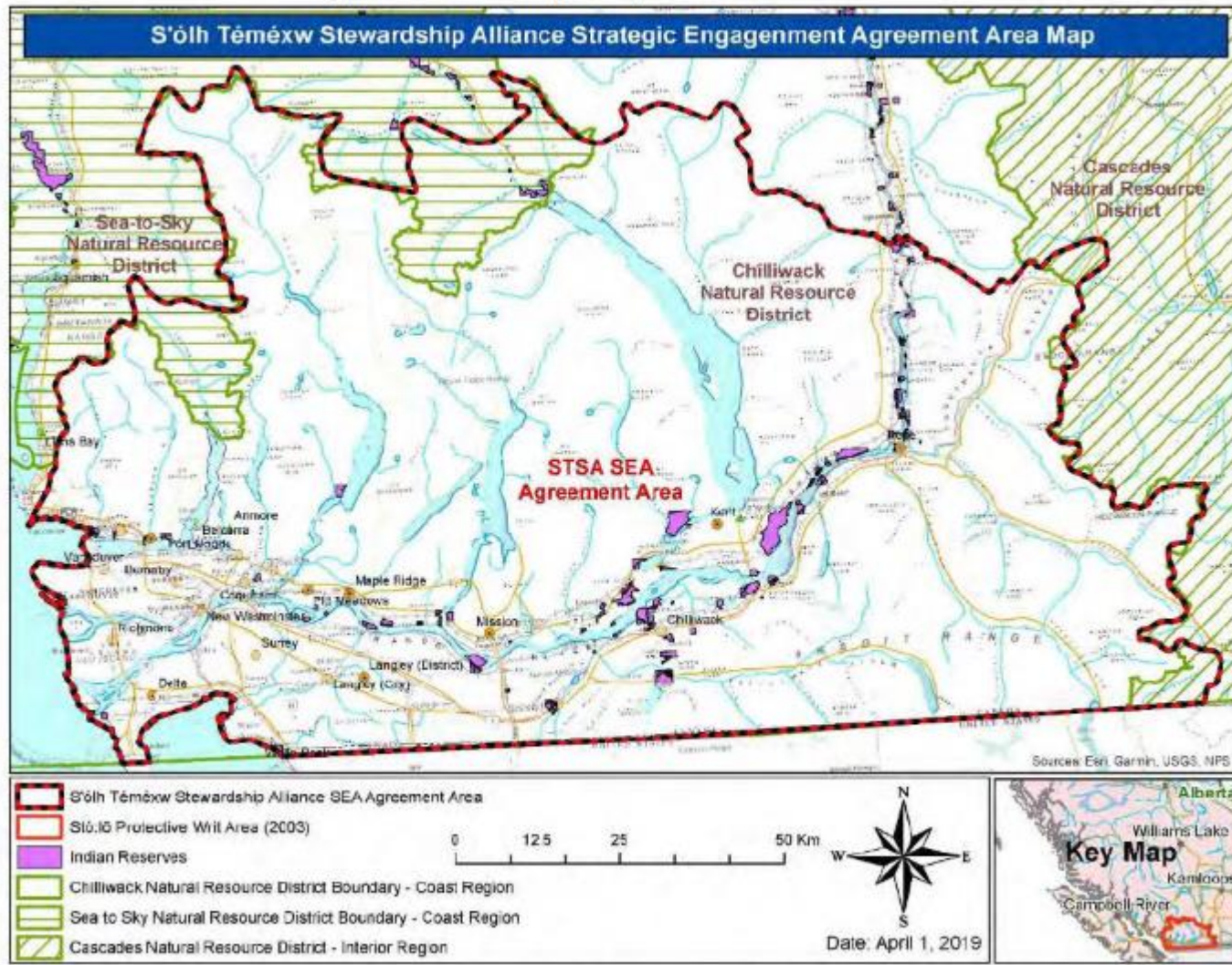


# FOI TOL communications with WLRS

<https://west-creek-awareness.ca/wp-content/uploads/2025/01/township-of-langley-foi-24-174.pdf>

## Appendix A Map of Agreement Area



Proposed Activities under the following statutes are subject to the Engagement Framework:

*Dike Maintenance Act*

*Environmental Management Act*

*Forest Act*

*Forest and Range Practices Act*

*Heritage Conservation Act*

*Integrated Pest Management Act*

*Land Act*

*Ministry of Lands, Parks and Housing Act*

*Mines Act*

*Mineral Tenure Act*

*Park Act*

*Protected Areas of British Columbia Act*

*Water Act*

*Water Sustainability Act*

*Wildlife Act*

For the purposes of this Agreement, the Agreement Area shown is the area in which Stó:lō Rights

From: " " < >

Sent: Sunday, June 03, 2023 8:23 PM

To: Stephen Richardson <[richardson@stole.ca](mailto:richardson@stole.ca)>; Eric Woodward <[er Woodward@stole.ca](mailto:er Woodward@stole.ca)>

Subject: [EXTERNAL] Re: covenant

Hello Stephen,

Thank you for the information.

Does 3: Expansion and Improvement of the community stormwater -- mean that the current detention ponds will be dug deeper/wider before turning them over to the Township? Will streets be cut down within the 55 acres?

Eric

On Sat, Jun 3, 2023 at 8:23 PM Stephen Richardson <[richardson@stole.ca](mailto:richardson@stole.ca)> wrote:

Good afternoon Mayor Woodward:

Correct, with respect to the subject current Bleedle application (14-05-0105) the pond areas (55 acres) is being permanently dedicated and protected as noted in the Report to Council and as referenced in the following development prerequisites:

1

3. Expansion and Improvement of the community stormwater detention facilities in accordance with the Township's Subdivision and Development Servicing Bylaw including dedication of the lands;

10 b. Securing transfer of approximately 22.31 ha (55.13 ac) of land to the Township upon securing any and all required environmental and servicing approvals and works

7. Compliance with Schedule 3 – Development Permit Areas: Streamside Protection and Enhancement of the Township OGP including issuance of a Streamside Development Permit, security of required senior government approvals, security of proposed enhancement works including access infrastructure, and transfer of the lands to the Township;

The information shared in the e-mail below references and pertains to a separate, distinct (approximately 1.15 km southeast of the current application) and previous Development Permit Application (Tol. Project # 14-05-0098 / 4825 - 275 Street/ Bleedle Development Group / Development Permit Application No. 100890) Issued by Council Nov. 6 / 17. As part of that application the subject site included 'a biofiltration/detention pond constructed in 2007 as part of the overall DFO compensation for the Gloucester Industrial Park. A non-disturbance restrictive covenant was registered on the property in 2008 to protect the pond. The subject development permit must comply with the terms and conditions of the restrictive covenant.'

Please let me know if staff can provide additional information / clarification or be of further assistance.

Best regards - Stephen

From: [REDACTED]  
Date: Tuesday, May 30, 2023 at 9:56 PM  
To: Eric Woodward [REDACTED]  
Subject: covenant

Hi,

I found this in some paperwork regarding the application by Beedie to develop the area on the south side of the freeway. It refers to the area on the north side. Two areas to read both in bold and underlined. This means that nothing can be done to the pond. There are also sections in the report that state the trees cannot be touched in the restricted area. All of this information came from the Township by way of a freedom of information application. I do not know if the areas that Beedie is trying to develop now are included in the restrictive covenant but certainly the pond and wetland trees, shrubs, etc are in the restrictive covenant. Checking at the Land Titles office should let you know if the areas that Beedie wants to develop now are in the restrictive covenant area.

1

Pages  
138 -  
139

Page 138 of 862

FOI 24-174

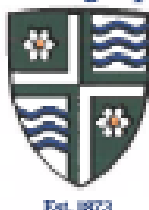
Whereas the original DFO Authorisation #99-HPAC-A2 000 000217 MELP File# A 20004880 cited in the staff report states: The valid authorisation period for the harmful alteration associated with various land development activities is from 10 May, 2000 through 15 September, 2005... and ...if any phase of the project is not completed by that date, such that fish habitat may be affected, a new Authorisation pursuant to Section 35(2) of the Fisheries Act may be required.; and Whereas the subject development proposal will now potentially adversely affect now fish populations which have resulted from the enhancement works undertaken in and around the subject property, thereby triggering the involvement of the DFO in the proposed SRW relocation in order to ensure that the original conditions of Authorisation are still applicable; Therefore, be it resolved that a reconsideration of the matter on the grounds of new information proceed and that the following conditions be added to the original DP: 1) Beedie Corporation and/or its Qualified Professional confirms that the location and general design of the works are consistent with the information originally provided to the DFO and that any substantive deviations be forwarded to them for review prior to current Authorisation; and 2) That the DFO conduct a site review in order to determine the number and species of fish potentially affected by the re-location of the SRW; and 3) That the DP conditions be subject to the current jurisdiction of the DFO with respect any harmful alteration of fish habitat and that all current applicable DFO and Township of Langley standards and policies be therefore applied; and 4) That the Ministry Environment be consulted further to the application in order to ascertain compliance with all related provincial policies further to fish and riparian guidelines and legislation; and 5) The issuance of a building permit for 4825 275th Street will not be completed until the preceding requirements have all substantively been met. Thanks, Councillor Patricia Amazon Township of Langley FOI 15-051 Page 47 of 857 From: Ramin Seifi Sent time: 11/27/2017 05:54:01 PM To: Stephen Richardson Co: Robert Knall; Rod Sheed; Joel Nagtegaal; Dave Anderson; David Cocking; Paul Albrecht; Kevin Larson Subject: RE: Information re: Development Permit Application No. 100890 Attachments: image001.png image002.jpg Thanks Stephen; I would like us to respond to the LEPS letter with clarifications to the points raised as per your comments below. Kevin is copied for information due to the working relationship we have/had with LEPS. Thanks. From: Stephen Richardson Sent: Monday, November 27, 2017 11:57 AM To: Ramin Seifi Co: Robert Knall; Rod Sheed; Joel Nagtegaal; Dave Anderson; David Cocking; Paul Albrecht Subject: RE: Information re: Development Permit Application No. 100890 Good morning Ramin; Staff are able to provide the following comment at this time regarding: 1) Information included in Nov. 6 / 17 Report to Council and 2. Langley Environmental Partners Society (LEPS) Nov. 24 / 17 correspondence. FOI 15-051 Page 48 of 857 1. Nov. 6 / 17 Report to Council As part of the application, the applicant has proposed to relocate an existing Statutory Right of Way and stormwater. The north portion of the site includes a biofiltration/detention pond constructed in 2007 as part of the overall DFO compensation for the Gloucester Industrial Park. A non disturbance restrictive covenant was registered on the property in 2008 to protect the pond. The subject development permit must comply with the terms and conditions of the restrictive covenant. (Report to Council November 6, 2017 Public Hearing (14-05-0098) Development Permit Application No. 100890 (161884 Canada Inc. / Beedie Development Group / 4825 - 275 Street

Two areas to read both in bold and underlined. **This means that nothing can be done to the pond. There are also sections in the report that state the trees cannot be touched in the restricted area.** All of this information came from the Township by way of a freedom of information application. I do not know if the areas that Beedie is trying to develop now are included in the restrictive covenant but **certainly the pond and wetland trees, shrubs, etc are in the restrictive covenant.** Checking at the Land Titles office should let you know if the areas that Beedie wants to develop now are in the restrictive covenant area.

