



Report to: Development Services Committee

Date Report Authored: May 31, 2011

SUBJECT: 008-R-11 Detailed Design for the Reconstruction of Main Street Markham, from Highway 7 to 16th Avenue

PREPARED BY: Dale MacKenzie, Senior Capital Works Engineer (4055)
Alain Cachola, Manager Capital Works and Infrastructure (2711)

RECOMMENDATION:

- 1) That the report entitled “Detailed Design for Main Street Markham from Highway 7 to 16th Avenue”, be received;
- 2) And that the Detailed Design work as specified in the contract “008-R-11 Detailed Design and Contract Administration for the reconstruction of Main Street Markham” (between Highway 7 and 16th Avenue) be awarded to the highest ranked and lowest priced bidder Morrison Hershfield Limited, in the amount of **\$280,317.25**, inclusive of HST.
- 3) And that funding for the project be provided from the following sources:
 - Part 1 for the detailed design of Main Street Markham, from Hwy 7 to Church Street Parkette, in the amount of **\$86,122.54** (inclusive of HST) to be funded from Capital Account **083-5350-10055-005** which currently has \$150,000 available funding;
 - Parts 3 and 4 for the detailed design of Main Street Markham, from Church Street Parkette to 16th Avenue, in the amount of **\$194,194.71** (inclusive of HST) to be funded from Capital Account **083-5350-11079-005** which currently has \$939,400.00 available funding (Gas Tax).
- 4) And that upon completion of the detailed design to the satisfaction of Engineering Department, staff be authorized to award Morrison Hershfield Limited the Contract Administration and Inspection works (Parts 2 and 5 of bid form) for the Main Street Markham, from Hwy 7 to 16th Avenue in the amount of **\$147,686.32**, inclusive of HST, which will be funded from Capital Accounts **083-5350-10055-005** and **083-5350-11079-005**;
- 5) And that the Engineering Department Project Management Fee in the amount of **\$37,835.00** be funded from Capital Accounts **083-5350-10055-005** and **083-5350-11079-005**;
- 6) And that a contingency amount of **\$130,000.00** inclusive of HST be established to cover any unforeseen design, contract administration and legal costs, which will be funded from Capital Accounts **083-5350-10055-005** and **083-5350-11079-005**;
- 7) And that staff be authorized to use the approved 2011 construction funding for Main Street Markham, from Hwy 7 to Church Street Parkette (**083-5350-11079-005**), to assist in funding the detailed design of Main Street Markham, from Church Street Parkette to 16th Avenue, which currently has a remaining amount of **\$294,604.26**, inclusive of HST;
- 8) And that the construction cost for Main Street Markham, from Church Street Parkette to Bullock Drive in the amount of **\$899,211.17**, inclusive of HST, be included in the 2012 Capital budget process;

- 9) And that staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

To award the detailed design for the reconstruction of Main Street Markham between Highway 7 and 16th Avenue to Morrison Hershfield Limited and upon satisfactory completion of the detailed design to award the contract administration and inspection assignment to Morrison Hershfield Limited.

BACKGROUND INFORMATION

Main Street Markham, from Highway 407 to Major MacKenzie Drive is a diverse roadway with three distinctive areas (functions) with a variety of adjacent land uses.

A Municipal Class Environmental Assessment for Main Street Markham was filed by the Town on September 2010, but a Part II Order request submitted by a resident took until February 14, 2011 to be withdrawn. With the Ministry of the Environment approval, the Town may now proceed with the detailed design of the project.

PROPOSAL CALL INFORMATION

A Request for Proposal #008-R-11 was issued to the market on February 9, 2011 and included the detailed design and contract administration of Main Street Markham from Highway 7 to 16th Avenue, in accordance with the approved Environmental Study Report. The results of the proposals received are summarized below:

Request for Proposal

Advertised	ETN
Bid closed on	March 16, 2011
Number of Consultants obtaining Bid documents	41
Number of Consultants responding to Bid	7

Capital engineering staff along with assistance from the Purchasing Department reviewed the submitted proposals. The prices from the seven (7) bidders ranged from a low of \$350,397.00 to a high of \$868,091.00 exclusive of HST. The average price for the seven (7) submitted RFP's is ±\$700,000.00. Upon review of the submissions, it was determined that all consultants provided complete proposals.

The lowest proposal price was from Morrison Hershfield Limited which also had the highest overall total combined points. A follow-up clarification letter was sent to Morrison Hershfield Limited to ensure that all of the services required would be provided for at the submitted price. All questions were answered satisfactorily and, as such, we recommend awarding this contract to this engineering firm. The Town of Markham has retained Morrison Hershfield on previous projects and has received good service and value.

The underground services in this area are quite old and the as-constructed drawings and records may not be accurate. We have allowed for a larger contingency than normal in the amount of \$130,000.00 to allow for funding of unforeseen design and contract administration issues.

Detailed Analysis:

Company	Technical Points (70%)	Financial Points (30%)	Total Points	Ranking
Morrison Hershfield Limited	61.50	30.00	91.50	1
Stantec Consulting	56.50	27.52	84.02	2
AECOM Canada Limited	57.33	11.27	68.60	3
McCormick Rankin Corporation	61.33	6.27	67.60	4
Lea Consulting Ltd.	57.00	0.00	57.00	5
Chisolm Fleming and Associates	47.33	4.69	52.02	6
SRM Associates	52.00	0.00	52.00	7

The bids have been verified for accuracy and compliance with the Request for Proposal terms and conditions. Purchasing has reviewed the references of the recommended proponent and is satisfied with the references provided.

