



Alberni-Clayoquot Regional District

BAMFIELD WATER COMMITTEE MEETING

MONDAY, FEBRUARY 20, 2017, 5:00 PM

Bamfield Volunteer Fire Department Hall, 352 Pachena Road, Bamfield, BC

AGENDA

	PAGE #
1. <u>CALL TO ORDER</u>	
Recognition of Traditional Territories.	
2. <u>APPROVAL OF AGENDA</u> <i>(motion to approve, including late items requires 2/3 majority vote)</i>	
3. <u>ADOPTION OF MINUTES</u>	
a. Bamfield Water Advisory Committee Meeting – August 16, 2016	3-5
<i>THAT the minutes of the Bamfield Water Advisory Committee meeting held on August 16, 2016 be received.</i>	
4. <u>CORRESPONDENCE FOR ACTION/INFORMATION</u>	
a. LETTER OF CONCERN	6
Bamfield Centennial Park Committee, February 15, 2017 regarding concerns on the noise and light associated with the Proposed Water Treatment Facility Plan for Bamfield.	
<i>THAT this correspondence be received.</i>	
5. <u>REQUEST FOR DECISIONS & BYLAWS</u>	
a. REQUEST FOR DECISION	7-10
Bamfield Water System 2017-2021 Financial Plan	
<i>THAT the Bamfield Water Advisory Committee recommend the Bamfield Water budget presented be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.</i>	
6. <u>REPORTS</u>	
a. Water Treatment Plant (WTP) Update	11-13
b. Raw Water Pressure – A. McGifford (Verbal)	
c. South Bamfield Road Fire Hydrants – A. McGifford (Verbal)	
d. Water Consumption – A. McGifford (Verbal)	

THAT the Bamfield Water Advisory Committee receives Reports a-d.

7. **LATE BUSINESS**
(requires 2/3 majority vote)
8. **ADJOURN**

Alberni-Clayoquot Regional District

MINUTES OF THE BAMFIELD WATER COMMITTEE MEETING HELD ON TUESDAY, AUGUST 16, 2016, 5:00 PM

Regional District Board Room, 3008 Fifth Avenue, Port Alberni, BC

MEMBERS Keith Wyton, Chairperson, Director, Electoral Area "A" (Bamfield) (By Teleconference)

PRESENT: John Mass, Advisory Planning Committee Chair (By Teleconference)
Mark Kelly, Bamfield Fire Chief (By Teleconference)
Lisa Herbig, Member at Large
J.P. Haste, Bamfield Marine Science Centre
Brad Anolt, Bamfield Marine Science Centre (By Teleconference)

STAFF PRESENT: Russell Dyson, Chief Administrative Officer
Teri Fong, Manager of Finance
Andrew McGifford, Manager of Environmental Services
Les Butler, Bamfield Water System Contractor (By Teleconference)

OTHER: Chris Downey, Koers & Associates (By Teleconference)

1. CALL TO ORDER

The Chairperson called the meeting to order at 5:00 pm

The Chairperson recognized the meeting is being held in the Huu-ay-aht, Hupacasath and Tseshaht First Nations Traditional Territories.

2. APPROVAL OF AGENDA

MOVED: J. Mass

SECONDED: L. Herbig

THAT the agenda be approved as circulated.

CARRIED

3. ADOPTION OF MINUTES

a. Bamfield Water Committee Meeting – April 21, 2016

MOVED: J. Mass

SECONDED: L. Herbig

THAT the minutes of the Bamfield Water Committee Meeting April 21, 2016 be adopted.

CARRIED

Brad Anholt and J.P. Hastey entered the meeting at 5:05 pm.

4. CORRESPONDENCE FOR ACTION/INFORMATION

a. **ISLAND HEALTH**

Island Health, July 14, 2016 regarding Bamfield Water System Upgrades

b. **ISLAND HEALTH**

Island Health, July 29, 2016 regarding Proposed Terms and Conditions for the Bamfield Community Water System Operating Permit.

MOVED: B. Anholt

SECONDED: J. Mass

THAT the correspondence a-b be received.

CARRIED

5. REPORTS

a. Bamfield Water System – YTD Capital Plan and Leak Update

b. Bamfield Water System - Financial Plan

c. Bamfield Water System – Status Report – Water Treatment Facility

d. Loan Authorization Bylaw

Andrew McGifford shared the preliminary results of the treatment works request for proposal. A full report is to be provided by Chris Downey assessing the proposals.