**The north portion of the site includes a biofiltration/detention pond constructed in 2007 as part of the overall DFO compensation for the Gloucester Industrial Park. A non disturbance restrictive covenant was registered on the property in 2008 to protect the pond. The subject development permit must comply with the terms and conditions of the restrictive covenant. (Report to Council November 6, 2017 Public Hearing (14-05-0098) Development Permit Application No. 100890 (161884 Canada Inc. / Beedie Development Group / 4825 - 275 Street**

<https://west-creek-awareness.ca/wp-content/uploads/2025/01/township-of-langley-foi-24-174.pdf>





July 7, 2023

Project: 14-05-0105  
Folder: RO100245

Scott Barrett, Director  
Resource Management  
Ministry of Forests  
South Coast Regional Office  
200, 10428 – 153 Street  
Surrey, BC V3R 1E1

**Re: Gloucester Industrial Park Community Plan Amendment Bylaw No. 5885 and  
Rezoning Bylaw No. 5886 (161884 Canada Inc. / Beedie Group / 5500 Block of 268,  
272 and 275 Streets)**

The purpose of this letter is to share information with regards to Council's proceedings regarding the subject application. For your information, the aforementioned bylaws were considered for third reading by Council at its regular meeting of June 26, 2023. According to the draft minutes, Council resolved the following:

**AMENDMENT**

*That Council grant third and final reading to "Langley Official Community Plan Bylaw 1979 No. 1842 Amendment (Gloucester Industrial Park) Bylaw 1988 No. 2556 Amendment (161884 Canada Inc. / Beedie Group) Bylaw No. 5885".*

*That Council defer consideration of third reading to "Township of Langley Zoning Bylaw 1987 No. 2500 Amendment (161884 Canada Inc. / Beedie Group) Bylaw No. 5886", subject to provision of additional information pertaining to required senior government environmental approvals; and*

*That the subject development prerequisites apply to Rezoning Bylaw No. 5886.*

We understand that the Ministry of Forests is currently reviewing Water Sustainability Act application WSA 2010025 for the subject lands. Consistent with the above motion, when available, please provide information with regards to the Ministry's proposed recommendations for the site and required approvals.

If you have any questions, please contact me at 604.533.6021 or [thanson@tol.ca](mailto:thanson@tol.ca).

Yours truly,

Teresa Hanson  
SENIOR PLANNER

TH/ba



June 30, 2023

Project: 14-05-0105  
Folder: RO100245

Beedie Group / 161884 Canada Inc.  
Conner O'Leary  
3030 Gilmore Diversion  
Burnaby, BC V5G 3B4

**Re: Gloucester Industrial Park Community Plan Amendment Bylaw No. 5885 and  
Rezoning Bylaw No. 5886 (161884 Canada Inc. / Beedie Group / 5500 Block of 268,  
272 and 275 Streets)**

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*That the subject development prerequisites apply to Rezoning Bylaw No. 5886.*

If you have any questions, please contact me at 604.533.6021 or [thanson@tol.ca](mailto:thanson@tol.ca).

Yours truly,

Teresa Hanson  
SENIOR PLANNER

TH/ba

copy: Paul Albrecht, Development Engineering  
Ana Velazquez, Green Infrastructure Services

From: [Conner O'Leary](#)  
 To: [James Smith](#)  
 Cc: [Alex Dwyer](#)  
 Subject: [00789041] 14-03-0308 - Review Gloucester Lands - PM Clarification  
 Date: Tuesday, June 20, 2023 3:44:47 PM  
 All participants: [View Message](#)  
[View Source](#)

Page  
280

Hi Teresa,

During the Council Meeting on June 12<sup>th</sup>, 2023, for the Public Hearing of the Golf Course Lands, Councilor Butler requested additional information regarding the use of the term "perpetuity" in reference to subject lands. This email has been drafted to provide clarification in response to this inquiry. It is not intended to provide any new information.

The notion of perpetuity is introduced in the original (2000) DFO Authorization agreement under item 228, which states:

"All leave-strip areas shown on ECL Drawing No. 467-02-12 will be protected by a restrictive covenant to be registered against the title of the property(ies) affected under section 219 of the Land Titles Act as per the requirements of MELP. All leave strips are to be left in a totally undisturbed, naturally vegetated state in perpetuity. The covenant boundary must be surveyed by a registered BC Land Surveyor and a permanent fence must be constructed at the covenant boundary between development areas and the covenant areas prior to the commencement of any site development, unless otherwise agreed to by MELP."

It should be noted, that the DFO Authorization was not specific to the Golf Course Lands but all undeveloped land within the entire Gloucester Estates at that time. For clarity, these can be viewed as two separate components. Habitats outside the subject lands and habitats within the subject lands.

- Habitats outside of the Golf Course Lands, have been approved and constructed in accordance with the DFO Authorization and legally protected and will remain undisturbed in perpetuity. These habitats can be seen to this day throughout the Gloucester Industrial Estates which act as important environmental, drainage and wildlife corridors.
- Habitats within the Golf Course Lands were never developed to a final stage. As such, they have never been protected under the methodology described by item 28 of the DFO Authorization. This is due to the several failed attempts to design a Golf Course on these lands. Until a final design for the lands is approved and constructed, the lands remain "not completed" and are not protected by a 219 Covenant. Furthermore, the DFO Authorization has now expired which requires the project to seek new approvals for all works within the Golf Course Lands.

Under our current application, not only do we meet the protected area as shown in the original DFO Authorization, the proposed 55 acres of land represents the most significant area of land protection included in any of the applications ever made on the property. The work proposed within this screening application will be completed to current environmental protection standards and legislation at all levels of government. Finally, upon completion of the required Environmental compensation, restoration and enhancement, ownership of the lands will be transferred to the Township of Langley for ongoing Stewardship and protection.

We hope this information provides clarity to the historical DFO Authorization, the open lands, and provides confirmation that works completed under the DFO Authorization remain valid and in place.

Should you have any further questions or require additional information, please do not hesitate to contact me.

All the best,

Page 280 of 282

#20124-174

Conner O'Leary  
 Senior Development Manager

[P004.455.5521](#) [P004.455.7540](#)  
[D004.455.7887](#) [C004.455.7888](#)  
 5550 Gilmore Division, Burnaby, BC V5G 5B4  
[conner.oleary@tsdco.ca](#)  
[tsdco.ca](#)  


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*"All leave-strip areas shown on ECL Drawing No. 467-02-12 will be protected by a restrictive covenant to be registered against the title of the property(ies) affected under section 219 of the Land Titles Act as per the requirements of MELP. All leave strips are to be left in a totally undisturbed, naturally vegetated state in perpetuity. The covenant boundary must be surveyed by a registered BC Land Surveyor and a permanent fence must be constructed at the covenant boundary between development areas and the covenant areas prior to the commencement of any site development, unless otherwise agreed to by MELP."*

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### Key Plan

## ZONING SUMMARY

**PROJECT ADDRESS**  
HUBBARD GLACIER NATIONAL MONUMENT  
TOWN OF GALLATIN, MONTANA

**ACTIVITY:**  
continued from  
REPORTER TO  
1995.

[illegible][illegible]

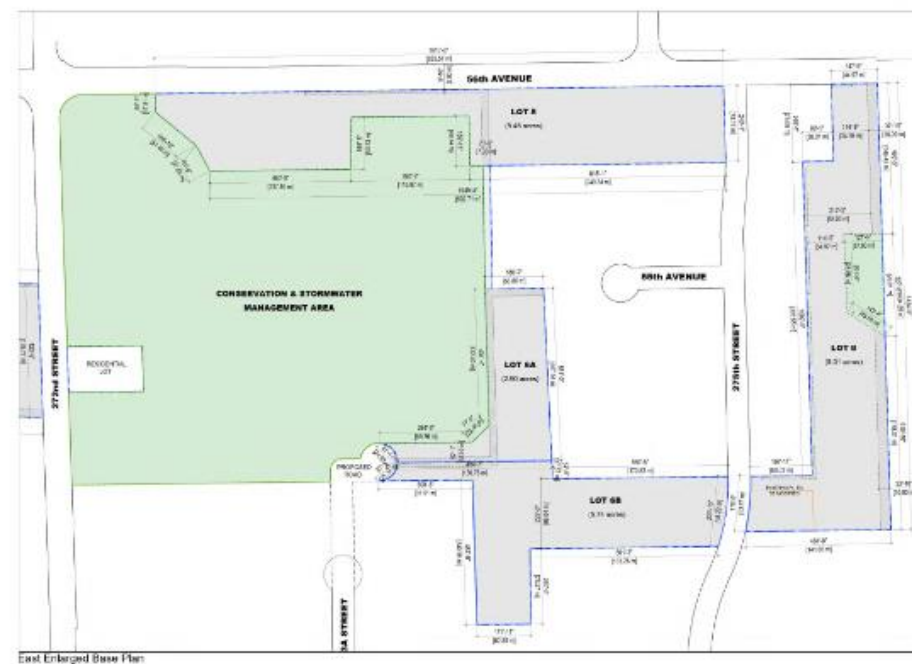
PROPOSED 2017 BUDGET	PROPOSED 2016	PROPOSED 2017	10% INCREASE
CONSTRUCTION & REPAIRS (2017 \$421)	\$41	CONSTRUCTION & REPAIRS (2016 \$421)	\$421
CONSTRUCTION & REPAIRS (2017 \$421)	\$41	CONSTRUCTION & REPAIRS (2016 \$421)	\$421
Sub Total Construction & Repairs			

[illegible]



West Enlarged Base Plan

OS/VS 211	21
OS/VS 221-231	22
OS/VS 241	23



East Enlarged Base Plan

1990-1991	1991-1992
1992-1993	1993-1994

NOTE:  
ALL DIMENSIONS WILL NEED TO BE VERIFIED WITH A LEGAL SURVEY



**From:** [FrontCounterBC@gov.bc.ca](mailto:FrontCounterBC@gov.bc.ca)  
**To:** [Ashleigh Gilbert](#)  
**Cc:** [Stephen Richardson](#)  
**Subject:** Province of BC Referral Request on an Approval for Changes In and About a Stream Under Section 11 of the Water Sustainability Act  
**Date:** Friday, November 03, 2023 3:08:49 PM

Township of Langley  
 Ashleigh Gilbert

Water Approval for Changes in and About a Stream (Section 11)  
 Referral Number: 162355310 - 001  
 Reference Number: Forests, Lands and Natural Resource Operations / 2010025  
 Request Sent: November 3, 2023  
 Response Due: December 3, 2023

You are invited to comment on the following Water Act application. A response is optional. If no response is received by the deadline, the application and adjudication process will move ahead.

File Number: 2010025

Proponent: 161884 Canada Inc.

Source: West Creek & Nathan Creek

Precinct: Cloverdale

Description of Works: Reconstruction of an existing stormwater management pond, stream and pond infills, and habitat enhancements.

Please [Click Here](#) to respond to this referral. You must be logged in using your BCeID account to view associated information. Forwarding or otherwise distributing this email will provide access to the associated information only if the receiver has a corresponding account.

Note that it can take an extended period of time to connect from the BCeID login to the E-Referrals website, this is normal. Avoid re-clicking the "Next" button or you could extend this connection time.

\*\*\*Please DO NOT reply to this email.\*\*\*

For "how-to" instructions on how to respond to this request, visit <https://portal.nrs.gov.bc.ca/web/client/-/e-referrals> for instructional videos. To obtain a BCeID, visit <https://www.bceid.ca/>

For technical assistance with E-Referrals, contact FrontCounter BC at 1-877-855-3222.

For more information regarding this referral, use the email link at the bottom of this message or use the "Email Coordinator" link located within the referral to contact the Referral Coordinator.

File Number: 2010025

Proponent: 161884 Canada Inc.

Source: West Creek & Nathan Creek

Shawn Fitzsimons

FrontCounter BC

Water Authorizations Specialist - Stream Management

(778) 572-2232

[shawn.fitzsimons@gov.bc.ca](mailto:shawn.fitzsimons@gov.bc.ca)





## Change Approval and Notification (Changes In and About a Stream)

FOI 36-174

Tracking Number: 100390145

ATS 884520  
File 2010025

### Applicant Information

If approved, will the authorization be issued to an individual or Company/Organization?  
What is your relationship to the company/organization?

Company/Organization

Consultant

### APPLICANT COMPANY/ORGANIZATION CONTACT INFORMATION

Applicant is an individual or an organization to whom this authorization Permit / Tenure / License will be issued, if approved.

Name: 181554 Canada Inc.  
Doing Business As:  
Phone: 804-455-3321  
Fax:  
Email:  
BC Incorporation Number:  
Extra Provincial Inc. No:  
Society Number:  
GST Registration Number:  
Contact Name: Mr. Adam Donnelly  
Mailing Address: 3050 Gilmore Division  
Burnaby BC V5G 3B4

### CONSULTANT INFORMATION

Please enter the contact information of the individual/organization who is acting on behalf of the applicant.

