

Agenda

City Council

Council Chambers, City Hall 6911 No. 3 Road Monday, May 28, 2018 7:00 p.m.

Pg. # ITEM

MINUTES

- 1. *Motion to:*
 - (1) adopt the minutes of the Regular Council meeting held on May 14, 2018 (distributed previously);
- CNCL-12
- (2) adopt the minutes of the Regular Council meeting for Public Hearings held on May 22, 2018.

AGENDA ADDITIONS & DELETIONS

PRESENTATIONS

Liesl Jauk, Manager, Arts Services, to present the 2017 Arts Update video.

COMMITTEE OF THE WHOLE

2. Motion to resolve into Committee of the Whole to hear delegations on agenda items.

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3. Delegations from the floor on Agenda items.

PLEASE NOTE THAT FOR LEGAL REASONS, DELEGATIONS ARE NOT PERMITTED ON ZONING OR OCP AMENDMENT BYLAWS WHICH ARE TO BE ADOPTED OR ON DEVELOPMENT PERMITS/DEVELOPMENT VARIANCE PERMITS – ITEM NO. 17.

4. *Motion to rise and report.*

RATIFICATION OF COMMITTEE ACTION

CONSENT AGENDA

PLEASE NOTE THAT ITEMS APPEARING ON THE CONSENT AGENDA WHICH PRESENT A CONFLICT OF INTEREST FOR COUNCIL MEMBERS MUST BE REMOVED FROM THE CONSENT AGENDA AND CONSIDERED SEPARATELY.

CONSENT AGENDA HIGHLIGHTS

- Receipt of Committee minutes
- Application for a New Liquor Primary Liquor Licence Truestea Cafe Ltd. Doing Business as: The True'stea Restaurant – 8400 Alexandra Rd Unit 180
- Application to Request a Food Primary Entertainment Endorsement for Food-Primary Liquor Licence #139438 – Richmond Country Club – 9100 Steveston Highway
- Voting Divisions for the 2018 General Local and School Election
- Land use applications for first reading (to be further considered at the Public Hearing on June 18, 2018):
 - 10451, 10471 & 10491 No. 2 Road Rezone from RS1/E to RTL4 (1076694 B.C. Ltd. – applicant)
 - 5480 Parkwood Way Rezone from IB1 to CV (Brian Ross Motorsports Corp. (DBA Alfa Maserati of Richmond) – applicant)
- ICBC-City of Richmond Road Improvement Program Proposed Projects for 2018
- Underpinning Works and Construction Fence Encroachment Bylaw No. 9833
- 2017 Climate Action Revenue Incentive Program and Carbon Neutral Progress Report

	Pg. #	ITEM	
			 2017 Annual Water Quality Report UBCM Resolutions – Provincial Action on Zero Emissions Vehicles and Low Carbon Fuels
		5.	Motion to adopt Items No. 6 through No. 16 by general consent.
Consent Agenda Item		6.	COMMITTEE MINUTES
			That the minutes of:
	CNCL-34		(1) the Community Safety Committee meeting held on May 15, 2018;
	CNCL-40		(2) the General Purposes Committee meeting held on May 22, 2018;
	CNCL-47		(3) the Planning Committee meeting held on May 23, 2018;
	CNCL-51		(4) the Public Works and Transportation Committee meeting held on May 24, 2018;
			be received for information.
Consent Agenda Item		7.	APPLICATION FOR A NEW LIQUOR PRIMARY LIQUOR LICENCE - TRUESTEA CAFE LTD DOING BUSINESS AS: THE TRUE'STEA RESTAURANT- 8400 ALEXANDRA RD UNIT 180 (File Ref. No. 12-8275-30-001) (REDMS No. 5818206)
	CNCL-56		See Page CNCL-56 for full report
			GENERAL PURPOSES COMMITTEE RECOMMENDATION
			(1) That the application from Truestea Cafe Ltd., doing business as, The True'stea Restaurant, for a new Liquor Primary Liquor Licence to operate entertainment with full service Asian cuisine, at premises located at 8400 Ackroyd Rd Unit 180, with liquor service, be supported for:
			(a) A new Liquor-Primary Liquor Licence with primary business focus of entertainment, specifically live music and games with total person capacity of 197 persons;

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- (b) Family Food Service to permit minors in all licensed areas until 10:00 p.m. when accompanied by a parent or guardian, when food service is available for families; and
- (c) Liquor service hours for Monday to Sunday, from 12:00 p.m. to 2:00 a.m.;

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- (2) That a letter be sent to Liquor Control and Licensing Branch advising that:
 - (a) Council supports the applicant's new Liquor Primary Liquor Licence and the hours of liquor service with the conditions as listed above;
 - (b) The total person capacity at 197 persons indoor is acknowledged;
 - (c) Council's comments on the prescribed criteria (section 71 of the Liquor Control and Licensing Regulations) are as follows:
 - (i) The impact of noise and traffic in the vicinity of the establishment was considered;
 - (ii) The general impact on the community was assessed through a community consultation process; and
 - (iii) There is no history of non-compliance with this operation;
 - (d) As the operation of a licenced establishment may effect nearby residents, businesses and property owners, the general impact assessment was conducted through the City's community consultation process as follows:
 - (i) Residents, businesses and property owners within a 50 meter radius of the establishment were notified by letter. The letter provided information on the application with instructions on how to submit comments or concerns; and
 - (ii) Signage was posted at the establishment and three public notices were published in a local newspaper. The signage and public notice provided information on the application with instructions on how to submit comments or concerns;
 - (e) That Council's comments on the general impact of the views of residents, businesses and property owners are as follows:
 - (i) The community consultation process was completed as part of the application process; and
 - (ii) The community consultation process resulted in no comments or views submitted from residents, businesses and property owners;

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8.

(f) That Council recommends the approval of the licence for the reasons that this new application of the liquor primary license is acceptable to the majority of the residents, businesses and property owners in the area and the community.

APPLICATION TO REQUEST A FOOD PRIMARY ENTERTAINMENT ENDORSEMENT FOR FOOD-PRIMARY LIQUOR LICENCE #139438 – RICHMOND COUNTRY CLUB – 9100 STEVESTON HIGHWAY

(File Ref. No. 12-8275-30-001) (REDMS No. 5814183)

CNCL-62

Consent

Agenda

Item

See Page CNCL-62 for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

- (1) That the application from Richmond Country Club, operating at 9100 Steveston Hwy, requesting a Food-Primary Entertainment Endorsement for Patron Participation to Food- Primary Liquor Licence # 139438, to enable patrons to dance at the establishment, be supported;
- (2) That a letter be sent to Liquor Control and Licensing Branch advising that:
 - (a) Council supports the amendment for a Patron Participation Entertainment Endorsement on Food-Primary Liquor Licence # 139438 as the endorsement will not have a significant impact on the community;
 - (b) The hours of liquor sales will remain the same at:
 - (i) 9:00 a.m. to 1:00 a.m., Monday to Saturday; and
 - (ii) 9:00 a.m. to Midnight, Sunday;
 - (c) The new seating capacity for the food primary portion of the licence will be increased to 694 persons indoors and 190 persons patio;
- (3) That Council's comments on the prescribed criteria (Section 71 of the Liquor Control and Licensing Regulations) are as follows:
 - (a) The potential for additional noise and traffic in the area was considered;
 - (b) The impact on the community was assessed through a community consultation process;

(c) Given that there has been no history of non-compliance with the operation, the amendment to permit patron participation entertainment endorsement under the Food Primary Liquor Licence should not change the establishment such that it is operated contrary to its primary purpose; and
 (d) As the operation of a licenced establishment may affect nearby

- (d) As the operation of a licenced establishment may affect nearby residents, businesses and property owners, the impact assessment was conducted through the City's community consultation process as follows:
 - (i) Residents, businesses and property owners within a 50 meter radius of the subject property were notified by letter. The letter provided information on the application with instructions on how to submit comments or concerns; and
 - (ii) Signage was posted at the subject property and three public notices were published in a local newspaper. The signage and public notice provided information on the application with instructions on how comments or concerns could be submitted;
- (e) That Council's comments and recommendations respecting the view of the residents, businesses and property owners are as follows:
 - (i) The community consultation process was completed as part of the application process; and
 - (ii) The community consultation process resulted in no comments or views submitted from residents, businesses and property owners;
- (f) That Council recommends the approval of the permanent change to add patron participation entertainment endorsement to the Food Primary Licence for the reasons that the addition of the endorsement proposed is acceptable to the majority of the residents, businesses and property owners in the area and the community.

CNCL-6

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9.

Consent Agenda Item

CNCL-68

VOTING DIVISIONS FOR THE 2018 GENERAL LOCAL AND SCHOOL ELECTION

(File Ref. No. 12-8125-80-05) (REDMS No. 5814102 v. 3)

See Page CNCL-68 for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

That Civic Election Administration and Procedure Bylaw No. 7244, Amendment Bylaw No. 9876, which proposes adjustments to voting division boundaries and establishes 4 additional voting divisions for the 2018 General Local and School Election, be introduced and given first, second, and third readings.

Consent Agenda Item

10. APPLICATION BY 1076694 B.C. LTD. FOR REZONING AT 10451, 10471 & 10491 NO. 2 ROAD FROM SINGLE DETACHED (RS1/E) TO LOW DENSITY TOWNHOUSES (RTL4) (File Ref. No. RZ 17-778834) (REDMS No. 5775047)

CNCL-83

See Page CNCL-83 for full report

PLANNING COMMITTEE RECOMMENDATION

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9872, for the rezoning of 10451, 10471 & 10491 No. 2 Road from "Single Detached (RS1/E)" to "Low Density Townhouses (RTL4)", be introduced and given first reading.

Consent Agenda Item 11. APPLICATION BY BRIAN ROSS MOTORSPORTS CORP. (DBA ALFA MASERATI OF RICHMOND) FOR REZONING AT 5480 PARKWOOD WAY FROM "INDUSTRIAL BUSINESS PARK (IB1)" TO "VEHICLE SALES (CV)" (File Part No. 87.16 754605) (REDMS No. 5825840 yr. 2)

(File Ref. No. RZ 16-754625) (REDMS No. 5835840 v. 3)

CNCL-131

See Page CNCL-131 for full report

PLANNING COMMITTEE RECOMMENDATION

- (1) That Official Community Plan Bylaw 9000 and 7100, Amendment Bylaw 9874, to re-designate 5480 Parkwood Way:
 - (a) from "Mixed Employment" to "Commercial" in the City of Richmond 2041 OCP Land Use Map to Schedule 1 of Official Community Plan Bylaw 9000; and

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(b) from "Industrial" to "Commercial" in the Land Use Map to Schedule 2.11B (East Cambie Area Plan) of the Official Community Plan;
be introduced and given first reading;
(2) That Bylaw 9874, having been considered in conjunction with:
(a) the City's Financial Plan and Capital Program; and

> (b) the Greater Vancouver Regional District Solid Waste and Liquid Waste Management Plans;

> is hereby found to be consistent with said program and plans, in accordance with Section 477(3)(a) of the Local Government Act;

- (3) That Bylaw 9874, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, is hereby found not to require further consultation; and
- (4) That Richmond Zoning Bylaw 8500, Amendment Bylaw 9875, for the rezoning of 5480 Parkwood Way from "Industrial Business Park (IB1)" to "Vehicle Sales (CV)", be introduced and given first reading.
- 12. ICBC-CITY OF RICHMOND ROAD IMPROVEMENT PROGRAM PROPOSED PROJECTS FOR 2018

(File Ref. No. 01-0150-20-ICBC1-01) (REDMS No. 5764530 v. 5)

CNCL-158

Consent

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See Page CNCL-158 for full report

PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION

- (1) That the list of proposed road safety improvement projects, as described in Attachment 2 of the staff report titled "ICBC-City of Richmond Road Improvement Program – Proposed Projects for 2018," dated May 15, 2018 from the Director, Transportation be endorsed for submission to the ICBC 2018 Road Improvement Program for consideration of cost-share funding; and
- (2) That should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to negotiate and execute the cost-share agreements, and that the 5-Year Financial Plan (2018-2022) be amended accordingly.

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Consent Agenda Item	13	UNDERPINNING WORKS AND CONSTRUCTION FENCE ENCROACHMENT BYLAW NO. 9833 (File Ref. No. 5818564) (REDMS No. 12-8060-20-009833)
	CNCL-164	See Page CNCL-164 for full report
		PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION
		That Underpinning Works and Construction Fence Encroachment Bylaw No. 9833 and Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9868, be introduced and given first, second and third readings.
Consent Agenda Item	14	2017 CLIMATE ACTION REVENUE INCENTIVE PROGRAM AND CARBON NEUTRAL PROGRESS REPORT (File Ref. No. 10-6125-07-03) (REDMS No. 5811042 v. 7)
	CNCL-185	See Page CNCL-185 for full report
		PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION
		That, in accordance with Provincial requirements, the Climate Action Revenue Incentive Program Report and Carbon Neutral Progress Report be posted on the City's website for public access.
Consent Agenda Item	15	 2017 ANNUAL WATER QUALITY REPORT (File Ref. No. 10-6000-01) (REDMS No. 5778511 v. 2)
	CNCL-219	See Page CNCL-219 for full report
		PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION
		That the staff report titled "2017 Annual Water Quality Report" dated April 23, 2018 from the Acting General Manager, Public Works, be endorsed and made available to the community through the City's website and through various communication tools including social media and as part of community outreach activities.

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Consent Agenda Item

16. UBCM RESOLUTIONS - PROVINCIAL ACTION ON ZERO EMISSIONS VEHICLES AND LOW CARBON FUELS (File Ref. No. 10-6125-07-02) (REDMS No. 5800684)

CNCL-301

See Page CNCL-301 for full report

PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION

That the proposed UBCM resolutions titled "Zero Emissions Vehicle Mandate" and "Strengthen Low Carbon Fuel Requirement" be submitted to the Union of BC Municipalities, as attached to the staff report titled "UBCM Resolutions - Provincial Action on Zero Emissions Vehicles and Low Carbon Fuels" dated April 11, 2018, from the Senior Manager, Sustainability and District Energy.

PUBLIC ANNOUNCEMENTS AND EVENTS

NEW BUSINESS

BYLAWS FOR ADOPTION

- **CNCL-309** Traffic Bylaw No. 5870, Amendment **Bylaw No. 9786** Opposed at $1^{st}/2^{nd}/3^{rd}$ Readings – None.
- CNCL-311 Parking (Off-Street) Regulation Bylaw No. 7403, Amendment Bylaw No. 9787 Opposed at 1st/2nd/3rd Readings – None.

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CNCL-316	Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9827 Opposed at 1 st /2 nd /3 rd Readings – None.		
CNCL-318	Notice of Bylaw Violation Dispute Adjudication Bylaw No. 8122, Amendment Bylaw No. 9829 Opposed at 1 st /2 nd /3 rd Readings – None.		
CNCL-320	Housing Agreement (8511 Capstan Way & 3360 No. 3 Road) Bylaw No. 9854		
	Opposed at $1^{st}/2^{nd}/3^{rd}$ Readings – None.		
CNCL-343	Richmond Zoning Bylaw No. 8500, Amendment Bylaw No. 9755 (9211, 9251, 9271, 9291 Odlin Road, RZ 17-778596) Opposed at 1 st Reading – None. Opposed at 2 nd /3 rd Readings – None.		

DEVELOPMENT PERMIT PANEL

17. RECOMMENDATION

See DPP Plan Package (distributed separately) for full hardcopy plans

- CNCL-348 (1) That the minutes of the Development Permit Panel meeting held on May 16, 2018, and the Chair's report for the Development Permit Panel meeting held on March 28, 2018, be received for information; and
- CNCL-366 (2) That the recommendation of the Panel to authorize the issuance of a Development Permit (DP 17-791769) for the property at 9211, 9251, 9271, 9291 Odlin Road be endorsed, and the Permit so issued.

ADJOURNMENT



Regular Council meeting for Public Hearings Tuesday, May 22, 2018

- Place: Council Chambers Richmond City Hall
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1.

Present: Mayor Malcolm D. Brodie Councillor Chak Au Councillor Derek Dang Councillor Carol Day Councillor Ken Johnston Councillor Alexa Loo Councillor Bill McNulty Councillor Linda McPhail Councillor Harold Steves

David Weber, Corporate Officer

- Call to Order: Mayor Brodie opened the proceedings at 7:00 p.m.
 - RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9836 (Location: 3551, 3571, 3591, 3611, and 3631 Sexsmith Road; Applicant: Polygon Development 218 Ltd.)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

- (a) Frank K.K. Chiu, Richmond resident (Schedule 1)
- (b) Licheng Feng, 3333 Brown Road (Schedule 2)
- (c) Jessie Deng, 3333 Brown Road (Schedule 3)

Submissions from the floor: None.

PH18/5-1 It was moved and seconded That Richmond Zoning Bylaw 8500, Amendment Bylaw 9836 be given second and third readings.

CARRIED



Regular Council meeting for Public Hearings Tuesday, May 22, 2018

2. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9852 (Location: 3991/3993 Lockhart Road; Applicant: Rav Bains)

Applicant's Comments: The applicant was available to respond to queries.

Written Submissions: None. Submissions from the floor: None.

PH18/5-2 It was moved and seconded *That Richmond Zoning Bylaw 8500, Amendment Bylaw 9852 be given second and third readings.*

CARRIED

 RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9856 (Location: 8280/8282 and 8300/8320 No. 3 Road; Applicant: Matthew Cheng Architect Inc.)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

None.

Submissions from the floor: None.

