

**Contract Award - Contract 09FS – 42WS,
Tender Call 59-2009 and Purchase Order Amendments
for Milliken Pumping Station and Reservoir Expansion**

Date:	May 20, 2009
To:	Public Works & Infrastructure Committee
From:	Executive Director, Technical Services Acting Director, Purchasing and Materials Management Division
Wards:	Not Applicable
Reference Number:	P:/2009/Internal Services/pmmd/pw09014pmmd (AFS#9556)

SUMMARY

The purpose of this report is to advise on the results of the Tender Call 59-2009 issued for the Milliken Pumping Station and Reservoir Expansion in accordance with specifications and drawings as required by Technical Services; to request authority to award a contract to the recommended bidder; and to amend the purchase order for professional engineering services with Associated Engineering (Ontario) Ltd.

RECOMMENDATIONS

The Executive Director of Technical Services and the Acting Director of Purchasing and Materials Management Division recommend that Council grant authority for:

1. Funds in the amount of \$21,280,410.00 net of GST be reallocated to CPW029-04 Milliken Reservoir Ext-Construction from CPW018-4 - Plant Winterization & Summerization, CPW039-06 - Business & Tech. Improvements, CPW052-01- Pumping Equipment, CPW059-04 - Gerrard St WM – Construction, CPW067-02 - Switchgears - Phase 2 Construction and CPW532-02 - Automated Meter Reading System, as indicated in the table contained in the Financial Impact section of this report.
2. Subject to the approval of Recommendation 1 above, award Contract 09FS-42WS, Tender Call 59-2009, for the Milliken Pumping Station and Reservoir Expansion to Bondfield Construction Company Limited, in the amount of \$89,652,666.67, net of

GST, having submitted the lowest bid meeting specifications in conformance with the Tender requirements.

- Amend Purchase Order No. 6024199 professional services with Associated Engineering (Ontario) Ltd. for provision of general office administration and site supervision services during construction by an additional amount of \$510,900.00 net of GST, for a revised total of \$2,210,900.00 net of GST, and extend the purchase order expiry date to December 31, 2013.

Financial Impact

The total construction contract award identified in this report is \$94,135,300.00 including all applicable taxes, charges and contingency allowances. The total purchase order amendment identified in this report is \$510,900.00 net of GST.

The total value of the contract award and purchase order amendment identified in this report is \$94,671,745.00, including all applicable taxes and charges. The cost to the City, net of GST is \$90,163,566.67.

There is insufficient funding currently available in WBS Element CPW029 – Water Storage Expansion for the contract award of \$89,652,666.67, the purchase order amendment of \$510,900.00 and approximately \$5,000,000.00 for additional permits, charges and fees for construction. As a result, reallocation of funding from approved projects in the 2009 Toronto Water Capital Budget and 2010-2013 Capital Plan is required.

The following Table summarizes the cash flow requirements, for the contract award and purchase order amendments identified in this report, by year:

ORIGINATING WBS ELEMENT	2009	2010	2011	2012	2013	TOTAL
Approved Funding						
CPW029-04 Milliken Reservoir Ext-Const	300,000	10,000,000	12,000,000	14,247,000	7,853,000	44,400,000
CPW029-05 Milliken P.S. Construction	300,000	5,000,000	7,500,000	10,000,000	7,200,000	30,000,000
Required Reallocations to CPW029-04						
CPW018-4 - Plant Winterization & Summerization		-61,000	-1,500,000			-1,561,000
CPW039-06 - Business & Tech. Improvements			-2,000,000	-144,000	774,590	-1,369,410
CPW052-01- Pumping Equipment -	-50,000		-1,500,000	-200,000		-1,750,000
CPW059-04 - Gerrard St WM - Construction				-10,000,000	-5,000,000	-15,000,000
CPW067-02 - Switchgears - Phase 2 Construction		-1,600,000				-1,600,000
CPW532-02 - Automated Meter Reading System		-6,420,000	-711,000	5,694,000	1,437,000	0

Reallocation Sub-total	-50,000	-8,081,000	-5,711,000	-4,650,000	-2,788,410	-21,280,410
TOTAL CASHFLOW	650,000	23,081,000	25,211,000	28,897,000	17,841,410	95,680,410

In accordance with the agreement with the Regional Municipality of York (York) dated March 1, 2005 - Contribution to Cost Sharing Facilities Schedule B2, York's contribution to the construction contract will be \$ 32,999,714.29, net of GST. The City of Toronto's financial commitment to this component of the project will be \$56,652,952.38, net of GST.

The high level (+/- 30%) engineers' estimate of probable cost developed in June 2008, at the time that the 2009 Toronto Water capital budget cycle was initiated, for this construction project was \$74,400,000 net of GST. The price of the recommended tender is within this high level range.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

TENDER BACKGROUND

Tender Call 59-2009 was issued by Purchasing and Materials Management Division and was advertised in the Daily Commercial News on March 02, 2009 and on the City's Internet Website.

The Purchasing and Materials Management Division at its Public Opening held on April 23, 2009, opened the following bids for Contract 09FS-42WS, Tender Call 59-2009, for the Milliken Pumping Station and Reservoir Expansion.

