

DATE: October 18, 2017

FILE: 5340-20

TO: Chair and Members
Comox Valley Sewage Commission

FROM: Russell Dyson
Chief Administrative Officer

Supported by Russell Dyson
Chief Administrative Officer

R. DYSON

**RE: Comox Valley Water Pollution Control Center – Phase One Upgrades –
Contract Award for Engineering Services**

Purpose

To seek approval for the award of a contract to Associated Engineering (BC) Ltd. for design, procurement and construction management services for the Comox Valley Water Pollution Control Center (CVWPCC) phase one upgrades.

Recommendations from the Chief Administrative Officer

THAT as a result of a competitive process, the contract for engineering services for the Comox Valley Water Pollution Control Center phase one upgrades be awarded to Associated Engineering (BC) Ltd. in the amount of \$813,290 excluding GST;

AND FINALLY THAT the Chair and Corporate Legislative Officer be authorized to execute the contract.

Executive Summary

In 2016 a Capacity Assessment of the CVWPCC was completed by ISL Engineering and Land Services Ltd. (ISL) and recommended a series of phased upgrades at the plant to increase capacity and comply with changing regulations for redundancy and effluent quality. Following these recommendations, in August 2017 the Comox Valley Regional District (CVRD) issued a request for proposal (RFP) for design services for the phase one upgrades at the CVWPCC. Design services for the upgrade are to include the following:

- Develop the detailed engineering design and construction cost estimate.
- Complete all permitting requirements needed as part of the upgrade.

Due to the urgency of solving the odour control, basement piping and outfall capacity issues, procurement services and construction support for this portion of the project scope is also included as part of this contract:

- Develop the issue for tender specifications for the odour control, basement piping and equalization tank.
- Provide contract administration and construction inspection services during construction of this scope.

Upon closing of the RFP, a total of five compliant proposals were received. The highest ranked proposal was from Associated Engineering (BC) Ltd. at an estimated cost of \$813,290 excluding GST.

Prepared by:

Concurrence:

Concurrence:

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Successful proponent	✓
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Background/Current Situation

To better understand the capital upgrades and operational requirements required to service a growing population and changing regulations, a capacity assessment of the treatment plant and outfall was conducted in 2016 by ISL along with an ultraviolet (UV) disinfection feasibility study completed by AECOM Canada Ltd.

In November 2016, the Comox Valley Sewage Commission approved proceeding with planning, engineering and construction of the phase one upgrades as identified by ISL within their capacity assessment. Due to the significant capital costs of the recommended upgrades and the multi-year approach, the CVRD undertook an independent third party review of ISL's findings prior to proceeding with the detailed design. The purpose of the third party review was to review ISL's recommendation and identify efficiencies.

From this third party review, an alternate option was suggested that replaces addition of a cloth media filter at this time with construction of a fourth clarifier. This option was reviewed in detail by ISL and was determined to significantly reduce the initial capital cost, while providing effluent quality that will still meet the anticipated Municipal Wastewater Regulations effluent quality requirements. In July 2017, this alternate option was approved by the Comox Valley Sewage Commission and in August 2017 an RFP for design services for the phase one upgrades was issued. The successful consultant will complete the detailed design of the following scope:

- Retrofitting the existing odour control system.
- Construction of an offline equalization tank.
- Replacement of the 12mm bar screen.
- Installation of a new grit removal system.
- Incorporation of ultraviolet disinfection.
- Construction of a fourth clarifier.
- Incorporation of a polymer dosing system and effluent reuse system.
- Conveyance piping replacements.
- Permitting requirement.
- Overall site design and layout.

Procurement and construction services were also included in the scope of the RFP, and were split into two phases: urgent works to address odour control and mitigation of peak flows in winter, and in the second phase, the remainder of the scope items.

Upon closing of the RFP, five compliant proposals were received. Proposals were evaluated using the two envelope system, part one being the technical submission and part two being the financial submission. The technical submission was worth 70 per cent of the total score and the financial submission was worth 30 per cent. The proposals were evaluated by a team comprised of five

CVRD staff, and the technical submission was evaluated against a set of point rated criteria set out in the RFP, including project understanding, approach and methodology, project delivery, qualifications and experience of the proponent team, and the proponent’s previous project experience. The results of the technical evaluations are provided in Table No.1 below.

