



CITY OF HAMILTON
PUBLIC WORKS DEPARTMENT
Hamilton Water Division

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	June 15, 2015
SUBJECT/REPORT NO:	Consultant Services for the Contract Administration of the New Highland Gardens Park Pumping Station (PW15050) - (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Dan McKinnon Director, Hamilton Water (905) 546-2424, Extension 5941 Stuart Leitch Manager, Capital Delivery (905) 546-2424, Extension 7808
SUBMITTED BY:	Gerry Davis, CMA General Manager Public Works Department
SIGNATURE:	

RECOMMENDATION

That Purchase Order No. 45674 for contract C11-80-08, Professional Engineering Consultant Services required for the Design and Contract Administration of the New Highland Gardens Park Pumping Station be increased by \$130,000 and that this increase be funded from Project ID 5140795752 (PD3 Pump Station Highland Gardens).

EXECUTIVE SUMMARY

In 2008, Hamilton Water awarded contract C11-80-08, Professional Engineering Consultant Services Required for the Design and Contract Administration of the Hillcrest Reservoir Condition Upgrades (Phase 1) and the New Highland Gardens Park Pumping Station (Phase 2) to a Consulting Engineering Firm, WSP (formerly Genivar). This contract involved a single contract administrator for two distinct project sites separated in time and by physical location.

The first phase being the Hillcrest Reservoir project was substantially performed in 2011 and required additional funds to complete the project administration component which, were added through Policy 11. The second phase being the Highland Garden Pump Station is currently approaching substantial completion however, there have been a number of construction issues that have required additional work by the Contract Administrator and as a result additional funds are now required to be added to the Purchase Order (PO). The total value of additions to this PO, including the amount in

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the recommendation of this report, now equal \$380,000 and exceed the threshold for Policy 11 and as a result staff are seeking approval for this funding.

The recommendations contained in this report support the Missions Statement of the Public Works Business Plan “Innovate Now” - “Provide safe, strategic and environmentally conscious services that bring our communities to life”.

Alternatives for Consideration - See Page 4

FINANCIAL - STAFFING - LEGAL IMPLICATIONS

Financial: The requested funds are available within the existing account (Project ID 5140795752) for this Project. Staff is requesting an additional \$130,000 be added to the Engineering Purchase Order as a contingency to provide funds, should unexpected circumstances arise.

Staffing: There are no staffing implications associated with the recommendations of this report.

Legal: There are no legal implications associated with the acceptance of the recommendations of this report.

HISTORICAL BACKGROUND

Summary of Project Sites

The now completed Hillcrest West Reservoir Project encountered several unanticipated events. Additional funds were requested in June 2011 (\$225,000) through a Procurement Policy 11 single source request for the Consulting Engineer. This amount was approved and provided funds to mitigate the unforeseen challenges and maintain the project schedule. Ultimately, the project was substantially performed on December 9, 2011, and the contractual warranty period was completed on December 9, 2012.

As part of the Infrastructure Stimulus Funding (ISF) Announcement on June 5, 2009, Hillcrest Water Reservoir Upgrades (ISF Project 714) was successfully granted Senior Government funding support. Priority was assigned to the completion of the Hillcrest Reservoir project to meet ISF timelines, ahead of the New Highland Gardens Park Pumping Station.

During the Hillcrest West Reservoir Rehabilitation Project, the Consultant encountered several unanticipated conditions, specifically Ministry of Environment Approvals for Endangered Species (Butternut Trees), Coordination with Environment Canada - Canadian Wildlife Services for tree removal impacting nesting Migratory Birds (Migratory Birds Regulations), unexpected structural and access issues related to the 80+ year old facility, and additional communications with respect to community concerns. Subsequently, on June 7, 2011, additional funds (\$225,000) through a Procurement Policy 11 single source request were approved. This provided appropriate funds to mitigate unforeseen challenges and maintain the project schedule. Ultimately, the project was substantially performed on December 9, 2011, and the contractual

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warranty period was completed on December 9, 2012, which met the requirements of the ISF program.

