

Notice of Meeting and Meeting Agenda Core Area Liquid Waste Management Committee

Wednesday, March 8, 2017

9:30 AM

6th Floor Boardroom
625 Fisgard Street
Victoria, BC V8W 1R7

L. Helps (Chair), S. Brice (Vice-Chair), M. Alto, R. Atwell, D. Blackwell, J. Brownoff,
V. Derman, B. Desjardins (Board Chair), C. Hamilton, B. Isitt, N. Jensen, C. Plant,
D. Screech, L. Seaton, G. Young, Chief R. Sam, Chief A. Thomas

1. Approval of Agenda

1.1. [17-217](#) Approval of Agenda (Including Delegation Requests)

Recommendation: 1. That the delegation requests be granted.
2. That the late delegation request be granted (requires unanimous vote)
3. That the agenda be approved.

2. Adoption of Minutes

2.1. [17-189](#) Minutes of the Core Area Liquid Waste Management Committee Meeting of February 8, 2017

Recommendation: That the Core Area Liquid Waste Management Committee Minutes of February 8, 2017, be adopted.

Attachments: [2017-02-08 Minutes Core Area Liquid Waste Management Committee](#)

3. Chair's Remarks

4. Presentations/Delegations

4.1. [17-208](#) Delegation: Marg Gardiner, James Bay Neighbourhood Association, re item 5.2

Attachments: [Delegation Request: Gardiner](#)
[Delegation Slides: Gardiner, James Bay Construction](#)

4.2. [17-209](#) Delegation: Wayne Shillington, re item 5.2

Attachments: [Delegation Request: Shillington](#)
[Delegation Slides: Shillington, Noise](#)

4.3. [17-210](#) Delegation: Joan Looy, re item 5.2

Attachments: [Delegation Request: Looy](#)

- 4.4. [17-211](#) Delegation: Darrel Woods, re item 5.2

Attachments: [Delegation Request: Woods](#)

- 4.5. [17-216](#) Late Delegation: Robert Drew, re item 5.2

Attachments: [Delegation Request: Drew](#)

5. Committee Business

- 5.1. [17-201](#) Approval to Enter into a Funding Agreement with the Province of British Columbia

Recommendation: That the Core Area Liquid Waste Management Committee recommend to the Capital Regional District Board:
That the Contribution Agreement between the Capital Regional District and Her Majesty the Queen in Right of the Province of British Columbia, substantially in the form attached as Appendix A, be approved.
(WA)

Attachments: [Staff Report: Approval to Enter into a Funding Agreement with the Province of B
Appendix A: Provincial Funding Agreement](#)

- 5.2. [17-200](#) Core Area Wastewater Treatment Project Development Phase Report

Recommendation: That the Core Area Liquid Waste Management Committee recommend to the Capital Regional District Board:
That the Project Development Phase Report be received for information.
(WP - Colwood, Esquimalt, Langford, Oak Bay, Saanich, Victoria and View Royal)

Attachments: [Committee Report: Core Area Wastewater Treatment Project Development Ph
Attachment 1: Project Development Phase Report](#)

- 5.3. [17-207](#) Harbour Resource Partners Agreement Price Reconciliation

Recommendation: That the Core Area Liquid Waste Management Committee receive this report for information.

Attachments: [Harbour Resource Partners Agreement Price Reconciliation](#)

- 5.4. [17-46](#) Regional Source Control Program - Emerging Contaminants Reduction Plan

Recommendation: That this report be received for information.

[Note: this report was received by the Environmental Services Committee and by the Capital Regional District Board and forwarded to the Core Area Liquid Waste Management Committee for information.]

Attachments: [Staff Report: Regional Source Control - Emerging Contaminants of Concern](#)

6. New Business

7. Adjournment

Next Meeting: TBA

Meeting Minutes

Core Area Liquid Waste Management Committee

Wednesday, February 8, 2017

9:30 AM

6th Floor Boardroom
625 Fisgard Street
Victoria, BC V8W 1R7

PRESENT

DIRECTORS: L. Helps (Chair), S. Brice (Vice-Chair), M. Alto, R. Atwell, D. Blackwell, V. Sanders (for J. Brownoff), V. Derman, B. Desjardins (Board Chair), C. Day (for C. Hamilton), B. Isitt, N. Jensen, C. Plant, D. Screech, L. Seaton, G. Young

STAFF: R. Lapham, Chief Administrative Officer; L. Hutcheson, General Manager, Parks and Environmental Services; N. Chan, Chief Financial Officer; T. Robbins, General Manager, Integrated Water Services; B. Reems, Corporate Officer, and N. More, Committee Clerk (Recorder)

ALSO PRESENT: J. Bird, Chair, and Director D. Howe, Core Area Wastewater Treatment Project Board

ABSENT: Chief R. Sam, Chief A. Thomas

The meeting was called to order at 9:30 a.m.

1. Approval of Agenda

**MOVED by Director Brice, SECONDED by Director Alto,
That the agenda be approved.
CARRIED**

2. Adoption of Minutes

- 2.1. [17-90](#) Minutes of 14 December 2016 Core Area Liquid Waste Management Committee

**MOVED by Director Alto, SECONDED by Director Seaton,
That the minutes of 14 December 2016 meeting of the Core Area Liquid Waste Management Committee be adopted.
CARRIED**

3. Chair's Remarks

Chair Helps expressed gratitude to the Project Board for their work over the past months, not only in negotiating with the provincial and federal governments on funding agreements and with municipal governments on zoning applications but also in connecting with communities by answering emails and attending open houses and community meetings, and making sure the project proceeds on time.

4. Presentations/Delegations

4.1. [17-141](#) Delegation: John Gunton, item 5.2

John Gunton spoke on behalf of several Victoria residents. With the aid of presentation slides, he described his concerns for the portion of the project that is the conveyance from Clover Point to McLoughlin Point.

**MOVED by Director Plant, SECONDED by Director Derman,
That the delegation be allowed to speak for five more minutes.
CARRIED**

J. Gunton spoke to the presentation slides outlining an alternative proposal of a sub-sea pipeline. The delegation provided a copy of the presentation slides, on file at Legislative and Information Services.

4.2. [17-142](#) Delegation: Marg Gardiner, James Bay Neighbourhood Association, item 5.2

Marg Gardiner spoke on behalf of the James Bay Neighbourhood Association regarding the construction of the conveyance piping from Clover Point to McLoughlin Point. She expressed concern over construction mitigation of noise and emissions, safeguarding the Dallas bluffs, amenities for the James Bay neighbourhood, public engagement with James Bay residents, and zoning. The delegation provided presentation slides, on file at Legislative and Information Services.

5. Committee Business

5.1. [17-91](#) 2017 Board Standing and Select Committees - Terms of Reference (Core Area Liquid Waste Management Committee)

R. Lapham provided highlights of the changes to the Terms of Reference.

**MOVED by Director Brice, SECONDED by Director Desjardins,
That the terms of reference for the 2017 Core Area Liquid Waste Management
Committee as attached in Appendix A be approved.
CARRIED**

5.2. [17-110](#)

Report from the Core Area Wastewater Treatment Project Board -
February 2017

Project Board Chair J. Bird introduced the report and attachments, and provided highlights of the report. The Committee sought clarification on the control budget.

J. Bird remarked on the proposal by the delegation J. Gunton of an alternative, sub-sea pipeline. The Committee requested the Project Board provide the Committee with a copy of the response being prepared in answer to the proposal, including information on a similar opportunity used in Nanaimo.

The Committee sought clarification on several points, including the following:

- meetings with James Bay Neighbourhood Association
- amenities being studied by the Project Board and the City of Victoria
- services provided by Partnerships BC to secure the procurement process
- salaries of the project management and the Project Board
- permitting related to the outfall
- innovation
- zoning approval and licenses of occupation

On the motion, the Committee discussed the following points:

- amenities provided in Esquimalt compared to considerations for James Bay
- financial contributions of Colwood compared to use of the service
- possibility that Saanich would seek enhancements

MOVED by Director Plant, **SECONDED** by Director Screech,
**That the Core Area Liquid Waste Management Committee recommend to the
Capital Regional District Board:**

That this report be received for information.

CARRIED

OPPOSED Atwell

5.3. [17-121](#) Budget Reconciliation Between Seaterra Program Budget and Business Case Budget

N. Chan provided highlights of the report.

Director Jensen left the meeting at 10:24 a.m.

The Committee sought clarification on comparing the budget from the earlier project with the current bid. Project Board Chair J. Bird clarified that the control budget presented as part of the business case and approved by the Capital Regional District Board reflected the anticipated price of the HRP project agreement. Upon finalization, the amount of the project agreement would be reported out and reflected in the control budget.

**MOVED by Director Brice, SECONDED by Director Screech,
That the Core Area Liquid Waste Management Committee recommend to the
Capital Regional District Board:**

That the report be received for information.

CARRIED

OPPOSED Atwell

5.4. [17-107](#) Core Area Liquid Waste Management Project Board Remuneration

N. Chan provided highlights of the report. On the motion, the Committee discussed the following points:

- the level of remuneration compared with incomes in the region generally
- the past and current work accomplished

**MOVED by Director Screech, SECONDED by Director Brice,
That the Core Area Liquid Waste Management Committee recommend to the
Capital Regional District Board:**

That the report be received for information.

CARRIED

OPPOSED Atwell, Isitt

6. New Business

There was none.

7. Motion to Close the Meeting

7.1. [17-135](#) Motion to Close the Meeting

**MOVED by Director Alto, SECONDED by Director Blackwell,
That the meeting be closed in accordance with the Community Charter Part 4,
Division 3, 90 (2) (b) the consideration of information received and held in
confidence relating to negotiations between the regional district and a provincial
government or the federal government or both, or between a provincial
government or the federal government or both and a third party.**

CARRIED

The Committee moved to the closed session at 10:38 a.m.
The Committee rose from the closed session at 10:47 a.m. without report.

8. Adjournment

**MOVED by Director Blackwell, SECONDED by Director Brice,
That the meeting be adjourned at 10:37 a.m.
CARRIED**

CHAIR

RECORDER

Nancy More

From: Legserv
Subject: FW: Addressing the Board - Submission

Sent: Monday, March 06, 2017 6:48 AM
To: Legserv <Legserv@crd.bc.ca>
Subject: Addressing the Board - Submission

The following message was received through the form at '<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees?c=%2fcore-area-liquid-waste-management-committee&d=636245910000000000>'. Neither the name nor the e-mail address can be confirmed as accurate.

.....

Your name::
Marg Gardiner

I represent::
James Bay Neighbourhood Association

Municipality/Electoral Area in which you reside::
Victoria

I wish to address::
Core Area Liquid Waste Management Committee

Meeting Date::
Mar 08, 2017, 9:30am

Agenda Item::
5.1-5.2 Core Area Wastewater Treatment Project Development

My reason(s) for appearing (is/are) and the substance of my presentation is as follows::
To discuss CRD consultation process and consultation with the James Bay Community with regard to project impacts

I will have a PowerPoint or video presentation and will submit it at least 24 hours in advance of the meeting.:
Yes

The meeting and my presentation will be webstreamed live via the CRD website and recorded.:
I understand,

Submitted at:3/6/2017 6:47:36 AM
Submitted via:<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees?c=%2fcore-area-liquid-waste-management-committee&d=636245910000000000>

James Bay



CRD Meeting

March 8th, 2017

JBNA focus:
*wellbeing
of residents
and land-base
of James Bay*



IAP2'S PUBLIC PARTICIPATION SPECTRUM

The IAP2 Federation has developed the Spectrum to help groups define the public's role in any public participation process. The IAP2 Spectrum is quickly becoming an international standard.