PH18/5-3 It was moved and seconded *That Richmond Zoning Bylaw 8500, Amendment Bylaw 9856 be given second and third readings.*

CARRIED



Regular Council meeting for Public Hearings Tuesday, May 22, 2018

4. OFFICIAL COMMUNITY PLAN BYLAW 7100, AMENDMENT BYLAW 9062 AND RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9063

(Location: 4020, 4080, 4100, 4180, 4280 and 4300 Bayview Street; Applicant: Onni Development (Imperial Landing) Corp.)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

- (a) Joe Williams, 197th Street, Surrey (Schedule 4)
- (b) Moreah Sinclaire, Richmond resident (Schedule 5)
- (c) Walter Nieboer, Richmond resident (Schedule 6)
- (d) Eleanor Hamilton, 4233 Bayview Street (Schedule 7)
- (e) Kevin Skipworth, 5999 Andrews Road (Schedule 8)
- (f) Jeff Jones, English Avenue (Schedule 9)
- (g) Ann Phelps, Canadian International Dragon Boat Festival Society (Schedule 10)

Submissions from the floor:

Cynthia Rautio, 12282 English Avenue, expressed concern with the proposed hotel use as it is in a residential area. She was of the opinion that the site was more suitable for uses such as banks, doctor's offices, etc. Ms. Rautio queried whether (i) there would be on-site hotel staff available 24/7, (ii) there would be public access around the proposed hotel, and (iii) there would be kitchenettes in the units.

Wayne Craig, Director, Development, advised that the covenant requested by Council requires that there be staff available at all times for the proposed hotel, and statutory rights of way will allow for public access from Bayview Street to the waterfront.

It was noted that should the proposed hotel not comply with City Business Regulations, the business licence may be revoked.



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Kevin Skipworth, 5999 Andrews Road, spoke in support of the proposed development, noting that he was involved with the inclusion of a daycare at the subject site. He was of the opinion that the area surrounding the subject site was in need of need of more vibrancy and wished to see the empty space occupied. Mr. Skipworth then noted that the proposed hotel would be a valuable addition to Steveston Village to cater to tourists all year round.

Loren Slye, 11911 3rd Avenue, spoke in favour of the proposed hotel, noting that it would be beneficial to the community and would provide much needed viability to the area. He was of the opinion that the proposed hotel would provide accommodation to tourists who wish to visit historic sites in Steveston Village.

Niti Sharma, Kingfisher Drive, expressed concern with the proposed development, noting that she does not see any data that supports the need for a hotel in the area. Ms. Sharma spoke of a potential land assembly in the City, and was of the opinion that the community amenity contribution amount was insufficient.

Carmen Keitsch, Richmond resident, expressed support for the proposed hotel, noting that it would provide appropriate accommodation for fishers. She was of the opinion that a commercial fishing store would be a valuable addition to the Stevesotn Village, as it would allow fishermen to purchase commercial grade equipment locally. Ms. Keitsch expressed concern regarding potential traffic impacts, noting long delays. Also, she wished to see the history of fishing in Steveston Village captured in some capacity.

Kelly Greene, Richmond resident, spoke in opposition to the proposed hotel. She believed that its operations would be modeled after that of a short-term rental. Ms. Greene queried whether the land lift analysis included hotel use. She then queried the proposed hotel's rates and whether they would be affordable for families.

In reply to queries from Council, Mr. Craig advised that the proposed hotel would have to comply with city business regulations as well as provincial regulations.

Anne Christian, 4211 Bayview Street, spoke of the proposed uses of the buildings, and expressed concern regarding (i) traffic along Bayview Street, (ii) lack of parking, (iii) emergency vehicle access, and (iv) traffic noise.



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In reply to queries from Council, Mr. Craig noted that other City Departments including Richmond Fire-Rescue were consulted and emergency vehicles can navigate the area. Also, he advised that the proposed project meets the City's parking requirements and as part of the rezoning there will be traffic improvements to Bayview Street. Mr. Craig then remarked that there are restrictions on the size of vehicles that can access the loading bay and are subject to the City's Noise Bylaw.

Mayor Brodie acknowledged the conclusion of the first round of public speakers. One speaker then addressed Council for a second time with new information.

Kelly Greene, Richmond resident, expressed concern with regard to traffic in the area, as she was of the opinion that the proposed hotel's services such as catering and housekeeping would further negatively affect traffic in the area.

PH18/5-4 It was moved and seconded *That Official Community Plan Bylaw 7100, Amendment Bylaw 9062 be given second and third readings.*

The question on PH18/5-4 was not called as discussion took place on the permitted uses of the buildings and the community amenity contribution amount. As a result of the discussion a referral motion to refer the application back to staff to provide more information on land use including an aquarium and marina was moved but was not seconded. It was noted that the Maritime Mixed Use zoning would remain in addition to the proposed other uses, and there have been substantive improvements to the application with regard to the requirements for the proposed hotel.

The question on PH18/5-4 then called and it was **CARRIED** with Councillors Day and Steves opposed.

PH18/5-5 It was moved and seconded *That Richmond Zoning Bylaw 8500, Amendment Bylaw 9063 be given third reading.*

CARRIED Opposed: Cllrs. Day Steves



Regular Council meeting for Public Hearings Tuesday, May 22, 2018

ADJOURNMENT

PH18/5-6 It was moved and seconded *That the meeting adjourn (8:08 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the Regular meeting for Public Hearings of the City of Richmond held on Tuesday, May 22, 2018.

Mayor (Malcolm D. Brodie)

Corporate Officer (David Weber)

MayorandCouncillors

Schedule 1 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018.

To Public Hearing Date: May 22, 2018 Item #_1 Re: 9836	
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From:
Sent:
To:
Subject:

Wednesday, 9 May 2018 14:00 MayorandCouncillors FW: Online submissions for comments regarding RZ 17-778835 by Polygon Development 218 Ltd.

From: CityClerk Sent: Wednesday, 9 May 2018 14:00 To: 'chiukwokkingmd@aol.com' Subject: RE: Online submissions for comments regarding RZ 17-778835 by Polygon Development 218 Ltd.

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email will be forwarded to the Mayor and each Councillor, and will be included as part of the May 22nd Public Hearing Agenda materials. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to share your views with Richmond City Council.

CitvClerk

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

From: <u>chiukwokkingmd@aol.com</u> [<u>mailto:chiukwokkingmd@aol.com</u>]
Sent: Wednesday, 9 May 2018 13:46
To: CityClerk
Subject: Re: Online submissions for comments regarding RZ 17-778835 by Polygon Development 218 Ltd.

Hello,

I owe an unit in the Polygon Avanti C building which faces east towards the proposed development. I hope there is a way to save the 4->5 trees on the proposed properties. They stand about 6->7 stories tall and they look pretty nice now that they are all sprouting green leaves in the spring. Is there a way Polygon can develop these properties along Sexsmith Road without causing excessive settlement in the newly constructed condo buildings abutting these properties along Sexsmith Road since the proposed building is rather close to the ones that are already constructed?

Thank you,

Frank K.K.Chiu

Schedule 2 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018.

ON TABLE ITEM Date: May 22, 2018 Meeting: Public Hearing

Neeting:<u>γ</u> Item: #1

CityClerk

From: Sent: To: Subject: CityClerk Tuesday, 22 May 2018 09:01 'Chao Fang' RE: Richmond Zoning Bylaw 8500, Amendment Bylaw 9836 (RZ 17-778835)

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email have been forwarded to the Mayor and each Councillor. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to make your views known.

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1



From: Chao Fang [mailto:chao.fang.4@gmail.com]
Sent: Thursday, 17 May 2018 20:05
To: CityClerk
Subject: Richmond Zoning Bylaw 8500, Amendment Bylaw 9836 (RZ 17-778835)

Licheng Fang 3333 Brown Road Richmond, BC V6X 0P6

Regarding: Richmond Zoning Bylaw 8500, Amendment Bylaw 9836 (RZ 17-778835)

First, I would like to thank you for hosting this public hearing. It is important to collect the opinions from the residents around the area prior to starting the construction.

Herein, I strongly oppose the amendment and rezoning.

I am living in the building located at 3333 Brown Road. All of the windows in my unit are facing east, which is directly facing the proposed high-rise building. When the construction of the building is finished, my unit will be completely blocked. It will significantly impact my daily life. First, according to the proposal, the new building is very close to my building. It will cause a lot of concerns about safety and privacy. Secondly, my property value will drop significantly if the only view towards east is blocked. When we were looking for our first property in Richmond, we were informed that the view of this unit would remain unblocked since the area on the east side was "Single Detached (RS1/F)". If it is rezoned and a high-rise building is built, we will suffer severe financial loss. Last but not least, the construction will generate a lot of noise, dust, and heavy traffic. I don't see a good arrangement for maintaining the area acceptably quiet and clean.

Therefore, I am against the amendment and rezoning.

Thank you for your time.

Best, Licheng Fang 604-652-5214 Schedule 3 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018. ON TABLE ITEM

Date: May 22, 2018 Meeting: Public Hearing Item: #1

CityClerk

From: Sent: To: Subject: CityClerk Tuesday, 22 May 2018 09:03 'Kason Li' RE: Richmond Zoning Bylaw 8500, Amendment Bylaw 9836 (RZ 17-778835)

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email have been forwarded to the Mayor and each Councillor. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to make your views known.

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

From: Kason Li [mailto:kslksl2003@gmail.com]
Sent: Saturday, 19 May 2018 20:10
To: CityClerk
Subject: Richmond Zoning Bylaw 8500, Amendment Bylaw 9836 (RZ 17-778835)

To whom this may concern,

Thanks for hosting the public hearing!

I am against the amendment and rezoning.

I invested a significant amount of my saving to purchase a unit in 3333 Brown Road. I really like the place, especially the view to the east. I can see the sky, the mountains, and the city. I had the concern that some high-rise buildings might be built in the future to block my view from my unit. So I did some research and found out the zoning of the land was Single Detached (RS1/F), which means no tall buildings would be built. But now it is going to be rezoned. Once the rezoning is passed, there will be tall buildings standing on the east side of our building and blocking my view. My unit and most units in building 3333 Brown Road facing east will be impacted. It is not what we bought. The property value will drop significantly. I feel like I was cheated.

Again, I am strongly against the amendment and rezoning.

Thank you for your consideration.

Regards, Jessie Deng 3333 Brown Road Richmond, BC V6X 0P6

MayorandCouncillors

From: Sent: To: Subject: Schedule 4 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018.

Contraction of the local division of the loc	To Public Hearing Date: May 22, 2018 Item # 4
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MayorandCouncillors Tuesday, 1 May 2018 08:52 'Joe' RE: I do not support the rezoning of 4020 Bayview Street - Imperial Landing in Steveston

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email will be forwarded to the Mayor and each Councillor, and will be included as part of the May 22nd Public Hearing Agenda materials. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to share your views with Richmond City Council.

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1



-----Original Message-----From: Joe [<u>mailto:joe.nadya@gmail.com</u>] Sent: Sunday, 15 April 2018 22:24 To: MayorandCouncillors Cc: <u>info@waterfrontrezoning.com</u>; Badyal,Sara Subject: I do not support the rezoning of 4020 Bayview Street - Imperial Landing in Steveston

Name: Joe Williams Street Name: 197th Street Postal Code: V2Y 2T7 E-mail: joe.nada@gmail.com Phone Number: 604.787.3874

Dear Mayor and Council

I am not a resident of Richmond. I worked in Richmond for 26 years. I visit Steveston many times a year with my boat.

Nikki marine closed a few years ago. Steveston hardware is going to close this summer. We are losing the reasons that myself and fellow boaters come to Steveston village. We need more reasons to come to Steveston not less.

If you allow rezoning at Imperial Landing what will happen in the village ? Too much new commercial property and the old small time shops will disappear. I don't want Steveston to become home to generic franchises and lose its charm and character.

Please keep marine use zoning in place.

Thank you for your time Joe Williams

Sent from my iPad

MayorandCouncillors

From: Sent: To: Subject: Schedule 5 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018.

Tuesday, May 22, 2018. MayorandCouncillors Tuesday, 1 May 2018 08:52 'Moreah Sinclaire'

To Public Hearing Date: May 22 2018 Itom # Bylaws 9062 + 9063

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email will be forwarded to the Mayor and each Councillor, and will be included as part of the May 22nd Public Hearing Agenda materials. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to share your views with Richmond City Council.

RE: Onni site in Steveston

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

From: Moreah Sinclaire [mailto:moreah sinclaire@hotmail.com] Sent: Tuesday, 24 April 2018 20:32 To: MayorandCouncillors Subject: Re: Onni site in Steveston

Dear Mr. Mayor and Councillors, Please consider the following suggestion which I sent to the Richmond News in late November. Thank you, Moreah Sinclaire Richmond Resident

To: <u>editor@richmond-news.com</u> Subject: Hello, Eve - Here are my thoughts on what to put on the Onni site: An Aquarium!

Before the zoning is changed to suit Onni, I would like to suggest that what Steveston needs on that priceless site, is an Aquarium - obviously 'Marine' themed; no re-zoning necessary.

The City's beautiful new tree-themed park on the Garden City Lands will help to beautify our mid-island, and an aquarium in Steveston would be another feature to draw visitors to that end of the island. Certainly, to the thousands of passengers from future cruise ships it would offer a charming gem close by. Steveston merchants would welcome such an interesting, natural attraction, rather than a hotel or more fish & chip cafes. As well, it would provide an educational field trip where students learn about the amazing marine life that inhabits our west coast waters. Starfish, rock fish, jelly fish, clams, anemones, sea cucumbers, sea urchins, salmon are just some of the possibilities.

Ucluelet, the small fishing village on the Island, has a small but amazing aquarium, with rave reviews, right on the water's edge, too. Their website, <u>www.uclueletaquarium.com</u> has numerous amazing photos, and shows their little building's interior which features typical westcoast design of natural log posts and heavy

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timber framing. If a similar design were used in Steveston's Aquarium, it would help to offset the dreadful concrete and steel we see there now. It could be a real gem....

Moreah Sinclaire

MayorandCouncillors

From: Sent: To: Subject: Schedule 6 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018.

MayorandCouncillors Thursday, 10 May 2018 08:10 'Walter Nieboer' RE: Another open House

To Public Hearing Date: May 22, 2018 Item #

Bylaws 9062+9063

Good morning Mr. Nieboer,

This is to acknowledge and thank you for your email. Please be advised that copies of your email will be forwarded to the Mayor and each Councillor, and will be included as part of the May 22nd Public Hearing Agenda materials. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to share your views with Richmond City Council.

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

-----Original Message-----From: Walter Nieboer [mailto:swnieboer@gmail.com] Sent: Wednesday, 9 May 2018 19:16 To: MayorandCouncillors Subject: Another open House

Dear Mayor and councillors, just received notice of yet another open house.

Really!

We are tired of your foot dragging and indecision.

You made a decision years ago.

Onni snubbed their nose at you and went ahead despite the restricted zoning.

You have been petionned, cajoled, by Onni ever since, AND, yes, they (Onni), will get their way, because you have not and will not stand by your principles and earlier decision.

Onni acts like a spoiled child that will badger a parent knowing the parent will cave to their demands.

Well the citizens are fed up but obviously powerless thanks to you, our representatives.

I have appealed to your broader sense of right on previous occasions to no avail.

Tell Onni they can have the ground floor space rezoned to residential and don't come back again. Case closed.

Thank you for listening.

This saga deserves to close.

Walter Nieboer

604 241-1471



Schedule 7 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018.

To Public Hearing Date: May 22, 2018 Item #	
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MayorandCouncillors

From: Sent: To: Subject: CityClerk Monday, 14 May 2018 14:47 MayorandCouncillors FW: Zoning Amendment

Categories:

- TO: MAYOR & EACH COUNCILLOR / FROM: CITY CLERK'S OFFICE

From: CityClerk Sent: Monday, 14 May 2018 14:47 To: 'Elly Hamilton' Subject: RE: Zoning Amendment

Good afternoon Ms. Hamilton,

This is to acknowledge and thank you for your email. Please be advised that copies of your email will be forwarded to the Mayor and each Councillor, and will be included as part of the May 22nd Public Hearing Agenda materials. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to share your views with Richmond City Council.

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

-----Original Message-----From: Elly Hamilton [mailto:sunflower31@shaw.ca] Sent: Thursday, 10 May 2018 15:33 To: CityClerk Subject: Zoning Amendment



I would like to address the re-zoning application for the ONNI development on Bayview St. in Steveston. I want to say "thank you" to The Richmond Council for their stand on the empty ONNI development for the last few years. And for not allowing ONNI to ignore our City Zoning Bylaw.

When ONNI planned and built the complex on Bayview St. (4020, 4080, 4100, 4280, 4300) they were aware of the zoning for that land. They put up the buildings thinking they could persuade, bribe, or force the city to allow retail/commercial uses.

The reason I am opposed to changing that area is because ONNI cannot be trusted. I live in an ONNI-built condo complex - across the street from the buildings under dispute. As a result of ONNI's dishonest and illegal building practices we are now undergoing a 10 to 15 million dollar restoration process.

Every ONNI building has major problems created as a result of their shoddy workmanship. I have been told that the company has been banned from building in Toronto because of their poor building practices.

Why should we now bend to their wishes - at our cost. It will be at our cost because if - and when the retail businesses are brought in to those empty spaces on Bayview, the traffic will be impossible to live with. Yes, there is underground parking but that space is limited. And if we have delivery trucks coming and going - night and day - in this residential area it will be a nightmare. Parking is already a major problem in this area and all of Steveston. ONNI should have considered that when they planned their development.

Also - we do not need another Pharmacy in Steveston - we already have five of them.. Nor do we need another coffee shop. And with Save On Foods coming into Steveston and Super Grocer already here - another grocery store is not a good idea.

ONNI knew the rules when they developed the property. We do not need to accommodate their wishes now!!!

Let it continue to stand empty - PLEASE

Eleanor Hamilton # 105 - 4233 Bayview St. Richmond Schedule 8 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018.

MayorandCouncillors

From: Sent: To: Subject: MayorandCouncillors Tuesday, 22 May 2018 09:28 'Kevin Skipworth' RE: Onni Development (Imperial Landing) Revising Maritime Mixed Use Zoning

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email have been forwarded to the Mayor and each Councillor. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to contact Richmond City Council.

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

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ON TABLE ITEM

Date: May 22, 2018

Item:#4

Meeting: Public Hearing

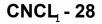
From: Kevin Skipworth [mailto:kevin@skipworth.ca]
Sent: Monday, 21 May 2018 22:22
To: MayorandCouncillors
Cc: Brendan Yee
Subject: Onni Development (Imperial Landing) Revising Maritime Mixed Use Zoning

Mayor and Councilors,

I wish to express my support for the proposed OCP Designation Amendment at Imperial Landing put forth by Onni. It is time to move forward and see this space no longer scream empty.

