

**Supplementary Agenda
Electoral Area Services Committee**

Wednesday, October 21, 2015

1:30 PM

Room 107

Committee Members:

M. Hicks (Chair), W. McIntyre (Vice-Chair), D. Howe

5. Committee Business

5.6. 15-1159 Burgoyne Bay Septage Facility Project - Action Plan

Recommendation:

That the Electoral Area Services Committee recommend to the CRD Board to direct staff to proceed with the design-bid-build project delivery approach and action plan to complete the Burgoyne Bay Septage Facility Project.



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**REPORT TO ELECTORAL AREA SERVICES COMMITTEE
MEETING OF WEDNESDAY, OCTOBER 21, 2015**

SUBJECT BURGOYNE BAY SEPTAGE FACILITY PROJECT – ACTION PLAN

ISSUE

The Salt Spring Island Liquid Waste Disposal Service, Burgoyne Bay Septage Facility Project is facing schedule and budget issues. A new project action plan to deliver the project has been prepared.

BACKGROUND

WorleyParsons (WP) was retained by the Capital Regional District (CRD) in 2013 to provide consulting services on the 'Salt Spring Island Liquid Waste Receiving Station and Storage Tanks' project. The original WP contract amount was \$81,730 and included delivery of project management and control, design, tendering and construction services. Based on their proposal, WP understood the project history, budget limitations and project schedule requirements upon entering into the consulting services agreement.

In May 2015, after receiving an updated construction budget estimate from WP, and with increasing concerns related to the performance of the WP team, CRD senior staff teleconferenced with a WP executive on May 29, 2015 to express a number of concerns with the project delivery to date. The meeting and follow-up correspondence resulted in WP expressing a commitment to completing the project as originally proposed and providing the CRD with an action plan to see the project through to completion. The WP action plan was presented to the CRD on June 10, 2015. In their response, WP acknowledged a number of key issues with their performance on the project, as it is related to their timeliness for providing project details, and their project management related to schedule, scope change management and communications, and generally meeting the terms of the agreement.

WorleyParsons' proposed (June 10) Action Plan was as follows:

1. Project Management
 - a. Establish a Project Steering Committee to review and oversee the project
 - b. Transition Project Management (PM) from Design – PM to a Tendering and Construction Services - PM
2. Project status review
 - a. Project Steering Committee members to meet with CRD PM to review status of project and align on what needs to be completed
3. Total Indicative Cost (TIC) discussion
 - a. Review the TIC cost variances to understand the rationale for the increase and to determine how to reduce the TIC cost
4. Next steps for the Design, Tendering, Construction Services with estimated timeline
 - a. Finalize design
 - i. Complete by end of early March 2016
 - b. Tendering
 - i. WorleyParsons to complete tendering process from mid-April to June 2016

- c. Construction services
 - i. WorleyParsons to start construction services scope in June 2016
 - ii. Anticipated construction schedule 4-6 months – complete by December 2016

The CRD staff have reviewed WorleyParsons' proposed Action Plan and developed alternatives as follows:

ALTERNATIVES

Alternative 1:

That the Electoral Area Services Committee recommend to the CRD Board to direct staff to proceed with the design-bid-build project delivery approach and action plan to complete the Burgoyne Bay Septage Facility Project.

The action plan, utilizing a **design-bid-build** project delivery approach, is as follows:

1. Enhanced Project Management Team
 - a. WorleyParsons to assign their best staff to the project to the satisfaction of the CRD and utilize on-island consulting resources (retained by Worley Parsons) where appropriate and available through project delivery
 - b. Establish a Project Steering Committee to oversee the project – October 23, 2015
2. Project status review
 - a. Project Steering Committee to undertake a value engineering review/workshop of the project with the aim of reducing the project budget – November 16, 2015
 - b. WorleyParsons to update the plans and provide an updated cost estimate, or total indicative cost (TIC) – November 30, 2015
3. TIC Review
 - a. Peer review (by third party quantity surveyor or contractor) the TIC to determine if cost estimate is realistic and determine variances to understand the rationale and to determine how to reduce the TIC cost if required – December 7, 2015
 - b. Confirm with Committee whether to proceed and address variances, if any - December 16, 2015
4. Next steps for the Design, Tendering, Construction Services with estimated timeline
 - a. Finalize design
 - i. 100 % Design and specifications – early March 2016
 - b. Tendering
 - i. WorleyParsons to complete tendering scope – mid April 2016
 - c. Construction services
 - i. WorleyParsons to start construction services scope – early June 2016
 - ii. Anticipated construction schedule 4-6 months – December 2016
5. Consultants and CRD Project Administration Budgets
The Electoral Area Services Committee to approve the following budgets:
 - a. The consultant's budget to remain at \$81,730 as per approved contract and scope of work, plus an additional \$46,000 to provide enhanced engineering services including:
 - i. Value Engineering Exercise: \$10,000
 - ii. Revised TIC estimate: \$ 6,000
 - iii. Enhanced project management: \$12,000
 - iv. Project Steering Committee: \$18,000
 - b. Retain a quantity surveyor to confirm anticipated construction costs: \$10,000
 - c. CRD staff support through design and construction: allocate \$50,000

