



# AGENDA

For the Council Meeting to be Held  
At the Saanich Municipal Hall,  
770 Vernon Avenue  
**MONDAY, FEBRUARY 20, 2017**

I **6:00 P.M., COMMITTEE ROOM NO. 2**

Motion to close the meeting to the public in accordance with Section 90 (1) (a) and (c) of the *Community Charter*.

II **7:00 P.M., COUNCIL CHAMBERS**

A. **MAYOR'S ANNUAL ADDRESS**

B. **ADOPTION OF MINUTES**

1. Council meeting held January 23, 2017
2. Committee of the Whole meeting held January 23, 2017
3. Special Council meeting held January 24, 2017
4. Council meeting held February 6, 2017

C. **BYLAWS FOR FIRST READING (SUBJECT TO A PUBLIC HEARING)**

**P. 3** 1. **ZONING BYLAW AMENDMENT – NEW ZONE CD-5AH**  
First reading of "Zoning Bylaw, 2003, Amendment Bylaw, 2017, No. 9415". To create a new Comprehensive Development Affordable Housing Zone CD-5AH.

**P. 6** 2. **1550 ARROW ROAD – REZONING TO NEW ZONE CD-5AH**  
First reading of "Zoning Bylaw, 2003, Amendment Bylaw, 2017, No. 9416". To rezone from Zone RA-1 (Apartment) to new Zone CD-5AH (Comprehensive Development Affordable Housing Zone).

D. **PUBLIC INPUT (ON BUSINESS ITEMS E & F)**

E. **RESOLUTIONS FOR ADOPTION**

**P. 8** 1. **INFRASTRUCTURE PLANNING GRANT APPLICATION FOR THE BOWKER CREEK DAYLIGHTING FEASIBILITY STUDY**  
Report of the Director of Engineering dated January 30, 2017 recommending that Council endorse an application for \$10,000 in grant funds through the Provincial Government Infrastructure Planning Grant Program to conduct the Bowker Creek Daylighting Feasibility Study in collaboration with the Capital Regional District, City of Victoria and the District of Oak Bay.

**P. 17** 2. **REQUEST FOR PROPOSAL 25/16 – HYDRO EXCAVATOR WITH FRONT HOSE REEL SEWER CLEANER – COMBINATION UNIT**  
Report of the Director of Engineering dated February 6, 2017 recommending that Council approve the award of Request for Proposal 25/16 Hydro Excavator with Front Hose Reel Sewer Cleaner – Combination Unit, and change orders within the project budget, to Vimar Equipment Ltd. in the amount of \$445,130 (net price after trade-in and excluding taxes).

**P. 19** 3. **CAPITAL REGIONAL DISTRICT – BYLAW NO. 4142, REGIONAL PARKS LOAN AUTHORIZATION BYLAW NO. 1, 2016**  
Request from the Capital Regional District that Council give consent to the adoption of Bylaw No. 4142, Regional Parks Loan Authorization Bylaw No. 1, 2016 in accordance with Section 346 of the *Local Government Act*.

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**F. RECOMMENDATIONS FROM COMMITTEES**

- P. 30** 1. **BOLLARD USE**  
Recommendation from the January 19, 2017 Bicycle and Pedestrian Mobility Advisory Committee meeting that Council request a review of Saanich's bollard usage policy, specifically to consider alternatives to bollard usage similar to policies in other jurisdictions such as California; and that this request be forwarded to Larisa Hutcheson, General Manager, CRD Parks, for consideration of reducing or eliminating bollard use on all CRD trails, and that this be made a priority by the CRD in 2017.

\* \* \* Adjournment \* \* \*

## **AGENDA**

For the Committee of the Whole Meeting  
\*\* IMMEDIATELY FOLLOWING\*\*  
The Council Meeting in the Council Chambers

- P. 63** 1. **4247 DIEPPE ROAD – DEVELOPMENT PERMIT AMENDMENT**  
Report of the Director of Planning dated January 3, 2017 recommending that Council approve Development Permit Amendment DPA00888 to incorporate changes to the site plan, landscaping and building façade for the previously approved warehouse, processing plant and office building for Islands West Produce.
- P. 117** 2. **3959 SHELBOURNE STREET – DEVELOPMENT PERMIT**  
Report of the Director of Planning dated January 23, 2017 recommending that Council approve new Development Permit DPR00647; discharge the previous Development Permit DPR2008-00023 (DP00384) and subsequent amendments DPA00705 and DPA00739 and associated covenant CA1339318 and modification CA2045076; and that ratification of the Development Permit be withheld pending registration of a covenant securing the construction to a LEED Silver or equivalent energy efficient standard for a proposed new two-storey commercial building for a bank. A Form and Character Development Permit is required and variances are requested for setback, parking, landscaping and signage.
- P. 152** 3. **226 STEVENS ROAD – TEMPORARY USE PERMIT**  
Report of the Director of Planning dated January 9, 2017 recommending that Council approve Temporary Use Permit TUP00007 to allow overnight camping for people with disabilities or barriers to accessing nature as a permitted use as part of the activities of "Power To Be", a Victoria and Vancouver based non-profit organization which currently operates on the site.

\* \* \* Adjournment \* \* \*

"IN CAMERA" COUNCIL MEETING IMMEDIATELY FOLLOWS

THE CORPORATION OF THE DISTRICT OF SAANICH

BYLAW NO. 9415

TO AMEND BYLAW NO. 8200,  
BEING THE "ZONING BYLAW, 2003"

Mayor  
Councillors  
Administrator

Council  
Administration  
Media

The Municipal Council of The Corporation of the District of Saanich enacts as follows:

- 1) Bylaw No. 8200, being the "Zoning Bylaw, 2003" is hereby amended as follows:
  - a) By adding to Subsection 4.1 – Zones, the following new classification under Comprehensive Development:  
  
"CD-5AH"
  - b) By deleting Subsection 4.2 – Zone Schedules and replacing it with the following Subsection 4.2:  
  

**"4.2 Zone Schedules**

The Zone Schedules numbered 101 to 1740 containing the uses and regulations pertaining to the zones referred to above, form an integral part of this bylaw."
  - c) By adding to Subsection 4.2 – Zone Schedules, a new Zone Schedule 1740 – Comprehensive Development Affordable Housing Zone - CD-5AH, attached hereto as Schedule "A".
- 2) This Bylaw may be cited for all purposes as the **"ZONING BYLAW, 2003, AMENDMENT BYLAW, 2017, NO. 9415"**.

Read a first time this    day of

Public Hearing held at the Municipal Hall on the    day of

Read a second time this    day of

Read a third time this    day of

Adopted by Council, signed by the Mayor and Clerk and sealed with the Seal of the Corporation on the    day of

\_\_\_\_\_  
Municipal Clerk

\_\_\_\_\_  
Mayor

**CM  
C.1**

**SCHEDULE 1740**

**1740.1 Development Areas**

Development Areas:

This zone contains regulations that apply to all areas within the zone and in addition the zone is divided into Development Areas A and B as shown on the attached plan forming part of this zone schedule.

**1740.2 Definitions**

Definitions:

**In this zone:**

**“Affordable Housing”** means a dwelling unit operated by a non-profit organization or government agency providing rental accommodation for seniors, persons with disabilities, or low income households, and where all rental rates are at the 80th percentile or lower of market rents as published by Canada Mortgage and Housing Corporation (Level 1 Affordability).

**“Accessory Dwelling Unit”** means a dwelling unit of 93 m<sup>2</sup> in floor area or less which is used for the accommodation of the owner, operator, manager, or caretaker providing on-site services

**“Floor Space Ratio”** means the gross floor area of all buildings on a Development Area excluding those portions located more than 1.5 m below finished grade, divided by the area of the relevant Development Area.

**“Motor Scooters”** means a power operated mobility aid similar to a wheelchair but configured with a flat area for the feet and handlebars for steering.

**“Seniors”** means any person aged 55 years of age or older.

**1740.3 Uses Permitted**

Uses Permitted:

- (a) Apartment for the provision of Affordable Seniors Independent Rental housing
- (b) Accessory Dwelling Unit
- (c) Accessory Buildings and Structures

**1704.4 Development Area A**

Lot Coverage:

- (a) The maximum coverage of all buildings and structures shall not exceed 25% of the area of Development Area A

Density:

- (a) Buildings and structures shall not exceed a Floor Space Ratio of 0.7
- (b) The maximum density shall be one dwelling unit per 85 m<sup>2</sup> of the area of Development Area A
- (c) Only one accessory dwelling unit is permitted

Buildings and Structures:

- (a) Shall be sited not less than 100.0 m from a front lot line
- (b) Shall be sited not less than 17.75 m from a rear lot line
- (c) Shall be sited not less than 13.0 m from an interior side lot line
- (d) Shall not exceed a height of 9.0 m.

**1740.5 Development Area B**

Lot Coverage:

- (a) The maximum coverage of all buildings and structures shall not exceed 25% of the area of Development Area B

Density:

- (a) Buildings and structures shall not exceed a Floor Space Ratio of 0.5
- (b) The maximum density shall be one dwelling unit per 110 m<sup>2</sup> of the area of Development Area B

Buildings and Structures:

- (a) Shall be sited not less than 10.0 m from a front lot line
- (b) Shall be sited not less than 50.0 m from a rear lot line
- (c) Shall be sited not less than 7.0 m from an interior side lot line
- (d) Shall not exceed a height of 7.5 m.



**SCHEDULE 1740**

**1740.6 Accessory Off-Street Parking**

Accessory Off-Street Parking:  
Despite Section 7.4 of this Bylaw, 0.1 spaces per dwelling unit of the required parking spaces shall be designated and clearly marked as “Visitor Parking” and shall be freely accessible at all times.

**1740.7 Bicycle Parking**

Bicycle Parking:  
Bicycle parking shall be provided in accordance with Table 7.4, except that where parking is provided for motor scooters the number of scooter parking spaces may be counted toward the bicycle parking requirement.

For the purpose of this section, motor scooter parking spaces must be secured, have electrical services for recharging, and have a minimum width of 1 m and length of 1.5 m.

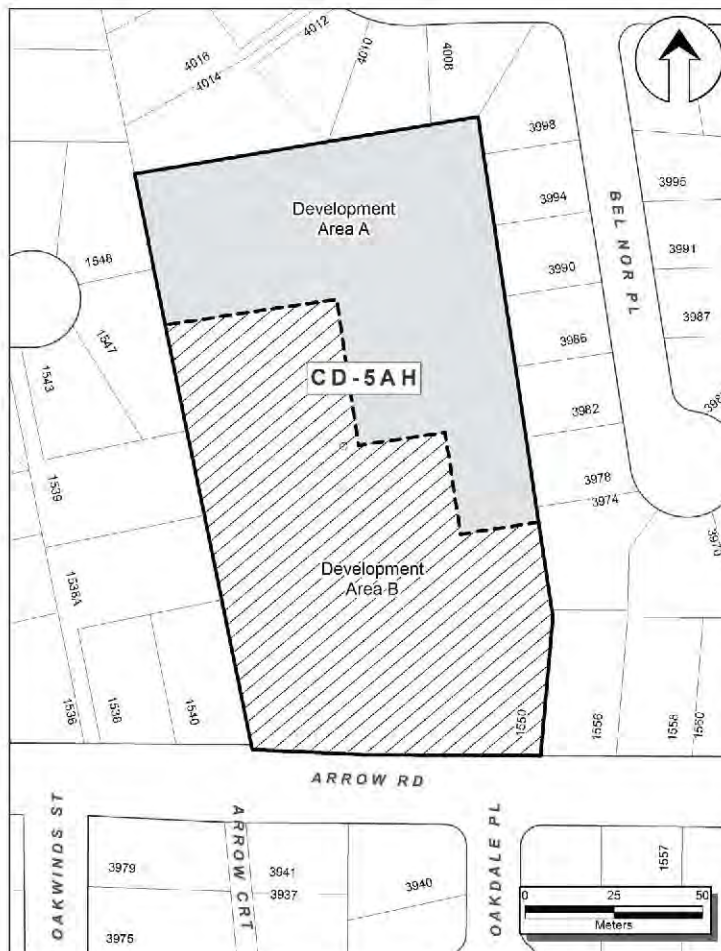
**1740.8 Accessory Buildings and Structures**

- Accessory Buildings and Structures
- (a) Shall be sited not less than 10.0 m from any lot line which abuts a street
  - (b) Shall be sited not less than 1.5 m from an interior side lot line and rear
  - (c) Shall not exceed a height of 3.75 m.
  - (d) Together shall not exceed a lot coverage of 10%

**1740.9 General**

General:  
The relevant provisions of Sections 5, 6, 7 and Schedule B and F of this Bylaw shall apply.

**1740.10 Plan of Development Areas**  
Plan of Development Areas:



THE CORPORATION OF THE DISTRICT OF SAANICH

Mayor  
Councillors  
Administrator  
Front Counter

BYLAW NO. 9416

Council  
Administrator  
Media

TO AMEND BYLAW NO. 8200,  
BEING THE "ZONING BYLAW, 2003"

The Municipal Council of The Corporation of the District of Saanich enacts as follows:

- 1) Bylaw No. 8200, being the "Zoning Bylaw, 2003" is hereby amended as follows:
  - a) By deleting from Zone RA-1 (Apartment) and adding to Zone CD-5AH (Comprehensive Development Affordable Housing) the following lands :
    - Lot A, Section 56, Victoria District, Plan 23817, Except Part in Plan 27015
    - (1550 Arrow Road)
    - Zoning Map Attached hereto as Schedule "A"
  
- 2) This Bylaw may be cited for all purposes as the "**ZONING BYLAW, 2003, AMENDMENT BYLAW, 2017, NO. 9416**".

Read a first time this    day of

Public Hearing held at the Municipal Hall on the    day of

Read a second time this    day of

Read a third time this    day of

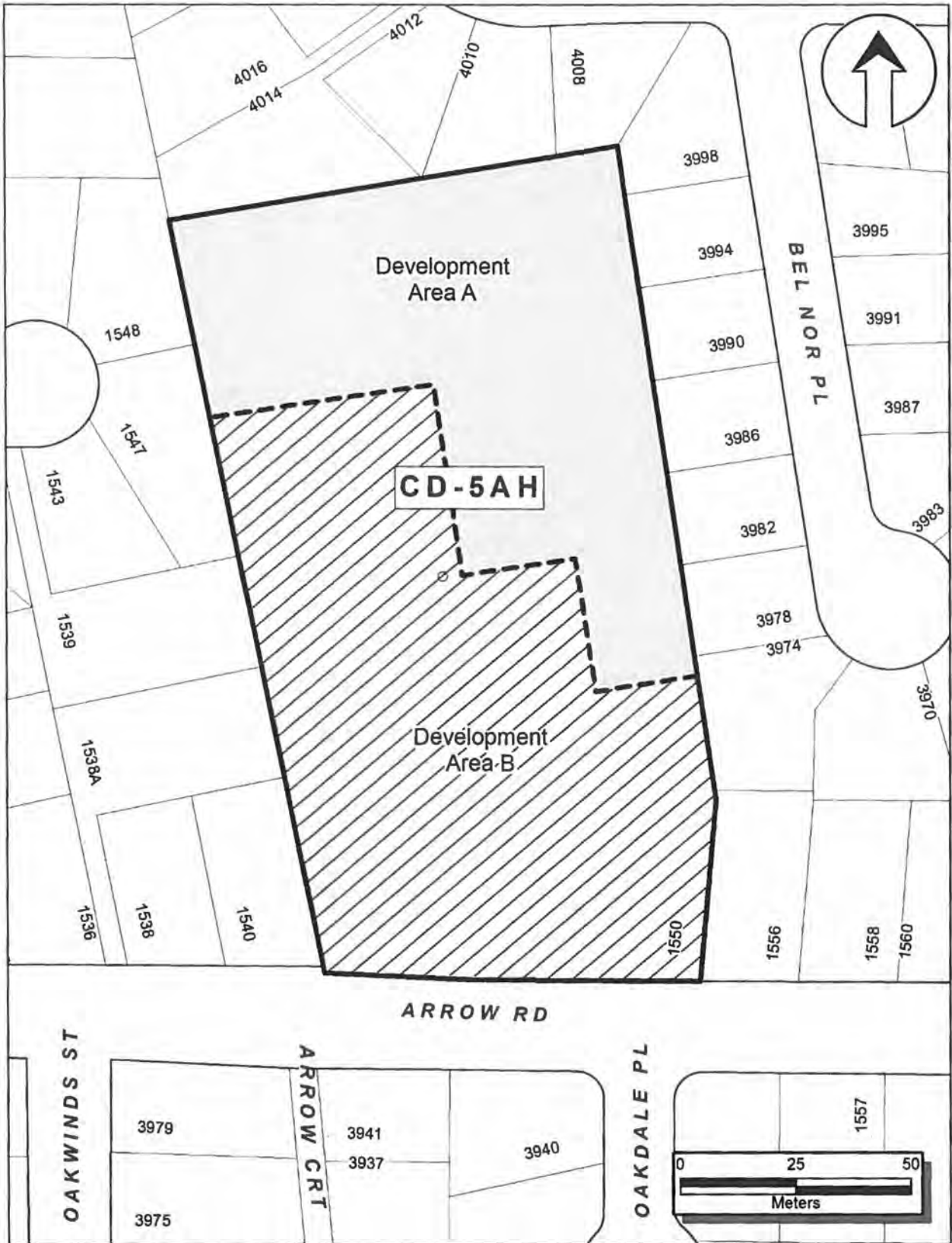
Adopted by Council, signed by the Mayor and Clerk and sealed with the Seal of the Corporation on the    day of

\_\_\_\_\_  
Municipal Clerk

\_\_\_\_\_  
Mayor

**CM  
C.2**

**Bylaw No. 9416  
Schedule "A"**







Mayor  
Councillors  
Administrator  
Front Counter

Council  
Administration  
Media

The Corporation of the District of Saanich

# Report

**To:** Mayor and Council

**From:** Harley Machielse, Director of Engineering

**Date:** 1/30/2017

**Subject:** Report to Mayor and Council – Infrastructure Planning Grant  
Application for the Bowker Creek Daylighting Feasibility Study

## RECOMMENDATION

That Council endorse Saanich’s application for \$10,000 in grant funds through the Infrastructure Planning Grant Program to conduct the Bowker Creek Daylighting Feasibility Study in collaboration with the Capital Regional District, City of Victoria, and the District of Oak Bay.

## PURPOSE

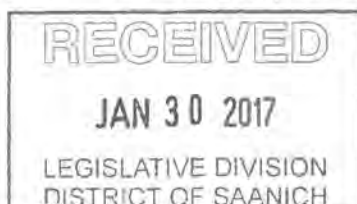
The purpose of this report is to obtain Council's support for a grant application to the Ministry of Community, Sport and Culture Development’s Infrastructure Planning Grant (IPG) program. The grant application requests funding support for an inter-jurisdictional watershed daylighting feasibility study of Bowker Creek sponsored by the Bowker Creek Initiative (BCI).

## DISCUSSION

### Background

Saanich staff have submitted an application to the BC Ministry of Community, Sport & Cultural Development Infrastructure Planning Grant (IPG) program for \$10,000 in funding towards the Bowker Creek Initiative's Daylighting Feasibility Study, a collaborative project of the CRD, District of Saanich, City of Victoria and District of Oak Bay. The purpose of this project is to create a tool to facilitate the establishment of a daylighting corridor for Bowker Creek to ensure future daylighting can occur as properties are redeveloped or major infrastructure renewal work is undertaken.

For past collaborative BCI projects, each local government partner has contributed \$5000 in project dollars or in-kind support to receive a \$10,000 IPG; these funds are then pooled and administered by the CRD. This approach was used by the BCI partners to obtain \$60,000 in funding towards both the Bowker Creek Master Drainage Plan in 2007 and the Bowker Creek Blueprint: A 100 year plan to restore the Bowker Creek Watershed in 2010. The BCI partners wish to pursue a similar funding approach to complete a Daylighting Feasibility Study for Bowker Creek.



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## **Current Project Overview**

The BCI and its partner local governments (Capital Regional District, District of Saanich, City of Victoria and District of Oak Bay) are collaborating on an integrated project to identify a feasible daylighting corridor for the enclosed sections of Bowker Creek. At a high level, the work for this project will include the following: (a) Documenting the role of land planning and redevelopment planning on the daylighting effort; (b) Identifying the best long term corridor for daylighting the enclosed sections of Bowker Creek (c) Assessing options for incorporating multi-use and pedestrian greenways corridors adjacent to the creek; (d) Assessing detention pond options

The total project cost for the Daylighting Feasibility study is approximately \$70,000, of which \$60,000 will requested through the IPG (\$10,000 grant funding plus \$5000 from each of the 4 local government partners). The remaining funds will come from existing BCI project budget.

In support of the grant application, the Province requires each applicant to obtain endorsement from their respective council's (or board) for participation in the IPG program. The Province will publicly announce successful grant applicants in spring of 2017.

## **ALTERNATIVES**

1. That Council endorse Saanich's application for \$10,000 in grant funds through the Infrastructure Planning Grant Program to conduct the Bowker Creek Daylighting Feasibility Study in collaboration with the Capital Regional District, City of Victoria, and the District of Oak Bay.
2. That Council not endorse a grant application for this purpose.
3. That Council provide alternate direction to Staff.

## **FINANCIAL IMPLICATIONS**

The IPG program provides for 100% funding on the first \$5,000 and 50% funding for the remainder up to a total funding contribution of \$10,000. In order to obtain the full \$10,000 benefit of the grant funding, the District must put forward \$5,000 toward the project. Funds are available in support of this project from the Drainage Capital Budget.

## **STRATEGIC PLAN IMPLICATIONS**

The Bowker Creek Daylighting Feasibility Study and IPG funding opportunity align with the Corporate Strategic Plan Objectives to:

**C4 PROTECT AND ENHANCE AIR, WATER AND LAND QUALITY:** Restore and protect air, land and water quality to support healthy local ecosystems for plants, animals and people.

**F3 BUILD NEW PARTNERSHIPS FOR FUNDING AND SERVICES:** Seek out cost-sharing or service delivery partnerships to reduce costs and improve services.



## **OTHER IMPLICATIONS**

The Bowker Creek Daylighting Feasibility Study and IPG funding opportunity also align with a variety of Regional and Community based planning documents and policies including:

### **Regional Growth Strategy**

The Capital Region's Regional Growth Strategy (2003, updated in 2016/17) contains a "commitment to work toward regional sustainability" and the following RGS objectives support this daylighting project: protect regional green and blue spaces, manage natural resources and the environment sustainably; increase transportation choice; and build complete communities.

### **Official Community Plan**

#### 4.0 Environmental Integrity

##### 4.2.10 Public Infrastructure (Policies – Stormwater Management)

23. Pursue "day-lighting" of watercourses as part of the watercourse restoration, where practical and feasible.

### **Shelbourne Local Area Plan**

#### 5.0 Environment (Policies)

- 5.4 Seek opportunities to restore and daylight sections of Bowker Creek.

### **Shelbourne Valley Action Plan**

#### Section 4 Environment

##### Environmental Objectives

- B. Restore watershed health and rehabilitate Bowker Creek.

#### Section 4.2 Watersheds and Stormwater Management

##### Policies – Bowker Creek Watershed

- 4.2.7 Support the Bowker Creek Initiative in the development of a study to assess the technical opportunities and constraints of daylighting Bowker Creek in the Shelbourne Valley.

### **Bowker Creek Blueprint: A 100-year action plan to restore the Bowker Creek Watershed**

Derived from the Bowker Creek Watershed Management Plan (2003) and Bowker Creek Master Drainage Plan (2007), this Blueprint contains 10 Key Actions that are supported by the proposed daylighting project. More specifically, action 6 will be advanced by this project:

6. Develop a strategy to acquire key properties as they become available.

## CONCLUSIONS

The Bowker Creek Initiative and its partner local governments (Capital Regional District, District of Saanich, City of Victoria and District of Oak Bay) are collaborating on an integrated project to identify a feasible daylighting corridor for the enclosed sections of Bowker Creek. This project aligns with many regional and local policy documents and plans. In support of this project, the 4 member partners are applying for an Infrastructure Planning Grant from the Ministry of Community Sport and Cultural Development for potential funding amount of \$10,000 with a \$5,000 municipal contribution. These funds will be pooled to engage a consultant to undertake the project with the Capital Regional District staff leading the project and administering the grant funding. The grant application requires Council's endorsement.

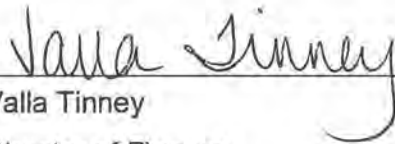
Prepared by



Lesley Hatch, P.Eng.

Manager of Underground Services

Reviewed by



Valla Tinney

Director of Finance

Approved by



Harley Machielse

Director of Engineering

LH/lh

### Attachments


Bowker Creek Feasibility Study Overview

Map – Bowker Creek Watershed Land Uses and Soil types

cc: Sharon Hvozdanski, Director of Planning

**ADMINISTRATOR'S COMMENTS:**

I endorse the recommendation from the Director of Engineering.



Administrator

## **Bowker Creek Daylighting Feasibility Study**

### **OVERVIEW**

Bowker Creek flows from its headwaters at the University of Victoria, through the Shelbourne Valley in the District of Saanich (DoS), then through the City of Victoria (CoV) and the District of Oak Bay (DoOB) to its discharge into Oak Bay. Bowker Creek, including the Cedar Hill tributary, is 9.4 km long; 3.4 km (36%) remains as open channel, the remaining 64% has been enclosed in pipes and culverts. Its watershed covers 1028 hectares and has been highly altered through extensive urbanization resulting in 56% of the land covered in impervious surfaces.

The Bowker Creek Initiative (BCI), a multi-jurisdictional, community collaborative, has developed long-term plans which support efforts to daylight Bowker Creek. To date, daylighting has only been moderately successful; municipalities continue to choose pipe options over daylighting options in redevelopment and storm sewer upgrade projects. Key reasons for this include the absence of a well-defined, long-term, daylighted creek layout and insufficient long-term planning needed to capitalize on redevelopment opportunities. This feasibility study will help to address these issues.

The BCI and its partner local governments (Capital Regional District, District of Saanich, City of Victoria and District of Oak Bay) are collaborating on an integrated project to identify a feasible daylighting corridor for the enclosed sections of Bowker Creek. The purpose of this project is to create a tool to facilitate the establishment of a daylighting corridor for Bowker Creek to ensure daylighting can occur as properties are redeveloped or major infrastructure renewal work is undertaken over the next few decades. At a high level, the work for this project will include the following: (a) Documenting the role of land planning and redevelopment planning on the daylighting effort; (b) Identifying the best long term corridor for daylighting the enclosed sections of Bowker Creek (c) Assessing options for incorporating multi-use and pedestrian greenways corridors adjacent to the creek; (d) Assessing detention pond options

The overall goal of the project is to identify a daylighting corridor for Bowker Creek. Specific project objectives are to:

- Demonstrate leadership in sustainable environmental management, planning and design through developing a multi-jurisdictional, integrated plan to define a corridor to daylight all enclosed creek reaches.
- Engage municipal planning, engineering and parks staff to provide input into potential creek corridors, land use plans and development plans
- Explore opportunities for large detention ponds in the upper watershed in an effort to reduce downstream flows and hence the space needed to daylight in the future
- Create innovative options to divert partial creek flows for daylighting in areas where space or depth constraints are likely prevent full daylighting options
- Create innovative options to create healthy riparian and aquatic habitat in conjunction with daylighting for various right-of-way widths (i.e. 15 m, 20 m, 25 m)

- Develop explanatory cross sections for proposed daylighting that incorporate greenways adjacent to the creek where feasible
- Develop a property acquisition plan for each municipality to obtain the lands (through purchase or obtaining right-of-way) necessary to achieve future daylighting of Bowker Creek
- Determine considerations related to timing and phasing of proposed daylighting activities
- Provide high level cost estimates for project implementation

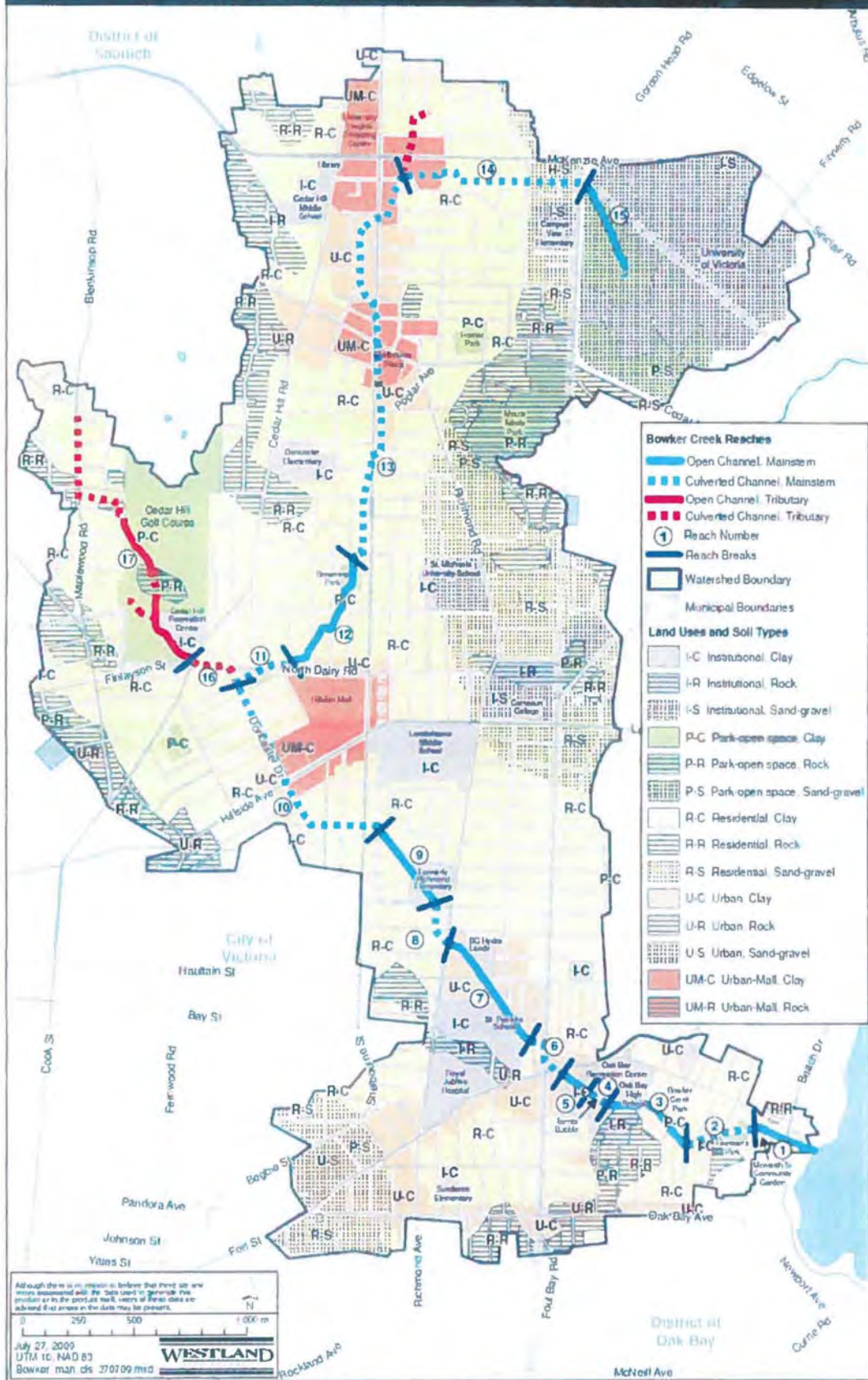
This project will be a partnership of 4 local government partners in the BCI (CRD, DoS, CoV and DoOB). A consultant will be hired to complete the study. A Daylighting Subcommittee will be established with representation from Parks, Engineering and Planning departments of each municipality. The consultant will hold workshops with municipal staff to obtain significant input into the most feasible routing of a daylighted creek, location of detention pond and a multi-use greenway. They will be responsible for ensuring that the project aligns with their OCPs and other guiding policies (i.e. Shelbourne Valley Action Plan), involved in reviewing and approving the final report, and to obtain their respective council approval of the project for implementation.

The CRD will perform the role of project manager, engage and manage the contractor, and administer the funds for this collaborative project between the CRD, Oak Bay, Saanich and Victoria.

The final deliverable for the study will be a report that identifies a feasible route for daylighting the enclosed sections of Bowker Creek. The report will summarize current and future land use and redevelopment plans adjacent to the creek corridor, provide plan and profile views of existing closed sections and proposed daylighted sections for 3 different potential right-of-way widths (i.e. 10 m, 15 m, 25 m), identify properties that may need to be obtained (purchase or right-of-way) to daylight the creek. Cost estimates and overall recommendations for implementation will also be provided.



# Bowker Creek Watershed Land Uses and Soil Types



5170-20

POSTED	
COPY TO	
INFORMATION	<input type="checkbox"/>
REPLY TO WRITER	<input type="checkbox"/>
COPY RESPONSE TO LEGISLATIVE DIVISION	<input type="checkbox"/>
REPORT	<input type="checkbox"/>
FOR	
ACKNOWLEDGED:	

**Caleb Horn**

Saanich, BC

Council  
Administrator  
Media

February 6, 2017

Mayor Richard Atwell and Council  
District of Saanich

**Re: Application for the Bowker Creek Daylighting Feasibility Study**

Dear Mayor Atwell and Council:

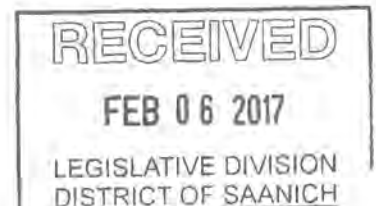
I'm writing in support of the Director of Engineering report to apply, with the Bowker Creek Initiative (BCI), for a grant to study the feasibility of daylighting Bowker Creek. Bowker Creek is a defining feature of the Mount Tolmie and Camosun communities in Saanich and efforts should be taken to restore and enhance the watercourse. The BCI's Bowker Creek Blueprint, which Saanich Council has endorsed, outlines how a daylighted Bowker Creek may appear in 100 years. The study proposed in the Engineering report is an important first step in the process to achieve this 100-year vision.

I trust that Saanich Council will continue to support the restoration of Bowker Creek and endorse the provincial grant application.

Sincerely,

  
Caleb Horn

cc: Harley Machielse, Director of Engineering, Saanich  
Jody Watson, BCI Coordinator, CRD



1410-04 eng  
ref: 6870-30



The Corporation of the District of Saanich

# Report

Mayor  
Councillors  
Administrator

Council  
Administrator  
Media

**To: Mayor and Council**  
**From: Harley Machielse, Director of Engineering**  
**Date: 2/6/2017**  
**Subject: Award of RFP #25/16**  
**Hydro Excavator with Front Hose Reel Sewer Cleaner – Combination Unit**

## RECOMMENDATION

That Council approve the award of Request for Proposal #25/16 Hydro Excavator with Front Hose Reel Sewer Cleaner – Combination Unit to **Vimar Equipment Ltd.** who submitted the best overall proposal, for an amount of \$445,130 (net price after trade-in and excluding taxes) plus change orders within budget.

## PURPOSE

The purpose of this report is to request approval to award the purchase of one (1) Hydro Excavator with Front Hose Reel Sewer Cleaner – Combination Unit.

## DISCUSSION

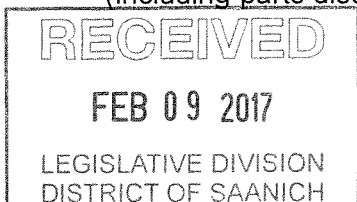
A Request for Proposal was issued to select one (1) qualified Proponent to supply one (1) Hydro Excavator. This would replace an aging piece of equipment that is highly used by the Public Works Division to perform several functions, such as:

- maintenance of the underground drainage system;
- maintenance of environmentally sensitive areas;
- support for lift stations during power outages;
- assistance with numerous capital construction activities, and;
- assistance with spill remediation and underground utility repair response time.

Compliant responses were received from the following vendors:

- Kendrick Equipment Ltd.
- Rollins Machinery Ltd.
- **Vimar Equipment Ltd.**

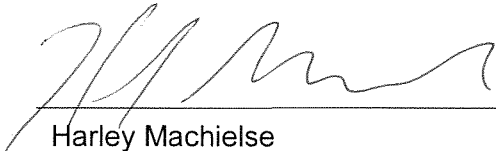
Proposals were evaluated on Specification Compliance, Warranty, Parts Availability and Services (including parts discount), Environmental Considerations and Corporate Sustainability Practices,

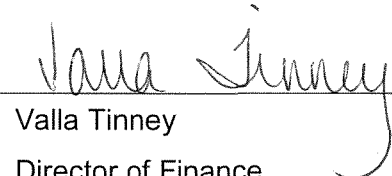


Delivery Time, and Price (after trade-in). **Vimar Equipment Ltd.** scored the highest on the combined criteria, with a thorough proposal.

**FINANCIAL IMPLICATIONS**

Funding for this work is available in the Vehicle Equipment Replacement Program budget.

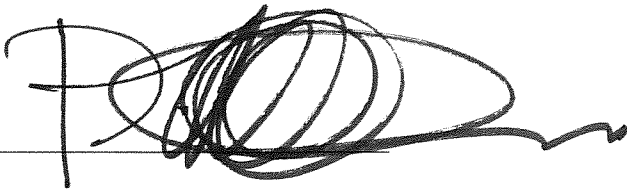
Prepared by   
Harley Machielse  
Director of Engineering

Reviewed by   
Valla Tinney  
Director of Finance

AK

**ADMINISTRATOR'S COMMENTS:**

I endorse the recommendation from the Director of Engineering.

  
Paul Thorkelsson, Administrator





Making a difference...together

Capital Regional District  
625 Fisgard Street, PO Box 1000  
Victoria, BC, Canada V8W 2S6

T: 250.360.3000  
F: 250.360.3234  
www.crd.bc.ca

Mayor  
Councillors  
Administrator

Council  
Administrator  
Media

January 30, 2017

File 3900-03

Ms. Donna Dupas  
Legislative Manager/Municipal Clerk  
District of Saanich  
770 Vernon Avenue  
Victoria, BC V8X 2W7

Dear Ms. Dupas:

**RE: Bylaw No. 4142, Regional Parks Loan Authorization Bylaw No. 1, 2016**

Attached is a copy of CRD Bylaw No. 4142 at third reading. Please place this Bylaw on your next Council agenda with a request to give consent to the adoption of the Bylaw in accordance with Section 346 of the *Local Government Act*.

The purpose of the Bylaw is to authorize the borrowing of up to \$6.1 Million in order to complete the E&N Rail Trail – Humpback Connector by 2019. The estimate cost to service the debt over 15 years will be approximately \$507,316 per year. The estimated annual cost per \$100,000 of assessed value for this debt is \$0.51.

As background, please find attached staff reports to the CRD Board dated November 30 and November 9, 2016, and a staff report to the Regional Parks Committee dated October 19, 2016.

If you require additional information prior to forwarding this request to Council, or if you wish to have CRD staff present when Bylaw No. 4116 is presented to Council, please let me know.

Yours sincerely,

Brent Reems  
Senior Manager  
Legislative and Information Services  
T 250.360.3128  
F 250.360.3130  
E breems@crd.bc.ca

Encl.

POST TO	CRD	RECEIVED	FEB 06 2017
COPY TO	PT/KW: /		
INFORMATION	<input type="checkbox"/>	* Scheduled	
REPLY TO WRITER	<input type="checkbox"/>	for Feb 20	
REPORT	<input type="checkbox"/>	COPY RESPONSE TO LEGISLATIVE DIVISION mtg	
FOR	_____		
ACKNOWLEDGED:	_____		

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LEGISLATIVE DIVISION
DISTRICT OF SAANICH

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CAPITAL REGIONAL DISTRICT

BYLAW NO. 4142

\*\*\*\*\*

A BYLAW TO AUTHORIZE THE BORROWING OF  
SIX MILLION ONE HUNDRED THOUSAND DOLLARS (\$6,100,000) TO PROVIDE  
FUNDING FOR COMPLETION OF THE E&N RAIL TRAIL – HUMPBACK CONNECTOR

\*\*\*\*\*

WHEREAS:

- A. The Board of the Capital Regional District adopted Bylaw No. 1749, "Regional Parks Extended Service Establishment Bylaw No. 1, 1989" for the functions of acquiring, developing, operating, and maintaining Regional Parks, subject to the Park (Regional Act);
- B. The Board of the Capital Regional District requires financing completion of the E&N Rail Trail – Humpback Connector by 2019;
- C. The portion of the project cost to be funded by debt servicing is the sum of Six Million One Hundred Thousand Dollars (\$6,100,000), which is the amount of debt intended to be authorized by this bylaw;
- D. Pursuant to the *Regional District Liabilities Regulation*, elector approval is not required if borrowing for a regional park service and consent on behalf of the participants is obtained pursuant to section 349(1)(b) of the *Local Government Act*;
- E. The approval of the Inspector of Municipalities is required under Section 403 of the *Local Government Act*; and
- F. It is proposed that the financing of the Project is to be undertaken by the Municipal Finance Authority of British Columbia pursuant to proposed agreements between that Authority and the Capital Regional District.

**NOW THEREFORE** the Board of the Capital Regional District in open meeting assembled enacts as follows:

- 1. The Board is hereby empowered and authorized to undertake and carry out regional trail infrastructure development including completion of the E&N Rail Trail – Humpback Connection (the Project), in connection with the service established under Bylaw No. 1749, and to do all things necessary in connection with the Project and without limiting the generality of the foregoing:
  - (a) To borrow upon the credit of the Regional District a sum not exceeding Six Million One Hundred Thousand Dollars (\$6,100,000);
  - (b) To acquire all such real property, easements, rights-of-way, leases, licenses, rights or authorities as may be requisite or desirable for or in connection with the Project.
- 2. The maximum term for which debentures may be issued to secure the debt intended to be created by this bylaw is fifteen (15) years.
- 3. This Bylaw may be cited as the "Regional Parks Loan Authorization Bylaw No. 1, 2016".

READ A FIRST TIME THIS 30<sup>th</sup> day of November 2016

READ A SECOND TIME THIS 30<sup>th</sup> day of November 2016

READ A THIRD TIME THIS 30<sup>th</sup> day of November 2016

APPROVED BY THE INSPECTOR OF MUNICIPALITIES THIS <sup>th</sup> day of

RECEIVED CONSENT OF THE PARTICIPANTS THIS <sup>th</sup> day of

ADOPTED THIS <sup>th</sup> day of

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
CORPORATE OFFICER

FILED WITH THE INSPECTOR OF MUNICIPALITIES THIS <sup>th</sup> day of



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**REPORT TO THE CRD BOARD  
MEETING OF WEDNESDAY, NOVEMBER 30, 2016**

---

**SUBJECT**    **Bylaw No. 4142: Loan Authorization Bylaw (Regional Parks Service)**

**ISSUE**

As directed by the Board this report brings forward the loan authorization Bylaw No. 4142, to provide funding for completion of the E&N Rail Trail – Humpback Connector (E&N Rail Trail) by 2019.

**BACKGROUND**

At its meeting of November 9, 2016, the CRD Board authorized staff to develop a loan authorization bylaw for borrowing up to \$6.1 million in order to complete the E&N Rail Trail – Humpback Connector by 2019 (agenda Item No. 16-1003).

This project has been included in the 2017 Financial Plan. The bylaw is being presented now in preparation for future borrowing as required, to enable timely progress toward completion of the E&N Rail Trail, which is included in the 2017 Capital Plan.

**ALTERNATIVES**

1. That Bylaw No. 4142, “Regional Parks Loan Authorization Bylaw No. 1, 2016” be introduced and read a first and second time, and read a third time.
2. That Bylaw No. 4142 be referred back to staff for further information.

**IMPLICATIONS**

It is estimated that the annual cost to service the \$6,100,000 debt over 15 years will be approximately \$507,316 per year based on the Municipal Finance Authority of BC (MFA) current indicative market interest rate of 2.94%. The estimated annual cost per \$100,000 assessed value for this new debt is \$0.51. The rates used in the analysis are estimates based on the information currently available and are subject to change.

Pursuant to the *Regional District Liabilities Regulation*, elector approval is not required if borrowing for a regional park service. The required approval can be obtained with the consent of at least 2/3 of the participants as per Section of 349 (1) (b) of the *Local Government Act*.

**CONCLUSION**

In its commitment to complete the E&N Rail Trail – Humpback Connector by 2019, the CRD Board has directed staff to prepare a loan authorization of \$6.1 million to fund the project. The bylaw is being presented now in preparation for future borrowing as required to enable timely progress toward completion of the E&N Rail Trail by 2019.

**RECOMMENDATION**

That Bylaw No. 4142, "Regional Parks Extended Service Loan Authorization Bylaw No. 1, 2016" be introduced and read a first and second time, and read a third time.