While I commend City Council for being able to achieve at CAC in the amount of \$5,500,000, what I would like to be brought forward at the Public Hearing on Tuesday, May 22, 2018 is the amount of City resources in terms of a financial dollars as to what the City of Richmond has spent in the last 5 years achieving this. Should this not be finally approved by Council, that amount spent will be for not and the City of Richmond residents will not benefit from that money which will go to our community. And to what end? The City's own consultant pegged the land lift at this amount from this rezoning. And it seems that because of a belief that Maritime related businesses need to be here. At what point is enough enough?

Let's move forward to end this stalemate now that the City has 100% of the lift according to the City's consultant. What more is needed? Even so far as to get a covenant on title to say how the hotel will be operated and ensure it is there. How often is that done to other businesses? To ensure that the surrounding residents are kept from harm and disturbance. That doesn't appear to be the norm, and a heavy burden to put on a business. So all has been achieved. It's time to let go and let Steveston develop and not be held back. This is not Granville Island, it never will be. Bring tourists for more than a day to the hotel, bring some vitality to space that embarrassingly sits empty. It's been 5 years, you've won. Bring services to those of us that live east of No 1 Road and don't want to venture into the Village on the tourist busy weekends. And look at bringing residents to the Village all year round, and not just catering to tourists. Instead of trying to force a maritime experience on a community that perhaps wants services, make a decision for a proper future. It's time.



Kevin Skipworth 5999 Andrews Road Schedule 9 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018.

MayorandCouncillors

From: Sent: To: Subject: MayorandCouncillors Tuesday, 22 May 2018 13:56 'jefflynn' RE: ONNI Imperial Landing Development

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email have been forwarded to the Mayor and each Councillor. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to contact Richmond City Council.

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

From: jefflynn [<u>mailto:jefflynn@shaw.ca</u>] Sent: Tuesday, 22 May 2018 10:48 To: CityClerk Cc: JEFF JONES Subject: Fw: ONNI Imperial Landing Development



From: jefflynn Sent: Monday, May 21, 2018 11:42 PM To: <u>cityclerk@richmond.ca</u> Subject: ONNI Imperial Landing Development

City Clerk Please accept this submission. The on line form was not available.

Mayor Brodie and Councillors. What do some of you have against ONNI, Why has every other project that ONNI and other developers projects gone ahead but not this one. There must a reason that I and other residents can't understand. When I have phoned some councillors if they answer which the majority don't although it, what they get paid well for, to be accountable to the the residents especially the ones right across the street from the development and voice my approval for the ONNI proposal all I receive is a tirade of abuse and complaints against ONNI. As far as I know ONNI has complied with every thing that council asked of them. Regarding the 24 hr desk coverage for the proposed Hotel development. I notice that at the Buccaneer Hotel in Steveston Village they don't have that 24 hr coverage so why is a required for ONNI. I can only guess that there is a hidden agenda with some councillors that do not want this development to go ahead. Some of you although you claim to work in the best interest of the city of Richmond to squeeze every last dime out of ONNI forget that Steveston Village is the City of Richmond too. I have lived at the same address for 14yrs I live on English Ave right across the street from the ONNI development. When I moved in my wife and I had great expectations for the then empty lot in front of us and that the community center would be upgraded or

ON TABLE ITEM

Date:<u>May 22,2018</u> Meeting:<u>PUblic Hearing</u> Item:#4

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replaced and new library built across the from the the community center on the corner Moncton and Easthope.

No such luck, nothing was done on the empty lot although ONNI proposed on Three occasions to build very good and purpose full developments. Those proposals didn't even make it through the development permit panel. Mr. steves, Mr. McNulty and Linda Barns blocked every time. In the end I believe ONNi went ahead with the original development plan so as to get past the Harold Steves committee. Now we have and have had for a number of years a stalemate where some member of council are determined to block the current ONNI proposal. I and other are disgusted with the way you have been time after time blocking this development, with one ridiculous reason after another. Most of you don't live where I live and seem not to care about how residents and visitors a like are puzzled and disgusted what council are doing and not approving this application.

Richmond

Regards Jeff Jones English Ave Steveston Village

MayorandCouncillors

From: Sent: To: Subject: Schedule 10 to the Minutes of the Public Hearing meeting of Richmond City Council held on Tuesday, May 22, 2018. **ON TABLE ITEM**

Date: May 22,2018 Meeting: Public Hearing _____ Item: Au

MayorandCouncillors Tuesday, 22 May 2018 16:32 'Ann Phelps' RE: A Hotel in Steveston

Hello,

This is to acknowledge and thank you for your email. Please be advised that copies of your email have been forwarded to the Mayor and each Councillor. In addition, your email has been forwarded to Wayne Craig, Director, Development.

Thank you again for taking the time to share your views with Richmond City Council.

Hanieh Berg | Acting Manager, Legislative Services City Clerk's Office | City of Richmond 6911 No. 3 Road, Richmond, BC V6Y 2C1

From: Ann Phelps [mailto:ann@dragonboatbc.ca] Sent: Tuesday, 22 May 2018 16:30 To: MayorandCouncillors Subject: A Hotel in Steveston OF RICHMON DATE MAY 2 2 2018 RECEIVED

Dear Mayor Brodie and Council Members:

On behalf of the Board of Directors of the Canadian International Dragon Boat Festival Society, presenter of the annual Steveston Dragon Boat Festival held in August, we are writing to express our support of the Onni development application you are discussing this evening.

We believe that a new hotel would be very beneficial to the area. Our event is a just one good example of the demonstrated need for more accommodation in Steveston Village.

The 9th Annual Steveston Dragon Boat Festival is only six registrations short of maximum capacity, a full 3 months away. Each team is made up of 22 paddlers (1584 paddlers in total) and an average of 10 more extra paddlers and supporters who accompany each team to races. One third of the paddlers come from out of town, spending an estimated \$695 per person in tourism dollars. Because there is no hotel within walking distance, many of the teams spend the day at the festival and then go to their hotel, often outside of the area. This is revenue that is lost to the local businesses.

As well, because of the lack of nearby accommodation, our event is limited to only one day. We have reached maximum capacity for a one day event for the past seven years. Local accommodation could allow us to increase our event to a full weekend of activities.

Past surveys have shown that many paddlers, both visiting and regional, stated that they had never visited Steveston and that they planned to re-visit as a result of taking part in the dragon boat festival. Steveston and the rest of Richmond will benefit from additional tourism-based visits as a direct result of the paddler's experiences in Steveston.

We strongly support your continued efforts to activate the site with cultural spaces, restaurants, quality retail outlets, and other spaces that would further activate the site and enhance the visitor experience, while adding much needed services to the neighbourhood.

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Creating a common vision for the Imperial landing site and turning that vision into reality requires strong partnerships between the community, the government and the developer and we are confident that with your leadership, Onni will be a strong community partner in the future development of Imperial Landing.

We hope that Onni is successful in their re-zoning application and look forward to the increased attractiveness of Steveston that will develop as a result of commercial and cultural enhancements. Onni is an excellent community partner to our smaller non-profit organization, in terms of both financial and value-in-kind support and we know that if they are successful our non-profit society's activities in Richmond will be more successful as well. We had hoped to come tonight to speak, but unfortunately we have a large volunteer event scheduled for the same evening.

Yours truly,

Regards,

Ann Phelps General Manager, ED Dragon Boat BC Canadian International Dragon Boat Festival Society

Join us for the Dragon Boat BC Legacy Gala on May 24, 2018, the 30th anniversary of the Concord Pacific Vancouver Dragon Boat Festival from June 22-24, 2018, and the Steveston Dragon Boat Festival on August 25, 2018.

www.dragonboatbc.com www.facebook.com/thedragonboatbc

This email, and any files transmitted, is confidential and may contain privileged information. Any unauthorized dissemination or copying is strictly prohibited. If you have received this email in error, please delete it and notify the sender immediately. We may monitor and review the content of all email communications.



Community Safety Committee

Date: Tuesday, May 15, 2018

Place: Anderson Room Richmond City Hall

- Present: Councillor Bill McNulty, Chair Councillor Derek Dang Councillor Ken Johnston Councillor Alexa Loo Councillor Linda McPhail
- Call to Order: The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the Community Safety Committee held on April 10, 2018, be adopted.

CARRIED

NEXT COMMITTEE MEETING DATE

June 12, 2018, (tentative date) at 4:00 p.m. in the Anderson Room

COMMUNITY SAFETY DIVISION

1. BUSINESS LICENCES QUARTERLY REPORT – FIRST QUARTER 2018 (File Ref. No. 12-8275-01) (REDMS No. 5804841)

(File Ref. No. 12-8275-01) (REDMS No. 5804841)

Carli Edwards, Manager, Community Bylaws and Licencing, highlighted that staff conducted a successful enforcement campaign on construction sites, advising that over 100 business licences were checked and a 60% compliance rate was achieved. She noted that Richmond has joined with other municipalities to conduct these enforcement campaigns in an effort to ensure mobile contractors have proper business licences.

In reply to queries from Committee, Ms. Edwards noted that (i) Community Bylaws has an inspector dedicated to short-term rentals, who regularly checks listings and addresses complaints, (ii) discussions with building managers have been successful with regard to rentals in condominiums, (iii) staff are working with the City of Vancouver regarding procedures for short-term rentals, (iv) an increase in short-term rentals is anticipated leading into the summer months, and (v) staff are working with the RCMP and Passenger Transportation Board with regard to illegal taxis in the city.

It was moved and seconded

That the staff report titled "Business Licences Quarterly Report – First Quarter 2018", dated April 19, 2018, from the General Manager Community Safety be received for information.

CARRIED

2. COMMUNITY BYLAWS MONTHLY ACTIVITY REPORT - MARCH 2018

(File Ref. No. 12-8060-01) (REDMS No. 5800616 v. 2)

In reply to queries from Committee, Ms. Edwards noted that Bylaw Officers recently went through an animal control retraining program and noted that more information can be provided with regard to equipment available to the Bylaw Officers for animal control.

It was moved and seconded

That the staff report titled "Community Bylaws Monthly Activity Report -March 2018", dated April 24, 2018, from the General Manager, Community Safety, be received for information.

CARRIED

3. RICHMOND FIRE-RESCUE MONTHLY ACTIVITY REPORT – MARCH 2018

(File Ref. No. 09-5000-01) (REDMS No. 5796325 v. 3)

In reply to queries from Committee, Kevin Gray, Deputy Fire Chief, Richmond Fire-Rescue, advised that incident response times vary per FireHall depending on various factors such as distance to a call, weather and the time of day. In response to a query regarding the implementation plan, Mr. Gray advised that more information on the matter is forthcoming.

It was moved and seconded

That the staff report titled "Richmond Fire-Rescue Monthly Activity Report – March 2018", dated April 23, 2018 from the Fire Chief, Richmond Fire-Rescue, be received for information.

CARRIED

4. **FIRE CHIEF BRIEFING** (Verbal Report)

Item for discussion: None.

5. RCMP MONTHLY ACTIVITY REPORT – MARCH 2018

(File Ref. No. 09-5000-01) (REDMS No. 5780750 v. 5)

Superintendent William Ng, Officer in Charge, Richmond RCMP, highlighted that (i) the Road Safety Unit conducted four successful campaigns targeting speeding drivers along River Road, (ii) Speed Watch Volunteers were situated along River Road and issued 102 warning letters, and (iii) RCMP Officers from the Crime Reduction Unit partnered with local Loss Prevention Officers (LPOs) to target crime at multiple retail locations. Superintendent Ng then noted that the marginal increase to the serious assault section can be attributed to LPOs being sprayed with bear spray.

In reply to queries from Committee, Superintendent Ng advised that (i) tickets will not be issued to cyclists along River Road until the education campaign is complete, (ii) final details are being discussed with Vancouver Coastal Health with regard to a mental health nurse and the Car 67 initiative and staff are examining the City of Vancouver's protocols with regard to the initiative, and (iii) there will be increased foot patrols during the summer months.

It was moved and seconded

That the report titled "RCMP Monthly Activity Report – March 2018", dated April 19, 2018, from the Officer in Charge, Richmond RCMP Detachment, be received for information.

CARRIED

6. **RCMP/OIC BRIEFING**

(Verbal Report)

Item for discussion:

Coffee with a Cop

Superintendent Ng advised that the first Coffee with a Cop session was successful and a great way to connect with the community. He noted that there will be two more sessions, on June 4^{th} at Aberdeen Centre and on June 10^{th} at the McDonalds at Ironwood Mall.

7. EMERGENCY PROGRAMS QUARTERLY ACTIVITY REPORT – FIRST QUARTER 2018

(File Ref. No. 09-5126-01) (REDMS No. 5819209 v. 4)

Norman Kotze, Manager, Emergency Programs, advised that the Richmond Resilient Communities Program workshops have come to an end and staff have commenced planning for next year's workshops.

Discussion took place on whether Emergency Programs has adequate resources to manage an emergency situation and it was noted that information on resources available or required would be valuable.

Joe Erceg, General Manager, Planning and Development, advised that staff will provide an update to Committee with information on current resources and Committee may discuss whether those resources are adequate for an emergency.

Discussion further took place and it was noted that both RFR and Richmond RCMP have established protocols as it relates to emergencies.

As result of the discussion, the following referral motion was introduced:

It was moved and seconded

- (1) That staff examine the development of emergency response plans, including a public education component and report back; and
- (2) That a plan for Emergency Services staffing be developed including appropriate budget implications and report back in a timely manner.

The question on the referral motion was not called as discussion took place on flooding in the Township of Langley and it was noted that the public is looking for more information with regard to what to do in an emergency.

The question on the referral motion was then called and it was **CARRIED**.

In reply to queries from Committee regarding the recent AlertReady notification, Mr. Kotze advised that, with any notification of that scale additional logistical improvements are to be expected.

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It was noted that although there have not been any recent large scale emergencies in the city, it is important to highlight to the community that there are programs available on emergency preparedness should an emergency arise.

It was moved and seconded

That the staff report titled "Emergency Programs Quarterly Activity Report – First Quarter 2018", dated April 26, 2018, from the General Manager, Community Safety, be received for information.

CARRIED

8. RICHMOND RESILIENT COMMUNITIES PROGRAMS UPDATE (File Ref. No. 09-5126-01) (REDMS No. 5820068 v. 5)

Mr. Kotze advised that the first year of the Resilient Communities Program is coming to an end and staff are gathering statistics to measure the growth of the Program. Also, he highlighted that participants were provided a skills training workshop, such as first aid and food safe training, to ensure there are individuals in the community that can assist in the event of an emergency.

It was moved and seconded

That the staff report titled "Richmond Resilient Communities Programs Update", dated April 26, 2018, from the General Manager, Community Safety, be received for information.

CARRIED

9. COMMITTEE STANDING ITEM

E-Comm

The Chair advised that Strategic Planning sessions are still underway with regard to the future of E-Comm and its integration into other areas of emergency services.

10. MANAGER'S REPORT

None.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (4:33 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Community Safety Committee of the Council of the City of Richmond held on Tuesday, May 15, 2018.

Councillor Bill McNulty Chair Sarah Kurian Legislative Services Coordinator



Minutes

General Purposes Committee

Date: Tuesday, May 22, 2018

Place: Anderson Room Richmond City Hall

Present:

Mayor Malcolm D. Brodie, Chair Councillor Chak Au Councillor Derek Dang Councillor Carol Day Councillor Ken Johnston Councillor Alexa Loo Councillor Bill McNulty Councillor Linda McPhail Councillor Harold Steves

Call to Order: The Chair called the meeting to order at 4:24 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the General Purposes Committee held on May 7, 2018, be adopted as circulated.

CARRIED

COMMUNITY SERVICES DIVISION

1. MAJOR FACILITIES PHASE 2 – RICHMOND LAWN BOWLING PROGRAM PLAN AND SITE

(File Ref. No. 06-2050-20-MLBC) (REDMS No. 5743253 v. 40)

In response to questions from Committee, Jim Young, Senior Manager, Capital Buildings Project Development and Gregg Wheeler, Manager, Sport and Community Events advised that (i) the various amenities and programming needs required and requested by the Richmond Lawn Bowling Club were reviewed during the program and service level development process, (ii) the proposed new multipurpose room would accommodate up to 125 and larger events could utilize the Minoru Centre for Active Living multipurpose rooms, (iii) a site location south of the greens on the east side was not recommended by staff as it is not as centrally located to the parking lot and building in that area could obstruct park views of residences nearby, and (iv) staff could review the option of constructing a multi-floor clubhouse.

Discussion ensued regarding increasing the size of the proposed clubhouse and potential site locations.

As a result of the discussion, the following **referral motion** was introduced:

It was moved and seconded That the report be referred back to staff to provide revised options for site locations and building size.

The question on the motion was not called as it was noted that staff should include any information that would accelerate or effect the longevity of a new clubhouse, including future population growth and replacement of the carpets.

The question on the motion was then called and it was CARRIED.

2. ANIMAL SHELTER GUIDING PRINCIPLES, PROGRAM AND SITE (File Ref. No. 06-2055-20-012) (REDMS No. 5799733 v. 17)

In response to queries from Committee, Mr. Young and Paul Brar, Manager, Parks Programs noted that (i) the proposed new shelter would be approximately 30% larger than the current space, (ii) staff reviewed trends in projecting future growth and while there has been a decline in the number of dogs and cats coming through shelter, the demand for smaller animals has increased, (iii) the proposed new building could allow for future expansion, if required, (iv) the new shelter would incorporate the current capacity for diagnostic medical intake of animals as they come into care, including minor immediate procedures, (v) the additional space of a wildlife room would act as a temporary holding facility for injured wildlife such as racoons and birds to provide immediate care or until they are collected by a service provider, (vi) multipurpose rooms are common in shelters as they provide space for training and community meetings, and (viii) the current budget for the project would not allow for the addition of a wildlife room or multipurpose room. Discussion took place on referring the report back to staff to provide further information on future projections based on population growth, inclusion of an animal hospital in the new facility, and inclusion of additional spaces such as a multipurpose room and wildlife temporary holding room.