The committee reviewed the reports pertaining to the proposed Water Treatment Facility. Various questions related to the treatment plant and it's capital operating costs were answered by staff and Chris Downey – engineer.

Teri Fong advised that the loan authorization bylaw should be for a maximum of \$600,000.00 based on the preliminary results at the request for proposal.

In response to the question of J.P. Hastey, Russell Dyson proposed that information pertaining to the treatment plant will be available on the website including questions and answers. It is proposed that staff, the engineer and an Island Health representative hold a meeting in Bamfield in advance of the referendum.

MOVED: J. Mass

SECONDED: B. Anholt

THAT the Bamfield Water Advisory Committee support the proposed loan authorization Bylaw for a maximum of \$600,000.00 to provide for capital funding for the Dissolved Air Flotation Water Treatment Plant.

CARRIED

MOVED: B. Anholt
SECONDED: J. Mass

THAT the Bamfield Water Advisory Committee recieve reports a-d.

CARRIED

6. ADJOURN

MOVED: B. Anholt
SECONDED: L. Herbig

THAT this meeting be adjourned at 6:10 pm.

CARRIED

Certified Correct:

Keith Wyton,
Chairperson

Russell Dyson,
CAO

Bamfield Centennial Park, Bamfield BC, V0R 1B0

15 February 2017

Andrew McGifford

Manager of Environmental Services

ACRD

Dear Mr. McGifford,

The Bamfield Centennial Park Board recognizes the importance of the proposed water treatment plant and agrees to portions thereof being on park land. Our major concern is noise and light that may be associated with the treatment process. The close proximity of the proposed site to our camp ground (10 meters) could result in our overnight guests being disturbed. We request the housing for the treatment equipment be sound proofed and exterior lighting be minimized.

The road passing the proposed construction site leads to Bamfield's only boat launch and receives considerable use. Accommodation of this traffic during construction would be appreciated.

Presently, the safety light on the park wharf is operated courtesy of the Bamfield Treatment Plant. As this plant has a backup electric generator, we can provide uninterrupted illumination during periods of emergency. We would appreciate continued access to this power. This would require the present pump house be retained, for park use, with its electric panel.

We appreciate this opportunity to respond to the proposed water treatment facility plan.

Sincerely yours,

Eileen Scott, Chair, Bamfield Centennial Park

cc. Keith Wyton, Regional Director



REQUEST FOR DECISION

To: Bamfield Water Advisory Committee

From: Teri Fong, CPA, CGA, Manager of Finance
Andrew McGifford, CPA, CGA, Manager of Environmental Services

Meeting Date: February 20, 2017

Subject: Bamfield Water System 2017-2021 Financial Plan

Recommendation:

THAT the Bamfield Water Advisory Committee recommend the Bamfield Water budget presented be included in the first reading of the 2017-2021 Alberni-Clayoquot Regional District Financial Plan.

2016 Highlights:

The Bamfield Water system was a very active service in 2016 with the water treatment plant (WTP) process and Assent vote taking a significant amount of staff resources. The result of the Assent vote has provided a strong indication that the community is committed to improving the water quality in Bamfield.

The WTP will consume much of the staff time and once the construction phase begins there will be additional time spent by the contractor and the ACRD water lead hand. ACRD administration staff will work with the engineer to ensure the project is completed as efficiently as possible; this will be reflected in the 2017 budget.

The 2016 capital plan included the following items:

- Fourteen water meters replaced for approximately \$19,000 in total.
- Purchased a generator for approximately \$1,300 to provide the backup power at the re-chlorination station.
- The red and white valve plan was not completed in 2016 and will continue to be on list in Miscellaneous Capital works for 2017.
- Pumphouse/Reservoir communications was not resolved and the investigation will continue.
- Both the turbidity meter and the chlorine shed upgrades were deferred as the WTP will be undertaken.
- The WTP engineering and Request for Proposals have seen approximately \$41,000 in expenditures in 2016.
- The South Bamfield Road hydrant install process saw some costs in the planning, these are costs are covered by the \$75,000 deposit from developer.

