signal warrant, one of the first three warrants must be met 100% or two of the first three warrants must be met at 80%. Based on the above results, the Provincial Traffic Signal warrant is not met. Warrant 1 is very close to being met. The accident experience has not been reduced with the installation of the all-way stop control. The above results were discussed in a report to the Committee of the Whole on May 20, 2008, and Council directed that the intersection be monitored again in Fall 2008 as stated at the beginning of this section.

Engineering Services staff conducted a follow-up intersection turning movement count at the intersection on September 11, 2008. The studied time periods were 7:00am to 9:00am, 11:00am to 2:00pm and 3:00pm to 6:00pm. On the day of the study the weather was clear and sunny. The results of the study are summarized below.

Warrant #1 – Minimum Vehicular Volumes		
Part A – All Approaches	-	95%
Part B – Minor Street Both Approaches	-	100%
Percentage Warrant (lowest of the two above)	-	95%
Warrant #2 – Delay to Cross Traffic		
Part A – Major Street Both Approaches	-	68%
Part B – Traffic Crossing Major Street	-	100%
Percentage Warrant (lowest of the two above)	-	68%
Warrant #3 – Accident Experience		
Part A – Reportable Accidents Correction by a Traffic Signal	-	60%
Part B – Adequate trial of less restrictive remedies	-	100%
Part C – Warrant 1 or Warrant satisfied 80% or more	-	100%
Warrant #4 – Combination Warrant		
Two Warrants Satisfied 80% for Traffic Signals	-	NO

In order to meet the Provincial Traffic Signal warrant, one of the first three warrants must be met 100% or two of the first three warrants must be met at 80%. Based on the above results, the Provincial Traffic Signal warrant is not met. Warrant 1 is very close to being met. The accident experience has been reduced since the March 2008 traffic study.

Staff did note that the southeast corner of the intersection is in the process of being developed. Once development in this area is completed, it is anticipated that the traffic generated by this development may fulfill the requirements of the Provincial Traffic Signal warrant.

Staff have included the required budget sheets for consideration in the 2009 Capital Budget as previously directed by Council. The approximate cost for the installation of traffic signals is \$125,000.

Staff will follow-up with another intersection turning movement count at this intersection in early Spring 2009. At that time, a report will be submitted to a Committee of the Whole meeting to update the status of the traffic signal warrants.

Relationship to Vaughan Vision 2020

Enhance and Ensure Community Safety, Health & Wellness – To advocate for, protect and enhance community safety, health and wellness through education, design and enforcement.

This report is consistent with the priorities previously set by Council.

Regional Implications

Not Applicable.

Conclusion

Engineering Services staff recommend that the intersection be monitored in the Spring 2009 to determine if the traffic signal warrant values have been met. The required budget sheets have been prepared and submitted during the upcoming budget preparation process for consideration in the 2009 Capital Budget deliberations, in anticipation that the Provincial Warrant for traffic signals will be met.

Attachments

1. Location Map

Report prepared by

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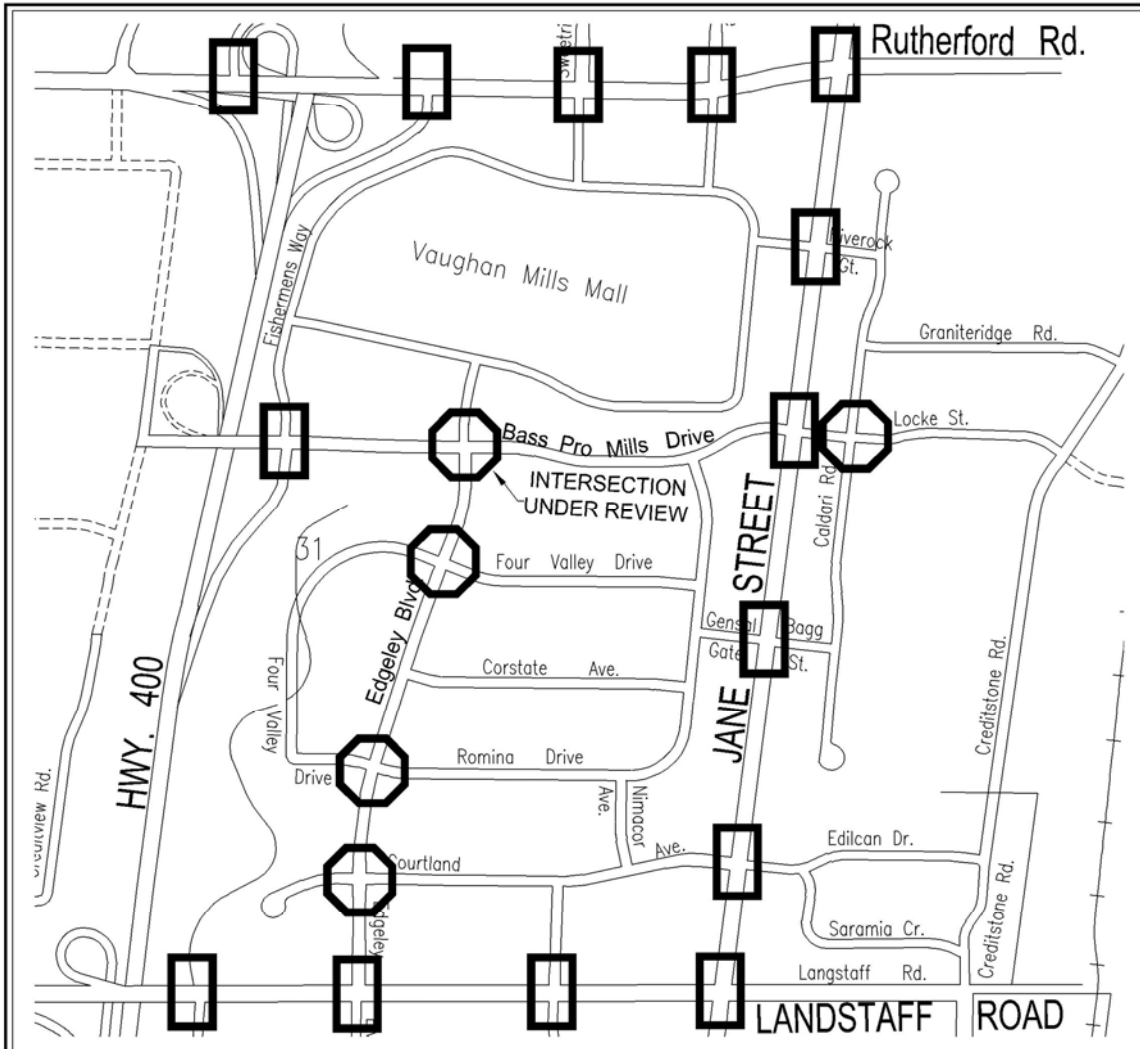
Respectfully submitted,

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

Debbie Korolnek, P. Eng.
Director of Engineering Services



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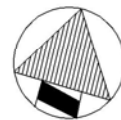
ATTACHMENT No. 1



EDGELEY BLVD. & BASS PRO MILLS DR. TRAFFIC REVIEW

LEGEND

-  EXISTING TRAFFIC SIGNALS
-  EXISTING ALL-WAY STOP CONTROL



NOT TO SCALE

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