- d. Within overall project budget, amend total consultants and CRD project administration budget allowances to \$187,730

Alternative 2:

That the Electoral Area Services Committee recommend to the CRD Board to direct staff to proceed with the design-build project delivery approach and action plan to complete the Burgoyne Bay Septage Facility Project.

The action plan, utilizing a **design-build** project delivery approach, is as follows:

1. Enhanced Project Management Team
 - a. WorleyParsons to assign their best design-build staff to the project to the satisfaction of the CRD
 - b. Establish a Project Steering Committee to oversee the project – October 23, 2016
2. Next Steps utilizing a Design-Build approach with estimated timelines
 - a. WorleyParsons to be the Owner's Representative
 - i. Revise scope of services – mid November 2015
 - b. CRD to retain the Process Consultant to prepare documents
 - i. Define scope of services – mid November 2015
 - ii. Approve Terms of Reference (TOR) and budget – mid November 2015
3. Project status review
 - a. Project Steering Committee to undertake a value engineering review/workshop of the project with the aim of reducing the project budget - mid December 2015
 - b. WorleyParsons to update the plans and provide an updated cost estimate, or total indicative cost (TIC) - end of December 2015
4. Next steps for the Design, Tendering, Construction Services with estimated timeline
 - a. WorleyParsons to prepare the Request for Qualification (RFQ) and Request for Proposal) RFP to retain a design-build consortium – January 31, 2016
 - b. Award to selected proponent – May 30, 2016
 - c. Anticipated design and construction schedule August 2016 to December 31, 2017
5. Consultants and CRD Project Administration Budgets
The Electoral Area Services Committee to approve the following budgets:
 - a. WorleyParsons' revised budget to be \$50,000 (incurred to date) plus \$130,000 (new scope) for a total of \$180,000
Work includes:
 - i. Prepare indicative design to 30%, modifying performance specifications, tendering and construction services
 - ii. WorleyParsons to approval final design, inspect and certify project meets the performance criteria, etc.
 - iii. to start construction services scope in October 2016
 - b. Retain a quantity surveyor to confirm anticipated construction costs: \$10,000
 - c. Process Design Consultant at \$30,000 (if required)
 - d. Legal to review contracts and associated agreements budget of \$10,000
 - e. Stipend of \$5,000 to each of the two short-listed design/build consortiums: \$10,000
 - f. CRD staff support through design and construction: allocate \$60,000
 - g. Within overall project budget, amend total consultants and CRD project administration budget allowances to \$300,000

Alternative 3:

That the Electoral Area Services Committee recommend to the CRD Board to direct staff to proceed with an alternative project delivery approach to complete the Burgoyne Bay Septage Facility Project and terminate the current project consulting services contract with Worley Parsons.

The action plan, utilizing an **alternative** project delivery approach is as follows:

1. Terminate the 'Salt Spring Island Liquid Waste Reveiving Station and Storage Tanks Project' consulting services contract with Worley Parsons– October 30, 2015
2. Direct staff to undertake an alternative project delivery approach for the project and the appropriate request for proposals to retain a new design and construction services consultant for the project
3. Enhanced Project Management Team
 - a. Establish a Project Steering Committee to oversee the project – November 30, 2015
 - b. Retain new consultant and establish TOR – February 28, 2016
4. Project status review
 - a. Consultant to prepare indicative design and coordinate a value engineering review/workshop of the project with the aim of reducing the project budget – July 2016
 - b. Consultant to update the plans and provide an updated cost estimate (TIC) – September 2016
5. TIC Review/Next Steps
 - a. Peer review (by third party quantity surveyor or contractor) the TIC to determine if cost estimate is realistic and determine variances to understand the rationale and to determine how to reduce the TIC cost if required – December 2016
 - b. Confirm with Committee whether to proceed – January 2017
 - c. Proceed with RFQ and RFP – February 1, 2017 to August 31, 2017
 - d. Design Build consortium to finalize design and construction – September 2017 to February 2018
6. Consultants and CRD Staff Budgets
The Electoral Area Services Committee would be required to approve the following budgets:
 - a. New Consultant – use WorleyParsons' anticipated cost \$180,000 plus an additional \$30,000 for confirmation of previous design work for a total of \$210,000
 - b. Lost investment to WorleyParsons for original contract: \$50,000
 - c. Process Design Consultant: \$30,000
 - d. Value Engineering Exercise: \$10,000
 - e. Retain a quantity surveyor to confirm anticipated construction costs: \$10,000
 - f. Stipend of \$5,000 to each of the two short-listed design/build consortiums: \$10,000
 - g. Legal fees related to termination of contract: \$10,000
 - h. Potential additonal payment to WorleyParson's for contract losses: \$31,000
 - i. CRD staff support through pre-design, design and construction: allocate \$70,000
 - j. Within overall project budget, amend total consultants and CRD project administration budget allowances to \$431,000

