

Popowich, Tracy CSNR:EX

From: Aura, Bernadette FLNR:EX
Sent: Thursday, July 7, 2011 2:19 PM
To: Pryce, Conrad FLNR:EX
Subject: RE: Charr Farmind

Thanks Conrad. Have a great day.

From: Pryce, Conrad FLNR:EX
Sent: Thursday, July 7, 2011 12:30 PM
To: Aura, Bernadette FLNR:EX; Nield, Lora M FLNR:EX; 'Ridley, Teri'
Cc: Barlas, Sajid A ENV:EX
Subject: RE: Charr Farmind

Hi Bernadette et al. – i just talked to Mr. Klassen on the phone to try and assist him with his aquaculture business and reg requirements.

The main contact for regulatory requirements for related discharge is Sajid Barlas, Section Head Environmental Management, Environmental Protection, MOE Penticton.

Sajid, Mr. Klassen will be emailing and/or phoning you about regulatory requirements for discharging this effluent. The water well is from groundwater (300' back from the Okanagan River Channel) and is currently exempt from needing a water license.

Please contact me if there are any additional requirements as relates to Water Act authorizations.

Regards Conrad

From: Aura, Bernadette FLNR:EX
Sent: Thursday, July 7, 2011 12:01 PM
To: Nield, Lora M FLNR:EX; Pryce, Conrad FLNR:EX; 'Ridley, Teri'
Subject: FW: Charr Farming

Hi Guys, this person will be contacting you about his proposal below. I have never seen an application like this before. So let me know if it is even possible.

Bernadette Aura
Natural Resource Officer
FrontCounterBC
Ministry of Natural Resource Operations
441 Columbia Street
Kamloops BC V2C 2T3

Telephone no. 250 828 4210
Fax no. 250 828-4442
Toll Free: 1-877-855-3222

How Did We Do?

Clients of **FrontCounter BC** are invited to take our [customer satisfaction survey](#). We'd appreciate your input.

From: Gary Klassen [<mailto:gary@dorocco.com>]
Sent: Tuesday, July 5, 2011 10:56 AM
To: Aura, Bernadette FLNR:EX
Subject: front counter.doc

Gary Klassen

S22

gary@dorocco.com
1-250-485-7408

Hi Bernadette

Thanks for the email with details about a new aquaculture license

The app will be in my name on the Oliver property shown above.
My mailing address is Gary Klassen Box 1000 Osoyoos BC V0H 1V0
Our farm is on 6.5 acres along side the Okanagan river. (the river was channelized past our property in the 1950s.
Zoning on this land is AG 1 the title plan is 1790
Lot number 311 and DL 24505

We plan to use flow thru system with our new 500 gpm 80' deep well as the supply.
We are licensed to draw this water at a rate of up to 600 gpm. Robbins Drilling is the did the development of this well. We have sent sample of the water to ALS for a complete analysis.

We want to obtain the correct approvals to discharge the water into the Okanagan river.
The River flows down into the osoyoos lake and continues down joining the Columbia river system in Washington. The river is fish bearing.

Supply water will go thru a degassing and oxygen tower prior to discharge into an elevated storage tank.

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Several 2 M dia tanks with three main 10m dia grow out tanks.

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We plan to use a concrete wall around the tank perimeter and cover the whole operation with a new green house complete with shading.

Please accept this as our application for an aquaculture license to grow up to 50000 lbs of Arctic Char per year.

Please Call or contact me with any further questions. Thanks Gary Klassen

Popowich, Tracy CSNR:EX

From: Barlas, Sajid A ENV:EX
Sent: Thursday, July 7, 2011 2:26 PM
To: Pryce, Conrad FLNR:EX
Subject: RE: Charr Farmind

Thanks Conrad.

The applicant contacted me today, and we will be working with him to get him the required permit/regiostraiton.

Sajid

From: Pryce, Conrad FLNR:EX
Sent: Thursday, July 7, 2011 12:30 PM
To: Aura, Bernadette FLNR:EX; Nield, Lora M FLNR:EX; 'Ridley, Teri'
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Telephone no. 250 828 4210
Fax no. 250 828-4442
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Sent: Thursday, July 7, 2011 5:04 PM
To: Nield, Lora M FLNR:EX; Aura, Bernadette FLNR:EX; 'Ridley, Teri'
Cc: Barlas, Sajid A ENV:EX
Subject: RE: Charr Farmind

Hi Lora, please note first EP needs to adjudicate this matter.

Copy to Sajid and Bernadette, if the proposed discharge involves works or activity below the high water mark of a stream i.e.: in this case Okanagan River... please have the proponent also apply to FrontCounterBC for a Water Act Approval or Notification for Work in And About A Stream. Thanks Conrad

From: Nield, Lora M FLNR:EX
Sent: Thursday, July 7, 2011 2:15 PM
To: Pryce, Conrad FLNR:EX; Aura, Bernadette FLNR:EX; 'Ridley, Teri'
Cc: Barlas, Sajid A ENV:EX
Subject: RE: Charr Farmind

A Water Act application would be required for the actual instream works to construct the outlet, correct?

Lora Nield
Senior Ecosystem Biologist
Ministry of Forests, Lands and Natural Resource Operations
Penticton Office
250-490-8212

From: Pryce, Conrad FLNR:EX
Sent: Thursday, July 7, 2011 12:30 PM
To: Aura, Bernadette FLNR:EX; Nield, Lora M FLNR:EX; 'Ridley, Teri'
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Please Call or contact me with any further questions. Thanks Gary Klassen

**AUTHORIZATIONS CONCERNING THE MOVEMENT OF
LIVE FISH IN BRITISH COLUMBIA**

Name: Gary Klassen

Address: Dorocco Developments Ltd

PO Box 1000, Osoyoos BC V0H 1V0

Introduction and Transfer Application Number: _____
PASB File # 82531



Fisheries and Oceans
Pêches et Océans

Pursuant to Section 56(1) of the Fishery (General) Regulations made under the *Fisheries Act*, permission is hereby granted to transfer _____ to the above named: _____

Conditions as per Section 22(1) of Fishery (General) Regulations:

- Precautions and procedures will be taken to prevent introduction of undesirable flora/fauna and spread of diseases/parasites as indicated on application form.
- This licence must accompany the transfer.
- All fish transferred under this licence must be destroyed and properly disposed of at the end of the research experiment.

This licence expires on _____

On behalf of the Federal Minister of Fisheries and Oceans

Co-Chair, BC Introductions and Transfers Committee

Date



Gary Klassen of Dorocco Developments Ltd is authorized by this permit to possess and transport **10000 Arctic Char (*Salvelinus alpinus*) eggs and/or milt** (originating from Whitehorse YT) from the **Penticton Airport** in Penticton BC to the aquaculture site at **8929 Road 17** in Oliver BC pursuant to section 3 of the Freshwater Fish Regulation, BC Reg. 261/83.

V E Marshall

Vicki Marshall

A person authorized by the Director, Wildlife
Ministry of Forests, Lands and Natural Resource Operations

October 3, 2012

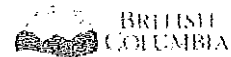
Date

Expiry Date: December 1, 2012

This document authorizes the holder to do only the things described above within British Columbia. It does not excuse the holder from any other obligations under any other federal or provincial legislation, whether concerning fish or otherwise.



Fisheries and Oceans
Pêches et Océans



APPLICATION FOR INTRODUCTION OR TRANSFER OF FISH AND/OR ACCESS TO WILD AQUATIC RESOURCES FOR AQUACULTURE

FOR INTERNAL USE ONLY

Date Received: _____ Received By: _____ ITC File#: _____
Access File#: _____ SARA File#: _____ PASB File#: _____

1. Applicant Information

Applicant/Company/Agency: Dorocco Developments Ltd

Contact Name: Gary Klassen

Bus. Phone: 1-250-485-7408

Business Box 1000

Bus. Fax: _____

Mailing Address: Osoyoos BC V0H 1V0

Bus. Email: gary@dorocco.com

2. Purpose of transfer:

Aquaculture

3. Species Information for Introduction or Transfer: Please complete the information for the species you wish to transfer in the two tables below. Attach information of additional species if required. For example Row 1. should reflect information regarding the same species across both tables.

	Species Common Name(s)	Species Scientific Name	Life Stage	Brood Year	Proposed Number for Transfer	Proposed Transfer Date
1.	<u>Arctic char</u>	<u>Salvelinus alpinus</u>	<u>Eggs/Milt</u>	<u>2012</u>	<u>10000</u>	<u>November 2012</u>
2.						
3.						
4.						

	Stock Origin	Genetic Status	Source Location of Fish or Aquaculture Licence#	Shellfish or Salmonid Transfer Zone	Nearest Town (City, Province/State)
1.	<u>Yukon, Icy Waters Ltd</u>	<u>Triploid</u>	<u>Licence no. N/A Yukon</u>	<u>Yukon</u>	<u>Whitehorse</u>
2.					
3.					
4.					

Are any of these species listed under the Species at Risk Act (SARA)? ☐ Yes ☒ No

If yes, have you been issued a SARA Permit? ☐ Yes ☒ No

Are any of these species being imported from outside Canada? ☐ Yes ☒ No

If you checked "Yes", please note a separate application will need to be made to the Canadian Food Inspection Agency for any imports into BC.

4. Access to Wild Aquatic Resources for Aquaculture Purposes

☐ Access not required, continue to section 5.

Please complete the application form for Access to Wild Aquatic Resources for Aquaculture Purposes and submit it **together** with this application. The form and the access policy can be found on the DFO Pacific Region Aquaculture Website: <http://www.dfo-mpo.gc.ca/aquaculture/pac-eng.htm>

For information on access to **freshwater** species for **educational or scientific** purposes, please visit:

http://www.gov.bc.ca/pasb/applications/process/scientific_fish_collect.html#a2

For information on access to **marine** species for **educational or scientific** purposes, please visit:

<http://www.pac.dfo-mpo.gc.ca/m-guilence-permis/sci/index-eng.htm>

5. Introduction and/or Transfer of Fish

Please note, a fee of \$30.00 will be applied to transport of any freshwater fish native or non-native to BC. Exceptions include transport for the purposes of live food trade, aquariums, and transfers of Pacific Salmon. Freshwater introduction and/or transfer applications should be submitted to the BC Permit and Authorizations Service Bureau.

5a. Rationale for introduction or transfer: Commercial culture of arctic char

5b. Destination: S22

Nearest Town: Oliver BC

Main mode of Transport: Air

Destination Description: Aquaculture Site

Destination Transfer Zone: 9.Columbia

Describe method of transport:

(attach additional information if required)

Air from Whitehorse to Penticton, ground from Penticton to final destination.

5c. List any intermediate sites and transfer dates, if any:

Location of Intermediate Site: None

Arrival and departure date: _____

Location of Intermediate Site: None

Arrival and departure date: _____

5d. Final Destination of Introduction or Transfer

Complete only one of items *i*, *ii*, or *iii*. In item *i*, animals placed within tenure in natural waters, under an aquaculture licence, must not be released beyond the licensed area. If the proposed release of introduced or transferred fish will be into natural waters, complete all of section *iii*.

i. If purpose is for aquaculture/enhancement:

Company Name: Dorocco Developments Ltd

Designated Contact Person: Gary Klassen

Aquaculture Licence# AQFW 6673 2012

Provincial Landfile# PR032

ii. If final destination is a contained experimental facility:

Will introduction or transfer be separate from other organisms in facilities with respect to: (Check all that apply)

☒ Tanks/ponds

☒ Water Supply

☒ Effluent Discharge

Will effluent be: (check all that apply)

☐ sterilized

☐ discharged directly to the municipal sewer

☐ discharged into ground sump (100%)

☐ discharged into the Ocean

☒ discharged into surface freshwater

Final disposal of the transferred fish: Food Market

iii. If final introduction or transfer is to be released into natural waters (not for commercial aquaculture purposes):

List two waters downstream from the release location:

☐ check if destination is permanently landlocked

1. _____

2. _____

Name federal and provincial fisheries staff who manage fisheries and assess stocks in the area you wish to release the fish. These staff must have been consulted with and approve of this introduction and transfer. Visit <http://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/areas-secteurs/index-eng.htm> to determine the Pacific Fishery Management Area and office contact information.

Provincial: _____

Contact Information: _____

Federal: _____

Contact Information: _____

Please attach additional documentation in support of this application, especially issues in regard to risks and mitigation measures.

Acknowledgement:

☒ I am 19 years of age or older

☒ I am authorized by my company to make this application on their behalf

By typing or signing my name below, I certify that the information that I have provided is true and correct to the best of my knowledge. I understand that it is an offence to provide false information.

Date of Application 21-Sep-12

Signature Gary Klassen

Popowich, Tracy CSNR:EX

From: Anderson, Des FLNR:EX
Sent: Thursday, October 6, 2011 2:27 PM
To: Reimer, Shaun FLNR:EX
Cc: Pryce, Conrad FLNR:EX
Subject: FW: Gary Klassen's Arctic Char application

Shaun,

Here is the note promised. I will also forward a voicemail I received today from Mr. Klassen for you to follow up with. Thanks you.

Des.

Des Anderson, P.Eng.
Section Head - Public Safety & Protection
Okanagan Shuswap District
Ministry of Forests, Lands & Natural Resource Operations
102 Industrial Place
Penticton, BC V2A 7C8
Phone: 250-490-8221
Fax: 250-490-2231

From: Pryce, Conrad FLNR:EX
Sent: Thursday, October 6, 2011 2:11 PM
To: 'Hughes, Debra'
Cc: Anderson, Des FLNR:EX; Nield, Lora M FLNR:EX; Barlas, Sajid A ENV:EX
Subject: RE: Gary Klassen's Arctic Char application

Debra et al - in addition please advise Mr. Klassen to also submit a section 9 – notification to FrontCounterBC in Kamloops

Note A Section 9 or Notification Acceptance is required to be obtained if the discharge outfall is located below the high water mark on Okanagan River. Thank you Conrad Pryce

Conrad J. Pryce, P.Eng.
Section Head, Water Allocation
Ministry of Forests, Lands and Natural Resource Operations
Okanagan Shuswap District
102 Industrial Place Penticton BC V2A 7C8
tel: (250) 490-8208 fax : (250) 490-2231
email: Conrad.Pryce@gov.bc.ca
web: www.env.gov.bc.ca/wsd

From: Hughes, Debra [<mailto:Debra.Hughes@dfo-mpo.gc.ca>]
Sent: Thursday, October 6, 2011 1:31 PM
To: Barlas, Sajid A ENV:EX
Cc: Anderson, Des FLNR:EX; Pryce, Conrad FLNR:EX; Nield, Lora M FLNR:EX
Subject: RE: Gary Klassen's Arctic Char application

Hello Sajid

Thank you for your prompt response. I'll forward your email to him.

Regards

Debra

From: Barlas, Sajid A ENV:EX [<mailto:Sajid.Barlas@gov.bc.ca>]
Sent: October 6, 2011 1:29 PM
To: Hughes, Debra
Cc: Anderson, Des FLNR:EX; Pryce, Conrad FLNR:EX; Nield, Lora M FLNR:EX
Subject: RE: Gary Klassen's Arctic Char application

Hello Debra,

Please advise Mr. Klassen to contact Mr. Des Anderson of Ministry of Forest, Land and Natural Resource Operations in our Penticton office, regarding questions involving dykes. His contact info is given below:

E-mail: Des.Anderson@gov.bc.ca
Phone: 250 490-8221

Regards,

Sajid

From: Hughes, Debra [<mailto:Debra.Hughes@dfo-mpo.gc.ca>]
Sent: Thursday, October 6, 2011 1:25 PM
To: Barlas, Sajid A ENV:EX
Subject: Gary Klassen's Arctic Char application

Hello Sajid

Thank you very for assistance in finding out who Mr. Klassen should be contacting re: directional drilling threw the dyke on the Okanagan River. I will keep you apprised of DFO's progress on the project review.

Respectfully

Debra Hughes
Biologist
Aquaculture Environmental Operations
Aquaculture Division, Fisheries Management
Fisheries and Oceans Canada

Phone: (250) 703-0915
Fax: (250)703-0921

Popowich, Tracy CSNR:EX

From: Gary Klassen [gary@dorocco.com]
Sent: Friday, October 7, 2011 2:10 PM
To: Reimer, Shaun FLNR:EX
Subject: Klassen Application
Attachments: SCAN2386_000.pdf

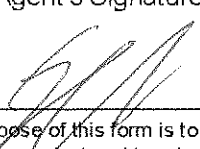
Hi Shaun
Please see attached application.
I hope it is clear. If you indicate I will dig up more info.
Thanks Gary

Gary Klassen 1-250-485-7408

-----Original Message-----

From: desertairerealty@telus.net
Date: Fri, 07 Oct 2011 21:24:32
To: <gary@dorocco.com>
Subject:

DIKE MAINTENANCE ACT APPROVAL - APPLICATION FORM

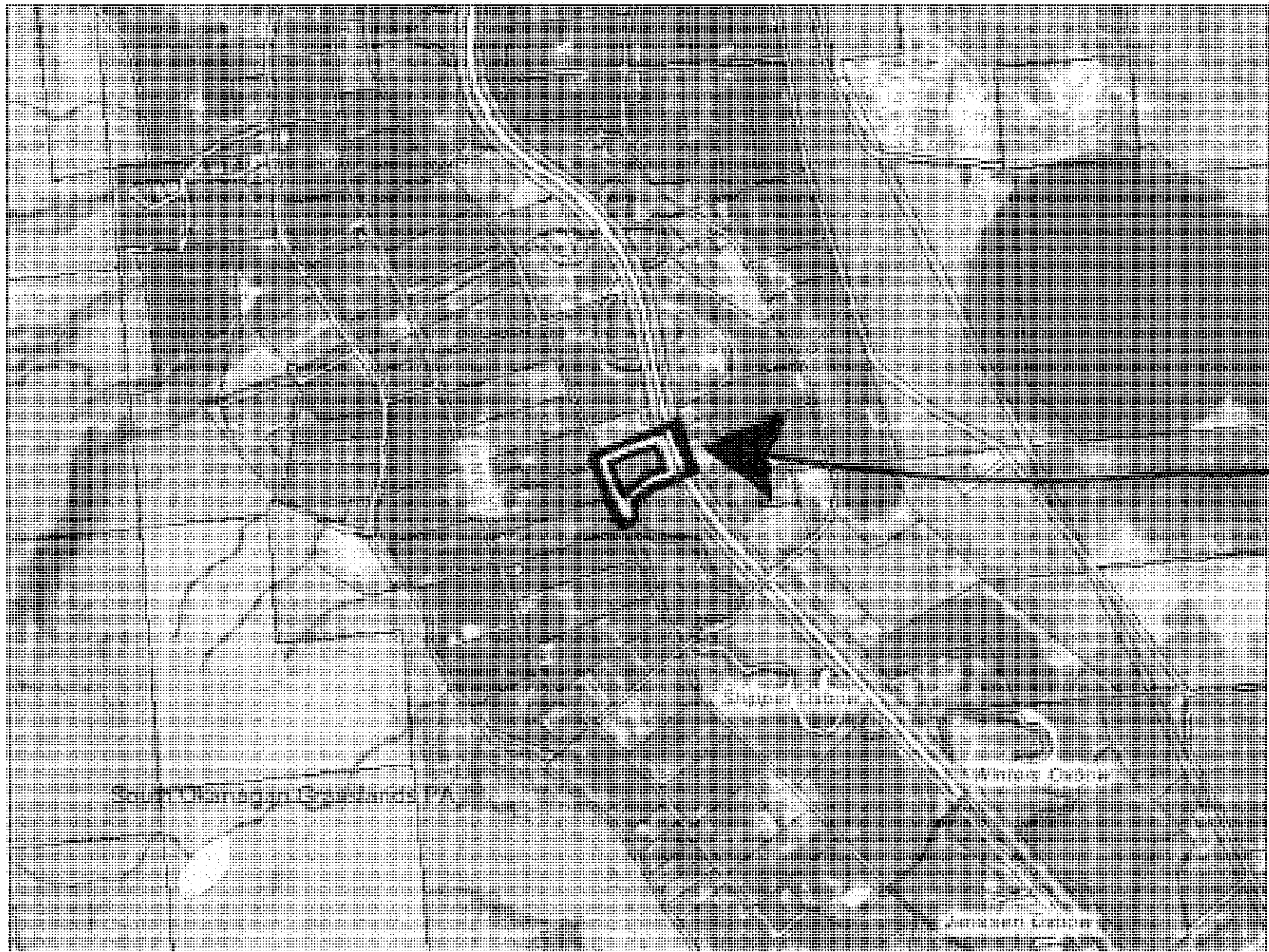
PART 1. CONTACT INFORMATION		
Name of Applicant: <u>Gary Klassen</u>		Applicant File Number (if applicable):
Name of Applicant Contact or Agent:		
E-mail Address of Contact: <u>gary@donocco.com</u>		
Home Phone: () - ()	Business Phone: (250) 485 7408	Fax Number: () - ()
Mailing Address for Correspondence from Ministry of Environment: <u>Box 1000</u> <u>Osoyoos BC</u>		
		Postal Code: <u>V0H 1V0</u>
Applicant or Agent's Signature(s): 		Date: <u>Oct 6 2011</u>
NOTE: The purpose of this form is to highlight this application's major points to allow Ministry staff to both understand the key aspects of the project and to prioritize the application accordingly. For more information on the processing of this application, please read the preceding Approval Process.		

PART 2. EXISTING CONDITIONS
Name of Dike and responsible Diking Authority (from Provincial Database) <u>Okanagan River RD #17 Oliver</u>
Exact Location of Proposed Works (Chainage specified on dyke maps or UTM Coordinates) <u>VDS #4</u>
Adjacent Water Body(source of flooding): <u>Channelled Okanagan River</u>

FOR OFFICE USE ONLY	
Date Ministry Received Application:	Diking Authority File Number:
	Priority/Deadline:
Preliminary Review and the Initial Applicant Consultation Complete on:	
(date) Comments:	

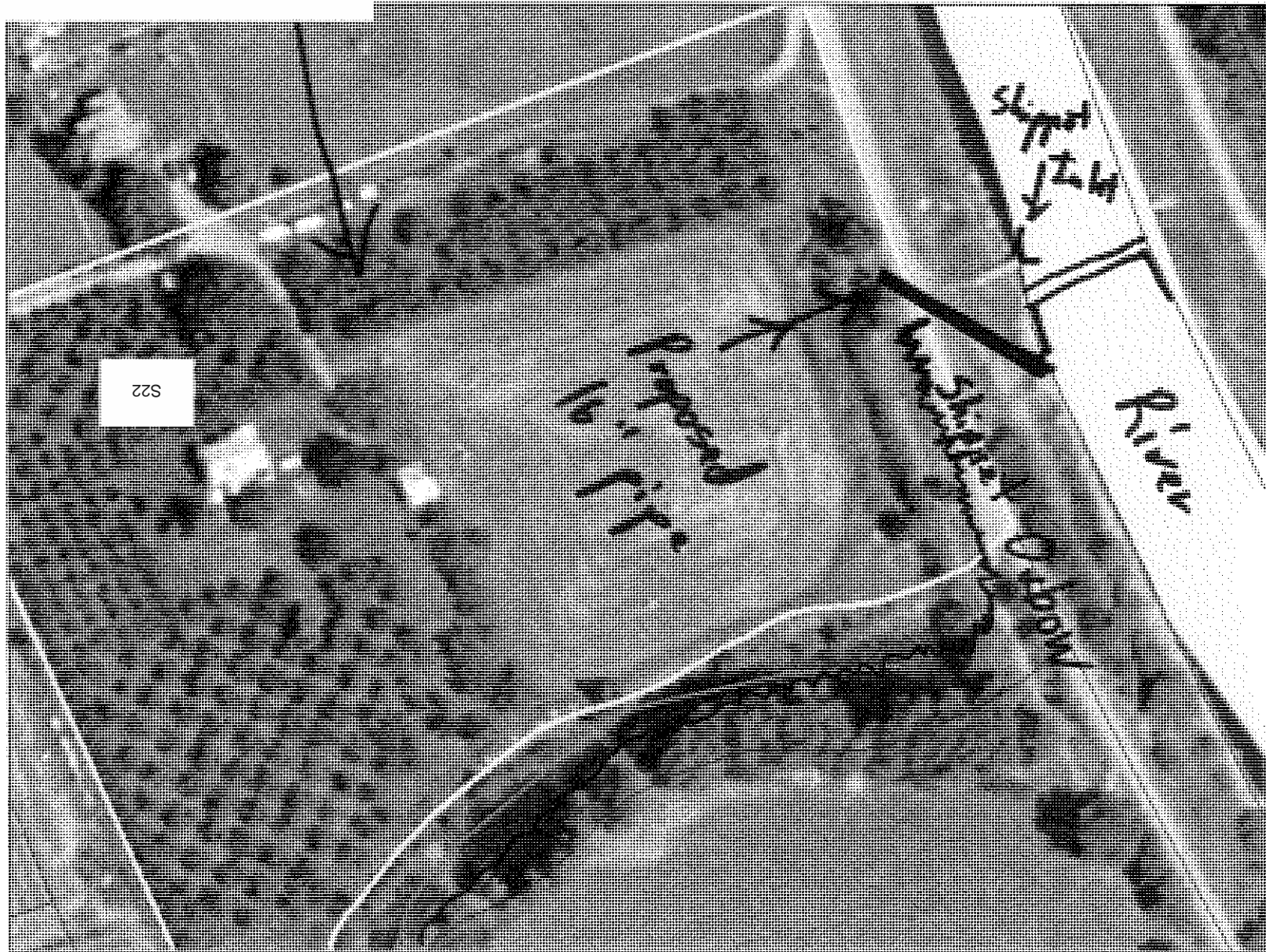
PART 3. PROPOSED WORKS	
Briefly describe your proposed works: <i>I need to instal a 16" outfall from aquaculture site</i>	
Provide a proposed construction schedule & note any constraints/milestones if important:	
Briefly describe your approach to ensure the integrity of existing flood protection system(s) is not compromised by the installation of the works: <i>A flap type one way valve at outfall</i>	
Have you referred to the 'Provincial Design and Construction Guide' in your design? Yes or No (circle one)	Are there any exceptions to this guide? Yes or No (circle one)
If yes, how and why have you deviated?	
PART 4. REQUIRED ATTACHMENTS	
Check off attachments to this application form: <input checked="" type="checkbox"/> General Location Plan <input checked="" type="checkbox"/> Detailed Site Plan <input checked="" type="checkbox"/> Preliminary Design Drawings and Specifications <input checked="" type="checkbox"/> Design Brief <input checked="" type="checkbox"/> Previous correspondence regarding this site from the Ministry	
If any required attachments are not included, please explain why.	
Have you included attachments not listed above? Please list them below.	
Note: Please forward a copy of this application to the appropriate Deputy Inspector of Dikes office as specified and to the Diking Authority responsible for the dike's operation and maintenance (see database) <input checked="" type="checkbox"/> Please confirm that a copy of this application has been forwarded to the Diking Authority	

RDOS Parcel Information Map

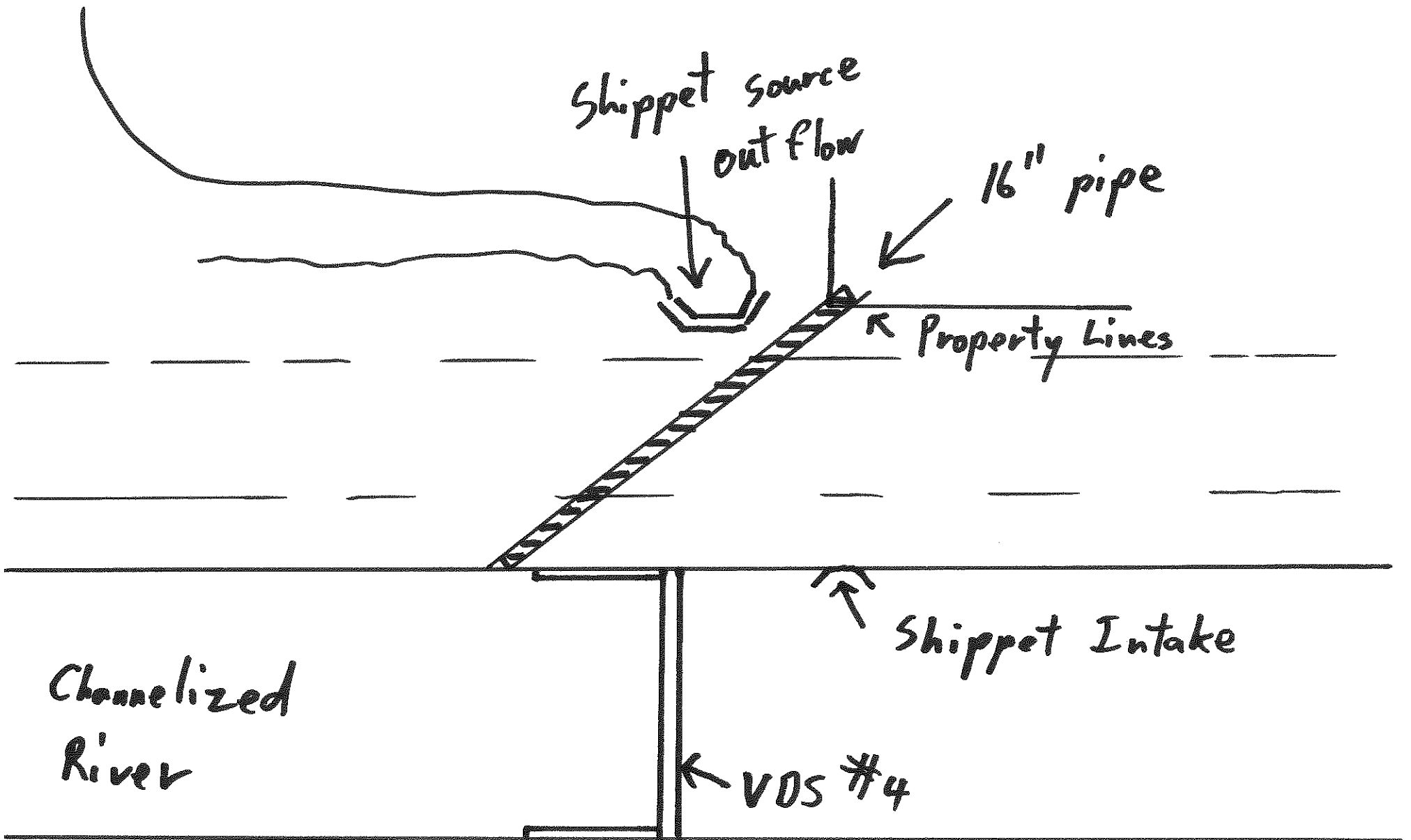


Property

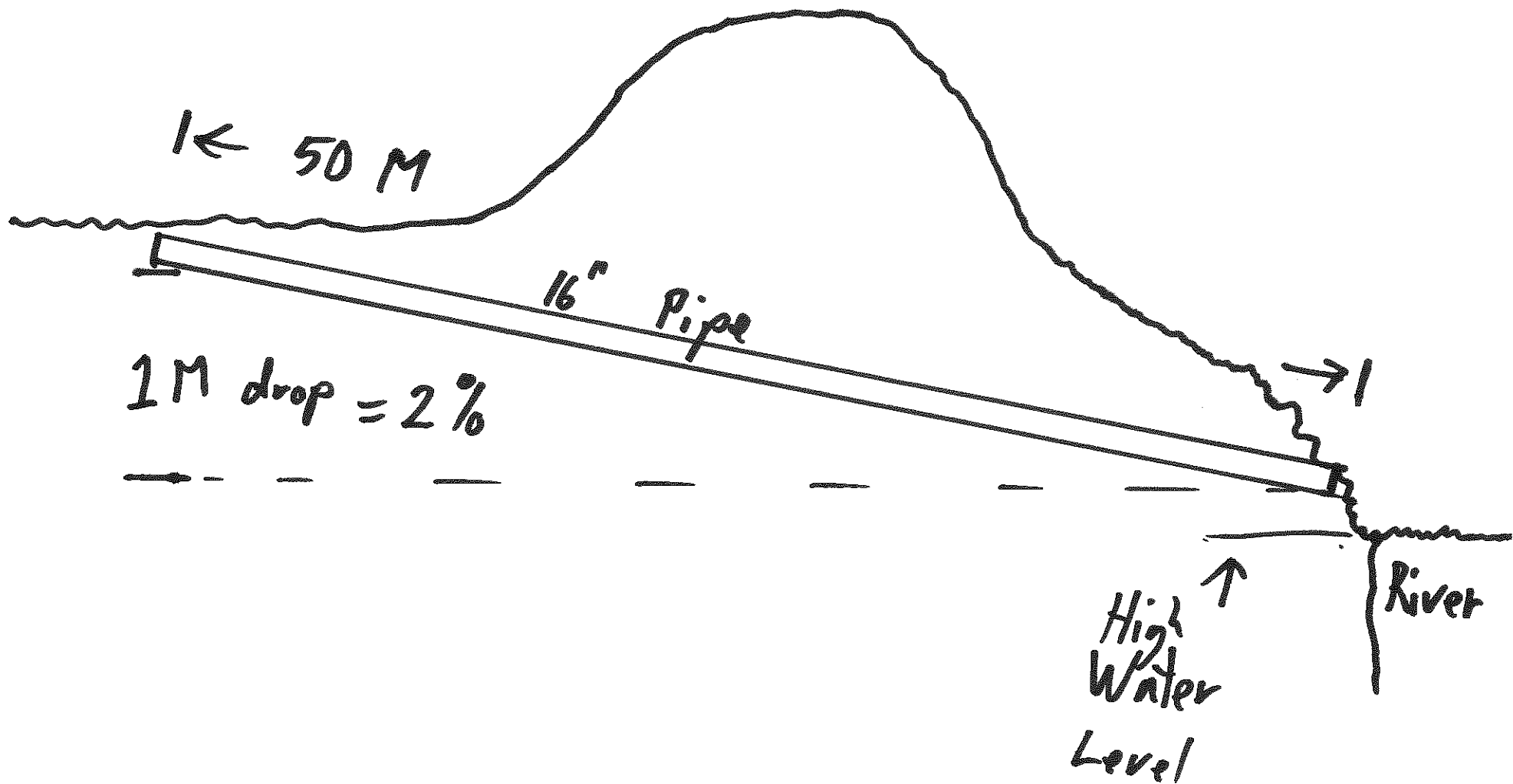
S22



Top View



Elevations



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From: S22 on behalf of Gary Klassen [gary@dorocco.com]
Sent: Friday, October 7, 2011 2:29 PM
To: Reimer, Shaun FLNR:EX
Subject: Fwd: 11 pictures showing outfall pipe route Klassen
Attachments: IMG_1599.JPG; IMG_1601.JPG; IMG_1602.JPG; IMG_1606.JPG; IMG_1608.JPG; IMG_1609.JPG; IMG_1612.JPG; IMG_1614.JPG; IMG_1615.JPG; IMG_1630.JPG; IMG_1631.JPG

----- Forwarded message -----

From: Gary Klassen <gary@dorocco.com>
Date: Thu, Oct 6, 2011 at 1:13 PM
Subject: 11 pictures showing outfall pipe route
To: Debra Hughes <debra.hughes@dfo-mpo.gc.ca>, Dorocco <Gary@dorocco.com>, John Lawrie
S22

You have been sent 11 pictures.

IMG_1599.JPG
IMG_1601.JPG
IMG_1602.JPG
IMG_1606.JPG
IMG_1608.JPG
IMG_1609.JPG
IMG_1612.JPG
IMG_1614.JPG
IMG_1615.JPG
IMG_1630.JPG
IMG_1631.JPG

These pictures were sent with Picasa, from Google.
Try it out here: <http://picasa.google.com/>




shows concrte blocks above oxbow

Page 23
FNR-2012-00335




**7th center of bike trail facing
west showing future tank yard**

Page 24
FNR-2012-00335

A photograph of a dirt bike trail. The trail is a wide, light-colored dirt path. In the background, there are trees and some tall, dry grass on the left side. A copper pipe lies horizontally across the middle of the trail. The text "6th center bike trail facing south" is overlaid on the image.

6th center bike trail facing south

Page 25
FNR-2012-00335




**8th showing edge of
bike trail and control wier**

Page 26
FNR-2012-00335



5 th shows center of biking road facing north

Page 27
FNR-2012-00335



4th shows road , blocks and corner of fence

Page 28
FNR-2012-00335

A photograph showing two large, grey concrete blocks with rectangular indentations on top, lying in a field of tall, dry grass. An orange plastic pipe runs diagonally across the foreground from the bottom left towards the middle right. The scene appears to be a construction or maintenance site.

3 rd facing west shows blocks above oxbow

Page 29
FNR-2012-00335



2 nd shows begining of oxbow facing south

Page 30
FNR-2012-00335



Page 31
155 corner of
FNR 20112-00335
drawing facing west



9th shows water fall facing east

Page 32
FNR-2012-00335



10 shows termination of out fall pipe

Page 33

FNR-2012-00335

Popowich, Tracy CSNR:EX

From: Gary Klassen [gary@dorocco.com]
Sent: Friday, October 7, 2011 2:49 PM
To: Reimer, Shaun FLNR:EX
Subject: Re: Horizontal layout scanned sheets Klassen app

Shaun

I guess we could cross perpendicular to dike, but would have pipe above the Shippet then.

Gary

-----Original Message-----

From: Shaun Reimer
To: gary@dorocco.com
Subject: RE: Horizontal layout scanned sheets Klassen app
Sent: Oct 7, 2011 2:42 PM

Gary, I am leaving now but my initial thought is that you need to cross the dike at an angle perpendicular to the dike.

Shaun Reimer, P.Eng.

Hydrotechnical Engineer
Ministry of Forests, Lands, & Natural Resource Operations
102 Industrial Place
Penticton, BC, V2A 7C8
(250) 490-8229
fax: (250) 490-2231

-----Original Message-----

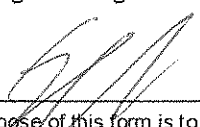
From: Gary Klassen [<mailto:gary@dorocco.com>]
Sent: Friday, October 7, 2011 2:10 PM
To: Reimer, Shaun FLNR:EX
Subject: Horizontal layout scanned sheets Klassen app

Gary Klassen 1-250-485-7408

-----Original Message-----

From: desertairerealty@telus.net
Date: Fri, 07 Oct 2011 21:26:08
To: <gary@dorocco.com>
Subject:

DIKE MAINTENANCE ACT APPROVAL - APPLICATION FORM

PART 1. CONTACT INFORMATION		
Name of Applicant: <i>Gary Klassen</i>	Applicant File Number (if applicable):	
Name of Applicant Contact or Agent:		
E-mail Address of Contact: <i>gary@dorocco.com</i>		
Home Phone: () S22	Business Phone: (<i>250</i>) <i>485 7408</i>	Fax Number: ()
Mailing Address for Correspondence from Ministry of Environment: <i>Box 1000</i> <i>Osoyoos BC</i>		
		Postal Code: <i>V0H 1V0</i>
Applicant or Agent's Signature(s): 		Date: <i>Oct 6 2011</i>
NOTE: The purpose of this form is to highlight this application's major points to allow Ministry staff to both understand the key aspects of the project and to prioritize the application accordingly. For more information on the processing of this application, please read the preceding Approval Process .		

PART 2. EXISTING CONDITIONS
Name of Dike and responsible Diking Authority (from Provincial Database) <i>Okanagan River BD #17 Oliver</i>
Exact Location of Proposed Works (Chainage specified on dyke maps or UTM Coordinates) <i>VDS #4</i>
Adjacent Water Body(source of flooding): <i>Channeled Okanagan River</i>

FOR OFFICE USE ONLY	
Date Ministry Received Application:	Diking Authority File Number:
	Priority/Deadline:
Preliminary Review and the Initial Applicant Consultation Complete on:	
(date) Comments:	

PART 3. PROPOSED WORKS

Briefly describe your proposed works:

I need to instal a 16" outfall from aquaculture site

Provide a proposed construction schedule & note any constraints/milestones if important:

Briefly describe your approach to ensure the integrity of existing flood protection system(s) is not compromised by the installation of the works:

A flap type one way valve at outfall

Have you referred to the 'Provincial Design and Construction Guide' in your design? Yes or No (circle one)

Are there any exceptions to this guide? Yes or No (circle one)

If yes, how and why have you deviated?

PART 4. REQUIRED ATTACHMENTS

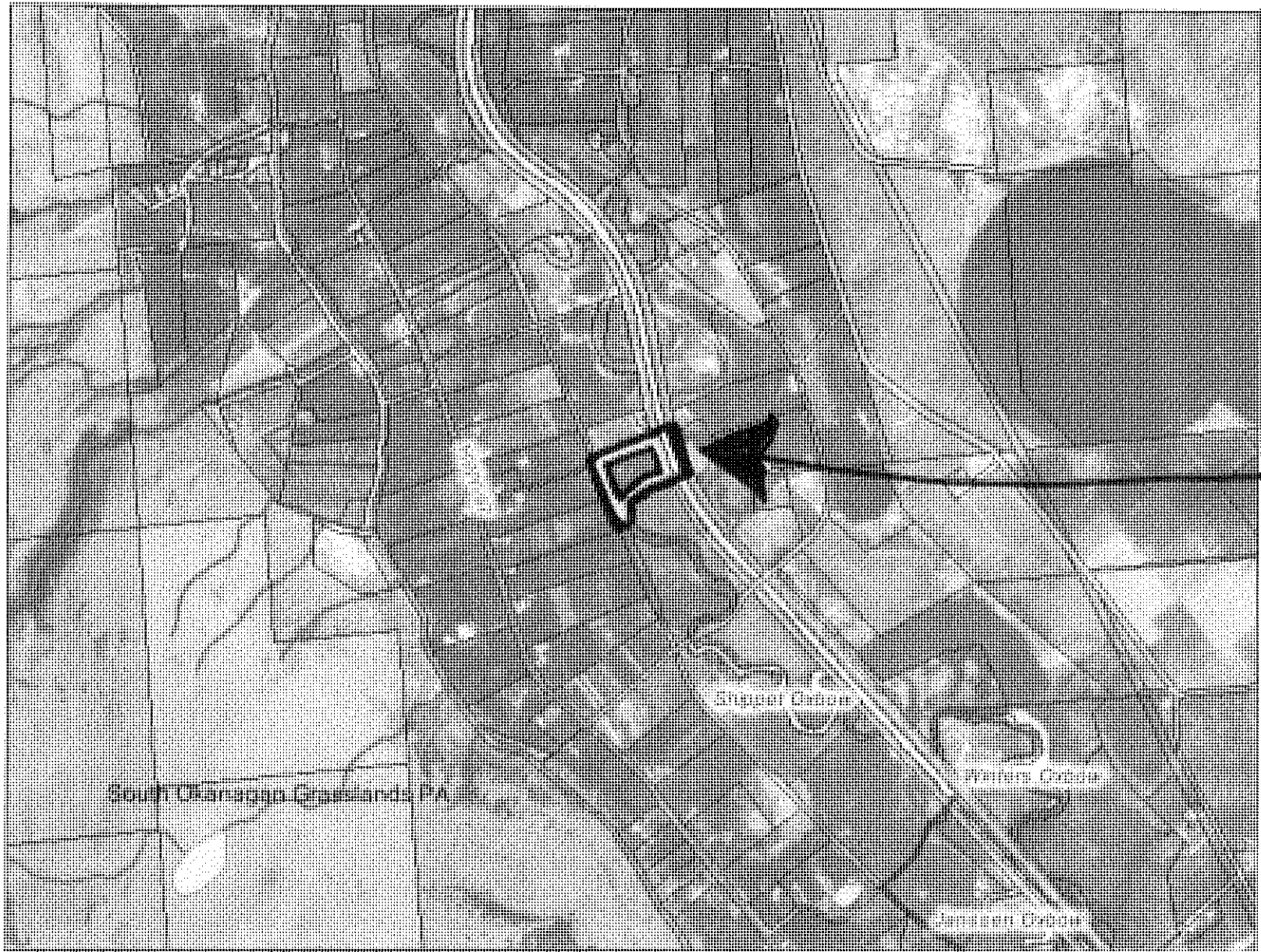
Check off attachments to this application form: ☐ General Location Plan ☐ Detailed Site Plan
☐ Preliminary Design Drawings and Specifications ☒ Design Brief ☐ Previous correspondence regarding this site from the Ministry

If any required attachments are not included, please explain why.

Have you included attachments not listed above? Please list them below.

