



Report to: Council

Date Report: May 15, 2014

SUBJECT: Contract Award of 066-T-14 Reconstruction of Main Street Markham from Highway 407 to Hwy 7

PREPARED BY: Dan Foong, Capital Works Engineer Ext 4055
Alain Cachola, Senior Manager, Infrastructure and Capital Works Ext 2711

RECOMMENDATION:

- 1) **THAT** the report entitled “**Contract Award of 066-T-14 Reconstruction of Main Street Markham from Highway 407 to Hwy 7**” be received;
- 2) **AND THAT** the Contract 066-T-14 be awarded to the lowest priced Bidder, Dagmar Construction Inc., in the amount of \$11,979,719.40, inclusive of HST;
- 3) **AND THAT** a contingency amount of \$898,478.96 (7.5%), inclusive of HST, be established to cover any additional construction costs and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy;
- 4) **AND THAT** Purchase Order PD 14093 issued to McCormick Rankin Corporation for the Contract Administration and Inspection Service be increased by a maximum amount of \$547,662.14, inclusive of HST, (from \$425,000.00 to \$972,662.14) to cover the additional contract administration and inspection services, geotechnical inspection, material testing and environmental inspections, and that the Director of Engineering and Manager of Purchasing negotiate the PO increase amount;
- 5) **AND THAT** Staff be authorized to award the contingency in the amount of \$98,014.21, inclusive of HST, to cover additional costs related to contract administration and inspection services, geotechnical inspections, material testing, and environmental inspections and reporting, and that authorization to approve expenditures of this contingency amount up to the specified limit be in accordance with the Expenditure Control Policy;
- 6) **AND THAT** an allowance of \$200,000.00, inclusive of HST, be approved to be utilized for Heritage Features at Hwy7 and Main Street intersection that are being requested by the Main Street Markham Committee for items that were not included in the original tender document, and that the CAO be authorized to approve expenditure of these funds, as required for the project;

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- 7) **AND THAT**, subject to the approval of the requested heritage features by the Region of York, staff apply for a grant funding from the Region of York's 2015 Municipal Partnership Program to cover the additional costs of the work;
- 8) **AND THAT** Staff be authorized to award the contract for the Pre and Post Construction Inspection Services to OZA Inspections Limited up to an upset limit of \$15,000.00, inclusive of HST, in accordance with the Purchasing By-law;
- 9) **AND THAT** the 2014 Engineering Capital Budget (Account 083-5350-14055-005 – Main Street Markham, Hwy 407 to Hwy 7) be revised to include an additional \$309,136.06, inclusive of HST, to be funded from the Waterworks Reserve to cover the additional costs in the tender amounts associated with the watermain construction;
- 10) **AND THAT** subject to obtaining funding commitment from the (a minimum of two of the three) property the owners of 53 Main Street Markham, 2 Fisher Court and 4 Fisher Court, to the satisfaction of the City Solicitor and CAO, the Finance Department be authorized to collect the total project costs currently estimated at \$59,822.07 (includes 10% Contingency and 15% Admin Fees), inclusive of HST, for the improvement to the Sanitary Sewers for the subject properties equally and the following items be approved;
- a) Council enacts a Fees By-Law pursuant to Section 391 of the *Municipal Act 2001* for costs associated with the sanitary sewer installation substantially in the form attached as per Attachment 'A' – Fee By-law, upon completion of all work and final determination of costs;
 - b) Costs per lot be paid either as a one-time payment or annual payment up to a maximum of 10 years accruing interests at the same rate as the Region of York 10 Year Debenture Rate, 3.6% starting in 2016 and ending in 2025;
 - c) There will be no interest payable if the lot costs are paid in full by March 30, 2016;
 - d) The collected funds for the sanitary sewer local improvements be reimbursed to the Engineering Capital Account 083-5350-14055-005 (Main Street Markham, Hwy 407 to Hwy 7 Construction);
- 11) **AND THAT** the Engineering Department Capital Administration Fee in the amount of \$902,402.70, inclusive of HST, be transferred to revenue account 640-998-8871 (Capital Admin Fees) as follows, 2014 - \$541,441.62 and 2015 - \$360,961.08;
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- 12) **AND THAT** the project costs as set out above be funded from the following accounts, as outlined under the “Financial Consideration and Template” section of this report;
- Main Street Markham, Hwy 407 to Hwy 7 Design (083-5350-11068-005)
 - Main Street Markham, Hwy 407 to Hwy 7 Construction (083-5350-14055-005)
 - Sidewalk Program (083-5350-14030-005)
 - Watermain Contract Administration (053-6150-14234-005)
 - Budget Increase – Waterworks reserve (083-5350-14055-005);
- 13) **AND THAT** any remaining funds in the account be returned to original funding source upon completion of the project;
- 14) **AND THAT** a Noise By-law exemption be approved for Dagmar Construction Inc., for works on Saturdays and extended hours (i.e. 7pm to 10 pm) during weekdays, from July 2, 2014 to December 31, 2014 to expedite completion of this project;
- 15) **AND THAT**, if required (as determined by the Director of Engineering), a Noise By-law exemption be approved for Dagmar Construction Inc., for works on Sundays, in order to be able to complete the bridge in accordance with the construction schedule;
- 16) **AND THAT** a 10-year moratorium be placed on any major servicing and utility installation along Main Street Markham between Highway 407 and Highway 7;
- 17) **AND THAT** the Director of Engineering be authorized to finalize and implement the traffic and pedestrian management plan in consultation with the two (2) local Ward Councillors, the Region of York, the Operations Department, and the Fire and Emergency Services Departments;
- 18) **AND THAT** staff continue to provide construction updates to residents and businesses within the area including notices to residents as well as municipal services (i.e. Fire and Emergency Services) for any driveway / access disruptions and construction project update on the City’s website;
- 19) **AND THAT** staff report back to Council as to the feasibility of a reversible centre lane for Main Street Markham, from Hwy 407 to Hwy 7;
- 20) **AND THAT** Staff be authorized and directed to do all things necessary to give effect to this resolution.

