



## TOWN OF LAKE COWICHAN

**Public Works and Environmental Services Committee**  
**Tuesday, August 7th at 5:00 p.m. – Council Chambers**

### AGENDA

**1. CALL TO ORDER**

**Page #**

**INTRODUCTION OF LATE ITEMS** (if applicable)

**2. APPROVAL OF AGENDA**

**3. BUSINESS ARISING AND UNFINISHED BUSINESS**

- (a) Watermain Upgrades for:
  - (i) Ohtaki Footbridge and Greendale Trestle- status
- (b) Water Treatment Plant Upgrade – status.
- (c) **Ongoing Items Still Being Addressed:**
  - (i) Boat Ramp Improvements.
  - (ii) CLEC Water System Options.

**3**

**4. DELEGATIONS AND REPRESENTATIONS**

None.

**5. CORRESPONDENCE**

None.

**6. REPORTS**

None.

**7. NEW BUSINESS**

- (a) Signage on Public Washrooms.
- (b) Parking Signage.
- (c) Drought and Water Restrictions.

**8. NOTICES OF MOTION**

**9. PUBLIC RELATIONS ITEMS**

**10. MEDIA/PUBLIC QUESTION PERIOD**  
**- Limited to items on the agenda**

**11. ADJOURNMENT**

Please note: Should this meeting end sooner than 6 p.m., the next meeting may start no later than 10 minutes after adjournment of this meeting.

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**Stantec Consulting Ltd.**  
400-655 Tyee Road, Victoria BC V9A 6X5

July 25, 2018  
File: 111720034

**Attention: Joseph Fernandez, Chief Administrative Officer**  
Town of Lake Cowichan,  
39 South Shore Road,  
Lake Cowichan, BC V0R 2G0

Dear Joseph,

**Reference: Lake Cowichan Water Treatment Facility: Project Budget Update**

As a result of recent conversations between Stantec and Town of Lake Cowichan staff, this letter summarizes the change orders to date that have been approved on the Lake Cowichan Water Treatment Facility (WTF) Project, and expected changes still to come as a means for the Town to plan their project budget.

**Approved Change Orders**

As of the writing of this letter, there have been 5 change orders approved on the project. These change orders are detailed below:

**Change Order 1:**

- Reason: Various changes from the tender documents. These changes were relatively small in financial terms, and resulted from discussions with Trittech and the Town as means of maximizing the efficiency of the design.
- Cost: A credit to the Town of (\$3,455.98).
- Date: October 2017.

**Change Order 2:**

- Reason: Rock Breaking for installation of the sewermain across and down the higher portion of Indian Road. Rock breaking for the foundation installation at the west side of the building. Removal of organic material from under the building slab that was unsuitable for constructing the building on. This change was a result of unforeseen site conditions.
- Cost: \$39,051.06
- Date: December 2017.



July 25, 2018  
Joseph Fernandez, Chief Administrative Officer  
Page 2 of 4

**Reference: Lake Cowichan Water Treatment Facility: Project Budget Update**

Change Order 3:

- Reason: Various structural, electrical and civil changes. Main financial items that were in this change are:
  - o Decrease VFD size for the backwash pumps (credit to the town).
  - o Cutting and fusing reservoir liner.
  - o Valve chamber removal at inlet to reservoir (credit to the town).
  - o Additional dewatering.
  - o Incorporation of the costs of the prepurchased equipment into the main general contract. This is a result of the execution of the novation agreements from the Backwash Pump Supply Contract, Blowers Supply Contract, UV Equipment Supply Contract and Direct Filtration Tank Supply Contracts. This required the general contractor to take on coordination tasks, as well as additional costs for insurance and bonding.
- Cost: \$401,483.91. This cost includes the incorporation of the Equipment Supply Contracts that the town previously had with the suppliers of that equipment in 4 separate contracts. The cost of the 4 equipment supply contracts was \$361,186.50, so the net increase of the overall project cost as a part of this Change Order was \$40,297.41.
- Date: February 2018

Change Order 4:

- Reason: Additional Rock Breaking for the installation of the backwash detention tank. Change was a result of unforeseen site conditions.
- Cost: \$21,238.60
- Date: March 2018

Change Order 5:

- Reason: Credit for elimination of the highway crossing with the sewermain by reusing the existing piping under the highway.
- Cost: (\$36,254.08) credit to the town.
- Date: May 2018

Design with community in mind



July 25, 2018  
Joseph Fernandez, Chief Administrative Officer  
Page 3 of 4

**Reference: Lake Cowichan Water Treatment Facility: Project Budget Update**

Summary of approved Change Orders: \$421,587.22 additional to the General Construction contract with Trittech Ltd. The net increase to the overall project cost as the Equipment purchase contracts are now incorporated into the Trittech contract is \$60,400.72 at this time.

***Outstanding Change Orders***

One Change Order is currently with the Town for execution.

Change Order 6:

- Reason: Various electrical changes and HVAC in the backwash pump chamber.
- Cost: \$50,407.91.
- Date: July 2018

***Additional Changes Currently Being Reviewed***

As a result of the strict schedule that was imparted onto the project by the Island Health deadlines, work has been completed without a Change Order being agreed to before the additional work has been carried out with the understanding that the costs will be agreed after the work is completed. This is allowed under the contract under CCDC 2 General Conditions Section 6.3. Stantec will review these additional changes claimed by the general contractor in accordance with this section of the contract and make a determination on a fair cost to the contract.

Trittech have submitted a number of work orders for additional work that Stantec are currently working through to make the determination of financial impact to the project. It is estimated that these Extra Work Orders (EWO's) currently submitted will result in an additional cost to the contract of approximately \$60K. These EWO's include costs involved with changes to the tie in location for the sewermain at River Road and Indian Road as a result of site conditions not allowing the tie in to be made as originally designed, as well as additional winterization costs during concrete construction.

These changes will be formalized in a Change Order within a working week.



July 25, 2018  
Joseph Fernandez, Chief Administrative Officer  
Page 4 of 4

**Reference: Lake Cowichan Water Treatment Facility: Project Budget Update**

***Potential Changes Moving Forward and Budget Status***

The project is now at a stage where the majority of the shop drawings have been completed, and so we don't expect a large amount of changes moving forward. However, a potential claim for additional rebar within the filter tanks as well as some additional finishing is expected from discussions with the general contractor.

Unforeseen claims are a possibility and indeed a likelihood in all construction projects of this size and complexity, and a contingency should be allowed for to cover additional costs. Stantec is the Contract Administrator and is legally bound to interpret the contract impartially and make determinations based on the terms of the contract – therefore if a claim from the contractor is valid, these costs will be transferred to the Town as the owner. A reasonable contingency for a project of this type is typically between 5% and 10% of the project cost. At this time, considering all the approved change orders, the outstanding change order #6, the Extra Work Order changes currently being reviewed and the additional potential claims from discussions with the contractor not yet made, the total budget overage is estimated at approximately 3.8% of the project cost (approx. \$230K). It should be noted that this figure is below the minimum recommended contingency on a project of this type and magnitude.

The Town should be aware that additional costs are expected and budget accordingly.

If you have any questions, please contact the undersigned.

Regards,

**STANTEC CONSULTING LTD.**

A handwritten signature in black ink, appearing to read 'S. Swarbrick'.

Shaun Swarbrick, P.Eng  
Associate  
Phone: (250) 389-2545  
Shaun.Swarbrick@stantec.com

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