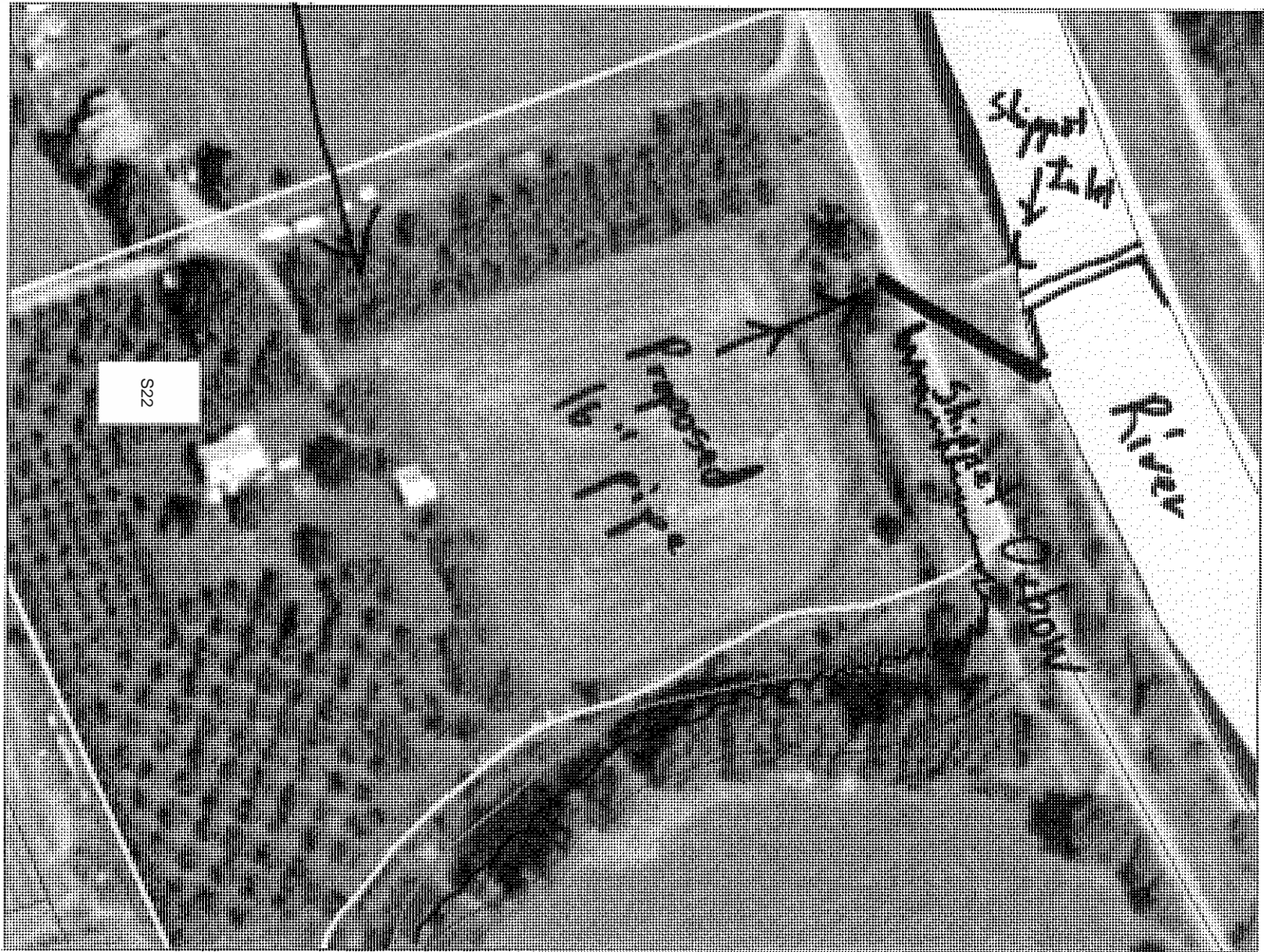
Note: Please forward a copy of this application to the appropriate Deputy Inspector of Dikes office as specified and to the Diking Authority responsible for the dike's operation and maintenance (see database) ☐ Please confirm that a copy of this application has been forwarded to the Diking Authority

RDOS Parcel Information Map

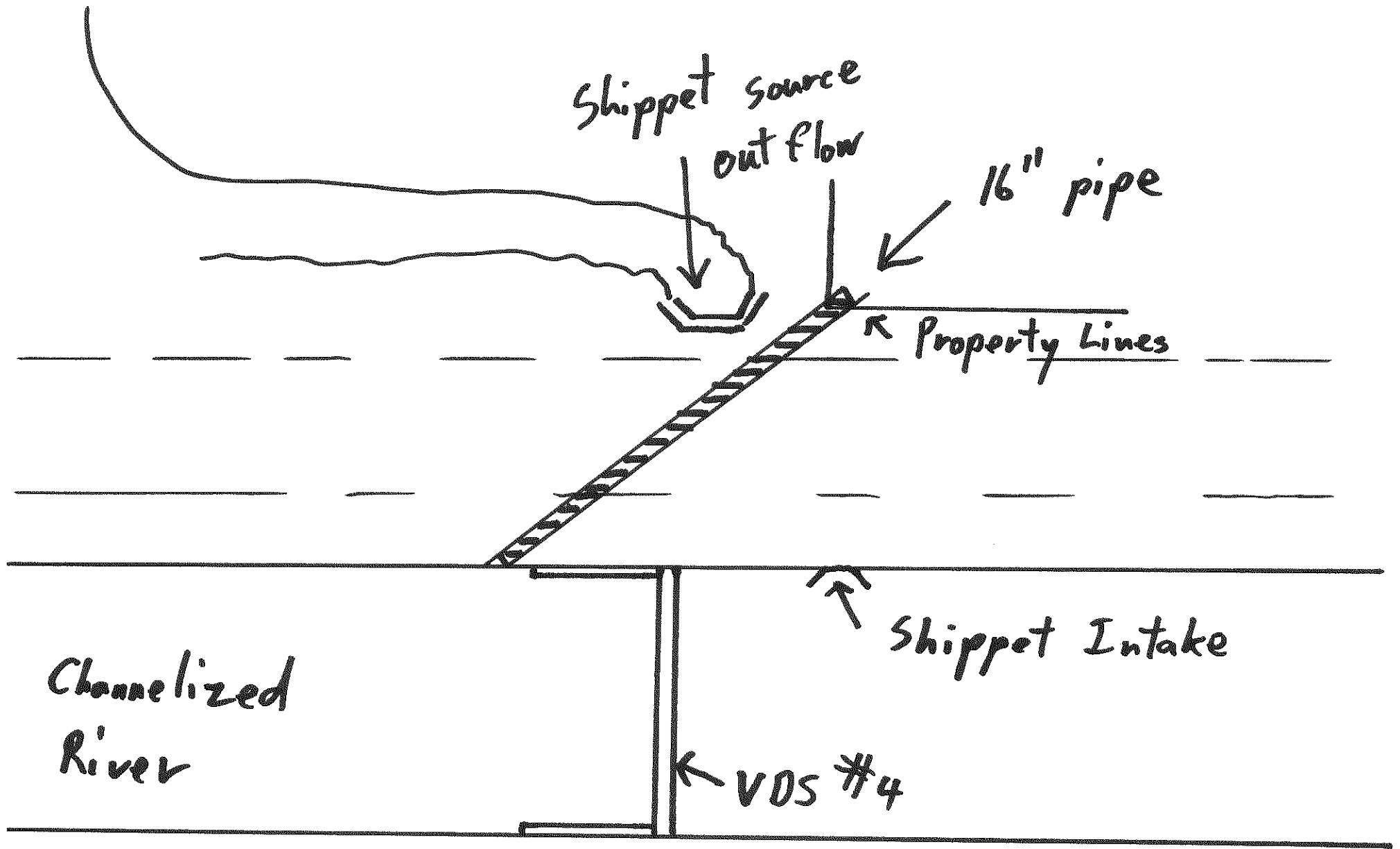


Property

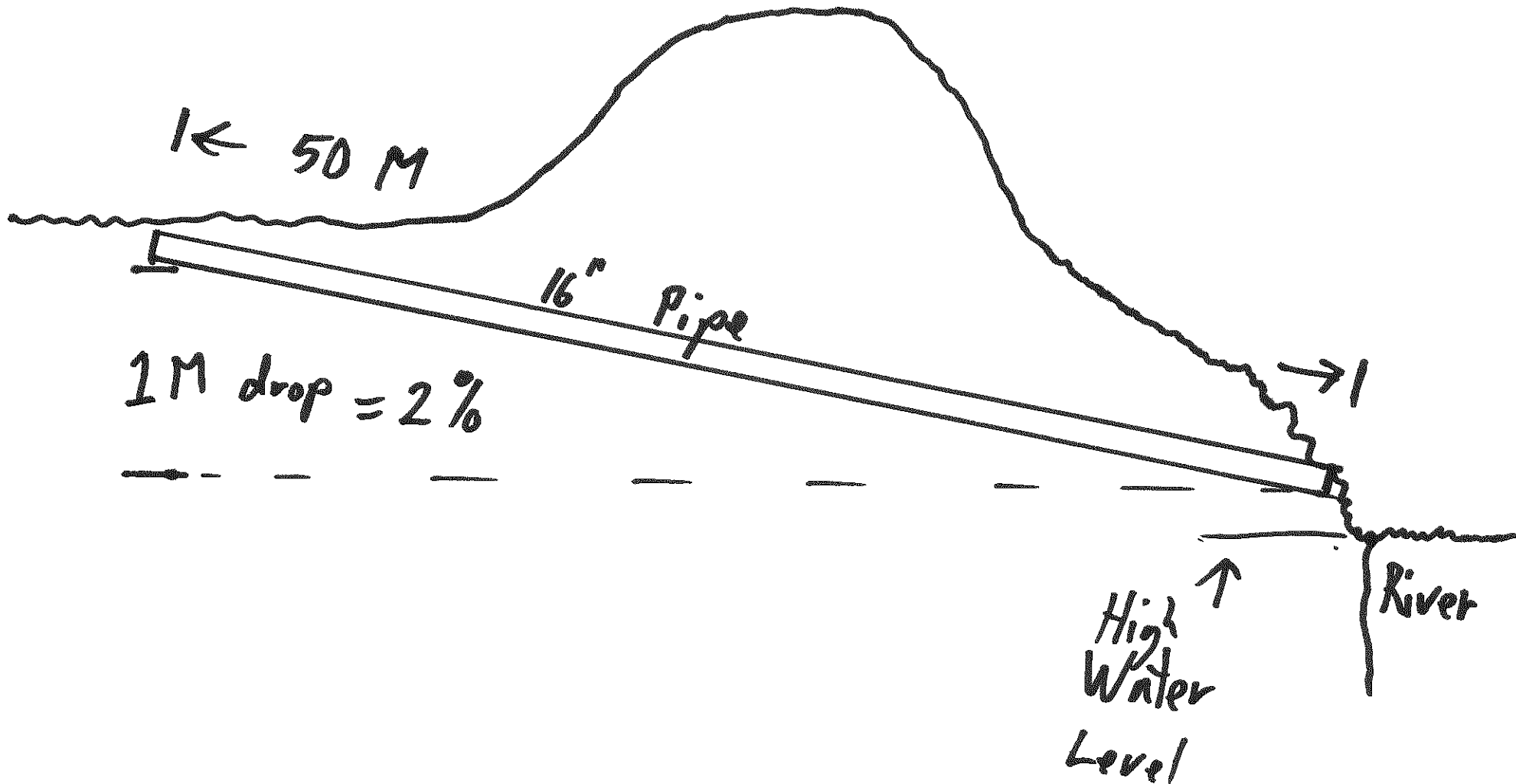
S22



Top View



Elevations



Popowich, Tracy CSNR:EX

From: Gary Klassen [gary@dorocco.com]
Sent: Tuesday, October 11, 2011 11:03 AM
To: Jorgensen, Catherine J FLNR:EX; Debra Hughes
Cc: Reimer, Shaun FLNR:EX
Subject: Attached Section 9 application
Attachments: SCAN2390_000.pdf

To whom it Concerns

Please see attached application for an Outfall from an aquaculture operation to the Okanagan River
VDS#4

Oliver Rd 17

Regards Gary

Gary Klassen 1-250-485-7408

-----Original Message-----

From: desertairerealty@telus.net
Date: Tue, 11 Oct 2011 18:12:24
To: <gary@dorocco.com>
Subject:

Ministry of Environment

Approval Application or Notification for Changes In and About a Stream

Under Section 9 of the Water Act and Part 7 of the Water Act Regulations

Incomplete or inaccurate forms do not constitute **Notification** & will not be accepted.

Proceeding with works after submission of an incomplete or inaccurate form would be a violation of the Water Regulation

☐ APPROVAL APPLICATION

☒ NOTIFICATION¹ (see USERS' GUIDE)

1. Applicant Information			
Name: Gary Klassen			
Address: Box 1000			
City: Osoyoos BC	Province: BC	Postal code: V0H 1V0	
Phone: 250 485 7408	e-mail: gary@lorocco.com		
2. Location of Works			
Street Address of Works (or nearest town):		S22	Oliver BC
Stream Name: Okanagan River		Flows Into: Osoyoos Lake	
Location on Stream: Shippet Ox low			
Reference Landmarks: VDS #4		Amount of disturbance in m ² :	
Multiple Sites: YES/NO ME		Number of sites: One	
Latitude: 11u 312482.81	Longitude: 5443752.74 mN	Elevation: 288 m	
Legal description of property where work is proposed:		S22	

3. Drawing, Plan and Site Map

1. Attach drawing showing lot boundaries, location of buildings and of proposed works, stream direction and flow.
2. Attach a key map at an appropriate scale showing the location of the site.
3. Attach engineering drawings (may be required for works identified with ^E under **Requires Approval** section below).

4. Proposed Timing for Work

Start (day/month/year): Nov 2011	Finish (day/month/year): Dec 2011
----------------------------------	-----------------------------------

FOR OFFICE USE ONLY

Date Received:	Water File Number:
	Client Number:
	Application Number:
	Amount Received:
	Receipt Number:

5. Type of Works

Requires Approval:

- ☐ Bank Erosion Protection ^E
- ☐ Bridge Installation/maintenance/removal (other than clear span) ^E
- ☐ Stream Diversion ^{OP} Diversion berm structure plan required
- ☐ Large Debris Removal – by machine ^{OP} plan required
- ☐ Gravel Removal ^{OP}
- ☐ Other: Provide details in space below

*Provide culvert dimensions:

Length:

Width:

Diameter:

^E Professional Engineer may be required

^{OP} Qualified Professional may be required

Requires Notification:

- ☐ Installation*/maintenance/removal of road crossing culvert (*follow Forest Practices Code Stream Crossing Guidebook)
- ☐ Construction/maintenance/removal of a clear span bridge
- ☐ Construction/maintenance of a pipeline crossing
- ☐ Construction/maintenance/removal of a pier or wharf
- ☐ Cutting of annual vegetation in a stream channel
- ☐ Repair/maintenance of existing dike or erosion protection works
- ☒ Construction/maintenance of storm water outfalls
- ☐ Control of Eurasian Watermilfoil or other aquatic vegetation
- ☐ Construction/maintenance of ice bridge, winter ford or snowfall
- ☐ Maintenance of minor and routine nature by a public utility
- ☐ Removal of a beaver dam (As authorized under the Wildlife Act)
- ☐ Small debris removal – by hand
- ☐ Construction of a temporary ford
- ☐ Construction of a temporary diversion around a worksite

The following require Notification and may only be undertaken by the Crown in right of either Canada or British Columbia, or their Agents:

Federal/Provincial

- ☐ Construction/maintenance/removal of a flow or water level measuring device
- ☐ Construction/removal of a fish fence or screen, fish or game guard
- ☐ Restoration/maintenance of fish habitat

The following require Notification and may only be undertaken by the Crown in right of either British Columbia, or a Municipality, or their Agents:

Provincial/Municipal

- ☐ Restoration/maintenance of a stream channel
- ☐ Clearing of an obstruction from a bridge or culvert during a flood emergency¹
- ☐ Construction or placement of erosion protection works or flood protection works during a flood emergency²

¹ Some activities fitting the description for Notification may be reviewed by Ministry/Agency staff, who may decide that an Approval is required.

² Must be completed under direction of the Crown. No notification is required prior to undertaking works, but a description of changes must be submitted to a habitat officer within 72 hours of the change.

^{OP} QP means a professional who through suitable education, experience, accreditation and knowledge may be reasonably relied on to provide advice within their area of expertise.

Detailed Description of Work to be Performed (continue on next page):

Total area disturbed by proposed works (all sites): 15-25 m²

Construct an outfall pipe from an
aquaculture farm 600 gpm.

Detailed Description of Work to be Performed, continued (attach a separate document if more space is required):

my intention is to install a 12"
pipe from S22 and enter the stream
close to the high water mark

I have been in touch with Shaun Reimer
in Porticton regarding Dike Maintenance App.

6. Land Ownership

Please check one of the following:

☒ The applicant is the owner of the property.

☐ The property is Crown land. Tenure/licence
number:

☐ The property is owned by the following Landowner (i.e. Landowner is different from applicant):

Landowner's Name: Gary Klassen		
Address: Box 1000		
City: Osoyoos	Province: BC	Postal code: V0H 1V0
Phone: 250 485 7408	e-mail: gary@dobocco.com	

Do you have the Landowner's written approval to enter the land(s) to complete the works? ☐ Yes ☐ No

Note: a) Ownership of all parcels of land on which the proposed works will occur must be identified, b) do not attach the written approval with the application, but keep it for your files as you may be asked to produce it during an inspection or audit.

7. Who is doing the Work?

Contact information for company designing and supervising construction of the work (if different from applicant):

Company Name:		
Contact Name: Gary Klassen	Professional Affiliation:	
Address: Aquaculture farmer applicant		
City:	Province:	Postal Code:
Phone:	e-mail:	

Contact information for company undertaking the construction (if different from applicant):

Company Name:		
Contact Name:		
Address:		
City:	Province:	Postal Code:
Phone:	e-mail:	

8. Statement of Intent

By submitting this application form, I declare that the information contained on this form is complete and accurate information. I have read, understood and will meet the requirements to construct works and changes in and about a stream in accordance with Section 9 of the *Water Act* and Part 7 Water Act Regulations including, for Notifications, **Terms and Conditions** as specified by a Habitat Officer of the Ministry of Environment.

Signed: _____

Application Date: _____

11/10/2011
day/month/year

9. Submission Instructions

Send the completed form along with the following attachments to the local office in which the proposed works are located. Addresses for local offices are listed on the instruction sheet.

Please note that if you are providing a Notification, no fees are required. However, a fee of \$130.00 is required if you are submitting an application for an Approval. The \$130.00 Approval application fee is not refundable. Payment for the Approval fee may be made at FrontCounter BC offices with a credit card.

If the proposed works require an Approval, prior to proceeding further with this application please ensure that this project will be able to proceed under the Federal *Fisheries Act*.

Required Attachments for both Notifications and Approvals:

- | | |
|---|---|
| <input type="checkbox"/> Sketch plan (mandatory) | <input type="checkbox"/> Engineering drawing (mandatory for works requiring approval noted with ^E) |
| <input type="checkbox"/> Key location map (mandatory) | <input type="checkbox"/> For works requiring an Approval only , a cheque, money order or deposit by credit card for \$130 payable to: Minister of Finance. The fee is non-refundable. No fee is required for a Notification. |

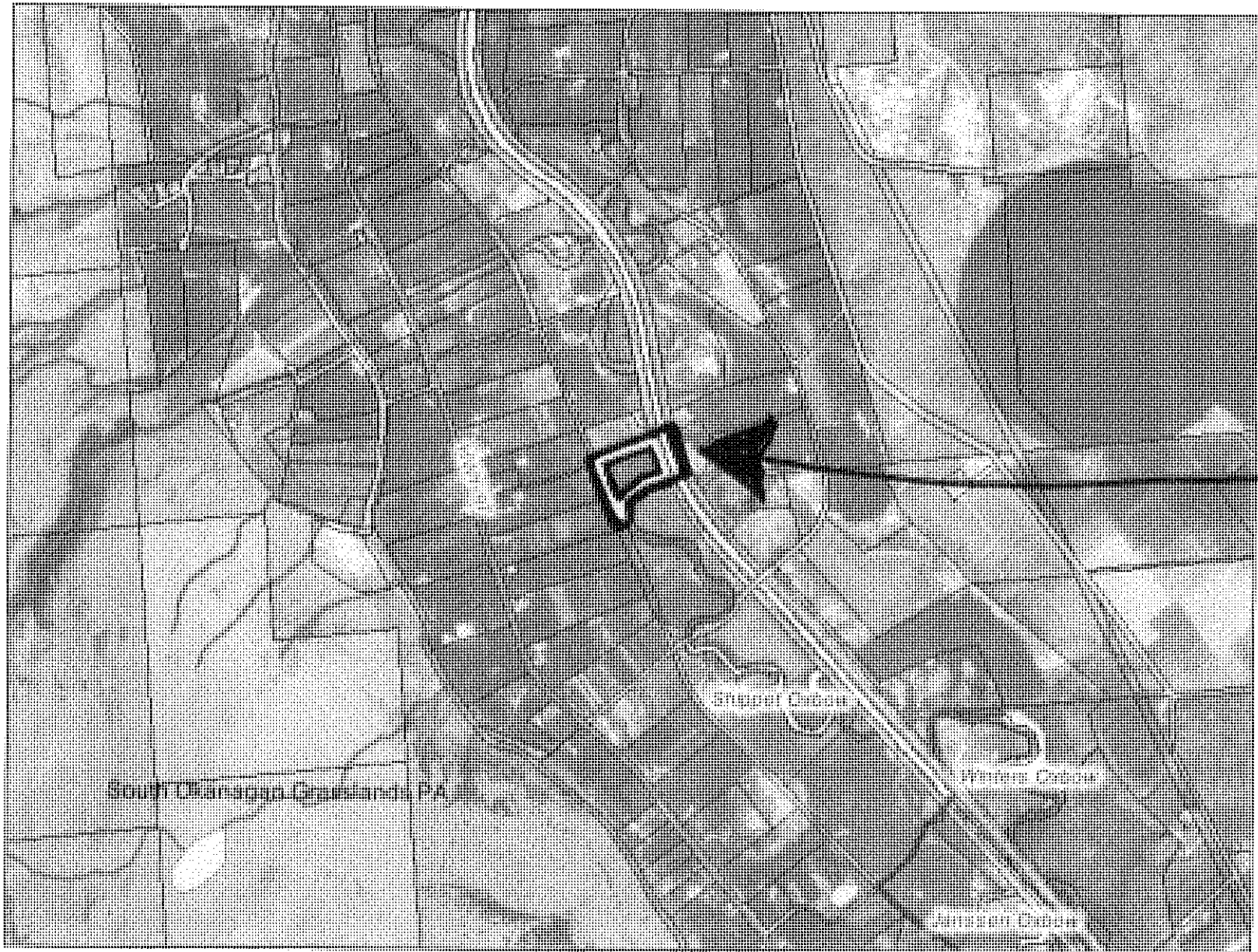
10. Responsibilities

You are required to comply with all applicable federal, provincial and municipal laws and regulations. If you anticipate that the planned work may result in harmful alteration, disruption or destruction of fish habitat you should send a copy of your completed Notification/Approval Application directly to the nearest office of Fisheries and Oceans Canada. Review and comment by DFO may necessitate changes to the proposed works.

Has a copy of this notification/approval application been sent to Fisheries and Oceans Canada (check one)?
YES ☒ NO ☐

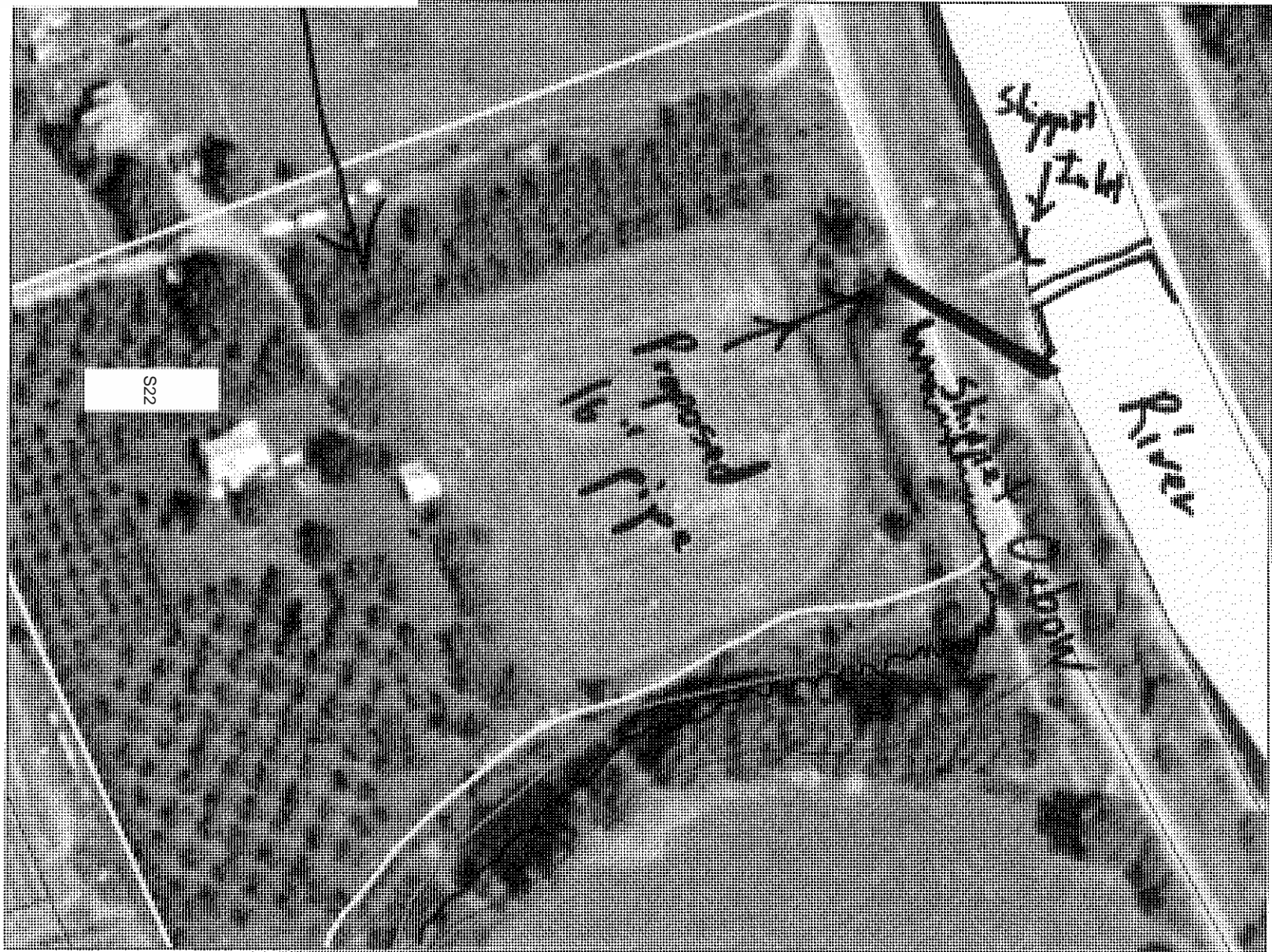
If YES, indicate the DFO office that the notification/approval application has been sent (for DFO offices, see Users' Guide):

RDOS Parcel Information Map

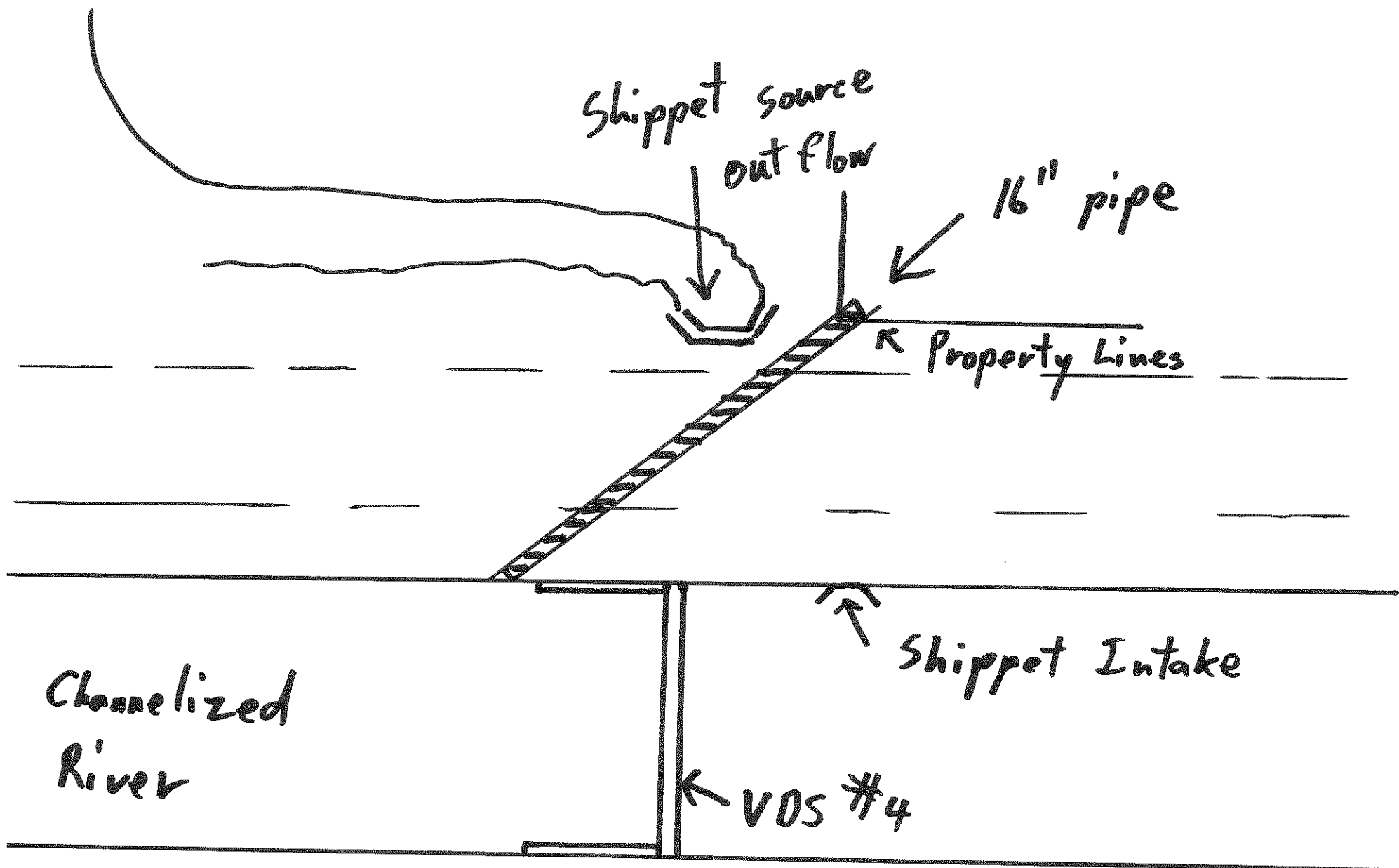


Property

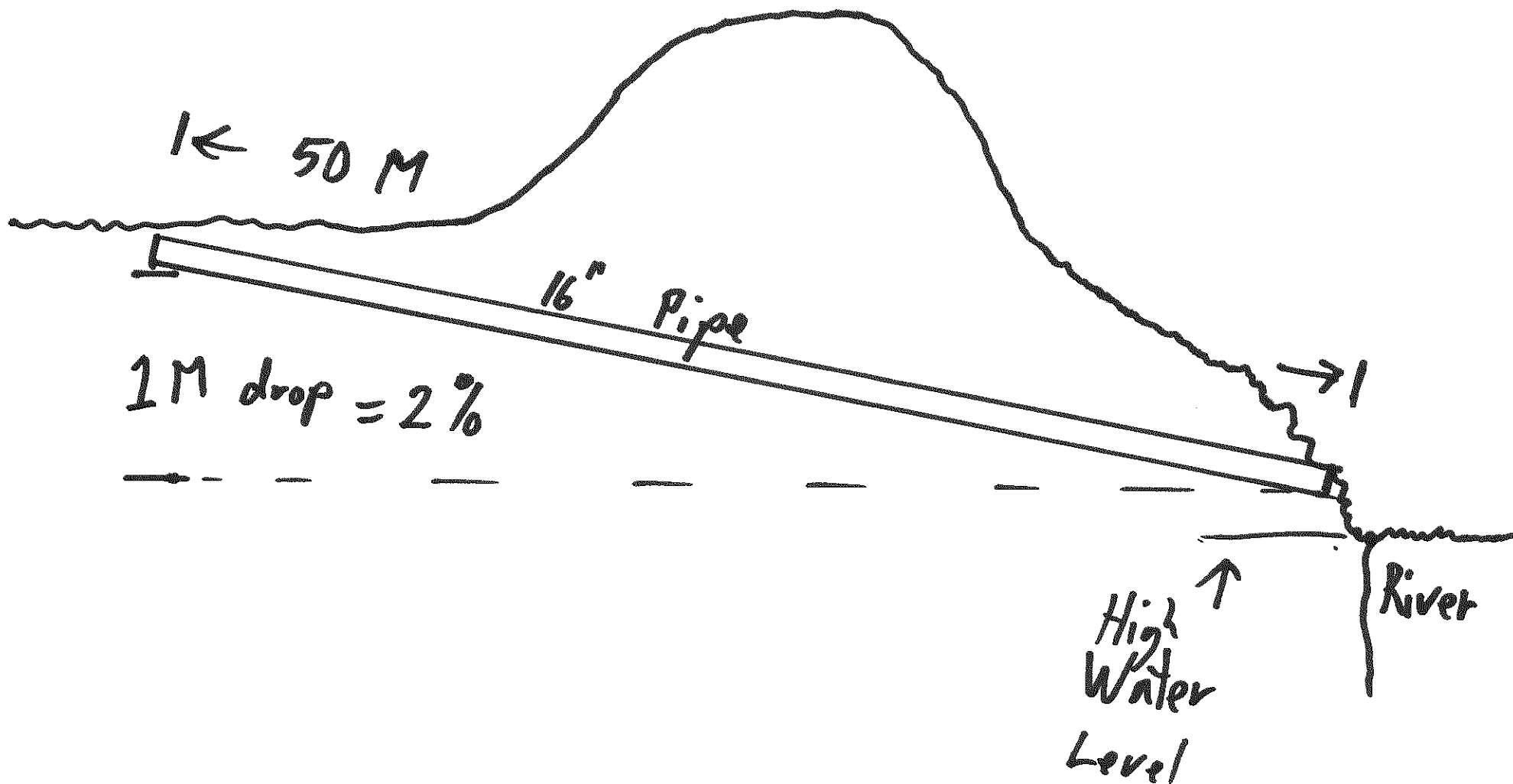
S22



Top View



Elevations



Ministry of Environment

Approval Application or Notification for Changes In and About a Stream Under Section 9 of the Water Act and Part 7 of the Water Act Regulations

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☐ APPROVAL APPLICATION

☒ NOTIFICATION¹ (see USERS' GUIDE)

1. Applicant Information			
Name: Gary Klassen			
Address: Box 1000			
City: Osoyoos BC	Province: BC	Postal code: V0H 1V0	
Phone: 250 485 7408	e-mail: gary@lorocco.com		
2. Location of Works			
Street Address of Works (or nearest town):		S22	O11vor BC
Stream Name: Okanagan River		Flows Into: Osoyoos Lake	
Location on Stream: Shippet Ox low			
Reference Landmarks: VDS #4		Amount of disturbance in m ² :	
Multiple Sites: YES/NO ME		Number of sites: One	
Latitude: 11u 312482.81	Longitude: 5443752.74 mN	Elevation: 288 m	
Legal description of property where work is proposed: S22			

3. Drawing, Plan and Site Map
<ol style="list-style-type: none"> 1. Attach drawing showing lot boundaries, location of buildings and of proposed works, stream direction and flow. 2. Attach a key map at an appropriate scale showing the location of the site. 3. Attach engineering drawings (may be required for works identified with ^E under Requires Approval section below).

4. Proposed Timing for Work	
Start (day/month/year): Nov 2011	Finish (day/month/year): Dec 2011

FOR OFFICE USE ONLY	
Date Received: Rec'd Oct 11/11 FrontCounter BC Kamloops	Water File Number:
	Client Number:
	Application Number:
	Amount Received:
	Receipt Number:

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Requires Approval:

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- ☐ Gravel Removal ^{OP}
- ☐ Other: Provide details in space below

*Provide culvert dimensions:

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☐ The property is owned by the following Landowner (i.e. Landowner is different from applicant):

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Contact Name: Gary Klassen	Professional Affiliation:	
Address: Aquaculture farmer applicant		
City:	Province:	Postal Code:
Phone:	e-mail:	

Contact information for company undertaking the construction (if different from applicant):

Company Name:		
Contact Name:		
Address:		
City:	Province:	Postal Code:
Phone:	e-mail:	

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Signed: _____

Application Date: _____

11/10/2011
day/month/year

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- | | |
|---|---|
| <input type="checkbox"/> Sketch plan (mandatory) | <input type="checkbox"/> Engineering drawing (mandatory for works requiring approval noted with ^E) |
| <input type="checkbox"/> Key location map (mandatory) | <input type="checkbox"/> For works requiring an Approval only , a cheque, money order or deposit by credit card for \$130 payable to: Minister of Finance. The fee is non-refundable. No fee is required for a Notification. |

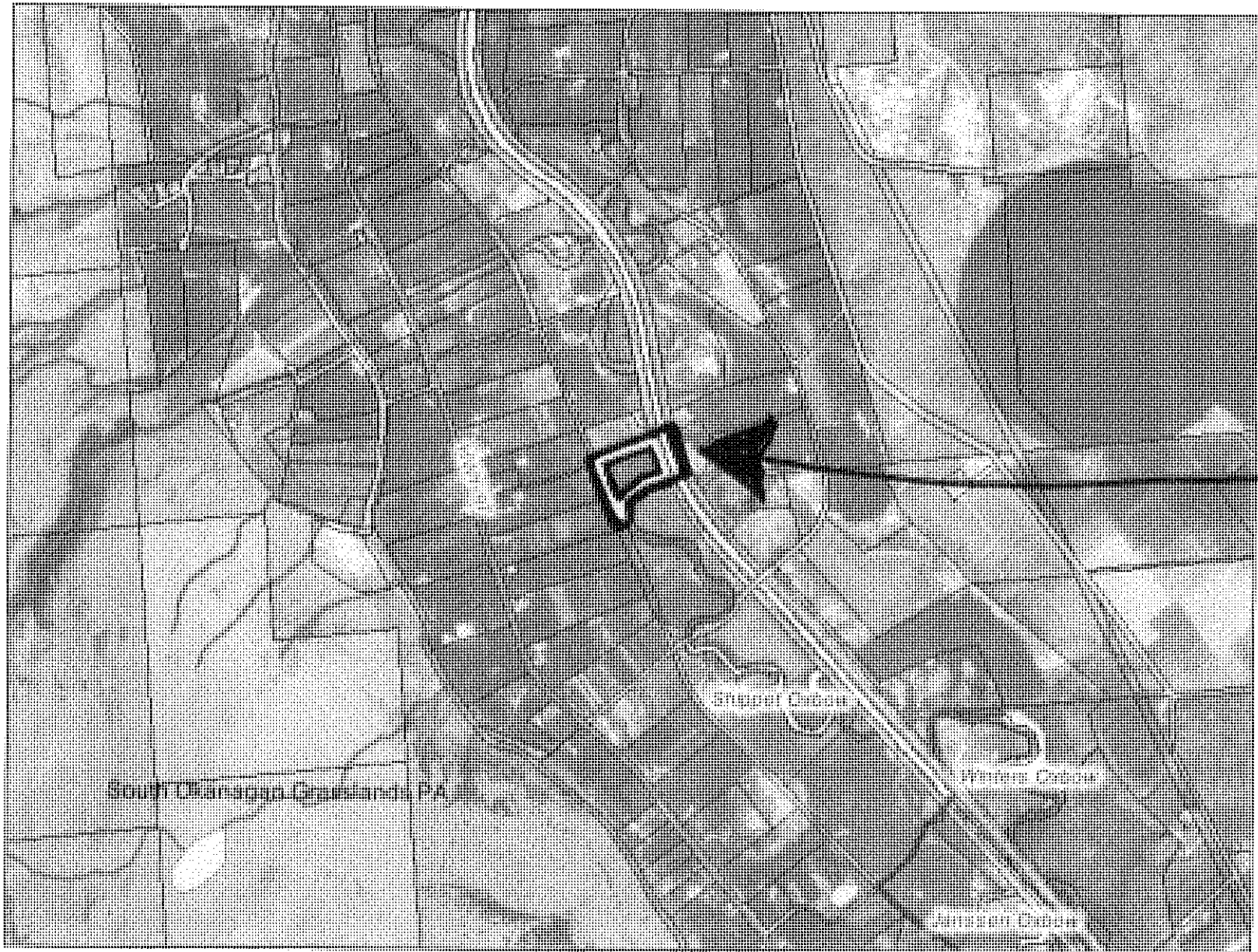
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Has a copy of this notification/approval application been sent to Fisheries and Oceans Canada (check one)?
YES ☒ NO ☐

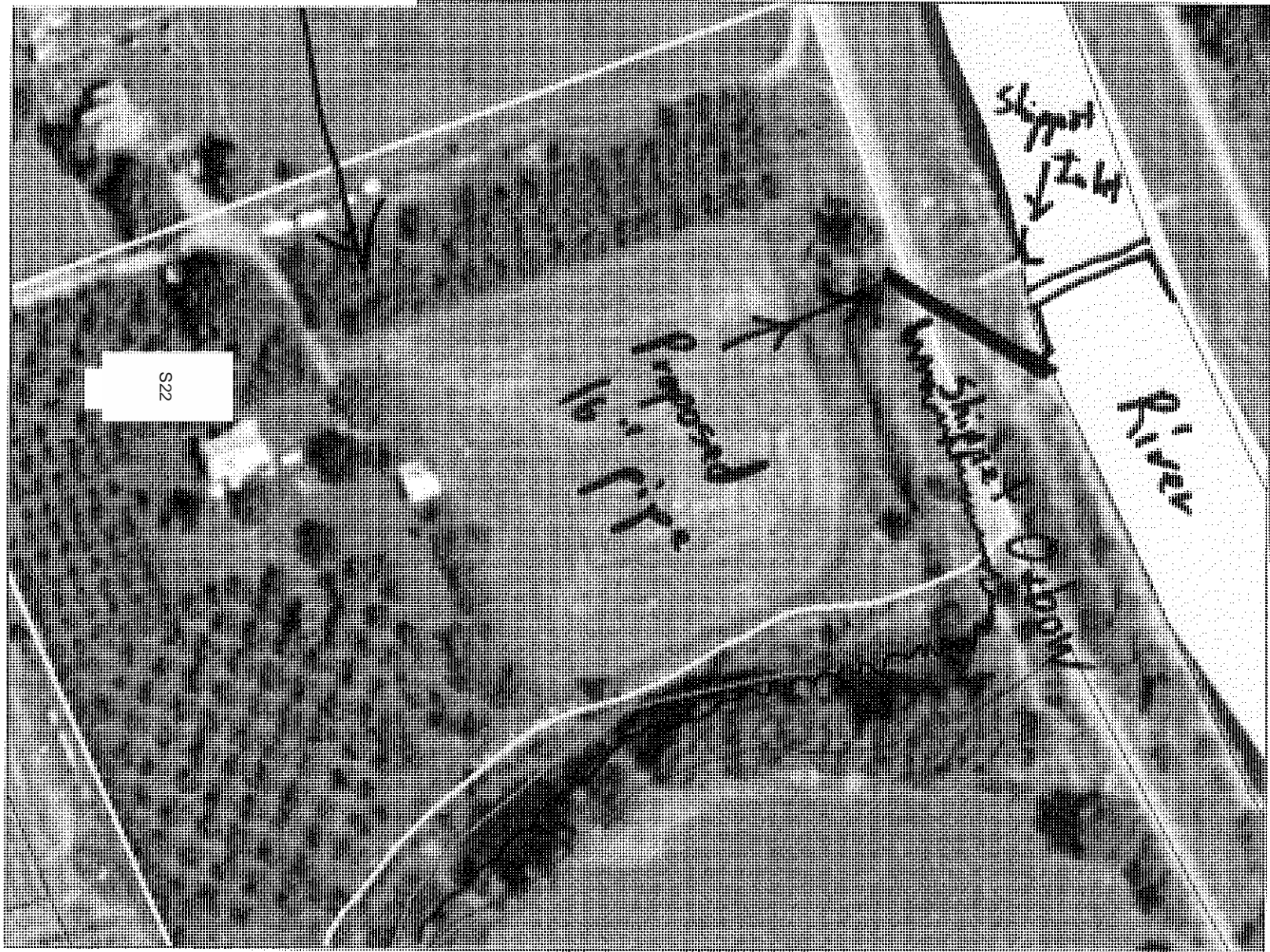
If YES, indicate the DFO office that the notification/approval application has been sent (for DFO offices, see Users' Guide):

RDOS Parcel Information Map

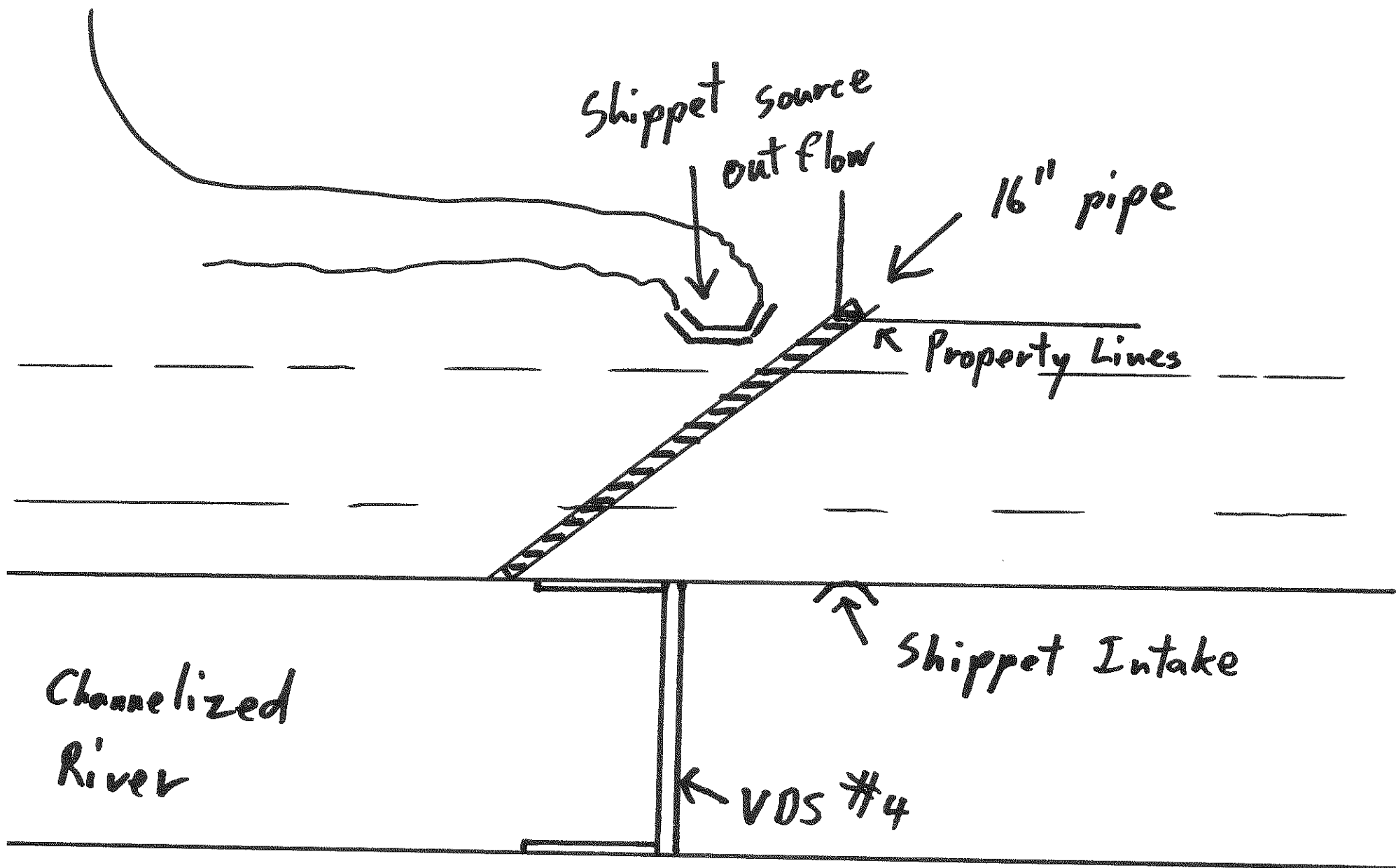


Property

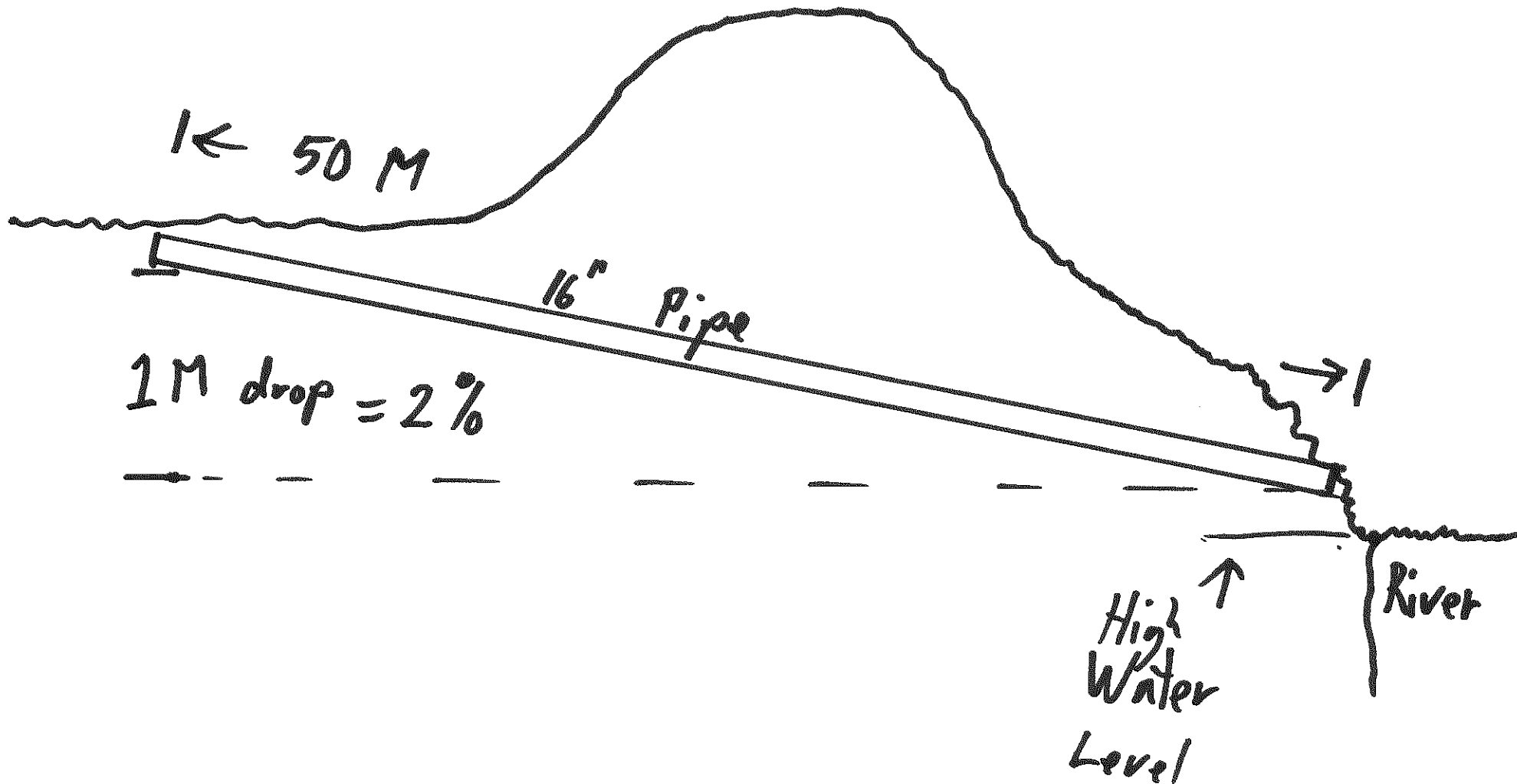
S22



Top View



Elevations



Popowich, Tracy CSNR:EX

From: Gary Klassen [gary@dorocco.com]
Sent: Sunday, October 16, 2011 9:46 PM
To: Reimer, Shaun FLNR:EX
Subject: Re: Horizontal layout scanned sheets Klassen app

Hi Shaun

I imagine you have a busy schedule.
It would sure simplify things if you could come to the farm and look at the crossing site.

