

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF SEPTEMBER 17, 2013

Item 12, Report No. 35, of the Committee of the Whole, which was adopted without amendment by the Council of the City of Vaughan on September 17, 2013.

**12 LOAD RESTRICTION BY-LAW ON BRIDGE NO. 008601
 HUMBER BRIDGE TRAIL BRIDGE
 IN THE VICINITY OF HIGHWAY 27 AND MAJOR MACKENZIE ROAD
 WARD 1**

The Committee of the Whole recommends approval of the recommendation contained in the following report of the Commissioner of Engineering and Public Works and the Director of Engineering Services, dated September 3, 2013:

Recommendation

The Commissioner of Engineering and Public Works and the Director of Engineering Services recommend:

1. That a by-law be enacted to limit the loading on the existing concrete bridge, being Bridge No. 008601, (Humber River, West Branch on Humber Bridge Trail, approximately 0.2 km east of Highway No. 27) to a maximum of 5 tonnes; and
2. That the by-law be in effect for a period of 2 years.

Contribution to Sustainability

Not Applicable.

Economic Impact

There is no economic impact to the City as a result of the recommendations from this report.

Communications Plan

A Communications Plan is not required for this activity.

Purpose

To pass a by-law to impose a load restriction on an existing concrete bridge for a period of 2 years, in accordance with regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2).

Background - Analysis and Options

The Humber Bridge Trail Bridge, (Bridge No. 008601), is located on Humber Bridge Trail, approximately 0.2 km east of Highway No. 27. (See Attachment No.1).

The existing bridge was constructed in 1914 and is an 18.3 metre single span cast in place concrete bowstring arch bridge with a concrete deck and wearing surface. The bridge provides a roadway width of 3.7 metres and accommodates a single lane for two way vehicular traffic.

Regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2) requires the City to ensure that the bridges are kept safe and in good repair. This requirement is completed through the performance of regular biennial structure inspections in accordance with the Ontario Structure Inspection Manual. Under these regulations, municipalities are still responsible for passing load limit by-laws. In place of the Ministry of Transportation of Ontario review, the recommendations to support the load limit and the duration for which it is valid, must now be stamped by two professional engineers.

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF SEPTEMBER 17, 2013

Item 12, CW Report No. 35 – Page 2

Based on our most recent inspection of the structure, completed by AECOM in August 2013, the 5 tonnes load limit currently posted is recommended to remain in effect.

The current By-law will expire on December 31, 2013 and a new by-law is required for renewal and continued enforcement of the posted load limit on this structure.

A Class Environmental Assessment was undertaken to identify rehabilitation/replacement alternatives for Bridge No. 008601 (Humber Bridge Trail Bridge). At the meeting held on September 25, 2012, Council adopted the recommendation to proceed with a full rehabilitation of the bridge. The bridge rehabilitation has been identified, within the 2014 – 2017 capital plan, for construction in 2015. A review of future load limit requirements will be undertaken once the detailed design of the bridge rehabilitation has been completed. It is appropriate to impose the recommended load limit until the bridge construction is complete.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of the report will assist in enhancing and maintaining community safety, health and wellbeing, by ensuring that an appropriate level of service for bridge conditions are maintained for the citizens of Vaughan.

Regional Implications

There are no Regional Implications for this activity.

Conclusion

A load limit by-law is required to renew a load restriction of 5 tonnes for a period of 2 years in accordance with regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2).

Attachments

1. Location Map

Report prepared by:

Majid Chaoudhry, BSc., I.T., Infrastructure Coordinator, ext 8497

Vince Musacchio, P. Eng., PMP, Manager of Capital Planning and Infrastructure, ext. 8311

(A copy of the attachments referred to in the foregoing have been forwarded to each Member of Council and a copy thereof is also on file in the office of the City Clerk.)