IMPLICATIONS

Alternative 1: Proceed with Design-Bid-Build Action Plan.

Pros:

- Commitment of WorleyParsons design team
- Project Steering Committee oversight to ensure project stays on track
- Easy to undertake a value engineering exercise for potential cost savings
- Peer review provides further assurance of design/cost estimate
- Provisional items allows ability to further reduce cost estimate closer to the project budget
- Construction can start by Summer 2016

Cons:

- Still requires redesign of many aspects of project based on value engineering exercise
- No guarantee that the revised cost estimate will be within original project budget (\$676,000) and may result in future phases of the project to be delayed or postponed

Alternative 2: Proceed with the Design Build modified Action Plan

Pros:

- Commitment of WorleyParsons design team
- Project Steering Committee oversight to ensure project stays on track
- Establish an indicative design (30%) and affordability ceiling (budget, including contingency)
- Peer review provides further assurance of design/cost estimate
- During RFQ, request proponents to provide early indication of preliminary project budget
- Design-Build Consortium to assess innovation and constructability opportunities in order to deliver the project within affordability ceiling

Cons:

- Still requires some redesign (up to 30%) of many aspects of project based on value engineering exercise
- Changing from a Design-Bid-Build to a Design Build incurs additional costs
- Scalability, the facility will be designed to meet the specifications provided today, and will not necessarily have any room for future expansion unless additional details are put into the specifications and the overall construction managed carefully, requiring additional project management on the part of the owners' engineers
- The community would have little input into the final design, as the contractor will select materials, equipment and aesthetics based on a performance specification
- Requires additional project management on the part of the owners' engineer
- No guarantee that the revised cost estimate will be within original project budget (\$676,000) and may result in future phases of the project to be delayed or postponed
- Construction expected to start in the Fall 2016

Alternative 3: Terminate current contract with WorleyParsons proceed to Design-Build

Pros:

- Project Steering Committee oversight to ensure project stays on track
- Establish an indicative design (30%) and affordability ceiling (budget, including contingency)

- Peer review provides further assurance of design/cost estimate
- During RFQ, request proponents to provide early indication of preliminary project budget
- Design-Build Consortium to assess innovation and constructability opportunities in order to deliver the project within affordability ceiling

Cons:

- Significantly higher cost of \$431,000
- Still requires some redesign (up to 30%) of many aspects of project based on value engineering exercise
- Changing from a Design-Bid-Build to a Design Build incurs additional costs
- Scalability, the facility will be designed to meet the specifications provided today and will not necessarily have any room for future expansion, unless additional details are put into the specifications and the overall construction managed carefully, requiring additional project management on the part of the owners engineers
- The community would have little input into the final design, as the contractor will select materials, equipment and aesthetics based on a performance specification
- Requires additional project management on the part of the owners' engineer
- No guarantee that the revised cost estimate will be within original project budget (\$676,000) and may result in future phases of the project to be delayed or postponed
- Construction expected to start in the Summer/Fall 2017

CONCLUSION

Completing the Burgoyne Bay Septage Receiving and Storage Project is an important step towards providing an on-island solution for liquid wastes. Utilizing a new project action plan and continuing with a design-bid-build project delivery approach with the current project engineering consultant is considered to be the most cost effective solution to deliver the project within the available budget constraints and at the earliest completion date.

RECOMMENDATION

That the Electoral Area Services Committee recommend to the CRD Board to direct staff to proceed with the design-bid-build project delivery approach and action plan to complete the Burgoyne Bay Septage Facility Project.

Submitted by:	Keith Wahlstrom, P. Eng., Manager, Engineering Salt Spring Island Electoral Area
Concurrence:	Karla Campbell, Senior Manager, Salt Spring Island Electoral Area
Concurrence:	Ted Robbins, BSc., C Tech., General Manager, Integrated Water Services
Concurrence:	Robert Lapham, MCIP, Chief Administrative Officer