Regards Gary
-----Original Message-----
From: Shaun Reimer
To: gary@dorocco.com
Subject: RE: Horizontal layout scanned sheets Klassen app
Sent: Oct 7, 2011 2:42 PM

Gary, I am leaving now but my initial thought is that you need to cross the dike at an angle perpendicular to the dike.

Shaun Reimer, P.Eng.

Hydrotechnical Engineer
Ministry of Forests, Lands, & Natural Resource Operations
102 Industrial Place
Penticton, BC, V2A 7C8
(250) 490-8229
fax: (250) 490-2231

-----Original Message-----
From: Gary Klassen [<mailto:gary@dorocco.com>]
Sent: Friday, October 7, 2011 2:10 PM
To: Reimer, Shaun FLNR:EX
Subject: Horizontal layout scanned sheets Klassen app

Gary Klassen 1-250-485-7408

-----Original Message-----
From: desertairerealty@telus.net
Date: Fri, 07 Oct 2011 21:26:08
To: <gary@dorocco.com>
Subject:

Gary Klassen 1-250-485-7408

Popowich, Tracy CSNR:EX

From: Reimer, Shaun FLNR:EX
Sent: Friday, October 21, 2011 8:42 AM
To: 'gary@dorocco.com'
Subject: RE: Design Shippet Klassen

Hi Gary, as discussed, here is a short list of QPs (Qualified Professionals).

In our phone conversation, you asked for a list of Qualified Professionals. A short list could include:

- Associated Engineering

610-1632 Dickson Ave

Kelowna, BC V1Y 7T2

(250) 763-3638

- Mould Engineering

206-437 Glenmore Rd

Kelowna, BC V1V 1Y5

(250) 868-2072

- Kerr Wood Leidal

1411 Applebridge Road,

Kelowna, (778) 477-4755

- Golder Associates

220-1755 Springfield Rd

Kelowna, BC V1Y 5V5

(250) 860-8424

This is only a short list and others can be found through the phone book and online.

Shaun Reimer, P.Eng.

Hydrotechnical Engineer

Ministry of Forests, Lands, & Natural Resource Operations

102 Industrial Place

Penticton, BC, V2A 7C8

(250) 490-8229

fax: (250) 490-2231

-----Original Message-----

From: Gary Klassen [<mailto:gary@dorocco.com>]

Sent: Friday, October 21, 2011 8:17 AM

To: Reimer, Shaun FLNR:EX

Subject: Design Shippet Klassen

Hi Shaun

I need some professional help to get this crossing designed and drawn. DFO will issue my license based on conditions and need to be confident it will be properly done, and they want to know the professionals involved.

Gary

Gary Klassen 1-250-485-7408

Popowich, Tracy CSNR:EX

From: Gary Klassen [gary@dorocco.com]
Sent: Friday, October 21, 2011 9:11 AM
To: Reimer, Shaun FLNR:EX
Cc: Roberta Dight
Subject: Transport Canada

Hi Shaun

This Roberta Dight is the contact I have from Transport Canada.

16046662863

Please contact her with any questions on my behalf.

Regards Gary
Gary Klassen 1-250-485-7408

Popowich, Tracy CSNR:EX

From: S22 on behalf of Gary Klassen [gary@dorocco.com]
Sent: Friday, October 21, 2011 3:03 PM
To: Reimer, Shaun FLNR:EX; Debra Hughes
Subject: Out Fall pipe design Klassen

Hi Shaun

I have retained Rod, Associated and Summit Environmental to do the professional design and drafting on our required out let. Debra Hughes has been asking who will do the professional design.

Please see email from him detailing his experience with the Shippit Oxbow and the Environmental people they will use.

You both have my permission to contact Rod at any time with regard to this project.

Regards Gary

----- Forwarded message -----

From: Rod MacLean <macleanr@ae.ca>
Date: Fri, Oct 21, 2011 at 2:52 PM
Subject: Contact Info
To: "gary@dorocco.com" <gary@dorocco.com>

Hi Gary,

Associated Engineering designed the Shippit Oxbow drain inlet for the Ministry of Environment. We have good knowledge of the project requirements. We have environmental biologists (from Summit Environmental) who are also available as required.

Hopefully we can help you with your outlet design. Please advise as to your requirements.

Here is my contact information.

Rod

Roderick (Rod) MacLean, P. Eng.

Project Manager – Civil, Municipal, Agriculture

Associated Engineering

Suite 610-1632 Dickson Avenue

Kelowna, BC V1Y 7T2

Tel: [250.763.3638](tel:250.763.3638)

Fax: [250.763.8880](tel:250.763.8880)

Cell: [250.470.8133](tel:250.470.8133)

macleanr@ae.ca

Popowich, Tracy CSNR:EX

From: White, Tara FLNR:EX
Sent: Thursday, October 27, 2011 9:24 AM
To: Matthews, Steve FLNR:EX; Marshall, Vicki FLNR:EX
Cc: Furness, Grant A FLNR:EX; Pryce, Conrad FLNR:EX
Subject: RE: ITC Application #12662 - Gary Klassen - Arctic Charr - FOR COMMENTS

Hi Vicki:

Thanks for the heads up. This is the first I have heard of this application and am quite concerned with the Provincial communication and processing shortfalls.

Aquaculture application licenses should be forwarded to regional Fisheries Section for comment and review.

I will follow up with Lora Nield regarding the status.
Tara

Tara White, R.P.Bio.

Senior Fisheries Biologist
Ministry of Forests, Lands and Natural Resource Operations
Okanagan-Thompson Region
Phone: (250) 490-2287
Email: tara.white@gov.bc.ca

From: Matthews, Steve FLNR:EX
Sent: Thursday, October 27, 2011 8:49 AM
To: Marshall, Vicki FLNR:EX; White, Tara FLNR:EX
Subject: RE: ITC Application #12662 - Gary Klassen - Arctic Charr - FOR COMMENTS

Hi Vicki

I have no knowledge of the applicants, and have not seen any information related to this application

Steve Matthews, RPBio
Head, Fish and Wildlife Section, Thompson / Okanagan Region
Ministry of Forests, Lands and Natural Resource Operations, Penticton
Ph: (250) 490-8243 Fax: (250) 490-2231
<mailto://steve.matthews@gov.bc.ca>

From: Marshall, Vicki FLNR:EX
Sent: Wednesday, October 26, 2011 1:31 PM
To: Matthews, Steve FLNR:EX; White, Tara FLNR:EX
Subject: FW: ITC Application #12662 - Gary Klassen - Arctic Charr - FOR COMMENTS

Hi Steve and Tara – I thought I had better bring you in to this discussion regarding the Arctic Char aquaculture license as there definitely seems to be a process glitch at work here..... Do you know any of these people mentioned below that have been involved in the development of the project to date? I am quite confused as, by my way of thinking, I would have thought these folks would have talked to fisheries managers but clearly they see it as a separate issue?

Thx,
Vicki.

From: Manning, Michelle [mailto:Michelle.Manning@dfo-mpo.gc.ca]

Sent: Wednesday, October 26, 2011 1:19 PM

To: Wong, Cindy; Herborg, Matthias ENV:EX; Fitzgerald, Monica; Sheppard, Mark; Keith, Ian; Higgins, Mark; Marshall, Vicki FLNR:EX; XT:Kosmider, Gabrielle FLNR:IN; Jantz, Lester; Whitehouse, Timber; Hughes, Debra

Cc: Johnston, Sandy

Subject: RE: ITC Application #12662 - Gary Klassen - Arctic Charr - FOR COMMENTS

Hi Cindy,

I disagree with the bullets regarding (1) "lack of consultation with Provincial Representatives" & (2) "consultation with FN".

(1) The Province has been aware of this application since July.

On July 5 - Gary sent in his application to Bernadette Aura, Natural Resource Officer, Front Counter in Kamloops.

Bernadette forwarded this application to Conrad Pryce, Section Head, Water allocation from MFLNRO who also involved Lora Nield Senior Ecosystem Biologist MFLNRO in Penticton and Sajid Barlas, Section Head Environmental Management, MOE Penticton.

Both myself and Deb Hughes have been in touch with Conrad Pryce & Deb Hughes has also been keeping Sajid Barla, Lora Nield, and Des Anderson informed of any developments regarding this file. In turn, Conrad Pryce has informed us that a section 9 approval will be required if the outlet of the pipe is below the HWM, and an Environmental Management Act, LAND-BASED FINFISH WASTE CONTROL REGULATION permit would be required. The proponent has already applied for his section 9 approval and continues to work with the Province regarding any other requirements.

If there are other provincial representatives that should have been engaged, we should address this now so that similar issues do not arise in the future.

(2) DFO Aquaculture Resource Management will be engaging FN on this application, through our licensing processes. If both ITC and ARM are doing this, this a duplication of work. As far as the genetic risks to native stocks - Is concern now alleviated by the use of triploids and triple screening of effluent?

In the future, I think there is a need to better coordinate work (i.e. who is doing what) between ARM, AEO and ITC, and better link our processes.

Thanks,

Michelle Manning

Aquaculture Management Coordinator | Coordinatrice - Gestion de l'aquaculture

Aquaculture Management Division | La Division de Direction de l'aquaculture

Fisheries and Oceans Canada | Pêches et Océans Canada

1965 Island Diesel Way Nanaimo BC V9S 5W8

Government of Canada | Gouvernement du Canada

Telephone | Téléphone 250-754-0409

Facsimile | Télécopieur 250-754-0391

From: Wong, Cindy

Sent: October 26, 2011 11:05 AM

To: 'Herborg, Matthias ENV:EX'; Fitzgerald, Monica; Sheppard, Mark; Keith, Ian; Higgins, Mark; Marshall, Vicki FLNR:EX; Kosmider, Gabrielle; Manning, Michelle; Jantz, Lester; Whitehouse, Timber; Hughes, Debra

Cc: Johnston, Sandy

Subject: RE: ITC Application #12662 - Gary Klassen - Arctic Charr - FOR COMMENTS

Good morning,

I've had a chance to chat with Gary extensively this morning regarding his application. At this time, we have communicated to him the various concerns we have received:

- Lack of fish health certification from the source facility
- A Risk Assessment to be completed for arctic charr as per the National Code on Introductions and Transfers
- A hydrological assessment for flood potential
- Inspection by Local Fish Health Officer of facility
- The absence of consultation with Provincial representatives
- The genetic risks associated with hybridizing with native stocks
- Consultations with First Nations regarding the intent of facility to discharge into Okanagan River

In my conversations with Gary, he has provided the additional information:

- The stock will be certified and has been triploid shocked (certification to be available any day)
- He is looking to import 10,000 eggs for research in the hopes of developing a viable broodstock program. Shipment date is proposed to be November 20.
- He has been consulting with First Nations in the area including the ONA

Gary would like some indication as to the ability to meet the November 20 import date. He has invested time and resources into establishing his operations and has expressed that if this import doesn't look like it will be doable, he will be scrapping his whole project. I indicated that I would make one last attempt to the committee and all stakeholders today given the additional information so that if the project is a definite NO at this time, he can cancel his shipment and project today.

Thank you,
Cindy

From: Herborg, Matthias ENV:EX [mailto:Matthias.Herborg@gov.bc.ca]

Sent: October 24, 2011 4:27 PM

To: Hughes, Debra; Fitzgerald, Monica; Wong, Cindy; Sheppard, Mark; Keith, Ian; Johnston, Sandy

Cc: XPAC Species at Risk; Higgins, Mark; Marshall, Vicki FLNR:EX; Wilkinson, James; Van der Slagt, Graham; Kosmider, Gabrielle; Manning, Michelle

Subject: RE: ITC Application #12662 - Gary Klassen - Arctic Charr - FOR COMMENTS

Hello

After some internal discussions here in the Province we would like a number of points. First of all we have the feeling that the province has been involved in this issue rather later. While we have no say in aquaculture licenses it sounds like the proponent is starting to spent money and resources on developing the aquaculture site, I assume that's what it is and not a hatchery, before anybody is talking to us. After consulting internally and with regional staff we have some real concerns about bringing in a salmonid species from outside BC, that is very likely to be able to hybridise with our native bull trout (currently blue listed and in the process of being assessed by COSWEWIC) and dolly varden.

At least we need an AURORA for this species and some clear site specific information regarding the escape risk associated with his site, is there a potential of flooding, what is site security and how is he proposed to market these fish, live or dead?

It would be great to establish these parameters before the proponent is spending any further resources on developing his aquaculture site.

Maybe this should be added to the ITC meeting agenda?

Matthias

Leif-Matthias Herborg PhD
Aquatic Invasive Species Coordinator
BC Ministry of Environment
Victoria, BC

From: Hughes, Debra [mailto:Debra.Hughes@dfo-mpo.gc.ca]
Sent: Tuesday, October 18, 2011 9:52 AM
To: Fitzgerald, Monica; Wong, Cindy; Sheppard, Mark; Keith, Ian; Johnston, Sandy
Cc: XPAC Species at Risk; Higgins, Mark; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX; Wilkinson, James; Van der Slagt, Graham; XT:Kosmider, Gabrielle FLNR:IN; Manning, Michelle
Subject: RE: ITC Application #12662 - Gary Klassen - Arctic Charr - FOR COMMENTS

To all

I spoke to Mr. Klassen yesterday and he assured me that he has been consulting with a number of professionals on various aspects of his proposed hatchery project. I asked him to send me an email with their names and respective roles and I would forward it to the other DFO assessors on this project. Please find his email attached.

Regards

Debra

From: Fitzgerald, Monica
Sent: October 16, 2011 1:23 PM
To: Fitzgerald, Monica; Wong, Cindy; Hughes, Debra; Sheppard, Mark; Keith, Ian; Johnston, Sandy
Cc: XPAC Species at Risk; Higgins, Mark; 'Matthias Herborg'; 'Vicki Marshall'; Wilkinson, James; Van der Slagt, Graham
Subject: ITC Application #12662 - Gary Klassen - Arctic Charr - FOR COMMENTS

Hello Everyone - Please find attached ITC application #12662 for import of Arctic Charr eggs from Whitehorse, YT to Oliver, BC.

Please review the application and provide your comments to me **no later than October 28, 2011**.

Thank you.

Monica

Monica Fitzgerald
Governance Officer / Agent de gouvernance
Aquaculture Management Division / Gestion de l'aquaculture
Fisheries Management / Direction des pêches
Department of Fisheries and Oceans / Pêches et Océans Canada

200-401 Burrard Street / 401, rue Burrard, bureau 200
Vancouver, BC / CB V6C 3S4
Phone / téléphone: (604) 666-5783
Fax / télécopieur: (604) 666-1076

From: XPAC FAM ITC
Sent: 2011-October-13 3:38 PM
To: Wong, Cindy; Fitzgerald, Monica; Choi, Shirley
Subject: FW: Icy Water transfer to Klassen

From: S22 n behalf of Gary Klassen[SMTP:GARY@DOROCCO.COM]
Sent: Thursday, October 13, 2011 3:37:57 PM
To: XPAC FAM ITC
Subject: Icy Water transfer to Klassen
Auto forwarded by a Rule

Hi Cindy

Please see attached transfers application for eggs from Icy Waters Yukon.
Here is a link to their web site.

www.icywaters.com

see details to Icy Water marketing brochure
http://www.icywaters.com/wp-content/uploads/2011/05/Marketing_-_Ova.pdf

I will request the Fish Health Certificate from Icy Waters and will forward it as soon as it comes.

Thanks Gary

----- Forwarded message -----

From: <desertairerealty@telus.net>
Date: Thu, Oct 13, 2011 at 3:49 PM
Subject:
To: gary@dorocco.com

Popowich, Tracy CSNR:EX

From: Reimer, Shaun FLNR:EX
Sent: Thursday, November 3, 2011 2:45 PM
To: 'Gary Klassen'
Subject: RE: hydrogoloical assessment plan for flood plain for your proposed aquaculture site

Hi Gary, sorry I haven't gotten back to you sooner. Out of the office a lot these days and S22 I don't know much about what you are asking about. I will phone you tomorrow morning as I am in meetings all day today. In the mean time, I will provide a link to floodplain mapping for you.

http://www.env.gov.bc.ca/wsd/data_searches/fpm/reports/region3.html

Shaun Reimer, P.Eng.

Hydrotechnical Engineer
Ministry of Forests, Lands, & Natural Resource Operations
102 Industrial Place
Penticton, BC, V2A 7C8
(250) 490-8229
fax: (250) 490-2231

From S22 **On Behalf Of** Gary Klassen
Sent: Wednesday, October 26, 2011 10:11 AM
To: Reimer, Shaun FLNR:EX
Subject: hydrogoloical assessment plan for flood plain for your proposed aquaculture site

Hi Shaun

Do you have any direction for me Introduction and transfers committee (ITC) is asking for this.

Gary Klassen

Bie, Linling FLNR:EX

From: Bie, Linling FLNR:EX
Sent: Wednesday, May 9, 2012 9:45 AM
To: Marshall, Vicki FLNR:EX
Cc: 'Choi, Shirley'
Subject: REVIEW - ITC Permit 78688 - KLASSEN, Gary
Attachments: NA12-78688-KLASSEN.doc; KLASSEN 78688.pdf

Hi Vicki,

Please review attached ITC permit application and draft for Gary Klassen to transport 5000 Arctic char eggs/milt from Yukon to a hatchery in Oliver BC on June 14th, 2012.

Thank you,

Linling Bie

Permit Administrator - Angling Guide Licence
Permit & Authorization Service Bureau
Fish and Wildlife Branch
BC Ministry of Forests, Lands and Natural Resource Operations
Tel: (250) 952-0788
Fax: (250) 387-1814

Popowich, Tracy CSNR:EX

From: Gary Klassen [gary@dorocco.com]
Sent: Wednesday, May 9, 2012 11:30 AM
To: Reimer, Shaun FLNR:EX
Subject: Klassen fish farm

Hi Shaun

I have a drawing from Rod showing a survey of our site, pipe elevations, outlet details and slope.

Rod visited the site and I have Manwell Vieira getting a quote together for us.

Can you tell me, what do we need for a formal permit? And does this involve an inspection process?

Gary
Best Regards From:

Gary Klassen
gary@dorocco.com
1-250-485-7408

Popowich, Tracy CSNR:EX

From: White, Tara FLNR:EX
Sent: Thursday, May 17, 2012 2:53 PM
To: Marshall, Vicki FLNR:EX
Cc: Herborg, Matthias ENV:EX; Goeller, Neil FLNR:EX; Stewart, Robert FLNR:EX; Sokal, Mike ENV:EX; Cavadini, Roger ENV:EX; Burwash, Michael FLNR:EX; White, Tara FLNR:EX
Subject: COMMENTS: Aquaculture Application- Gary Klaussen - Arctic Charr _ 8929 Rd#17, Oliver BC
Attachments: Klassen Application April2012.pdf
Follow Up Flag: Follow up
Flag Status: Completed

Hi Vicki:

I have reviewed the above noted Aquaculture Application and provide the following comments:

1. Triploid Arctic Charr eggs will be imported from the Yukon. Although they will be coming from a disease certified source and will be heat shock treated triploids, we know from the Freshwater Fisheries Society of BC's research w/ kokanee that sterility is not 100% effective. There is up to a 5% chance that the eggs will not be sterile, thereby increasing the risk of hybridization w/ native stocks, should fish escape.
2. The fish are proposed to be raised in tanks, in a closed environment. Water intake/discharge pipes will be screened. Therefore, the risk of escape into the Okanagan River is likely low. Survival of escaped fish is also anticipated to be low, due to the warm water temperatures in the Okanagan River and Osoyoos Lake a portion of year (optimum temperatures for Charr are 11 C-16 C). If fish were to escape during the winter months, however, the risk to native stocks and ecosystem health increases significantly (ie. higher potential for charr survival). Potential risks to native species include disease transfer, competition for food & habitat and hybridization.
3. Water for the proposed facility will be supplied from a well situated on the property (Plan 1790, DL 24505, Lot 311, civic 8929 Rd #17, Oliver). The maximum withdrawal rate = 75L/sec. I am not clear what this mean in terms of water availability & use in the Okanagan River basin. What are the implications of the water withdrawal/use on groundwater availability and recharge? What are the implications to fish habitat and native stocks (eg. habitat constraints & water quality)? Water is already limited in the Okanagan during dry years - particularly between July-Sept.
4. The Okanagan River is directly connected to Osoyoos Lake, which is a trans-boundary watershed. If fish were to escape and survive, there could also be management implications in the US. Additionally, potential impacts from effluent discharge would affect Canadian waters, as well as the US. It would be prudent to consult w/ US fisheries managers regarding the proposed application.
5. The application indicates water withdrawal/discharge pipes will be screened, but does not provide further detail (ie. screening size, life-stage and guidelines to be followed). Screening should meet freshwater Intake end-of-pipe fish screen guidelines (DFO) in order to minimize resident fish entrainment and impingement on the screen.
6. A drum filter and settling tank are proposed to treat effluent water prior to discharge. Will this be sufficient to filter nitrates and pharmaceuticals (used to treat hatchery eggs/fish) from the water and prevent pathogen transfer to the Okanagan River system? If not, what are the implications to native stocks, SAR and watershed health?
7. Osoyoos Lake exhibits an oxygen/temperature squeeze during the summer months. The majority of the lake has little to no oxygen (≤ 4 ppm) July –Sept and only a small corridor is available for fish migration and survival (@ 15 m depth). Water temperatures in the upper 15 m of the water column are in sub-lethal to lethal limits for fish (17-24 C) taxing resident stocks to their limit. Discharge of effluent into the Ok River may further aggravate water quality issues in Osoyoos Lake.

8. It is unclear as to where the effluent water will be discharged. Will it be discharged on the property, into the neighbouring oxbows or the Okanagan River ?
9. The effluent discharge rate proposed = 75 L/s . Will this rate be continuous year round or for a specified time period ? Water does this mean in terms of licensed use? As I understand it wells are not licensed....
10. Water for the facility is to be supplied from a well and 12 C. The temperature of discharge water, however was not identified. Discharge of effluent water should meet specified guidelines for aquatic life— particularly when dealing with a sensitive ecosystem & fish stocks.
11. The hatchery is proposed in a sensitive ecological area – near historic oxbows off the Okanagan River. What is the risk to the floodplain, SAR and surrounding area from proposed development and water withdrawal and discharge?
12. The application states fish will be supplied “Direct to Food Market”. Will fish be transported live? If so, this will increase risk to native stocks.

If you have any questions regarding the information provided, please feel free to give me a call. I have copied regional EP, Water and Ecosystems staff on my response.

Cheers Tara

Tara White, R.P.Bio.

Senior Fisheries Biologist

Ministry of Forests, Lands and Natural Resource Operations

Okanagan-Thompson Region

Phone: (250) 490-2287

Email: tara.white@gov.bc.ca

><(((°>

From: Marshall, Vicki FLNR:EX
Sent: Thursday, May 3, 2012 9:09 AM
To: White, Tara FLNR:EX
Subject: FW: Klassen Updated Application Submitted

Hi Tara – here we go again..
surrounding this application on Friday?

S22

Can I try to set up a meeting for us to discuss the issues

Thx,
Vicki.

From: Choi, Shirley [<mailto:Shirley.Choi@dfo-mpo.gc.ca>]
Sent: Wednesday, May 2, 2012 10:43 AM
To: Higgins, Mark; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX; Sheppard, Mark; Keith, Ian; Martin, Stacey
Subject: FW: Klassen Updated Application Submitted

Hi ITC,

So the madness has begun (again) for the Klassen file. This time he has hired a consultant to help with the set up of his site. He still wants to get triploid Arctic Char eggs from Icy Waters in the Yukon, are we still concerned that it is not an FHPR certified site? We have asked that an ITC application be submitted, but thought we could use a head start to this application. I don't believe a hydrological assessment has been done, does he still need one? Other information on effluent treatment, fish health and fish habitat can be found in the document below as well (Start at Page 18).

Thanks,

Shirley

From: Manning, Michelle
Sent: 2012-May-01 12:04 PM
To: Hughes, Debra; Choi, Shirley; Martin, Stacey
Cc: Meadows, Shelley; Lim, Susan; Kosmider, Gabrielle
Subject: Klassen Updated Application Submitted

Hi all,

Attached is Gary Klassen's updated application. He is going to be sending in some engineered plans separately (I will forward these on when I receive them).

He has asked me to walk through the application with him Thursday morning to make sure he is not missing any info. I was hoping you could all take a look at it and see if there is anything else we need from him. He wants to move fish in June and it would be a great success if we could facilitate that for him this year. The earlier we get our requirements to him (if any), the better.

Thanks so much!

<<Klassen Application April2012.pdf>>

Michelle Manning

Aquaculture Management Coordinator | Coordinatrice - Gestion de l'aquaculture
Aquaculture Management Division | La Division de Direction de l'aquaculture
Fisheries and Oceans Canada | Pêches et Océans Canada
1965 Island Diesel Way Nanaimo BC V9S 5W8
Government of Canada | Gouvernement du Canada
Telephone | Téléphone [250-754-0409](tel:250-754-0409)
Facsimile | Télécopieur [250-754-0391](tel:250-754-0391)
michelle.manning@dfo-mpo.gc.ca
www.pac.dfo-mpo.gc.ca

PACIFIC FRESHWATER & LAND-BASED AQUACULTURE APPLICATION

Ministry of Forests, Lands and Natural Resource Operations
Fisheries and Oceans Canada
Transport Canada

PART I – GENERAL APPLICANT INFORMATION

SECTION A: APPLICANT AND GENERAL INFORMATION

1) Applicant Name(s) (Full Legal Name(s) or Registered Company Name) Dorocco Developments Ltd.		Applicant Business Information: Telephone: () Cell: (250) 485 7408 Fax: () Email: gary@dorocco.com	
2) Applicant Business Mailing Address: Box 1000 Osoyoos BC		Postal Code: V0H 1V0	
3) Doing Business as:		4) BC Inc #, BC Registration # or BC Society #	
5) Physical Business Address (if different from above): 8315 Main Street Osoyoos BC V0H 1V0			
6) Contact Name (if different from above): Gary Klassen		Contact Business Information: Telephone: () Cell: (250) 485 7408 Fax: () Email: gary@dorocco.com	
7) Agent/ Representative (if applicable): Jeremy Lee		Agent/Representative Business Information: Telephone: () Cell: (902) 692 0992 Fax: () Email: jeremylee@btinternet.com	
8) Business Mailing Address of Agent/Representative:		Postal Code:	
		Letter of Authorization: <input type="checkbox"/> Yes <input type="checkbox"/> No	

9) Type of Application:		
<input checked="" type="checkbox"/> New site Tenure Type (if applicable): <input type="checkbox"/> Licence of Occupation <input type="checkbox"/> Lease <input type="checkbox"/> Investigative Permit		
<input type="checkbox"/> Amendment Amendment Type: <input type="checkbox"/> Tenure Area <input type="checkbox"/> Infrastructure <input type="checkbox"/> Production <input type="checkbox"/> Species <input type="checkbox"/> Other (Describe)	<u>Currently Approved</u> (required only for type of amendment applied for, attach additional page if necessary)	<u>Proposed</u>
<input type="checkbox"/> Licence Holder Change		Current Licence Holder Name:
10) Location of Operation:		
<input checked="" type="checkbox"/> Land-Based		<input type="checkbox"/> In Freshwater Body
12) Type of Operation:		
<input checked="" type="checkbox"/> Hatchery (fin fish species)	<input checked="" type="checkbox"/> Grow-Out	<input type="checkbox"/> U-Catch
<input type="checkbox"/> Hatchery (shellfish)	<input type="checkbox"/> Other (describe):	
13) Government Reference Numbers		
BC Land File # (Crown land)	DFO Aquaculture Licence # AQFW 6673	NWPA #
OR	AND	
Park Use Permit # (Park/Protected land)	Site Reference #	Parcel Identification # (Private land)

SECTION B: SITE AND INFRASTRUCTURE INFORMATION

1) Site Category:

<input type="checkbox"/> Provincial Crown Land	<input type="checkbox"/> Provincial Park	<input checked="" type="checkbox"/> Private Land
<input type="checkbox"/> Federal Land	<input type="checkbox"/> First Nation Reserve	<input type="checkbox"/> Other _____

2) Geographic location of site: Okanagan Valley Rural Oliver _____

3) Site Common Name: _____

4) DFO Area: _____ Sub Area: _____ (if applicable)

5) Canadian Hydrographic Service Chart (CHS) Marine Chart Number: _____ and/or
Topographical Map Number: _____

6) If the site is surveyed, provide legal description of site (e.g., Land District and Lot Number):
Land District Similkameen Division of Yale Lot 311 Plan 1790 PID 003-749-614 _____
Civic Address: S22 _____

7) If the site is not surveyed, provide metes and bounds description from a surveyed point or geographic coordinate: _____

8) Provide GPS coordinates for the center of the application area/tenure:

Latitude: 49° 7' __deg. 4.44 min.

Longitude: 119° 34' __deg. 16.55 min.

9) Total Area of site (Hectares): 2.6 Hectares _____

10) **Physical Structures** (Improvements): Complete the table below describing all applicable structures. Attach another page if required.

Purpose: Indicate the purpose of the infrastructure. Examples for buildings include: Office, Residence, Hatchery, Grow-out, Quarantine, etc; examples for tanks include: Fish Rearing, Quarantine, Solids Capture, Water Storage, Purge Tank, etc.

Location: Indicate whether the infrastructure is located in-doors (provide building number), or out-doors.

Lined: Are the ponds lined, Yes or No?

DESCRIPTION	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LOCATION
<i>e.g.: Building 1</i>	<i>Hatchery</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	10 x 10 x 4		
<i>e.g.: Tanks 1</i>	<i>Fish Rearing</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	0.7 x 0.7 x 0.5	380 L	Building 1
LAND-BASED <i>please note: construction in association with fish and fish habitat may require redesign, relocation, mitigation and/or a fish habitat survey review and approval prior to installation. See section E.</i>							
Buildings 1	Well House	X	<input type="checkbox"/>	1	3x7		
2	Growout	<input type="checkbox"/>	X	1	16x46		
3	Shop&Hatchery	<input type="checkbox"/>	X	1	22x16		
4		<input type="checkbox"/>	<input type="checkbox"/>				
5		<input type="checkbox"/>	<input type="checkbox"/>				
Heath Stacks 1	Hatchery	<input type="checkbox"/>	X	2	0.5x0.5x1		Building 3
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
Troughs 1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
Tanks 1	Hatchery	<input type="checkbox"/>	X	2	1x1x0.5	300L	Building 3
2	Growout	<input type="checkbox"/>	X	5	6x2	50m ³ each 250m ³	Building 2
3	Growout	<input type="checkbox"/>	X	4	3x1.7	12m ³ each 48m ³	Building 2
4	Hatchery	<input type="checkbox"/>	X	2	3x1.7	12m ³ each 24m ³	Building 3
Raceways 1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				

Constructed Ponds	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LINED
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
Intake/Discharge Pipes	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LOCATION
Intake Pipe 1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
Discharge Pipe 1		<input type="checkbox"/>	X	1	300mm D	120gpm	Okanagan River
2		<input type="checkbox"/>	<input type="checkbox"/>				
IN FRESHWATER BODY <i>please note: proposed in water works or undertakings will require a fish habitat information review. See section E.</i>							
Containment Structures	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	TYPE
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
Work Floats							
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
5		<input type="checkbox"/>	<input type="checkbox"/>				
OTHER (describe)							

--	--

SECTION C: MAPS AND DIAGRAMS:

Attach the following maps and diagrams. They must be submitted to scale and be consistent with the other information in this application. Please refer to the Guide for details and sample diagrams.

1) Location Maps:

- i. A topographic map at a scale of 1:50,000 to 1:250,000 indicating the general location of area under application, noting the location of significant geographic features, such as a lake, mountain, road, community, etc.
- ii. A Cadastral map, Topographical map, or Canadian Hydrographic Service Marine Chart (if applicable) of a scale between 1:20,000 and 1:40,000, showing the general location of the area under application.

2) Operational Diagram: A 1:5000 scale topographical map or hydrographic chart showing the specific area under application and the operational components as outlined in the guide.

3) Site Plan: A plan of the site identifying the location of buildings and out-door infrastructure. Use the table from question 10 to label the plan. Clearly indicate the location of your water source(s) and discharge point(s), along with any water bodies (including culverts and ditches) located on or near the site.

4) Engineered Plans: Any new or proposed infrastructures/construction require an engineered plan.

5) For applications In Freshwater Bodies: Include a 1:2000 scale map(s) showing a side view diagram of the containment array(s) which at minimum must illustrate and itemize all structures above the surface and include all underwater structures (based on season of lowest water).

6) For applications situated On Land: If you are located within or near a flood plain, include a flood plain map (www.env.gov.bc.ca/wsd/data_searches/fpm/reports/regoff.html)

SECTION D: WATER USE

1. Will fresh water be used at this facility? ☒ Yes ☐ No

2. If yes, and if water source is surface water (not ground), provide name:

3. If you already have a water licence at this site, please provide licence number, or provide date of submission of an application:

Do not require water licence for existing well.

SECTION E: FIRST NATIONS CONSIDERATION

Please describe any contact you may have had, including the name of the First Nation(s) and individuals contacted. Provide copies of, or a description of any information you may have acquired from or provided to the First Nations(s) and any archaeological resources and areas of cultural significance you are aware of in the vicinity of the proposed project. Consult the Consultative Area Database (CAD) Public Map Service for First Nations contact information instructions and supporting information – ftp://ftp.geobc.gov.bc.ca/pub/outgoing/CAD/CAD_Public_Map_Service-User_Guidance-Technical_Instructions.pdf.

Colette Louie clouie@oib.ca

Certified Fisheries Technician

Osoyoos Indian Band

250 498 3942

PART II – INFORMATION FOR THE BC MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS

Introduction

The following information is required as part of the Provincial Crown Land Tenure application to make a licensing decision for licensing under the BC *Land Act*.

Parts I, II and V of the Pacific Freshwater and Land-Based Aquaculture application will be used to review this application for tenure under the BC *Land Act*.

Additional Crown Lands Information

SECTION A: SITING CONSIDERATIONS

Applicants must respond to each consideration and may be required to provide additional information in some situations.

YES	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<p>If water-based, is the site situated in a manner whereby it does not infringe on the riparian rights of an upland owner?</p> <p>If No, has the owner provided written consent for you to occupy the site for the term of the tenure? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, include a copy of the written consent.</p> <p>Indicate if the upland property is: <input type="checkbox"/> Crown <input type="checkbox"/> Private</p>
x	<input type="checkbox"/>	<p>Is the intended use consistent with approved local government bylaws for land use planning and zoning?</p> <p>Provide the name of the Regional District or Municipality for the area:</p> <p>_____ Regional District of Similkameen _____</p> <p>If No, have you discussed your application with local government and have you initiated a re-zoning process? <input type="checkbox"/> Yes <input type="checkbox"/> No Please provide details:</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Is the intended use consistent with a local area plan or Coastal Zone Management Plan?</p> <p>Name of Plan:</p> <p>_____</p>

		<p>Please provide details where an application for variance is submitted:</p> <hr/> <p><input type="checkbox"/> Check if not applicable</p>
<input type="checkbox"/>	x	<p>Is the site situated in an area of cultural or heritage significance as determined in the <i>Heritage Conservation Act</i>?</p> <p>If Yes, have you contacted the Heritage and Conservation Branch to discuss your application? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide details: _____</p> <hr/>

SECTION B: ADDITIONAL CROWN LANDS INFORMATION

1. Is Applicant or Applicant's Spouse a Provincial Government Employee ☐ Yes ☒ No
2. Canadian Citizen or Permanent Resident: ☒ Yes ☐ No
3. Age: 19 or over ☒ Yes ☐ No
4. For applications made by more than one individual: ☐ Joint Tenant or ☐ Tenants in Common

PART III – INFORMATION FOR FISHERIES AND OCEANS CANADA

The following information is required as part of the Federal aquaculture licence application to make a decision for licensing under the *Pacific Aquaculture Regulations*.

Parts I, III, IV, and V must be submitted to apply for your Federal aquaculture licence or to amend an existing licence.

In addition to Part I, DFO requires the applicant(s), if an individual or a proprietorship or a person 'doing business as', submit date(s) of birth:

Applicant Gary Klassen Date of Birth (yyyy/mm/dd): zzz
Name

Applicant _____ Date of Birth (yyyy/mm/dd): _____
Name DOB

Has an application previously been submitted for this location? ☒ Yes ☐ No

If Yes, provide details:

On June 21, 2011 I submitted a harmonized freshwater application form.

Aquaculture licence # AQFW6673

GOVERNMENT REFERENCE NUMBERS:

Sec. 9 Notification – Tracking #:	Sec. 9 Approval – Water File #:	Water Licence – Water File #:
Well ID #:	ITC #:	Land-Based Finfish Waste Control Regulations Registration #
Does the British Columbia Riparian Areas Regulation apply to this project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, are you requesting a variance? File #: <input type="checkbox"/> Yes <input type="checkbox"/> No		

This completed document will form the site management plan on which your aquaculture licence conditions will be based.

SECTION A: WATER

1) WATER SOURCES

Complete the table below referring to the guide for detailed instructions.

Well ID #: To determine whether you require a well ID number, visit:

http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/wells/identification/faqs.html

	WATER TYPE (Fresh, Brackish, Marine)	EXISTING AT THE SITE	NEW PROPOSED	GOVT ID (Water Act Licence #, or Well ID #)	GPS COORDINATES	MAX WITHDRAWAL RATE (L/sec)
Surface Water Intake¹: Name of Water Body: _____						
#S1		<input type="checkbox"/>	<input type="checkbox"/>			
#S2		<input type="checkbox"/>	<input type="checkbox"/>			
Well						
#W1	<i>Fresh</i>	X	<input type="checkbox"/>	17884	49°7'6.2"N, 119°34'17.2"W	75 L/sec
#W2		<input type="checkbox"/>	<input type="checkbox"/>			
#W3		<input type="checkbox"/>	<input type="checkbox"/>			
#W4		<input type="checkbox"/>	<input type="checkbox"/>			
Municipal Water						
#1		<input type="checkbox"/>	<input type="checkbox"/>			
Other (describe):						
		<input type="checkbox"/>	<input type="checkbox"/>			
TOTAL COMBINED MAXIMUM WITHDRAWAL RATE						

¹: Please ensure your intake is screened according to the appropriate reference documents (see Guide).

2) WATER DISCHARGE

Complete the table below referring to the guide for detailed instructions.

	WATER TYPE (Fresh, Brackish, Marine)	EXISTING AT THE SITE	NEW PROPOSED	GOVT ID (Water Act Licence or Authorization #)	GPS COORDINATES	MAX DISCHARGE RATE (L/sec)
Surface Water Outfall: Name of Water Body: _____						
#S1	Fresh	<input type="checkbox"/>	X		49° 7'4.78" N, 119° 34'10.65" W	75 L/sec
#S2		<input type="checkbox"/>	<input type="checkbox"/>			
Ground Infiltration						
#G1		<input type="checkbox"/>	<input type="checkbox"/>			
#G2		<input type="checkbox"/>	<input type="checkbox"/>			
Municipal Sewer						
#1		<input type="checkbox"/>	<input type="checkbox"/>			
Other (describe):						
		<input type="checkbox"/>	<input type="checkbox"/>			
TOTAL COMBINED MAXIMUM DISCHARGE RATE						

A) Have you applied for a permit under the Environmental Management Act or an exemption under the Land-based Finfish Waste Control Regulations?

☐ Yes (Ref. File # _____)

☐ No

X Not Applicable

Provide details:

Not required because dilution ratio will always be greater than 20 to 1.

SECTION B: SPECIES & PRODUCTION

For Hatchery activities: Complete Table 1 **For Grow-Out activities:** Complete Table 2 **For U-Catch activities:** Complete Table 3

Table1: Annual Expected Hatchery Production:.

SPECIES COMMON NAME	SPECIES SCIENTIFIC NAME	NUMBER OF EGGS OR SPAT	ESTIMATED SURVIVAL (%)	ANNUAL PRODUCTION ESTIMATE		EXISTING AT THE SITE	NEW PROPOSED
				NUMBER OF FISH	TONNAGE (MT)		
<i>Ex. Rainbow trout</i>	<i>Onchorhynchus mykiss</i>	12000	75%	9000	0.45	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Arctic Charr	Salvelinus Alpinus	80 000	90%	72 000	0.36	<input type="checkbox"/>	X
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
TOTAL ANNUAL PRODUCTION ESTIMATE					0.36		

Table 2: Annual Expected Grow-Out Production: (excludes shellfish for marine grow-out)

SPECIES COMMON NAME	SPECIES SCIENTIFIC NAME	NUMBER OF FISH STOCKED	MEAN WEIGHT STOCKE D	GROW- OUT PERIOD (MONTH S)	ESTIMATED SURVIVAL (%)	ANNUAL PRODUCTION ESTIMATE		EXISTING AT THE SITE	NEW PROPOSED
						NUMBER OF FISH	TONNAGE (MT)		
<i>Ex. Rainbow Trout</i>	<i>Onchorhynchus mykiss</i>	50 000	250 g	7	10%	45 000	45	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Arctic Charr	Salvelinus Alpinus	70 000		18		50 000	50 MT	<input type="checkbox"/>	x
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
TOTAL GROW-OUT ANNUAL PRODUCTION ESTIMATE							50 MT		

Table 3: U-Catch

SPECIES (COMMON NAME)	SPECIES (SCIENTIFIC NAME)	NUMBER OF FISH STOCKED PER YEAR	EXISTING AT THE SITE	NEW PROPOSED
<i>Ex. Rainbow Trout</i>	<i>Onchorhyncus mykiss</i>	200	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

To Be Completed By All Applicants:

SOURCE OF FISH/SHELLFISH

4) For each licensed or proposed species, indicate:

- The source location of broodstock (city, state, nearest town, import into BC). Where possible, include contingency source (Name of company & facility).
- Life stage (eggs, spat, juveniles, etc.).
- Genetic Status (mono-sex, diploid, triploid, etc.).

Triploid Arctic Charr eggs will be imported from Icy Waters Ltd. located in Whitehorse, Yukon.

BUSINESS PLAN

5) Purpose of culture for each proposed species (ex. Sale to other Aquaculturists, Direct to Food Market, etc). Refer to guide for assistance.

Direct to Food Market

STOCKING DENSITY

6) Indicate the maximum projected stocking density for each licensed or proposed species.

120 kg m³

PRODUCTION

7) Will you have multiple year classes on site?

☒ Yes

☐ No

8) Indicate when, during the calendar year, you expect to reach Peak Biomass. (Multiple year class operations may have multiple Peak Biomasses).

Will be attempting to have consistent production 52 weeks of the year.

SECTION C: FACILITY OPERATION

WATER CIRCULATION

1) Will you be recirculating any water on site? ☒ Yes ☐ No

If Yes, please describe the system:

30-70% partial water reuse through a degassing tower - CO² stripper and aerator.