As a result of the discussion, the following **referral motion** was introduced:

It was moved and seconded

That the staff report be referred back to examine options and costs on the overall size of a new animal shelter, including additional spaces such as a multi-purpose room and wildlife temporary holding room, that would meet the City's growing needs.

CARRIED

As a further result of discussion, an additional **referral motion** was introduced:

It was moved and seconded

That staff analyze the possibilities for an animal hospital in conjunction with a new animal shelter.

DEFEATED Opposed: Mayor Brodie Cllrs. Au Dang Loo Steves

COMMUNITY SAFETY DIVISION

3. APPLICATION FOR A NEW LIQUOR PRIMARY LIQUOR LICENCE - TRUESTEA CAFE LTD DOING BUSINESS AS: THE TRUE'STEA RESTAURANT- 8400 ALEXANDRA RD UNIT 180 (File Ref. No. 12-8275-30-001) (REDMS No. 5818206)

It was moved and seconded

- (1) That the application from Truestea Cafe Ltd., doing business as, The True'stea Restaurant, for a new Liquor Primary Liquor Licence to operate entertainment with full service Asian cuisine, at premises located at 8400 Ackroyd Rd Unit 180, with liquor service, be supported for:
 - (a) A new Liquor-Primary Liquor Licence with primary business focus of entertainment, specifically live music and games with total person capacity of 197 persons;

- (b) Family Food Service to permit minors in all licensed areas until 10:00 p.m. when accompanied by a parent or guardian, when food service is available for families; and
- (c) Liquor service hours for Monday to Sunday, from 12:00 p.m. to 2:00 a.m.;
- (2) That a letter be sent to Liquor Control and Licensing Branch advising that:
 - (a) Council supports the applicant's new Liquor Primary Liquor Licence and the hours of liquor service with the conditions as listed above;
 - (b) The total person capacity at 197 persons indoor is acknowledged;
 - (c) Council's comments on the prescribed criteria (section 71 of the Liquor Control and Licensing Regulations) are as follows:
 - (i) The impact of noise and traffic in the vicinity of the establishment was considered;
 - (ii) The general impact on the community was assessed through a community consultation process; and
 - (iii) There is no history of non-compliance with this operation;
 - (d) As the operation of a licenced establishment may effect nearby residents, businesses and property owners, the general impact assessment was conducted through the City's community consultation process as follows:
 - (i) Residents, businesses and property owners within a 50 meter radius of the establishment were notified by letter. The letter provided information on the application with instructions on how to submit comments or concerns; and
 - (ii) Signage was posted at the establishment and three public notices were published in a local newspaper. The signage and public notice provided information on the application with instructions on how to submit comments or concerns;
 - (e) That Council's comments on the general impact of the views of residents, businesses and property owners are as follows:
 - *(i)* The community consultation process was completed as part of the application process; and

- (ii) The community consultation process resulted in no comments or views submitted from residents, businesses and property owners;
- (f) That Council recommends the approval of the licence for the reasons that this new application of the liquor primary license is acceptable to the majority of the residents, businesses and property owners in the area and the community.

CARRIED

4. APPLICATION TO REQUEST A FOOD PRIMARY ENTERTAINMENT ENDORSEMENT FOR FOOD-PRIMARY LIQUOR LICENCE # 139438 – RICHMOND COUNTRY CLUB – 9100 STEVESTON HWY

(File Ref. No. 12-8275-30-001) (REDMS No. 5814183)

It was moved and seconded

- (1) That the application from Richmond Country Club, operating at 9100 Steveston Hwy, requesting a Food-Primary Entertainment Endorsement for Patron Participation to Food- Primary Liquor Licence # 139438, to enable patrons to dance at the establishment, be supported;
- (2) That a letter be sent to Liquor Control and Licensing Branch advising that:
 - (a) Council supports the amendment for a Patron Participation Entertainment Endorsement on Food-Primary Liquor Licence # 139438 as the endorsement will not have a significant impact on the community;
 - (b) The hours of liquor sales will remain the same at:
 - (i) 9:00 a.m. to 1:00 a.m., Monday to Saturday; and
 - (ii) 9:00 a.m. to Midnight, Sunday;
 - (c) The new seating capacity for the food primary portion of the licence will be increased to 694 persons indoors and 190 persons patio;
- (3) That Council's comments on the prescribed criteria (Section 71 of the Liquor Control and Licensing Regulations) are as follows:
 - (a) The potential for additional noise and traffic in the area was considered;
 - (b) The impact on the community was assessed through a community consultation process;

- (c) Given that there has been no history of non-compliance with the operation, the amendment to permit patron participation entertainment endorsement under the Food Primary Liquor Licence should not change the establishment such that it is operated contrary to its primary purpose; and
- (d) As the operation of a licenced establishment may affect nearby residents, businesses and property owners, the impact assessment was conducted through the City's community consultation process as follows:
 - (i) Residents, businesses and property owners within a 50 meter radius of the subject property were notified by letter. The letter provided information on the application with instructions on how to submit comments or concerns; and
 - (ii) Signage was posted at the subject property and three public notices were published in a local newspaper. The signage and public notice provided information on the application with instructions on how comments or concerns could be submitted;
- (e) That Council's comments and recommendations respecting the view of the residents, businesses and property owners are as follows:
 - *(i) The community consultation process was completed as part of the application process; and*
 - (ii) The community consultation process resulted in no comments or views submitted from residents, businesses and property owners;
- (f) That Council recommends the approval of the permanent change to add patron participation entertainment endorsement to the Food Primary Licence for the reasons that the addition of the endorsement proposed is acceptable to the majority of the residents, businesses and property owners in the area and the community.

CARRIED

FINANCE AND CORPORATE SERVICES DIVISION

5. VOTING DIVISIONS FOR THE 2018 GENERAL LOCAL AND SCHOOL ELECTION

(File Ref. No. 12-8125-80-05) (REDMS No. 5814102 v. 3)

It was moved and seconded

That Civic Election Administration and Procedure Bylaw No. 7244, Amendment Bylaw No. 9876, which proposes adjustments to voting division boundaries and establishes 4 additional voting divisions for the 2018 General Local and School Election, be introduced and given first, second, and third readings.

CARRIED

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (4:54 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the General Purposes Committee of the Council of the City of Richmond held on Tuesday, May 22, 2018.

Mayor Malcolm D. Brodie Chair Amanda Welby Legislative Services Coordinator

Minutes



Planning Committee

Date:	Wednesday, May 23, 2018
Place:	Anderson Room Richmond City Hall
Present:	Councillor Linda McPhail, Chair Councillor Bill McNulty, Vice-Chair Councillor Chak Au Councillor Alexa Loo Councillor Harold Steves
Also Present:	Councillor Carol Day
Call to Order:	The Chair called the meeting to order at 1:00 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the Planning Committee held on May 8, 2018, be adopted as circulated.

CARRIED

PLANNING AND DEVELOPMENT DIVISION

 APPLICATION BY 1076694 B.C. LTD. FOR REZONING AT 10451, 10471 & 10491 NO. 2 ROAD FROM SINGLE DETACHED (RS1/E) TO LOW DENSITY TOWNHOUSES (RTL4) (File Ref. No. RZ 17-778834) (REDMS No. 5775047)

Steven De Sousa, Planner 1, reviewed the application, noting that (i) the purpose of the application is to develop 12 two and three storey townhouse units with vehicle access from No. 2 Road, (ii) the proposal is consistent with the Official Community Plan (OCP) and the arterial land use policy, and (iii) the proposal would provide a cash-in-lieu contribution towards the City's affordable housing reserve fund and frontage improvements along No. 2 Road.

It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9872, for the rezoning of 10451, 10471 & 10491 No. 2 Road from "Single Detached (RS1/E)" to "Low Density Townhouses (RTL4)", be introduced and given first reading.

CARRIED

2. APPLICATION BY BRIAN ROSS MOTORSPORTS CORP. (DBA ALFA MASERATI OF RICHMOND) FOR REZONING AT 5480 PARKWOOD WAY FROM "INDUSTRIAL BUSINESS PARK (IB1)" TO "VEHICLE SALES (CV)"

(File Ref. No. RZ 16-754625) (REDMS No. 5835840 v. 3)

Mark McMullen, Senior Coordinator, Major Projects, reviewed the application and highlighted that the property encompasses a one acre lot and existing 20,000 square foot building located on the edge of the Richmond Auto Mall. He further noted that the proposed rezoning would involve an amendment to the OCP and area plan to designate the property as commercial. Mr. McMullen also noted that similar rezoning applications had recently been approved by Council.

In response to a question from Committee, Wayne Craig, Director, Development advised that similar OCP amendments have previously been made to incorporate properties within the Richmond Auto Mall.

The applicant was available for questions from Committee.

It was moved and seconded

- (1) That Official Community Plan Bylaw 9000 and 7100, Amendment Bylaw 9874, to re-designate 5480 Parkwood Way:
 - (a) from "Mixed Employment" to "Commercial" in the City of Richmond 2041 OCP Land Use Map to Schedule 1 of Official Community Plan Bylaw 9000; and
 - (b) from "Industrial" to "Commercial" in the Land Use Map to Schedule 2.11B (East Cambie Area Plan) of the Official Community Plan;

be introduced and given first reading;

- (2) That Bylaw 9874, having been considered in conjunction with:
 - (a) the City's Financial Plan and Capital Program; and
 - (b) the Greater Vancouver Regional District Solid Waste and Liquid Waste Management Plans;

is hereby found to be consistent with said program and plans, in accordance with Section 477(3)(a) of the Local Government Act;

- (3) That Bylaw 9874, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, is hereby found not to require further consultation; and
- (4) That Richmond Zoning Bylaw 8500, Amendment Bylaw 9875, for the rezoning of 5480 Parkwood Way from "Industrial Business Park (IB1)" to "Vehicle Sales (CV)", be introduced and given first reading.

CARRIED

3. MANAGER'S REPORT

(i) Richmond Centre South Development Plan Public Consultation

Mr. Craig noted that public consultation for the ongoing redevelopment of the Richmond Centre Mall commenced this week, with information board displayed in the galleria in the mall over the next two weeks. He further commented that there are two open houses scheduled, the first on Sunday May 27 from 1 p.m. to 4 p.m. and the second on Thursday, May 31 from 5 p.m. to 8 p.m.

In response to questions from Committee, Mr. Craig commented that while there is no specific information board that highlights community amenities, there are a number of different information boards that outline various amenities that would be incorporated into the project.

(ii) Introduction of New Staff

Mr. Craig introduced new staff member Suzanne Smith, Program Coordinator, Development, to Committee.

(iii) National Youth Strategy

Kim Somerville, Manager, Community Social Development, advised that a youth forum would be held this afternoon from 4 p.m. to 6 p.m. at the Community Centre City Centre to collect input and contributions from youth ages 13-24 on how to shape the National Youth Strategy.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (1:07 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Planning Committee of the Council of the City of Richmond held on Wednesday, May 23, 2018.

Councillor Linda McPhail Chair Amanda Welby Legislative Services Coordinator





Public Works and Transportation Committee

Date: Thursday, May 24, 2018

- Place: Anderson Room Richmond City Hall
- Present:

Councillor Chak Au, Chair Councillor Harold Steves Councillor Derek Dang Councillor Carol Day (entered at 4:01 p.m.) Councillor Alexa Loo

Call to Order: The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the Public Works and Transportation Committee held on April 18, 2018, be adopted as circulated.

CARRIED

1.

NEXT COMMITTEE MEETING DATE

June 20, 2018, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING AND DEVELOPMENT DIVISION

1. ICBC-CITY OF RICHMOND ROAD IMPROVEMENT PROGRAM – PROPOSED PROJECTS FOR 2018

(File Ref. No. 01-0150-20-ICBC1-01) (REDMS No. 5764530 v. 5)

In reply to queries from Committee, Fred Lin, Senior Transportation Engineer, advised that should there be any safety benefits associated with any of the measures including traffic cameras, ICBC could provide some funding cost-share to the City for the projects.

Councillor Day entered the meeting (4:01 p.m.)

It was moved and seconded

- (1) That the list of proposed road safety improvement projects, as described in Attachment 2 of the staff report titled "ICBC-City of Richmond Road Improvement Program – Proposed Projects for 2018," dated May 15, 2018 from the Director, Transportation be endorsed for submission to the ICBC 2018 Road Improvement Program for consideration of cost-share funding; and
- (2) That should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to negotiate and execute the cost-share agreements, and that the 5-Year Financial Plan (2018-2022) be amended accordingly.

The question on the motion was not called as discussion took place on LED street name signs and in response to a query from Committee, Mr. Lin advised that signs are changed at approximately 5-10 locations a year depending on funding.

In response to further questions from Committee, Mr. Lin advised that there are various traffic measures being implemented on Granville Avenue, such as extending the green time to ensure pedestrians can walk across Granville Avenue, a median for pedestrians to stop and activate the signal again, and seating in the median. Also, he noted that the project is anticipated to be completed by this year.

The question on the motion was then called and it was **CARRIED**.

ENGINEERING AND PUBLIC WORKS DIVISION

2. UNDERPINNING WORKS AND CONSTRUCTION FENCE ENCROACHMENT BYLAW NO. 9833 (File Ref. No. 5818564) (REDMS No. 5818564)

Staff advised that a public education component can be considered with regard to the underpinning concept. It was noted that the method of underpinning has been used for many decades; however is not a common strategy as it is costly. Staff provided a brief description of the method, noting that it is quite effective.

It was moved and seconded

That Underpinning Works and Construction Fence Encroachment Bylaw No. 9833 and Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9868, be introduced and given first, second and third readings.

CARRIED

3. 2017 CLIMATE ACTION REVENUE INCENTIVE PROGRAM AND CARBON NEUTRAL PROGRESS REPORT

(File Ref. No. 10-6125-07-03) (REDMS No. 5811042 v. 7)

It was moved and seconded

That, in accordance with Provincial requirements, the Climate Action Revenue Incentive Program Report and Carbon Neutral Progress Report be posted on the City's website for public access.

CARRIED

4. 2017 ANNUAL WATER QUALITY REPORT

(File Ref. No. 10-6000-01) (REDMS No. 5778511 v. 2)

It was moved and seconded

That the staff report titled "2017 Annual Water Quality Report" dated April 23, 2018 from the Acting General Manager, Public Works, be endorsed and made available to the community through the City's website and through various communication tools including social media and as part of community outreach activities.

CARRIED

5. UBCM RESOLUTIONS - PROVINCIAL ACTION ON ZERO EMISSIONS VEHICLES AND LOW CARBON FUELS (File Ref. No. 10-6125-07-02) (REDMS No. 5800684)

Brendan McEwen, Sustainability Manager, noted that there was an error in attachment two of the staff report titled "UBCM Resolutions - Provincial Action on Zero Emissions Vehicles and Low Carbon Fuels" and a revised version was distributed on table (attached to and forming part of these Minutes as Schedule 1).

In reply to a query from Committee, Mr. McEwen commented that low carbon fuel requirements apply to fuel for all types of vehicles, however the Zero Emissions Vehicle standards apply to personal vehicles only.

It was moved and seconded

That the proposed UBCM resolutions titled "Zero Emissions Vehicle Mandate" and "Strengthen Low Carbon Fuel Requirement" be submitted to the Union of BC Municipalities, as attached to the staff report titled "UBCM Resolutions - Provincial Action on Zero Emissions Vehicles and Low Carbon Fuels" dated April 11, 2018, from the Senior Manager, Sustainability and District Energy.

CARRIED

6. MANAGER'S REPORT

(i) Freshet Update

Tom Stewart, Acting General Manager, Public Works, provided an update on freshet, noting that even though it has reached its peak, the dikes are performing well and staff will maintain daily inspections. He noted that it has not been necessary to move any water, as the dikes are being armoured appropriately and water levels are being monitored.

In reply to queries from Committee, Mr. Irving noted that there is no urgent concern of flooding in Richmond as there is ample notification with regard to high flows of water coming towards the City.

In reply to further queries from Committee, Mr. Stewart noted that there is technology installed to measure water levels and staff are consistently examining new technology.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (4:18 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works and Transportation Committee of the Council of the City of Richmond held on Thursday, May 24, 2018.

Councillor Chak Au Chair Sarah Kurian Legislative Services Coordinator Schedule 1 to the Minutes of the Public Works and Transportation Committee meeting of Richmond City Council held on Thursday, May 24, 2018.



Attachment 2: Proposed UBCM Resolution – Strengthen Low Carbon Fuel Requirement

STRENGTHEN LOW CARBON FUEL REQUIREMENT

City of Richmond

WHEREAS The Pan-Canadian Framework on Clean Growth and Climate Change calls the implementation of a clean fuel standard to reduce emissions from fuels used in transportation, buildings and industry;

AND WHEREAS British Columbia's Renewable and Low Carbon Fuel Requirements Regulation requires an increasing percentage of renewable content in transportation fuels reaching 10% by 2020, which has prevented 6.4 million tonnes of CO₂e greenhouse gas emissions between 2010 and 2016;

AND WHEREAS the Climate Leadership Team's 2015 Recommendations to the BC Government included increasing the Low Carbon Fuel Requirement to 20 per cent by 2030:

THEREFORE be it resolved that the Province be requested to increase the Low Carbon Fuel Requirement to 20 per cent by 2030.



