



**Report to:** Development Services Committee

**Date:** October 22, 2013

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**SUBJECT:** Highway 404 Ramp Extensions (Highway 7, Major Mackenzie and Elgin Mills) Project Update

**PREPARED BY:** Alain Cachola, Senior Manager Infrastructure and Capital Works, Ext 2711

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**RECOMMENDATION:**

- 1) THAT the report entitled "Highway 404 Ramp Extensions (Highway 7, Major Mackenzie and Elgin Mills) Project Update" be received;
- 2) AND THAT the detailed design of the Highway 404 Ramp extensions at Highway 7 and Major Mackenzie Drive be deferred;
- 3) AND THAT the Class EA for the Highway 404 Ramp extension on Elgin Mills Road be deferred;
- 4) AND THAT upon payment of all engineering consultant invoices and administration fees to date for the above-noted projects, the following capital accounts be closed and all remaining funds be returned to original funding source:
  - i. Hwy 404 Ramp Extension, North of Hwy 7
    - a. 083-5350-9317-005 (Hwy 404 Ramp Extension at Hwy 7).  
Remaining funds to be returned to original funding source (\$440,681.61)
    - b. 083-5350-12047-005 (Hwy 404 Ramp Extension – Hwy 7)  
Remaining funds to be returned to original funding source (\$8,132,900.00)
  - ii. Hwy 404 Ramp Extension, North of Major Mackenzie Drive
    - c. 083-5350-7272-005 (Hwy 404 Ramp Extension at Major Mackenzie)  
Remaining funds to be returned to original funding source (\$120,721.83)
    - d. 083-5350-9316-005 (Hwy 404 Ramp Extension at Major Mackenzie)  
Remaining funds to be returned to original funding source (\$133,158.01)
  - iii. Hwy 404 Ramp Extension, North of Elgin Mills Road
    - e. 083-5350-9315-005 (Hwy 404 Ramp Extension at Elgin Mills)  
Remaining funds to be returned to original funding source (\$550,000.00)
- 5) AND THAT the implementation of the Hwy 404 ramp extensions be deferred until such time as the projects warrant the capital expenditure by Markham;
- 6) AND THAT the property requirements for the Hwy 404 ramp extensions at the three (3) locations be protected through future planning applications and conditions of approval;
- 7) AND THAT the benefiting landowners in the vicinity of the three (3) ramp extensions be permitted to proceed with the implementation of the Hwy 404 ramp extensions subject to the conditions outlined in this report;

- 8) AND THAT staff be authorized and directed to do all things necessary to give effect to this resolution.

**PURPOSE:**

The purpose of the report is to provide an update on the status of the Highway 404 ramp extensions at Hwy 7, Major Mackenzie Drive and Elgin Mills Road.

The report also requests approval from Council to defer the detailed design of the Hwy 404 ramp extension projects on Hwy 7 and Major Mackenzie Drive and the Class EA for the Hwy 404 ramp extension on Elgin Mills Road due to the limited cost/benefit of the projects at this time and the challenges in acquiring full access from the Ontario Ministry of Transportation. However, if the abutting benefiting developers/institutions wish to proceed with the implementation of the ramp extension, staff recommend they be permitted to do so subject to the conditions listed in this report.

**BACKGROUND:**

The City of Markham has been experiencing significant population and employment growth for a number of years which is placing increased demand on the existing transportation network. Anticipated growth and traffic demand in the Highway 404 corridor area, bounded by Highway 7 to Elgin Mills Road, will lead to future congestion that will reduce the current level of service within the area.

To accommodate these future traffic issues, Markham has undertaken the following studies to identify the future transportation issues and to determine future improvements:

- City of Markham Transportation Study.
- Municipal Class Environmental Assessment for the Highway 404 ramp extension, north of Hwy 7 – City of Markham (Filed and approved – January 2008)
- Municipal Class Environmental Assessment for the Highway 404 ramp extension, north of Major Mackenzie Drive – City of Markham (Filed and approved – October 2009)
- Highway 404 Mid-Block Crossings Study – Region of York, City of Markham and Town of Richmond Hill (Completed May 2012).
- Municipal Class Environmental Assessment for the Highway 404 ramp extension, north of Elgin Mills – City of Markham (Substantially Completed).