EXECUTIVE SUMMARY:

The Environmental Assessment of Main Street Markham, from Highway 407 to Major Mackenzie Drive was completed in 2010 and approved by the Ministry of the Environment in 2011 which supported the vision of Main Street Markham.

The reconstruction of Main Street Markham from Highway 407 to Highway 7 has been a strategic priority for the City of Markham to provide a gateway into Main Street as well as to provide additional road capacity. The bridge replacement is included in the City's program for replacement in 2014 as it is at the end of its life cycle. Council endorsed the proposed road construction and bridge replacement and approved the proposed road closure at the March 18, 2014 Development Services Committee Meeting.

As part of the overall community involvement, the City arranged for public meetings to address any issues or concerns from businesses and residents prior to and during construction. A Project Liaison Committee (PLC) meeting was held on February 12, 2014 and March 20, 2014 to receive feedback from both residents and businesses within the area. These public meetings were established as a forum for the general public to provide input on the implementation of improvements to Main Street Markham, from Hwy 407 to Hwy 7. A number of issues were received from residents and businesses which staff have reviewed and are addressing as part of the work. Attachment "B" identifies the issues raised by the residents and businesses to date and the staff response.

Construction is expected to commence on July 2, 2014 and the main focus of construction is to complete the removal and replacement of the existing bridge. The intent is for the contractor to complete the bridge in such a manner that the bridge can be opened to two (2) lanes by late 2014 and substantially completed by Fall 2015. Once completed, a 10-year construction moratorium, on any major servicing and utility installation, along Main Street Markham, From Hwy 407 to Hwy 7, is being recommended to ensure that the improvements that are being built will not be disturbed.

PURPOSE:

The purpose of this report is to obtain Council's approval regarding the following:

- Award the construction contract to the lowest priced Bidder, Dagmar Construction Inc.;
- Establish the construction contingency to cover additional construction costs and the requested allowance to deal with stakeholders request;
- Approve the Purchase Order increase for McCormick Rankin Corporation for the additional contract administration and inspections, geotechnical inspection and material testing, and environmental inspections up to a maximum amount;
- Establish the contract administration and inspections contingency to cover additional consulting costs;
- Approve an allowance for the heritage features at Hwy7 and Main Street intersection that are being requested by the Main Street Markham Committee;

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- Subject to the approval of the requested heritage features by the Region of York, staff apply for a grant funding from the Region of York's 2015 Municipal Partnership Program to cover the additional costs of the work;
 - Award the contract for pre and post construction inspection to OZA Inspections Limited;
 - Approve an increase in the 2014 Engineering Capital Account to cover the additional watermain replacement costs to be funded from Waterworks Reserve;
 - Authorize the collection of costs of sanitary sewer improvement from the property owners of 53 Main Street Markham, 2 Fisher Court and 4 Fisher Court;
 - Enact a Fees By-Law pursuant to Section 391 of the *Municipal Act 2001* for costs associated with the sanitary sewer installation
 - Approve the transfer of the Engineering Capital Administration Fees in 2014 and 2015;
 - Approve the request for a 10-year moratorium on any major servicing and utility installation along Main Street Markham between Highway 407 and Highway 7;
 - Implement the proposed traffic and pedestrian management plan; and
 - Update Council on issues raised by the public on the proposed construction work.