Table No.1: Ranking of Technical Submissions

Name of Firm	Technical Ranking
Associated Engineering (BC) Ltd.	1
AECOM Canada Ltd.	2
ISL Engineering and Land Services Ltd.	2
CH2M HILL Canada Ltd.	4
WSP Canada Group Ltd.	5

The evaluation team reviewed the technical submissions and per the RFP, only those proponents whose technical submissions scored within 15 per cent of the highest technical submission score were shortlisted for evaluation of their financial submissions. Only AECOM and ISL’s proposals were within 15 per cent of the highest ranked technical submission, being Associated Engineering (BC) Ltd. The financial submissions were evaluated per the terms of the RFP.

Table No.2 below provides the results of the overall ranking of the proposals.

Table No.2: Overall Ranking of Proposals

Name of Firm	Overall Ranking
Associated Engineering (BC) Ltd.	1
ISL Engineering and Land Services Ltd.	2
AECOM Canada Ltd.	3

When combining the technical and financial scores, the firm that ranked the highest overall was Associated Engineering (BC) Ltd with a price of \$813,290 exclusive of GST for the design, procurement and construction management for phase one. Associated Engineering (BC) Ltd. will develop the detailed design for all project components and provide construction management services during construction for the urgent scope identified.

Policy Analysis

Bylaw No. 284, being the “Comox Valley Regional District Delegation of Purchasing Authority Bylaw No. 284, 2013” requires that the Board approve all contracts in excess of \$100,000.

At their November 15, 2016 meeting the Comox Valley Sewage Commission approved the following recommendation:

THAT the Comox Valley Regional District proceed with planning, engineering and construction of phase one of the Comox Valley Water Pollution Control Center (CVWPCC) upgrade option three identified within the CVWPCC Capacity Assessment completed by ISL Engineering and Land Services dated August 2016;

AND FINALLY THAT as part of the phase one upgrades for the CVWPCC, ultraviolet disinfection technology with a disinfection target of 200MPN/100mL be included within the scope of work for the detailed design.

At their July 11, 2017 meeting the Comox Valley Sewage Commission approved the following recommendation:

THAT the Comox Valley Regional District proceed with planning, engineering and construction of the phase one upgrades at the Comox Valley Water Pollution Control Center as per the alternate option (option nine) as identified within the Wastewater Treatment Option Memorandum completed by ISL Engineering and Land Services dated June 27, 2017.

Options

The Comox Valley Sewage Commission has the following options:

1. To approve the contract award to Associated Engineering (BC) Ltd.
2. To not award the contract at this time.

The RFP was issued with the intent to award a contract to the proponent that ranked the highest, offering the best value to the CVRD. Each proposal was evaluated per the RFP with the highest ranked proponent being Associated Engineering (BC) Ltd. As such, only option No.1 above is recommended.

Financial Factors

An updated ten year capital plan was approved by the Comox Valley Sewage Commission in November 2016 and includes \$18,638,200 for the phase one capacity and effluent quality upgrades at the CVWPCC. The modification of the scope has reduced the capital costs and associated borrowing requirements estimated for this project.

The 2017-2021 financial plan has sufficient allowance for the contract award.

Legal Factors

Bylaw No. 284, being the “Comox Valley Regional District Delegation of Purchasing Authority Bylaw No. 284, 2013” requires that the Board approve all contracts in excess of \$100,000.

Regional Growth Strategy Implications

Upgrades to the CVWPCC will help ensure proper and effective treatment of wastewater for future generations whilst supporting a high quality of life through the protection and enhancement of community health and safety.

Disinfection of the effluent will add improved redundancy within the treatment process, compliance with regulations and increase local shellfish harvesting security by ensuring fecal coliform limits at the end of pipe are below guidelines.

Intergovernmental Factors

The Comox Valley Sewerage Service is governed by the Comox Valley Sewage Commission whose membership includes representation from the Town of Comox, the City of Courtenay and the Department of National Defence.

Interdepartmental Involvement

The Engineering Services Branch is leading this work with help from Financial Services.

Citizen/Public Relations

Clear and consistent public messaging is crucial for large and complex capital projects. The Comox Valley Sewage Commission is considering a recommendation of award on the same agenda for external communications expertise and resources to assist with development of communications strategies and public outreach for this project.