Submitted by:	Rajat Sharma, MBA, CPA, CMA, Senior Manager, Financial Services
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

Attachment: Bylaw No. 4142



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**REPORT TO CAPITAL REGIONAL DISTRICT BOARD  
MEETING OF WEDNESDAY, NOVEMBER 9, 2016**

---

**SUBJECT**     **Supplementary Information – Funding for the Completion of the E&N Rail Trail**

**ISSUE**

To consider funding options for the completion of phases 3 and 4 of the E&N Rail Trail.

**BACKGROUND**

At its meeting of October 19, 2016, the Regional Parks Committee recommended that the Capital Regional District (CRD) Board borrow up to \$6.1 million under a new loan authorization bylaw to complete construction of phases 3 and 4 of the E&N Rail Trail – Humpback Connector by 2019 (Attachments 1 and 2).

At that meeting, staff were directed to provide additional information regarding the estimated annual costs per household of borrowing the \$6.1 million, and regarding the number of roads in each municipality that the E&N Rail Trail would cross once completed.

**ECONOMIC IMPLICATIONS**

Completion of phases 3 and 4 of the E&N Rail Trail is estimated to cost \$6.1 million. Phase 3 is estimated to cost \$3.63 million. Phase 4 is estimated to cost \$2.49 million. If \$6.1 million were borrowed for this initiative, the total payment over a 15-year period is estimated to be \$7,609,742 based on the current Municipal Finance Authority indicative market interest rate of 2.94 per cent. The annual debt servicing cost for such a loan would be approximately \$507,316.

The annual cost per average household to repay the loan is estimated to be \$2.72, based on the above interest rate and term, and current assessment roll data. Staff would continue to seek grant funding to support the construction of the trail and reduce the need for borrowing.

**SOCIAL IMPLICATIONS**

The table below and Attachment 3 show the municipal roads crossed by the E&N Rail Trail corridor in each municipality where upgrades to the crossing are required due to the trail project, and the number of upgrades remaining to be constructed. When trail or road improvements are within 30 m of a railway track at a level crossing, Transport Canada's *Canada Wide Grade Crossing* regulation requires that certain safety upgrades are made. Typically, warning signs and signal equipment, and in some cases barrier gates, are required to ensure user safety. Phase 3 includes one rail crossing at Atkins Road, for which required improvements are estimated to cost \$450,000. Phase 4 includes 5 rail crossings, which are estimated to cost a total of \$1 million. The type of safety improvements needed at individual crossings and the associated actual costs of the crossings in Phase 4 will depend on future decisions about the speed at which the train will travel on each portion of the rail line and where the train will stop.



Jurisdiction	# of locations requiring level grade road crossings for E&N Rail Trail (All phases)	# of locations requiring a crossing still to be completed
Esquimalt/Songhees	8	1
Langford	4	3
Victoria	7	5
View Royal	2	1
<b>Total</b>	<b>21</b>	<b>10</b>

**CONCLUSION**

Completing phases 3 and 4 of the E&N Rail Trail is estimated to cost approximately \$6.1 million. Completing these phases would provide residents and visitors with an active transportation option connecting the rapidly-growing Westshore communities to Victoria and enhance the quality of life of CRD residents.

**RECOMMENDATION**

That the Capital Regional District Board receive this report for information.

Submitted by:	Mike Walton, Senior Manager, Regional Parks
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

BH:km

- Attachments: Attachment 1 – October 19 Staff Report on Funding for Completion the E&N Rail Trail  
 Attachment 2 – E&N Development Plan Map  
 Attachment 3 – Level Grade Crossings



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**REPORT TO REGIONAL PARKS COMMITTEE  
MEETING OF WEDNESDAY, OCTOBER 19, 2016**

---

**SUBJECT**     **Funding for the Completion of the E&N Rail Trail**

**ISSUE**

To consider funding options for the completion of phases 3 and 4 of the E&N Rail Trail.

**BACKGROUND**

The E&N Rail Trail – Humpback Connector links 6 communities within the Capital Regional District (CRD) and will be 17 km when complete. Construction of the E&N Rail Trail is taking place in phases; a map showing completed and future phases of the Rail Trail is attached (Attachment 1). The CRD Board did not dedicate funding to this initiative as the goal was to fund the project from grants as they became available. To date, a total of \$18.2 million has been granted to the CRD for the E&N Rail Trail. Staff continue to seek grant opportunities for future sections.

Phases 1 and 2 are substantially constructed and funding is in place to complete these sections. Segments of Phase 1 are located in Langford, View Royal, Esquimalt and Victoria. The CRD recently received a Bike BC grant to assist with completion of the outstanding 1 km of Phase 1 between Hallowell and Maplebank roads. Phase 2 of the trail, between Hallowell Road and the Four Mile Bridge in View Royal, was completed in 2015.

Phase 3 is a 1 km section in the City of Langford between Atkins Avenue and Savory School. This section of the trail will connect existing sections of the trail between Savory School and the Galloping Goose Regional Trail, creating a continuous 11 km off-street route between Langford and Victoria. Phase 4 is a 1.3 km section between Esquimalt Road and the Johnson Street Bridge.

**ALTERNATIVES**

That the Regional Parks Committee recommend to the Capital Regional District Board:

*Alternative 1*

1. That up to \$6.1 million be borrowed under a new loan authorization bylaw to complete construction of phases 3 and 4 of the E&N Rail Trail – Humpback Connector by 2019.
2. That staff be directed to assess and report back on the merit and opportunities of extending the land acquisition fund beyond 2019, to enable funding of both future regional parkland acquisitions and other major parks infrastructure assets.

*Alternative 2*

That staff be directed to assess and report back on the merit and opportunities of extending the land acquisition fund beyond 2019, to enable funding of both future regional parkland acquisitions and other major parks infrastructure assets.

### **ECONOMIC IMPLICATIONS**

Completion of phases 3 and 4 of the E&N Rail Trail is estimated to cost \$6.1 million. Phase 3 is estimated to cost \$3.63 million. Phase 4 is estimated to cost \$2.49 million.

If \$6.1 million were borrowed for this initiative, the total payment over a 15-year period is estimated to be \$7,600,592, based on a 2.9 per cent interest rate. The annual debt servicing cost for such a loan would be approximately \$506,706. If approved, the loan authorization bylaw will be prepared and brought back to the Board for approval. Staff would continue to seek grant funding to reduce the amount of internal funding required to complete the E&N Rail Trail.

The Land Acquisition Fund was established in 2000 for a 10-year period at a rate of \$10 per average household assessed value. In 2010, the Fund was extended for another 10 years and the rate was increased gradually to its current level of \$20 per average household value. The Land Acquisition Fund now generates approximately \$3.7 million per year. The Fund expires in 2019.

The Fund is used to purchase lands for the completion of the regional parks system, as directed in the board-approved Regional Parks Strategic Plan (2012-2021) and the Land Acquisition Strategy (2015-2017). Between 2000 and 2014, the CRD, with its partners, has purchased 4,485 hectares of land totalling \$48 million. The CRD contributed \$35 million (73%) from the Land Acquisition Fund and partners contributed \$13 million (27%). In 2015, an additional 86 hectares with a value of \$2.5 million were acquired through donations and transfers from partners.

### **SOCIAL IMPLICATIONS**

Completing phases 3 and 4 of the E&N Rail Trail provides opportunity for residents and visitors to enjoy uninterrupted pedestrian and cycling experiences. Additionally, short cycling rides and walks or longer full-day excursions are possible as a result of connections to the Galloping Goose Regional Trail. Completing phases 3 and 4 will contribute to the quality of life enjoyed by CRD residents and encourage business opportunities related to sustainable tourism. Cycling commuters will have access to a continuous corridor for travel purposes.

### **INTERGOVERNMENTAL IMPLICATIONS**

Phase 3 will close the gap between the existing trail ending at Savory School and a new segment of trail along Atkins Road built by the City of Langford with Bike BC funding in 2016.

A section of Phase 4 from Esquimalt Road to Johnson Street Bridge through the Roundhouse area will be constructed by developers. Alignment of this section has not been confirmed with all stakeholders, including the City of Victoria.

### **CONCLUSION**

Construction of the E&N Rail Trail was originally intended to be grant funded. Completing phases 3 and 4 of the E&N Rail Trail is estimated to cost approximately \$6.1 million. Completing these phases would provide residents and visitors with an active transportation option connecting the rapidly-growing Westshore communities to Victoria, and enhance the quality of life of CRD residents. In order to expedite progress on the project independent of revenue from grants, it is

recommended that approval be granted to borrow up to \$6.1 million under a new loan authorization bylaw to complete construction of phases 3 and 4 of the trail by 2019 while continuing to actively seek grants to off-set the cost.

**RECOMMENDATION**

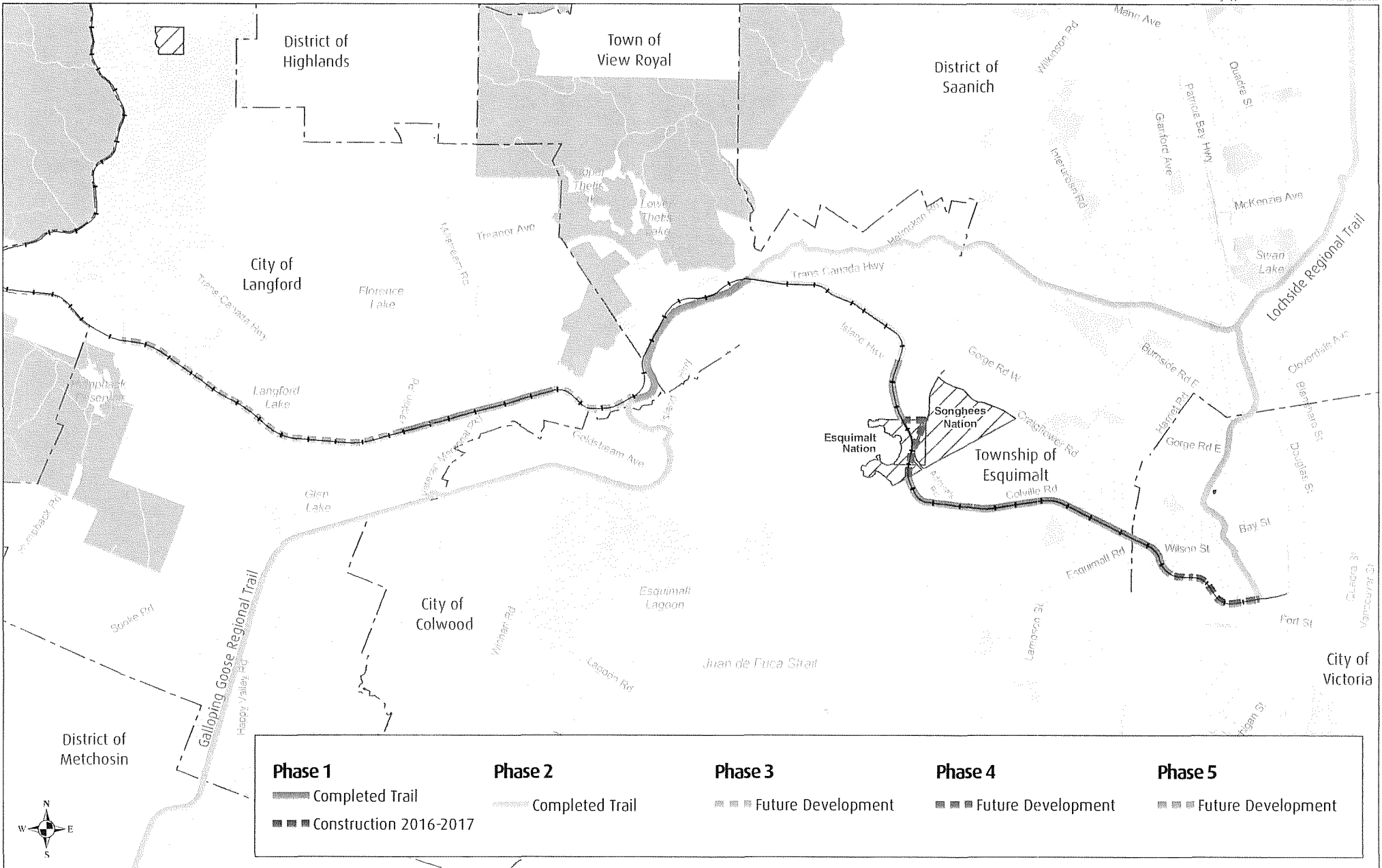
That the Regional Parks Committee recommend to the Capital Regional District Board:

1. That up to \$6.1 million be borrowed under a new loan authorization bylaw to complete construction of phases 3 and 4 of the E&N Rail Trail – Humpback Connector by 2019.
2. That staff be directed to assess and report back on the merit and opportunities of extending the land acquisition fund beyond 2019, to enable funding of both future regional parkland acquisitions and other major parks infrastructure assets.

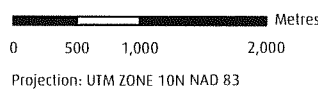
Submitted by:	Mike Walton, Senior Manager, Regional Parks
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Nelson Chan, MBA, CPA, CMA, Chief Financial Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

BH:km

Attachments: Attachment 1 – E&N Rail Trail - Humpback Connector - Development Map



**CRD**  
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— Galloping Goose / Lochside Regional Trails  
 — E & N Rail Corridor  
 - - - Municipal / Electoral Area Boundary

■ Regional Park  
 ■ Other Park  
 ▨ First Nation Reserve  
 ■ Lake / Ocean

**Important** This map is for general information purposes only. The Capital Regional District (CRD) makes no representations or warranties regarding the accuracy or completeness of this map or the suitability of the map for any purpose. **This map is not for navigation.** The CRD will not be liable for any damage, loss or injury resulting from the use of the map or information on the map and the map may be changed by the CRD at any time.

Attachment 2  
 E & N Rail Trail - Humpback Connector  
 Development Map  
 Capital Regional District Board Staff Report  
 November 9, 2016



LEGISLATIVE SERVICES

# Memo

File 1420-30 Biped

Mayor  
Councillors  
Administrator  
Front Counter

To: Donna Dupas, Legislative Manager  
From: Tania Douglas, Senior Committee Clerk  
Date: January 25, 2017  
Subject: Bollard Use

Council  
Administrator  
Media

At the January 19, 2017 Bicycle and Pedestrian Mobility Advisory Committee meeting, the committee discussed the issue of bollards and the safety concerns surrounding them. Committee members resolved as follows:

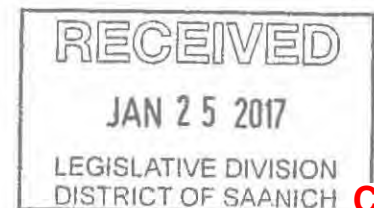
**“Recognizing the use of bollards on cycling trail-road interfaces to block motor vehicle entry to prevent hypothetical bicycle-motor collisions versus the documented large number of accidents with serious injury caused by bollard-cyclist collisions, the Bicycle and Pedestrian Mobility Advisory Committee recommends that:**

- a) Council request a review of Saanich’s bollard usage policy; specifically to consider alternatives to bollard usage similar to policies in other jurisdictions such as California; and,
- b) This request be forwarded to Larisa Hutcheson, General Manager, CRD Parks, for consideration of reducing or eliminating bollard use on all CRD trails, and that this be made a priority by the CRD in 2017.”

An excerpt of the draft January 19, 2017 meeting minutes, along with supporting documents, is attached for information.

Tania Douglas  
Senior Committee Clerk  
/td

e-copy: Councillor Derman, Chair BiPed  
Manager, Transportation & Development



CM  
F.1



## BOLLARDS

Committee members discussed the dangers of bollards to cyclists; the following was noted:

- Very serious injuries have occurred because of cyclists hitting, or trying to avoid bollards. This information is not usually collected because it is not usually reported.
- Suggestion for flexible bollard was made but it was pointed out that if a handlebar hits one, the cyclist will likely still fall.
- There is a lot of information about bollards and solutions (eg. California and Europe); a few committee members noted that there are no bollards in Europe and no problems with automobiles in those areas.
- It is the Capital Regional District's (CRD) policy to have bollards on their trails; they need to re-examine this policy.
- They are also a danger for people with trailers and cargo bikes. Kids sitting in trailers with their feet sticking out can be injured.
- It would be best to start off with no bollards and only install them if and when an issue arises.
- Bollards are dangerous to inexperienced cyclists.
- Speed is not necessarily the issue; dogs and/or children darting on the trail, as well as unaware pedestrians, can cause cyclists to have to react and hit bollards.

**Motion: MOVED by D. Wick and Seconded by A. Nagelbach, "Recognizing the use of bollards on cycling trail-road interfaces to block motor vehicle entry to prevent hypothetical bicycle-motor collisions versus the documented large number of accidents with serious injury caused by bollard-cyclist collisions, the Bicycle and Pedestrian Mobility Advisory Committee recommends that:**

- a) **Council request a review of Saanich's bollard usage policy; specifically to consider alternatives to bollard usage similar to policies in other jurisdictions such as California; and,**
- b) **This request be forwarded to Larisa Hutcheson, General Manager, CRD Parks for consideration of reducing or eliminating bollard use on all CRD trails, and that this be made a priority by the CRD in 2017."**

The Manager of Transportation and Development noted that the majority of bollards in use today in Saanich are located on CRD trails and that, in general, it is Saanich's policy to not over-use bollards. They are placed very strategically for particular instances to restrict vehicle entry.

The Police liaison noted that the trails are multi-use and suggested perhaps cyclist speed is an issue. The only imposed speed limit is for electric bikes and the maximum for that is 32 km/h. He noted that BikeMaps.org may have some data about bollard accidents and also that it could potentially be a liability issue for Saanich if bollards are removed and a vehicle ends up on a trail causing an accident.

The Chair stated that he could bring a Notice of Motion regarding this item to the CRD Board, and speak to the item on behalf of the committee. Committee members requested that all supporting evidence be provided to the CRD and to Council for information.

**The Motion was then Put and CARRIED**

## **Bollards - A Danger to Cyclists**

Through her role on the CRD Parks Committee, Saanich Councilor Judy Brownoff received a couple of emails expressing concerns about bollards on trails at road interfaces and the danger they posed to cyclists. She was told that cyclists were colliding with them with resulting serious injuries. Evidently no agency compiles any statistics on such accidents; generally there is no police report and no ICBC claim. To obtain more information she asked for reports of accidents on a local talk show and also by sending out an email request for reports to several local cycling club email lists.

Twenty-five reports quickly followed detailing serious injuries (broken legs, hips, pelvis, arms, collar bones) resulting from bollard collisions on the CRD Galloping Goose, Lochside trails and a couple more on trails such as the airport circle trail or the cycling approach to Schwartz Bay Ferry Terminal. Interestingly, speed was not a factor in these accidents. The most common reason was that the bollard was not visible until the last moment because of walkers or another cyclist in front blocking the view. A couple other accidents resulted from the rider being distracted by others in the vicinity of the bollard area or automobiles.

Some have suggested replacing the fixed bollards with flexible ones, but some accidents were caused by handlebars hitting the bollard. Hitting even a flexible bollard with one's handlebar can quickly cause the cyclist to lose control and fall.

There appears to be two reasons for bollards; to warn trail users that they are approaching a road crossing and also to block automobiles from entering the trail.

And internet search of how to address the trail - road interface indicates many jurisdictions acknowledge the bollard danger and view them as a very last resort. Their policies state the first approach is to do nothing unless there is a clearly established problem, then to implement a sequence of solutions with bollards being the very last and least recommended solution.

**Appendix A** is a compilation of the accident reports received by Councilor Brownoff.

**Appendix B** is the bollard policy from California, CALTrans.

**Appendix C** is the current CRD Regional Parks policy regard road/trail intersections and an email from Mike Walton, senior Manager, CRD Regional Parks.

**Appendix D:** Examples of existing problematic bollards installations



## Appendix A

### Summary of injuries:

- Bent front fork, chped shoulber bone, lots of pain
- Hit post with handle bar, bruised hand, broken geat shifter
- Wrecked bike, ambulance to hosptital
- 8 years of rides trails almost daily, never seen motorcycle on trail (surmise motorcyclists no more law abiding than car drivers.)
- \$7000 bike destroyed, 4th degree AC separation, dropped shoulder.
- Two crashes with bollards, seriously hit head on pavement
- Three people injured with one accident, permanently injured thumb, another to hospital, another cyclists injured
- Solo crash, no longer rides
- 7 year old hit bollard with triangle flanges
- tore bone off of top of thumb.
- Centre Bollard removed, leaving 6" collar
- Hit handlebars, fellheavily breaking arm
- Badly broken leg
- Front wheel damaged beyond repair
- Broke pelvis in 3 places, 4.5 hours surgery, 12 days in hospital
- Concussion, separated shoulder broken rib, road rash.
- Broken wrist
- Dislocated finger, laceration of finder, dental fracture, mild concussion
- Multiple fractures and moderate concussion
- Shattered head of my ulnar requiring surgical reconstruction with plate and five pins.
- Aluminum frame dented, bruised knee
- Bike frame ruined, sent to hospital, serious sprained ankle
- Report of four different bollard accidents no further details
- Broken left femur
- a level 2/3 separation of my right shoulder, which resulted in lost work, medical expenses and lots of pain

### Judy

What follows is information on my accident in October 2012 ( description from emails written at the time) and images from Google Earth/Street View of the site of the accident. I have also included comments about a few other bollards that have caused concern for me over the years. Basically the fixed solid ones are extremely dangerous to cyclists ( and runners) riding solo and even more so when riding in a group. This has taken a few hours to put together so please take this seriously. Thank you.

1) Bike accident Oct 4, 2012 at about 6:35-6:40 AM Lockside Trail north Hunt road intersection at end of car ride able section going North. Here are the contents of two emails related to the incident and an image of the site.

On October 4, 2012 at 6:16PM, I in part wrote:

"I've been doing the annual CRD cycle survey this week so have spend a fair amount of time at intersections. I've seen a few old friends and newer ones like (name removed). Over 400 cycles in 3 hours downtown and 300 at Lockside and Royal Oak. I'm impressed.

Well, going out to Central Saanich this morning to do an intersection there, I hit one of those road barriers (added in 16-bollard), you know the ones that took out cyclists on the STP bike trails, Hit hard, bent front fork of folder bike and have chipped shoulder bone and have lots of pain. Doc says again I was lucky but maybe should give up cycling ( are you kidding). He said with rehab I could have most function back in month. The last crash took three months so I'm realistic.(note added in 16-three months earlier coming off east side Swan lake trestle my front forks on a bike collapsed and I hit the ground hard-shoulder bruised but other wise ok. This was not related to bollards but more poor rough cycling surface of the bridge and age of the bike forks)"

The bike repairs cost me \$250 to repair and another \$60 for a new front tire-\$300 total. The doctor costs were about \$80 for prescription pain killers, \$90 for shoulder slings and wrist guard and about 2 years for most of my shoulder function to return. I still have residual aches. I did not do the bike survey that day and did not volunteer again for the survey until this year.

2) Image of site (1) and description along with other bollard hazards: ( note I have used the terms bolons and posts to refer to bollards).

3) bollards are inconsistently placed, ( for example -sometimes one in centre and sometimes 3) painted-( for example- white, red, yellow or chipped) and often the same colour as trail separator lines so they disappear when approached straight on.

I hope this information is useful and will indicate to the CRD committee that accidents with bollards are real and have long lasting consequences. I am lucky to be alive after hitting the bollard. I had a helmet on and my pack absorbed some of the impact. Trail users were quick to my assistance and it was not a very cold day.

Best of luck with your cycle trail work.

Jim

-----

Hi Judy,

I would like to comment with my feed back around Bollards and their use on the local bike trails.

I do see a need to restrict vehicle traffic on the bike trails and I also endorse the use of bollards for the purpose of traffic calming at intersections. As a cyclist I believe that bollards help keep cyclists more engaged and aware of surroundings, especially when entering an intersection, and therefore preventing potential accidents.

Wendy

Victoria Cycling Adventures

-----

Tyee at Kimsit, the old trail from the Johnson Street Bridge, [click for street view picture](#).

2012, Summer evening. My batteries were low so my front light was a bit dim, which I suppose makes it my fault!

Hit the post on the right with my right handle bar. Bruised hand, broken gear shifter.

Also, riding North on the Galloping Goose to the Switch Bridge and observed a cyclist with a wrecked bike being loaded in to an ambulance. Spoke to his friend. They had been travelling South and the other one had hit one of these bollards, [click for street view picture](#).

Comment: The purpose of bollards is to prevent cars from driving on the trails. I have been riding on them for 8 years almost daily and have never seen a motorcycle on the trails. Unless there are figures that prove that motorcyclists are more law abiding than motorists, then cars driving on the trails is just not an issue. Bollards are far more of a hazard to cyclists than the rare car that might accidentally drive on them in their absence. Bendable plastic markers and signage would prevent even these rare occurrences.

Are there any studies done anywhere that show that motorists will drive on trails in the absence of solid metal bollards? That they are automatically stuck everywhere on our trails where the only consequence of their presence is to injure cyclists is bordering on criminal negligence.

Thanks for doing this!

Simon  
(Founder and ride organizer: [Victoria Cycling Adventures Meetup group](#).)

-----

Dear Ms Brownoff;

I was asked by my cycling club to provide information in regards to an accident involving one of the bollards on the Galloping Goose trail.

It occurred May 31st, 2015 near the end of a group ride. I was in a closely connected paceline of about 6 riders and approaching the intersection - looked off to the side of the trail at a police cruiser that was unusually positioned next to the trail and before I could look back I was hitting the bollard that the person in front of me swerved around. He might have signaled with his arm that it was there but I didn't catch it. I hit the bollard with such force that my frame was broken in half and forks broken on a \$7000.00 bike. :-)

I went over the handlebars, landing on my shoulder and got an 4th degree AC separation (this dropped shoulder still looks bad). The policeman called the ambulance and they took me and my broken bike to RGH. I would love it if we could find some alternative way to manage the intersections that didn't involve bollards that don't move no matter how hard you hit 'em! I included a jpeg of the bike post crash...

Thanks;

Alan

-----

Bollard caused bike accidents on the goose

Hi Judy

In the past I've hit them and crashed twice. It was kind of my fault, I guess, but they are still pretty stupidly designed and placed. It must suck trying to get past them in a wheel chair. I crashed hard enough to break a cycling mirror once and both times hit my already brain-injured head on the pavement. It was years ago, so I'm not sure where, but

they happened on the Goose between Recyclistas and the Blue Bridge. Oh wait, one was around Quadra and Mackenzie, and the other was near Recyclistas.

Danna

-----

Hi Judy

The Cuthbert Holmes one is at the eastern end, so away from the new construction. Maybe it was from something to do with the campers in the park? Anyways, it's quite dangerous. Thanks for getting someone to look at it.

As an aside, Saanich Parks (and anyone) can create an account with [BikeMaps.org](http://BikeMaps.org) and then define a "riding area". Parks could create areas around each of their parks (that have biking). When something gets reported in those parks, they would receive an alert from [BikeMaps.org](http://BikeMaps.org). It's a free way to keep on top of their infrastructure. Public works could do the same for the entire municipality.

Karen

-----

Hi Judy,

I wanted to comment on the use of bollards on the bike paths.

I find them to be very dangerous and have witnessed several crashes. I was also in

One while going between the bollards on the correct side. A runner stepped in front of us and I was trapped by the bollards with nowhere to go. Three people were injured. I have a permanently injured thumb as a result of this crash. The runner required an ambulance. The other cyclist also was injured. The only one who did not get hurt was

Far enough back to avoid the bollards.

My usual training partner also had a solo crash. My neighbour also has crashed and no Longer rides.

I run and ride on the bike paths several times per week. I hate the bollards for the risks they pose. Solid steel with no give whatsoever. Surely there is a better safer option.

One idea would be to at least remove the middle one. That's the most often hit in my

Experience.

Thanks for hearing me on this. I hope some changes are made to improve safety.

Kim

-----

Dear Judy Brownoff:

I, and my fellow cyclists from the Wednesday Morning Coffee Ride (WMCR) cycling group, are pleased that the CRD is looking at the use of bollards from a cycling safety point of view.

As a large informal group of mature and experienced cyclists, we are concerned about the safety of all our community's citizens and we welcome the opportunity to advise the CRD with regard to the safe use of bollards and potential safe alternatives.

One of the WMCR cyclists ended up in the hospital as a result of an encounter with a bollard and he has sent you a note about this incident.

Below is a note from another WMCR cycling couple, which includes an interesting review of the use of bollards, mainly in the Netherlands.

If, as the bollard review process progresses, you would like further input from members of the WMCR cycling group, please let me know. I have about 70 members of the WMCR group on my private distribution list.

Keep moving as long as you can .... Ken

Hi Ken,

There is quite a lot on the internet about bollards and cycling safety.

Here is one from Europe - mostly Dutch experience I think.

What about rumble strips before and after the bollards?

<http://www.aviewfromthecyclepath.com/2013/08/the-fifty-bollard-game-how-bollards-on.html>

David O.

-----

Hi Judy,

2 years ago my 7 year old grandson ran into a bollard in beacon Hill park. These are the ones with the triangular flanges on both sides. My handlebars are high enough to go over the flanges but a 7 year old's bike is too short and the widest part of the protruding flange catches the handlebar and down goes the child. A very stupid design.

I spend a lot of time out on our trails every week. Thanks for doing such a good job, for such a long time, on connecting our neighbourhoods.

Chris

-----

Hello Judy,

It was recommended I reach out to you regarding my experience hitting one of the poles. I was on a bike ride with my cycling team about seven years ago when I hit one head on because the cyclist in front of me was blocking my view so that I couldn't see it.



The only injury was to my thumb, the top of which including some bone was torn off. Fortunately, I have doctors and nurses on my team, but this is an injury I will always be reminded of, as the doctor was unable to reattach it. I consider myself a very skilled cyclist. But my momentary glance away, and not being able to see ahead at this precise moment was all that was required. The location was on the lochside trail next to the Pat Bay Highway just about 2km passed Michell's Farm at the border of the first nations reserve on the right as you drive towards Sidney.

When we are on our bike rides, we always signal them because they can be dangerous!

Best regards,

Eileen

-----

Joe & Guest

There are bollards and delineators available to users that are designed to withstand impact and protect people from injury.

Take a look at the link and related study.

Please feel free to contact me for further information.

[http://www.trafficsignsolutions.com/shop.php?store\\_cat\\_id=4&id=1](http://www.trafficsignsolutions.com/shop.php?store_cat_id=4&id=1)

(Chris)

-----

Hi Judy,

Noon, Sunday, October 30th, the bollard from the centre of the Interurban Rail-Trail, south side of Prospect Lake Road, had been removed, thereby leaving a potentially dangerous bollard-collar, in the middle of the trail, for an attention-diverted cyclists to encounter.

Perhaps, either Saanich Engineering or Saanich Parks could take appropriate action to re-mount the bollard without unnecessary delay.

Jim

-----

Hi - You have asked for reports from people who have had a bollard accident. Mine happened some years ago. I was with my regular Friday biking group and we were travelling south on the Lochside trail having started at Blue Heron Park. We were approaching the Sidney intersection of the Pat Bay Hwy with Beacon Ave. We were travelling in single file and I was following a biker fairly closely and did not realise there was a bollard ahead as I could not see it and it was in the shade. I hit it with the left side of my handlebars and fell heavily on my right side breaking my right arm. The usual six weeks before it healed.

I have wondered out loud many times why they have to be such dangerous barriers placed very close together. I hope this helps future designs.

Brenda

-----

Hi Judy,

I understand that you are collecting information on the above. I know of two incidents, one involving me and another a former colleague at the Ministry of Environment. I'm travelling in Europe at the moment and don't have access to the exact dates and other specific details of these events. If you need more information I could obtain it in mid November.

#### Incident 1

Where the accident occurred

At the south end of the Switch Bridge. Bob L was commuting to work [REDACTED] near the Selkirk Trestle) and was travelling south on the Switch Bridge.

When the accident occurred (date/time of day)

Approximately 7 to 8 years ago, in the morning around 7 to 8 am.

A brief description of any injuries and/or bike damage

Badly broken leg. Unknown damage to bicycle.

Any other comments about the accident or about bollards

It took several years and surgery for the broken leg to heal. Bob sustained a serious injury and was affected for a number of years.

#### Incident 2

Where the accident occurred

On the Galloping Goose trail, on the west side where it crosses Atkins Road, west of Six Mile Road. I was riding and was distracted by a truck approaching the crosswalk.

When the accident occurred (date/time of day)

About 8 years ago, in the early afternoon.

A brief description of any injuries and/or bike damage

Front wheel was bent so badly it had to be replaced.

Any other comments about the accident or about bollards

About a year after this incident the bollards were set back further from Atkins Road at his location.

I hope this helps. Please let me know if you would like any further information.

John

-----

On July 8/16 about 12:30 pm I collided with the bollards on the Lochside trail behind the Saanich Municipality Complex. I was turning right exiting the municipal parking lot when the collision occurred. I was checking for trail traffic to the left and then found myself too close to the bollards to avoid a collision.

The bike was not damaged but I broke my pelvis in 3 places requiring a 4.5hr. operation and 12 days in the hospital.

I am a very experience cycling and many of my fellow cyclists have either had a mishap with the bollards or near misses.

I suggest as a temporary solution removing the side bollards and leaving the centre bollard installed. Then cyclists would know if they keep right they will not collide with a bollard, as many times these bollards are obscured by cyclists and pedestrians ahead.

Norm

-----

Hi Judy

I not sure if this information will be useful to you or not given it occurred on the airport path and not one of CRD's trails but it does involve bollards.

In May of 2015, a Saturday about 2:30, I was riding with my wife on the airport path, I decided I would do three laps and she would do two. We went in opposite directions, not really relevant except for the direction I was going. I was heading west on the path and at the bottom of Cresswell Rd. where it meets the path there are two sets of three bollards about 10 metres apart. I have no memory of the actual crash due to the fact I was concussed but I will reconstruct as best I can. The path at this point has a curve in it to the left as well as sloping to the right, wrong way for gravitational forces, there was also small bits of gravel and dust from the Cresswell rd intersection. I believe as I approached the first set of bollards, I was likely going about 20-25 kph, my rear wheel skidded out and I bumped the first bollard putting me down leaning to the left and onto the path where I slid into the next set of bollards hitting them full on with the side of my head, yes I was wearing a helmet but I hit just below it close to the temple. There was no damage to the bike apart from a mis-aligned brake lever. I was fortunate that two young girls, around 12-13 where coming by and found me laying on the ground moaning, they had a cell phone and the presence of mind to call 911. A police car arrived shortly and when I came to the officer was looking down at me and telling to stay where I was an ambulance was on it's way. I wanted to get back on the bike but the officer said "I don't think that is a good idea sir". In the hospital I was diagnosed with a concussion, separated shoulder, broken rib, bruised kidney,(blood in urine), a small tear in my right MCL, the other injuries where all on my left side, and a lot of road rash. Like I mentioned I don't have a memory past coming up to the bollards and being found on the ground. This would be consistent with the injuries and where I was found, I had to have been down when I hit the second bollard because of the location of the injuries and the height of the bollards. I dislike the use of the bollards, they don;t really seem to prevent what they are meant to, easy to drive around if one is so inclined, at the very least they could be made of hard rubber or other material that has some give to it.

This past summer I was in hospital for an unrelated problem but was waiting to go in for an x-ray and there was a woman in full bike kit also waiting, I asked her what happened and she said she hit a bollard just past McDonalds by Mt. Newton on the Lockside trail. She said she was riding with a group and didn;t see it and the next thing she was



on the ground, suspected broken wrist. Her group was visiting from Toronto and was just at the end of their holiday. Bummer.

I hope this helps and if you have any questions please ask away.

Regards

Terry

-----

This is general info plus wording in Trails Mgmt Plan on Bollards

GG 2015 close to 2,000,000 users

Lochside 1,200,000

Regional trail mgmt plan

Bollards

. Bollards will be used in advance of trail-road intersections to preclude motor vehicles from accessing the trail and to alert trail users that they are approaching an intersection.

. Generally, bollards will be located approximately 5 m back from the edge of road or edge of sidewalk. Depending on the terrain, in some cases bollards may be located differently or chicanes may be used in place of bollards to slow trail users.

. Bollard placement will be such that they allow for wheelchair and mobility scooter access and standard child bike trailer (1.3 m maximum width) access.

. Reflective tape will be used on bollards to increase visibility.

. Bollards will be silver or white in colour.

-----

Thank you for the opportunity to comment on the use of bollards on our cycling trails. I have first hand knowledge of the dangers of these posts. I broke my wrist (twist fracture) about five years ago. I was following my cycling friends and the person ahead, swerved to miss the post, and I did not have time to swerve. The post hit my handlebar and hand, causing a severe twist in my wrist. (left wrist). It was very painful, and upon examination and x-ray at the hospital, it was determined to be a fracture. It required a cast. The time of day was about 10 am. We were cycling a normal, safe speed. The accident occurred close to the Saanich Historical Society, close to the road entering the Tsawout First Nations. (Jus Kun Road)

I would be pleased to provide additional information if you wish.

Ken

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Dear Judy,

I am told that: The CRD Parks committee, through their Regional Trails Management Plan for the Lochside, Galloping Goose and E&N, has included a priority action to review the use of bollards and trail / road interfaces with respect to user (cyclist) safety. Currently the installation of bollards is the default treatment for these interfaces, but there are other jurisdictions that utilize other approaches to block or discourage motor vehicles from entering trails.

They have heard unsubstantiated reports about cyclists hitting these bollards. If you know of someone who can provide a first-hand report, it would be very helpful. We would like to know:

--where the accident occurred. LOCHSIDE TRAIL AT HERITAGE PARK

--when the accident occurred (date/time of day) JULY 28, 2016

--a brief description of any injuries and/or bike damage. DISLOCATED FINGER, LACERATION OF FINGER, DENTAL FRACTURE, MILD CONCUSSION

--any other comments about the accident or about bollards.

ADDITIONAL HAZARD:

I witnessed a crash on the Lochside Trail just North of the pedestrian overpass at MacDonald Park Road. The cyclist fell as a result of hitting a section of the path that has been pushed up by a tree root or something similar. It a daytime accident on Wednesday, August 16, I believe. The gentleman had multiple fractures and a moderated concussion. He was admitted to ICU and was in hospital about 3 weeks. He is a very experienced cyclist. The Trail needs maintenance in that area.

Thanks,

Ron

-----

Good afternoon Judy,

I am a female cyclist aged

October 2014 when aged

Heading south on do

Loch side trail on a dark rainy day heading south just past Royal Oak drive just past the school the trail abruptly changes from paced to hard pack where there are unmarked bollards.

I was not paying close attention just rushing home did not see the bollard fortunately my handle bars hit the bollards and turned me to my right.

On impact I shattered the head of my ulnar requiring surgical reconstruction with plate and five pins.

I had full recovery was back riding in less than two months.

Bollards are a hazard

Jean

-----

Hi Judy, I hear you are looking for information about cyclists colliding with bollards on trails. I have passed this request to a couple of my friends who have also collided with bollards on the trails so I will let them tell you there details.

--where the accident occurred: Entering the BC ferries Swartz bay terminal on the bike path off Dolphin Road

--when the accident occurred: summer of 2015 in the morning

--a brief description of any injuries and/or bike damage: The aluminum frame was dented when I hit the bollard and luckily I only had a bruised knee

--any other comments about the accident or about bollards: This accident occurred entering the ferries paying area were there were a lot of cars driving up to the tellers. I was watching the cars to make sure I didn't ride out in front of any of them and didn't see the bollard because it was lower than where I was looking.

Cheers

Dewain

-----

Hi Judy,

A friend said you were collecting info on bicycle-bollard collisions.

I hit a bollard on the E&N trail at Intervale on 6 January of this year. I was distracted by a pedestrian, and directly hit the bollard in the middle of the entrance to the E&N trail. The bike frame was bent (and ruined) and I went to the Victoria General Hospital ER where it was determined I had a serious sprained ankle.

Sprocket marks left on the bollard from my bike

Since that accident, I have heard about several other people who have either hit, or had near misses with bollards. While visiting Ucluelet this summer, I noticed that they had stiff nylon bollards which can bend. Something I think would be an improvement for Victoria.

It is unfortunate that a device which is supposed to make cycling safer actually causes serious accidents. If you need any additional information, please let me know.

thank you,

Craig...

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I live in Broadmead and cycle approx 5000k a year with maybe 25-45 % on lock side/galloping goose. Over the last years I personally know of many cyclist being seriously hurt by hitting those tank stopping cast iron posts on the

entrance to the trail. My brother hit one at 18 km/hour as the cyclist he was following temporarily blocked his view. I clipped one and needed medical attention. Two other cyclist broke their arms/wrists on a ride I was one. There has to be a better way.

The second issue is the muddy trail portion just north of the soccer field. I agree with the multiple use of the trail but it becomes very muddy for about 4 months of the year. It becomes very dangerous and slippery as I have witnessed cyclist falling hard on the loose gravel by the soccer field and on the poorly drained muddy trail. If this could be better drained and crushed stone similar to the trail just south of Royal Oak, the fuss would blow over.

I may even consider holding off running on "Make CRD trails great again" slogan campaign and starting a mud fight with the horsy set for a few more weeks if action is taken.

Thank u Mrs. Clinton-North.

Dr. Michael

-----  
I wish you would get rid of these metal bollards that are situated on the Galloping Goose. I was forced into the one located on the Galloping Goose at Saanich Road. The accident happen on September 7th, 2016 at approximately 09:15. As a result of hitting the pole I fell off my bike and broke my Left femur. If the bollard wasn't there I would have been able to get off my bike without incident.

Ken

It has been brought to my attention that you are gathering information concerning cyclist vs bollard incidents. My initial accident was a collision that took place in 1998 on the Lockside trail adjacent to the skate board park in Sidney. It was at 5:00 pm on a partly overcast day with good visibility during my commute from work. My attention was drawn to the park for a moment where my son was skateboarding and in that moment of inattention I drifted slightly to the centre of the path and hooked my handle bar on the bollard. The result of the accident was a level 2/3 separation of my right shoulder, which resulted in lost work, medical expenses and lots of pain. The bollard at that time was not brightly painted or adorned with reflective tape and was rather randomly placed as there was no access from a road to the path anywhere near it. I have since had a few occasions where I clipped a bollard at various locations on the trails in the CRD region but other than some minor scrapes and bruises have not sustained further injury due to these hazardous contraptions. The use of bollards to control automobile access to cycling trails is a ludicrous idea as it creates a constant hazard for cyclists due to several factors; low visibility, the bollards are short and hard to see if there are other trail users, they are located to create choke points at intersections so when you are looking up and ahead for automobiles, cyclists and pedestrians one must also look down to make certain you don't collide with one of these trail hazards.

If a driver should take a car onto a trail it is the same as if they are driving on a sidewalk, which is an extremely rare occurrence and can be dealt with under the motor vehicle act or criminal code. In short, my opinion is to remove bollards from all cycling trails to increase the safety and decrease the hazard to cyclists. I also have fellow cycling club members who have suffered injury due to bollards who I will encourage to contact you with their story's.

I am a year round cyclist who regularly cycles 7-10,000 km per year in the CRD.

Yours Sincerely

Craig

## Appendix B CHAPTER 1000 BICYCLE TRANSPORTATION DESIGN

CalTrans Highway Design Manual

December 30, 2015

<http://www.dot.ca.gov/hq/oppd/hdm/pdf/english/chp1000.pdf>

(3) **Clearance to Obstructions.** A minimum 2-foot horizontal clearance from the paved edge of a bike path to obstructions shall be provided. See Figure 1003.1A. 3 feet should be provided. Adequate clearance from fixed objects is needed regardless of the paved width. If a path is paved contiguous with a continuous fixed object (e.g., fence, wall, and building), a 4-inch white edge line, 2 feet from the fixed object, is recommended to minimize the likelihood of a bicyclist hitting it. The clear width of a bicycle path on structures between railings shall be not less than 10 feet. It is desirable that the clear width of structures be equal to the minimum clear width of the path plus shoulders (i.e., 14 feet).

(17) **Entry Control for Bicycle Paths.** Obstacle posts and gates are fixed objects and placement within the bicycle path traveled way can cause them to be an obstruction to bicyclists. **Obstacles such as posts or gates may be considered only when other measures have failed to stop unauthorized motor vehicle entry.** Also, these obstacles may be considered only where safety and other issues posed by actual unauthorized vehicle entry are more serious than the safety and access issues posed to bicyclists, pedestrians and other authorized path users by the obstacles.

The 3-step approach to prevent unauthorized vehicle entry is:

(a) Post signs identifying the entry as a bicycle path with regulatory signs prohibiting motor vehicle entry where roads and bicycle paths cross and at other path entry points.

(b) Design the path entry so it does not look like a vehicle access and makes intentional access by unauthorized users more difficult. Dividing a path into two one-way paths prior to the intersection, separated by low plantings or other features not conducive to motor vehicle use, can discourage motorists from entering and reduce driver error.