COMMITTEE OF THE WHOLE – SEPTEMBER 3, 2013

LOAD RESTRICTION BY-LAW ON BRIDGE NO. 008601 HUMBER BRIDGE TRAIL BRIDGE IN THE VICINITY OF HIGHWAY 27 AND MAJOR MACKENZIE ROAD WARD 1

Recommendation

The Commissioner of Engineering and Public Works and the Director of Engineering Services recommend:

1. That a by-law be enacted to limit the loading on the existing concrete bridge, being Bridge No. 008601, (Humber River, West Branch on Humber Bridge Trail, approximately 0.2 km east of Highway No. 27) to a maximum of 5 tonnes; and
2. That the by-law be in effect for a period of 2 years.

Contribution to Sustainability

Not Applicable.

Economic Impact

There is no economic impact to the City as a result of the recommendations from this report.

Communications Plan

A Communications Plan is not required for this activity.

Purpose

To pass a by-law to impose a load restriction on an existing concrete bridge for a period of 2 years, in accordance with regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2).

Background - Analysis and Options

The Humber Bridge Trail Bridge, (Bridge No. 008601), is located on Humber Bridge Trail, approximately 0.2 km east of Highway No. 27. (See Attachment No.1).

The existing bridge was constructed in 1914 and is an 18.3 metre single span cast in place concrete bowstring arch bridge with a concrete deck and wearing surface. The bridge provides a roadway width of 3.7 metres and accommodates a single lane for two way vehicular traffic.

Regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2) requires the City to ensure that the bridges are kept safe and in good repair. This requirement is completed through the performance of regular biennial structure inspections in accordance with the Ontario Structure Inspection Manual. Under these regulations, municipalities are still responsible for passing load limit by-laws. In place of the Ministry of Transportation of Ontario review, the recommendations to support the load limit and the duration for which it is valid, must now be stamped by two professional engineers.

Based on our most recent inspection of the structure, completed by AECOM in August 2013, the 5 tonnes load limit currently posted is recommended to remain in effect.

The current By-law will expire on December 31, 2013 and a new by-law is required for renewal and continued enforcement of the posted load limit on this structure.

A Class Environmental Assessment was undertaken to identify rehabilitation/replacement alternatives for Bridge No. 008601 (Humber Bridge Trail Bridge). At the meeting held on September 25, 2012, Council adopted the recommendation to proceed with a full rehabilitation of the bridge. The bridge rehabilitation has been identified, within the 2014 – 2017 capital plan, for construction in 2015. A review of future load limit requirements will be undertaken once the detailed design of the bridge rehabilitation has been completed. It is appropriate to impose the recommended load limit until the bridge construction is complete.

Relationship to Vaughan Vision 2020/Strategic Plan

In consideration of the strategic priorities related to Vaughan Vision 2020, the recommendations of the report will assist in enhancing and maintaining community safety, health and wellbeing, by ensuring that an appropriate level of service for bridge conditions are maintained for the citizens of Vaughan.

Regional Implications

There are no Regional Implications for this activity.

Conclusion

A load limit by-law is required to renew a load restriction of 5 tonnes for a period of 2 years in accordance with regulations under the Highway Traffic Act (Section 123(2)) and the Bridges Act (Section 2).

Attachments

1. Location Map

Report prepared by:

Majid Chaoudhry, BSc., I.T., Infrastructure Coordinator, ext 8497

Vince Musacchio, P. Eng., PMP, Manager of Capital Planning and Infrastructure, ext. 8311