Report to Committee

Re:	Application For a New Liquor Primary Liquor Lic Doing Business As: The True'stea Restaurant- 84		
From:	Carli Edwards, P.Eng. Manager, Community Bylaws and Licencing	File:	12-8275-30-001/2018- Vol 01
То:	General Purposes Committee	Date:	April 26, 2018

Staff Recommendation

- 1. That the application from Truestea Cafe Ltd., doing business as, The True'stea Restaurant, for a new Liquor Primary Liquor Licence to operate entertainment with full service Asian cuisine, at premises located at 8400 Ackroyd Rd Unit 180, with liquor service, be supported for;
 - a) A new Liquor-Primary Liquor Licence with primary business focus of entertainment, specifically live music and games with total person capacity of 197 persons;
 - b) Family Food Service to permit minors in all licensed areas until 10:00 PM when accompanied by a parent or guardian, when food service is available for families;
 - c) Liquor service hours for Monday to Sunday, from 12:00 PM to 2:00 AM;
- 2. That a letter be sent to Liquor Control and Licensing Branch advising that:
 - a) Council supports the applicant's new Liquor Primary Liquor Licence and the hours of liquor service with the conditions as listed above;
 - b) The total person capacity at 197 persons indoor is acknowledged;
 - c) Council's comments on the prescribed criteria (section 71 of the Liquor Control and Licensing Regulations) are as follows:
 - i) The impact of noise and traffic in the vicinity of the establishment was considered;
 - ii) The general impact on the community was assessed through a community consultation process;
 - iii) There is no history of non-compliance with this operation.
 - d) As the operation of a licenced establishment may effect nearby residents, businesses and property owners, the general impact assessment was conducted through the City's community consultation process as follows:

- i) Residents, businesses and property owners within a 50 meter radius of the establishment were notified by letter. The letter provided information on the application with instructions on how to submit comments or concerns; and
- ii) Signage was posted at the establishment and three public notices were published in a local newspaper. The signage and public notice provided information on the application with instructions on how to submit comments or concerns.
- e) Council's comments on the general impact of the views of residents, businesses and property owners are as follows:
 - i) The community consultation process was completed as part of the application process; and
 - ii) The community consultation process resulted in no comments or views submitted from residents, businesses and property owners.
- f) The Council recommends the approval of the licence for the reasons that this new application of the liquor primary license is acceptable to the majority of the residents, businesses and property owners in the area and the community.

Carli Edwards, P.Eng. Manager, Community Bylaws and Licencing (604-276-4136)

Att. 1

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS:
APPROVED BY CAO	

Staff Report

Origin

The Provincial Liquor Control and Licensing Branch (LCLB) issues licences in accordance with the *Liquor Control and Licensing Act* (the Act) and the Regulations made pursuant to the Act.

This report deals with an application to the LCLB and the City of Richmond by Truestea Cafe Ltd., doing business as The True'stea Restaurant, for a new Liquor Primary Liquor Licence to:

- operate, Monday to Sunday, 10:00 AM to next day 2:00 AM;
- permit a total person capacity of 197 persons indoor; and
- permit Family Food Service, to permit minors in all licensed areas until 10:00 PM when accompanied by a parent or guardian, when food service is available for families.

The City is given the opportunity to provide written comments by way of a resolution to the LCLB with respect to the proposed Liquor Primary application. Regulatory criteria local government must consider are:

- the location of the establishment;
- the proximity of the establishment to other social or recreational facilities and public buildings;
- the person capacity and hours of liquor service of the establishment;
- the impact of noise on the community in the immediate vicinity of the establishment; and
- the general impact on the community if the application is approved.

Analysis

Location of the Establishment

The Liquor Primary License applicant's establishment is located at 180-8400 Alexandra Rd., under the business name The True'stea Restaurant. This property is zoned Auto-Oriented Commercial (CA) and liquor primary establishment and restaurant are permitted uses in this zone.

The True'stea Restaurant will offer its patrons a wide variety of Asian cuisine, liquor and entertainment and is requesting Family Food Service to permit minors in all licensed areas until 10:00 PM when accompanied by a parent or guardian. The target clientele base The True'stea Restaurant is looking to attract are, tourists, regular customers, Richmond and Vancouver residents.

This business has been in operation since 2000 and under the current ownership since 2011, operating a restaurant without liquor service. There is no history of non-compliance. The True'stea Restaurant is situated in a commercial use area focusing on restaurants and entertainment. The True'stea Restaurant is situated on a parcel within a 5 unit building with various restaurants including a Karaoke Box Room business.

Proximity of the Establishment to Other Social, Recreational and Public Building

There are no schools or parks within 500 meters of The True'stea Restaurant. There is only one other liquor primary establishment within the visinity of the establishment.

Person Capacity and Hours of Liquor Service of the Establishment

The True'stea Restaurant is proposing to operate with a person capacity of 197 persons. The applicants proposed hours of liquor service are Monday to Sunday, 12:00 AM to next day 2:00 AM which is consistent with City's Policy 9400.

The Impact of Noise on the Community in the Immediate Vicinity of the Establishment

The True'stea Restaurant location is situated in Auto-Oriented Commercial (CA) district within a busy commercial area. Within the area, there are also other restaurants and businesses frequently visited by the public. Based on this assessment, the noise level is not a concern due to the location of the establishment.

Summary of Community Consultation Process and Comments

The City's community consultation process for reviewing applications for liquor related licences is prescribed by the Development Application Fees Bylaw 8951 which under Section 1.8.1 calls for:

- 1.8.1 Every applicant seeking approval from the City in connection with:
 - (a) a licence to serve liquor under the *Liquor Control and Licensing Act* and *Regulations*;

must proceed in accordance with subsection 1.8.2.

- 1.8.2 Pursuant to an application under subsection 1.8.1, every applicant must:
 - (b) post and maintain on the subject property a clearly visible sign which indicates:
 - (i) type of licence or amendment application;
 - (ii) proposed person capacity;
 - (iii)type of entertainment (if application is for patron participation entertainment); and
 - (iv)proposed hours of liquor service; and
 - (c) publish a notice in at least three consecutive editions of a newspaper that is distributed at least weekly in the area affected by the application, providing the same information required in subsection 1.8.2(b) above.

The required signage was posted on March 29, 2018 and three advertisements were published in the local newspaper on March 29, 2018, April 5, 2018 and April 12, 2018.

In addition to the advertised signage and public notice requirements, staff sent letters to businesses, residents and property owners within a 50 meter radius of this establishment. On March 23, 2018, a total of 232 letters were mailed out to businesses, residents and property owners. The letter provided information on the proposed liquor licence application and contained instructions to comment on the application. The period for commenting for all public notifications ended April 29, 2018.

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Based on the community consultative process described, the City has not received any responses opposed to this application.

Other Agency Comments

As part of the review process, staff requested comments from other agencies and departments such as Vancouver Coastal Health, Richmond R.C.M.P., Richmond Fire-Rescue and Building Approvals. These agencies and departments generally provide comments on the compliance history of the applicant's operations and premises. All of the agencies and departments expressed no concerns regarding this application.

Financial Impact

None.

Conclusion

The results of the community consultation process, of The True'stea Restaurant's Liquor Primary Licence application was reviewed based on the LCLB criteria. The analysis concluded there would be no noticeable potential impact from noise, no significant general impact in the community and no concerns raised by City departments, other agencies or the general public. The True'stea Restaurant has operated out of the existing space under the current ownership since 2011 with no noted negative community impact. Based on the culmination of these factors, the application of the Liquor Primary Licence with liquor service Monday to Sunday, from 12 PM to next day 2 AM and Family Food Service until 10 PM with occupant capacity of 197 persons is recommended.

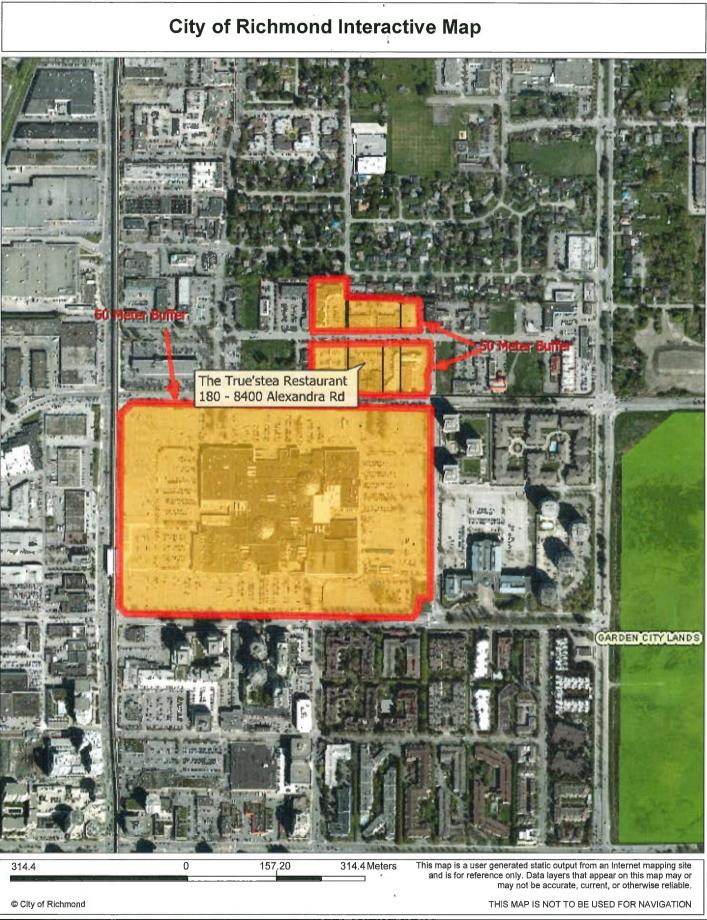
ictor M. Duarte

Supervisor, Business Licences (604-276-4389)

VMD:vmd

Att. 1: Arial Map with 50 metre buffer area

Attachment 1



CNCL - 61



To:	General Purposes Committee	Date:	April 23, 2018
From:	Carli Edwards, P.Eng. Manager, Commmunity Bylaws and Licencing	File:	12-8275-30-001/2018- Vol 01
Re:	Application to Request a Food Primary Entertain Food-Primary Liquor Licence # 139438 - Richmo Steveston Hwy		

Staff Recommendation

- That the application from Richmond Country Club, operating at 9100 Steveston Hwy, requesting a Food-Primary Entertainment Endorsement for Patron Participation to Food-Primary Liquor Licence # 139438, to enable patrons to dance at the establishment, be supported, and;
- 2) That a letter be sent to Liquor Control and Licensing Branch advising that:
 - a) Council supports the amendment for a Patron Participation Entertainment Endorsement on Food-Primary Liquor Licence # 139438 as the endorsement will not have a significant impact on the community;
 - b) The hours of liquor sales will remain the same at:
 - i) 9:00 AM to 1:00 AM, Monday to Saturday;
 - ii) 9:00 AM to Midnight, Sunday;
 - c) The new seating capacity for the food primary portion of the licence will be increased to 694 persons indoors and 190 persons patio;
- 3) Council's comments on the prescribed criteria (Section 71 of the Liquor Control and Licensing Regulations) are as follows:
 - a) The potential for additional noise and traffic in the area was considered;
 - b) The impact on the community was assessed through a community consultation process; and
 - c) Given that there has been no history of non-compliance with the operation, the amendment to permit patron participation entertainment endorsement under the Food Primary Liquor Licence should not change the establishment such that it is operated contrary to its primary purpose;
 - d) As the operation of a licenced establishment may affect nearby residents, businesses and property owners, the impact assessment was conducted through the City's community consultation process as follows:

- i) Residents, businesses and property owners within a 50 meter radius of the subject property were notified by letter. The letter provided information on the application with instructions on how to submit comments or concerns; and
- Signage was posted at the subject property and three public notices were published in a local newspaper. The signage and public notice provided information on the application with instructions on how comments or concerns could be submitted.
- e) Council's comments and recommendations respecting the view of the residents, businesses and property owners are as follows:
 - i) The community consultation process was completed as part of the application process; and
 - ii) The community consultation process resulted in no comments or views submitted from residents, businesses and property owners.
- f) Council recommends the approval of the permanent change to add patron participation entertainment endorsement to the Food Primary Licence for the reasons that the addition of the endorsement proposed is acceptable to the majority of the residents, businesses and property owners in the area and the community.

Carli Edwards, P.Eng. Manager, Community Bylaws and Licencing (604-276-4136)

Att. 1

REPORT CONCURRENCE					
	NERAL MANAGER				
REVIEWED BY STAFF I AGENDA REVIEW SUB					
		·			

Staff Report

Origin

The Provincial Liquor Control and Licensing Branch (LCLB) issues licences in accordance with the *Liquor Control and Licensing Act* (the Act) and the Regulations made pursuant to the Act.

This report deals with an application to the LCLB and the City of Richmond by, Richmond Country Club, for the following amendment to its Food Primary Liquor Licence No. 139438:

- To add patron participation entertainment endorsement to the food primary liquor licence which must end by midnight; and
- To re-allocate seats between the liquor primary and food primary portions of the license resulting in a new seating person capacity for the food primary of 694 persons for indoor seating and 190 persons for patio seating.

The City of Richmond is given the opportunity to provide comments and recommendations to the LCLB with respect to liquor licence applications and amendments. For an amendment to a Food Primary Licence, the process requires the local government to provide comments with respect to the following criteria:

- the potential for noise,
- the impact on the community; and
- whether the amendment may result in the establishment being operated in a manner that is contrary to its primary purpose.

Analysis

Richmond Country Club has operated the establishment, with a positive record within the community with both, a Food Primary and a Liquor Primary Liquor Licence. The intent of this application is to increase the person capacity covered by the Food Primary Liquor Licence while also decreasing the number of seats in the liquor primary. Further, Richmond Country Club is requesting a patron participation entertainment endorsement. The applicant's proposed permanent changes to add patron participation and new person capacity to the Food Primary Liquor Licence, initiates a process to seek local government approval.

The current licencing for the Richmond Country Club allows 306 seats covered by the Food Primary Licence and 920 seats in the Liquor Primary Licence. The proposed reallocation of seats is an overall decrease, resulting in 884 seats, (694 inside and 190 patio) for the Food Primary Licence and 281 seats for the Liquor Primary Licence.

The property is zoned Golf Course (GC) and the use of a clubhouse with food and beverage services are consistent with the permitted uses in this zoning district. Richmond Country Club is a Private club, open to members only. Richmond Country Club is located in a pristine golf course located off of Steveston Hwy.

The applicant's request for a patron participation entertainment endorsement for the food primary licence is to enable patrons to dance at the establishment. This would add greater flexibility to the venue.

Impact of Noise on the Community

The location of this establishment is such that there should be no noise impact on the community. The patron participation entertainment must end by Midnight and the establishment should not operate contrary to it primary purpose as a food primary establishment.

Impact on the Community

The community consultation process for reviewing applications for liquor related licences is prescribed by the Development Application Fees Bylaw 8951 which under Section 1.8.1 calls for:

- 1.8.1 Every applicant seeking approval from the City in connection with:
 - (a) a licence to serve liquor under the Liquor Control and Licensing Act and Regulations;
 must proceed in accordance with subsection 1.8.2

must proceed in accordance with subsection 1.8.2.

- 1.8.2 Pursuant to an application under subsection 1.8.1, every applicant must:
 - (a) post and maintain on the subject property a clearly visible sign which indicates:
 - (i) type of licence or amendment application;
 - (ii) proposed person capacity;
 - (iii)type of entertainment (if application is for patron participation entertainment); and
 - (iv)proposed hours of liquor service; and
 - (c) publish a notice in at least three consecutive editions of a newspaper that is distributed at least weekly in the area affected by the application, providing the same information required in subsection 1.8.2(b) above.

The required signage was posted on March 21, 2018 and three advertisements were published in the local newspaper on March 22, 2018, March 29, 2018 and April 5, 2018.

In addition to the advertised signage and public notice requirements, staff sent letters to businesses, residents and property owners within a 50 meter radius of the establishment. On March 12, 2018, 33 letters were sent to residents, businesses and property owners. The letter provided information on the proposed liquor licence application and contained instructions to comment on the application. The period for commenting for all public notifications ended April 21, 2018.

As a result of the community consultative process described, the City has not received any responses opposed to this application.

Other Agency Comments

As part of the review process, staff requested comments from other agencies and departments such as Vancouver Coastal Health, Richmond R.C.M.P., Richmond Fire-Rescue, Building Approvals and the Business Licence Department. These agencies and departments generally provide comments on the compliance history of the applicant's operations and premises. No concerns were raised by these agencies.

Financial Impact

None

Conclusion

The results of the community consultation process of Richmond Country Club's application for patron participation entertainment endorsement, was reviewed based on the LCLB criteria. The analysis concluded there would be no noticeable potential impact from noise, no significant impact to the community and no concerns raised by City departments, other agencies or the public. Richmond Country Club has operated in the community for over 40 years with no noted negative community impact. Staff recommend approval of the application to permit a patron participation entertainment endorsement and to allocate the seating capacity as described in this report.

Supervisor, Business Licences (604-276-4389)

VMD:vmd

Att. 1: Arial Map with 50 metre buffer area

Attachment 1



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Report to Committee

Re:	Voting Divisions for the 2018 General Local an	d Schoo	I Election
From:	David Weber Director, City Clerk's Office Chief Election Officer	File:	12-8125-80-05/Vol 01
То:	General Purposes Committee	Date:	May 1, 2018

Staff Recommendation

That Civic Election Administration and Procedure Bylaw No. 7244, Amendment Bylaw No. 9876, which proposes adjustments to voting division boundaries and establishes 4 additional voting divisions for the 2018 General Local and School Election, be introduced and given first, second and third readings

Pail Weles

David Weber Director, City Clerk's Office Chief Election Officer (604-276-4098)

Att. 7

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
A	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	Initials:
APPROVED BY CAO	

Staff Report

Origin

At the November 27, 2017 Regular Council Meeting, Council considered a report on the 2018 General Local and School Election and endorsed a recommendation that a divisional-voting approach be taken in the upcoming election. This approach to election administration, which establishes that electors vote at neighbourhood voting places, is consistent with past practice in Richmond and consistent with the current Civic Election Administration and Procedure Bylaw.

In the November report it was noted that an analysis would be undertaken to determine whether additional voting divisions would be warranted in areas that have experienced significant population growth and where voter turnout has been very strong. The intention behind the establishment of new divisions, or the adjustment of existing divisions, is to provide a better experience for the electorate and a more manageable election operation.

This report supports Council's 2014-2018 Term Goal #9 A Well-Informed Citizenry:

Continue to develop and provide programs and services that ensure the Richmond community is well-informed and engaged on City business and decision making.

This Council Term Goal would be supported by ensuring that voting divisions are reasonably balanced for the 2018 election which would allow the public to better engage in this significant and fundamental public process.

The deadline for the adoption of any bylaws that apply to the 2018 General Local and School Election is July 9, 2018.