Name: ENVIRONMENTAL CONSULTANTS INC.  
Doing Business As: Environmental Consultants Inc.  
Phone: 804-944-0502  
Fax:  
Email: blanchard@envirocat.ca  
BC Incorporation Number:  
Extra Provincial Inc. No:  
Society Number:  
GST Registration Number:  
Contact Name: Lisa Blanchard  
Mailing Address: 2000 Hartley Avenue  
Coquitlam BC V3K 6W5  
Letter(s) Attached: Yes (Letter of Agency 22.04.2018.pdf)

### CORRESPONDENCE E-MAIL ADDRESS

If you would like to receive correspondence at a different email address than shown above, please provide the correspondence email address here. If left blank, all correspondence will be sent to the above given email address.

Email: whyte@envirocat.ca  
Contact Name: Ian Whyte

### ELIGIBILITY

Please answer the following questions related to your Change Approval/Notification.

Question	Answer	Warning
Is this application to support oil and gas activity that is being authorized by the Oil and Gas Commission?	No	

### TECHNICAL INFORMATION

### GOVERNMENT AND FIRST NATION FEE EXEMPTION REQUEST

Tracking Number: 100390145 | Version 1.0 | Submitted Date: Jun 3, 2022

Page 1 of 2

Page 377 of 982

Do you belong to, are you applying on behalf of, or are you:

FOI 36-174

- A provincial government ministry
- The Government of Canada
- A First Nation for water use on reserve land
- A person applying to use water on Treaty Lands
- A Nisga'a citizen
- An entity applying to use water from the Nisga'a Water Reservation?

No

### APPLICATION BY GOVERNMENT

Please indicate if you are someone who works in the government OR you are working on behalf of the government.

Are you, or are you applying on behalf of, a government entity? No

### TYPE OF WORKS

Please select the type of Notifications/Approvals you want to apply for as part of this application.

Please select the type of works to be undertaken:

Notification

- ☐ Road Crossing Culvert - Construction / Maintenance / Removal
- ☐ Clear Span Bridge - Construction / Maintenance / Removal
- ☐ Pipeline Crossing - Construction / Maintenance
- ☐ Dry Hydrant - Construction / Maintenance
- ☐ Pier, Wharf, (including docks) - Construction / Maintenance / Removal
- ☐ Cutting of annual vegetation in a stream channel
- ☐ Dike or Erosion Protection Works - Repair / Maintenance
- ☐ Storm Sewer Outfalls - Construction / Maintenance
- ☐ Control of Eurasian Watermillet or other invasive aquatic vegetation
- ☐ Ice Bridge / Winter Ford or Snowfill - Construction / Maintenance
- ☐ Maintenance of minor and routine nature by a public utility
- ☐ Removal of a beaver dam (as authorized under the Wildlife Act)
- ☐ Construction of a temporary ford
- ☐ Construction of a temporary diversion around a worksite

Approval:

- ☐ Bank Erosion Protection
- ☐ Bridge (other than clear span) - Construction / Maintenance / Removal
- ☐ Stream Diversion
- ☐ Large Debris Removal by machine - Plan required
- ☐ Gravel removal
- ☒ Other: Reconstruction of an existing stormwater management pond, stream infills, habitat creation and enhancements

Has a DMA Approval under the Dike Maintenance Act been submitted for this work? No

Please note that the ultimate decision whether this constitutes a Notification or a Change Approval lies with the Province of British Columbia. NOTE: Answer the question below as No. The Dike Maintenance Act (DMA) Approval application is currently transitioning to this form but is not yet been fully implemented. This question will be updated once the transition is complete.

### SITES

Click on the Add Sites button to add one or more sites.

Tracking Number: 100390145 | Version 1.0 | Submitted Date: Jun 3, 2022

Page 2 of 2

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<https://west-creek-awareness.ca/wp-content/uploads/2025/01/township-of-langley-foi-24-174.pdf>

<b>SITE</b>	
Location ID:	Golf Course Lands at Gougeator
<b>STREAM</b>	
Name of the Stream:	West and Nathan creeks
Source Flows Into:	Fraser River
<b>PROPOSED WORKS</b>	
Detailed Description of Works:	<p>Description of Proposed Activities/Works</p> <p>The Applicant (Seedle) is proposing to rezone a portion of the Golf Course Lands from RU-10 and RU-1 to M-2A. Approximately 40 percent of the Golf Course Lands are proposed to be rezoned to M-2A with the remaining 60 percent to be transferred to the Township of Langley for ecological and stormwater management uses.</p> <p>Existing stormwater management (detention) ponds are located within the subject properties. The West Pond is located west of 272 Street while the East Pond is located east of 272 Street. The proposed works involve expansion of the East Pond to increase its stormwater detention capacity and will include significant habitat enhancements. Minor modification of control works at the existing west detention pond are also proposed. A beaver management strategy has been developed to restore the intended design objectives for the stormwater management ponds.</p> <p>Ponds W4 and W5, and portions of Ponds W1 and W2 are proposed to be infilled. Streams W2, W3 and W8 are proposed to be infilled. The total proposed habitat losses west of 272 Street are 2,767 m<sup>2</sup> of aquatic habitat and 10,667 m<sup>2</sup> of riparian habitat. Areas where aquatic habitat is infilled but redeveloped as riparian habitat are characterized as "converted". Available off-setting area for riparian (or potentially aquatic habitat) is 36,260 m<sup>2</sup>.</p> <p>Ponds E6, E7, E8 and E9, as well as the eastern extension of Pond E5 are proposed to be infilled. Streams E2, E3 and streams adjacent to ponds E6 and E7 are proposed to be infilled. The total proposed habitat losses east of 272 Street are 7,104 m<sup>2</sup> of aquatic habitat and 23,123 m<sup>2</sup> of riparian habitat. Available off-setting area for riparian (or potentially aquatic habitat) is 13,558 m<sup>2</sup>. Areas where aquatic habitat is infilled but redeveloped as riparian habitat are characterized as "converted". Note that the East Pond (interim detention ponds) area is excluded from this habitat balance and is addressed separately.</p> <p>A conceptual plan for proposed off-setting is depicted by Envirocast Drawing No. 487-15-55. West of 272 Street new habitats include 10,976 m<sup>2</sup> of aquatic and 16,530 m<sup>2</sup> of riparian. An additional 950 m<sup>2</sup> of riparian habitat is converted from aquatic habitat. East of 272 Street an infiltration swale will be created along the eastern boundary of the Golf Course Lands.</p> <p>Various forms of off-setting habitats are proposed and are generally to be developed within areas presently characterized by low ecological values (i.e. previously disturbed and/or predominantly non-native vegetation). The proposed habitats include the following:</p> <ul style="list-style-type: none"> <li>shallow wetlands;</li> <li>ponds with depths over 1.0 metres;</li> <li>riparian shrublands;</li> <li>riparian/upland woodlands; and</li> </ul>

<ul style="list-style-type: none"> <li>a landscaped infiltration swale.</li> </ul> <p>Equipment/Machinery – to be determined.</p> <p>Construction Steps/Timelines – to be determined.</p> <p>Timing Windows – all instream work will be completed during the standard Fisheries window.</p> <p>Roles and Responsibilities – a Professional Engineer will oversee all aspects of the proposed stormwater management works. A QEP (R.P.Sic. or P.Ag.) will oversee all habitat construction and landscaping.</p> <p>Long-term Maintenance – under agreement with the Township of Langley all constructed habitats will be monitored and maintained for ten (10) years.</p>	Footprint of Project:	45,000 m <sup>2</sup>
<b>PROPOSED TIMING FOR WORKS</b>		
Instream Start Date: Instream End Date: Is the proposed timing within the approved regional timing window?	Aug 1, 2023 Sep 15, 2023 Yes	
<b>LOCATION OF WORKS</b>		
Provide a legal description of the land(s) where works are proposed:  Geographic Coords of Works: Photo of Works Location:	PID 024-850-817 PID 024-850-825 PID 023-854-395 49.1010000, -122.4710000 Golf Course Lands at Gougeator - aerial view of east side of project area Golf Course Lands at Gougeator - aerial view of west side of project area	
<b>LAND OWNERSHIP AT THE WORKS</b>		
Land Ownership:	<input checked="" type="checkbox"/> Applicant owns land <input type="checkbox"/> Land is Crown Land but applicant has tenure <input type="checkbox"/> Land is Crown Land but tenured to Ministry of Transportation <input type="checkbox"/> A third Party owns the land but the applicant has lease or tenure <input type="checkbox"/> A third Party owns the land but applicant has written consent <input type="checkbox"/> Land is Crown Land but the applicant does not have a tenure	
<b>CONTACTS</b>		
If you are not carrying out the work, indicate contractor/company's name, professional affiliation, mailing address, postal code and telephone numbers. If a different company is designing and supervising the work, please include this information as well.		
Contact Info: Name: Doing Business As: Phone: Fax: Email: BC Inc. Number: GST Registration Number: Contact Name: Mailing Address: City:	Aglin & Martin Consultants Ltd.  804-597-9055  201-12448 80 Avenue Surrey BC V3W 3E9	Type of Contact: Design and Supervision

## LOCATION INFORMATION

## LAND DETAILS

## DRAWINGS

A Drawing to Scale is required that meets the Application Drawing Standards. Choose one of the options below to submit the required map/drawing.

Additionally, it is recommended that you provide a topographical map showing the general location of the property where the water is proposed to be used and the works constructed in relation to nearby communities, highways, railways and other water sources.

(This additional map will not be necessary if your Drawing to Scale is provided using the Geomark Service or a spatial file such as .KML or .KMZ)

☒ I have map(s) saved to my computer and wish to provide those with my application

## MAP FILES

Do you have a PDF or image file of a drawn map? You can upload it here.

Description	Filename
Location Map	Figure 1 East and West Loca...

## ATTACHED DOCUMENTS

Document Type	Description	Filename
Other	report with drawings	WSA - June 1 2022.pdf

## PRIVACY DECLARATION

## PRIVACY NOTE FOR THE COLLECTION, USE AND DISCLOSURE OF PERSONAL INFORMATION

Personal information is collected by FrontCounter BC under the legal authority of section 26 (c) and 27 (1)(a)(i) of the Freedom of Information and Protection of Privacy Act (the Act).

The collection, use, and disclosure of personal information is subject to the provisions of the Act. The personal information collected by FrontCounter BC will be used to process your inquiry or application(s). It may also be shared when strictly necessary with partner agencies that are also subject to the provisions of the Act. The personal information supplied in the application package may be used for referrals or notifications as required. Personal information may be used by FrontCounter BC for survey purposes. For more information regarding the collection, use, and/or disclosure of your personal information by FrontCounter BC, please contact FrontCounter BC at 1-877-855-3322 or at:

FrontCounter BC Program Director  
FrontCounter BC, Provincial Operation  
441 Columbia Street  
Kamloops, BC V2C 2T3

☒ Check here to indicate that you have read and agree to the privacy declaration stated above.

## REFERRAL INFORMATION

Some applications may also be passed on to other agencies, ministries or other affected parties for referral or consultation purposes. A referral or notification is necessary when the approval of your application might affect someone else's rights or resources or those of the citizens of BC. An example of someone who could receive your application for referral purposes is a habitat officer who looks after the fish and wildlife in the area of your application. This does not apply to all applications and is done only when required.

Please enter contact information below for the person who would best answer questions about your application that may arise from anyone who received a referral or notification.

Company / Organization:	181544 Canada Inc.
Contact Name:	Mr. Adam Donnelly
Contact Address:	3050 Gilmour Division Burnaby BC V5G 3S4
Contact Phone:	604-455-3322
Contact Email:	adam.donnelly@bocdc.ca

☒ I hereby consent to the disclosure of the information contained in this application to other agencies, government ministries or other affected parties for referral or First Nation consultation purposes.

## IMPORTANT NOTICES

Please review the "Important Notices" below and then check the declaration at the bottom confirming that everything in this application is complete and accurate.

- I understand that the submission of this application does not provide authority under the Water Sustainability Act to construct works in and about a stream. I also understand that my application must be reviewed before a decision is made as to whether an approval may be granted and that, as part of that review, additional information may be requested of me.
- The application may be subject to further requirements under the federal Fisheries Act. Please refer to Fisheries and Oceans Canada Projects Near Water webpage (<http://www.dfo-mpo.gc.ca/pnw-gpc/index-eng.html>) for information on how to ensure your project complies with the Fisheries Act.