<u>Tenderer</u>	<u>Price Complete Including All Charges, net of GST</u>
1. Bondfield Construction Company Limited	\$89,652,666.67*
2. Kenaidan Contracting Ltd.	\$90,169,510.48
3. Alberici Constructors Ltd	\$99,714,285.71

* The information provided in the tender submitted by Bondfield Construction Company Limited was verified in accordance with the terms of the tender call document and found to meet the mandatory requirements of the call.

COMMENTS

The Tender documentation submitted by the recommended bidder has been reviewed by the Executive Director of Technical Services and was found to be in conformance with the Tender requirements.

Technical Services staff have compared the bid to the estimated cost and found the price of the recommended bidder to be reasonable given the tender prices of all bidders.

The Fair Wage Office has reported that the recommended firm has indicated that it reviewed and understands the Fair Wage Policy and Labour Trades requirements and has agreed to comply fully.

Project Background

The City of Toronto water treatment and supply system has 4 water treatment plants, 11 reservoirs and 18 pumping stations that supply and distribute water to City of Toronto and York Region users.

The Milliken Pumping Station and Reservoir was constructed and placed into service in the 1970's. The reservoir and pumping station provides elevated equalization, fire/emergency storage and pumping capacity for Pressure Districts 5 (City of Toronto and York Region) 5M/6S (York Region) and 6 (Future York Region District). The reservoir receives water from the City of Toronto's four water treatment plants via a transmission network and pumping stations and is directly fed by one watermain. The various Pressure Districts are fed by the Milliken Pumping Station and requires constant coordination with the York Region systems operators.

A Toronto-York Region Joint Optimization Study, updated in 2006, recommended expansion of the Milliken Reservoir and the Milliken Pumping Station capacities are required to support current population growth projections and enhance water supply.

Justification of Tender Price

The tender price is approximately \$16,000,000 higher than the initial estimate that was included in the Toronto Water 2009 – 2013 Capital Budget developed in 2008 due to the following:

- Pre-tender estimate did not include for the requirements for rigorous seismic design of the reservoir and associated structures. During the course of design, the geotechnical investigation revealed a unique site specific sandy and silty soil condition, classified seismic condition Class E that required a special seismic design. The Town of Markham requires reservoirs built on this type of sand and silty soil classified seismic condition Class E, be post disaster structures. Post disaster structures are designed not to fail during a seismic event. As a result, the additional requirements to address seismic issues, required significant upgrades to the base and roof slab design, joint and connection design and closer column spacing, ultimately increasing the material and labour cost. The requirements to meet seismic design increased the structural cost by approximately \$6M.
- Pre-tender estimate did not include for approximately \$6M of work related to provision of additional yard piping to allow additional Toronto Water operational flexibility. This operational flexibility allows the necessary system redundancy to maintain system reliability to York Region and City of Toronto
- Pre-tender estimate did not include for additional emergency generators. A system sustainability study finalized in April 2009 recommended the installation

of two 1.70 - MW emergency generator for the Milliken PS and Reservoir project to allow the required system reliability and to maintain security of the City and York's water supply during power outage events. The cost for the additional generators is estimated to be \$4.4M.

- Pre-tender estimate did not include for the upgrade of all joints in the existing reservoir to NSF 61 compliant materials. NSF 61 certification pertains to materials tested and approved for use with potable water. During the course of the design, this was determined to be required and included. The estimated cost of this work is \$0.25M
- Municipalities in the GTA (including the City of Toronto) have in place significant capital investment programs designed to meet growth demands, repair older infrastructure and enhance existing facilities. Current market conditions and activities are such that currently all major water and wastewater contractors are actively engaged with other construction projects throughout the Greater Toronto Area (GTA). Consequently, tender prices for large construction projects are continuously increasing.

Requirements for Additional Contracted Professional Services for Associated Engineering (Ontario) Ltd.

Request for Proposal 9117-07-7226 was awarded for the design, general office administration and site supervision services during construction, and post construction services for the Milliken Pumping Station and Reservoir Expansion to Associated Engineering (Ontario) Ltd. (Report No. 3 of Bid Committee meeting held on October 17, 2007). The work under the above RFP allowed for general office administration and site supervision services during construction based on 104 weeks construction duration.

The contract timelines for construction is currently estimated at 143 weeks. Based on 104 weeks of site inspection carried in Associated Engineering (Ontario) Ltd's proposal, an additional 39 weeks (104-143 weeks) of general office administration and site supervision services during construction is required.

Associated Engineering (Ontario) Ltd's proposal had identified an amount of \$13,100.00 per week inclusive of disbursements and exclusive of GST, for any additional general office administration and site inspection services during construction. Based on this weekly rate, the additional 39 weeks of construction services results in an additional amount of \$510,900.00 thus revising the cost of engineering services during construction cost from \$1,700,000.00 to \$2,210,900.00 net of GST.

Based on the above additional time required, it is requested that Purchase Order No. 6024199 for contracted professional services with Associated Engineering (Ontario) Ltd. for the provision of general office administration and site supervision services during construction, be amended for an additional \$510,900.00 net of GST (\$536,445.00 inclusive of GST), and to amend the delivery end date of this Purchase Order to December 31, 2013.

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SIGNATURE

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