BACKGROUND:

The Class Environmental Assessment (EA) for the reconstruction of Main Street Markham (Highway 48) from Highway 407 to the future connection of the Donald Cousens Parkway north of Major Mackenzie Drive was undertaken from 2008 to 2010. A number of meetings (11 in total) were conducted to review and address the public's comments and to obtain a consensus on a preferred road cross section. The Environmental Study Report was subsequently endorsed by Council and then submitted to the Ministry of the Environment in 2010. The Ministry of the Environment gave its approval to the Environmental Study Report on February 24, 2011.

Subsequent to the filing of the EA, detailed design began on the improvements to Main Street Markham between Highway 407 and Major Mackenzie Drive. The project was divided into the following three (3) sections:

- 1) **Highway 407 to Highway 7** (*Design completed – contract award*)
- 2) **Highway 7 to 16th Avenue**
 - a) **Highway 7 to Bullock Drive** (*To be completed in June 2014*)
 - b) **Bullock Drive to 16th Avenue** (*30% Design Completed*)
- 3) **16th Avenue to Major Mackenzie Drive** (*To be completed July 2014*)

OPTIONS/ DISCUSSION:

Public Input

Project Liaison Committee (PLC) meetings were held on February 12, 2014 and March 20, 2014 for the Hwy 407 to Hwy 7 section. The meetings provided an update to the affected residents and businesses within the general area, as well as addressing any potential issues or concerns that the public has on the proposed construction. Staff met with the affected stakeholders to address their concerns. A list of these concerns and how they are to be addressed is shown in Attachment 'B' – List of Public Concerns.

An additional Project Liaison Committee (PLC) meeting will be scheduled prior to the start of construction to update the public on the construction schedule, traffic management plan, communications plan and to review any outstanding issues with the residents and businesses.

Streetscaping

The Heritage, Urban Design, Operations and Asset Management Departments have reviewed and commented on the final Streetscaping plans for this section of Main Street.

The project will continue to utilize enhanced Streetscaping features similar to the section from Hwy 7 to Bullock Drive. The enhancement features of this section of Main Street include, but are not limited to the following items:

1. LED Streetlighting
2. Heritage Streetlight Poles and Lanterns
3. 3.0m wide Concrete Multi-Use Pathway (Hwy 7 to Bridge) – East Side
4. Raised planters with stonework facade on the Centre Median (South of Hwy 7) and retaining walls where required
5. Dual row tree planting on East Side of Main Street (South of Hwy 7)
6. Decorative concrete and metal railing on bridge parapet walls
7. Two (2) pedestrian crossings north and south of the bridge

Subsequent to the finalization of the engineering drawings and issuance of the tender documents to the public, the Main Street Markham Committee requested the Ward and Regional Councillors, as well as the Mayor, to meet with the City and Region of York staff to have further discussions on the intersection improvement designs at Highway 7 and Main Street Markham which is under the Region of York's jurisdiction.

Staff originally requested the Region of York to allow the City to improve the intersection lighting and traffic signals by utilizing the heritage poles that are being used on the sections of Main Street, from Hwy 407 to Bullock Drive. The proposed LED lighting at the intersection cannot cover the entire area and will provide insufficient lighting at the intersection. City staff also requested that the pavers be used for the proposed pedestrian crosswalks. The Region of York advised that due to maintenance

and operational concerns, they will not allow the City to use the requested heritage features. The pavers at the pedestrian crosswalks may get damaged and require replacement on a yearly basis. As a result, the final design for the project included standard streetlighting and traffic signals at the intersection and standard pavement marking treatment for the pedestrian crosswalks.

The tender documents did not include any provision for the heritage features at the Highway 7 and Main Street intersection. Staff requests that an allowance of \$200,000.00 be set aside to cover the proposed implementation of the heritage features, subject to approval by the Region. The details of the proposed heritage features not included in the the original tender documents are as follows:

- Heritage feature requirements at the intersection of Main Street Markham and Hwy 7 (i.e. heritage poles in lieu of standard signal poles)
- Interlocking pavers at crosswalks at Hwy 7 intersection and two (2) pedestrian crossings north and south of the bridge
- Retaining wall adjacent to sidewalk to use same stone veneer (Masonal – Tiger Buff) as the centre median raised planters

Staff will arrange a meeting with the Region and concerned parties to review the intersection streetscaping features. There may also be an opportunity to utilize the Region of York's 2015 Municipal Partnership Program at this location. Engineering, Urban Design and Heritage are to review the requirements from the Region and pursue the grant funding, if possible.

Vehicle and Pedestrian Traffic Management Plan

Council endorsed the proposed road closure of Main Street Markham, from Hwy 407 to Hwy 7 as per the March 18, 2014 DSC report. The proposed road closure is scheduled to commence from July 2, 2014 to December 31, 2014. The contractor is to ensure that the bridge is completed and ready to accept vehicular traffic by December 31, 2014.