(c) Assess whether signing and path entry design prevents or minimizes unauthorized entry to tolerable levels. **If there are documented issues caused by unauthorized motor vehicle entry, and other methods have proven ineffective, assess whether the issues posed by unauthorized vehicle entry exceed the crash risks and access issues posed by obstacles.**

If the decision is made to add bollards, plantings or similar obstacles, they should be:

- Yielding to minimize injury to bicyclists and pedestrians who may strike them.
- Removable or moveable (such as gates) for emergency and maintenance access must leave a flush surface when removed.
- Reflectorized for nighttime visibility and painted, coated, or manufactured of material in a bright color to enhanced daytime visibility.
- Illuminated when necessary.
- Spaced to leave a minimum of 5 feet of clearance of paved area between obstacles (measured from face of obstacle to face of adjacent obstacle). Symmetrically about the center line of the path.



- Positioned so an even number of bicycle travel lanes are created, with a minimum of two paths of travel. An odd number of openings increase the risk of head-on collisions if traffic in both directions tries to use the same opening.
- Placed so additional, non-centerline/lane line posts are located a minimum of 2 feet from the edge of pavement.
- Delineated as shown in California MUTCD Figure 9C-2.
- Provide special advance warning signs or painted pavement markings if sight distance is limited.
- Placed 10 to 30 feet back from an intersection, and 5 to 10 feet from a bridge, so bicyclists approach the obstacle straight on and maintenance vehicles can pull off the road.
- Placed beyond the clear zone on the crossing highway, otherwise breakaway.

When physical obstacles are needed to control unauthorized vehicle access, a single non removable, flexible, post on the path centerline with a separate gate for emergency/maintenance vehicle access next to the path, is preferred. The gate should swinging away from the path,

**Fold-down obstacle posts or bollards shall not be used within the paved area of bicycle paths.** They are often left in the folded down position, which presents a crash hazard to bicyclists and pedestrians. When vehicles drive across fold-down obstacles, they can be broken from their hinges, leaving twisted and jagged obstructions that project a few inches from the path surface.

Obstacle posts or gates must not be used to force bicyclists to slow down, stop or dismount. Treatments used to reduce vehicle speeds may be used where it is desirable to reduce bicycle speeds.

For obstacle post visibility marking, and pavement markings, see the California MUTCD, Section 9C.101(CA).



## Appendix C

### Regional Trails Management Plan Capital Regional District / October 2016 Appendix 3: Trail Development Guidelines

#### Bollards

- Bollards will be used in advance of trail-road intersections to preclude motor vehicles from accessing the trail and to alert trail users that they are approaching an intersection.
- Generally, bollards will be located approximately 5 m back from the edge of road or edge of sidewalk. Depending on the terrain, in some cases bollards may be located differently or chicanes may be used in place of bollards to slow trail users.
- Bollard placement will be such that they allow for wheelchair and mobility scooter access and standard child bike trailer (1.3 m maximum width) access.
- Reflective tape will be used on bollards to increase visibility.
- Bollards will be silver or white in colour.

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Communication from Mike Walton, Senior Manager, CRD Regional Parks:

When and why CRD Regional Parks uses bollards at road/trail intersections

CRD Regional Parks' operational practice over the past 29 years has been to install bollards at road-trail crossings along the regional trails to prevent vehicles (cars/ATVs) from driving on the trails and to alert trail users that they are approaching a road crossing. Given that the road-trail intersections could be mistaken for laneways, that the trails have high use, and that there are potentially very high consequences if vehicles were to travel down the trails unchecked, bollards are considered necessary to mitigate this risk.

In most cases along the 90+ km of regional trail, motor vehicles on roads have priority over trail users crossing the roads (trail users are to yield to road users) so the bollards also provide a visual cue, in addition to trail signage, to alert users that they are approaching an intersection. The fact that bollards are at all road-trail crossings provides consistency for trail users.

#### Design and specifications

The CRD (Regional Planning) developed Design Guidelines in 2011 as part of the Pedestrian and Cycling Master Plan (PCMP) project. These design guidelines were developed based on best management practices gathered from various government agencies in Canada and the US. The guidelines relating to bollards state that where bollards are installed, odd numbers of bollards should be used to reduce conflicts among users. The number of bollards on a trail and the space between them is dependent on the trail width (e.g., a 2 m wide trail may be managed with 1 bollard, a 3 m wide (or greater) trail width requires at least 3 bollards to preclude vehicles). In most of the urban areas of the regional trails system, the trail width is at least 3 m, so in these locations, 3 bollards are used. The bollards are installed with a minimum of 1.5 m and a maximum of 2.2 m between the posts to have enough space to allow the passage of recumbent bicycles, standard bicycle trailers for children, and wheelchairs, as well as standard bicycles.

Bollards on the regional trails have a reflective band at the top of the post to improve visibility for cyclists during conditions of poor visibility. Further, the bollard guidelines includes a paint design to be used on paved trails with bollards to make them more visible (a solid yellow line in advance of the bollard to indicate no passing and a diamond around the center bollard). This design has been required on the more recently constructed sections of the E&N Rail Trail and is being implemented along the Goose and the Lochside as line re-painting is conducted.

The Regional Trails Management Plan, in the Trail Planning and Development section (2.4.3), indicates that the trail development guidelines provided in Appendix 3 will be used to guide regional trail development. The guidance regarding bollards indicates they will be used in advance of trail-road intersections to preclude motor vehicles and to alert trail users of the upcoming intersection. It does not specify the number of bollards to be used because, as noted above, that varies depending on the width of the trail surface.

I hope this information assists in your discussions with trail users about why CRD Regional Parks uses bollards on the regional trails system.

### Appendix D



Lochside at Saanich Rd.  
Bollards block travel path

Gordon Head Local Connector  
Connection between San Juan Ave and Columbia Dr



Lochside at Blenkinsop Rd.  
 No bollards on far side but bollards at every road and driveway along Mt Douglas X Rd despite the fact cars could easily cross gravel boulevard between road and trail.

Why are outer bollards placed within path.  
 Silver bollards are not very visible compared to white bollards.



Lochside at McKenzie and Borden.  
 Why have any bollards here?



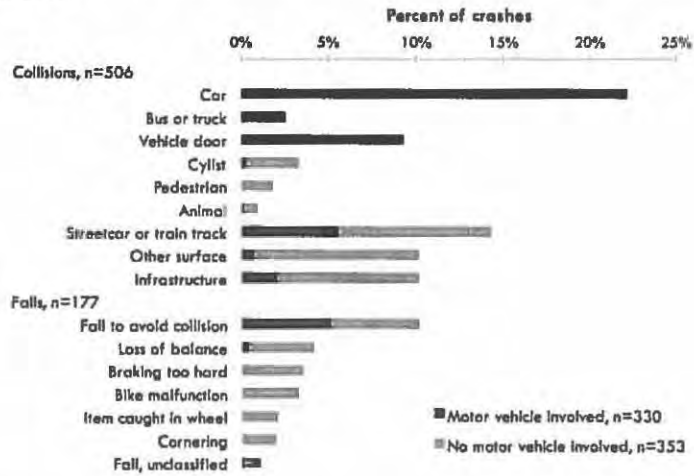
An interesting approach to warn of approaching road interface



# INJURY CIRCUMSTANCES, SEVERITY & ROUTE INFRASTRUCTURE

## injury circumstances

Data from interviews with 683 participants of the BICE study was used to classify Injury crash circumstances.



Most crashes (74%) were collisions. Collisions included those with motor vehicles, streetcar or train tracks, other surface features, infrastructure, and pedestrians, cyclists, or animals. Although direct collisions with motor vehicles represented about 1/3 of the crashes, many additional crashes occurred because the cyclist was attempting to avoid a motor vehicle, so the total proportion that involved motor vehicles was about 1/2.

Crash circumstances were distributed differently by route type, for example

- collisions with motor vehicles, including "doorings", were overrepresented on major streets with parked cars
- collisions involving streetcar tracks were overrepresented on major streets
- collisions involving infrastructure (curbs, posts, bollards, street furniture) were overrepresented on multi-use paths and bike paths

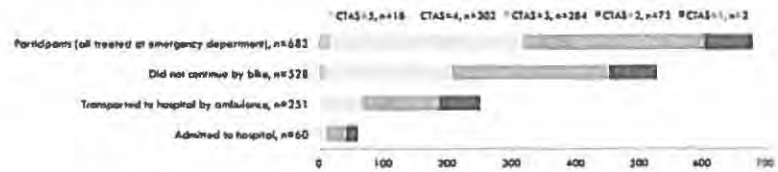


## injury severity

Data from the BICE study was also used to determine what factors were related to the severity of the bicycling injuries of the 690 study participants. Injury severity was classified using the following 4 metrics:



- able to continue trip by bike or not
- transported to hospital by ambulance or not
- admitted to hospital or not
- treatment urgency as assessed by Emergency Department personnel ("CTAS", where 1 = most urgent and 5 = least)



The following factors were consistently associated with increased severity:

- older age
- collision with a motor vehicle
- bicycling on downhill grades
- routes with higher motor vehicle speeds
- cycling on sidewalks, multi-use paths or local streets

Collisions with motor vehicles and higher motor vehicle speeds have been found to be related to injury severity in many other studies.

When taken together with the main BICE study results, these results show that facilities that separate cyclists from motor vehicle traffic and pedestrians, minimise slopes, and lower motor vehicle speeds would reduce both the risk of being in a crash and injury severity after a crash.

## publications

These results were published as follows in the scientific literature:

- BMC Public Health - crash circumstances by route type
- BMJ Open - injury severity by personal, trip, route, and crash characteristics

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RESEARCH ARTICLE

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# Bicycling crash circumstances vary by route type: a cross-sectional analysis

Kay Teschke<sup>1\*</sup>, Theresa Frendo<sup>1</sup>, Hui Shen<sup>1</sup>, M Anne Harris<sup>2</sup>, Conor CO Reynolds<sup>3</sup>, Peter A Cripton<sup>4</sup>, Jeff Brubacher<sup>5</sup>, Michael D Cusimano<sup>6</sup>, Steven M Friedman<sup>7</sup>, Garth Hunte<sup>5</sup>, Melody Monro<sup>1</sup>, Lee Vernich<sup>6</sup>, Shelina Babu<sup>8</sup>, Mary Chipman<sup>6</sup> and Meghan Winters<sup>9</sup>

## Abstract

**Background:** Widely varying crash circumstances have been reported for bicycling injuries, likely because of differing bicycling populations and environments. We used data from the Bicyclists' Injuries and the Cycling Environment Study in Vancouver and Toronto, Canada, to describe the crash circumstances of people injured while cycling for utilitarian and leisure purposes. We examined the association of crash circumstances with route type.

**Methods:** Adult cyclists injured and treated in a hospital emergency department described their crash circumstances. These were classified into major categories (collision vs. fall, motor vehicle involved vs. not) and subcategories. The distribution of circumstances was tallied for each of 14 route types defined in an earlier analysis. Ratios of observed vs. expected were tallied for each circumstance and route type combination.

**Results:** Of 690 crashes, 683 could be characterized for this analysis. Most (74%) were collisions. Collisions included those with motor vehicles (34%), streetcar (tram) or train tracks (14%), other surface features (10%), infrastructure (10%), and pedestrians, cyclists, or animals (6%). The remainder of the crashes were falls (26%), many as a result of collision avoidance manoeuvres. Motor vehicles were involved directly or indirectly with 48% of crashes. Crash circumstances were distributed differently by route type, for example, collisions with motor vehicles, including "doorings", were overrepresented on major streets with parked cars. Collisions involving streetcar tracks were overrepresented on major streets. Collisions involving infrastructure (curbs, posts, bollards, street furniture) were overrepresented on multiuse paths and bike paths.

**Conclusions:** These data supplement our previous analyses of relative risks by route type by indicating the types of crashes that occur on each route type. This information can guide municipal engineers and planners towards improvements that would make cycling safer.

**Keywords:** Bicycling injuries, Bike lanes, Traffic accidents

## Background

There is renewed interest in promoting bicycling around the world – to increase physical activity in the population, promote city vitality, and reduce traffic congestion, air pollution and greenhouse gases [1]. Evidence shows that the safety and motivators of utilitarian and leisure cycling are influenced by route infrastructure [2-10]. Bike-specific facilities that reduce interactions with motor vehicle traffic have lower crash risk for cyclists

[2-6]. Such facilities also encourage cycling [7-10]. As this evidence has grown, many cities have begun to build new facilities that offer dedicated space for cyclists [1,11]. Crashes may occur on any route type, but the circumstances (e.g., falls, collisions) may differ. Understanding these differences will help planners and engineers select and design cycling routes in a way that maximizes safety.

A number of cycling injury studies have reported crash circumstances. Most report whether a crash was a collision with a motor vehicle or not [12-18]. Many report other collisions (e.g., with pedestrians, cyclists, animals, or objects) and falls [12,14,16-19]. There is considerable

\* Correspondence: kay.teschke@ubc.ca

<sup>1</sup>School of Population and Public Health, University of British Columbia, 2206 East Mall, Vancouver, BC, Canada

Full list of author information is available at the end of the article



variance in the proportions of various crash circumstances reported from study to study. This may be a result of different cycling infrastructure in the locations studied, but this has rarely been investigated or described [18,20].

Differences in crash circumstances may also be related to study design, for example the population or mode of cycling being investigated. Bicycling is a term that represents an array of activities that includes not only cycling as a mode of utilitarian or leisure travel where safety is desired and expected, but also as a sport (e.g., road racing, mountain biking, cyclo-cross, BMX, trick riding) where risk-taking is intentional and part of the challenge [21]. Crashes that occur during these very different activities are best examined separately. Unfortunately most administrative data on bicycling injuries offer two extremes: a narrow focus on motor vehicle crashes or a breadth that includes all types of cycling together. Transportation data typically only count collisions with motor vehicles [13,22]. Hospitalization data usually captures all cyclist crashes, including injuries incurred in deliberately risky cycling sports and in utilitarian or leisure cycling [15,23]. Studies using primary data collection may also mix these [2,16].

We previously conducted a study of 690 cyclists injured in two of Canada's largest cities, Toronto and Vancouver: the Bicyclists' Injuries and the Cycling Environment Study [3,4]. Its primary purpose was to examine the relative risks of cycling injury by route type and other infrastructure features. Data were collected from cyclists who were injured seriously enough to be treated in a hospital emergency department. We excluded crashes incurred in mountain biking, racing and trick riding, so the study focused on cycling as a mode of utilitarian and leisure travel using urban transportation infrastructure designed by planners and transport engineers. The relative risk results are outlined in detail elsewhere [3,4], but in brief, we found that injury risks were highest on major streets with car parking and no bike infrastructure, and were lower on cycle tracks, bike lanes, local streets and bike paths.

To understand how the injuries occurred, here we describe elements of the crash circumstances observed in the study and examine whether the circumstances differed on 14 route types defined in the main study analysis [3].

## Methods

The study methods were reviewed and approved by the human subjects ethics review boards of the University of British Columbia, the University of Toronto, St. Paul's Hospital, Vancouver General Hospital, St. Michael's Hospital, and the University Health Network (Toronto General Hospital and Toronto Western Hospital). All

participants gave written informed consent before taking part in the study.

Study procedures have been described in detail elsewhere [3,24]; the following is a summary. The study population consisted of adult ( $\geq 19$  years) residents of Toronto and Vancouver who were injured while riding a bicycle in the city and treated within 24 hours in the emergency departments of the hospitals listed above between May 18, 2008 and November 30, 2009. All hospitals were located in central business districts, and one in each city was a regional trauma centre.

Eligible participants were interviewed in person by trained interviewers, using a structured questionnaire (<http://cyclingincities.spph.ubc.ca/files/2011/10/InterviewFormFinal.pdf>) as soon as possible after the injury to maximize recall. Crash circumstances were derived from participants' answers to the following questions:

- In your own words, please describe the circumstances of the injury incident. (response open-ended)
- Was this a collision between you and a motor vehicle, person, animal or object (including holes in the road)? (response options: yes, no)
- If yes, what did you collide with? (response options: car, SUV, pick-up truck, or van; motorcycle or scooter; large truck; bus or streetcar; pedestrian; cyclist; animal; other non-motorized wheeled transport; pot hole or other hole; streetcar or train track; other (specify))

A classification system for the crash circumstances (Figure 1) was developed based on a review of other systems in the injury literature [12-19] and the range of responses to the questions above. Each participant's answers to the questions were reviewed and classified by two study investigators (TF, KT), blind to route type. Differences in initial classifications were reviewed and adjudicated (KT).

We determined features of the crash site and of a randomly selected control site located along the route of the trip during which the injury occurred. The probability that specific route types would be selected as controls was proportional to their relative lengths on the trips (e.g., on a 4-km trip, there would be a 25% chance of selecting a control site on a 1-km section that was on a bike path). Cumulated over all trips, the control sites provide an estimate of study participants' exposure to the various route types.

Data were collected at every injury and control site via structured observations by trained personnel blinded to site status (<http://cyclingincities.spph.ubc.ca/files/2011/10/SiteObservationFormFinal.pdf>). These observations were used to classify the sites into 14 route types

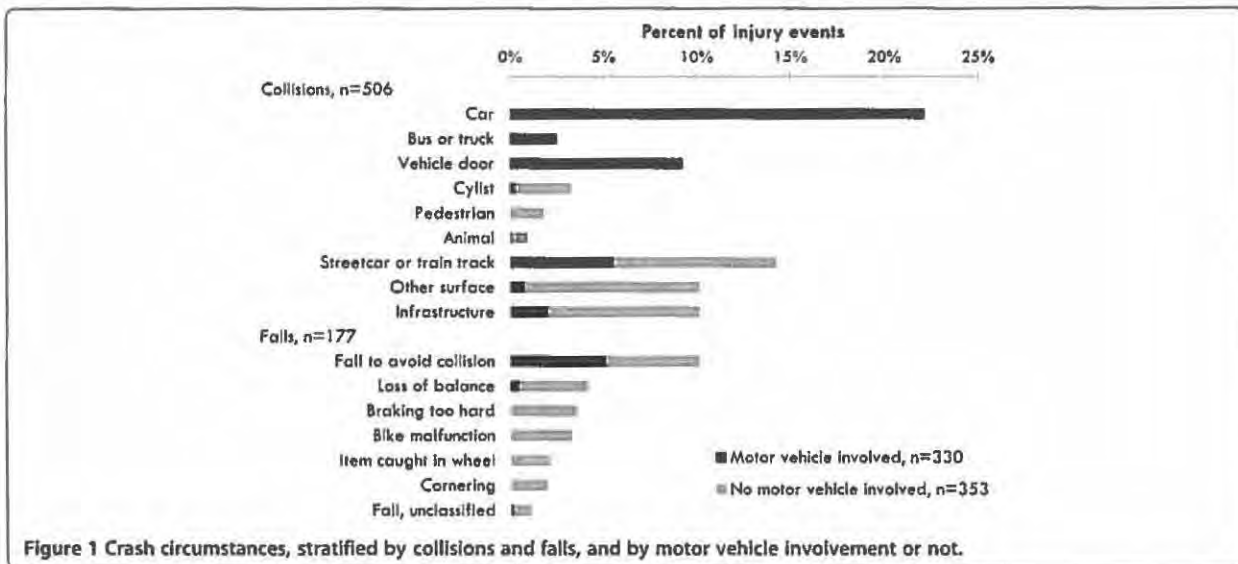


Figure 1 Crash circumstances, stratified by collisions and falls, and by motor vehicle involvement or not.

(Figure 2) and provide contextual information such as traffic volumes and speeds [3]. Observations were conducted at a time that conformed as closely as possible to the time of the crash (i.e., season; weekday vs weekend; morning rush, midday, afternoon rush, evening, night).

Data analyses were performed using JMP 10 (SAS Institute, Cary, NC) and R (<http://www.r-project.org>). We tallied the crash circumstances and cross-tabulated them with route type. We examined associations between crash circumstances and route type by calculating the ratio of observed to expected injury events for each crash circumstance and route type combination. Expected events were calculated two ways: 1) using the distribution of controls sites (reflecting exposure) by route

type, and 2) using the distribution of injury sites by route type:

Expected<sub>1</sub> = all control sites with that route type \* all injury events with that crash circumstance/all injury events

Expected<sub>2</sub> = all injury sites with that route type \* all injury events with that crash circumstance/all injury events

Confidence intervals (95%) for the ratio of observed to expected events were calculated using the R function prop.test. Since there were zero injury events for some circumstances and route types, the commonly used

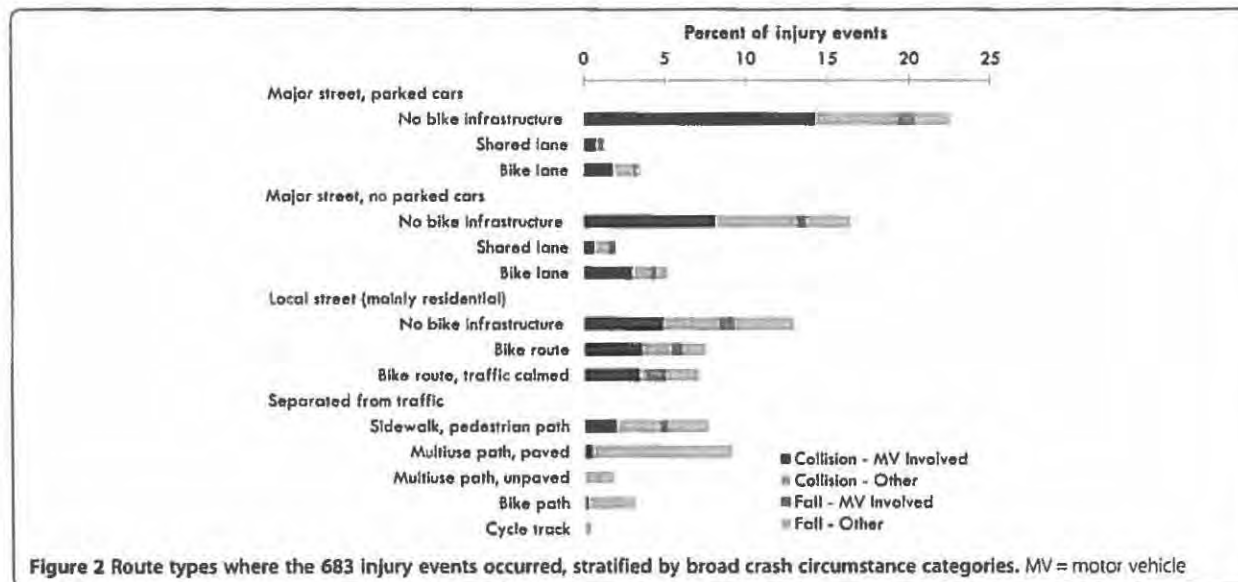


Figure 2 Route types where the 683 injury events occurred, stratified by broad crash circumstance categories. MV = motor vehicle

normal approximation was not appropriate. Instead, the Wilson score with continuity correction was used to obtain the 95% CI for each proportion [25,26].

## Results

The study recruited 690 injured cyclists (414 in Vancouver, 276 in Toronto). Most participants were men (59%), younger than 40 years (62%), well-educated (75% with a post-secondary diploma or degree), employed full time (69%), regular cyclists (88% cycled  $\geq 52$  times per year). Most of the trips during which the injuries occurred were utilitarian in nature (74%), on weekdays (77%), during daylight hours (78%), and short (68%  $< 5$  km) [3].

Seven of the 690 injured cyclists could not recall enough about their crash to classify it for this analysis. Of the available 683 crashes, 506 were classified as collisions and 177 as falls. Figure 1 lists 16 detailed crash circumstance categories, and further stratifies them according to whether a motor vehicle was involved. Motor vehicles were involved directly in 231 (33.8%) collisions, with cars, buses, trucks or vehicle doors. They were also involved indirectly when cyclists took avoidance manoeuvres that resulted in other

collisions or falls (99 additional crashes, 14.5%). The top crash circumstances were collisions with cars (22.1% of crashes), streetcar (tram) tracks (14.2%), other surfaces (10.1%), infrastructure (10.1%), vehicle doors (9.2%), and falls to avoid collisions (10.1%). Crashes with other cyclists, pedestrians or animals were rare (total = 5.9%).

Figure 2 and Table 1 list the 14 route types where the 683 injury events occurred. To describe these route types, we measured traffic and speeds. Median motor vehicle traffic and median speeds were higher on major streets than local streets (~900 vs. 50 vehicles/hour and ~40 vs. 30 km/h, respectively). Median bike traffic was highest on cycle tracks (114/h), then bike lanes and multi-use paths (60-78/h), then shared lanes, local street bikeways and bike paths (36-48/h), and lowest on streets with no bike infrastructure (0-24/h).

The dominant route types where crashes occurred were major streets with no bike infrastructure (with or without parked cars, 22.5% and 16.4% respectively), residential streets with no bike infrastructure (12.9%), and off-street multiuse paths (9.1%). Note that the distribution of injury events by route type was influenced both

**Table 1 Observed injury events classified by crash circumstance and route type**

	Injury sites	Motor vehicle (excluding door)	Motor vehicle door	Pedestrian, cyclist or animal	Streetcar (tram) or train tracks	Other surface	Infrastructure	Fall to avoid collision	Other fall
	683	168	63	40	97	69	69	69	108
Major street, with parked cars									
No bike infrastructure	155	42	31	2	49	6	3	8	14
<sup>a</sup> Shared lane	9	3	2	-	-	-	1	2	1
Bike lane	24	8	4	1	2	4	2	2	1
Major street, no parked cars									
No bike infrastructure	112	24	12	5	28	9	12	4	18
<sup>a</sup> Shared lane	13	1	2	2	2	2	1	3	-
Bike lane	35	14	1	1	5	2	5	2	5
Local street (mainly residential)									
No bike infrastructure	88	24	5	4	5	13	6	5	26
Bike route	51	18	4	1	1	7	6	5	9
Bike route, with traffic calming	48	19	2	2	-	2	1	12	10
Separated from traffic									
Sidewalk or other pedestrian path	52	12	-	2	2	7	9	9	11
Multiuse paths, paved	61	3	-	12	3	9	13	13	8
Multiuse paths, unpaved	12	-	-	1	-	7	2	1	1
Bike path	21	-	-	6	-	-	8	3	4
<sup>b</sup> Cycle track	2	-	-	1	-	1	-	-	-

- no injury events with this crash circumstance on this route type.

<sup>a</sup>Shared lanes include traffic lanes marked with sharrows or shared HOV lanes.

<sup>b</sup>Cycle tracks run alongside major streets but are physically separated from them, except at intersections. They are also called "separated bike lanes" or "protected bike lanes".



by where people cycled and the risk of a specific route type (relative risks by route type are described in detail in our earlier paper and reported in brief in Table 2 here) [3]. Motor vehicle involvement in collisions and falls featured most prominently on major streets with parked cars, and almost not at all on routes separated from traffic. A minority of all crashes occurred at intersections (31%), though a higher proportion of motor vehicle collisions were at intersections (53%) (data not shown).

Table 1 shows a cross-tabulation of crash circumstances by route type. To ensure numbers for subsequent analyses, some circumstances shown in Figure 1 were grouped into larger categories (circumstances with <5% of crashes). There were no collisions involving motor vehicle doors on any of the route types separated from traffic. There were no collisions with motor vehicles or with streetcar or train tracks on unpaved multiuse paths, bike paths, or cycle tracks.

Table 2 reports associations between crash circumstance and route type via the ratio of observed to expected injury events, using the distribution of controls sites (reflecting exposure) by route type (Expected<sub>1</sub>). All crash circumstances except "other fall" were associated with route type. Collisions involving motor vehicles, including motor vehicle doors, were consistently higher than expected for all major street route types with parked cars, significantly so where there was no infrastructure for bikes. This excess was not observed on major streets without parked cars. Streetcar and train track collisions were significantly higher than expected on major streets without bike infrastructure, whether or not there were parked cars. Local street bike routes with traffic calming had significantly more motor vehicle collisions and falls to avoid collisions than expected. Paved multi-use paths and bike paths had more collisions than expected involving infrastructure and pedestrians, cyclists or animals. Paved multi-use paths had more falls to avoid collisions than expected. Unpaved multi-use paths had more collisions involving surfaces than expected.

We also calculated observed to expected injury events using the distribution of injury sites by route type (Expected<sub>2</sub>, data not shown). Using this method, associations between crash circumstance and route type did not differ substantively from those described above.

## Discussion

In this study, we examined a large number of crash circumstances and considered their distributions across 14 route types. Of the 683 crashes characterized, 34% were direct collisions with motor vehicles, 6% were collisions with pedestrians, cyclists, or animals, 34% were collisions with infrastructure or surface features, and 26%

were falls. Crash circumstances were distributed differently by route type, for example, motor vehicle and tram track collisions were overrepresented on major streets, and infrastructure or other surface collisions were overrepresented on off-street routes. Below, our results for each circumstance type is considered in light of other research.

### Crashes involving motor vehicles

Understanding collisions with motor vehicles is particularly important because they typically result in more severe injuries [2,15,27] and concern about collisions with motor vehicles deters cycling [8,9]. In this study, 34% of the injury events were direct crashes with motor vehicles. Studies of hospital visits in comparable jurisdictions with little specialized bicycling infrastructure have found similar proportions: 27% in the US [15]; 31% in France [12]; and 34% in New Zealand [17]. Others have reported lower proportions of collisions with motor vehicles: 9% in Sweden [14]; 14% in Australia [16]; 18% in the Netherlands [19]; and 21% in South Korea [18]. These lower proportions may result from different case definitions (inclusion of less serious injuries and sports cycling injuries, as in the Australian study) [16] or the bicycling facilities available in the area (routes that separate cyclists from motor vehicles, as in Sweden, the Netherlands and Korea) [14,18,19].

The potential for cycling infrastructure to reduce crashes between cyclists and motor vehicles is observed in our results. Collisions with motor vehicles represented 40% of all crashes on streets. Major streets with parked cars had more crashes with vehicles than expected, including those with vehicle doors. In contrast, collisions with motor vehicles on routes separated from traffic were rare (10%). There has been concern that cycle tracks and other separated infrastructure might pose a special risk to cyclists when they eventually meet traffic at intersections [5]. Our results show that even if that were the case, the overall benefit of separation is maintained. Other studies found similar benefits to separated infrastructure. A study in South Korea [18] found that 40% of bike crashes on regular roadways were with motor vehicles, compared to only 4.4% of those on bike lanes (typically separated). A study in Australia found that 35% of bike crashes in traffic involved motor vehicles, compared to only 11% of those on other facilities (bike lanes, shared paths, footpaths) [20].

A number of studies have tallied collisions with opening doors of parked vehicles ("doorings"). In a Swedish study, "doorings" accounted for 4.3% of collisions with motor vehicles [22], in a Dutch study, 3% of single party crashes [19] and in Australian studies, 2.2% of surveyed cyclists, 3.1% of hospital presentations, and 8.1% of police reported crashes [16,28]. These proportions are all

**Table 2 Ratio of observed to expected injury events for each crash circumstance and route type combination**

	Odds Ratio (relative risk of injury) by route type [3] <sup>A</sup>	Control sites	Ratios of observed to expected, injury events (and 95% confidence intervals) <sup>B</sup>							
			Motor vehicle (excluding door)	Motor vehicle door	Pedestrian, cyclist or animal	Streetcar (tram) or train track	Other surface	Infrastructure	Fall to avoid collision	Other fall
		683	168	63	40	97	69	69	69	108
Major street, with parked cars										
No bike infrastructure	1.0 reference	114	<b>1.5<sup>B</sup> (1.1-1.9)</b>	<b>3.0 (2.1-4.0)</b>	0.3 (0.1-1.2)	<b>3.0 (2.4-3.7)</b>	0.5 (0.2-1.2)	<b>0.3 (0.1-0.8)</b>	0.7 (0.3-1.4)	0.8 (0.5-1.3)
<sup>C</sup> Shared lane	0.78	7	1.7 (0.5-3.2)	3.1 (0.6-7.6)	0 (0-7.5)	0 (0-3.1)	0 (0-4.4)	1.4 (0.1-5.7)	2.8 (0.5-6.9)	0.9 (0.1-3.7)
Bike lane	0.53	27	1.2 (0.6-2.1)	1.6 (0.5-3.8)	0.6 (0-3.6)	0.5 (0.1-1.8)	1.5 (0.5-3.4)	0.7 (0.1-2.6)	0.7 (0.1-2.6)	0.2 (0-1.3)
Major street, no parked cars										
No bike infrastructure	*0.65	116	0.8 (0.6-1.2)	1.1 (0.6-1.9)	0.7 (0.3-1.8)	<b>1.7 (1.2-2.3)</b>	0.8 (0.4-1.5)	1.0 (0.6-1.8)	0.3 (0.1-0.9)	1.0 (0.6-1.5)
<sup>C</sup> Shared lane	0.66	12	0.3 (0-1.6)	1.8 (0.3-5.3)	2.9 (0.5-8.4)	1.2 (0.2-3.5)	1.7 (0.3-4.9)	0.8 (0-4.0)	2.5 (0.7-5.7)	0 (0-1.9)
Bike lane	*0.47	46	1.2 (0.7-1.9)	0.2 (0-1.4)	0.4 (0-2.2)	0.8 (0.3-1.7)	0.4 (0.1-1.6)	1.1 (0.4-2.4)	0.4 (0.1-1.6)	0.7 (0.3-1.5)
Local street (mainly residential)										
No bike infrastructure	*0.44	115	0.9 (0.6-1.2)	0.5 (0.2-1.1)	0.6 (0.2-1.6)	<b>0.3 (0.1-0.7)</b>	1.1 (0.6-1.9)	0.5 (0.2-1.1)	0.4 (0.2-1.0)	1.4 (0.9-2.0)
Bike route	*0.53	56	1.3 (0.8-1.9)	0.8 (0.3-2.0)	0.3 (0-1.9)	<b>0.1 (0-0.8)</b>	1.2 (0.6-2.4)	1.1 (0.4-2.2)	0.9 (0.3-2.0)	1.0 (0.5-1.8)
Bike route, with traffic calming	0.59	46	<b>1.7 (1.1-2.3)</b>	0.5 (0.1-1.7)	0.7 (0.1-2.7)	0 (0-0.7)	0.4 (0.1-1.6)	0.2 (0-1.3)	<b>2.6 (1.5-4.1)</b>	1.4 (0.7-2.3)
Separated from traffic										
Sidewalk, pedestrian path	0.73	47	1.0 (0.6-1.7)	0 (0-1.0)	0.7 (0.1-2.7)	0.3 (0.1-1.1)	1.5 (0.7-2.9)	1.9 (1.0-3.3)	1.9 (1.0-3.3)	1.5 (0.8-2.4)
Multiuse paths, paved	0.75	55	<b>0.2 (0.1-0.7)</b>	<b>0 (0-0.9)</b>	<b>3.7 (2.1-6.0)</b>	0.4 (0.1-1.1)	1.6 (0.8-2.9)	<b>2.3 (1.4-3.7)</b>	<b>2.3 (1.4-3.7)</b>	0.9 (0.4-1.7)
Multiuse paths, unpaved	0.63	11	0 (0-1.3)	0 (0-3.5)	1.6 (0.1-7.3)	0 (0-2.3)	<b>6.3 (3.1-8.7)</b>	1.8 (0.3-5.2)	0.9 (0.1-4.2)	0.6 (0-2.7)
Bike path	0.54	21	<b>0 (0-0.8)</b>	0 (0-2.1)	<b>4.9 (2.1-8.9)</b>	0 (0-1.4)	0 (0-1.9)	<b>3.8 (1.9-6.1)</b>	1.4 (0.4-3.7)	1.2 (0.4-2.7)
<sup>D</sup> Cycle track	*0.12	10	0 (0-1.4)	0 (0-3.7)	1.7 (0.1-7.8)	0 (0-2.4)	1.0 (0.1-4.5)	0 (0-3.4)	0 (0-3.4)	0 (0-2.2)

<sup>A</sup>Odds ratios (relative risks of injury) by route type are from a previous analysis [3] and are provided for reference only. Asterisks indicate risk of injury for this route type was significantly lower than on major streets with parked cars and no bike infrastructure (the reference category).

<sup>B</sup>Ratios of observed to expected, injury events and confidence intervals in bold when statistically significantly different from 1.0. Expected<sub>1</sub> based on exposure to route type, estimated via randomly selected control sites on the trip route.

<sup>C</sup>Shared lanes include traffic lanes marked with sharrows or shared HOV lanes.

<sup>D</sup>Cycle tracks run alongside major streets but are physically separated from them, except at intersections. They are also called "separated bike lanes" or "protected bike lanes". Statistical significance, p ≤ 0.05.



considerably lower than we found (10% of all crashes, 27% of motor vehicle collisions). The Australian study included mountain biking and racing injuries, likely influencing the low proportion there [16]. In Sweden and the Netherlands, the prevalence of well designed, usually separated facilities on major streets likely made collisions with vehicle doors rare.[19,22] In Vancouver and Toronto at the time of our study, cycling between parked and moving cars was often the only option on major roads, even where there were painted bike lanes or shared lanes.

Tallying direct collisions with motor vehicles may not provide a complete picture of motor vehicles' influence on cycling injuries. In the Australian survey, cyclists reported that 5% of crashes involved motor vehicle collision avoidance [16]. In our study, 15% of cases involved crashes to avoid a motor vehicle, so in total, motor vehicle interactions were responsible for half the crashes. Separated routes prevent these interactions (except at intersections) and can prevent whole classes of crashes such as doorings [3,5].

#### Crashes involving people or animals

A common concern with separated and off-street bike facilities is collisions with other cyclists, pedestrians, or animals. Only 5.9% of the injury events in this study involved such collisions. Similar low proportions were identified in France and New Zealand [12,17], but in South Korea where cycle lanes were more common, 15% of crashes were with other cyclists and 3% with pedestrians [18]. An Australian survey also reported a higher proportion of crashes between cyclists (11%), though one-quarter of their survey cohort were racing cyclists who may collide during training and races [16].

We found more crashes involving people or animals than expected on multi-use paths. Multi-use paths are designated for both pedestrians and cyclists, so this result is not a surprise. Multi-use paths also had more falls to avoid collisions than expected, most to avoid other cyclists or pedestrians. Another study reported higher proportions of cyclist and pedestrian collisions or collision-avoidance crashes on multi-use paths [20].

Bike only paths also had more collisions than expected with cyclists and pedestrians (in equal numbers), suggesting that the delineation of the path for cyclists may not have been clear or that heavy pedestrian traffic overflowed to the cyclist side. Bike paths did not have a problem with falls to avoid collisions, suggesting they did function better than multi-use paths.

#### Crashes with infrastructure and surface features

Much more common than collisions with people or animals were those with infrastructure or surface features. These contributed 34% of injury events, the same as

motor vehicle collisions. This group comprised many crash circumstances, most related to route type, and likely preventable via design solutions.

Crashes on streetcar (tram) or train tracks made up 14% of all events, and were in excess on major streets. Toronto has an extensive streetcar system in its central business district, not separated from traffic along most streets. In our previous analyses, we found greatly increased relative risk where streetcar tracks were present [3,4]. Streetcar track crashes involved wheels being caught in the slot or slipping on the rail surface. Two recent reports from Europe noted the issue of tram tracks [19,29]. Physically separated bike lanes or streetcar lanes are potential design changes that would greatly reduce this type of crash. Crossings would still be needed at intersections, but in our study two-thirds of the crashes involving tracks were not at intersections.

While streetcar or train tracks were a problem on major city streets, other surfaces (10% of crash circumstances) were involved in crashes across all route types, with unpaved multi-use paths showing a strong excess. Crashes with surfaces involved bumps, potholes, gravel, icy or wet surfaces, and vegetation such as roots or leaves, pointing to the importance of route maintenance. Some studies tallied surface feature crash circumstances: 18% in Australia [16]; 23% (including tram rails) in the Netherlands [19]; and 21% (including tracks) in Belgium [29]. These proportions are similar to the total of streetcar track and other surface crashes we found (24%).

Infrastructure such as curbs, concrete barriers, walls, fences, railings, furniture, boulders, speed bumps, and stairs contributed 10% of crash circumstances, and were overrepresented particularly on paved multi-use paths and bike paths. In our previous analyses of relative risks by route type, we found that multi-use and bike paths were not as safe as cycle tracks and local street bikeways with traffic diversion [4]. A reason may be that such paths were often designed to be interesting (e.g., with street furniture and curves) and to direct traffic (using bollards, signage, curbs and fences to prevent motor vehicle ingress or to separate pedestrians and cyclists). In measurements taken at injury and control sites, 5 to 10% of bike and multi-use paths had poor forward visibility, but this was not a problem on on-street routes. The crashes with infrastructure suggest a rethink of multi-use and bike path design to provide straight, wide and obstacle-free passage for cyclists. In other studies, infrastructure was involved in 8 to 31% of crashes [12,16,18,19]. A South Korean study tallied crashes with obstacles by route type; it found similar proportions (~10%) on both bike lanes and roads [18].

#### Falls

Falls to avoid collisions contributed 10% of crash circumstances. About half (N = 34) were to avoid motor

vehicles, 16 to avoid pedestrians, 8 to avoid other cyclists, 10 to avoid infrastructure or surface features, and 1 to avoid an animal. Excesses were observed on shared facilities (shared lanes on streets, multi-use paths) and sidewalks, reinforcing the importance of bike-specific infrastructure [2-4].

Collision avoidance falls were also in excess on local street bike routes with traffic calming, most to avoid motor vehicles. Two types of traffic calming were observed in our study: traffic diversion (full or partial barriers to motor vehicles at intersections with arterials) and traffic slowing (speed humps, traffic circles) [4]. Traffic circles are small diameter (6–8 m) roundabouts used at local street intersections. They had higher relative risk of injury in our earlier analyses [4], in part because drivers did not observe cyclists or did not know who had the right of way. Traffic circles also presented a difficult-to-negotiate obstacle to cyclists. In contrast, bike routes with traffic diversion had very low relative risk of injury in our earlier analyses [4], suggesting this is a better traffic calming method. A British study found a benefit to cyclists of traffic slowing; techniques used (speed humps, chicanes, raised junctions) only partly overlapped with those observed in our study, reinforcing the importance of understanding the effects of specific elements [30]. Raised junctions have been shown to greatly reduce cycling injuries at intersections [19], but these were not observed in our study.

Our category “other falls” (16% of crash circumstances) included loss of balance, braking too hard, bike malfunctions, having an item caught in the wheel and cornering. This crash category was the only one not related to route type. This is reasonable, since these falls represented either problems with the bicycle itself or with bicycling operations.

#### Single party (bicyclist only) crashes

Some studies classify crashes as multi-party vs. single party (bicyclist only) crashes. Single party is interpreted as any crash not involving a direct collision with a motor vehicle, pedestrian, cyclist or animal. By this standard, 60% of the crashes in our study were single party crashes. Schepers [19] reviewed data from several countries and reported that 60 to 90% of crashes involving hospital treatment were single cyclist crashes. Our study is at the low end of these results, likely reflecting both the case definition (urban cycling) and the types of routes available to cyclists in Toronto and Vancouver (typically on street mixed with motor vehicle traffic). The above definition of single party omits collision avoidance crashes that do not result in direct collisions with other parties. If we include collision avoidance crashes as multi-party crashes, only 42% remain single party in our study. An Australian study [20] also found

that single party crashes were considerably lower once collision avoidance was taken into account (52%).

#### Strengths and limitations

This study adds to the small base of evidence examining the distribution of crash circumstances in an urban cycling context [12,18,20]. It is the first to report observed to expected crash circumstances by route type (controlling for exposure). It examined 14 route types, many more than previous studies, though this meant that some route types had small numbers of injury events, so that confidence intervals were wide for observed to expected ratios.

We included injuries serious enough to require a hospital visit: treatment in an emergency department or hospital admission, but the most serious injuries (including deaths) were not included because routes and circumstances could not be reported. Hospital-based case identification allowed a broad array of crash circumstances to be captured beyond motor vehicle collisions. Others have reported injuries with hospital identification, providing a basis for comparison [12-15,17-19]. We restricted cases to those injured while cycling for utilitarian or leisure travel by excluding cases injured during risk-taking sports like mountain biking and racing. This restriction provided a clear delineation of the focus: on cycling for which urban transportation engineers design route infrastructure. Other studies did not have such restrictions and sports injuries may have been substantial, particularly in countries such as the United States, Australia and New Zealand [13,15,16,23].

We classified crash circumstances using classes similar to those in other studies, although each study had variations [12-19]. Collisions with motor vehicles or not is the most frequent basis for classification. We tallied crashes with vehicle doors as a separate category and also tallied motor vehicle involvement in crashes that did not end in a direct collision with a vehicle. Another common basis for classification is collision vs. fall. In collisions, we included crashes with surface features because most of these crashes involved a dramatic change in motion after striking the feature. Some might consider these falls; our separate tally of streetcar track and other surface crashes allows others to do their own calculations. There are other methods of classifying crashes, for example, based on travel movements or collision partner responsibility, but our data did not allow these [31].

Crash circumstances in this study were based on a description of the event by the injured cyclist. This is true of most studies classifying crashes, including surveys of cyclists and studies using hospital coding of injury events [12,14-18]. The results therefore rely on the accuracy of participants' recall. To minimize problems



related to recall, we excluded cyclists who could not remember their injury event, we interviewed subjects as soon as possible after the crash (50% completed within 4.9 weeks, 75% within 7.7), and we did not ask for comments about fault. Some injury data, particularly from police or transportation agencies, may include reporting by all parties in the crash, witnesses, and investigators [13,22].