Analysis

Under a divisional-voting approach, electors who vote on General Voting Day are required to vote at a specific voting place designated for their specific neighbourhood. Voting divisions are used to effectively balance and distribute administrative resources for an election. The boundaries for a voting division must therefore encompass reasonably balanced and manageable portions of the local population so that election administrators may effectively plan for and allocate equipment, supplies and appropriate levels of staffing at the voting places. These measures are taken to ensure an orderly and positive experience for the voting public.

In addition to considering the number of registered electors within a given area, election administrators also consider the following factors when establishing voting division boundaries:

- the availability of an appropriately-sized facility to conduct the vote within the division that is accessible, secure and has adequate parking (often a school building);
- ensuring that the voting place is conveniently located for residents who wish to drive, walk or take transit on election day; and
- ensuring that divisional boundaries are logically drawn along natural boundaries, major roads, or other familiar neighbourhood boundaries.

The Current Voting Divisions

When the current voting divisions were first established in 1993, there were only 70,600 registered electors in Richmond. The original 34 voting divisions were drawn so that the majority of divisions would encompass no more than 2,600 registered electors (Attachment 1).

Today, there are 125,350 registered electors in Richmond and, using the Richmond Interactive Map system (RIM/GIS) to plot today's Voters list using the same grid of neighbourhood voting divisions that was established in 1993, the number of registered electors that would be assigned to some divisions is now double or triple the original range.

In addition to the increase in the numbers of registered electors across all voting divisions, the RIM/GIS analysis also showed that the distribution of registered electors across the City has not been uniform, with some areas becoming significantly more densely populated than other areas over time.

To illustrate, Table 1 below provides four examples of voting divisions where the number of registered electors and the number of ballots cast has increased over time, but in a manner that can still be reasonably managed. With these four divisions and other similarly-sized divisions, an orderly and efficient experience for electors on General Voting Day can be provided by adjusting resources and staffing levels accordingly.

Voting Division	Total Registered Voters per Division			Ballots Cast per Division		
	1993	2014	% change	1993	2014	% change
RC03 Gilmore	1,717	1,770	3% increase	598	594	1% decrease
RE10 Woodward	1,929	2,699	40% increase	515	874	70% increase
RS09 Blundell	2,505	3,123	25% increase	659	788	20% increase
RE09 McNair	2,504	3,484	39% increase	624	927	49% increase

Table 1: Examples of Voting Divisions with a MANAGEABLE Amount of Change Between 1993 and 2014

In contrast, the RIM/GIS analysis also showed that some voting divisions have increased significantly and disproportionately compared to the rest. For example, there are now 6 voting divisions that would encompass between 5,000 and 9,000 registered electors compared to the original maximum number of 2,600. This represents an increase for some voting divisions of up to 280%, with similar increases over the same time period in the number of electors casting ballots in those same divisions.

To illustrate further, Table 2 below shows figures for four divisions that have had a significant amount of change over time. The areas that are have been most affected are in the City Centre, the area just south of the City Centre, the Steveston area, and some areas in East Richmond.

Voting Division	Total Registered Voters per Division			Ballots Cast per Division		
	1993	2014	% change	1993	2014	% change
RS05	2,427	6,193	155%	643	2,183	240%
Homma	2,427	0,195	increase	045	2,105	increase
RE06	2,164	7,369	241%	455	1,563	244%
Kate McNeely	2,104	7,309	increase	455	1,505	increase
RC12	0.271	7146	201%	526	1 209	147%
Cook	2,371	7,146	increase	320	1,298	increase
RE01	2.256	2017	280%	510	1047	261%
General Currie	2,356	8,947	increase	540	1,947	increase

Table 2: Examples of Voting Divisions with a SIGNIFICANT Amount of Change Between 1993 and 2014

(A full listing of all 34 voting divisions showing the degree of change between 1993 and 2014 in the number of registered electors and the number of ballots cast can be found in Attachment 2. Attachment 3 depicts the same data visually in the form of 2 bar graphs which highlight the areas with the most significant and disproportionate increases).

The Proposed Voting Divisions

In terms of a target for the average voting place, experience has shown that processing approximately 1,000 electors in one day is a reasonable and manageable number. When the numbers of ballots cast at a single voting place starts to surpass 1,200 ballots per day, then it can become challenging due to the voting place being overly busy and, as a result, electors may have a less than positive experience.

Using the RIM/GIS system, various options were explored to adjust voting division boundaries and to add additional divisions where necessary in order to even out the overall distribution of registered electors across divisions and to address the areas where the most significant increases have been recorded.

In many instances, no changes were necessary to maintain voting divisions within the target size and range. In other instances, a minor shift in boundaries was enough to even out the numbers between neighbouring divisions. In other areas, such as the City Centre and Steveston, some voting divisions were re-configured or divided in order to better serve the number of people now living in those areas.

Overall, 38 voting divisions are proposed for 2018 (Attachment 4), an increase of 4 divisions over the number that was originally established in 1993 (see Attachment 1 for the original 1993-2014 Voting Division map for comparison).

No more than 5,500 registered electors would fall into any of the proposed divisions, which is a significant shift in the range that would be present using the 1993-2014 divisional grid where the upper range would reach as high as 9,070 registered electors. Attachment 5 and 6 show how the number of registered electors would be significantly evened out under the proposed grid of voting divisions.

Financial Impact

The election budget that was approved in the fall of 2017 included provision for the possibility of adding a few additional voting divisions.

Conclusion

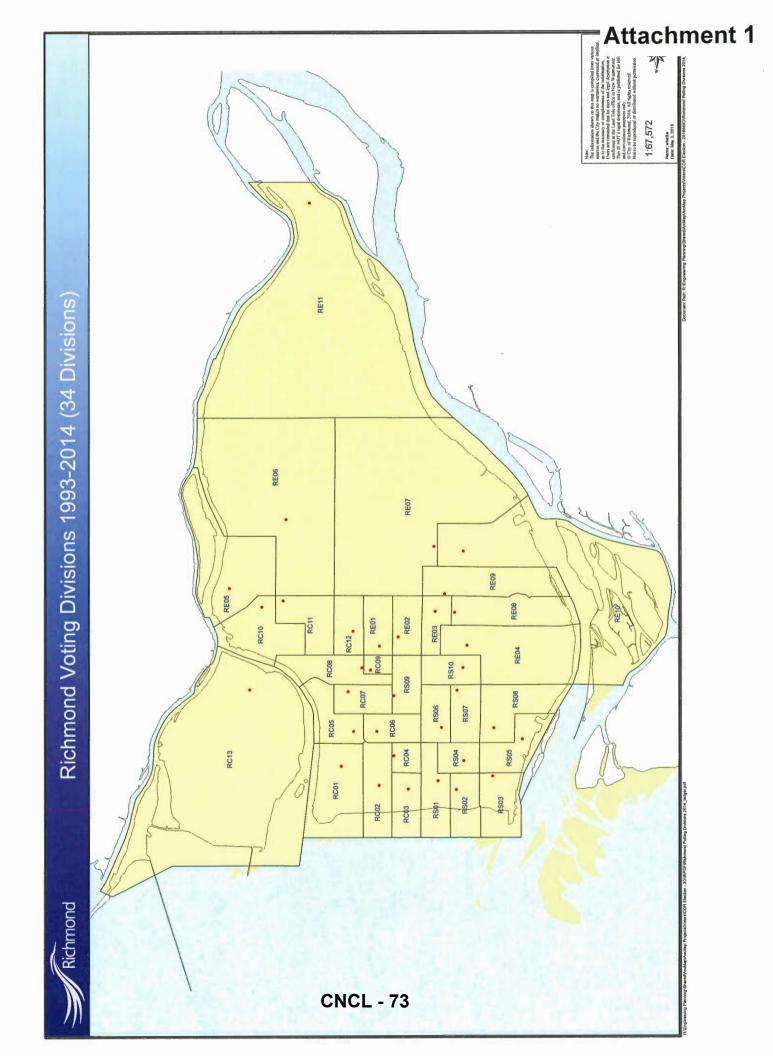
The voting divisions in Richmond have not been adjusted since they were first established 25 years ago. However, there have been significant and uneven increases in population across Richmond during this time frame. The proposed 2018 voting divisions are more manageable in size and more evenly distributed which would allow the City to plan more effectively for a better experience for the public on General Voting Day.

Davil Wiles

David Weber Director, City Clerk's Office and Chief Election Officer (604-276-4098)

Attachments:

- 1: Map Richmond Voting Divisions 1993-2014
- 2: Voting Division Statistics Difference Between 1993 and 2014
- 3: Bar Graphs Registered Electors & Ballots Cast Difference Between 1993 and 2014
- 4: Map Proposed Richmond Voting Divisions 2018
- 5: Registered Electors Per Voting Division Current Divisional Grid vs. Proposed Divisions
- 6: Bar Graph Registered Electors for 2018 Showing the Impact of the Proposed Divisions
- 7: Civic Election Administration and Procedure Bylaw No. 7244, Amendment Bylaw No. 9876



Attachment 2

Voting Division Statistics Difference Between 1993 and 2014 (Sorted By Number of Ballots Cast in 2014)

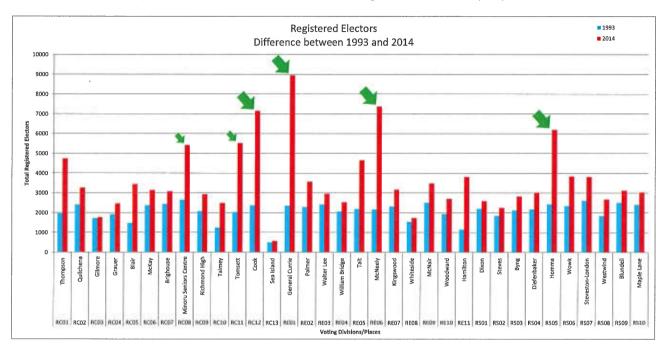
	Voting Division / Place	Total Registered Voters			Total Ballots Cast		
		1993	2014	% change	1993	2014	% change
RC13	Sea Island	496	568	15%	137	216	58%
RE08	Whiteside	1536	1730	13%	418	561	34%
RC10	Talmey	1243	2486	100%	239	589	146%
RC03	Gilmore	1717	1770	3%	598	594	-1%
RC04	Grauer	1910	2464	29%	571	720	26%
RE04	William Bridge	2064	2531	23%	464	720	55%
RC07	Brighouse	2436	3079	26%	644	733	14%
RS10	Maple Lane	2410	3042	26%	666	783	18%
RS09	Blundell	2505	3123	25%	659	788	20%
RC11	Tomsett	2030	5517	172%	253	799	216%
RS02	Steves	1845	2248	22%	551	819	49%
RC09	Richmond High	2076	2928	41%	493	855	73%
RC06	МсКау	2372	3138	32%	614	869	42%
RE10	Woodward	1929	2699	40%	515	874	70%
RC05	Blair	1475	3438	133%	371	912	146%
RE03	Walter Lee	2426	2962	22%	690	915	33%
RE07	Kingswood	2309	3168	37%	578	925	60%
RE09	McNair	2504	3484	39%	624	927	49%
RE02	Palmer	2287	3568	56%	625	956	53%
RS01	Dixon	2193	2585	18%	637	958	50%
RE11	Hamilton	1146	3809	232%	222	963	334%
RS03	Byng	2121	2824	33%	725	997	38%
RC02	Quilchena	2407	3262	36%	672	997	48%
RC08	Minoru Seniors Centre	2652	5416	104%	536	1009	88%
RE05	Tait	2190	4654	113%	518	1039	101%
RS08	Westwind	1835	2675	46%	663	1052	59%
RS04	Diefenbaker	2174	3019	39%	660	1086	65%
RS07	Steveston-London	2608	3811	46%	791	1197	51%
RS06	Wowk	2343	3841	64%	760	1233	62%
RC01	Thompson	1970	4733	140%	710	1296	83%
RC12	Cook	2371	7146	201%	526	1298	147%
RE06	McNeely	2164	7369	241%	455	1563	244%
RE01	General Currie	2356	8947	280%	540	1947	261%
RS05	Homma	2427	6193	155%	643	2183	240%

The Voting Divisions with the highest number of ballots cast in 2014 (circled in **RED**) were moderately or significantly outside of the target range.

Attachment 3

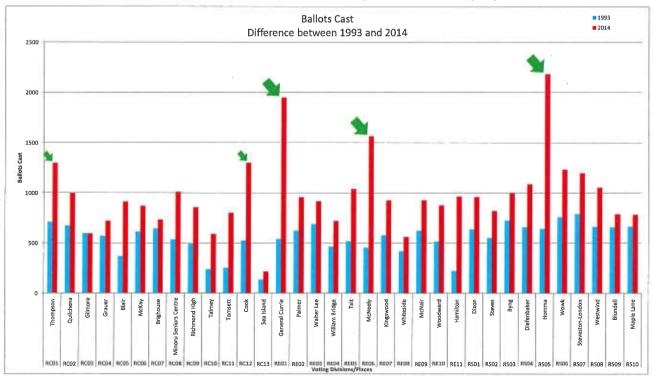
Registered Electors: Difference Between 1993 and 2014

The **Blue Bars** show the number of <u>registered electors</u> per division in **1993 (more even distribution)** The **Red Bars** show the number of <u>registered electors</u> per division in **2014 (less even distribution)** The **Green Arrows** point to the areas with the most significant and disproportionate increases

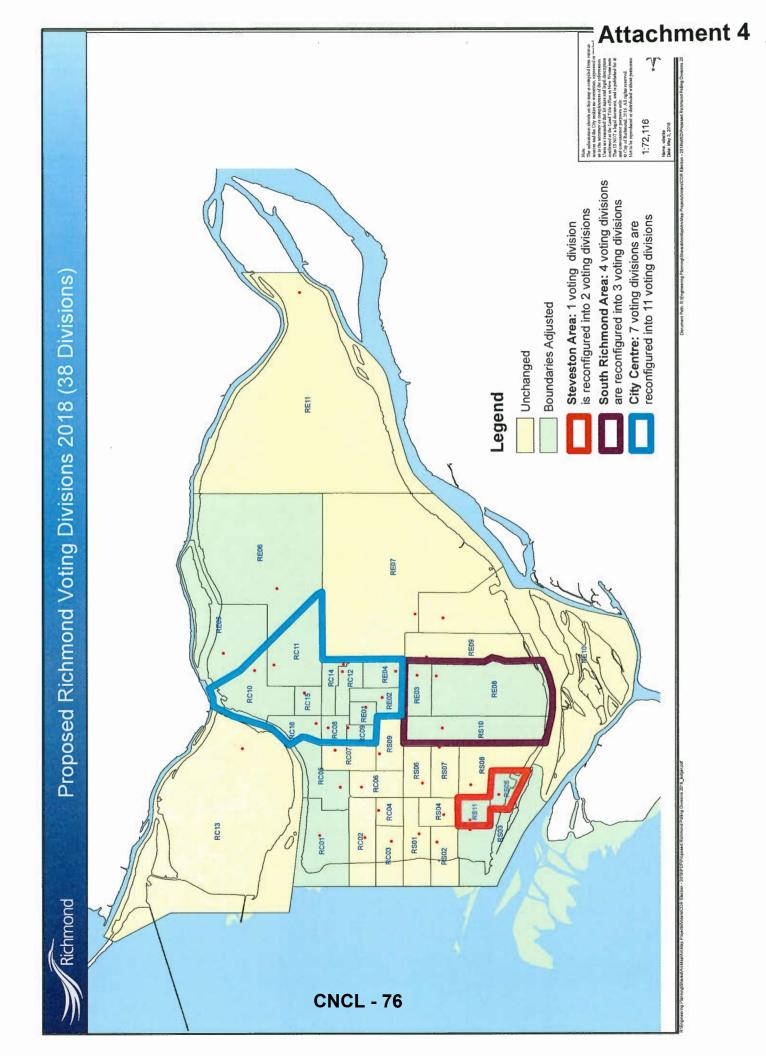


Ballots Cast: Difference Between 1993 and 2014

The **Blue Bars** show the number of <u>ballots cast</u> per division in **1993 (more even distribution)** The **Red Bars** show the number of <u>ballots cast</u> per division in **2014 (less even distribution)** The **Green Arrows** point to the areas with the most significant and disproportionate increases



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Attachment 5

Registered Electors Per Voting Division

Current Divisional Grid (in use between 1993 and 2014)

VS.

Proposed Divisional Grid for 2018

Sorted by # of Registered Electors If No Changes Made

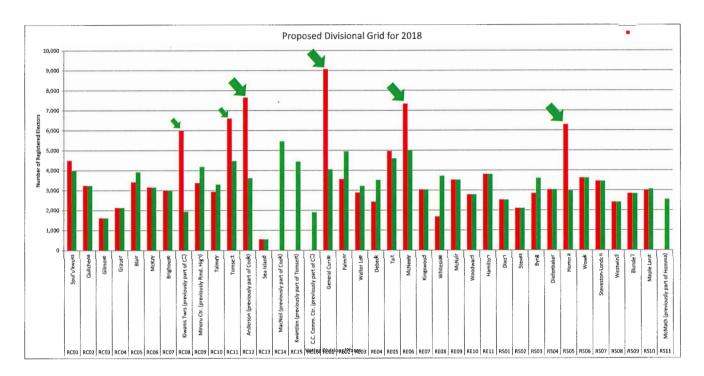
	Voting Division / Place	With No Changes Total # of Registered Electors per Division under the Current (1993-2014) Divisional Grid	Proposed Changes Total # of Registered Electors per Division under the Proposed 2018 Divisional Grid (all Divisions less than 5,500)
RC14	MacNeil (previously part of Cook)	0	5,463
RC15	Kwantlen (previously part of Tomsett)	0	4,443
RC16	C.C.C.Centre (previously part of Minoru)	0	1,907
RS11	McMath (previously part of Homma)	0	2,546
RC13	Sea Island	551	551
RC03	Gilmore	1,619	1,619
RE08	Whiteside	1,683	3,720
RS02	Steves	2,103	2,103
RC04	Grauer	2,133	2,133
RS08	Westwind	2,407	2,407
RE04	Debeck	2,427	3,521
RS01	Dixon	2,528	2,528
RE10	Woodward	2,787	2,787
RS09	Blundell	2,834	2,834
RS03	Byng	2,847	3,610
RE03	Walter Lee	2,886	3,222
RC10	Talmey	2,932	3,299
RC07	Brighouse	2,995	2,995
RS10	Maple Lane	3,008	3,062
RE07	Kingswood	3,037	3,037
RS04	Diefenbaker	3,037	3,037
RC06	МсКау	3,158	3,158
RC02	Quilchena	3,241	3,241
RC09	Minoru Centre (previously Rmd. High)	3,376	4,186
RC05	Blair	3,414	3,920
RS07	Steveston-London	3,461	3,461
RE09	McNair	3,522	3,522
RE02	Palmer	3,558	4,955
RS06	Wowk	3,623	3,623
RE11	Hamilton	3,810	3,810
RC01	Spul'u'kwuks	4,495	3,989
RE05	Tait	4,965	4,598
RC08	Kiwanis Twrs (previously part of Minoru)	5,997 🗶	1,941 🗸
RS05	Homma	6,294 🗶	2,985 🗸
RC11	Tomsett	6,602 🗶	4,477 🗸
RE06	McNeely	7,332 🗶	5,014 🗸
RC12	Anderson (previously part of Cook)	7,649 🖌	3,618 🗸
RE01	General Currie	9,070	4,058 🗸

The proposed divisional grid would correct (\checkmark) the divisions with the highest number of registered electors and bring them back into a more manageable range. Overall, registered electors would be nGNCdven 77 distributed across all divisions. The maximum number of registered electors per division would be 5,500.