The objective of the vehicle traffic management plan is to divert through traffic onto adjacent arterial roadways before motorists reach the construction zone, thereby alleviating congestion and frustration before motorists can get to the construction area. The plan also advises motorists that Main Street Markham businesses are still open during construction. Attachment 'C' – Traffic Management Plan, is a draft plan prepared by the design consultant. The contractor will provide a final plan, which will be reviewed and approved by the Operations Department and the Region.

Construction Staging

Staff has reviewed the preliminary construction staging as submitted by the lowest priced bidder during the construction tender stage (Dagmar Construction Inc.). The current tentative schedule for the project is as follows, subject to discussions with the contractor:

Phase 1 (July 2014 to December 2014) – Full Road Closure

Commence bridge removal and replacement including sewer and watermain installation on the roadway. Open road and bridge to two (2) lane traffic by December 31, 2014. The contractor will provide winter maintenance for this section of the road from November 1 to December 31, 2014.

Phase 2 (January 2015 to Spring 2015) – Two (2) lanes open to traffic

Winter construction shutdown. Contractor to complete minimal work on site (weather dependent). The contractor will not be on site during this time, as such, the City's Operations Department will have to maintain the road for public use during this period.

Phase 3 (Spring 2015 to Fall 2015) – Two (2) lanes open to traffic

Complete remaining road and bridge work including all Streetscaping and aboveground works.

The above schedule will be revised accordingly upon award of the contract and discussions with the contractor. The overall schedule will be posted on the City's website in order for the public to be informed.

One of the major challenges for this project will be to ensure that all works related to the bridge that require an environmental permit and timing window (July 1 to September 15) be completed on time.

The Engineering Department will continue to discuss the preliminary staging plans with other City departments (e.g. Fire, Waste Management, Operations, Waterworks, Asset Management, etc.) and ensure that their comments are addressed prior to the start of construction.

Construction Contingency

Although the typical construction contingency as per policy is 5.0% of the construction costs, staff recommends that a construction contingency of 7.5% in the amount of \$898,478.96, inclusive of HST, be approved to cover additional costs associated with the construction of this complex project. Staff recommends increasing the contingency value from 5% to 7.5% due to the following potential project costs:

- On site environmental requirements from TRCA and MNR (i.e. additional erosion and sediment control, tree preservation and remediation, reporting, etc.)
- Dewatering requirements over and above current estimates
- Mitigation of possible soil contamination at Main Street and Hwy 7

In addition, there may be possible challenges during the bridge construction which may require additional resources to mitigate any delays to the completion date of the bridge. As such, a 7.5% contingency for the project is being recommended.

Contract Administration and Inspection Services

As part of the original detailed design RFP for Main Street Markham, from Hwy 407 to Hwy 7, issued on July 2011, the consultant was requested to submit a preliminary work program and fee for the contract administration and inspection services. The contract administration and inspection services were based on a percent of the total construction cost for the project. McCormick Rankin Corporation submitted a proposal for 4.6% of the total construction cost. The original proposal identified the work to be completed in 6 to 8 months, working 5 days a week. A Purchase Order was issued to McCormick Rankin Corporation on April 3, 2014 in the amount of \$425,000.00 as per the submitted proposal.

Staff has recently reviewed the original contract administration and inspection services as submitted in the July 2011 proposal as submitted by McCormick Rankin Corporation. Based on the review by staff, an increase to the Purchase Order in the amount of \$547,662.14, inclusive of HST, will be required. The justification for the increase is based on the following:

- The original PO issued to McCormick Rankin Corporation was based on a construction cost estimate of \$9.3 million. The lowest priced tender is \$11,979,719.40, as such, the Contract Administration PO should be increased by \$118,587.09.
- Original proposal identified construction duration to be 6 to 8 months. It is anticipated that the current project will take approximately 10 to 12 months to complete. This is primarily due to the environmental timing restrictions that are imposed on the project. This increase in the duration of the project will increase the contract administration services and inspections by \$170,970.99, inclusive of HST.
- Geotechnical inspections and materials testing were not included in the original RFP. Based on the recent submission by McCormick Rankin Corporation, the geotechnical inspections and materials testing for this project will be in the order of \$61,056.00, inclusive of HST.
- Environmental inspections and reporting were also not included in the original RFP. As part of the permit process, inspection and reporting will be required to be provided to the Environmental Agencies (i.e. TRCA, MNR, etc.). As such, McCormick Rankin Corporation has submitted a proposal for this task in the amount of \$61,056.00, inclusive of HST.
- Landscaping and Electrical inspections are also required for the project. McCormick Rankin Corporation has submitted a proposal in the amount of \$66,144.00
- The accelerated schedule (i.e. Saturday work and extended work hours) were also not included in the original RFP. McCormick Rankin Corporation has submitted a quote in the amount of \$69,848.06, inclusive of HST, to provide staff on Saturdays and extended work hours during weekdays;

Based on the above and upon further review of the revised proposal, the Director of Engineering and Manager of Purchasing continue to negotiate with McCormick Rankin Corporation to increase the Purchase Order by a maximum of \$547,664.14.