INCREASING IMPACT ON THE DECISION 

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

James Bay sub-project considerations:

JBNA – CRD Project Team

- Meeting of December 14, 2016
 - established approach to consultation with JBNA
 - set first JBNA Community meeting – January 11, 2017
 - discussed possible ways to notify/invite community
 - Project Impacts (broad timeline)
 - Noise: need to target WHO Community Noise – 60 dBA max
 - Project Team would discuss options re hours # days etc
 - Issues
 - Dallas bluff (land vs sea-bed route)
 - construction mitigation
 - amenities
-

Anglers – drill site – across the street from homes



Anglers

homes

NIAGARA

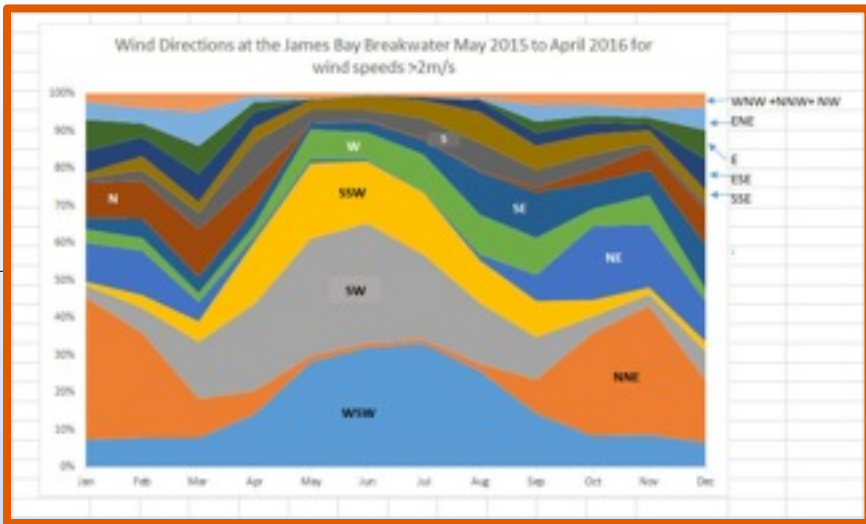
James Bay & Esquimalt Comparison

Esquimalt	item	James Bay
\$20,000,000	one-time payment & improvements	\$0
\$55,000/yr	on-going \$ support	\$0
\$480,000	Esquimalt/Songhees Nations West Bay RV & Marina	\$0
construction impacts of McLaughlin works		
McLaughlin site construction impacts akin to Capital Park in James Bay		
trench and X-harbour tunnel		
none	Dallas trench	street closures
none	noise	significant (not disclosed)
none	traffic/equipment	level not yet disclosed
12 mos of tunnel drilling		
200-500m from residences	noise	75-85dBA 50m from homes
5 days (weekdays)		6 days (weekdays + Saturday)
	pipe pull	1km Niagara pipe lay-over
service traffic	on-going impacts	service traffic treatment plant emissions if any loss of Dallas parking

JB Community discussion - January 11, 2017

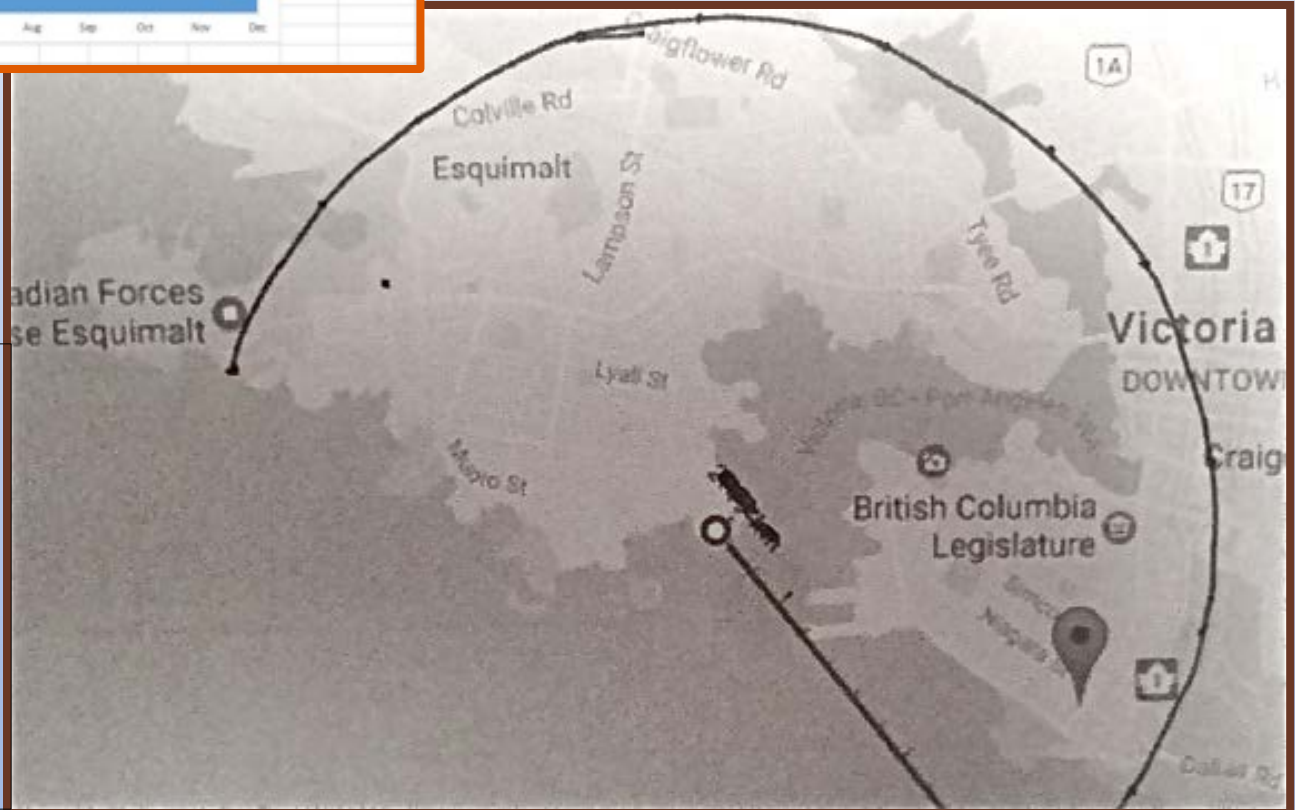
CRD project Team disclosure and commitments:

- Disclosed
 - timeline (approx), noise, drill debris handling
 - Construction intent to mitigate noise/dust
 - Not disclosed
 - noise mitigation targets (real)
 - odour possibility from treatment plant was DENIED
 - noise levels at treatment plant (60 dBA)
 - Project Team Commitment
 - involve and collaborate with JBNA
 - inform/consult via JBNA General Meetings every 2-3 months
-



Esquimalt
 Amenity boundary:
 community of 2.5km

Winds, noise,
 odours,
 do not respect
 municipal
 boundaries



Diminishing of community participation

- Project Team:
 - December 14 & January 11 meetings set participation levels of *consult-involve-collaborate*
 - Set next Community meeting: April 12th, then March 8th
 - CRD Management February 8th & CoV February 23rd Hearing
 - Cancelled consultation - JBNA March 8th Community Meeting
 - February 16th e-mail & February 27th phone convo (e-mail followed)
 - JBNA:
 - January 11 Meeting facilitation (resources)
 - Schedule changes: April 12th, then March 8th Meetings
 - Resident/participant notifications/lists
-

IAP2'S PUBLIC PARTICIPATION SPECTRUM

The IAP2 Federation has developed the Spectrum to help groups and organizations design and manage their public participation process. The IAP2 Spectrum is quickly becoming an international standard.

resident expectation



	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision. We will seek your feedback on drafts and proposals.	We will work with you to ensure your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will work together with you to formulate solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

JBNA expectation

Summary: James Bay

- residents of JB not being respected:
 - disclosure and participation
 - noise, emissions, “enhancement” considerations
- JB routing needs: during construction and enhancement: park pathways, 5-6 controlled X-walks, traffic calming, sidewalks, street alignment, parking, . . .

Request of CRD Management Committee:

- Project Team to
 - Honour January 11th commitments made to the community regarding community participation
 - Involve, and collaborate with, JBNA
-

Nancy More

From: Legserv
Subject: FW: Addressing the Board - Submission

Sent: Monday, March 06, 2017 6:52 AM
To: Legserv <Legserv@crd.bc.ca>
Subject: Addressing the Board - Submission

The following message was received through the form at '<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees?c=%2fcore-area-liquid-waste-management-committee&d=636245910000000000>'. Neither the name nor the e-mail address can be confirmed as accurate.

.....

Your name::
Wayne Shillington

I represent::
I am a resident of Jaems Bay

Municipality/Electoral Area in which you reside::
Victoria

I wish to address::
Core Area Liquid Waste Management Committee

Meeting Date::
Mar 08, 2017, 9:30am

Agenda Item::
5.1-5.2 Core Area Wastewater Treatment Project Development

My reason(s) for appearing (is/are) and the substance of my presentation is as follows::
I am concerned about noise levels which are anticipated during the James Bay to Esquimalt drilling sub-project for the undersea conveyance pipe.

I will have a PowerPoint or video presentation and will submit it at least 24 hours in advance of the meeting.:
Yes

The meeting and my presentation will be webstreamed live via the CRD website and recorded.:
I understand,

Submitted at:3/6/2017 6:51:39 AM
Submitted via:<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees?c=%2fcore-area-liquid-waste-management-committee&d=636245910000000000>

James Bay sub-project considerations: NOISE, a substantive issue

CRD Wastewater Project; 2 conveyance sub-projects

- Dallas trench
 - James Bay to McLaughlin pipe
 - December 14, 2016 meeting
 - Expectation of noise target: WHO Guidelines of Community Noise
 - Concern over proximity to housing
 - Concern of families/children near-by
 - January 11, 2017 JBNA Community Meeting
 - 80+ residents expressed concerns
 - CRD Project team committed to on-going consultation with JBNA and updating/discussions at JBNA General Meetings every 2-3 months
-

NOISE : 50 metres from JB homes

Esquimalt	item	James Bay
construction impacts of McLaughlin works McLaughlin site construction impacts akin to Capital Park in James Bay		
trench and X-harbour tunnel		
none	Dallas trench	street closures
none	noise	significant (not disclosed)
none	traffic/equipment	level not yet disclosed
12 mos of tunnel drilling		
200-500m from residences 5 days (weekdays)	noise	75-85dBA 50m from homes 6 days (weekdays + Saturday)
	pipe pull	1km Niagara pipe lay-over

noise

definitions & guidelines

A-weighted decibels (dBA)

- Logarithmic scale: Energy level vs. perceived noise (energy doubles every 3 dBA, perceived noise every 10 dBA)
- WHO Guidelines for Community Noise (55 dBA = threshold for serious annoyance)

Relevant Community Noise Guidelines

- City of Victoria Noise Bylaw
- Health Canada Guidelines
- World Health Organization (WHO)

NOTE: City bylaw focussed on noise permitted to be transmitted . . . silent with respect to overall community noise.

Typical sound levels:

Speech interference at 60 dBA

- 30 dBA library, whispers
 - 40 dBA living room bedroom (with no 'outside traffic noise')
 - 50 dBA conversation, quiet office, light traffic
 - 60 dBA sewing machine, air conditioner 20' away
 - 70 dBA vacuum, hair dryer, noisy restaurant, car at 50 km/h
 - 80 dBA city traffic, alarm clock
 - 90 dBA motorcycle, lawn mower
 - 100 dBA chain saw, pneumatic drill
 - 120 dBA loud rock band
-

Table 1: Guideline values for community noise in specific environments.

Specific environment	Critical health effect(s)	L _{Aeq} [dB(A)]	Time base [hours]	L _{Amax} fast [dB]
Outdoor living area	Serious annoyance, daytime and evening	55	16	-
	Moderate annoyance, daytime and evening	50	16	-
Dwelling, indoors	Speech intelligibility & moderate annoyance, daytime & evening	35	16	45
Inside bedrooms	Sleep disturbance, night-time	30	8	
Outside bedrooms	Sleep disturbance, window open (outdoor values)	45	8	60
School class rooms & pre-schools, indoors	Speech intelligibility, disturbance of information extraction, message communication	35	during class	-
Pre-school bedrooms, indoor	Sleep disturbance	30	sleeping-time	45
School, playground outdoor	Annoyance (external source)	55	during play	-

Children and noise

MAGNITUDE AND EFFECTS OF SOUND

COMMON EXAMPLE	dBA	EFFECT
Breathing	0-10	Hearing threshold
Conversation at home	50	Quiet
Freeway traffic (15 m), vacuum cleaner, noisy party	70	Annoying , intrusive, interferes with phone use
Average factory, train (at 15 m)	80	Possible hearing damage
Jet take-off (at 305 m), motorcycle	100	Damage if over 1 minute
Thunderclap, textile loom, chain saw, siren, rock concert	120	Human pain threshold
Toy cap pistol, Jet takeoff (at 25 m), firecracker	150	Eardrum rupture

Adverse health effects of noise I

- **Physical effects (pathological effects)**
Noise-induced hearing loss, hearing impairment, threshold shift;
- **Physiological effects**
Startle and defense reaction leading to potential increase blood pressure;
- **Sensory effects**
Aural pain, ear discomfort, tinnitus
- **Interference with speech communication**
Reduction in intelligibility of conversation, radio, music, television and others



Process issues: loss of community input

Residents to carry burden of impacts

- JBNA notified of impacts - December 14, 2016
 - on-going consultation and consider ways to mitigate noise
 - residents to be consulted on hours, length of day vs # days
- Residents informed January 11, 2017
 - assured project team would continue consultation with JBNA
 - assured project team would be at JBNA General Meetings every 2-3 months with updates and further discussion

Request: project team to ensure Lmax noise be at or below 60 dBA at Dallas Road and fulfill commitments of consultation

Nancy More

From: Legserv
Subject: FW: Addressing the Board - Submission

Sent: Monday, March 06, 2017 11:13 AM
To: Legserv <Legserv@crd.bc.ca>
Subject: Addressing the Board - Submission

The following message was received through the form at '<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees?c=%2fcore-area-liquid-waste-management-committee&d=636245910000000000>'. Neither the name nor the e-mail address can be confirmed as accurate.

.....

Your name::
Joan Looy

I represent::

Municipality/Electoral Area in which you reside::
Victoria

I wish to address::
Core Area Liquid Waste Management Committee

Meeting Date::
Mar 08, 2017, 9:30am

Agenda Item::
5.1-5.2

My reason(s) for appearing (is/are) and the substance of my presentation is as follows::
Break of consultation

I will have a PowerPoint or video presentation and will submit it at least 24 hours in advance of the meeting.:
No

The meeting and my presentation will be webstreamed live via the CRD website and recorded.:
I understand,

Submitted at:3/6/2017 11:13:21 AM
Submitted via:<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees?c=%2fcore-area-liquid-waste-management-committee&d=636245910000000000>

Nancy More

From: Legserv
Subject: FW: Addressing the Board - Submission

Sent: Monday, March 06, 2017 11:42 AM
To: Legserv <Legserv@crd.bc.ca>
Subject: Addressing the Board - Submission

The following message was received through the form at '<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees?c=%2fcore-area-liquid-waste-management-committee&d=636245910000000000>'. Neither the name nor the e-mail address can be confirmed as accurate.