Registered Electors: 2018

The **Red Bars** show the number of registered electors per division for 2018 **if no changes are made**. The **Green Arrows** point to the areas that would remain problematic if no changes were made.

The **Green Bars** show the distribution of registered electors under the **Proposed Divisions** for 2018 which is much more evenly distributed across the City, more manageable for administrative purposes, and offers a more consistent election experience for the public.





Bylaw 9876

Civic Election Administration and Procedure Bylaw No. 7244, Amendment Bylaw No. 9876

The Council of the City of Richmond enacts as follows:

- 1) Civic Election Administration and Procedure Bylaw No. 7244, as amended, is further amended:
 - a) by deleting Schedule B to Bylaw No. 7244 and replacing it with Schedule A as attached to this bylaw.
 - b) by deleting Schedule C to Bylaw No. 7244 and replacing it with Schedule B as attached to this bylaw.
 - c) by deleting Schedule D to Bylaw No. 7244 and replacing it with Schedule C as attached to this bylaw.
- 2) This Bylaw is cited as "Civic Election Administration and Procedure Bylaw No. 7244, Amendment Bylaw No. 9876".

FIRST READING

SECOND READING

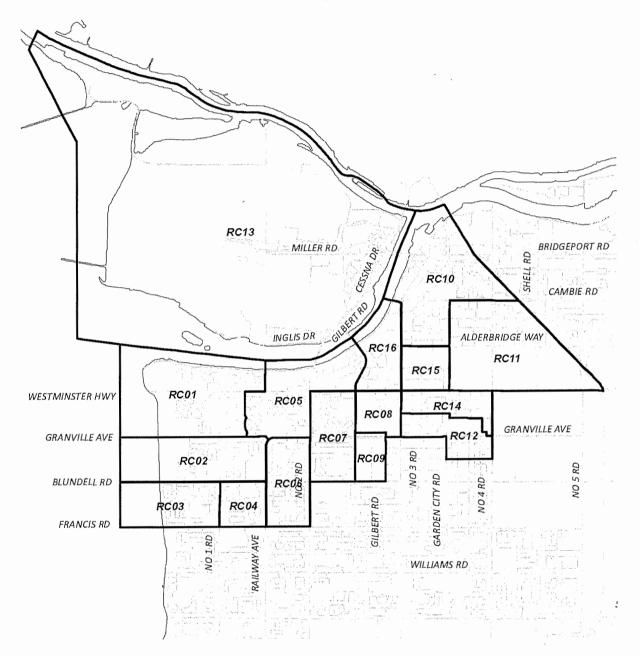
THIRD READING

ADOPTED

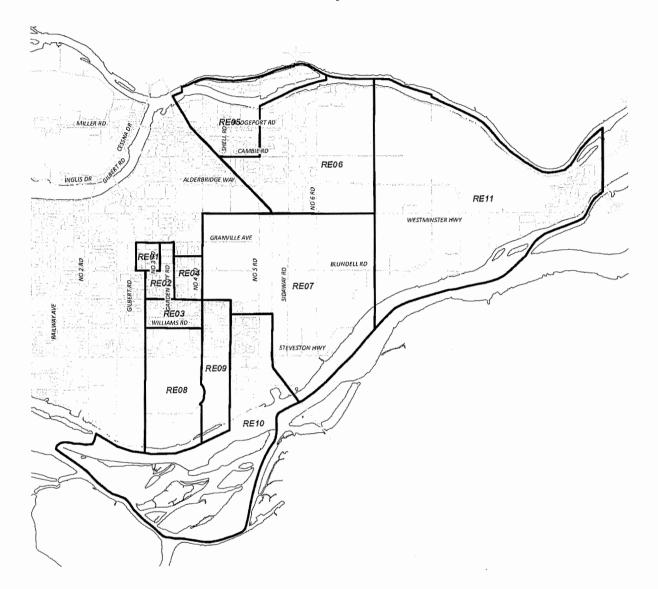
APPROVED for content by originating dept. DW APPROVED for legality by Solicitor

MAYOR

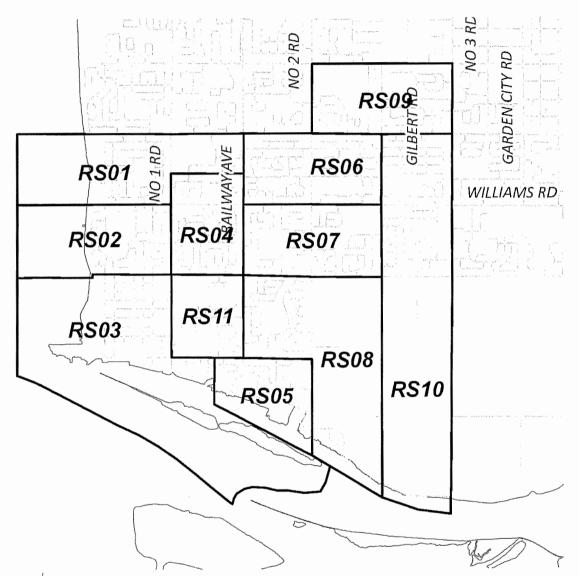
CORPORATE OFFICER



Schedule B to Bylaw No. 7244



Schedule C to Bylaw No. 7244



Schedule D to Bylaw No. 7244



Report to Committee

To: Planning Committee From: Wayne Craig Director, Development Date: May 15, 2018 File: RZ 17-778834

Re: Application by 1076694 B.C. Ltd. for Rezoning at 10451, 10471 & 10491 No. 2 Road from Single Detached (RS1/E) to Low Density Townhouses (RTL4)

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9872, for the rezoning of 10451, 10471 & 10491 No. 2 Road from "Single Detached (RS1/E)" to "Low Density Townhouses (RTL4)", be introduced and given first reading.

Wayne Crai Director, Development

WC:sds Att. 6

REPORT CONCURRENCE						
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER				
Affordable Housing		- fitneg_				

Staff Report

Origin

1076694 B.C. Ltd. has applied to the City of Richmond for permission to rezone the properties at 10451, 10471 & 10491 No. 2 Road (Attachment 1) from the "Single Detached (RS1/E)" zone to the "Low Density Townhouses (RTL4)" zone in order to permit the development of 12 townhouse units with vehicle access from No. 2 Road.

Project Description

The subject properties have a total combined frontage of 65.3 m (214 ft.) and are proposed to be consolidated into one development parcel. The proposal includes two three-storey and 10 two-storey townhouse units, in two triplex and three duplex buildings, with a proposed floor area ratio (FAR) of 0.6. The preliminary site plan, building elevations and landscape plan are provided in Attachment 2. The subject site is currently occupied by three single-family dwellings, which are proposed to be demolished.

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (Attachment 3).

Existing Housing Profile

The developer has advised one existing single-family home is currently vacant (10451 No. 2 Road), which was vacant upon purchase of the property, two existing single-family homes are currently rented (10471 & 10491 No. 2 Road), and one of the homes has an existing secondary suite (10471 No. 2 Road) approximately 55 m² (600 ft²) in area with one bedroom.

Surrounding Development

Development immediately surrounding the subject site is as follows:

- To the North: Single-family dwelling on a lot zoned "Single Detached (RS1/E)" fronting No. 2 Road.
- To the South: Single-family dwellings on lots zoned "Single Detached (RS1/D)" fronting No. 2 Road.
- To the East: Across No. 2 Road, 133-unit townhouse development on a lot zoned "Town Housing (ZT72) – London/Steveston (No. 2 Road)", a 9 m (30 ft.) wide public greenway connecting No. 2 Road to Steveston-London Park/School, and singlefamily dwellings on lots zoned "Single Detached (RS1/E)" fronting Dylan Place.
- To the West: Single-family dwellings on lots zoned "Single Detached (RS1/B)" and a duplex zoned "Two-Unit Dwellings (RD1)" fronting Kozier Drive.

Related Policies & Studies

Official Community Plan/Steveston Area Plan

The Official Community Plan (OCP) land use designation for the subject site is "Neighbourhood Residential (NRES)". The Steveston Area Plan land use designation for the subject site is "Multiple-Family". The development proposal is consistent with these designations.

Arterial Road Policy

The subject site is identified for "Arterial Road Townhouse" on the Arterial Road Housing Development Map. The development proposal is consistent with this designation.

Public Art

In response to the City's Public Art Program (Policy 8703), the applicant will provide a voluntary contribution at a rate of \$0.83 per buildable square foot (2017 rate) to the City's Public Art Reserve Fund, for a total contribution in the amount of \$15,189.84.

Floodplain Management Implementation Strategy

The proposed redevelopment must meet the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204. Registration of a flood indemnity covenant on Title is required prior to final adoption of the rezoning bylaw.

Public Consultation

A rezoning sign has been installed on the subject property. Staff have not received any comments from the public about the rezoning application in response to the placement of the rezoning sign on the property.

The applicant has advised that notification letters were delivered by the applicant to all five adjacent neighbouring properties, which included information on density, height, massing, perspective views from each property and developer contact information. To date, none of the neighbours have responded to the applicant. The applicant has also submitted a map showing the properties notified, which is provided in Attachment 4, along with a copy of the letter.

Should the Planning Committee endorse this application and Council grant 1st reading to the rezoning bylaw, the bylaw will be forwarded to a Public Hearing, where any area resident or interested party will have an opportunity to comment.

Public notification for the Public Hearing will be provided as per the Local Government Act.

Analysis

Built Form and Architectural Character

The applicant is proposing to consolidate the subject properties into one development parcel, with a total frontage of 65.3 m (214 ft.) and a site area of 2,833.7 m² (30,501 ft²), in order to

construct 12 townhouse units. The proposed townhouse units are oriented around a single driveway providing access to the site from No. 2 Road and a north-south internal manoeuvering aisle providing access to the garages of the units. The shared outdoor amenity space is proposed to be situated in the northeast corner of the site, in order to maximize tree protection opportunities.

The proposal consists of 10 two-storey and two three-storey townhouse units, all with side-byside double car garages, with a proposed FAR of 0.6. Five buildings are proposed, including three duplex buildings along the rear property line and two triplex buildings along the No. 2 Road frontage.

The applicant has provided concept plans for a single-lot development to the north (10431 No. 2 Road) and a consolidation with the lots along Wallace Road (10431 No. 2 Road & 5840-5900 Wallace Road) demonstrating development potential consistent with the Arterial Road Land Use Policy.

Existing Legal Encumbrances

There is an existing 3.0 m (10 ft.) by 3.0 m utility Statutory Right-of-Way (SRW) located in the southwest corners of 10451 & 10471 No. 2 Road for sanitary sewer services. There is also an existing 3.0 m wide utility SRW along the west property line of 10491 No. 2 Road. The existing SRWs will not be impacted by the proposed development and the developer is aware that encroachment into the SRWs is not permitted.

Transportation and Site Access

Vehicular access to the subject site is proposed via one driveway from No. 2 Road. The longterm objective is for the driveway access established on No. 2 Road to be utilized by adjacent properties to the north and south, if the properties redevelop. A Statutory Right-of-Way (SRW) for Public Right-of-Passage (PROP) over the entire area of the proposed driveway and the internal maneuvering aisle is required prior to final adoption of the rezoning bylaw, which will facilitate access for future adjacent development.

Tree Retention and Replacement

The applicant has submitted a Certified Arborist's Report, which identifies tree species, assesses tree structure and condition, and provides recommendations on tree retention and removal relative to the proposed development. The Report assesses 10 trees and one cedar hedge located on the development site and three trees located on neighbouring properties.

The City's Tree Preservation Coordinator has reviewed the Arborist's Report and Tree Management Plan (Attachment 5), conducted an on-site visual assessment and concurs with the Arborist's recommendations, with the following comments:

• Two trees (tag# 25 & 26) located on-site in the northeast corner and three trees (tag# 27, 28, & 30) located in the southwest corner are in good condition. Trees are to be protected as per City of Richmond Tree Protection Information Bulletin TREE-03.

- Four trees (tag# 23, 24, 29 & 31) located on the development site are in poor health, exhibit poor structure or are poor quality specimens. These trees not good candidates for retention and should be removed and replaced.
- One tree (tag# 32) located on-site along the No. 2 Road frontage is a small windmill palm tree in good condition, however, this tree should be removed and replaced with a more suitable tree species (this species is not identified on the suitable tree species list) that is consistent with the proposed landscaping.
- One cedar hedge (tag# 1-22) located on-site in the northeast corner along the No. 2 Road frontage will be critically impacted from significant grade change and utility service upgrades. Remove, no compensation required for the hedge.
- Three trees (tag# 33-35) located on the neighbouring properties to the north and west are to be protected as per City of Richmond Tree Protection Information Bulletin TREE-03.

Tree Replacement

The applicant is proposing to remove five on-site trees (tag# 23, 24, 29, 31 & 32). The OCP tree replacement ratio of 2:1 requires 10 replacement trees to be planted and maintained on-site. Based on the submitted preliminary Landscape Plan (Attachment 2), the developer is proposing to plant 18 new trees. The size and species of replacement trees, and overall landscape design, will be reviewed in detail through the Development Permit application process. To ensure the replacement trees are planted and maintained on-site, the applicant is required to provide an acceptable Landscape Plan and Landscape Security based on 100% of the cost estimate provided by the Landscape Architect, prior to Development Permit issuance.

Securities will not be released until a landscaping inspection has been passed by City staff after construction and landscaping has been completed. The City may retain a portion of the security for a one year maintenance period from the date of the landscape inspection.

Tree Protection

The proposed Tree Management Plan is provided in Attachment 5, which outlines the protection of the five on-site trees (tag# 25-28, & 30) and three neighbouring trees (tag# 33-35). To ensure the protection of these trees, the applicant is required to provide the following, prior to final adoption of the rezoning bylaw:

- Submission to the City of a contract with a Certified Arborist for supervision of all works conducted within or in close proximity to tree protection zones.
- Submission of a Tree Survival Security in the amount of \$35,000, based on the sizes of the trees to be retained.

Prior to demolition of the existing dwellings on the subject site, installation of tree protection fencing around all trees to be retained, in accordance with the City's Tree Protection Information Bulletin TREE-03, is required.

Variance Requested

The proposed development is generally in compliance with the "Low Density Townhouses (RTL4)" zone other than the variances noted below. Based on the review of the current plans for the project, the following variances are being requested:

• Reduce the front yard setback (along the No. 2 Road frontage) from 6.0 m (20 ft.) to 4.5 m (15 ft.), in order to provide a 6.0 m rear yard setback to both the ground and second floors of the rear units.

Staff are supportive of the proposed variance for the following reasons:

a) The proposed variance is consistent with the Arterial Road Guidelines for Townhouses in the OCP. Balconies, bay windows, and porches are not permitted to project into the proposed 4.5 m front yard setback.

b) The proposed 6.0 m rear yard setback to both the ground and second floors of the rear units provides an improved rear yard interface with the existing single-family dwellings to the west and enhances solar access to the rear yards.

c) The proposed front yard setback is varied, ranging from 4.5 m to 6.0 m, in order to reflect the scale and articulation found in single-family areas and avoid long, continuous and unarticulated building frontages along the street.

d) The proposed location of the buildings along the No. 2 Road frontage accommodates the proposed shared outdoor amenity space, which is located in the northeast corner in order to maximize tree retention opportunities.

• Allow one small car parking stall in each of the side-by-side garages in all of the units (12 small car stalls in total).

Staff are supportive of the proposed variance as it enables the required resident parking spaces to be provided within the garages of each unit, in a side-by-side arrangement. The Zoning Bylaw allows small parking stalls for on-site parking areas which contain 31 or more spaces.

These variances will be reviewed in the context of the overall detailed design of the project, including architectural form, site design and landscaping at the Development Permit stage.

Affordable Housing Strategy

As per the City's Affordable Housing Strategy, townhouse rezoning applications received prior to July 24, 2017 are required to provide a cash-in-lieu contribution of \$4.00 per buildable square foot towards the City's Affordable Housing Reserve Fund. The applicant proposes to make a cash-in-lieu contribution in the amount of \$73,204.06.

The applicant has stated that due to the requirement of an additional vehicle parking space, the provision of secondary suites and required parking would significantly impact the size and functionality of the proposed townhouse units.

Townhouse Energy Efficiency and Renewable Energy

The applicant has committed to achieving an EnerGuide Rating System (ERS) score of 82 and to provide pre-ducting for solar hot water heating for the proposed development. As part of the Development Permit application review process, the applicant is required to submit an evaluation report by a Certified Energy Advisor (CEA) providing details about the specific construction requirements that are need to achieve the rating.

Prior to final adoption of the rezoning bylaw, the applicant is required to register a restrictive covenant on Title, specifying that all units are to be built and maintained to ERS 82 or higher, as detailed in the CEA's evaluation report, and that all units are to be solar hot water-ready.

