

DATE: October 30, 2014 **FILE:** 5360/CR

TO: Chair and Directors
Comox Valley Regional District (Comox Strathcona waste management) board

FROM: Debra Oakman, CMA
Chief Administrative Officer

RE: SCS Engineers contract award for design for Phase 2 Campbell River landfill closure project

Purpose

To request CSWM board approval for the direct award of a contract to SCS Engineers (SCS) to complete the design of phase 2 Campbell River existing landfill closure, provide tender documents and construction contract tender assistance.

Policy analysis

The 2012 solid waste management plan (SWMP) was approved by the Ministry of Environment (MoE) on May 23, 2013 and the CSWM strategic plan and objectives support the design and closure work included in this report.

Bylaw No. 284, being the “Comox Valley Regional District Delegation of Purchasing Authority, Bylaw No. 284, 2013” delegates authority for all regional district purchases and requires that the board approve all contracts in excess of \$100,000.

Executive summary

The Campbell River (CR) existing landfill closure project is a part of the SWMP capital projects and has been a part of the CSWM strategic plan since 2012. SCS Engineers was selected through a competitive process, as the consultant for this long term complex design project and was awarded the closure design contract by the board in 2012.

The next phase of the services required is for the completion the CR phase 2 closure design, provision of tender documents and construction contract tender assistance.

As a result of their original contract work, SCS Engineers are well into preliminary design of the phase 2 work which is to be complete in 2015. This will help to ensure scheduled 2016 construction of the SWMP mandated phase 2 gas system at Campbell River.

The schedule of this project is part of the SWMP Campbell River facility environmental compliance requirement to maintain the CR landfill disposal permit. SCS Engineers have performed very well to this time adding project value and reduced risk to the CSWM service by assessing project alternatives and assisting staff in providing acceptance for CSWM CR permit applications from the Ministry of Environment (MoE). In the evaluation of this contract award, the potential loss of momentum, knowledge and project expertise should be considered in light of the critical project timelines, financial and legal risks.

Recommendation from the chief administrative officer:

THAT a contract for the completion of the phase 2 design of the Campbell River waste management centre closure including tender documents and tendering assistance be direct awarded to SCS Engineers in the amount of \$337,110.00 excluding GST;

AND FURTHER THAT the corporate legislative officer and chair be authorized to sign the contract.

Respectfully:

D. Oakman

Debra Oakman, CMA
Chief Administrative Officer

History/background factors

Work was initiated in 2011 on the three major SWMP capital projects including:

1. Campbell River landfill closure;
2. Comox Valley landfill closure; and
3. Comox Valley new landfill expansion.

CSWM projects listed above are referenced in the solid waste strategic plan from 2011 through 2014.

CSWM service staff manage these large complex projects using principals of management and technical programs including:

1. Quality based selection (QBS) – consultant selection and management;
2. Budget guidelines for consulting engineers – project estimates and consultant fees; and
3. Project management institute – project management framework for oversight.

Starting in 2011, the CSWM service approached the selection of consultants for the SWMP capital projects with the use of QBS process. For these complicated, complex and long term projects consultants with proven experience on in depth environmental landfill closures and construction as well as provincial approval abilities were needed. To provide for qualified consultants the CSWM selected two sequential competitive processes including:

1. Request for qualifications (RFQu) – evaluation of seven submissions resulted in shortlist of top three qualified consultants, completed in 2011; and
2. Request for proposals (RFP) – top three RFQu consultants competed for each project resulting in three contracts awarded between 2012 and 2013.

The QBS best practice methodology when applied to large complex and long term projects is a transparent process that encourages viewing of consultants as “trusted advisors” who share their objectives and who are evaluated throughout the project by their performance including risk reduction and value added factors. For acceptably performing consultants, direct awards for phased construction tender documents and contract oversight is planned and makes sense as the tender documents are between thirty and fifty percent completed for all phases of the projects within the first months of contract award.