## Conclusions

In the Bicyclists' Injuries and the Cycling Environment study in Toronto and Vancouver, about one-third of crashes were collisions with motor vehicles (including "doorings"), one-third collisions with infrastructure and surface features, and a small proportion collisions with cyclists, pedestrians and animals. All collision circumstances, and falls to avoid collisions, were related to route type. Our results reinforce the importance of providing bicycle-specific facilities such as cycle tracks alongside major streets and bike paths off-street. They demonstrate the value of not placing cyclists between parked and moving vehicles on major streets to reduce the chance of being hit by a door. They show the value of separation from streetcar (tram) tracks, via cycle tracks or separated streetcar lanes. They shed light on problems with off-street bike paths and multi-use paths, where collisions with infrastructure and surface features were elevated. Such facilities are very attractive to people of all ages and abilities; removing obstacles, providing clear sight lines and ensuring routine maintenance should improve their safety.

Many cities are trying to encourage cycling, and safety is a key motivator [7,9]. Understanding crash circumstances on the various routes types will help transportation planners and engineers target improvements to make cycling safer.

## Competing interests

KT, CCOR, PAC, MW have held consultancies to related to their transportation or injury biomechanics expertise. PAC has stock in a company developing a helmet that he co-invented. All other authors have no financial or other relationships or activities that could appear to have influenced the submitted work.

## Authors' contributions

KT, MAH, CCOR, and PAC were responsible for initial conception and design of the study. KT, MAH, CCOR, PAC, MW, MC, MDC, JB, GH, SB and SMF were responsible for the funding proposal. MAH, CCOR, MW, MM, MDC, LV and KT designed and tested data collection instruments. JB, GH, SMF, and MDC contributed to identification of injured cyclists at the study hospitals. HS was responsible for data analyses. KT drafted the article. All authors contributed to study design and implementation, analysis decisions, interpretation of results, and critical revision of the article. All authors read and approved the final manuscript.

## Acknowledgements

We thank the study participants for generously giving their time. We appreciate the many contributions of study staff (Evan Beaupré, Niki Blakely, Jill Dalton, Vartouji Jazmaji, Martin Kang, Kevin McCurley, Andrew Thomas), hospital personnel (Barb Boychuk, Jan Buchanan, Doug Chisholm, Nada Elfeki, Kishore Muipuri), city personnel (Peter Stary, David Tomlinson, Barbara

Wentworth) and community collaborators (Jack Becker, Bonnie Fenton, David Hay, Nancy Smith Lea, Fred Sztabinski). The study was funded by the Heart and Stroke Foundation of Canada and the Canadian Institutes of Health Research (Institute of Musculoskeletal Health and Arthritis, and Institute of Nutrition, Metabolism and Diabetes). JRB, MAH, and MW were supported by awards from the Michael Smith Foundation for Health Research. MAH, CCOR, and MW were supported by awards from the Canadian Institutes of Health Research.

## Author details

<sup>1</sup>School of Population and Public Health, University of British Columbia, 2206 East Mall, Vancouver, BC, Canada. <sup>2</sup>School of Occupational and Public Health, Ryerson University, Toronto, ON, Canada. <sup>3</sup>Institute for Resources, Environment and Sustainability, University of British Columbia, Vancouver, BC, Canada. <sup>4</sup>Department of Mechanical Engineering, ICORD and the Brain Research Centre, University of British Columbia, Vancouver, BC, Canada. <sup>5</sup>Department of Emergency Medicine, University of British Columbia, Vancouver, BC, Canada. <sup>6</sup>School of Public Health, University of Toronto, Toronto, ON, Canada. <sup>7</sup>Emergency Medicine, University Health Network, Toronto, ON, Canada. <sup>8</sup>British Columbia Injury Research and Prevention Unit, Vancouver, BC, Canada. <sup>9</sup>Faculty of Health Sciences, Simon Fraser University, Burnaby, BC, Canada.

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Council  
Administrator  
Media

Dear Saanich Mayor and Council,

**Re: Bollard Use**

The Greater Victoria Cycling Coalition (GVCC) strongly supports the motion from Saanich's Bicycle and Pedestrian Advisory Committee to review the bollard usage policy on Saanich trails.

As noted on pages 38-39 of the agenda package, research demonstrates that the current 3-bollard design on trails is dangerous. In our experience, far too many people on bikes have been needlessly injured, or have had near misses, with bollards on trails. The narrow widths between bollards present a significant challenge and obstacle for inexperienced cyclists, children, and people using wider bikes such as cargo bikes and child trailers.

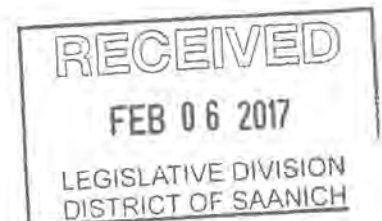
Thank you for considering this issue. Removing the bollards is an easy and inexpensive way to increase the safety and comfort of people on bikes.

Sincerely,

Breanna Merrigan

**Breanna Merrigan**  
Vice President  
Greater Victoria Cycling Coalition (GVCC)  
[info@gvcc.bc.ca](mailto:info@gvcc.bc.ca)

*More people cycling, more places, more often*





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# The Corporation of the District of Saanich

Mayor  
Councillors  
Administrator

Council  
Administrator  
Media

## Report

**To:** Mayor and Council  
**From:** Sharon Hvozanski, Director of Planning  
**Date:** January 3, 2017  
**Subject:** Development Permit Amendment Application  
File: DPA00888 • 4247 Dieppe Road

### PROJECT DETAILS

**Project Proposal:** The applicant proposes to amend Development Permit DPR00543 to incorporate changes to the site plan, landscaping and building façade for the previously approved warehouse, processing plant and office building for Islands West Produce.

**Address:** 4247 Dieppe Road

**Legal Description:** Lot D (DD 234442I), Sections 11 and 100, Lake District, Plan 2611 Except Part in Plan 2395 RW

**Owner:** Fatt's Poultry Farm Ltd., Inc. No. 31205

**Applicant:** de Hoog and Kierulf Architects (Peter de Hoog)

**Parcel Size:** 2.38 ha

**Existing Use of Parcel:** Food Processing and Single Family Dwellings

**Existing Use of Adjacent Parcels:**  
 North: RS-8 (Single Family Dwelling) Zone  
 South: RS-8 (Single Family Dwelling) Zone and RD-1A (Two-Family Dwelling) Zone  
 East: RS-8 (Single Family Dwellings) Zone  
 West: M-3 (Patricia Bay Highway, Industrial Park) Zone

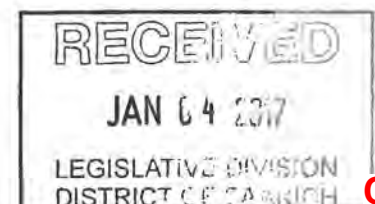
**Current Zoning:** CD-4DR (Comprehensive Development Dieppe Road) Zone

**Minimum Lot Size:** N/A

**Proposed Zoning:** N/A

**Local Area Plan:** North Quadra

**LAP Designation:** Potential Mixed-Residential

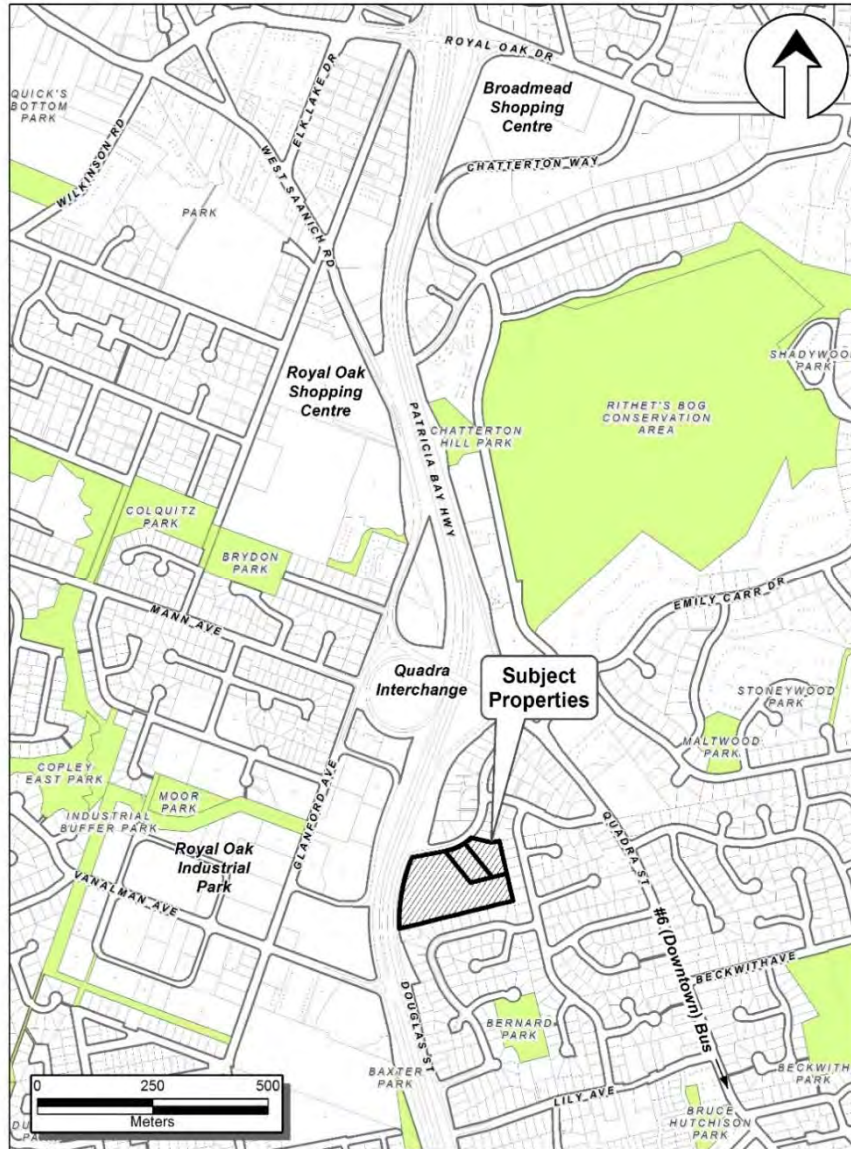


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**Community Assn Referral:** North Quadra Community Association • Referral sent September 26, 2016. Letter of non-support received October 4, 2016.

**PROPOSAL**

The applicant proposes to amend Development Permit DPR00543 to incorporate changes to the site plan, landscaping and building façade for the previously approved warehouse, processing plant and office building for Islands West Produce.



**Figure 1: Context Map**

---

## PLANNING POLICY

### Official Community Plan (2008)

- 4.2.1.1 “Support and implement the eight strategic initiatives of the Regional Growth Strategy, namely: Keep urban settlement compact, Protect the integrity of rural communities; Protect regional green and blue space; Manage natural resources and the environment sustainably; Build complete communities; Improve housing affordability; Increase transportation choice; and Strengthen the regional economy.”
- 4.2.1.14 “Encourage the use of ‘green technologies’ in the design of new buildings.”
- 4.2.3.1 “Focus new multiple family residential, commercial, institutional and civic development in Major and Neighbourhood “Centres”, as indicated on Map 4.”
- 4.2.4.3 “Support the following building types and land uses in Neighbourhoods:
- single family dwellings;
  - duplexes, tri-plexes, and four-plexes;
  - townhouses;
  - low-rise residential (up to 4 storeys); and
  - mixed-use (commercial/residential) (up to 4 storeys).”
- 1.1.3.3 “Work cooperatively with the Greater Victoria Development Agency to retain and enhance existing businesses, and attract new environmentally friendly businesses to the region.”
- 6.2.5 “Support a balanced economy by encouraging a broad range of commercial, service, research, high tech and industrial uses.”

### North Quadra Local Area Plan (2003)

- 5.3 a) “Consider mixed residential use for the Fatt’s farm on Dieppe Road at a base density of 10 units per gross hectare.”
- b) “Consider a density bonus for mixed residential use to a maximum 15 units per gross hectare where a development proposal provides substantial amenities.”

### Saanich General Development Permit Area Guidelines

Relevant guidelines relate to integrating new development with adjacent land uses and the streetscape, providing attractive and well-landscaped street frontages and high quality architecture, balancing the needs of all transportation modes, and retaining healthy trees and other natural vegetation.

---

## DISCUSSION

### Background

In March, 2016 Council approved Development Permit DPR00543 to allow construction of a 2-storey warehouse, processing plant and office building for Islands West Produce. The Development Permit and complementary Rezoning and Subdivision applications were part of a comprehensive proposal to redevelop three properties at 4247, 4253 and 4255 Dieppe Road for a mixed-use development which also includes 33 attached housing units, as well as eight

bareland strata lots and one fee-simple lot for single family dwelling use. The food processing facility is the first phase of this comprehensive development.

### **Neighbourhood Context**

The 3.1 ha site is located at the corner of Douglas Street and Dieppe Road. The site has been used by the Fatt Family for agriculture and food production since the land was purchased in 1922. It currently accommodates a food processing business operated by Islands West Produce, as well as a single family dwelling. A right-of-way containing a major hydro transmission line is located along the south side of the site. Surrounding land use consists of single family dwellings on three sides and the Royal Oak Industrial Park to the west across Patricia Bay Highway.

### **Proposed Design Changes**

Through the design development process for the processing plant building, the applicant has identified a number of design changes. These changes are in response to Building, Fire, Life Safety, and Health Code requirements; evolving function and operational requirements; sustainability and environmental performance initiatives; and the desire to keep costs low, improve efficiency, and achieve a high level of performance for the facility. Building siting, location of loading bays, access location and overall character have not changed from the approved Development Permit.

### Site Design

The applicant has redesigned the south east parking area and drive aisle to improve safety and efficiency, and reduce the amount of pavement required. The landscape buffer to the existing Garry oak tree to be retained has been increased, the height and extent of proposed retaining walls have been reduced, and the distance and amount of landscape buffer to the common property line with the proposed attached housing development has been increased. An internal exit stair to the north east corner of the building has been added eliminating an external walkway stair and retaining wall from the east 3 m property line setback. The remaining retaining wall has been moved from the north and east property line to the setback line and reduced in height allowing for landscaping both above and below. Dumpsters, screened by the retaining wall and landscaping were added in this location (see Figure 2).

### Landscaping

The Health Code prohibits vegetation on or within 60 cm (2 ft.) of the building exterior necessitating removal of the majority of landscaping directly adjacent to the building, including the green screens and vines that were features on the building. Moveable planter boxes have been substituted for the previously proposed green roof terraces. Landscaping has been substituted for the proposed small rain garden at the northwest corner of the building and a new larger rain garden has been added at the south east corner. A transformer and generator have been added in the area of the northwest rain garden, both oriented towards the parking area and screened from the street and neighbours (see Figure 2).



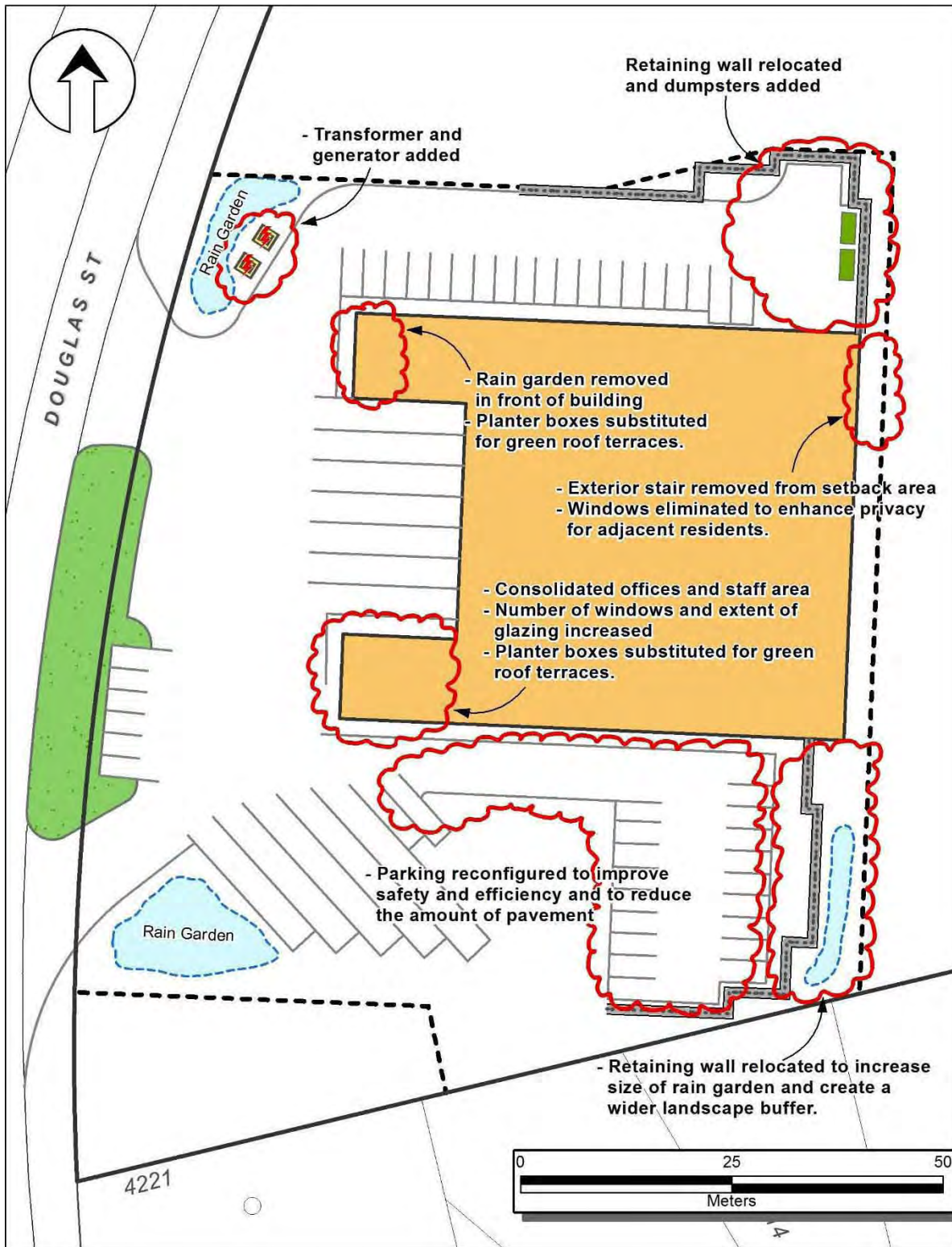


Figure 2: Proposed Site Plan Showing Areas of Change



### Building Facade

The interior spaces of the proposed building have been reorganized to create consolidated office, warehouse, and refrigeration zones to reduce construction costs, reduce energy use, and improve overall building performance and efficiency. In doing so, most of the office and staff areas have been relocated to the perimeter of the building. The number of windows and extent of glazing have been increased to provide employees with greater access to natural light, ventilation, and views. Windows have been added in all doors and glazing has been added or increased in stairs and hallways so that employees working in windowless areas of the facility would have access to natural light and views when moving through the facility. Privacy for neighbouring properties has been preserved or enhanced by eliminating the windows from the east elevation that looked directly onto the future townhouses. Most of the windows have been concentrated in the north and southwest areas of the building where they overlook the parking areas and the street.



**Figure 3: Food Processing Facility with Proposed Changes**



**Figure 4: Food Processing Facility as per Approved Development Permit**

The main entrance canopy has been increased in size, canopies have been added at the staff and loading area entrance doors, and guardrails have been added as required by Code. Given the loss of the green screens and vines and the increase in the number of windows and amount of glazing, the elevations have been re-composed while maintaining the same material and

colour palette, and the same scale, detail and compositional interest as the previously approved plans.

---

## CONSULTATION

A referral was sent to the North Quadra Community Association (NQCA), and a letter of non-support from the Association was received October 4, 2016. NQCA has stated that they did not support the project in the first place, and therefore, do not support the amendment for the following reasons:

1. The approval was based on flawed Planner's reports and very poor reasoning from Council.
2. The development and density did not comply with the North Quadra Local Area Plan.
3. Excessive density and major height variances were granted without seeking substantial amenity.
4. A right-of-way for future bicycle lanes along Dieppe Road was not sought, and therefore, not secured.
5. No sidewalk along Dieppe to Quadra was considered, and therefore, not obtained.
6. But most importantly, a fair Community Amenity Contribution was not asked for, and therefore, not received.

As noted in the April 14, 2015 Planner's report, the single family and attached housing components of the development are consistent with the North Quadra Local Area Plan which designates the site for mixed-residential use. While not strictly in accordance with the future land use vision of the local area plan, the commercial/industrial component would maintain the historic use of the site for food production and support the local economy by allowing a long standing local business to remain on the site.

The total Community Contribution attributed to this development is \$168,500 or \$4,011.90 per residential unit. While there is no specific Council policy respecting community contributions, the benchmark for recent residential development is ±\$1500.00 per unit. The contribution for this development includes provision of curb, gutter, and sidewalk upgrades extending beyond the parcel frontage along the east side of Dieppe Road to Caen Road and then as far up Caen Road as funds allow, two additional street lights on Caen Road, a contribution to the Saanich Affordable Housing Fund, and a contribution for Gabo Creek environmental enhancement and awareness. Respecting the priority for sidewalk improvements, NovaTrans Engineering Inc. undertook a comparison of the Dieppe to Quadra and Caen to Quadra routes. The consultant's report recommended Caen Road as the priority due to traffic volume and speed.

Dieppe Road is a residential street and part of a local bikeway connector extending from Lochside Trail at Saanich Municipal Hall to Quadra Street at Dieppe Road. Provision for future bicycle lanes on Dieppe Road was not a Development Servicing Requirement based on the residential road designation and the number of users.

---

## SUMMARY

Changes are proposed to the approved Development Permit for a food processing facility in response to Building, Fire, Life Safety, and Health Code requirements; evolving function and operational requirements; sustainability and environmental performance initiatives; and the desire to keep costs low, improve efficiency, and achieve a high level of performance for the

facility. Staff have reviewed the proposed site, landscaping, and building changes. These changes, which are mostly minor in nature, are positive enhancements to the design and building function, and can be supported.

---

**RECOMMENDATION**

That Development Permit Amendment DPA00888 amending Development Permit DPR00543 be approved.

Report prepared by:   
Neil Findlow, Senior Planner

Report prepared and reviewed by:   
Jarret Matanowitsch, Manager of Current Planning

Report reviewed by:   
for i  
Sharon Hvozdzanski, Director of Planning

NDF/jp  
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Attachment

cc: P. Thorkelsson, CAO  
G. Barbour, Manager of Inspection Services

**CAO'S COMMENTS:**

I endorse the recommendation of the Director of Planning.



Paul Thorkelsson, CAO



## DISTRICT OF SAANICH

NO. DPA00888  
AMENDS DPR00543

## AMENDMENT TO DEVELOPMENT PERMIT

TO: **Fatt's Poultry Farm Ltd., Inc. No. 31205**  
**4251 Dieppe Road**  
**Victoria, BC V8X 2N2**

*(herein called "the Owner")*

1. This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied by this Permit.
2. This Development Permit applies to the lands known and described as:

**Lot D (DD 234442I), Sections 11 and 100, Lake District, Plan 2611 Except  
Part in Plan 2395 RW**

**4247 Dieppe Road**

*(herein called "the lands")*

3. This Development Permit further regulates the development of the lands as follows:
  - (a) By supplementing the provisions of the Zoning Bylaw 2003 to require the warehouse, food processing plant, and office building and lands to be constructed and developed in accordance with the plans prepared by de Hoog & Kierulf architects, Murdoch de Greeff Inc. Landscape Architect, and Westbrook Consulting Ltd. received on September 16, 2016 copies of which are attached to and form part of this permit.
4. The Owner shall substantially start the development within 24 months from the date of issuance of the Permit, in default of which the Municipality may at its option upon 10 days prior written notice to the Owner terminate this Permit and the Permit shall be null and void and of no further force or effect.
5. Notwithstanding Clause 4, construction of driveways and parking areas, and delineation of parking spaces shall be completed prior to the issuance of an Occupancy Permit.
6. (a) The landscaping requirements of this Permit shall be completed within four months of the date of issuance of the Certificate of Occupancy for the development, in default of which the Municipality may enter upon the lands, through its employees or agents, and complete, correct or repair the landscaping works at the cost of the Owner and may apply the security, interest at the rate payable by the Municipality for prepaid taxes.
  - (b) In the event that any tree identified for retention is destroyed, removed or fatally injured, a replacement tree shall be planted in the same location by the Owner in accordance with the replacement guidelines as specified within the Saanich Tree and Vegetation Retention, Relocation and Replacement Guidelines. The replacement tree shall be planted within 30 days of notice from the Municipality in default of which the Municipality may enter upon the lands and carry out the works and may apply the security provided herein in payment of the cost of the work<sup>s</sup>. For the purpose of this section, existing trees

identified for retention and new trees planted in accordance with the landscape plan attached to and forming part of this permit shall be deemed to be "trees to be retained".

- 7. The lands shall be developed strictly in accordance with the terms and conditions and provisions of this Permit and shall comply with all Municipal bylaws except for those provisions specifically varied herein. Minor variations which do not affect the overall building and landscape design and appearance may be permitted by the Director of Planning or in her absence, the Manager of Current Planning.
- 8. Notwithstanding the provisions of Section 7 of this Permit the following changes will be permitted and not require an amendment to this Permit:
  - (a) When the height or siting of a building or structure is varied 20 cm or less provided, however, that this variance will not exceed the maximum height or siting requirements of the Zoning Bylaw.
  - (b) Changes to the relative location and size of doors and windows on any façade which do not alter the general character of the design or impact the privacy of neighbouring properties following consultation with the Director of Planning, or Manager of Current Planning in her absence.
  - (c) Where items noted under Section 8(b) are required to comply with the Building Code and/or the Fire Code and those changes are not perceptible from a road or adjacent property.
  - (d) Changes to soft landscaping provided the changes meet or exceed the standards contained on the landscape plans forming part of this Permit.
- 9. The terms and conditions contained in this Permit shall enure to the benefit of and be binding upon the Owner, their executors, heirs and administrators, successors and assigns as the case may be or their successors in title to the land.
- 10. This Permit is not a Building Permit.

AUTHORIZING RESOLUTION PASSED BY THE MUNICIPALCOUNCIL ON THE

\_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_  
 ISSUED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
 Municipal Clerk



## APPENDIX X

### PROTECTIVE FENCING FOR TREES AND COVENANT AREAS

Protective fencing around trees and covenant areas is an important requirement in eliminating or minimizing damage to habitat in a development site.

Prior to any activities taking place on a development site, the applicant must submit a photo showing installed fencing and "WARNING – Habitat Protection Area" signs to the Planning Department.

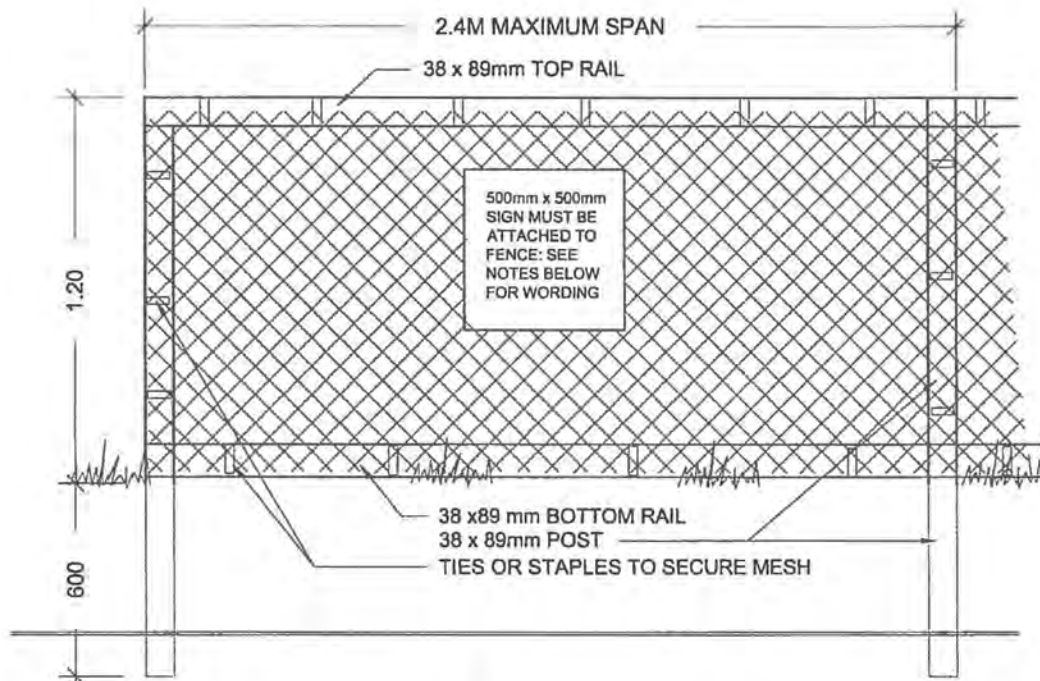
#### Specifications:

- Must be constructed using 2" by 4" wood framing and supports, or modular metal fencing
- Robust and solidly staked in the ground
- Snow fencing to be affixed to the frame using zip-ties or galvanized staples
- Must have a "WARNING – HABITAT PROTECTION AREA" sign affixed on every fence face or at least every 10 linear metres



Note: Damage to, or moving of, protective fencing will result in a stop work order and a \$1,000 penalty.





**TREE PROTECTION FENCING**

**NOTES:**

1. FENCE WILL BE CONSTRUCTED USING 38 X 89 mm (2"X4") WOOD FRAME: TOP, BOTTOM AND POSTS. \*  
USE ORANGE SNOW-FENCING MESH AND SECURE TO THE WOOD FRAME WITH "ZIP" TIES OR GALVANIZED STAPLES.
2. ATTACH A 500mm x 500mm SIGN WITH THE FOLLOWING WORDING:  
**WARNING-HABITAT PROTECTION AREA.** THIS SIGN MUST BE AFFIXED ON EVERY FENCE FACE OR AT LEAST EVERY 10 LINEAR METRES.

\* IN ROCKY AREAS, METAL POSTS (T-BAR OR REBAR) DRILLED INTO ROCK WILL BE ACCEPTED

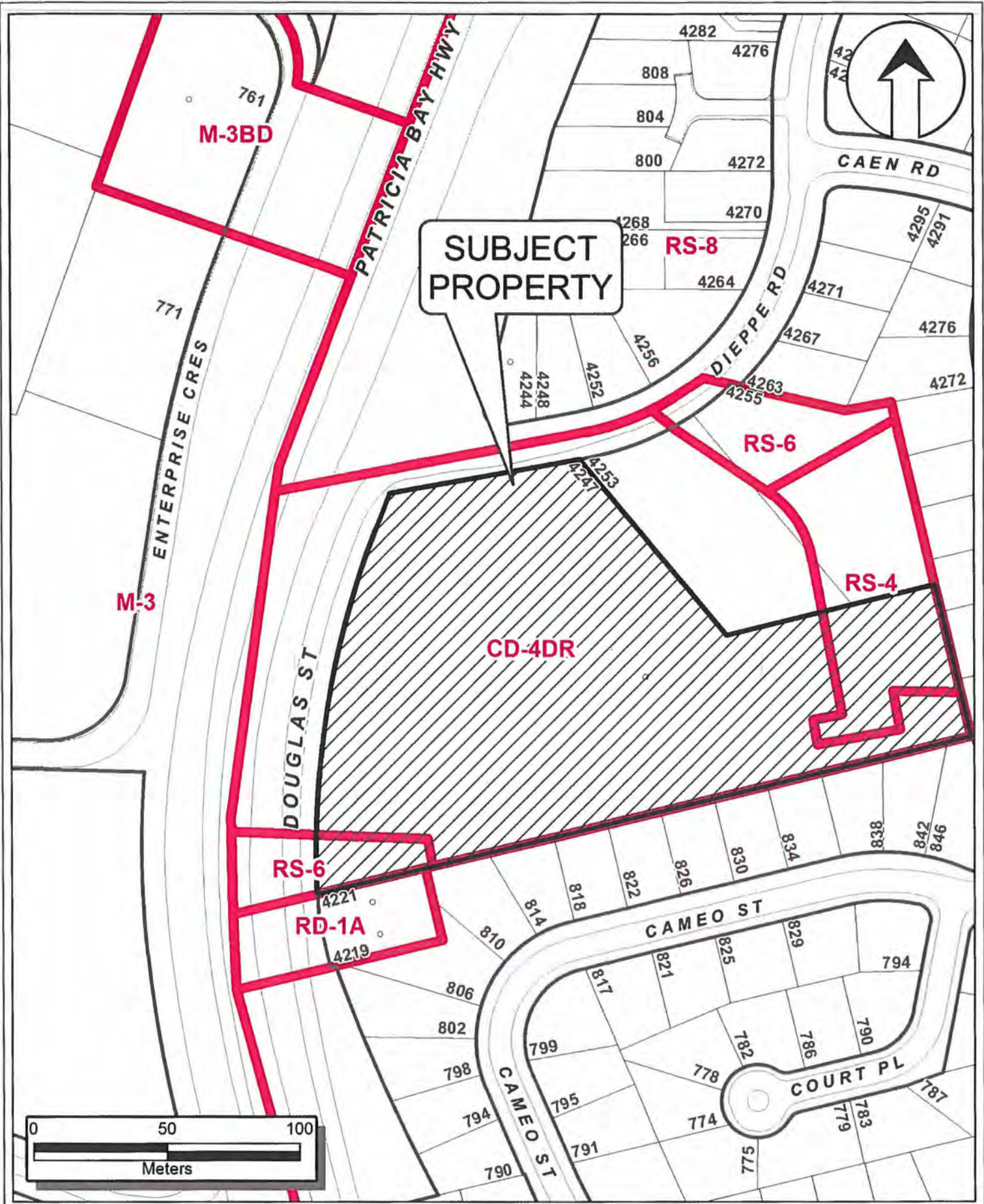


DETAIL NAME: **TREE PROTECTION FENCING**

H:\shared\parks\Tree Protection Fencing.pdf

DATE: March/08  
DRAWN: DM  
APP'D: RR  
SCALE: N.T.S.









#100-31 Bastion Square  
Victoria, BC Canada  
V8W 1J1

Office: 250.383.1008  
Toll Free: 888.383.1008  
Fax: 250.383.1005  
admin@advicas.com

www.advicas.com

September 9, 2016

Project: 2012021

The Corporation of the District of Saanich  
770 Vernon Avenue  
Victoria, BC  
V8X 2W7

Attention: Neil Findlow  
Senior Planner

Dear Mr. Findlow:

**Re: Islands West Office and Food Processing Warehouse  
4247 Dieppe Road, Covenant Item #6: Sustainability Requirements  
Building Permit Application**

Per the requirements of the project Covenant, *"The Covenantors agree to design and construct any commercial/industrial buildings on the Lands to a minimum LEED<sup>®</sup> Silver standard or an equivalent energy and environmental performance standard, as determined by the Director of Planning of the Covenantee, and to submit design plans and LEED checklist or LEED equivalency report for the review and approval of the Director of Planning prior to the issuance of a building permit."*

As the project's Sustainability Consultant and as a LEED<sup>®</sup> Accredited Professional, it is my opinion the proposed Islands West Office and Food Processing Warehouse has met this requirement in that it has followed a process and pursued sustainability strategies generally consistent with what we infer the District of Saanich intends by "LEED<sup>®</sup> Silver standard or an equivalent energy and environmental performance standard".

Based on our phone conversation on December 1, 2015, it is Advicas' understanding that it is acceptable to the District of Saanich that this project not pursue LEED<sup>®</sup> certification with the Canada Green Building Council (CaGBC), as long as we demonstrate suitably high levels of sustainability. The project team has opted not to pursue certification with LEED<sup>®</sup> or an alternate third-party rating system and instead to use as consideration the concept of "suitably high levels of sustainability", working toward this goal for the good of the project and environment, and to satisfy Saanich's requirements for this facility.

There is no industry consensus on what constitutes LEED Equivalency, so to address this, Advicas has used its experience with the LEED rating system to engage the team in a design collaboration process focused on sustainability, with the LEED Canada New Construction v2009 rating system Silver level rating as a basis for discussion and guidance. As a result of this process, the team has developed a number of sustainability initiatives in keeping with this facility and its intended use. The design incorporates water efficiency measures, high efficiency lighting systems, and mechanical systems selected for efficiency, occupant comfort and reclaim of waste heat. Considerable improvements are planned for the site in the way of stormwater management and landscaping, treating rainwater runoff through rain gardens prior to its introduction into Gabo Creek, and restoring native grass species and camas flowers to the meadow around the retained Garry Oak tree.




We attach a checklist with brief descriptions of:

- ✎ Targeted sustainability strategies including additional strategies under consideration. Individuals familiar with the LEED rating system will recognize relationships between our project's targeted sustainability strategies and LEED credits, however the checklist is not intended to imply precise correlation and achievement of specific LEED credit requirements. Attached letters from the Design Team provide more detailed information about the sustainability strategies in their respective designs.
- ✎ Company name of discipline which provides additional description of the sustainability strategy in this Building Permit stage Sustainability Submission.
- ✎ Proposed Occupancy Permit Submission documentation. Note that, in most cases, we propose the Occupancy Permit Sustainability Submission be of similar structure to this Building Permit submission. The primary difference will be that, for many of the sustainability strategies, the individual(s) responsible for the design associated with the strategy will provide a letter confirming the strategy has been constructed per design intent. By this we mean individual(s) responsible will review construction through the typically expected practices of shop drawing review and/or site reviews, as they deem appropriate, to confirm construction is in general accordance with design intent, drawings and specifications.

From Advicas' experience, the systems and sustainability strategies in the design for this project are strategies we would expect in a building meeting Saanich's requirements. As Sustainability Consultant for this project, I will continue to support the sustainability strategies through the construction process and will provide an update on these strategies as a part of this project's submission for Occupancy Permit.

We are hopeful we have interpreted your requirements correctly and this package demonstrates compliance with the Building Permit stage sustainability requirements. We look forward to your response and confirmation.

Yours truly  
per: Advicas Group Consultants Inc.

  
Wendy C. Macdonald, PEng, LEED® AP  
Sustainability Consultant



(250) 995-5423  
[wmacdonald@advicas.com](mailto:wmacdonald@advicas.com)

enclosures (16 pages)





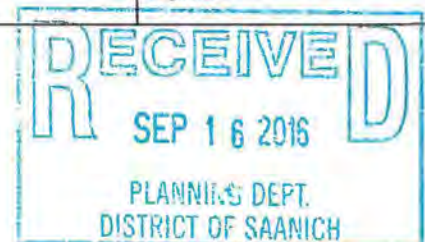
# 4251 DIEPPE SUSTAINABILITY SCORECARD

## Building Permit Application Stage

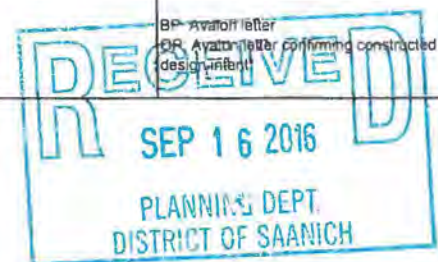
Sept 9/16

This checklist is intended to be used for the purposes of outlining the project's sustainability strategies and identifying how project intends to meet District of Saanich Covenant re: sustainability requirements.