Upcoming for 2017:

- The operational functions of the water system should not see too much change over the 2017 year.
- The increases are focused on the wage and administration charge for staff in 2017; this is purely to deal with the WTP.
- Continued meter and line valve replacement under miscellaneous capital works.
- The focus will be completing the WTP with a timeline expected to have the system operational by the January of 2018.
- Clean Water and Wastewater Fund grant has not been announced and we have been providing follow up information to the provincial staff for evaluation of the application. While this is not any indication that we are successful it is a still a potential that we can provide the WTP with a lower cost and possibly only have to borrow 18% versus the 33% that is currently planned.

Background:

This budget was developed with input from the following people:

- The ACRD Finance and Environmental Services department
- Koers and Associates Engineering
- Water system contractor – Les Butler

Financial:

The operational costs are increasing with the additional water treatment and a plan to increase the rates in 2017 will need to be undertaken. Staff will bring the options to the committee for consideration to increase rates to cover the operational expenses.

The parcel tax remains unchanged for 2017 and will see an increase in 2018 to service the debt associated with the WTP. As costs are firmed up for the WTP project staff will bring forth the required increases to service the interest and debt for the WTP borrowing.

Policy or Legislation:

The terms and conditions for the Bamfield Community Water System operating permit require that the water treatment plant be in place by January 2018. Island Health provided these terms and conditions on July 29, 2016. Regional Districts are required to adopt a 5-year financial plan by March 31st of each year.

Disclosure:

The prior year actual balances may yet change as 2016 invoices are still trickling in and year-end adjustments are still being completed.



Submitted by: _____

Teri Fong, CPA, CGA, Manager of Finance



Submitted by: _____

Andrew McGifford, CPA, CGA, Manager of Environmental Services



**ALBERNI-CLAYOQUOT REGIONAL DISTRICT
2017-2021 FINANCIAL PLAN
BAMFIELD WATER SYSTEM
PARTICIPANTS: PORTION OF ELECTORAL AREA 'A'**

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Draft
For Discussion

History			Budget						
	2016	2016		2017	2018	2019	2020	2021	
	ACTUAL	PLAN							
Line	REVENUE								Line
1	\$ 3,224	\$ 1,621	Surplus (deficit) from prior years	\$ 587	\$ -	\$ -	\$ -	\$ -	1
2	55,074	55,549	Parcel tax	55,549	94,736	94,736	94,736	94,736	2
3	116,138	131,000	Sale of service	133,000	175,000	175,000	175,000	175,000	3
4	-	426,672	Transfer of Gas Tax	1,026,672	-	-	-	-	4
5	-	-	South Bamfield Road hydrant contribution	75,000	-	-	-	-	5
6	2,388	-	Other revenue	-	-	-	-	-	6
7	947	500	Grants in lieu of taxes	500	500	500	500	500	7
8	<u>\$ 177,771</u>	<u>\$ 615,342</u>	TOTAL REVENUE	<u>\$ 1,291,308</u>	<u>\$ 270,236</u>	<u>\$ 270,236</u>	<u>\$ 270,236</u>	<u>\$ 270,236</u>	8
EXPENDITURES									
9	\$ 14,000	\$ 14,000	Administrative charge	\$ 24,000	\$ 18,000	\$ 14,000	\$ 14,000	\$ 14,000	9
10	57,721	55,549	Capital fund contribution from operating	124,736	60,236	66,936	66,436	65,636	10
11	-	426,672	Capital fund contribution from grants	1,026,672	-	-	-	-	11
12	-	-	Debt repayment	6,000	35,700	35,700	35,700	35,700	12
13	8,929	-	Election/Asset voting process	-	-	-	-	-	13
14	2,131	5,000	Engineering & consulting	3,000	5,000	5,000	5,000	5,000	14
15	6,198	6,400	Insurance	6,400	6,400	6,400	6,800	7,000	15
16	19,464	22,000	Labour & benefits	21,000	21,400	18,000	18,400	18,800	16
17	19,750	25,721	Materials & repairs/maintenance	23,000	55,500	55,500	55,500	55,500	17
18	36,575	40,000	Operation contracts	40,000	49,000	49,000	49,000	49,000	18
19	3,775	6,500	Other operating costs	7,000	7,000	7,000	7,000	7,000	19
20	5,749	7,500	Utilities	6,500	9,000	9,200	9,400	9,600	20
21	2,892	6,000	Water monitoring	3,000	3,000	3,500	3,000	3,000	21
22	<u>\$ 177,184</u>	<u>\$ 615,342</u>	TOTAL EXPENDITURES	<u>\$ 1,291,308</u>	<u>\$ 270,236</u>	<u>\$ 270,236</u>	<u>\$ 270,236</u>	<u>\$ 270,236</u>	22
23	\$ 587	\$ -	FINANCIAL PLAN BALANCE	\$ -	\$ -	\$ -	\$ -	\$ -	23
24	57,721	55,549	Add: Transfer to reserves	124,736	60,236	66,936	66,436	65,636	24
25		75,750	Deduct: Estimated amortization not included	75,750	75,750	75,750	75,750	75,750	25
26	3,224	1,621	Surplus from previous year	587	-	-	-	-	26
27	<u>\$ 55,084</u>	<u>-\$ 21,822</u>	ANNUAL SURPLUS/(DEFICIT)	<u>\$ 48,399</u>	<u>-\$ 15,514</u>	<u>-\$ 8,814</u>	<u>-\$ 9,314</u>	<u>-\$ 10,114</u>	27