Pre and Post Construction Inspection Services

In order to protect the City's interest and avoid potential claims, Staff recommend that OZA Inspection Services Limited (OZA) be awarded the contract for the Pre and Post Construction Inspection Services for the road and bridge construction, in accordance with the Purchasing By-law, in the amount of \$15,000.00, inclusive of HST.

This inspection process will identify the conditions (external and internal) of all of the buildings adjacent to Main Street Markham, Hwy 407 to Hwy 7, prior to and at the end of the construction period. These documents will be used to assess any damage / claims that may arise during or after the construction on Main Street Markham.

OZA was contracted by the City to undertake Pre and Post Construction Inspections for the underground construction in 2012 and the streetscaping works in 2013.

Markham Road Sanitary Sewer Outfall Replacement

The proposed work for Main Street Markham, Hwy 407 to Hwy 7 includes a replacement of the existing sanitary sewer that crosses the road. The sewer replacement is required as part of the settlement between the City and the adjacent developer. Funds from the developer (\$107,896.58) have been set aside for the sewer replacement work and are to be transferred to the approved capital account for Main Street Markham, from Hwy 407 to Hwy 7 (083-5350-14055-005).

Watermain Replacement and Bridge Replacement Program

The existing watermain on Main Street and the bridge at Rouge River have also been identified to be at the end of life cycle and are both scheduled for replacement. The improvements for these infrastructures are included in the overall design and tender of the Main Street Markham project. Asset Management has previously received approval for their component of the bridge replacement funding in the 2009 Capital Budget request (Account 9226). The funds in this account have been carried forward to the overall Main Street Markham, Hwy 407 to Hwy 7 Project (Account 14055). Environmental Services received approval in the 2014 capital budget request to include the costs of the watermain replacements into the overall Main Street Markham, Hwy 407 to Hwy 7 project (account 14055).

Based on the current contract amount, the costs associated with the bridge replacement is within the approved budget. However, the cost associated with the watermain replacement is higher and will require an increase in the budget. Staff recommends increasing the budget for Main Street Markham, Hwy 407 to Hwy 7 (Watermain

Replacement) in the amount of \$309,136.06, inclusive of HST, to be funded from the Waterworks Reserve.

Girder Tender

Staff has been advised that upcoming MTO bridge projects in Windsor Ontario will take most of the production capacity of the three (3) bridge girder manufacturers within the GTA. Staff were concerned that the girders may not be available in time to construct the bridge and may delay the project completion. In order to avoid the delay, Tender 106-T-14 was issued on April 4, 2014 to pre-order the 21 girders required for this project. The City received three (3) Bids, and the project was awarded to the lowest priced Bidder, Prestressed Systems Incorporated (PSI) in the amount of \$394,014.20, inclusive of 10% contingency and HST. The Purchase Order was issued to PSI on April 11, 2014. As part of the contract, the supplier will deliver the concrete girders to the site by September 15, 2014.

Local Improvements – Sanitary Sewer (2 & 4 Fisher Court and 53 Main Street)

During the detailed design process and Project Liaison Committee (PLC) meetings, certain residents have requested staff to review the possibility of installing the local services (i.e. sanitary sewers) for the residents adjacent to Fisher Court as part of the overall Main Street Markham Project. Staff has advised the residents that the proposed work will be considered a local improvement and will need to follow a certain process.

According to Section 391 of the *Municipal Act, 2001*, Council is required to enact a fees by-law to recover the costs from the benefiting property owners. A fees by-law may provide for interest charges and other penalties for fees that are due and unpaid. Fees may be added to the tax roll and collected in the same manner as taxes (under Subsection 398(2) of the *Municipal Act, 2001*).

The Fees by-law may provide the residents with the option of paying the full amount either as a one-time payment or annually up to a maximum of 10 years with interest payable at the same rate as the 10 Year Region of York Debenture Interest Rate. The rate is 3.6% and payment in full of the outstanding balance plus accrued interest would be permitted at anytime.

Table 1 – Local Improvement Cost Breakdown

Item	Amount (Inclusive of HST)
Construction Cost	\$47,857.67
Construction Contingency (10%)	\$4,785.77
Capital Administration Fee (15%)	\$7,178.65
Total:	\$59,822.07
Cost per Lot	\$19,940.69

In order to provide a firm cost estimate to the residents for the construction of the sanitary sewer local improvements, staff had to wait for the project tender to close to confirm the unit rates for the sanitary sewer. The tender for the project closed on May 1, 2014.

Subsequent to the tender opening, staff provided the costs estimate to the residents as well as a request to respond to the City if they are willing to pursue this local improvement. Staff requested the three (3) homeowners to respond back to the City no later than Tuesday, May 13, 2014.

