

# STAFF REPORT

TO: Committee of the Whole MEETING: July 10, 2018

FROM: Randy Alexander FILE: 5330-20-Bowser

GM, Regional and Community

Utilities

**SUBJECT:** Bowser Village Centre Wastewater Project Update

#### RECOMMENDATION

That the report be received for information.

#### **SUMMARY**

On December 12, 2017, the Board provided approvals for borrowing and creation of a service area that allowed the advancement of the Bowser Village Center Wastewater Project. The activities to date are summarized, and updates are provided the on project timeline, future activities, funding and costs.

#### BACKGROUND

The Bowser Village Sanitary Sewer Service Establishment Bylaw No. 1760, Loan Authorization Bylaw No. 1761 and Development Cost Charge (DCC) Bylaw No. 1765 were approved by the Inspector of Municipalities on October 17, 2017 and adopted by the Board on December 12, 2017.

The Board authorized staff to proceed with engineering, permitting and tender preparation work for the project, not to exceed \$400,000. Updates regarding a number items required to advance the project are provided below for the Board's consideration.

# **Funding and Cost Estimate**

On December 12, 2017 the Regional Board also directed the Regional District of Nanaimo (RDN) to enter into the DCC Frontender Amendment Agreement, which provided \$2.6 million in DCC funding required for the capital project, including construction of a collection system, secondary treatment plant, and marine outfall for effluent disposal.

Including the aforementioned DCC funding, the total estimated project cost of \$10.7 million is composed of:

• Clean Water and Wastewater Fund: \$7.6 million (maximum)

Development Cost Charges (DCCs): \$2.6 million
Borrowing (repaid through Property Taxes): \$0.5 million

The current cost estimate for the project is \$10.7 million which includes an \$847,000 contingency. The design drawings for the collection system have been revised to incorporate changes requested made during the petition process, and preliminary input provided by permitting authorities. The Treatment Plant drawings are being updated based on information provided as part of the rezoning process and the initial discussions with permitting authorities. The outfall design is underway with the final outfall design to be completed in the fall. The outfall design has been extended an additional 400 metres to address input from the public. As part of the design process, the project cost estimate will continue to be reviewed to consider any required design changes, regulatory requirements and market conditions. If the estimated project cost exceeds the \$10.7 million budget, approval for additional funds would need to be secured from the service area participants and potentially other sources.

# Clean Water and Wastewater Funding Deadline and Project Schedule

The funding deadline for the \$7,590,328 Clean Water and Wastewater Fund Grant was originally set for March 2018, but was extended shortly after the award to March 2019. The project schedule has been revised based on updated permitting and construction timelines. Our engineers estimate project completion in fall 2020. Given this, the RDN requested an extension to the grant funding deadline to allow the project to be completed. The Province and Federal Government have agreed in principle to extend the project funding deadline to March 2020. An amendment to the funding agreement is required to formalize this support, and staff are in discussion with representatives of the Clean Water and Wastewater Fund to secure this amendment. It is important to note that the new March 2020 funding deadline is earlier than the anticipated project completion date. Staff are investigating possible mitigation measures to address this risk.

The updated project schedule anticipates completion of detailed design for all project components in September 2018, submission of required permitting and approvals applications by December 2018. The collection system, treatment plant, and marine outfall would then be tendered separately, with contract awards anticipated in January 2019. Construction and commissioning of the project are estimated to be completed in October 2020.

# **First Nations Communications**

Sixteen First Nations and First Nation Organizations have been identified as having consultative area over the project area. A project information package was sent to Chief and Council and/or the designated consultative contact for each First Nation in March 2018 to provide an overview of the project and the permits and approvals for which they may receive referral packages. Also included was an offer to meet to discuss the project. To-date, the RDN has held project meetings with Qualicum First Nation at the invitation of Chief Michael Recalma and K'ómoks

First Nation at the invitation of staff. Consultation procedures for each permit or approval are being carried out as directed by the respective approving agency.