Upon successful conclusion of the Hillcrest West Reservoir project, the New Highland Gardens Park Pumping Station design was completed and the construction project awarded in May 2014. Currently, this project is nearing the end of construction and the approved schedule indicates a substantial performance date of June 10, 2015. However due to recent events, the following activities are contributing to delays to the project:

- 1) Various supplier issues.
- 2) Indication of an arc flash hazard at the main circuit breaker. To correct this concern, a remote operator connected to the main circuit breaker must be installed prior to start-up and commissioning of the facility.

Due to the above circumstances, Hamilton Water is anticipating an extension to the Substantial Performance date by approximately forty working days. Consulting Engineering work impacted during this time include: site inspection, Project Management, Contract Administration and support services. The current remaining Consulting Engineering project contingency is not sufficient to complete the tasks associated with the project delay. As such, the project team and management prepared a second Procurement Policy 11 single source request in the amount of \$24,500 (approved May 11, 2015); in order to secure the appropriate funds to meet the completion requirements of the project. Our intent is to recover these costs where applicable from the General Contractor through a contract credit change order.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

There are no known policy implications or legislated requirements affected if council approves the recommendation.

RELEVANT CONSULTATION

Not Applicable

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The purpose of this recommendation is to expand PO 45674 in the amount of \$130,000 intended to re-establish a project contingency. Current contingency on this project has been fully utilized while tasks still remain to complete this project. In order to proactively plan for unexpected events that may arise during the important steps through start-up and commissioning activities of this project, Hamilton Water is seeking approval to re-establish a source of contingency. Having this contingency will avoid potential unnecessary delays on this important water infrastructure project. As the total of the above noted Policy 11's and this report recommendation exceed \$250,000, approval by Council is required.

Upon completion of the design of the New Highland Gardens Park Pumping Station, the construction contract was awarded in May 2014. Currently, this project is under

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construction and the approved schedule indicates a substantial performance date of June 10, 2015. However due to recent events, the following activities are contributing to delays on the project:

- 1) Various supplier issues (HVAC, Pumps and MCC's) and City design changes (Pump) have occurred which has resulted in an estimated ten work day extension to the construction schedule.
- 2) The Electrical Coordination Study indicated that an arc flash hazard exists at the main circuit breaker. The most cost effective and expedient alternative is to install a remote operator for the main circuit breaker. This must be installed prior to energizing the equipment for start-up and commissioning activities. This has resulted in an additional thirty working days to the construction schedule.

Due to the above circumstances, Hamilton Water is anticipating an extension to the Substantial Performance date by an estimated total of forty working days. Consulting Engineering work impacted during this delay include: site inspection, Project Management, Contract Administration and support services. There remains an opportunity to recover some of these funds after substantial completion however it remains unknown if and when this might occur.

ALTERNATIVES FOR CONSIDERATION

Should Council choose to deny this request there will be no contingency available for issues that arise through commissioning that are difficult to predict. This outcome may impact the ability of staff to complete this project successfully, should there be issues that need to be addressed which are discovered as start-up and commissioning tasks are undertaken.

Council can direct staff to undertake a new procurement to have the project administration completed however, the current Consulting Engineer has completed the design and is in the process of performing construction administration and site inspection services for the project. Additional costs associated with having an alternative engineering firm taking over and continuing these services this far into an existing contract would likely be significantly higher as compared to utilizing the current Consulting Engineer.

The alternatives above are not recommended so as to maintain project continuity and minimize extra costs.

ALIGNMENT TO THE 2012 - 2015 STRATEGIC PLAN

Strategic Priority #1

A Prosperous & Healthy Community

WE enhance our image, economy and well-being by demonstrating that Hamilton is a great place to live, work, play and learn.

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Strategic Objective

- 1.2 Continue to prioritize capital infrastructure projects to support managed growth and optimize community benefit.
- 1.6 Enhance Overall Sustainability (financial, economic, social and environmental).

Strategic Priority #2

Valued & Sustainable Services

WE deliver high quality services that meet citizen needs and expectations, in a cost effective and responsible manner.

Strategic Objective

- 2.1 Implement processes to improve services, leverage technology and validate cost effectiveness and efficiencies across the Corporation.
- 2.3 Enhance customer service satisfaction.

Strategic Priority #3

Leadership & Governance

WE work together to ensure we are a government that is respectful towards each other and that the community has confidence and trust in.

Strategic Objective

- 3.5 Continue to be a leader in providing reliable, safe and clean drinking water to the community.

APPENDICES AND SCHEDULES ATTACHED

None