If staff receives a response from two (2) of the three (3) property owners to pursue the local improvements, then staff recommend that the sewer improvement be included in the construction contract and the cost thereof collected from the property owners in accordance with a by-law enacted pursuant to Section 390 of the Municipal Act, 2001. If the City received a response not to move forward with the project or no response at all from two (2) of the three (3) homeowners, then the local improvements will not be completed by the City.

Communications Plan

A Project Liaison Committee (PLC) meeting is scheduled for June 2014 to present the contractor's staging and communications plan for the proposed work. Staff will be providing a bi-weekly meeting update to the affected stakeholders as well as providing early notification for any disruptions to driveway access or municipal services. The City of Markham's website will also be updated as required to provide up-to-date information on the status of the project. Engineering and Corporate Communications Departments will continue to provide an update to the public, regarding the on-going construction work.

Construction Moratorium

Engineering Staff are requesting that Council approve a 10-year moratorium on any major servicing and utility installation work along Main Street Markham between Highway 407 and Hwy 7, which is to be enforced immediately after construction is substantially completed. Minor and emergency repairs would be permitted.

Permits

Staff is in the process of acquiring the permits required for the project. To date, staff has received clearance from Navigable Waters Canada and confirmation from MNR that works can commence on the project. Staff is currently waiting on the final letter of advice from MNR. Staff and the design consultant are also pursuing the final permits from TRCA and MOE (permit to take water). TRCA has provided their final comments and have committed to providing the permit to the City prior to the start date of July 2, 2014. Staff is following up with MOE as to the dewatering permits and expects to receive such before the start of construction.

Construction Tender

Due to the scope of the project, contractors were prequalified to ensure that they have the necessary qualifications, experience and resources to complete the work in accordance with the City of Markham requirements and within the specified timelines. Prequalification 009-P-14 was issued in accordance with the Purchasing By-law 2004-341.

PRE QUALIFICATION INFORMATION (009-P-14)

Advertised	ETN
Pre qualification closed on	February 20, 2014
Number of Contractors picking up the Pre qualification document	21
Number of Contractors responding to the Pre qualification	10
Number of Contractors Pre qualified	9

TENDER INFORMATION (066-T-14)

Advertised	By Invitation (Pre qualified Bidders)
Bids closed on	Stage 1 – Wednesday April 30, 2014 Stage 2 – Thursday May 1, 2014
Number picking up the Bid document	10
Number responding to the Bid	5*

* Of the document takers that picked up the Bid document but did not submit a bid; one firm was a sub-contractor, two firms were too busy and one firm advised that the time for completion was too aggressive,

PRICE SUMMARY – Table 1 Bidder	Bid Price (Incl. of HST)
<i>Dagmar Construction Inc.</i>	<i>\$11,979,719.40</i>
PCL Constructors Canada Inc.	\$13,291,678.37
KAPP Contracting Inc.	\$14,921,596.02
Aecon Construction & Materials Limited	\$16,124,718.64
Graham Bros. Construction Limited	\$17,644,557.15

Based on the above, staff recommends awarding the project to Dagmar Construction Inc. in the amount of \$11,979,719.40, inclusive of HST.

FINANCIAL CONSIDERATIONS AND TEMPLATE:

Table 2 outlines the available funding and tendered construction costs.

Table 2 – Main Street Markham, Hwy 407 to Hwy 7– Contract Award Summary

Item	Amount (Inclusive of HST)	Supplier
Construction	\$ 11,979,719.40	Dagmar Construction Inc.
Construction Contingency (7.5%)	\$ 898,478.96	Dagmar Construction Inc.
Additional Streetscaping	\$ 200,000.00	(Allowance)

Contract Administration and Inspections (PO Increase)	\$ 547,662.14	McCormick Rankin Corporation
Contract Administration and Inspections Contingency (10%)	\$ 98,014.21	McCormick Rankin Corporation
Pre / Post Inspections	\$ 15,000.00	OZA Inspections
Capital Admin Fee	\$ 902,406.54	
Total Award:	\$ 14,641,277.42	
Available Funding:	\$ 386,439.42 \$ 13,544,382.64 \$ 314,251.50 \$ 125,950.00 <u>\$ 309,136.06</u> \$ 14,680,159.44	Account 083-5350-11068-005 *Account 083-5350-14055-005 Account 083-5350-14030-005 Account 053-6150-14324-005 <u>Budget Increase (Waterworks)</u> Total Available funding

*Capital account 14055 includes \$107,896.58 of funding from developers for the sanitary sewer replacement. The account also includes the costs associated with the sanitary sewer local improvements cost in the amount of \$59,822.08.

