



ADMINISTRATIVE REPORT

Report Date: May 18, 2012
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RTS No.: 9642
VanRIMS No.: 08-2000-20
Meeting Date: May 29, 2012

TO: Vancouver City Council

FROM: General Manager of Engineering Services and Director of Supply Chain Management

SUBJECT: Award of Contract for ITT PS20120077 Contracting Services - Phase 2 Closure Construction and Gas System Upgrades at the Vancouver Landfill

RECOMMENDATION

THAT subject to the conditions set out below, Council award a contract to King Hoe Excavating Ltd. for construction services on the Phase 2 Closure Construction and Gas System Upgrades Project at an estimated cost of \$13,686,469.78 (excluding HST) subject to a contract satisfactory to the General Manager of Engineering Services, Director of Legal Services, Director of Finance, and the Chief Purchasing Official;

FURTHER THAT all legal documentation is to be in a form which is satisfactory to the General Manager of Engineering Services, Director of Legal Services, Director of Finance and Chief Purchasing Official;

AND FURTHER THAT upon approval of the legal documentation, the Director of Legal Services, the General Manager of Engineering Services, the Director of Finance and the Chief Purchasing Official be authorized to execute and deliver the necessary agreement on behalf of City Council;

AND FURTHER THAT no legal rights or obligations shall arise hereby and none shall arise or be granted hereafter unless and until all contemplated legal documentation has been executed and delivered by all parties.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

It is Council policy to enter into contracts for the purchase of equipment, supplies and services that will give the best value based on quality, service and price.

Council approval is required for contracts with a value over \$2 million.

In 2001, Council set the minimum balance of the Solid Waste Capital Reserve at \$30,000,000.

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The Deputy City Manager, General Manager of Engineering Services, Chief Financial Officer and the Chief Purchasing Official (collectively “the Bid Committee”) have reviewed and endorsed this award.

SUMMARY

The Vancouver Landfill’s Operational Certificate (as defined below) issued by the BC Ministry of Environment requires that final cover be constructed no later than 1 year after final placement of garbage. In addition, the Vancouver Landfill has set a target to achieve 75% landfill gas collection efficiency ahead of the BC *Landfill Gas Management Regulation* requirement in effect on January 1, 2016.

The 2012-2014 Capital Plan contains closure and landfill gas works at the Vancouver Landfill of more than \$34 million over the next three years. As detailed in this report, closure and landfill gas works are planned for 2012 and ongoing work will be necessary over the life of the Vancouver Landfill to maintain the 75% landfill gas collection efficiency.

Led by Supply Chain Management, the City issued an Invitation to Tender (PS20120077) for the Phase 2 Closure Construction and Gas System Upgrades (the “Project”) at the Vancouver Landfill. With the assistance of the City’s Consultant (as defined below), an evaluation team comprised of City staff evaluated the seven bids received and recommended, King Hoe Excavating Ltd. with a total Project budget of \$13,686,469.78 plus HST. The recommendation of the evaluation team was subsequently approved by the Bid Committee on May 18th, 2012.

Background/Context

Owned and operated by the City, the Vancouver Landfill serves approximately 40% of the Metro Vancouver region, specifically, Vancouver, Delta, Richmond, White Rock, UBC/UEL, and a portion of Surrey. In operation since 1966, the Landfill is authorized by an Operational Certificate issued by the BC Ministry of Environment pursuant to the BC *Environmental Management Act* (the “Operational Certificate”) and Metro Vancouver’s *Integrated Solid Waste and Resource Management Plan*. The current operating agreements with Metro Vancouver and the Corporation of Delta expire in 2037.

The Vancouver Landfill’s Operational Certificate requires that final cover be constructed no later than 1 year after final placement of garbage. Construction of Phase 2 closure is scheduled to begin in June 2012 and garbage filling in Phase 2 was completed in September 2011. Progressive closure for each phase on completion minimizes the environmental impact of the Landfill by maximizing landfill gas capture and minimizing leachate generation from closed areas.