The three high value projects described above have been unfolding over a long term with relatively complex scopes. The scope of these projects were not readily definable when the RFQu was issued in 2011 and has continued to provide challenges to staff and the CSWM board as the projects have

evolved. Project scopes have been adjusted over time through component assessment and option selection. From the beginning, the major constraint with managing these projects has been the compressed project timeline as a result of limited system capacity. Capacity is the permitted landfill airspace available for municipal solid waste. For all three projects, the financial and legal risks are proportional to the existing landfill capacity. In other words, the closer we are to running out of landfill space the larger the risks of not completing scheduled work and the fewer the disposal options for MSW exist.

Current estimated capacity or landfill space available in terms of time includes:

1. Campbell River landfill – January 2018
2. Comox Valley landfill – October 2017

The above estimates are conservative and due to expected variance in tonnages and an ongoing post retaining wall construction survey at the Campbell River facility may be adjusted from time to time. At this time there appears to be enough airspace available to not have to amend the SWMP to provide for alternative disposal of regional MSW before completion of the new expanded landfill scheduled for construction in 2017.

The scope of work for the contract for the completion of the design of phase 2 Campbell River existing landfill closure including the provision of tender documents and construction contract tender assistance is:

1. CR Landfill Gas Collection and Treatment Facility: Design needs to be completed by October 2015 to enable construction per the SWMP in 2016;
2. Comprehensive Stormwater Facility Improvements: Includes storm water system improvements for the landfill closure scheduled 2016 as well as final closure scheduled to begin in 2018; and
3. Final Closure of Approximately 70% of Landfill Outer Slopes. Includes extending the closure membrane installed on the lower slope along Argonaut Road during Phase one closure construction completed in October, 2014.
4. Construction tender assistance including contractor evaluation.

SCS has submitted a proposal for this work with the phase 2 CR detailed design and tender documents scheduled to be completed in August 2015 and contractor tender evaluation recommendation letter by December 18th, 2015 in order to begin SWMP compliance construction now scheduled in 2016.

A summary of the SCS contract for CR closure phase 1 to date and proposed for phase 2 is presented below in Table 1.

Table 1. Summary of SCS Engineers contract for CR closure project, phase 1 and 2

Contract Description¹	Cost
Original contract - phase 1 closure plan and design, w/o GST	\$491,000.00
Phase 1 construction oversight contract, w/o GST	\$407,565.20
Sum of scope changes to date w/o GST	\$58,196.00
Proposed contract for phase 2 closure design and tendering, w/o GST	\$337,110.00
Total	\$1,293,871.20

Note 1 – Campbell River Landfill Comprehensive Engineering Services, May 2012

SCS Engineers has performed very well to this time adding value and reduced risk to the CSWM service by assessing project alternatives and providing approval for CSWM applications from the

Minister of Environment (MoE) by their work. Some of this work has involved scope changes and contract extensions. Examples include:

1. Modification of comprehensive CR landfill closure plan in 2011 from two to three phases of construction (Phase 1 MSE wall in 2014, Phase 2 gas system in 2016, Phase 3 final closure to begin 2018) which provides for landfill gas compliance and additional landfill capacity; and
2. Phase 1 construction contract oversight contract awarded by the board in 2013 which included:
 - a. Waste relocation contract completed in 2014;
 - b. North embankment excavation contract now at final completion; and
 - c. Phase 1 landfill closure contract: project management, contract quality assurance (materials), contractor quality control (construction oversight) which includes the MSE retaining wall now at final completion.

The 2016 construction project construction schedule is part of the SWMP compliance requirement to maintain the CR landfill disposal permit. Phase 2 project design needs to be completed by October 2015 in order to meet provincial landfill gas regulatory requirements in 2016. Construction of CR phase 2 closure is scheduled to begin in 2016 in accordance with the SWMP to maintain compliance at our regional landfills.

In February 2013, SCS submitted final CR closure plans and operation documents to the MoE which include thirty to fifty percent completed phase 2 construction plans. Acceptance by the MoE of SCS CR updated closure and operations plans (including phase 2 conceptual design) occurred in March 2013. Under this contract award, SCS will complete the design of phase 2 CR closure and provide construction tender documents and tendering assistance.