.....

Your name::
Darrel Woods

I represent::

Municipality/Electoral Area in which you reside::
Victoria

I wish to address::
Core Area Liquid Waste Management Committee

Meeting Date::
Mar 08, 2017, 9:30am

Agenda Item::
Core Area Wastewater Treatment Project

My reason(s) for appearing (is/are) and the substance of my presentation is as follows::
I am my neighbours will be affected by the operation of the McLoughlin Point plant.

1. encourage implementation of best practices in odour and noise mitigation at the treatment plant.

I will have a PowerPoint or video presentation and will submit it at least 24 hours in advance of the meeting.:
Yes

The meeting and my presentation will be webstreamed live via the CRD website and recorded.:
I understand,

Submitted at:3/6/2017 11:42:22 AM
Submitted via:<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees?c=%2fcore-area-liquid-waste-management-committee&d=636245910000000000>

Nancy More

From: Legserv
Subject: FW: Addressing the Board - Submission

Sent: Tuesday, March 07, 2017 3:49 PM
To: Legserv <Legserv@crd.bc.ca>
Subject: Addressing the Board - Submission

The following message was received through the form at '<https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees>'. Neither the name nor the e-mail address can be confirmed as accurate.

.....

Your name::
Robert Drew

I represent::

Municipality/Electoral Area in which you reside::
Victoria

I wish to address::
Capital Regional District Board

Meeting Date::
March 8, 2017

Agenda Item::
5.2

My reason(s) for appearing (is/are) and the substance of my presentation is as follows::
Dear Directors:

I own and live at a waterfront condo along the Westsong or Songhees Walkway on the north shore of the Inner Harbour, part of a constituency that was not been canvassed.

As such, we and hundreds of other existing and under-construction condo/stata residents along the southern portion of Victoria West are directly affected by the decision to locate a sewage treatment plant at McLoughlin Point. (As are citizens of Esquimalt and James Bay)

Our concerns: 1. Odours; 2. Raw Sewage Spills from the Plant 3. Oversight - ensuring delivery to required spec

(1.) ELIMINATION OF ODOUR DURING OPERATION (a) With the well known prevailing winds, hundreds of residents along the entire north shore of the Inner harbour, the southern portion of West Victoria, will be directly exposed to any sewage plant odors on a continuous basis.

(b.) Residents and businesses in James Bay will also be affected. (c.) Frequent East / SouthEast winds will also carry sewage plant odors which will affect the residents, Marina Recreation Vehicle Park, West Bay Marine Village and the nearby residential homes in Esquimalt.

(d.) There should be NO detectible odors even at close range - Noting the Coho and numerous new Ferries, ships and yacht traffic which will sail at close proximity to the plant.

(2.) ELIMINATE RISK OF RAW SEWAGE SPILLS Historically, raw sewage spills from major sewage plants WILL occur. They can occur during: (a) Construction and Commissioning (b) Routine system cleaning, maintenance and upgrading. (c) Equipment failure or breakdown

(d) Natural events or causes

Catastrophic sewage spills occurred at Halifax Harbour, Ottawa, and on Feb.7, 2017 at Seattle. There is no reason to believe that this will not happen here at the entrance to the Inner Harbour. The inherent design must be reliable with a robust contingency plan.

Tidal tables are established. A raw sewage spill occurring during a flood tide will have a disastrous effect on the Inner Harbour; the hundreds or thousands of near-by residential homes and families; and the main attraction of the recreational and tourist industry of the entire South Island region.

A fecal coliform sewage spill or release at flood tide would do health & environmental damage all the way up the Gorge waterway and seriously pollute the Inner harbour. Such an event, witnessed by cruise ship visitors will permanently damage the Victoria brand and our important tourist industry permanently.

(C.) ESTABLISH SPECS AND EXERCISE VIGOROUS OVERSIGHT

I urge the CRD to be vigilant in all steps through this project's process. To first ensure that the essential specifications regarding odor and spill elimination have been identified, as required contracted specs in writing, from the very beginning.

And that there will be robust oversight throughout the environmental, regulatory, and Permit , Development and construction stages,

And that these requirements are not departed from, or compromised or departed by those sympathetic with cost-cutting contractors.

For effective oversight, the CRD should ensure it has the funds to engage known INDEPENDENT experts with established experience in contract law and the requisite engineering specialties.

Respectfully Submitted

Robert Drew

I will have a PowerPoint or video presentation and will submit it at least 24 hours in advance of the meeting.:

No

The meeting and my presentation will be webstreamed live via the CRD website and recorded.:

I understand,

Submitted at: 3/7/2017 3:49:29 PM

Submitted via: <https://www.crd.bc.ca/about/board-committees/addressing-the-board/addressing-the-crd-board-committees>

User Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_12_3) AppleWebKit/602.4.8 (KHTML, like Gecko)

Version/10.0.3 Safari/602.4.8

User Host Address: 70.67.56.229



Making a difference...together

**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE
MEETING OF WEDNESDAY, March 8, 2017**

SUBJECT **Approval to Enter into a Funding Agreement with the Province of British Columbia**

ISSUE

To seek approval for the Capital Regional District (CRD) to enter into a funding agreement with the Province of BC, substantially in the form attached as Appendix A.

BACKGROUND

On May 25, 2016 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 (CAWTP);
- 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.

The Provincial Funding Agreement (the Agreement) provides for a non-repayable contribution of up to \$248 million of eligible costs of the CAWTP, including the McLoughlin Point Wastewater Treatment Plant (the WWTP), the Residuals Treatment Facility (RTF) and the conveyance component of the CAWTP.

The Agreement contains a provision that two of the three payments will occur on 'Commissioning', which is defined to include "when the CRD has obtained approval from the Ministry of Environment for a plan for the beneficial re use of biosolids in accordance with Amendment 11 to the Core Area Liquid Waste Management Plan".

The Agreement also includes, as Schedule E, a letter from the Ministry of Environment that states that "the condition [in the Agreement] does not increase the obligation of the CRD from those described in the Ministry's November letter because the plan is already required as a condition of the Ministerial approval of Amendment No. 11".

This condition was not considered by the Project Board when it sought, and was granted approval, of the Business Case. The Terms of Reference of the Project Board state that CRD

Board approval is required for any changes that could materially affect availability of funding. This condition could affect availability of funding if the CRD fails to meet its obligations as contained in the Ministry's November letter. Consequently, the Project Board is seeking CRD Board approval.

BUDGET AND RISK IMPLICATIONS

The expected provincial funding of \$248 million is unchanged from the Business Case.

The risk associated with the condition requiring approval of the Ministry of Environment was not considered by the Project Board when it sought and was granted approval by the CRD Board on September 14, 2016. The risk of meeting the condition is effectively within the control of the CRD as it intends to work collaboratively with the Ministry of Environment throughout the development of the plan. Notwithstanding that the risk of not meeting the condition is low, it is a new risk and consequently, consistent with its Terms of Reference, the Project Board is requesting CRD Board approval of the Provincial Funding Agreement.

RECOMMENDATION

That the Core Area Liquid Waste Management Committee recommend to the CRD Board that:

The Contribution Agreement between the Capital Regional District and Her Majesty the Queen in Right of the Province of British Columbia, substantially in the form attached as Appendix A, be approved.

Submitted by:	Jane Bird, Chair, Core Area Wastewater Treatment Project Board
---------------	--

Attachment: 1

Appendix A – Provincial Funding Agreement

JB:dd

This Contribution Agreement dated for reference the __day of _____ 2017.

BETWEEN

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE
OF BRITISH COLUMBIA, represented by the Minister of Community,
Sport and Cultural Development and Minister Responsible for
Translink (the "Province")

AND

Capital Regional District, a regional district incorporated under the
Local Government Act [R.S.B.C. 1996, Chapter 323], (the "CRD")

WHEREAS:

- A. The CRD has adopted a Core Area Liquid Waste Management Plan that has been approved by the Province's Minister of Environment and that includes the construction of a Wastewater Treatment Plant (WWTP) and a Residuals Treatment Facility (RTF) for sludge treatment.
- B. The Corporation of the Township of Esquimalt has approved the rezoning application and a development permit application for the WWTP at McLoughlin Point.
- D. The Province has approved funding to be paid by the Province to the CRD for the Project described in this Agreement, on the terms and conditions of this Agreement and when the CRD has met the eligibility criteria set out in this Agreement.

NOW THEREFORE, in consideration of the sum of One Dollar and other valuable consideration, the receipt and sufficiency of which is acknowledged by each party, the parties agree as follows:

DEFINITIONS

1. In this Agreement and its recitals the following definitions apply:

"Agreement" means this Contribution Agreement and any schedules attached hereto;

"Agreement on Internal Trade" means the agreement entered into between the Governments of Canada, Newfoundland and Labrador, Nova Scotia, Prince Edward Island, New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon which came into force in 1995, as amended from time to time;

"Commencement Date" means the date identified as the Commencement Date in Schedule A;

"Commissioned/Commissioning" occurs when:

- (a) the facilities, systems, and assemblies of the Project are fully operational and have been tested to verify the Project is designed, installed, maintained, operated, and functions according to the design objectives and specifications;
- (b) the requirements of Schedule A have been met;
- (c) the CRD has obtained approval from the Ministry of Environment of B.C. for a plan for the beneficial reuse of biosolids in accordance with Amendment No. 11 to the Core Area Liquid Waste Management Plan; and
- (d) the Province has evaluated the Commissioning Report described in section C.6 of Schedule C and the Province acknowledges, in writing, that the report is acceptable and that the eligibility criteria have been met;

"Completion Date" means the date specified in Schedule A upon which the CRD must meet all the requirements of this Agreement;

"Contract" means a contract between the CRD and a Third Party whereby the latter agrees to provide a product or service to the Project in return for financial consideration;

"Core Area" means the following seven (7) core municipalities within the CRD – City of Colwood, Township of Esquimalt, City of Langford, District of Oak Bay, District of Saanich, City of Victoria, and Town of View Royal;

"Fiscal Year" means the period beginning April 1 of a year and ending March 31 of the following year;

"Project" means the project described in Schedule A;

"Provincial Minister" means the Minister of Community, Sport and Cultural Development and Minister Responsible for Translink and includes anyone authorized to act on his/her behalf;

"Provincial Staff" means employees of the Ministry of Community, Sport and Cultural Development who are directly involved in the administration of this Agreement, and includes anyone authorized to act on their behalf;

"Substantial Completion of the RTF" is achieved when:

- (a) the RTF is ready for the intended use for which it was designed and constructed;

(b) the CRD has obtained approval from the Ministry of Environment of B.C. for a plan for the beneficial reuse of biosolids in accordance with Amendment No. 11 to the Core Area Liquid Waste Management Plan; and,

(c) when the Province has evaluated the Substantial Completion report described in section C.5 of Schedule C and the Province acknowledges, in writing, that the report is acceptable;

"Substantial Completion of the WWTP" is achieved when the WWTP is ready for the intended use for which it was designed and constructed, and when the Province has evaluated the Substantial Completion report described in section C.4 of Schedule C and the Province acknowledges, in writing, that the report is acceptable;

"Third Party" means any person, employee or agent, other than a party to this Agreement that is involved in the implementation of the Project.

SCHEDULES

2. The Schedules to this Agreement are:

Schedule A	Schedule Project Information
B Schedule	C Payment Terms and Eligibility Criteria
Schedule D	Reporting Requirements
	Commission

TERM

3. Notwithstanding the actual date of execution of this agreement, the term of this agreement begins on the Commencement Date and expires on March 31, 2023.

OBLIGATIONS OF THE CRD

4. The CRD agrees to:

- (a) carry out the Project in a diligent and professional manner;
- (b) commence carrying out the Project within 6 months of the date of reference of this Agreement;
- (c) complete the Project no later than the Completion Date; and
- (d) provide evidence satisfactory to the Province that the CRD has commenced the Project in accordance with section 4(b) of this Agreement.

5. For the purposes of section 4 (d), the following shall constitute sufficient evidence that the CRD has commenced carrying out the Project:
 - (a) verification that contracts for work related to the Project have been awarded;
 - (b) site preparation or construction of any aspect of the Project has started; or
 - (c) other evidence deemed appropriate by the Province, acting reasonably.

6. If, in the opinion of the Province, the CRD has failed to provide evidence satisfactory to the Province in accordance with section 4(d) and section 5 of this Agreement to demonstrate the Project has commenced, this Agreement may be terminated by the Province at any time of its choosing and without notice. The Province shall advise the CRD, in writing, within forty-five days of being provided the evidence required under section 4(d) if it does not intend to accept such evidence. Otherwise, the Province shall be deemed to have accepted the evidence of commencement of the Project.

7. The CRD will comply, and will ensure that any Third Party will comply, with all applicable laws, statutes, regulations, or bylaws of Her Majesty the Queen in Right of Canada ("Canada"), the Province and any local government.