## DECLARATION

☒ By submitting this application form, I declare that the information contained on this form is complete and accurate.

## APPLICATION AND ASSOCIATED FEES

Item	Amount	Taxes	Total	Outstanding Balance
Changes in and about a Stream	\$250.00		\$250.00	\$0.00

Application Fee

## OFFICE

Office to submit application to: Surrey

## PROJECT INFORMATION

Is this application for an activity or project which requires more than one natural resource authorization from the Province of BC? No

## APPLICANT SIGNATURE

Applicant Signature	Date

## OFFICE USE ONLY

Office	File Number	Project Number
Surrey	Disposition ID	Client Number



# GOLF COURSE LANDS AT GLOUCESTER, LANGLEY, BC

## PROPOSED STREAM INFILLS AND DETENTION POND EXPANSION

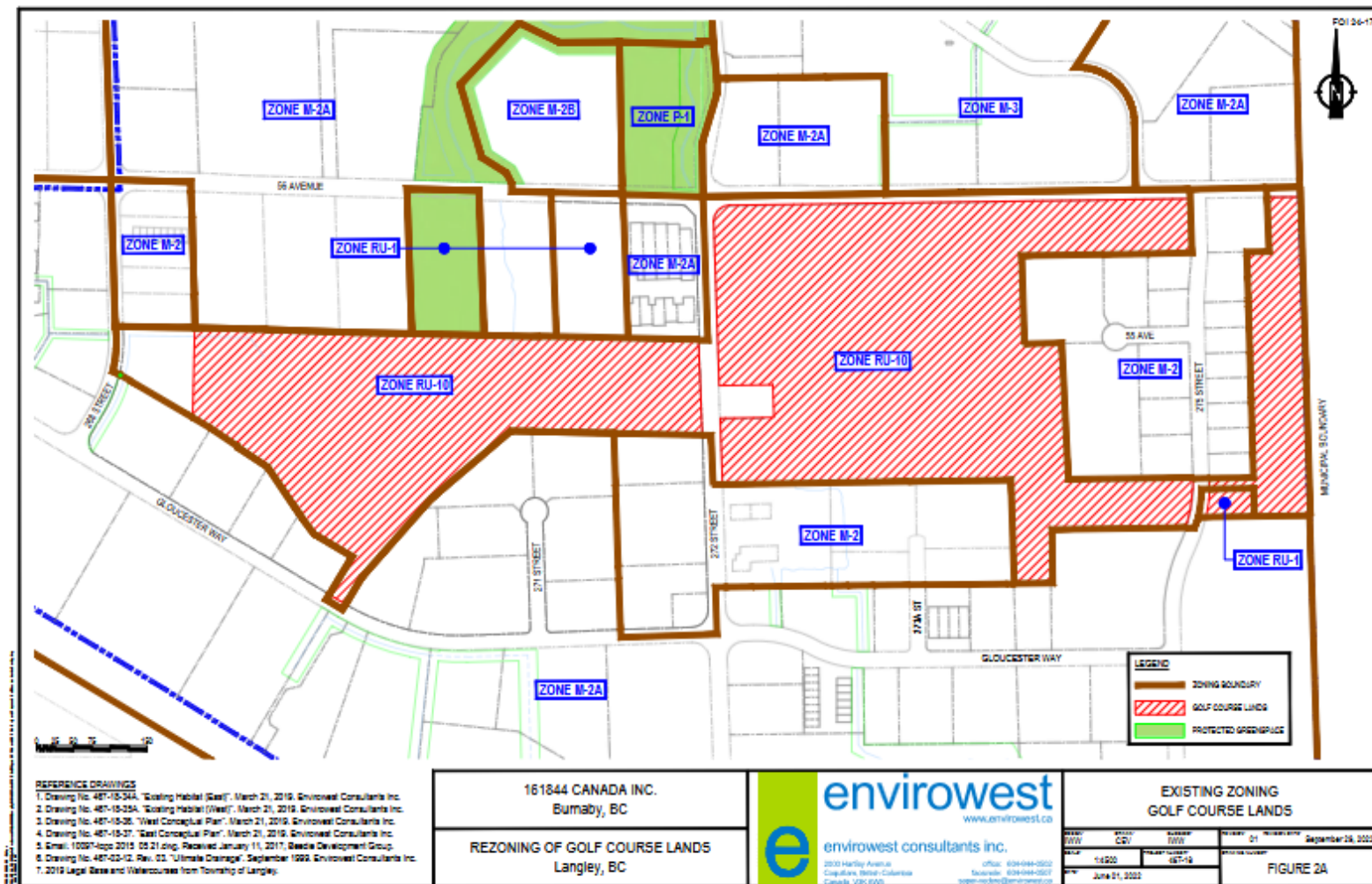
November 30, 2022

**ENVIROWEST CONSULTANTS INC.**  
2000 Hartley Avenue  
Coquitlam, BC V3K 6W5  
Tel.: 604-944-0502  
[www.envirowest.ca](http://www.envirowest.ca)



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## 2.0 DEVELOPMENT PERMIT REQUIREMENTS

The following information is provided to satisfy Subsection 4.20 of OCP Sch. 3. The fee will be submitted by the applicant. Mr. Ian Whyte, P.Ag. is the lead agent for this application. Supporting information follows.

## 3.0 FISH AND FISH HABITAT

### 3.1 Fish Distribution

West of 272 Street, only manmade habitat/drainage features occur south of 56 Avenue (except for a section of channel immediately south of 56 Avenue). Historical aerial imagery and mapping reflect only a small area of open water. However, extensive excavation and grading was undertaken in preparation for both the detention pond and golf course development, creating a large lentic (pond) ecosystem.

Since its construction beaver activity has raised the water levels in the West Pond (Photograph 1) resulting in inundation of adjacent areas that have developed as wetland habitats. All of the constructed drainage features drain through the West Pond. West of 272 Street coho salmon have been observed upstream as far as Highway 1. All of the stream features in the Golf Course Lands west of 272 Street are considered accessible to (if not also inhabited by) salmonids. Other fish species captured during instream works west of 272 Street include cutthroat trout, threespine stickleback, fathead minnow, brown bullhead, black crappie and largemouth bass.



Photograph 1. Beaver lodge on the shoreline of Pond W1 (West Pond) (April 5, 2017).

East of 272 Street, upstream of the East Pond, historical records indicate presence of coho salmon, cutthroat trout, threespine stickleback and crayfish (not identified to species). Beaver activity has likely eliminated access for juvenile salmonids into some areas. Sampling in and about the East Pond in 2018 captured only threespine stickleback where salmonids were previously captured.

East of 272 Street, upstream of the East Pond, historical records indicate presence of coho salmon, cutthroat trout, threespine stickleback and crayfish (not identified to species). Beaver activity has likely eliminated access for juvenile salmonids into some areas. Sampling in and about the East Pond in 2018 captured only threespine stickleback where salmonids were previously captured

## May 2025

## Proof of Life. Video Evidence of Coho Successfully Spawning in West Creek Headwaters East of 272 St

black cottonwood, with wetlands/pond expanding into low lying areas. Himalayan blackberry is common throughout the Golf Course Lands east of 272 Street. A significant occurrence of Japanese knotweed (a noxious weed in British Columbia) occurs to the southeast of the East Pond; treatment of the Japanese knotweed by a licensed pesticide applicator is underway.

### 3.4 Fish Distribution

West of 272 Street, only manmade habitat/drainage features occur south of 56 Avenue (except for a section of channel immediately south of 56 Avenue). Historical aerial imagery and mapping reflect only a small area of open water. However, extensive excavation and grading was undertaken in preparation for both the detention pond and golf course development, creating a large lentic (pond) ecosystem.

Since its construction beaver activity has raised the water levels in the West Pond (Photograph 24) resulting in inundation of adjacent areas that have developed as wetland habitats. All of the constructed drainage features drain through the West Pond. West of 272 Street coho salmon have been observed upstream as far as Highway 1. All of the stream features in the Golf Course Lands west of 272 Street are considered accessible to (if not also inhabited by) salmonids. Other fish species captured during instream works west of 272 Street include cutthroat trout, threespine stickleback, fathead minnow, brown bullhead, black crappie and largemouth bass.



Photograph 24. Beaver lodge on the shoreline of Pond W1 (West Pond) (April 5, 2017).

East of 272 Street, upstream of the East Pond, historical records indicate presence of coho salmon, cutthroat trout, threespine stickleback and crayfish (not identified to species). Beaver activity has likely eliminated access for juvenile salmonids into some areas. Sampling in and about the East Pond in 2018 captured only threespine stickleback where salmonids were previously captured.

West Creek continues approximately ten kilometres downstream and is confluent with the Fraser River upstream of MacMillan Island. Fish species known to inhabit West Creek include coho, chinook and chum salmon, coastal cutthroat and rainbow trout, threespine stickleback, prickly sculpin, lamprey and non-native brown catfish and brassy minnow.



Oct 2022  
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Photograph 9. Pond W5 is a shallow area of seasonal ponding adjacent to developed lots south of the Golf Course Lands (January 27, 2022).

### 3.2.2 Aquatic Habitats East of 272 Street

Drainage features within the Golf Course Lands east of 272 Street include manmade/alterd drainages and storm sewers, but also include a number of features that are natural and/or naturalized. A detention pond east of 272 Street (the East Pond; also referred to as Interim Detention Ponds) was constructed in 2004 to an interim standard. DFO approved the expansion of the East Pond in 2008; however, that work has not been completed to date. The East Pond drains into a section of natural channel that is conveyed diagonally from the southeast of the 56 Avenue - 272 Street intersection to its northwest side. It then flows northward along the west side of 272 Street to the confluence with drainage from the West Pond and continues northward beyond the boundaries of the Gloucester Industrial Park.

Proposed modifications to the East Pond are addressed separately under the heading "Proposed Stormwater Management Improvements" below.

<https://west-creek-awareness.ca/wp-content/uploads/2023/05/township-of-langley-foi-23-026-pgs.-209-256.pdf>

#### Aquatic Habitats East of 272 Street

Drainage features within the Golf Course Lands east of 272 Street include manmade/alterd drainages and storm sewers, but also include a number of features that are natural and/or naturalized. A detention pond east of 272 Street (the East Pond; also referred to as Interim Detention Ponds) was constructed in 2004 to an interim standard. DFO approved the expansion of the East Pond in 2008; however, that work has not been completed to date. The East Pond drains into a section of natural channel that is conveyed diagonally from the southeast of the 56 Avenue - 272 Street intersection to its northwest side. It then flows northward along the west side of 272 Street to the confluence with drainage from the West Pond and continues northward beyond the boundaries of the Gloucester Industrial Park.

Nov 2023  
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Photograph 8. Pond W5 is a shallow area of seasonal ponding adjacent to developed lots south of the Golf Course Lands (January 27, 2022).

### 3.1.2 Aquatic Habitats East of 272 Street

Drainage features within the Golf Course Lands east of 272 Street include manmade/alterd drainages and storm sewers, but also include a number of features that are natural and/or naturalized. A detention pond east of 272 Street (the East Pond; also referred to as Interim Detention Ponds) was constructed in 2004 to an interim standard. DFO approved the expansion of the East Pond in the mid-2010s; however, that work has not been completed to date. The East Pond drains into a section of natural channel that is conveyed diagonally from the southeast of the 56 Avenue - 272 Street intersection to its northwest side. It then flows northward along the west side of 272 Street to the confluence with drainage from the West Pond and continues northward beyond the boundaries of the Gloucester Industrial Park.

Proposed modifications to the East Pond are addressed separately under the heading "Proposed Stormwater Management Improvements" below.

#### 3.1.2.1 Streams

Stream E1 (Photograph 9) is a manmade channel that was constructed in 2004 to connect the storm sewer system at the 55 Avenue cul-de-sac (west of 275 Street) to the East Pond. This stream intersects original/natural channels that drained Ponds E4 and E5 and is currently flooded by beaver dams at its eastern end (currently considered the eastern end of Pond E5). The channel has a wetted width of 3 to 4 metres, although this is variable depending on the influence of beaver dams. The bankfull channel width is 6 to 8 metres.