Project Schedule

The project schedule for the reconstruction of the Main Street Markham project is as follows:

- May 19, 2014 – Issue Purchase Order to contractor
- June 4, 2014 - PLC meeting
- June 16, 2014 - Site Preparation Work (No Road Closures)
- July 2, 2014 – Full Road Closure / Bridge Removal commences
- December 31, 2014 – Complete bridge deck to allow for 2 lane traffic
- January to Spring 2015 – Winter Shutdown
- Spring 2015 to Fall 2015 – Complete remaining road work, streetscaping work and above ground works

In order to meet the above schedule, staff included in the tender documents an allowance for the contractor to work on Saturdays and extended hours during the week days. These work hours are required to ensure that the bridge can be completed to accept two (2) way traffic by December 31, 2014. A Noise exemption to work on Saturdays and extended hours during weekdays will be required and a request is included in this report. The contractor will be required to make the application for the exemption.

ALIGNMENT WITH STRATEGIC PRIORITIES:

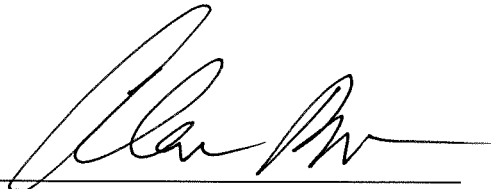
The reconstruction of Main Street Markham from Highway 407 to Hwy 7 has long been contemplated as a strategic priority. The project provides the necessary upgrades to the existing infrastructure, and the opportunity to enhance the existing streetscape, to promote pedestrian traffic and showcase this heritage area.

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

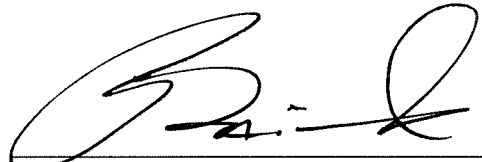
BUSINESS UNITS CONSULTED AND AFFECTED:

Finance, Legal, Corporate Communications, Operations, Environmental Services, Asset Management, Planning (Urban Design & Heritage) and Fire 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, Development Services

ATTACHMENTS:

Attachment 'A' – Local Improvements Fee By-law

Attachment 'B' – List of Public Concerns

Attachment 'C' – Traffic Management Plan

Attachment 'A' - Local Improvements Fee by-Law

Draft By-law – Main Street Markham and Fisher Area Sanitary Sewer System Fees By-law

BY-LAW 2014 –

Being a By-law to levy the actual cost of construction of the sanitary sewer on Main Street Markham and Fisher Court area.

WHEREAS paragraph 391(1)(a) of the *Municipal Act*, 2001 provides that a municipality may pass a by-law for imposing fees or charges or activities provided by or done on behalf of it;

AND WHEREAS Council of The Corporation of the City of Markham on May 15, 2014 authorized a by-law to levy the actual cost of construction of a sanitary sewer system in the Main Street Markham and Fisher Court area, subject to funding commitments from the residents;

NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE CITY OF MARKHAM ENACTS AS FOLLOWS:

1. Main Street Markham and Fisher Court Area is comprised of those properties as set out in Schedule "A" hereto. These properties shall hereinafter be referred to collectively as "Main Street Markham and Fisher Court Residents".
2. The actual cost of construction of the sanitary sewer system installed on Main Street Markham and Fisher Court Area is \$59,822.07 (the "Actual Cost").
3. The Actual Cost be allocated as per Schedule "A" to each lot on Main Street Markham and Fisher Court residents (the "Lot Cost") shall be \$19,940.69.
4. Each property owner on Main Street Markham and Fisher Court Area shall pay the Lot Cost by making annual payments, comprised of principal and interest, as set out in Schedule "B" attached hereto. The payments shall be made in instalments as set by the final annual tax levy by-law until the Lot Cost is paid in full.
5. Interest shall be calculated and paid by each property owner on the outstanding principal amount at the rate of 3.60% annually.
6. Notwithstanding section 4 above, the outstanding balance, plus accrued interest up to the date of payment, may be paid at any time prior to December 31, 2025.
7. There shall be no interest payable if the Lot Cost is paid in full by March 30, 2016.
8. The Schedules attached hereto shall be and form part of this By-law.

READ A FIRST, SECOND AND THIRD TIME AND PASSED THIS DAY OF , 2014.

