



CORE AREA WASTEWATER TREATMENT PROJECT BOARD
Notice of a Meeting on **Wednesday, January 20, 2021 at 9:00 am**
CRD Centre for Engagement, 625 Fisgard Street, Victoria, BC

Don Fairbairn (Chair)	Dana Hayden (Vice-Chair)	Brenda Eaton	David Howe
Bob Lapham	Colin Smith	Tim Stanley	

AGENDA

1. Territorial Acknowledgement
2. Approval of Agenda and Statement of No Conflict
Motion:
That the Agenda be approved.
3. Safety Minute
4. Minutes
 - 4.1. Approval of the November 26, 2020 Meeting Minutes.
Motion:
That the minutes of the November 26, 2020 meeting be approved.
 - 4.2. Approval of the December 15, 2020 Special Meeting Minutes.
Motion:
That the minutes of the December 15, 2020 Special Meeting Minutes be approved.
5. Report of the Chair
6. Presentations/Delegations
 - No one has registered to speak.
7. Project Board Business
 - 7.1. Staff Report for Information: Wastewater Treatment Project November 2020 Monthly Report
Motion:
That the Staff Report 'Wastewater Treatment Project November 2020 Monthly Report' be received for information and forwarded to the Core Area Liquid Waste Management Committee and CRD Board for information.
 - 7.2. Staff Report for Information: Wastewater Treatment Project Q4 2020 Quarterly Report

To ensure quorum, contact Erika Russell (erussell@crd.bc.ca) if you are unable to attend.

**Core Area Wastewater Treatment Project Board
Agenda January 20, 2021****2****Motion:**

That the Staff Report 'Wastewater Treatment Project Q4 2020 Quarterly Report' be received for information and forwarded to the Core Area Liquid Waste Management Committee and CRD Board for information.

8. Correspondence

8.1. Email received November 26, 2020 Re: Clover Point Pump Station

8.2. Email received December 18, 2020 Re: Clover Point Pump Station

9. New Business

Confirmation of upcoming Meeting Dates:

1. Next Project Board Meeting: February 23, 2021

2. Next Core Area Liquid Waste Management Committee Meeting: January 27, 2021

10. Motion to Close the Meeting

Motion:

That the Core Area Wastewater Treatment Project Board meeting be closed in accordance with the Community Charter: Part 4, Division 3 90(1) *(i)the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.*

11. Adjournment



**Minutes of a Meeting of the Core Area Wastewater Treatment Project Board
Held Thursday, November 26, 2020 in CRD Boardroom, 625 Fisgard Street, Victoria, BC**

Members: D. Fairbairn (Chair) (EP); D. Hayden (Vice-Chair); T. Stanley (EP); D. Howe;
C. Smith (EP); B. Eaton; R. Lapham;

CRD Staff: D. Clancy, Project Director; E. Scott, Deputy Project Director; E. Russell (recorder);

*EP= Electronic Participation

The meeting was called to order at 2:02 pm.

1. Territorial Acknowledgement

Chair Fairbairn provided a territorial acknowledgement.

2. Approval of Agenda and Statement of No Conflict

The members stated they had no conflict with the agenda items.

MOVED by C. Smith, **SECONDED** by T. Stanley,

That the circulated agenda be approved.

CARRIED

3. Safety Minute

D. Clancy provided a safety minute about safety during the holiday season, and the top five reported injuries that can impact peoples' holidays and cause injuries including: fires, burns, cuts and falls.

4. Approval of the October 27, 2020 Meeting Minutes.

MOVED by D. Hayden, **SECONDED** by R. Lapham,

That the minutes of the October 27, 2020 meeting be approved.

CARRIED

5. Report of the Chair

The Chair recognized that this is the last meeting of 2020 and between now and the next meeting the McLoughlin Point Wastewater Treatment Plant will have completed commissioning and be fully operational. There were plans to organize an in-person celebration of the Project meeting regulatory requirements, however due to the current Provincial Health Orders this milestone will be acknowledged virtually.

The Chair recognized the leadership of the member municipalities, CRD, Provincial and federal governments and all of our partners, and recognized the Project team and CRD staff.

6. Presentations and Delegations

**Core Area Wastewater Treatment Project Board
Minutes – November 26, 2020**

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No registrations/delegations

7. Project Board Business

7.1. Election of Wastewater Treatment Project Board Vice-Chair

MOVED by T. Stanley, **SECONDED** by C. Smith,

That the Project Board elect Dana Hayden to serve as vice-chairperson of the Core Area Wastewater Treatment Project Board.

7.2. Staff Report for Information: Wastewater Treatment Project October 2020 Monthly Report

MOVED by D. Howe, **SECONDED** by B. Eaton,

That the Staff Report, Wastewater Treatment Project October 2020 Monthly Report, be received for information and forwarded to the Core Area Liquid Waste Management Committee and CRD Board for information.

CARRIED

D. Clancy and E. Scott provided an overview of the October 2020 Monthly Report including:

- No changes were made to the KPIs over the reporting period.
- Over the reporting period of October 2020, the safety KPI for the Project and the conveyance system remained yellow and the Total Recordable Incident Frequency increased from 1.5 at the end of the third quarter (September 2020) to 1.6 at the end of October 2020. D. Clancy highlighted that a Total Recordable Incident Frequency of 1.6 is well below the industry average. Over the reporting period there were five safety incidents, of which one was reportable. The Project Team continues to monitor all of the Project's sites, including office and site trailers, for compliance with COVID-19 protocols.
- Three environmental incidents occurred over the reporting period. Two were summarized in the October 27th Project Board meeting, and the third occurred on October 27th, when there was a small release of wastewater into the ocean at the McLoughlin Point Site. After a power outage a gate closed resulting in wastewater flowing into the site's storm system. The majority of wastewater was collected on-site but approximately five cubic meters entered a planter in the site's storm system and then into the ocean. An environmental professional assessed the potential impacts to be very low, and water samples were collected to confirm this. There is no indication of public health or long-term environmental impacts. The release was reported to Emergency Management BC, in accordance with the Spill Reporting Regulation.
- The Project Team remains confident that the regulatory deadline will be met.
- Project expenditures are within the control budget: total expenditures to date are \$576.8 million, comprising 74% of the budget.

Core Area Wastewater Treatment Project Board Minutes – November 26, 2020

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- An update on construction progress (including after the reporting period of October 2020):
 - McLoughlin Point Wastewater Treatment Plant: currently there are 90 people working on site. Acceptance testing commenced in November with completion expected in mid-December. Minor electrical work continues with the majority of outstanding work being site grading and landscaping. CRD staff are expected to be moving into the Operations and Maintenance building in early December.
 - Clover Point Pump Station: the pump station is running with the contractor resolving deficiencies and completing exterior finishes, exterior site works and public realm improvements. Restoration of the lay down area is anticipated to be complete by mid to late December.
 - Macaulay Point Pump Station: the pump station is running, demolition of the old pump station now complete with ongoing landscaping of the site; minor mechanical and electrical work remain.
 - Residuals Treatment Facility: the facility is receiving and treating residuals from McLoughlin Point Wastewater Treatment Plant. Odour challenges have been present with measures being taken by CRD and the contractor Harbour Resource Management Group to mitigate and remedy.
 - Residual Solids Conveyance Line: Peers Creek improvement work is now complete: due to a utility conflict, a modification to the culvert was required and has now been completed.
 - Residual Solids Pump Stations and Bridge Crossings: site work including grading and paving at the pump station sites nearing completion. The Hartland reservoir and Saanich pump station work are expected to be complete by the end of the year.
 - Arbutus Attenuation Tank: Formwork and reinforcing steel installation continues for tank walls and intermediate slabs; concrete pours continue with the target of closing the tank at end of January.
 - Trent Forcemain: secant piles and East Coast Interceptor retaining structure near Clover Point Pump Station are now complete; fusing and installing of forcemain along Dallas Road continues.
 - Don Mann has started work within the Township of Esquimalt on DND land, building an access road for BC Hydro to service the tie connection for the McLoughlin Point Wastewater Treatment Plant.
- Communications: Enquiry numbers remained steady, with key themes including questions regarding scaffolding at Gorge Bridge and Admirals Bridge; and interest in restoration, landscaping along Dallas Road and at Clover Point. Last week a tour of the Residuals Treatment Facility was provided for members of the Willis Point Residents Association; two further tours were planned in the coming weeks for representatives of the Mount Work Coalition and Prospect Lake Community Association, however those tours will be rescheduled due to the current Provincial Health orders.

**Core Area Wastewater Treatment Project Board
Minutes – November 26, 2020**

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D. Hayden enquired about the report-only incidents that were reported in the safety table where no impacts to workers were indicated. D. Clancy reported that for our Project the decision was made to report any incident where there was the potential for a worker to be impacted.

C. Smith enquired about the two incidents involving a gate or vane opening during or after power outages – one such incident having been reported in the October 2020 monthly report and a similar incident having occurred earlier in the Project. D. Clancy clarified that the incident reported in the October 2020 monthly report was a programming issue and the program has been corrected.

R. Lapham enquired if a power outage was part of the commissioning procedure. D. Clancy confirmed that it is, for each of the facilities, including the plant.

D. Fairbairn asked about the status of the road restoration on roads impacted by the Project. D. Clancy advised that roads in which Project infrastructure have been installed have been restored either to the width of the excavated trench or to full width, depending on a number of factors including the trench width and location within the road, and that discussions are ongoing with the Township of Esquimalt about the roads that were used as truck access routes.

7.3. Confirmation of upcoming Project Board Meetings

MOVED by T. Stanley, **SECONDED** by C. Smith,

That the following Project Board meeting dates be confirmed

- Wednesday, January 20, 2021 9:00 am
- Tuesday, February 23, 2021 9:00 am
- Tuesday, March 30, 2021 1:00 pm
- Thursday, April 22, 2021 11:00 am

8. Correspondence

9. New Business

9.1. Confirmation of upcoming meeting dates:

1. Next Project Board Meeting: January 20, 2021
2. Next Core Area Liquid Waste Management Committee Meeting: January 27, 2021

10. Motion to Close the Meeting

MOVED by R. Lapham, **SECONDED** by D. Hayden,

That the Core Area Wastewater Treatment Project Board meeting be closed in accordance with the Community Charter: Part 4, Division 3 90(1) (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.

CARRIED

11. Adjournment

The Project Board moved to closed session at 2:55 PM
On motion the meeting adjourned at 5:21 PM

Minutes of a Meeting of the Core Area Wastewater Treatment Project Board
Held Tuesday, December 15, 2020 in CRD Boardroom, 625 Fisgard Street, Victoria, BC

Members: D. Fairbairn (Chair) (EP); D. Hayden (Vice-Chair); T. Stanley(EP); D. Howe; C. Smith (EP); B. Eaton; R. Lapham;

CRD Staff: D. Clancy, Project Director; E. Scott, Deputy Project Director; E. Russell (recorder);

Guest: G. Lewis- Norton Rose Fullbright (EP)

*EP= Electronic Participation

The meeting was called to order at 1:31 pm.

1. Territorial Acknowledgement
2. Approval of Agenda and Statement of No Conflict

The members stated they had no conflict with the agenda items.

MOVED by D. Hayden, **SECONDED** by R. Lapham,

That the circulated agenda be approved.

3. Presentations/Delegations
4. Special Meeting Matters
5. Motion to Close the Meeting

No registrations/delegations

MOVED by T. Stanley, **SECONDED** by C. Smith,

That the Core Area Wastewater Treatment Project Board meeting be closed in accordance with the Community Charter: Part 4, Division 3 90(1) *(i)the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose.*

6. Adjournment

The Project Board moved to closed session at 1:34 PM
 On motion the meeting adjourned at 2:50 PM

Item 7.1



**Wastewater
Treatment Project**
Treated for a cleaner future

**REPORT TO CORE AREA WASTEWATER TREATMENT PROJECT BOARD
MEETING OF WEDNESDAY, JANUARY 20, 2021**

SUBJECT Wastewater Treatment Project November 2020 Monthly Report

ISSUE

To provide the Core Area Wastewater Treatment Project Board with the Wastewater Treatment Project November 2020 Monthly Report.

BACKGROUND

On May 25, 2016 the Regional Board of the CRD:

- i) Adopted by resolution the Core Area Wastewater Treatment Project Board Terms of Reference (Project Board Terms of Reference) for the purposes of establishing principles governing the Core Area Wastewater Treatment Project (the Wastewater Treatment Project or the WTP);
- ii) Established the Core Area Wastewater Treatment Project Board (Project Board) under Bylaw 4109 (the CRD Core Area Wastewater Treatment Board Bylaw No. 1, 2016) for the purposes of administering the Core Area Wastewater Treatment Project; and
- iii) Delegated certain of its powers, duties and functions to the Project Board under Bylaw 4110 (the CRD Core Area Wastewater Treatment Project Board Delegation Bylaw No. 1, 2016).

On September 14, 2016 the Regional Board of the CRD:

- i) Received the final report of the Project Board with respect to its recommendation for the CAWTP, dated September 7, 2016 (the Final Report); and
- ii) Approved the business case attached as Appendix 1 (the Business Case) to the Final Report.

DISCUSSION

The Core Area Wastewater Treatment Project Board (the Project Board) Terms of Reference requires, amongst other things: that the Project Board provide the CRD Board with monthly progress reports and a comprehensive quarterly report on the Project.

The monthly report for the period of November 2020 is attached as Appendix A.

RECOMMENDATION

That the Core Area Wastewater Treatment Project Board approve the following resolution:

Core Area Wastewater Treatment Project Board – January 20, 2021
Wastewater Treatment Project November 2020 Monthly Report

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RESOLVED that:

The Staff Report, 'Wastewater Treatment Project November 2020 Monthly Report', be received for information and forwarded to the Core Area Liquid Waste Management Committee and CRD Board for information.



Elizabeth Scott, Deputy Project Director
Wastewater Treatment Project



Dave Clancy, Project Director
Wastewater Treatment Project
Concurrence

Attachments: 1

Appendix A: Wastewater Treatment Project November 2020 Monthly Report

ES:er



Wastewater Treatment Project

Treated for a cleaner future

CRD Wastewater Treatment Project

Monthly Report

Reporting Period: November 2020

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1 Executive Summary

1.1 Introduction

This Monthly Report covers the reporting period of November 2020 and outlines the progress made on the Wastewater Treatment Project over this time.

The Wastewater Treatment Project (the “Project”) includes three main Project Components (the “Project Components”): the McLoughlin Point Wastewater Treatment Plant (the “McLoughlin Point WWTP”), the Residuals Treatment Facility (the “RTF”) and the Conveyance System (which includes upgrades to the conveyance network including the construction of pump stations and pipes). The Project scope is being delivered through a number of contracts with a variety of contracting strategies.

Over the reporting period the COVID-19 public health emergency continued to have impacts on the Project. The Project Team and Project contractors are actively monitoring the status of the COVID-19 public health emergency and are taking additional precautions to protect our staff, contractors, and the public. At each of the remaining Project sites, construction is ongoing in accordance with guidelines established by the Provincial Health Officer.

While construction is ongoing, the public health emergency is impacting the Project. However, based on current progress the Wastewater Treatment Project remains on schedule to meet the regulatory deadline for treatment by the end of 2020.

The McLoughlin Point WWTP Project Component is continuing with Harbour Resource Partners (“HRP” as the Design-Build contractor for the McLoughlin Point WWTP) commencing acceptance testing and progressing site landscaping.

The RTF Project Component is continuing with Hartland Resource Management Group (“HRMG” as the Design-Build-Finance-Operate-Maintain contractor for the RTF) progressing construction activities including: draining water from Digester 1, and the Digested Solids Storage Tank; ongoing commissioning of various systems; completing site landscaping, and installation of fencing and the main gate.

The Conveyance System is being delivered through seven construction contracts: two design-build contracts and five design-bid-build contracts, one of which (the Clover Forcemain) concluded in October 2020.

The two design-build Conveyance System contracts progressed over the reporting period as follows:

- Clover Point Pump Station: Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressed construction and commissioning activities over the reporting period including: completion of exterior stone veneer; and grading for walkways outside of the pump station.
- Macaulay Point Pump Station: Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressed construction and commissioning activities over the reporting period including: completing demolition of the old pump station; installation of screen covers; and completed air balancing and grit sampling tests.

The design-bid-build Conveyance System contracts progressed over the reporting period, as follows:

- Residual Solids Conveyance Line (“RSCL”): the RSCL is being delivered through two construction contracts, with work progressing as follows:
 - Residual Solids Pipes: Don Mann Excavating Ltd. (“Don Mann” as the Construction Contractor) continued construction activities over the reporting period for the Saanich infrastructure improvement being undertaken at Peers Creek, and began construction of a BC Hydro access road in the Township of Esquimalt including,
 - for the Peer’s Creek culvert replacement: pumps being set up to lower the water level and inverts cut into the culverts; and line painting including replacement of crosswalk lines, fog lines, and centreline; and
 - for the BC Hydro access road: lawn basin was installed at Bewdley Avenue, and commencement of tree removal and roadwork for the BC Hydro Access Road.
 - Residual Solids Pump Stations: Knappett Projects Inc. (“Knappett” as the Construction Contractor) continued construction and commissioning activities including: installation of odour control heat trace and insulation at pump stations 1, 2 and 3; commencement of irrigation work at pump stations 1, and 2; and landscape restoration, trail screening and odour control unit damper installation at Marigold pump station.
- Arbutus Attenuation Tank (“AAT”): NAC Constructors Ltd. (as the Construction Contractor) continued construction activities including: caisson wall system cleaning; installation of column reinforcing steel; ongoing concrete pours for majority of columns; installed wall formwork; and perimeter wall and interior room divider wall concrete pours.
- Trent Forcemain: Jacob Bros. Construction Inc. (as the Construction Contractor) progressed construction activities including: completion of gravity main low-pressure air test; installation of approximately 60 meters of sheet piles along Ross Bay seawall; excavation of pipe trench; pre-fused high density polyethylene pipe at laydown area; and restoration of curb and gutter, sidewalk, pavement and topsoil along the forcemain’s route.

1.2 Dashboard

Table 1 indicates the high level status of the Project and each Project Component with regards to the six Key Performance Indicators (“KPI”) that were defined within the Project Charter.

There were no changes made to the KPIs over the reporting period.

The safety KPI for the Project and the conveyance system remains yellow. Over the reporting period no recordable safety incidents occurred and the total recordable incident frequency at the end of the reporting period remained at 1.6, as it was at the end of October 2020.

The Project Team continues to work with and ensure that all of the prime contractor partners maintain safety as their number one priority. The Project Team is also actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. The BC Government has designated construction as an essential service, and issued guidelines for construction sites to minimize the risks of COVID-19 transmission or illness. All Project contractors have implemented additional precautions to ensure the health and safety of their workers. These measures follow the direction set by the BC Government, including emphasizing the importance of maintaining social distance, increasing handwashing stations, reducing in-person meetings and increasing cleaning of common areas. The Project Team will continue to monitor contractors' compliance with the direction of the government as the situation evolves.

The schedule KPI for the Project overall and the Project components remains green. The COVID-19 public health emergency is impacting the Project. However, construction is ongoing in accordance with provincial guidelines and commissioning of each of the key facilities continued over the reporting period, and based on current progress the Wastewater Treatment Project remains on schedule to meet the regulatory deadline for treatment by the end of 2020.

The cost KPI for the Project overall and the conveyance system remained red over the reporting period, and are expected to remain red for the duration of the Project, primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020. As a result of these budget pressures, the Project Team forecast the cost to complete the Project at \$775M, or \$10M over the Project's control budget. In May 2019 the CRD Board approved an increase in the Project's budget by \$10M to \$775M.

Subsequent to May 2019 the Project Team have continued to manage risks and there have been two main opposing budget drivers:

- i) The Project's financing costs to-date have been lower than budgeted for two reasons: firstly as a result of low interest rates since the start of the Project, and secondly due to the receipt of funding from the provincial government earlier than forecast; and
- ii) The Project's construction costs may be higher than budgeted as many contractors have advised that there are cost impacts from the COVID-19 public health emergency. Impacts include labour availability, work modifications to comply with provincial guidelines, and delays to the delivery of equipment and supplies.

It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.

Table 1- Executive Summary Dashboard

Key Performance Indicators		Project Overall	WWTP	RTF	Conveyance System	Comments
Safety	Deliver the Project safely with zero fatalities and a total recordable incident frequency (TRIF) of no more than 1*.					No recordable incidents occurred over the reporting period. Site inspections are ongoing. The Project Team is actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. All Project contractors have implemented additional precautions to ensure the health and safety of their workers. The Project Team will continue to monitor and follow the direction of the government during this evolving situation.
Environment	Protect the environment by meeting all legislated environmental requirements and optimizing opportunities for resource recovery and greenhouse gas reduction.					There were no environmental incidents over the reporting period. HRMG are continuing with spill remediation and environmental monitoring associated with the October 13, 2020 release of residual solids at the Residuals Treatment Facility.
Regulatory Requirements	Deliver the Project such that the Core Area complies with provincial and federal wastewater regulations.					No regulatory issues.
Stakeholders	Continue to build and maintain positive relationships with First Nations, local governments, communities, and other stakeholders.					Engagement activities were ongoing over the reporting period. Significant efforts were made to provide accurate and timely information to stakeholders.
Schedule	Deliver the Project by December 31, 2020.					The COVID-19 public health emergency has and is impacting the Project. The schedule KPI for the Project overall and the Project components remains green. The COVID-19 public health emergency is impacting the Project's progress. However, construction is ongoing in accordance with provincial guidelines and commissioning of each of the key facilities continued over the reporting period, and based on current progress the Wastewater Treatment Project remains on schedule to meet the regulatory deadline for treatment by the end of 2020.
Cost	Deliver the Project within the Control Budget (\$765 million).					<p>The CRD Board approved an increase to the Project's budget by \$10M, to \$775M, based on the Project Team's forecast of the cost to complete the Project. The increase was required primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.</p> <p>Many contractors have advised that there are cost impacts from the COVID-19 public health emergency. It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.</p>

* A TRIF of no more than 1 means that there is 1 or fewer recordable incidents (being a work-related injury or illness that requires medical treatment beyond first aid or causes death, days away from work, restricted work or transfer to another job, or loss of consciousness) for every 200,000 person-hours of work

Status	Description
	KPI unlikely to be met
	KPI at risk unless correction action is taken
	KPI at risk but corrective action has been identified/is being implemented
	Good progress against KPI

2 Wastewater Treatment Project Progress

2.1 Safety

Safety information for the reporting period and cumulative for the Project from January 1, 2017 is summarized in Table 3.

The Project Team is actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. The BC Government has designated construction as an essential service, and issued guidelines for construction sites to minimize the risks of COVID-19 transmission or illness.

All Project contractors have implemented additional precautions to ensure the health and safety of their workers. These measures follow the direction set by the BC Government, including emphasizing the importance of maintaining social distance, increasing handwashing stations, reducing in-person meetings and increasing cleaning of common areas. The Project Team will continue to monitor contractors' compliance with the direction of the government during this evolving situation.