ALBERNI-CLAYOQUOT REGIONAL DISTRICT
 2017-2021 FINANCIAL PLAN
 BAMFIELD WATER SYSTEM (continued)
 PARTICIPANTS: PORTION OF ELECTORAL AREA 'A'

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Draft
 For Discussion

Line	History			Budget					Line
	2016 ACTUAL	2016 PLAN		2017	2018	2019	2020	2021	
			CAPITAL FUND						
28	\$ 254,059	\$ 254,059	Balance, beginning of year	\$ 243,463	\$ 298,847	\$ 321,383	\$ 335,819	\$ 349,855	28
29	55,549	55,549	Contribution from operating fund	124,736	60,236	66,936	66,436	65,636	29
30	-	-	Water treatment plant debt	600,000	-	-	-	-	30
31	-	426,672	Grants and other contributions	1,026,672	-	-	-	-	31
32	2,172	1,900	Interest earnings	2,000	2,300	2,500	2,600	2,700	32
33			<i>Less - capital expenditures</i>						33
34	-	426,672	Upgrades - gas tax funding	-	-	-	-	-	34
35	23,315	50,000	Miscellaneous works	40,000	40,000	40,000	40,000	40,000	35
36	41,648	-	Water treatment plant - Gas Tax project	1,585,024	-	-	-	-	36
37	-	-	Infrastructure assessment	-	-	15,000	-	-	37
38	-	-	Development Cost Charge update	-	-	-	15,000	-	38
39	3,354	-	South Bamfield Road - hydrant install	73,000	-	-	-	-	39
40	68,317	476,672	Total capital expenditures	1,698,024	40,000	55,000	55,000	40,000	40
41	\$ 243,463	\$ 261,508	BALANCE, END OF YEAR	\$ 298,847	\$ 321,383	\$ 335,819	\$ 349,855	\$ 378,191	41



MEMORANDUM

To: Bamfield Water Advisory Committee

From: Andrew McGifford, CPA, CGA, Manager of Environmental Services

Meeting Date: February 20, 2017

Subject: Water Treatment Plant (WTP) update

The project is currently within the time line that Koers & Associates Engineering Ltd. provided to the ACRD for the WTP in July 22, 2016. The Water Treatment Equipment Supplier is working on the final details before the start of manufacturing the equipment. The final detailed design of the plant is progressing. I have attached the timeline for your reference.

The location of the WTP will be within the Community Parks land and the parks committee was provided with the opportunity to provide feedback and identify the concerns. The layout was emailed to the committee on February the 10th for consideration and comments. Discussion can occur at the meeting.

The issues from Parks committee are as follows:

Long-term items are the lighting and the possible noise impacts of the WTP. The noise issue will be investigated and staff have asked the engineer to provide the information. The lighting is something that can be controlled with the design and location; staff feel this issue can be resolved with input from the stakeholders.

The short-term issue while under construction will be the possible access issues to the boat launch. Traffic can be managed when there are initial site meetings to begin the construction of the plant, the issue will be brought forward to ensure concerns provide to construction crews and have minimal impacts on traffic in the area.