Kimberley Kitteringham, City Clerk

Frank Scarpitti, Mayor

Attachment 'A' - Local Improvements Fee by-Law

SCHEDULE "A"
TO BY-LAW 2014-XX

Address	Lot Cost
2 Fisher Court	\$19,940.69
4 Fisher Court	\$19,940.69
53 Main Street Markham South	\$19,940.69
Total	\$59,822.07

Attachment 'A' - Local Improvements Fee by-Law

SCHEDULE "B"
TO BY-LAW 2014-XX
Reconstruction of Main Street Markham from Highway 407 to Highway 7
Repayment Plan: 10 years at 3.6% annually

Cost per lot:	\$19,940.69
Interest:	3.60%
Number of Years:	10

	Year	Principal	Interest	Payment
	2016	\$ 19,940.69	\$ 717.86	\$ 2,409.80
	2017	\$ 18,248.75	\$ 656.96	\$ 2,409.80
	2018	\$ 16,495.91	\$ 593.85	\$ 2,409.80
	2019	\$ 14,679.96	\$ 528.48	\$ 2,409.80
	2020	\$ 12,798.64	\$ 460.75	\$ 2,409.80
	2021	\$ 10,849.59	\$ 390.59	\$ 2,409.80
	2022	\$ 8,830.38	\$ 317.89	\$ 2,409.80
	2023	\$ 6,738.47	\$ 242.58	\$ 2,409.80
	2024	\$ 4,571.26	\$ 164.57	\$ 2,409.80
	2025	\$ 2,326.02	\$ 83.74	\$ 2,409.80
Total			\$4,157.27	\$24,098.00

Attachment 'B' – List of Public Concerns

Reconfiguration of Princess Street/James Scott Road Intersection – Residents are concerned of the existing condition at the intersection where some vehicles are using the dedicated right-turn lane to jump the queue. The existing taper lane cannot be moved further south over the 407 due to the Highway 407 off-ramp. Creating a physical barrier on the roadway is not advisable, as there is a bus stop at this location, as buses still need to merge back into the northbound lane.

The proposed design shifts right turning traffic further east, making the merge movement more difficult (see attached Figure 1). Staff will be implementing signage at the intersection as part of the overall project. Motorists will be advised of the changes in the intersection. A pay duty police will be requested to monitor the intersection upon completion of the intersection.

Sidewalk on the West side – Residents requested a sidewalk on the west side of Main Street for the entire section, from James Scott Road to Hwy 7. Property, heritage, and environmental restrictions preclude the installation of a sidewalk along the west side of Main Street Markham.

Pedestrian Crossing at Mill Street and Fisher Court – Due to the lack of sidewalk on the west side of Main Street Markham South, residents at 84, 82, 80, and 78 Main Street Markham South and at 4 Fisher Court raised concerns regarding their safety if they chose to walk somewhere.

Pedestrian access to the above noted property owners is being provided by way of two (2) pedestrian crossings (one at Mill Street and one at Fisher Court). These signals have been included as part of the current tender. Additionally, a sidewalk will be constructed from the private driveway for properties 84, 82, 80, and 78 Main Street Markham South to opposite Mill Street. The sidewalk will provide access for the above noted properties to a pedestrian crossing at Mill Street. The proposed sidewalk is included in the current tender.

Pedestrian Railing along sidewalk/MUP (on bridge) – Resident raised a concern of children running into the street and the narrow walkway that is being proposed does not separate traffic from pedestrians. Bridge building code nor existing bridge provides a segregated pathway for pedestrians.

Intersection of Highway 7 – The Region of York has jurisdiction of this intersection and does not support the use of "Heritage-Style" poles and interlocking pavers in the roadway. Staff will meet with Region Staff to discuss and report back to Council. Staff have set aside a budget allowance in the tender award report to implement the above noted streetscaping if approved by the Region.

Heritage Style Traffic Signals – Main Street Markham committee requested that "Heritage-Style" Traffic signal poles be utilized. Staff has already included the installation of the heritage signals at Princess Street and Pedestrian Crossings. Hwy 7 intersection will be reviewed with the Region of York as noted above.

Pedestrian Access to Hwy 7 during construction – Residents living south of the bridge raised concerns regarding how they would be able to get to Highway 7. No access available on site due to safety issues until road is reopened to public in December 2014.

Bus Service during Construction – Residents were concerned on how the proposed full road closure will affect the transit going through Main Street Markham. Request has been reviewed with Transit Authorities and they are making arrangement for a detour plan during the duration of the road closure.

Attachment 'B' – List of Public Concerns

Reversible Centre Lane Concern regarding need for additional northbound lanes – Residents requested the use of reversible lanes (similar to Jarvis Street in Toronto). The concept was reviewed EA Stage and not supported by the stakeholders. Staff to report back to DSC on implementing the feasibility of a reversible lane in the future.

Garbage Pickup During Construction – Provision for the collection of garbage from private properties to a designated location by the contractor have been included in the tender. The contractor will pick up garbage, recycling, and compost from the curb of private residents and drop them off at a designated location.

School Buses – Residents with children in High School (Brother Andre Catholic School and Markville Secondary) raised concerns of how their children will get to school. Usually these children walk, but without a bridge there is no way for them to get access north. Staff have contacted both York Region School Boards to request bus service for high school students and are awaiting a response. Elementary school students who are currently using bus service will not be affected.