Site safety tours and weekly safety inspections were carried out by Project Management Office ("PMO") construction and safety personnel over the reporting period at all active worksites: McLoughlin Point WWTP, RTF, Macaulay Point Pump Station, Clover Point Pump Station, Residual Solids Pipes; Residual Solids Pump Stations; Arbutus Attenuation Tank and Trent Forcemain.

Over the reporting period (November 2020) five safety incidents occurred, comprising: two near-miss and three report-only incidents, as summarized in Table 2.

Table 2: Safety Incidents over the Reporting Period

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
November 3, 2020	McLoughlin Pt WWTP	Report Only	While demobilizing site trailers at the laydown area workers were removing de-energized temporary power cables.	All cables were tested and deemed not energized. Unfortunately there were a number of cables and it was determined after removal that they had cut a low voltage cable which was to remain in service.	There were no injuries and the cable was reinstalled.

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
November 12, 2020	Trent Forcemain	Report Only	A vehicle moving through an active worksite struck and damaged the contractor's site trailer. The trailer was well off the travelled portion of the road and delineators adequately placed around the trailer.	The driver misjudged the roadway and drove over the delineators. The front right of the vehicle hit the corner of the trailer damaging a panel. At the time of the incident normal two-way traffic was occurring though the site on Dallas Road.	The contractor ensured the driver was uninjured, contacted the police and aided in safely removing the vehicle. Delineators were reinstated around the corner of the trailer.
November 12, 2020	McLoughlin Pt WWTP	Near Miss	Worker while moving around the site stopped, made eye contact with a driver of a moving vehicle. The driver signaled for the worker to proceed.	The driver pulled forward while worker was in close proximity to the vehicle.	Tool-box talk held to discuss proper communication and eye contact. Emphasis placed on vehicle movement and signaling pedestrian to proceed.
November 24, 2020	McLoughlin Pt WWTP	Report Only	Operator identified a leak from a manway door in the BAF area.	The manway was isolated and resealed.	No injuries or damage to any equipment were recorded.
November 26, 2020	McLoughlin Pt WWTP	Near Miss	While demobilizing site trailers at the laydown area workers were removing a stockpile of crushed blast rock. While excavating the operator notice a conduit exposed in the side of the bank.	A conduit was exposed and removal of rock immediately ceased. Upon investigation it was determined that the conduit housed an active 120V power feed.	There were no injuries or damage recorded. The conduit was re-buried and the contractor reviewed Ground Disturbance requirements when removing stockpiles from site.

Key safety activities conducted during November included:

- bi-weekly project update meetings with prime contractors: Knappett, NAC, HRMG, Jacob Brothers, Don Mann and Kenaidan;
- monthly update meetings with prime contractor: HRP;
- monthly Incident Investigation reviews;
- participated in BC Hydro access road pre-job planning meeting;
- hosted Prime Contractor Safety Meeting;
- reviewing daily progress reports and contacting Primes of any safety notations or observations contained within those reports;
- reviewed COVID-19 document submissions from CRD Corporate;
- reviewed site specific safety plans and high risk tasks; and
- Safety Manager and/or Construction Manager conducting regular site inspections at all active Project work sites.

Table 3: WTP Safety Information

	Reporting Period (November 2020)	Project Totals
Person Hours		
PMO	2780	164,049
Project Contractor	52,857	2,288,223
Total Person Hours	55,637	2,452,272
Total Number of Employees		
PMO	24	
Project Contractors (& Project Consultants) working on Project Sites	223	
Total Number of Employees	247	
Incidents		
Near Miss Reports	2	49
High Potential Near Miss Reports	0	7
Report Only	3	185
First Aid	0	68
Medical Aid	0	12
Medical Aid (Modified Duty)	0	2
Lost Time	0	5
Total Recordable Incidents	0	19
		Project Frequency (from January 1, 2017)
First Aid Frequency		5.6
Medical Aid Frequency		1.1
Lost time Frequency		0.4
Total Recordable Incident Frequency		1.6

2.2 Environment and Regulatory Management

Environmental and regulatory activities continued over the reporting period relating primarily to the execution of current work.

2.2.1 Environment

Environmental work progressed as planned over the reporting period. The focus was on environmental monitoring of construction activities.

Key environmental management activities completed in November included:

- An end-of-spill report was submitted to the BC Ministry of Environment and Climate Change Strategy (ENV) in fulfilment of requirements related to the minor release of residual solids that occurred on October 19 at a low point drain valve location on the Residual Solids Conveyance Line within Hartland Landfill;
- An end-of-spill report was submitted by HRP to ENV in fulfilment of requirements related to the small release of wastewater into the ocean at the McLoughlin Point site that occurred on October 27; and

- HRMG continued with spill remediation and environmental monitoring associated with the release of residual solids at the Residuals Treatment Facility (RTF) site that occurred on October 13.

2.2.2 Regulatory Management

Over the reporting period, the Project Team continued to support or lead the advancement of the few regulatory approvals remaining.

Key permitting activities over the reporting period included:

- The Department of National Defence approved an Environmental Effects Determination Amendment related to the construction of a BC Hydro access road in the Township of Esquimalt.

The status of the two remaining key Project permits are summarized in Table 4. The table is not a list of all required Project permits, but rather a summary of the status of key Project permits. There were no changes made to the status of the key outstanding permits from the table presented in the October 2020 Monthly Report.

Table 4- Key Permits Status

<i>Permit/Licence</i>	<i>Anticipated Date</i>	<i>Status</i>	<i>Party Responsible for Obtaining Perming</i>
McLoughlin Point Harbour Crossing			
Transport Canada Lease	Q1 2021	On track	CRD
McLoughlin Point Outfall			
Transport Canada Lease	Q1 2021	On track	CRD

2.3 First Nations

First Nations communication and engagement was ongoing over the reporting period. Meetings with the Esquimalt and Songhees' liaisons continued, as did meetings with the WSÁNEĆ Leadership Council's (WLC) liaison. The meetings are a forum for covering both Project-related issues with the potential to impact First Nations, as well as an opportunity for broader discussion of CRD-related issues.

2.4 Stakeholder Engagement

The Project maintained its ongoing two-way Communications and Engagement Plan to provide Project information to stakeholders, communities and the public and to respond to public inquiries. The key focus of the communications and engagement activities over the period was to keep residents and stakeholders informed of Project plans, progress and construction information, and to receive and respond to questions and concerns raised by the community. A variety of communications tools and engagement activities were utilized to support the implementation of the plan, including stakeholder meetings, Project website updates and notifications of construction through notices and a public inquiry program, among other methods.

Construction Communications

One construction notice and one letter were issued to stakeholders in the reporting period:

- McLoughlin Point: BC Hydro Access Road (November 6, 2020) (Appendix A)
- Trent Forcemain: Dallas Road Update Letter (November 23, 2020) (Appendix B)

The construction notice was hand delivered to 54 homes on: Thomas Street; Bewdley Avenue between Peek Street and Anson Street; and Anson Street between Bewdley Avenue and Thomas Street.

A letter providing more information to residents about the Trent Forcemain work taking place along the Dallas Road Seawall was hand delivered to 54 residents along Dallas Road between Clover Point and Memorial Crescent, Bushby Street between Dallas Road and George Street, and Eberts Street between Dallas Road and Bushby Street.

In addition, as part of ongoing construction communications, residents affected by localized, temporary disruptions, such as driveway impacts, were notified by hand delivery of notices.

A sign was posted at the Macaulay Point Pump Station providing an update on the work that was taking place (Appendix C).

Project Website

Over the reporting period the Project website, wastewaterproject.ca, was updated with information about the Project. The construction notice and Macaulay Point Pump Station sign were posted.

The CRD's Twitter account was used to provide Project information to the public, including: information about the McLoughlin Point Wastewater Treatment commissioning.

Community Meetings

Over the reporting period, the Project Team held meetings with the following community groups and representatives, and municipality representatives:

- Esquimalt Liaison Committee;
- City of Victoria Technical Working Group;
- District of Saanich Technical Working Group; and
- meeting and RTF site tour with representatives from the Willis Point Residents Association.

Public Inquiries

Public inquiry numbers from the Project email address and 24/7 information phone line (1 844 815-6132) are noted in Table 5.

Table 5 – Project Inquiries- November 2020

Inquiry Source	Contacts for November 2020
Information phone line inquiries	32
Email inquiries responded to	19

Key themes of the public inquiries were as follows:

- questions regarding vibrations caused by Trent Forcemain work;
- questions regarding odour on Willis Point Road and nearby areas during the commissioning process; and
- interest in restoration, landscaping and the final look of Project facilities.

2.5 Resolutions from Other Governments

There were no resolutions related to the Project passed by other governments during the reporting period.

2.6 Schedule

Progress over the reporting period is summarized in Section 2.9.

Figure 1 shows the high-level Project schedule. There has been no change from that shown in the October 2020 Monthly Report.

Over the reporting period the COVID-19 public health emergency continued to have impacts on the Project. However, construction is ongoing at all of the Project's sites, in accordance with provincial guidelines, and based on current progress the Wastewater Treatment Project remains on schedule to meet the provincial and federal regulations for treatment for the Core Area's wastewater by December 31, 2020.

Figure 1- High-Level Project Schedule

Wastewater Treatment Project Schedule*

Construction + Commissioning



*Schedule subject to updates as Project planning progresses.

2.6.1 30 day look ahead

Key activities and milestones for the next 30 days (December) are outlined below by function.

Safety

- bi-weekly and monthly prime contractor progress meetings;
- review of any site specific safety plans or high risk tasks;
- review prime contractor document submissions;
- issue Safety Notices for trending observations or similar incidents occurring on project sites;
- review Daily Progress reports and contact Primes of any safety notations or observations contained within those reports;
- WTP Safety Manager will conduct regular site inspections at all active Project work sites; and
- incident reporting review with prime contractors at active work locations.

Environment and Regulatory Management

- HRMG to continue environmental monitoring related to the October 13, 2020 release of residual solids at the Residuals Treatment Facility; and
- Ongoing environmental monitoring of all other active construction sites.

First Nations

- CRD and Songhees and Esquimalt liaisons will continue to work on interpretive sign content.

Stakeholder Engagement

- ongoing construction communications with stakeholders; and
- ongoing community liaison meetings.

Cost Management and Forecast

- prepare cost reports;
- prepare for year-end; and
- monitor schedule.

Construction

McLoughlin Point

- training; and
- connect servers to network at site.

Clover Point Pump Station

- install pathways;
- install water fountain, benches, garbage cans, and bike maintenance station and public art; and
- install washroom accessories.

Macaulay Point Pump Station

- complete demolition of old pump station;
- clean up and demobilize site; and
- restore area E to green space.

Residuals Treatment Facility

- complete process commissioning with residuals;
- complete biogas commissioning; and
- complete site landscaping.

Residual Solids Pump Stations

- complete landscaping; and
- complete clean up and demobilization.

Arbutus Attenuation Tank

- install electrical duct banks;
- install monorail and platform in valve chamber;
- install stainless steel piping and valves flowmeter to tank;
- form and pour suspended slab and curbs in main tank; and
- install Fiberglass Reinforced Plastic (FRP) stairway.

Trent Forcemain

- install sanitary sewer on Dallas Rd between Bushby and Eberts streets; and
- surface restoration as required.

2.6.2 60 day look ahead

Key activities and milestones for the next 60 days (January) are outlined below by function.

Safety

- bi-weekly and monthly prime contractor progress meetings;
- review of any site specific safety plans or high risk tasks;
- review prime contractor document submissions;
- issue Safety Notices for trending observations or similar incidents occurring on project sites;
- WTP Safety Manager will conduct regular site inspections at all active Project work sites; and
- incident reporting review with prime contractors at active work locations.

Environment and Regulatory Management

- HRMG to submit an end-of-spill report to ENV related to the October 13 residual solids spill.

First Nations

- Songhees and Esquimalt to host a ceremonial burning to honour the ancestors that were encountered during Project construction, prior to their reburial.

Stakeholder Engagement

- ongoing construction communications with stakeholders; and
- ongoing community liaison meetings.

Cost Management and Forecast

- prepare cost reports;
- monitor schedule; and
- fiscal year end close.

Construction

McLoughlin Point

- clean up and demobilize site.

Clover Point Pump Station

- installation of public art; and
- ongoing landscaping.

Macaulay Point Pump Station

- reinstate surfaces.

Residuals Treatment Facility

- load testing; and
- commence acceptance testing.

Residual Solids Pump Stations

- landscaping.

Arbutus Attenuation Tank

- install electrical duct banks for power;
- install valve chamber piping;
- install air intake and supply tank;
- install air intake heating ventilation and air conditioning (HVAC) ducting;
- install gas detection panel and system in electrical room;
- install motor control centre; and
- complete roofing.

Trent Forcemain

- install sanitary sewer on Dallas Rd between Bushby and Clover Point Pump Station; and
- surface restoration as required.

2.7 Cost Management and Forecast

The monthly cost report for November is attached as Appendix D. The cost reports summarize Project expenditures and commitments by Project Components and the major cost centres common to the Project Components.

The Project Team has been reporting budget pressures through its monthly reports to the Project Board (and CRD Board) since September 2017, primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.

The Project Team forecast the cost to complete the Project at \$775M, or \$10M (1.3%) over the Project's control budget. In May 2019 the CRD Board approved an increase in the Project's budget by \$10M to \$775M, and on August 14, 2019, the associated amendment to the 2019-2023 Financial Plan was approved.

Subsequent to May 2019 the Project Team have continued to manage risks and there have been two opposing budget drivers:

- i) The Project's financing costs to-date have been lower than budgeted for two reasons: firstly as a result of low interest rates since the start of the Project, and secondly due to the receipt of funding from the provincial government earlier than forecast; and
- ii) The Project's construction costs may be higher than budgeted as many contractors have advised that there are cost impacts from the COVID-19 public health emergency. Impacts include labour availability, work modifications to comply with provincial guidelines, and delays to the delivery of equipment and supplies.

It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.

2.7.1 Commitments

Commitments were made over the reporting period in furtherance of delivering the Project. The net commitments made during the reporting period resulted in an increase in committed costs of \$2.1 million. The significant commitments made in the reporting period include work on the BC Hydro access road, ferric dosing at the WWTP, and the approval of provisional items in construction contracts and contract change orders.

2.7.2 Expenses and Invoicing

The Project expenditures for the reporting period were as expected and were within the budget allocations for each of the budget areas. The main Project expenditures incurred over the reporting period were associated with commissioning, construction activities and project management office-related costs.

2.7.3 Contingency and Program Reserves

Over the reporting period contingency draws of \$0.6M were made as summarised in Table 6. The draws to-date and remaining contingency and program reserve balances are also summarized in Table 6.

Table 6- Contingency and Program Reserve Draw-Down Table

WTP Contingency and Program Reserve Draws and Reallocations	Draw Date	\$ Amount
Contingency and Program Reserve (in Control Budget)		\$ 69,318,051
Net Contingency and Program Reserve draws to October 31, 2020		\$ (54,499,997)
Contingency and Program Reserve balance as at October 31, 2020		\$ 14,818,054
Costs associated with seeking the Certificate of Compliance for Remediation of WWTP Site	Nov-20	\$ (15,909)
Ferric dosing at the Wastewater Treatment Plant	Nov-20	\$ (457,100)
WWTP Total Draw		\$ (473,009)
RTF Total Draw		\$ -
Additional SCADA Licenses for Clover Point Pump station	Nov-20	\$ (24,414)
Relocation of the Cathodic Protection Rectifier Panel	Nov-20	\$ (83,440)
Additional SCADA Licenses for Macaulay Point Pump Station	Nov-20	\$ (24,414)
Conveyance Total Draw		\$ (132,267)
PMO Total Draw		\$ -
BC Hydro Total Draw		\$ -
WTP Program Reserve Draw		\$ -
Contingency and Program Reserve draws in the reporting period		\$ (605,276)
Contingency and Program Reserve balance as at November 30, 2020		\$ 14,212,778

2.7.4 Project Funding

The federal and provincial governments are assisting the Capital Regional District in funding the Project.

The Government of British Columbia will provide \$248 million towards the three components of the Project, while the Government of Canada is contributing:

- \$120 million through the Building Canada Fund Major infrastructure Component towards the McLoughlin Point WWTP;
- \$50 million through the Green Infrastructure Fund towards the conveyance system; and
- up to \$41 million towards the RTF through the P3 Canada Fund.

The Project Team has applied to the Federation of Canadian Municipalities (FCM) for additional funding and has executed a grant agreement for the contribution of up to \$346,900 towards the delineation of the contamination and remediation and risk assessment for the McLoughlin Point Wastewater Treatment Plant.

The status of funding claims is summarised in Table 7. Note that the timing for the provision of Government of British Columbia and Government of Canada's funding differs by funding source. The Project Team will submit claims to the funding partners in accordance with the relevant

funding agreements. In accordance with the funding agreements, the remainder of the funding cannot be claimed until relevant Project components are substantially complete.

Table 7- Project Funding Status

Funding Source	Maximum Contribution	Funding Received in the Reporting Period	Funding Received to Date
Government of Canada (Building Canada Fund)	\$120M	-	\$108M
Government of Canada (Green Infrastructure Fund)	\$50M	-	\$45M
Government of Canada (P3 Canada Fund)	\$41M	-	-
Government of British Columbia	\$248M	-	\$186M
Federation of Canadian Municipalities	\$0.3M	-	-
TOTAL	\$459.3M	-	\$339M

2.8 Key Risks and issues

The Project Team actively identified and managed Project risks over the reporting period. Table 8 summarizes the highest-level risks that were actively managed over the reporting period, as well as the mitigation steps identified and/or undertaken over the reporting period. No changes were made to the risk register since the October 2020 Monthly Report.

The COVID-19 public health emergency continued to have impacts on the Project over the reporting period. It is anticipated that these impacts may affect several of the Project's risks. The Project Team are currently evaluating the impact of the public health emergency on the Project's risks, and anticipates that changes may be made to several of the risks as the situation evolves. Those risks that the Project Team have identified as potentially impacted, and that are currently under review, are identified in Table 8.

Table 8- Project Active Risks Summary

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Project				
Misalignment between First Nations' interests and the implementation of the Project.	The assessed risk level reflects the Project Team's priority of establishing strong and effective relationships with First Nations interfacing with, or interested in, the Project.	First Nations engagement activities remained ongoing over the reporting period (see section 2.3 for further details).	L	No change
Divergent interests between multiple parties and governance bodies whose co-operation is required to successfully deliver the Project.	The assessed risk level reflects the Project Team's priority of establishing strong and effective relationships with municipal, provincial and federal government departments.	The Project Team continued engagement with municipal, provincial and federal government departments throughout the reporting period.	L	No change
Misalignment between Project objectives/scope and stakeholder expectations.	The assessed risk level reflects the Project Team's priority of establishing strong and effective community stakeholder engagement.	Community engagement activities were ongoing over the reporting period (see section 2.4 for further details).	L	No change
Lack of integration between Project Components.	Planning challenges and system integration between the McLoughlin point WWTP, RTF and Conveyance System components of the Project results in schedule delays and/or additional Project costs.	Physical and schedule interfaces are clearly delineated in all construction contracts along with the requirement for commissioning and control plans. The Project Team has used a single Owner's engineer (Stantec) to develop the indicative design for all critical project components with significant interfaces. Commissioning and control plans are under development	L	No change
Senior government funds issue delayed.	The assessed risk level reflects the Project Team's priority of ensuring Project funding commitments are honoured.	Responsibility for meeting funding commitments has been assigned and is being monitored.	L	No change
Public directly contacting contractors at sites.	Direct contact between the public and contractors could expose both parties to worksite hazards and potential injuries.	Communications and engagement plan and coverage of communications in contractor orientations.	L	No change.

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Change in law.	A change in law impacts the scope, cost or schedule of the Project.	Keep apprised of proposed modifications to relevant regulations so as to do the following as appropriate: submit comments on proposed modifications; and/or consider including anticipated modifications in contracts.	H	No change: this risk has been impacted by the COVID-19 public health emergency
Labour - availability and/or cost escalation.	There is insufficient labour available to construct the Project, and/or there is significant labour cost.	The Project Team will, through the use of competitive selection processes for all construction contracts, ensure that all Project contractors have appropriate experience and therefore understand labour risk.	L	No change
Disagreement on contractual obligations of the construction contractors.	There is a disagreement between the Project Team and a contractor regarding the performance of their contractual obligations.	The Project Team takes a proactive management approach to the resolution of any changes, claims and disputes that arise, working expeditiously to achieve resolution with the goal of minimizing any impacts to budget and schedule while ensuring adherence to the terms of the construction contracts.	M	No change but this risk may be impacted by the COVID-19 public health emergency (assessment is currently underway)

Risk Level Key - Assessed risk level (based on likelihood and potential impact)			
Low	Medium	High	Closed
L	M	H	C

2.9 Status (Engineering, Procurement and Construction)

2.9.1 Wastewater Treatment Plant (McLoughlin Point WWTP)

The McLoughlin Point WWTP Project Component continued with Harbour Resource Partners (“HRP” as the Design-Build contractor for the McLoughlin Point WWTP) progressing construction and commissioning activities.

Key activities in progress or completed by HRP in November were commencing the acceptance test and progressing site landscaping.

Photographs of construction progress over the month of November at McLoughlin Point WWTP are shown in Figures 2-4.



Figure 2 – McLoughlin Point Wastewater Treatment Plant – Aluminium countertops and electrical outlets installed in instrumentation workshop



Figure 3 – McLoughlin Point Wastewater Treatment Plant- Gravel installation along the generator area.

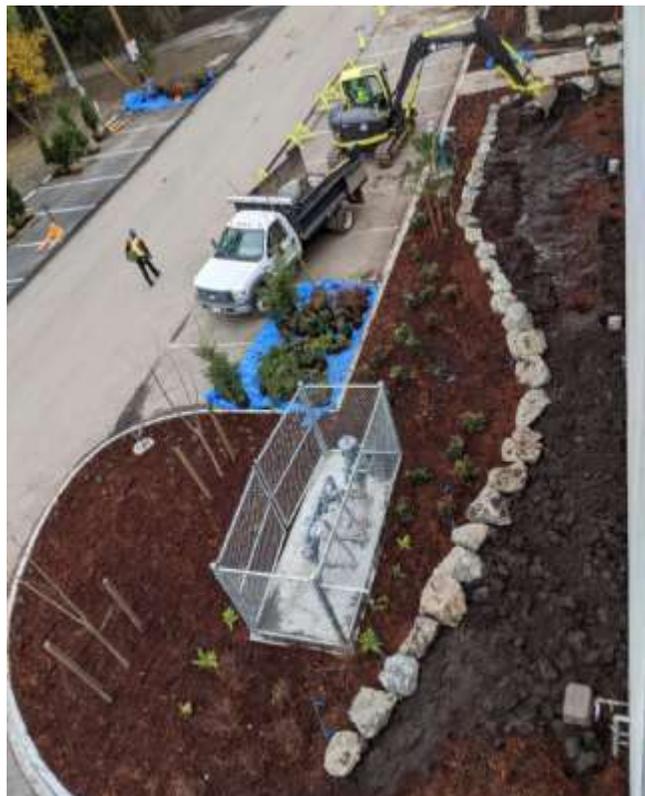


Figure 4 – McLoughlin Point Wastewater Treatment Plant- Rock installation at landscape area west of process building.

