

HALIFAX

P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 12.1
Audit & Finance Standing Committee
September 17, 2014

TO: Chair and Members of Audit & Finance Standing Committee
Original Signed

SUBMITTED BY:

Richard Butts, Chief Administrative Officer
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Mike Labrecque, Deputy Chief Administrative Officer

DATE: September 17, 2014

SUBJECT: Approval of Project Funding – Borrow Pit Development / Technical & Owners
Engineering Services

ORIGIN

Correspondence from MIRROR NS regarding the need to expand the borrow pit.

The 1997 contract agreement between the Municipality and MIRROR NS in section 15 provides for the construction and closure of each landfill cell.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Council approved, Dec 11, 2012, that all budget increases are to be presented to the Audit and Finance Standing Committee, prior to submission to Council.

Halifax Charter, section 93(1) - The Council shall make estimates of the sums that are required by the Municipality for the fiscal year; Halifax Charter, section 79(1) - Specifies areas that the Council may expend money required by the Municipality; Halifax Charter, section 35(2)(d)(i) - The CAO can only authorize budgeted expenditures or within the amount determined by Council by policy; Halifax Charter, section 120(6) - The Municipality may maintain other reserve funds for such purposes as the Council may determine; Halifax Regional Municipality policy on Changes to Cost Sharing for Capital Projects - Changes requiring Council approval; and the Halifax Regional Municipality Reserve Policy - No reserve funds will be expended without the CAO's recommendation and Council approval.

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RECOMMENDATION

It is recommended that the Audit & Finance Standing Committee recommend that Halifax Regional Council:

1. Approve capital project spending from Project Account CWU01066 Cell 6 Construction – Otter Lake in the upset amount of \$220,268.00 as funding needed to further develop a borrow pit near the Otter Lake site, as outlined in the Financial Implications section of this report.
2. Approve the allocation of an upset amount of \$100,000.00 from Project Account CWU01066 Cell 6 Construction – Otter Lake for technical and owner's engineering services to engage and retain professional advice related to the Solid Waste system.

BACKGROUND

The Otter Lake Landfill site currently sources its clay soil from a clay drumlin located off the Carmichael Rd (this road was upgraded for use as a haul road) on Municipal land which is being developed as a borrow pit in phases (of less than 4 hectares each). The clay soil is generally utilized on site for cell construction and closure (capping), for operational purposes such as clay fire breaks between cells or breaks in sections of cells, clay soil for cap maintenance or repairs to eroded areas of the landfill cap, soil for intermediate cover where needed for gas/odour control and in a back-up supply in case of a need for fire suppression in the landfill. Daily cover for the landfill operations is provided through use of ground construction & demolition material (referred to as alternate daily cover C&D matrix).

Prior to 2011, the borrow pits located at the Otter Lake site were in close proximity to the Landfill cells. In 2011, a haul road was built to a drumlin located approximately 1.5 km from the Landfill cells and the first phase of borrow pit of less than 4 ha was opened (off the Carmichael Rd) in conjunction with the construction of Cell 6 of the Landfill. In late May, 2014, MIRROR NS, the contracted facility operator, indicated to the Municipality that the initial borrow pit off Carmichael Rd had no more clay soil and that a new borrow pit (of less than 4 ha) adjoining the initial borrow pit should be developed to provide clay soil for site operations during the remainder of 2014 and future cell closure work.

The 1997 contract agreement between the Municipality and MIRROR NS in section 15 provides for the construction and closure of each landfill cell. Borrow pit development has occurred over time at this site as part of capital projects in conjunction with the construction of a landfill cell or closure of a landfill cell and funds are provided for the cell construction or closure within the Municipality's project budgets. MIRROR NS has recommended the development of a 1.9 hectare borrow pit this Fall to provide for site operational needs such as fire breaks, cover for gas/odor control where needed and fire suppression supply during the remainder of 2014. As a result of running out of clay this phase of the borrow pit could not be completed in conjunction with the next planned cell closure project. The original phase of the borrow pit developed in 2011 was expected to last longer and provide sufficient clay soil until the closure of Cell 6.

DISCUSSION

This report is before the Audit & Finance Committee because it is a request for capital and project spending that was not included within the original scope of work approved in the project budget.

Conestoga-Rovers & Associates were engaged by the Municipality to provide professional advice with respect to reviewing the clay soil and borrow pit needs at the Otter Lake Landfill. The firm was requested to review and analyse the need to open a new borrow pit (the second phase of development of borrow

pits of less than 4 hectares). The firm was also asked for an assessment (based upon best practices) of the potential need (including estimates for quantities over time) for clay soil required at the Landfill for landfill operations including such site activities as clay fire breaks between cells or breaks in sections of cells, clay soil for cap maintenance or repairs, soil for intermediate cover where needed for gas/odour control and in back-up supply in case of a need for fire suppression in the landfill. A cost review of the borrow pit development costs (as proposed by MIRROR NS) was also included in the scope of work.