8. The CRD agrees to:
 - (a) establish and maintain accurate accounting and administrative records (including supporting documents) in a form and content satisfactory to the Province following generally accepted accounting principles for local governments;
 - (b) establish and maintain books of account, invoices, receipts and vouchers for all expenses incurred in a form and content satisfactory to the Province;
 - (c) permit the Province, or any staff member of the Province, for contract monitoring and audit purposes, to inspect at all reasonable times, any books of account or records (both printed and electronic, including, but not limited to, electronic storage devices), whether complete or not, and any executed Contracts that are produced, received or otherwise acquired by the CRD as a result of this Agreement;
 - (d) maintain all such accounts and records for a period of seven years after the Completion Date; and
 - (e) ensure that all Contracts entered into by the CRD with any Third Parties contain the provision in section 7 above.

9. The CRD is solely responsible for all aspects of the Project, including without limitation, the planning, design, construction, private finance costs, operation,

maintenance, worker and public safety, completion and ownership of the infrastructure, and nothing in this Agreement shall be deemed to give the Province an interest in, or responsibilities for the Project, unless otherwise provided in this Agreement.

10. Upon completion of the Project, the infrastructure resulting from the Project will be used, maintained and operated for its intended purpose for a reasonable period of at least one half of the expected life of the asset after the Completion Date. This section does not prevent the replacement of defective, worn or outdated components of the Project consistent with good engineering practices.
11. The CRD agrees to ensure that the provincial contribution as set out in section B.1 of Schedule B of this Agreement is to be used solely for the purpose of defraying the costs incurred, excluding land acquisition costs, by the CRD in constructing and completing the WWTP and RTF as described in Schedule A.
12. The CRD agrees to promptly notify the Province through Provincial Staff, in writing, if it receives or is entitled to receive funding from any federal or private entity source or provincial funding outside of this Agreement (the "External Funding"). If the External Funding, together with the Province's contribution under this Agreement, exceeds two-thirds of the total actual cost of the Project as calculated before the inclusion of land acquisition costs, the Province reserves the right to adjust its contribution accordingly.
13. The CRD will not knowingly permit any member of the Legislative Assembly of British Columbia, a mayor or any municipal councilor of the Core Area, the Chair or any board member of the CRD, or any member of the Project Board established under Schedule D, to be admitted, directly or indirectly, to any share or part of any contract, agreement or Project Board made pursuant to this Agreement or in relation to the Project or to obtain any benefit arising therefrom.
14. The CRD acknowledges the Province will not provide any guarantees against Project default to the CRD or any other party.
15. The CRD acknowledges that it and the Project Board referred to in Schedule D are not agents of the Province and will do no act which might be construed as authorizing any contract or permitting any other liability or obligation to be incurred on behalf of the Province.
16. The CRD will retain title to and ownership of the infrastructure resulting from the Project for at least ten years after Commissioning.
17. As a stipulation to this agreement, if at any time within ten (10) years from Commissioning, the CRD:

- (a) sells, other than to the Province, a local government, or a Crown corporation of the Province;
- (b) leases (excluding the design, build, finance, and operation of the RTF described in Schedule A) other than to the Province, a local government, or a Crown corporation of the Province; or
- (c) encumbers

directly or indirectly, the Project or any part thereof, paid for with funds contributed by the Province under this Agreement, the CRD hereby undertakes to repay the Province, on demand, a proportionate amount of the funds contributed by the Province, as follows:

Where Project asset is sold, leased, or encumbered:	Repayment of contribution (in current dollars)
Within 2 years after Commissioning	100%
Between 2 and 5 years after Commissioning	55%
Between 5 and 10 years after Commissioning	10%
10 years after Commissioning	0%

- 18. At any time during the ten (10) years following the Commissioning, each party agrees to notify the other party in writing as soon as practicable, of any transaction triggering the above-mentioned repayment of which the party becomes aware.
- 19. The CRD agrees to ensure that any contracts it awards to any Third Party will be awarded in a way that is transparent, competitive, and consistent with this Agreement and the Agreement on Internal Trade and is also in accordance with regular purchasing provisions used by the CRD for contracted services.
- 20. The CRD agrees to ensure that all Contracts awarded in relation to the construction of the Project will include a provision ensuring that Substantial Completion of either or both of the WWTP and the RTF will not occur prior to April 1, 2020.

OBLIGATIONS OF THE PROVINCE

- 21. Provided the CRD is in compliance with its obligations under this Agreement, the Province will pay the CRD the amounts and in the manner set out in Schedule B of this Agreement.
- 22. The Province will not have any obligation to make a contribution under section 21 unless the CRD has complied with Schedule A and the eligibility criteria and payment provisions set out in Schedule B.

COMMUNICATIONS

23. The CRD agrees that all public information material pertaining to the Project will clearly indicate that the Project is funded in part by the Province. The CRD acknowledges that the Province shall be given at least 15 working days' notice of any scheduled communications material or public events relating to the Project.
24. The CRD agrees to install, at their expense, temporary signage if provided by the Province at a prominent location where there is visible activity related to the Project indicating that the Project is funded in part by the Province.
25. The CRD agrees that temporary signage will be removed within 90 days of Project completion.
26. Upon completion of the Project, the CRD will install, at their expense, a plaque or permanent sign at the WWTP and the RTF with an appropriate inscription approved by the Province acknowledging that the Project was funded in part by the Province.

INDEMNIFICATION

27. The CRD will be solely responsible for and shall indemnify and save harmless the Province, and their ministers, officers, servants, employees or agents from and against all losses, claims, liabilities, suits, damages, actions, causes of action, costs and expenses, and demands of any kind ("losses"), or other proceedings by whomsoever brought or prosecuted in any manner based upon, or occasioned by any injury to persons, damage to or loss or destruction of property, economic loss or infringement of rights, caused by or arising directly or indirectly, from:
 - (a) the CRD's performance under this Agreement or the breach of any term or condition of this Agreement by the CRD, its officers, servants, employees, agents, and appointees to any commissions established pursuant to this Agreement or by any Third Party's performance of its Contract with the CRD and any officers, employees, servants or agents of the Third Party;
 - (b) the on-going operation, maintenance and repair of the infrastructure resulting from the Project; and
 - (c) any act or omission of the CRD, a Third Party, their respective employees, officers, servants, or agents.

INSURANCE

28. The CRD will, without limiting its obligations or liabilities herein, provide and maintain, or cause to be maintained, at their own expense, insurances with insurers licensed in Canada with coverage of a type, and in amounts, that any similar business, acting reasonably, would procure for a project of the scope, size and exposure of the Project, during the term of this Agreement and for any subsequent ongoing operations and maintenance of the resulting infrastructure.

29. All policies covering the construction or operation of the Project shall name the Province as an additional named insured and the Province retains the right to request proof of insurance on an annual basis.

REPRESENTATIONS AND WARRANTIES

30. The CRD represents and warrants to the Province, with the knowledge that the Province will rely upon these warranties and representations in entering into this Agreement and in completing its obligations under this Agreement, that, at the execution date of this Agreement:
- (a) it is a regional district duly incorporated under the *Local Government Act*;
 - (b) it has all necessary power and capacity to enter into this Agreement and to carry out the transactions contemplated herein and the execution of this Agreement has been duly and validly authorized by all necessary proceedings under the *Local Government Act*;
 - (c) the making and performance of this Agreement by the CRD has been duly **authorized b)'the board of the CP** ;
 - (d) the execution of this Agreement and its performance will not result in a breach of any statute, bylaw or other enactment or of any agreement affecting it;
 - (e) there is no claim or litigation pending or threatened against it which would affect its right to enter into and carry out its obligations under this Agreement; and,
 - (f) all information contained in any report related to the Project is true and correct.

DEFAULT

31. Any of the following events will constitute an Event of Default, whether any such event be voluntary, involuntary or result from the operation of law or any judgment or order of any court or administrative or government body:
- (a) the CRD fails to comply with any provision of this Agreement;
 - (b) any representation or warranty made by the CRD in connection with this Agreement is untrue or incorrect;
 - (c) any information, statement, certificate, report or other document furnished or submitted by or on behalf of the CRD pursuant to or as a result of this Agreement is untrue or incorrect;
 - (d) the CRD ceases, in the opinion of the Province, to carry on business as a going concern;
 - (e) a change occurs with respect to one or more of the properties, assets, conditions (financial or otherwise), business or operations of the CRD which, in the opinion of the Province, materially adversely affects the ability of the CRD to fulfill its obligations under this Agreement;

- (f) an order is made or a resolution is passed or a petition is filed for the liquidation or winding up of the CRD;
- (g) the CRD becomes insolvent or commits an act of bankruptcy or makes an assignment for the benefit of its creditors or otherwise acknowledges its insolvency; or
- (h) a bankruptcy petition is filed or presented against, or a proposal under the *Bankruptcy and Insolvency Act* (Canada) is made, by the CRD or a receiver or receiver-manager of any property of the CRD is appointed.

TERMINATION

32. Upon the occurrence of any Event of Default and at any time thereafter the Province may, notwithstanding any other provision of this Agreement, at its sole option, elect to do any one or more of the following:
- (a) terminate this Agreement in which case the Province's obligation to make any payment of the money remaining unpaid under this Agreement is also terminated and discharges the Province of all liability to the CRD under this **Agreement**;
- (b) require that the Event of Default be remedied within a time period specified by the Province;
- (c) suspend any payment due to the CRD by the Province while the Event of Default continues;
- (d) waive the Event of Default; and
- (e) pursue any other remedy available at law or in equity.
33. If the Province terminates this Agreement under section 32(a), then such termination is effective upon ninety (90) days after written notice to the CRD.

REMEDIES NON-EXCLUSIVE

34. The rights, powers and remedies conferred on the Province under this Agreement or any statute or law are not intended to be exclusive and each remedy shall be cumulative and in addition to and not in substitution for every other remedy existing or available to the Province.
35. The exercise of any one or more remedies available to the Province will not preclude the simultaneous or later exercise by the Province of any other right, power or remedy.

APPROPRIATION

36. Notwithstanding any other provision of this Agreement, the payment of money by the Province to the CRD under this Agreement is subject to:
- (a) there being sufficient monies available in an appropriation, as defined in the *Financial Administration Act*, to enable the Province, in any fiscal year or part

thereof, when any payment by the Province to the CRD falls due under this Agreement, to make that payment; and

- (b) Treasury Board, as defined in the *Financial Administration Act*, not having controlled or limited expenditure under any appropriation referred to in subsection (a) of this section.

NO FURTHER OBLIGATIONS

- 37. The CRD acknowledges that nothing in this Agreement will bind the Province to provide any funding for any addition or improvement to the Project, or any cost overruns of the Project, and that no partnership, joint venture or agency will be created or will be deemed to be created by this Agreement or any action of the parties under this Agreement.

JOINT AND SEVERAL OBLIGATIONS

- 38. In the event the CRD is comprised of more than one entity, then the covenants and obligations of each of such entities \With the others will be both joint as well as several .

AMENDMENTS

- 39. Unless otherwise specified in this Agreement, this Agreement may be amended only by further written agreement between the parties. Any requests for amendments to this Agreement will be made in writing and submitted to the other party.

SURVIVAL OF TERMS

- 40. All of the provisions of this Agreement in favour of the Province and all of the rights and remedies of the Province, either at law or in equity, will survive any expiration or sooner termination of this Agreement.

NOTICE

- 41. Any written communication from the CRD to the Province must be mailed, personally delivered, faxed, or electronically transmitted to the following address:

Ministry of Community, Sport and Cultural Development and Minister
Responsible for Translink
Local Government Infrastructure and Finance Branch PO Box
9838, STN PROV GOVT
Victoria, BC V8W 9T1

Fax No.: Email: 250 356-1873
INFRA@gov.bc.ca

Attention: Director, Infrastructure and Engineering

42. Any written communication from the Province to the CRD must be mailed, personally delivered, faxed or electronically transmitted to the following address:

Capital Regional District PO Box
1000
Victoria, BC V8W 2S6

Fax No.: Email: 250 360-3234
cawtp@crd.be.ca

Attention: Chief Administrative Officer

43. Any written communication from either party will be deemed to have been received by the other party on the tenth business day after mailing in British Columbia; on the date of personal delivery if personally delivered; or on the date of transmission if faxed or electronically transmitted.
44. Either party may, from time to time, notify the other party in writing of a change of address and, following the receipt of such notice, the new address will, for the purposes of sections 41 or 42 of this Agreement, be deemed to be the mailing address of the party giving notice.

LOBBYISTS AND AGENT FEES

45. The CRD warrants:
- (a) that any person or organization it has hired, for payment, to speak to or correspond with any employee or other person representing the Province on the CRD's behalf, concerning any matter relating to the contribution under this Agreement or any benefit hereunder and who is required to be registered pursuant to either the *Lobbying Act*, R.S.C. 1985, c. 44 (4th Supp.) or the *Lobbyists Registration Act* [SBC 2001], c. 42, as amended, is registered pursuant to one or both of those acts;
 - (b) it has not and will not make a payment or other compensation to any legal entity that is contingent upon or is calculated upon the contribution hereunder or negotiating the whole or any part of the terms of this Agreement; and
 - (c) in the event of a breach of subsections (a) or (b) of this section, the Province may either terminate this Agreement or recover from the CRD the full amount of any contribution paid to the CRD by the Province under the terms of this Agreement.