2.9.2 Residuals Treatment Facility

The RTF Project Component continued with Hartland Resource Management Group (“HRMG” as the Design-Build-Finance-Operate-Maintain contractor for the RTF) progressing construction and commissioning activities.

Key activities in progress or completed by HRMG in November were as follows:

- draining water from Digester 1 and the Digested Solids Storage Tank;
- ongoing commissioning of various systems;
- completed fencing and main gate; and
- completed landscaping.

A photograph of construction progress over the month of November at the Residuals Treatment Facility is shown in Figure 5.



Figure 5 – Residuals Treatment Facility- Landscaping installation.

2.9.3 Conveyance System

2.9.3.1 Clover Point Pump Station

The Clover Point Pump Station continued with Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressing construction and commissioning activities.

Key construction activities in progress or completed by Kenaidan in November included:

- completed exterior stone veneer;
- grading for walkways outside of pump station;
- continue demobilizing site compound; and
- landscaping and exterior works in plaza.

Photographs of construction progress over the month of November at Clover Point Pump Station are shown in Figures 6 and 7.



Figure 6 – Clover Point Pump Station - Conduit area preparation.



Figure 7 – Clover Point Pump Station - Rock face on new pump station.

2.9.3.2 Macaulay Point Pump Station and Forcemain

The Macaulay Point Pump Station and Forcemain continued with Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressing construction and commissioning activities.

Key construction activities in progress or completed by Kenaidan in November were as follows:

- completed demolition of the old pump station;
- installed screen covers;
- completed air balancing test;
- completed grit sampling test;
- backfill around the existing drop structure and new diversion chamber; and
- completed tree planting.

A photograph of construction progress over the month of November at the Macaulay Point Pump Station is shown in Figure 8.



Figure 8 – Macaulay Point Pump Station - Demolition of old Pump Station completed

2.9.3.3 Residual Solids Conveyance Line

The RSCL is being delivered through two construction contracts:

- Residual Solids Pipes; and
- Residual Solids Pump Stations

Residual Solids Pipes: Don Mann Excavating Ltd. (“Don Mann” as the Construction Contractor for the Residual Solids Pipes) continued construction activities over the reporting period for the Saanich infrastructure improvement being undertaken at Peers Creek, and began construction of a BC Hydro access road in the Township of Esquimalt.

Key construction activities in progress or completed by Don Mann in November were as follows:

- Peers Creek culvert replacement:
 - pumps were set up to lower the water level on the west side of the culvert;
 - inverts of both culverts were cut out to lower the effective invert elevation;
 - installed guardrails at both headwalls; and
 - completed line painting including replacement of crosswalk lines, fog lines, and centreline.
- BC Hydro access road:
 - installed lawn basin at Bewdley Ave and tied into the existing drain main;
 - commenced tree removal;
 - commenced roadwork at Bewdley Ave; and
 - drilled new anchor hole for a conflicting guywire anchor.

A photograph of construction progress over the month of November on the construction of the BC Hydro access road is shown in Figure 9.



Figure 9 – Residual Solids Pipes – Building BC Hydro Access Road.

Residual Solids Pump Stations: Knappett Projects Inc. (“Knappett” as the Construction Contractor for the Residual Solids Pump Stations) continued construction and commissioning activities over the reporting period.

Key construction activities in progress or completed by Knappett in November included:

- installed RTF leachate chamber castings, and final restoration on Willis Point Road;
- commenced irrigation work at pump stations 1 and 2;
- installed odour control unit (OCU) heat trace and insulation at pump stations 1, 2 and 3;
- Installed surge tank heat trace and insulation at pump stations 1, 2 and 3;
- landscape restoration, trail screening and OCU damper installation at Marigold Pump Station; and
- pipe tested and chlorinated at Hartland Pump Station.

Photographs of construction progress over the month of November on the Residual Solids Pump Stations are shown in Figures 10 and 11.



Figure 10 – Residual Solids Pump Stations–Pump Station 2 – Installation of irrigation and sprinkler heads.



Figure 11 –Residual Solids Pump Stations – Restoration of Willis Point Road Laydown area.

2.9.3.4 Arbutus Attenuation Tank

NAC Constructors Ltd. (as the Construction Contractor for the Arbutus Attenuation Tank) continued construction activities over the reporting period.

Key construction activities in progress or completed by NAC Constructors Ltd. in November included:

- installed Attenuation Tank interior room divider walls lower floor reinforcing steel;
- caisson wall system cleaning;
- installed column reinforcing steel;
- ongoing concrete pours for the majority of columns;
- installed wall formwork; and
- perimeter wall and interior room divider walls concrete pours.

Photographs of construction progress during the month of November at the Arbutus Attenuation Tank are shown in Figures 12 and 13.



Figure 12 – Arbutus Attenuation Tank- Column reinforcing installation process.



Figure 13 – Arbutus Attenuation Tank- Attenuation Tank Overview.

2.9.3.5 Trent Forcemain

Jacob Bros. Construction Inc. (as the Construction Contractor for the Trent Forcemain) progressed construction activities over the reporting period.

Key construction activities in progress or completed by Jacob Bros. in November included:

- completed gravity main low-pressure air test;
- installation of approximately 60m of sheet piles along Ross Bay seawall;
- excavate pipe trench;
- pre-fused high density polyethylene pipe at laydown area;
- installed electrical conduit and light post bases on Memorial Crescent;
- completed Lower Memorial Green sidewalk;
- restoration on St. Charles Street of curb, gutter, sidewalk, pavement and topsoil;
- restoration on Dallas Road at Eberts Street of curb, gutter, and pavement; and
- restoration on Memorial crescent of pavement and topsoil.

A photograph of construction progress during the month of November at the Trent Forcemain is shown in Figure 14.



Figure 14 – Trent Forcemain - Fusion of High Density Polyethylene Pipe.

Appendix A– McLoughlin Point: BC Hydro Access Road (November 6, 2020)

**November 6, 2020**

McLoughlin Point: BC Hydro Access Road

As part of construction for the McLoughlin Point Wastewater Treatment Plant, BC Hydro and the Capital Regional District will be installing new power lines and an access road. The power lines will run along Munro Street, Anson Street, and Thomas Street and a new gravel access road will be built between Thomas Street and Bewdley Avenue (please see map on reverse).

Work is expected to begin on the access road in the week of November 9 and is expected to be complete in approximately 10 weeks. Once the access road is in place BC Hydro will begin working to install the power lines.

What to Expect for the Construction of the Access Road

- The access road route will be cleared and the area prepared for construction.
- Rock will be removed by blasting and mechanical means.
- Pre- and post-blast surveys will be conducted when blasting is required. Notification will be provided to residents directly.
- The road will be graded and the gravel surface will be installed.
- Noise associated with this work includes blasting, excavation machinery, and truck back-up beepers.
- Equipment will be temporarily stored in the area.

Blasting Procedure

- Each blast will last less than 60 seconds
- All blasts will be covered with blast mats. Blasting signs will be posted, and warning signals will be used as follows:
 - 12 short whistles at one second intervals followed by a two minute pause
 - Blast will be detonated
 - One long whistle signals all is clear
 - Blasting Hours: Monday to Friday, 8:00 a.m. to 4:30 p.m.

Work Hours

- Monday to Friday 7:00 a.m. to 7:00 p.m.

Traffic Impacts

- There are no traffic impacts anticipated for work on the BC Hydro access road.

About the Wastewater Treatment Project

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees Nations by the end of 2020.

Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca



BC Hydro Power Line and Access Road Route



Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca

Appendix B– Trent Forcemain: Dallas Road Update Letter (November 23, 2020)



Wastewater Treatment Project

November 23, 2020

Dear Resident,

We would like to provide an update about the construction on the Dallas Road Seawall and acknowledge concerns we have heard regarding impacts on the neighbourhood.

Unfortunately, the construction along the seawall causes some unavoidable noise and vibration due to the nature of the work and location of infrastructure.

While vibrations have and will occur, the contractor is required to ensure that no damage is caused by construction activities. The vibrations are being monitored to ensure that they remain below the threshold for damage.

The work along the seawall is taking place in segments. It takes approximately two weeks for the contractor to install the sheet piles in one segment. For the following two weeks, after the sheet piles are installed, the work changes and a trench is excavated, pipe is installed and the trench is backfilled within that segment. The work then moves onto the next segment and the sheet piling begins once again. This approach means that the vibrations experienced due to the sheet piling activities will pause for approximately two weeks at a time.

Another concern we have been hearing is that the contractor is stockpiling materials in a parking area along Dallas Road. This location was approved by the City of Victoria and was selected for a number of reasons including safety. While the location for this stockpile won't change the contractor is looking into ways to reduce the noise and vibrations caused by working in this area.

Construction on the Trent Forcemain is nearly 80% complete and we expect the work along Dallas Road should be finished by early next year.

We appreciate your patience as this work is being completed. Please feel free to contact us at our 24/7 phone line 1-844-815-6132 or email wastewater@crd.bc.ca if you have any questions.

Thank you,

Wastewater Treatment Project Team

Appendix C– Macaulay Point Pump Station Sign



Macaulay Point Pump Station Update

The Wastewater Treatment Project Team wants to thank you for your patience during the construction of the Macaulay Point Pump Station. We are close to the end of the Project and are now in the final restoration stage.

Construction on the new Macaulay Point Pump Station is coming to an end and it is undergoing the commissioning (or testing) phase. This means that the new pump station is now pumping wastewater to the McLoughlin Point Wastewater Treatment Plant for treatment rather than releasing untreated sewage into the ocean. During this phase some short-term increases in odour may occur. Thanks to the state-of-the-art odour control system, there should be no discernible odour in the community once testing is complete.

Landscaping

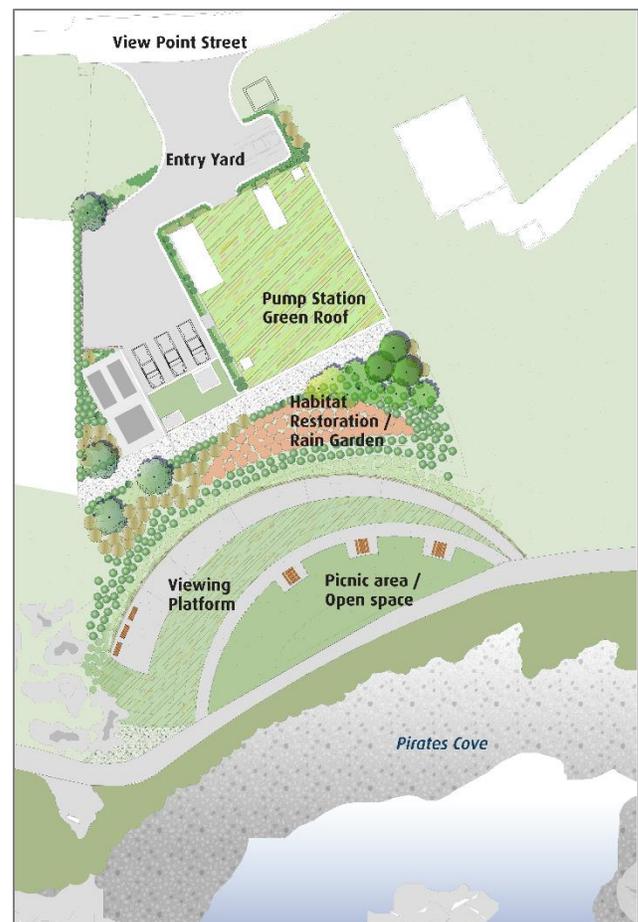
The next steps include landscaping and restoration. The landscaping will create an attractive and welcoming waterfront space to be enjoyed.

Thank you

We recognize construction has been disruptive and want to thank you for your patience. We hope you will enjoy the new park-like setting once it is complete.

About the Wastewater Treatment Project

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees Nations by the end of 2020.



Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca

Appendix D- Monthly Cost Report (November)

**MONTHLY COST REPORT
as at November 30, 2020**

Description	BUDGET		COST EXPENDED					COMMITMENTS			FORECAST		VARIANCE	
	Control Budget	Allocated Budget	Expended to October 31, 2020	Expended over reporting period (November 2020)	Expended to November 30, 2020	Expended to November 30, 2020 as a % of Allocated Budget	Remaining (Unexpended) Allocated Budget at November 30, 2020	Total Commitment at November 30, 2020	Unexpended Commitment at November 30, 2020	Uncommitted Allocated Budget at November 30, 2020	Forecast to Complete	Forecast at Completion	Variance at Completion \$	Variance at Completion as a % of Allocated Budget
McLoughlin Point Wastewater Treatment Plant	331.4	329.7	313.3	(0.1)	313.2	95%	16.5	322.3	9.1	7.4	16.5	329.7	-	0%
Construction	306.7	321.7	312.9	0.0	312.9	97%	8.8	321.7	8.7	0.1	8.8	321.7	-	0%
Contingency	14.9	1.1	-	-	-	0%	1.1	-	-	1.1	1.1	1.1	-	0%
Financing	9.8	6.9	0.4	(0.1)	0.3	4%	6.6	0.7	0.4	6.2	6.6	6.9	-	0%
Residuals Treatment Facility	159.4	140.7	11.8	0.3	12.1	9%	128.6	139.3	127.2	1.4	128.6	140.7	-	0%
Construction	145.4	139.3	11.8	0.3	12.1	9%	127.2	139.3	127.2	0.0	127.2	139.3	-	0%
Contingency	12.3	1.0	-	-	-	0%	1.0	-	-	1.0	1.0	1.0	-	0%
Financing	1.7	0.4	-	-	-	0%	0.4	0.0	0.0	0.4	0.4	0.4	-	0%
Conveyance System	158.0	213.4	184.2	3.6	187.7	88%	25.6	198.8	11.1	14.6	25.6	213.4	-	0%
Macaulay Point Pump Station	25.4	31.1	29.6	0.4	30.0	96%	1.2	31.1	1.2	0.0	1.2	31.1	-	0%
Macaulay Forcemain	5.6	7.4	7.4	-	7.4	100%	-	7.4	-	-	-	7.4	-	0%
Craigflower Pump Station	12.5	12.4	12.4	-	12.4	100%	-	12.4	-	-	-	12.4	-	0%
Clover Point Pump Station	23.7	27.3	24.7	1.0	25.8	95%	1.5	27.3	1.5	0.0	1.5	27.3	-	0%
Currie Pump Station^	2.8	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
Arbutus Attenuation Tank	14.2	24.6	18.8	0.8	19.6	80%	4.9	23.8	4.2	0.8	4.9	24.6	-	0%
Clover Forcemain	14.6	31.9	31.6	0.1	31.7	99%	0.2	31.9	0.2	0.0	0.2	31.9	-	0%
Currie Forcemain^	3.3	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
Trent Forcemain	9.5	11.7	6.0	0.9	6.9	59%	4.8	9.4	2.5	2.3	4.8	11.7	-	0%
Residual Solids Conveyance Line	19.1	36.8	36.5	-	36.5	99%	0.3	36.8	0.3	0.0	0.3	36.8	-	0%
Residual Solids Pump Stations & Bridge Crossings	4.6	17.8	16.3	0.3	16.6	93%	1.2	17.7	1.1	0.1	1.2	17.8	-	0%
Residual Solids Conveyance Line – Highway Crossing	-	0.3	0.3	-	0.3	100%	-	0.3	-	-	-	0.3	-	0%
Contingency	16.8	7.6	-	-	-	0%	7.6	-	-	7.6	7.6	7.6	-	0%
Financing	5.8	4.1	0.1	-	0.1	3%	3.9	0.3	0.2	3.7	3.9	4.1	-	0%
Project Management Office ("PMO")	75.8	77.9	61.2	1.0	62.2	80%	15.7	71.3	9.1	6.5	15.7	77.9	-	0%
Project costs Aug 2016-Dec 2016	2.2	2.2	2.2	-	2.2	100%	-	2.2	-	-	-	2.2	-	0%
Owner's Engineering	17.2	17.9	16.0	0.3	16.3	91%	1.6	17.9	1.5	0.0	1.6	17.9	-	0%
Conveyance Design	5.0	9.3	8.3	0.0	8.4	90%	0.9	9.1	0.7	0.2	0.9	9.3	-	0%
Advisors & Professional Support	7.0	14.8	10.7	0.1	10.7	73%	4.0	11.7	0.9	3.1	4.0	14.8	-	0%
Project Board	2.0	1.3	1.0	0.0	1.0	79%	0.3	1.0	-	0.3	0.3	1.3	-	0%
Project Board Expenses	0.3	0.1	0.1	-	0.1	64%	0.0	0.1	-	0.0	0.0	0.1	-	0%
Project Team	29.1	23.2	17.6	0.4	18.0	78%	5.2	23.2	5.2	-	5.2	23.2	-	0%
Project Leadership Team Expenses	0.7	0.4	0.2	-	0.2	65%	0.1	0.2	-	0.1	0.1	0.4	-	0%
Project Support Team Expenses	0.5	0.2	0.1	-	0.1	73%	0.0	0.1	-	0.0	0.0	0.2	-	0%
CRD Financial Services	1.5	1.4	1.0	0.0	1.0	75%	0.4	1.4	0.4	-	0.4	1.4	-	0%
CRD Human Resources	0.3	0.3	0.3	0.0	0.3	100%	0.0	0.3	0.0	-	0.0	0.3	-	0%
CRD Corporate Communications	0.2	0.2	0.2	-	0.2	95%	-	0.2	-	-	-	0.2	-	0%
CRD Real Estate	0.3	0.3	0.3	-	0.3	96%	-	0.3	-	-	-	0.3	-	0%
CRD Information Technology	0.4	0.4	0.3	0.0	0.3	79%	0.1	0.4	0.1	-	0.1	0.4	-	0%
CRD Insurance	0.1	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
CRD Operations	0.6	0.6	0.5	0.0	0.5	93%	0.0	0.6	0.0	-	0.0	0.6	-	0%
CRD Legislative Services	0.1	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
CRD Corporate Safety	0.2	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
CRD Executive Services	-	0.1	0.1	-	0.1	86%	-	0.1	-	-	-	0.1	-	0%
Office Lease	1.9	1.3	1.0	0.0	1.0	76%	0.3	1.2	0.2	0.1	0.3	1.3	-	0%
Office Supplies	0.1	0.2	0.2	-	0.2	92%	0.0	0.2	-	0.0	0.0	0.2	-	0%
Vehicles	0.2	0.2	0.2	-	0.2	95%	-	0.2	-	-	-	0.2	-	0%
Connections Call Center	-	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
Communication support materials	0.5	0.2	0.1	-	0.1	61%	0.1	0.1	-	0.1	0.1	0.2	-	0%
Computer Hardware, Software & Training	1.0	1.0	0.7	0.0	0.7	69%	0.3	0.7	-	0.3	0.3	1.0	-	0%
Contingency	4.8	2.3	-	-	-	0%	2.3	-	-	2.3	2.3	2.3	-	0%
BC Hydro	12.9	4.3	2.1	(0.0)	2.1	48%	2.2	2.1	0.0	2.2	2.2	4.3	-	0%
Third Party Commitments	8.1	8.1	4.3	0.1	4.3	53%	3.8	6.9	2.5	1.3	3.8	8.1	-	0%
Program Reserves	19.2	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Core Area Wastewater Treatment Project	765.0	775.0	576.8	4.8	581.6	75%	193.4	740.7	159.1	34.3	193.4	775.0	-	0%

* Values presented in \$millions, results in minor rounding differences

** Cost report presents approved expenditures

^ Component no longer required, and would not provide any value therefore removed from Project Scope; Costs include Seaterra initiation, planning and design

Item 7.2



**Wastewater
Treatment Project**
Treated for a cleaner future

**REPORT TO CORE AREA WASTEWATER TREATMENT PROJECT BOARD
MEETING OF WEDNESDAY, JANUARY 20, 2021**

SUBJECT **Wastewater Treatment Project Q4 2020 Quarterly Report**

ISSUE

To provide the Core Area Wastewater Treatment Project Board with the Wastewater Treatment Project Q4 2020 Quarterly Report.

BACKGROUND

On May 25, 2016 the Regional Board of the CRD:

- i) Adopted by resolution the Core Area Wastewater Treatment Project Board Terms of Reference (Project Board Terms of Reference) for the purposes of establishing principles governing the Core Area Wastewater Treatment Project (the Wastewater Treatment Project or the WTP);
- ii) Established the Core Area Wastewater Treatment Project Board (Project Board) under Bylaw 4109 (the CRD Core Area Wastewater Treatment Board Bylaw No. 1, 2016) for the purposes of administering the Core Area Wastewater Treatment Project; and
- iii) Delegated certain of its powers, duties and functions to the Project Board under Bylaw 4110 (the CRD Core Area Wastewater Treatment Project Board Delegation Bylaw No. 1, 2016).

On September 14, 2016 the Regional Board of the CRD:

- i) Received the final report of the Project Board with respect to its recommendation for the CAWTP, dated September 7, 2016 (the Final Report); and
- ii) Approved the business case attached as Appendix 1 (the Business Case) to the Final Report.

DISCUSSION

The Core Area Wastewater Treatment Project Board (the Project Board) Terms of Reference requires, amongst other things: that the Project Board provide the CRD Board with monthly progress reports and a comprehensive quarterly report on the Project.

The Quarterly report for the period of October – December 2020 is attached as Appendix A.

RECOMMENDATION

That the Core Area Wastewater Treatment Project Board approve the following resolution:

Core Area Wastewater Treatment Project Board – January 20, 2021
Wastewater Treatment Project Q4 2020 Quarterly Report

2

RESOLVED that:

The Staff Report, 'Wastewater Treatment Project Q4 2020 Quarterly Report', be received for information and forwarded to the Core Area Liquid Waste Management Committee and CRD Board for information.



Elizabeth Scott, Deputy Project Director
Wastewater Treatment Project



Dave Clancy, Project Director
Wastewater Treatment Project
Concurrence

Attachments: 1

Appendix A: Wastewater Treatment Project Q4 2020 Quarterly Report

ES:er



Wastewater Treatment Project

Treated for a cleaner future

CRD Wastewater Treatment Project

Quarterly Report

Reporting Period: October- December 2020

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1 Executive Summary

1.1 Introduction

This Quarterly Report covers the reporting period of October - December 2020 and outlines the progress made on the Wastewater Treatment Project over this time.

The Wastewater Treatment Project (the “Project”) includes three main Project Components (the “Project Components”): the McLoughlin Point Wastewater Treatment Plant (the “McLoughlin Point WWTP”), the Residuals Treatment Facility (the “RTF”) and the Conveyance System (which includes upgrades to the conveyance network including the construction of pump stations and pipes). The Project scope is being delivered through a number of contracts with a variety of contracting strategies.