Sustainability Strategies Checklist	Strategies	Sustainability Submission Building Permit (BP) Proposed for Occupancy Permit (OP)
Construction Activity Pollution Prevention	A Construction Activity Pollution Prevention Plan (CAPP) and Erosion and Sediment Control plan (ESC) will be developed based on approved guidelines. The Contractor will be responsible for maintaining measures to limit suspended solids in site runoff to prescribed levels using a variety of tools such as settling ponds/tanks, filtration systems, filter bags, silt fence, hay bales, etc. Regular sampling and reporting of water quality will be submitted by the Contractor. Westbrook will include in specifications the requirement for Erosion & Sediment Control Plan with requirement that E&S plan be approved by Westbrook.	BP Westbrook letter OP Westbrook letter based on E&S reporting from Contractor
Site Selection	Project is on predeveloped land which is not ALR, parkland, ecologically sensitive, habitat for rare/endangered species, nor near a wetland. Project site area defined as limits of construction.	BP Westbrook letter OP None proposed
Development Density and Community Connectivity	Confirmed 10 services within 800m radius. Also, residential development on site will increase density.	BP None proposed OP None proposed
Alternative Transportation: Public Transportation Access	#6 Quadra bus stop is 650m from building. IW tracked distance to work for in-town employees (Jan 2014). 78 of 103 employees live less than 10km, 42 live less than 5km. IW open to funding bus pass and bike to work programs and will look positively on helping funding purchases for adjacent residential properties for long time employees.	BP None proposed OP None proposed
Alternative Transportation: Bicycle Storage & Changing Rooms	Rough calculations based on 10 office FTEs at 8 hrs/day and 5 days/wk, plus 40 manufacturing staff in building from 4am-7pm (15 hrs/day) and 6 5 days/wk = approximately 120 FTEs. Since this aligns with max occupancy load, will use this figure. 5 bike racks at employee area (each with 2 spots), and 4 racks at main entrance (each with 2). In basement, 4 hangers with each. Total: 18 outside and 8 inside. Showers located in locker room.	BP deHoog & Kierulf letter OP deHoog & Kierulf letter confirming constructed per design intent*
Alternative Transportation: Low-Emitting & Fuel-Efficient Vehicles	Based on approximately 44 parking stalls, will install 2@120V charging stations, with controls from inside, signage. Locate one in private, one in public areas.	BP Triumph letter OP Triumph letter confirming constructed per design intent
Site Development: Maximize Open Space	We have 25% vegetated open space. This site is spot zoned (we are our own zone). Credit available will pursue via Case 3 - sites with zoning but no open space requirements which requires min. 20% vegetated open space.	BP Murdoch deGreeff letter OP Murdoch deGreeff letter confirming constructed per design intent*
Stormwater Design: Quantity Control	We have confirmed we are detaining what we need using the on site raingardens. We are slowing and storing required amounts (though all ultimately goes to the infrastructure). Strategy meets Saanich stormwater bylaw requirements re: storage. Existing conditions are largely impervious. Design is for 100% of hardscape and roof areas are to be drained to raingardens for storage and infiltration. Raingardens are oversized for requirements. MdG developed the stormwater strategy for the comprehensive site and submitted stormwater statement to Saanich. MdG and Westbrook to work together to produce required Saanich documents.	BP Westbrook letter, Murdoch de Greeff letter OP Westbrook letter, Murdoch de Greeff letter confirming constructed per design intent*
Stormwater Design: Quality Control	Water is treated through the raingardens. Islands West and Advicas to discuss cleansing agents for truck washdown (1x/wk). Washdown at loading bay (outside), drains to raingarden. No ongoing fertilizer program. IW will develop Nutrient Management Plan which minimizes use of phosphates on site. This would apply to fertilizers (if used) and exterior cleaners (review re: truck cleaning products). Raingardens will handle Total Suspended Solids.	BP Westbrook letter, Murdoch de Greeff letter OP Westbrook letter, Murdoch de Greeff letter confirming constructed per design intent*
Heat Island Effect: Roof	Select roof with an SRI of at least 58.5 (Note: Standard SBS roofing with high SRI is available).	BP deHoog & Kierulf letter OP deHoog & Kierulf letter confirming constructed per design intent*
Light Pollution Reduction	Good neighbour policy. Select fixtures with cutoff lighting. Preference to not produce photometric analysis to prove out specifics of point.	BP Triumph letter OP Triumph letter confirming constructed per design intent*



Sustainability Strategies Checklist	Strategies	Sustainability Submission Building Permit (BP) Proposed for Occupancy Permit (OP)
Water Use Reduction	Select plumbing fixtures for water efficiency	BP Avalon letter OP Avalon letter confirming constructed per design intent*
Water Efficient Landscaping	Irrigation efficiency using smart controllers and appropriate, drought tolerant plantings	BP Murdoch deGreeff letter OP Murdoch deGreeff letter confirming constructed per design intent*
Fundamental Commissioning of Building Energy Systems	Requirement for commissioning of systems will be included in project specifications	BP Avalon letter OP Avalon letter confirming systems commissioning activities
Minimum Energy Performance	Variable Refrigerant Flow (VRF) system within heated spaces Heat recovery ventilation from locker room exhaust VRF ability to provide heat recovery (between North/South exposures as well as between floors) and simultaneous heating/cooling without reheat Use waste heat from refrigeration system for comfort heating of otherwise unheated warehouse Extensive use of LED lighting, occupancy controls Opportunities to fine tune this system to allow for user controllability, optimization and energy efficiency Overhead lighting in offices each with own control and vacancy sensors In process general areas overhead LED lighting with built-in occupancy sensors	BP Avalon letter Triumph letter OP Avalon letter Triumph letter confirming constructed per design intent*
Fundamental Refrigerant Management	Refrigerants in HVAC systems not CFC based	BP Avalon letter OP Avalon letter confirming constructed per design intent*
Optimize Energy Performance	See notes under Minimum Energy Performance	See notes under Minimum Energy Performance
Enhanced Refrigerant Management	Base building refrigeration systems utilise HFC refrigerant (e.g. R410a)	BP Avalon letter OP Avalon letter confirming constructed per design intent*
Measurement and Verification	Will include water meters to track water usage of different systems Meter process water, domestic water, irrigation Will have electricity, gas utility meters Will have DDC system for environmental (thermal, humidity) monitoring of food processing areas	BP Avalon letter OP Avalon letter confirming constructed per design intent*
Storage and Collection of Recyclables	Area at back of building (NE corner) process waste room for cardboard, food waste (goes to farmer for beef cattle) Cardboard goes for recycling, plastic goes to CRD recycling Bins in employee areas for recycling	BP deHoog & Kierulf letter OP deHoog & Kierulf letter confirming constructed per design intent*
Construction Waste Management	Construction Waste Management Plan to be implemented with a target diversion rate of at least 75% With careful deconstruction of the existing facilities and reuse of concrete as subbase, a 95% diversion rate is likely Spec section to require separation of waste streams Bins on site	BP deHoog & Kierulf letter OP deHoog & Kierulf letter based on tracking information provided by waste receiver
Materials Reuse	Concrete from the existing building was crushed on site and re used as structural fill below the footings Where possible, lumber from deconstructed building was sold or will be reused in new building	BP deHoog & Kierulf letter OP None proposed
Recycled Content	Proposed structure is tilt-up concrete and steel Structure and envelope constitute the vast majority of the material cost of the project due to its use Experience indicates with such a large amount of concrete and steel, project will achieve good results of recycled content Propose not track during construction due to intensity of effort of tracking with minimal effect on affecting results	BP Skyline letter OP None proposed
Regional Materials	Proposed structure is tilt-up concrete and steel Structure and envelope constitute the vast majority of the material cost of the project due to its use Experience indicates with such a large amount of concrete and steel, project will achieve good results of regional content Propose not track during construction due to intensity of effort of tracking with minimal effect on affecting results	BP Skyline letter OP None proposed
Minimum Indoor Air Quality Performance	Ventilation system to be designed to meet ASHRAE 62.1-2007 requirements	BP Avalon letter OP Avalon letter confirming constructed per design intent*



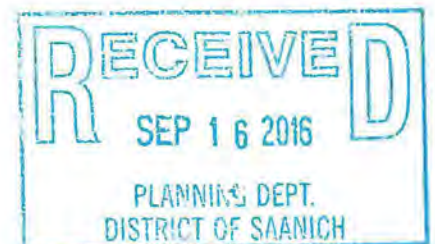


Sustainability Strategies Checklist	Strategies	Sustainability Submission Building Permit (BP) Proposed for Occupancy Permit (OP)
Environmental Tobacco Smoke (ETS) Control	No smoking allowed within building or within 7.5m of operable windows, doors and air intakes. IW has an incentive program for quitting smoking.	BP: None proposed OP: None proposed
Increased Ventilation	Avalon will design for 30% above required outdoor airflow rates required by ASHRAE for office and warehouse applications.	BP: Avalon letter OP: Avalon letter confirming constructed per design intent*
Construction IAQ Management Plan: During Construction	Contractor implement an Indoor Air Quality (IAQ) Management Plan during construction which requires implementation of the design approaches described in the Sheet Metal and Air Conditional Contractor's National Association (SMACNA) IAQ Guideline for Occupied Buildings Under Construction for the pre-occupancy stage of construction. Requirement will be included in Sustainability Spec section.	BP: None proposed OP: Letter from Contractor confirming implementation of IAQ Management Plan
Low-Emitting Materials: Adhesives and Sealants	Credit applies to all adhesives and sealants used inboard of the weatherproofing system and applied on site. Contract Documents include a Sustainability Specification Section which describes maximum VOC levels for adhesives and sealants used inside the building and applied on site. Green Material Information Sheets as provided in that specification section will be used to inform suppliers and trade consultants regarding the VOC content of the relevant products. NOTE: it is our intent to use low emitting materials and our specifications are written as such. Special attention will be given to areas affected by industrial processes and products found historically to be effective may be selected. Due to concerns re complications with industrial processes, preference to not perform ongoing verification and tracking of products on-site, instead relying on appropriate specifying of products and Contractor compliance with Contract Documents.	BP: deHoog & Kierulff letter OP: Letter from Contractor confirming products in general compliance with sustainability specification section and Green Material Information Sheets
Low-Emitting Materials: Paints and Coatings	Credit applies to all paints and coatings used inboard of the weatherproofing system and applied on site. Contract Documents include a Sustainability Specification Section which describes maximum VOC levels for adhesives and sealants used inside the building and applied on site. Green Material Information Sheets as provided in that specification section will be used to inform suppliers and trade consultants regarding the VOC content of the relevant products. NOTE: it is our intent to use low emitting materials and our specifications are written as such. Special attention will be given to areas affected by industrial processes and products found historically to be effective may be selected. Due to concerns re complications with industrial processes, preference to not perform ongoing verification and tracking of products on-site, instead relying on appropriate specifying of products and Contractor compliance with Contract Documents.	BP: deHoog & Kierulff letter OP: Letter from Contractor confirming products in general compliance with sustainability specification section and Green Material Information Sheets
Low-Emitting Materials: Flooring Systems	Credit applies to all flooring systems. Carpet systems must be Green Label Plus certified, resilient flooring to be FloorScore certified, adhesives and coatings to comply with VOC requirements. See LEED Reference Guide for other specific requirements. Contract Documents include a Sustainability Specification Section which describes maximum VOC levels for adhesives and sealants used inside the building and applied on site. Green Material Information Sheets as provided in that specification section will be used to inform suppliers and trade consultants regarding the VOC content of the relevant products. NOTE: it is our intent to use low emitting materials and our specifications are written as such. Special attention will be given to areas affected by industrial processes and products found historically to be effective may be selected. Due to concerns re complications with industrial processes, preference to not perform ongoing verification and tracking of products on-site, instead relying on appropriate specifying of products and Contractor compliance with Contract Documents.	BP: deHoog & Kierulff letter OP: Letter from Contractor confirming products in general compliance with sustainability specification section and Green Material Information Sheets
Low-Emitting Materials: Composite Wood and Agrifibre Products	Credit applies to all composite wood products used on the interior of the building and affixed to the building. Laminating adhesives used to fabricate on-site and shop-applied composite wood and agrifibre assemblies must not contain added urea-formaldehyde. This includes (but is not limited to) plywood, MDF board, millwork, door cores, elevator cabs, washroom partitions. Material considered fixtures, furniture, and equipment are exempt. Contract Documents include a Sustainability Specification Section which describes maximum VOC levels for adhesives and sealants used inside the building and applied on site. Green Material Information Sheets as provided in that specification section will be used to inform suppliers and trade consultants regarding the VOC content of the relevant products. NOTE: it is our intent to use low emitting materials and our specifications are written as such. Special attention will be given to areas affected by industrial processes and products found historically to be effective may be selected. Due to concerns re complications with industrial processes, preference to not perform ongoing verification and tracking of products on-site, instead relying on appropriate specifying of products and Contractor compliance with Contract Documents.	BP: deHoog & Kierulff letter OP: Letter from Contractor confirming products in general compliance with sustainability specification section and Green Material Information Sheets
Indoor Chemical and Pollutant Source Control	Specific chemical mixing rooms, chlorination rooms appropriately ventilated, hardlid ceilings. MERV 13 filters on offices spaces. Will have walkoff mat (carpet squares) in vestibula at main entry.	BP: Avalon letter OP: Avalon letter confirming constructed per design intent*
Controllability of System: Lighting	Overhead lighting in offices, each with own control and vacancy sensors. In process general areas overhead LED lighting with built-in occupancy sensors. 30/70 approach likely.	BP: Triumph letter OP: Triumph letter confirming constructed per design intent*
Controllability of System: Thermal Comfort	High degree of comfort and control in the offices via mechanical system zoning and operable windows. Not available for process areas as these are unheated and/or refrigerated spaces. For unheated but not refrigerated process spaces, waste heat to be provided to support comfort of occupants.	BP: Avalon letter OP: Avalon letter confirming constructed per design intent*



Sustainability Strategies Checklist	Strategies	Sustainability Submission Building Permit (BP) Proposed for Occupancy Permit (OP)
Thermal Comfort: Design	High degree of comfort and control in the offices via mechanical system zoning and operable windows. Not available for process areas as these are unheated and/or refrigerated spaces. For unheated but not refrigerated process spaces, waste heat to be provided to support comfort of occupants.	BP: Avalon letter OP: Avalon letter confirming constructed per design intent*
Daylight and Views: Daylight	Daylight provided in office areas. Not available for process space. Windows provided in corridors, lunchroom, stairwell, locker rooms. Windows in overhead doors to process area and mandors to outside. Windows in office areas. Windows provided as much as possible to facilitate daylight, views and connection to outdoors.	BP: deHoog & Kierulf letter OP: deHoog & Kierulf letter confirming constructed per design intent*
Daylight and Views: Views	Views provided in office areas. Not available for process space. Windows provided in corridors, lunchroom, stairwell, locker rooms. Windows in overhead doors to process area and mandors to outside. Windows in office areas. Windows provided as much as possible to facilitate daylight, views and connection to outdoors.	BP: deHoog & Kierulf letter OP: deHoog & Kierulf letter confirming constructed per design intent*
Innovation in Design -Educational Outreach	Signage program to describe sustainable strategies incorporated into project.	BP: None OP: Photographs of installed signage
Innovation in Design -Water Use Reduction target >35%	See Water Efficiency	BP: See Water Efficiency OP: See Water Efficiency
Innovation in Design -Construction Waste diversion target >95%	See Construction Waste Management	BP: See Construction Waste Management OP: See Construction Waste Management
Innovation in Design -Reduced Mercury in Lamps	Will be using LED strategy (no flourscents) therefore low-mercury IW to commit to lamp replacement policy which utilizes same low mercury strategy as initial installation.	BP: Triumph letter OP: Triumph letter confirming constructed per design intent*
Innovation in Design -Water Performance Measurement - 80%	Will include water meters to track water usage of different systems. Meter process water, domestic water, irrigation.	BP: Avalon letter OP: Avalon letter confirming constructed per design intent*
LEED® Accredited Professional	Wendy C. Macdonald of Advicas Group Consultants is a LEED AP with specialization in Building Design & Construction.	BP: None proposed OP: None proposed
Regional Priority Credit -Water Use Reduction target >35%	See Water Efficiency	BP: See Water Efficiency OP: See Water Efficiency
Regional Priority Credit -Construction Waste Management target >=75%	See Construction Waste Management	BP: See Construction Waste Management OP: See Construction Waste Management

\*"constructed per design intent": Individual(s) responsible will review construction through the typically expected practices of shop drawing review and/or site reviews, as they deem appropriate, to confirm construction is in general accordance with design intent, drawings and specifications.







July 19, 2016

The Corporation of the District of Saanich  
770 Vernon Avenue  
Victoria, BC  
V8X 2W7

Attention: Neil Findlow  
Senior Planner

Re: **Islands West Office and Food Processing Warehouse**  
**4247 Dieppe Road, Covenant Item #6: Sustainability Requirements**  
**Architectural Items**



It is the intent of this project to achieve a high level of energy and environmental performance, as determined by the Director of Planning of the Covenant. Per the requirements of the Covenant for the submission for Building Permit, we submit design plans and the following reporting of the sustainability strategies for review and approval. The undersigned gives assurance that the design incorporates strategies to improve the energy and environmental performance of the project, described as follows:

#### **Site Sustainability**

##### *Alternative Transportation: Bicycle Storage & Changing Rooms*

Eight Class II bicycle parking spaces are provided in the north basement adjacent to the staff entry and sixteen Class I bicycle parking spaces equally divided between the staff and main entries. Showers and changing facilities for bicycle commuters are provided in each of the staff bathrooms located in the staff area on the north side of the second floor.

##### *Heat Island Effect: Roof*

The specified roof membrane will have a solar reflectance index (SRI) greater than 58.5.

#### **Materials and Responsible Resource Use**

##### *Storage and Collection of Recyclables*

Areas for the storage and collection of recyclables are provided in both the staff/office and process areas of the facility. Process recyclables are collected and stored in the Process Waste Room. Pallets are reused, plastic and cardboard is broken down for recycling, and food waste is collected for use as animal feed and for composting. Recycling containers for normal staff waste are located with the dumpsters in the north east corner of the site with collection areas in the Lunch Room, office areas, and throughout the facility.

##### *Construction Waste Management*

A Construction Waste Management Plan will be implemented with a minimum target diversion rate of 75%. Bins will be provided on site for the separation and recycling of construction waste.

Victoria  
977 Fort Street V8V 3K3  
T 250-658-3367  
[www.dhk.ca](http://www.dhk.ca)

Nanaimo  
102-5190 Dublin Way V9T 2K8  
T 250-585-5810

### *Materials Reuse*

The existing facilities have been carefully deconstructed to separate materials for salvage and reuse. Lumber from the existing building has been sold for reuse and the existing concrete slabs, foundation walls, and footings will be ground up and used as sub-base under the new parking areas and drive aisles.

### **Indoor Environmental Quality for Occupants**

#### *Low-Emitting Materials:*

Adhesives and Sealants, Paints and Coatings, Flooring Systems, and Composite Wood and Agrifibre Products – The Contract Documents include a Sustainability Specification Section which outlines emission limits/requirements for these materials. Specifically: adhesives, sealants, paints and coatings applied onsite and inside the building will be selected to adhere to maximum VOC levels, flooring systems will meet low VOC standards, and composite wood products used inside the building will contain no added urea-formaldehyde resins.

#### *Daylight and Views:*

Windows providing access to daylight and views are provided throughout the facility where not limited by Operation and/or Food Safety requirements. Windows are provided in all occupied office areas, staff support areas (the lunch and locker rooms) the walkway, all stairwells and in all exterior man and overhead doors.

We trust this narrative adequately demonstrates how the Architectural design for the Islands West Office and Food Processing Warehouse meets the sustainability requirements and intent of the project Covenant.

Sincerely,



Flemming Petersen  
dHKA



July 20, 2016

The Corporation of the District of Saanich  
770 Vernon Avenue  
Victoria, BC  
V8X 2W7

Attention: Neil Findlow  
Senior Planner



Dear Mr. Findlow:

**Re: Islands West Office and Food Processing Warehouse  
4247 Dieppe Road, Covenant Item #6: Sustainability Requirements – Landscape Items**

It is the intent this project achieve a high level of energy and environmental performance, as determined by the Director of Planning of the Covenantee. Per the requirements of the Covenant for the submission for Building Permit, we submit design plans and the following reporting of the sustainability strategies for review and approval. The undersigned gives assurance the design of the building incorporates strategies to improve the energy and environmental performance of the project, described as follows:

### ***Site Sustainability***

#### **Site Development: Maximize Open Space**

The existing site consists of a commercial operation at the low end of the property along Douglas Street with a wide high tension power line corridor running along the property's south edge. One large Garry Oak tree exists on site, with most other vegetation having been removed and replaced with non-native grasses.

The proposed development will be 25% vegetated open space. New landscapes will consist of rain garden and mixed planting areas which will be planted with a combination of native and adapted non-native shrubs and trees. Buffer zones (adjacent to proposed and existing residential areas) include a variety of native trees including *Acer macrophyllum*, *Crataegus douglasii*, *Pseudotsuga menziesii*, *Rhamnus purshianus*, and *Thuja plicata*. The existing large Garry Oak tree will be retained, on the south side of the property, and native grass species and camas bulbs will be reintroduced to the meadow area beneath the tree.

The intent is to create a more functional landscape that integrates stormwater management and environmental values, and that contributes to the livability of the local neighbourhood.

#### **Stormwater Design: Quantity and Quality Control**

Drainage from the existing commercial area is currently conveyed by roadside ditches directly to Gabo Creek, which flows under the Patricia Bay Highway on its way to the Colquitz River. The stormwater management plan for the Dieppe Road development project uses rain gardens to infiltrate water through soil, both cleansing runoff water and slowing runoff delivery to Gabo Creek.

Runoff from all proposed impervious surface areas on the site (roofs, roads, parking, and driveways) will be redirected into rain gardens that are strategically located throughout the site to manage pollution and slow water



flow. The rain gardens are sized to accommodate 200 m<sup>3</sup> of runoff per hectare of impervious area (as per District of Saanich Stormwater Bylaw-Schedule H).

Rain gardens will be designed with underdrains and a high-capacity overflow drain (beehive grates) that will be connected to the onsite piped drainage system. Although designed with underdrains, the rain gardens are expected to also infiltrate some water into the existing native site soils and supplement base flows to Gabo Creek.

The bottom of the rain gardens will be planted, rather than covered with rock, to maximize the water's contact with living plants and soils and thereby maximizing the ability of the plants and soils to filter pollutants from runoff. The rain garden planting are sedges, rushes, and other plants that are adapted to winter inundation and summer droughts.

### ***Water Efficiency***

#### **Water Efficient Landscaping**

Native and adapted non-native (non-invasive) plant material will be used in proposed landscape improvements to enhance vegetation cover and increase on-site rainwater interception. The plant selections for this project are adapted to the site microclimates, and consume less water than typical ornamental landscape plants.

A high efficiency irrigation system will be installed for all new planting areas. The irrigation system will comply with IIABC and BCSLA standards, and include the efficiency-improving elements such as:

- Separate zones for different types of plant material, based on watering needs.
- High efficiency nozzles or drip line with pressure-compensating inline emitters.
- Moisture sensor.
- Smart Control system.
- Central shut-off ball valve.
- Pressure-regulating device.
- Head to head coverage.

We trust this narrative adequately demonstrates how this discipline's design for Islands West Office and Food Processing Warehouse meets the sustainability requirements and intents of the project Covenant.

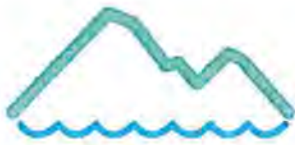
Best regards,



Paul de Greeff, RLA







# WESTBROOK Consulting Ltd.

July 12, 2016

The Corporation of the District of Saanich  
770 Vernon Avenue  
Victoria, BC  
V8X 2W7

Attention: Neil Findlow  
Senior Planner

Dear Mr. Findlow:



**Re: Islands West Office and Food Processing Warehouse  
4247 Dieppe Road, Covenant Item #6: Sustainability Requirements - Civil Items**

It is the intent this project achieve a high level of energy and environmental performance, as determined by the Director of Planning of the Covenantee. Per the requirements of the Covenant for the submission for Building Permit, we submit design plans and the following reporting of the sustainability strategies for review and approval. The undersigned gives assurance the design of the building incorporates strategies to improve the energy and environmental performance of the project, described as follows:

### ***Site Sustainability***

#### *Construction Activity Pollution Prevention*

A Construction Activity Pollution Prevention Plan (CAPPP) and Erosion and Sediment Control plan (ESC) will be developed based on approved guidelines. The contractor will be responsible to establish and maintain measures to limit suspended solids in site runoff to prescribed levels using a variety of tools such as settling ponds/tanks, filtration systems, filter bags, silt fence, hay bales, etc. Regular sampling and reporting of water quality will be submitted by the Contractor. Westbrook will include in specifications the requirement for Erosion & Sediment Control Plan with requirement that E&S plan be approved by Westbrook.

#### *Site Selection*

The project site is a previously developed site with defined limits of construction. The project site has not been identified as a sensitive ecosystems, wetland, woodland, or environmental development area by the District of Saanich.

#### *Storm Water Quantity Control*

All onsite storm water runoff will be direct to onsite rain gardens. Storm water will be allowed to infiltrate through the growing medium and be collected in a perforated pipe along the bottom of the rain garden. The proposed storm water management plan meets District of Saanich Schedule H of the Subdivision Bylaw 7452. Westbrook will prepare a storm water management plan as part of the detailed design drawings submission.

*Storm Water Quality*

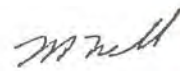
100% of the storm water runoff from the onsite impervious areas will be directed to rain gardens. The velocity of the storm water runoff will be reduced and the water will be filtered through the growing medium before being released into the municipal drain along Douglas Street.

We trust this narrative adequately demonstrates how this discipline's design for Islands West Office and Food Processing Warehouse meets the sustainability requirements and intents of the project Covenant.

Best regards,



Nicole Vagle, EIT  
Project Engineer



Mike Wignall, P. Eng., LEED AP  
Project Manager



**WESTBROOK  
Consulting Ltd.**



July 25, 2016

The Corporation of the District of Saanich  
770 Vernon Avenue  
Victoria, BC  
V8X 2W7

Dear Mr. Findlow:

**RE: Island West Office and Food Processing Warehouse 4247 Dieppe Rd**  
**Covenant Item #6: Sustainability Requirements – Structural Items** **Project: 10225.01**

It is the intent this project achieve a high level of energy and environmental performance, as determined by the Director of Planning of the Covenantee. Per the requirements of the Covenant for the submission for Building Permit, we submit design plans and the following reporting of the sustainability strategies for review and approval. The undersigned gives assurance the design of the building incorporates strategies to improve the energy and environmental performance of the project, described as follows:

### ***Materials and Responsible Resource Use***

#### ***Recycled and Regional Content***

Proposed structure is tilt-up concrete and steel. Structure and envelope constitute the vast majority of the material cost of the project due to its use. Concrete will be specified with a recycled content of fly-ash added to reduce overall cement use to approximately 75% of standard concrete without fly-ash. This benefits in 2 ways, 1<sup>st</sup> a re-use of a waste product from the energy sector. 2<sup>nd</sup> the reduction of cement in the concrete reduces overall CO2 off-gassing from the concrete curing process. Steel will be specified with a minimum of 75% recycled content.





We trust this narrative adequately demonstrates how this discipline's design for Islands West Office and Food Processing Warehouse meets the sustainability requirements and intents of the project Covenant.

Yours truly,

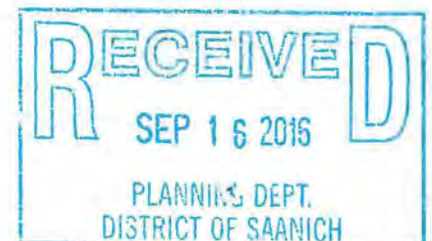
Skyline Engineering Ltd.



**Cord MacLean, P.Eng., LEED AP**

Principal

Encl.



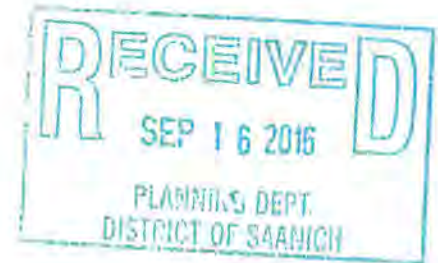




The Corporation of the District of Saanich  
770 Vernon Avenue  
Victoria, BC  
V8X 2W7

Attn: Neil Findlow  
Senior Planner

Dear Mr. Findlow:



**Re: Islands West Office and Food Processing Warehouse  
4247 Dieppe Road, Covenant Item #6: Sustainability Requirements - Mechanical Items**

It is the intent this project achieve a high level of energy and environmental performance, as determined by the Director of Planning of the Covenantee. Per the requirements of the Covenant for the submission for Building Permit, we submit design plans and the following reporting of the sustainability strategies for review and approval. The undersigned gives assurance the design of the building incorporates strategies to improve the energy and environmental performance of the project, described as follows:

***Water Efficiency***

*Water Use Reduction*

Water use in the building will be reduced by installing flow restrictors or reduced flow aerators on lavatory, sink, and shower fixtures. Automatic faucet sensors will be used on all lavatories to minimize waste, and high-efficiency water closets and urinals will be installed.

*Measurement and Verification*

Water sub-meters will be installed at all large points of water consumption, including, at a minimum, sub-meters for process water, domestic water, irrigation water.

***Energy and Atmospheric Considerations***

*Commissioning of Building Energy Systems*

Comprehensive commissioning of mechanical systems and associated controls, lighting and daylighting controls, and domestic hot water systems will be specified by the consulting team. The commissioning agent will verify the owner's environmental, sustainability and energy efficiency goals; indoor environmental quality requirements; equipment expectations; and building occupant and O&M personnel requirements. The commissioning agent will develop pre-start and startup checklists to clarify these requirements, and perform functional testing and system performance.

*Minimum Energy Performance*

The prescriptive measures of the ASHRAE publication *Advanced Energy Design Guide for Small Warehouses and Self-Storage Buildings* will be followed. In accordance with these measures, the building will feature extensive use of energy recovery equipment, including a variable-flow refrigerant (VRF) heat recovery system. Heat will be recovered from zones requiring cooling, and used to heat zones which require heating, requiring minimal net input from the

building's variable speed air-to-air heat pumps. Energy recovery ventilators (ERV) will be used to recover heat from exhaust air, and used to preheat incoming ventilation air for the building. Waste heat from the refrigeration system will be used for comfort heating of otherwise unheated warehouse spaces. LED lighting and occupancy controls will be used to minimize lighting energy use and cooling requirements.

*Refrigerant Management*

No CFC-based refrigerants will be used.

**Indoor Environmental Quality**

*Indoor Air Quality Performance*

To enhance indoor air quality in the building, all parts of the building will be designed to exceed the requirements of ASHRAE 62.1-2007 *Ventilation for Acceptable Indoor Air Quality*.

*Indoor Chemical and Pollutant Source Control*

Chemical storage and mixing rooms, chlorination rooms, and janitorial rooms will be maintained at negative space pressures using self-closing doors and exhaust air equipment. High-efficiency (MERV 13+) filters will be installed on ventilation equipment. Walk-off mats (carpet squares) will be used in vestibules at main entry points.

*Thermal Comfort*

A high level of thermal comfort control will be provided to occupants by using small thermostatic zones and operable windows. HVAC systems shall be designed to meet ASHRAE 55-2004 *Thermal Comfort* except for production areas where specific environmental conditions are required (refrigerated spaces, etc).

We trust this narrative adequately demonstrates how this discipline's design for Islands West Office and Food Processing Warehouse meets the sustainability requirements and intents of the project Covenant.

Sincerely,



Kevin Jackson, P.Eng.  
Avalon Mechanical Consultants Ltd.





# TRIUMPH ELECTRICAL CONSULTING ENGINEERING LTD

To: The Corporation of the District of Saanich From: Randal J. Slade, P. Eng.

Attn: Neil Findlow, Senior Planner

Date: July 20, 2016

**Re: Islands West Office and Food Processing Warehouse,  
4247 Dieppe Road, Covenant Item #6: Sustainability Requirements- Electrical Items**

It is the intent of this project to achieve a high level of energy and environmental performance. We will follow with plans and specifications detailing those strategies for approval at the Building Permit stage of the Project. For now we summarize the design strategies for your comment;

1. Site Lighting and Controls thereof.
  - a. It is the intent of the Design to incorporate lighting on the site that is not intrusive on the local community or the nearby Highway. This will include designed luminaires that feature sharp cut-off optics and controls to limit their use to the use of the Building.
  - b. The Lighting will be aimed towards the Building and not the off-site areas and will be of intensity, height and color to reduce overall appearance at the property line while being effective on site.
2. Transportation Strategy
  - a. There will be two EV car charging stations included on site- one in Visitor's and one in Staff Parking.
3. Energy Performance- Lighting Systems in the Building
  - a. The intent of the Design is to illuminate the various areas of the Building with good performance while reducing the energy consumption and operational costs.
  - b. The lighting will feature LED design through-out and will include operational controls for overall energy reduction.
  - c. Offices will look typical with LED troffers but will feature occupancy controlled fixtures to reduce the impact of the energy costs.
  - d. The Warehouse and areas will also feature LED high-bay lighting with controls to reduce the energy loads.







4. Environmental

- a. As the basic lighting will be LED it is also anticipated that the environmental impact of mercury will be reduced to near zero or zero.

Yours truly,

Randal J. Slade, P. Eng.





# 4247 Dieppe Road Development – Stormwater Statement

Stormwater management for the Dieppe Road development project centers on the use of rain gardens to infiltrate water through soil, both cleansing runoff water and slowing runoff delivery to Gabo Creek. The rain gardens have been strategically located to work with existing topography on the site such that grading and disruption of existing soils is minimized. The stormwater management plan has been designed to integrate and support natural features (i.e.: existing specimen Garry Oaks and healthy site soils), mimic the existing hydrological processes and drainage patterns of the site, and protect neighbouring properties from large storm events. Flow paths, stormwater management features and calculations are shown on the Rainwater Management Plan (L1.02). The following plan illustrates drainage in the area surrounding the site. The following items describe drainage adjacent to the site (i.e. in the watershed, of which the site is a part).



## Local Area Drainage Plan (from District of Saanich web map data)

1. The small ditch running along Douglas Street drains intercepted runoff (water that flows through the soil and discharges into the swale) from the site. It also collects runoff from half of Dieppe Road along its length. It does not drain the larger watershed (yellow area) which is conveyed by a large storm drain (identified as 3 on the drawing).
2. The ditch on Dieppe Road drains runoff from the Caen Road catchment area. It conveys water to a drain that flows under the road before discharging into Gabo Creek.
3. This storm drain system collects runoff from the yellow catchment area. Eventually the collection system runs under Douglas Street and then is diverted under the Pat. Bay Highway. The site does not discharge into this system.

The site currently consists of an existing commercial operation at the low end of the property along Douglas Street, sloping grassed areas with two residential units and a few out buildings at



# 4247 Dieppe Road Development – Stormwater Statement

the centre of the site, and a wide high tension power line corridor running along the property's south edge. Three large Garry Oak trees exist on site, with most other vegetation having been removed and replaced with non-native grasses.

## Building Drainage Management Intent:

Water collected from building roofs will be piped to the rain gardens positioned strategically throughout the site (see Sheet L1.02). The rain gardens are sized to accommodate 200 m<sup>3</sup> of runoff per hectare of impervious area (as per District of Saanich Stormwater Bylaw-Schedule H). Rain gardens will be designed with underdrains and a high-capacity overflow drain or beehive grates that will be connected to the onsite piped drainage system. Although designed with underdrains, the rain gardens are expected to also infiltrate some water into the existing native site soils – this is a positive system process that will aid in supplementing base flows to Gabo Creek.

## Road and Landscape Drainage Management Intent:

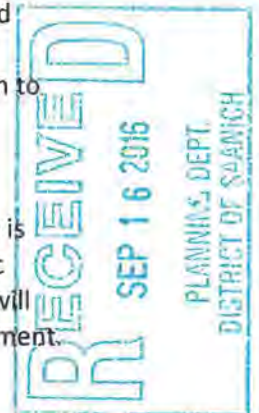
The existing swales along Douglas and Dieppe Roads will be filled in to allow construction of the sidewalk and expansion of the roadway. The Douglas Road swale is very shallow and probably functions to remove pollutants from the road runoff. The Dieppe Road swale is very deep and sees large flows from the Caen Road catchment area, with limited water treatment potential. The rebuilt streetscape will include rain gardens to manage pollution loads and volume from the road runoff. The sections of Dieppe Road and Douglas Street adjacent to the site, will be drained towards two large rain gardens positioned in the boulevard strip between the curb and sidewalk on the south and east sides of the roads respectively.

Water collected from roads and driveways within the site will be directed to the same rain gardens as roof drainage. Landscape areas are considered to be 'absorptive landscapes' and largely expected to manage rain water inputs, however, these surfaces will also be sloped towards rain gardens. In essence, the vast majority of surface drainage on the site will drain to rain gardens for water quality treatment and volume control.

The stormwater system was collaboratively designed with input from landscape architects, arborists, civil engineers and architects. Wetlands and ponds will not be used since the site is relatively steep. Rain gardens are an ideal infrastructure type for this site from an aesthetic perspective, and also from a functional/hydrological perspective, and we expect that they will provide optimal water quality treatment performance, as well as effective volume management.

## Existing and Proposed Drainage – Key Elements:

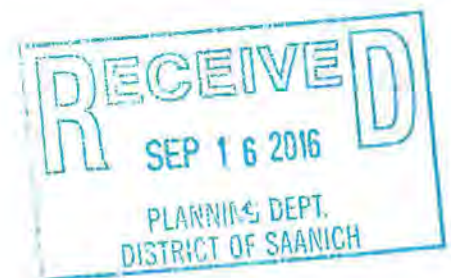
- a) The existing site is 3.14 hectares and supports a commercial operation with one large warehouse and several outbuildings, and two single family homes. Approximately 60% of the site is currently covered in grasses that are frequently mowed, and the existing buildings cover 3,973m<sup>2</sup>, or 13% of the site area. Total Existing Impervious Surface Area (ISA) is estimated at 29%, which includes several large gravel parking areas and driveways on the existing site. A major power line right-of-way runs along the south edge of the property, where buildings and tall vegetation will be restricted. Drainage from the existing commercial area and upland areas of the site are currently conveyed



## 4247 Dieppe Road Development – Stormwater Statement

through roadside ditches directly to Gabo Creek, which flows under the Patricia Bay Highway on its way to the Colquitz River.

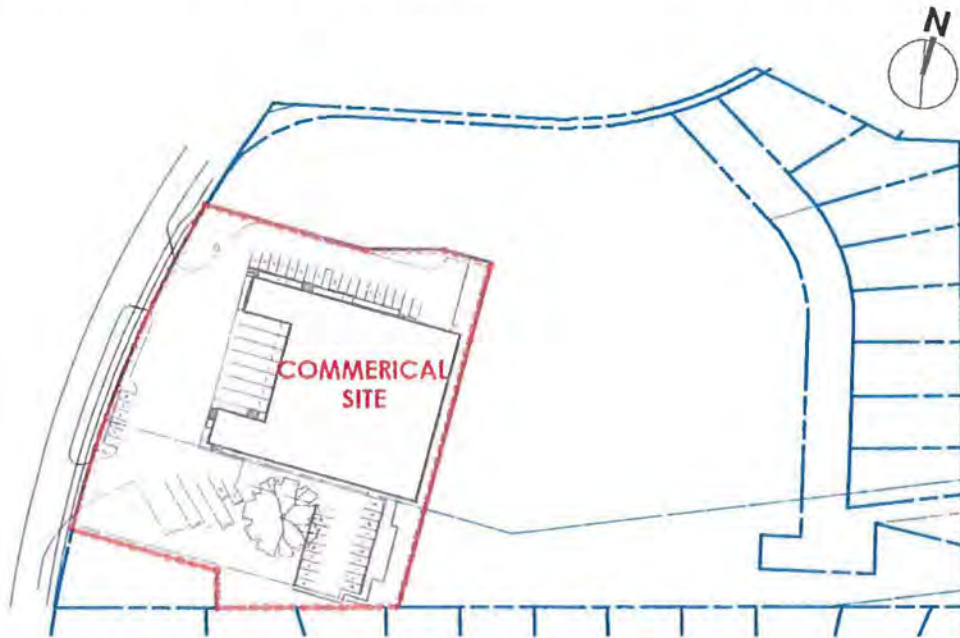
- b) Runoff from all impervious surface areas on the site (roofs, roads, and driveways) and from municipal roads fronting the property will be redirected into rain gardens strategically located throughout the site to manage pollution and slow water flow. Runoff from sidewalks and decks/patios will be managed in adjacent absorptive landscape. The rain gardens will treat runoff water for quality, and will provide storage to meet or exceed Saanich's Schedule H requirements.
- c) The proposed development will have approximately 15,528 m<sup>2</sup> of Impervious Surface Area (or 49.4%). Runoff produced by the townhouse and single family home roof areas (6,815 m<sup>2</sup>) and all driveway, parking area, road, and patio areas (8,713 m<sup>2</sup>) within the site will discharge into rain gardens. The exception is a small section of Road A that will use permeable paving to manage runoff to meet District of Saanich standards. The remaining walkway areas and patios that are exposed to rain will drain to Absorbent Landscape areas. Runoff from Fee Simple Lot will be managed to meet District of Saanich Stormwater Bylaw Standards, using a rain garden or bioswale (to be detailed at time of Building Permit application).
- d) Native and adapted non-native (non-invasive) plant material will be used in proposed landscape improvements to enhance vegetation cover and increase on-site rainwater interception. The three existing mature Garry Oaks will be retained and will also contribute positively to help reduced site runoff.





# 4247 Dieppe Road Development – Stormwater Statement

## Islands West Commercial Site: Existing and Proposed Drainage – Key Elements:



- a) The existing commercial site is 0.9 hectares and supports a commercial operation with one large warehouse and associated outbuildings. Total Existing Impervious Surface Area (ISA) is estimated at 47%, which includes a large gravel parking areas and driveways on the existing site.
- b) The proposed commercial property will have approximately 5329 m<sup>2</sup> of Impervious Surface Area (or 59%). All runoff produced by roof and parking areas within the site will discharge into rain gardens. The exception is a small section of parking that will use permeable paving to manage runoff to meet District of Saanich standards.





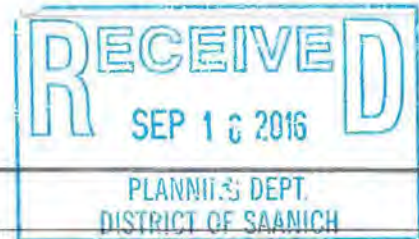
# BUILDING CODE INFORMATION SHEET

*In order to reduce or eliminate costly design changes later in the development review process, please complete this form and attach a reduced site plan or key plan with a separate information sheet for each building in the project.*

SITE ADDRESS: <u>4247 Dieppe Road</u> SUITE #: _____ PROJECT: <u>Islands West Processing Facility</u>	PERMIT #: _____ ISD FILE: _____
INTERNAL USE ONLY	
TYPE OF WORK: NEW BUILDING <input checked="" type="checkbox"/> ADDITION <input type="checkbox"/> ALTERATIONS <input type="checkbox"/> TENANT IMPROVEMENTS <input type="checkbox"/>	DESCRIPTION: _____
EQUIVALENCY REPORT: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	DEVELOPMENT PERMIT: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

BC BUILDING CODE (CURRENT EDITION)	<u>BC Building Code - 2012</u> PART 3 <input checked="" type="checkbox"/> PART 9 <input type="checkbox"/>	
BUILDING AREA (S) (AS DEFINED BY THE BC BUILDING CODE)	<u>2575 m2</u>	
GROSS FLOOR AREA	<u>3930m2</u>	NO. OF STOREYS <u>2</u>
FIREWALL(S)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	RATING OF FIREWALL(S) _____
NO. OF STREETS FACING	<u>1</u>	

<b>CONSTRUCTION REQUIREMENTS</b>			
MAJOR OCCUPANCY CLASSIFICATIONS (CIRCLE ONE OR MORE)		A-1, A-2, A-3, A-4, B-1, B-2, B-3, C, <b>(D)</b> , E, F-1, <b>(F-2)</b> , F-3	
BUILDING CLASSIFICATION (S) (ARTICLES 3.2.2.20 TO 3.2.2.88 OR SUBSECTION 9.10.8) 73 - Group F up to 4 storeys, increased area, sprinklered 3.2.2. 59 - Group D up to 3 storeys sprinklered OR 9.10.8 _____			
SPRINKLERED	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	NFPA STANDARD	<u>NFPA-13</u>
NON-COMBUSTIBLE CONSTRUCTION REQUIRED?	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
FIRE RESISTANCE RATING OF BUILDING COMPONENTS:			
FLOORS	<u>1hr</u>	ROOFS	<u>n/a</u>
		MEZZANINES	<u>1hr</u>
SUPPORTING STRUCTURE	<u>1hr</u>		
NO. OF SUITES	<u>n/a</u>	FIRE RESISTANCE RATING BETWEEN SUITES	<u>n/a</u>
FIRE RESISTANCE RATING OF CORRIDOR	<u>n/a</u>		



**SPATIAL SEPARATION (SUBSECTION 3.2.3 OR 9.10.14)**

	AREA OF EXPOSING BUILDING FACE	RATIO L/H H/L	LIMITING DISTANCE (M)	OPENING % PERMITTED	OPENING % PROPOSED	CONSTRUCTION OF EXPOSING BUILDING FACE		
						F.R.R.	NON-COMBUSTIBLE CONSTRUCTION	NON-COMBUSTIBLE CLADDING
NORTH	-	-	>9m	-	-	-	-	-
SOUTH	-	-	>9m	-	-	-	-	-
EAST	380m2	n/a	3m	22%	0%	-	-	-
WEST	-	-	>9m	-	-	-	-	-

MEZZANINE: YES  NO 
 INTERCONNECTED FLOORS: YES  NO

FIRE ALARM SYSTEM: YES  NO 
 STANDPIPE SYSTEM: YES  NO

EMERGENCY POWER: YES  NO 
 OCCUPANT LOAD: (SUBSECTION 3.1.17) 203\*

ACCESSIBLE FOR PERSONS WITH DISABILITIES? YES  NO

WATER CLOSETS PROVIDED, IN TOTAL (SUBSECTION 3.7)
   
 MALE 4 FEMALE 3
  
 + 3 non-gendered w/c
   
 1 water closet
   
 + 1 accessible toilet compartment per sex provided

NUMBER OF ACCESSIBLE WATER CLOSETS \_\_\_\_\_

ACCESSIBLE TOILET ROOM PROVIDED (SUBSECTION 3.8.2.3) YES  NO

**EXPLANATORY INFORMATION:**
  
 \*Please see sheet A001 for occupant load calculation breakdown.

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FORM COMPLETED BY: Nicole Basich

DATE: September 1st, 2016

PHONE : OFFICE 250-658-3367

CELL \_\_\_\_\_



January 21, 2014

District of Saanich  
Parks and Recreation

Attention: Brent Ritson, Park Referral Coordinator

Dear Brent:

Re: **4247/4253 and 4255 Dieppe Road; REZ00515 & DPR00543**

As requested in your deficiency memo of October 17, 2013, I am writing to confirm that I have reviewed the most current architectural, landscape, site servicing and grading plans for this project with the design team and that all tree-related conflicts have been resolved satisfactorily.<sup>1</sup> I have embedded our response to each of the points within the text of your memorandum (see attached).

I have also revised the Gye and Associates Tree Plan drawing to reflect several new building, site servicing, rain-garden and pathway adjustments away from affected trees.

Also attached are a sheet of tree x-sections from the Landscape drawings and a sheet of elevations of Building 9 from the Architectural drawings, which illustrate the adjustments we have made to grades within the protected tree root zones.

Yours truly,

Jeremy Gye - Consulting Arborist  
I.S.A. Certification # PN-0144  
I.S.A. Municipal Specialist Certification # PN-0144AM  
PNW-ISA Certified Tree Risk Assessor Certification # 0016

<sup>1</sup> All drawings current as of January 16, 2014



Urban Forests by Design



T (250) 544-1700  
jgye@shaw.ca  
www.gyeandassociates.ca





PARKS AND RECREATION  
Parks

## Memo

To: Shari Holmes-Saltzman, Planner  
From: Brent Ritson, Park Referral Coordinator  
CC: Park Referral Team, JB, Plansec  
Date: October 17, 2013  
Subject: 4247/4253 and 4255 DIEPPE ROAD; REZ00515 & DPR00543  
- PARK REFERRAL RESPONSE

### Description:

To rezone from A-1 & M-5 to RS-4 and RS-6 for nine SFD and to a new site specific zone for 33 townhouses and one parcel for food processing warehouse use.

The Information Package included an arborist report written by Jeremy Gye of Gye and Associates Ltd. dated January 28, 2013.

In accordance with our Service Level Agreement with Planning, Parks has reviewed this application and provide the following response:

### I Site/Tree/Service Plans:

1. The Site plan showing existing trees and other features appears accurate for the information shown. Existing trees important to Saanich are the three Garry Oak trees.
2. The existing and future servicing Information provided by the applicant is more thorough than we typically receive at the early application stage.
3. Landscape drawing L1.01 shows the future planting over top of a ghosted site servicing plan. In some locations there appears to be proposed trees located in conflict with proposed services. ***Architectural, Landscape and Civil Engineering (site servicing and grading) drawings have all been reviewed as of January 16, 2013. All conflicts, including those identified herein, have been successfully resolved.***

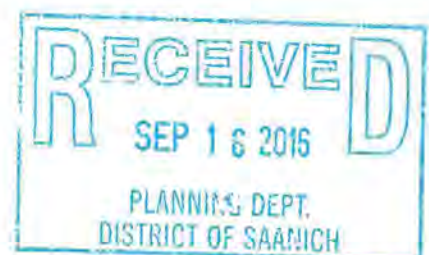




## II Trees and Landscaping:

Note: all existing trees in a development permit area are protected by Section 3(c) of the Tree Preservation bylaw. All trees shown to be retained when the DP Is approved are also bylaw protected. Newly planted trees are protected through the development permit.