Submitted by: _____
Andrew McGifford, CPA, CGA, Manager of Environmental Services



ALBERNI-CLAYOQUOT REGIONAL DISTRICT BAMFIELD WATER TREATMENT PLANT PRELIMINARY PROJECT SCHEDULE

updated on: July 22, 2016

Task No.	Description	Target Completion Date	2016						2017											
			July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1	Project Initiation	Schedule Prepared on July 5, 2016																		
1.1	Project Start-up	May 26, 2016																		
2	Site Survey, Base Plan & Develop Site Layout																			
2.1	Perform Site Survey and Create Base Plan	July 21, 2016																		
2.2	Develop Site Plan Showing Layout of WTP & Tanks	August 14, 2016																		
3	Water Treatment Equipment Supply																			
3.1	Prepare Supply Contract for Procurement of Treatment Equipment	July 14, 2016																		
3.2	Procure WT Equipment (4 weeks)	August 16, 2016																		
3.3	Borrow Bylaw to the Board for 3rd Readings & referendum Question	August 24, 2016																		
3.4	Proposed Date for Referendum	November 19, 2016																		
3.5	Bylaw Adoption (If referendum successful)	November 23, 2016																		
3.6	Bylaw Quashing Period ends (30 days) and approval to borrow finalized	December 23, 2016																		
3.7	Award WT Equipment Supply Contract	December 23, 2016																		
3.8	Shop Drawings (15 days after Award)	January 21, 2017																		
4	Preliminary Design of Water Treatment Plant																			
4.1	Preliminary Design (7 weeks)	October 4, 2016																		
4.2	Review Shop Drawings (2 weeks)	February 7, 2017																		
4.3	Manufacture WT Equipment (16 - 20 weeks)	July 7, 2017																		
5	Detailed Design of Water Treatment Plant																			
5.1	Water Treatment Plant (7 weeks) - Electrical Power Supply - Building Structure - Building HVAC - Building Electrical & Controls - Process Piping - Waste Disposal	March 31, 2017																		
6	Prepare Contract Documents and Tender																			
6.1	Water Treatment Plant Contract (6 weeks)	May 1, 2017																		
6.2	Tender Construction Contract	June 1, 2017																		
6.3	Award Construction Contract	June 9, 2017																		
7	Award Contracts & Proceed with Construction																			
7.1	Obtain Health Permit (5 weeks)	April 21, 2017																		
7.2	Water Treatment Plant Contract	November 30, 2017																		

LEGEND:

- Activity
- Limited Activity
- Waiting Period
- Milestone

RECORD OF REVISIONS				
REV	DATE	BY	ENG	DESCRIPTION

ISS	DATE	BY	ENG	DESCRIPTION
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SEAL
PRELIMINARY
 DATE: January 12, 2017