On December 15, 2020, the Government of Canada, the Government of British Columbia, and the Capital Regional District (CRD) announced that the Wastewater Treatment Project is treating wastewater and is exceeding regulatory requirements. The majority of construction is complete on the major components of the Wastewater Treatment Project. Construction continues on the Trent Forcemain and Arbutus Attenuation Tank. These are being built to increase the capacity of the conveyance system and are expected to be complete in spring 2021.

Over the reporting period the COVID-19 public health emergency continued to have impacts on the Project. The Project Team and Project contractors are actively monitoring the status of the COVID-19 public health emergency and are taking additional precautions to protect our staff, contractors, and the public. At each of the remaining Project sites, construction is ongoing in accordance with guidelines established by the Provincial Health Officer.

The McLoughlin Point WWTP Project Component is continuing with Harbour Resource Partners (“HRP” as the Design-Build contractor for the McLoughlin Point WWTP) progressing: site landscaping; air flush of heating ventilation and air conditioning (HVAC) system; commissioning of biological systems; final commissioning of safety systems; and completion of the acceptance test.

The RTF Project Component is continuing with Hartland Resource Management Group (“HRMG” as the Design-Build-Finance-Operate-Maintain contractor for the RTF) progressing construction activities including: installation of roof handrails on the Digester Building; installation of the canopy on the Other Municipal Solids Receiving Facility; poured foundation for the main gate; drained water from Digester 1, and the Digested Solids Storage Tank; ongoing commissioning of various systems; completing site landscaping; installation fencing and the main gate; and progressing commissioning activities.

The Conveyance System is being delivered through seven construction contracts: two design-build contracts and five design-bid-build contracts, one of which (the Clover Forcemain) concluded in October 2020.

The two design-build Conveyance System contracts progressed over the reporting period as follows:

- Clover Point Pump Station: Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressed construction and commissioning activities over the

reporting period including: fine tuning performance of screen and degritting system; completing exterior stone veneer; grading for walkways outside of the pump station; progressed painting; and completing architectural works inside the washroom at the public plaza.

- Macaulay Point Pump Station: Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressed construction and commissioning activities over the reporting period including: backfilling around existing drop structure and new diversion chamber; new diversion chamber was completed; installation of screen covers; ongoing topsoil placement; completed preparation for landscaping; completed demolition of the old pump station.

The design-bid-build Conveyance System contracts progressed over the reporting period, as follows:

- Clover Forcemain: Windley Contracting Ltd. (“Windley” as the Construction Contractor) completed construction and commissioning activities including: final clean-up of the lay down area.
- Residual Solids Conveyance Line (“RSCL”): the RSCL is being delivered through two construction contracts, with work progressing as follows:
 - Residual Solids Pipes: Don Mann Excavating Ltd. (“Don Mann” as the Construction Contractor) continued construction activities over the reporting period for the Saanich infrastructure improvement being undertaken at Peers Creek, and began construction of a BC Hydro access road in the Township of Esquimalt including:
 - for the Peer’s Creek culvert replacement: backfilling both headwalls; removing west side cofferdam; replacing archaeological material; pumps being set up to lower the water level and inverts cut into the culverts; the concrete curb and sidewalk on the east side was replaced; final paving was completed; line painting including replacement of crosswalk lines, fog lines, and centreline; reinstated asphalt curb along the west side of the road; and
 - for the BC Hydro access road: lawn basin was installed at Bewdley Avenue; commencement of tree removal; excavated 60 meters and placed subgrade gravel on Thomas Street; and excavated road and subgrade gravels placed to the first rock outcropping on Bewdley Avenue.
 -
 - Residual Solids Pump Stations: Knappett Projects Inc. (“Knappett” as the Construction Contractor) continued construction and commissioning activities including: regraded and backfilling the centrate return line on Willis Point Road near the RTF entrance; installed odour control unit fences at pump stations 1, 2 and 3; scaffolding was removed from the Tillicum and Admirals bridges; Hartland Flow Control Bypass was installed; piping at Hartland Pump Station was completed and pressure tested; installation of odour control heat trace and insulation at pump stations 1, 2 and 3; commencement of irrigation work at pump stations 1 and 2; landscape restoration, trail screening and odour control unit (OCU) damper installation at Marigold Pump Station; completed fencing at pump stations 2 and 3.

- Arbutus Attenuation Tank (“AAT”): NAC Constructors Ltd. (as the Construction Contractor) continued construction activities including: completing installation of attenuation tank perimeter walls and divider wall reinforcing steel; installation of column reinforcing steel; ongoing concrete pours for majority of columns; installed wall formwork; perimeter wall and interior room divider wall concrete pours; completed attenuation tank wall formwork installation and concrete pours and commenced shoring installation for the main roof slab.
- Trent Forcemain: Jacob Bros. Construction Inc. (as the Construction Contractor) progressed construction activities including: installation of 35 metres of forcemain; completion of gravity main low-pressure air test; installation of approximately 160 meters of sheet piles along Ross Bay seawall; excavation of pipe trench; pre-fused high density polyethylene pipe at laydown area; excavation of pipe trench between existing seawall and sheet pile wall; installed two 40 metre sections of HDPE pipe; hydro seeded sections of topsoil on Lower Memorial Green as part of City of Victoria improvements; and restoration of curb and gutter, sidewalk, pavement and topsoil along the forcemain’s route.

1.2 Dashboard

Table 1 indicates the high level status of the Project and each Project Component with regards to the six Key Performance Indicators (“KPI”) that were defined within the Project Charter.

There were no changes made to the KPIs over the reporting period.

The safety KPI for the Project and the conveyance system remains yellow. Over the reporting period one recordable safety incident occurred and the total recordable incident frequency was 1.5 at the start and end of the reporting period.

The Project Team continues to work with and ensure that all of the prime contractor partners maintain safety as their number one priority. The Project Team is also actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. The BC Government has designated construction as an essential service, and issued guidelines for construction sites to minimize the risks of COVID-19 transmission or illness. All Project contractors have implemented additional precautions to ensure the health and safety of their workers. These measures follow the direction set by the BC Government, including emphasizing the importance of maintaining social distance, increasing handwashing stations, reducing in-person meetings and increasing cleaning of common areas. The Project Team will continue to monitor contractors’ compliance with the direction of the government as the situation evolves.

The schedule KPI for the Project overall and the Project components remains green. The COVID-19 public health emergency is impacting the Project. However, construction is ongoing in accordance with provincial guidelines and the Project met the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.

The cost KPI for the Project overall and the conveyance system remained red over the reporting period, and are expected to remain red for the duration of the Project, primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical

considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020. As a result of these budget pressures, the Project Team forecast the cost to complete the Project at \$775M, or \$10M over the Project's control budget. In May 2019 the CRD Board approved an increase in the Project's budget by \$10M to \$775M.

Subsequent to May 2019 the Project Team have continued to manage risks and there have been two main opposing budget drivers:

- i) The Project's financing costs to-date have been lower than budgeted for two reasons: firstly as a result of low interest rates since the start of the Project, and secondly due to the receipt of funding from the provincial government earlier than forecast; and
- ii) The Project's construction costs may be higher than budgeted as many contractors have advised that there are cost impacts from the COVID-19 public health emergency. Impacts include labour availability, work modifications to comply with provincial guidelines, and delays to the delivery of equipment and supplies.

It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.

Table 1- Executive Summary Dashboard

Key Performance Indicators		Project Overall	WWTP	RTF	Conveyance System	Comments
Safety	Deliver the Project safely with zero fatalities and a total recordable incident frequency (TRIF) of no more than 1*.					One recordable incident occurred over the period. Site inspections are ongoing. The Project Team is actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. All Project contractors have implemented additional precautions to ensure the health and safety of their workers. The Project Team will continue to monitor and follow the direction of the government during this evolving situation.
Environment	Protect the environment by meeting all legislated environmental requirements and optimizing opportunities for resource recovery and greenhouse gas reduction.					There were four environmental incidents over the reporting period: in October there were: two releases of residual solids (one at the Residuals Treatment Facility and one at a valve chamber on the Residual Solids Conveyance Line), and a release of wastewater at the McLoughlin Point Wastewater Treatment Plant; in December, due to heavy rains, there was surface run-off from the construction site at the Clover Point Pump Station into the ocean, causing a plume of silty-looking water. All four releases were reported to Emergency Management BC, in accordance with the Spill Reporting Regulation. In each case environmental professionals assessed the affected area, and where warranted, provided oversight over remediation and monitoring activities.
Regulatory Requirements	Deliver the Project such that the Core Area complies with provincial and federal wastewater regulations.					Over the reporting period the Project met the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020. The majority of construction is complete on the major components of the Wastewater Treatment Project. Construction continues on the Trent Forcemain and Arbutus Attenuation Tank: these are being built to increase the capacity of the conveyance system and are expected to be complete in spring 2021.
Stakeholders	Continue to build and maintain positive relationships with First Nations, local governments, communities, and other stakeholders.					Engagement activities were ongoing over the reporting period. Significant efforts were made to provide accurate and timely information to stakeholders.
Schedule	Deliver the Project by December 31, 2020.					Over the reporting period the Project met the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020. The majority of construction is complete on the major components of the Wastewater Treatment Project. Construction continues on the Trent Forcemain and Arbutus Attenuation Tank: these are being built to increase the capacity of the conveyance system and are expected to be complete in spring 2021.
Cost	Deliver the Project within the Control Budget (\$765 million).					<p>The CRD Board approved an increase to the Project's budget by \$10M, to \$775M, based on the Project Team's forecast of the cost to complete the Project. The increase was required primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.</p> <p>Many contractors have advised that there are cost impacts from the COVID-19 public health emergency. It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.</p>

* A TRIF of no more than 1 means that there is 1 or fewer recordable incidents (being a work-related injury or illness that requires medical treatment beyond first aid or causes death, days away from work, restricted work or transfer to another job, or loss of consciousness) for every 200,000 person-hours of work

Status	Description
	KPI unlikely to be met
	KPI at risk unless correction action is taken
	KPI at risk but corrective action has been identified/is being implemented
	Good progress against KPI

2 Wastewater Treatment Project Progress

2.1 Safety

Safety information for the reporting period and cumulative for the Project from January 1, 2017 is summarized in Table 3.

The Project Team is actively monitoring the status of the COVID-19 public health emergency and is taking additional precautions to protect our staff, contractors, and the public. The BC Government has designated construction as an essential service, and issued guidelines for construction sites to minimize the risks of COVID-19 transmission or illness.

All Project contractors have implemented additional precautions to ensure the health and safety of their workers. These measures follow the direction set by the BC Government, including emphasizing the importance of maintaining social distance, increasing handwashing stations, reducing in-person meetings and increasing cleaning of common areas. The Project Team will continue to monitor contractors' compliance with the direction of the government during this evolving situation.

Site safety tours and weekly safety inspections were carried out by Project Management Office ("PMO") construction and safety personnel over the reporting period at all active worksites: McLoughlin Point WWTP, RTF, Macaulay Point Pump Station, Clover Point Pump Station, Clover Forcemain, Residual Solids Pipes, Residual Solids Pump Stations, Arbutus Attenuation Tank and Trent Forcemain.

Over the quarterly reporting period (October – December 2020) eleven safety incidents occurred, comprising: two near-miss, six report-only, one medical aid recordable, and two first aid incidents, as summarized in Table 2.

Table 2: Safety Incidents over the Reporting Period

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
October 2, 2020	McLoughlin Pt WWTP	Report Only	Water hose developed a leak allowing potable water to escape.	An operator that was in the immediate area was sprayed by the potable water.	Tool-Box talk to discuss inspection of hoses and replacing anything that looks defective was held.

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
October 12, 2020	RTF	Medical Aid Recordable	While grinding a worker had a small sliver of steel enter their eye.	The worker went to first aid where they flushed the eye, but were unable to remove the object. The worker was then sent to the hospital where the sliver was removed.	Worker was wearing appropriate safety glasses at the time of the incident. Upon review of the activity use of a face shield for further protection was added to the job task description.
October 15, 2020	McLoughlin Pt WWTP	Report Only	Drainage of a waterline in the Tertiary Building in order to perform repairs resulted in the Tertiary Building basement flooding causing equipment damage.	Area was drained of water and equipment was removed to be inspected and repaired. Workers were never at risk.	Tool-Box talk to discuss isolation procedures and ensuring personnel are available to monitor activity. Also reminded team that a permit review is to be performed prior to commencement of work.
October 20, 2020	McLoughlin Pt WWTP	First Aid	While cutting rebar a worker received a small cut to their forearm from a portable saw.	Worker reported to first aid where the cut was cleaned and bandaged. No further treatment was required.	Tool-box talk to remind workers that hazard assessments of the work activity must be conducted prior to commencement.
October 28, 2020	Clover Point Pump Station	Report Only	Sub-contractors inadvertently interrupted operations of the grit system.	While maneuvering scaffolding in a restricted space part of their scaffold hit the emergency STOP button for the grit pump. No damage occurred and the operators restarted the equipment.	Tool-box talk to discuss proper care and control while moving materials in a restricted area.
November 3, 2020	McLoughlin Pt WWTP	Report Only	While demobilizing site trailers at the laydown area workers were removing de-energized temporary power cables.	All cables were tested and deemed not energized. Unfortunately there were a number of cables and it was determined after removal that they had cut a low voltage cable which was to remain in service.	There were no injuries and the cable was reinstalled.
November 12, 2020	Trent Forcemain	Report Only	A vehicle moving through an active worksite struck and damaged the contractor's site trailer. The trailer was well off the travelled portion of the road and delineators adequately placed around the trailer.	The driver misjudged the roadway and drove over the delineators. The front right of the vehicle hit the corner of the trailer damaging a panel. At the time of the incident normal two-way traffic was occurring though the site on Dallas Road.	The contractor ensured the driver was uninjured, contacted the police and aided in safely removing the vehicle. Delineators were reinstated around the corner of the trailer.
November 12, 2020	McLoughlin Pt WWTP	Near Miss	Worker while moving around the site stopped, made eye contact with a driver of a moving vehicle. The driver signaled for the worker to proceed.	The driver pulled forward while worker was in close proximity to the vehicle.	Tool-box talk held to discuss proper communication and eye contact. Emphasis placed on vehicle movement and signaling pedestrian to proceed.
November 24, 2020	McLoughlin Pt WWTP	Report Only	Operator identified a leak from a manway door in the BAF area.	The manway was isolated and resealed.	No injuries or damage to any equipment were recorded.

Date	Work Site	Incident Type	Description	Outcome	Corrective Action Taken
November 26, 2020	McLoughlin Pt WWTP	Near Miss	While demobilizing site trailers at the laydown area workers were removing a stockpile of crushed blast rock. While excavating the operator notice a conduit exposed in the side of the bank.	A conduit was exposed and removal of rock immediately ceased. Upon investigation it was determined that the conduit housed an active 120V power feed.	There were no injuries or damage recorded. The conduit was re-buried and the contractor reviewed Ground Disturbance requirements when removing stockpiles from site.
December 1, 2020	McLoughlin Pt WWTP	First Aid	Worker sustained minor injury to hand while using a hand held reciprocating saw to cut a lock.	The blade jumped, causing 1/2 inch laceration to the left thumb. Worker was wearing gloves at time of incident however had not secured the lock.	Worker attended first aid and was treated on site. Tool-box talk topic on the safe use of hand tools.

Key safety activities conducted during October included:

- bi-weekly project update meetings with prime contractors: Knappett, NAC, HRMG, Kenaidan, Jacobs Brothers;
- monthly update meetings with prime contractors: HRP;
- monthly Incident Investigation reviews;
- Great Shake Out Earthquake and Annual Emergency Evacuation Drill;
- reviewed site specific safety plans and high risk tasks; and
- Safety Manager and/or Construction Manager conducting regular site inspections at all active Project work sites.

Key safety activities conducted during November included:

- bi-weekly project update meetings with prime contractors: Knappett, NAC, HRMG, Jacob Brothers, Don Mann and Kenaidan;
- monthly update meetings with prime contractor: HRP;
- monthly Incident Investigation reviews;
- participated in BC Hydro access road pre-job planning meeting;
- hosted Prime Contractor Safety Meeting;
- reviewing daily progress reports and contacting Primes of any safety notations or observations contained within those reports;
- reviewed COVID-19 document submissions from CRD Corporate;
- reviewed site specific safety plans and high risk tasks; and
- Safety Manager and/or Construction Manager conducting regular site inspections at all active Project work sites.

Key safety activities conducted during December included

- bi-weekly project update meetings with prime contractors: Knappett, NAC, HRMG, Kenaidan, Jacobs Brothers and Don Mann;
- monthly update meetings with prime contractor: HRP;
- reviewed site specific safety plans and high risk tasks;
- reviewed daily progress reports and contacting Primes of any safety notations or observations contained within those reports;
- participated in CRD Corporate Health and Safety Risk Registry meeting; and
- reviewed COVID-19 document submissions from CRD Corporate.

Table 3: WTP Safety Information

	Reporting Period (October - December 2020)	Project Totals
Person Hours		
PMO	8062	166,290
Project Contractor	137,485	2,323,273
Total Person Hours	145,547	2,489,563
PMO	23	
Project Contractors (& Project Consultants) working on Project Sites	729	
Total Number of Employees	752	
Near Miss Reports	2	49
High Potential Near Miss Reports	0	7
Report Only	6	185
First Aid	2	69
Medical Aid	1	12
Medical Aid (Modified Duty)	0	2
Lost Time	0	5
Total Recordable Incidents	0	19
		Project Frequency (from January 1, 2017)
First Aid Frequency		5.5
Medical Aid Frequency		1.1
Lost time Frequency		0.4
Total Recordable Incident Frequency		1.5

2.2 Environment and Regulatory Management

Environmental and regulatory activities continued over the reporting period relating primarily to the execution of current work.

2.2.1 Environment

Environmental work progressed as planned over the reporting period. The focus was on environmental monitoring of construction activities.

Key environmental management activities completed in October included:

- Riparian restoration planting was completed at the Peers creek and Colquitz River sites. Plantings included replacement trees and native plants.
- The CRD submitted an Environmental Effects Determination Amendment to the Department of National Defence for the construction of an access road for new BC Hydro power lines.

Key environmental management activities completed in November included:

- An End-of-Spill report was submitted to the BC Ministry of Environment and Climate Change Strategy (ENV) in fulfilment of requirements related to the minor release of

residual solids at a low point drain valve location on the Residual Solids Conveyance Line within Hartland Landfill;

- An End-of-Spill report was submitted by HRP to ENV in fulfilment of requirements related to the small release of wastewater into the ocean at the McLoughlin Point Site; and
- HRMG continued with spill remediation and environmental monitoring associated with the release of residual solids at the Residuals Treatment Facility (RTF) site that occurred on October 13.

Key environmental management activities completed in December included:

- HRMG continued monitoring activities associated with the release of residual solids at the RTF site and began preparing an End-of-Spill report for submission to ENV.

Over the reporting period, there were four environmental incidents:

- On October 13, there was a release of residual solids at the Residuals Treatment Facility (RTF) site. A temporary pipe failed during the commissioning process. Some of the residual solids were contained on-site (within Hartland Landfill) but some travelled through a culvert and collected in a nearby low area in the CRD's Mount Work Regional Park. The release was reported to Emergency Management BC, in accordance with the Spill Reporting Regulation. Environmental professionals assessed the affected area and provided oversight over remediation activities, including on the appropriate monitoring and testing protocols. It was determined that there was no surface flow to Durrance Lake but samples were taken as a precaution: microbiological indicators in the samples were present at consistent or slightly lower levels than prior to the incident, demonstrating that the release did not impact Durrance Lake.
- On October 19, there was a minor release of residual solids at a low point drain valve location on the Residual Solids Conveyance Line within Hartland Landfill, as a result of a valve failure. The valve was changed and all valve chambers on the Residual Solids Conveyance Line were inspected to confirm that the installed fail-safe mechanisms were operable. The release was mostly contained within a manhole, although some residual solids over-topped the manhole and drained through gravel. The release was reported to Emergency Management BC, in accordance with the Spill Reporting Regulation. Environmental professionals assessed the affected area and provided oversight over remediation activities, including on the appropriate monitoring and testing protocols.
- On October 27, there was a small release of wastewater into the ocean at the McLoughlin Point Site. After a power outage a gate closed resulting in wastewater flowing into the site's storm system. The majority of wastewater was collected on-site but approximately 5 cubic meters entered a planter in the site's storm system and then into the ocean. An environmental professional assessed the potential impacts to be very low, and water samples were collected to confirm this. There is no indication of public health or long-term environmental impacts. The release was reported to Emergency Management BC, in accordance with the Spill Reporting Regulation.
- During heavy rains on December 21, sediment control measures at the Clover Point pump station were initially overwhelmed, leading to a surface run-off and sediment-laden water entering the marine environment. Once Kenaidan repaired the silt fencing at the site, sediment ceased entering the environment. Kenaidan reported the sediment

release to Emergency Management BC. No long-term environmental impacts are anticipated.

2.2.2 Regulatory Management

Over the reporting period, the Project Team continued to support or lead the advancement of the few regulatory approvals remaining.

Key permitting activities in October included:

- The CRD received a Certificate of Compliance (CoC) from the Province for the McLoughlin Point site. The CoC is a provincial legal instrument that demonstrates that a given site complies with contamination remediation standards.

Key permitting activities in November included:

- The Department of National Defence (DND) approved an Environmental Effects Determination (EED) Amendment related to the construction of an access road for new BC hydro power lines.

Key permitting activities in December included:

- The CRD completed and submitted an EED Amendment to DND for the temporary storage of material on their property.

The status of the two remaining key Project permits are summarized in Table 4. The table is not a list of all required Project permits, but rather a summary of the status of key Project permits. For the two permits in the table, the anticipated date and party responsible were updated from the table presented in the Project's Q3 2020 Quarterly Report:

- The anticipated date was changed from 'following completion of construction' to Q1 2021; and
- The party responsible was updated from HRP to the CRD, as HRP have met their responsibilities and the CRD is finalizing the text of the leases with Transport Canada

Table 4- Key Permits Status

<i>Permit/Licence</i>	<i>Anticipated Date</i>	<i>Status</i>	<i>Party Responsible for Obtaining Perming</i>
McLoughlin Point Harbour Crossing			
Transport Canada Lease	Q1 2021	On track	CRD
McLoughlin Point Outfall			
Transport Canada Lease	Q1 2021	On track	CRD

2.3 First Nations

First Nations communication and engagement was ongoing over the reporting period. Meetings with the Esquimalt and Songhees' liaisons continued, as did meetings with the WSÁNEĆ Leadership Council's (WLC) liaison. The meetings are a forum for covering both Project-related issues with the potential to impact First Nations, as well as an opportunity for broader discussion of CRD-related issues.

Key activities in October included:

- The CRD and the Songhees, Esquimalt and WLC liaisons discussed re-interment of Ancestral remains following Project completion. Discussions included scheduling of a burning ceremony to honour the Ancestors and planning a burning ceremony that complies with COVID protocols.