NON-WAIVER

46. No term or condition of this Agreement and no breach by one party of any such term or condition will be deemed to have been waived unless such waiver is in writing signed by the other party.
47. The written waiver by one party of any breach by the other party of any term or condition of this Agreement will not be deemed a waiver of any subsequent breach by the other party of the same or any other term or condition of this Agreement.

ENTIRE AGREEMENT

48. This Agreement constitutes the entire agreement between the parties with respect to the subject matter of this Agreement.
49. Upon execution of this Agreement by both parties the Contribution Agreement between the parties dated for reference March 13, 2013 is terminated.

FURTHER ACTS AND ASSURANCES

50. Each of the parties will, upon the reasonable request of the other, make, do, execute or cause to be made, done or executed all further and other lawful acts, deeds, things, devices, documents, instruments and assurances whatever for the better and absolute performance of the terms and conditions of this Agreement.

TIME OF ESSENCE

51. Time will be of the essence of this Agreement.

ASSIGNMENT

52. The CRD will not, without the prior written consent of the Province, assign, either directly or indirectly, this Agreement or any of the rights of the CRD.

MISCELLANEOUS

53. This Agreement will be governed by and construed in accordance with the laws of the Province of British Columbia.
54. The Schedules to this Agreement are an integral part of this Agreement as if set out at length in the body of this Agreement.
55. If any provision of this Agreement or the application to any person or circumstance is invalid or unenforceable to any extent, the remainder of this Agreement and the application of such provision to any other person or circumstance will not be affected or impaired thereby and will be enforceable to the extent permitted by law.

56. Nothing in this Agreement operates as a consent, permit, approval or authorization by the Province or any ministry or branch thereof to or for anything related to the Project that by statute, the CRD is required to obtain unless it is expressly stated herein to be such a consent, permit, approval or authorization.
57. Any reference to a statute in this Agreement, whether or not that statute has been defined, includes all regulations at any time made under or pursuant to that statute and amendments to that statute.

DISPUTE RESOLUTION

58. Any disputes that arise under this Agreement will be referred to and finally resolved in accordance with the following procedures:
- (a) upon written notice from either party to the other outlining a dispute, the following representative of each party will meet within 21 days of receipt of such notice and attempt to resolve the dispute described in the notice:
 - 1. the Director of Infrastructure and Engineering, Ministry of Community, Sport and Cultural Development on behalf of the Province;
 - 11. the Chair of the Core Area Wastewater Treatment Project Board on behalf of the CRD;
 - (b) if the dispute is not resolved in accordance with subsection (a) of this section, the parties will attempt in good faith to resolve the dispute through mediation under the rules of the Mediate BC Society;
 - (c) unless the parties otherwise agree, if the dispute is not resolved pursuant to subsection (b) of this section, the dispute will be referred to and finally resolved by arbitration, in Victoria, pursuant to the *Commercial Arbitration Act*.

IN WITNESS WHEREOF each of the parties has executed this Agreement on the dates set out below.

SIGNED by the Minister of Community, Sport)
 and Cultural Development and Minister)
 Responsible for Translink or his or her)
 duly authorized representative on behalf of)
 HER MAJESTY THE QUEEN IN RIGHT)
 OF THE PROVINCE OF BRITISH)
 COLUMBIA:)
)
)
)
) Date: _____

 Minister or his/her Delegate

CAPITAL REGIONAL DISTRICT:

Per: _____
 Authorized Signatory

 Name/Title

 Date

Schedule A:**PROJECT INFORMATION**

- A.1 Project Title: CRD Core Area Wastewater Treatment Project.
- A.2 Project Description: The CRD Core Area Wastewater Treatment Project, as per the CRD's updated business case for the project, will consist of a Wastewater Treatment Plant (WWTP), a Residuals Treatment Facility (RTF) for sludge treatment, and conveyance systems upgrades, all serving the Core Area.
- A.3 The WWTP shall:
- (a) deliver the following outcomes:
 - i. an average carbonaceous biochemical oxygen demand in the effluent not exceeding 10 mg/L; and
 - ii. an average concentration of suspended solids in the effluent not exceeding 10 mg/L;
 - iii. recovery and internal reuse of resources; and
 - (b) be procured using a Design-Build-Finance approach.
- A.4 The RTF shall:
- (a) treat the residual solids and produce Class A biosolids for future beneficial reuse; and
 - (b) be procured using a Design-Build-Finance-Operate-Maintain approach.
- A.5 The Project will be managed in accordance with Schedule D.
- A.6 The Commencement Date of the Project is March 14, 2017.
- A.7 The Completion Date of the Project shall be no later than March 31, 2022.

Schedule B: PAYMENT TERMS AND ELIGIBILITY CRITERIA

8.1 Financial Contribution and Payment by the Province:

- (a) Upon meeting the eligibility criteria identified in section B.2 of this Schedule B and subject to section 12 of this Agreement, the Province will pay to the CRD an amount that will not exceed the lesser of 1/3 of the total actual cost of the Project (not including land acquisition costs) or Two Hundred and Forty Eight Million Dollars and Zero Cents (\$248,000,000);
- (b) Notwithstanding any other provisions of this Agreement, in no event will the Province be or become obligated to pay to the CRD an amount exceeding Two Hundred and Forty Eight Million Dollars and Zero Cents (\$248,000,000) in relation to the Project;
- (c) Notwithstanding any other provisions in this Agreement, no payments will be made by the Province prior to April 1, 2020; and
- (d) Notwithstanding any other provisions in this Agreement, no payments will be made by the Province after March 31, 2022.

B.2 Eligibility Criteria:

When the CRD has met the following eligibility criteria, the Province will make the payments to the CRD described in section B.3:

- (a) The Project Board established under the Core Area Wastewater Treatment Project Board Bylaw No. 4109 of the CRD, and as described in Schedule D, is to be in place prior to any procurement awards for construction of either the WWTP or the RTF;
- (b) Substantial Completion of the WWTP on a date no earlier than April 1, 2020; and no later than March 31, 2021
- (c) Substantial Completion of the RTF on a date no earlier than April 1, 2020; and no later than March 31, 2021
- (d) The Project being Commissioned on a date no earlier than April 1, 2021 and no later than March 31, 2022..

B.3 Payment Terms:

The Province will make payments to the CRD as follows:

- (a) Upon Substantial Completion of the WWTP and upon compliance with section C.4 of Schedule C, the Province will pay to the CRD the sum of Sixty Two Million Dollars and Zero Cents (\$62,000,000);
- (b) Upon Substantial Completion of the RTF and upon compliance with section C.5 of Schedule C, the Province will pay to the CRD the sum of Sixty Two Million Dollars and Zero Cents (\$62,000,000);

(c) Upon Commissioning and upon compliance with section C.6 of Schedule C and subject to section 12 of this Agreement, the Province will pay to the CRD the lesser of the sum of One Hundred and Twenty-Four Million Dollars and Zero Cents (\$124,000,000), or the remaining portion of 1/3 of the total actual cost of the Project, excluding land acquisition costs, and less the payment of the sums previously paid under sections B.3(a) and B.3(b) of this Schedule B.

B.4 All payments will be made by the Province within 90 days of the date the funds become owing by the Province to the CRD under Section B.3 (a), (b), or (c), respectively.

B.5. In connection with the definitions of "Substantial Completion of the RTF" and "Commissioned/Commissioning", attached as Schedule E is a letter dated March 2, 2017 from Mark Zacharias, Assistant Deputy Minister, Environmental Protection Division of the Province to Jane Bird, Chair, Core Area Wastewater Treatment Project Board.

Schedule C:**REPORTING REQUIREMENTS****C.1 Quarterly Progress Reports**

The CRD will submit to the Province through Provincial Staff quarterly progress reports, within thirty (30) days of the end of each quarter (March 31, September 30, and December 31) of each year of the term of this Agreement commencing on the first quarter following the date of execution of this Agreement. The quarterly progress reports will be in a form satisfactory to the Province and will include, but not be limited to, the following:

- (a) an introduction with a general description of the Project focusing on major achievements to date;
- (b) detailed summary information on the Project's progress; and
- (c) amounts expended on the Project.

C.2 Annual Progress Reports

The CRD will submit to the Province an annual progress report, delivered by June 30 of each Fiscal Year. The annual progress reports will be in a form satisfactory to the Province, which will include, but not be limited to, the following:

- (a) the information listed in section C.1 of Schedule C;
- (b) an overview about the status of both expected and unanticipated significant environmental issues related to the Project and the proposed mitigation strategies to deal with these concerns;
- (c) an update of qualitative and quantitative performance measurement information linked to the expected results to gauge Project benefit outcomes (e.g. environmental, economic, social, cultural, and safety) outlining results or successes achieved during the Fiscal Year. The CRD will ensure that appropriate data collection processes are in place to enable the capture of benefit outcomes;
- (d) any areas of concern or risks and proposed mitigation strategies affecting the schedule or the budget of the Project;
- (e) highlights of communication activities of the Project during the Fiscal Year; and
- (f) problems encountered, solutions and lessons learned.

C.3 Project Audit Report

The CRD may be required, at its expense, to provide a Project audit report from a person authorized to be an auditor under section 169 of the *Community Charter* confirming that the Project expenditures have been made in compliance with this Agreement. If required by the Province, the audit is to be in accordance with the form and reporting standards recommended by the Canadian Institute of Chartered Accountants.

C.4 Substantial Completion Report for WWTP

Prior to the Province making payment under section B.3(a) of Schedule B for the WWTP component of the Project, the CRD will deliver to the Province through Provincial Staff a Substantial Completion Report for the WWTP in a form satisfactory to the Province acting reasonably. This report will be approved by the Chair of the Project Board and Project Director and will verify that the WWTP has met all the requirements for Substantial Completion in this Agreement.

C.5 Substantial Completion Report for the RTF

Prior to the Province making payment under section B.3(b) of Schedule B for the RTF component of the Project, the CRD will deliver to the Province through Provincial Staff a Substantial Completion Report for the RTF in a form satisfactory to the Province acting reasonably. This report will be approved by the Chair of the Project Board and Project Director and will verify that the RTF has met all the requirements for Substantial Completion in this Agreement.

C.6 Commissioning Report

Prior to the Province making the final payment under section B.3(c) of Schedule B, the CRD will deliver to the Province through Provincial Staff a Commissioning Report in a form satisfactory to the Province acting reasonably. This report will be approved by the Chair of the Project Board and Project Director and will verify that the Project has met all the requirements for Commissioning in this Agreement. The Commissioning Report will include, but not be limited to, the following:

- (a) demonstration of how the WWTP component has met the outcomes, the procurement and governance requirements, and all conditions identified in this Agreement;
- (b) demonstration of how the RTF component has met the outcomes, the procurement and governance requirements, and all conditions identified in this Agreement;
- (c) demonstration of how the WWTP and the RTF function together to meet the requirements of this Agreement;

- (d) demonstration of how the eligibility criteria in section B.2 of Schedule B have been met;
- (e) breakdown of Project costs outlining the costs for each of the WWTP, RTF, and conveyance upgrade components of the Project defined in section A.2 of Schedule A;
- (f) an overview of both expected and unanticipated significant environmental issues encountered during the Project and mitigation strategies undertaken to deal with these concerns;
- (g) qualitative and quantitative performance measurement information linked to the expected results to gauge Project benefit outcomes (e.g. environmental, economic, social, cultural, and safety) outlining results or successes achieved. The CRD will ensure that appropriate data collection processes are in place to enable the capture and reporting of benefits;
- (h) any areas of concern or risk and mitigation strategies that affected the schedule or the budget of the Project;
- (i) highlights of communication activities during the Project; and
- (j) problems encountered, solutions and lessons learned.

C.7 Reports:

The Province in no way endorses, approves or verifies the findings, technical data, results, quality statements, representations or recommendations in the reports described above.

C.8 Other Information:

The CRD will provide the Province, upon request, all such other information concerning the progress of the Project, as may be required by the Province.

Schedule D: PROJECT GOVERNANCE

D.1 Establishment of the Project Board

The CRD has established, by bylaw, a Project Board known as the Core Area Wastewater Treatment Project Board (the "Project Board") to be in effect for the duration of the Project.

D.2 Project Board Governance

The Project Board must operate in accordance with the following:

- (a) deliver the Project in accordance with the scope, budget, and schedule established under this Agreement;
- (b) establish a Project Team that will report to the Project Director, who in turn reports directly to the Project Board. Neither the Project Director nor the Project Team members will report to or receive direction through the CRD's Chief Administrative Officer on Project related matters;
- (c) select a procurement leader and any other legal, financial and procurement advisors with considerable previous experience working on behalf of the public sector and managing public-private partnership procurements of similar size, complexity and commercial structure in British Columbia; and
- (d) the Project Board will have the authority to:
 - i. approve Project expenditures;
 - ii. hire and direct the Project team;
 - iii. approve key Project milestones; and
 - iv. enter into legal contracts on behalf of the CRD as required for the Project.