1. The applicant's ISA certified arborist is Gye and Associates. They have provided a Tree inventory and mitigation report dated January 28, 2013 for the preservation of the three Garry Oaks based on site Investigation to determine impacts to the oaks.
2. The methodology of Gye's assessment has included working with the design team of Architect, Engineer, and Landscape Architect to design with preservation of the Garry Oaks In mind including the repositioning and reduction of townhouse units, and relocation of underground services. The January 28, 2013 report included the following statements: "Based upon the results of this assessment, we recommended changes to the original site plan..." and "These recommendations have been accepted by the design team and are reflected in the current site layout. It is not clear as to whether the drawings received by Saanich Planning on August 22, 2013 and are the subject of this memo are the drawings supported by the arborist. We recommend the project arborist is asked to review the current plans and if appropriate provide a letter indicating his support. **Completed. See note above, p.1**
3. In the previous memo Saanich Parks requested X-sectional details to be shown through the centre of each of the 3 oaks. The Information Is now shown on L3.01. The X sections satisfy our concerns with the exception that detail FF appears to use existing grades Instead of the proposed grades. Please revise section FF to show proposed grades. **Completed. See revised Landscape sheet L3.01, which corrects x-section FF and includes an additional x-section of tree 622.**
4. On Oct. 9, 2013 Rob Hughes and Brent Ritson visited the site to Inspect the 3 Garry oak trees. We met with Scott Murdoch and Wayne Fatt The following was noted:
  - a. Garry oak # 605: Extension of canopy towards proposed building #1 - 10.0 m, distance of proposed building #1 from oak 14 m = no clearance issue. Extension of canopy towards proposed truck parking bay - 11.5 m, distance of proposed truck parking bay 12.25 m = no clearance Issue. Two lower limbs on the building side that are approx .25 m & .15 m in diameter will likely need to pruned off to provide



clearance over the driveway to the upper parking area. This is acceptable. One lower limb on the easterly side that is approx .25 m In diameter will likely need to be pruned off to provide clearance over the upper parking area. This is acceptable. We agree with the recommendations provided in the Gye report to mitigate construction Impacts within oak # 605's root zone.

- b. Garry oak # 622: Planted by Wayne Fatt. Extension of canopy easterly towards proposed building #2 - 5.2 m. distance of proposed building #1 from oak 7.0 m = close, but workable. Storm water retention area to west scales off the drawing to be 6.25 m from oak #622, which has a PRZ of 9 metres. Please either relocate the storm water retention area so it is outside of the PRZ or prove to Saanich the Incursion into the oak's root zone will not impact the tree. **Drain line has been relocated.** ~~Drain line from building #9 scales off the drawing to be 7.0 m from oak #622. Please either relocate the storm water retention area so it is outside of the PRZ or prove to Saanich the incursion into the oak's root zone will not impact the tree.~~ **Deletion authorized by Brent January 9<sup>th</sup>, 2014, by e-mail. See item 4e below.**

c. Garry oak # 622: Drawing A2.1 Northwest corner of building 2 - existing grade 18.33 finished grade 18.80, therefore grade increase of .47 m. Southwest corner of building 2- existing grade 18.48 finished grade 18.75, therefore grade increase of .27 m. The proposed grade increase is not acceptable; please change the finished grades so there is no fill placed in the oak's root zone. **Finished grades have been so adjusted.**

d. Garry oak# 613: Drawing A9.1 Extension of canopy towards proposed building #9 - 7.8 m, distance of proposed building #9 from oak 8.5 m = very tight and likely Insufficient space for construction and likely to be unacceptably close for future owners. Can the building be shifted to provide at least 2 m of clearance from the canopy? **Building 9 has been adjusted to a distance 10.25m from Tree 613.** The tree is an excellent specimen that has branches that extend to within approx 1.5 metres of the ground. The low canopy will make construction of the proposed path way difficult. We recommend the path way is not placed under the tree but extended directly towards Dieppe Rd. **Pathway has been so re-routed.** Northerly corner of building 9 - existing grade 21.84 finished grade 22.50, therefore grade increase of .66 m. The proposed grade Increase is not acceptable; please change the finished grades so there is no fill placed in the oak's root zone. **Finished grade of Building 9 has been adjusted to avoid fill.**





- e. Garry oak# 613: Drawing L1.01 A storm drain line is proposed through the tree's protected root zone that has a radius of 10 metres. The proposed drain line scales to be approx 6 metres from the oak. Saanich Parks preference is to have the drain line relocated to be totally outside of the PRZ. If that can not be accomplished the drain line must be shifted as close as possible to the building and excavation for the trench to accommodate the pipe shall be done by an arborist using an Air-Spade. **Drain line has been relocated outside protected root zone of Tree 613.** The proposed sidewalk on the public road allowance is approx 3.5 m from oak #613. The portion of the sidewalk within the oak's root zone shall be "floated" over the area and built under the supervision I direction of the project arborist. **Confirmed.**
5. Schedule I requirements for the existing public boulevards are for one medium to large growing shade tree for every 15 linear meters. Adequate clearance from driveways, sidewalks and utilities will be required to accommodate the greatest number of properly spaced trees. **Confirmed.**
6. Saanich Parks is pleased to see Garry oak chosen as a tree to be planted on the public boulevard. We would prefer to have the Garry oak trees be specimens that are from local stock.
7. Drawing L1.01 states all street trees to be watered with drip irrigation on a separate zone. We recommend boulevard Irrigation is supplied from the manufacturing / warehouse property. Continuity of ownership makes it less likely the irrigation will be turned off before the trees are established. **Confirmed.**
8. The development of the site will require a large amount of re-grading which means native soil will, in some situations, not be undisturbed or available for tree planting. Care will need to be taken to ensure there is adequate soil volume available to each tree as per the recommendations found in the current edition of the BCSLA Landscape Standards eg 10 cubic metres per tree. It is noted that the Tree Planting Detail shown on L3.01 states "Place 2 cubic metres of growing medium per tree" Please confirm the BCSLA Landscape Standards will prevail. **Soil volumes specified on Tree Planting Detail has been updated to reflect current BCSLA standards of 10 cubic metres per tree.**

Park and Trail:

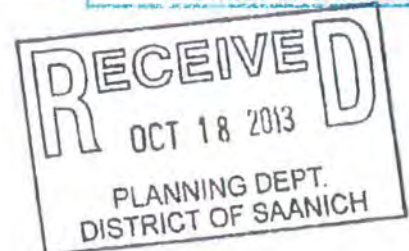
- There are no parkland or trail opportunities on this site.



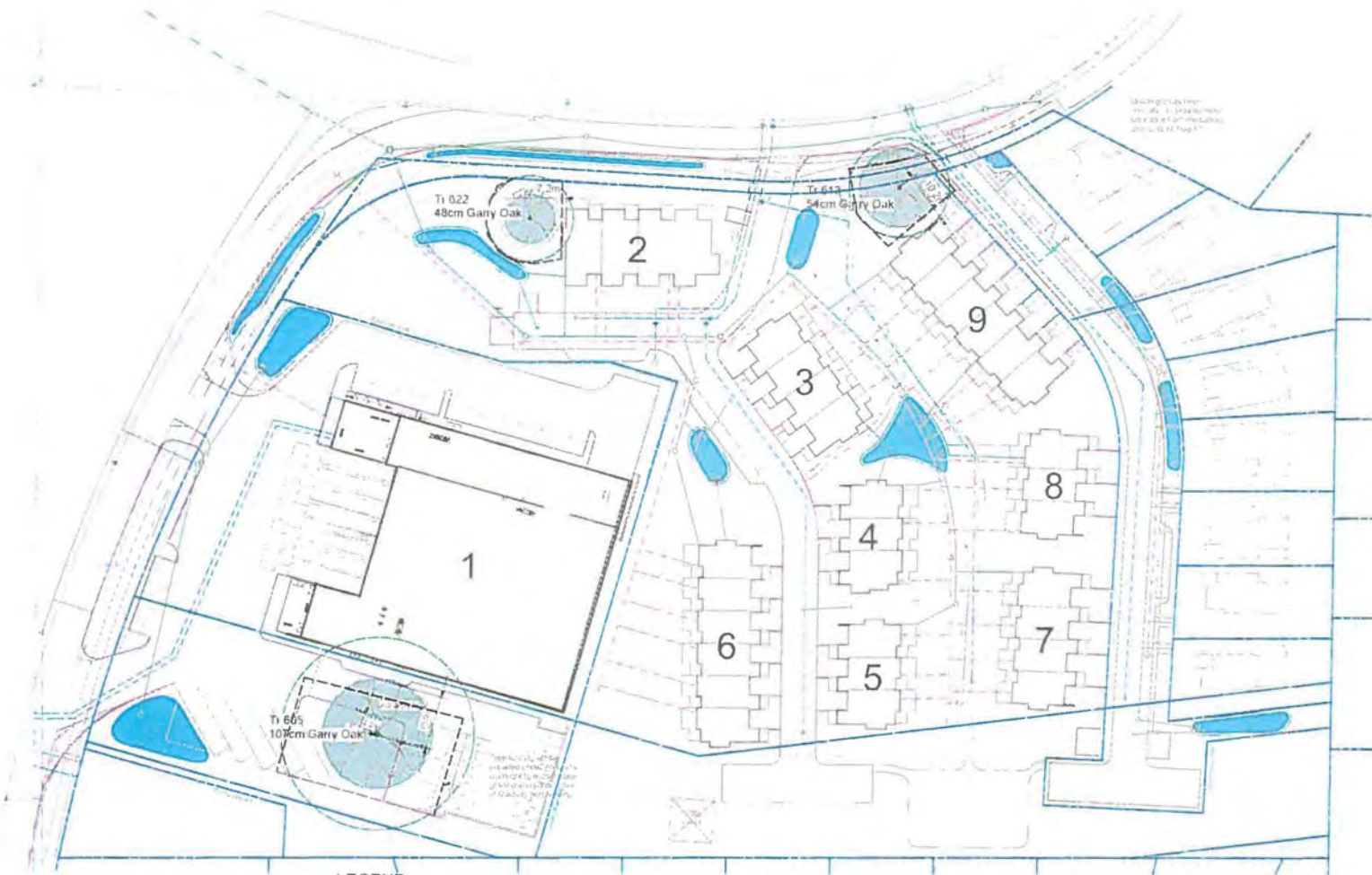
- A cash-in-lieu parkland contribution is recommended.
- Further discussion on amenity contribution is required.



Brent Ritson, Park Referral Coordinator,  
Saanich Parks







10/20/2015 10:00 AM  
 10/20/2015 10:00 AM  
 10/20/2015 10:00 AM

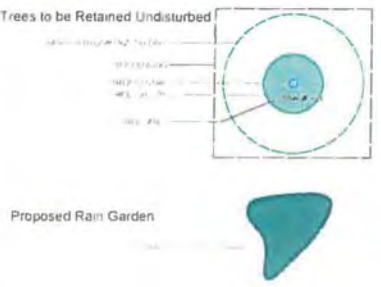
**TREE PRESERVATION MEASURES**

1. The existing tree locations shown on this plan are to be preserved and maintained in accordance with the provisions of the Saanich Tree Protection Bylaw (2012) and the Saanich Tree Protection Act (2012).
2. Any new tree locations shown on this plan are to be planted in accordance with the provisions of the Saanich Tree Protection Bylaw (2012) and the Saanich Tree Protection Act (2012).
3. The existing tree locations shown on this plan are to be preserved and maintained in accordance with the provisions of the Saanich Tree Protection Bylaw (2012) and the Saanich Tree Protection Act (2012).
4. The new tree locations shown on this plan are to be planted in accordance with the provisions of the Saanich Tree Protection Bylaw (2012) and the Saanich Tree Protection Act (2012).

Tree Protection Fencing Detail  
 Manual Tree Protection Fencing shall be constructed with a 2x4 frame and supports. (See photo below). Small fencing will then be added to the frame using zip-ties, staples wire or nails. All weather signage will be attached, clearly marking the area within as a TREE PROTECTION AREA - NO TRESPASSING.



**LEGEND**



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 DISTRICT OF SAANICH

Architect:  
 Jay Hixon & Kimball Architecture  
 Landscape Architect:  
 Moushumi K. Ghosh  
 Civil Engineer:  
 W&J Consulting  
 Consulting Arborist:  
 Greg S. Butler  
 Gyeon Associates Ltd.

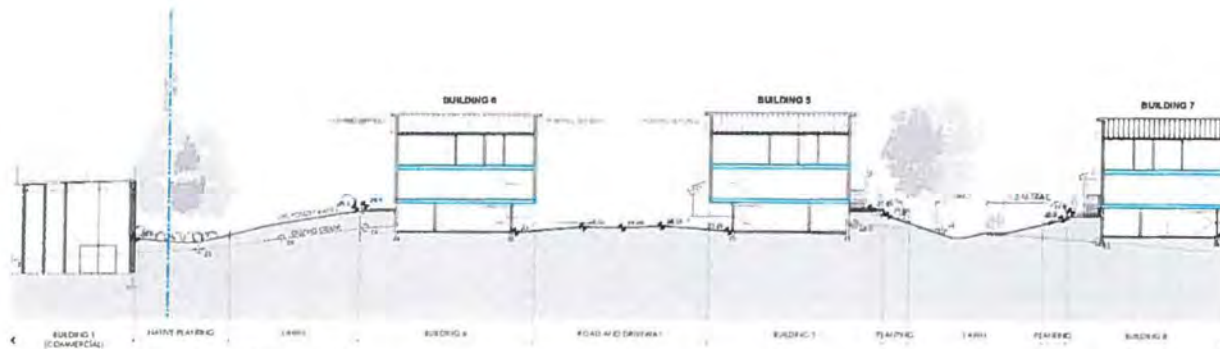


PROJECT:  
 4347 Deppe Rd  
 Saanich, BC  
 SHEET NO:  
 Tree Plan

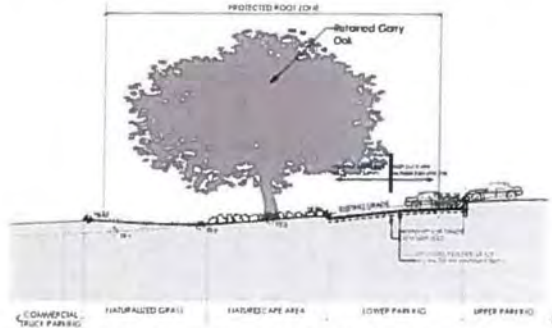
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SCALE:	1:1



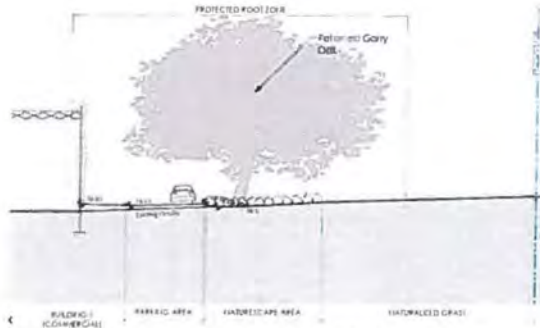
SECTION AA' - SCHEMATIC SECTION THROUGH BUILDINGS 4 & B



SECTION BB' - SCHEMATIC SECTION THROUGH BUILDINGS 1, 5, 6 & 7



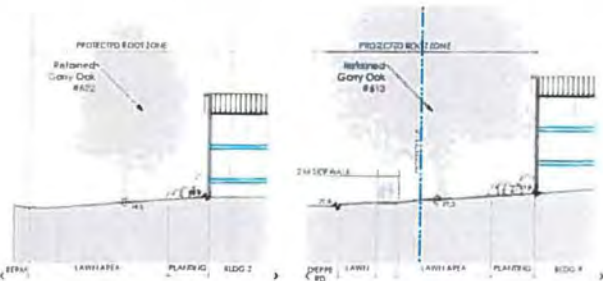
SECTION CC' - SCHEMATIC SECTION THROUGH EXISTING GARRY OAK #605 TO BE RETAINED



SECTION DD' - SCHEMATIC SECTION THROUGH EXISTING GARRY OAK #605 TO BE RETAINED



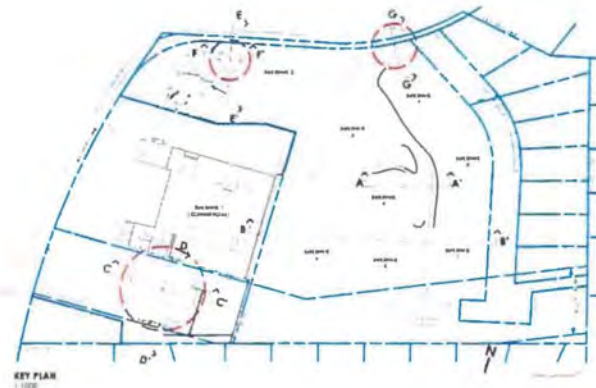
SECTION EE' - SCHEMATIC SECTION THROUGH EXISTING GARRY OAK #622 TO BE RETAINED



SECTION FF' - SCHEMATIC SECTION THROUGH EXISTING GARRY OAK #622 TO BE RETAINED



SECTION GG' - SCHEMATIC SECTION THROUGH EXISTING GARRY OAK #613 TO BE RETAINED



KEY PLAN 1:1000

PRELIMINARY  
NOT FOR CONSTRUCTION

#	DEV PERMIT REV	14.01.20
1	DEV PERMIT REV	13.12.21
2	RELA PERMIT	13.08.16
3	DEV PERMIT	13.04.21
REV NO	DESCRIPTION	DATE



Client  
**Dieppe Rd Hldgs**  
4247 Dieppe Rd  
Victoria B.C. V8K 2H2

Project  
4747 Dieppe Road  
Saanich, B.C.

Sheet No.

**Landscape Sections**

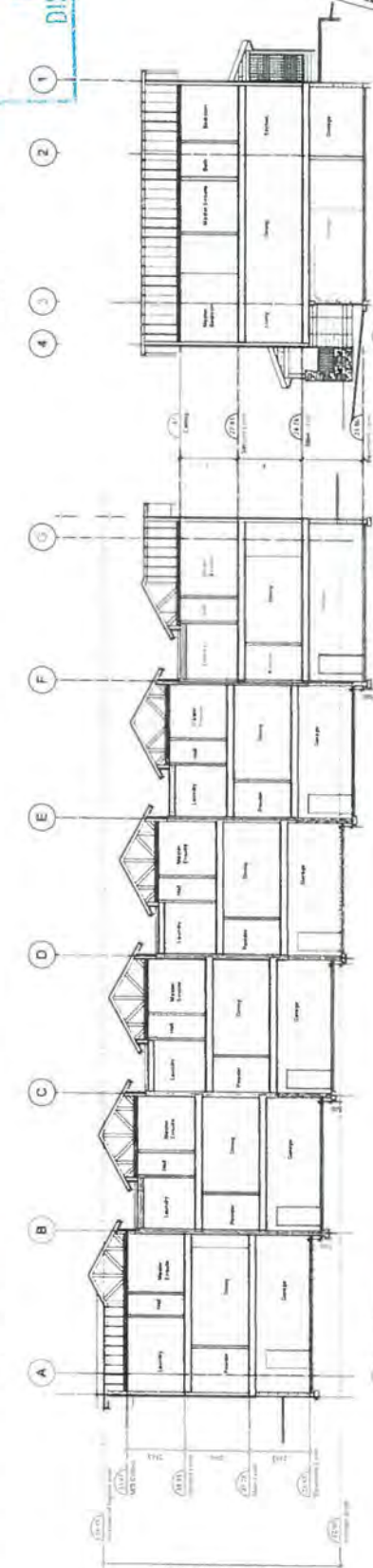
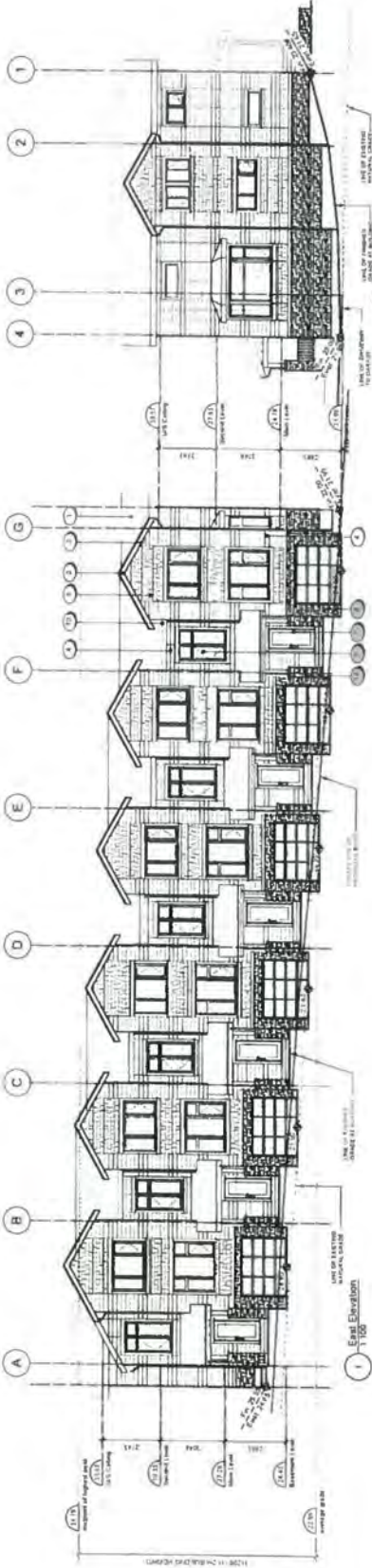
PROJECT NO.	14223
SCALE	1:200
DRAWN BY	MA/NA
CHECKED BY	MA/NA
DESIGN NO.	14223
SHEET NO.	4

**L3.02**





- MATERIALS SCHEDULE**
- 1. ASPHALT / GRANITE / FRENCH SLATE
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  - 100. ASPHALT / GRANITE / FRENCH SLATE



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DISTRICT OF SAANICH



KEY PLAN

**A9.3**

Building 9 Elevations & Sections

4247 Dieppe Road

Project No. 1218  
January 15, 2014  
de Hoog & Klarndorf architects



# *Gye and Associates Ltd.*

*Consultants in Urban Forestry and Arboriculture*



January 28, 2013

District of Saanich  
Parks Department  
Attention: Ron Carter  
Park Referral Coordinator

Dear Ron:

Re: 4247 Dieppe Rd.  
Tree Protection Planning

**Background:**

A rezoning and development permit application is being prepared for this site by de Hoog & Kierulf Architects on behalf of Dieppe Road Holdings Ltd. Currently the site is made up of a commercial building with two single family homes. The redevelopment application will propose one commercial building, 9 strata single family lots, and 33 strata town homes (see attached Tree Plan drawing).

**Protected Tree Resource:**

This site is sparsely treed. There are three trees of significance, all Garry Oaks protected under the Saanich Tree Protection Bylaw. The three oaks in question are located on the accompanying Tree Plan drawing. All three trees are in good health and structural condition and worthy of preservation.

TABLE-1

Tag #	Common Name	DBH (cm)	PRZr (m)	Canopy Spread (m)	Health	Structural Condition	Action
605	Garry Oak	107	19	22	Good	Sound. No significant defects	Retain
613	Garry Oak	54	10	12	Good	Sound. No significant defects	Retain
622	Garry Oak	48	9	16	Good	Sound. No significant defects	Retain

**Proposed Site Plan:**

Preliminary site planning has been reviewed by Gye and Associates Ltd (G&A) for potential conflicts with the three protected oaks. In response to our comments, the architects, engineering and landscape consultants have worked with G&A to revise the original site plan to minimize impacts to the three protected oaks as much as possible. Adjustments have been made to the site layout and proposed grading around the trees, as well as to the placement and alignment of some site servicing.

595 WESTERN AVENUE, SUITE 100, VANCOUVER, BC V9E 3G7  
 TEL: (604) 273-1100 FAX: (604) 273-1101  
 WWW.GYEANDASSOCIATES.COM



Oak # 605:



Fig-1 (Oak # 605)

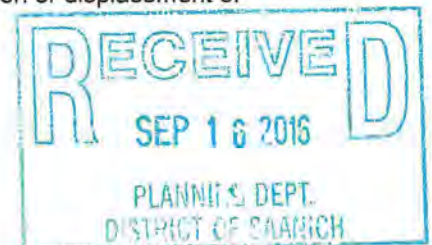
This tree faces the greatest challenges arising from the site plan. The tree is located within the building envelope in an area that must accommodate a new commercial building, two parking areas (one for semi-trucks and another for employee parking) and a drive-aisle connecting these three site elements (see attached Tree Plan drawing). It is impossible, given the size of the tree, to avoid encroaching within its protected root zone (PRZ); however, the current site plan represents the project design team's best efforts to minimize encroachment and associated impacts to the PRZ.

In developing the current design, we began by investigating the soil conditions and root structure (extent, depth, size etc.) within the PRZ. This was done in order to evaluate how much encroachment the tree could tolerate and to assist in developing appropriate mitigation measures. Accordingly, the soil profile, root depth and root extent were investigated through a series of soil pits on the north (most vulnerable) side of the tree. (See Appendix-2 for assessment methodology and details.)

Our investigation revealed a deep horizon of silty-loam soil, approximately 1m in depth, overlying a more consolidated clay soil. Small woody roots were present in the upper metre of soil at a low density. No roots greater than 20mm were found in the upper metre of soil. Larger roots began to emerge just below the transition point from silt-loam to clay. Rainwater seepage was observed along the top of the clay horizon.

Based on the results of this assessment, we recommended changes to the original site layout that included relocating a number of parking stalls, narrowing raising the grade of the drive-aisle using a pervious surface treatment within the PRZ. These recommendations have been accepted by the design team and are reflected in the current site layout. (See also attached Aqua-pave section detail.) Additionally, we recommend the following:

1. Excavation depth for the drive-aisle and parking areas should be minimized as much as possible and compaction of the native soils beneath the excavated sub-base should be avoided (or minimized). Use of geo-grid and a more generous lift of aggregate may be required to effect this outcome.
2. Site preparation within the PRZ must be supervised by the Project Arborist and carried out in such a manner as to minimize unnecessary rutting, compaction or displacement of growing-soils within the PRZ.



3. Protective tree-fencing should remain in place until site preparation with the PRZ commences under the supervision of the arborist and must be restored once work is complete.

Oak # 613:

The building placement of the townhomes to the south of this tree have been adjusted to minimize the encroachment into the PRZ. The drain from the catchbasin in the roadway located east of the tree feeds into a rain-garden to the west of the tree. Its alignment has been modified to minimize encroachment within the PRZ.

Oak # 622:

A townhome originally located to the south of this tree, which encroached within the PRZ, has been deleted. The placement of the remaining townhome to the east of the tree has been adjusted as much as possible to minimize encroachment. The raingarden to the west of the tree will be moved and/or reconfigured to stand outside the PRZ.

**Tree Protection Measures:**

Tree Protection Measures and a fencing detail have been included on the Tree Plan drawing.

Respectfully submitted,



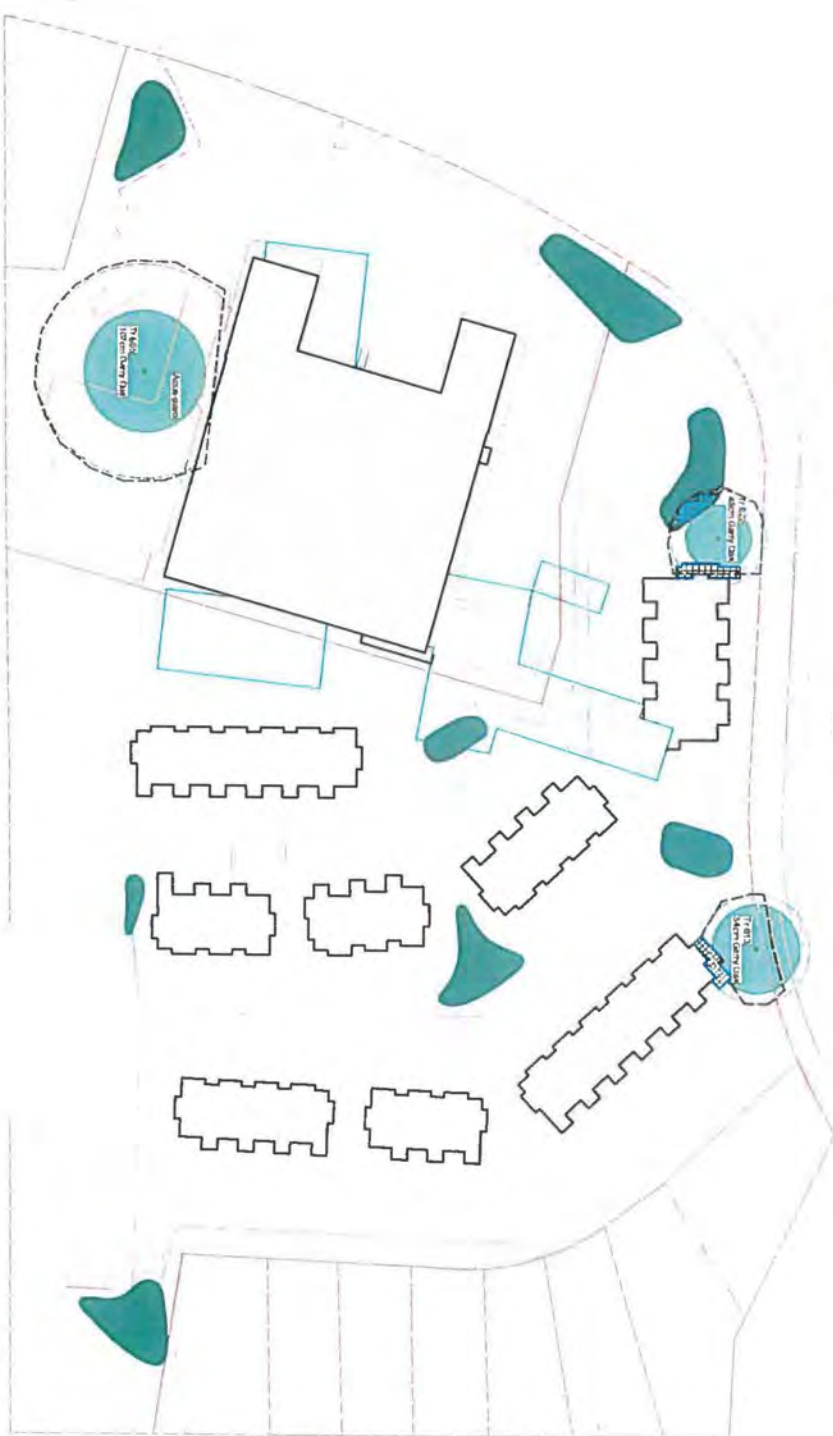
Jeremy Gye - Consulting Arborist  
I.S.A. Certification # PN-0144







**Tree Protection Fencing Detail**  
 Detail: Tree Protection Fencing shall be constructed with a 2' tall frame and  
 supports. The frame shall be 2' above ground and shall be attached to the frame  
 supports by means of a 2" x 2" x 1/2" galvanized steel pipe. The frame shall  
 be constructed of 2" x 2" x 1/2" galvanized steel pipe. The frame shall be  
 constructed of 2" x 2" x 1/2" galvanized steel pipe.

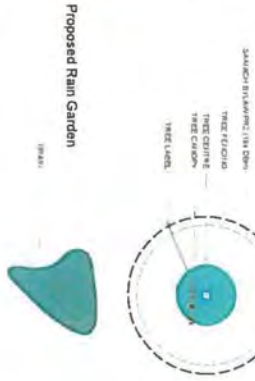


Disturbance area resulting  
 from building construction,  
 excavation and perimeter  
 fencing.

Disturbance area resulting  
 from building construction,  
 excavation and perimeter  
 fencing.

**LEGEND**

**Trees to be Retained Undisturbed**



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**TREE PRESERVATION MEASURES**

1. Tree Inventory shall be completed prior to any construction or ground disturbance throughout the site.
2. Any tree preservation measures shall be approved and supervised by the District of Saanich.
3. The District of Saanich shall be notified of any tree removal or significant tree damage.
4. Any tree removal shall be replaced with a new tree of similar size and species.

**Oil & Associates Ltd.**  
 4247 Dufferin Rd.  
 Saanich, BC

DATE: 12/20/15  
 TIME: 1:00 PM  
 SHEET NO: 01.1.1.4  
 SHEET: 1-1

## APPENDIX - 2

### Root and Soil Assessment:

Two soil pits were excavated with the assistance of a mechanical digger on the north side of Oak # 605. Understorey conditions were field grass.

The first pit was located 7.5m distance from the tree (*Fig-2*). The pit was dug to depth of 1m and was 3m in length. A 300mm horizon of displaced soil was observed, likely spread on top of the field surrounding the tree at the time the nearby Patricia Bay Highway was constructed. (This overburden diminishes in depth to meet the pre-existing or undisturbed grade at the base of the tree.) The soil texture of both the overburden and sub-soils to a depth of 700mm is a uniform silt loam with a narrow, nutrient-rich, Ah layer and a darkish brown sub-soil. A few number of small woody roots (<20mm) were observed in this layer of soil (*Fig-3*). No large woody roots (>20mm) were found in the upper 700mm of soil. A clay-dominated soil emerges below this layer, with a higher number of larger roots (20 – 40mm in diameter) observed just below the interface, along with seeping interflows of groundwater (*Fig-4*).



*Fig-2 (Oak # 605)*

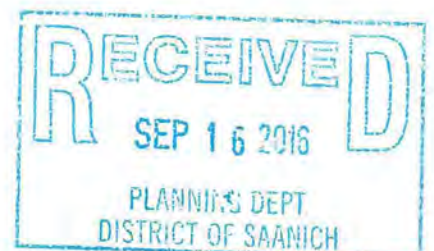




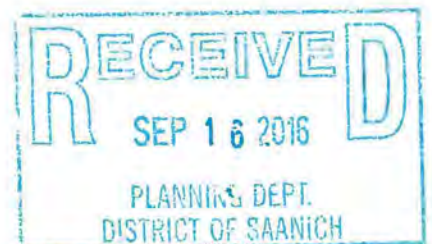


Fig-3 (Small roots from soil pit #1, Oak # 605)



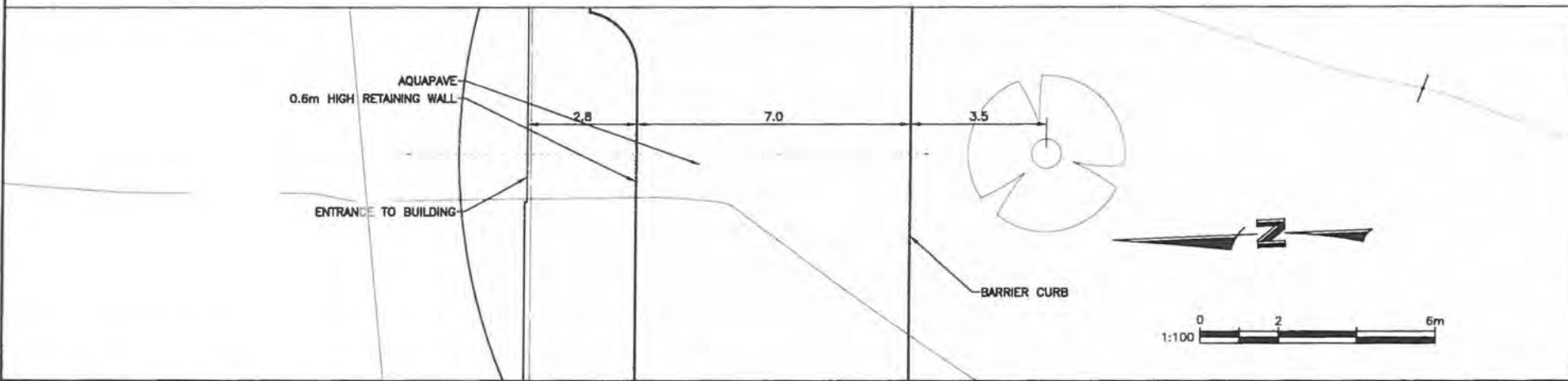
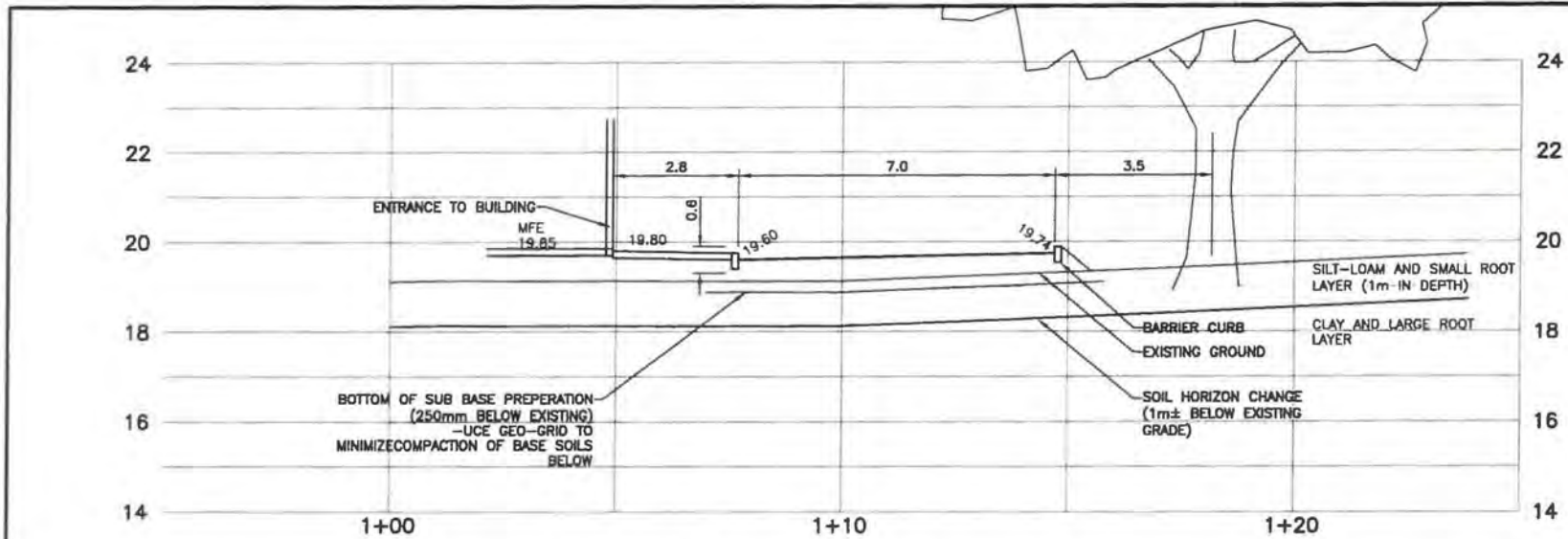
Fig-4 (Soil pit #1, Oak # 605)

Based on the results of the first soil pit, a second soil pit closer to the tree at a measured distance of 4.35m to a depth of 1m, with similar results. No large roots were found in the first 700mm of soil. A pressurized copper water pipe was uncovered at this depth, measured 4.34m from the base of the tree, aligned on a vector toward the centre of the base of the transmission tower at the top of the field.





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 DISTRICT OFFICE



REVISIONS			
No.	DESCRIPTION	DATE	SIGN
1	REVISED AS PER COMMENTS FROM GYE AND ASS.	13/01/28	PC

DESIGNED	PC
DRAWN	PC
CHECKED	
DATE	2013-01-08
B.M.	
ELEV.	
SCALE	Horz. 1:100
	Vert.


**WESTBROOK Consulting Ltd.**  
 #115 - 866 Goldstream Ave., Victoria, BC V9B 0J3  
 Telephone: 250-391-8592 Facsimile: 250-391-8593

PROJECT  
**DIEPPE**  
 ISLAND WEST PRODUCE  
 AQUAPAVE SECTION

WESTBROOK PROJECT No.		
2660		
GOVERNING AUTHORITY FILE No.		
SHEET	OF	REV.
1	1	1
WESTBROOK DRAWING No.		
FIG 1		

DPA00288 \*Copy\*  
SUB00717

Planning - Amend DPR00543 - 4247 Dieppe Road

✓ Clerks

From: "Haji Charania" [redacted]  
To: <planning@saanich.ca>  
Date: 10/4/2016 6:36 PM  
Subject: Amend DPR00543 - 4247 Dieppe Road  
CC: "Neil Findlow" <Neil.Findlow@saanich.ca>, "Jarret Matanowitsch" <Jarre...

Hello Saanich Planners,

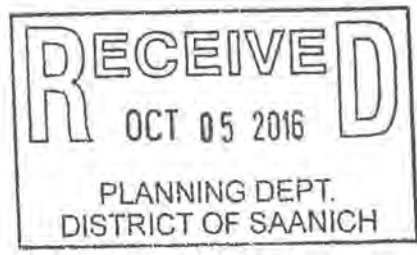
While the proposed amendments seem minor, we at North Quadra Community Association are not going to support these amendments. The staff and Council know that we have not supported the original project. Our reasons for not supporting the project t in the first place, and therefore, not supporting any amendments are very well known to Saanich staff and Council. The reasons are summarised below:

1. The approval was based on flawed Planners reports and very poor reasoning from Council.
2. The development and density did not comply with the North Quadra Local Area Plan.
3. Excessive density and major height variances were granted without seeking substantial amenity.
4. A right-of-way for future bicycle lanes along Dieppe Road was not sought, and therefore, not secured.
5. No sidewalk along Dieppe to Quadra was considered, and therefore, not obtained.
6. But most importantly, a fair Community Amenity Contribution was not asked for, and therefore, not received.

We have been extremely disappointed with the Planner's flawed reports and Council's poor decision. We believe this was one of the worst decisions Saanich council has made in the past 44 years for the North Quadra Area. A very meager and unfair Community Amenity Contribution was accepted; that left the existing community very impoverished. Very disappointing decision indeed!

Best regards. Haji Charania for North Quadra Community Associations.

SEEN BY	
JM	✓
NF	WMA
PLEASE INITIAL AND RETURN TO ADMIN	





The Corporation of the District of Saanich

Mayor  
Councillors  
Administrator

Council  
Administrator  
Media

# Report

**To:** Mayor and Council

**From:** Sharon Hvozanski, Director of Planning

**Date:** January 23, 2017

**Subject:** Development Permit Application  
File: DPR00647 • 3959 Shelbourne Street  
(Cancels DPR00384, DPA00705, and DPA00739)

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**PROJECT DETAILS**

**Project Proposal:** The applicant proposes to construct a new two-storey commercial building for a bank use. A Form and Character Development Permit is required. The applicant is also requesting variances for setbacks, parking, landscaping and signage.

**Address:** 3959 Shelbourne Street

**Legal Description:** Lot A, Section 57, Victoria District Plan EPP61288

**Owner:** First Capital Corporation

**Applicant:** Stantec Consulting Ltd. c/o Ross Roy

**Parcel Size:** 1,567 m<sup>2</sup>

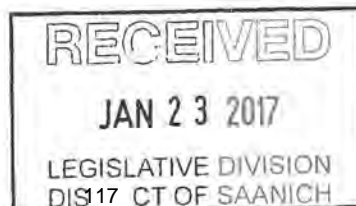
**Existing Use of Parcel:** Vacant

**Existing Use of Adjacent Parcels:**  
North: RA-3 (Apartment) Zone  
South: C-8 (Service Station) Zone  
East: C-3L (Shopping Centre/Major Liquor Retail) Zone  
West: C-8 (Service Station) Zone and C-3 (Shopping Centre) Zone

**Current Zoning:** C-2S (General Commercial Shelbourne) Zone

**Minimum Lot Size:** n/a

**Proposed Zoning:** n/a





**Proposed Minimum Lot Size:** n/a

**Local Area Plan:** Gordon Head

**LAP Designation:** Commercial

**Community Assn. Referral:** Referred to Gordon Head Residents' Association on May 9, 2016.  
 • Response received June 14, 2016 indicating generally no objections, however concerns were expressed that the proposal did not include a pedestrian entrance off Shelbourne Street and that the façade facing Shelbourne Street was unattractive.

## PROPOSPAL

The applicant proposes to construct a new two-storey commercial building for a bank use. A Form and Character Development Permit is required. The applicant is also requesting variances for setbacks, parking, landscaping and signage.