<https://west-creek-awareness.ca/wp-content/uploads/2025/01/township-of-langley-foi-24-174.pdf>

#### Aquatic Habitats East of 272 Street

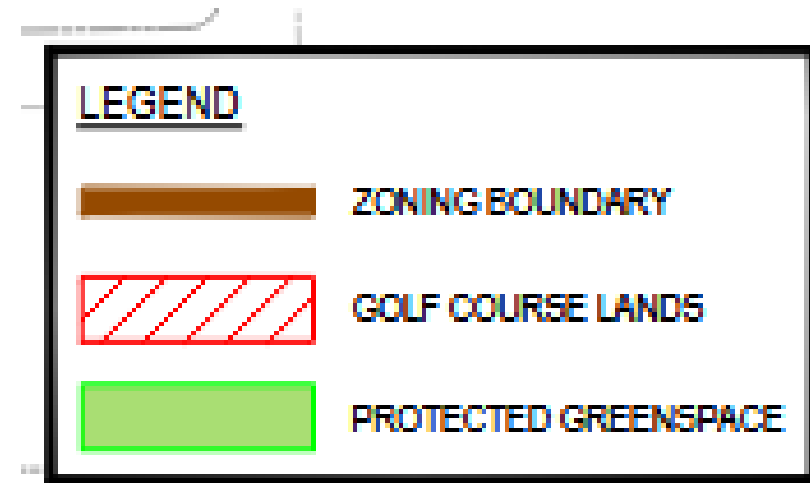
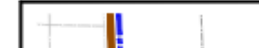
Drainage features within the Golf Course Lands east of 272 Street include manmade/alterd drainages and storm sewers, but also include a number of features that are natural and/or naturalized. A detention pond east of 272 Street (the East Pond; also referred to as Interim Detention Ponds) was constructed in 2004 to an interim standard. DFO approved the expansion of the East Pond in the mid-2010s; however, that work has not been completed to date. The East Pond drains into a section of natural channel that is conveyed diagonally from the southeast of the 56 Avenue - 272 Street intersection to its northwest side. It then flows northward along the west side of 272 Street to the confluence with drainage from the West Pond and continues northward beyond the boundaries of the Gloucester Industrial Park.



### 1.4 Development Objective

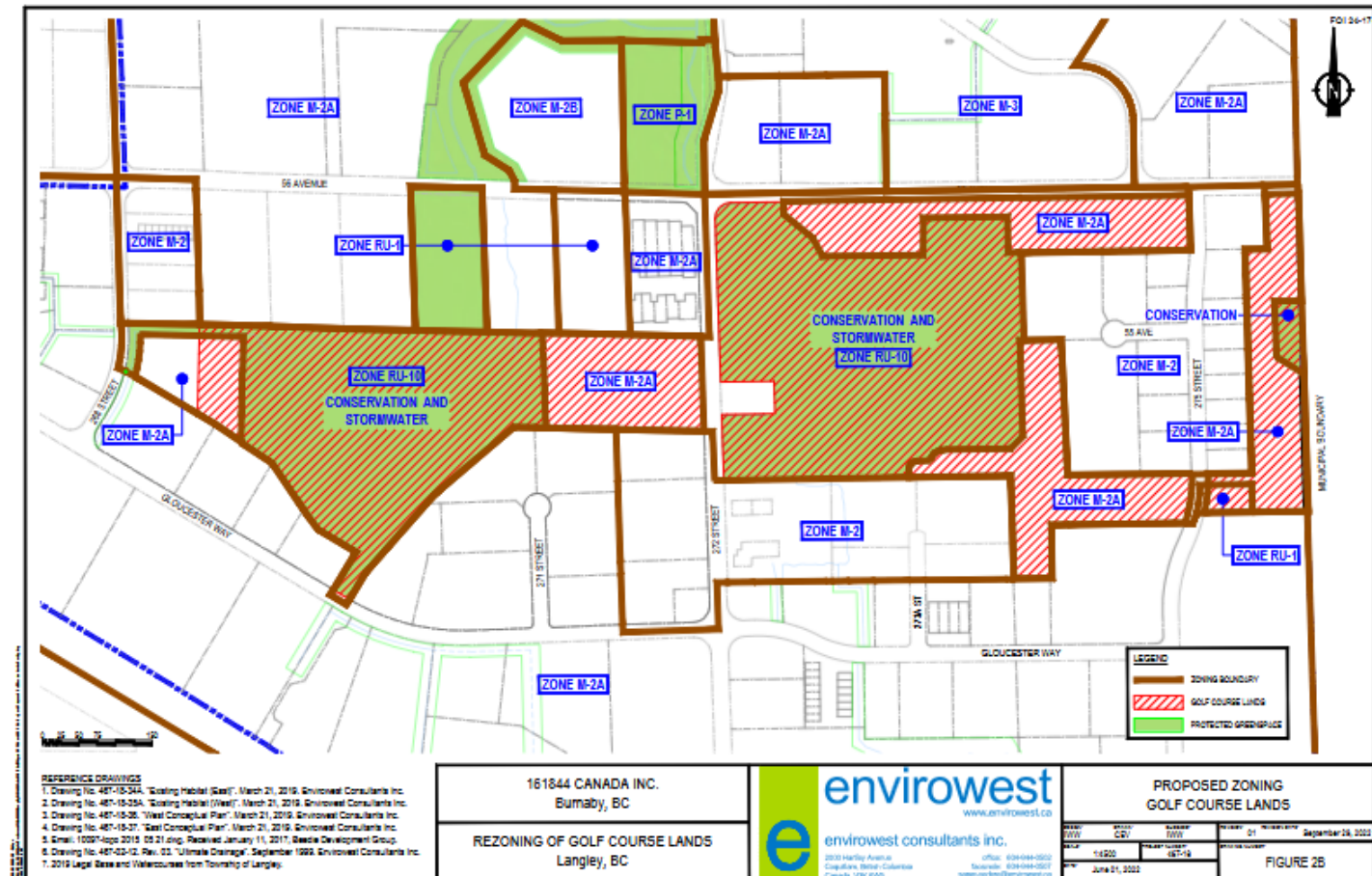
Beedie is proposing to rezone a portion of the Golf Course Lands from RU-10 and RU-1 to M-2A. The Golf Course Lands are comprised of one large lot (PID 024-650-617) of 36.05 ha (89.09 acres) and a smaller lot (PID 024-650625) of 0.24 ha (0.60 acres) located east of 275 Street. The development application also includes one lot outside of the Golf Course Lands. The lot east of 268 Street (PID 023-884-398) is currently zoned RU-10 and will also be rezoned to M-2A. Approximately 40 percent of the Golf Course Lands are proposed to be rezoned to M-2A with the remaining 60 percent to be transferred to the Township of Langley for ecological and stormwater management uses. Proposed zoning is shown in Figure 2B.

The Golf Course Lands are surrounded by developed industrial properties with the exception of several yet-to-be developed properties, and ALR land in the adjacent City of Abbotsford. The Golf Course Lands occur to the south of 56 Avenue, on both the east and west sides of the highway. Figure 3 illustrates the boundaries of the Golf Course Lands.



## REFERENCE DRAWINGS

1. Drawing No. 467-18-34A. "Existing Habitat (East)". March 21, 2019. Envirowest Consultants Inc.
2. Drawing No. 467-18-35A. "Existing Habitat (West)". March 21, 2019. Envirowest Consultants Inc.
3. Drawing No. 467-18-36. "West Conceptual Plan". March 21, 2019. Envirowest Consultants Inc.
4. Drawing No. 467-18-37. "East Conceptual Plan". March 21, 2019. Envirowest Consultants Inc.
5. Email: 10097-topo 2015 05 21.dwg. Received January 11, 2017; Beedie Development Group.
6. Drawing No. 467-02-12. Rev. 03. "Ultimate Drainage". September 1999. Envirowest Consultants Inc.
7. 2019 Legal Base and Watercourses from Township of Langley.

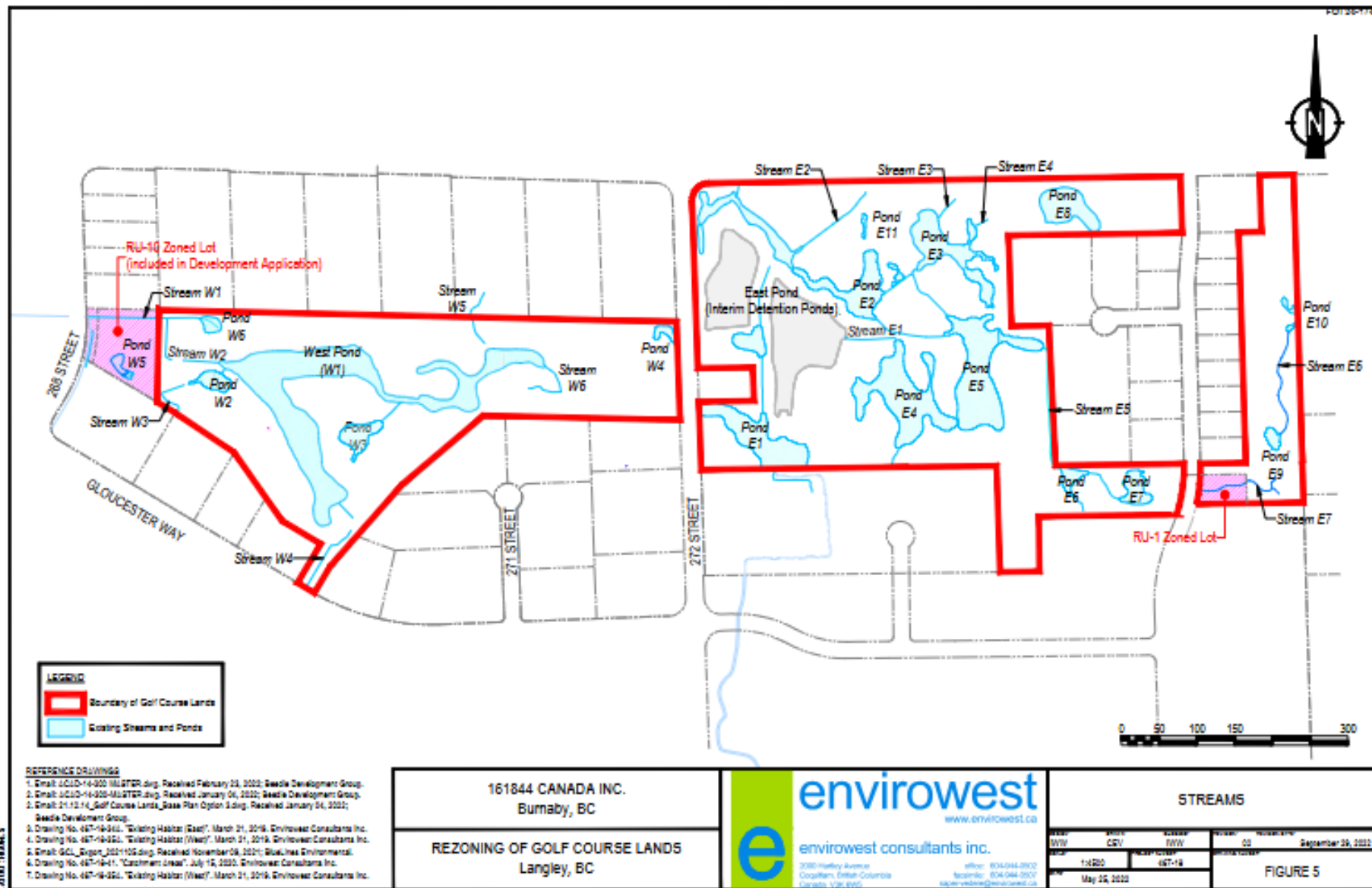


The location of the Gloucester Industrial Park (and Golf Course Lands) relative to watershed boundaries is depicted in Figure 4. Envirowest Drawing No. 467-18-41 (Attachment A) defines the catchment boundaries within the industrial park.



