

COMMITTEE OF THE WHOLE – SEPTEMBER 7, 2004

PROPOSED CLOSURE OF KING HIGH DRIVE AT DUFFERIN STREET ADDITIONAL REVIEW

Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That no further action is required on King High Drive; and
2. That King High Drive not be closed at Dufferin Street.

Purpose

To report on the feasibility and impacts associated with closing King High Drive at Dufferin Street and to address safety concerns.

Background - Analysis and Options

At its meeting of February 9, 2004, Council adopted:

“That staff review the matter in 6 months, and report on recommendations to address safety concerns on the street;

That staff investigate the feasibility of installing a sidewalk on King High Drive; and

That the Region of York be requested to increase the southbound left turn phase timing at the intersection of Dufferin Street and Centre Street.”

Please refer to Attachment No. 1 for the area street network.

Background

King High Drive is within the area of the King High Drive Traffic Committee, which was formed as per Council direction at its meeting of May 13, 2002, to look at the installation of traffic calming measures on King High Drive, Concord Road and Lawrie Road. One of the issues identified by the residents at the initial public meeting was traffic infiltration on King High Drive east of Dufferin Street.

The initial infiltration study was conducted by staff in October, 2002. The results of the study indicate that during the morning peak period approximately 34 percent of motorists travelling between the Dufferin Street/King High Drive and Concord Road/Centre Street intersections were infiltrating. The corresponding amount during the afternoon peak period is approximately 14 percent. However, the actual number of motorists turning onto King High Drive from Dufferin Street during each of these time periods is low, at less than 50 vehicles.

A follow-up infiltration study was conducted by staff in March 2003 during the morning peak period. The results indicate that approximately 49 percent of motorists travelling between the Dufferin Street/King High Drive and Concord Road/Centre Street intersections during this time were infiltrating. The actual number of motorists turning onto King High Drive from Dufferin Street during the morning peak period was again low, at less than 50 vehicles.

An additional infiltration study was conducted by staff in June 2004 during the morning and evening peak time periods. The results of the study indicate that during the morning peak time

approximately 52 percent of motorists entering at Dufferin Street and King High Drive during this time were infiltrating and during the evening peak time only approximately 4 percent of motorists from Centre Street are infiltrating.

In May 2003, the Region of York reviewed the signal timing and increased the southbound left turn phase timing by 7 seconds. This additional timing provided the maximum allowable phase time without violating the minimum crossing timings required for pedestrians, therefore, the Region of York can not provide any more additional time for the southbound left turn phase.

Recently Conducted Traffic Studies

It appears that the signal phasing change at Dufferin Street and Centre Street has not reduced the percentage of vehicles infiltrating through King High Drive during the morning peak hours. However, the actual number of motorists turning onto King High Drive from Dufferin Street was observed at 119 vehicles down from 130 vehicles last year.

Traffic Volumes

Location	Number of Vehicles/Direction
1. King High Dr east of Dufferin St	1838 vehicles/eastbound 967 vehicles/westbound
2. King High Dr east of Concord Rd	991 vehicles/eastbound 935 vehicles/westbound
3. Concord Rd north of Centre St	1220 vehicles/northbound 1957 vehicles/southbound
4. Concord Rd south of Beverly Glen Blvd	1355 vehicles/northbound 1588 vehicles/southbound
5. Beverley Glen Blvd west of Concord Rd	2819 vehicles/westbound 3263 vehicles/eastbound

Both King High Drive and Concord Road are designed to local road standards with a right-of-way width of 20.0 metres and constructed with urban cross section (i.e. curb and gutter and no ditches). Beverley Glen Boulevard is designed to a collector/feeder road standard with a right-of-way width of 23.0 metres. Traffic volumes for a local roadway should not exceed 3,000 vehicles/day and for a collector/feeder roadway volume should not exceed 8,000 vehicles/day. The above accumulated traffic volumes for each roadway is well within these specified limits.

Radar Studies

Location	Average Speed/Direction
1. King High Dr east of Dufferin St	46 km/h/eastbound 48 km/h/westbound
2. King High Dr east of Concord Rd	41 km/h/eastbound 41 km/h/westbound
3. Concord Rd north of Centre St	39 km/h/northbound 39 km/h/southbound

The recorded vehicle speeds are within the posted 50 km/h limit and comparable to other similar roadways within the City.

There are existing allway stop controls at the following intersections:

Beverly Glen Blvd/Concord Rd, Concord Rd/King High Dr, Concord Rd/Lawrie Rd and King High Dr/Vaughan Blvd.

Road Closure Impacts

Closing King High Drive at Dufferin Street would:

- Affect residents on adjacent streets. Many motorists currently driving through the neighbourhood, as well as residents living on King High Drive, would likely divert to Beverley Glen Boulevard to the north. The residents of these other streets would likely oppose a road closure on King High Drive.
- Inconvenience residents of King High Drive by forcing them to divert onto other streets with vehicular and possible pedestrian movements.
- Increase emergency response times. This will be the case even if an emergency access with removable bollards is provided at the intersection, as the Fire Department has indicated the act of removing these bollards often involves an equivalent amount of time as diverting to another street.
- Set a precedent in the City of Vaughan. Similar road closure requests, such as on Santa Barbara Place in Weston Downs, or Wigwoss Drive in the Vaughanwood neighbourhood, have been refused by Council in the past.
- Impact access for a planned development on the southeast corner of the intersection. A site plan application (DA.02.062) was considered by Committee of the Whole at its meeting of March 3, 2003, for an office building with 33 parking spaces on the site. Access would be via a full movements driveway off King High Drive, and a right in/right out driveway off Dufferin Street. Should King High Drive be closed the location of the closure would have to be carefully considered. If the closure was at Dufferin Street, the patrons unable to use the right in/right out driveway would be forced to divert through the adjacent residential neighbourhood to access the office/commercial site. If the closure was located east of the planned driveway, it would be difficult to implement given limited space in the right of way and the locations of existing residential driveways.
- Require a turning circle to accommodate waste collection and snow ploughing vehicles so that they could turn around without backing up. Any closure would have to be designed to incorporate a turning circle, the construction of which would impact the boulevard and driveways of the existing homes at this location

In light of these impacts, and the low volume of infiltrating traffic on King High Drive, staff does not recommend the closure of King High Drive at Dufferin Street.

Proposed Sidewalk

Staff was requested to investigate the feasibility and cost of constructing a 1.5m wide sidewalk on either the north or south side of King High Drive from Dufferin Street to Vaughan Boulevard.

Staff conducted a site visit and determined the following:

1. King High Drive is an urbanized residential street with a mix of mature residential properties and new lot in-fills.

2. Installation of a sidewalk on either side of the road will be complicated by the existing topography requiring cut and fill, disruption to mature trees and street/landscaping, a culvert crossing with pedestrian protection, utility/service relocations and "reverse slope" driveways.

A preliminary estimate to construct a 1.5m wide concrete sidewalk on either the north or south side of King High Drive is approximately \$175,000 per side.

Relationship to Vaughan Vision 2007

This traffic study is consistent with Vaughan Vision 2007 as to ensure that the enhancement of safety standards are adhered to (1.1.2) and that effective traffic calming measures meet the City's Neighbourhood Policy and Procedures and Warrants for traffic calming (3.3.1).

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

Conclusion

Based on the above review, it is recommended that King High Drive not be closed at Dufferin Street, and that no further investigations are required at this time.

Attachments

1. Location Map

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Respectfully submitted,

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