## PLANNING POLICY

### Official Community Plan (2008)

- 4.2.1.1 "Support and implement the eight strategic initiatives of the Regional Growth Strategy, namely: Keep urban settlement compact, Protect the integrity of rural communities; Protect regional green and blue space; Manage natural resources and the environment sustainably; Build complete communities; Improve housing affordability; Increase transportation choice; and Strengthen the regional economy."
- 4.2.1.2 "Maintain the Urban Containment Boundary as the principal tool for growth management in Saanich, and encourage all new development to locate within the Urban Containment Boundary."
- 4.2.1.18 "Encourage new development to achieve higher energy and environmental performance through programmes such as "Built Green", LEED or similar accreditation systems."
- 4.2.2.3 "Consider the use of variances to development control bylaws where they would achieve a more appropriate development in terms of streetscape, pedestrian environment, view protection, overall site design, and compatibility with neighbourhood character and adjoining properties."
- 4.2.2.4 "Through the development review process consider the use of variances and density bonusing to secure public amenities such as; open space, playgrounds, landmarks, focal points, activity centres or cultural features."
- 4.2.3.1 "Focus new multiple family residential, commercial, institutional and civic development in Major and Neighbourhood "Centres", as indicated on Map 4."
- 4.2.3.7 "Support the following building types and land uses in Major and Neighbourhood "Centres":
- Townhouses (up to 3 storeys)
  - Low-rise residential (up to 4 storeys)

- Mid-rise residential (up to 8 storeys)
  - Live/work studios & Office (up to 8 storeys)
  - Commercial and Mixed-Use (generally up to 8 storeys)”
- 4.2.8.10 “Encourage publicly accessible open spaces in new developments, such as plazas, walkways or small park nodes.”
- 4.2.9.15 “Ensure the pedestrian and cycling network in “Centres” and “Villages” is designed to accommodate projected population densities and associated activities such as, sidewalk cafes, public art, street furniture, and boulevard plantings.”
- 4.2.9.21 “Support the development and enhancement of transit in order to reduce the reliance on automobiles.”
- 4.2.9.25 “Support the use of Transportation Demand Management (TDM) by schools, institutions and major employers, to help reduce the reliance on automobiles, and make more efficient use of available parking and transportation resources.”
- 4.2.9.37 “Consider parking variance where one or more of the following apply:
- transportation demand strategies (TDM) are implemented;
  - a variety of alternative transit options exist within the immediate vicinity of the proposed development;
  - there is a minimal reduction in required parking;
  - the development is located in a “Centre”;
  - the availability of on-street parking.”
- 6.2.4 “Support a balanced economy by encouraging a broad range of commercial, service, research, high tech and industrial uses.”
- 6.2.5 “Focus new commercial development primarily to “Centres” and “Villages” (Map 4).”

#### **Gordon Head Local Area Plan (1997)**

- 6.1 “Restrict commercial development to existing commercially zoned sites identified on Map 6.1.” Note: the site is identified as ‘potential commercial’ on Map 6.1.”
- 6.3 “Consider rezoning 3959 Shelbourne Street for general office use.”
- 6.4 “Use development permits to ensure that new commercial development respects the scale of adjacent uses and the environmental character of Gordon Head.”

#### **Draft Shelbourne Valley Action Plan**

The subject property is within the study area for the draft Shelbourne Valley Action Plan (SVAP). Although the SVAP has not yet been adopted, draft policies relevant to this proposal should be considered.

- 4.3.11 “Where feasible, plant London Plane trees on boulevards along Shelbourne Street as an acknowledgement of the street’s designation as a Road of Remembrance.”
- 5.1.1 “Consider changes to use, density and height in the Shelbourne Valley based on designations identified on Map 5.1.”  
Note: Map 5.1 identifies the site as Mixed Use/Commercial at eight storeys.

- 5.3.2 “For properties designated as mixed-use / commercial require retail or other pedestrian-oriented commercial use on the main floor.”
- 5.3.3 “Encourage residential above the first floor in all properties designated for mixed-use/ commercial.”
- 5.7.2 “Locate all surface parking to the rear of new development and screen from view.”
- 5.7.3 “Locate short-term bicycle parking in convenient locations near primary building entrances.”
- 5.7.4 “Consider parking variances where contributions are made to enhance cycling, walking and transit infrastructure.”
- 6.1.13 “Provide pedestrian amenities such as benches and drinking fountains on major pedestrian routes and greenways, with a focus on linking higher density developments and seniors’ housing with major destinations.”
- 6.4.8 “Remove bus bays, where feasible, along Shelbourne Street to improve transit efficiency, improve bus stop areas, and create more ‘people space’ between the road edge and buildings.”
- 6.5.12 “Promote the use of electric vehicles, including through encouraging charging facilities in higher density developments.”
- 6.6.9 “Provide wide (4 to 6 metre), accessible pedestrian areas in front of buildings in the Valley’s Centres and Village, located within the right-of-way or partly on private property where direct building access is provided.”
- 7.2.1 “Evaluate development applications within the Planning Area (Map 7.1) using the Shelbourne Valley Design Principles.”

The Design Principles Include:

- 1 a) “Align building facades with the street to create a defined street edge.”
- 1 b) “Plant trees to create a continuous “green street” edge.”
- 1 c) “Encourage development where buildings and entrances are oriented towards the street.”
- 1 e) “Ensure commercial development is visually interesting, active, and scaled to human proportions. Blank walls and or dark or mirrored glazing is discouraged at street level.”
- 4 a) “Design and orient building entrances so they face, and can be seen from, the street.”
- 4 d) “Define pathways to lead pedestrians to building entrances.”
- 4 e) “Encourage the design of building entrances to support the comfort and pleasure of people through the inclusion of weather protection, seating and accessibility features.”



- 10 c) “Encourage buildings with commercial uses on the ground floor to have generous amounts of clear glass at ground level (>80%) facing the street.”
- 10 d) “Discourage the use of reflective coatings and films.”
- 16 a) “Include signs, lights, refuse and recycling containers, and weather protection in the design of bus stops and shelters.”
- 16 b) “Consider pavement treatments that differentiate bus stop areas from sidewalks.”
- 21 a) “Use architectural detailing in paving in the public realm as a strategy to help define and delineate public spaces.”
- 22 a) “Design commercial and mixed-use buildings to include weather protection in the form of overhangs, canopies, arcades and awnings along their frontages.”

### **Development Permit Area Guidelines**

The development proposal falls within the Shelbourne/McKenzie Development Permit Area. Relevant guidelines include: screening of parking areas, landscaping of Shelbourne Street frontage, a 20 m building setback from the centre line of Shelbourne Street, commercial buildings at a human scale to increase social interaction and create a vibrant pedestrian environment, treating buildings as an integral component of the streetscape and ensuring windows are not blanked out, creating public spaces, balancing all modes of transportation, and high quality architecture that incorporates varied elements and avoids large blank walls.

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## **DISCUSSION**

### **Neighbourhood Context**

The 1,567 m<sup>2</sup> lot is currently vacant and located one lot north of the McKenzie Avenue and Shelbourne Street intersection. The property falls within the core of the University major “Centre”. The proposed two-storey building would be adjacent to a one-storey gas station building to the south, and a four-storey mixed-use building to the east (Tuscany Village). A care facility (The Kensington) and residential strata (The Cumberland) are located on the adjacent property to the north.

Access to the subject lot would be from Shelbourne Street, via a “stub end” section of Teakwood Road. This western section of Teakwood Road services the subject site and Tuscany Village, but does not allow for through vehicle movement to the eastern section of Teakwood and the residential neighbourhood. A pedestrian pathway is provided for between the two sections of Teakwood.

The subject site is adjacent to an existing bus stop that serves approximately 1,000 riders per weekday. The Shelbourne corridor is one of the highest demand areas in the Victoria Regional Transit System with this bus stop being one of the busiest. Due to ridership demands, the Shelbourne corridor has a higher level of service at almost twice that of BC Transit’s “Frequent Transit” standards. Improvements to the pedestrian and cycling infrastructure along the Shelbourne corridor are also anticipated as a result of the draft Shelbourne Valley Action Plan.

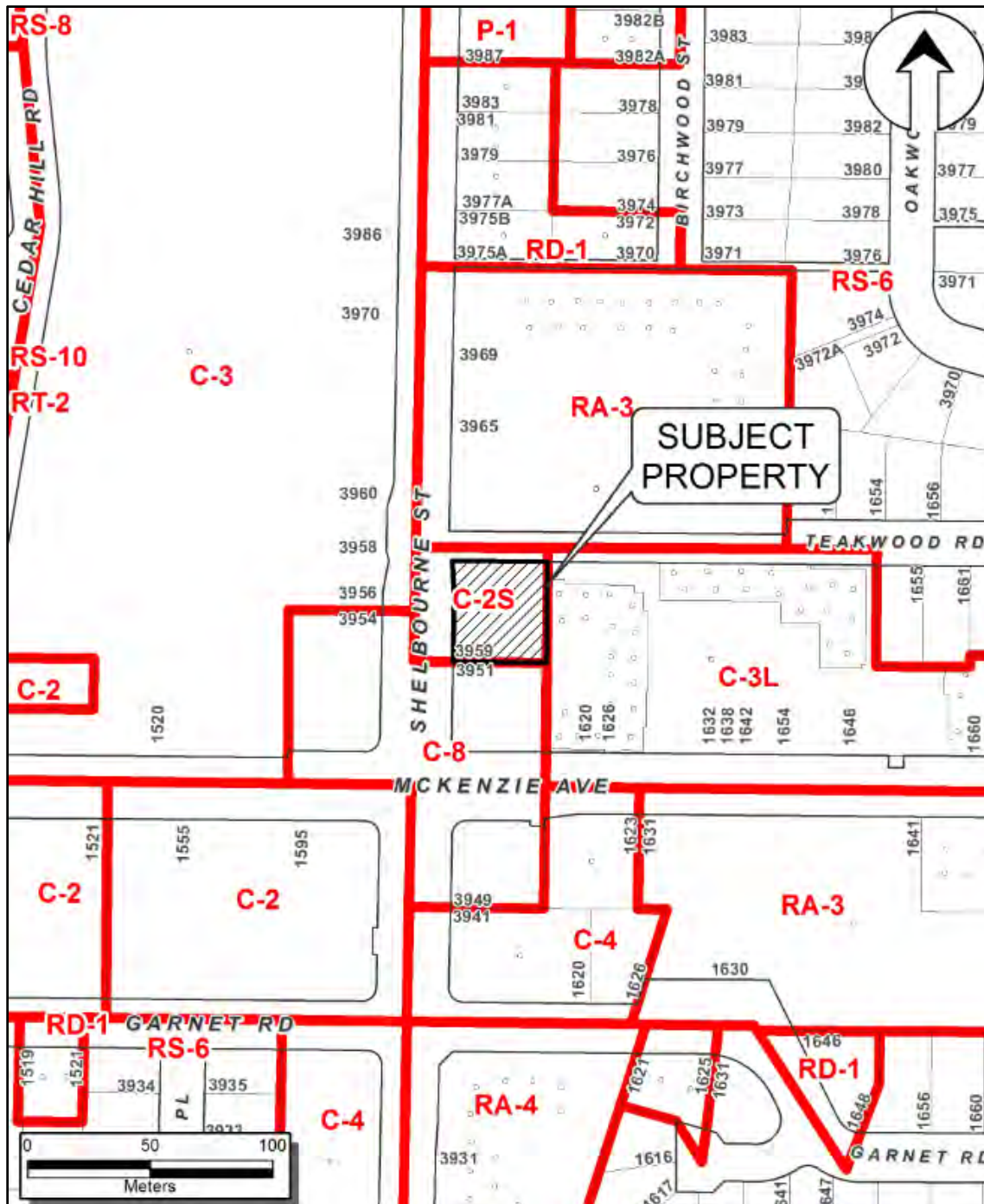


Figure 1: Context Map

**Land Use and Density**

The property is zoned C-2S (General Commercial Shelbourne) Zone and the proposed financial institution use is permitted. The tenant (Canadian Imperial Bank of Commerce) CIBC is proposing to relocate from their existing location at the University Heights Shopping Centre.

In terms of policy, the Official Community Plan (OCP) supports higher density (up to eight storeys) within the core of major “Centres”, where more compact development with a broader range of residential, community and commercial services is strongly encouraged. The draft Shelbourne Valley Action Plan also identifies the site for higher density land use, specifically a

six-storey mixed-use/commercial development. A higher density proposal was discussed with the applicant, however the applicant's preference is for a two-storey building with surface parking.

The subject site was rezoned in 2009 for a four-storey office/retail building with underground parking. If the subject development proposal is supported, the 2009 Development Permit and associated covenant would need to be discharged from the property's Title.

### **Site and Building Design**

The proposed development would be for the sole occupancy by the CIBC. The first floor would include traditional bank customer service and office areas, and the second floor, which would be a partial floor that is approximately 60% of the main level floor area, would be used for offices. The proposed building is based on a typical CIBC design and the exterior would include a brick veneer with metal accent panels in the standard CIBC red colour (see figures 2- 5).

The building has two entrances from the glazed entry vestibule, one oriented towards Shelbourne Street and the other oriented eastwards towards the parking lot. Glazing is proposed for all other elevations to a lesser amount, which is generally tinted along the lower level for privacy purposes.

A key consideration in the site design was accommodating improvements to public transit and pedestrian infrastructure. No improvements to the constructed vehicle portion of the roadway are required, however the frontage along Shelbourne has been designed to provide adequate waiting area for transit riders and a wider pedestrian pathway. A variety of options were explored, including the preferred option for an integrated approach where wide overhangs from the building face serve as bus shelters. The integrated approach was not acceptable to the CIBC for the following reasons: a preference to maintain a clear separation of the bus shelter from the building to simplify ongoing operations or future changes, uncertainty with respect to ongoing maintenance responsibilities, increased risk of misuse of the building face (i.e.; flyers, notices), security concerns, legal risks, and maintaining distinct branding/signage from transit service.

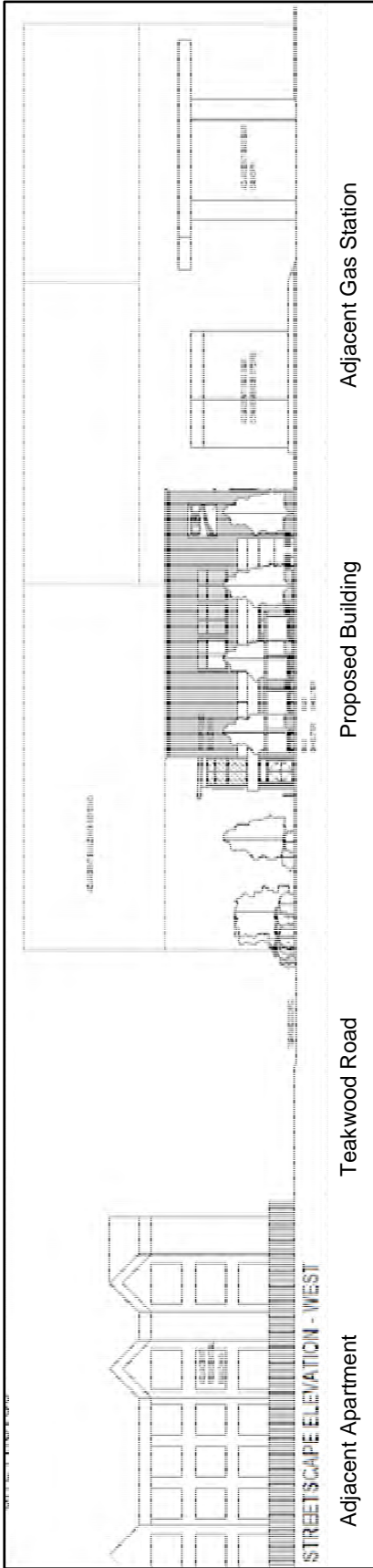
The current streetscape proposal would provide larger standalone bus shelters than currently exist, additional seating, and approximately 5 m of pedestrian/transit waiting area between the curb and building face. New boulevard trees would be incorporated into the main bus shelter area. Additional trees, an intensive planting area, seating and bike racks would be installed at the intersection of Shelbourne Street and Teakwood Road, to further enhance the public realm. Vehicle access would be off Teakwood Road with surface parking on the north and east portion of the site.

Typically having the most prominent elevation facing a main corridor, such as Shelbourne Street, would be encouraged. However, the applicant has chosen to design the project so that the Teakwood Road (north) elevation facing the parking lot is the more prominent façade. Although the Shelbourne Street frontage would not have the same level of architectural prominence as the north elevation, there would be an enhanced public realm along Shelbourne Street through the improved transit facility, a doorway into the bank directly off Shelbourne Street, improved landscaping, and an enhanced pedestrian environment.





Figure 2: Site Plan



**Figure 3: Streetscape of Proposed Commercial Building** (Provided by Stantec Architecture Ltd.)



**Figure 4: Rendering of Proposal – North East Corner** (Provided by Stantec Architecture Ltd.)





Figure 5: Proposed Building Elevations (Provided by Stantec Architecture Ltd.)



**Requested Variances**

The proposal includes variances for setbacks, landscaping, parking, and signage.

**Setback – Shelbourne Street:**

A 2.75 m variance to the required setback from Shelbourne Street is requested. Where the setback area is landscaped and not used for parking the required setback is 3.75 m. The applicant is proposing a setback of 1 m. The proposed variance is in large part required due to the land dedication needed along Shelbourne Street for mobility improvements, and the comparatively smaller size of the subject commercial parcel. In an attempt to mitigate the variance, the area between the proposed building and the street has been designed to create a substantially improved pedestrian and transit stop area. For the above-noted reasons, the variance can be supported.

**Setback – Interior Side Yard (Building):**

A variance is requested to reduce the interior side yard (south) setback from 3 m to 2.5 m. The Zoning Bylaw allows a building to be set back either between 0 m to 0.5 m from the lot line, or at 3 m or more. The proposed interior side yard setback variance relates to the property area between the subject development and the adjacent gas station. The subject side yard area would be landscaped. Shifting the building southward by 0.5 m would allow for more space in the northwest corner of the site for pedestrian improvements, and as such can be supported.

**Setback – Interior Side Yard (Bike Locker):**

A bike locker is proposed in the southeast corner of the site. A variance is requested to site the locker 1 m from the interior side lot line. The Zoning Bylaw allows a building to be setback between 0 m to 0.5 m from the lot line, or at 3 m or more. The requested variance would allow for valuable secure bike parking while enabling a landscaping strip to extend along the bike locker to the rear property line. The locker would be a relatively small structure located in corner of the parking area and have negligible impact on either neighbouring property. Given the above-noted reasons the variance can be supported.

**Landscaping – North Property Line:**

A variance is requested in regard to the landscaping strip along the north property line. The Zoning Bylaw requires that where commercially zoned properties abut a street opposite an RA (Apartment) Zone, a 1.75 m wide landscape area must be provided along the facing property line. The property to the north is zoned RA (the Kensington), therefore the landscape area is required along the northern boundary.

A small landscape area that is 1.5 m wide and 6.5 m long would be planted on the northeastern portion of the lot line, however no landscape area is proposed on the northwestern portion of the lot line adjacent to a drive aisle (approximately 17 m length).

The required width for a maneuvering aisle would not be achievable if the landscape area on the northwestern portion of the lot line adjacent to the drive aisle was required. In regard to the intent of the policy, namely visual buffering, the adjacent residential property across Teakwood Road does not face toward the subject site and there is a wooden fence and landscaping along the development's property line.

Given that a more intensive landscaped area would be provided at the corner of Teakwood Road and Shelbourne Street, the subject residential development backs onto Teakwood, and there is a solid panel fence and established landscaping along its property line, the variance can be supported.

Landscaping – Number of Trees in Parking Area:

A variance is requested for the number of trees required within the parking area. The Zoning Bylaw requires a certain number of trees based on lot area, and that 50% of these trees are in parking areas. Based on the subject lot area 13 trees are required. Thirteen on-site trees are proposed, however only one (7.5%) would be located in a parking area. The majority of the trees would be planted along the west and south property lines.

Given the relatively small commercial site, that landscaping is focused toward Shelbourne Street where it will be of most benefit to the public realm, and the addition of more trees in the parking area on this small site would further reduce the amount of parking, the variance can be supported.

Parking - Total Number of Stalls:

For a financial institution the Zoning Bylaw parking requirement is based on gross floor area. In the case of this property, the Bylaw requires 49 parking stalls, and 20 stalls are proposed (variance of 29 stalls).

The applicant has stated that as part of their lease agreement, the owner of the property would provide 15 underground parking spaces for CIBC staff to use at the adjacent Tuscan Village, which they also own. Approximately 18 to 20 staff would be working at any given time. The property owners have stated that the underground parking spaces at Tuscan Village are consistently underutilized and that a shared parking arrangement would not impact their operations on this site. Given existing lease conditions with key Tuscan Village client(s), a formal agreement to secure the shared parking in perpetuity is not possible. That being said, the single user of the proposed building is in a very good position to oversee and manage the parking of its staff, should this shared parking agreement ever cease to exist. In addition, the bank has a vested interest in ensuring its clients can easily find onsite parking.

Customer parking at banks typically has a high turnover rate. Finding parking on a one-use, stand-alone property, such as this one is generally not a problem. As more people do their banking online the number of in-person visits is also changing. As staff parking has been addressed through an offsite sharing agreement, concern over parking demands not being met on site is minimal.

The site location is also well serviced by alternative modes of travel, and as major "Centres" evolve to become higher density walkable neighbourhoods, travel by walking and cycling would become increasingly more attractive than travel by automobile. Both Shelbourne Street and McKenzie Avenue are key transit corridors. The Shelbourne Corridor is designated as a Frequent Transit Corridor with transit service every 15 minutes or better between 7 am and 7 pm Monday to Friday. McKenzie Avenue is designated as a Regional Route and is a Rapid Transit Priority Corridor. Service is provided every 15-60 minutes, with limited stops. Future improvements along the Shelbourne Street corridor will certainly enhance opportunities for these alternative modes of travel.

Given the above-noted reasons, the parking variance can be supported.

Parking - Number of Small Car Stalls:

The Zoning Bylaw allows up to 30% of the required parking spaces to be designated for small cars. The proposal includes seven, or 35% of the total parking spaces to be designated for small cars and nine would be standard size spaces. It is recognized that the Zoning Bylaw requirements in terms of number and size of parking spaces is dated and does not reflect current automotive trends. It would not be anticipated that the proposed business (bank) would

attract larger than average vehicles. Given the above and the central location in a major "Centre" the variance can be supported.

Parking - Parking Adjacent to Drive Aisle:

The Zoning Bylaw restricts parking accessed from the drive aisle within 5.5 m of the lot line. The objective is to prevent vehicle stacking on the roadway while vehicles manoeuvre into or out of the space. There are two offending parking spaces which are designated for small cars and they would be parked beside the building face of the adjacent commercial property. Due to the lot configuration, the outbound traffic would potentially be impacted more than inbound traffic. Given the adjacent road only provides access to the subject site and Tuscany Village the variance can be supported.

Parking – Loading Spaces:

The Zoning Bylaw specifies the number of required loading spaces based on floor area, and the loading spaces are of a dimension suitable for commercial vehicles. The proposal requires one loading space but given the nature of the business it would not be utilized and therefore, the variance can be supported.

Signs - Number:

The Sign Bylaw permits one sign per building face, however two signs are proposed for each elevation. Each building face has one larger CIBC logo sign (approximately 2.7 m x 2.5 m), as well as the name "CIBC Banking Centre" on a red metal panel above full height windows. As a single-occupant building no additional business signage on the building would be permitted without Council's approval. The proposed signage in comparison with other financial institutions and commercial operations in Saanich is not excessive, and as such, the variance can be supported.

**Environment**

The subject site is currently vacant with no significant vegetation. Stormwater would be managed through an underground detention tank system with oil/grit separators. The development proposal includes one parking space for EV charging.

The applicant has committed to the project meeting LEED Silver, or a comparative energy efficient standard and has agreed to secure this through a covenant. Constructing the building as solar ready is not proposed and the applicant has focused on achieving a LEED Silver certification through other aspects of the development. Given the open span nature of the building, installation of a solar energy system in the future, could be achieved relatively easily.

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**CONSULTATION**

**Applicant**

Prior to submitting their proposal, the applicant met with the Gordon Head Residents' Association and the Mount Tolmie Community Association. The applicant noted the proposal was generally well received and that the development would provide a high-quality building that would improve the immediate neighbourhood. Feedback received noted that the west elevation (Shelbourne Street frontage) had insufficient architectural engagement and a similar level of detail as the north elevation should be given to the west elevation.

**Community Association**

The application was referred to the Gordon Head Residents' Association on May 9, 2016. Response was received June 14, 2016, indicating generally no objections, however concerns



were expressed that the proposal did not include an entrance off Shelbourne Street and that the façade facing Shelbourne Street was unattractive.

### **Advisory Design Panel**

The application was considered by the Advisory Design Panel (ADP) at their November 16, 2016 meeting. The ADP recommended the proposal be accepted subject to:

- Relocating the entry door to the west (Shelbourne Street) frontage;
- Reconfiguring the pedestrian plaza in the northwest corner to better integrate with the entrance;
- Creating a more proportional and cohesive connection between the north and west elevations; and
- Improving the west (Shelbourne Street) elevation.

In response to the ADP and community comments the applicant has revised the proposal as follows:

- A second doorway into the entry vestibule has been added on the Shelbourne Street frontage;
- The landscaping, public benches and surfacing materials have been revised to create a more distinct pedestrian plaza area that integrates better with the building entrance;
- A canopy at the first floor level has been wrapped around from the north elevation to extend along the west elevation, terminating with a vertical element. The canopy would be relatively prominent given the contrast of the stronger CIBC red colour scheme against the more natural, lighter brick facade; and
- Upper level windows on the Shelbourne Street frontage have been enlarged.

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### **OPTIONS**

The subject application is a Form and Character Development Permit, with variances. Based on Saanich's Development Permit Guidelines, the proposed building would meet the general intent of these guidelines. The requested variances also need to be adjudicated by Council. In that regard Council has three basic options:

- Option 1: Support all of the requested variances as outlined.  
Option 2: Support some of the requested variances and ask the applicant reconsider others.  
Option 3: Support none of the requested variances.

### **Staff Comment:**

The proposed land use/building design, in conjunction with the small site, are driving the need for the requested variances. It is unlikely that the subject site would be developed in the foreseeable future without the need for some variance(s). While a higher density mixed-use building would be more desirable for this site, the zoning permits the proposed use. For the reasons outlined in the body of this report, staff can support each of the variances, and as such recommend Option 1.

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### **SUMMARY**

The applicant proposes to construct a new two-storey commercial building for a bank use. The proposal includes variances for setbacks, landscaping, parking and signage. The property is zoned C-2S (General Commercial Shelbourne) Zone which permits the subject land use.

The proposed bank branch (CIBC) would be relocated from their existing location at the University Heights Shopping Centre.

The vacant property is located one lot north of the McKenzie Avenue and Shelbourne Street intersection within the core of the University major "Centre". The draft Shelbourne Valley Action Plan identifies the site for six-storey mixed-use/commercial development and the Official Community Plan (OCP) policies support higher density (up to eight storeys) within major "Centres". A higher density proposal was discussed with the applicant, however given the size of the site and applicant's preference, a two-storey building with surface parking is what they are proposing.

A key consideration in the site design was accommodating improvements to public transit and pedestrian mobility infrastructure. A small public plaza area would create a focal point at the corner of Teakwood Road and Shelbourne Street, which would integrate the public and private realm and enhance the building entrance presence on Shelbourne Street.

Although the proposal would have the most prominent building face oriented toward Teakwood Road (north) rather than Shelbourne Street (west), the Shelbourne Street frontage would provide an enhanced pedestrian environment with the plaza, improved transit facility, a doorway into the bank directly off Shelbourne Street, and improved landscaping.

As part of the proposal the applicant has agreed to dedicate 2.38 m along the Shelbourne Street frontage and secure by covenant that the building would be constructed to LEED Silver, or a comparative energy efficient standard.

The proposed land use/building design, in conjunction with the small site, are driving the need for the requested variances. It is unlikely that the subject site would be developed in the foreseeable future without the need for some variance(s). For the reasons outlined in the body of this report, staff can support each of the individual variances, and as such recommend the application in its entirety be approved.

**RECOMMENDATION**

1. That Development Permit DPR2008-00023 (DPR00384) and subsequent amendments DPA00705 and DPA00739 be cancelled and that Development Permit DPR00647 be approved.
2. That covenant CA1339318 currently on Title, along with its subsequent modification CA2045076 be discharged.
3. That ratification of the Development Permit be withheld pending registration of a covenant securing the construction to a LEED Silver or equivalent energy efficient standard.

Report prepared by:



for:

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Andrea Pickard, Planner

Report prepared and reviewed by:




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Jarret Matanowitsch, Manager of Current Planning

Report reviewed by:




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Sharon Hvozdzanski, Director of Planning

APK/gv

H:\TEMPEST\PROSPERO\ATTACHMENTS\DPR\DPR00647\REPORT.3959SHELBOURNE FINAL.DOCX

Attachment

cc: Paul Thorkelsson, CAO  
 Graham Barbour, Manager of Inspection Services

**CAO'S COMMENTS:**

I endorse the recommendation of the Director of Planning



Paul Thorkelsson, CAO



## DISTRICT OF SAANICH

NO. DPR00647  
 CANCELS: DPR2008-00023 (DPR00384) and  
 Subsequent amendments DPA00705 and DPA00739

## DEVELOPMENT PERMIT

TO: **First Capital (3959 Shelbourne Street) Corporation Inc. No. BC0975240**  
**Mount Royal Village Suite 400, 1550-8<sup>th</sup> Street SW**  
**Calgary, AB T2R 1K1**

*(herein called "the Owner")*

1. This Development Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto, except as specifically varied by this Permit.
2. This Development Permit applies to the lands known and described as:

**Lot A, Section 57, Victoria District Plan EPP61288**

**3959 Shelbourne Street**

*(herein called "the lands")*

3. This Development Permit further regulates the development of the lands as follows:
  - (a) By varying the provisions of Zoning Bylaw 2003, Section 817.4 a) i) to permit a building to be sited 1 m from a lot line abutting a street (3.75 m required),
  - (b) By varying the provisions of Zoning Bylaw 2003, Section 817.4 iii) to permit a commercial building to be sited 2.5 m from an interior side lot line (3 m required),
  - (c) By varying the provisions of Zoning Bylaw 2003, Section 817.4 iii) to permit an accessory building (bicycle locker) to be sited 1 m from an interior side lot line (3 m required),
  - (d) By varying the provisions of Zoning Bylaw 2003, Section 6.5 a) to permit a property zoned C (commercial) not to provide a landscape area having a minimum depth of 1.75 m along a property line abutting a street that is opposite an RA (Apartment) Zone,
  - (e) By varying the provisions of Zoning Bylaw 2003, Section 6.5 c) to permit a property zoned C (commercial) to provide 7.5% of the required on-site trees to be located within that portion of the lot devoted to parking, (50%) required.
  - (f) By varying the provisions of Zoning Bylaw 2003, Section 7.3 a) to permit the minimum number of off-street parking spaces provided to be 20 (49 required),

- (g) By varying the provisions of Zoning Bylaw 2003, Section 7.5 b) to permit up to 35% of the off-street parking spaces to be designated as small car spaces (30% permitted),
  - (h) By varying the provisions of Zoning Bylaw 2003, Section 7.6 d) to permit parking spaces with direct access to the maneuvering aisle within 5.5 m of the lot line common to the lot and a street,
  - (i) By varying the provisions of Zoning Bylaw 2003, Section 8.3 to permit a property zoned commercial not to provide an off-street loading space (1 required),
  - (j) By varying the provisions of Sign Bylaw 2006, No. 8789, Section 12 a) ii) to permit two signs (fascia sign, canopy sign or wall sign) per business per building face (1 per building face permitted), and
  - (k) By requiring the buildings and lands to be constructed and developed in accordance with the building plans prepared by Stantec Architecture Ltd., date stamped received December 2, 2016, and the Landscape Plan prepared by Stantec Architecture Ltd., date stamped received December 13, 2016, copies of which are attached to and form part of this permit.
4. The Owner shall substantially start the development within 24 months from the date of issuance of the Permit, in default of which the Municipality may at its option upon 10 days prior written notice to the Owner terminate this Permit and the Permit shall be null and void and of no further force or effect.
5. Notwithstanding Clause 4, construction of driveways and parking areas, and delineation of parking spaces shall be completed prior to the issuance of an Occupancy Permit.
6. (a) Prior to issuance of a Building Permit, the Owner shall provide to the Municipality security by cash, certified cheque, or an irrevocable letter of credit in the amount of \$300,000 to guarantee the performance of the requirements of this Permit respecting landscaping.
- (b) A Landscape Architect registered with the British Columbia Society of Landscape Architects must be retained for the duration of the project until the landscaping security has been released. Written letters of assurance must be provided at appropriate intervals declaring the registered Landscape Architect, assuring that the landscape work is done in accordance with the approved landscape plan, and indicating a final site inspection confirming substantial compliance with the approved landscape plan (BCSLA Schedules L-1, L-2 and L-3).
- (c) All landscaping must be served by an automatic underground irrigation system.
- (d) The owner must obtain from the contractor a minimum one-year warranty on landscaping works, and the warranty must be transferable to subsequent owners of the property within the warranty period. The warranty must include provision for a further one-year warranty on materials planted to replace failed plant materials.
- (e) Any protective fencing of trees or covenant areas must be constructed, installed and signed according to the specifications in Appendix X.



- (f) No site activity shall take place prior to the installation of any required tree or covenant fencing and the posting of "WARNING – Habitat Protection Area" signs. The applicant must submit to the Planning Department a photograph(s) showing the installed fencing and signs. Damage to, or moving of, any protective fencing will result in an immediate stop work order and constitute a \$1,000 penalty.
  - (g) The landscaping requirements of this Permit shall be completed within four months of the date of issuance of the Certificate of Occupancy for the development, in default of which the Municipality may enter upon the lands, through its employees or agents, and complete, correct or repair the landscaping works at the cost of the Owner and may apply the security, interest at the rate payable by the Municipality for prepaid taxes.
  - (h) In the event that any tree identified for retention is destroyed, removed or fatally injured, a replacement tree shall be planted in the same location by the Owner in accordance with the replacement guidelines as specified within the Saanich Tree and Vegetation Retention, Relocation and Replacement Guidelines. The replacement tree shall be planted within 30 days of notice from the Municipality in default of which the Municipality may enter upon the lands and carry out the works and may apply the security provided herein in payment of the cost of the works. For the purpose of this section, existing trees identified for retention and new trees planted in accordance with the landscape plan attached to and forming part of this permit shall be deemed to be "trees to be retained".
7. The lands shall be developed strictly in accordance with the terms and conditions and provisions of this Permit and shall comply with all Municipal bylaws except for those provisions specifically varied herein. Minor variations which do not affect the overall building and landscape design and appearance may be permitted by the Director of Planning or in her absence, the Manager of Current Planning.
8. Notwithstanding the provisions of Section 7 of this Permit the following changes will be permitted and not require an amendment to this Permit:
- (a) When the height or siting of a building or structure is varied 20 cm or less provided, however, that this variance will not exceed the maximum height or siting requirements of the Zoning Bylaw.
  - (b) Changes to the relative location and size of doors and windows on any façade which do not alter the general character of the design or impact the privacy of neighbouring properties following consultation with the Director of Planning, or Manager of Current Planning in her absence.
  - (c) Where items noted under Section 8(b) are required to comply with the Building Code and/or the Fire Code and those changes are not perceptible from a road or adjacent property.
  - (d) Changes to soft landscaping provided the changes meet or exceed the standards contained on the landscape plans forming part of this Permit.

- 9. The terms and conditions contained in this Permit shall enure to the benefit of and be binding upon the Owner, their executors, heirs and administrators, successors and assigns as the case may be or their successors in title to the land.
- 10. This Permit is not a Building Permit.

AUTHORIZING RESOLUTION PASSED BY THE MUNICIPAL COUNCIL ON THE

\_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_

ISSUED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_ Municipal Clerk

**APPENDIX X**



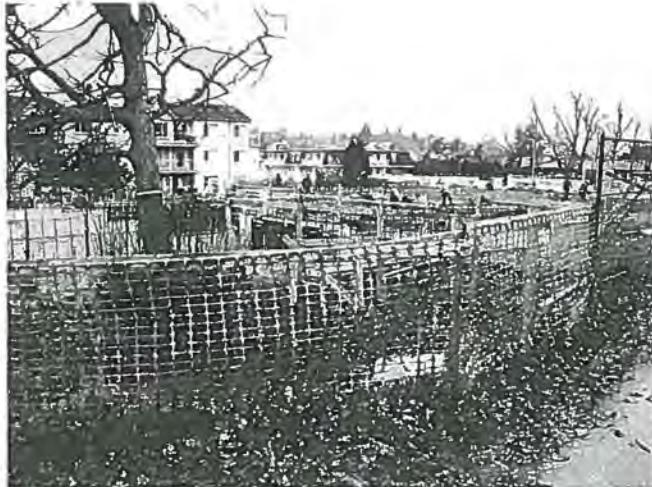
### PROTECTIVE FENCING FOR TREES AND COVENANT AREAS

Protective fencing around trees and covenant areas is an important requirement in eliminating or minimizing damage to habitat in a development site.

Prior to any activities taking place on a development site, the applicant must submit a photo showing installed fencing and "WARNING – Habitat Protection Area" signs to the Planning Department.

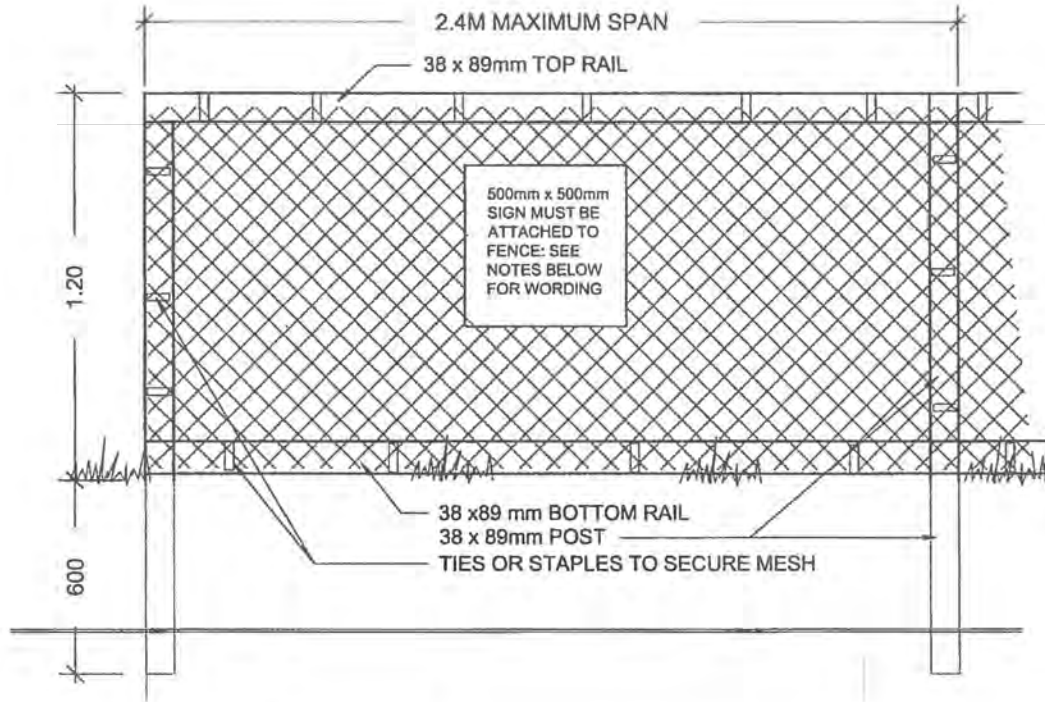
**Specifications:**

- Must be constructed using 2" by 4" wood framing and supports, or modular metal fencing
- Robust and solidly staked in the ground
- Snow fencing to be affixed to the frame using zip-ties or galvanized staples
- Must have a "WARNING – HABITAT PROTECTION AREA" sign affixed on every fence face or at least every 10 linear metres



Note: Damage to, or moving of, protective fencing will result in a stop work order and a \$1,000 penalty.





**TREE PROTECTION FENCING**

**NOTES:**

1. FENCE WILL BE CONSTRUCTED USING 38 X 89 mm (2"X4") WOOD FRAME: TOP, BOTTOM AND POSTS. \*  
USE ORANGE SNOW-FENCING MESH AND SECURE TO THE WOOD FRAME WITH "ZIP" TIES OR GALVANIZED STAPLES.
2. ATTACH A 500mm x 500mm SIGN WITH THE FOLLOWING WORDING:  
**WARNING-HABITAT PROTECTION AREA.** THIS SIGN MUST BE AFFIXED ON EVERY FENCE FACE OR AT LEAST EVERY 10 LINEAR METRES.

\* IN ROCKY AREAS, METAL POSTS (T-BAR OR REBAR) DRILLED INTO ROCK WILL BE ACCEPTED



DETAIL NAME:

**TREE PROTECTION FENCING**

DATE:	March/08
DRAWN:	DM
APP'D:	RR
SCALE:	N.T.S.

# Memo

**To:** Planning Department  
**From:** Jagtar Bains – Development Coordinator  
**Date:** October 13, 2016  
**Subject:** Servicing Requirements for the Proposed Development- REVISED



**PROJECT: TO CONSTRUCT A NEW 2 STOREY CIBC BRANCH BUILDING, VARIANCES REQUESTED.**

**SITE ADDRESS: 3959 SHELBOURNE ST  
PID: 008-280-371  
LEGAL: LOT K BLOCK 2 SECTION 57 VICTORIA DISTRICT PLAN  
DEV. SERVICING FILE: SVS02008  
PROJECT NO: PRJ2016-00274**

The above noted application for Development Permit Amendment has been circulated to the Engineering Department for comment. A list of servicing requirements has been attached on the following page(s). To allow Council to deal effectively with this application, we would appreciate confirmation, prior to the Committee of the Whole Meeting, that the applicant agrees to complete the servicing requirements. Should there be any disagreement with any of these requirements, it should be discussed with the undersigned prior to the Committee of the Whole Meeting.



Jagtar Bains  
DEVELOPMENT COORDINATOR  
cc: Harley Machielse, Director of Engineering  
Catherine Mohoruk, Manager of Transportation & Development

#### **General Information on Development Servicing**

Servicing requirements are stated at this time for the applicant's information. The requirements must be met prior to building permit issuance, including consolidation or subdivision, payments and/or deposits.

Services which must be installed by a developer must be designed by a Professional Engineer hired by the developer and installed under the Engineer's supervision. The design must be approved prior to building permit issuance. The approval process may take up to 30 working days of staff time to complete circulations and request revisions of the Engineer. Certain circumstances can lengthen the approval process.

A Financial sheet is issued with the design drawing which will state:

- 1) The estimated cost of developer installed servicing plus 20% which must be deposited.
- 2) The estimated cost of Municipal installed servicing which must be paid.
- 3) The Development Cost Charges payable.
- 4) Any special conditions which must be met.

This information is not intended to be a complete guide to development procedures. A more complete listing may be found in Section 2 of the Engineering Specifications, Schedule H to Bylaw 7452 (Subdivision Bylaw).



# Development Servicing Requirements

Development File: SVS02008  
Civic Address: 3959 SHELBOURNE ST  
Page: 1

Date: Oct 13, 2016

## Drain

1. AN APPROPRIATELY SIZED STORM DRAIN CONNECTION IS REQUIRED TO SERVE THIS DEVELOPMENT FROM THE EXISTING MAIN ON SHELBOURNE STREET OR ALTERNATIVELY THE EXISTING STORM DRAIN CONNECTIONS MAY BE USED.
2. GREASE/OIL INTERCEPTOR MUST BE INSTALLED ON SITE.
3. ALL PROPOSED BUILDING AND PARKING AREAS MUST BE DRAINED IN ACCORDANCE WITH THE B.C. BUILDING CODE REQUIREMENTS.
4. STORM WATER MANAGEMENT MUST BE PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF SCHEDULE H "ENGINEERING SPECIFICATIONS" OF SUBDIVISION BY-LAW. THIS SUBDIVISION/DEVELOPMENT IS WITHIN TYPE II WATERSHED AREA WHICH REQUIRES STORM WATER STORAGE, OIL/GRIT SEPARATOR OR GRASS SWALE AND SEDIMENT BASIN. FOR FURTHER DETAILS, REFER TO SECTION 3.5.16, STORM WATER MANAGEMENT AND EROSION CONTROL OF SCHEDULE H "ENGINEERING SPECIFICATIONS" OF SUBDIVISION BY-LAW.

## Gen

1. THE BUILDING IS REQUIRED TO COMPLY WITH THE 2012 BC BUILDING CODE AND MUNICIPAL BYLAWS. BUILDING AND PLUMBING PERMITS WILL BE REQUIRED FOR ALL WORKS.
2. THIS PROPOSAL IS SUBJECT TO THE PREVAILING MUNICIPAL DEVELOPMENT COST CHARGES.

## Hydro/tel

1. UNDERGROUND WIRING SERVICE CONNECTION IS REQUIRED TO SERVE THE PROPOSED DEVELOPMENT.

## Road

1. 2.38 M WIDE PROPERTY DEDICATION, ALONG THE ENTIRE FRONTAGE OF SHELBOURNE STREET COMPLETE WITH A 6.0 RADIUS CORNER CUT AT TEAKWOOD ROAD AND SHELBOURNE STREET, IS REQUIRED FOR ROAD ALLOWANCE.
2. NEW DRIVEWAY DROP IS REQUIRED ON TEAKWOOD ROAD AS PER SAANICH STANDARD DRAWING NO. C7SS AND THE EXISTING DRIVEWAY DROP ON TEAKWOOD ROAD IS TO BE REPLACED WITH STANDARD SECTION OF NON-MOUNTABLE CURB AND GUTTER.
3. T4C BUS SHELTERS, BENCHES AND TWO GARBAGE CANS MEETING BC TRANSIT AND MUNICIPAL REQUIREMENTS ARE REQUIRED FRONTING THIS DEVELOPMENT ON SHELBOURNE STREET. IF ADDITIONAL BENCHES ARE INSTALLED WITHIN THE ROAD ALLOWANCE, THEY MUST CONFORM TO MUNICIPAL SPECIFICATIONS.