Key activities in November included:

- The CRD and the Songhees and Esquimalt liaisons discussed close-out of Support Agreement commitments and how that should be documented.

Key activities in December included:

- The CRD's archaeologist joined meetings with the Songhees, Esquimalt and WLC liaisons to provide an update on analysis of artifacts that have been uncovered during project work.

2.4 Stakeholder Engagement

The Project maintained its ongoing two-way Communications and Engagement Plan to provide Project information to stakeholders, communities and the public and to respond to public inquiries. The key focus of the communications and engagement activities over the period was to keep residents and stakeholders informed of Project plans, progress and construction information, and to receive and respond to questions and concerns raised by the community. A variety of communications tools and engagement activities were utilized to support the implementation of the plan, including stakeholder meetings, Project website updates and notifications of construction through notices and a public inquiry program, among other methods.

October Overview

One construction notice was issued to stakeholders in October:

- Trent Forcemain: Dallas Road Closure (October 19, 2020) (Appendix A)

The construction notice was hand delivered to four buildings, including an apartment building, on Dallas Road near the road closure. In addition, as part of ongoing construction communications, residents affected by localized, temporary disruptions, such as driveway impacts, were notified by hand delivery of notices.

In October the Project website, wastewaterproject.ca, was updated with information about the Project. The construction notice and an update on the Environmental Incident at the Residual Treatment Facility (Appendix B) were posted.

The CRD's Twitter and Facebook accounts were used to provide Project information to the public, including: a traffic advisory regarding the closure of Dallas Road required for Trent Forcemain construction work; and information on the Environmental Incident at the Residual Treatment Facility.

Over the month of October, the Project Team held meetings with the following community groups and representatives, and municipality representatives:

- City of Victoria Technical Working Group;

- District of Saanich Technical Working Group; and
- meeting and site tour with representative from the Willis Point Residents Association.

November Overview

One construction notice and one letter were issued to stakeholders in November:

- McLoughlin Point: BC Hydro Access Road (November 6, 2020) (Appendix C)
- Trent Forcemain: Dallas Road Update Letter (November 23, 2020) (Appendix D)

The construction notice was hand delivered to 54 homes on Thomas Street, Bewdley Avenue between Peek Street and Anson Street; and Anson Street between Bewdley Avenue and Thomas Street. A letter providing more information to residents about the Trent Forcemain work taking place along the Dallas Road Seawall was hand delivered to 54 residents along Dallas Road between Clover Point and Memorial Crescent, Bushby Street between Dallas Road and George Street, and Eberts Street between Dallas Road and Bushby Street. In addition, as part of ongoing construction communications, residents affected by localized, temporary disruptions, such as driveway impacts, were notified by hand delivery of notices.

A sign was posted at the Macaulay Point Pump Station providing an update on the work that was taking place (Appendix E).

In November, the Project website, wastewaterproject.ca, was updated with information about the Project. The construction notice and Macaulay Point Pump Station sign were posted.

The CRD's Twitter account was used to provide Project information to the public, including: information about the McLoughlin Point Wastewater Treatment commissioning.

Over the month of November, the Project Team held meetings with the following community groups and representatives, and municipality representatives:

- Esquimalt Liaison Committee;
- City of Victoria Technical Working Group;
- District of Saanich Technical Working Group; and
- meeting and site tour with representatives from the Willis Point Residents Association.

December Overview

In December, the CRD announced that the Wastewater Treatment Project is now treating wastewater and is exceeding regulatory requirements. This announcement was coordinated with the Project's funding partners – the Province of BC and Government of Canada – and the Project's First Nations service participants (Songhees and Esquimalt Nations).

Given the public health guidance, in-lieu of an in-person opening event the announcement was made through a media release (Appendix F) and a video (https://www.youtube.com/watch?v=w8_U5-Ofq44) which showcased the Project components, thanked the funding partners, acknowledged First Nations on whose traditional territory the Project has been built, and recognized the patience of residents over the construction period.

The announcement and video were emailed to local and Seattle media; posted to the Project website and the CRD's Twitter, Facebook, YouTube, and LinkedIn accounts; and distributed by

email to the Esquimalt Liaison Committee and more than 730 residents and stakeholders who have signed up to receive Project updates.

While the CRD were hoping to celebrate achievement of this milestone with an in-person event, we were pleased to receive the coverage that was hoped for – locally, provincially, nationally and internationally – to inform stakeholders of Project progress.

Over the month of December, the Project Team held meetings with the following community groups and representatives, and municipality representatives:

- City of Victoria Technical Working Group; and
- District of Saanich Technical Working Group.

Public Inquiries

Public inquiry numbers from the Project email address and 24/7 information phone line (1 844 815-6132) are noted in Table 5.

Table 5 – Project Inquiries- October - December 2020

Inquiry Source	Contacts for October to December 2020
Information phone line inquiries	74
Email inquiries responded to	69

Key themes of the public inquiries were as follows:

- questions regarding scaffolding at Gorge Bridge and Admirals Bridge;
- interest in restoration, landscaping along Dallas Road and at Clover Point;
- questions regarding impacts to driveway access and parking due to construction and restoration work;
- questions regarding vibrations caused by Trent Forcemain work;
- questions regarding odour during the commissioning process, especially for the Residuals Treatment Facility;
- interest in tours or public access to the McLoughlin Point Wastewater Treatment Facility; and
- interest in restoration, landscaping and the final look of facilities.

2.5 Resolutions from Other Governments

There were no resolutions related to the Project passed by other governments during the reporting period.

2.6 Schedule

Progress over the reporting period is summarized in Section 2.9.

Figure 1 shows the high-level Project schedule. This schedule has been updated from that shown in the Q3 2020 Quarterly Report with the extension of commissioning activities at both Clover Point Pump Station and Macaulay Point Pump Station to the end of December 2020.

Over the reporting period the COVID-19 public health emergency continued to have impacts on the Project. However, on December 15, 2020, the Government of Canada, the Government of

British Columbia, and the Capital Regional District (CRD) announced that the Wastewater Treatment Project is treating wastewater and is exceeding regulatory requirements. The majority of construction is complete on the major components of the Wastewater Treatment Project. Construction continues on the Trent Forcemain and Arbutus Attenuation Tank. These are being built to increase the capacity of the conveyance system and are expected to be complete in spring 2021.

Figure 1- High-Level Project Schedule

Wastewater Treatment Project Schedule*

Construction + Commissioning



*Schedule subject to updates as Project planning progresses.

2.6.1 30 day look ahead

Key activities and milestones for the next 60 days (January) are outlined below by function.

Safety

- bi-weekly and monthly prime contractor progress meetings;
- host Prime Contractor Safety Meeting;
- review Daily Progress reports and contact prime contractors of any safety notations or observations contained within those reports;
- updating Prime Contractors WorkSafeBC Clearance and Rate information for 2021;
- review of any site specific safety plans or high risk tasks;
- review prime contractor document submissions;
- issue Safety Notices for trending observations or similar incidents occurring on project sites;
- WTP Safety Manager will conduct regular site inspections at all active Project work sites; and
- incident reporting review with prime contractors at active work locations.

Environment and Regulatory Management

- HRMG to submit an End-of-Spill report to ENV related to the October 13 residual solids spill.

First Nations

- CRD to continue meeting with the Songhees and Esquimalt liaisons and WSANEC liaison.

Stakeholder Engagement

- ongoing construction communications with stakeholders; and
- ongoing community liaison meetings.

Cost Management and Forecast

- prepare cost reports;
- prepare 2020 Final Service Budgets;
- monitor schedule; and
- fiscal year end close.

Construction

McLoughlin Point

- clean up and demobilize site.

Clover Point Pump Station

- installation of public art; and
- ongoing landscaping.

Macaulay Point Pump Station

- reinstate surfaces; and
- landscaping.

Residuals Treatment Facility

- load testing; and
- progress commissioning.

Residual Solids Pump Stations

- landscaping.

Arbutus Attenuation Tank (AAT)

- install electrical duct banks for power;
- install valve chamber piping;
- install air intake and supply tank;
- install air intake heating ventilation and air conditioning (HVAC) ducting;
- install gas detection panel and system in electrical room;
- install motor control centre; and
- complete roofing.

Trent Forcemain

- install sanitary sewer on Dallas Road between Bushby and Clover Point Pump Station; and
- surface restoration.

2.6.2 60 day look ahead

Key activities and milestones for the next 60 days (February) are outlined below by function.

Safety

- bi-weekly and monthly prime contractor progress meetings;
- review of any site specific safety plans or high risk tasks;
- review prime contractor document submissions;
- issue Safety Notices for trending observations or similar incidents occurring on project sites;
- WTP Safety Manager will conduct regular site inspections at all active Project work sites; and
- incident reporting review with prime contractors at active work locations.

Environment and Regulatory Management

- HRMG to continue monitoring activities associated with the release of residual solids at the RTF site.

First Nations

- Songhees and Esquimalt to host a ceremonial burning to honour the ancestors that were encountered during Project construction prior to their reburial.

Stakeholder Engagement

- ongoing construction communications with stakeholders; and
- ongoing community liaison meetings.

Cost Management and Forecast

- prepare cost reports;
- monitor schedule; and
- prepare for CRD 2020 Financial Statement Audit.

Construction

Clover Point Pump Station

- install asphalt walkways, and concrete curbs;
- install public art;
- fabricate and install feature railings; and
- odour control performance testing.

Macaulay Point Pump Station

- complete landscaping.

Residuals Treatment Facility

- acceptance testing.

Residual Solids Pump Stations

- continue to work with Contractor to finalize project turnover documentation

Arbutus Attenuation Tank (AAT)

- install motor control centre;
- install Heating ventilation and air conditioning and ductwork in tank entrance room;
- install permanent overflow for attenuation tank;
- install fire alarm system; and
- install air intake and ducting.

Trent Forcemain

- Continue with installation of the gravity section of forcemain along Dallas Road.

2.7 Cost Management and Forecast

The monthly cost report for December and the quarterly report for the period (October to December 2020) are attached in Appendices G and H respectively. The cost reports summarize Project expenditures and commitments by Project Components and the major cost centres common to the Project Components.

The Project Team has been reporting budget pressures through its monthly reports to the Project Board (and CRD Board) since September 2017, primarily as a result of inflation in the Vancouver Island construction market. Other factors that have contributed to budget pressures include: design development to incorporate stakeholder input; geotechnical considerations including removal and disposal of contaminated material; and schedule constraints associated with the requirement to provide wastewater treatment by the regulatory deadline of December 31, 2020.

The Project Team forecast the cost to complete the Project at \$775M, or \$10M (1.3%) over the Project's control budget. In May 2019 the CRD Board approved an increase in the Project's budget by \$10M to \$775M, and on August 14, 2019, the associated amendment to the 2019-2023 Financial Plan was approved.

Subsequent to May 2019 the Project Team have continued to manage risks and there have been two opposing budget drivers:

- i) The Project's financing costs to-date have been lower than budgeted for two reasons: firstly as a result of low interest rates since the start of the Project, and secondly due to the receipt of funding from the provincial government earlier than forecast; and
- ii) The Project's construction costs may be higher than budgeted as many contractors have advised that there are cost impacts from the COVID-19 public health emergency. Impacts include labour availability, work modifications to comply with provincial guidelines, and delays to the delivery of equipment and supplies.

It is too early to determine the cost impact to the Project, but given the ability to offset the unforeseen costs of COVID-19 through the finance cost savings, the Project Team remain confident that, if construction continues at the current pace, the Project cost will be within the Project's \$775M budget.

2.7.1 Commitments

Commitments were made over the reporting period in furtherance of delivering the Project. The net commitments made during the reporting period resulted in an increase in committed costs of \$3.5 million. The significant commitments made in the reporting period include work on the Trent Forcemain sanitary sewermain and the installation of a secant pile to protect the sanitary sewer main, work on the BC Hydro access road, ferric dosing at the WWTP, the RTF biosolids load chute, and the approval of provisional items in construction contracts and contract change orders.

2.7.2 Expenses and Invoicing

The Project expenditures for the reporting period were as expected and were within the budget allocations for each of the budget areas. The main Project expenditures incurred over the reporting period were associated with commissioning, construction activities and project management office-related costs.

2.7.3 Contingency and Program Reserves

Over the reporting period contingency draws of \$0.9M were made as summarised in Table 6. The draws to-date and remaining contingency and program reserve balances are also summarized in Table 6.

Table 6- Contingency and Program Reserve Draw-Down Table

WTP Contingency and Program Reserve Draws and Reallocations	Draw Date	\$ Amount
Contingency and Program Reserve (in Control Budget)		\$ 69,318,051
Net Contingency and Program Reserve draws to September 30, 2020		\$ (54,424,667)
Contingency and Program Reserve balance as at September 30, 2020		\$ 14,893,384
DND Request to Convert Temporary Area D Yard Works Laydown into Permanent Facility (CCN-021)	Oct-20	\$ 15,000
WWTP- Z.48 – Sample Sinks Washdown Water	Oct-20	\$ (25,595)
Costs associated with seeking the Certificate of Compliance for Remediation of WWTP Site	Oct-20	\$ (64,735)
Costs associated with seeking the Certificate of Compliance for Remediation of WWTP Site	Nov-20	\$ (15,909)
Ferric dosing at the Wastewater Treatment Plant	Nov-20	\$ (457,100)
WWTP Total Draw		\$ (548,339)
Changes to the Biosolids Loadout Chute	Dec-20	\$ (86,276)
RTF Total Draw		\$ (86,276)
Additional SCADA Licenses for Clover Point Pump station	Nov-20	\$ (24,414)
Relocation of the Cathodic Protection Rectifier Panel	Nov-20	\$ (83,440)
Additional SCADA Licenses for Macaulay Point Pump Station	Nov-20	\$ (24,414)
Exhaust Stack Cladding Installation	Dec-20	\$ (39,453)
Peers Creek Culvert Replacement and Supporting Utility Replacement	Dec-20	\$ (78,000)
Conveyance Total Draw		\$ (249,720)
PMO Total Draw		\$ -
BC Hydro Total Draw		\$ -
WTP Program Reserve Draw		\$ -
Contingency and Program Reserve credits in the reporting period		\$ 15,000
Contingency and Program Reserve draws in the reporting period		\$ (899,335)
Contingency and Program Reserve balance as at December 31, 2020		\$ 14,009,048

2.7.4 Project Funding

The federal and provincial governments are assisting the Capital Regional District in funding the Project.

The Government of British Columbia will provide \$248 million towards the three components of the Project, while the Government of Canada is contributing:

- \$120 million through the Building Canada Fund Major infrastructure Component towards the McLoughlin Point WWTP;
- \$50 million through the Green Infrastructure Fund towards the conveyance system; and
- up to \$41 million towards the RTF through the P3 Canada Fund.

The Project Team has applied to the Federation of Canadian Municipalities (FCM) for additional funding and has executed a grant agreement for the contribution of up to \$346,900 towards the delineation of the contamination and remediation and risk assessment for the McLoughlin Point Wastewater Treatment Plant.

In December the Federation of Canadian Municipalities awarded the CRD a \$20 million loan and \$3 million grant funded by the Government of Canada through the Green Municipal Fund (GMF). This funding body is focused on investing in innovative solutions to reduce pollution and improve energy efficiency. The combination of the loan and the grant will reduce interest costs to the Core Area Wastewater Service: it will not reduce the CRD's contribution towards the capital cost of the Project and therefore will not be tracked in Table. 7.

The status of funding claims is summarised in Table 7. Note that the timing for the provision of Government of British Columbia and Government of Canada's funding differs by funding source. The Project Team will submit claims to the funding partners in accordance with the relevant funding agreements. In accordance with the funding agreements, the remainder of the funding cannot be claimed until relevant Project components are substantially complete.

Table 7- Project Funding Status

Funding Source	Maximum Contribution	Funding Received in the Reporting Period	Funding Received to Date
Government of Canada (Building Canada Fund)	\$120M	-	\$108M
Government of Canada (Green Infrastructure Fund)	\$50M	-	\$45M
Government of Canada (P3 Canada Fund)	\$41M	-	-
Government of British Columbia	\$248M	-	\$186M
Federation of Canadian Municipalities	\$0.3M	-	-
TOTAL	\$459.3M	-	\$339M

2.8 Key Risks and issues

The Project Team actively identified and managed Project risks over the reporting period. Table 8 summarizes the highest-level risks that were actively managed over the reporting period, as well as the mitigation steps identified and/or undertaken over the reporting period.

The following changes were made to the active risks summary over the quarterly reporting period: the removal of two risks (downstream and upstream work delays) that were closed in the previous quarterly reporting period.

The COVID-19 public health emergency continued to have impacts on the Project over the reporting period. It is anticipated that these impacts may affect several of the Project's risks. The Project Team are currently evaluating the impact of the public health emergency on the Project's risks, and anticipates that changes may be made to several of the risks as the situation evolves. Those risks that the Project Team have identified as potentially impacted, and that are currently under review, are identified in Table 8.

Table 8- Project Active Risks Summary

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Project				
Misalignment between First Nations' interests and the implementation of the Project.	The assessed risk level reflects the Project Team's priority of establishing strong and effective relationships with First Nations interfacing with, or interested in, the Project.	First Nations engagement activities remained ongoing over the reporting period (see section 2.3 for further details).	L	No change
Divergent interests between multiple parties and governance bodies whose co-operation is required to successfully deliver the Project.	The assessed risk level reflects the Project Team's priority of establishing strong and effective relationships with municipal, provincial and federal government departments.	The Project Team continued engagement with municipal, provincial and federal government departments throughout the reporting period.	L	No change
Misalignment between Project objectives/scope and stakeholder expectations.	The assessed risk level reflects the Project Team's priority of establishing strong and effective community stakeholder engagement.	Community engagement activities were ongoing over the reporting period (see section 2.4 for further details).	L	No change
Lack of integration between Project Components.	Planning challenges and system integration between the McLoughlin point WWTP, RTF and Conveyance System components of the Project results in schedule delays and/or additional Project costs.	Physical and schedule interfaces are clearly delineated in all construction contracts along with the requirement for commissioning and control plans. The Project Team has used a single Owner's engineer (Stantec) to develop the indicative design for all critical project components with significant interfaces. Commissioning and control plans are under development	L	No change
Senior government funds issue delayed.	The assessed risk level reflects the Project Team's priority of ensuring Project funding commitments are honoured.	Responsibility for meeting funding commitments has been assigned and is being monitored.	L	No change
Public directly contacting contractors at sites.	Direct contact between the public and contractors could expose both parties to worksite hazards and potential injuries.	Communications and engagement plan and coverage of communications in contractor orientations.	L	No change.

Risk Event	Description of Risk Event	Risk mitigation activities undertaken or planned in the reporting period	Assessed risk level	Trend in risk level from previous reporting period
Change in law.	A change in law impacts the scope, cost or schedule of the Project.	Keep apprised of proposed modifications to relevant regulations so as to do the following as appropriate: submit comments on proposed modifications; and/or consider including anticipated modifications in contracts.	H	No change: this risk has been impacted by the COVID-19 public health emergency
Labour - availability and/or cost escalation.	There is insufficient labour available to construct the Project, and/or there is significant labour cost.	The Project Team will, through the use of competitive selection processes for all construction contracts, ensure that all Project contractors have appropriate experience and therefore understand labour risk.	L	No change
Disagreement on contractual obligations of the construction contractors.	There is a disagreement between the Project Team and a contractor regarding the performance of their contractual obligations.	The Project Team takes a proactive management approach to the resolution of any changes, claims and disputes that arise, working expeditiously to achieve resolution with the goal of minimizing any impacts to budget and schedule while ensuring adherence to the terms of the construction contracts.	M	No change but this risk may be impacted by the COVID-19 public health emergency (assessment is currently underway)

Risk Level Key - Assessed risk level (based on likelihood and potential impact)			
Low	Medium	High	Closed
L	M	H	C

2.9 Status (Engineering, Procurement and Construction)

2.9.1 Wastewater Treatment Plant (McLoughlin Point WWTP)

The McLoughlin Point WWTP Project Component continued with Harbour Resource Partners (“HRP” as the Design-Build contractor for the McLoughlin Point WWTP) progressing construction and commissioning activities.

Key activities in progress or completed by HRP in October were as follows:

- Primary, secondary and tertiary treatment areas: commissioned biological systems.
- O&M building:
 - heating ventilation and air conditioning (HVAC) air flush underway; and
 - safety systems nearing final commissioning.
- Site works:
 - achieved functional completion; and
 - site landscaping nearing completion.

Key activities in progress or completed by HRP in November were as follows:

- commencing the acceptance test; and
- progressing site landscaping.

Key activities in progress or completed by HRP in December were as follows:

- acceptance test completed.

Photographs of construction progress over the month of December at McLoughlin Point WWTP are shown in Figures 2-4.



Figure 2– McLoughlin Point Wastewater Treatment Plant- Blower outlet process air piping insulation installed.



Figure 3- McLoughlin Point Wastewater Treatment Plant- Aerial view of plant



Figure 4- McLoughlin Point Wastewater Treatment Plant- Site view looking east

2.9.2 Residuals Treatment Facility

The RTF Project Component continued with Hartland Resource Management Group (“HRMG” as the Design-Build-Finance-Operate-Maintain contractor for the RTF) progressing construction and commissioning activities.

Key activities in progress or completed by HRMG in October were as follows:

- Digester Area: installed roof handrails on Digester Building.
- Other Municipal Solids Receiving Facility: installed canopy.
- Residuals Drying Facility: commissioning of various systems in progress.
- Site Works:
 - poured main gate foundation; and
 - hydro seeded storm ponds.

Key activities in progress or completed by HRMG in November were as follows:

- draining water from Digester 1 and the Digested Solids Storage Tank;
- ongoing commissioning of various systems;
- completed fencing and main gate; and
- completed landscaping.

Key activities in progress or completed by HRMG in December were as follows:

- progressed commissioning.

Photographs of construction progress over the month of December at the Residuals Treatment Facility are shown in Figures 5-6.



Figure 5- Residuals Treatment Facility- Residuals Drying Facility Building



Figure 6– Residuals Treatment Facility- Aerial view of RTF

2.9.3 Conveyance System

2.9.3.1 Clover Point Pump Station

The Clover Point Pump Station continued with Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressing construction and commissioning activities.

Key construction activities in progress or completed by Kenaidan in October included:

- progressed exterior stone veneer;
- progressed grading for walkways outside of pump station;
- commenced demobilizing site compound;
- functional testing of HVAC;
- installed pipe straps to pipe supports;
- progressing painting and coating;
- fine tuning performance of screen and degritting systems; and
- complete installation of grinder pump/forcemain for public washroom.

Key construction activities in progress or completed by Kenaidan in November included:

- completed exterior stone veneer;
- grading for walkways outside of pump station;
- continue demobilizing site compound; and
- landscaping and exterior works in plaza.

Key construction activities in progress or completed by Kenaidan in December included:

- install pavement to multiuse pathway’s walkways outside of pump station;
- continued demobilizing site compound;
- progressing painting;
- completed architectural works inside the washroom at the public plaza;
- progressed landscape and public plaza works.