FEEDING

2) Specify the method and amount that the stock will be fed:

1% body weight with automated feeders and by hand

PREDATORS

3) Outline the measures you will undertake to avoid the attraction of predators to your site and how you will deal with them, should a problem arise:

Fish tanks will all be in a contained building in a controlled, insulated environment.

WASTE

6) Describe the methods for storage and disposal of sludge and other waste materials:

Water will flow through swirl separators, then into the settling tank with 5 chambers, and through a drum filter prior to discharge. The sludge and other waste materials will be composted on site.

MORTALITIES

7) Describe the procedures employed to store and dispose of fish/shellfish carcasses during routine operations and major mortality events (refer to guide for specific requirements):

Will use the compost process to make plant fertilizer.

SECTION D: FISH HEALTH

For finfish destined for transfer to culture facilities located in open water systems – marine or freshwaters - the applicant must submit a Health Management Plan (HMP) based on a template available from the Department. Cultured shrimp are also subject to this HMP requirement. Refer to Guide for assistance.

1) A Health Management Plan is attached:

☐ Yes ☒ No (Complete 2)

If you answered **No**, to question E1, it is understood that your fin fish will not be transferred to open water systems for any stage of their lifecycle. For these other types of freshwater or land-based fish culture please answer question 2.

2) Fish are considered sentient beings deserving of welfare and proper husbandry. Outline the basic fish health and husbandry practices you will employ to ensure the health and welfare of your fish (see guide for specific requirements):

We will be employing state of the art oxygen monitoring sensors linked with an oxygen injection

system. The fish will be fed in a systematic and consistent method, both automatically and by hand.

Water will be regularly tested and adjusted to optimize all of the basic husbandry practices for

parameters such PH, ammonia levels, CO² levels, and suspended solids.

The well water is 12° Celsius; this temperature is considered optimal for arctic char culturing.

SECTION E: FISH HABITAT & PROTECTION MEASURES

Fisheries and Oceans Canada – Aquaculture Management Division (DFO - AMD) is responsible for the sustainable management of aquaculture in British Columbia.

Like other types of industrial development taking place in and around water, aquaculture projects have the potential to affect fish and fish habitat.

You are completing this section because you have identified that you will be undertaking an activity that may result in a harmful alteration, disruption or destruction of fish habitat. Please Note: if you are referred to an Application Guide section or to contact the Aquaculture Environmental Operations group (AEO), habitat mitigation, relocation, redesign and/or biophysical assessments may be required.

Aquaculture activities must Not result in harm to a Species at Risk Act (SARA) listed species, their residence or their critical habitat, as defined in the associated Recovery Strategy, or Action Plan.

1) Does the proposed project:

a) Have **any** components within 30 m of the high water mark of a watercourse or water body (this includes intakes, outfalls or water crossings)?

☒ Yes – please see Application Guide or contact AEO (see contact information).

☐ No - go to question (b).

(b) Have downstream impacts on water quality or water quantity?

☐ Yes (or maybe) – please see Application Guide or contact AEO (see contact information).

☐ No – No additional information is required.

PART IV – INFORMATION FOR TRANSPORT CANADA

The following information, along with Part I and Part V, is required for the adjudication of the NWPA approval under the *Navigable Waters Protection Act*.

SECTION A: SITING CONSIDERATIONS

Applicants must respond to each consideration and may be required to provide additional information in some situations.

YES NO

x

☐

Is the site situated greater than 30 m from the edge of the approach channel to a small craft harbour, federal wharf or dock?

SECTION B: ADDITIONAL TRANSPORT CANADA INFORMATION

1.a) Waterway Name: _____

b) Width(m): _____ c) Depth Range(m): _____

2. Nearest Community: _____

3. Is this Work: ☐ Proposed ☐ Existing ☐ Modification of Existing Work

4. To help with the review process, please include the following:

☐ Photographs at the site of the proposed/existing work and surrounding area

☐ Environmental Assessment documents (if any)

PART V – INFORMATION FOR ALL AGENCIES

All applicable components of this application package must be complete. Incomplete applications will be returned to applicant. Applicable fees must be submitted at time of application.

Provincial Fees:

Note that the current fee schedule does not include the taxes that apply.

Forms of Payment:

- Cheques or Money orders must be in Canadian Funds to **Minister of Finance**
- Debit Card (in-person only)
- Visa and MasterCard payments are accepted in-person or over the telephone. To locate a FrontCounter BC office, visit the website at <http://www.frontcounterbc.gov.bc.ca/contact/> or call the toll free number 1-877-855-3222.

FrontCounter BC will not accept personal cheques drawn on US banks, regardless of what currency. Payment will not be accepted even if it has "CDN Funds" handwritten on the cheque.

PLEASE NOTE: Additional items may be required (eg. Advertising, Security Deposit, Proof of Insurance, Letter of Consent). Some items may have additional associated costs or require additional processing time.

As the management of this fishery program is both a federal and provincial government responsibility, the information you provide may be subject to the following legislation: British Columbia *Freedom of Information and Protection of Privacy Act* (FOIPP Act); the federal *Access to Information Act*; and the federal *Privacy Act*. The personal information collected by the Government of BC is collected under the authority of section 26 (c) of the FOIPP Act and will be used to process your application(s) and will be shared only with the necessary government agencies needed to provide you with the service that you have requested. If you have any questions regarding the handling of your personal information, please contact FrontCounter BC at 1-877-855-3222 or by writing to Manager, Provincial Operations, FrontCounter BC at 441 Columbia Street, Kamloops, BC V2C 2T3 and/or the Director, Access to Information and Privacy Secretariat at the Department of Fisheries and Oceans Canada and Transport Canada.

The Province of British Columbia, Fisheries and Oceans Canada, and Transport Canada do not consider the information submitted in this form to be confidential unless it is subject to the privacy protection of the *Freedom of Information and Protection of Privacy Act* or the *Access to Information Act*. I understand that the information supplied will be used to review my applications under the BC *Land Act*, BC *Fisheries Act* (until such time as it is amended) Federal *Fisheries Act* and the *Navigable Waters Protection Act* and information will be shared amongst the other agencies, First Nations and/or with the public.

**Signature(s) of
Applicant(s) or
authorized
representative**

**Name(s) of Applicant(s)
or authorized
representative***

Date

*If signature is by an authorized representative please supply a letter granting authorization to act on behalf of the applicant.

Submit completed application, and additional supporting information (if applicable) to:

In Person: Any FrontCounter BC office.

Visit <http://www.frontcounterbc.gov.bc.ca> for the location nearest you.

By Mail: FrontCounter BC, 2080a Labieux Road, Nanaimo, BC V9T 6J9

By Email: frontcounterbc@gov.bc.ca

(NOTE: IF FEES ARE APPLICABLE, CLIENT MUST CONTACT FRONTCOUNTER BC BY TELEPHONE WITH CREDIT CARD INFORMATION PRIOR TO SUBMITTING THE APPLICATION ELECTRONICALLY. DO NOT INCLUDE PAYMENT (CREDIT CARD) INFORMATION VIA EMAIL OR FAX.)

PLEASE RETAIN A COPY OF THIS APPLICATION FOR YOUR RECORDS

APPLICATIONS ARE NOT TRANSFERABLE

THE SUBMISSION OF THIS FORM DOES NOT IN ANY MANNER CONVEY ANY RIGHTS TO USE OR OCCUPY CROWN LAND AND/OR CONDUCT REQUESTED ACTIVITIES

Popowich, Tracy CSNR:EX

From: Herborg, Matthias ENV:EX
Sent: Wednesday, June 6, 2012 2:06 PM
To: Pryce, Conrad FLNR:EX; Sokal, Mike ENV:EX; Barlas, Sajid A ENV:EX
Cc: White, Tara FLNR:EX; Woodruff, Patricia FLNR:EX; 'Choi, Shirley'; 'Higgins, Mark'; 'Keith, Ian'; 'Sheppard, Mark'; Marshall, Vicki FLNR:EX; 'Martin, Stacey'; Herborg, Matthias ENV:EX
Subject: Freshwater aquaculture licensing - Klassen applicaton #12835

Hello

Regarding the recent discussions surrounding Application# 12835 - Dorocco Developments - Arctic Char to the Introductions and Transfers Committee (ITC), this note is to confirm that the ITC will consider an application from Dorocco Developments, once/if an aquaculture licence is issued. Just for clarification, the role of the ITC is determine whether or not the Department of Fisheries and Oceans, Ministry of Forests, Lands and Natural Resource Operations and the Ministry of Environment have concerns regarding the risk of ecological, disease or genetic impacts resulting from the transfer of the fish specified in the application, and to relay that information to decision makers. From the information provided in this application, the risks, as listed above, appear to be low in the event of escape of arctic char into the Okanagan River. Concerns still exist, however, around the conditions attached to the development of the facility and the implications of water allocation on other elements of the ecosystem. Specifically, there are fisheries temporal concerns around water quality/temperatures in Osoyoos Lake. Details can be provided by regional fisheries management staff.

The following concerns have also been raised and to my knowledge remain unanswered:

1. The fish are proposed to be raised in tanks, in a closed environment. Water intake/discharge pipes will be screened. Therefore, the risk of escape into the Okanagan River is likely low. Survival of escaped fish is also anticipated to be low, due to the warm water temperatures in the Okanagan River and Osoyoos Lake a portion of year (optimum temperatures for Charr are 11 C-16 C). If fish were to escape during the winter months, however, the risk to native stocks and ecosystem health increases significantly (ie. higher potential for charr survival). Potential risks to native species include disease transfer, competition for food & habitat and hybridization.
2. Water for the proposed facility will be supplied from a well situated on the property (Plan 1790, DL 24505, Lot 311, civic 8929 Rd #17, Oliver). The maximum withdrawal rate = 75L/sec. I am not clear what this mean in terms of water availability & use in the Okanagan River basin. What are the implications of the water withdrawal/use on groundwater availability and recharge ? What are the implications to fish habitat and native stocks (eg. habitat constraints & water quality) ? Water is already limited in the Okanagan during dry years - particularly between July-Sept .
3. The application indicates water withdrawal/discharge pipes will be screened, but does not provide further detail (ie. screening size, life-stage and guidelines to be followed). Screening should meet freshwater Intake end-of-pipe fish screen guidelines (DFO) in order to minimize resident fish entrainment and impingement on the screen.
4. A drum filter and settling tank are proposed to treat effluent water prior to discharge. Will this be sufficient to filter nitrates and pharmaceuticals (used to treat hatchery eggs/fish) from the water and prevent pathogen transfer to the Okanagan River system ? If not, what are the implications to native stocks, SAR and watershed health?
5. Osoyoos Lake exhibits an oxygen/temperature squeeze during the summer months. The majority of the lake has little to no oxygen (≤ 4 ppm) July –Sept and only a small corridor is available for fish migration and survival (@ 15 m depth). Water temperatures in the upper 15 m of the water column are in sub-lethal to lethal limits for fish (17-24 C) taxing resident stocks to their limit. Discharge of effluent into the Ok River may further aggravate water quality issues in Osoyoos Lake.

6. It is unclear as to where the effluent water will be discharged. Will it be discharged on the property, into the neighbouring oxbows or the Okanagan River ?
7. The effluent discharge rate proposed = 75 L/s . Will this rate be continuous year round or for a specified time period ? Water does this mean in terms of licensed use? As I understand it wells are not licensed....
8. Water for the facility is to be supplied from a well and 12 C. The temperature of discharge water, however was not identified. Discharge of effluent water should meet specified guidelines for aquatic life– particularly when dealing with a sensitive ecosystem & fish stocks.
9. The hatchery is proposed in a sensitive ecological area – near historic oxbows off the Okanagan River. What is the risk to the floodplain, SAR and surrounding area from proposed development and water withdrawal and discharge?
10. The application states fish will be supplied “Direct to Food Market”. Will fish be transported live? If so, this will increase risk to native stocks.

I will seek to try to identify and resolve issues surrounding the application process and how regional fish biologist can enter their review comments into the process, as this is causing confusion. Perhaps we could discuss further.

Regards,

Matthias Herborg
Provincial Co-Chair, Introductions and Transfers Committee

Popowich, Tracy CSNR:EX

From: Goeller, Neil FLNR:EX
Sent: Tuesday, June 12, 2012 2:56 PM
To: White, Tara FLNR:EX; Cavadini, Roger ENV:EX; Reimer, Shaun FLNR:EX
Subject: Klassen fish farm application and related permits

Tara and Roger and Shaun,

I spoke with both Gary Klassen and Adam Neil (Summit Environmental) regarding the fish farm application down near Oliver.

Summit is preparing a summary report including the proposed works, construction methods and mitigation methods to support the applications to DFO and Water Stewardship (Section 9). I understand that Gary has retained Associated Engineering to assemble the engineering drawings, and as of 2 days ago (or so), Summit to handle the environmental/permitting aspects.

Gary hopes to have shovels in the ground by July 22nd of this year. The summary report by Summit is expected by the end of this month (June). If this date is not possible, we should let him know sooner than later.

From a Section 9 perspective, unless the design changes, I don't see any showstoppers at the moment. I will only be concerned with the outfall pipe which will be a directional drill through the dyke. I will also be concerned if the construction encroaches on Shippet Oxbow, which is adjacent to the proposed farm. This doesn't seem to be the case right now.

Shaun, I'm not sure if they have approached you regarding drilling through the dyke. They plan to cross Shippet Oxbow and directional drill very close to, what appears to be, a culvert through the dyke at the lower end of Shippet Oxbow.

Roger, Tara said you are handling their permit. My understanding from Gary and Adam at this point is that they are under the impression that a discharge permit is already in place (I may be wrong on this). I talked to Tara about this, and that doesn't sound like it is the case. I think if Adam hasn't contacted you at this point, then it would be a good idea to inform them of the status of their permit.

I will be adding text to the Section 9 Approval regarding the other permit requirements that have to be in place prior to undertaking the work. So if you can let me know what permits need to be in place, that will help me out.

If you know anyone else who is a part of this approval process maybe we can add them to the cc list and expand the conversation so we are all on the same page.

Thanks,

Neil.

NEIL GOELLER, M.Sc., G.I.T.
REGIONAL HYDROLOGIST
MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS
OKANAGAN SHUSWAP DISTRICT
PH: (250) 490-8265, Fx: (250) 490-2231

**AUTHORIZATIONS CONCERNING THE MOVEMENT OF
LIVE FISH IN BRITISH COLUMBIA**

Name: Gary Klassen

Address: Dorocco Developments Ltd.

Box 1000, Osoyoos BC V0H 1V0

Introduction and Transfer Application Number: _____

PASB File # NA12-78688



Fisheries and Oceans
Pêches et Océans

Pursuant to Section 56(1) of the Fishery (General) Regulations made under the *Fisheries Act*, permission is hereby granted to transfer _____ to the above named: _____

Conditions as per Section 22(1) of Fishery (General) Regulations:

- Precautions and procedures will be taken to prevent introduction of undesirable flora/fauna and spread of diseases/parasites as indicated on application form.
- This licence must accompany the transfer.
- All fish transferred under this licence must be destroyed and properly disposed of at the end of the research experiment.

This licence expires on _____

On behalf of the Federal Minister of Fisheries and Oceans

Co-Chair, BC Introductions and Transfers Committee

Date



Gary Klassen – Dorocco Developments Ltd. is authorized by this permit to possess, and transport 5000 Arctic char eggs/milt (*Salvelinus alpinus*) from Icy Waters Ltd in Whitehorse, YK to hatchery in Oliver BC pursuant to section 3 of the Freshwater Fish Regulation, BC Reg. 261/83.

Vicki Marshall

A person authorized by the Director, Wildlife
Ministry of Forests, Lands and Natural Resource Operations

Date

Expiry Date: June 15, 2012

This document authorizes the holder to do only the things described above within British Columbia. It does not excuse the holder from any other obligations under any other federal or provincial legislation, whether concerning fish or otherwise.

Popowich, Tracy CSNR:EX

From: Adam Neil [an@summit-environmental.com]
Sent: Saturday, June 16, 2012 9:26 AM
To: Reimer, Shaun FLNR:EX
Subject: RE: Section 9 Water Act Applications and information and Dike Maintenance act info

Thanks Shaun, I will bring Rod (our Engineer) up to speed and have him and Gary submit this application as we discussed.

From: Reimer, Shaun FLNR:EX [<mailto:shaun.reimer@gov.bc.ca>]
Sent: June 15, 2012 1:51 PM
To: Adam Neil
Subject: FW: Section 9 Water Act Applications and information and Dike Maintenance act info

Adam, here is a link to the forms in question and background info for filling them out. I did send this to Gary last October.

Shaun Reimer, P.Eng.

Hydrotechnical Engineer
Ministry of Forests, Lands, & Natural Resource Operations
102 Industrial Place
Penticton, BC, V2A 7C8
(250) 490-8229
fax: (250) 490-2231
Shaun Reimer, P.Eng.

Hydrotechnical Engineer
Ministry of Forests, Lands, & Natural Resource Operations
102 Industrial Place
Penticton, BC, V2A 7C8
(250) 490-8229
fax: (250) 490-2231

From: Reimer, Shaun FLNR:EX
Sent: Friday, October 7, 2011 10:29 AM
To: 'gary@dorocco.com'
Subject: Section 9 Water Act Applications and information and Dike Maintenance act info

Hello Gary,

I have attached a link for the form to use to apply for Section 9 Water Act Approvals. It's found at:

http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/application.pdf

Check the 'Notification' box on the form; you don't need to submit an application fee for that and the process is quicker. There is a small chance that the reviewer's would say that your proposal requires the Approval (that determination is not my call) but I think it unlikely.

The form will be submitted to Front Counter BC. It's at:

<http://www.frontcounterbc.gov.bc.ca/>

There is a toll free number listed at that site for any questions regarding the application process.

The following site explains the process with more links to relevant websites:

http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/index.html

The Dike Maintenance Act info and form (attached as a Word document) regarding these approvals are at:

http://www.env.gov.bc.ca/wsd/public_safety/flood/dma_approvals.html

You can call me to discuss but try to fill in anything you can first.

Regards...

Shaun Reimer, P.Eng.

Hydrotechnical Engineer
Ministry of Forests, Lands, & Natural Resource Operations
102 Industrial Place
Penticton, BC, V2A 7C8

Popowich, Tracy CSNR:EX

From: Goeller, Neil FLNR:EX
Sent: Tuesday, July 10, 2012 1:46 PM
To: White, Tara FLNR:EX; Cavadini, Roger ENV:EX; Reimer, Shaun FLNR:EX
Subject: FW: Gary Klassen Hatchery Project: Mitigation Plan and Environmental Assessment
Attachments: Klassen_Mitigation Plan & Environmental Assessment.pdf

FYI, additional information regarding Gary Klassens fish farm.

From: Adam Neil [<mailto:an@summit-environmental.com>]
Sent: Friday, June 29, 2012 11:24 AM
To: debra.hughes@dfo-mpo.gc.ca; Goeller, Neil FLNR:EX; gary@dorocco.com
Subject: Gary Klassen Hatchery Project: Mitigation Plan and Environmental Assessment

Hi,

Summit is pleased to provide this Mitigation Plan and Environmental Assessment for construction of an effluent discharge pipe adjacent to the Okanagan River, on behalf of Gary Klassen (Dorocco Developments Ltd.). We trust this letter meets the additional information requirements, which were previously discussed, for the project permit applications.

Please feel free to contact us if you have any questions or concerns. Please forward all correspondence to Gary and cc Summit.

Regards,

Adam Neil, B.Sc.
Environmental Scientist
200-2800 29th Street
Vernon, BC, Canada, V1T 9P9



Tel: 250.545.3672 Ext 257
Fax: 250.545.3654

Web: www.summit-environmental.com

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June 28, 2012

File: 2012-2040.001

Gary Klassen
Dorocco Developments Ltd.
Box 1000
Osoyoos, B.C.
V0H 1V0

CC:

Debra Hughes (DFO) debra.hughes@dfo-mpo.gc.ca

Neil Goeller (MFLNRO) neil.goeller@gov.bc.ca

Re: OKANAGAN RIVER EFFLUENT DISCHARGE PIPE: MITIGATION PLAN AND ENVIRONMENTAL ASSESSMENT

Dear Mr. Klassen:

Summit Environmental Consultants Inc. (Summit) is pleased to provide this Mitigation Plan (MP) and Environmental Assessment (EA) for construction of an effluent discharge pipe adjacent to the Okanagan River. The effluent discharge pipe is part of an Arctic Char fish hatchery proposed by Dorocco Developments Ltd. (Dorocco) near Oliver, B.C. Dorocco has previously submitted a Section 9 Application and DFO Review for this project. The Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) and Fisheries and Oceans Canada (DFO) have requested additional information on the project design, mitigation plan and environmental effects, as they relate to construction of the effluent discharge pipe, to supplement Dorocco's permit applications^{1,2}.

This letter provides a description of the proposed project and environmental baseline within the project area. A proposed mitigation plan is presented below with an assessment of residual effects on the environment. This letter only addresses construction of the effluent discharge pipe.

1 PROJECT DESCRIPTION

Dorocco is proposing an Arctic Char fish hatchery near Oliver, B.C (Figure 1). Project infrastructure will include a hatchery facility, waste settling basin, effluent discharge pipe and outlet structure (Figure 2). The hatchery facility and waste settling basin will be located in a private field outside of any environmentally sensitive areas (i.e. > 15 m from any watercourse). The effluent discharge pipe will cross the Shippet Oxbow and flood dike, and the outlet structure will be located on the bank of the Okanagan River (Figure 2 and 3).

¹ Personal communication. Neil Goeller (MFLNRO). June 13, 2012.

² Personal communication. Debra Hughes (DFO). June 12, 2012.

The effluent discharge pipe will be constructed of sections of PVC and steel pipe (300 mm diameter) connected together by couplings and set in precast cement structures. The pipe will be buried in a trench from its connection to the waste settling basin to the outlet structure, with the exception of that section which will overhang the Shippet Oxbow. Generally, the trench will be about 1 to 2 m wide by 1 m deep. A 10 m wide by 3 m deep trench will be required to install the pipe across the flood dike (Figure 2); additional details on construction of this section of pipe will be provided in the Dike Maintenance Application for this project. The outlet structure will be precast in cement and set into place on the bank of the Okanagan River.

2 ENVIRONMENTAL BASELINE

Summit completed a field assessment of the project area on June 15, 2012. Riparian areas adjacent to the Shippet Oxbow and Okanagan River are largely disturbed, mainly due to the flood dike and adjacent farm land (Photos 1 to 3). Riparian species present in these areas consist of Sumac (*Rhus Spp.*), Willow (*Salix spp.*), Wylch Elm (*Ulmus glabra*) and Cattail (*Typha spp.*). The riparian areas adjacent to the Shippet Oxbow are about 3 m and 7 m wide on the left and right banks, respectively. The width of the riparian area on the right bank of the Okanagan River is about 2 m.

The bankfull width and height of the Okanagan River is about 50 m and 2.5 m, respectively (Figure 2). Flow in the Okanagan River was in excess of 70 m³/s during the field assessment. The banks of the Okanagan River are entirely composed of large rip-rap since this section of river has been channelized (Photo 4). Habitat suitability and availability is low for juvenile fish and high for adults. The depth and velocity of the river in this area is relatively high, with little cover, velocity refuge and habitat complexity. Juvenile rearing habitat is likely limited to the margins of the channel, while adult fish would utilize the entire width of the river. A summary of fish species present in the Okanagan River is presented in Table 1³.

The bankfull width and height of the Shippet Oxbow is about 8 m and 2 m, respectively (Figure 2). During the field assessment the wetted width and depth of the oxbow was about 1.5 m and 0.2 m, respectively. There was minimal flow (< 20 lps) through the oxbow during this assessment because the inlet was closed due to the risk of flooding. The banks and bed of the oxbow are composed of fines and organic material (Photos 5). Habitat suitability and availability is moderate for juvenile fish and low for adults within this area of the Shippet Oxbow. There is a general lack of habitat complexity and cover in these areas. The section of Shippet Oxbow adjacent to the project area is an inlet channel with high value habitat located further downstream. All fish species inhabiting the Okanagan River can access the Shippet Oxbow.

An overview of the project area showing riparian areas, watercourses, project infrastructure and construction footprints is provided in Figure 4.

³ Ministry of Environment. 2012. Fisheries Information Summary System. Accessed online June 26, 2012.

Table 1. Fish species present in the Okanagan River.

Common Name	Scientific Name
Prickly Sculpin	<i>Cottus asper</i>
Mottled Sculpin	<i>Cottus bairdi</i>
Sculpin (General)	<i>Cottus spp.</i>
Chinook Salmon	<i>Oncorhynchus tshawytscha</i>
Chiselmouth	<i>Acrocheilus alutaceus</i>
Carp	<i>Cyprinus carpio</i>
Brook Trout	<i>Salvelinus fontinalis</i>
Kokanee	<i>Oncorhynchus nerka</i>
Largemouth Bass	<i>Micropterus salmoides</i>
Longnose Sucker	<i>Catostomus catostomus</i>
Northern Pikeminnow	<i>Ptychocheilus oregonensis</i>
Pumpkinseed	<i>Lepomis gibbosus</i>
Rainbow Trout	<i>Oncorhynchus mykiss</i>
Redside Shiner	<i>Richardsonius balteatus</i>
Sockeye Salmon	<i>Oncorhynchus nerka</i>
Smallmouth Bass	<i>Micropterus dolomieu</i>
Steelhead	<i>Oncorhynchus mykiss</i>
Sucker (General)	<i>Catostomus spp.</i>
Tench	<i>Tinca tinca</i>
Yellow Perch	<i>Perca flavescens</i>

3 MITIGATION PLAN

Construction works will be completed by Dorocco and/or a designated contractor. All project works will be completed within the reduced risk instream work window for the Okanagan River (July 22 to August 31) according to *Standards and Best Management Practices for Instream Works*⁴.

Excavation, infilling and re-grading will be completed using an excavator. These works will be completed in the dry from the top of bank in sensitive areas adjacent to watercourses. Water level elevations in the Shippit Oxbow and Okanagan River will be far below the trench elevation during the construction period. In the event that water levels are not below this critical elevation, works will be postponed until water levels recede. A double layer silt fence will be installed between construction areas and watercourses to prevent erosion and sedimentation. This fencing will remain in place until these areas are stabilized well after the construction and restoration periods.

Construction materials and equipment required for the project will be stored in a designated location well away from any watercourses (>30 m). Material (sediment and debris) removed from the trench will also be stockpiled next to the trench, and not allowed to slough back into the trench or adjacent water courses. Excess material will

⁴ Ministry of Water, Land and Air Protection (WLAP). 2004. Standards and Best Management Practices for Instream Works

be removed from the site and disposed of in an appropriate location and timely manner. Equipment will be refuelled from a tidy tank in a designated location well away from any watercourses (i.e. > 30 m).

All equipment and machinery will be in good operating condition, free of leaks, excess oil, and grease. Equipment and machinery will be checked prior to entering the project area and frequently during construction. We recommend that hydraulic machinery have environmentally sensitive hydraulic fluids that are non-toxic to aquatic life and that are readily or inherently biodegradable. A spill contaminant kit will be readily accessible onsite in the event of a release of deleterious substance to the environment. All construction personnel will be trained in spill containment and responsible for responding to a spill. Spills will be immediately reported to the Provincial Emergency Program.

Precast cement structures required for the pipe connections and outlet structure will be constructed in a designated area well away from any watercourses. Structures will be completely cured before placement so there is no risk of spills or leaching. These structures will be lifted into place using an excavator.

Temporarily disturbed riparian areas will be restored to a pre-disturbance state immediately following the construction phase. Native plant species identified in Section 2 will be planted at a density of 1 plant per 1 m². Diversity of planting will mimic the natural surroundings. Native grass seed will also be broadcast in disturbed areas. Channel banks will be re-graded to a pre-disturbance state using the same material which was removed.

Environmental monitoring will be completed on a full time basis by a Qualified Environmental Professional (QEP) to ensure compliance with BMPs and regulatory permits. A pre-construction meeting will be held to discuss construction activities, mitigation measures and environmental concerns. All construction personnel will be aware of environmental concerns onsite and the Section 9 *Water Act* approval will be kept on site at all times. The EM will have authority to stop or postpone works if there any environmental concerns. An environmental monitoring report will be completed and submitted to the regulatory agencies following project completion.

4 ENVIRONMENTAL EFFECTS

The total temporary disturbance of riparian and instream areas will be 158 m² and 12 m². These values represent a 4 m wide construction right-of-way along the pipe alignment. Instream areas are considered those areas of the channel bank below the high-water elevation in the Shippet Oxbow and Okanagan River. The total permanent loss in instream areas for the project is 4 m² which consists of the outlet structure located on the bank of the Okanagan River. A summary of temporary and permanent disturbances of riparian and instream areas is presented in Table 2, with an overview of these areas provided in Figure 4.

Table 2. Summary of project disturbances.

Watercourse	Disturbances (m ²)			
	Instream		Riparian	
	Temporary	Permanent	Temporary	Permanent
Okanagan River	4	4	60	-
Shippet Oxbow	8	-	98	-

The proposed project will have short term minor impacts on riparian areas if the mitigation plan noted above is followed. As previously mentioned, restoration of these areas will commence immediately following the construction period. Impacts on water quality are not expected since all works will be completed in the dry and isolated using silt fencing. Temporary disturbance of instream areas are not expected to have an effect on fish or other aquatic biota since these areas will be dry during construction.

The permanent loss of instream areas under the footprint of the outlet structure is not expected to adversely affect fish. This area is typically dry during most periods of the year and is only wetted during extreme high flow events. Moreover, this area is entirely composed of rip-rap which provides little habitat value for fish. Juvenile fish may use these areas to escape high velocities; however, there is abundant like-value habitat through this area of the Okanagan River so minor losses will have a negligible effect. The effluent discharge pipe will remain above the high-water mark in the Shippet Oxbow so there will be no adverse effects.

Please feel free to contact me if you have any questions or comments.

Yours truly,

Adam Neil
Environmental Scientist

Attachments:

Figures
Photographs

June 28, 2012
Gary Klassen
Dorocco Developments Ltd.
- 6 -



Photo 1. Okanagan River right bank riparian area.



Photo 2. Shippet Oxbow right bank riparian area.

June 28, 2012
Gary Klassen
Dorocco Developments Ltd.
- 7 -



Photo 3. Shippet Oxbow left bank riparian area.



Photo 4. Okanagan River right bank.

June 28, 2012
Gary Klassen
Dorocco Developments Ltd.
- 8 -



Photo 5. Shippet Oxbow left and right banks.

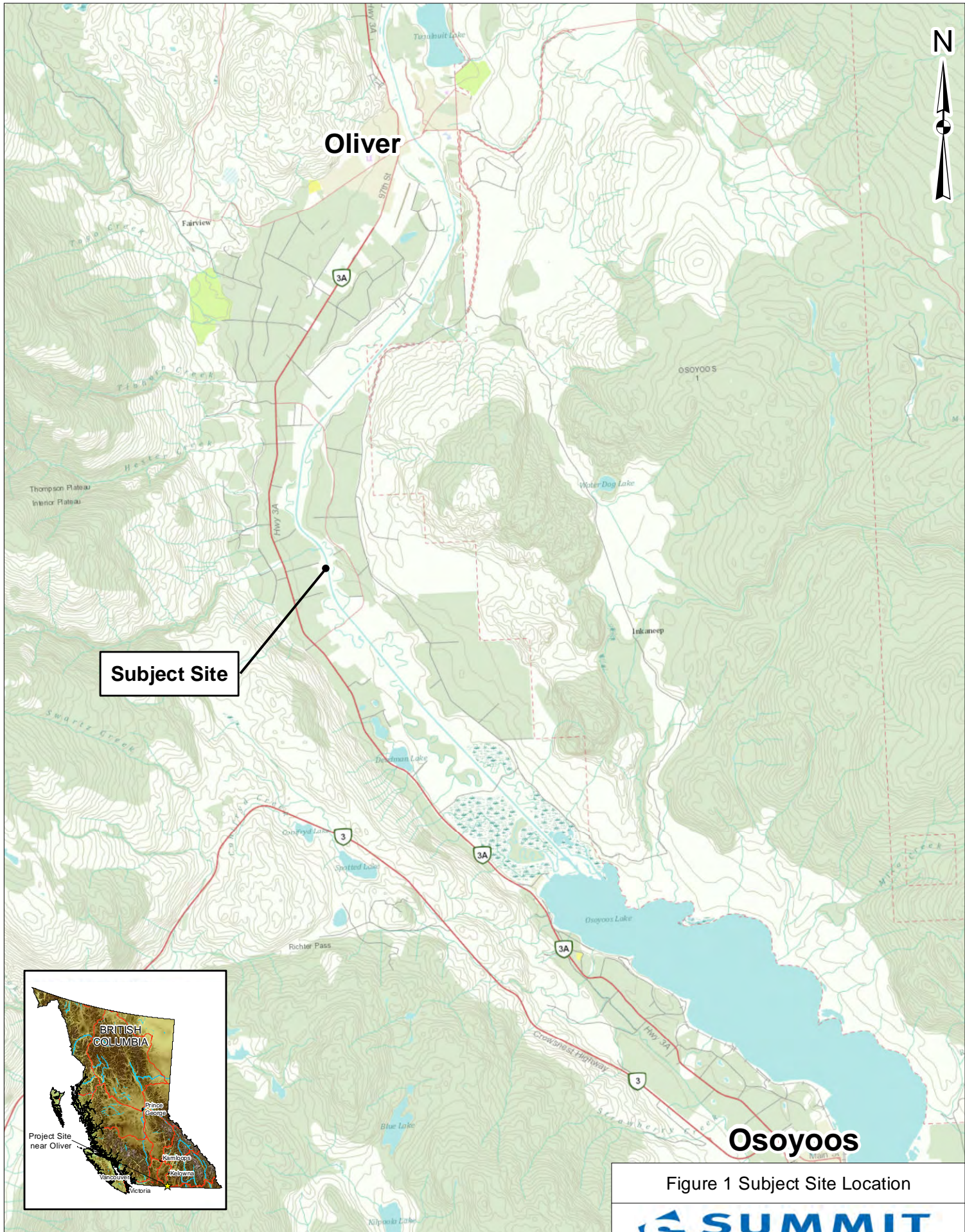
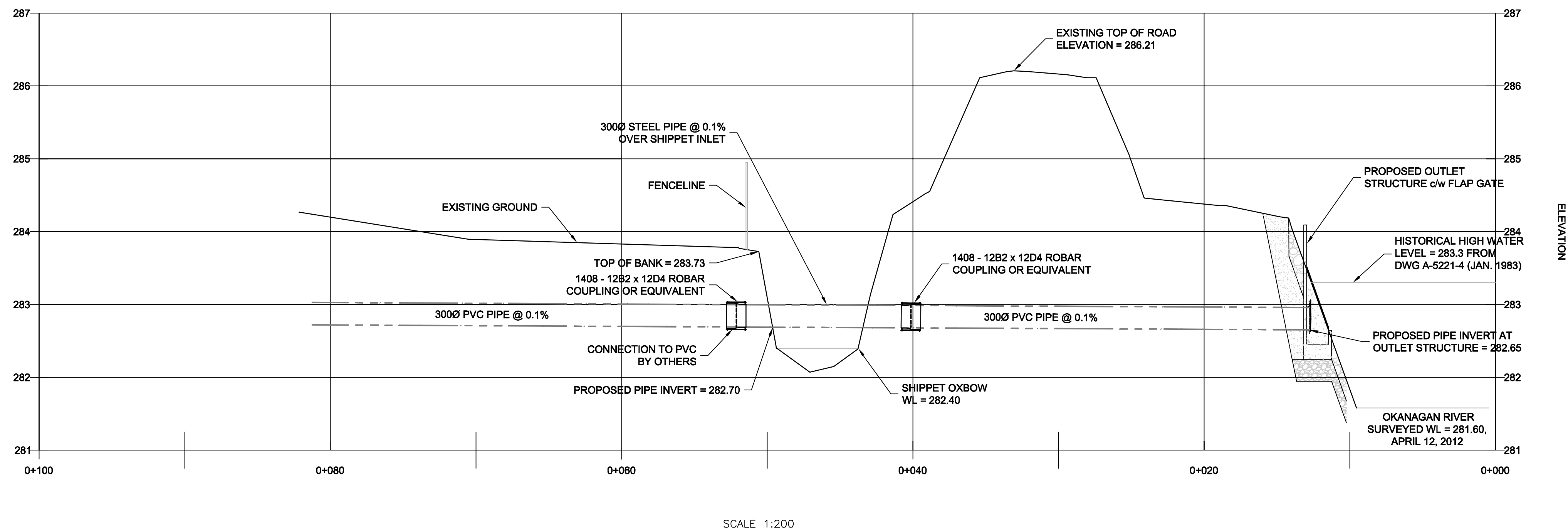
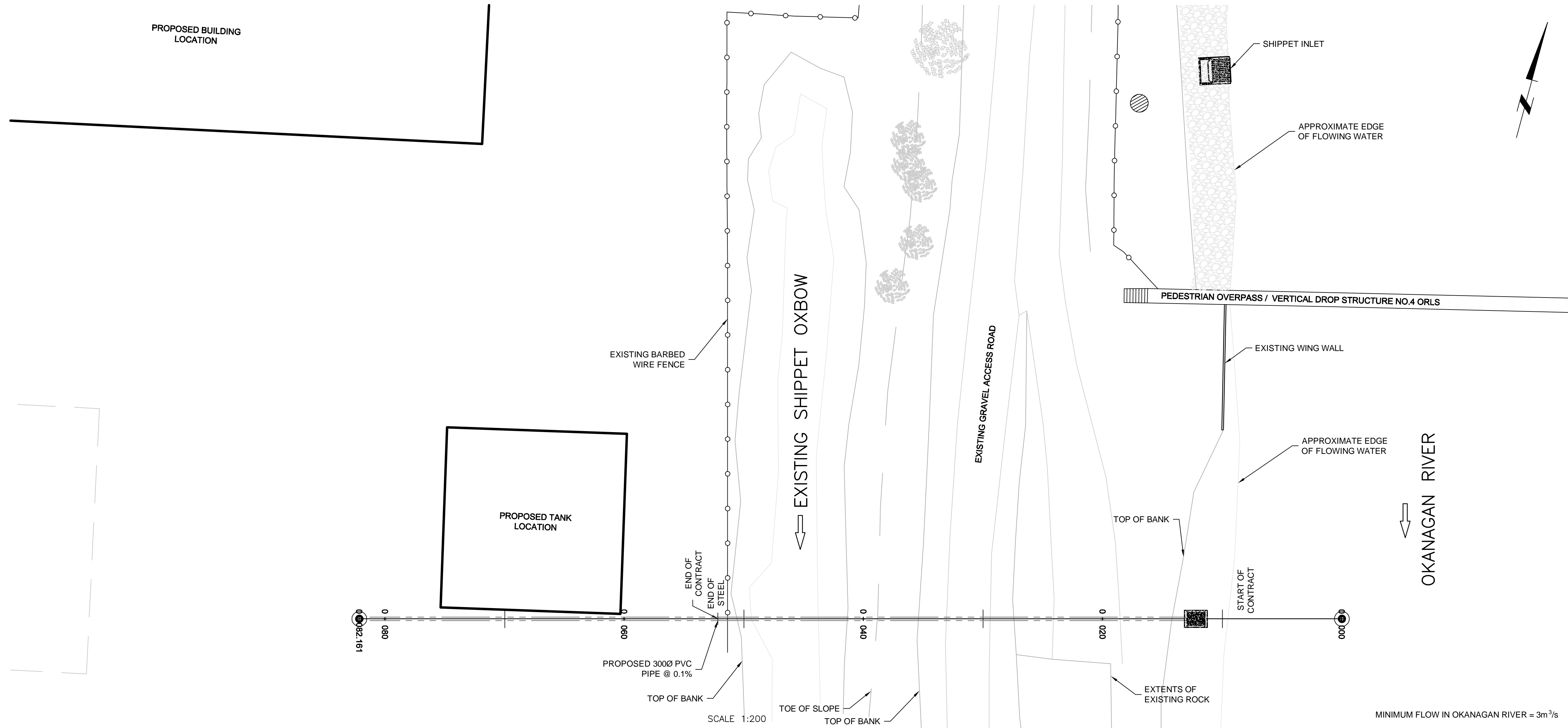


Figure 1 Subject Site Location

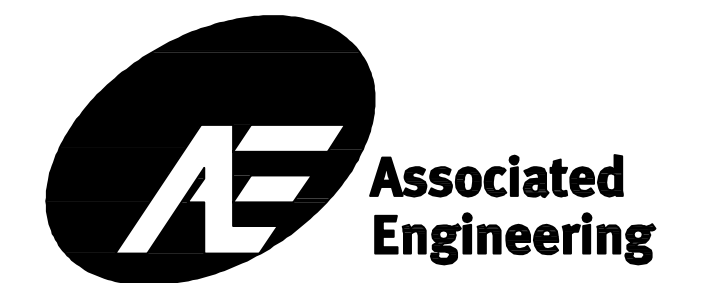
This Drawing Is For The Use Of The Client And Project Indicated
No Representations Or Any Kind Are Made To Other Parties



NOTE 1

SHRUBS TO BE SET ASIDE AND REPLACED UPON COMPLETION WHERE POSSIBLE

A	2012/04/25	RM	TWS	ISSUED FOR APPROVAL
NO.	DATE	ENG.	BY	SUBJECT
REVISIONS				
SCALE		AS SHOWN		
PROJECT NO.	20122040	INITIAL	DATE	
DRAWN	TWS		2012/04/16	
DESIGNED	TWS		2012/04	
CHECKED	RM		2012/04	
APPROVED	RM		2012/04	
DATE	April 20, 2012			