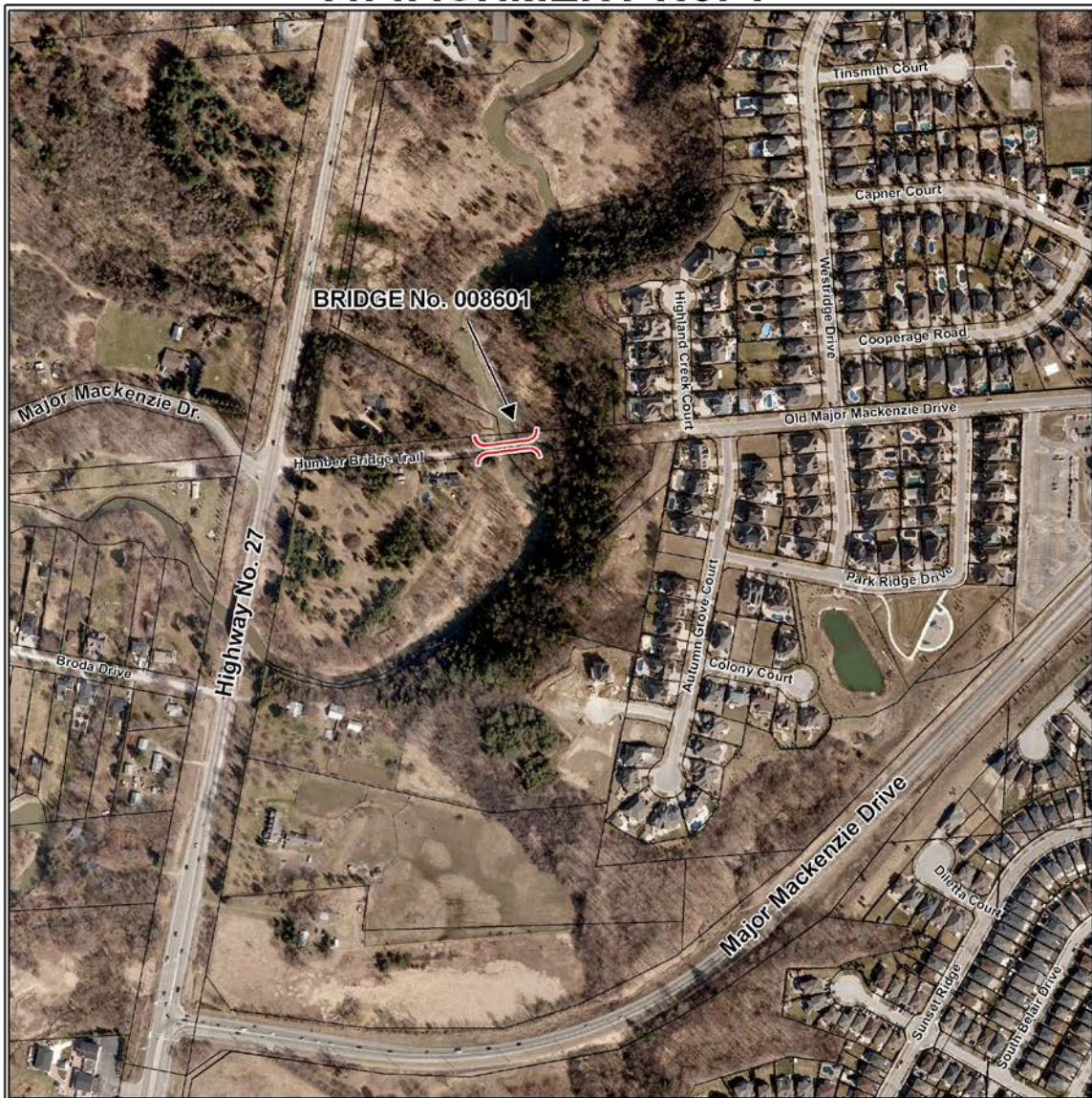
Respectfully submitted,

Paul Jankowski, P. Eng.
Commissioner of Engineering and Public Works

Jack Graziosi, P. Eng.
Director of Engineering Services

VM:mc

ATTACHMENT No. 1



LOAD RESTRICTIONS BY-LAW **BRIDGE No. 008601** **HUMBER RIVER WEST BRANCH**

LEGEND



SUBJECT BRIDGE

LOCATION: Part of Lots 20 & 21,
Concession 8

Note: Aerial photography acquired in spring, 2011



NOT TO SCALE