

COMMITTEE OF THE WHOLE – SEPTEMBER 18, 2006

**CASTLE PARK BOULEVARD AND COLLE MELITO WAY
REQUEST FOR ALL-WAY STOP CONTROL**

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That an all-way stop control not be installed at the intersection of Castle Park Boulevard and Colle Melito Way;
2. That the existing stop signs located on Castle Park Boulevard be relocated to Colle Melito Way; and
3. That additional stop signs be installed on Colle Melito Way eastbound at Castle Park Boulevard and westbound at Castle Park Boulevard.

Economic Impact

The cost to install additional stop control signs and stop bar pavement markings will be an initial impact on the 2006 Operating Budget. The on-going costs to maintain the signs and pavement markings would be an impact to future Operating Budgets.

Purpose

To review the feasibility of implementing an all-way stop control at the intersection of Castle Park Boulevard and Colle Melito Way.

Background - Analysis and Options

A request has been received from a resident requesting a review of the traffic activity at the intersection of Castle Park Boulevard and Colle Melito Way. Castle Park Boulevard is a local roadway with one travel lane in each direction and is divided by a grass centre median approximately 20 metres in width. This design operates as two one-way streets on Castle Park Boulevard from Sonoma Boulevard to a point approximately 110 metres north of Colle Melito Way. Colle Melito Way is also a local roadway, undivided, with one travel lane in each direction. The existing stop controls are located on Castle Park Boulevard. The existing speed limit is 50 km/h on both roadways. The area is shown in Attachment No.1.

A turning movement count was conducted on Thursday, June 8, 2006 at the intersection of Castle Park Boulevard and Colle Melito Way during the morning and afternoon peak time periods of 7:00 am to 9:00 am, and 4:00 pm to 6:00 pm. The weather on this day was sunny and clear. The data collected was compared to the Provincial Warrant for an All-way Stop Control with the following results:

Warrant 1 – Minimum Vehicular Volumes	Warranted	9%
Warrant 2 – Accident Hazard	Warranted	25%
Warrant 3 – Sight Restriction	Warranted	100%

All-way stop controls are recommended when one of the above warrants are satisfied to 100% or more. Existing traffic volumes fulfill only 9% of the requirements, and there has been one reported collision at this intersection susceptible to prevention by an all-way stop control over the last twelve-month period. However, the existing landscaped median on Castle Park Boulevard creates sightline issues for all four approaches to this intersection.

This centre median contains a masonry (brick) wall approximately 13 metres in width and 2 metres in height as well as numerous trees and small bushes. The City of Vaughan requires a minimum 65 metres of unobstructed visibility for motorists entering an intersection from the minor roadway. Visibility at this intersection is below the required 65 metres.

In terms of traffic volumes, Castle Park Boulevard is the major roadway and Colle Melito Way is the minor roadway. The recorded traffic volumes on Castle Park Boulevard and Colle Melito Way during the study are 478 and 140 vehicles, respectively. However, the existing stop controls at this location are located on Castle Park Boulevard, the major street, rather than the minor street Colle Melito Way. The existing stop signs should be removed from Castle Park Boulevard and relocated to Colle Melito Way. This will improve free flow movement in the north and south directions on Castle Park Boulevard.

Further, it would be beneficial to individually operate this location as two separate intersections, Castle Park Boulevard and Colle Melito Way (east approach), and Castle Park Boulevard and Colle Melito Way (west approach). The geometric configuration of this intersection is unique and it is the only intersection within the City of Vaughan with such an oversized centre median. To improve sight visibility, intersection operations, and vehicular and pedestrian safety, a total of four stop signs are required on Colle Melito Way:

- Two stop signs on Colle Melito Way for the intersection of Castle Park Boulevard and Colle Melito Way (east approach); and
- Two stop signs on Colle Melito Way for the intersection of Castle Park Boulevard and Colle Melito Way (west approach).

Implementation of the recommended stop control revisions will bring these intersections into compliance with all applicable standards.

Relationship to Vaughan Vision 2007

This traffic study is consistent with Vaughan Vision 2007 as to identify and implement innovative traffic management alternatives to improve general safety (1.1.3).

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

Conclusion

Based on this review, staff recommends removing and relocating the existing stop signs from Castle Park Boulevard to Colle Melito Way and installing two additional stop signs on Colle Melito Way to the east and to the west of the existing centre median.