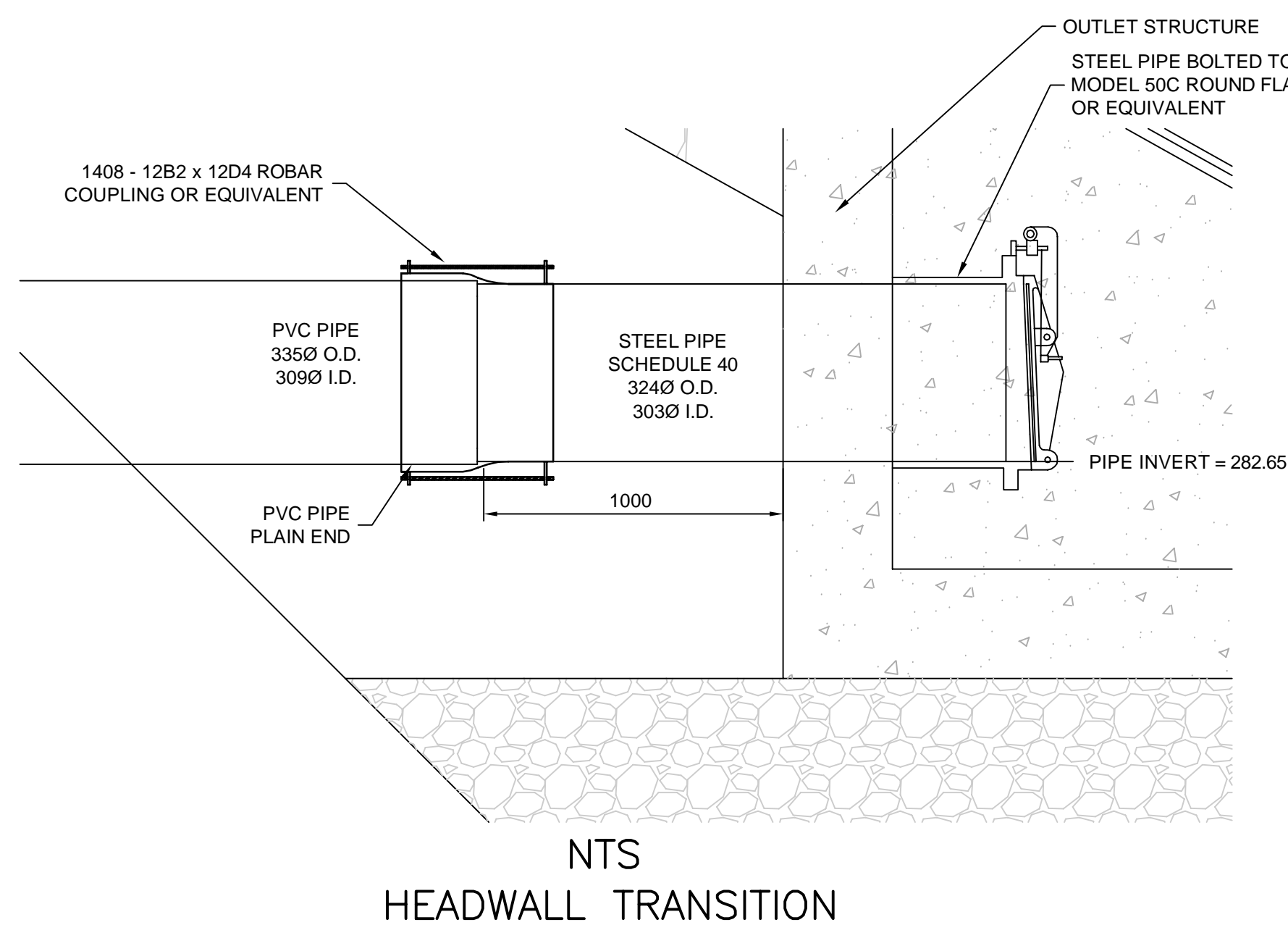
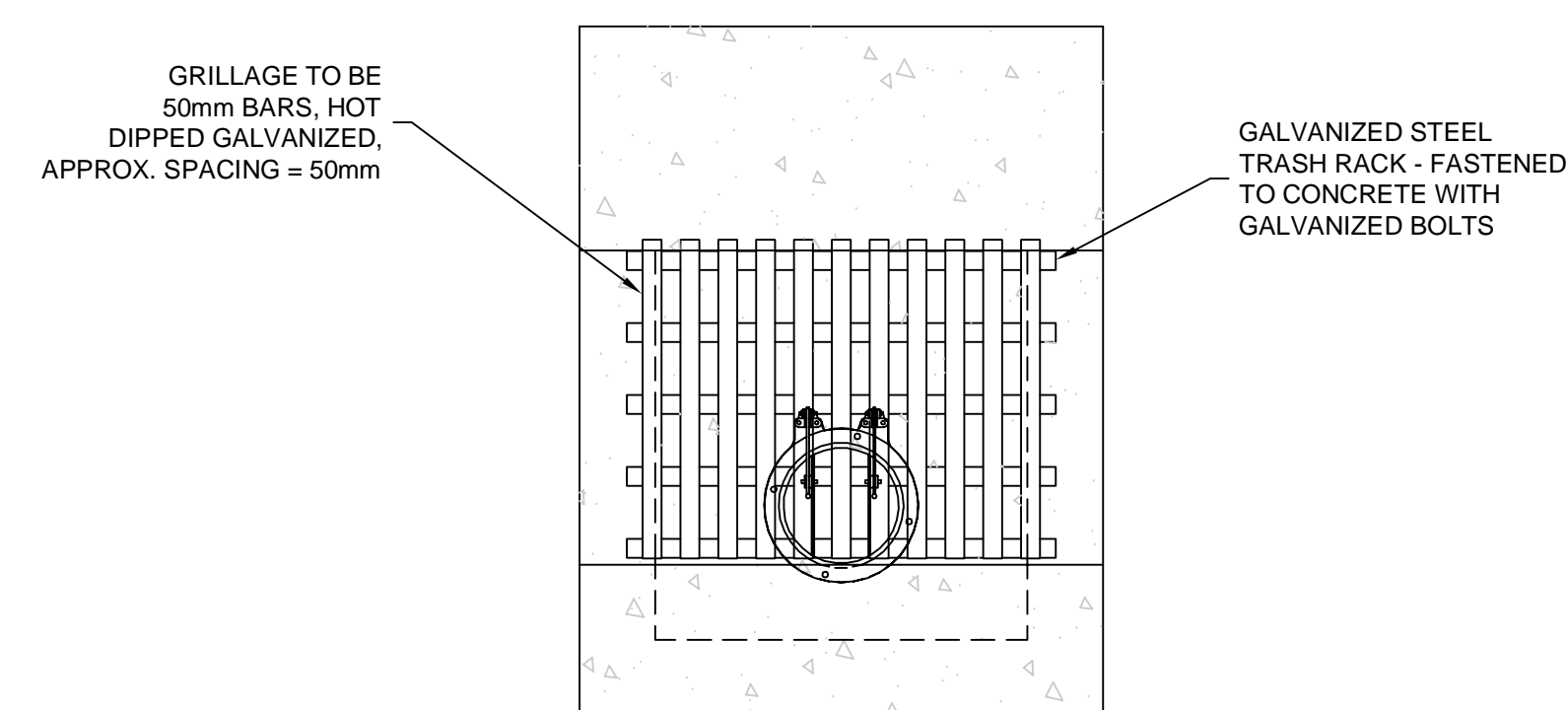
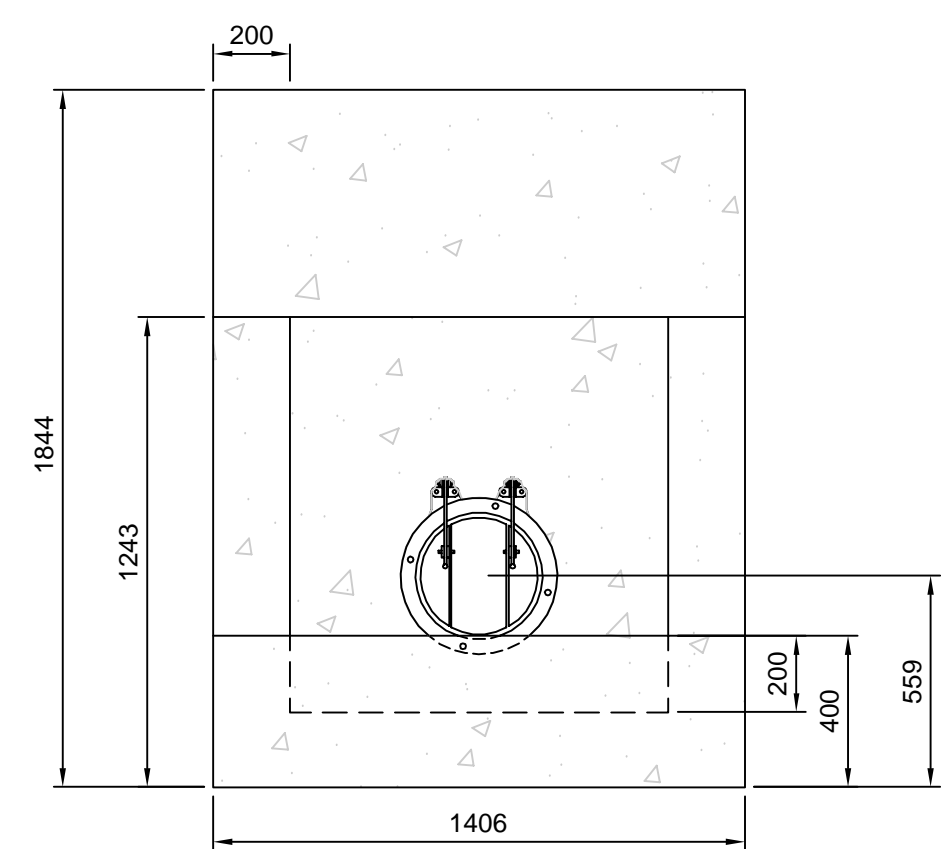
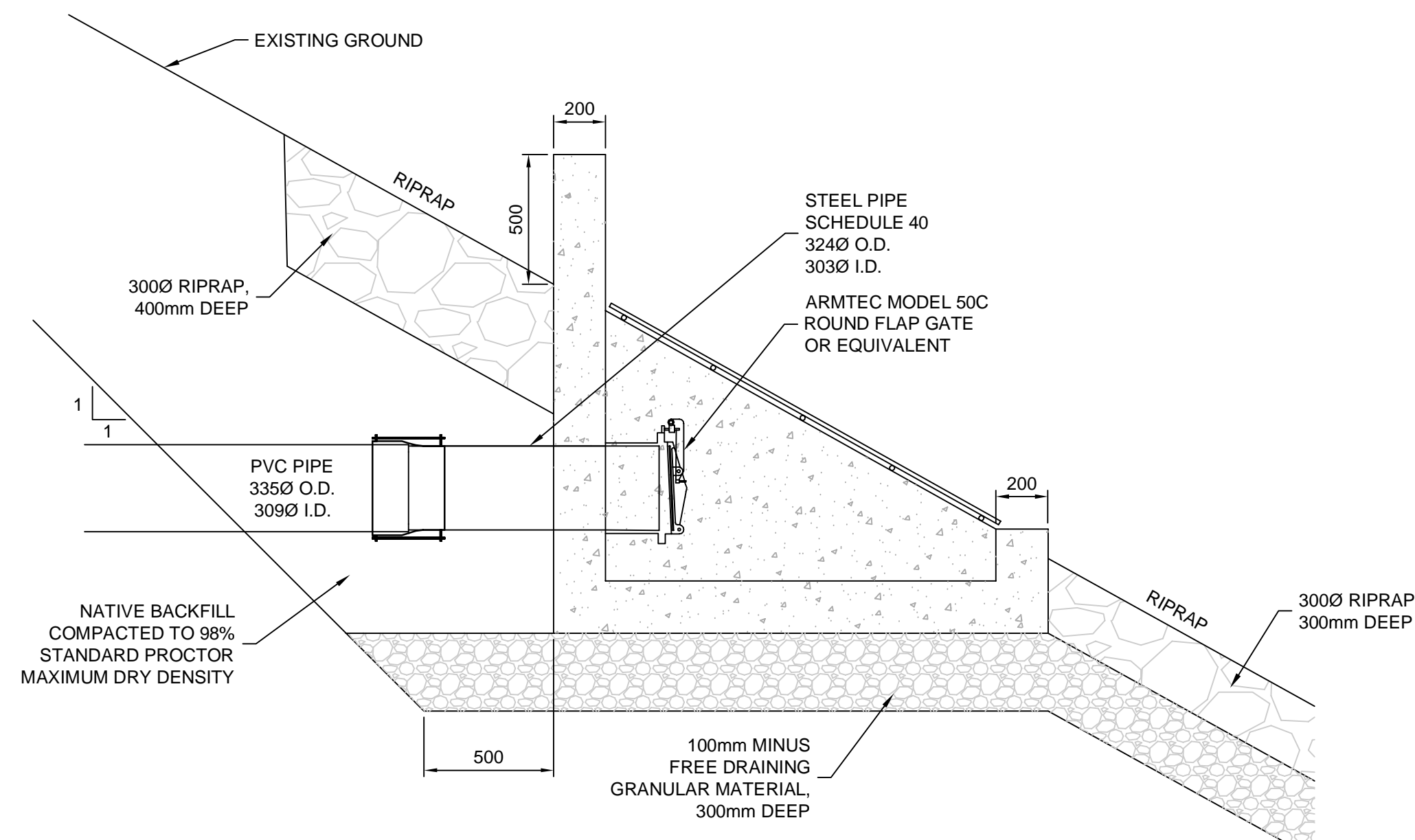
DOROCO DEVELOPMENTS
LTD.

**OKANAGAN RIVER
KLASSEN OUTLET
STRUCTURE DESIGN
NEAR VDS No. 4**

Figure 2
KLASSEN OUTLET PLAN & PROFILE

DRAWING NUMBER	REV. NO.	SHEET
2040-1-101	A	1 2

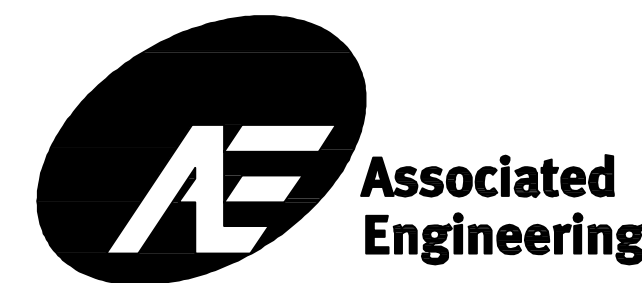
This Drawing Is For The Use Of The Client And Project Indicated
No Representations Or Any Kind Are Made To Other Parties



NOTES:
(1) ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

ASSOCIATED ENGINEERING	
QUALITY MANAGEMENT SIGN-OFF	
Signature: _____	
Date: _____	

A	2012/04/25	RM	TWS	ISSUED FOR APPROVAL
NO.	DATE	ENG.	BY	SUBJECT
REVISIONS				
SCALE		AS SHOWN		
PROJECT NO.	20122040	INITIAL	DATE	
DRAWN	TWS		2012/04/16	
DESIGNED	TWS		2012/04	
CHECKED	RM		2012/04	
APPROVED	RM		2012/04	
DATE	April 20, 2012			



DOROCO DEVELOPMENTS LTD.

OKANAGAN RIVER
KLASSEN OUTLET
STRUCTURE DESIGN
NEAR VDS No. 4

Figure 3.
CONSTRUCTION DETAILS

DRAWING NUMBER	REV. NO.	SHEET
2040-1-102	A	2/2

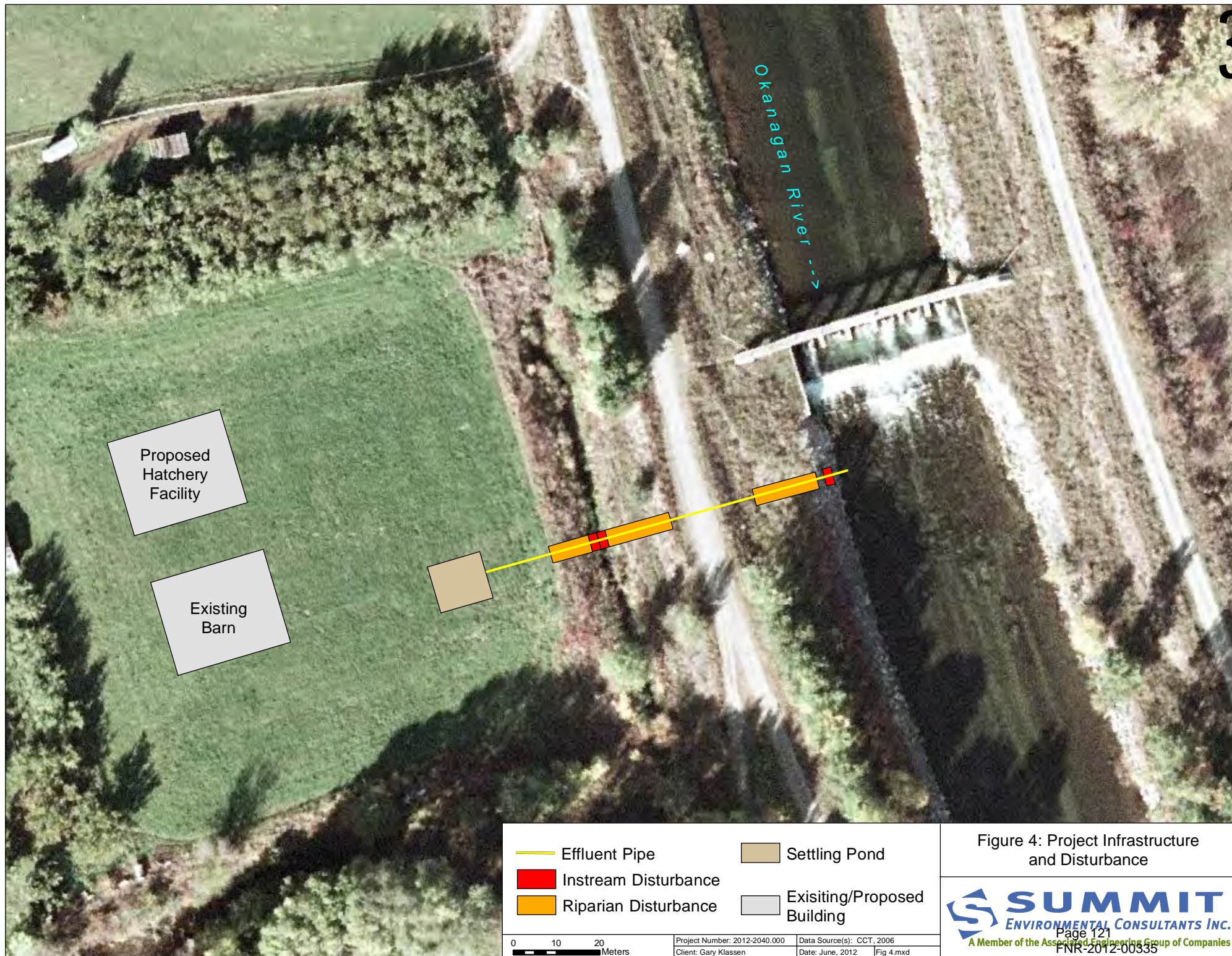


Figure 4: Project Infrastructure and Disturbance

Popowich, Tracy CSNR:EX

From: Cormier, Laverne FLNR:EX
Sent: Thursday, July 26, 2012 3:13 PM
To: Goeller, Neil FLNR:EX
Subject: As requested: Section 9 806524, Fish Farm water works, Shippet Oxbow

Please consider the following comment:

Project Description:

This Section 9 application is for a 12 inch pipe to be placed (directionally drilled) within the Shippet Oxbow. The pipe will also run through the levee along the Okanagan River channel. The purpose of the pipe is to discharge effluent from a proposed fish farm. District First Nations staff understand the fish farming operation requires further permitting via MOE Environmental Protection staff.

Initial Review

This project was referred to all respective First Nations as identified by Front Counter BC including the Okanagan and Nlaka'pamux groups and their respective communities. The core groups include Osoyoos, Lower Similkameen and Penticton Indian Band.

The proposed water works pose a low risk of impacting aboriginal interests. The impact is believed to be low because the works are associated with private land which is highly cultivated, and previously disturbed areas of the levee. The Shippet oxbow is not fish bearing, and photographs indicate the oxbow is filling in.

The Okanagan River area is associated with a relatively strong aboriginal title claim because of its proximity to village sites, and records of use and occupation of the Okanagan River. The Okanagan River area is also associated with relatively strong claims of aboriginal rights to fish, gather foods and medicines. It is a documented travel route of the Okanagan people.

Recommendation

Based on this review, the appropriate level of consultation would be notification. FCBC has provided notification to the key Okanagan groups and no responses were received. This review is limited to the Section 9 approval.

Laverne Cormier, RPF
First Nations Relations Advisor
Ministry of Forests, Lands & Natural Resource Operations
Phone: 250.490.2203
Fax: 250.490.2231
Email: laverne.cormier@gov.bc.ca

Popowich, Tracy CSNR:EX

From: Toews, Michael T FLNR:EX
Sent: Monday, July 30, 2012 1:04 PM
To: Goeller, Neil FLNR:EX
Cc: Morrison, Craig D FLNR:EX
Subject: RE: parcel question

Hi Neil,

I would say yes. You could direct them to FCBC to ensure they are making all the applicable applications. I've cc'd Craig Morrison, Natural Resource Specialist, that could guide them through the Provincial permitting/tenuring process.

Mike

From: Goeller, Neil FLNR:EX
Sent: Monday, July 30, 2012 12:15 PM
To: Toews, Michael T FLNR:EX
Subject: RE: parcel question

Ok,

I am pretty sure he is drawing from a groundwater source, so there is no water licence here. Should I advise them to apply for land tenure over the corridor?

Neil.

From: Toews, Michael T FLNR:EX
Sent: Monday, July 30, 2012 11:44 AM
To: Goeller, Neil FLNR:EX
Subject: RE: parcel question

Hi Neil,

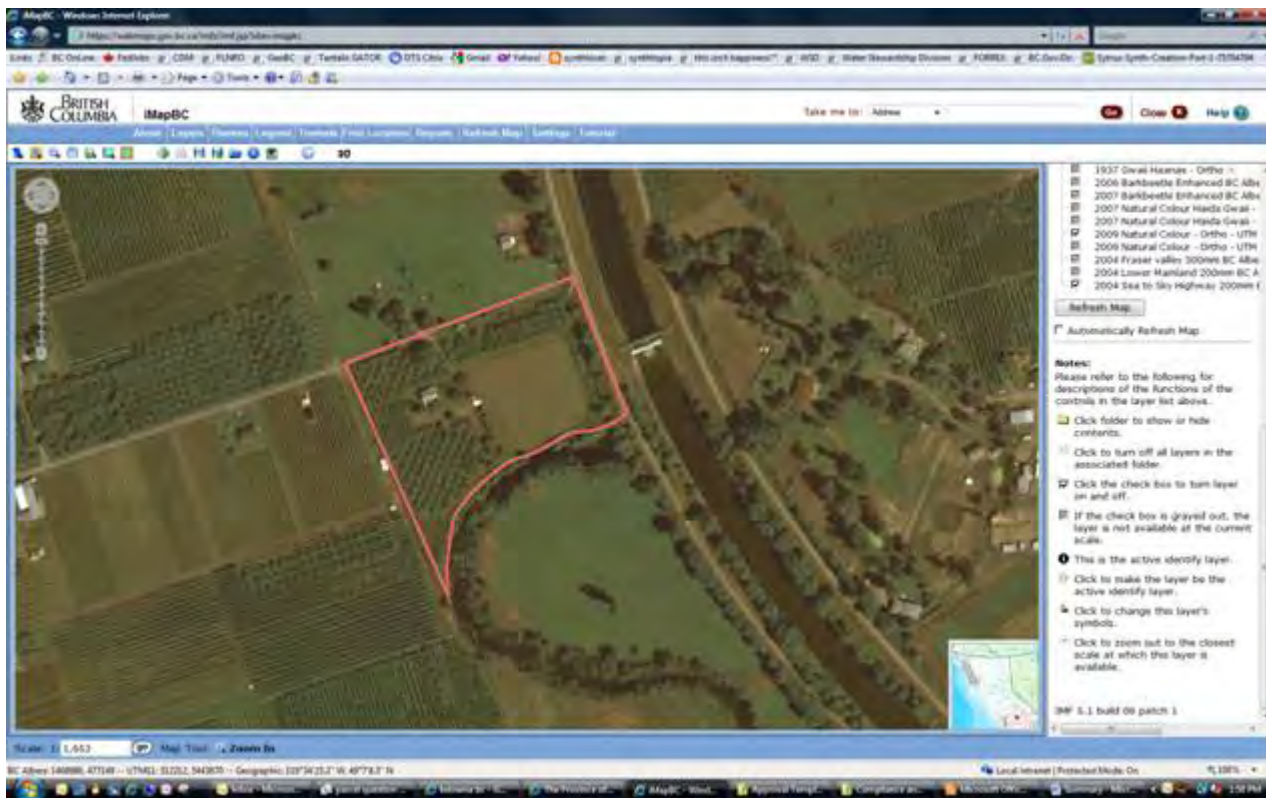
This one might be tricky? If the pipe is related to an active water licence they may be able to acquire a PCL (permit over Crown land). I'm guessing you understand these but thought I would mention it anyway. If it is not related to a water licence, then yes, they should apply for a Crown land tenure under our utilities program (the channel is considered Crown land).

Mike

From: Goeller, Neil FLNR:EX
Sent: Wednesday, July 25, 2012 1:51 PM
To: Toews, Michael T FLNR:EX
Subject: parcel question

Mike,

I've got an application to put a pipe through a dike down south of Oliver and wondering if this guy needs to apply for tenure. The PID is 003-749-614. I can send more information or explain if you need to know more. See below, property is in pink, and pipe would go through dike with an outfall into Okanagan channel.



NEIL GOELLER, M.Sc., P.GEO.
 REGIONAL HYDROLOGIST
 MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS
 OKANAGAN SHUSWAP DISTRICT
 PH: (250) 490-8265, Fx: (250) 490-2231

Popowich, Tracy CSNR:EX

From: Stewart, Robert FLNR:EX
Sent: Monday, August 27, 2012 2:25 PM
To: Goeller, Neil FLNR:EX
Cc: Lacey, Cathy M ENV:EX; Referral Apps REG8 ENV:EX
Subject: Water Act Approval A8-6524

File: A8-6524

Proponent: Gary Klassen

Works: Effluent Outfall on Okanagan River

Location: Okanagan River south of Oliver

Staff with the Ministry of Environment have reviewed the above application and have the following comments.

To ensure that a HADD of fish habitat does not occur during works and that impacts to other aquatic and terrestrial species and habitats I recommend the proponent meet the following terms and conditions:

The Habitat Officer's Terms and Conditions for changes in and about a stream

http://www.env.gov.bc.ca/wsd/regions/okr/wateract/terms_conditions_okanagan.pdf

Additionally I recommend the proponent review information at the following website to ensure they are in compliance with the *Water Act*:

http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/index.html

The Ecosystem Section of BC Natural Resources Operations recommends that a qualified professional (QP) be engaged by the proponent if proposed activities are inconsistent with the Best Management Practices, term and conditions, or the established work window. It is the proponent's responsibility to ensure their activities are in compliance with all legislation, including the *Fisheries Act*. I recommend that the proponent's plans include all the QP recommendations and that the QP works to ensure a HADD will not occur as a result of the proponent's proposal.

Additional Terms and Conditions

Works must be completed by **September 15, 2012**.

If you have any other questions or require further information please contact Robert Stewart at (250) 490-8253.