D.3 Project Board Structure and Membership:

- (a) Membership
 - i. The Project Board will consist of at least 7 members;
 - ii. Members will be appointed for a term of four years; and
 - iii. Membership on the Project Board will be dependent on qualifications and experience ensuring that at a minimum, the following areas of expertise will be represented:
 - 1. large, complex infrastructure construction projects;
 - 2. wastewater engineering;
 - 3. contract law;
 - 4. alternative procurement methods;
 - 5. project management;
 - 6. project finance; and

7. communications.

(b) Objectives:

- l. administer the procurement, design, construction and Commissioning of the Project;
- ii. conduct the procurement process in a way that promotes industry innovation;
- m. complete the Project in accordance with the scope, budget and schedule established under this Agreement; and
- iv. ensure Project compliance with all applicable provincial and federal laws.

Schedule E: LETTER RE. ELIGIBILITY CRITERIA



Reference: 308456

March 2, 2017

Chair, Core Area Wastewater Treatment Project Board Capital
Regional District
PO Box 1000, 625 Fisgard Street Victoria
BC V8W 2S6

Dear Ms. Bird:

We refer to our letter of November 18, 2016 and the submission by the CRD of a planning schedule before May 31, 2017 and a definitive plan for the beneficial reuse of biosolids before June 30, 2019.

We note that in the Provincial Contribution Agreement for the Wastewater Treatment Project, the second and third payments are conditional on approval by MOE of the plan for beneficial reuse of biosolids.

In the context of the regulatory process, the condition in the Provincial Contribution Agreement does not increase the obligation of the CRD from those described in our November letter because the plan is already required as a condition of the Ministerial approval of Amendment No. 11 to the Core Area Liquid Waste Management Plan.

Sincerely,

Mark Zacharias
Assistant Deputy Minister Environmental
Protection Division



Making a difference...together

**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE
MEETING OF MARCH 8, 2017**

SUBJECT Core Area Wastewater Treatment Project Development Phase Report

ISSUE

We enclose for information the Project Development Phase Report.

RECOMMENDATION

That the Core Area Liquid Waste Management Committee recommend to the Capital Regional District Board:

Receive the Project Development Phase Report for information.

Submitted by:	Jane Bird, Chair, Core Area Wastewater Treatment Project Board
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Attachment: Project Development Phase Report

Project Development Phase

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1. Introduction

The Core Area Wastewater Treatment Project Board (Project Board) Board was formed by Bylaw in May of 2016. From May to September 2016, in accordance with its terms of reference, the Project Board worked to recommend a project for approval by the CRD. The CRD approved the recommendations in September 2016. In the five months since the approval the Project Board has worked to develop the project to a point where construction could proceed.

Activities in this development phase included:

- writing the project Charter;
- finalizing a construction schedule for the McLoughlin Point Wastewater Treatment Plant (the Wastewater Plant);
- finalizing the project agreement for the Wastewater Plant with the contractor, Harbour Resource Partners (HRP);
- developing procurement plans and schedules for the conveyance, collection and residual solids treatment parts of the Project;
- finalizing funding agreements with senior levels of government;
- obtaining necessary zoning and land use approvals;
- obtaining First Nations support; and
- finalizing required permits and licenses.

We are now in a position to begin construction. To that end we are concluding the Development Phase of the project and beginning the Construction Phase. This report provides a summary of the Development Phase activities and outcomes.

2. Project Definition/Approval

On September 14, 2016, the Capital Regional District (CRD) received the report and recommendations from the Project Board and approved the Business Case for a defined wastewater treatment project consisting of a 108 megalitre/day tertiary wastewater treatment plant at McLoughlin Point, conveyance and collection infrastructure including pump station upgrades at Clover Point and Macaulay Point, and a residual treatment facility at Hartland landfill (collectively the Project).

Since that time, the Project team has developed a formal definition of the Project. It is attached as Attachment 1. This definition is consistent with the Business Case, and is the basis for the approvals, permits and licences issued during the Development Phase.

3. Project Funding / Sources and Uses

The Project cost of \$765 million, as noted in the Business Case, remains the same.

The sources of funding (Infrastructure Canada, P3 Canada, the Province of British Columbia and the CRD) remain the same. While finalising the funding agreements, the funding amount from P3 Canada *increased* by \$5 million, from \$36 million to \$41 million.

This is because Federal funding agreements define certain project costs as ‘eligible’ for funding from Canada. In the case of P3 Canada, more of the Project costs fell within P3 Canada definition of eligible costs than appeared to be the case when the Business Case was approved.

The final funding sources are:

Program Costs (millions)	Wastewater Treatment	Residuals Treatment	Conveyance	Total Costs
Total Capital Costs ^(A)	\$ 350	\$ 170	\$ 179	\$ 699
Owner’s Program Management and Land Costs ^(B)	\$ 35	\$ 19	\$ 13	\$ 66
Total Program Costs	\$ 385	\$ 189	\$ 192	\$ 765
Sources of Funding				
PPP Canada ^(C)		\$ 41		\$ 41
Building Canada Fund ^(D)	\$ 120			\$ 120
Green Initiative Fund ^(E)			\$ 50	\$ 50
Provincial Government ^(F)	\$ 124	\$ 62	\$ 62	\$ 248
Total Federal and Provincial Funding	\$ 244	\$ 103	\$ 112	\$ 459
Capital Regional District ^(G)	\$ 141	\$ 86	\$ 80	\$ 306
Total Funding	\$ 385	\$ 189	\$ 192	\$ 765

Notes:

- A. Total Capital Costs include: construction costs; construction contingency, engineering costs; administration and program management costs; Contractor's bid development and special purpose vehicle set-up costs; risk adjustment; Owner's interim financing costs; inflation to the mid-point of construction in Year 2019; Contractor's interest during construction, financing fees and debt service reserve account (DSRA) funding for the Biosolid Treatment Facility.
- B. Owner’s Program Management and Land Costs include: additional land purchases; impact consideration and mitigation allowance; development and due diligence costs; Owner's procurement costs; risk adjustment for retained risks; and land.
- C. PPP Canada contributions would be released in a single payment upon the Project's Substantial Completion.
- D. Building Canada Fund contributions would be released upon approving annual progress and performance reports and audits.
- E. Green Initiative Fund contributions would be released upon approving quarterly and annual progress and performance reports and audits.
- F. Provincial Government funding would be released partly during construction and partly upon commissioning, as defined in the Contribution Agreement.

- G. Contribution from the CRD is assumed to be the remaining balance of costs that would not be funded by the federal and provincial governments' contributions.

4. Schedule

A high-level Project schedule is attached as Attachment 2. The Project schedule is driven by the need to comply with federal regulations to treat sewage by December 31, 2020. Construction will begin in April 2017. The early activities are centred around the construction of the Wastewater Plant and the undersea forcemain from Ogden Point to McLoughlin Point. Conveyance pipes, pump station upgrades and the residual treatment facility will follow. The construction schedule for the various elements of the Project is a function of the commissioning requirements. As the design of each of the project components is further developed the Project team, in consultation with the contractors, will optimize the schedule.

5. Senior Government Funding

There are three Federal funding agreements:

- a. Infrastructure Canada agreement for the Wastewater Plant and Marine Outfall (Building Canada Fund);
- b. Infrastructure Canada agreement for the Conveyance System (Green Infrastructure Fund);
- c. P3 Canada agreement for the Conveyance System

All funding agreements are complete, and are either executed or circulating for execution.

The terms of the funding agreement with the Province are finalized. The agreement has been submitted by the Project Board to the Core Area Liquid Waste Management Committee for referral to the CRD Board for approval. Consideration of the approval is scheduled for the week of 8 March. Following approval, the Provincial agreement will be executed.

6. First Nations Support Agreements

The Core Area spans the traditional territory of the Lekwungen peoples, known today as Esquimalt Nation and Songhees Nation. As part of the Project and in recognition of the Crown's obligation to consult with the Esquimalt and Songhees Nations and the contribution of the Nations, including to the planning of the wastewater system, the CRD has entered into Support Agreements with the Esquimalt and Songhees Nations. All costs associated with the Support Agreements are included in the Control Budget for the Project.

Key terms of the agreements are:

- The CRD will lease Rock Bay from Matullia Holdings Limited Partnership, a partnership of the Esquimalt Nation and Songhees Nation, for use as a laydown area for four years.

- The CRD will create an Esquimalt Nation liaison position and a Songhees Nation liaison position for the four year term of the Project. The liaisons will assist the CRD and the contractors to ensure that the Nations continue to be informed and engaged during the Project and will provide support and guidance to the CRD and members of the Project Team with respect to cultural protocols between CRD and the Nations, including protocols that may apply in the event of the discovery of ancestral remains during construction.
- The CRD will contribute \$480,000 to Xhamasung Holdings LLP, a corporation jointly owned by the Esquimalt Nation and Songhees Nation, for the upgrading and development of Westbay Village Marina and R.V. park.
- The CRD will cause its contractors to make meaningful efforts to train and employ members of both Nations during construction.
- The CRD will contribute to the legal, professional and administrative costs incurred by the Nations in respect of the Project and the Support Agreements.
- The CRD will make contributions to each Nation for improvements to their reserves and for the re-interment of Aboriginal ancestors whose remains may be disturbed as a result of the construction of the Project.

As part of the agreements, the Nations have each provided letters of support for the Project, agreed to work closely with the liaisons to foster ongoing engagement during construction and agreed to support a process for the re-interment of Aboriginal ancestors. Reaching an understanding in advance of construction will hopefully go some way to minimize the emotional upheaval in the event of the discovery of ancestral remains and as well, mitigate the risk of potential delays in construction.

7. Land Use

In November 2016, the Project team, the Township of Esquimalt, and the City of Victoria developed a schedule to seek the required land use permits in each municipality. As contemplated by the agreed schedule, the municipalities and the Project team concluded the land use permitting before the end of February, 2017. This date was important in order for the Project Board to maintain the schedule to conclude the Project Agreement with HRP for the Wastewater Plant and undersea pipe in early March, such that construction could begin as planned in April.

Each of these processes are detailed below.

a. Township of Esquimalt

i. Zoning

On February 20, 2017, following a public hearing, the re-zoning application of Bylaw 2888 (which was initiated by the Township) and the amenity agreements were unanimously approved by Council.

Prior to the public hearing, the Project team presented to the Township Advisory Planning Commission, and to Council at its meetings to consider first and second reading. The Project team also held extensive discussions with Township staff about the details of the bylaw amendment and the agreements for amenities.

ii. Amenity Agreements

The Amenity Agreements acknowledge the permanent loss of waterfront land use as a result of the Wastewater Plant, and provide amenities valued at \$20 million, as contemplated in the approved Business Case. The amenities include \$17 million which will be given to the Township to be used for capital projects in waterfront parks, recreation facilities and public safety facilities. This contribution must be spent within approximately five years. The Township intends to lead public consultation prior to any finalizing the scope and design of the projects. The amenity agreements also contemplate the expansion and upgrade of the Macaulay Pump Station in Esquimalt, which is part of the Project.

iii. Right of Way (future trail)

As part of the rezoning, in recognition of the fact that the Department of National Defense (DND) owns the land surrounding McLoughlin Point and is not at this time prepared to provide a public trail through its lands, the Township removed the requirement for a walkway around the Wastewater Plant. The CRD agreed to grant the Township a right-of-way over its site to enable the future construction of a trail or walkway should discussions with DND at some point in the future result in an agreement for a trail connected to the Wastewater Plant site.

b. City of Victoria

i. Zoning

In Victoria, on February 23, 2017, following a public hearing, the CRD application to rezone the Clover Point pump station site to allow for the expansion of the existing pump station and related public realm improvements were unanimously approved by Council.

Prior to the public hearing, the Project team presented to the Committee of the Whole, held or attended several public and community association meetings, including public meetings hosted by the Fairfield-Gonzales Community Association Land Use Committee and the James Bay Neighbourhood Association, and met with key stakeholders including the Greater Victoria Harbour Authority (GVHA). Associated with this rezoning, and described below, are two

licences of occupation, one for the Clover Point pump station and one for the Clover Point forcemain.

As part of the rezoning, and following extensive discussions with City staff, staff and the Project team agreed on the proposed public realm improvements to be constructed along the conveyance route and around the Clover Point pump station. The City intends to lead public consultation before finalizing the detailed design of these improvements.

8. Land Interests

The Project team also negotiated and executed, or is in the process of executing, a series of agreements with landowners.

Licence/Lease	Project Requirement
City of Victoria Clover Point Licence	<ul style="list-style-type: none"> • The City of Victoria owns the land on which the Clover Point Pump Station is located. • The Project requires a construction licence and a longer term in the existing licence to accommodate the Clover Point expansion.
City of Victoria Dallas Road Licence	<ul style="list-style-type: none"> • The City of Victoria owns the land along Dallas Road. • The Project requires a construction licence and a longer term licence to accommodate the conveyance system under Dallas Road.
Department of National Defence Licence	<ul style="list-style-type: none"> • DND owns the land surrounding the McLoughlin Point site. • The Project requires a construction licence and statutory rights of way to authorise works associated with the Wastewater Plant, Conveyance System, and Macaulay Point Pump Station.
Greater Victoria Harbour Authority Ogden Point and Dallas Road Licence	<ul style="list-style-type: none"> • The GVHA owns land at 187 Dallas Road. • The Project requires a construction licence and statutory rights of way to accommodate the parts of the undersea cross-harbour forcemain and the conveyance system that will be located on GVHA lands. This license is being considered for approval by GVHA on March 3.