Photographs of construction progress over the month of December at Clover Point are shown in Figures 7-8.



Figure 7–Clover Point Pump Station- Protective Coating Installation at Mezzanine Level



Figure 8–Clover Point Pump Station- Site Overview

2.9.3.2 Macaulay Point Pump Station and Forcemain

The Macaulay Point Pump Station and Forcemain continued with Kenaidan Contracting Limited (“Kenaidan” as the Design-Build Contractor) progressing construction and commissioning activities.

Key construction activities in progress or completed by Kenaidan in October were as follows:

- Diversion Chamber
 - completed new diversion chamber;
 - ongoing backfill around the existing drop structure and new diversion chamber; and
 - completed foreshore drain works.

- Pump Station
 - demolition for the old pump station is ongoing;
 - installed non-classified flow switches;
 - installed door sidelights; and
 - installed genset stair.

Key construction activities in progress or completed by Kenaidan in November were as follows:

- completed demolition of the old pump station;
- installed screen covers;
- completed air balancing test;
- completed grit sampling test;
- backfill around the existing drop structure and new diversion chamber; and
- completed tree planting.

Key construction activities in progress or completed by Kenaidan in December were as follows:

- completed preparation for landscaping; and
- ongoing topsoil placement.

A photograph of construction progress over the month of December at Macaulay Point Pump Station is shown in Figure 9.



Figure 9–Macaulay Point Pump Station

2.9.3.3 Clover Forcemain (CFM)

Windley Contracting Ltd. (“Windley” as the Construction Contractor) completed all construction and commissioning activities over the reporting period, including:

- completed final clean up

2.9.3.4 Residual Solids Conveyance Line

The RSCL is being delivered through two construction contracts:

- Residual Solids Pipes; and
- Residual Solids Pump Stations

Residual Solids Pipes: Don Mann Excavating Ltd. (“Don Mann” as the Construction Contractor for the Residual Solids Pipes) continued construction activities over the reporting period for the Saanich infrastructure improvement being undertaken at Peers Creek, and began construction of a BC Hydro access road in the Township of Esquimalt.

Key construction activities in progress or completed by Don Mann in October were as follows:

- Peers Creek Culvert Replacement:
 - backfilled both headwalls;
 - outlet weir was shaped and cobbles placed;
 - west side cofferdam was removed and the area cleaned up, including cobble placement around the inlet;
 - all archaeological material was able to be replaced onsite and the entire east side area was topped with screened topsoil;
 - garden mulch was delivered and placed around east headwall for use by Current Environmental as they replant the riparian area;

- coco matting was secured to the gravel embankment on either side of the west headwall;
- storm drain installation was completed;
- replaced concrete curb and sidewalk on the east side;
- topsoil and grass seed were placed over the storm drain alignment adjacent to the new sidewalk; and
- completed final paving.

Key construction activities in progress or completed by Don Mann in November were as follows:

- Peers Creek Culvert Replacement:
 - pumps were set up to lower the water level on the west side of the culvert;
 - inverts of both culverts were cut out to lower the effective invert elevation;
 - installed guardrails at both headwalls; and
 - completed line painting including replacement of crosswalk lines, fog lines, and centreline.
- BC Hydro Access Road:
 - installed lawn basin at Bewdley Ave and tied into the existing drain main;
 - commenced tree removal;
 - commenced roadwork at Bewdley Ave; and
 - drilled new anchor hole for a conflicting guywire anchor.
 -

Key construction activities in progress or completed by Don Mann in December were as follows:

- Peers Creek Culvert Replacement
 - reinstated asphalt curb along the west side of the road.
- BCH Access Road
 - excavated road and subgrade gravels placed up to the first rock outcropping on Bewdley Avenue; and
 - excavated 60 meters and placed subgrade gravel on Thomas Street

A photograph of construction progress over the month of December on the Residual Solids Pipes is shown in Figure 10.



Figure 10–Residual Solids Pipes – View of site from Bewdley Ave facing south

Residual Solids Pump Stations: Knappett Projects Inc. (“Knappett” as the Construction Contractor for the Residual Solids Pump Stations) continued construction and commissioning activities over the reporting period.

Key construction activities in progress or completed by Knappett in October included:

- regraded and backfilled the centrate return line on Willis Point Rd near the RTF entrance;
- backfilled the Residuals Treatment Facility chamber and leachate connection chamber
- completed the odour control unit fence at pump stations 1, 2 and 3;
- completed backfill and trail prep at pump station 2;
- installed dampers in the Marigold valve chamber at Marigold Pump Station;
- removed fencing from multiple locations on the project;
- scaffolding was removed and sites cleaned up at Tillicum and Admirals Bridges;
- installed Hartland Flow Control Bypass;
- completed and pressure tested piping at Hartland Pump Station; and
- commenced installation of Hartland Reservoir kiosks.

Key construction activities in progress or completed by Knappett in November included:

- installed RTF leachate chamber castings, and final restoration on Willis Point Road;
- commenced irrigation work at pump stations 1 and 2;
- installed odour control unit (OCU) heat trace and insulation at pump stations 1, 2 and 3;
- Installed surge tank heat trace and insulation at pump stations 1, 2 and 3;
- landscape restoration, trail screening and OCU damper installation at Marigold Pump Station; and
- pipe tested and chlorinated at Hartland Pump Station.

Key construction activities in progress or completed by Knappett in December included:

- completed fencing at pump stations 2 and 3;
- ongoing landscaping at pump stations; and
- Hartland Reservoir:
 - installed final pad and bollards poured in place;
 - completed electrical work; and
 - reservoir filled, chlorinated, backfilled and graded.

Photographs of construction progress over the month of December on the Residual Solids Pump Stations are shown in Figures 11 and 12.



Figure 11–Residual Solids Pump Stations– Tower Fence installed around the Surge Tank



Figure 12 –Residual Solids Pump Stations – Pump Station Landscaping

2.9.3.5 Arbutus Attenuation Tank

NAC Constructors Ltd. (as the Construction Contractor for the Arbutus Attenuation Tank) continued construction activities over the reporting period.

Key construction activities in progress or completed by NAC Constructors Ltd. in October included:

- completed installation of valve chamber suspended slab reinforcing steel, water stop, and shoring;
- completed installation of attenuation tank perimeter walls and divider wall reinforcing steel;
- ongoing caisson wall system cleaning;
- commenced installation of attenuation tank column reinforcing steel;
- commenced installation of wall formwork;
- ongoing perimeter wall and divider wall concrete pours took place; and
- poured concrete for valve chamber suspended slab.

Key construction activities in progress or completed by NAC Constructors Ltd. in November included:

- installed Attenuation Tank interior room divider walls lower floor reinforcing steel;
- caisson wall system cleaning;
- installed column reinforcing steel;
- ongoing concrete pours for the majority of columns;
- installed wall formwork; and
- perimeter wall and interior room divider walls concrete pours.

Key construction activities in progress or completed by NAC Constructors Ltd. in December included:

- completed attenuation tank interior room divider walls upper floor reinforcing steel installation;
- completed caisson wall system cleaning;
- ongoing column reinforcing steel installation and concrete pours;
- completed intermediate slab rebar installation;
- completed attenuation tank wall formwork installation and concrete pours; and
- commenced shoring installation for the main roof slab.

Photographs of construction progress during the month of December at the Arbutus Attenuation Tank are shown in Figures 13 and 14.



Figure 13–Arbutus Attenuation Tank- View of Tank looking south



Figure 14–Arbutus Attenuation Tank- Concrete Pour completed at the South end of the tank

2.9.3.6 Trent Forcemain

Jacob Bros. Construction Inc. (as the Construction Contractor for the Trent Forcemain) progressed construction activities over the reporting period.

Key construction activities in progress or completed by Jacob Bros. in October included:

- completed 35m of St Charles Street Forcemain;
- ongoing storm and watermain relocation;
- recommenced Eberts Street Gravity Main at intersection with Dallas Road;
- large diameter manhole installed on Dallas Road;
- completed curb and gutter restoration on Memorial Crescent, and Bushby Street and Memorial Crescent;
- completed sidewalk restoration on Memorial Crescent and Bushby Street, and Bushby Street and Eberts;
- completed pavement restoration at Bushby Street, Brooke Street and Stannard Avenue intersection, and Memorial Crescent and May Street intersection;
- completed top-soil restoration at Ross Bay Cemetery; and
- completed stop bars on Bushby Street, Brooke Street, and May Street.

Key construction activities in progress or completed by Jacob Bros. in November included:

- completed gravity main low-pressure air test;
- installation of approximately 60m of sheet piles along Ross Bay seawall;
- excavate pipe trench;
- pre-fused high density polyethylene pipe at laydown area;
- installed electrical conduit and light post bases on Memorial Crescent;
- completed Lower Memorial Green sidewalk;
- restoration on St. Charles Street of curb, gutter, sidewalk, pavement and topsoil;
- restoration on Dallas Road at Eberts Street of curb, gutter, and pavement; and
- restoration on Memorial crescent of pavement and topsoil.

Key construction activities in progress or completed by Jacob Bros. in December included:

- installation 100m of sheet piles along Ross Bay Seawall;
- excavated pipe trench between existing seawall and sheet pile wall;
- installed two 40m sections of high density poly ethylene(HDPE) pipe;
- hydro-seeded sections of topsoil on Lower Memorial Green as part of City of Victoria improvements;
- restoration of topsoil on Lower Memorial Green; and
- restoration of pavement on Memorial Crescent/Dallas Road.

Photographs of construction progress during the month of December at the Trent Forcemain is shown in Figures 15 and 16.



Figure 15-Trent Forcemain- Seeding along Memorial Avenue.



Figure 16-Trent Forcemain- Work area by Seawall

Appendix A– Trent Forcemain: Dallas Road Closure (October 19, 2020)



UPDATE

October 21, 2020

Trent Forcemain: Dallas Road Closure

As part of construction for the Trent Forcemain, a pipe will be installed along Dallas Road and under the pedestrian path on the Dallas Road Seawall. This work will require the closure of Dallas Road at Eberts Street during work hours on the following dates:

- Monday, October 19
- Tuesday, October 20
- Wednesday, October 21
- Thursday, October 22
- Friday, October 23

On street parking along Dallas Road between Eberts Street and Memorial Crescent will be restricted during this work. Please refer to construction signage.

What to Expect

- A trench will be excavated, the pipe will be installed, and the trench will be backfilled.
- Steel road plates may be installed overnight in some locations.
- Noise associated with this work includes excavation machinery and truck back-up beepers.
- Equipment will be temporarily stored in the area.

Traffic Impacts

- Dallas Road will be closed at Eberts Street during work hours for approximately one week. A detour will be in place.
- Traffic control areas will be delineated by cones and signs and controlled by flaggers.

Access

- On street parking along Dallas Road between Eberts Street and Memorial Crescent will be restricted while construction takes place on Dallas Road.
- Access to your property may be impacted for short periods of time due to the presence of equipment.

Work Hours

- Monday to Friday from 7:00 a.m. to 7:00 p.m.
- Saturday 8:00 a.m. to 7:00 p.m.

Thank you for your patience while we complete this work. We apologize for any inconvenience this may cause.

Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca

Appendix B– Environmental Incident at the Residual Treatment Facility



Residual Treatment Facility Environmental Incident

During commissioning of the Residuals Treatment Facility, a temporary pipe failed on October 13, 2020 resulting in the release of residual solids. Some of the residual solids were contained on-site (within the Hartland Landfill) but some travelled through a culvert and collected in a nearby low area in the CRD's Mount Work Regional Park. Signs have been installed advising park users not to enter the affected area.

There is no indication of public health or long-term environmental impacts, including to Durrance Lake.

Environmental professionals assessed the affected area, are overseeing the remediation activities, and are advising on the appropriate monitoring and testing protocols.

The release was reported to Emergency Management BC, in accordance with the Spill Reporting Regulation.

Any questions about the work, please contact the Project Team.



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Appendix C– McLoughlin Point: BC Hydro Access Road (November 6, 2020)



November 6, 2020

McLoughlin Point: BC Hydro Access Road

As part of construction for the McLoughlin Point Wastewater Treatment Plant, BC Hydro and the Capital Regional District will be installing new power lines and an access road. The power lines will run along Munro Street, Anson Street, and Thomas Street and a new gravel access road will be built between Thomas Street and Bewdley Avenue (please see map on reverse).

Work is expected to begin on the access road in the week of November 9 and is expected to be complete in approximately 10 weeks. Once the access road is in place BC Hydro will begin working to install the power lines.

What to Expect for the Construction of the Access Road

- The access road route will be cleared and the area prepared for construction.
- Rock will be removed by blasting and mechanical means.
- Pre- and post-blast surveys will be conducted when blasting is required. Notification will be provided to residents directly.
- The road will be graded and the gravel surface will be installed.
- Noise associated with this work includes blasting, excavation machinery, and truck back-up beepers.
- Equipment will be temporarily stored in the area.

Blasting Procedure

- Each blast will last less than 60 seconds
- All blasts will be covered with blast mats. Blasting signs will be posted, and warning signals will be used as follows:
 - 12 short whistles at one second intervals followed by a two minute pause
 - Blast will be detonated
 - One long whistle signals all is clear
 - Blasting Hours: Monday to Friday, 8:00 a.m. to 4:30 p.m.

Work Hours

- Monday to Friday 7:00 a.m. to 7:00 p.m.

Traffic Impacts

- There are no traffic impacts anticipated for work on the BC Hydro access road.

About the Wastewater Treatment Project

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees Nations by the end of 2020.

Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca



BC Hydro Power Line and Access Road Route



Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca

Appendix D– Trent Forcemain: Dallas Road Update Letter (November 23, 2020)



Wastewater Treatment Project

November 23, 2020

Dear Resident,

We would like to provide an update about the construction on the Dallas Road Seawall and acknowledge concerns we have heard regarding impacts on the neighbourhood.

Unfortunately, the construction along the seawall causes some unavoidable noise and vibration due to the nature of the work and location of infrastructure.

While vibrations have and will occur, the contractor is required to ensure that no damage is caused by construction activities. The vibrations are being monitored to ensure that they remain below the threshold for damage.

The work along the seawall is taking place in segments. It takes approximately two weeks for the contractor to install the sheet piles in one segment. For the following two weeks, after the sheet piles are installed, the work changes and a trench is excavated, pipe is installed and the trench is backfilled within that segment. The work then moves onto the next segment and the sheet piling begins once again. This approach means that the vibrations experienced due to the sheet piling activities will pause for approximately two weeks at a time.

Another concern we have been hearing is that the contractor is stockpiling materials in a parking area along Dallas Road. This location was approved by the City of Victoria and was selected for a number of reasons including safety. While the location for this stockpile won't change the contractor is looking into ways to reduce the noise and vibrations caused by working in this area.

Construction on the Trent Forcemain is nearly 80% complete and we expect the work along Dallas Road should be finished by early next year.

We appreciate your patience as this work is being completed. Please feel free to contact us at our 24/7 phone line 1-844-815-6132 or email wastewater@crd.bc.ca if you have any questions.

Thank you,

Wastewater Treatment Project Team

Appendix E– Macaulay Point Pump Station Sign



Macaulay Point Pump Station Update

The Wastewater Treatment Project Team wants to thank you for your patience during the construction of the Macaulay Point Pump Station. We are close to the end of the Project and are now in the final restoration stage.

Construction on the new Macaulay Point Pump Station is coming to an end and it is undergoing the commissioning (or testing) phase. This means that the new pump station is now pumping wastewater to the McLoughlin Point Wastewater Treatment Plant for treatment rather than releasing untreated sewage into the ocean. During this phase some short-term increases in odour may occur. Thanks to the state-of-the-art odour control system, there should be no discernible odour in the community once testing is complete.

Landscaping

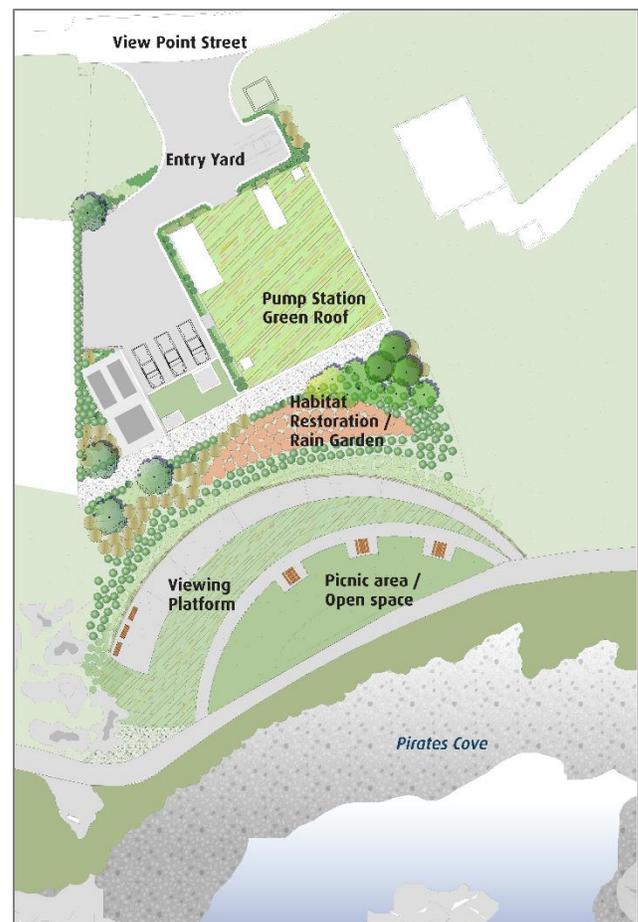
The next steps include landscaping and restoration. The landscaping will create an attractive and welcoming waterfront space to be enjoyed.

Thank you

We recognize construction has been disruptive and want to thank you for your patience. We hope you will enjoy the new park-like setting once it is complete.

About the Wastewater Treatment Project

The Wastewater Treatment Project will provide tertiary treatment for wastewater from the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Langford and Colwood, and the Esquimalt and Songhees Nations by the end of 2020.



Any questions about the work, please contact the Project Team.



24/7 Phone Line
1.844.815.6132



Email
wastewater@crd.bc.ca



Website
wastewaterproject.ca

Appendix F– Media Release- CRD’s Wastewater Treatment Project begins treating wastewater (December 15, 2020)



Media Release

For Immediate Release

December 15, 2020

CRD's Wastewater Treatment Project begins treating wastewater

Victoria, BC– The Government of Canada, the Government of British Columbia, and the Capital Regional District (CRD), are pleased to announce that the Wastewater Treatment Project is now treating wastewater and is exceeding regulatory requirements.

The \$775-million Wastewater Treatment Project provides wastewater treatment for the core area municipalities of Victoria, Esquimalt, Saanich, Oak Bay, View Royal, Colwood and Langford and the Esquimalt and Songhees Nations. It was approved in 2016 and has been under construction for four years. The Project consists of three main components:

- The McLoughlin Point Wastewater Treatment Plant in Esquimalt, which provides tertiary treatment to the core area's wastewater;
- The Residuals Treatment Facility located in Saanich at the Hartland Landfill, which turns residual solids into Class A biosolids; and
- A conveyance system, which carries wastewater from across the core area to the treatment plant, and residual solids to the Residuals Treatment Facility.

The Wastewater Treatment Project was built to meet federal and provincial regulations for wastewater treatment. The McLoughlin Point Wastewater Treatment Plant can treat 108 megalitres of wastewater per day to a tertiary level – one of the highest levels of treatment available which exceeds the regulatory requirements. The wastewater system is controlled and monitored 24/7. The state-of-the-art facility has 24-hour odour control monitoring and there will be no discernible odour in the community.

The Residuals Treatment Facility turns residual solids from the McLoughlin Point Wastewater Treatment Plant into Class A biosolids. These are the highest quality by-product suitable for beneficial use. The biosolids will be transported to the Lower Mainland where they will be used as an alternative fuel source for a cement manufacturing facility for five years, helping reduce their reliance on non-renewable fuels to power the facility. The CRD is currently in the process of determining a long-term biosolids strategy.

The majority of construction is complete on the major components of the Wastewater Treatment Project. Construction continues on the Trent Forcemain and Arbutus Attenuation Tank. These are being built to increase the capacity of the conveyance system and are expected to be completed in spring 2021.

The CRD would like to thank the Lekwungen speaking peoples, known today as Songhees and Esquimalt Nations, for their support of the Wastewater Treatment Project, much of which is located on their traditional territories. The CRD would also like to thank the WSÁNEĆ Nations as the Residuals Treatment Facility and parts of the conveyance system are located within their traditional territories.

The Wastewater Treatment Project is funded by the Government of Canada (\$211 million), the Government of British Columbia (\$248 million) and the Capital Regional District (\$316 million).

Please enjoy a video to celebrate this achievement. https://youtu.be/w8_U5-Ofq44

Video Speaking Times

00:51 – Florence Dick, Songhees Nation Liaison

04:41 - The Honourable Catherine McKenna, Minister of Infrastructure and Communities

05:27 - The Honourable John Horgan, Premier of BC and Jay Inslee, Governor of Washington State

07:31 – Colin Plant, CRD Board Chair

A backgrounder follows.

Quotes:

The Honourable Catherine McKenna, Minister of Infrastructure and Communities – “The Government of Canada’s investments in wastewater treatment are helping keep the Strait of Juan de Fuca safe and clean for marine life. Operations at the new McLoughlin Point Wastewater Treatment Plant are now underway, saving energy, supporting community development and preserving the Strait for future generations. Canada’s infrastructure plan invests in thousands of projects, creates jobs across the country, and builds cleaner, more inclusive communities.”

The Honourable John Horgan, Premier of British Columbia – “Congratulations to the Capital Regional District for completing the McLoughlin Point Wastewater Treatment Plant. This state-of-the-art facility means a cleaner future for the region. Our government will continue to support initiatives like this one that protect our environment and create jobs for generations to come.”

Colin Plant, CRD Board Chair – “This Project has been years in the making and I’m very pleased we are meeting our regulatory requirements to treat wastewater. I would like to thank the Project Board and all the staff who have delivered this project before the end of the year. I’d also like to thank residents for their patience during many months of construction and disruptions. This is the largest infrastructure project in the region’s history and is a demonstration of our commitment to protect our ocean and our environment.”

Proud to be recognized as one of [BC’s Top Employers](#) and [Canada’s Greenest Employers](#), the CRD delivers regional, sub-regional and local services to 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands. Governed by a 24-member Board of Directors, the CRD works

collaboratively with First Nations and all levels of government to enable sustainable growth, foster community well-being, and develop cost-effective infrastructure while continuing to provide core services to residents throughout the region. Visit us online at www.crd.bc.ca

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Infrastructure Canada

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Ministry of Municipal Affairs

Media Relations: 778.584.2433

Backgrounder

The Wastewater Treatment Project: By the Numbers

The Wastewater Treatment Project is the largest infrastructure project in CRD history.