In Administrative Report RTS No. 09154, dated May 17, 2011, Council approved the recommendation to proceed with the initial portion of the Phase 2 Closure and Landfill Gas Collection Works Project with a budget of \$4.678 million. This precursor project included the construction of 54 new vertical gas wells in Phases 1 and 2 in 2011 and

the design and construction management of Phase 2 Closure Construction & Gas System Upgrades Project.

In September 2011, SCS Engineers/Sperling Hansen Associates (the “City’s Consultant”) were awarded a contract with a budget of \$958,152 to provide professional services for the detailed design and construction management of the Phase 2 Closure and Gas System Upgrades Project.

Timely construction of these and other works is also required to meet the Provincial regulatory target of 75% collection efficiency by January 1, 2016 set by the BC *Landfill Gas Management Regulation*. Ongoing closure activities and landfill gas works will be necessary over the life of the Vancouver Landfill to maintain the regulatory target of 75% past 2016.

Bid Evaluation Process

In March 2012, the General Manager of Engineering Services and Manager of Supply Chain Management sought bids for construction of Phase 2 Closure and Gas System Upgrades through an Invitation to Tender (ITT) (PS20120077). Seven tenders were received on April 25, 2012.

Company Name and Bid Pricing

King Hoe Excavating Ltd. (“King Hoe”) submitted the lowest, qualified bid of \$13,686,471.98 plus HST. The bid evaluations and supplier selection were performed by Engineering Services Staff and Supply Chain Management. Consultation for service requirements and vendor selection was also done with the City’s Consultant. The evaluation team determined that King Hoe’s bid was compliant with the ITT specifications and provides best overall value to the City.

The total maximum value of the contract listed in the recommendation includes the base bid price of \$13,403,469.78 plus three provisional items for a total cost of \$13,686,469.78 plus HST. These provisional items include the supply of a temporary weigh scale to alleviate line ups, supply of drain rock and management of asbestos waste from drilling activities.

Strategic Analysis

King Hoe is qualified to perform the work required for the Project as set out in the tender package based on satisfactory completion of similar work and references provided and checked. References were checked by the City’s Consultant and Supply Chain Management and financial statements were requested and reviewed by Finance and Supply Chain Management.

Implications/Related Issues/Risk (if applicable)

Financial

The 2012-2014 Capital Plan contains closure and landfill gas works totalling over \$34 million. The 2012 budget for the Project of \$20,850,000 was approved in RTS No. 09454 in February 2012 and was based on initial cost estimates prior to completion of the design work.

Funding for this Project is from the Solid Waste Capital Reserve, through a loan for operational capital works and payment for closure works. Metro Vancouver pays a portion of closure works based on Metro Vancouver and Vancouver/Delta waste proportions. Metro Vancouver will be invoiced for their portion of costs (up to approximately \$3,500,000 of the full Project budget) once the Project is completed.

Landfill sites are inherently difficult environments to construct on as it is never certain what may be below the surface when drilling and installing gas collection systems. In order to mitigate the construction related risk on this project a contingency of 15% has been included in the Project budget to account for unforeseen circumstances or difficulties that may be encountered during project execution.

As this is a large project with a relatively short schedule, in order to manage the scheduling and financial risk a professional project management firm will be hired to oversee this Project. City staff and the City's Consultant will work closely with the project manager to deliver this Project.

Environmental

This Project mitigates the environmental risk of landfill gas emissions. Landfill gas is a key greenhouse gas (GHG) with at least 20 times the impact of carbon dioxide. The detailed construction sequence and timeline prescribed by the City's Consultant in the contract documents will optimize landfill gas collection throughout the Project. Construction is scheduled to begin on June 1, 2012 and total completion is scheduled for November 30, 2012.

Legal

Work under this contract is a regulatory requirement under the Vancouver Landfill's Operational Certificate, and must be completed under the schedule dictated by the Operational Certificate. In addition, this work will move towards meeting the landfill gas collection efficiency target of 75% set in advance of regulatory requirements coming in 2016.

CONCLUSION

The General Manager of Engineering Services and the manager of Supply Chain Management recommend award of the Phase 2 Closure Construction and Gas System Upgrade Project to King Hoe Excavating Ltd.

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