## **OPTIONS / DISCUSSIONS:**

### ***A. Hwy 404 Ramp Extension at Hwy 7 (Attachment 'A')***

In January 2008, the City of Markham completed and filed the Municipal Class Environmental Assessment for the Highway 404 off-ramp extension at Hwy 7. All approval agencies (TRCA, MNR, Region of York, MTO) and other external stakeholders that required input for the proposed study were contacted to gather their comments for the project. The Class EA recommended that the northbound off-ramp extension be constructed north of Hwy 7 to the future Highway 404 crossing with a two way road (one northbound and one southbound lane). The study also identified that the proposed ramp extension would improve the level of service to the existing intersections, regional roads and off ramps within the area which benefits not just the City of Markham, but also Region of York, Town of Richmond Hill and adjacent developers/institutions.

#### **Detailed Design**

In June 2010, the City awarded the detailed design for the Highway 404 Ramp Extension at Hwy 7 project to URS Canada Inc. As a part of the recommendation on the award report, the Region of York and Town of Richmond Hill were requested to cost share the fees for the detailed design of the Highway 404 ramp extension at Hwy 7. This proposal is similar to the current Tri-Party agreement that the City of Markham has with Region of York and Town of Richmond Hill for the detailed design of the Highway 404 Mid-Block Crossing, North of Hwy 7. To date, City staff has not received any commitments from the Region of York or Town of Richmond Hill for the proposed cost sharing of the design fees. The current detailed design cost for the Hwy 404 ramp extension at Hwy 7 project is in the order of \$840,000.00, which would need to be 100% upfronted by Markham. The detailed design for the proposed Hwy 404 ramp extension is currently at 30% design stage.

#### **Permit Approvals from Agencies**

As a part of the detailed design exercise, URS Canada Inc. and City staff have had numerous meetings with the different agencies that would need to issue approvals for the proposed project. One of the major challenges that URS and City staff are experiencing are the requirements set out by the Ministry of Transportation (MTO). The Ministry has requested a number of studies from URS to identify the level of service improvements within the intersection of Hwy 7 and ramp extension. All studies requested by MTO have been provided to date. Despite the approved Class EA Study showing a two-direction ramp extension, the MTO is now not permitting outbound access (southbound movement) from the ramp extension to Hwy 7 as MTO claims that it may have negative impact on the intersection (i.e. additional phasing on the traffic signal to accommodate the southbound traffic). This effectively makes the ramp a one way northbound road.

Another requirement from MTO was to utilise a design speed of 80km/hr, instead of 70 km/hr as per the approved EA, for the proposed off-ramp (i.e. East-North) to Hwy 404.

Keeping the 80km/hr design speed will require additional property to be acquired from the Seneca property at substantial cost.

As part of Seneca's site plan approval in June 2005, Seneca conveyed to the City 3.0 acres of land free and clear of all encumbrances for the proposed Hwy 404 ramp extension and Mid-Block Crossing as a condition of the site plan approval at no cost to the City. However, the proposed revision required by MTO because of the design speed for the proposed off-ramp will increase the property requirement. City staff has met with Seneca to review the proposed additional land required for the project, Seneca has advised that they will require full market compensation for the additional properties (approximately 0.6 Ha).

The August 5, 2011 agreement between the City of Markham and Seneca College required the owner (Seneca College) consider the City request for additional lands for future Hwy 404 northbound ramp extension, if required.

### **Construction Cost and Schedule**

The current cost estimate for the construction of the ramp extension is in the order of \$10.0 million (not including property costs), which is included in the Development Charges Background Study (2013). Staff have prioritized development charges funded projects and recommend this project to be deferred to at least 2023.