Ponds W4 and W5, and portions of Ponds W1 and W2 are proposed to be infilled. Streams W2, W3 and W6 are proposed to be infilled. The total proposed habitat losses west of 272 Street are 2,767 m<sup>2</sup> of aquatic habitat and 10,667 m<sup>2</sup> of riparian habitat. Areas where aquatic habitat is infilled but redeveloped as riparian habitat are characterized as “converted”. Available off-setting area for riparian (or potentially aquatic habitat) is 36,280 m<sup>2</sup>.

Ponds E6, E7, E8 and E9, as well as the eastern extension of Pond E5 are proposed to be infilled. Streams E2, E5 and streams adjacent to ponds E6 and E7 are proposed to be infilled. The total proposed habitat losses east of 272 Street are 7,104 m<sup>2</sup> of aquatic habitat and 23,123 m<sup>2</sup> of riparian habitat. Available off-setting area for riparian (or potentially aquatic habitat) is 13,358 m<sup>2</sup>. Areas where aquatic habitat is infilled but redeveloped as riparian habitat are characterized as “converted”. Note that the East Pond (interim detention ponds) area is excluded from this habitat balance and is addressed separately





### 3.4 Fish Distribution

West of 272 Street, only manmade habitat/drainage features occur south of 56 Avenue (except for a section of channel immediately south of 56 Avenue). Historical aerial imagery and mapping reflect only a small area of open water. However, extensive excavation and grading was undertaken in preparation for both the detention pond and golf course development, creating a large lentic (pond) ecosystem.

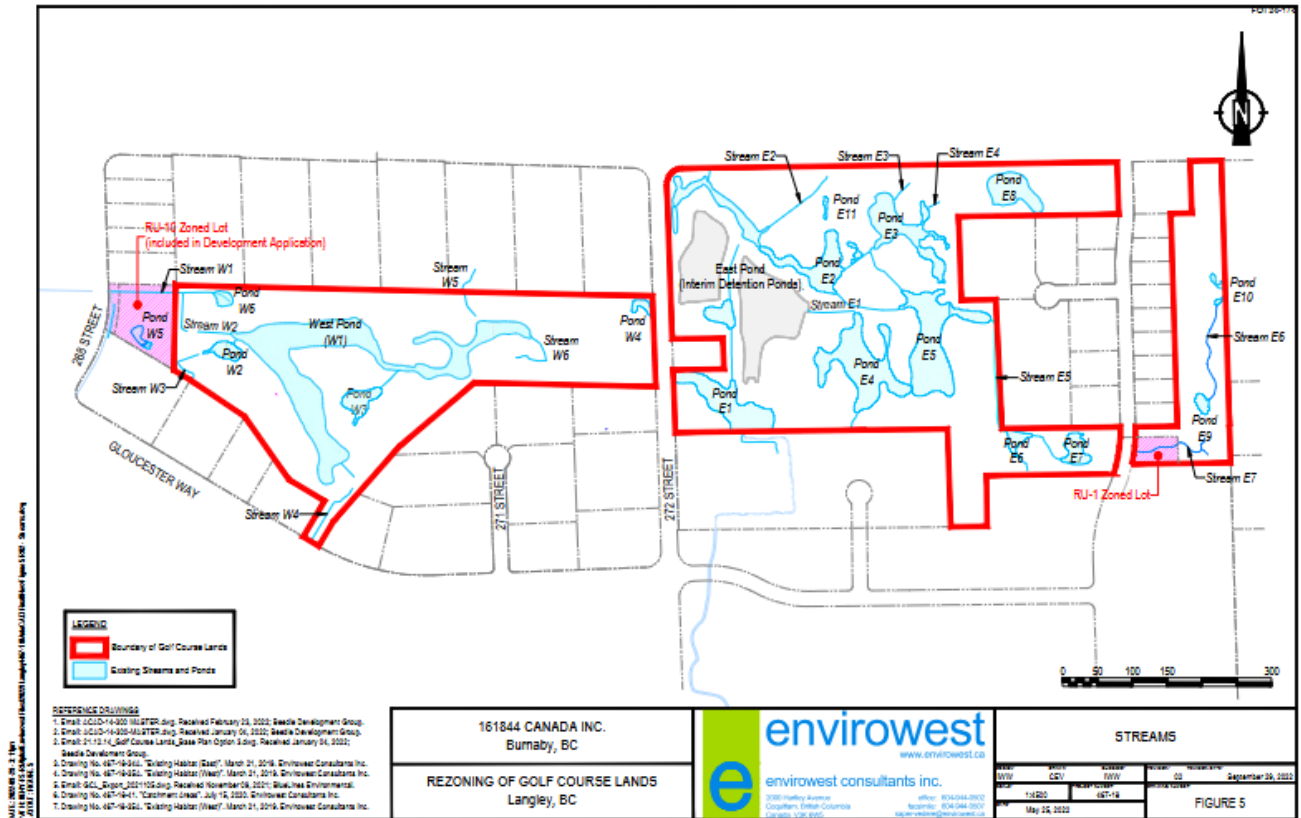
Since its construction beaver activity has raised the water levels in the West Pond (Photograph 24) resulting in inundation of adjacent areas that have developed as wetland habitats. All of the constructed drainage features drain through the West Pond. West of 272 Street coho salmon have been observed upstream as far as Highway 1. All of the stream features in the Golf Course Lands west of 272 Street are considered accessible to (if not also inhabited by) **salmonids**. Other fish species captured during instream works west of 272 Street include cutthroat trout, threespine stickleback, fathead minnow, brown bullhead, black crappie and largemouth bass.



Photograph 24. Beaver lodge on the shoreline of Pond W1 (West Pond) (April 5, 2017).

East of 272 Street, upstream of the East Pond, historical records indicate presence of coho salmon, cutthroat trout, threespine stickleback and crayfish (not identified to species). Beaver activity has likely eliminated access for juvenile **salmonids** into some areas. Sampling in and about the East Pond in 2018 captured only threespine stickleback where **salmonids** were previously captured.

West Creek continues approximately ten kilometres downstream and is confluent with the Fraser River upstream of MacMillan Island. Fish species known to inhabit West Creek include coho, chinook and chum salmon, coastal cutthroat and rainbow trout, threespine stickleback, prickly sculpin, lamprey and non-native brown catfish and brassy minnow.



East of 272 Street, upstream of the East Pond, historical records indicate presence of coho salmon, cutthroat trout, threespine stickleback and crayfish (not identified to species). Beaver activity has likely eliminated access for juvenile **salmonids** into some areas. Sampling in and about the East Pond in 2018 captured only threespine stickleback where **salmonids** were previously captured

### 12.3 Impact Summary

Ponds W4 and W5, and portions of Ponds W1 and W2 are proposed to be infilled. Streams W2, W3 and W6 are proposed to be infilled. The total proposed habitat losses west of 272 Street are 2,767 m<sup>2</sup> of aquatic habitat and 10,667 m<sup>2</sup> of riparian habitat. Areas where aquatic habitat is infilled but redeveloped as riparian habitat are characterized as “converted”. Available off-setting area for riparian (or potentially aquatic habitat) is 36,280 m<sup>2</sup>.

Ponds E6, E7, E8 and E9, as well as the eastern extension of Pond E5 are proposed to be infilled. Streams E2, E5 and streams adjacent to ponds E6 and E7 are proposed to be infilled. The total proposed habitat losses east of 272 Street are 7,104 m<sup>2</sup> of aquatic habitat and 23,123 m<sup>2</sup> of riparian habitat. Available off-setting area for riparian (or potentially aquatic habitat) is 13,358 m<sup>2</sup>. Areas where aquatic habitat is infilled but redeveloped as riparian habitat are characterized as “converted”. Note that the East Pond (interim detention ponds) area is excluded from this habitat balance and is addressed separately.

A conceptual plan for proposed WSA/FA offsetting is depicted by Envirowest Drawing No. 467-18-57A (Attachment A). West of 272 Street new habitats include 10,978 m<sup>2</sup> of aquatic and 18,330 m<sup>2</sup> of riparian. An additional 980 m<sup>2</sup> of riparian habitat is converted from aquatic habitat. East of 272 Street an infiltration swale (treated herein as riparian habitat) will be created along the eastern boundary of the Golf Course Lands in association with an ALR buffer requirement.

A summarized habitat balance table for WSA/FA losses and gains is presented below.

**Table 1. Impacts addressed by WSA and FA Authorizations**

Habitat Feature	Aquatic Habitat Area (m <sup>2</sup> )			Riparian Habitat Area (m <sup>2</sup> )		
	Loss	Gain	Net	Loss	Gain	Net
Streams/wetlands	9,871	10,978	1,107			
RAPR SPEAs				33,790	31,546	-2,244
Converted	1,107	0	-1,107	0	1,107	1,107
Infiltr'n swale				0	1,137	1,137
<b>TOTALS:</b>	<b>10,978</b>	<b>10,978</b>	<b>0</b>	<b>33,790</b>	<b>33,790</b>	<b>0</b>

A conceptual plan for proposed OCP Sch. 3 offsetting is depicted by Envirowest Drawing No. 467-18-57B. Infilling of streamside areas that are outside of RAPR setbacks include 23,263 m<sup>2</sup>. New riparian habitats that are exclusive of those required to balance the loss of RAPR areas include 2,153 m<sup>2</sup> of additional streamside area (that will also require restoration/enhancement) and 42,870 m<sup>2</sup> of area inside streamside setbacks (also requiring restoration/enhancement). The latter is afforded only 50% credit. A nominal net gain of riparian area is proposed.

A summarized habitat balance table for OCP Sch. 3 losses and gains is presented below.

### 4.2.1 Impact Summary

Ponds W4 and W5, and portions of Ponds W1 and W2 are proposed to be infilled. Streams W2, W3 and W6 are proposed to be infilled. The total proposed habitat losses west of 272 Street are 2,767 m<sup>2</sup> of aquatic habitat and 10,667 m<sup>2</sup> of riparian habitat. Areas where aquatic habitat is infilled but redeveloped as riparian habitat are characterized as “converted”. Available off-setting area for riparian (or potentially aquatic habitat) is 36,280 m<sup>2</sup>.

Ponds E6, E7, E8 and E9, as well as the eastern extension of Pond E5 are proposed to be infilled. Streams E2, E5 and streams adjacent to ponds E6 and E7 are proposed to be infilled. The total proposed habitat losses east of 272 Street are 7,104 m<sup>2</sup> of aquatic habitat and 23,123 m<sup>2</sup> of riparian habitat. Available off-setting area for riparian (or potentially aquatic habitat) is 13,358 m<sup>2</sup>. Areas where aquatic habitat is infilled but redeveloped as riparian habitat are characterized as “converted”. Note that the East Pond (interim detention ponds) area is excluded from this habitat balance and is addressed separately.

A conceptual plan for proposed offsetting is depicted by Envirowest Drawing No. 467-18-55 (Attachment A). West of 272 Street new habitats include 10,978 m<sup>2</sup> of aquatic and 18,330 m<sup>2</sup> of riparian. An additional 980 m<sup>2</sup> of riparian habitat is converted from aquatic habitat. East of 272 Street an infiltration swale (treated herein as riparian habitat) will be created along the eastern boundary of the Golf Course Lands in association with an ALR buffer requirement.

A summarized habitat balance table is presented below; a detailed habitat balance is provided in Attachment C.

Habitat Feature	Aquatic Habitat Area (m <sup>2</sup> )			Riparian Habitat Area (m <sup>2</sup> )		
	Loss	Gain	Net	Loss	Gain	Net
Streams/wetlands	9,871	10,978	1,107			
RAPR SPEAs				33,790	31,546	-2,244
Converted	1,107	0	-1,107	0	1,107	1,107
Infiltr'n swale				0	1,137	1,137
<b>TOTALS:</b>	<b>10,978</b>	<b>10,978</b>	<b>0</b>	<b>33,790</b>	<b>33,790</b>	<b>0</b>

### 4.2.2 Habitat Descriptions for Proposed Infill Areas

The aquatic areas proposed to be infilled include a variety of habitat types. Ponds/wetlands proposed to be infilled include permanent and seasonal water bodies of various depths and exposure (forested or open areas). Several are isolated with no overland connectivity to other drainage features. Streams proposed to be infilled include permanent and seasonal features and exposure (forested or open areas). These are discussed below.

