

PO Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

> Halifax Regional Council September 19, 2006

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Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:

Dan English, Chief Administrative Officer

Wayne Anstey, Deputy Chief Administrative Officer - Operations

DATE:

August 30, 2006

SUBJECT:

Award of RFP 06-328 for Consultant Engineering Design Services; Roach's Pond Pumping Station Upgrade and Forcemain Replacement

ORIGIN

2005/06 Capital Budget

RECOMMENDATIONS

It is recommended that Regional Council award the Engineering Design Services, Roach's Pond Pumping Station Upgrade and Forcemain Replacement, as called for in RFP #06-328, to SNC Lavalin for a total cost of \$113,668 including net HST, with funding authorized as per the Budget Implications section of this report.

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BACKGROUND

The Roach's Pond Pumping Station was originally built in 1964 and is located on Princeton Avenue in Halifax. It serves a sewershed with an estimated (1996) population of 11,000. Upgrades to the station in 1985 included the addition of a mechanical bar screen, a grit removal system, a retention tank, an overflow sewer, and valves on suction lines.

The pumping station is subject to major increases in flow volume during wet weather events. During certain rainfall events, this station will overflow into the environment. This will typically occur approximately ten to twelve times per year. Additionally, a number of the station components have reached the end of their service life and need to be replaced. Due to the age of the pumps, replacement parts are very difficult to locate and in some cases, have to be specially manufactured, resulting in high costs and operating problems for this station, .

The Wastewater Pumping Stations and Forcemains Study (SNC Lavalin, 2003), identified a number of problems and recommended several upgrades to this pumping station. Some of the recommendations included replacement of the pumps, installation of backup power, additional screening of overflows, as well as other structural, mechanical and electrical upgrades.

There are presently two forcemains, each approximately 700 m long, one of which is 400mm in diameter while the other is 450mm diameter. These existing forcemains are subject to frequent breaks due to the pipe material (asbestos cement) and to general overall deterioration. In order to minimize the effect of water hammer and to reduce the likelihood of forcemain breakage, only one of the 250 hp pumps is operated at any given time. As a result, less wastewater can be pumped from the station and during wet weather conditions, overflows occur.

The work covered under this RFP includes the detailed design of the forcemains and the preliminary design of the pumping station upgrades. The two projects are being undertaken in conjunction with one another to ensure that the forcemains and the pumping station components are designed and sized to work together in order to ensure continued safe operation, to provide for future growth and to maintain regulatory compliance.

Replacement of these forcemains will allow both pumps to run at the same time, thereby pumping more waste water and reducing the volume and frequency of overflows from this pumping station.

Other recommendations that may result from a more detailed investigation of the Roach's Pond Pumping Station, undertaken as a part of this work, will also be included in the preliminary design of the upgrades to the pumping station.

A second storage tank is to be constructed at this pumping station as a part of the Halifax Harbour Solutions Project. The addition of this tank will double the existing storage capacity, and is therefore expected to result in even fewer overflows. The tank is expected to be operational by 2008.

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HRM staff members have met with representatives from NSEL and with Nova Scotia's Medical Officer of Health at which time concerns by both the regulators and citizens were expressed over continuing overflows. Staff was encouraged to proceed in a timely manner to effect a solution to minimize the overflow situation.

DISCUSSION

The RFP (#06-328) for Roach's Pond Pumping Station Upgrade and Forcemain Replacement, closed on August 11, 2006 and three proposals were received. These proposals were evaluated by two staff members from Environmental Engineering Services and one from Design Services, with a representative from Procurement in attendance. The following proposals were received and evaluated:

	<u>Firm</u>	rm Average Score (/1000)	
1	SNC Lavalin	896	
2	CBCL	861	
3	Dillon Consulting	637	

Based on the results of the evaluation, it is recommended that this work be awarded to SNC Lavalin for a cost, exclusive of taxes, of \$109,900. The detailed breakdown of the scoring is included as an attachment. The project cost including net HST is \$113,668. The estimated cost for this work was \$150,000.

The detailed design of the forcemains is expected to be completed by February 2007. The preliminary design for the upgrades to the pumping station is expected to be completed by the spring of 2007, with a detailed design to be undertaken thereafter.

BUDGET IMPLICATIONS

Based on the highest scoring proponent's price of \$109,900, the total project cost, including net HST, is \$113,668. Funding is available in the Capital Budget from Account No.CSR00803 for the Roach's Pond Forcemains. The budget availability has been confirmed by Financial Services.

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Budget Summary:

less:

Account No. CSR00803	Roach's Pond Forcemains
Cumulative Unspent Budget;	\$150,000
RFP#06-328	\$113.668

Balance of Account \$ 36,332

The estimated cost for this work was \$150,000. The balance of the funds remaining in this account will be used for contingencies and other future work at this pumping station.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

ALTERNATIVES

Council could choose to reject the recommendation to award the Roach's Pond Pumping Station Upgrade and Forcemain Replacement design services. Staff does not recommend this option as the result would likely be continued deterioration of the pumping station, its components and the forcemains, which could lead to continuing problems such as forcemain failure and sewage releases into the environment. This would result in potential future property damage and increased public health risk.

ATTACHMENTS

1. Detailed Consultant Evaluation form

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Copies of this report, an or Fax 490-6425.	nd information on its status, can be obtained by contacting the Procurement Dept. at 490-4170,
Report Prepared by:	Barbara MacLean, P.Eng., Environmental Engineer, EES at 490-3685
Report Approved by:	John Sheppard, P.Eng. Manager, Environmental Engineering Services at 490-6958
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Financial Review:	Ferdinand Makani, MBA, CMA, Financial Consultant at 490-6902
Procurement Review:	Anne Feist, Operations Manager, Procurement at 490-4200
Report Approved by:	Catherine Sanderson, Senior Manager, CMA, Financial Services at 490-1562

Attachment 1

RFP No. 06-328 Roach's Pond Pumping Station Upgrade and Forcemain Replacement

DETAILED EVALUATION OF PROPOSALS

CRITERIA	MAX SCORE	DILLON	SNC LAVALIN	CBCL
Expertise of Firm and Project Team Project Team, Previous Experience, Past Experience on HRM projects	250	178	223	205
Methodology Understanding Of Project, Methodology, Considerations Of Options/Solutions, Work Schedule	550	280	505	505
Fee Schedule	150	150	124	109
Overall Proposal Quality & Compliance With the RFP	50	28	44	42
TOTAL	1000	636	896	861
RANKING		3	1	2
PROPOSED PRICE (including net HST)		\$49,687	\$113,668	\$108,518