### **Next Steps**

With the above issues and financial circumstances staff recommend the following:

- The design and construction of the Hwy 404 ramp extension at Hwy 7 by Markham be deferred until the project warrants the \$10.0 million capital cost.
- Staff pay all invoices and administration fees for the project to date and terminate the contract with URS Canada Inc. The project capital accounts be closed and all remaining funds be returned to original funding source;
- Staff work with landowners to protect the properties required for the Hwy 404 ramp extension at Hwy 7;
- Markham permit abutting landowners to proceed with the implementation of the Hwy 404 ramp extension at Hwy 7 subject to the following conditions:
  - Landowners submit a formal request to the City.
  - Landowners to be responsible for the design completion (including obtaining all required permits from approval agencies), property acquisition and construction.
  - Landowners to upfront the project implementation costs, to be reimbursed in the future from the development charges based on Engineering Department Capital Program (beyond year 2023) and repayment schedule.
  - Landowners enter into a development charges credit agreement with Markham.

***B. Hwy 404 Ramp Extension at Major Mackenzie Drive (Attachment 'B')***

**Municipal Class EA**

The Municipal Class Environmental Assessment for the Highway 404 off-ramp extension at Major Mackenzie Drive was approved by Council and filed in October 2009. All stakeholders (TRCA, MNR, Region of York, MTO, public and landowners) were contacted to gather their comments on the project. The Class EA recommended that the off-ramp, which includes a two way roadway (one northbound and one southbound lane), be extended north of Major Mackenzie Drive to Markland Street.

**Detailed Design and Cost Sharing**

In April 2011, the City awarded the detailed design for the Highway 404 Ramp Extension at Major Mackenzie Drive Project to AMEC Consultant. The current detailed design cost for the project is in the order of \$450,000.00, which would need to be funded 100% by the City of Markham.

**Permit Approvals from Agencies**

AMEC Consultant has initiated discussions with the Ministry of Transportation (MTO) with respect to the detailed design for the proposed ramp extension. Similar to the MTO comments for the ramp extension at Hwy 7, MTO has advised of their requirement to prohibit outbound access (southbound movement) from the ramp extension to the arterial road. MTO did not object to the two way road in the approved Class EA study.

Staff has been in discussion with MTO regarding the preferred lane configuration of the proposed road extension. However an agreement has not been established. MTO has advised that there has been extensive back up and complaints from municipalities and developers regarding lack of signal time on ramp extensions constructed to-date with outbound access to the arterial road. The project is currently on hold subject to resolution of the MTO requirement.

**Property Requirements / Future Development**

The proposed ramp extension crosses through lands owned by Majorwood Developments Inc. and Loblaws Properties Limited.

Majorwood Developments residential subdivision agreement was executed in November, 2007. Paragraph 8.24 of the agreement required that the owner covenants and agrees to convey the required right of way for the ramp extension through the owner's lands, and to construct the ramp extension, within this plan of subdivision or the owner's abutting lands or both, and if necessary, make adjustments to Markland Street design to accommodate the design of the intersection, at its sole cost, when requested by the Director of Engineering.

In March 2004, Loblaw Properties Ltd. submitted applications for Official Plan and Zoning By-law Amendments to permit development of a large retail centre on the north side of Major Mackenzie Drive between Highway 404 and Woodbine Avenue. In April 2005, Council refused the application. The applicant appealed to the Ontario Municipal Board. The City and the applicant reached a settlement, and Official Plan and Zoning By-law amendments for the proposed development were approved by the Ontario Municipal Board in December 2005, with the support of Council.

As part of the settlement of the appeals by Loblaw Properties limited, Minutes of Settlement between the City of Markham, Loblaw Properties Limited and Fieldgate Developments were executed on December 1, 2005. Paragraph 3 required Loblaws to convey a 20 m right-of-way to the City in order to extend the northbound 404 off-ramp from its current terminus at Major Mackenzie Drive through the Loblaws property to connect with Markland Street. The City had to advise Loblaws and Fieldgate if the ramp was not required. Landowners were notified of the recommendation of the Class EA study to extend the ramp extension at Major Mackenzie Drive.

City staff has discussed with the landowners regarding cost sharing the construction of the road section of the ramp extension. Under the Development Charges background study, the internal two lane road is considered local facility and is not eligible for development charges. Details of the cost sharing will be discussed as a part of a future site plan agreement for the development of the lands.