Key Facts:

- Construction for the Wastewater Treatment Project has taken place across three municipalities and within the traditional territories of the Esquimalt, Songhees, Tsartlip, Tsawout, Tseycum and Pauquachin Nations.
- The McLoughlin Point Wastewater Treatment Plant has capacity to treat 108 megalitres of wastewater per day. That's the equivalent of 43 Olympic-sized swimming pools.
- The plant has capacity to accommodate future population growth.
- Three levels of wastewater treatment take place at McLoughlin Point: primary treatment is the physical separation of solids from wastewater; secondary treatment is a biological process that

removes dissolved and suspended organic compounds in the wastewater; and tertiary treatment is a physical process that reduces solids that remain after the secondary treatment process.

- A new outfall was installed at McLoughlin Point that is 2 km long and discharges treated effluent at a water depth of 60 metres. The outfall pipe is made of HDPE (high density polyethylene) and has 350 concrete ballast weights spaced 4-6 metres apart, each weighing approximately 11,400 kg. There are also 20 bridges across the pipe to allow for migration of sea life across the pipe. Additionally, artificial reefs were constructed near the shoreline to create habitat for a variety of marine species, including salmon.
- A cross-harbour undersea pipe from Ogden Point in Victoria to McLoughlin Point in Esquimalt was installed in 2018, to connect the Clover Point Pump Station to the McLoughlin Point Wastewater Treatment Plant. The cross-harbour pipe is made of steel and is 1.1 metres in diameter. It took 9 months to drill a 1 kilometre-long tunnel under the harbour, 6 weeks to assemble and weld 78 pieces of steel pipe sections together on Niagara Street, and 3 days to pull the 1 kilometre pipe through the tunnel. At its deepest, the harbour crossing is more than 60 metres below the ocean floor.
- The Residuals Treatment Facility has capacity to treat more than 14,000 dry tonnes of residual solids per year.
- The Clover Point Pump Station was originally built in the 1970s to discharge wastewater from Victoria, Oak Bay and Saanich into the ocean. It has been expanded and upgraded to convey wastewater to the McLoughlin Point Wastewater Treatment Plant for treatment.
- A new Macaulay Point Pump Station has been built in Esquimalt, replacing the 48-year-old pump station that was located on that site. The Macaulay Point Pump Station conveys wastewater from Esquimalt, View Royal, Langford, Colwood, Saanich, Victoria and the Esquimalt and Songhees Nations to the McLoughlin Point Wastewater Treatment Plant for treatment.
- Over 35 km of pipes were installed to carry wastewater from across the core area to the McLoughlin Point Wastewater Treatment Plant for treatment, and residual solids to the Residuals Treatment Facility at Hartland Landfill for further treatment.
- At the peak of construction, over 650 people were working on the Project at 24 construction sites.
- Over 2.5 million hours have been worked on the Wastewater Treatment Project, by eleven major contractors (five headquartered in BC, four in Canada and two US) with the support of multiple subcontractors:
 - Don Mann Excavating
 - Harbour Resource Management Group
 - Bird Construction Inc.
 - Maple Reinders PPP Ltd.
 - Synagro Capital
 - Harbour Resource Partners
 - AECOM Canada
 - Graham Infrastructure
 - Jacob Brothers

- Kenaidan Contracting Ltd.
- Knappett Projects Inc.
- NAC Constructors Ltd.
- Windley Contracting Ltd.
- Safety of the public and workers has been the Project's and the Project contractors' top priority. All Project contractors implemented additional precautions to ensure the health and safety of their workers and the public during the global health pandemic.
- The Project has been built to post-disaster standards so it will remain operational following a major earthquake.
- Sustainable design features include:
 - The Operations and Maintenance Building at the McLoughlin Point Wastewater Treatment Plant has been built to LEED Gold design standards.
 - Heat recovery from wastewater will be used to heat buildings at McLoughlin Point Wastewater Treatment Plant.
 - Green roofs at both the McLoughlin Point Wastewater Treatment Plant and the Macaulay Point Pump Station contribute to lower urban air temperatures by absorbing the sun's rays, retain rain water and provide wildlife habitat.
 - Processing of residual solids into class A biosolids that are suitable for beneficial use.
 - The dryer at the Residuals Treatment Facility will be fueled by biogas generated during the digestion process.
- One of the Project's goals was to add value to the surrounding community and enhance the livability of neighborhoods. This was achieved by improving infrastructure and adding amenities in neighbourhoods impacted by the construction of the Project, including:
 - Clover Point public space improvements including a viewing plaza and public washrooms
 - Dallas Road cycle track
 - Creating a park amenity at Macaulay Point Pump Station
 - Improving the level of water service to properties in Saanich near Hartland Landfill

For more information, visit www.wastewaterproject.ca.

Appendix G– Monthly Cost Report (December)

MONTHLY COST REPORT
as at December 31, 2020

Description	BUDGET		COST EXPENDED					COMMITMENTS			FORECAST		VARIANCE	
	Control Budget	Allocated Budget	Expended to November 30, 2020	Expended over reporting period (December 2020)	Expended to December 31, 2020	Expended to December 31, 2020 as a % of Allocated Budget	Remaining (Unexpended) Allocated Budget at December 31, 2020	Total Commitment at December 31, 2020	Unexpended Commitment at December 31, 2020	Uncommitted Allocated Budget at December 31, 2020	Forecast to Complete	Forecast at Completion	Variance at Completion \$	Variance at Completion as a % of Allocated Budget
McLoughlin Point Wastewater Treatment Plant	331.4	329.7	313.2	2.4	315.6	96%	14.1	322.3	6.8	7.4	14.1	329.7	-	0%
Construction	306.7	321.7	312.9	2.4	315.3	98%	6.4	321.7	6.3	0.1	6.4	321.7	-	0%
Contingency	14.9	1.1	-	-	-	0%	1.1	-	-	1.1	1.1	1.1	-	0%
Financing	9.8	6.9	0.3	(0.0)	0.2	3%	6.7	0.7	0.4	6.2	6.7	6.9	-	0%
Residuals Treatment Facility	159.4	140.7	12.1	0.3	12.4	9%	128.3	139.4	127.0	1.3	128.3	140.7	-	0%
Construction	145.4	139.4	12.1	0.3	12.4	9%	127.0	139.4	127.0	-	127.0	139.4	-	0%
Contingency	12.3	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Financing	1.7	0.4	-	-	-	0%	0.4	0.0	0.0	0.4	0.4	0.4	-	0%
Conveyance System	158.0	213.4	187.7	2.8	190.5	89%	22.9	199.1	8.6	14.3	22.9	213.4	-	0%
Macaulay Point Pump Station	25.4	31.1	30.0	0.6	30.6	98%	0.5	31.1	0.5	0.0	0.5	31.1	-	0%
Macaulay Forcemain	5.6	7.4	-	-	7.4	100%	-	7.4	-	-	-	7.4	-	0%
Craigflower Pump Station	12.5	12.4	-	-	12.4	100%	-	12.4	-	-	-	12.4	-	0%
Clover Point Pump Station	23.7	27.3	25.8	0.0	25.8	94%	1.5	27.3	1.5	0.0	1.5	27.3	-	0%
Currie Pump Station^	2.8	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
Arbutus Attenuation Tank	14.2	24.6	19.6	0.8	20.4	83%	4.1	23.8	3.4	0.7	4.1	24.6	-	0%
Clover Forcemain	14.6	31.9	31.7	-	31.7	99%	0.2	31.9	0.2	0.1	0.2	31.9	-	0%
Currie Forcemain^	3.3	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
Trent Forcemain	9.5	11.6	6.9	0.6	7.5	65%	4.1	9.4	1.9	2.2	4.1	11.6	-	0%
Residual Solids Conveyance Line	19.1	36.9	36.5	0.2	36.7	99%	0.2	36.9	0.2	0.0	0.2	36.9	-	0%
Residual Solids Pump Stations & Bridge Crossings	4.6	17.9	16.6	0.5	17.1	96%	0.8	17.8	0.7	0.1	0.8	17.9	-	0%
Residual Solids Conveyance Line – Highway Crossing	-	0.3	0.3	-	0.3	100%	-	0.3	-	-	-	0.3	-	0%
Contingency	16.8	7.5	-	-	-	0%	7.5	-	-	7.5	7.5	7.5	-	0%
Financing	5.8	4.1	0.1	-	0.1	3%	3.9	0.3	0.2	3.7	3.9	4.1	-	0%
Project Management Office ("PMO")	75.8	77.9	62.2	0.8	63.0	81%	14.8	71.2	8.2	6.6	14.8	77.9	-	0%
Project costs Aug 2016-Dec 2016	2.2	2.2	2.2	-	2.2	100%	-	2.2	-	-	-	2.2	-	0%
Owner's Engineering	17.2	17.9	16.3	-	16.3	91%	1.6	17.9	1.5	0.0	1.6	17.9	-	0%
Conveyance Design	5.0	9.3	8.4	0.1	8.4	91%	0.9	9.1	0.7	0.2	0.9	9.3	-	0%
Advisors & Professional Support	7.0	15.1	10.7	0.2	10.9	73%	4.1	11.8	0.8	3.3	4.1	15.1	-	0%
Project Board	2.0	1.3	1.0	0.0	1.0	82%	0.2	1.0	-	0.2	0.2	1.3	-	0%
Project Board Expenses	0.3	0.1	0.1	-	0.1	64%	0.0	0.1	-	0.0	0.0	0.1	-	0%
Project Team	29.1	23.0	18.0	0.5	18.5	81%	4.5	23.0	4.5	-	4.5	23.0	-	0%
Project Leadership Team Expenses	0.7	0.4	0.2	-	0.2	65%	0.1	0.2	-	0.1	0.1	0.4	-	0%
Project Support Team Expenses	0.5	0.2	0.1	-	0.1	73%	0.0	0.1	-	0.0	0.0	0.2	-	0%
CRD Financial Services	1.5	1.4	1.0	0.0	1.1	78%	0.3	1.4	0.3	-	0.3	1.4	-	0%
CRD Human Resources	0.3	0.3	0.3	0.0	0.3	100%	-	0.3	-	-	-	0.3	-	0%
CRD Corporate Communications	0.2	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
CRD Real Estate	0.3	0.3	0.3	-	0.3	100%	-	0.3	-	-	-	0.3	-	0%
CRD Information Technology	0.4	0.4	0.3	0.0	0.3	79%	0.1	0.4	0.1	-	0.1	0.4	-	0%
CRD Insurance	0.1	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
CRD Operations	0.6	0.6	0.5	0.0	0.5	95%	0.0	0.6	0.0	-	0.0	0.6	-	0%
CRD Legislative Services	0.1	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
CRD Corporate Safety	0.2	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
CRD Executive Services	-	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
Office Lease	1.9	1.3	1.0	0.0	1.0	78%	0.3	1.2	0.2	0.1	0.3	1.3	-	0%
Office Supplies	0.1	0.2	0.2	-	0.2	92%	0.0	0.2	-	0.0	0.0	0.2	-	0%
Vehicles	0.2	0.2	0.2	-	0.2	95%	-	0.2	-	-	-	0.2	-	0%
Connections Call Center	-	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
Communication support materials	0.5	0.2	0.1	-	0.1	61%	0.1	0.1	-	0.1	0.1	0.2	-	0%
Computer Hardware, Software & Training	1.0	1.0	0.7	-	0.7	70%	0.3	0.7	-	0.3	0.3	1.0	-	0%
Contingency	4.8	2.3	-	-	-	0%	2.3	-	-	2.3	2.3	2.3	-	0%
BC Hydro	12.9	4.3	2.1	-	2.1	48%	2.2	2.1	0.0	2.2	2.2	4.3	-	0%
Third Party Commitments	8.1	8.1	4.3	0.1	4.4	54%	3.7	6.9	2.5	1.3	3.7	8.1	-	0%
Program Reserves	19.2	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Core Area Wastewater Treatment Project	765.0	775.0	581.6	6.3	587.9	76%	187.0	741.0	153.0	34.0	187.0	775.0	-	0%

* Values presented in \$millions, results in minor rounding differences

** Cost report presents approved expenditures

^ Component no longer required, and would not provide any value therefore removed from Project Scope; Costs include Seaterra initiation, planning and design

Appendix H- Quarterly Cost Report

QUARTERLY COST REPORT
as at December 31, 2020

Description	BUDGET		COST EXPENDED					COMMITMENTS			FORECAST		VARIANCE	
	Control Budget	Allocated Budget	Expended to September 30, 2020	Expended over reporting period (Q4 2020 Oct-Dec)	Expended to December 31, 2020	Expended to December 31, 2020 as a % of Allocated Budget	Remaining (Unexpended) Allocated Budget at December 31, 2020	Total Commitment at December 31, 2020	Unexpended Commitment at December 31, 2020	Uncommitted Allocated Budget at December 31, 2020	Forecast to Complete	Forecast at Completion	Variance at Completion \$	Variance at Completion as a % of Allocated Budget
McLoughlin Point Wastewater Treatment Plant	331.4	329.7	311.0	4.6	315.6	96%	14.1	322.3	6.8	7.4	14.1	329.7	-	0%
Construction	306.7	321.7	310.6	4.8	315.3	98%	6.4	321.7	6.3	0.1	6.4	321.7	-	0%
Contingency	14.9	1.1	-	-	-	0%	1.1	-	-	1.1	1.1	1.1	-	0%
Financing	9.8	6.9	0.4	(0.2)	0.2	3%	6.7	0.7	0.4	6.2	6.7	6.9	-	0%
Residuals Treatment Facility	159.4	140.7	11.5	0.9	12.4	9%	128.3	139.4	127.0	1.3	128.3	140.7	-	0%
Construction	145.4	139.4	11.5	0.9	12.4	9%	127.0	139.4	127.0	-	127.0	139.4	-	0%
Contingency	12.3	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Financing	1.7	0.4	0.0	-	-	0%	0.4	0.0	0.0	0.4	0.4	0.4	-	0%
Conveyance System	158.0	213.4	180.8	9.7	190.5	89%	22.9	199.1	8.6	14.3	22.9	213.4	-	0%
Macaulay Point Pump Station	25.4	31.1	28.7	1.9	30.6	98%	0.5	31.1	0.5	0.0	0.5	31.1	-	0%
Macaulay Forcemain	5.6	7.4	7.4	-	7.4	100%	-	7.4	-	-	-	7.4	-	0%
Craigflower Pump Station	12.5	12.4	12.4	-	12.4	100%	-	12.4	-	-	-	12.4	-	0%
Clover Point Pump Station	23.7	27.3	24.7	1.0	25.8	94%	1.5	27.3	1.5	0.0	1.5	27.3	-	0%
Currie Pump Station [^]	2.8	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
Arbutus Attenuation Tank	14.2	24.6	18.0	2.4	20.4	83%	4.1	23.8	3.4	0.7	4.1	24.6	-	0%
Clover Forcemain	14.6	31.9	31.1	0.5	31.7	99%	0.2	31.9	0.2	0.1	0.2	31.9	-	0%
Currie Forcemain [^]	3.3	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
Trent Forcemain	9.5	11.6	6.0	1.5	7.5	65%	4.1	9.4	1.9	2.2	4.1	11.6	-	0%
Residual Solids Conveyance Line	19.1	36.9	35.8	0.9	36.7	99%	0.2	36.9	0.2	0.0	0.2	36.9	-	0%
Residual Solids Pump Stations & Bridge Crossings	4.6	17.9	15.7	1.4	17.1	96%	0.8	17.8	0.7	0.1	0.8	17.9	-	0%
Residual Solids Conveyance Line – Highway Crossing	-	0.3	0.3	-	0.3	100%	-	0.3	-	-	-	0.3	-	0%
Contingency	16.8	7.5	-	-	-	0%	7.5	-	-	7.5	7.5	7.5	-	0%
Financing	5.8	4.1	0.1	-	0.1	3%	3.9	0.3	0.2	3.7	3.9	4.1	-	0%
Project Management Office ("PMO")	75.8	77.9	60.1	2.9	63.0	81%	14.8	71.2	8.2	6.6	14.8	77.9	-	0%
Project costs Aug 2016-Dec 2016	2.2	2.2	2.2	-	2.2	100%	-	2.2	-	-	-	2.2	-	0%
Owner's Engineering	17.2	17.9	15.7	0.6	16.3	91%	1.6	17.9	1.5	0.0	1.6	17.9	-	0%
Conveyance Design	5.0	9.3	8.3	0.1	8.4	91%	0.9	9.1	0.7	0.2	0.9	9.3	-	0%
Advisors & Professional Support	7.0	15.1	10.5	0.4	10.9	73%	4.1	11.8	0.8	3.3	4.1	15.1	-	0%
Project Board	2.0	1.3	1.0	0.1	1.0	82%	0.2	1.0	-	0.2	0.2	1.3	-	0%
Project Board Expenses	0.3	0.1	0.1	-	0.1	64%	0.0	0.1	-	0.0	0.0	0.1	-	0%
Project Team	29.1	23.0	17.1	1.4	18.5	81%	4.5	23.0	4.5	-	4.5	23.0	-	0%
Project Leadership Team Expenses	0.7	0.4	0.2	0.0	0.2	65%	0.1	0.2	-	0.1	0.1	0.4	-	0%
Project Support Team Expenses	0.5	0.2	0.1	0.0	0.1	73%	0.0	0.1	-	0.0	0.0	0.2	-	0%
CRD Financial Services	1.5	1.4	1.0	0.1	1.1	78%	0.3	1.4	0.3	-	0.3	1.4	-	0%
CRD Human Resources	0.3	0.3	0.2	0.0	0.3	100%	-	0.3	-	-	-	0.3	-	0%
CRD Corporate Communications	0.2	0.2	0.2	0.0	0.2	100%	-	0.2	-	-	-	0.2	-	0%
CRD Real Estate	0.3	0.3	0.3	0.0	0.3	100%	-	0.3	-	-	-	0.3	-	0%
CRD Information Technology	0.4	0.4	0.3	0.0	0.3	79%	0.1	0.4	0.1	-	0.1	0.4	-	0%
CRD Insurance	0.1	0.0	0.0	-	0.0	100%	-	0.0	-	-	-	0.0	-	0%
CRD Operations	0.6	0.6	0.5	0.0	0.5	95%	0.0	0.6	0.0	-	0.0	0.6	-	0%
CRD Legislative Services	0.1	0.1	0.1	-	0.1	100%	-	0.1	-	-	-	0.1	-	0%
CRD Corporate Safety	0.2	0.2	0.2	-	0.2	100%	-	0.2	-	-	-	0.2	-	0%
CRD Executive Services	-	0.1	0.1	0.0	0.1	100%	-	0.1	-	-	-	0.1	-	0%
Office Lease	1.9	1.3	0.9	0.1	1.0	78%	0.3	1.2	0.2	0.1	0.3	1.3	-	0%
Office Supplies	0.1	0.2	0.2	-	0.2	92%	0.0	0.2	-	0.0	0.0	0.2	-	0%
Vehicles	0.2	0.2	0.2	-	0.2	95%	-	0.2	-	-	-	0.2	-	0%
Connections Call Center	-	0.0	0.0	0.0	0.0	100%	-	0.0	-	-	-	0.0	-	0%
Communication support materials	0.5	0.2	0.1	-	0.1	61%	0.1	0.1	-	0.1	0.1	0.2	-	0%
Computer Hardware, Software & Training	1.0	1.0	0.7	0.0	0.7	70%	0.3	0.7	-	0.3	0.3	1.0	-	0%
Contingency	4.8	2.3	-	-	-	0%	2.3	-	-	2.3	2.3	2.3	-	0%
BC Hydro	12.9	4.3	2.1	-	2.1	48%	2.2	2.1	0.0	2.2	2.2	4.3	-	0%
Third Party Commitments	8.1	8.1	4.2	0.2	4.4	54%	3.7	6.9	2.5	1.3	3.7	8.1	-	0%
Program Reserves	19.2	0.9	-	-	-	0%	0.9	-	-	0.9	0.9	0.9	-	0%
Core Area Wastewater Treatment Project	765.0	775.0	569.6	18.3	587.9	76%	187.0	741.0	153.0	34.0	187.0	775.0	-	0%

* Values presented in \$millions, results in minor rounding differences

** Cost report presents approved expenditures

[^] Component no longer required, and would not provide any value therefore removed from Project Scope; Costs include Seaterra initiation, planning and design

From: [Wastewater](#)
To: [Erika Russell](#)
Subject: FW: CLOVER POINT - GIANT UGLY SHOWCASE TO SEWAGE PUMPING
Date: Wednesday, January 13, 2021 8:43:41 AM
Attachments: [image005.png](#)

From: [REDACTED]
Sent: Friday, November 27, 2020 11:59 AM
To: Wastewater <Wastewater@crd.bc.ca>
Subject: FW: CLOVER POINT - GIANT UGLY SHOWCASE TO SEWAGE PUMPING

Resending (bounced back)

From: [REDACTED]
Sent: November 26, 2020 7:48 PM
To: 'rlapham@crd.bc.ca'; 'cplant@crd.bc.ca'; 'jjenkins@victoria.ca'; 'mayor@victoria.ca'; 'Mayorandcouncil@victoria.ca'; 'sthompson@victoria.ca'; 'gyoung@victoria.ca'; 'bissit@victoria.ca'; 'jloveday@victoria.ca'; 'Barbara.desjardins@esquimalt.ca'; 'dclancy@crd.bc.ca'; 'escott@crd.bc.ca'; 'Wastewater@CRD.bc.ca'; 'dfairburn@crd.bc.ca'; 'beaton@crd.bc.ca'; 'blawson@crd.bc.ca'
Cc: 'nchan@crd.bc.ca'; 'gharris@crd.bc.ca'; 'lhutchinson@crd.ca.ca'; 'smay@crd.bc.ca'; 'pw@victoria.ca'; 'eng@victoria.ca'
Subject: RE: CLOVER POINT - GIANT UGLY SHOWCASE TO SEWAGE PUMPING

To CRD and CITY OFFICIALS AND MANAGERS:

Dave Clancy's Nov. 17 email completely ignores the fact that the monolith built at Clover Point Park is a huge bait and switch from what was presented to the public, the City and even the land use planning committee. The landscape drawings used for the public consultation (below) showed an acceptable building about 16'x30' wide, less than 1/3rd the height of the hill under Clover Point with small retaining walls. These drawings were the ones used in the public consultation and are the only drawings available on the CRD - Clover Point website, not the 2017 drawing Clancy included as Attachment 1. The eyesore that has been built takes up the entire height of the Point with enormous flaring wall spanning over 100', now about 300 feet across with other developments attached to it.. The old pumping station was built underground to be nearly invisible; this one has now been built as a **GIANT SHOWCASE TO SEWAGE PUMPING**. While that may turn some of the engineers and builders on, it is an insult to the many users of the Clover Point Park and especially to all of us along Hollywood Crescent and Dallas Road whose waterfront views are completely spoiled by this monstrous development, not to mention millions of dollars in loss of property values. What is especially maddening is that the public consultation on this Project was a huge lie. And what is even more maddening is that much of **the extraneous building is COMPLETELY UNNECESSARY**, and makes a mockery of all of the public statements and acceptance of a small, buried and innocuous pump station in this City gem of a park.