# **Permitting and Approvals Process**

RDN staff and consultants commenced the permitting and approvals process in December 2017. The project cannot be constructed until all necessary permits and approvals are in place. At present, the following applications have been submitted and are in-process:

Permit or Approval	Approving Agency	Date Submitted
Municipal Wastewater Regulation Registration	Ministry of Environment	December 2017
Zoning Amendment Application	Regional District of Nanaimo	January 2018
Crown lease amendment application for wastewater treatment plant site	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	March 2018
Occupant License to Cut timber for wastewater treatment plant site and access	Ministry of Forests, Lands, Natural Resource Operations and Rural Development	May 2018

Additional applications will be submitted in the coming months, pending completion of requisite design work; these include: Ministry of Transportation and Infrastructure (MOTI) permit(s), Fisheries Act authorization, Navigation Protection Act notification and Disposal at Sea notification. The requirement for Heritage Conservation Act permit(s) will be determined through the completion of an Archaeological Impact Assessment. Additional permitting and approvals requirements may be identified in detailed design. All required permits and approvals must be granted by approving agencies prior to construction. Delays in the permitting process may affect the project schedule.

#### May 16, 2018 Zoning Amendment Public Information Meeting

A Public Information Meeting (PIM) regarding proposed amendment of the zoning of the wastewater treatment plant site from Residential 2 (RS2) to Public 4 (PU4) to permit a wastewater treatment facility was held on May 16, 2018. Regional District of Nanaimo Land Use and Subdivision Amendment Bylaw No. 500.420, 2018 was forwarded to the Regional Board for consideration of first and second reading on June 26, 2018. A fulsome account of the proposed zoning amendment is provided in the staff report accompanying Bylaw No. 500.420.

# **Archaeological and Environmental Considerations**

Archaeological and environmental studies will inform the detailed design and permitting and approvals processes. An Archaeological Impact Assessment commenced in June 2018 for the proposed site of the wastewater treatment plant, and further assessments associated with the collection system and marine outfall will be undertaken in the coming months. Representatives of Qualicum First Nation and K'ómoks First Nation have been invited to participate and advise in this work. The assessments will provide guidance regarding *Heritage Conservation Act* permitting requirements and the protection of historical resources during construction of the project.

A Stage I Environmental Impact Study based on desktop information was completed in 2016. A Stage II Environmental Impact Study, based on field sampling will be completed in 2018. Prior to construction, the contractor(s) will be required to produce a Construction Environmental Management Plan to identify monitoring requirements and measures to protect biological, social and cultural resources and habitat during construction. In addition, Provincial regulations require a Receiving Environment Monitoring Program to be run both before and after system construction. The scope of this monitoring program will be determined by the Ministry of Environment and must demonstrate that the effluent meets the regulatory requirements for water quality. Once commissioned, the system will be subject to Wastewater Services' operational monitoring program to demonstrate ongoing compliance with Provincial and Federal regulations.

#### **Public Communications**

In May 2018, staff implemented a refreshed communication approach for the project, including updates to the "Get Involved RDN" project webpage (<a href="www.getinvolved.rdn.ca/bowser-village-sewer">www.getinvolved.rdn.ca/bowser-village-sewer</a>) and a project update newsletter mailed to residents of Electoral Area 'H' (see Attachment 1). Looking ahead, project updates will be provided monthly and at milestones.

# **Review of Disposal Alternatives**

As part of the detailed design process, alternate outfall routes were explored and consideration given to extending the length of the outfall. The feasibility of alternate outfall routes to the Noonday Rd alignment were also reviewed. It was determined that no alternative alignments were available. The length of the outfall will be extended approximately 400 m (1,300 ft) longer than the original design. The diffuser will be at a depth of about 65 m (213 ft), the outfall will be roughly 2,700 m (8,860 ft) long and 2,350 m (7,700 ft) from shore. The diffuser location will be approximately twice the required distance of 400 m from the shellfish lease. No suitable sites for ground disposal were found for a number of reasons, including: unsuitable soil types; prohibited protected areas; and proximity to vulnerable water resources (including surface water, ground water, and drinking water wells).

#### STRATEGIC PLAN IMPLICATIONS

Establishing sewer servicing for the Bowser Village Centre in order to support the community's evolution into a "compact, complete community" is supported by the Bowser Village Centre Plan (2010) and RDN Rural Village Centre Study (2013).

The project supports the RDN Board's strategic focus areas of: Service and Organizational Excellence through "funding infrastructure in support of our core services"; Economic Health, through "fostering economic development"; and Environment, through development decisions that protect our environment.

Randy Alexander

ralexander@rdn.bc.ca

June 21, 2018

#### Reviewed by:

• P. Carlyle, Chief Administrative Officer

#### Attachments

1. May 2016 Project Update Mail Out