### **Construction Cost and Schedule**

The current cost estimate for the construction of the ramp extension is in the order of \$5.5 million which is included in the Development Charges background study (2013). Staff have prioritized development charges funded projects and recommend this project to be deferred to at least 2023.

### **Next Steps**

With the above issues and financial circumstances staff recommend the following:

- The design and construction of the Hwy 404 ramp extension at Major Mackenzie Drive by Markham be deferred until the project warrants the \$5.5 million capital cost.
- Staff pay invoices and administration fees for the above-noted projects and terminate the contract with AMEC Consultant. The project capital accounts be closed and all remaining funds be returned to original funding source;
- Staff work with landowners to protect the properties required for the Hwy 404 ramp extension at Major Mackenzie Drive through future site plan applications;
- Markham permit abutting landowners to proceed with the implementation of the Hwy 404 ramp extension at Major Mackenzie Drive subject to the following conditions:
  - Landowners submit a formal request to the City.

- Landowners to be responsible for the design completion (including obtaining all required permits from approval agencies), property acquisition and construction.
- Landowners to upfront the project implementation costs, to be reimbursed in the future from the development charges based on Engineering Department Capital Program (beyond year 2023) and repayment schedule.
- Landowners enter into a development charges credit agreement with Markham.

### **C. Hwy 404 Ramp Extension at Elgin Mills Road (Attachment 'C')**

#### **Municipal Class EA**

In September 2008, the Class Environmental Assessment Study for the Highway 404 off-ramp extension at Elgin Mills Road was issued to McCormick Rankin Corporation (MRC). The proposed ramp extension was to follow the same principles as the ramp extensions on Hwy 7 and Major Mackenzie Drive. MRC has completed all the requirements for the Class EA and was in a position to file the Class EA by mid-2011. However, due to the requirements set out by MTO for the prohibition of southbound lanes on the proposed ramp extension, filing the Class EA has been put on hold.

City staff is not in a position to recommend to Council to file the Class EA until the MTO requirements are addressed.

#### **Detailed Design and Cost Sharing**

The detailed design for the proposed ramp extension will follow upon completion of the Class EA. Staff met with the local developers in April 2011 and advised them of the proposed cost sharing of the local road section of the ramp extension. Under the Development Charges background study, the internal two lane road is considered local facility and is not eligible for development charges.

#### **Permit Approvals from Agencies**

As noted above, the Class EA is currently on hold pending the approval of the proposed ramp extension from MTO. All other agencies have provided their comments and they have been addressed as a part of the Class EA process.

#### **Property Requirements / Future Development**

The lands required for the proposed ramp extension have not been conveyed to the City. The secondary plan for the area includes the proposed ramp extension and the lands required will have to be conveyed by the local developer to the City as a condition of draft plan of subdivision or site plan approval.

#### **Construction Cost and Schedule**

The current cost estimate for the construction of the ramp extension is in the order of \$3.5 million which is included in the Development Charges background study. Staff have

prioritized development charges funded projects and recommend this project to be deferred to at least 2023.

### **Next Steps**

- Staff pay invoices and administration fees to date for the above-noted projects and terminate the contract with McCormick Rankin Corporation. The project capital accounts be closed and all remaining funds be returned to original funding source;
- The completion of the Class EA study be deferred and revisited in the future;
- The design and construction of the Hwy 404 ramp extension at Elgin Mills Road be deferred by Markham until such time that the cost/benefit warrants such.
- Staff work with landowners to protect the properties required for the Hwy 404 ramp extension at Elgin Mills Road through future applications;
- Markham permit abutting landowners to proceed with the implementation of the Hwy 404 ramp extension at Elgin Mills Drive subject to the following conditions:
  - Landowners submit a formal request to the City.
  - Landowners to be responsible to obtain required approvals to complete the Environmental Assessment Study, detailed design, property acquisition and construction.
  - Landowners to upfront the project implementation costs, to be reimbursed in the future from the development charges based on Engineering Department Capital Program (beyond year 2023) and repayment schedule.
  - Landowners enter into a development charges credit agreement with Markham.