Manulife lease	<ul style="list-style-type: none"> • Manulife owns 1675 Douglas Street. • The CRD entered into a lease for Unit 510 in the Douglas Street building in November 2012 for office space for the former Seaterra program. • The Project Board has extended the lease term from its current expiration on October 31, 2017, until June 30, 2021. The space requirement has been reduced, and will be unit 510 only. The balance of the space has been sublet to HRP for use as a construction office.
Matullia Holdings Limited Partnership lease	<ul style="list-style-type: none"> • Matullia owns the land at Rock Bay in the City of Victoria. • The Project requires a lease to use the site as a laydown area for the four years of the Project.
Transport Canada Construction Licence	<ul style="list-style-type: none"> • Transport Canada owns portions of Victoria Harbour. • The Project requires a licence to authorise the construction works associated with the McLoughlin Point outfall and the undersea cross-harbour forcemain.
Transport Canada Geotechnical Works Licence and Permit	<ul style="list-style-type: none"> • The Project requires a licence permit to undertake the geotechnical works associated with the McLoughlin Point outfall and the undersea cross-harbour forcemain.

9. Permits and Approvals

The Project team has obtained the following permits and authorisations:

a. Ministry of Environment – Core Area Liquid Waste Management Plan (CALWMP)

During the development phase, the Project team obtained conditional approval and subsequent clarification of Amendment 11 of the CALWMP from the Minister of Environment (Minister).

The Project Board submitted Amendment #11 to the Ministry of Environment to approve the Project as presented in the Business Case. On September 30, 2016, the Minister approved Amendment #11, with conditions. Of note was the condition requiring the CRD to submit to the Minister by December 31 2017 a definitive plan for the beneficial reuse of bio-solids. On November 18, 2016 the Minister extended the deadline set out in the original approval of Amendment #11 to the CALWMP from December 31, 2017 to June 30, 2019. The CRD is responsible for the development of the plan.

a. Township of Esquimalt Development Permit

On February 27, 2017, the Project team obtained the Development Permit for the Wastewater Plant on the McLoughlin Point site. Prior to Council's consideration of the Development Permit, the Project team hosted two open houses in Esquimalt and one on the DND base. The Project

team also met with the Township's Design Review Committee on three occasions to review the plant design.

b. Other Permits

Additional permits and approvals will be obtained by CRD, HRP and other contractors as construction proceeds.

10. Construction Phase Contracts

a. Harbour Resource Partners

The Project team has finalised the contract for the construction of the Wastewater Plant, which includes the construction of three main components:

- a 108 Ml/d tertiary wastewater treatment plant located at McLoughlin Point,
- the cross harbour undersea forcemain, which consists of a 1 kilometre long pipe, 1050 millimetres in diameter, between Ogden Point and McLoughlin Point in the bedrock under the sea
- a 2100mm diameter marine outfall off McLoughlin Point.

Construction is anticipated to commence on both McLoughlin Point and Ogden Point in April 2017 with an overall completion date of November 30 2020.

11. Construction Phase Procurement

a. Residual Solids

The Project Team initiated the procurement of the Residuals Treatment Facility by issuing a Request for Qualifications (RFQ) in December 2016. An information webinar was conducted during the RFQ period and seven submissions were received. The Project Team is currently evaluating the submissions received and expects to select a shortlist of three qualified proponents in March.

The Project Team has appointed three positions related to the process:

- Fairness Advisor to monitor the procurement. The Fairness Advisor will act as an independent observer of the fairness of the implementation of the Competitive Selection Process, up to the selection of a Preferred Proponent. The Fairness Advisor will provide a written report to the CRD, which will be public;
- Conflict of Interest Adjudicator to provide decisions on conflicts of interest or unfair advantage issues related to the procurement of the Residuals Treatment Facility.
- Due diligence panel, to review aspects of the competitive selection process.

b. Conveyance

The Project team is progressing the design of the collection and conveyance components of the Project. The Project team is planning to procure the collection and conveyance components of the Project through nine contracts as follows:

- Design-bid-build contracts:
 - Residual Solids Pipelines and Pump Stations;
 - Macaulay Point Forcemain;
 - Clover Point Forcemain;
 - Currie Pump Station;
 - Currie Forcemain;
 - ECI/Trent Twinning; and
 - Arbutus Attenuation Tank

- Design-build contracts:
 - Macaulay Point Pump Station; and
 - Clover Point Pump Station

The schedule for the nine procurements is set out on the Schedule attached as Attachment 2.

12. Community Engagement Plan

The Project team continues to actively engage with stakeholders and the community. In its November report the Project Board presented a three-stage plan to engage interested stakeholders and communities and provide timely information. During phase 1 and 2, the Project Board's Chair, Vice Chair and Project team met with representatives of the Core Area municipalities, presented to the Councils of the Township of Esquimalt, City of Victoria and District of Saanich, met on several occasions with staff at DND and GVHA and with Esquimalt and Songhees Nations members and advisors. In addition as noted above, the land use permitting process involved several meetings with community associations, residents and other stakeholder groups in Victoria and Esquimalt.

The Project team is now working through the activities in Phase 3. This Phase is focused on finalizing the engagement plan for the construction phase while continuing to engage with community groups near the areas where early construction works will occur. For example, a multi-stakeholder public meeting related to the early construction works, in particular the work on the cross harbour undersea forcemain at Ogden Point has been planned for April 2017. It will be advertised shortly.

The Project team has developed and commenced executing a comprehensive Project Communications and Engagement Plan (CEP) for the construction phase. The CEP has been

informed by the feedback obtained from community and stakeholder engagements undertaken in the previous two phases, and key learnings from the Project's history.

The CEP recognises that the Project is making an important transition from the planning phase, which has been underway for many years, to the construction phase. The CEP:

- defines the Project's communications and engagement goals.
- describes the communications and engagement activities during construction.
- defines the roles and responsibilities of the Project team, and representatives from the contractors for each component of the project.

The CEP's objective is to maintain and strengthen the ongoing two-way communications and engagement program with stakeholders, Esquimalt Nation, Songhees Nation, and communities to provide timely project information and respond to public inquiries.

Key features of the CEP include:

- **Communications Planning**, which involves developing plans and strategies to support the Project, including integrating the community relations and construction communications functions listed below.
- **Community Relations**, which involves building relationships with the public and stakeholders, keeping them informed through ongoing, two-way communications regarding the project, and responding to inquiries in an effective and timely manner.
- **Media Relations**, which involves providing the media with progress reports and updates on the project and the work, and responding to issues raised by the media.
- **Construction Communications**, which involves keeping the public and stakeholders advised on a timely basis about all matters relating to construction progress, schedules and impacts.

The CEP recognises the many stakeholders with diverse interests in the Project. The CEP highlights the need to utilise various materials and tools to support the Project's communication and engagement objectives, including a public inquiry program, website, social media, community newsletters, construction notifications, community and stakeholder meetings, local government technical working groups, and door-to-door notifications.

13. Project Management and Reporting

The recruitment of the core Project team is now complete. In November and December 2016 respectively, the Project Board recruited the Deputy Project Director and Project Director. The Project team also filled senior management team positions, communications and engagement advisor, and other key advisors. The Project team continues to finalise the establishment of the Project management office, and recruit remaining Project management and staff.

The Project team has developed a Project Charter and is finalizing a Project Management Plan to enable the successful execution of the Project.

a. Project Charter

The Project Charter outlines the Project mission, vision and objectives. It provides a description of roles and responsibilities, and presents a high-level description of the Project budget, schedule, scope, risks, and stakeholders.

b. Project Management Plan

The Project Management Plan will guide and control the execution of the Project. It will provide details of how the project objectives will be fulfilled by outlining the major products, milestones, activities, and resources.

The Project Management Plan will also provide detailed instructions on the execution management and control of the Project, including processes for all core project management functions, for example:

- Project Controls Management
- Risk Management
- Environmental and Regulatory Management
- Communications and Stakeholder Engagement;
- Quality Management;
- Safety Management;
- Engineering Management;
- Construction Management;
- Human Resources Management; and
- Procurement and Contract Management.

The Project Charter will be available to the public in March; the Project Management Plan will follow.

c. Reporting Format

The Project team will prepare monthly reports for the Project Board, the CRD Board and the funding partners, reporting on the status of the Project. The monthly reports will summarise progress and include updates on expenditures against the Control Budget, forecast to complete, schedule and risks. Quarterly reports will also be provided to the CRD board.

14. Budget/Expenditures

The Control Budget is as described in the Business Case. Attachment 3 is a summary of project expenditures to the end of the Development Phase.

ATTACHMENT 1: DESCRIPTION OF PROJECT

WASTEWATER TREATMENT

1. A 108 megalitre/day wastewater treatment plant at McLoughlin Point in Esquimalt that will treat sewage to a tertiary level consistent with federal wastewater treatment regulations;
2. A cross harbour undersea forcemain from Ogden Point to the McLoughlin Point treatment plant (approximately 1000 metres in length);
3. A marine outfall for discharging the effluent from the Treatment Plant into the marine environment.

RESIDUALS TREATMENT

4. The residual solids produced by the McLoughlin wastewater treatment plant will be pumped via pipeline to the Residuals Treatment Facility (RTF) located at the Hartland Landfill site, to be processed into Class A Bio-solids for future reuse;
5. Two pipelines along with 4 pumping stations will connect the treatment plant to the RTF site; a 200mm pipeline approximately 18.5km in length and 4 inline pumping stations will convey the residual solids from the treatment plant to the RTF. A 350mm pipeline approximately 11,5km in length will return the resulting centrate liquid back to the Marigold pumping station. Flows from the Marigold pumping station will be directed to the McLoughlin Point Treatment Plant through the existing collection system for treatment and then discharge out the new McLoughlin Point marine outfall. These two pipelines will be installed in a common trench where possible.
6. The residual solids will be processed into Class A biosolids with biogas and heat as the primary bi-products. The biogas can be used for cogeneration and to offset the RTF's energy needs. The Class A biosolids will be available for beneficial uses.

COLLECTION AND CONVEYANCE COMPONENTS

Macaulay Point Catchment

The Macaulay Point catchment area conveyance upgrades include three main components:

- a. A new Craigflower pump station (already constructed) replaces an older, smaller lift station to convey the increasing wastewater flows generated by View Royal, Colwood, Langford, Songhees First Nation and Esquimalt First Nation to the Macaulay Point pump station; and
- b. Macaulay Point pump station will be upgraded to increase pumping capacity and upgrade the building and headworks to include grit removal and screening of the wastewater flows conveyed to the treatment plant at McLoughlin Point; and

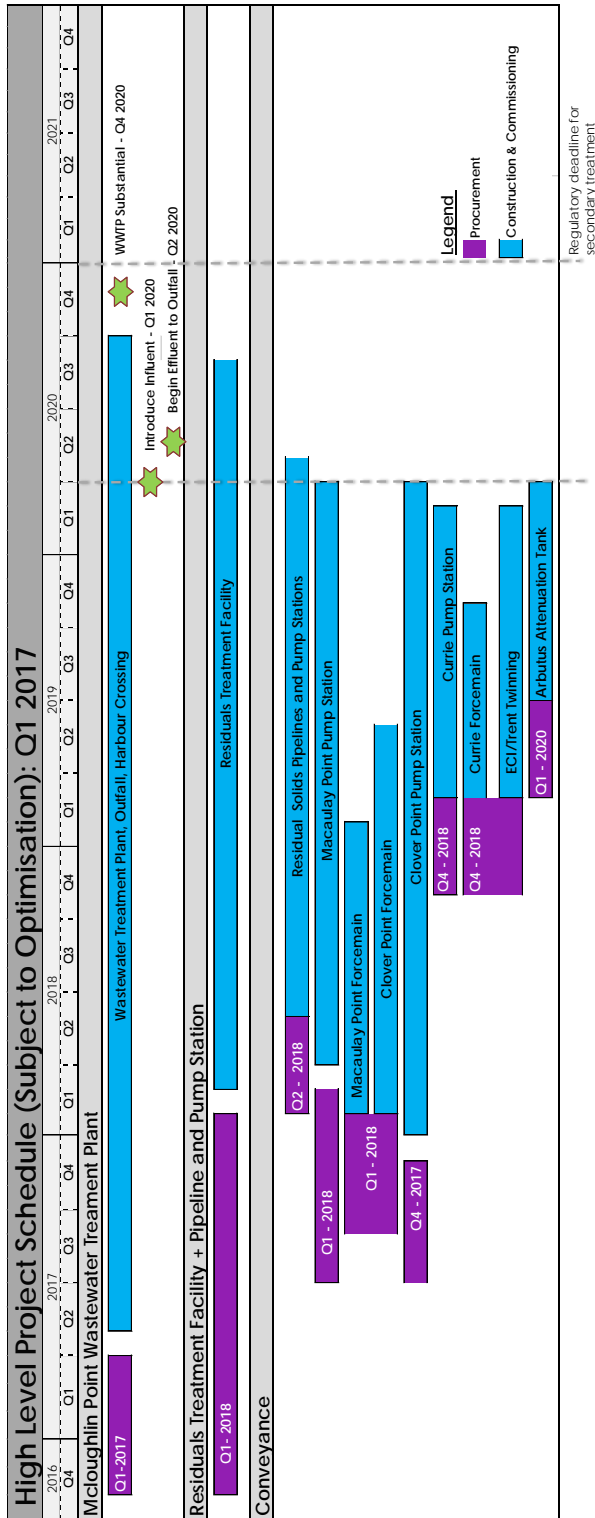
- c. A new forcemain will be constructed from Macaulay Point pump station to convey all wastewater flows from the Macaulay Point catchment area to the treatment plant at McLoughlin Point

Clover Point Catchment

The Clover Point catchment area conveyance upgrades include four main components:

- a. Clover Point pump station will be upgraded to increase pumping capacity and upgrade the headworks to include grit removal and screening to convey the wastewater flows to the treatment plant at McLoughlin Point;
- b. A new forcemain will be constructed from Clover Point pump station to connect into the Victoria Harbour forcemain crossing at Ogden Point to convey all wastewater flows from the Clover Point catchment area to the treatment plant at McLoughlin Point;
- c. Currie pump station upgrade, pipeline twinning and Trent siphon extension will be completed to increase conveyance capacity for the increasing wastewater flows in the East Coast Interceptor pipeline to Clover Point pump station; and
- d. The Arbutus attenuation tank will be constructed to attenuate the wastewater flows entering the East Coast Interceptor from the Saanich East / North Oak Bay area to alleviate system overflows downstream.