**Table 2. Impacts addressed by OCP Schedule 3 Development Permit.**

Habitat Feature	Aquatic Habitat Area (m <sup>2</sup> )			Riparian Habitat Area (m <sup>2</sup> )		
	Loss	Gain	Net	Loss	Gain	Net
OCP SPEAs				23,263	2,153	-21,110
OCP SPEAs					42,870	21,435
TOTALS:						325

#### 12.4 Habitat Descriptions for Proposed Infill Areas

The aquatic areas proposed to be infilled include a variety of habitat types. Ponds/wetlands proposed to be infilled include permanent and seasonal water bodies of various depths and exposure (forested or open areas). Several are isolated with no overland connectivity to other drainage features. Streams proposed to be infilled include permanent and seasonal features and exposure (forested or open areas). These are discussed below.

##### 12.4.1 Permanent Open Ponds

The eastern extent of Pond W1 is an open expanse of deep water whose banks are characterized by reed canarygrass (*Phalaris arundinacea*) and shrubs, with small red alders (*Alnus rubra*) on the north bank, and snags on the south bank. Parts of this pond are considered likely to be suitable for breeding by Pacific treefrog (*Pseudacris regilla*), but also by introduced American bullfrog (*Lithobates catesbeianus*) and green frog (*Lithobates clamitans*). Pond W1 is accessible to fish.

Pond W2 is a smaller, sun-exposed pond surrounded by trees on its west side, that is characterized by a deeper area of open water with shrubs and reed canarygrass growing in the water around the edge, and a shallower area characterized by denser reed canarygrass and common cattail (*Typha latifolia*) growing in the water. Pond W2 is considered suitable for breeding by northern red-legged frog (*Rana aurora*), Pacific treefrog, and northwestern salamander (*Ambystoma gracile*), but may also be suitable for American bullfrog and green frog. Oregon spotted frog (*Rana pretiosa*) is not expected to occur on site due to its decline at the nearest known occurrence location (Aldergrove), but shallow inundated areas around the edges of this pond are considered suitable for breeding by this species. Pond W2 is accessible to fish.

The eastern extent of Pond E5 is generally shallow with a deeper central area; its general character is marshy, with common cattail and small red alder trees growing in the water, along with reed canarygrass. Evidence of recent beaver activity is abundant. A great blue heron was observed foraging here. The location is considered suitable for breeding by northwestern salamander, Pacific treefrog and potentially northern red-legged frog, but likely also American bullfrog and green frog. Pond E5 is considered to be accessible to fish.

Pond E8 is of broadly similar character to the eastern extent of Pond W1 (i.e., open deeper water with reed canarygrass around the edges), but less of its banks have shrubs or trees. A small number of mature conifers occur at its west edge. A small amount of woody debris occurs in the pond, as do some submerged plants, but cattail is absent. This pond is expected to be used for breeding by



# ATTACHMENT B Species-at-Risk List

Table 1. Species at risk (provincially Red- or Blue-listed species, and species designated Special Concern, Threatened or Endangered by COSEWIC), considered to have some likelihood of occurrence on the subject Property. Acronyms: COSEWIC = Committee on the Status of Endangered Wildlife in Canada, SARA = Species at Risk Act, CDC = BC Conservation Data Centre, N/A = not applicable. 'N/A' in occurrences columns indicates that the species is not mapped by that resource, or that critical habitat does not exist for that species.

Scientific Name	Common Name	Conservation Status			Potential Use of Property				Occurrences Within 5 km of Property's Midpoint				
		BC List	COSEWIC	SARA Schedule 1	Reproduction	Foraging	Sheltering (e.g. Roosting, Over-wintering)	Dispersal / Migration	CDC Element Occurrence	E-Fauna BC / E-Flora BC (non-CDC records)	All Fish Points	BC Frogwatch Atlas	Critical Habitat
Amphibians and Reptiles													
Anaxyrus boreas	Western Toad	Yellow	Special Concern	Special Concern	✓	✓	✓	✓	N/A	-	N/A	-	N/A
Chrysemys picta pop. 1	Painted Turtle - Pacific Coast Population	Red	Threatened	Endangered	✓	✓	✓	✓	✓	-	N/A	-	✓
Rana aurora	Northern Red-legged Frog	Blue	Special Concern	Special Concern	✓	✓	✓	✓	✓ (on Property)	-	N/A	✓	N/A
Rana pretiosa	Oregon Spotted Frog	Red	Endangered	Endangered	✓	✓	✓	✓	-	✓	N/A	✓	✓
Birds													
Ardea herodias fannini	Great Blue Heron, fannini subspecies	Blue	Special Concern	Special Concern	✓	✓	✓	✓	-	✓	N/A	N/A	N/A
Asio flammeus	Short-eared Owl	Blue	Threatened	Special Concern	✓	✓	✓	✓	-	-	N/A	N/A	N/A
Botaurus lentiginosus	American Bittern	Blue	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
Butorides virescens	Green Heron	Blue	-	-	✓	✓	✓	✓	-	✓	N/A	N/A	N/A
Contopus cooperi	Olive-sided Flycatcher	Blue	Special Concern	Threatened	✓	✓	✓	✓	N/A	✓	N/A	N/A	N/A
Hirundo rustica	Barn Swallow	Blue	Special Concern	Threatened	-	✓	✓	✓	N/A	✓	N/A	N/A	N/A
Megascops kennicottii kennicottii	Western Screech-Owl, kennicottii subspecies	Blue	Threatened	Threatened	✓	✓	✓	✓	-	-	N/A	N/A	N/A
Nycticorax nycticorax	Black-crowned Night-heron	Red	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
Patagioenas fasciata	Band-tailed Pigeon	Blue	Special Concern	Special Concern	✓	✓	✓	✓	-	✓	N/A	N/A	N/A
Progne subis	Purple Martin	Blue	-	-	-	✓	✓	✓	-	-	N/A	N/A	N/A
Tyto alba	Barn Owl	Red	Threatened	Threatened	✓	✓	✓	✓	-	-	N/A	N/A	✓ (on Property)

Table 1, continued.

Scientific Name	Common Name	Conservation Status			Potential Use of Property				Occurrences Within 5 km of Property's Midpoint				
		BC List	COSEWIC	SARA Schedule 1	Reproduction	Foraging	Sheltering (e.g. Roosting, Over-wintering)	Dispersal / Migration	CDC Element Occurrence	E-Fauna BC / E-Flora BC (non-CDC records)	All Fish Points	BC Frogwatch Atlas	Critical Habitat
Mammals													
<i>Corynorhinus townsendii</i>	Townsend's Big-eared Bat	Blue	-	-	-	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Lepus americanus washingtonii</i>	Snowshoe Hare, <i>washingtonii</i> subspecies	Red	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Mustela frenata altifrontalis</i>	Long-tailed weasel, <i>altifrontalis</i> subspecies	Red	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Myotis lucifugus</i>	Little Brown Myotis	Yellow	Endangered	Endangered	✓	✓	✓	✓	N/A	-	N/A	N/A	-
<i>Sorex bendirii</i>	Pacific Water Shrew	Red	Endangered	Endangered	✓	✓	✓	✓	✓	✓	N/A	N/A	✓
<i>Sorex rohwleri</i>	Olympic Shrew	Red	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Sorex trowbridgei</i>	Trowbridge's Shrew	Blue	-	-	✓	✓	✓	✓	✓	-	N/A	N/A	N/A
Fishes													
<i>Catostomus</i> sp. cf. <i>catostomus</i>	Salish Sucker	Red	Threatened	Threatened	-	-	-	-	✓	N/A	✓	N/A	✓
<i>Oncorhynchus clarkii clarkii</i>	Cutthroat Trout, <i>clarkii</i> subspecies	Blue	-	-	-	✓	✓	✓	N/A	N/A	✓	N/A	N/A
<i>Rhinichthys cataractae</i>	Nooksack Dace	Red	Endangered	Endangered	-	-	-	-	✓	N/A	✓	N/A	✓
Molluscs													
<i>Allogona townsendiana</i>	Oregon Forestsnail	Red	Endangered	Endangered	✓	✓	✓	✓	✓	-	N/A	N/A	✓
<i>Carychium occidentale</i>	Western Thorn	Blue	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Galba bulimoides</i>	Prairie Fossaria	Blue	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Galba dalli</i>	Dusky Fossaria	Blue	-	-	✓	✓	✓	✓	N/A	-	N/A	N/A	N/A
<i>Galba parva</i>	Pygmy Fossaria	Blue	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A

Table 1, continued.

Scientific Name	Common Name	Conservation Status			Potential Use of Property				Occurrences Within 5 km of Property's Midpoint				
		BC List	COSEWIC	SARA Schedule 1	Reproduction	Foraging	Sheltering (e.g. Roosting, Overwintering)	Dispersal / Migration	CDC Element Occurrence	E-Fauna BC / E-Flora BC (non-CDC records)	All Fish Points	BC Frogwatch Atlas	Critical Habitat
Insects													
<i>Erythemis collocata</i>	Western Pondhawk	Blue	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Euphyes vestris</i>	Dun Skipper	Blue	Threatened	Threatened	✓	✓	✓	✓	-	-	N/A	N/A	-
<i>Ophiogomphus occidentis</i>	Simous Snaketail	Blue	-	-	✓	✓	✓	✓	N/A	-	N/A	N/A	N/A
<i>Pachydiplax longipennis</i>	Blue Dasher	Blue	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Parnassius clodius claudianus</i>	Clodius Parnassian, <i>claudianus</i> subspecies	Blue	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
<i>Symptetrum vicinum</i>	Autumn Meadowhawk	Blue	-	-	✓	✓	✓	✓	-	-	N/A	N/A	N/A
Lichens													
<i>Scytinium polycephalum</i>	Peacock Vinyl	Yellow	Special Concern	Special Concern	✓	N/A	N/A	N/A	-	N/A	N/A	N/A	N/A
Vascular Plants													
<i>Bidens amplissima</i>	Vancouver Island Beggarticks	Blue	Special Concern	Special Concern	✓	N/A	N/A	N/A	✓	-	N/A	N/A	N/A
Nonvascular Plants													
<i>Brotherella roellii</i>	Roell's Brotherella	Red	Endangered	Endangered	✓	N/A	N/A	N/A	✓	✓	N/A	N/A	✓

**Data Sources:**

BC Conservation Data Centre. 2022. BC Species & Ecosystems Explorer. <https://a100.gov.bc.ca/pub/ewsp/search.do> (01/05/2022)

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BC Ministry of Environment and Climate Change Strategy. 2022. Known BC Fish Observations and BC Fish Distributions. Knowledge Management. <https://catalogue.data.gov.bc.ca/dataset/aca31811-4b08-4382-9af7-204e0b9d2448> (03/30/2022)

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Fisheries and Oceans Canada. 2022. Critical Habitat of Species at Risk. <https://open.canada.ca/data/en/dataset/d6177a8c-5d7d-49eb-8290-31a6a45d786c> (03/30/2022)

Klinkenberg, B. (ed.) 2021. E-Fauna BC: Electronic Atlas of the Fauna of British Columbia [efuna.bc.ca]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver, BC. <https://lmsnet.geog.ubc.ca/biodiversity/efuna/> (04/06/2022)

Klinkenberg, B. (ed.) 2020. E-Flora BC: Electronic Atlas of the Plants of British Columbia [eflora.bc.ca]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver, BC. <https://lmsnet.geog.ubc.ca/biodiversity/eflora/> (04/06/2022)



Park. The two storm ponds have been severely degraded by beaver activities that have reduced the storage capacity and functionality of the ponds. The Beaver Management Plan will illustrate inform management considerations and provide an overview of mitigation strategies for the management of North American beavers (*Castor canadensis*) within the Gloucester Stormwater Detention Ponds Complex. Photograph 29 shows a beaver dam located at Stream E2; photographs 30 and 31 illustrate damage caused by beavers.



Photograph 29.  
Beaver dam at Stream E2 near the  
East Pond (September 23, 2021).