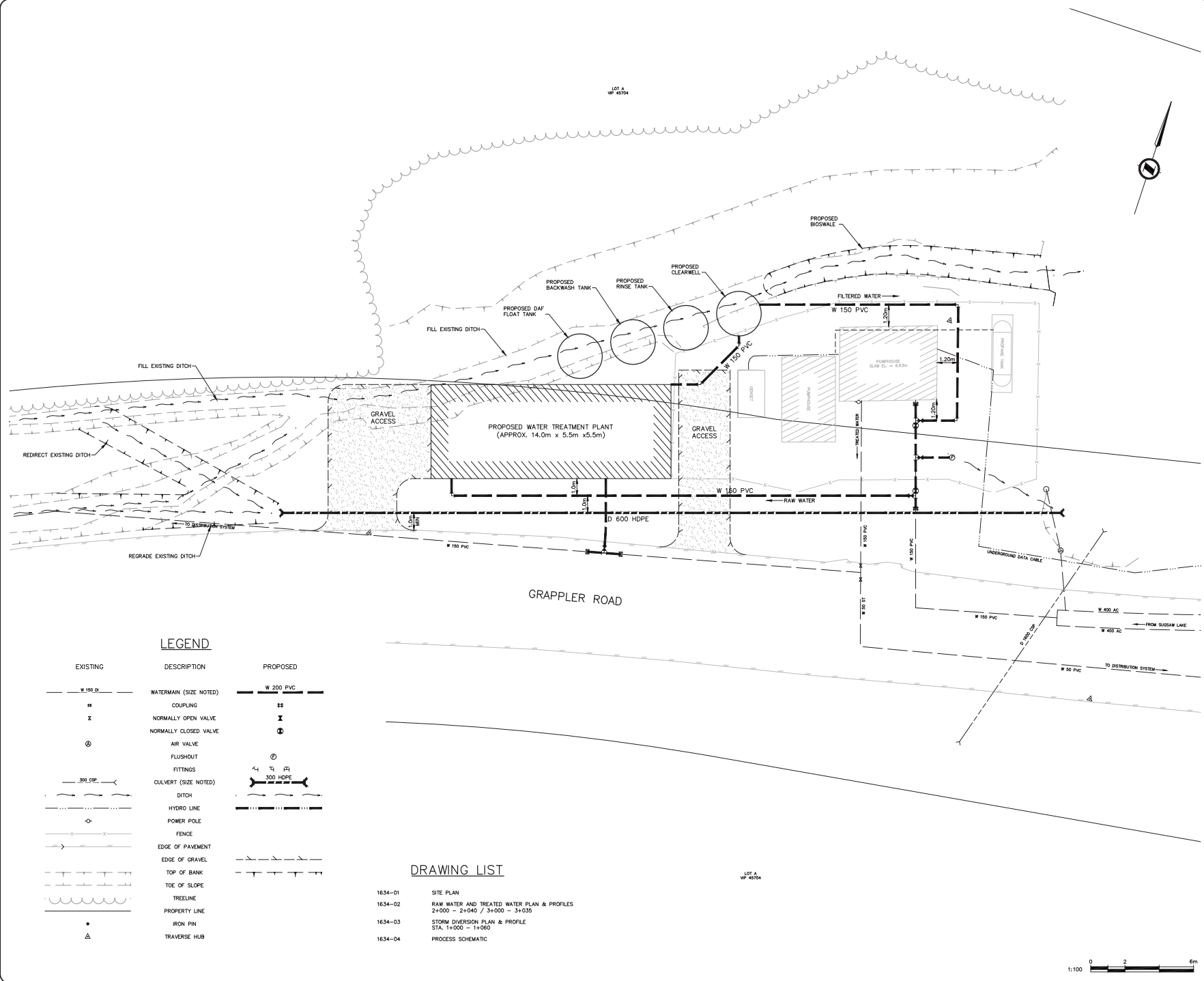
PROJECT NO.	1634
DRAWN	CACH
DESIGNED	KD
CHECKED	CD
APPROVED	CD
DATE	AUGUST 2016
SCALE	1:100

CLIENT
**ALBERNI-CLAYOQUOT
 REGIONAL DISTRICT**

PROJECT
**BAMFIELD
 WATER TREATMENT PLANT**

TITLE
SITE PLAN

DRAWING No.	1634-01	REV.	—	SHEET	1/4
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LEGEND

EXISTING	DESCRIPTION	PROPOSED
— W 150 DS —	WATERMAIN (SIZE NOTED)	— W 200 PVC —
— II —	COUPLING	— II —
— X —	NORMALLY OPEN VALVE	— X —
— ⊗ —	NORMALLY CLOSED VALVE	— ⊗ —
— ⊙ —	AIR VALVE	— ⊙ —
— — —	FLUSHOUT	— — —
— — —	FITTINGS	— — —
— — —	CULVERT (SIZE NOTED)	— — —
— — —	DITCH	— — —
— — —	HYDRO LINE	— — —
— — —	POWER POLE	— — —
— — —	FENCE	— — —
— — —	EDGE OF PAVEMENT	— — —
— — —	EDGE OF GRAVEL	— — —
— — —	TOP OF BANK	— — —
— — —	TOE OF SLOPE	— — —
— — —	TREELINE	— — —
— — —	PROPERTY LINE	— — —
— — —	IRON PIN	— — —
— — —	TRAVERSE HUB	— — —

DRAWING LIST

- 1634-01 SITE PLAN
- 1634-02 RAW WATER AND TREATED WATER PLAN & PROFILES
2+000 — 2+040 / 3+000 — 3+035
- 1634-03 STORM DIVERSION PLAN & PROFILE
STA. 1+000 — 1+060
- 1634-04 PROCESS SCHEMATIC

1:100 0 2 6m