Sincerely,

Robert Stewart
Ecosystems Biologist

~~~~~  
Robert Stewart  
Ecosystem Biologist  
Resource Management  
Ministry of Forests, Lands and Natural Resources Operations

Penticton  
Phone (250) 490-8253  
Fax (250) 490-2231

## Popowich, Tracy CSNR:EX

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**From:** Goeller, Neil FLNR:EX  
**Sent:** Tuesday, September 4, 2012 1:47 PM  
**To:** 'gary@dorocco.com'  
**Cc:** 'Adam Neil'; Stewart, Robert FLNR:EX; 'Guerin, Jeff'; FLNR DOS Resource; Reimer, Shaun FLNR:EX; White, Tara FLNR:EX; Cavadini, Roger ENV:EX; Hankins, Carmen E FLNR:EX; 'Ritchie, Lynda'; 'Manning, Michelle'; 'debra.hughes@dfo-mpo.gc.ca'  
**Subject:** A806524 - Klassen Fish Farm Approval  
**Attachments:** A806524 - Klassen Fish Farm Approval.pdf

Gary,

Please find attached your Section 9 Approval for construction of the outfall structure associated with the proposed fish farm. Please let me know if you have any questions.

Regards,

Neil

---

NEIL GOELLER, M.Sc., P.GEO.  
REGIONAL HYDROLOGIST  
MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS  
OKANAGAN SHUSWAP DISTRICT  
PH: (250) 490-8265, Fx: (250) 490-2231

July 26, 2012

File: A8-6524

Gary Klassen  
Box 1000  
Osoyoos, BC V0H 1V0

Attention: Gary Klassen

**Re: Section 9 Water Act Approval – Pipeline Crossing of Shippet Oxbow and Outfall into Okanagan River**

Approval for the above has been granted, and the approval document verifying this is attached. This Approval, or copy of it, must be kept on the work site so that it may be shown to a Ministry official upon request.

It is the Approval Holder's responsibility to ensure that their activities, works or construction are in compliance with all legislation, including the *Fisheries Act* (Canada), as well as with any applicable federal, provincial or local government bylaws, regulations or enactments.

The Approval includes as an Attachment the document entitled "Habitat Officer's Terms and Conditions for changes in and about a stream specified by Ministry of Environment Habitat Officers, Okanagan Region", which describes requirements specified by the Ministry's Ecosystem Section. For any questions about those requirements, please contact Rob Stewart, Ecosystems Biologist 250-490-8253.

If you have any other questions or concerns regarding this Approval, please contact Neil Goeller, P.Geo. Regional Hydrologist in Penticton at (250) 490-8265.

Yours truly,



Conrad J. Pryce, P.Eng.  
Assistant Regional Water Manager

Attachments

pc: Adam Neil, Summit Environmental Consultants, Vernon  
Rob Stewart, Ecosystems Section, Penticton



Shawn L'Henaff, Front Counter BC, Vernon  
Jeff Guerin, Fisheries and Oceans Canada, Kamloops  
Shaun Reimer, Hydrotechnical Engineer, FLNRO  
Tara White, Senior Fisheries Biologist, FLNRO  
Roger Cavadini, Environmental Protection Officer, MoE

## APPROVAL

### Changes in and about a stream

#### WATER ACT - SECTION 9 (1)

Gary Klassen is hereby authorized to make changes in and about a stream as follows:

- A. The stream is Shippet Oxbow and Okanagan River.
- B. The changes to be made in and about the stream are construction of a pipeline crossing of Shippet Oxbow and an outfall structure on the banks of Okanagan River as submitted with the application.
- C. All works shall comply to design plans submitted by Summit Environmental Consultants for the application.
- D. The works authorized shall be completed on or before December 31<sup>st</sup>, 2012.
- E. This Approval does not constitute authority of any other agency. The holder of this Approval shall have the necessary permits from other agencies concerned prior to the commencement of the works authorized herein.
- F. Instream work shall be undertaken during the period July 22<sup>nd</sup> to September 15<sup>th</sup> to minimize the impact on the fisheries resource. Work may be scheduled to occur outside of this designated work window if the qualified environmental professional determines that the work can be completed without contravening the federal *Fisheries Act* and any other applicable legislation. Also, the approval holder must comply with steps 2 and 3 described in paragraph (a) **Fish and Fish Habitat** (page 1 of 5) of the attachment entitled “Habitat Officer’s Terms and Conditions for changes in and about a stream specified by Ministry of Environment Habitat Officers, Okanagan Region”. The approval holder must ensure that necessary documentation, as outlined in the attachment is obtained and kept at hand when undertaking instream work under the Approval outside of the designated work window.
- G. A qualified environmental professional shall be onsite at all times of the work. The qualified environmental professional shall have the authority to suspend work at any time if a harmful alteration, disruption or destruction of fish habitat in the stream appears imminent.

- H. This Approval or copy of it must be kept on the work site so that it may be shown to a Ministry official upon request.
- I. No silt, or other deleterious substances, shall be allowed to enter the water. This must be ensured through the use of appropriate silt curtain and/or cofferdam materials.
- J. All work shall be conducted in the dry portion of the channel. No equipment shall be operated in the water.
- K. All work shall be conducted from the top of the bank. No equipment shall be operated in the channel.
- L. The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees or other property, and shall make full compensation to the owners for any damage or loss resulting from the exercise of the rights granted with this Approval.
- M. This Approval does not authorize entry onto privately held land.
- N. Vegetation shall be disturbed as little as possible.
- O. All disturbed areas shall be restored to their original condition and protected from erosion.
- P. All excavated material and debris shall be removed from the site and taken to an appropriate facility or placed in a stable area above the high water mark and protected from erosion by planting grass and/or vegetation.
- Q. Fuelling and servicing of vehicles and equipment must occur away from all streams, lakes and water bodies and any spills must be properly cleaned up and reported as required by the Spill Reporting Regulation (B.C. Reg. 263/90).
- R. Any machinery operated on the site shall be in good repair and be free of hydraulic leaks and excess surface oil and grease.
- S. All reasonable effort will be made to avoid any negative impacts to the stream's ecosystem.
- T. Appropriate design methods and construction techniques for the site conditions shall be utilized.

- U. Where rock riprap is used to protect against erosion, it shall be clean, durable, angular in shape and suitably graded and sized to resist movement by freshet flows. The riprap shall have an apron or entrenched toe of rock placed on the streambed at the toe of the slope. The resulting protected channel must have a cross-sectional area greater than or equal to the present cross-sectional area.
- V. Where rock riprap is used to protect against erosion, the upstream end of the riprap must be keyed (trenched) back into the bank so that the bank protection is not outflanked by erosion farther upstream.
- W. Rock riprap must not be end-dumped down the bank of the stream but must be placed against the bank/apron/toe trench using an excavator with a thumb.
- X. Holder(s) of water licences within one kilometer downstream are to be provided with an alternate supply of fresh water during periods when water quality may be adversely affected.
- Y. Upon commencement of the project, the works shall be pursued to completion as quickly as possible.



---

Conrad J. Pryce, P.Eng.  
Assistant Regional Water Manager

Approval: A806524

Date: July 26, 2012

## Habitat Officer's Terms and Conditions for changes in and about a stream specified by Ministry of Environment Habitat Officers, Okanagan Region

Section 42 (1) of the *Water Regulation* gives authority to a Habitat Officer to add specific conditions to ensure the protection of habitat in addition to the conditions of general application. Under this authority, Ministry of Environment (MoE) Habitat Officers, Okanagan Region, require the following mandatory terms and conditions:

***42 (1) To protect habitat, a person making a change in and about a stream<sup>1</sup> under this regulation, other than under section 44(1)(o) to (s) or (2), must make that change in accordance with terms and conditions specified by the habitat officer with respect to***

---

***a) The timing window or the period or periods of time in the year during which the change can proceed without causing harm to fish, wildlife or habitat,***

Windows of least risk for fish and wildlife, including some species at risk, in Okanagan Region can be found on the work windows webpage:

<http://www.env.gov.bc.ca/wsd/regions/okr/wateract/workwindows.html>

### **Fish and Fish Habitat:**

1. All activities in fish streams, as well as tributaries that have a risk of depositing sediment into fish streams, must be undertaken within a window of least risk to fish and fish habitat. Windows of least risk are designed to protect all fish species known to occur in a stream.
2. **If works are proposed outside the listed windows the proponent must engage a qualified professional** to assess species and habitats present and determine if a site specific plan can be developed to ensure compliance with the *Fisheries Act*.
3. The recommendations and the technical rational for the plan must be developed, signed and sealed by an appropriately qualified professional(s). A report must be maintained by the proponent in the event the works are monitored or a compliance inspection is conducted.
4. If impacts cannot be mitigated to avoid the potential for a harmful alteration, disruption or destruction to fish and/or fish habitat, and the proponent wishes to continue to seek approval for the operations to proceed, the proponent must proceed with the process for obtaining an authorization from the Federal Department of Fisheries and Oceans (outlined in section (h) below).
5. Notwithstanding the above, the fisheries timing window is not applicable if the stream channel is naturally dry (no flow), or frozen to the bottom, at the worksite and the instream activity will not adversely impact fish habitat (e.g. result in the introduction of sediment into fish habitat or damage to fish habitat).

<sup>1</sup>. A "stream" is defined in the *Water Act* as "a natural watercourse or source of water supply, whether usually containing water or not, ground water, and a lake, river, creek, spring, ravine, swamp and gulch". For the purposes of this document, the definition of "stream" includes all those watercourses that are considered to be fish habitat, including channelized streams, and ditches that are fish habitat.

### **Wildlife:**

1. Most species of wildlife are at their highest risk for disturbance during the period where they raise their young.
2. Some may be at risk during their dormant or hibernating period.
3. Wildlife observation records can be obtained through the Conservation Data Centre <http://www.env.gov.bc.ca/cdc> for species at risk.
4. Habitat Wizard <http://www.env.gov.bc.ca/habwiz/> provides observation records for other species.
5. The absence of an observation record does not confirm that a species is not present.
6. **A qualified professional may be able to determine minor variances to these least risk work windows based on the location in the region and species presence.**

**NOTE:** In all cases, minimize the amount of time the work site is in a disturbed state by completing work as quickly as possible, while considering worker safety and minimizing environmental risk.

***b) The minimum instream flow or the minimum flow of water that must remain in the stream while the change is being made,***

The natural rate of water flow must be maintained upstream and down stream of the worksite during all phases of instream activity.

***c) The removal of material from the stream or stream channel in connection with the change,***

1. In fish streams, the permanent removal of stable, naturally occurring material from the stream or stream channel is not permitted.
2. In non fish streams with a species at risk, or habitat of a species at risk, the permanent removal of stable, naturally occurring material from the stream or stream channel is not permitted.
3. In non-fish bearing streams without species at risk, the permanent or temporary removal of stable, naturally occurring material must be minimized and completed only as necessary to make the change in accordance with Part 7 of the *Water Regulation*.
4. The removal of material must not lead to stream channel instability or increase the risk of sedimentation into the watercourse.
5. Any spoil materials must be placed in a manner that ensures that sediment, or debris, does not enter the watercourse.
6. The spoil must be placed where it will not impact riparian habitats or impact habitats of species at risk

***d) The addition of substance, sediment, debris or material to the stream or stream channel in connection with the change,***

1. Instream activities must be conducted in the dry (no water present within the worksite) and the worksite must be isolated from water flowing in the stream channel.
2. Measures must be taken to ensure that no harmful material (e.g. fuel and other hydrocarbons, soil, road fill, or sediment), which could adversely impact water quality, fish and other aquatic life, species at risk and/or fish habitat(including riparian and or emergent vegetation), can enter the wetted perimeter as a result of the project activities.
3. All equipment must be located and operated outside of the wetted perimeter of the stream unless operated from a barge where deleterious substances will not enter the water and in a manner that will not result in grounding of the barge.
4. Equipment used in close proximity to the wetted perimeter must be free of deleterious material (e.g. hydrocarbons) and in good mechanical condition (e.g. no fuel or hydraulic leaks).
5. Erosion and sediment control structures are to be available onsite and utilized as necessary.
6. Do not work in weather conditions likely to substantially increase the risk of sediment introduction to the stream
7. If approved, beaver dam removal must occur slowly, a portion at a time, in order to minimize scouring and the addition of silt to downstream areas. A dam breach should normally not exceed 0.2 square metres in area (i.e., a typical breach could measure 1.0 metre x 20 centimetres in size). All material removed from a beaver dam must be disposed of in such a manner that it cannot re-enter the stream.

***e) The salvage or protection of fish or wildlife while the change is being made or after the change has been made,***

1. If dewatering of the worksite is necessary, fish salvage must occur on a fish-bearing stream prior to commencing works. A fish salvage permit must be obtained from the Ministry of Environment prior to commencing salvage activities  
([http://www.env.gov.bc.ca/pasb/applications/process/scientific\\_fish\\_collect.html](http://www.env.gov.bc.ca/pasb/applications/process/scientific_fish_collect.html))
2. If an area is de-watered as a result of beaver dam removal or modification and results in the stranding of fish, then these fish must be salvaged and returned to the stream.
3. Measures must be taken to ensure that operating equipment (e.g. water pumps) does not harm aquatic life.
4. **NOTE** – if you are undertaking an activity in a **red zone** based on known western ridged mussel (*Gonidea angulata*) occurrences (see LLP<sup>1</sup>), salvage mussels and relocate them to an areas with similar site conditions. Salvage must be undertaken by a qualified professional and must be consistent with the Department of Fisheries and Oceans (DFO) Salvage Protocol (contact MOE Ecosystems Staff to obtain this protocol). Follow up monitoring is to be conducted for 2 years post relocation and reports provided to the Habitat Officer annually.

***f) The protection of natural materials and vegetation that contribute to habitat or stream channel stability,***

Minimize disturbance to natural materials and vegetation that contribute to habitat or stream channel stability. In addition to fish habitats this includes protection of riparian habitats for wildlife.

***g) The restoration of the work site after the change has been made, and***

1. Complete restoration activities (including erosion control), as soon as possible following construction/disturbance.
2. Any disturbed areas must be restored to function as they did in their pre-disturbance condition (e.g. riparian areas, including grasslands). Appropriate native seed/plant/tree species must be used to restore the site to pre disturbance conditions.
3. Restoration must be completed in a manner that will minimize colonization and spread of invasive plants.

***h) The requirement to obtain an approval from the federal Department of Fisheries and Oceans in connection with the change.***

1. **Proponents are responsible for complying with the federal *Fisheries Act*.** No “harmful alteration, disruption, or destruction” (HADD) of fish habitat is authorized by this document.
2. If a qualified professional or Habitat Officer determines a potential HADD may occur as a result of the works, a review for formal “authorization” from DFO is required.
3. If requested, the proponent will need to provide the Habitat Officer more information (including assessments by qualified professionals) to determine if an “authorization” is required from DFO.

**NOTE: If you are constructing a dock** (as defined in the Okanagan Large Lake Foreshore Protocol<sup>1</sup>) **the following applies:**

(A) An approval from DFO is **not required** when:

1. The structure is proposed on a water body not indentified in the Okanagan Large Lake Foreshore Protocol<sup>(1)</sup> (LLP) or in a **no colour or yellow zone** (as identified in the LLP). In addition, dock construction and design must meet **all** of the conditions and measures outlined in the *Fisheries and Oceans Canada Pacific Region Operation Statement for Dock and Boathouse Construction in Fresh water System*<sup>2</sup> (ROS). If some of the conditions or measures of the ROS cannot be met then you must engage a qualified professional (fish biologist) to assist you in your design and construction to ensure a HADD does not occur.
2. The structure is proposed in a **red zone** (as identified in the LLP) where there is no shore spawning habitat, and a qualified professional (fish biologist) has been engaged to ensure all of the conditions and measures outlined in the ROS have been followed and that a HADD will not occur.



3. The structure is proposed in a **red zone** (as identified in the LLP), and
- All ROS conditions and measures will be adhered to, except for Measure 3 (i.e. dock is in a known spawning habitat); and
  - A qualified professional (fish biologist) has been engaged to ensure that a HADD will not occur, and
  - All of the design criteria identified below are adhered to.

Design Criteria:

- All instream works must occur during the least risk timing window;
- Piles are not to be placed within known or potential spawning substrates;
- The spanning structure (gangway) of spawning area must be no greater than 1.5m in width;
- The spanning structure (gangway) over the spawning area must be made with light penetrating materials;
- Dock must be no less than 0.5m above the high water mark, or the Geodetic Survey of Canada datum (if available);
- Batter boards are not to be used on the dock; and
- There will be no floating structures.

(B) An approval from DFO is **required** when:

- 1) A qualified professional or a Ministry of Environment Habitat Officer has indicated a **HADD** will likely occur as a result of your works, regardless of what lake or zone you are in.
- 2) The structure is proposed in a **black zone** on any of the lakes identified in the LLP (see section 6.1 of the LLP).
- 3) The structure is proposed in a **red zone** (as identified in the LLP) where there is no shore spawning habitat and the ROS will not be adhered to.
- 4) The structure is proposed in a **red zone** (as identified in the LLP) where there **is** shore spawning and ROS (except Measure 3), and all design criteria (listed above), will not be adhered to.

<sup>1</sup> Okanagan Region Large Lakes Foreshore Protocol <http://www.env.gov.bc.ca/okanagan/esd/ollp/ollp.html>

<sup>2</sup> Fisheries and Oceans Canada Pacific Region Operation Statement for Dock and Boathouse Construction in Fresh water Systems  
([http://www-heb.pac.dfo-mpo.gc.ca/decisionsupport/os/operational\\_statements\\_e.htm](http://www-heb.pac.dfo-mpo.gc.ca/decisionsupport/os/operational_statements_e.htm))

## Popowich, Tracy CSNR:EX

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**From:** Adam Neil [an@summit-environmental.com]  
**Sent:** Wednesday, September 12, 2012 11:04 AM  
**To:** Reimer, Shaun FLNR:EX  
**Subject:** RE: Dike Maintenance Application - Gary Klassen  
**Attachments:** Dike Maintenance Application\_Gary Klassen.pdf

Thanks Shaun

---

**From:** Reimer, Shaun FLNR:EX [<mailto:shaun.reimer@gov.bc.ca>]  
**Sent:** September 12, 2012 11:01 AM  
**To:** Adam Neil  
**Subject:** RE: Dike Maintenance Application - Gary Klassen

No attachment...

Shaun Reimer, P.Eng.

Hydrotechnical Engineer  
Ministry of Forests, Lands, & Natural Resource Operations  
102 Industrial Place  
Penticton, BC, V2A 7C8  
(250) 490-8229  
fax: (250) 490-2231

---

**From:** Adam Neil [<mailto:an@summit-environmental.com>]  
**Sent:** Wednesday, September 12, 2012 10:56 AM  
**To:** Reimer, Shaun FLNR:EX  
**Cc:** [gary@dorocco.com](mailto:gary@dorocco.com)  
**Subject:** Dike Maintenance Application - Gary Klassen

Hi Shaun,

Further to our discussion, I have attached a copy of the dike maintenance application for the Klassen Fish Hatchery Project near Oliver, BC. Please let me know if you need anything further. We are hoping to start construction asap once all of the regulatory approvals are received.

Regards,

**Adam Neil, B.Sc.**  
Environmental Scientist  
200-2800 29th Street  
Vernon, BC, Canada, V1T 9P9



Tel: 250.545.3672 Ext 257  
Fax: 250.545.3654


Web: [www.summit-environmental.com](http://www.summit-environmental.com)

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# DIKE MAINTENANCE ACT APPROVAL - APPLICATION FORM

## PART 1. CONTACT INFORMATION

|                                                                                                                                                                                                                                                                                                                        |                                     |                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Name of Applicant:<br><b>Gary Klassen</b>                                                                                                                                                                                                                                                                              |                                     | Applicant File Number (if applicable):                                                                         |
| Name of Applicant Contact or Agent:<br><b>Rod MacLean, P. Eng.<br/>Associated Engineering</b>                                                                                                                                                                                                                          |                                     |                                                                                                                |
| E-mail Address of Contact: <b>macleanr@ae.ca</b>                                                                                                                                                                                                                                                                       |                                     |                                                                                                                |
| Home Phone:<br>(      )                                                                                                                                                                                                                                                                                                | Business Phone:<br>( 250 ) 763-3638 | Fax Number:<br>( 250 ) 763-8880                                                                                |
| Mailing Address for Correspondence from Ministry of Environment:<br><br><b>Suite 610 - 1632 Dickson Ave.<br/>Kelowna, BC</b>                                                                                                                                                                                           |                                     |                                                                                                                |
| Applicant or Agent's Signature(s):<br>                                                                                                                                                                                                |                                     | Date: <b>July 6, 2012</b><br> |
| <b>NOTE:</b> The purpose of this form is to highlight this application's major points to allow Ministry staff to both understand the key aspects of the project and to prioritize the application accordingly. For more information on the processing of this application, please read the preceding Approval Process. |                                     |                                                                                                                |

## PART 2. EXISTING CONDITIONS

|                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Name of Dike and responsible Diking Authority (from Provincial Database)<br><b>Okanagan Flood Control System</b>                                  |
| Exact Location of Proposed Works (Chainage specified on dyke maps or UTM Coordinates)<br><b>Station 6+395. South of Vertical Drop Structure 4</b> |
| Adjacent Water Body(source of flooding):<br><b>Okanagan River/Shippet Inlet</b>                                                                   |

## FOR OFFICE USE ONLY

|                                                                        |                               |
|------------------------------------------------------------------------|-------------------------------|
| Date Ministry Received Application:                                    | Diking Authority File Number: |
|                                                                        | Priority/Deadline:            |
| Preliminary Review and the Initial Applicant Consultation Complete on: |                               |
| _____ (date) Comments:                                                 |                               |

## DIKE MAINTENANCE ACT APPROVAL - Application Form

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>PART 3. PROPOSED WORKS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                       |
| Briefly describe your proposed works:<br><b>New pipeline, outlet and structure for new fish farm.</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                       |
| Provide a proposed construction schedule & note any constraints/milestones if important:<br><b>Summer, 2012.</b>                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                       |
| Briefly describe your approach to ensure the integrity of existing flood protection system(s) is not compromised by the installation of the works: Construction will be consistent with the Provincial Design and Construction Guide. Design includes all necessary armouring, shaping and seepage controls.                                                                                                                                                                                                                |                                                                       |
| Have you referred to the 'Provincial Design and Construction Guide' in your design? <b>Yes</b> or No (circle one)                                                                                                                                                                                                                                                                                                                                                                                                           | Are there any exceptions to this guide? Yes or <b>No</b> (circle one) |
| If yes, how and why have you deviated?<br><div style="text-align: center; padding: 20px;">N/A</div>                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                       |
| <b>PART 4. REQUIRED ATTACHMENTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                       |
| Check off attachments to this application form: <input checked="" type="checkbox"/> General Location Plan <input checked="" type="checkbox"/> Detailed Site Plan<br><input checked="" type="checkbox"/> Preliminary Design Drawings and Specifications <input checked="" type="checkbox"/> Design Brief <input checked="" type="checkbox"/> Previous correspondence regarding this site from the Ministry<br><div style="text-align: center; padding: 5px;">See attached mitigation plan and environmental assessment</div> |                                                                       |
| If any required attachments are not included, please explain why.<br><br>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                       |
| Have you included attachments not listed above? Please list them below.<br><br>                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                       |
| <b>Note:</b> Please forward a copy of this application to the appropriate Deputy Inspector of Dikes office as specified and to the Diking Authority responsible for the dike's operation and maintenance (see database) <input type="checkbox"/> Please confirm that a copy of this application has been forwarded to the Diking Authority                                                                                                                                                                                  |                                                                       |



June 28, 2012

File: 2012-2040.001

Gary Klassen  
Dorocco Developments Ltd.  
Box 1000  
Osoyoos, B.C.  
V0H 1V0

CC:

Debra Hughes (DFO) [debra.hughes@dfo-mpo.gc.ca](mailto:debra.hughes@dfo-mpo.gc.ca)

Neil Goeller (MFLNRO) [neil.goeller@gov.bc.ca](mailto:neil.goeller@gov.bc.ca)

**Re: OKANAGAN RIVER EFFLUENT DISCHARGE PIPE: MITIGATION PLAN AND ENVIRONMENTAL ASSESSMENT**

Dear Mr. Klassen:

Summit Environmental Consultants Inc. (Summit) is pleased to provide this Mitigation Plan (MP) and Environmental Assessment (EA) for construction of an effluent discharge pipe adjacent to the Okanagan River. The effluent discharge pipe is part of an Arctic Char fish hatchery proposed by Dorocco Developments Ltd. (Dorocco) near Oliver, B.C. Dorocco has previously submitted a Section 9 Application and DFO Review for this project. The Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) and Fisheries and Oceans Canada (DFO) have requested additional information on the project design, mitigation plan and environmental effects, as they relate to construction of the effluent discharge pipe, to supplement Dorocco's permit applications<sup>1,2</sup>.

This letter provides a description of the proposed project and environmental baseline within the project area. A proposed mitigation plan is presented below with an assessment of residual effects on the environment. This letter only addresses construction of the effluent discharge pipe.

## **1 PROJECT DESCRIPTION**

Dorocco is proposing an Arctic Char fish hatchery near Oliver, B.C (Figure 1). Project infrastructure will include a hatchery facility, waste settling basin, effluent discharge pipe and outlet structure (Figure 2). The hatchery facility and waste settling basin will be located in a private field 31 m and 15 m, respectively, away from any watercourses and environmentally sensitive areas. The effluent discharge pipe will cross the Shippet Oxbow and flood dike, and the outlet structure will be located on the bank of the Okanagan River (Figure 2 and 3).

---

<sup>1</sup> Personal communication. Neil Goeller (MFLNRO). June 13, 2012.

<sup>2</sup> Personal communication. Debra Hughes (DFO). June 12, 2012.

The effluent discharge pipe will be constructed of sections of PVC and steel pipe (300 mm diameter) connected together by couplings and set in precast cement structures. The pipe will be buried in a trench from its connection to the waste settling basin to the outlet structure, with the exception of that section which will overhang the Shippet Oxbow. Generally, the trench will be about 1 to 2 m wide by 1 m deep. A 10 m wide by 3 m deep trench will be required to install the pipe across the flood dike (Figure 2); additional details on construction of this section of pipe will be provided in the Dike Maintenance Application for this project. The outlet structure will be precast in cement and set into place on the bank of the Okanagan River.

## 2 ENVIRONMENTAL BASELINE

Summit completed a field assessment of the project area on June 15, 2012. Riparian areas adjacent to the Shippet Oxbow and Okanagan River are largely disturbed, mainly due to the flood dike and adjacent farm land (Photos 1 to 3). Riparian species present in these areas consist of Sumac (*Rhus Spp.*), Willow (*Salix spp.*), Wylch Elm (*Ulmus glabra*) and Cattail (*Typha spp.*). The riparian areas adjacent to the Shippet Oxbow are about 3 m and 7 m wide on the left and right banks, respectively. The width of the riparian area on the right bank of the Okanagan River is about 2 m.

The bankfull width and height of the Okanagan River is about 50 m and 2.5 m, respectively (Figure 2). Flow in the Okanagan River was in excess of 70 m<sup>3</sup>/s during the field assessment. The banks of the Okanagan River are entirely composed of large rip-rap since this section of river has been channelized (Photo 4). Habitat suitability and availability is low for juvenile fish and high for adults. The depth and velocity of the river in this area is relatively high, with little cover, velocity refuge and habitat complexity. Juvenile rearing habitat is likely limited to the margins of the channel, while adult fish would utilize the entire width of the river. A summary of fish species present in the Okanagan River is presented in Table 1<sup>3</sup>.

The bankfull width and height of the Shippet Oxbow is about 8 m and 2 m, respectively (Figure 2). During the field assessment the wetted width and depth of the oxbow was about 1.5 m and 0.2 m, respectively. There was minimal flow (< 20 lps) through the oxbow during this assessment because the inlet was closed due to the risk of flooding. The banks and bed of the oxbow are composed of fines and organic material (Photos 5). Habitat suitability and availability is moderate for juvenile fish and low for adults within this area of the Shippet Oxbow. There is a general lack of habitat complexity and cover in these areas. The section of Shippet Oxbow adjacent to the project area is an inlet channel with high value habitat located further downstream. All fish species inhabiting the Okanagan River can access the Shippet Oxbow.

An overview of the project area showing riparian areas, watercourses, project infrastructure and construction footprints is provided in Figure 4.

---

<sup>3</sup> Ministry of Environment. 2012. Fisheries Information Summary System. Accessed online June 26, 2012.

**Table 1. Fish species present in the Okanagan River.**

| Common Name         | Scientific Name                  |
|---------------------|----------------------------------|
| Prickly Sculpin     | <i>Cottus asper</i>              |
| Mottled Sculpin     | <i>Cottus bairdi</i>             |
| Sculpin (General)   | <i>Cottus spp.</i>               |
| Chinook Salmon      | <i>Oncorhynchus tshawytscha</i>  |
| Chiselmouth         | <i>Acrocheilus alutaceus</i>     |
| Carp                | <i>Cyprinus carpio</i>           |
| Brook Trout         | <i>Salvelinus fontinalis</i>     |
| Kokanee             | <i>Oncorhynchus nerka</i>        |
| Largemouth Bass     | <i>Micropterus salmoides</i>     |
| Longnose Sucker     | <i>Catostomus catostomus</i>     |
| Northern Pikeminnow | <i>Ptychocheilus oregonensis</i> |
| Pumpkinseed         | <i>Lepomis gibbosus</i>          |
| Rainbow Trout       | <i>Oncorhynchus mykiss</i>       |
| Redside Shiner      | <i>Richardsonius balteatus</i>   |
| Sockeye Salmon      | <i>Oncorhynchus nerka</i>        |
| Smallmouth Bass     | <i>Micropterus dolomieu</i>      |
| Steelhead           | <i>Oncorhynchus mykiss</i>       |
| Sucker (General)    | <i>Catostomus spp.</i>           |
| Tench               | <i>Tinca tinca</i>               |
| Yellow Perch        | <i>Perca flavescens</i>          |

### 3 MITIGATION PLAN

Construction works will be completed by Dorocco and/or a designated contractor. All project works will be completed within the reduced risk instream work window for the Okanagan River (July 22 to August 31) according to *Standards and Best Management Practices for Instream Works*<sup>4</sup>.

Excavation, infilling and re-grading will be completed using an excavator. These works will be completed in the dry from the top of bank in sensitive areas adjacent to watercourses. Water level elevations in the Shippit Oxbow and Okanagan River will be far below the trench elevation during the construction period. In the event that water levels are not below this critical elevation, works will be postponed until water levels recede. A double layer silt fence will be installed between construction areas and watercourses to prevent erosion and sedimentation. This fencing will remain in place until these areas are stabilized well after the construction and restoration periods.

Construction materials and equipment required for the project will be stored in a designated location well away from any watercourses (>30 m). Material (sediment and debris) removed from the trench will also be stockpiled next to the trench, and not allowed to slough back into the trench or adjacent water courses. Excess material will

<sup>4</sup> Ministry of Water, Land and Air Protection (WLAP). 2004. Standards and Best Management Practices for Instream Works

be removed from the site and disposed of in an appropriate location and timely manner. Equipment will be refuelled from a tidy tank in a designated location well away from any watercourses (i.e. > 30 m).

All equipment and machinery will be in good operating condition, free of leaks, excess oil, and grease. Equipment and machinery will be checked prior to entering the project area and frequently during construction. We recommend that hydraulic machinery have environmentally sensitive hydraulic fluids that are non-toxic to aquatic life and that are readily or inherently biodegradable. A spill contaminant kit will be readily accessible onsite in the event of a release of deleterious substance to the environment. All construction personnel will be trained in spill containment and responsible for responding to a spill. Spills will be immediately reported to the Provincial Emergency Program.

Precast cement structures required for the pipe connections and outlet structure will be constructed in a designated area well away from any watercourses. Structures will be completely cured before placement so there is no risk of spills or leaching. These structures will be lifted into place using an excavator.

Environmental monitoring will be completed on a full time basis by a Qualified Environmental Professional (QEP) to ensure compliance with BMPs and regulatory permits. A pre-construction meeting will be held to discuss construction activities, mitigation measures and environmental concerns. All construction personnel will be aware of environmental concerns onsite and the Section 9 *Water Act* approval will be kept on site at all times. The EM will have authority to stop or postpone works if there any environmental concerns. An environmental monitoring report will be completed and submitted to the regulatory agencies following project completion.

#### **4 SITE RESTORATION**

Temporarily disturbed riparian areas will be restored to a pre-disturbance state immediately following the construction phase. Native plant species identified in Section 2 will be planted at a density of 1 plant per 1 m<sup>2</sup>. Diversity of planting will mimic the natural surroundings. Native grass seed will also be broadcast in disturbed areas. Channel banks will be re-graded to a pre-disturbance state using the same material which was removed.

#### **5 ENVIRONMENTAL EFFECTS**

The total temporary disturbance of riparian and instream areas will be 158 m<sup>2</sup> and 12 m<sup>2</sup>. These values represent a 4 m wide construction right-of-way along the pipe alignment. Instream areas are considered those areas of the channel bank below the high-water elevation in the Shippet Oxbow and Okanagan River. The total permanent loss in instream areas for the project is 4 m<sup>2</sup> which consists of the outlet structure located on the bank of the Okanagan River. A summary of temporary and permanent disturbances of riparian and instream areas is presented in Table 2, with an overview of these areas provided in Figure 4.



June 28, 2012  
Gary Klassen  
Dorocco Developments Ltd.  
- 5 -

**Table 2. Summary of project disturbances.**

| Watercourse    | Disturbances (m <sup>2</sup> ) |           |           |           |
|----------------|--------------------------------|-----------|-----------|-----------|
|                | Instream                       |           | Riparian  |           |
|                | Temporary                      | Permanent | Temporary | Permanent |
| Okanagan River | 4                              | 4         | 60        | -         |
| Shippet Oxbow  | 8                              | -         | 98        | -         |

The proposed project will have short term minor impacts on riparian areas if the mitigation plan noted above is followed. As previously mentioned, restoration of these areas will commence immediately following the construction period. Impacts on water quality are not expected since all works will be completed in the dry and isolated using silt fencing. Temporary disturbance of instream areas are not expected to have an effect on fish or other aquatic biota since these areas will be dry during construction.

The permanent loss of instream areas under the footprint of the outlet structure is not expected to adversely affect fish. This area is typically dry during most periods of the year and is only wetted during extreme high flow events. Moreover, this area is entirely composed of rip-rap which provides little habitat value for fish. Juvenile fish may use these areas to escape high velocities; however, there is abundant like-value habitat through this area of the Okanagan River so minor losses will have a negligible effect. The effluent discharge pipe will remain above the high-water mark in the Shippet Oxbow so there will be no adverse effects.

Please feel free to contact me if you have any questions or comments.

Yours truly,



Adam Neil  
Environmental Scientist

**Attachments:**

Figures  
Photographs

June 28, 2012  
Gary Klassen  
Dorocco Developments Ltd.  
- 6 -



**Photo 1.** Okanagan River right bank riparian area.



**Photo 2.** Shippet Oxbow right bank riparian area.



June 28, 2012  
Gary Klassen  
Dorocco Developments Ltd.  
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**Photo 3.** Shippet Oxbow left bank riparian area.



**Photo 4.** Okanagan River right bank.

June 28, 2012  
Gary Klassen  
Dorocco Developments Ltd.  
- 8 -



**Photo 5.** Shippet Oxbow left and right banks.



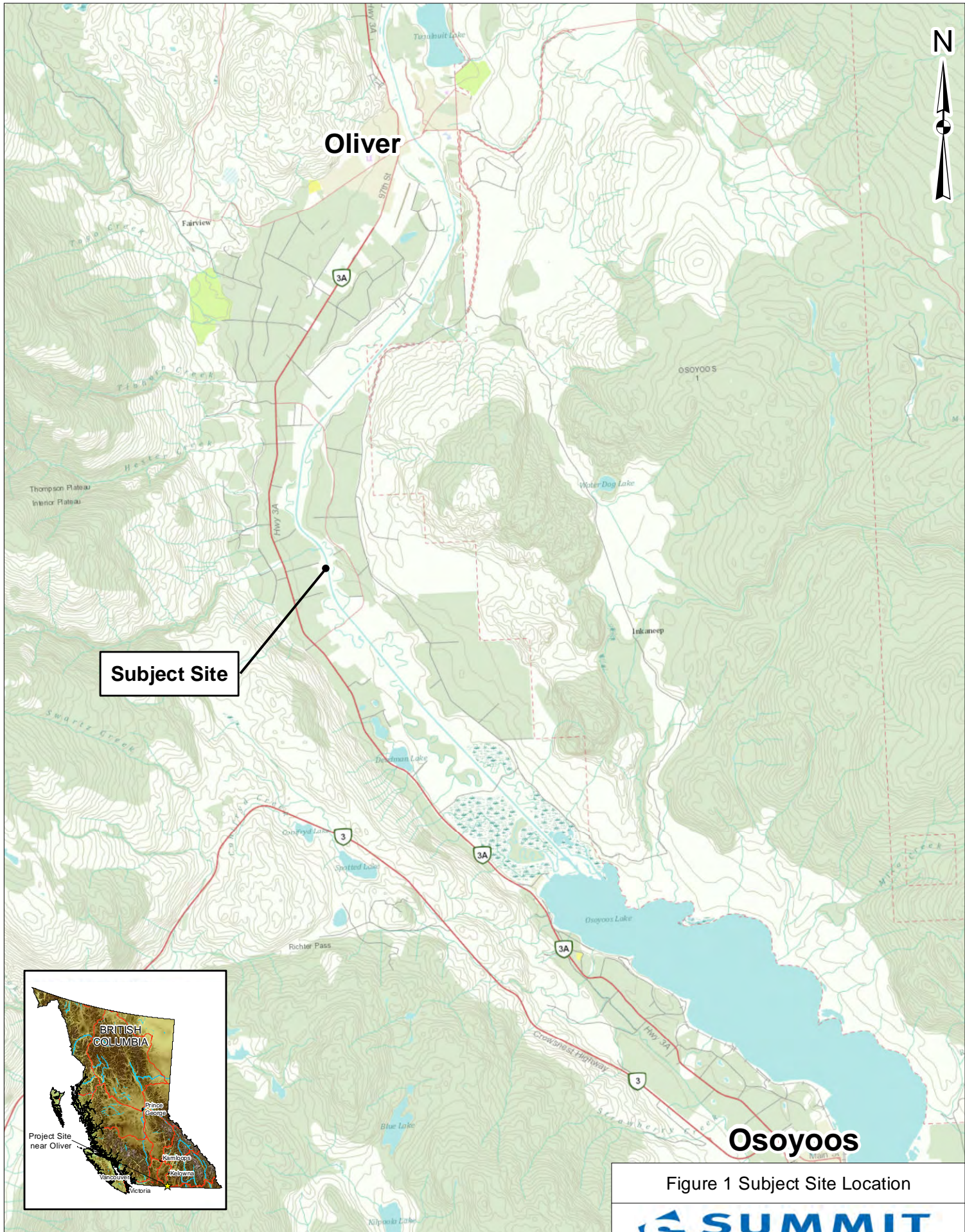
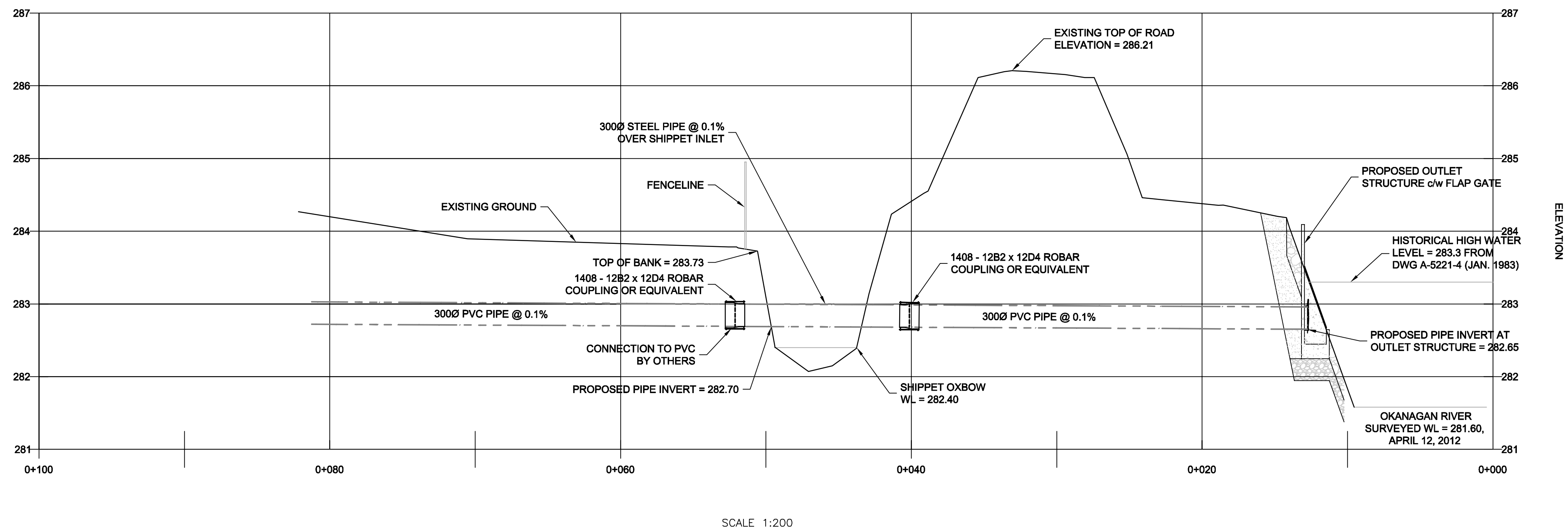
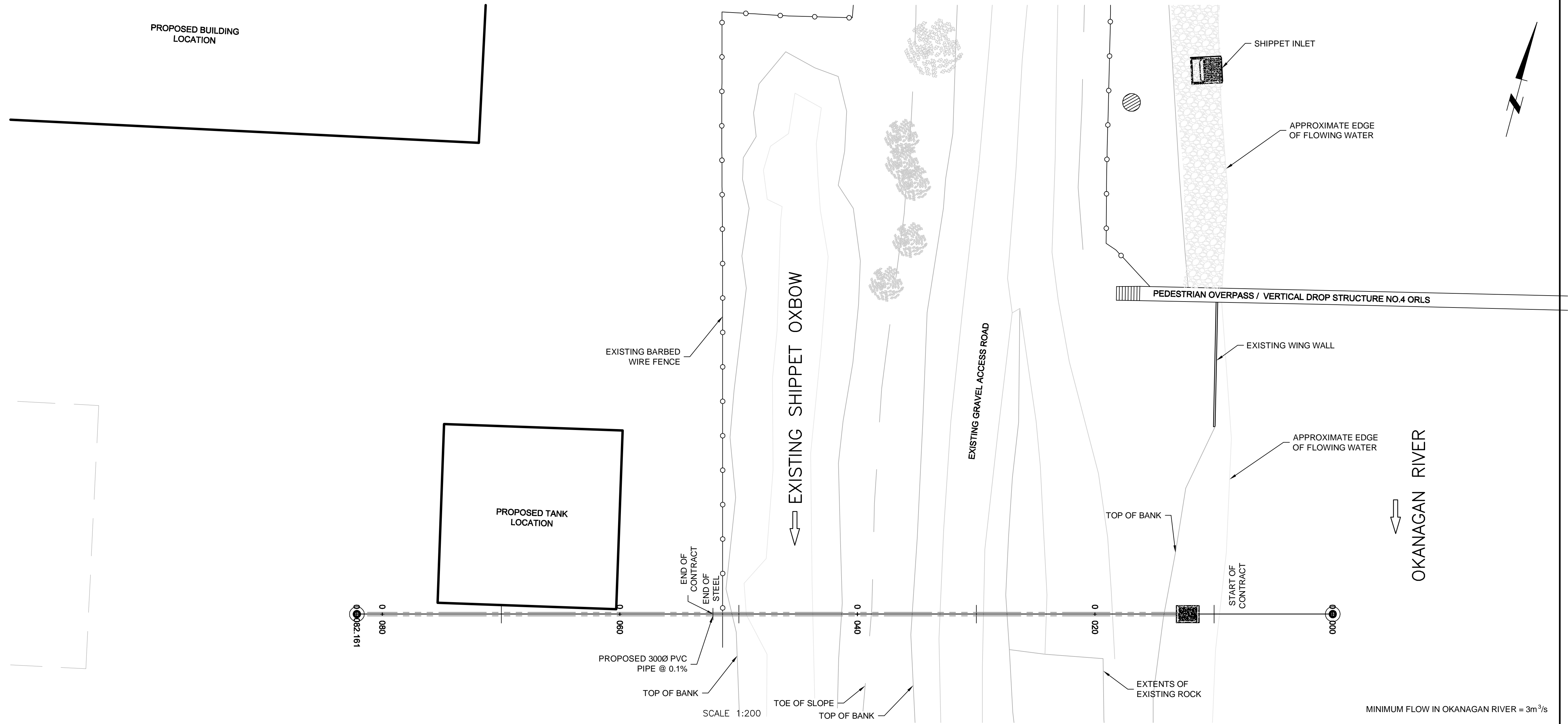


Figure 1 Subject Site Location



This Drawing Is For The Use Of The Client And Project Indicated  
No Representations Or Any Kind Are Made To Other Parties

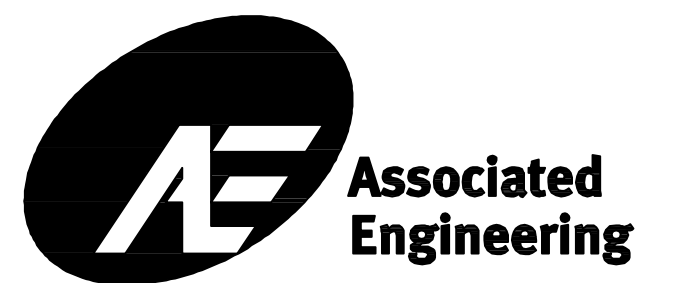
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DATE: 4/25/2012 2:54:28 PM User: jason.somers



**NOTE 1**

SHRUBS TO BE SET ASIDE AND REPLACED UPON COMPLETION WHERE POSSIBLE

|             |                |          |         |                     |
|-------------|----------------|----------|---------|---------------------|
|             |                |          |         |                     |
|             |                |          |         |                     |
| A           | 2012/04/25     | RM       | TWS     | ISSUED FOR APPROVAL |
| NO.         | DATE           | ENG.     | BY      | SUBJECT             |
| REVISIONS   |                |          |         |                     |
| SCALE       |                | AS SHOWN |         |                     |
| PROJECT NO. | 20122040       |          | INITIAL | DATE                |
| DRAWN       | TWS            |          |         | 2012/04/16          |
| DESIGNED    | TWS            |          |         | 2012/04             |
| CHECKED     | RM             |          |         | 2012/04             |
| APPROVED    | RM             |          |         | 2012/04             |
| DATE        | April 20, 2012 |          |         |                     |



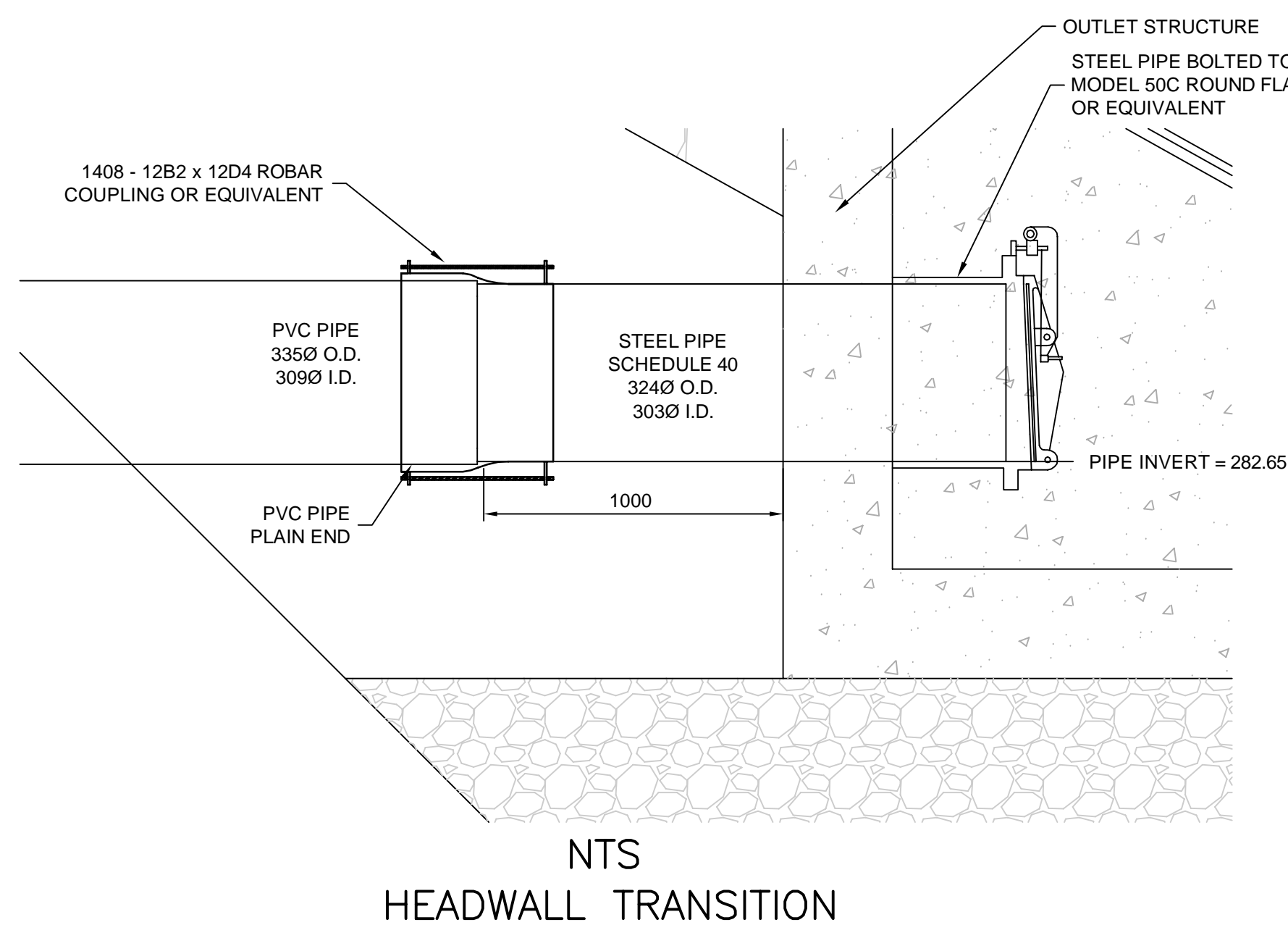
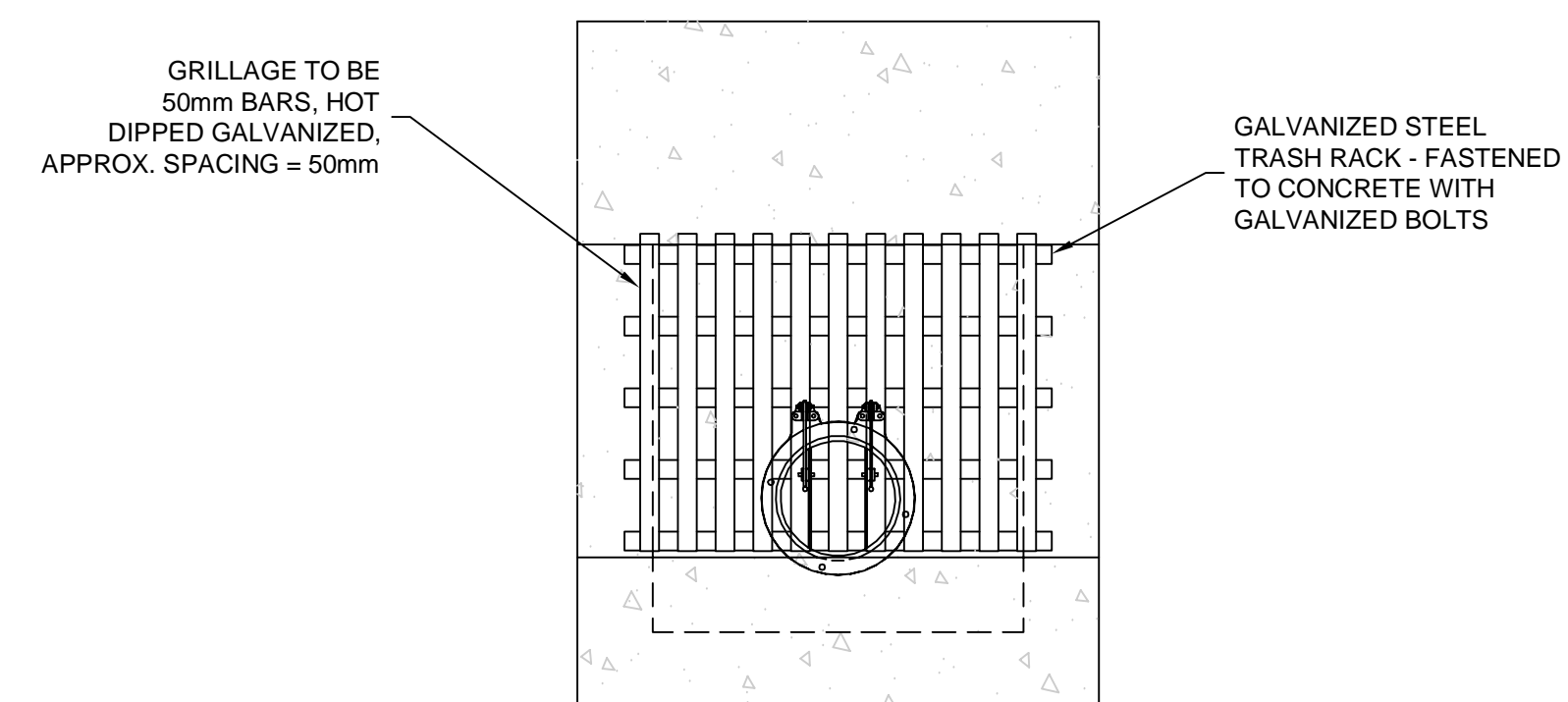
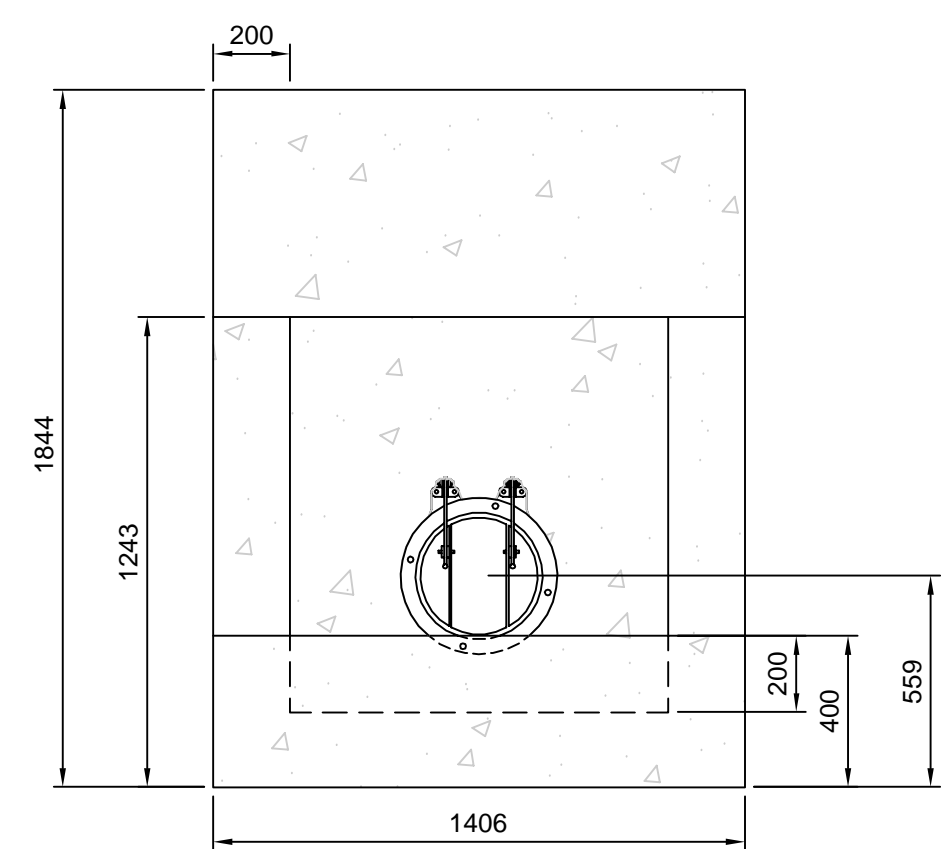
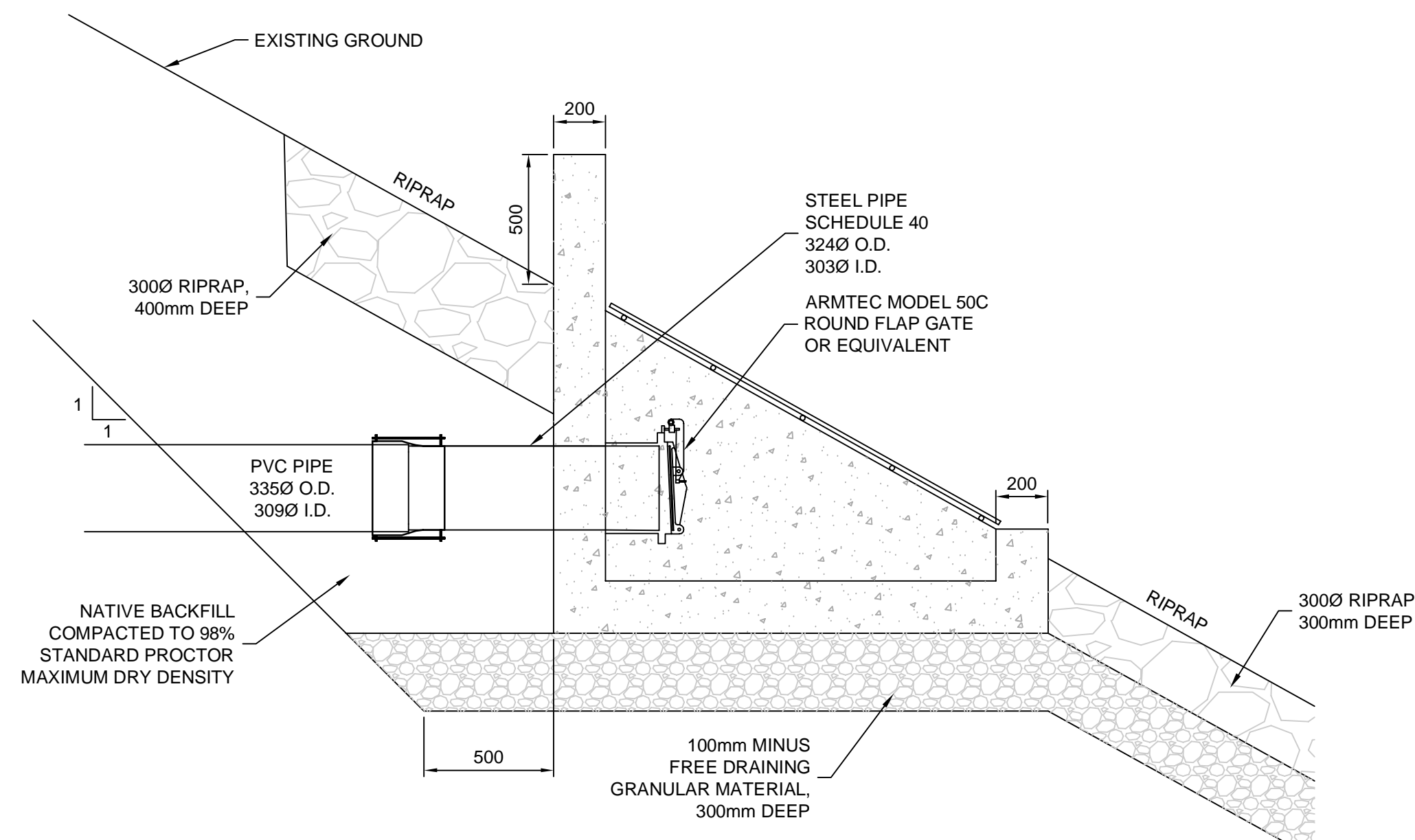
DOROCO DEVELOPMENTS  
LTD.

OKANAGAN RIVER  
KLASSEN OUTLET  
STRUCTURE DESIGN  
NEAR VDS No. 4

**Figure 2**  
KLASSEN OUTLET PLAN & PROFILE

| DRAWING NUMBER | REV. NO. | SHEET |
|----------------|----------|-------|
| 2040-1-101     | A        | 1 2   |

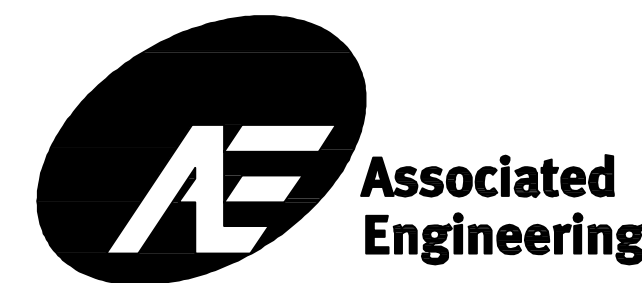
This Drawing Is For The Use Of The Client And Project Indicated  
No Representations Or Any Kind Are Made To Other Parties



NOTES:  
(1) ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE.

|                             |  |
|-----------------------------|--|
| ASSOCIATED ENGINEERING      |  |
| QUALITY MANAGEMENT SIGN-OFF |  |
| Signature: _____            |  |
| Date: _____                 |  |

|             |                |          |         |                     |
|-------------|----------------|----------|---------|---------------------|
|             |                |          |         |                     |
|             |                |          |         |                     |
|             |                |          |         |                     |
| A           | 2012/04/25     | RM       | TWS     | ISSUED FOR APPROVAL |
| NO.         | DATE           | ENG.     | BY      | SUBJECT             |
| REVISIONS   |                |          |         |                     |
| SCALE       |                | AS SHOWN |         |                     |
| PROJECT NO. | 20122040       |          | INITIAL | DATE                |
| DRAWN       | TWS            |          |         | 2012/04/16          |
| DESIGNED    | TWS            |          |         | 2012/04             |
| CHECKED     | RM             |          |         | 2012/04             |
| APPROVED    | RM             |          |         | 2012/04             |
| DATE        | April 20, 2012 |          |         |                     |



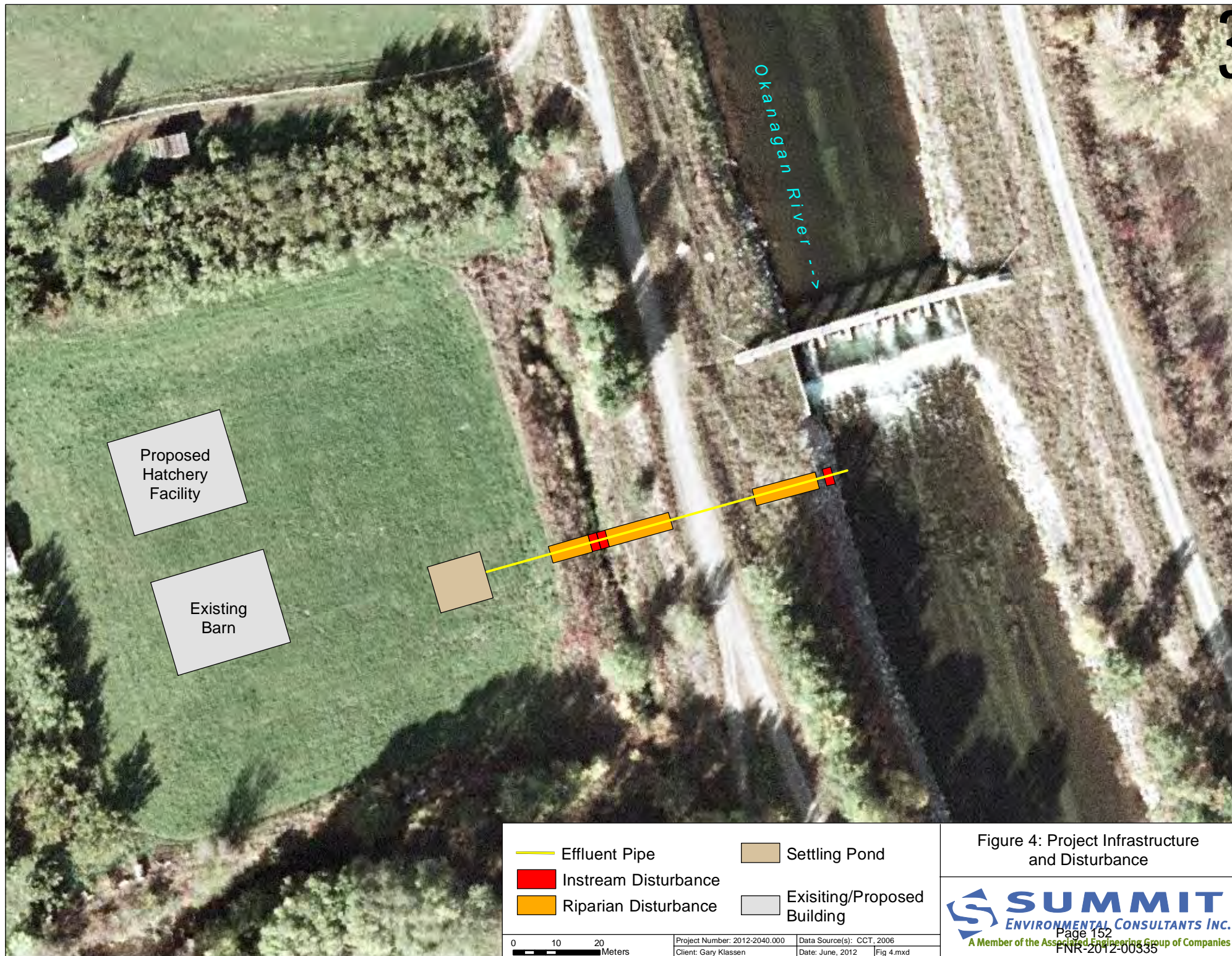
DOROCO DEVELOPMENTS LTD.

OKANAGAN RIVER  
KLASSEN OUTLET  
STRUCTURE DESIGN  
NEAR VDS No. 4

Figure 3.  
CONSTRUCTION DETAILS

|                |          |       |
|----------------|----------|-------|
| DRAWING NUMBER | REV. NO. | SHEET |
| 2040-1-102     | A        | 2/2   |







## Popowich, Tracy CSNR:EX

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**From:** Barlas, Sajid A ENV:EX  
**Sent:** Wednesday, September 19, 2012 3:50 PM  
**To:** White, Tara FLNR:EX; Nield, Lora M FLNR:EX; Askey, Paul FLNR:EX  
**Subject:** FW: Char Fish Farm -FYI

---

**From:** Manning, Michelle [<mailto:Michelle.Manning@dfo-mpo.gc.ca>]  
**Sent:** Wednesday, September 19, 2012 3:38 PM  
**To:** Barlas, Sajid A ENV:EX  
**Cc:** Cavadini, Roger ENV:EX  
**Subject:** RE: Char Fish Farm

Hi Sajid and Roger,

Just a quick email to let you know that DFO has approved the issuance of the aquaculture licence to Mr. Klassen. The licence will be generated and mailed to him shortly.

Regards,

### **Michelle Manning**

Aquaculture Management Coordinator | Coordinatrice - Gestion de l'aquaculture  
Aquaculture Management Division | La Division de Direction de l'aquaculture  
Fisheries and Oceans Canada | Pêches et Océans Canada  
1965 Island Diesel Way Nanaimo BC V9S 5W8  
Government of Canada | Gouvernement du Canada  
Telephone | Téléphone [250-754-0409](tel:250-754-0409)  
Facsimile | Télécopieur [250-754-0391](tel:250-754-0391)  
[michelle.manning@dfo-mpo.gc.ca](mailto:michelle.manning@dfo-mpo.gc.ca)  
[www.pac.dfo-mpo.gc.ca](http://www.pac.dfo-mpo.gc.ca)

---

**From:** Barlas, Sajid A ENV:EX [<mailto:Sajid.Barlas@gov.bc.ca>]  
**Sent:** September 17, 2012 1:51 PM  
**To:** 'Donna Butler'  
**Cc:** Cavadini, Roger ENV:EX; White, Tara FLNR:EX; Manning, Michelle  
**Subject:** RE: Char Fish Farm

Hi Donna,

The primary approval for the proposed Char Fish Farm will be given by DFO Canada - an aquaculture licence issued by the minister charged with the administration of the *Fisheries Act*. The contact info for DFO contact person is:

### **Michelle Manning**

Aquaculture Management Coordinator | Coordinatrice - Gestion de l'aquaculture  
Aquaculture Management Division | La Division de Direction de l'aquaculture  
Fisheries and Oceans Canada | Pêches et Océans Canada  
1965 Island Diesel Way Nanaimo BC V9S 5W8  
Government of Canada | Gouvernement du Canada  
Telephone | Téléphone [250-754-0409](tel:250-754-0409)

Province's role is limited to registration for exemption for waste discharge, under the Land-Based Finfish Waste Control Regulation of the Environmental Management Act.

The proponent has submitted a registration for the proposed farm but it has not been processed by my staff as it lacks aquaculture licence number, which (to my knowledge) has not yet been issued.

Please let me know if you need additional information or have any questions.

Sajid Barlas

---

**From:** Donna Butler [<mailto:dbutler@rdos.bc.ca>]  
**Sent:** Friday, September 14, 2012 11:52 AM  
**To:** Barlas, Sajid A ENV:EX  
**Subject:** Char Fish Farm

Hi Sajid, this message was sent to Tara, who is out of the office. Can you assist?

Hi Tara, there have been some concerns expressed at the Regional Board about the environmental impact of the proposed Klassen fish farm. Can you confirm that an application has been made to your agency or that you are working with the owner? Secondly, please provide the name of Manager of this section of the Ministry (we will be inviting him/her to speak to the Board).

**Hewison, Melinda FLNR:EX**

---

**From:** Hewison, Melinda FLNR:EX  
**Sent:** Thursday, September 20, 2012 9:44 AM  
**To:** Marshall, Vicki FLNR:EX  
**Subject:** Follow up for ITC Application for Dorocco Development Ltd. - KLASSEN, Gary.78688  
**Attachments:** 20120920093523.pdf

Hi Vicki,

Just going through Linling's pending folder and following up on ongoing applications.

This permit was applied for on May 8<sup>th</sup>, 2012 and the client had proposed for a transfer date of June 14<sup>th</sup>, 2012 to transfer 5000 Arctic Char eggs and/or milt from Icy Waters Ltd. in Whitehorse YK to a hatchery in Oliver BC. Could you please advise the status of this application? Has it been denied or should I contact the client and ask if he would still like the permit with a different transfer date?

Thank you,

Melinda Hewison  
Permit Officer,  
BC Permit & Authorization Service Bureau  
Victoria Office: (250) 952-0799

## Hewison, Melinda FLNR:EX

---

**From:** Choi, Shirley [Shirley.Choi@dfo-mpo.gc.ca]  
**Sent:** Monday, September 24, 2012 9:55 AM  
**To:** Hewison, Melinda FLNR:EX  
**Cc:** Hagel, Lynn J FLNR:EX  
**Subject:** FW: Application ITC Arctic Char  
**Attachments:** ITC Application Dec 2012.pdf

**Categories:** To Do

Hi Melinda,

Please find attached an application to transfer Arctic Char for payment processing. I haven't forwarded the application to Vicki for review yet, so please send it to her (with a cc to me) once you have collected the payment.

Thank you,

**Shirley Choi**

A/Governance Officer  
Aquaculture Management Division  
Fisheries Management  
Fisheries and Oceans Canada

200-401 Burrard St.  
Vancouver, BC V6C 3S4  
Tel. (604) 666-5519  
Fax. (604) 666-1076

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**From:** Gary Klassen [<mailto:gary@dorocco.com>]  
**Sent:** 2012-September-21 6:14 PM  
**To:** Martin, Stacey; Choi, Shirley; XPAC FAM ITC  
**Subject:** Application ITC Arctic Char

Hi

Please find attached application to transfer eggs in the end of November 2012 from Icy Waters Whitehorse.

Can someone confirm this application is appropriately completed?

My new DFO License is AQFW 6673 2012.

Gary Klassen

1-250-485-7408

**Hewison, Melinda FLNR:EX**

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**From:** Hewison, Melinda FLNR:EX  
**Sent:** Thursday, September 27, 2012 12:37 PM  
**To:** Marshall, Vicki FLNR:EX  
**Cc:** Woodruff, Patricia ENV:EX; 'Choi, Shirley'  
**Subject:** REVIEW - ITC Permit - KLASSEN, Gary.82531 - Dorocco Developments Ltd.  
**Attachments:** NA12-82531-KLASSEN-DOROCCO DEVELOPMENTS LTD.doc; 20120927123426.pdf

Hi Vicki,

Please find attached ITC permit application and draft permit for Gary Klassen to transport 10,000 Arctic Char (*Salvelinus alpinus*) eggs and/or milt from Whitehorse YT to the aquaculture site located at 8928 Road 17 in Oliver BC. The fish will be landing in Penticton Airport and being transported from there to their destination – as I am still unsure of how to indicate out-of-province origins, could you please review the permit description and confirm if I have indicated this correctly?

The proposed Transfer Date is **November 2012**.

Please let me know if you need anything else.

Thank you,

Melinda Hewison  
Permit Officer

Victoria Office: (250) 387-2928  
or Toll Free Inside BC: 1-866-433-7272  
Permit and Authorization Services Bureau  
Fish, Wildlife & Habitat Management Branch  
PO Box 9372, Stn Prov Govt  
Victoria BC V8W 9M3  
Fax: 250-387-1814

## Hewison, Melinda FLNR:EX

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**From:** Hewison, Melinda FLNR:EX  
**Sent:** Thursday, October 4, 2012 9:05 AM  
**To:** 'Choi, Shirley'  
**Cc:** Marshall, Vicki FLNR:EX  
**Subject:** FW: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char  
**Attachments:** NA12-82531-KLASSEN-DOROCCO DEVELOPMENTS LTD.doc; 20120927123426.pdf

Hi Shirley,

Please find attached one (1) ITC permit with Provincial approval for Gary Klassen to transport 10,000 Arctic Char (*Salvelinus alpinus*) eggs and/or milt from Whitehorse YT to the aquaculture site located at 8928 Road 17 in Oliver BC. The fish will be landing in BC at the Penticton Airport and then transported to their destination.

The proposed Transfer Date is **November 2012**.

Please let me know if you need anything else.

Thank you,

Melinda Hewison  
Permit Officer

Victoria Office: (250) 387-2928  
or Toll Free Inside BC: 1-866-433-7272  
Permit and Authorization Services Bureau  
Fish, Wildlife & Habitat Management Branch  
PO Box 9372, Stn Prov Govt  
Victoria BC V8W 9M3  
Fax: 250-387-1814

---

**From:** Marshall, Vicki FLNR:EX

**Sent:** Wednesday, October 3, 2012 4:22 PM

**To:** Askey, Paul FLNR:EX; Hewison, Melinda FLNR:EX; Woodruff, Patricia ENV:EX

**Subject:** Re: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

Yes, Thanks!

Approved: Melinda

Vicki

---

**From:** Askey, Paul FLNR:EX

**Sent:** Wednesday, October 03, 2012 03:51 PM

**To:** Marshall, Vicki FLNR:EX

**Subject:** RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

Yes, if the licence is issued, then transport of sterile eggs is not an issue.

---

**From:** Marshall, Vicki FLNR:EX

**Sent:** Wednesday, October 3, 2012 3:19 PM

**To:** Askey, Paul FLNR:EX

**Subject:** FW: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

**Importance:** High

Okay with you in Tara's absence?

---

**From:** Choi, Shirley [mailto:Shirley.Choi@dfo-mpo.gc.ca]

**Sent:** Wednesday, October 3, 2012 11:15 AM

**To:** Choi, Shirley; Higgins, Mark; Keith, Ian; Sheppard, Mark; Woodruff, Patricia ENV:EX; Marshall, Vicki FLNR:EX

**Cc:** Martin, Stacey

**Subject:** RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

**Importance:** High

Hi All,

Just wanted to follow up on this one, do we need more time or further discussion at our next meeting? The deadline for response is tomorrow.

Thanks!  
Shirley

---

**From:** Choi, Shirley

**Sent:** 2012-September-24 12:50 PM

**To:** Higgins, Mark; Keith, Ian; Sheppard, Mark; 'Woodruff, Patricia ENV:EX'; [vicki.marshall@gov.bc.ca](mailto:vicki.marshall@gov.bc.ca)

**Cc:** Martin, Stacey

**Subject:** ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

Hi All,

Please find attached an application for the transfer of 10,000 Arctic Char eggs from Icy Waters Ltd. in Whitehorse, Yukon to Oliver, BC. Mr. Klassen's Aquaculture licence was issued to him last week after thorough review of escapement prevention measures, and the use of eggs from a certified disease free facility and importing only triploid shocked eggs.

Mark, I believe you mentioned that the source is FHPR certified, does this need a Fish Health Certificate?

Please provide your comments by **October 4, 2012.**

Thank you,

**Shirley Choi**

A/Governance Officer  
Aquaculture Management Division  
Fisheries Management  
Fisheries and Oceans Canada

200-401 Burrard St.  
Vancouver, BC V6C 3S4  
Tel. (604) 666-5519  
Fax. (604) 666-1076

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**From:** Gary Klassen [mailto:[gary@dorocco.com](mailto:gary@dorocco.com)]

**Sent:** 2012-September-21 6:14 PM

**To:** Martin, Stacey; Choi, Shirley; XPAC FAM ITC

**Subject:** Application ITC Arctic Char

Hi

Please find attached application to transfer eggs in the end of November 2012 from Icy Waters Whitehorse.



Can someone confirm this application is appropriately completed?

My new DFO License is AQFW 6673 2012.

Gary Klassen

1-250-485-7408

## Hagel, Lynn J FLNR:EX

---

**From:** Marshall, Vicki FLNR:EX  
**Sent:** Tuesday, November 27, 2012 5:09 PM  
**To:** Hagel, Lynn J FLNR:EX  
**Subject:** FW: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

Most recent that I have. Apologies for not keeping PASB folks involved  
S22

S22

V. ☺

---

**From:** Keith, Ian [<mailto:Ian.Keith@dfo-mpo.gc.ca>]  
**Sent:** Thursday, October 4, 2012 2:03 PM  
**To:** Choi, Shirley; Higgins, Mark; Sheppard, Mark; Woodruff, Patricia ENV:EX; Marshall, Vicki FLNR:EX  
**Cc:** Martin, Stacey  
**Subject:** RE: ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

The interprovincial import permit for surface disinfected eyed eggs from the FHPR certified facility to the aquaculture facility should cover disease concerns - the bacteria isolated from fish from the source facility historically should not be vertically transmitted. With a new hatchery facility there shouldn't be problems with opportunistic bacteria and fungi for this first shipment of fish. The aquaculture licence has mortality reporting requirements should there be unexplained mortalities or infectious disease. Perhaps the permit could have the condition that these reports be reported to ITC as well, at least until the window for the early development diseases, specifically concerned about IPN, and the early and later development diseases, specifically concerned about IHN.

The fish are housed within a structure behind a dyke, not in tanks or raceways outside. The physical structures given the floodplain location has been deemed adequate to contain fish that are sterile by the aquaculture licence. Can this permit compel reporting or destruction of fish with evidence of failed triploidy, such as precocious parr? Escape of fish that are diploid i.e. failed induction of triploidy in embryos, pose genetic and ecological risk to this watershed, and this permit and risk assessment is for sterile triploids.

Ian

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**From:** Choi, Shirley  
**Sent:** September 24, 2012 12:50 PM  
**To:** Higgins, Mark; Keith, Ian; Sheppard, Mark; 'Woodruff, Patricia ENV:EX'; [vicki.marshall@gov.bc.ca](mailto:vicki.marshall@gov.bc.ca)  
**Cc:** Martin, Stacey  
**Subject:** ITC Application# 12946 - Dorocco Developments (Klassen) - Arctic Char

Hi All,

Please find attached an application for the transfer of 10,000 Arctic Char eggs from Icy Waters Ltd. in Whitehorse, Yukon to Oliver, BC. Mr. Klassen's Aquaculture licence was issued to him last week after thorough review of escapement prevention measures, and the use of eggs from a certified disease free facility and importing only triploid shocked eggs.

Mark, I believe you mentioned that the source is FHPR certified, does this need a Fish Health Certificate?

Please provide your comments by **October 4, 2012.**

Thank you,

**Shirley Choi**

A/Governance Officer  
Aquaculture Management Division  
Fisheries Management  
Fisheries and Oceans Canada

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**From:** Gary Klassen [<mailto:gary@dorocco.com>]  
**Sent:** 2012-September-21 6:14 PM  
**To:** Martin, Stacey; Choi, Shirley; XPAC FAM ITC  
**Subject:** Application ITC Arctic Char

Hi

Please find attached application to transfer eggs in the end of November 2012 from Icy Waters Whitehorse.

Can someone confirm this application is appropriately completed?

My new DFO License is AQFW 6673 2012.

Gary Klassen

1-250-485-7408

## Hagel, Lynn J FLNR:EX

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**From:** Marshall, Vicki FLNR:EX  
**Sent:** Tuesday, November 27, 2012 5:13 PM  
**To:** Hagel, Lynn J FLNR:EX  
**Subject:** FW: ITC Permitting Requirements for Arctic Char Movements

Okay, that's all I have. There was never an official written denial. All communications must have gone verbal unless DFO has it in writing. He was simply not able to make the transfer on the date requested as he did not satisfy all of our requirements so had to re-apply for the second transfer date.

Sound okay?

Vicki

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**From:** Martin, Stacey [<mailto:Stacey.Martin@dfo-mpo.gc.ca>]  
**Sent:** Tuesday, September 4, 2012 4:20 PM  
**To:** Higgins, Mark; Sheppard, Mark; Marshall, Vicki FLNR:EX; Woodruff, Patricia ENV:EX; Keith, Ian  
**Cc:** Choi, Shirley  
**Subject:** RE: ITC Permitting Requirements for Arctic Char Movements

Hi all,  
As follow-up to Mark's email, and to further clarify, we are wondering if all Arctic Char movements into and/or out of a licenced facility should require an I&T Licence? If so, we can make it a special condition on the Klassen aquaculture licence (and any others that may be approved in the future). Otherwise, as Arctic Char is considered a Salmonid, movements within zone will not require an I&T Licence. Is this a concern? Thanks. /Stacey

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**From:** Sheppard, Mark  
**Sent:** September 4, 2012 11:15 AM  
**To:** Higgins, Mark; Martin, Stacey; Choi, Shirley; Keith, Ian; 'Marshall, Vicki'; 'Woodruff, Patricia'  
**Subject:** RE: ITC Permitting Requirements for Arctic Char Movements

Hi,  
To weigh in here... I'm guessing the concerns are that, once Arctic salmonids exist on this site, an aquaculture licence holder can sell/move said fish to another valid (or potential) aquaculture licence holder within the same zone (if the 2nd individual has Arctic char listed as a species on his licence), and/or perhaps move the Arctic salmonid to non-aquaculture back-yard, u-catch, larder/pond (under the Wildlife provision?)? Vicki? Patricia?

Mark Sheppard  
Tel: 250-703-0901

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**From:** Higgins, Mark  
**Sent:** August 31, 2012 8:37 AM  
**To:** Martin, Stacey; Choi, Shirley; Keith, Ian; 'Marshall, Vicki'; Sheppard, Mark; 'Woodruff, Patricia'  
**Subject:** RE: ITC Permitting Requirements for Arctic Char Movements

What kind of transfers would Mr. Klassen be making and how often? Fish going to market are exempt from section 56, so in my mind that leaves introductions to his facility (which I think are from an FHPR certified facility in Yukon – correct me if wrong). Am I missing other transactions he will be performing (like supplying fish to other facilities)? Mark.

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**From:** Martin, Stacey

Hello all,

There has recently been some discussion regarding the potential need for a site specific aquaculture licence condition requiring that all movements to and from the proposed Klassen arctic char facility be licenced by the ITC. Before proceeding with this addition to the aquaculture licence, however, I wanted to touch base with you all to gauge the importance, from your perspective, of permitting and tracking all movements of arctic char. The current general CoL do require that any cross-zone transfers of salmonids have a separate licence, so if you feel this is sufficient in regards to Arctic char specifically, please let me know. Thanks everyone. /S

**Stacee Martin**

A/Governance Coordinator | Coordonateur de gouvernance  
Aquaculture Management Division | Gestion de l'aquaculture  
Fisheries Management | Direction des pêches  
Fisheries and Oceans Canada | Pêches et Océans Canada

200-401 Burrard Street | 401, rue Burrard, bureau 200  
Vancouver, BC V6C 3S4 | Vancouver (C.-B.) V6C 3S4  
Telephone | Téléphone: (604) 666-6831  
Facsimile | Télécopieur: (604) 666-1076  
Email | Courriel: [stacee.martin@dfo-mpo.gc.ca](mailto:stacee.martin@dfo-mpo.gc.ca)

**Hagel, Lynn J FLNR:EX**

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**From:** Marshall, Vicki FLNR:EX  
**Sent:** Tuesday, November 27, 2012 5:06 PM  
**To:** Hagel, Lynn J FLNR:EX  
**Subject:** FW: COMMENTS: Aquaculture Application- Gary Klaussen - Arctic Charr \_ 8929 Rd#17, Oliver BC  
**Attachments:** Klassen Application April2012.pdf

Hmmm, this one went "viral" in a whole bunch of different directions....I will keep digging and supply you with more by tomorrow if I can find them.

V.

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**From:** White, Tara FLNR:EX  
**Sent:** Thursday, May 17, 2012 2:53 PM  
**To:** Marshall, Vicki FLNR:EX  
**Cc:** Herborg, Matthias ENV:EX; Goeller, Neil FLNR:EX; Stewart, Robert FLNR:EX; Sokal, Mike ENV:EX; Cavadini, Roger ENV:EX; Burwash, Michael FLNR:EX; White, Tara FLNR:EX  
**Subject:** COMMENTS: Aquaculture Application- Gary Klaussen - Arctic Charr \_ 8929 Rd#17, Oliver BC

Hi Vicki:

I have reviewed the above noted Aquaculture Application and provide the following comments:

1. Triploid Arctic Charr eggs will be imported from the Yukon. Although they will be coming from a disease certified source and will be heat shock treated triploids, we know from the Freshwater Fisheries Society of BC's research w/ kokanee that sterility is not 100% effective. There is up to a 5% chance that the eggs will not be sterile, thereby increasing the risk of hybridization w/ native stocks, should fish escape.
2. The fish are proposed to be raised in tanks, in a closed environment. Water intake/discharge pipes will be screened. Therefore, the risk of escape into the Okanagan River is likely low. Survival of escaped fish is also anticipated to be low, due to the warm water temperatures in the Okanagan River and Osoyoos Lake a portion of year (optimum temperatures for Charr are 11 C-16 C). If fish were to escape during the winter months, however, the risk to native stocks and ecosystem health increases significantly (ie. higher potential for charr survival). Potential risks to native species include disease transfer, competition for food & habitat and hybridization.
3. Water for the proposed facility will be supplied from a well situated on the property (Plan 1790, DL 24505, Lot 311, civic 8929 Rd #17, Oliver). The maximum withdrawal rate = 75L/sec. I am not clear what this mean in terms of water availability & use in the Okanagan River basin. What are the implications of the water withdrawal/use on groundwater availability and recharge ? What are the implications to fish habitat and native stocks (eg. habitat constraints & water quality) ? Water is already limited in the Okanagan during dry years - particularly between July-Sept .
4. The Okanagan River is directly connected to Osoyoos Lake, which is a trans-boundary watershed. If fish were to escape and survive, there could also be management implications in the US. Additionally, potential impacts from effluent discharge would affect Canadian waters, as well as the US. It would be prudent to consult w/ US fisheries managers regarding the proposed application.
5. The application indicates water withdrawal/discharge pipes will be screened, but does not provide further detail ( ie. screening size, life-stage and guidelines to be followed) . Screening should meet freshwater Intake end-of-pipe fish screen guidelines (DFO) in order to minimize resident fish entrainment and impingement on the screen.
6. A drum filter and settling tank are proposed to treat effluent water prior to discharge. Will this be sufficient to filter nitrates and pharmaceuticals (used to treat hatchery eggs/fish) from the water and prevent pathogen transfer to the Okanagan River system ? If not, what are the implications to native stocks, SAR and watershed health?
7. Osoyoos Lake exhibits an oxygen/temperature squeeze during the summer months. The majority of the

lethal limits for fish (17-24 C) taxing resident stocks to their limit. Discharge of effluent into the Ok River may further aggravate water quality issues in Osoyoos Lake.

8. It is unclear as to where the effluent water will be discharged. Will it be discharged on the property, into the neighbouring oxbows or the Okanagan River?
9. The effluent discharge rate proposed = 75 L/s. Will this rate be continuous year round or for a specified time period? Water does this mean in terms of licensed use? As I understand it wells are not licensed....
10. Water for the facility is to be supplied from a well and 12 C. The temperature of discharge water, however was not identified. Discharge of effluent water should meet specified guidelines for aquatic life— particularly when dealing with a sensitive ecosystem & fish stocks.
11. The hatchery is proposed in a sensitive ecological area – near historic oxbows off the Okanagan River. What is the risk to the floodplain, SAR and surrounding area from proposed development and water withdrawal and discharge?
12. The application states fish will be supplied “Direct to Food Market”. Will fish be transported live? If so, this will increase risk to native stocks.

If you have any questions regarding the information provided, please feel free to give me a call. I have copied regional EP, Water and Ecosystems staff on my response.

Cheers Tara

Tara White, R.P.Bio.  
Senior Fisheries Biologist  
Ministry of Forests, Lands and Natural Resource Operations  
Okanagan-Thompson Region  
Phone: (250) 490-2287  
Email: [tara.white@gov.bc.ca](mailto:tara.white@gov.bc.ca)

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**From:** Marshall, Vicki FLNR:EX  
**Sent:** Thursday, May 3, 2012 9:09 AM  
**To:** White, Tara FLNR:EX  
**Subject:** FW: Klassen Updated Application Submitted

Hi Tara – here we go again... S22 . Can I try to set up a meeting for us to discuss the issues surrounding this application on Friday?

Thx,  
Vicki.

---

**From:** Choi, Shirley [<mailto:Shirley.Choi@dfo-mpo.gc.ca>]  
**Sent:** Wednesday, May 2, 2012 10:43 AM  
**To:** Higgins, Mark; Herborg, Matthias ENV:EX; Marshall, Vicki FLNR:EX; Sheppard, Mark; Keith, Ian; Martin, Stacey  
**Subject:** FW: Klassen Updated Application Submitted

Hi ITC,

So the madness has begun (again) for the Klassen file. This time he has hired a consultant to help with the set up of his site. He still wants to get triploid Arctic Char eggs from Icy Waters in the Yukon, are we still concerned that it is not an FHPR certified site? We have asked that an ITC application be submitted, but thought we could use a head start to this application. I don't believe a hydrological assessment has been done, does he still need one? Other information on effluent treatment, fish health and fish habitat can be found in the document below as well (Start at Page 18).

Thanks,

Shirley

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**From:** Manning, Michelle  
**Sent:** 2012-May-01 12:04 PM  
**To:** Hughes, Debra; Chol, Shirley; Martin, Stacey  
**Cc:** Meadows, Shelley; Lim, Susan; Kosmider, Gabrielle  
**Subject:** Klassen Updated Application Submitted

Hi all,

Attached is Gary Klassen's updated application. He is going to be sending in some engineered plans separately (I will forward these on when I receive them).

He has asked me to walk through the application with him Thursday morning to make sure he is not missing any info. I was hoping you could all take a look at it and see if there is anything else we need from him. He wants to move fish in June and it would be a great success if we could facilitate that for him this year. The earlier we get our requirements to him (if any), the better.

Thanks so much!

<<Klassen Application April2012.pdf>>

***Michelle Manning***

Aquaculture Management Coordinator | Coordinatrice - Gestion de l'aquaculture  
Aquaculture Management Division | La Division de Direction de l'aquaculture  
Fisheries and Oceans Canada | Pêches et Océans Canada  
1965 Island Diesel Way Nanaimo BC V9S 5W8  
Government of Canada | Gouvernement du Canada  
Telephone | Téléphone 250-754-0409  
Facsimile | Télécopieur 250-754-0391  
[michelle.manning@dfo-mpo.gc.ca](mailto:michelle.manning@dfo-mpo.gc.ca)  
[www.pac.dfo-mpo.gc.ca](http://www.pac.dfo-mpo.gc.ca)





Fisheries  
and Oceans

Pêches  
et Océans



BRITISH  
COLUMBIA

## APPLICATION FOR INTRODUCTION OR TRANSFER OF FISH AND/OR ACCESS TO WILD AQUATIC RESOURCES FOR AQUACULTURE

### FOR INTERNAL USE ONLY

Date Received: \_\_\_\_\_

Received By: \_\_\_\_\_

ITC File#: \_\_\_\_\_

Access File#: \_\_\_\_\_

SARA File#: \_\_\_\_\_

PASB File#: \_\_\_\_\_

### 1. Applicant Information

Applicant/Company/Agency: Dorocco Developements Ltd.

Contact Name: Gary Klassen

Bus. Phone: 250 485 7408

Business Box 1000 Osoyoos B.C. V0H 1V0

Bus. Fax: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Bus. Email: gary@dorocco.com

### 2. Purpose of transfer:

Aquaculture

**3. Species Information for Introduction or Transfer:** Please complete the information for the species you wish to transfer in the two tables below. Attach information of additional species if required. For example Row 1, should reflect information regarding the same species across both tables.

| Species Common Name(s) | Species Scientific Name   | Life Stage       | Brood Year  | Proposed Number for Transfer | Proposed Transfer Date |
|------------------------|---------------------------|------------------|-------------|------------------------------|------------------------|
| 1. <u>Arctic char</u>  | <u>Salvelinus alpinus</u> | <u>Eggs/Milt</u> | <u>2012</u> | <u>5000</u>                  | <u>June 14th 2012</u>  |
| 2. _____               | _____                     | _____            | _____       | _____                        | _____                  |
| 3. _____               | _____                     | _____            | _____       | _____                        | _____                  |
| 4. _____               | _____                     | _____            | _____       | _____                        | _____                  |

| Stock Origin                   | Genetic Status  | Source Location of Fish or Aquaculture Licence# | Shellfish or Salmonid Transfer Zone | Nearest Town (City, Province/State) |
|--------------------------------|-----------------|-------------------------------------------------|-------------------------------------|-------------------------------------|
| 1. <u>Yukon, Icy Waters Lt</u> | <u>Triploid</u> | <u>Licence no. N/A Yukon</u>                    | <u>Yukon</u>                        | <u>Whitehorse</u>                   |
| 2. _____                       | _____           | _____                                           | _____                               | _____                               |
| 3. _____                       | _____           | _____                                           | _____                               | _____                               |
| 4. _____                       | _____           | _____                                           | _____                               | _____                               |

Are any of these species listed under the Species at Risk Act (SARA)?

☐ Yes

☒ No

If yes, have you been issued a SARA Permit?

☐ Yes

☒ No

Are any of these species being Imported from outside Canada?

☐ Yes

☒ No

If you checked "Yes", please note a separate application will need to be made to the Canadian Food Inspection Agency for any imports into BC.

### 4. Access to Wild Aquatic Resources for Aquaculture Purposes

Please complete the application form for Access to Wild Aquatic Resources for Aquaculture Purposes and submit it together with this application. The form and the access policy can be found on the DFO Pacific Region Aquaculture Website: <http://www.dfo-mpo.gc.ca/aquaculture/pac-eng.htm>

☒ Access not required, continue to section 5.

For information on access to freshwater species for educational or scientific purposes, please visit: [http://www.env.gov.bc.ca/pasb/applications/process/scientific\\_fish\\_collect.html#a2](http://www.env.gov.bc.ca/pasb/applications/process/scientific_fish_collect.html#a2)

For information on access to marine species for educational or scientific purposes, please visit: <http://www.pac.dfo-mpo.gc.ca/fm-gp/licence-permis/sci/index-eng.htm>

## 5. Introduction and/or Transfer Fish

Please note, a fee of \$30.00 will be applied to transport of any freshwater fish native or non-native to BC. Exceptions include transport for the purposes of live food trade, aquariums, and transfers of Pacific Salmon. Freshwater introduction and/or transfer applications should be submitted to the BC Permit and Authorizations Service Bureau.

5a. Rationale for introduction or transfer: Commercial culture of arctic char

5b. Destination: S22

Nearest Town: Oliver, British Columbia

Main mode of Transport:

Air

Destination Description: Hatchery

Destination Transfer Zone: Zone 9 Columbia

Describe method of transport:

(attach additional information if required)

Eggs will be transported by air to Penticton Airport where we will pick them up and bring them to the hatchery.

5c. List any intermediate sites and transfer dates, if any:

Location of Intermediate Site: None

Arrival and departure date: \_\_\_\_\_

Location of Intermediate Site: None

Arrival and departure date: \_\_\_\_\_

5d. Final Destination of Introduction or Transfer

Complete only one of items i, ii, or iii. In item i, animals placed within tenure in natural waters, under an aquaculture licence, must not be released beyond the licensed area. If the proposed release of introduced or transferred fish will be into natural waters, complete all of section iii.

i. If purpose is for aquaculture/enhancement:

Company Name: \_\_\_\_\_ Designated Contact Person: \_\_\_\_\_

Aquaculture Licence# \_\_\_\_\_ Provincial Landfile# \_\_\_\_\_

ii. If final destination is a contained experimental facility:

Will introduction or transfer be separate from other organisms in facilities with respect to: (Check all that apply)

☒ Tanks/ponds

☒ Water Supply

☒ Effluent Discharge

Will effluent be: (check all that apply)

☐ sterilized

☐ discharged directly to the municipal sewer

☐ discharged into ground sump (100%)

☐ discharged into the Ocean

☒ discharged into surface freshwater

Final disposal of the transferred fish: Food Market

iii. If final introduction or transfer is to be released into natural waters (not for commercial aquaculture purposes):

List two waters downstream from the release location:

☐ check if destination is permanently landlocked

1. \_\_\_\_\_

2. \_\_\_\_\_

Name federal and provincial fisheries staff who manage fisheries and assess stocks in the area you wish to release the fish. These staff must have been consulted with and approve of this introduction and transfer. Visit <http://www.pac.dfo-mpo.gc.ca/fm-pp/maps-cartes/areas-secteurs/index-eng.htm> to determine the Pacific Fishery Management Area and office contact information.

Provincial: \_\_\_\_\_

Contact Information: \_\_\_\_\_

Federal: \_\_\_\_\_

Contact Information: \_\_\_\_\_

Please attach additional documentation in support of this application, especially issues in regard to risks and mitigation measures.

Acknowledgement:

☒ I am 19 years of age or older

☒ I am authorized by my company to make this application on their behalf

By typing or signing my name below, I certify that the information that I have provided is true and correct to the best of my knowledge. I understand that it is an offence to provide false information.

Date of Application

May 8 2012

Signature

[Signature]

## INFORMATION AND PRECAUTIONS RELATING TO THE MOVEMENT OF EGGS, FISH OR INVERTEBRATES

- A. If you are moving eggs, as is preferred over the hatched animal, they should be surface-disinfected according to the procedure in the Manual of Compliance, Fish Health Protection Regulations (Fisheries and Marine Science, Miscellaneous Special Publication 31 (Revised), 1984 Ottawa). The eggs should be rinsed in (fish-free) ground water or pasteurized water to prevent recontamination.
- B. If you are moving fish or invertebrates, please do everything possible to ensure that you do not accidentally introduce nuisance plants or animals. Disinfect or destroy any shipping containers.

### APPLICATION INFORMATION

1. Applications should be received at least one month before the date of the proposed movement of the aquatic organism. Please refer to the policy on Access to Wild Aquatic Resources for Aquaculture purposes for timelines on access application submissions: [http://www.dfo-mpo.gc.ca/aquaculture/ref/AWAR\\_e.pdf](http://www.dfo-mpo.gc.ca/aquaculture/ref/AWAR_e.pdf)
2. Transport shall be by the most direct route and with no water exchange unless specifically approved by the committee.
3. For any imports of fish into BC from outside Canada, a separate import permit will be required from the Canadian Food Inspection Agency (CFIA).

| Submitting Your Application                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Marine Species                                                                                                                                                                                                                                                                                                                                                  | Freshwater Species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>For further information regarding the application process or to submit your access and/or transfer application please contact:</p>                                                                                                                                                                                                                           | <p>Applications for the transport of freshwater fish are subject to a \$30 processing fee. Please submit your application and payment by the following options to the Permit and Authorizations Service Bureau:</p>                                                                                                                                                                                                                                                                                                                                        |
| <p style="text-align: center;"><b>Shirley Choi</b><br/>           Department of Fisheries and Oceans<br/>           #200- 401 Burrard Street<br/>           Vancouver, BC V6C 3S4<br/>           Phone: 604-666-5519<br/>           Fax: 604-666-1076<br/>           Email: <a href="mailto:FAMITC@dfo-mpo.gc.ca">FAMITC@dfo-mpo.gc.ca</a></p>                  | <p style="text-align: center;"><u>Credit Card</u><br/>           Authorization form on the next page<br/>           By Fax only: (250) 387-1814</p> <p style="text-align: center;"><u>Cheque</u><br/>           Paid to Minister of Finance<br/>           By Mail: PO Box 9372 STN PROV GOVT<br/>           Victoria, BC V8W 8M3<br/>           By Courier: 4th Floor, 2975 Jutland Road<br/>           Victoria, BC V8W 9M3</p> <p style="text-align: center;"><u>Cash</u><br/>           In person only: 4th Floor, 2975 Jutland Road, Victoria, BC</p> |
| <p>Questions regarding Access to Wild Aquatic Resources for Aquaculture Purposes</p> <p>Shellfish Collection: <a href="mailto:Shellfish.Aquaculture@dfo-mpo.gc.ca">Shellfish.Aquaculture@dfo-mpo.gc.ca</a><br/>           Marine Finfish Collection: <a href="mailto:Marine.Finfish.Aquaculture@dfo-mpo.gc.ca">Marine.Finfish.Aquaculture@dfo-mpo.gc.ca</a></p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

This permit does not release the holder from any obligations under the *Fisheries Act* or any other federal or provincial legislation or of any other regulatory agencies.

Permit(s) cannot be issued for activities that are contrary to the proper management of the *Fisheries Act*.

As the management of Introductions and Transfers is both a federal and provincial government responsibility, the information you provide may be subject to the following legislations: *British Columbia Freedom of Information and Protection of Privacy Act*; the federal *Access to Information Act*; and the federal *Privacy Act*. This information will be used to verify your eligibility for the permit(s) you are seeking and for the purposes related to the application administration. If you have any questions regarding the handling of your personal information, please contact the Director of Wildlife for the Province of BC and/or the Director, Access to Information and Privacy Secretariat at the Department of Fisheries and Oceans.

## Popowich, Tracy CSNR:EX

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**From:** Stewart, Robert FLNR:EX  
**Sent:** Monday, August 27, 2012 2:25 PM  
**To:** Goeller, Neil FLNR:EX  
**Cc:** Lacey, Cathy M ENV:EX; Referral Apps REG8 ENV:EX  
**Subject:** Water Act Approval A8-6524

**File: A8-6524**

**Proponent: Gary Klassen**

**Works: Effluent Outfall on Okanagan River**

**Location: Okanagan River south of Oliver**

Staff with the Ministry of Environment have reviewed the above application and have the following comments.

To ensure that a HADD of fish habitat does not occur during works and that impacts to other aquatic and terrestrial species and habitats I recommend the proponent meet the following terms and conditions:

The Habitat Officer's Terms and Conditions for changes in and about a stream

[http://www.env.gov.bc.ca/wsd/regions/okr/wateract/terms\\_conditions\\_okanagan.pdf](http://www.env.gov.bc.ca/wsd/regions/okr/wateract/terms_conditions_okanagan.pdf)

Additionally I recommend the proponent review information at the following website to ensure they are in compliance with the *Water Act*:

[http://www.env.gov.bc.ca/wsd/water\\_rights/licence\\_application/section9/index.html](http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/index.html)

The Ecosystem Section of BC Natural Resources Operations recommends that a qualified professional (QP) be engaged by the proponent if proposed activities are inconsistent with the Best Management Practices, term and conditions, or the established work window. It is the proponent's responsibility to ensure their activities are in compliance with all legislation, including the *Fisheries Act*. I recommend that the proponent's plans include all the QP recommendations and that the QP works to ensure a HADD will not occur as a result of the proponent's proposal.

### **Additional Terms and Conditions**

Works must be completed by **September 15, 2012**.

If you have any other questions or require further information please contact Robert Stewart at (250) 490-8253.

Sincerely,

Robert Stewart  
Ecosystems Biologist