Decisions from here must be made at high levels. It is time for Plan "B" where the CRD and City make some serious decisions to **BURY, REDUCE AND HIDE** this structure as much as possible. It is obvious the Wastewater Project Committee has been complicit in the bait and switch and gone

along with the massive amount of unnecessary building, to the serious detriment of the many park users and hundreds of very unhappy residents of this area.



Small, under the hill, max 16x30'
TWICE AS BIG

pump station unfilled

walls and concrete*

QUESTIONABLE LEGALITY

Of significant concern is that after much research, I found the Rezoning Application made for the City of Victoria for the building and occupancy of this portion of the Clover Point Park by the CRD to build this project. The 2013 Application requested rezoning for a building only 3.55m in height (11.6') tall, basement only, which explains why the landscape drawings put out for public consultation showed a small rectangular building 10-12 feet tall with several feet of wall on top, at most 16' high. It also makes me seriously question whether the CRD has the proper legal authority to have built the pump station twice this size. The east-facing drawing (attached, along with current photos) are the only drawings I ever saw; they have been the only drawings available on the CRD – Clover Point website, and no one I've talked to recalls seeing anything but these. Virtually all of the public commentary I've seen and heard was directed towards leaving Clover Park as untouched as possible. Even the Jan 24, 2014 written comments made by the Victoria Planning and Land Use Committee for this Application stated that "The **visual impact** of the proposed expansion to the existing pump station at Clover Point would be **minimal** and the improved facility would not adversely affect the public the public use and enjoyment of this area". What has been built is

GIANT UGLY SHOWCASE TO SEWAGE PUMPING,

Unnecessary and unfilled retaining walls, old

***BURY, HIDE and CUT OFF unnecessary**

PLEASE

outrageous and the visual impact to the hundreds of residents of Hollywood Crescent and Dallas Road is overwhelming.

PUBLIC CONSULTATION BAIT AND SWITCH

There also seems to have been a purposeful attempt to ignore the Hollywood Crescent owners and many of the Dallas Road owners and apartment and condo residents, apart from those near the entrance to the Point, who are now looking at a huge amount of concrete and over-development above the Point. Despite claims that the neighbourhood had been widely canvassed, only a dozen notices were sent out, and no mailings or handouts for the rest of us - even though everyone along Ross Bay is seriously affected. In fact, the Hollywood Crescent owners, who are most directly affected, were left out of the drawings and not mentioned in any of the discussion documents. There was also very limited media attention and it appears most of the consultation took place several miles away in James Bay, mainly over bike paths. I was also always under the impression that Clover Point was always part of the Beacon Hill Trust, but I wasn't concerned with a small buried. under the hill, pump station only slightly larger than the existing old one. However, you can be certain that I and many of my neighbours would have been making our voices heard loudly and clearly if presented with the actual plans and drawings to ensure that more of the building took place as low and underground and was as unobtrusive as possible in keeping with all the PR statements made by the City and CRD. At this stage, it is very **disingenuous** of Dave Clancy to include Attachment 1, dated April 2017 "for discussion only" with his email; the only drawings on the CRD website are three of the ones included in his Attachment 2; no one ever recalls seeing this drawings. Nor were the drawings and plans for a HUGELY increased pump station publicized in any manner. It is the CRD website drawings that were publicized and used in the LIMITED public consultation, most of which occurred long before this with the later consultation mainly concerned with bike paths and amenities. There has been a huge bait and switch between what the public expected to be built and the monolith that has been built, with very serious impacts to everyone living along Ross Bay. It is apparent that the approvals and public support were given for a small unobtrusive building, then the builder and CRD and City engineers have gone about building this into a giant showcase, with no consideration given to keeping this as small and buried as possible – and no apparent oversight by the CRD or City to ensure that the impacts were kept as minimal as possible.

At this belated stage, is up to the CRD (now the owner and operator of the pumping station) to **SERIOUSLY MITIGATE** the damage done by the false representations that have done serious harm to all of the users of Clover Point, and especially the homes overlooking it along Hollywood Crescent (about half the waterfront homeowners in Victoria), and people along Dallas Road whose use and enjoyment, as well as millions of dollars in value if their properties, have been seriously harmed. The building that has occurred here is not a small matter that we can just get used to – it is front and center to our daily lives. It is essential that much of the **UNECESSARY OVERBUILDING BE REDUCED** to even make this project halfway acceptable and reduce the harm caused.

WHAT TO DO:

Assuming its "too late now" to do anything with the actual size of the pump station, there is a huge amount of completely unnecessary building that could be hidden, reduced or landscaped out of view. It is time to get out the concrete cutters.

1. **BURY THE TOP HALF:** It is not too late to require that the top half of the pump station be buried. This could be accomplished by laying down steel beams across the elevation above door height and placing steel plates across that could hold earth. I hear there may be some excess steel beams around that couldn't be used on the Blue Bridge replacement.
2. **THE TOP WALL:** The concrete and rock wall at the top of the pump station should be removed to at least attempt to lower the height of the structure 3-4 feet. It could be replaced chain link or other earth-toned fencing that could tie in with other fencing along the path across the top of the pump stations (all of which should be painted earth toned along with all concrete surfaces of east-facing retaining walls concrete)
3. **FLARING SIDE WALLS:** The enormous flaring side walls (much higher and more flaring than any drawings or plans, and built much higher and larger than the previously underground flaring walls of the old pump station) **MUST** be must be cut down as low as necessary to retain earth. Much of the north wall appears to exist for no reason and has had dirt pushed up against it only to justify the wall being there, which will undoubtedly slide down after the winter rains. The earth should just slope down as much as possible towards the pump station and the wall be made as low as possible. Ditto for much of the giant south wall. A small portion of the south wall needs to remain to butt into the old pump station, but from there the height could sharply flare down to about 2' high in order to meet up with the old wall instead of taking a weird jog down toward the end. There is NO reason to keep the height of these walls standing above the lowest possible ground level as public barriers. The old pump station had none. There are already public barriers along the walkway across the top and all these huge flaring walls do is heighten the size and serve to showcase the pumping station. The overheight walls also prevent any landscaping that could help to hide the overbuilt pump station. To the extent any public barriers are needed, they could be innocuous hedges or chain link or neutral toned fencing that would enable landscaping.
4. **OLD PUMP STATION:** The old pump station and retaining walls were completely buried and I simply do not understand why the intention is not to completely bury it and the retaining walls again. The two east facing vents were not previously showing, but if necessary to better bury the station, they could be vented out further to allow for better coverage of the old pump station. The drive-in area of the old pump station has the old retaining wall standing as an eyesore above the point for no apparent reason and its apparent by now that it won't be infilled. It should simply be cut off. The top fencing could continue past the opening and steel plate covered with earth used at the top.
5. **INFILLING OF CLOVER POINT:** It is quite apparent by now that the Point will not be infilled to its previous elevation which would take hundreds of truckload of soil, though the builder is contractually required to do so and I'm assuming there will be some more infilling near Dallas Road. There has somehow been a decision made to leave 3-4 feet of all the retaining walls protruding above the point, which is a huge part of the eyesore problem. There is no earthly reason for this except to save Kenaidan a lot of money in filling. not burying the old pump station and for leaving the previously buried top 3-4 feet of the old pump station retaining walls and the enormous newly built walls sticking up above grade, except to save Kenaidan a lot of money. I strongly suggest that the CRD and City, in exchange for infilling, require Kenaidan to cut 3-4 feet or more off the top of ALL of the overbuilt retaining walls.
6. **LANDSCAPING:** The landscaping plans attached to the Clancy email do not include any

attempt to hide or buffer the east side of the pump station development; grass won't help a bit and I even question whether any of the native grass/seeds will grow and last in topsoil rather than the windblown largely clay soil on Clover point. Though Dave Clancy told me that the City was developing a landscape plan for this; a City engineer informed me that their involvement is only future maintenance; the building site is now owned by the CRD and it is their responsibility. Catch 22. Landscaping to hide the huge size of the pump station is virtually impossible unless the retaining walls are reduced and EVERYTHING possible must be done to plant vegetation to hide this monstrous structure under draping vegetation, even tree planting trees in front at the foreshore and I refer you to some of the suggestions made in my previous emails.

7. PAINTING: While I appreciate that some possible neutral painting of the top facing of the overly bright white capping on the retaining walls may be done, there is much more that needs doing and much more dulling down of all the surfaces facing east, including the washroom and all of the overly-bright white concrete that will take years to fade down. There has recently been more concrete poured for the side paths and a variety of retaining walls, plus concrete blocks and white patches here, there, and everywhere along the seawall area that must be neutralized.

TOO MUCH CONCRETE & TOO LITTLE INFILLING – CHECK THE CONTRACT AND THE OVERSIGHT:

There is so much overbuilt concrete that a building contractor friend of mine firmly believes there must be some sort of plus-up or strange approval in the Kenaidan's contract for both the siting and pouring of concrete – which is the only possible explanation for so much unnecessary overbuilding. I certainly hope someone is reading the fine print. The decisions recently being made to leave all the retaining walls sticking up above the Point rather than infilling them with soil, as well not bringing other areas up original elevations is another plus-up to Kenaidan's benefit. It is pretty obvious that Kenaidan, who was hired to do the "strategic planning, prepare the plans and do the building, is making out on both ends. Rather like the fox minding the henhouse: getting paid for overbuilding walls then saving enormous amounts by not bringing in the hundreds of truckloads it would take to even cover the old pump station or bring the Point up to elevation. Good deal for them - not for us. Dave Clancy and the Wastewater Project Committee has undoubtedly worked closely with the builder, but it seems too closely because there appears to be a total to be a lack of oversight and complicity in allowing all of the extraneous building and next to no effort being made to reduce some of the worst of the damage.

FAILURE OF OVERSIGHT:

The CRD and City, by farming out the entire project to Kenaidan in this manner have failed to do their oversight of what was intended to preserve this gem of a Park for all of the users of it and especially all of the residents of Ross Bay. The CRD and City have also absolutely failed to ensure that the public was informed and given an opportunity to comment about the MASSIVE CHANGES from the initial project put before the public and the monstrosity it has become. It would be a much better project if it had.

I'm fully cognizant of what a huge project this has been for the City and CRD to accomplish, but a failure to address the obvious overbuilding problems will be permanent stain on the CRD and the City for allowing this to happen and the failure of public consultation that preceded it, as well as a

permanent blight on Clover Point Park itself. The CRD and City have also opened themselves up to legal challenge by this failure, especially if there is no attempt to ameliorate a significant amount of the damage caused to surrounding residents by the manner in which it rezoned this Park and the “bait and switch” approach allowed to be taken towards public consultation.

Clover Point has always been a jewel of the City and everyone is familiar with it. The overbuilding that has occurred needs serious attention at the highest levels --This project could still be success but **only** if immediate remediation occurs.

I am losing my enjoyment of my lovely property of 25 years, my ability to ever sell my property for what it is worth, if at all, my life savings and retirement income and my belief in good government because of this monstrosity, as are many of my neighbours – much of which could still be corrected if anyone were paying attention. Please take heed to do what is necessary to hide and scale down this hugely overbuilt “showcase to sewage pumping”. And please reply to me at this email or contact me at [REDACTED] to let me know that you are.

[REDACTED]
[REDACTED]

Cc: Neighbours

From: Dave Clancy [<mailto:dclancy@crd.bc.ca>]

Sent: November 17, 2020 3:57 PM

To: [REDACTED]

Cc: Elizabeth Scott; Wastewater

Subject: Clover Point Visual Concerns

[REDACTED]

Thank you for meeting with Elizabeth and me on November 9, 2020 to discuss your concerns regarding the Clover Point Pump Station, and for your follow-up phone call with Elizabeth on November 13th.

You asked a number of questions during our meeting that I committed to answering. I’m following-up with this e-mail to provide that information, and also a summary of the actions that we are taking in response to your concerns, while acknowledging that we cannot reduce the height of the constructed walls.

To provide information about the Clover Point Pump Station, the Project Team hosted the following open houses and community meetings:

- January 11, 2017 at the James Bay New Horizons
- January 11, 2017 at the Victoria Conference Centre
- January 10, 2018 at the James Bay New Horizons
- January 11, 2018 at the Cook Street Village Activity Centre

We also presented the pump station design proposals to the City of Victoria Council at three public meetings:

- at the Public Hearing for the Clover Point Rezoning on February 23, 2017;

- at the 30% design stage on December 14, 2017; and
- at the 50% design stage on April 12, 2018.

The artist's renderings presented at the above meetings were developed by WSP on behalf of Kenaidan Contracting Ltd, the contractor selected by the CRD to design and build the new portion of the pump station. The renderings were provided to share a representation of what the new portion of the pump station, and the upgrades to Clover Point, would look like once complete. While artist's renderings are not intended to be used to take scale measurements, those presented do show the relative proportion of the exterior of the new and existing pump station. For context, the flat face of the existing pump station is 8.9 meters high and 4.8 meters wide. For comparison, the flat face of the new portion of the pump station is slightly less high (varying from 8.4 meters high at the south corner, to 7.8 meters high in the north corner), and several times wider (at 17 meters wide). The renderings therefore provided a reasonable representation of the height and width of the new portion of the pump station, compared to the existing portion. For reference please see attached the renderings presented in the 2017 and 2018 meetings, which are also available on the Project website.

In addition to the open houses, community meetings and council meetings, as part of the design development process we worked with City of Victoria staff who reviewed and provided input into the design. That input was provided through design workshops in which City staff reviewed detailed design drawings.

The retaining walls have always been part of the design of the new portion of the pump station. The walls are required to preserve, as much as possible, the original slope of Clover Point as it was before the construction of the new portion of the pump station, and include a safety barrier for pedestrians on the upper side of the slope. The retaining walls are currently being backfilled with earth, and will continue to be backfilled to a level 1.2 metres below the top of the retaining wall, to provide that safety barrier. Along the walking path there will be a galvanized steel handrail that will connect to the retaining wall, but this will not extend above the height of the retaining wall.

The area around the retaining walls will be planted with a coastal revegetation mix. I have attached the landscaping plan which has been reviewed by the City of Victoria.

I am sorry that the view from your home has been impacted by the construction of the new pump station. We have considered your concerns and what actions we could take to improve your view. Unfortunately we are not in a position to change the construction of the pump station (including the retaining walls) at this stage, but we do appreciate your suggestion that we consider painting the top concrete section of the retaining wall. We will look into whether we could paint or treat the concrete section to expedite it taking on a more neutral colour, with the objective of it blending into its surroundings better. The view will also change, and I believe improve, as we complete the construction and restoration.

I can also confirm that we have passed your additional landscaping suggestions to Jas Paul, the Assistant Director of Engineering with the City of Victoria. I have also informed him that you have a number of concerns with respect to City of Victoria work in your neighbourhood.

Thank you,

Dave

Dave Clancy | Project Director

Wastewater Treatment Project | Capital Regional District

510-1675 Douglas Street, Victoria, BC V8W 2G5

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From: [Wastewater](#)
To: [Erika Russell](#)
Subject: FW: Clover Point Pump Station - lack of infilling
Date: Wednesday, January 13, 2021 9:35:42 AM

From: [REDACTED]
Sent: Friday, December 18, 2020 4:14 PM
To: Wastewater <Wastewater@crd.bc.ca>
Subject: FW: Clover Point Pump Station - lack of infilling

Resending

From: [REDACTED]
Sent: December 18, 2020 3:24 PM
To: 'rlapham@crd.bc.ca'; 'dclancy@crd.bc.ca'; 'escott@crd.bc.ca'; 'Mayor@victoria.ca'; 'Mayorandcouncil@victoria.ca'; 'jjenkins@victoria.ca'; 'jloveday@victoria.ca'; 'bissit@victoria.ca'; 'gyoung@victoria.ca'; 'sandrew@victoria.ca'
Cc: 'dfairburn@crd.bc.ca'; 'beaton@crd.bc.ca'; 'blawson@crd.bc.ca'; 'csmith@crd.bc.ca'; 'cplant@crd.bc.ca'; 'Barbara.desjardins@esquimalt.ca'
Subject: RE: Clover Point Pump Station - lack of infilling

So in other words, Dave Clancy is saying that the retaining walls and top portion of the old pump station, which were previously buried, **will not be infilled** by the builder to their original height, in violation of its contractual and licensing obligations. (Left side of photo below). Even the 2017 “disingenuous” drawing attached to his previous email showed these walls being buried to elevation and the top of the old pump station being covered. There is nothing about the improvements and paths that prevents proper infilling; the upper paths could either be placed on top the required elevation or cut through portions of it. Nor does it appear there has been any public consultation re the various platforms, plaza areas and fencing – just a lot more concrete being poured on the top of the Point.

Dave also says that the giant flaring walls of the new pump station were designed to match the old pump station, when **instead they are built much larger with longer higher flaring portion and completely unnecessary white capping** that only showcases the enormous size of the structure. This is on top of the pump station itself being built the height of the Point, **twice as high and wide as what was presented to the public** and in the drawings on the CRD website, which show a small building just above door height. The hugely overbuilt upper portions of the flaring walls are not necessary to retain earth and in some areas has just been banked up against them and is likely to flatten out with the winter rains. These huge walls also add extra height that prevents landscaping being **used to diminish the oversize nature of this monolith**.



- The best solution would be to bury the top half of the structure as suggested in my previous emails.
- A reasonable solution would be to remove the upper portions of the flaring walls and white capping for both the new and old pump stations to enable landscaping.
- A lesser solution would be to at least infill the walls to original elevations.
- The worst solution is leaving it as stands with minimal attempts to neutralize, when there are many concrete structures and paths that obviously need neutralizing.

A group of concerned “Friends of Clover Point” is forming to pursue better public consultation and legal remedies with respect to the blatant overbuilding of the pumping station as well as the ongoing uses and amenities at the Point. There also now concerns about heightened odor problems given what has occurred in James Bay as well as concerns over road closures and parking concerns that impact every grandparent in Victoria.

The overbuilt nature of this project and the lack of infilling are to the serious detriment of the hundreds of residents of Hollywood Crescent and Dallas Road, not to mention the thousands of users of Clover Point. It is bad enough that the pump station itself doubled in size; its even worse when there are obvious things that could and should be done to even attempt to remediate the situation that are being ignored. Need I remind you again this is built in a **public park** and only received public acceptance on the basis of a small innocuous structure, not this giant **SHOWCASE TO SEWAGE PUMPING**.



Cc: Neighbours

PS: The double doors were neutralized several weeks ago. Think its fair to begin asking why and when the other doors will likewise be tended to.

PPS: There has never been hardly any use of the Z path to the Seawall on the north side, since it virtually leads from nowhere to nowhere halfway up a hill. All of the concrete poured to extend and magnify this path and attach to the Seawall is now just as an alternate “steep” route!!!!!! This additional building has added hundreds of feet concrete to our views, just for an unnecessary extra path????? BURY AND HIDE IT

From: Dave Clancy [<mailto:dclancy@crd.bc.ca>]
Sent: December 17, 2020 12:58 PM
To: [REDACTED]
Cc: Robert Lapham; mayorandcouncil@victoria.ca; jjenkins@victoria.ca; Elizabeth Scott
Subject: RE: Clover Point Pump Station - lack of infilling

[REDACTED],

I wanted to follow up on your phone call with Elizabeth last week (on December 8th) and your e-mail earlier this week (on December 15th). You highlighted a number of concerns which I would like to address.

The Wastewater Treatment Project committed to build the Clover Point Pump Station expansion primarily underground and below the grade of the adjacent section of Dallas Road. This is what has been accomplished. The retaining walls have always been part of the design of the new portion of the pump station. The sloped design of the walls were developed to reflect the old portion of the pump station. They were also built with similar materials to match the existing facility.

The retaining walls of the old portion of the pump station have not been altered. Some changes to the grading of the hill around the pump station was required to accommodate the public realm improvements and pathways which are being built at Clover Point. These public realm improvements were included as part of our licensing agreement and were designed in collaboration with the City of Victoria.

A series of pathway connections have been designed to ensure accessibility throughout the site linking Dallas Road sidewalks, park sidewalks and the Dallas Road waterfront trail network. This design provides several key improvements for those with mobility challenges. One of the new pedestrian routes that connects the existing ramp system leading from the Dallas Road sidewalk to the waterfront trail has steeper than ideal slope due to the existing grade of the area. After reviewing the design with the City of Victoria it was agreed that this route could remain as there are multiple other ways to access the plaza areas with lower grades for those who find it too strenuous.

Backfilling of the area around the Clover Point Pump Station is nearly complete and we expect it to be finished in the first quarter of 2021. After the area has been filled it will be planted with a coastal revegetation mix similar to what was there before.

The doors are stainless steel and currently covered in a protective covering which we understand is causing some glare. A decal will be applied to all the doors which will look like the rock wall that surrounds them and match the doors on the existing pump station. Once the decal is applied the glare should no longer be an issue.

We are actively looking into options to neutralize the colour of the top concrete section of the retaining walls built as part of the Clover Point Pump Station expansion, so that it more quickly blends into the surroundings.

Thank you,

Dave

From: [REDACTED]
Sent: Tuesday, December 15, 2020 10:15 AM
To: Elizabeth Scott <escott@crd.bc.ca>
Cc: Robert Lapham <rlapham@crd.bc.ca>; Mayorandcouncil@victoria.ca; jjenkins@victoria.ca
Subject: Clover Point Pump Station - lack of infilling



It is my understanding that Kenaidan is contractually obligated to return Clover Point to its natural elevations. The retaining walls surrounding the old pump station and station itself were previously completely buried, apart from the small 1 vehicle opening. There is no justification for not covering it again, or for leaving the hugely overbuilt white-capped retaining walls of the new pump station that simply act as a showcase to sewage pumping. There is already fencing planned across the top and all over Clover Point; using the overheight retaining walls as public barriers is simply unnecessary and even prevents any landscaping that could be used to trail over and help to hide this hugely overbuilt monolith.

A better solution than infilling (apart from better burying of the old and even the new pump station) would be to require the developer to remove the excess height of all the retaining walls, none of which are necessary to retain present levels of earth, in exchange for requiring the hundreds of truckloads of soil that would be needed for infilling, then using landscaping or innocuous fencing as barriers where needed. You might note that the landscape drawing of the southwest view of the pump station used on your website not only shows the small building but also that the top of the station is under the elevation height of the Point. Something has gone really wrong here if the contractor neither required to infill nor, better yet, remove the excess height of these walls.

Current photos are attached – as you can see our views are getting even worse as more concrete is poured for paths and retaining walls along the north side, so the project now looks 300-400' across as well as well as filling the entire side of the Point. Now more concrete is being poured on top for the various City platforms and amenities. I certainly hope that water based neutral paint will be used to dull down all the unnecessary white capping and new shiny concrete that will take years and years to dull down on its own. This is so far from the small, under the hill building, promised throughout the public consultation.

I had expected to hear back from you by yesterday after again discussing this with you last week. I hope to hear from you today.

Regards,



PS I had also understood that the side paths were to be wheelchair accessible, however the steepness of them, especially the steepest portion near the pump station, appears from here to be far more than the 1/12 elevation we discussed.

cc: neighbours

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