Attachments

1. Location Map

Report prepared by:

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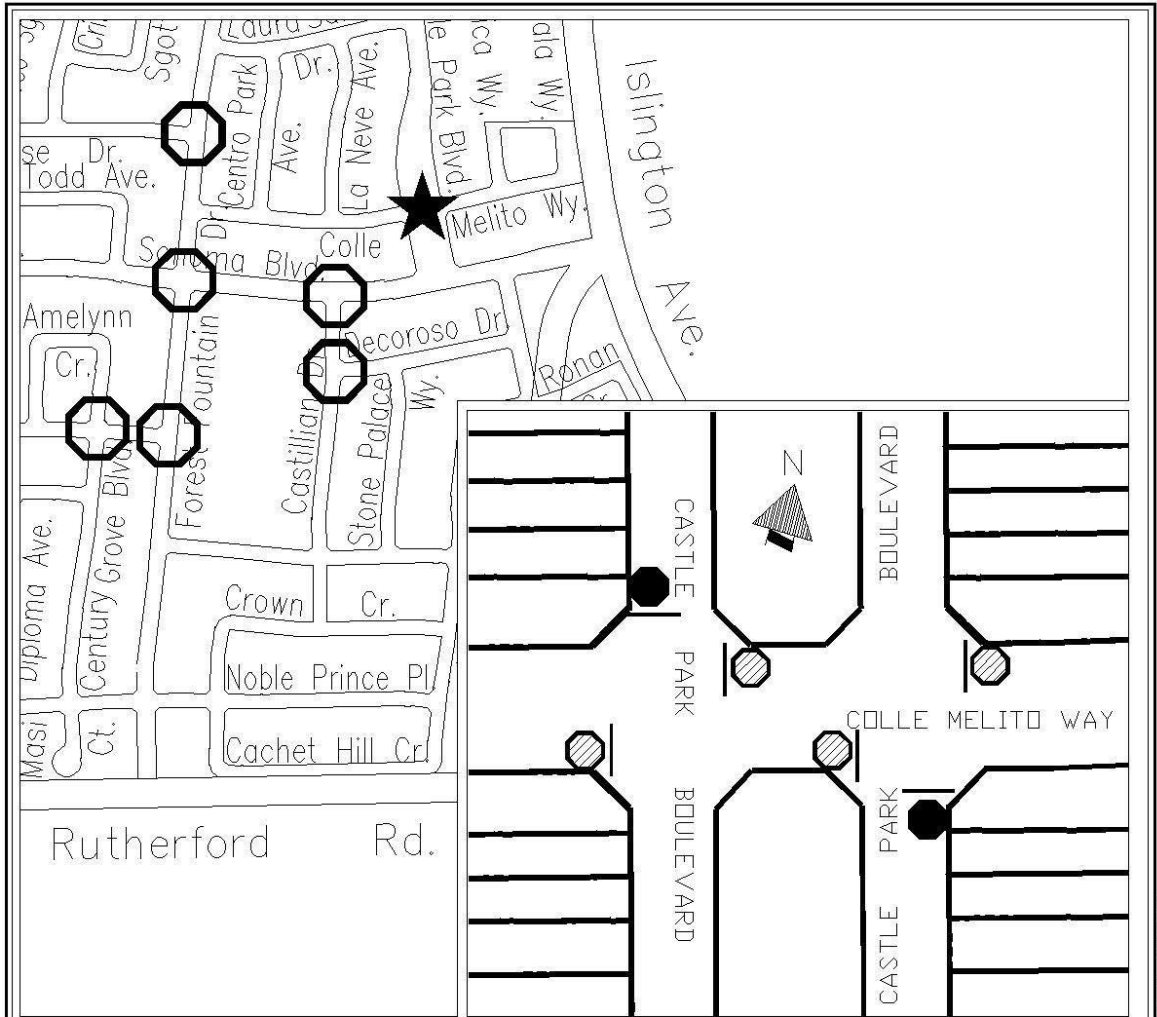
Respectfully submitted,

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

Gary Carroll, P. Eng.
Director of Engineering Services






TA:mc

ATTACHMENT No. 1



CASTLE PARK BOULEVARD AT COLLE MELITO WAY REQUEST FOR ALL-WAY STOP CONTROL

LEGEND

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



NOT TO SCALE