~~~~~  
Robert Stewart
Ecosystem Biologist
Resource Management
Ministry of Forests, Lands and Natural Resources Operations

Penticton
Phone (250) 490-8253
Fax (250) 490-2231

File: A8-6524

Proponent: Gary Klassen

Works: Effluent Outfall on Okanagan River

Location: Okanagan River south of Oliver

Staff with the Ministry of Environment have reviewed the above application and have the following comments.

To ensure that a HADD of fish habitat does not occur during works and that impacts to other aquatic and terrestrial species and habitats I recommend the proponent meet the following terms and conditions:

The Habitat Officer's Terms and Conditions for changes in and about a stream

http://www.env.gov.bc.ca/wsd/regions/okr/wateract/terms_conditions_okanagan.pdf

Additionally I recommend the proponent review information at the following website to ensure they are in compliance with the *Water Act*:

http://www.env.gov.bc.ca/wsd/water_rights/licence_application/section9/index.html

The Ecosystem Section of BC Natural Resources Operations recommends that a qualified professional (QP) be engaged by the proponent if proposed activities are inconsistent with the Best Management Practices, term and conditions, or the established work window. It is the proponent's responsibility to ensure their activities are in compliance with all legislation, including the *Fisheries Act*. I recommend that the proponent's plans include all the QP recommendations and that the QP works to ensure a HADD will not occur as a result of the proponent's proposal.

Additional Terms and Conditions

Works must be completed by **September 15, 2012**.

If you have any other questions or require further information please contact Robert Stewart at (250) 490-8253.

Sincerely,

Robert Stewart
Ecosystems Biologist

Popowich, Tracy CSNR:EX

From: Hare, Al FLNR:EX
Sent: Monday, October 15, 2012 8:57 AM
To: Reimer, Shaun FLNR:EX
Subject: FW: Another project - FCBC Project 101660

FYI. As discussed maybe we can corner Ken sometime this week and discuss our options.

Al Hare
Land Officer
Regional Operations Division
Ministry of Forests, Lands & Natural Resource Operations
Thompson Okanagan Region

250 490-2285
Al.Hare@gov.bc.ca

From: Aura, Bernadette FLNR:EX
Sent: Friday, October 12, 2012 8:43 AM
To: Hare, Al FLNR:EX
Cc: Johnson, Jerry FLNR:EX
Subject: RE: Another project - FCBC Project 101660

Good points Al. I will wait to hear back from you next week.

From: Hare, Al FLNR:EX
Sent: Thursday, October 11, 2012 4:31 PM
To: Johnson, Jerry FLNR:EX; Aura, Bernadette FLNR:EX
Subject: RE: Another project - FCBC Project 101660

I've discussed with Shaun Reimer who runs Okanagan River and Gary Klassen has also submitted an application under the Dike Maintenance Act for this work. Shaun is of the opinion that there are numerous water lines, discharge lines etc which have been placed across the dike over the years without any authority so why are we so concerned about this pipe. He wants to discuss this with Conrad Pryce next week but he feels that the Approval under the Water Act should be sufficient authority for these works without obtaining a Permit over Crown Land.

Anyway, hold onto this application until I can get together with Water next week and I'll keep you in the loop. My sense is that if the applicant insists on some type of legal authority other than the Approval then we should insist that Water Management include a 'PCL' with the existing Approval. Just so you're aware, Water is reluctant to issue 'PCL's' with Approvals but I feel that to accept the application under our Utility Policy is overly bureaucratic and costly to both the client and the Province.

Thanks!

Al Hare
Land Officer
Regional Operations Division

Ministry of Forests, Lands & Natural Resource Operations
Thompson Okanagan Region

250 490-2285

Al.Hare@gov.bc.ca

From: Johnson, Jerry FLNR:EX
Sent: Thursday, October 11, 2012 1:15 PM
To: Aura, Bernadette FLNR:EX
Cc: Hare, Al FLNR:EX
Subject: RE: Another project - FCBC Project 101660

Bernadette, I think the client should be advised to obtain a Permit over Crown Land (PCL) on this area since it is associated with an Approval under the Water Act. I have requested that Al Hare (Penticton) check with the Water staff on if this is a possibility.

Jerry Johnson
Senior Land Officer
Crown Land Adjudication
Ministry of Forests, Lands and Natural Resource Operations
441 Columbia St , Kamloops BC V2C 2T3
Phone: 250-828-4418
FAX: 250-828-4442
email: Jerry.Johnson@gov.bc.ca

From: Aura, Bernadette FLNR:EX
Sent: Wednesday, October 10, 2012 2:59 PM
To: Johnson, Jerry FLNR:EX
Subject: Another project - FCBC Project 101660

Hi Jerry:

I have an application for an discharge pipe going over MOE property: Parcel 2 (PlanA1272), DL 2450S, SDYD, Plan 1790. Can I take application for this so that we can issue tenure? Here is the application package. << File: Klassen CLT Application Package.pdf >>

Bernadette Aura
Natural Resource Specialist
FrontCounterBC
Ministry of Natural Resource Operations
441 Columbia Street
Kamloops BC V2C 2T3

Telephone no. 250 828 4210
Fax no. 250 828-4442

Toll Free: 1-877-855-3222

How Did We Do?

Clients of **FrontCounter BC** are invited to take our [customer satisfaction survey](#). We'd appreciate your input.

Popowich, Tracy CSNR:EX

From: Anderson, Des FLNR:EX
Sent: Monday, October 22, 2012 4:20 PM
To: Aura, Bernadette FLNR:EX
Cc: Reimer, Shaun FLNR:EX
Subject: RE: Application over MOE Property FCBC Project 101660

Hi Bernadette,

We are aware of this development proposal and are not opposed to the application (fall within our jurisdiction). Please send a referral directly to Shaun Reimer for comment. Thank you.

Des.

Des Anderson, P.Eng.
Section Head - Public Safety & Protection
Okanagan Shuswap District
Ministry of Forests, Lands & Natural Resource Operations
102 Industrial Place
Penticton, BC V2A 7C8
Phone: 250-490-8221
Fax: 250-490-2231

From: Aura, Bernadette FLNR:EX
Sent: Friday, October 19, 2012 12:58 PM
To: Anderson, Des FLNR:EX
Subject: Application over MOE Property FCBC Project 101660
Importance: High

Hi Des, we received an application from Garry Klassen for an effluent discharge pipe for his fish hatchery. In order for me to except the application I need your consent in principle if this does not fall under your mandate. (If it does then you can process the application). I believe the property is for flood control (I think?

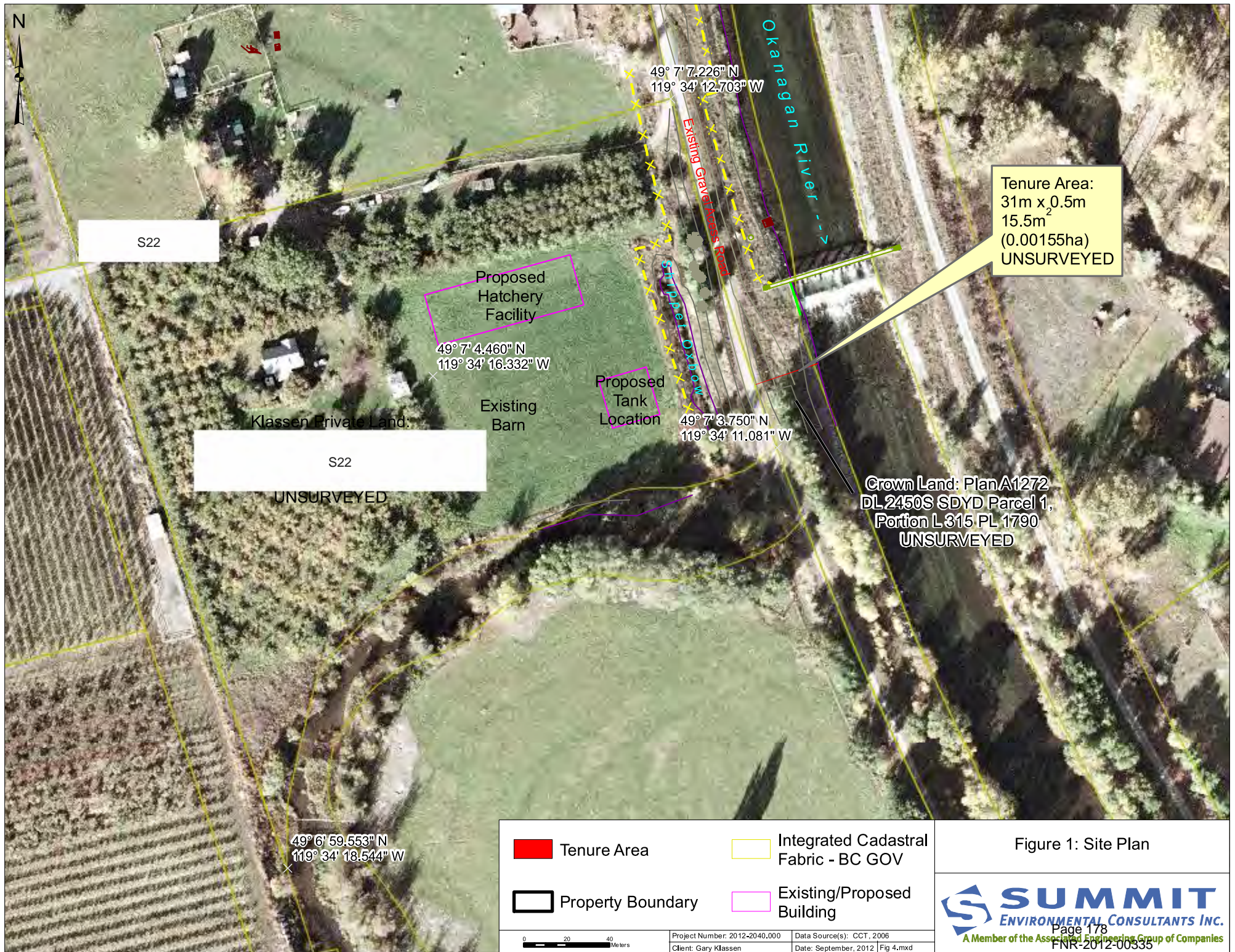
Bernadette << File: SiteMap.pdf >>

Bernadette Aura
Natural Resource Specialist
FrontCounterBC
Ministry of Natural Resource Operations
441 Columbia Street
Kamloops BC V2C 2T3

Telephone no. 250 828 4210
Fax no. 250 828-4442
Toll Free: 1-877-855-3222

[How Did We Do?](#)

Clients of **FrontCounter BC** are invited to take our [customer satisfaction survey](#). We'd appreciate your input.



Popowich, Tracy CSNR:EX

From: Aura, Bernadette FLNR:EX
Sent: Wednesday, October 24, 2012 12:51 PM
To: Bell, Valerie J TRAN:EX; Luison, Deborah E TRAN:EX
Cc: Meeks, Don FLNR:EX; Reimer, Shaun FLNR:EX
Subject: RE: Parcel 6 - OIC 889/99 FCBC Project 101660

Hi Valerie and Debbie: Shaun Reimer advised me that he will be the MOE contact for the client – Mr. Klassen (adjacent owner that wants to put in a discharge pipeline for his fish hatchery). So, you guys can sort out which agency (either MOE, BCTFA or MOTI) issues Mr. Klassen a permit so that he can get going with putting in his pipeline. Mr. Klassen's agent will be contacting Shaun.

On a separate note, Shaun mentioned that the reason MOTI acquired the right of way in 1953 was because they used to look after the dikes at that time. We all know that MOE now looks after dikes, and the various parcels in the name of BCTFA within the Okanagan Floor Control right of way still need to be transferred to them.

Bernadette

From: Aura, Bernadette FLNR:EX
Sent: Wednesday, October 24, 2012 11:33 AM
To: Bell, Valerie J TRAN:EX
Cc: Luison, Deborah E TRAN:EX
Subject: Parcel 6 - OIC 889/99



<< File: OIC 889-99.pdf >> << File: 20121024113029.pdf >> << File: 20121024113036.pdf >>

The property – Parcel 6 (PlanA1272), Lot 311, District Lot 2450S, SDYD, Plan 1790 was acquired by MOTI for future highway purposes – Page 38. It was subsequently transferred to BCTFA. Shown on attached documents.

Bernadette Aura
Natural Resource Specialist
FrontCounterBC
Ministry of Natural Resource Operations
441 Columbia Street
Kamloops BC V2C 2T3

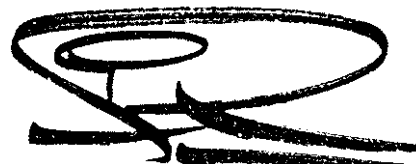
Telephone no. 250 828 4210
Fax no. 250 828-4442
Toll Free: 1-877-855-3222

How Did We Do?