#### 12.6.1 Objectives

The overarching objective of this beaver management strategy is to provide a high-level document that will be used to assist with the restoration and maintenance of the stormwater ponds. To meet these objectives the modified ponds will need to work with beavers through the use of flow conveyance devices that allow for manipulation of water levels. Water levels are key for ensuring success of the proposed habitat compensation and ensure protection of downstream habitats (ponds and properties from flash precipitation events). The strategy will also provide an overview of the relevant regulatory frameworks as they apply to beaver management, to outline the ecology of beavers, to describe both the ecological benefits and impacts to urban infrastructure and to summarize the common mitigation strategies utilized in managing the impacts associated with beaver activities.

#### 7 BEAVER MANAGEMENT

EBB Environmental Consulting Inc. (EBB) was retained by the Beedie Group of Companies (Beedie) to prepare a beaver management strategy, which is intended to compliment the restoration works that are designed to enhance the existing storm pond function for the Gloucester Industrial Park. The two storm ponds have been severely degraded by beaver activities that have reduced the storage capacity and functionality of the ponds. The Beaver Management Plan will illustrate inform management considerations and provide an overview of mitigation strategies for the management of North American beavers (*Castor canadensis*) within the Gloucester Stormwater Detention Ponds Complex. Photograph 29 shows a beaver dam located at Stream E2; photographs 30 and 31 illustrate damage caused by beavers.



Photograph 29.  
Beaver dam at Stream E2 near the  
East Pond (September 23, 2021).

#### 7.1 Objectives

The overarching objective of this beaver management strategy is to provide a high-level document that will be used to assist with the restoration and maintenance of the stormwater ponds. To meet these objectives the modified ponds will need to work with beavers through the use of flow conveyance devices that allow for manipulation of water levels. Water levels are key for ensuring success of the proposed habitat compensation and ensure protection of downstream habitats (ponds and properties from flash precipitation events). The strategy will also provide an overview of the relevant regulatory frameworks as they apply to beaver management, to outline the ecology of beavers, to describe both the ecological benefits and impacts to urban infrastructure and to summarize the common mitigation strategies utilized in managing the impacts associated with beaver activities.

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Photograph 25. Aerial view of the West Pond, looking west (May 1, 2021).



Photograph 26. Ground level view of the West Pond (January 27, 2021).



Photograph 27. Aerial view of the East Pond, looking south (August 17, 2021).

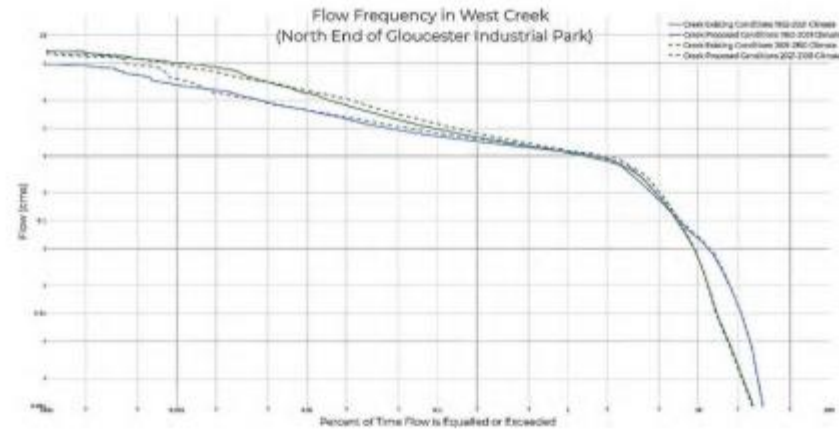
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Photograph 28. Ground level view of the East Pond (January 27, 2021).

be a positive outcome as it will provide the creek with more frequent, more sustained base flows that are well below the likely erosion threshold, while limiting potentially damaging high flows above  $0.6 \text{ m}^3/\text{s}$ . Also shown by the graphs, the **proposed** condition with climate change (2021-2100) shows less frequency of flows above  $0.6 \text{ m}^3/\text{s}$  than the **existing** condition without climate change (1962-2021). This demonstrates that the proposed works not only mitigate proposed development, but also mitigate the effects of climate change.



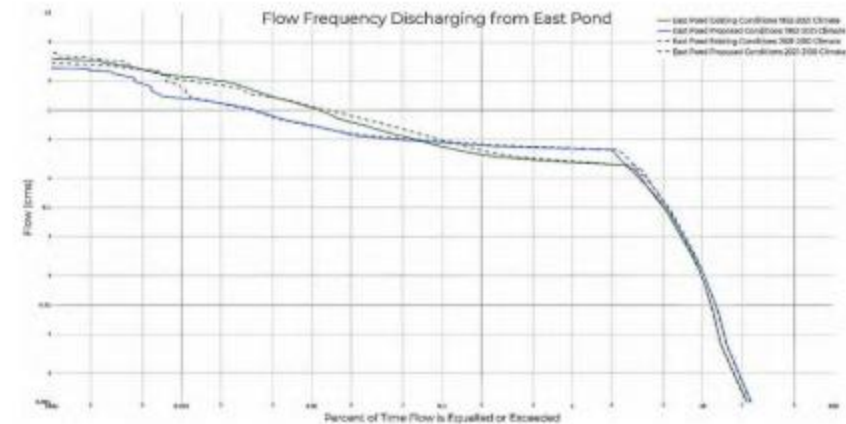
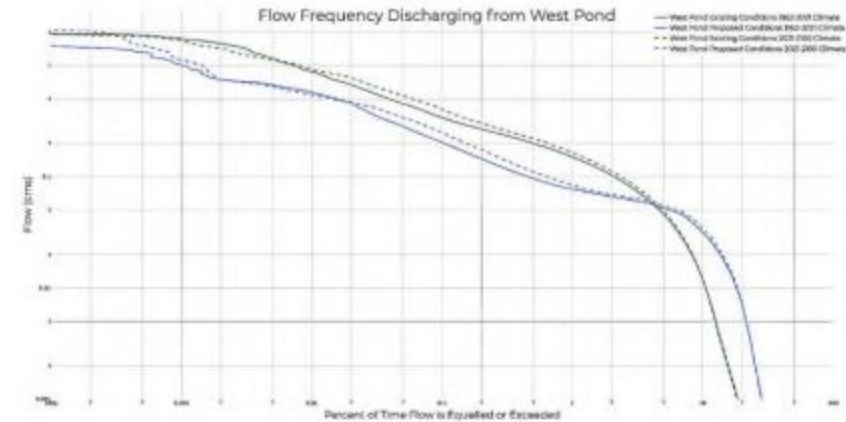
The results for the West Pond have a similar pattern but it has a more distinct transition from more frequent to less frequent flows. This is because of the absence of a weir or orifice on the existing control structure. By adding the proposed orifice, low flows will be sustained for a much longer period of time, whereas higher flows will be restricted to a far greater extent. The only exception is for flow around  $2 \text{ m}^3/\text{s}$ , where modelling suggests more frequency in the future, but still a very rare event. This exception only applies to the future climate condition (2021-2100) demonstrating that the proposed works are sufficient to mitigate proposed development but not fully capable of mitigating against the rare storms associated with climate change alone. Note also that this pond was never designed for an event greater than 1:25 years.

For the East Pond, the existing 1:2 year peak flow is  $0.7 \text{ m}^3/\text{s}$ , with the 6 month flow then being estimated at  $0.5 \text{ m}^3/\text{s}$ . Again, in the absence of rigorous sediment transport analysis,  $0.5 \text{ m}^3/\text{s}$  is suggested as being the safe threshold for considering risk to erosion. Between of flow of  $0.3$  and  $0.5 \text{ m}^3/\text{s}$  there will be an increase in discharge frequency as a result of the pond being less restrictive at low flows in order to optimize its performance for the larger damaging flows. Above  $0.5 \text{ m}^3/\text{s}$  the proposed condition once again shows less frequency than the existing condition, except for future conditions around  $3 \text{ m}^3/\text{s}$  where, like the West Pond, climate change will cause an increase for very rare events.

#### 5.4 East Pond Improvements

While no physical works are proposed at the West Pond (only control structure modifications) the East Pond will be enlarged and regraded to achieve the design capacity of approximately  $99,000 \text{ m}^3$ . This work is in accordance with the previous DFO Authorization that acknowledged the commitment to complete these works; a new DFO Authorization will be obtained.

Grading plans and details have been developed by Aplin & Martin Consultants Ltd. and are included as Attachment E.





Habitat Feature	Aquatic Habitat Area (m <sup>2</sup> )			Riparian Habitat Area (m <sup>2</sup> )		
	Loss	Gain	Net	Loss	Gain	Net
Streams/wetlands	9,871	10,978	1,107			
RAPR SPEAs				33,790	31,546	-2,244
Converted	1,107	0	-1,107	0	1,107	1,107
Infiltr'n swale				0	1,137	1,137
<b>TOTALS:</b>	<b>10,978</b>	<b>10,978</b>	<b>0</b>	<b>33,790</b>	<b>33,790</b>	<b>0</b>

Most of the proposed offsetting will occur west of 272 Street; proposed impacts are summarized below:

1. Development of 10,978 m<sup>2</sup> of new aquatic habitats;
2. Protection and enhancement of 18,330m<sup>2</sup> of riparian habitat outside of RAPR SPEAs;
3. Conversion of 980 m<sup>2</sup> of aquatic habitat to riparian habitat;
4. Infilling of 2,767 m<sup>2</sup> of aquatic habitat (streams, ponds and wetlands); and
5. Infilling of 10,667 m<sup>2</sup> of riparian habitat (defined by RAPR SPEAs).

East of 272 Street proposed habitat impacts include the following:

6. Protection of 13,216 m<sup>2</sup> of high value riparian habitat outside of RAPR SPEAs;
7. Conversion of 127 m<sup>2</sup> of aquatic habitat to riparian habitat;
8. Construction of an infiltration swale (1,137 m<sup>2</sup>);
9. Infilling of 7,104 m<sup>2</sup> of aquatic habitat (streams, ponds and wetlands); and
10. Infilling of 23,123 m<sup>2</sup> of riparian habitat (defined by RAPR SPEAs).

The total gains and losses of both aquatic and riparian habitats balance within an overall protected area of 21.7 ha (53.6 acres), or approximately 40% of the Golf Course Lands. Most of the offsetting is proposed west of 272 Street within previously disturbed areas of limited habitat value (predominantly invasive vegetation). All proposed habitats will be designed and landscaped to provide high value and diverse habitats that will support all fish and wildlife species presently occupying the Golf Course Lands, with emphasis on native species and species-at-risk.

### 8.3 Offset Implementation and Effectiveness Monitoring

The project involves the rezoning of the Golf Course Lands to allow industrial development on approximately 60 percent (14.6 ha or 36.1 acres) while retaining/improving stormwater

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Habitat Feature	Aquatic Habitat Area (m <sup>2</sup> )			Riparian Habitat Area (m <sup>2</sup> )		
	Loss	Gain	Net	Loss	Gain	Net
Streams/wetlands	9,871	10,978	1,107			
RAPR SPEAs				33,790	31,546	-2,244
Converted	1,107	0	-1,107	0	1,107	1,107
Infiltr'n swale				0	1,137	1,137
<b>TOTALS:</b>	<b>10,978</b>	<b>10,978</b>	<b>0</b>	<b>33,790</b>	<b>33,790</b>	<b>0</b>

The East Pond, as it currently exists, was intended only as an interim pond. This pond is to be expanded and a new control structure built to service six of the new lots. Analysis shows that peak flows in West Creek downstream of the development will improve significantly over current conditions and meet the original criteria of the development. The maximum permissible flow in West Creek immediately north of the Gloucester Industrial Park based on its original approval was 2.58 m<sup>3</sup> /s for the 25 year event. Applying the same historic design event today, the peak flow in the proposed condition would be 2.4 m<sup>3</sup> /s, thereby satisfying the original criteria for West Creek. Analysis also shows that peak flow in West Creek will be significantly reduced from current levels when applying current design storms, thereby also meeting current criteria. And finally, continuous simulation shows that flow frequency above potentially damaging flows (using the 6 month, 24 hour event as the benchmark) will decrease with the proposed works, whereas the flow frequency below potentially damaging flows will increase. Both of these are positive outcomes for the health of West Creek