## Sewer

1. THE EXISTING 100 MM SEWER CONNECTION ON TEAKWOOD ROAD IS TO BE USED FOR THIS DEVELOPMENT.

## Water

1. A PUMPER CONNECTION FOR THE FIRE SPRINKLER SYSTEM MUST BE PROVIDED AT A LOCATION ACCEPTABLE TO THE FIRE DEPARTMENT AND WITHIN 45 M OF A FIRE HYDRANT. THIS PUMPER CONNECTION IS TO BE FREE-STANDING AND OUTSIDE OF COLLAPSE ZONE OF THE BUILDING.
2. A FIRE HYDRANT IS REQUIRED AT THE SOUTHERN CORNER OF SHELBOURNE STREET AND TEAKWOOD ROAD.
3. A SUITABLY SIZED WATER SERVICE MUST BE INSTALLED AS PER AWWA MANUAL M 22 TO SERVE THE PROPOSED

# Development Servicing Requirements

Development File: SVS02008  
Civic Address: 3959 SHELBOURNE ST  
Page: 2

Date: Oct 13, 2016

DEVELOPMENT FROM THE EXISTING MAIN ON TEAKWOOD ROAD. A FIRE LINE WILL BE REQUIRED.

RS-8

CEDAR HILL RD

RS-10

RT-2

C-3

C-2

1520

C-2

C-2

1521

1555

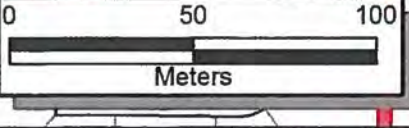
1595

RD-1 GARNET RD

RS-6

PL

C-4



P-1

3982B

3983

398

3987

3982A

3981

39

3983

3978

3979

3979

3981

3976

3977

3982

3979

3974

3973

3980

3977A

3972

3975

3977

3975B

3970

3978

3975

3975A

RD-1

3970

3971

3976

3986

3970

3969

RS-6

3974

3972

3970

3965

RA-3

SUBJECT PROPERTY

3960

3958

3956

3954

3959

3951

1620

1626

C-3L

1632

1638

1642

1654

1646

1660

TEAKWOOD RD

1654

1656

1655

1661

SHELBOURNE ST

TEAKWOOD RD

MCKENZIE AVE

C-8

3949

3941

C-2

C-2

C-4

RA-3

1623

1631

1641

1620

1626

1630

RD-1 GARNET RD

RS-6

RA-4

RD-1

3931

1616

1617

1646

1648

1641

1647

GARNET RD

1656

1660







## DEVELOPMENT PERMIT APPLICATION STORMWATER MANAGEMENT STATEMENT

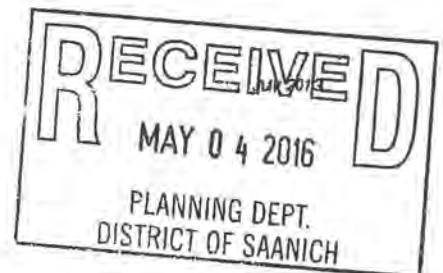
**Parcel Address:** 3959 Shelbourne St. Victoria, BC  
**Applicant:** Stantec on behalf of First Capital Realty Inc.  
**Date:** April 29, 2016  
**Contact Person:** Ross Roy  
**Telephone:** 403-750-2336

Storm water management is reviewed as part of the Development Permit Review process. Applications are required to meet:

1. The Engineering Specifications detailed in Section 3.5.16 of Schedule "H" of the Subdivision Bylaw, 7452; and
2. The intent of the Development Permit guidelines:
  - a) Development Permit Areas #1, 2, 3, 6, through 15, 17, 18, 20, 21, 22, 23
    - The total impervious cover of the site should minimize impact on the receiving aquatic environment. Consideration should be given to reducing impervious cover through reduction in building footprint and paved areas.
    - Storm water runoff controls should replicate the natural runoff regime. The controls could include on-site infiltration, storage in ponds or constructed wetlands, sand filtration and creative road/curb configurations.
  - b) Development Permit Area #27

Maintain pre-development hydrological characteristics should by the following means:

    - minimize impervious surfaces.
    - return the storm water runoff from impervious surfaces of the development to natural hydrologic pathways in the ground to the extent reasonably permitted by site conditions, and treat, store and slowly release the remainder per the specifications of Schedule H to the Subdivision Bylaw.
    - minimize alteration of the contours of the land outside the areas approved for buildings, structures and site accesses by minimizing the deposit of fill and removal of soil, and
    - minimize the removal of native trees outside the areas approved for buildings, structures and site accesses.



Keeping in mind the requirements of Schedule "H", describe how your storm water management concept will meet the intent of the relevant development permit guidelines. Provide details on types of treatment systems that will be used, considering the following questions:

- a) Will there be an increase or decrease in impervious area compared to existing conditions?
- b) What percentage of the site will be impervious cover compared to existing conditions?
- c) How will impervious surface area be minimized (e.g. minimizing paved area and building footprints, pervious paving, green roofing, absorbent landscaping)?
- d) How will the proposed system detain and regulate flows and improve storm water quality (e.g. infiltration systems, engineered wetlands, bioswales)?
- e) If the intent of the guideline cannot be met, explain why.

Use additional pages if necessary. Attach plans if available; detailed engineering plans will be required as part of the Building Permit process.

**NOTE: Meeting the Development Permit guidelines and issuance of a Development Permit does not relieve the requirements of Schedule "H" of the Subdivision Bylaw.**

a) It is currently unknown, but assumed that there is an increase in the amount of impervious area from the previous land use. The topographic survey of the existing site provided shows the site has been cleared of all structures and hardscaping prior to commencement of this design.

b) As noted in point a) above, it is not possible to determine the increase in the imperviousness with the information available. The proposed level of imperviousness for the site is 90.2%.

c) Pedestrian accessible areas on the west of the building to be paved with a permeable unit paver system that will allow infiltration to existing ground as deemed acceptable by the Geotechnical Engineer.

d) The proposed stormwater management system will regulate flows per District of Saanich Schedule H to Bylaw 7452 Type II watershed requirements, or LEED Green Building requirements, whichever is more stringent. This will be achieved via flow controlled orifice manhole with an underground detention tank system preceded by an oil/grit separator which will be located on-site predominately in the proposed parking lot area of the site.

e) As the project is also targeting LEED certification we feel that the guidelines will be met or exceeded.

If you require clarification, please contact:  
The District of Saanich • Planning Department • 3<sup>rd</sup> Floor • Municipal Hall  
770 Vernon Avenue • Victoria • BC • V8X 2W7  
Tel: 250-475-5471 Fax: 250-475-5430

To: Stantec

From: Pete Law

Date: May 3, 2016

Pages: 4 (including this page)

**Re: CIBC - Saanich, BC – Sizing Estimate Package**

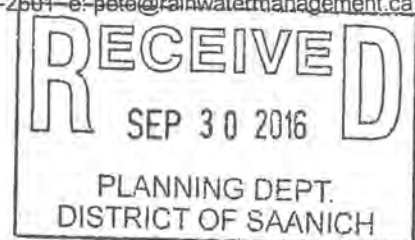
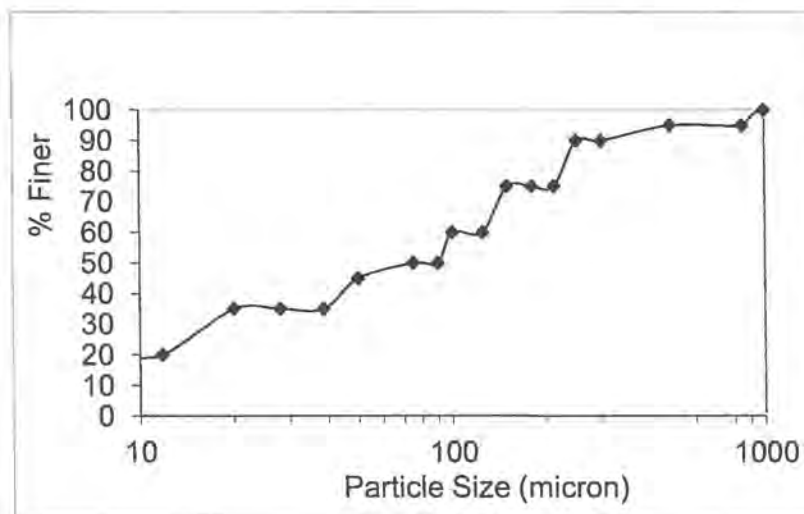
**Engineering Information:**

- 1) Controlled Flow: None
- 2) Removal Target: 80 % removal of the 50 micron and larger particles (NJDEP PSD).

Drainage Area	Runoff Coefficient	CDS Model	Net Annual Removal	Annual Rainfall Treated
0.16 ha	0.82	CDS2015-4	84.4 %	94.2 %

**Design Parameters:**

- 1) The CDS Technologies Stormwater unit for this project has been designed to remove 80 % TSS annually. This is based on the Particle Size Distribution defined by the NJDEP. Please see graph below.





- 2) The sediment influent concentration is assumed to be constant over the full range of flows resulting in more accurate predicted removal efficiencies.
- 3) The peak flows will be conveyed through the unit without re-suspending the previously trapped pollutants. The sediment storage sump is separate from the high flow area.

### CDS Technologies Summary:

The CDS Technologies Stormwater Treatment System is a true hydrodynamic (swirl concentrator) oil/grit separator that combines screening and enhanced gravity settling to remove floating, neutrally buoyant and non-buoyant solids from stormwater runoff. The non-blocking screen captures 100 % of the pollutants equal to the screen aperture size (2400 microns and larger) and is proprietary to CDS Technologies. All non-buoyant solids are directed to a sump that separates the captured pollutants from the treatment flow path to prevent the larger storm events from re-suspending previously trapped material. The floatable debris and oil/grease are trapped upstream of the baffle for easy removal.

The CDS Technologies Stormwater Treatment System can be installed as a bend structure, can accommodate multiple inlets, and does not require an elevation difference between the inlet and outlet pipes.

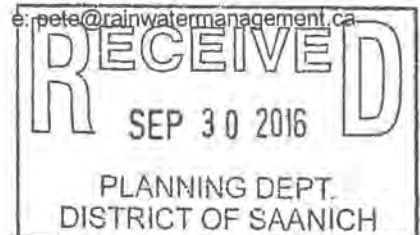
The CDS has been tested in accordance with a number of industry-accepted test protocols including the NJDEP laboratory protocol, the Indianapolis laboratory standard, the Washington Department of Ecology laboratory standard and the TARP Tier II field testing protocol. A number of additional laboratory tests have been executed on the CDS using industry-accepted testing practices and sample analysis procedures. All of the testing conducted on the CDS in order to document performance and refine sizing methodologies has been executed on full-scale CDS units. The vast majority of CDS testing has been executed by or fully overseen by independent 3rd parties. It is standard practice to size the CDS to meet local criteria using the results of full scale laboratory testing across a full range of expected treatment rates.

Maintenance is a key to any oil/grit separator system for proper long-term effectiveness. CDS allows for unobstructed access without confined space requirements. Rainwater Management is available to train a maintenance crew or to provide regular inspection/maintenance services.

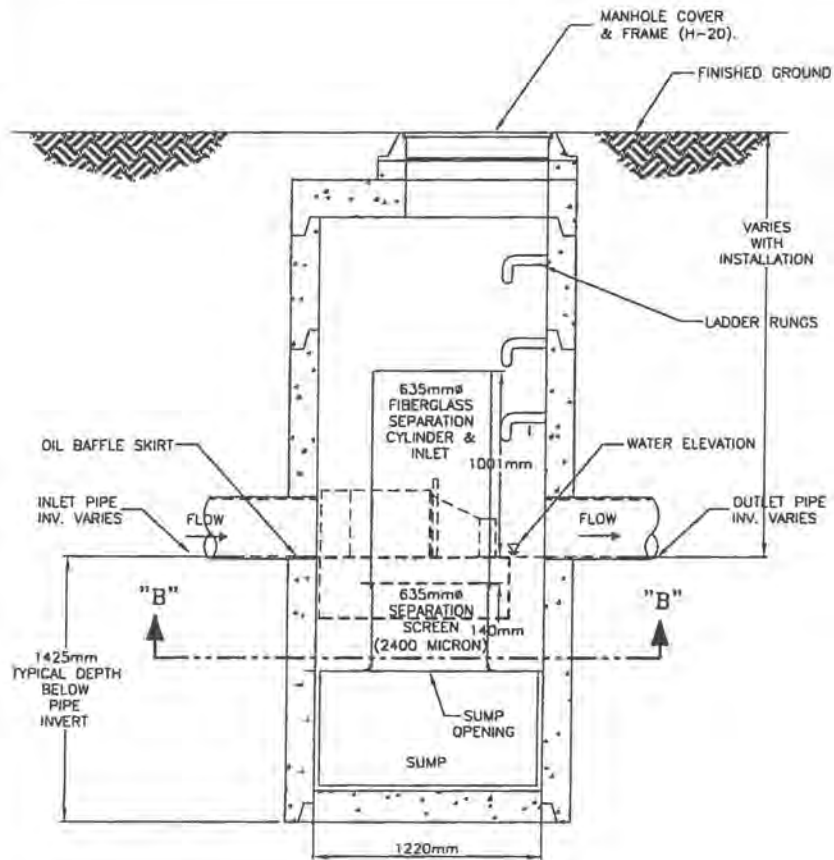
Following is a sizing table and general drawing for your review. Please feel free to contact me for further information or clarification.

Kind Regards,

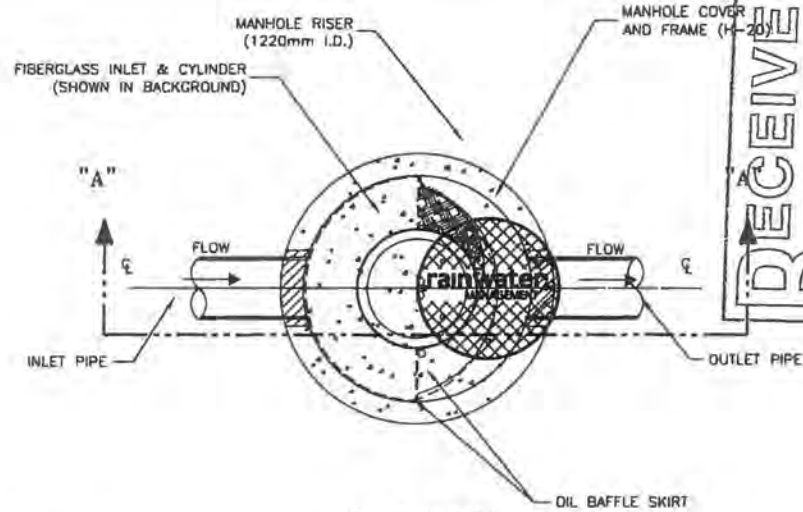
Pete Law, P.Eng.







**ELEVATION VIEW**  
"A"- "A"  
NOT TO SCALE



**PLAN VIEW**  
"B"- "B"  
NOT TO SCALE

**DESIGN NOTES**

1. THE STANDARD CDS2015-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE. PLEASE CONTACT RAINWATER MANAGEMENT. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
2. THE CDS UNIT CAN HANDLE MULTIPLE INLET PIPES, TOP INLET AND CAN ACCOMMODATE INLET PIPES AT AN ANGLE TO THE OUTLET.

**GENERAL NOTES**

1. RAINWATER MANAGEMENT TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR RAINWATER MANAGEMENT PRODUCTS REPRESENTATIVE. [www.rainwatermanagement.ca](http://www.rainwatermanagement.ca)
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE AND CASTINGS SHALL MEET HS20 LOAD RATINGS, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. MANHOLE MANUFACTURED TO ASTM 478 SPECIFICATIONS.

**INSTALLATION NOTES**

1. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY THE ENGINEER OF RECORD.
2. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED). HEAVIEST LIFT TO PLAN FOR IS 3000kg.
3. CONTRACTOR TO ADD GASKETS OR JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
4. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES, MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
5. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



**SITE SPECIFIC DATA REQUIREMENTS FOR CDS2015-4**

STRUCTURE ID	PIPE DATA:	I.E.	MATERIAL	DIAMETER	ANIT-FLOTATION BALLAST	WIDTH	HEIGHT
WATER QUALITY FLOW RATE (L/S)	INLET PIPE 1						
PEAK FLOW RATE (L/S)	INLET PIPE 2						
RETURN PERIOD OF PEAK FLOW (YRS)	OUTLET PIPE						
SCREEN APERTURE (2400)	RIM ELEVATION						

\* PER ENGINEER OF RECORD

**rainwater**  
MANAGEMENT  
[www.rainwatermanagement.ca](http://www.rainwatermanagement.ca)  
TEL : 604-944-9265

**CDS2015-4**  
**INLINE CDS**  
**STANDARD DETAIL**

**RECEIVED**  
 SEP 30 2016  
 PLANNING DEPT.  
 DISTRICT OF SAANICH



**Planning - Re: Saanich Referral***(June 15)*

**From:** "Chris Poirier-Skelton" [REDACTED]  
**To:** "Planning Planning" <Planning.Mun\_Hall.Saanich@saanich.ca>  
**Date:** 6/14/2016 5:35 PM  
**Subject:** Re: Saanich Referral  
**CC:** "Peter Ostergaard" [REDACTED]

Hello Andrea, I do apologize, I thought I had send you our reply to this request. However, after looking through my sent items I see that I had not replied. Please see our note below. Again apologies for being tardy with this.

Chris Poirier-Skelton, President  
 Gordon Head Residents' Association.

**From:** Planning Planning  
**Sent:** Monday, May 9, 2016 10:12 AM  
**To:** Ray Travers  
**Subject:** Saanich Referral

May 9, 2016

Dear Gordon Head Residents Association:

**Re: Application for Development:**

**Applicant:** Stantec Consulting  
**Site Address:** 3959 Shelbourne Street  
**Legal:** LOT K BLOCK 2 SECTION 57 VICTORIA DISTRICT PLAN  
 901A EXCEPT PLAN 49121, DD C22006.  
**Folder No.:** DPR00647  
**Description:** **TO CONSTRUCT A NEW 2 STOREY CIBC BRANCH  
 BUILDING, VARIANCES REQUESTED.**

The District of Saanich has received an application for a site within your Community Association area. The Planning Department is referring the proposed plans and relevant information to your Community Association for review and comment. Please note that any requested variances may be subject to change based on the Planners detailed review of the file.

In a written letter or email to [planning@saanich.ca](mailto:planning@saanich.ca), please provide your comments to the Planning Department indicating if your Community Association:

- Has no objection to the project "GHRA representatives met with the proponent and architect in late April. We expressed concerns over the proposed unattractive facade facing Shelbourne and our preference for a customer entrance off of Shelbourne rather than the Teakwood extension. We understand that Saanich staff had expressed similar concerns.

We were subsequently advised that CIBC is considering a revised and improved west (Shelbourne) elevation and facade that would better engage the street. We await these revisions, if any, before finalizing our views on this high profile gateway to Gordon Head

- Generally has no objection with suggested changes or concerns
- Does not support the project (please provide reason).

We would appreciate receiving your comments by June 10, 2016 so that they can be included in the package that is forwarded to Council. If you cannot meet this time frame, please email or call our office to indicate if and when you might be able to respond to the referral.

**If you require further information about the proposed development please contact ANDREA PICKARD Local Area Planner at 250-475-5494 extension 3425.**

It is suggested that you periodically check our website, [www.saanich.ca](http://www.saanich.ca) *Active Planning Applications* as any revised site plans for this application will be posted there.

Sincerely,

Andrea Pickard  
Planner

2860-30

**From:** EARL KING  
**To:** <clerksec@saanich.ca>  
**Date:** 2/2/2017 1:21 AM  
**Subject:** Development permit 3959 Shelbourne St.

COPY TO	
INFORMATION	<input type="checkbox"/>
COPY TO WRITER	<input type="checkbox"/>
COPY RESPONSE TO LEGISLATIVE DIVISION	<input type="checkbox"/>
FOR JRT	<input type="checkbox"/>
OR	
*ACKNOWLEDGED:	

The following points are conveyed on behalf of a group of Kensington residents:

A). The reduced setback should definitely not be permitted. The sidewalk along Shelbourne St. Needs to be widened , not made narrower. It has a very busy BC Transit bus exchange and transit users need much more space not less. There are already large hydro poles impeding sidewalk traffic.

B). The proposed variation of the lot line should not be allowed. This is the area hat is used by all delivery trucks that deliver food to Thrifty Foods. It is a very busy area with big trucks parking there while drivers deliver the goods.

C.) A landscaped area around the building should be required not scuttled.

D). Don't allow any reduction in the bylaw parking space requirement.  
Group of Kensington Retirement residents who regularly use the sidewalks around the subject lot.

**RECEIVED**  
FEB 02 2017  
LEGISLATIVE DIVISION  
DISTRICT OF SAANICH

1410-04 Planning  
xref: 2860-85



The Corporation of the District of Saanich

Mayor  
Councillors  
Administrator  
Com. Assoc.  
Applicant  
Council  
Administra  
Media  
Feb 3/17

# Report

**To:** Mayor and Council  
**From:** Sharon Hvozdanski, Director of Planning  
**Date:** January 9, 2017  
**Subject:** Temporary Use Permit Application  
File: TUP00007 • 226 Stevens Road

## PURPOSE

**Project Proposal:** The applicant is requesting a Temporary Use Permit to allow overnight camping as a permitted use as part of the activities of "Power To Be", a Victoria and Vancouver based non-profit organization which currently operates on the site.

**Address:** 226 Stevens Road

**Legal Description:** Parcel B (DD 333731) of Section 92, Lake District, except amended Parcel 2 (DD 1718721) of said Parcel B, and except part in Plan 10212

**Owner:** Samuel Cedric Steele

**Applicant:** Shawn Steele

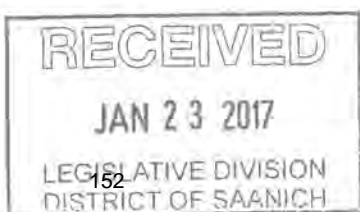
**Parcel Size:** 326,235 m<sup>2</sup> (32.62 ha)

**Existing Use of Parcel:** P-4 (Recreation and Open Space) Zone – Prospect Lake Golf Course

**Existing Use of Adjacent Parcels:**  
North: P-4 (Recreation and Open Space) Zone, and A-4 (Rural) Zone – 4 ha Lot  
South: A-1 (Rural) Zone – 2 ha Lot, A-2 (Rural) Zone – Two Dwelling, and A-4 (Rural) Zone – 4 ha Lot  
East: A-1 (Rural) Zone – 2 ha Lot  
West: P-4 (Recreation and Open Space) Zone, and A-4 (Rural) Zone – 4 ha Lot

**Current Zoning:** P-4 (Recreation and Open Space) Zone

**Minimum Lot Size:** n/a





**Proposed Zoning:** No Change

**Proposed Minimum Lot Size:** n/a

**Local Area Plan:** Rural Saanich

**LAP Designation:** Commercial (Golf Course)

**Community Assn Referral:** Prospect Lake Community Association • Referral sent September 6, 2016. Response received October 11, 2016 indicating no objection.

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## PROPOSAL

The applicant is requesting a Temporary Use Permit to allow overnight camping as a permitted use. The proposed overnight camping use would be restricted to participants in “Power To Be” programs.

“Power To Be began in 1998 with an idea: help people living with a disability or barrier access nature. The idea grew into a community, connecting participants to adventures and supporters to opportunities, collectively redefining our definition of ability. Based in Victoria and Vancouver, (they) are a non-profit organization that empowers people to explore their limitless abilities through inclusive adventures rooted in nature. (They) believe finances shouldn’t prevent anyone from accessing nature, and (they) work to remove cognitive, physical and social barriers to the outdoors, supporting participants to explore who they are and what they are capable of with the support of our staff, volunteers and each other.”

The applicant initially contemplated a rezoning application. After consultation with area residents the applicant felt utilizing a Temporary Use Permit would be the best means to demonstrate how such an operation could fit within the community. By using a Temporary Use Permit as a potential first step, both Council and the neighbourhood have an opportunity to gain a better understanding of the operation and potential impacts while retaining the option of not renewing the Permit if any negative impacts arise, or are felt to be out of keeping with the character of the area.

If supported by Council, a Temporary Use Permit would allow overnight camping for a maximum of three years, with the opportunity for a one time renewal of the Permit, for a maximum of three additional years. Council can set the maximum time period on both the initial Permit, and the renewal, to any time frame it wishes. Council is also not obligated to renew the Permit.

After the expiry of the Temporary Use Permit, the overnight camping would either cease, or the applicant could apply to rezone the property to allow for the camping use to continue.

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## PLANNING POLICY

### Official Community Plan (2008)

- 4.1.2.4 “Protect and restore rare and endangered species habitat and ecosystems, particularly those associated with Garry Oak ecosystems.”
- 4.1.2.25 “Work with private land owners to encourage stewardship that protects, preserves, and enhances natural systems and, where appropriate, enter into conservation covenants or provide incentives to protect riparian or environmentally significant areas.”
- 5.1.4.1 “Foster the development of a community that is safe, diverse and inclusive and where social interaction, physical activity, sense of place, and neighbourliness are actively promoted and supported.”
- 5.2.1.1 “Continue to work with Neighbourhood Associations, service organizations, sports groups, business and other stakeholders to support and strengthen the community.”
- 5.2.1.2 “Continue to develop and enhance community pride and identity through the creation and implementation of events and on-going community services and programs.”
- 5.2.1.6 “Encourage and support a wide range of educational and learning opportunities which aid in community capacity building, and strive to meet a broad range of community needs.”
- 6.2.1.4 “Support a balanced economy by encouraging a broad range of commercial, service, research, high tech and industrial uses.”

### Rural Saanich Local Area Plan (2008)

- 6.6 “Continue to work with local schools, parent advisory groups, community associations, established agencies, and local residents, including youth, to determine community service needs and implement needed programs.”
- 10.2 “Work to maintain private open space by:
- a) encouraging and promoting land stewardship by private and institutional landowners;
  - b) considering natural state covenants as a condition of development approval; and
  - c) considering property tax exemptions or discounts for lands subject to a conservation covenant.”

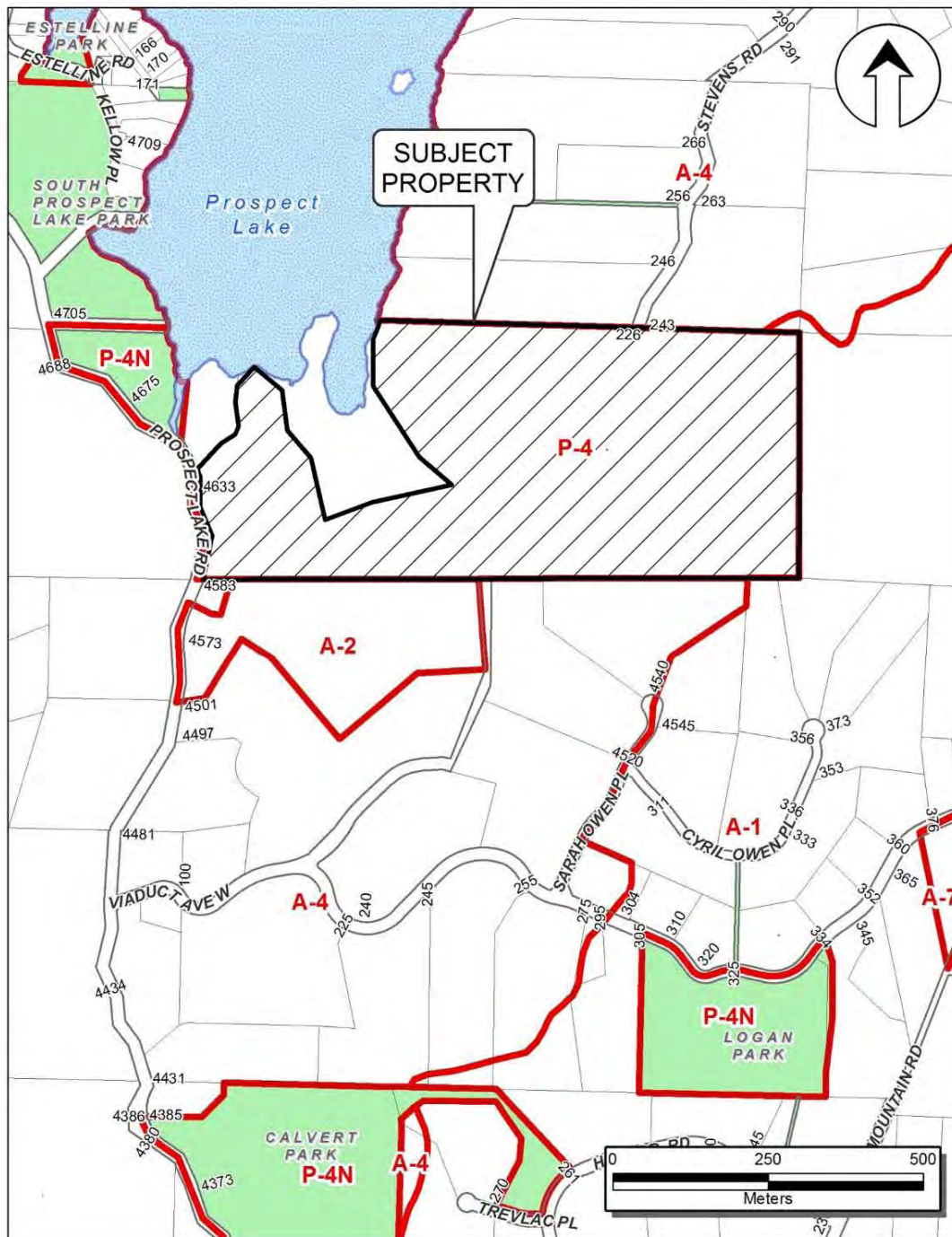
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## DISCUSSION

### Neighbourhood Context

The subject property located at 226 Stevens Road (4633 Prospect Lake Road). The 32.62 ha parcel is situated in the Rural Saanich Local Area, and borders on the southern edge of Prospect Lake. The area is a predominantly single family neighbourhood of large rural residential parcels.

The subject property is approximately 1.8 km from the Prospect Lake Rural Village “Centre”. Nearby parks include South Prospect Lake Park (60 m away), Logan Park (590 m away), and Calvert Park (810 m away).



**Figure 1: Neighbourhood Context**

**Land Use**

The parcel falls within the Prospect Lake Watershed, an area designated as 4 ha minimum lot size in the Rural Saanich Local Area Plan. This designation was established to help maintain the water quality of Prospect Lake by limiting the potential for subdivision within the watershed.

Surrounding properties are primarily A-4 (Rural – 4.0 ha) zoned parcels, though parcels to the east are zoned A-1 (Rural – 2.0 ha) and the parcel immediately to the south is zoned A-2 (Rural – Two Dwelling).

#### Current Land Use

The subject property is zoned P-4 (Recreation and Open Space) and operated for many years as the Prospect Lake Golf Course. Permitted uses in the P-4 Zone include the following:

- (a) Community Centre;
- (b) Park;
- (c) Recreation Facility;
- (d) Accessory Residential;
- (e) Accessory Buildings and Services;
- (f) Daycare, Adult; and
- (g) Daycare, Child.

“Power To Be” currently uses the property for day programs, most of which are water-based, such as kayaking, canoeing, and stand-up paddle boarding. They also use the property for meetings. They would like to expand their program offerings to allow for overnight camping for participants of their programs.

#### Proposed Land Use (Temporary Use Permit)

The applicant is requesting a Temporary Use Permit for overnight camping. The proposed campsite area is located in the southwest portion of the property, situated on former golf greens and fairway areas. Impact on adjacent properties from this proposed use is expected to be minimal. The closest neighbouring dwelling to the proposed campsite is over 100 m away, and is screened by trees and topography (see Figure 2).

“Power To Be” policy dictates a minimum ratio of 2 staff to 10 participants and a maximum group size of 10 participants per group. The applicant notes that “the majority of campers would be youth between 13 to 24 years of age”. Typically, most participants would be asleep before 10:00 PM, activities after that time would be “quiet time”. “Power To Be” enforces a strict no alcohol and no smoking policy.

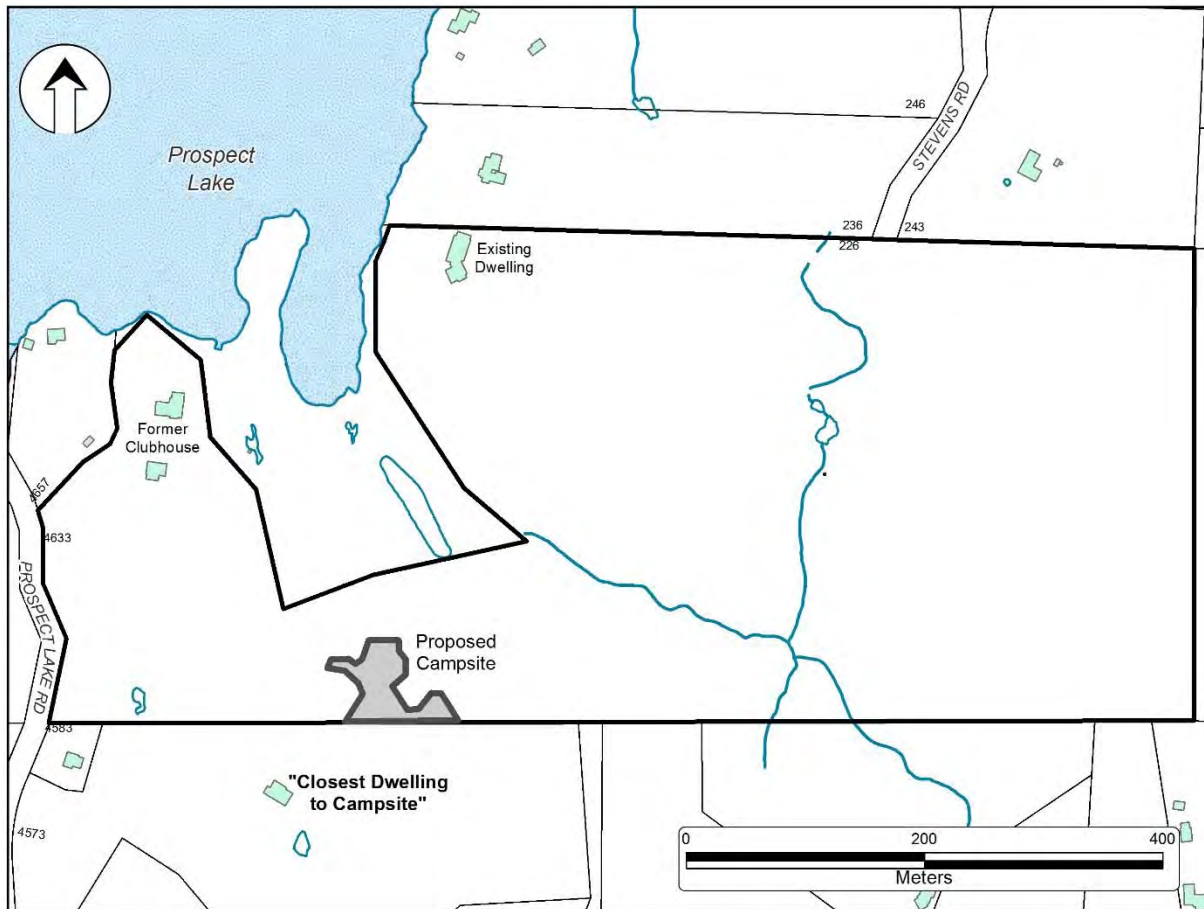
The applicant states that from October to May, they anticipate 2 to 4 camps a month ranging from 1 to 3 nights per trip. From May to September, they anticipate 4 to 8 camps a month, ranging from 1 to 4 nights. They may also have 1 to 3 larger camps that may have up to 30 people for 1 or 2 nights, where family members would help facilitate camping activities.

In both seasonal windows two groups on a given night would be the maximum. “Power To Be” goal is to have in most cases one group involved in day use activities occurring on the site and one group camping overnight.

To help mitigate potential impacts on the surrounding residential neighbourhood, the proposed Temporary Use Permit on this site could contain the following conditions:

- Restrict overnight camping to participants in programs under the direction of “Power To Be”;
- Restrict the overnight camping to the area shown as “Proposed Campsite” (see Figures 2 and 3); and
- Prohibit the use of Recreational Vehicles (RV's) or Camper trailers.





**Figure 2: Site Plan**

### **Site and Building Design**

The applicant's intent is for the property to retain its existing rural character. No changes to existing buildings are proposed.

To provide toilet facilities for both the camping area and day users to the site, "Power to Be" would use a portable toilet (porta-potty) service. The portable toilets would be located within 50m of the campsite area.

As part of the camping experience, "Power to Be" are proposing to have a campfire. The applicant would work with the Saanich Fire Department to secure the appropriate permit and to ensure that proper safety measures are put in place.



**Figure 3: Location of proposed Campsite**

### **Environment**

Environmental Services staff have reviewed the proposal and have conducted a site visit. The proposed campsite location is within a previously disturbed area that was formerly used for the Prospect Lake Golf Course. The operators have stated that over most of the golf course, grass will be allowed to grow back and over time some areas will return to a more natural state.

The proposed campsite area is not located within an environmentally sensitive area, and there are no significant environmental concerns.

### **Mobility & Traffic**

The site is not well-served by transit. The nearest bus stops are located over 3 km away at the corner of Prospect Lake and West Saanich Road. These stops are served by Route #83, with service every 2 hours on weekdays.

However, the applicant advises that they provide roughly 90% of the transportation for their programs, mainly via their 12-passenger vans. The remaining 10% of the time would be when there is a mix of larger groups, which would involve some participants making their own way to the site, bus rentals, and/or program partners providing transportation. Adequate parking is provided on site.

As mentioned previously, the heaviest use of the site would occur between May and September, where up to 8 camps a month, ranging from 1 to 4 nights, are anticipated. Including drop off and pickup, this would mean the 12-passenger vans would be travelling to and from the site a total of 16 times. There are also anticipated to be up to three larger camps during this period which could involve the use of rented buses, and some participants making their own way to the site, as noted above. This is in addition to the day programs offered at the site. The majority of day program groups range in size from 8 to 15 individuals, who arrive at the site either in the program's vans or by carpooling. Alternative transportation, such as a bus, is explored for larger scale groups of 20 to 30 people. Larger groups are infrequent; since "Power To Be" has been using the site over the past year, they have had only 10 programs and gatherings with over 20 people on site.

None of this is expected to have any negative impacts on traffic and use of the rural road. It should be noted that until recently the site was the former Prospect Lake Golf Course, which saw much heavier daily traffic than is expected under the proposed use.

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## **COMMUNITY CONSULTATION**

The applicant states that they held an information session to discuss the proposed overnight camping use on October 13, 2015 that was attended by more than 20 Prospect Lake area residents. They also presented to the Prospect Lake Community Association on April 20, 2016. The applicant also met with an adjacent neighbour on August 29, 2016 and discussed their concerns.

On September 8, 2016, "Power To Be" organized a Prospect Lake community engagement evening at the subject property to familiarize the local community with their organization and intended programs on the property. The event was advertised on the Prospect Lake Community Association website, via a Prospect Lake Community Association email to residents, via a notice on two community mailboxes, and via flyers hand delivered to 80 nearby houses. 18 members of the community attended.

A referral was sent to the Prospect Lake Community Association on September 6, 2016 and a response was received on October 11, 2016 indicating no objection.

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## **OPTIONS**

When evaluating this proposal, the following three options are presented for Council's consideration:

### **Option 1**

Council may decide to approve the Temporary Use Permit application for the requested three year period. Three years is the maximum time period allowed under the legislation governing Temporary Use Permits, and is also what the applicant has requested. A three year period is supportable by staff, in that it should provide enough time for the applicant to be operating routinely, and for the neighbourhood to assess the impacts, if any. It should be noted that there has been no neighbourhood feedback on the proposed length of time. The Temporary Use Permit would contain the following conditions:

- Restrict the proposed Youth Camp use to programs under the direction of “Power To Be”;
- Restrict the proposed Youth Camp use to the area shown as “Proposed Campsite”; and
- Prohibit the use of Recreational Vehicles (RV’s) or Camper trailers.

### **Option 2**

Council may decide that the requested three year period of the Temporary Use Permit application is too long, and may suggested a shorter duration, e.g. 1 or 2 years. The permit would contain the same conditions as listed under Option 1, above.

A concern of staff is that a shorter time frame may not allow the applicant adequate time to begin operating on a routine basis, or give the neighbourhood a chance to fully assess any impacts the operation may have.

### **Option 3**

Alternatively, Council may decide that the proposed overnight camping use is not appropriate in this location, and choose to reject the application.

#### Staff Comment

Staff recommend Option 1. The requested time frame of three years is considered to be optimal in terms of allowing the proposed overnight camping use to function at a representative level, and allow neighbours to assess what impacts, if any, may be caused by this use.

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## **SUMMARY**

The applicant is requesting a Temporary Use Permit to allow overnight camping as a permitted use. The proposed overnight camping use would be restricted to “Power To Be”, a Victoria and Vancouver based non-profit organization. A Temporary Use Permit would allow overnight camping for up to three years with the opportunity for three additional years with Council approval. After the expiry of a Temporary Use Permit, the overnight camping would either cease or the property would need to be rezoned to an appropriate zone (possibly a new, site-specific zone) that would permit the use to continue on the site.

Impacts on adjacent properties is expected to be negligible, however to help mitigate potential impacts on the neighbourhood, the proposed Temporary Use Permit could contain the following conditions:

- Restrict the proposed Youth Camp use to programs under the direction of “Power To Be”;
- Restrict the proposed Youth Camp use to the area shown as “Proposed Campsite”; and
- Prohibit the use of Recreational Vehicles (RV’s) or Camper trailers.

Options available to Council are to approve the application with a three year time frame as requested by the applicant, approve the application but with a reduced time frame, or reject the application. On the premise that three years would be optimal in terms of allowing the proposed overnight camping use to function at a representative level, and allow neighbours to assess what impacts, if any, may be caused by this use, staff recommend approval for a three year period.



**RECOMMENDATION**

That Temporary Use Permit TUP00007 be approved.

Report prepared by:   
for:  
\_\_\_\_\_  
Chuck Bell, Planner

Report prepared and reviewed by:   
\_\_\_\_\_  
Jarret Matanowitsch, Manager of Current Planning

Report reviewed by:   
\_\_\_\_\_  
Sharon Hvozdzanski, Director of Planning

CWB/jp  
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cc: Paul Thorkelsson, CAO  
Graham Barbour, Manager of Inspection Services

**CAO'S COMMENTS:**

I endorse the recommendation of the Director of Planning.

  
Paul Thorkelsson, CAO

# DISTRICT OF SAANICH

NO. TUP00007

## TEMPORARY USE PERMIT

**TO: Samuel Cedric Steele  
205 - 1208 Wharf Street  
Victoria BC V8W 3B9**

*(herein called "the owner")*

1. This Temporary Use Permit is issued subject to compliance with all of the Bylaws of the Municipality applicable thereto.

2. This Temporary Use Permit applies to the lands known and described as:

**Parcel B (DD 33373I) of Section 92, Lake District,  
except amended Parcel 2 (DD 171872I) of said Parcel B, and except part in  
Plan 10212**

**226 Stevens Road**

*(herein called "the lands")*

3. This Temporary Use Permit regulates the development of the lands as follows:

(a) Notwithstanding the provisions of Section 1030.1 of the Zoning Bylaw 2003, by allowing "Youth Camp" as a permitted use on the lands.

(b) By requiring that the Youth Camp operate in accordance with the following conditions:

- The proposed Youth Camp use to be restricted to programs under the direction of Power To Be;
- The proposed Youth Camp use be restricted to the area shown on the attached plan (Attachment A); and
- The use of Recreational Vehicles (RV's) or Camper trailers is prohibited.

4. This Permit shall expire three years from the date of issuance, at which time the right granted under this permit will cease.

5. The lands shall be developed strictly in accordance with the terms and conditions and provision of the Permit provided, however, that minor variations which do not affect the overall use and landscape design may be permitted by the Director of Planning.

6. The terms and conditions contained in this Permit shall enure to the benefit of and be binding upon the Owner, their executors, heirs and administrators, successors and assigns as the case may be or their successors in title to the land.

7. This Permit is not a Building Permit.

AUTHORIZING RESOLUTION PASSED BY THE MUNICIPAL COUNCIL ON THE

\_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_

ISSUED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20 \_\_\_\_\_

\_\_\_\_\_  
Municipal Clerk

H:\TEMPEST\PROSPERO\ATTACHMENTS\TUP\TUP00007\TEMPORARY USE PERMIT\_JAN 2017.DOC

ATTACHMENT 'A'



Prospect Lake

246

236  
226

243

Existing Dwelling

Former Clubhouse

4657

4633

PROSPECT LAKE RD

4583

Proposed Campsite

"Closest Dwelling to Campsite"

4573

STEVENS RD

164