FINANCIAL CONSIDERATIONS:

As a part of the 2011 Capital budget request, Engineering Department received approval for the following Capital Budget request for the Main Street Markham project:

- Capital Account 083-5350-10055-005 (\$150,000.00) – Detailed Design and Contract Administration for Main Street Markham, from Hwy 7 to Church Street Parkette
- Capital Account 083-5350-11079-005 (\$939,400.00) – Construction budget for Main Street Markham, from Hwy 7 to Church Street Parkette.

Detailed Design

The total cost of the detailed design for Main Street Markham, from Hwy 7 to 16th Avenue is as follows:

Detailed Design Cost Summary

Item	Cost (Inclusive of HST)	Account Number
2011 Works		
Part 1 (Detailed Design) Highway 7 to Church Street Parkette	\$ 86,122.54	Capital Account 083-5350-10055-005 (\$ 150,000.00)
Contingencies	\$ 7,972.02	
Engineering Admin Fee (9.0%)	\$ 8,468.51	
Sub-Total:	\$ 102,563.08	
Parts 3 & 4 (Detailed Design) Church Street to Parkette to 16 th Avenue	\$ 194,194.71	Capital Account 083-5350-11079-005 (\$ 939,400.00)
Contingencies	\$ 76,084.43	
Engineering Admin Fee (9.0%)	\$ 24,325.12	
Sub-Total:	\$ 294,604.26	
Total Detailed Design Award Cost:	\$ 397,167.34	

As per previous discussions with the local Councillors, Finance Department and Budget committee, staff noted that there is a cost and efficiency advantage to advance the design of the entire section of Main Street Markham, from Highway 7 to 16th Avenue under one design assignment. As such, staff is recommending that the additional cost for the detailed design of Main Street Markham, from Church Street Parkette to 16th Avenue, in the amount of \$294,604.26 (Parts 3 & 4), inclusive of HST, be included in the award report and funded from the construction capital account 083-5350-11079-005.

Contract Administration

The total cost of the Contract Administration for Main Street Markham, from Hwy 7 to 16th Avenue is as follows:

Contract Administration Cost Summary

Item	Cost (Inclusive of HST)	Account Number
2012 Works		
Part 2 (Contract Administration) Highway 7 to Church Street Parkette	\$ 39,832.93	Capital Account 083-5350-10055-005 (\$ 150,000.00)
Contingencies	\$ 3,687.18	
Engineering Admin Fee (9.0%)	\$ 3,916.81	
Sub-Total:	\$ 47,436.92	
Part 5 (Contract Administration) Church Street Parkette to 16 th Avenue	\$ 107,853.39	Capital Account 083-5350-11079-005 (\$ 939,400.00)
Contingencies	\$ 42,256.37	
Engineering Admin Fee (9.0%)	\$ 13,509.88	
Sub-Total:	\$ 163,619.64	
Total for Contract Admin Award Cost:	\$ 211,056.56	

Upon completion of the detailed design to the satisfaction of Engineering Department, staff is requesting authorization to award the contract administration of Main Street Markham, from Church Street Parkette to 16th Avenue, in the amount of \$163,619.64 (Part 5), inclusive of HST, to be funded from the construction capital account 083-5350-11079-005.

Construction

The estimated cost of construction of Main Street Markham, from Hwy 7 to 16th Avenue is as follows:

Construction Cost Summary

Item	Estimated Cost	Account Number
Highway 7 to Church Street Parkette	\$ 898,000.00	083-5350-11079-005
Church Street Parkette to Bullock Drive	\$ 610,000.00	2012 Budget Request
Bullock Drive to Springdale Street	\$ 933,000.00	2013 Budget Request
Springdale Street to 16 th Avenue	\$ 1,229,000.00	2014 Budget Request
Total Estimated Construction Cost:	\$ 3,670,000.00	

The estimated construction cost for Main Street Markham, from Hwy 7 to Bullock Drive is **\$1,508,000.00, inclusive of HST**. The shortfall in the funding to complete the design, contract

administration and construction of Main Street Markham, from Hwy 7 to Bullock Drive is **\$899,211.17, inclusive of HST**.

It is also recommended that the construction cost for Main Street Markham, from Church Street Parkette to Bullock Drive in the amount of **\$899,211.17, inclusive of HST**, be included in the 2012 Capital budget process. It is anticipated that this project will go to tender in February/March 2012.

The funding for the construction of the remaining sections of Main Street Markham, from Bullock Drive to 16th Avenue is to be considered in the 2013 & 2014 Capital budget request process.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The reconstruction of Main Street Markham from Highway 7 to 16th Avenue provides the necessary upgrades to the existing infrastructure, and will also enhance the existing streetscape to promote pedestrian traffic. This area is the main heritage area of Main Street Markham and will be enhanced with street landscaping.

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

BUSINESS UNITS CONSULTED AND AFFECTED:

The Finance and Legal 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" – Project location and construction time frame

Attachment "B" – Typical cross-sections