The scope of the SCS proposed CR phase 2 closure was jointly developed through a teamwork approach between staff and consultant engineers. The scope and the fee for the proposed extended design work is a realistic representation of project.

It could be counterproductive to break the landfill project into smaller pieces of study and design with new consultants. The potential loss of momentum, knowledge and local expertise should be considered in light of the critical project timeline.

Options

CSWM board options include:

1. Approval of direct award contract to SCS Engineers for completion of phase 2 design of Campbell River landfill closure and tendering assistance or
2. To not approve the award of the contract to SCS Engineers and direct staff otherwise.

Staff recommends option no. 1, approval of the contract direct award in order to meet SWMP schedule and MoE criteria for operation and closure of the Campbell River existing landfill.

Financial factors

The value of the scope of work for the CR phase 2 design by SCS Engineers is \$337,110.00 which includes 10% contingency and excludes GST. The preliminary 2015 capital budget, function 391 which is part of the CSWM 2015 – 2019 preliminary financial plan includes an allowance of \$350,000 for this work.

Financial risks of not proceeding with this SWMP project could include significant expenditures to amend the SWMP, increases to project closure costs in the future and potential significant increases in municipal solid waste (MSW) disposal costs for the CSWM service as well as increasing the risk of environmental litigation.

Funding for this project is budgeted to be provided by long term debt through the Municipal Finance Authority.

Legal factors

This project and the recommended scope of the contract with SCS Engineers are supported by the SWMP and are in accord with the service establishment bylaw 1822.

The SWMP provides for regulatory closure of the existing CR landfill which is designed to reduce environmental liability to the service and demonstrate to the MoE the intension of the CSWM to operate the new engineered landfill in Comox Valley in accordance with the SWMP and regulatory permits. The operational permit for the CV new expanded engineered landfill is under regulatory review by the MoE at this time.

Legal risks of not proceeding with the recommendations could include a possible SWMP amendment which requires at least two years to complete, requires Minister of Environment approval and, could include significant public outreach assent requirements. In addition, not proceeding with the closure would increase the operational environmental risk for this site.

The CVRD delegation of purchasing authority bylaw no. 284 provides for circumstances where direct award procurement is permissible. Section 9 indicates that a direct award is justified “where the competitive process is impractical because of the need to obtain unique third party skills, there is a requirement for contractor continuity, or there is a strong case for the cost effectiveness of maintaining or retaining an existing contractor for a specific task.”

As described in this report these circumstances are met due to the unique expertise and knowledge SCS Engineers have attained throughout their design of the phase 1 and to date on phase 2 as submitted to the MOE. As well there are financial risks of not meeting the required timeline as any delay will likely result in decreased cost effectiveness.

The bylaw requires that a notice of intent to direct award be published on the CVRD website for a period of five business days.

Sustainability implications

Closure of existing Campbell River landfill is a part of the capital projects included in the SWMP. This project represents a major improvement in MSW disposal in the region reducing environmental impacts and providing major sustainability improvements. The SWMP supports the Comox Valley Sustainability Strategy including the following goals:

Goal 3.2: Establish a diverse network of clean and renewable local energy supply systems; energy is harnessed from the waste sources in the community;

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Goal 3.3: Waste diversion and recycling programs approach “zero-waste” targets including:
Objective 3.3.1. Develop a regional “zero-waste” strategy, including promotion of recycling that is aimed at waste reduction and diversion from landfill disposal;

Goal 3.4: The waste stream associated with construction, demolition and land clearing waste is reduced; Objective 3.4.1. Develop and implement a regional waste management program.

Interdepartmental involvement

A number of CVRD branches will support the work recommended in this report including but not limited to engineering services, financial services, public affairs and information systems and legislative services. Most of the work will be undertaken by the CSWM staff of the engineering services branch at the CVRD.

Citizen/public relations

The public affairs and information systems branch is consulted regularly as to communications plans for the CSWM services and this work could include all updates to the SWMP communication plan. However, no additional public communication is planned at this time for this project.

Prepared by:

Concurrence:

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