Conestoga-Rovers has submitted an assessment that there is a need to open a second phase of borrow pit for continued operations at the Landfill for the next 18 months. Conestoga-Rovers has also indicated that a 1.9 hectare borrow pit at the site would meet the clay soil demand for the next 18 months.

Conestoga-Rovers (CRA) is currently completing a cost review for Halifax of the proposed pricing received from MIRROR NS for this 1.9 hectare borrow pit. This cost review of pit design, size, quantities, work activities, unit prices, etc. will be utilized by Halifax in conjunction with CRA's professionals to finalize a price for this project with MIRROR NS. The project total of \$270,268 included in this report is an upset cost for the project subject to any reductions based on cost review.

Due to the time needed during the 2014 construction season to develop this project, the CAO awarded funds of \$50,000 inc. net HST to initiate this project on September 8, 2014 and have MIRROR NS begin development of the borrow pit. This report has been prepared for the Committee to outline the timing of this project, the remainder of funding requirements and source to complete this project.

Owners Engineer

Staff is recommending we engage and secure the capability of an owners engineer to strengthen our ability to provide management and oversight of the solid waste system. Through the course of the solid waste systems review as well as the need to open a new borrow pit, securing this type of technical ability has become priority.

The benefits of an owners engineer include:

- An enhanced level of safeguards for the community and the asset owner
- Improved community protections and environmental stewardship
- Minimization of risks associated with environmental and legislative compliance
- Increased level of accountability and oversight over contracted partners
- Ensures the infrastructure and resources are being managed properly
- Provides assurance that technical and contractual requirements are met
- Supplies additional project support and management
- Assists in reducing the risk for budget and cost overruns
- Able to be deployed on an as needed basis with the technical expertise required for a given situation

Staff expects the scope of work to include, but not limited to:

- Operational and environmental compliance monitoring
- Environmental audits
- Geotechnical and hydrogeological analysis
- Technical and design reviews
- Cost reviews
- Site inspections
- Project management

The infrastructure that will be monitored initially, the Otter Lake facility, has an annual operating budget for 2014/15 of \$14.7M with a project budget of \$1.6M. The planned capital budget for 2015/16 is \$23.2M

(as per the 2014/15 project budget book). The owners engineer will then expand to other components of the solid waste system (material recovery facility, compost plants, and collections etc.). The request for an upset amount of \$100,000 is a preliminary estimate for the program. It is anticipated that this funding will cover fiscal 2014/15 as well as 2015/16 activities. Budget for this program will be requested on an annual basis in order to support this function

FINANCIAL IMPLICATIONS

The projected cost for this 2014 phase of borrow pit development including margin is \$259,160.00 plus net HST of \$11,107.60, for a total of \$270,268.00. This borrow pit development was not included within the original scope of work approved in 2011/12 for Project Account CWU01066 Cell 6 Construction – Otter Lake. However, there are remaining funds available in this account to undertake this borrow pit development in 2014. The budget availability has been confirmed by Finance.

The estimated cost for technical and owners engineering services is \$100,000.00. It is anticipated that this funding will be used over two fiscal years. Additional program funding will be requested annually as part of the annual budget process.

Budget Summary:	<u>Project Account No. CWU01066 Cell 6 Construction</u>	
	Cumulative Unspent Budget	\$546,103
	Less: CAO award initiate development	\$50,000
	Less: Remainder borrow pit development in 2014	\$220,268
	Less: Technical & Owners Engineering Services	<u>\$100,000</u>
	New Balance	\$175,835

(There are more than sufficient remaining funds in this Account for a needed wetland compensation project related to the road development through a wetland in 2011)

COMMUNITY ENGAGEMENT

N/A

ENVIRONMENTAL IMPLICATIONS

The approval of funding to develop the next phase of the borrow pit in 2014 will provide for clay soil to be used in site operations including fire breaks, cover for gas/odour control where needed and fire suppression supply during the remainder of 2014, rather than waiting to develop the next phase of a borrow pit in conjunction with the next planned cell closure project.

ALTERNATIVES

One alternative, not recommended, is not to approve capital project spending at this time for this phase of borrow pit development. However, given the current operational need for clay soil at the site in the remainder of 2014, this is not recommended.

ATTACHMENTS

N/A

A copy of this report can be obtained online at <http://www.halifax.ca/boardscom/SCfinance/index.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Robert Orr, P. Eng., Coordinator, Collection & Processing, 902-490-6698
Original Signed

Report Approved by: _____
Matthew Keliher, Acting Manager, Solid Waste Resources, 902-490-6606

Financial Approval by: Original Signed

Greg Keefe, Director of Finance & ICT/CFO, 902-490-6308