### **Capital Program**

The Engineering Department has updated its 20 year Capital Program in which the three ramp extensions are programmed for beyond year 2023. The schedule will be updated on an annual basis. However based on future development charges revenue and other priorities, staff do not foresee Markham justifying the cost/benefit of the three ramp extensions for at least ten (10) years. However, if the abutting benefiting developers/institutions wish to proceed, staff recommend they be permitted to do so subject to the conditions listed in this report.

The work completed to date for the three ramp extensions would form the basis of future work required to complete these projects and is not a throw away.

### **FINANCIAL CONSIDERATIONS:**

The following is the latest summary of all of the accounts relating to the Hwy 404 ramp extension projects:



Account Number	Original Budget	Expenditures	Remaining
<b>Hwy 404 Ramp Extension at Hwy 7</b>			
083-5350-9317-005 (Design)	\$787,630.44	\$346,948.83	\$440,681.61
083-5350-12047-05 (Construction)	\$8,132,900.00	\$0.00	\$8,132,900.00
<b>Sub-Totals</b>	<b>\$8,920,530.44</b>	<b>\$346,948.83</b>	<b>\$8,573,581.61</b>
<b>Hwy 404 Ramp Extension at Major Mackenzie Drive</b>			
083-5350-7272-005 (EA)	\$325,000.00	\$204,278.17	\$120,721.83
083-5350-9316-005 (Design)	\$257,097.04	\$123,939.03	\$133,158.01
<b>Sub-Totals</b>	<b>\$582,097.04</b>	<b>\$328,217.20</b>	<b>\$253,879.84</b>
<b>Hwy 404 Ramp Extension at Elgin Mills Road</b>			
083-5350-9315-005 (Design)	\$550,000.00	\$0.00	\$550,000.00
<b>Sub-Totals</b>	<b>\$550,000.00</b>	<b>\$0.00</b>	<b>\$550,000.00</b>
<b>Total</b>	<b>\$10,052,627.48</b>	<b>\$675,166.03</b>	<b>\$9,377,461.45</b>

As per the recommendation, upon payment of all invoices and capital administration fees for the above-noted projects, the above capital accounts be closed and all remaining funds be returned to original funding source.

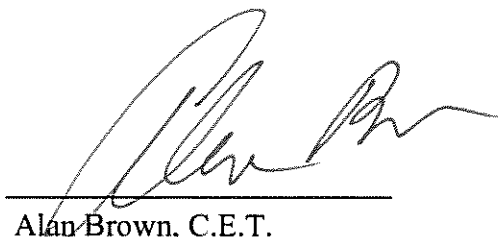
**ALIGNMENT WITH STRATEGIC PRIORITIES:**

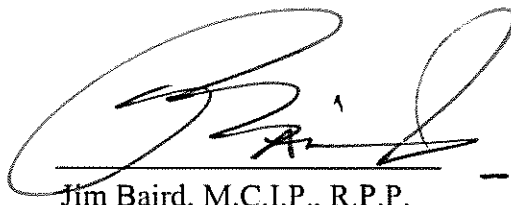
Phasing of Transportation Infrastructure in line with the City of Markham's strategic focus relating to Growth Management, Transportation/Transit, Safety, the Environment and Municipal Services.

**BUSINESS UNITS CONSULTED AND AFFECTED:**

The Planning, Legal and Finance Departments have been consulted and their comments have been incorporated.

**RECOMMENDED BY:**

  
 Alan Brown, C.E.T.  
 Director of Engineering

  
 Jim Baird, M.C.I.P., R.P.P.  
 Commissioner of Development Services

**ATTACHMENTS:**

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|----------------|---|
| Attachment 'A' | Site Location Map – Hwy 404 Ramp Extension at Hwy 7                 |
| Attachment 'B' | Site Location Map – Hwy 404 Ramp Extension at Major Mackenzie Drive |
| Attachment 'C' | Site Location Map – Hwy 404 Ramp Extension at Elgin Mills Road      |