Clients of **FrontCounter BC** are invited to take our [customer satisfaction survey](#). We'd appreciate your input.

PROVINCE OF BRITISH COLUMBIA
ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. 889, Approved and Ordered JUL 16 1999



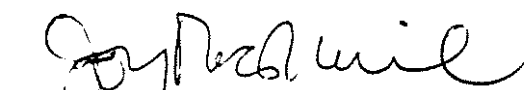
Lieutenant Governor

Executive Council Chambers, Victoria

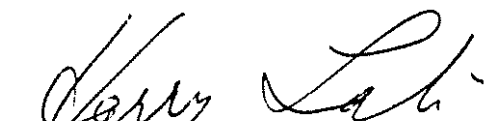
On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that

being satisfied that the land described in Schedule A to this order is owned by the government and comprises a land bank for future highway development,


- (a) the lands set out in the attached Schedule A are specified as corridor protection lands for the purposes of subsection 3.1(3) of the Highway Act, and
- (b) the BC Transportation Financing Authority Property Transfer Tax Exemption Regulation in the attached Schedule B is made



Minister of Finance and Corporate Relations



Minister of Transportation and Highways



Presiding Member of the Executive Council

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section: Highway Act, section 3.1(7), Property Transfer Tax Act, sections 37(1) and 37(2)(b)

Other (specify): MoTH 031/99

(QP 4033)

9/9/99/13

Schedule A

Legal Description of Corridor Protection Lands

Pages 182 through 218 redacted for the following reasons:

Not Responsive

KAMLOOPS LAND TITLE OFFICE

PID

LEGAL DESCRIPTION

Not Responsive

011-334-649 Parcel 6 (Plan A1272) of Lot 311 District Lot 2450S Similkameen Division Yale
District Plan 1790

Not Responsive

Pages 220 through 224 redacted for the following reasons:

Not Responsive

KAMLOOPS LAND TITLE OFFICE

PID

LEGAL DESCRIPTION

Not Responsive

- 012-869-821 Block A District Lot 2450S Similkameen Division Yale District Townsite of Oliver
- 012-869-830 Block B District Lot 2450S Similkameen Division Yale District Townsite of Oliver
- 012-869-881 Lot 1 Block C District Lot 2450S Similkameen Division Yale District Townsite of Oliver
- 012-869-899 Lot 2 Block C District Lot 2450S Similkameen Division Yale District Townsite of Oliver
- 012-869-856 Block D District Lot 2450S Similkameen Division Yale District Townsite of Oliver
- 012-869-902 Block E District Lot 2450S Similkameen Division Yale District Townsite of Oliver

Not Responsive

KAMLOOPS LAND TITLE OFFICE

PID

LEGAL DESCRIPTION

Not Responsive

011-334-673 That Part of Lot 311 Shown on Plan H681; District Lot 2450S Similkameen
Division Yale District Plan 1790

Not Responsive

Pages 227 through 324 redacted for the following reasons:

Not Responsive

Schedule B

BC Transportation Financing Authority Property Transfer Tax Exemption Regulation

1. BC Transportation Financing Authority is exempt from payment of any tax and from the requirement to file any return in connection with its acquisition, from the government, of the lands described in this Schedule.

Pages 326 through 468 redacted for the following reasons:

Not Responsive

00 MAR 13 13 17

KP022182

LAND TITLE ACT

Form 17

(Sections 151, 152(1), 220)

00 MAR 13 13 17

KP022178

LAND TITLE OFFICE
KAMLOOPS/NELSON

APPLICATION

LAND TITLE OFFICE
KAMLOOPS/NELSON

NOTE: Before submitting this application for interests under (1) and (2), applicants should check and satisfy themselves as to the tax position, including taxes of the Crown Provincial, a Municipality and Improvement, Water and Irrigation Districts.

NATURE OF INTEREST:

- (1) FEE SIMPLE ☒ See EN69843 in Victoria Land Title Office for Order in Council

Page 37 and 38 of Schedule B

Pursuant to Section 3 of the Highway Act and Budget Measures
Implementation Act, 1999

Market Value: N/A

Parcel Identifier No.(s):

- (2) CHARGE ☐ Parcel Identifier No.(s):

Nature of Charge

- (3) CANCELLATION
OF CHARGE ☒ Parcel Identifier No.(s):

01 00/03/13 13:16:15 01 KL 34153
FEE SIMPLE FREE \$0.00

HEREWITH FEES OF: N/A

As to (1) and (2) ADDRESS of person entitled to be registered as owner, if different then shown in the instrument:

BC Transportation Financing AuthorityBox 9900 Stn Prov GovtVictoria, B.C., V8W 9R1

As to (3) FULL NAME of person entitled to cancellation who or on whose behalf the application is made:

LEGAL DESCRIPTION, if not shown in instrument being submitted with this application:

SEE ATTACHED SCHEDULE

FULL NAME, ADDRESS, TELEPHONE NUMBER of person presenting application:

Andrea Knight for Robert Guenther. PLEASE TELEPHONE 356-8177 FOR DEFECTSBox 9900 Stn Prov GovtVictoria, B.C., V8W 9R1 (250)-387-2670


SIGNATURE OF APPLICANT OR
SOLICITOR OR AUTHORIZED AGENT

00 MAR 13 17

KP022182

LAND TITLE ACT MAR 13 17

KP022178

LAND TITLE OFFICE
KAMLOOPS/NELSONForm 17
(Sections 151, 152(1), 220)LAND TITLE OFFICE
KAMLOOPS/NELSON

APPLICATION

NOTE: Before submitting this application for interests under (1) and (2), applicants should check and satisfy themselves as to the tax position, including taxes of the Crown Provincial, a Municipality and Improvement, Water and Irrigation Districts.

NATURE OF INTEREST:

(1) FEE SIMPLE ☒ See EN69843 in Victoria Land Title Office for Order in Council

Page 37 and 38 of Schedule B

Pursuant to Section 3 of the Highway Act and Budget Measures
Implementation Act, 1999

Market Value: N/A

Parcel Identifier No.(s):

(2) CHARGE ☐ Parcel Identifier No.(s):

Nature of Charge

(3) CANCELLATION
OF CHARGE ☒ Parcel Identifier No.(s):

01 00/03/13 13:16:15 01 KL 34553
FEE SIMPLE FREE \$0.00

HEREWITH FEES OF: N/A

As to (1) and (2) ADDRESS of person entitled to be registered as owner, if different than shown in the instrument:

BC Transportation Financing AuthorityBox 9900 Stn Prov GovtVictoria, B.C., V8W 9R1

As to (3) FULL NAME of person entitled to cancellation who or on whose behalf the application is made:

LEGAL DESCRIPTION, if not shown in Instrument being submitted with this application:

SEE ATTACHED SCHEDULE

FULL NAME, ADDRESS, TELEPHONE NUMBER of person presenting application:

Andrea Knight for Robert Guenther PLEASE TELEPHONE 356-8177 FOR DEFECTSBox 9900 Stn Prov GovtVictoria, B.C., V8W 9R1 (250)-387-2670
SIGNATURE OF APPLICANT OR
SOLICITOR OR AUTHORIZED AGENT

PACIFIC FRESHWATER & LAND-BASED AQUACULTURE APPLICATION

Ministry of Forests, Lands and Natural Resource Operations
Fisheries and Oceans Canada
Transport Canada

PART I – GENERAL APPLICANT INFORMATION

SECTION A: APPLICANT AND GENERAL INFORMATION

1) Applicant Name(s) (Full Legal Name(s) or Registered Company Name) Dorocco Developments Ltd.		Applicant Business Information: Telephone: () Cell: (250) 485 7408 Fax: () Email: gary@dorocco.com	
2) Applicant Business Mailing Address: Box 1000 Osoyoos BC - (Office Mailing Address)			Postal Code: V0H 1V0
3) Doing Business as:		4) BC Inc #, BC Registration # or BC Society # 2011345697 – Interprovincial ID: 858241979	
5) Physical Business Address (if different from above): 8315 Main Street Osoyoos BC V0H 1V0 (Office Physical Address)			
6) Contact Name (if different from above): Gary Klassen		Contact Business Information: Telephone: () Cell: (250) 485 7408 Email: gary@dorocco.com Fax: ()	
7) Agent/ Representative (if applicable): Jeremy Lee		Agent/Representative Business Information: Telephone: () Cell: (902) 692 0992 Email: jeremylee@btinternet.com Fax: ()	
8) Business Mailing Address of Agent/Representative:		Postal Code:	
		Letter of Authorization: <input type="checkbox"/> Yes <input type="checkbox"/> No	

9) Type of Application:		
<input checked="" type="checkbox"/> New site Tenure Type (if applicable): <input type="checkbox"/> Licence of Occupation <input type="checkbox"/> Lease <input type="checkbox"/> Investigative Permit		
<input type="checkbox"/> Amendment Amendment Type: <input type="checkbox"/> Tenure Area <input type="checkbox"/> Infrastructure <input type="checkbox"/> Production <input type="checkbox"/> Species <input type="checkbox"/> Other (Describe)	<u>Currently Approved</u> (required only for type of amendment applied for, attach additional page if necessary)	<u>Proposed</u>
<input type="checkbox"/> Licence Holder Change		Current Licence Holder Name:
10) Location of Operation:		
<input checked="" type="checkbox"/> Land-Based		<input type="checkbox"/> In Freshwater Body
12) Type of Operation:		
<input checked="" type="checkbox"/> Hatchery (fin fish species)	<input checked="" type="checkbox"/> Grow-Out	<input type="checkbox"/> U-Catch
<input type="checkbox"/> Hatchery (shellfish)	<input type="checkbox"/> Other (describe):	
13) Government Reference Numbers		
BC Land File # (Crown land)	DFO Aquaculture Licence # AQFW 6673	NWPA #
OR	AND	
Park Use Permit # (Park/Protected land)	Site Reference #	Parcel Identification # (Private land)

SECTION B: SITE AND INFRASTRUCTURE INFORMATION

1) Site Category:		
<input type="checkbox"/> Provincial Crown Land	<input type="checkbox"/> Provincial Park	<input checked="" type="checkbox"/> Private Land
<input type="checkbox"/> Federal Land	<input type="checkbox"/> First Nation Reserve	<input type="checkbox"/> Other _____

2) Geographic location of site: Okanagan Valley Rural Oliver _____

3) Site Common Name: _____

4) DFO Area: _____ Sub Area: _____ (if applicable)

5) Canadian Hydrographic Service Chart (CHS) Marine Chart Number: _____ and/or

Topographical Map Number: _____

6) If the site is surveyed, provide legal description of site (e.g., Land District and Lot Number):

Land District Similkameen Division of Yale Lot 311 Plan 1790 PID 003-749-614 _____

Civic Address S22 Oliver, BC _____

7) If the site is not surveyed, provide metes and bounds description from a surveyed point or geographic coordinate: _____

8) Provide GPS coordinates for the center of the application area/tenure:

Latitude: 49° 7' _deg. 4.44 _min.

Longitude: 119° 34' _deg. 16.55 _min.

9) Total Area of site (Hectares): 2.6 Hectares _____

10) **Physical Structures** (Improvements): Complete the table below describing all applicable structures. Attach another page if required.

Purpose: Indicate the purpose of the infrastructure. Examples for buildings include: Office, Residence, Hatchery, Grow-out, Quarantine, etc; examples for tanks include: Fish Rearing, Quarantine, Solids Capture, Water Storage, Purge Tank, etc.

Location: Indicate whether the infrastructure is located in-doors (provide building number), or out-doors.

Lined: Are the ponds lined, Yes or No?

DESCRIPTION	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LOCATION
<i>e.g.: Building 1</i>	<i>Hatchery</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1	10 x 10 x 4		
<i>e.g.: Tanks 1</i>	<i>Fish Rearing</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	0.7 x 0.7 x 0.5	380 L	<i>Building 1</i>
LAND-BASED <i>please note: construction in association with fish and fish habitat may require redesign, relocation, mitigation and/or a fish habitat survey review and approval prior to installation. See section E.</i>							
Buildings 1	Well House	X	<input type="checkbox"/>	1	3x7		
2	Growout	<input type="checkbox"/>	X	1	16x46		
3	Shop&Hatchery	<input type="checkbox"/>	X	1	22x16		
4		<input type="checkbox"/>	<input type="checkbox"/>				
5		<input type="checkbox"/>	<input type="checkbox"/>				
Heath Stacks 1	Hatchery	<input type="checkbox"/>	X	2	0.5x0.5x1		Building 3
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
Troughs 1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
Tanks 1	Hatchery	<input type="checkbox"/>	X	2	1x1x0.5	300L	Building 3
2	Growout	<input type="checkbox"/>	X	5	6x2	50m ³ each 250m ³	Building 2
3	Growout	<input type="checkbox"/>	X	4	3x1.7	12m ³ each 48m ³	Building 2
4	Hatchery	<input type="checkbox"/>	X	2	3x1.7	12m ³ each 24m ³	Building 3
5	Settling Tank	<input type="checkbox"/>	X	1	15 x 15 x 2		Outside
Raceways 1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				

4		<input type="checkbox"/>	<input type="checkbox"/>				
Constructed Ponds	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LINED
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
Intake/Discharge Pipes	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	LOCATION
Intake Pipe 1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
Discharge Pipe 1		<input type="checkbox"/>	X	1	300mm D	120gpm	Okanagan River
2		<input type="checkbox"/>	<input type="checkbox"/>				
IN FRESHWATER BODY <i>please note: proposed in water works or undertakings will require a fish habitat information review. See section E.</i>							
Containment Structures	PURPOSE	EXISTING AT THE SITE	NEW PROPOSED	QUANTITY	DIMENSIONS (m)	TOTAL WATER VOLUME	TYPE
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
Work Floats							
1		<input type="checkbox"/>	<input type="checkbox"/>				
2		<input type="checkbox"/>	<input type="checkbox"/>				
3		<input type="checkbox"/>	<input type="checkbox"/>				
4		<input type="checkbox"/>	<input type="checkbox"/>				
5		<input type="checkbox"/>	<input type="checkbox"/>				
OTHER (describe)							

SECTION C: MAPS AND DIAGRAMS:

Attach the following maps and diagrams. They must be submitted to scale and be consistent with the other information in this application. Please refer to the Guide for details and sample diagrams.

1) Location Maps:

- i. A topographic map at a scale of 1:50,000 to 1:250,000 indicating the general location of area under application, noting the location of significant geographic features, such as a lake, mountain, road, community, etc.
- ii. A Cadastral map, Topographical map, or Canadian Hydrographic Service Marine Chart (if applicable) of a scale between 1:20,000 and 1:40,000, showing the general location of the area under application.

2) Operational Diagram: A 1:5000 scale topographical map or hydrographic chart showing the specific area under application and the operational components as outlined in the guide.

3) Site Plan: A plan of the site identifying the location of buildings and out-door infrastructure. Use the table from question 10 to label the plan. Clearly indicate the location of your water source(s) and discharge point(s), along with any water bodies (including culverts and ditches) located on or near the site.

4) Engineered Plans: Any new or proposed infrastructures/construction require an engineered plan.

5) For applications In Freshwater Bodies: Include a 1:2000 scale map(s) showing a side view diagram of the containment array(s) which at minimum must illustrate and itemize all structures above the surface and include all underwater structures (based on season of lowest water).

6) For applications situated On Land: If you are located within or near a flood plain, include a flood plain map (www.env.gov.bc.ca/wsd/data_searches/fpm/reports/regoff.html)

SECTION D: WATER USE

1. Will fresh water be used at this facility? ☒ Yes ☐ No

2. If yes, and if water source is surface water (not ground), provide name:

3. If you already have a water licence at this site, please provide licence number, or provide date of submission of an application:

Do not require water licence for existing well.

SECTION E: FIRST NATIONS CONSIDERATION

Please describe any contact you may have had, including the name of the First Nation(s) and individuals contacted. Provide copies of, or a description of any information you may have acquired from or provided to the First Nations(s) and any archaeological resources and areas of cultural significance you are aware of in the vicinity of the proposed project. Consult the Consultative Area Database (CAD) Public Map Service for First Nations contact information instructions and supporting information – ftp://ftp.geobc.gov.bc.ca/pub/outgoing/CAD/CAD_Public_Map_Service-User_Guidance-Technical_Instructions.pdf .

Colette Louie clouie@oib.ca

Certified Fisheries Technician

Osoyoos Indian Band

250 498 3942

Contact Person: Richard Bussanich – Rbussanich@syilx.org Tel: 250 707-0095 (x.108) Cell: 250 215-0255

PART II – INFORMATION FOR THE BC MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS

Introduction

The following information is required as part of the Provincial Crown Land Tenure application to make a licensing decision for licensing under the BC *Land Act*.

Parts I, II and V of the Pacific Freshwater and Land-Based Aquaculture application will be used to review this application for tenure under the BC *Land Act*.

Additional Crown Lands Information

SECTION A: SITING CONSIDERATIONS

Applicants must respond to each consideration and may be required to provide additional information in some situations.

YES	NO	
<input type="checkbox"/>	<input type="checkbox"/>	<p>If water-based, is the site situated in a manner whereby it does not infringe on the riparian rights of an upland owner?</p> <p>If No, has the owner provided written consent for you to occupy the site for the term of the tenure? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, include a copy of the written consent.</p> <p>Indicate if the upland property is: <input type="checkbox"/> Crown <input type="checkbox"/> Private</p>
x	<input type="checkbox"/>	<p>Is the intended use consistent with approved local government bylaws for land use planning and zoning?</p> <p>Provide the name of the Regional District or Municipality for the area:</p> <p>_____Regional District of Similkameen_____</p> <p>If No, have you discussed your application with local government and have you initiated a re-zoning process? ? <input type="checkbox"/> Yes <input type="checkbox"/> No Please provide details:</p> <p>_____</p> <p>_____</p>
<input type="checkbox"/>	<input type="checkbox"/>	<p>Is the intended use consistent with a local area plan or Coastal Zone Management Plan?</p> <p>Name of Plan:</p> <p>_____</p>

		<p>Please provide details where an application for variance is submitted:</p> <hr/> <p><input type="checkbox"/> Check if not applicable</p>
<input type="checkbox"/>	x	<p>Is the site situated in an area of cultural or heritage significance as determined in the <i>Heritage Conservation Act</i>?</p> <p>If Yes, have you contacted the Heritage and Conservation Branch to discuss your application? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide details: _____</p> <hr/>

SECTION B: ADDITIONAL CROWN LANDS INFORMATION

1. Is Applicant or Applicant's Spouse a Provincial Government Employee ☐ Yes ☒ No
2. Canadian Citizen or Permanent Resident: ☒ Yes ☐ No
3. Age: 19 or over ☒ Yes ☐ No
4. For applications made by more than one individual: ☐ Joint Tenant or ☐ Tenants in Common

PART III – INFORMATION FOR FISHERIES AND OCEANS CANADA

The following information is required as part of the Federal aquaculture licence application to make a decision for licensing under the *Pacific Aquaculture Regulations*.

Parts I, III, IV, and V must be submitted to apply for your Federal aquaculture licence or to amend an existing licence.

In addition to Part I, DFO requires the applicant(s), if an individual or a proprietorship or a person 'doing business as', submit date(s) of birth:

Applicant Gary Klassen Date of Birth (yyyy/mm/dd): S22
Name DOB

Applicant _____ Date of Birth (yyyy/mm/dd): _____
Name DOB

Has an application previously been submitted for this location? ☒ Yes ☐ No

If Yes, provide details:

On June 21, 2011 I submitted a harmonized freshwater application form.

Aquaculture licence # AQFW6673

GOVERNMENT REFERENCE NUMBERS:

Sec. 9 Notification – Tracking #:	Sec. 9 Approval – Water File #:	Water Licence – Water File #:
Well ID #:	ITC #:	Land-Based Finfish Waste Control Regulations Registration #
Does the British Columbia Riparian Areas Regulation apply to this project? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, are you requesting a variance? File #: <input type="checkbox"/> Yes <input type="checkbox"/> No		

This completed document will form the site management plan on which your aquaculture licence conditions will be based.

SECTION A: WATER

1) WATER SOURCES

Complete the table below referring to the guide for detailed instructions.

Well ID #: To determine whether you require a well ID number, visit:

http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/wells/identification/faqs.html

	WATER TYPE (Fresh, Brackish, Marine)	EXISTING AT THE SITE	NEW PROPOSED	GOVT ID (Water Act Licence #, or Well ID #)	GPS COORDINATES	MAX WITH-DRAWAL RATE (L/sec)
Surface Water Intake¹: Name of Water Body: _____						
#S1		<input type="checkbox"/>	<input type="checkbox"/>			
#S2		<input type="checkbox"/>	<input type="checkbox"/>			
Well						
#W1	Fresh	X	<input type="checkbox"/>	17884	49°7'6.2"N, 119°34'17.2"W	75 L/sec
#W2		<input type="checkbox"/>	<input type="checkbox"/>			
#W3		<input type="checkbox"/>	<input type="checkbox"/>			
#W4		<input type="checkbox"/>	<input type="checkbox"/>			
Municipal Water						
#1		<input type="checkbox"/>	<input type="checkbox"/>			
Other (describe):						
		<input type="checkbox"/>	<input type="checkbox"/>			
TOTAL COMBINED MAXIMUM WITHDRAWAL RATE						

¹: Please ensure your intake is screened according to the appropriate reference documents (see Guide).

***Site currently withdraws 600 gallon/min but application is for 1200 gal/min. Well engineered said no addition permits required for 1200 gal/min withdrawal rate

2) WATER DISCHARGE

Complete the table below referring to the guide for detailed instructions.

	WATER TYPE (Fresh, Brackish, Marine)	EXISTING AT THE SITE	NEW PROPOSED	GOVT ID (Water Act Licence or Authorization #)	GPS COORDINATES	MAX DISCHARGE RATE (L/sec)
Surface Water Outfall: Name of Water Body: ____ Settling Tank then Okanagan River						
#S1	Fresh	<input type="checkbox"/>	X		49° 7'4.78" N, 119° 34'10.65" W	75 L/sec
#S2		<input type="checkbox"/>	<input type="checkbox"/>			
Ground Infiltration						
#G1		<input type="checkbox"/>	<input type="checkbox"/>			
#G2		<input type="checkbox"/>	<input type="checkbox"/>			
Municipal Sewer						
#1		<input type="checkbox"/>	<input type="checkbox"/>			
Other (describe):						
		<input type="checkbox"/>	<input type="checkbox"/>			
TOTAL COMBINED MAXIMUM DISCHARGE RATE						

A) Have you applied for a permit under the Environmental Management Act or an exemption under the Land-based Finfish Waste Control Regulations?

☐ Yes (Ref. File # _____)

☐ No

X Not Applicable

Provide details:

Not required because dilution ratio will always be greater than 20 to 1.

SECTION B: SPECIES & PRODUCTION

For Hatchery activities: Complete Table 1 **For Grow-Out activities:** Complete Table 2 **For U-Catch activities:** Complete Table 3

Table1: Annual Expected Hatchery Production:

SPECIES COMMON NAME	SPECIES SCIENTIFIC NAME	NUMBER OF EGGS OR SPAT	ESTIMATED SURVIVAL (%)	ANNUAL PRODUCTION ESTIMATE		EXISTING AT THE SITE	NEW PROPOSED
				NUMBER OF FISH	TONNAGE (MT)		
<i>Ex. Rainbow trout</i>	<i>Onchorhynchus mykiss</i>	12000	75%	9000	0.45	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Arctic Charr	Salvelinus Alpinus	80 000	90%	72 000	0.36	<input type="checkbox"/>	X
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
TOTAL ANNUAL PRODUCTION ESTIMATE					0.36		

Table 2: Annual Expected Grow-Out Production: (excludes shellfish for marine grow-out)

SPECIES COMMON NAME	SPECIES SCIENTIFIC NAME	NUMBER OF FISH STOCKED	MEAN WEIGHT STOCKE D	GROW- OUT PERIOD (MONTH S)	ESTIMATED SURVIVAL (%)	ANNUAL PRODUCTION ESTIMATE		EXISTING AT THE SITE	NEW PROPOSED
						NUMBER OF FISH	TONNAGE (MT)		
<i>Ex. Rainbow Trout</i>	<i>Onchorhyncus mykiss</i>	50 000	250 g	7	10%	45 000	45	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Arctic Charr	Salvelinus Alpinus	70 000		18		50 000	50 MT	<input type="checkbox"/>	X
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
								<input type="checkbox"/>	<input type="checkbox"/>
TOTAL GROW-OUT ANNUAL PRODUCTION ESTIMATE							50 MT		

Table 3: U-Catch

SPECIES (COMMON NAME)	SPECIES (SCIENTIFIC NAME)	NUMBER OF FISH STOCKED PER YEAR	EXISTING AT THE SITE	NEW PROPOSED
<i>Ex. Rainbow Trout</i>	<i>Onchorhynchus mykiss</i>	<i>200</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>

To Be Completed By All Applicants:

SOURCE OF FISH/SHELLFISH

4) For each licensed or proposed species, indicate:

- The source location of broodstock (city, state, nearest town, import into BC). Where possible, include contingency source (Name of company & facility).
- Life stage (eggs, spat, juveniles, etc.).
- Genetic Status (mono-sex, diploid, triploid, etc.).

Triploid Arctic Charr eggs will be imported from Icy Waters Ltd. located in Whitehorse, Yukon.

BUSINESS PLAN

5) Purpose of culture for each proposed species (ex. Sale to other Aquaculturists, Direct to Food Market, etc). Refer to guide for assistance.

Direct to Food Market

STOCKING DENSITY

6) Indicate the maximum projected stocking density for each licensed or proposed species.

120 kg m³

PRODUCTION

7) Will you have multiple year classes on site?

☒ Yes

☐ No

8) Indicate when, during the calendar year, you expect to reach Peak Biomass. (Multiple year class operations may have multiple Peak Biomasses).

Will be attempting to have consistent production 52 weeks of the year.

SECTION C: FACILITY OPERATION

WATER CIRCULATION

1) Will you be recirculating any water on site? ☒ Yes ☐ No

If Yes, please describe the system:

30-70% partial water reuse through a degassing tower - CO² stripper and aerator.

Phase 1 – Flow through Phase 2 – Recirculating with 30% target

FEEDING

2) Specify the method and amount that the stock will be fed:

1% body weight with automated feeders and by hand

PREDATORS

3) Outline the measures you will undertake to avoid the attraction of predators to your site and how you will deal with them, should a problem arise:

Fish tanks will all be in a contained building in a controlled, insulated environment.

ESCAPES

4) Outline the infrastructure used and the practices employed at the facility to prevent the escape of cultivated fish:

Water will go through 3 levels of screening.

Screen at tank, screen before settling tank, and drum filter prior to discharge.

Screen size will be based on size of fish.

EFFLUENT TREATMENT

5) Provide a detailed description of any effluent treatment works (UV, ozone, biological and/or mechanical filtration) and/or monitoring occurring or proposed on site (see Guide):

A drum filter and settling tank will be used.

WASTE

6) Describe the methods for storage and disposal of sludge and other waste materials:

Water will flow through swirl separators, then into the settling tank with 5 chambers, and through a drum filter prior to discharge. The sludge and other waste materials will be composted on site.

MORTALITIES

7) Describe the procedures employed to store and dispose of fish/shellfish carcasses during routine operations and major mortality events (refer to guide for specific requirements):

Will use the compost process to make plant fertilizer.

SECTION D: FISH HEALTH

For finfish destined for transfer to culture facilities located in open water systems – marine or freshwaters - the applicant must submit a Health Management Plan (HMP) based on a template available from the Department. Cultured shrimp are also subject to this HMP requirement. Refer to Guide for assistance.

1) A Health Management Plan is attached:

☐ Yes ☒ No (Complete 2)

If you answered **No**, to question E1, it is understood that your fin fish will not be transferred to open water systems for any stage of their lifecycle. For these other types of freshwater or land-based fish culture please answer question 2.

2) Fish are considered sentient beings deserving of welfare and proper husbandry. Outline the basic fish health and husbandry practices you will employ to ensure the health and welfare of your fish (see guide for specific requirements):

We will be employing state of the art oxygen monitoring sensors linked with an oxygen injection

system. The fish will be fed in a systematic and consistent method, both automatically and by hand.

Water will be regularly tested and adjusted to optimize all of the basic husbandry practices for

parameters such PH, ammonia levels, CO² levels, and suspended solids.

The well water is 12° Celsius; this temperature is considered optimal for arctic char culturing.

SECTION E: FISH HABITAT & PROTECTION MEASURES

Fisheries and Oceans Canada – Aquaculture Management Division (DFO - AMD) is responsible for the sustainable management of aquaculture in British Columbia.

Like other types of industrial development taking place in and around water, aquaculture projects have the potential to affect fish and fish habitat.

You are completing this section because you have identified that you will be undertaking an activity that may result in a harmful alteration, disruption or destruction of fish habitat. Please Note: if you are referred to an Application Guide section or to contact the Aquaculture Environmental Operations group (AEO), habitat mitigation, relocation, redesign and/or biophysical assessments may be required.

Aquaculture activities must Not result in harm to a Species at Risk Act (SARA) listed species, their residence or their critical habitat, as defined in the associated Recovery Strategy, or Action Plan.

1) Does the proposed project:

a) Have **any** components within 30 m of the high water mark of a watercourse or water body (this includes intakes, outfalls or water crossings)? ******Within 30 m of a Channelized River**

☒ Yes – please see Application Guide or contact AEO (see contact information).

☐ No - go to question (b).

(b) Have downstream impacts on water quality or water quantity?

☐ Yes (or maybe) – please see Application Guide or contact AEO (see contact information).

☐ No – No additional information is required.

PART IV – INFORMATION FOR TRANSPORT CANADA

The following information, along with Part I and Part V, is required for the adjudication of the NWPA approval under the *Navigable Waters Protection Act*.

SECTION A: SITING CONSIDERATIONS

Applicants must respond to each consideration and may be required to provide additional information in some situations.

YES NO

x ☒

Is the site situated greater than 30 m from the edge of the approach channel to a small craft harbour, federal wharf or dock?

SECTION B: ADDITIONAL TRANSPORT CANADA INFORMATION

1.a) Waterway Name: _____

b) Width(m): _____ c) Depth Range(m): _____

2. Nearest Community: _____

3. Is this Work: ☐ Proposed ☐ Existing ☐ Modification of Existing Work

4. To help with the review process, please include the following:

☐ Photographs at the site of the proposed/existing work and surrounding area

☐ Environmental Assessment documents (if any)

PART V – INFORMATION FOR ALL AGENCIES

All applicable components of this application package must be complete. Incomplete applications will be returned to applicant. Applicable fees must be submitted at time of application.

Provincial Fees:

Note that the current [fee schedule](#) does not include the taxes that apply.

Forms of Payment:

- Cheques or Money orders must be in Canadian Funds to **Minister of Finance**
- Debit Card (in-person only)
- Visa and MasterCard payments are accepted in-person or over the telephone. To locate a FrontCounter BC office, visit the website at <http://www.frontcounterbc.gov.bc.ca/contact/> or call the toll free number 1-877-855-3222.

FrontCounter BC will not accept personal cheques drawn on US banks, regardless of what currency. Payment will not be accepted even if it has “CDN Funds” handwritten on the cheque.

PLEASE NOTE: Additional items may be required (eg. Advertising, Security Deposit, Proof of Insurance, Letter of Consent). Some items may have additional associated costs or require additional processing time.

As the management of this fishery program is both a federal and provincial government responsibility, the information you provide may be subject to the following legislation: British Columbia *Freedom of Information and Protection of Privacy Act* (FOIPP Act); the federal *Access to Information Act*; and the federal *Privacy Act*. The personal information collected by the Government of BC is collected under the authority of section 26 (c) of the FOIPP Act and will be used to process your application(s) and will be shared only with the necessary government agencies needed to provide you with the service that you have requested. If you have any questions regarding the handling of your personal information, please contact FrontCounter BC at 1-877-855-3222 or by writing to Manager, Provincial Operations, FrontCounter BC at 441 Columbia Street, Kamloops, BC V2C 2T3 and/or the Director, Access to Information and Privacy Secretariat at the Department of Fisheries and Oceans Canada and Transport Canada.

The Province of British Columbia, Fisheries and Oceans Canada, and Transport Canada do not consider the information submitted in this form to be confidential unless it is subject to the privacy protection of the *Freedom of Information and Protection of Privacy Act* or the *Access to Information Act*. I understand that the information supplied will be used to review my applications under the BC *Land Act*, BC *Fisheries Act* (until such time as it is amended) Federal *Fisheries Act* and the *Navigable Waters Protection Act* and information will be shared amongst the other agencies, First Nations and/or with the public.

Signature(s) of Applicant(s) or authorized representative	Name(s) of Applicant(s) or authorized representative*	Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

*If signature is by an authorized representative please supply a letter granting authorization to act on behalf of the applicant.

Submit completed application, and additional supporting information (if applicable) to:

In Person: Any FrontCounter BC office.

Visit <http://www.frontcounterbc.gov.bc.ca> for the location nearest you.

By Mail: FrontCounter BC, 2080a Labieux Road, Nanaimo, BC V9T 6J9

By Email: frontcounterbc@gov.bc.ca

(NOTE: IF FEES ARE APPLICABLE, CLIENT MUST CONTACT FRONTCOUNTER BC BY TELEPHONE WITH CREDIT CARD INFORMATION PRIOR TO SUBMITTING THE APPLICATION ELECTRONICALLY. DO NOT INCLUDE PAYMENT (CREDIT CARD) INFORMATION VIA EMAIL OR FAX.)

PLEASE RETAIN A COPY OF THIS APPLICATION FOR YOUR RECORDS

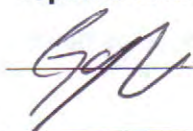
APPLICATIONS ARE NOT TRANSFERABLE

THE SUBMISSION OF THIS FORM DOES NOT IN ANY MANNER CONVEY ANY RIGHTS TO USE OR OCCUPY CROWN LAND AND/OR CONDUCT REQUESTED ACTIVITIES

Signature(s) of
Applicant(s) or
authorized
representative

Name(s) of Applicant(s)
or authorized
representative*

Date



Gary Klassen

May 3 2012

*If signature is by an authorized representative please supply a letter granting authorization to act on behalf of the applicant.

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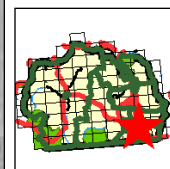
RDOS BASE MAP

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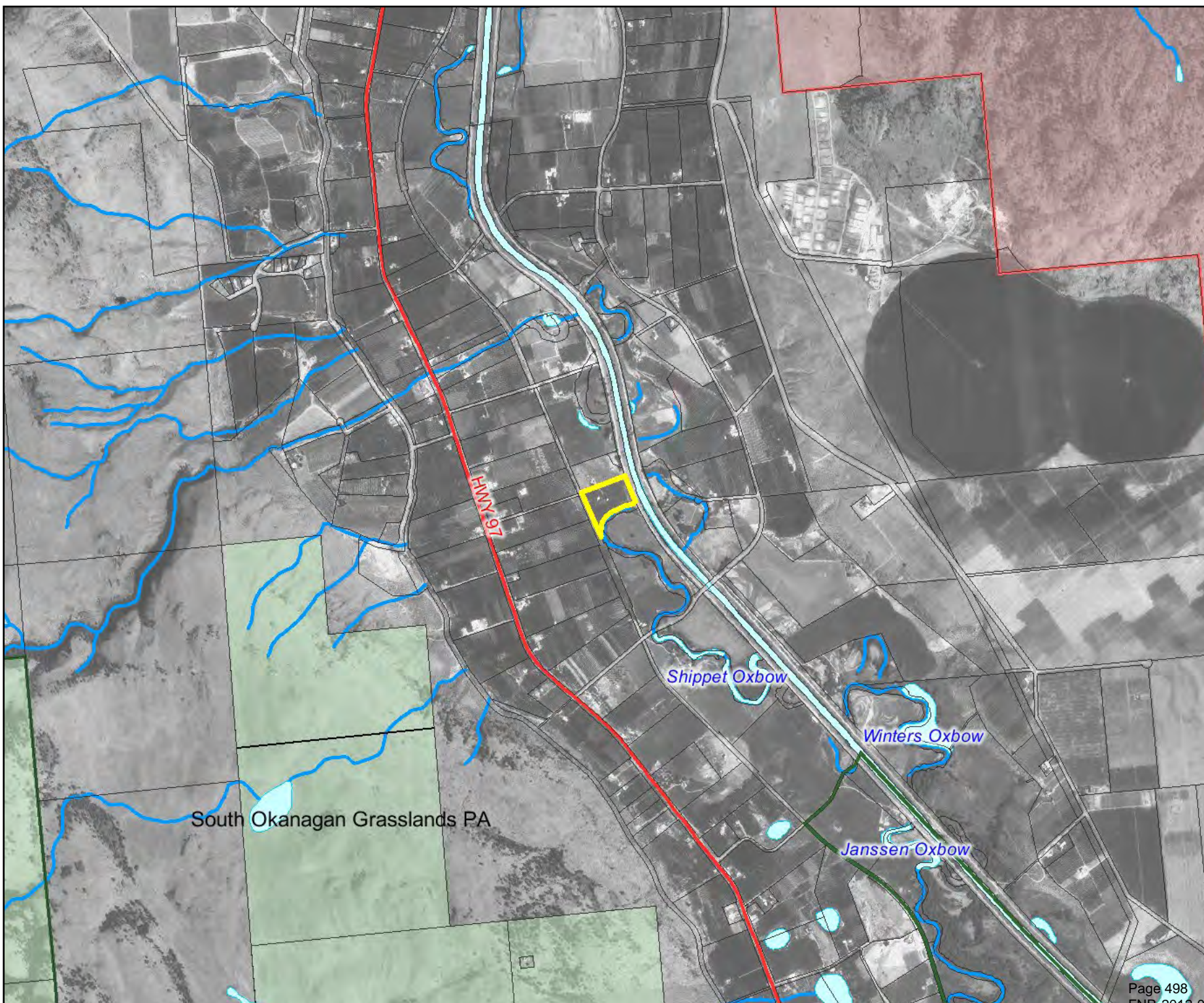
-  Parcels
-  Electoral Boundary
-  Major Highways
-  Lakes
-  Streams
-  Indian Reserve
-  Parks
-  Provincial Park
-  Protected Area
-  Regional Park
-  Ecological Reserve



This is a consolidated map compiled from representational data to be used for convenience only and has no legal sanction. The Regional District of Okanagan-Similkameen makes no warranty to the correctness or accuracy of the information on this map.



Scale: 1:19,999





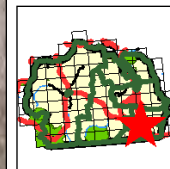
**RDOS
BASE MAP**

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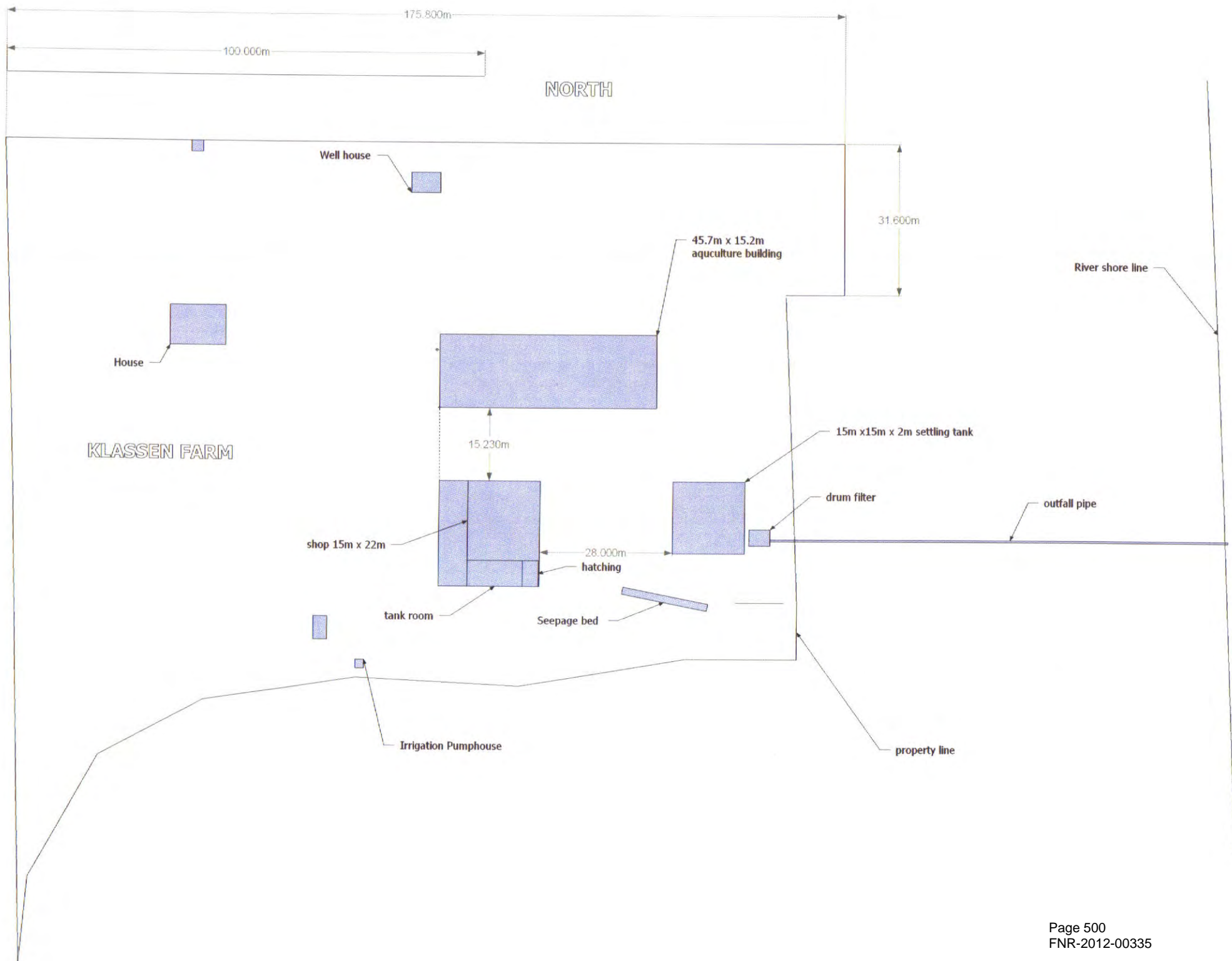
- Parcels
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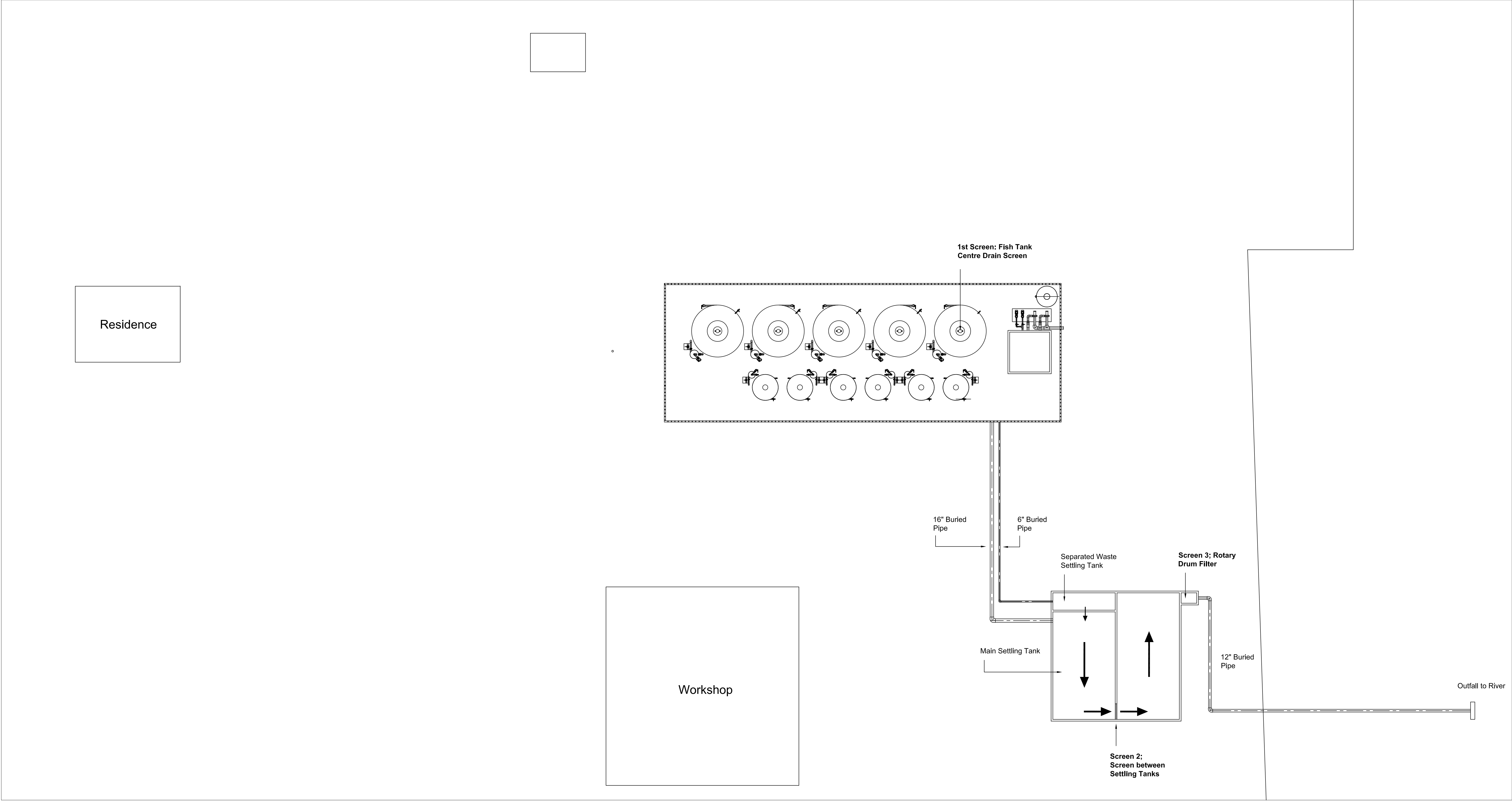


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Scale: 1:5,000
0 20 40 60 80 m.





REV.	DATE	BY	DESCRIPTION	DRAWN BY: JBL	PROJECT TITLE: DORROCO CHAR FARM
				DATE 10-05-12	DRAWING TITLE: SITE LAYOUT WITH DRAINAGE LINES AND SCREENS
				CHECKED BY:	
				DATE	
				APPROVED BY:	
				DATE	
				STATUS: FOR INFORMATION	DRAWING NO.: 33-004
				SCALE 1:200	



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