ATTACHMENT 2: HIGH LEVEL PROJECT SCHEDULE



ATTACHMENT 3: EXPENDITURES TO-DATE

CORE AREA LIQUID WASTE MANAGEMENT SUMMARY REPORT MONTH ENDING JANUARY 31, 2017 (in \$ millions)

3.795C - Core Area Wastewater Treatment						
Program	to 2013	2014	2015	2016*	2017	Total*
Program Expenses						
Wastewater Treatment - McLoughlin	9.71	0.43	0.48	(0.15)	-	10.47
Conveyancing	6.90	7.53	3.01	0.02	0.00	17.45
Biosolids/Energy Centre	2.99	1.66	0.01	0.82	-	5.48
Common Costs*	4.96	3.16	0.24	(1.70)	0.02	6.68
Interim Financing	0.04	0.03	0.19	0.23	0.02	0.51
LWMP - Project Board	-	-	-	2.61	0.56	3.17
Total program expenditures	24.60	12.80	3.93	1.83	0.60	43.76

*Fiscal Year 2016 has not been audited.

*2016 values increased by 285K from Draft version distributed February 8, 2017. Change relates to invoices received after reporting date that relate to services rendered in 2016 and were accrued.

PROGRAM SUMMARY REPORT SUMMARY OF PROJECT EXPENSES TO January 31, 2017 (in \$ millions)

	to 2013	2014	2015	2016*	2017	Total *
WASTEWATER TREATMENT PLANT						
Marine Outfall - McLoughlin Pnt - CAWTP	210,592	4,843	-	-	-	215,435
Project Management & Commission	983	-	-	-	-	983
Victoria Harbour Crossing - CAWTP	467,794	5,377	102	-	-	473,273
Wastewater Treatment - McLoughlin Pnt	9,035,692	417,911	476,269	(151,019)	-	9,778,854
Subtotal Wastewater Treatment Plant	9,715,061	428,131	476,371	(151,019)	-	10,468,545
CONVEYANCING - PUMP STATIONS & PIPES						
Arbutus Rd Attenuation Tank	3,740,034	552,160	135,860	-	-	4,428,054
Clover Ogden FM	13,840	15,930	-	-	-	29,771
Clover Pt PS	318,411	86,020	142,857	-	-	547,288
Craigflower PS	2,616,936	6,805,124	2,684,505	15,976	350	12,122,890
Currie FM	4,245	588	-	-	-	4,832
Currie PS	4,245	-	-	-	-	4,245
Macaulay - McLoughlin FM	20,993	588	-	-	-	21,581
Macaulay Pt PS	141,761	50,790	50,000	-	-	242,551
Trent/ECl Twinning	35,487	14,506	-	-	-	49,993
Subtotal Conveyancing - Pump Stations & Pipes	6,895,951	7,525,706	3,013,222	15,976	350	17,451,205
RESOURCE RECOVERY CENTRE						
Project Management & Commission	596	-	-	-	-	596
Resource Recovery Ctr	2,930,973	1,530,025	13,223	816,975	-	5,291,196
Sludge & Concentrate Conveyance	63,463	127,131	-	-	-	190,593
Subtotal Resource Recovery Centre	2,995,032	1,657,155	13,223	816,975	-	5,482,386
COMMON COSTS						
Commission Direct	374,120	144,694	89,199	31,821	-	639,834
Project Management	4,583,480	3,013,700	148,393	(1,726,466)	20,285	6,039,392
Subtotal Common Costs	4,957,600	3,158,394	237,592	(1,694,645)	20,285	6,679,226
INTERIM FINANCING	36,600	29,916	192,834	226,776	20,044	506,170
PROGRAM CONTINGENCY	-	-	-	-	-	-
LWMP - PROJECT BOARD						
Project Oversight (Project Board)	-	-	-	554,661	66,144	620,805
Communications	-	-	-	38,616	73,644	112,259
Feasibility and Costing Analysis	-	-	-	649,203	-	649,203
Business Case review	-	-	-	75,630	-	75,630
Partnerships BC	-	-	-	373,042	345,398	718,440
Project Management (Staff and Wages)	-	-	-	193,600	55,806	249,406
Miscellaneous and Legal	-	-	-	725,862	17,097	742,960
Subtotal LWMP - Project Board	-	-	-	2,610,613	558,089	3,168,702
TOTAL	24,600,244	12,799,303	3,933,242	1,824,676	598,768	43,756,233

* Fiscal Year 2016 has not been audited.

*2016 values increased by 285K from Draft version distributed February 8, 2017. Change relates to invoices received after reporting date that relate to services rendered in 2016 and were accrued.

PROGRAM SUMMARY REPORT
MONTH ENDING JANUARY 31, 2017
(in \$ millions)

	<u>Budget</u>	<u>Cost to Date</u>	<u>Commitments Unpaid</u>	<u>Total CTD + CU</u>	<u>Forecast to Complete</u>	<u>Forecast to Completion</u>	<u>Variance</u>	<u>Variance from Last report</u>
WASTEWATER TREATMENT PLANT	384.8	10.5	-	10.5	374.3	384.8	-	-
CONVEYANCING -PUMP STATIONS & PIPES	188.5	17.5	-	17.5	171.1	188.5	-	-
RESOURCE RECOVERY CENTRE	191.6	5.5	-	5.5	186.2	191.6	-	-
COMMON COSTS**	-	6.7	-	6.7	(6.7)	-	-	-
INTERIM FINANCING*	-	0.5	-	0.5	(0.5)	-	-	-
PROGRAM CONTINGENCY*	-	-	-	-	-	-	-	-
LWMP - PROJECT BOARD*	-	3.2	0.3	3.5	(3.5)	-	-	-
TOTAL	765.0	43.8	0.3	44.0	720.9	765.0	-	-

* The budget for common costs, interim financing, program contingency and Project Board are allocated directly to the project components.

** Common costs include salaries & benefits, consultants, building rental, supplies.



Making a difference...together

**CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE
MEETING OF WEDNESDAY, MARCH 8, 2017**

SUBJECT Harbour Resource Partners Agreement Price Reconciliation

ISSUE

To prepare a reconciliation between the price for the Harbour Resource Partners (HRP) Project Agreement and the pricing Seaterra Request for Proposals (RFP).

BACKGROUND

At the February 8, 2017, Core Area Liquid Waste Management Committee meeting a request was made that the Core Area Wastewater Treatment Project Board provide a reconciliation between the 2014 RFP pricing offered by HRP to Seaterra and the control budget.

The pricing HRP submitted for the plant in March 2014, excluding the Harbour Directional Drill and the McLoughlin outfall, was \$170.4 million. The price of the harbour directional drill was \$34.1 million and \$30.5 million for the McLoughlin marine outfall. The total price submitted in March 2014 was \$235 million.

The \$235 million price was reconfirmed by HRP in September 2016, subject to determining adjustments to account for price escalation, foreign exchange and debt pricing adjustments from the HRP RFP proposal. The expected final pricing for the HRP contract, subject to foreign exchange, insurance and debt cost adjustments is \$272 million. The \$37 million difference is approximately \$21 million in escalation, approximately \$5 million in foreign exchange and debt costs adjustments and approximately \$11 million in scope changes. The scope change costs arise primarily from the addition of tertiary treatment and redesign of the plant arising from the development permit application process.

The control budget as approved, as part of the Business Plan, includes the costs associated with the construction of the plant, harbour crossing and outfall.

Proposal	Item	Amount (Million)
March 2014 Original Proposal based on 2014 financial close	Total	\$ 235
Adjustment to Original Proposal	General Escalation as per CANSIM Index	\$ 21
	Foreign Exchange Adjustment	\$ 5
	Additions to Scope	\$11
March 3rd 2017 Total Contract Price	Total	\$ 272

CONCLUSION

In summary, the cost for the plant, harbour directional drill and McLoughlin marine outfall is within the Control Budget (of \$765 million) and is reconcilable to the original 2014 RFP pricing submitted to Seaterra.

RECOMMENDATION

That the Core Area Liquid Waste Management Committee receive this report for information.



Dave Clancy, Project Director
Core Area Wastewater Treatment Project



Elizabeth Scott, Deputy Project Director
Core Area Wastewater Treatment Project
CONCURRENCE

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**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, JANUARY 25, 2017**

SUBJECT **Regional Source Control Program – Emerging Contaminants Reduction Plan**

ISSUE

To provide information on a source control plan for increased protection of the quality of wastewater and sewage sludge produced at the region's treatment facilities with a focus on reduction of emerging contaminants of concern.

BACKGROUND

On January 13, 2016, the Capital Regional District (CRD) Board approved an implementation plan for the Regional Source Control program (RSCP) over the period of 2016-2019. Part of this plan included enhancement of initiatives and outreach to achieve further reduction of emerging contaminants of concern such as pharmaceuticals and personal care products (PPCP), surfactants and other substances in wastewater and sewage sludge produced within the region.

At the Saanich Peninsula Wastewater Commission meeting on November 17, 2016, staff were asked what more could be done through source control to increase protection of wastewater, dewatered sludge and biosolids produced at the Saanich Peninsula wastewater treatment plant, particularly regarding emerging chemicals of concern. Staff presented some preliminary options for discussion.

Subsequently, in alignment with the RSCP four-year implementation plan, RSCP staff have prepared an outline of an approach for reducing emerging contaminants in wastewater and sludge for application throughout the region.

The plan includes, at a minimum, the following components:

1. **Pharmaceuticals and Personal Care Products (PPCP)**

Enhancement of existing outreach supporting the provincial Medications Return Program (MRP) to include:

- development of area-specific PPCP outreach highlighting protection of the environment and sludge quality including:
 - MRP information
 - veterinary medications return messaging
 - information on personal care product choices and safer alternatives
 - voluntary labelling for over-the-counter medications packaging
 - pharmacy-specific events to be held at pharmacies willing to participate
 - social media, print and radio paid advertising

- collection of area-specific MRP data to measure success of the initiative
- review of medication disposal practices at regional hospitals, medical and veterinary clinics and improvement as necessary

2. **Cleaning Products and Other Emerging Contaminants of Concern**

Enhancement of the existing “Clean Green”, “Surfactant Reduction” and “Household Hazardous Waste” outreach initiatives to include:

- development of area-specific messaging and materials highlighting protection of the environment and sludge quality
- social media, print and radio paid advertising
- development of outreach for businesses, including information on proper hazardous waste disposal, cleaning product choices and safer alternatives
- inspections of potential contaminant-generating businesses operating under permits, authorizations or codes of practice, to confirm and promote proper waste management practices.

PUBLIC HEALTH AND ENVIRONMENTAL IMPLICATIONS

Academic and industrial research into emerging contaminants is ongoing and accelerating, however, current analytical capability still far exceeds scientific knowledge on toxicity. The true environmental effects risk of sludge or biosolids-borne contaminants cannot yet be determined for the majority of emerging substances. Further analysis and research may determine more specific contaminants of concern for our local sewage treatment facilities and related environmental and human health effects. An emerging substance reduction plan for the region will focus on both the known and suspected contaminants of concern.

FINANCIAL IMPLICATIONS

The cost of the emerging contaminants reduction plan is included in the RSCP core budgets for 2017-2019.

CONCLUSION

Enhancement of inspection initiatives and outreach to achieve further reduction of emerging contaminants of concern is part of the four-year implementation plan for the RSCP. CRD staff have prepared a proactive source control plan for reduction of a range of emerging contaminants known, or suspected, to be present in wastewater and dewatered sludge produced at regional wastewater treatment facilities in order to protect future wastewater and residuals quality.

RECOMMENDATION

That the Environmental Services Committee recommend to the Capital Regional District Board:

That this report be received for information and forwarded to the Core Area Liquid Waste Management Committee and Saanich Peninsula Wastewater Commission for information.

Submitted by:	Heidi Gibson, M.N.R.M., Senior Manager, Environmental Partnerships
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence	Robert Lapham, MCIP, RPP, Chief Administrative Officer

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