Amenity Space

The applicant is proposing a cash contribution in-lieu of providing the required indoor amenity space on-site. As per Council Policy 5041, rezoning applications received prior to February 28, 2018 may choose to provide a cash contribution of \$1,000 per unit for developments up to 19 units. The total cash contribution required for this 12 unit townhouse development is \$12,000.

Shared outdoor amenity space will be provided on-site. Based on the preliminary design, the size of the proposed outdoor amenity space complies with the Official Community Plan (OCP) requirements of 6 m² per unit. Staff will work with the applicant at the Development Permit stage to ensure the configuration and design of the outdoor amenity space meets the Development Permit Guidelines in the OCP.

Site Servicing and Frontage Improvements

Prior to final adoption of the rezoning bylaw, the developer is required to enter into a Servicing Agreement for the design and construction of required site servicing and frontage improvements, as described in Attachment 6. Frontage improvements include, but are not limited to, the following:

- Removing the existing sidewalk next to the curb along No. 2 Road and replacing it with a new grassed boulevard and concrete sidewalk along the property line with connections to the existing sidewalk north and south of the subject site.
- Constructing a 3.0 m (10 ft.) by 9.0 m (30 ft.) concrete bus pad at the existing southbound bus stop on No. 2 Road.

Prior to final adoption of the rezoning bylaw, the developer is required to provide a \$25,000 cash contribution towards the purchase and installation of a City standard bus shelter.

The developer is also required to pay DCC's (City & Metro Vancouver), School Site Acquisition Charge, Address Assignment Fees, and the costs associated with the completion of the required site servicing and frontage improvements as described in Attachment 6.

Development Permit Application

A Development Permit application is required to be processed to a satisfactory level, prior to final adoption of the rezoning bylaw. Further refinements to architectural, landscape and urban design will be completed as part of the Development Permit application review process, including, but not limited to, the following:

- Compliance with Development Permit Guidelines for multi-family developments and arterial road townhouses in the OCP.
- Refinement of the proposed building form and architectural features to achieve sufficient variety in design and create an interesting streetscape along No. 2 Road.
- Review of size and species of on-site replacement trees to ensure bylaw compliance and to achieve an acceptable mix of conifer and deciduous trees on-site.
- Refinement of the shared outdoor amenity area design, including the choice of play equipment, to create a safe and vibrant environment for children's play and social interaction.
- Review of relevant accessibility features, including aging-in-place features in all units and the provision of a convertible unit.
- Review of a sustainability strategy for the development proposal, including measures to achieve an EnerGuide Rating System (ERS) score of 82.

Additional issues may be identified as part of the Development Permit application review process.

Financial Impact or Economic Impact

The rezoning application results in an insignificant Operational Budget Impact (OBI) for off-site City infrastructure (such as roadworks, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals).

Conclusion

The purpose of this application is to rezone the properties at 10451, 10471 & 10491 No. 2 Road from the "Single Detached (RS1/E)" zone to the "Low Density Townhouses (RTL4)" zone in order to permit the development of 12 townhouse units.

The rezoning application complies with the land use designation and applicable policies contained within the OCP and Area Plan for the subject site. Further review of the project design will be completed as part of the Development Permit application review process

The list of rezoning considerations is included in Attachment 6, which has been agreed to by the applicant (signed concurrence on file).

On this basis, it is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 9872 be introduced and given first reading.

Steven De Sousa Planner 1

SDS:cas

Attachment 1: Location Map/Aerial Photo

Attachment 2: Conceptual Development Plans

Attachment 3: Development Application Data Sheet

Attachment 4: Notification Map and Letter by Applicant

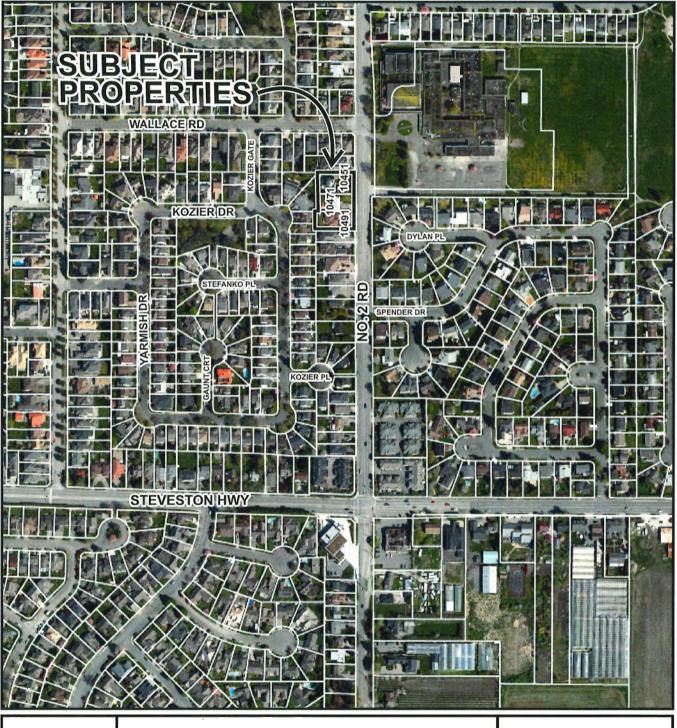
Attachment 5: Tree Management Plan Attachment 6: Rezoning Considerations



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City of Richmond



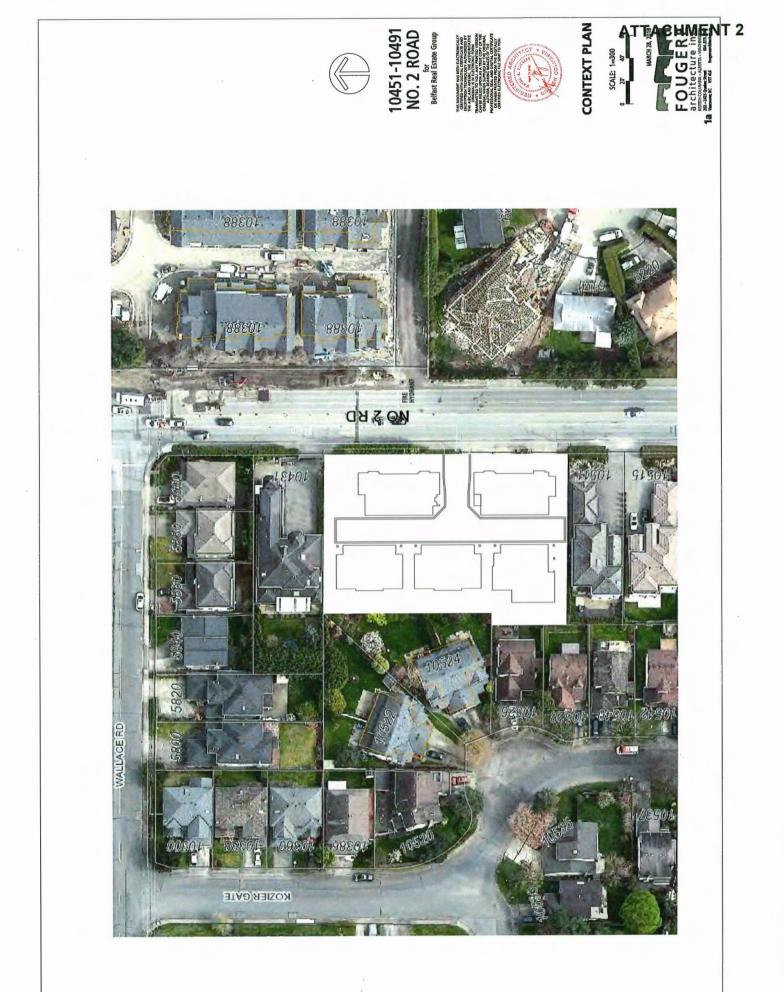


RZ 17-778834

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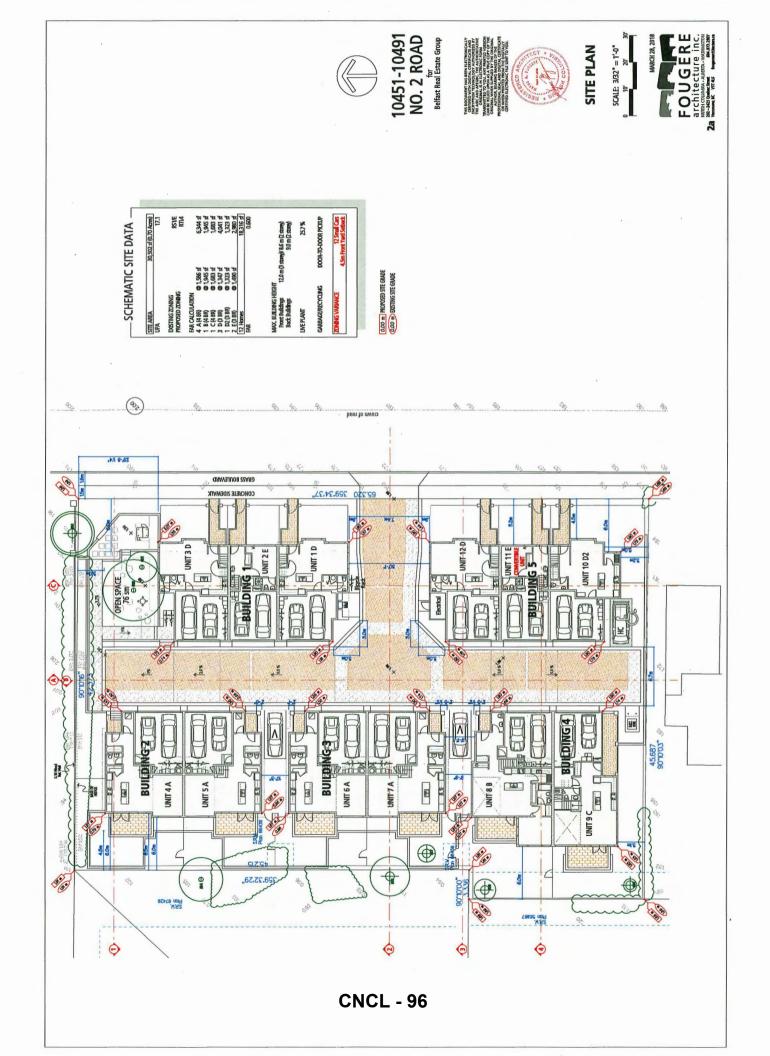
Revision Date:

Note: Dimensions are in METRES

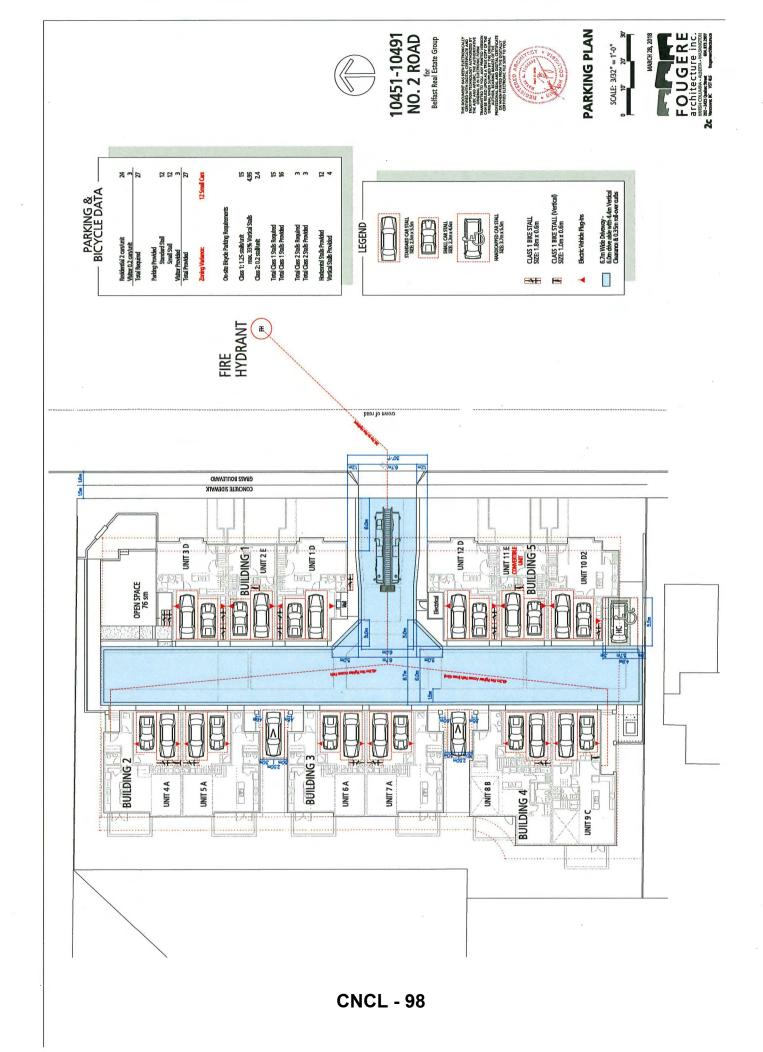


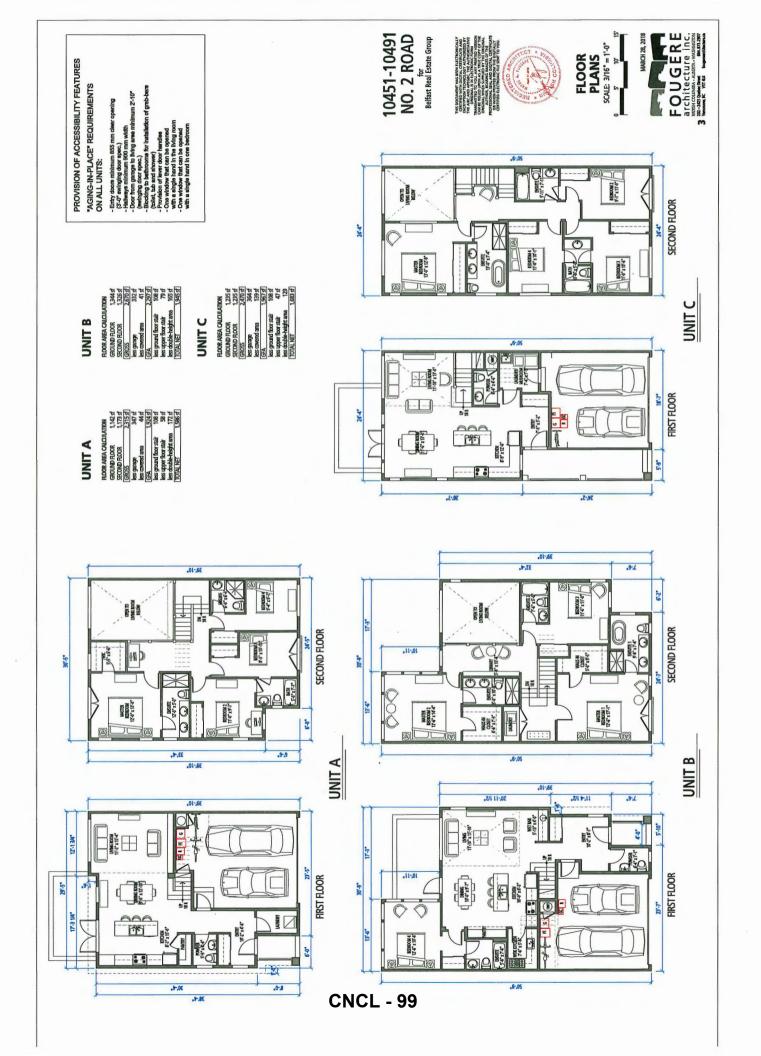
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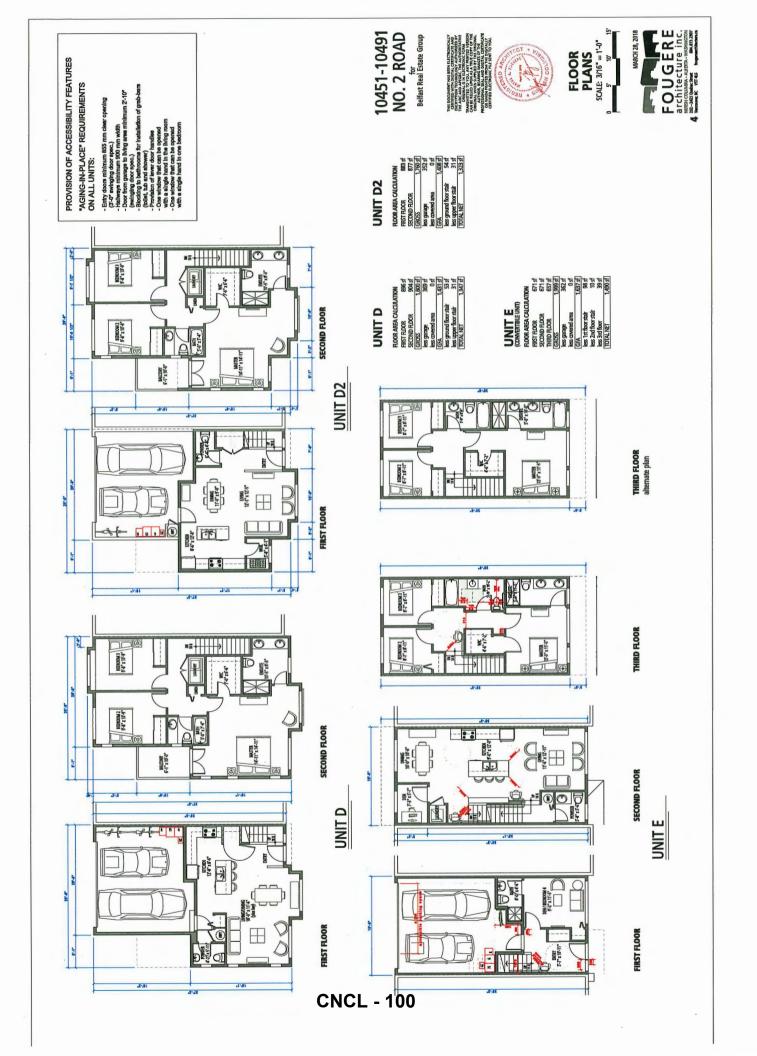


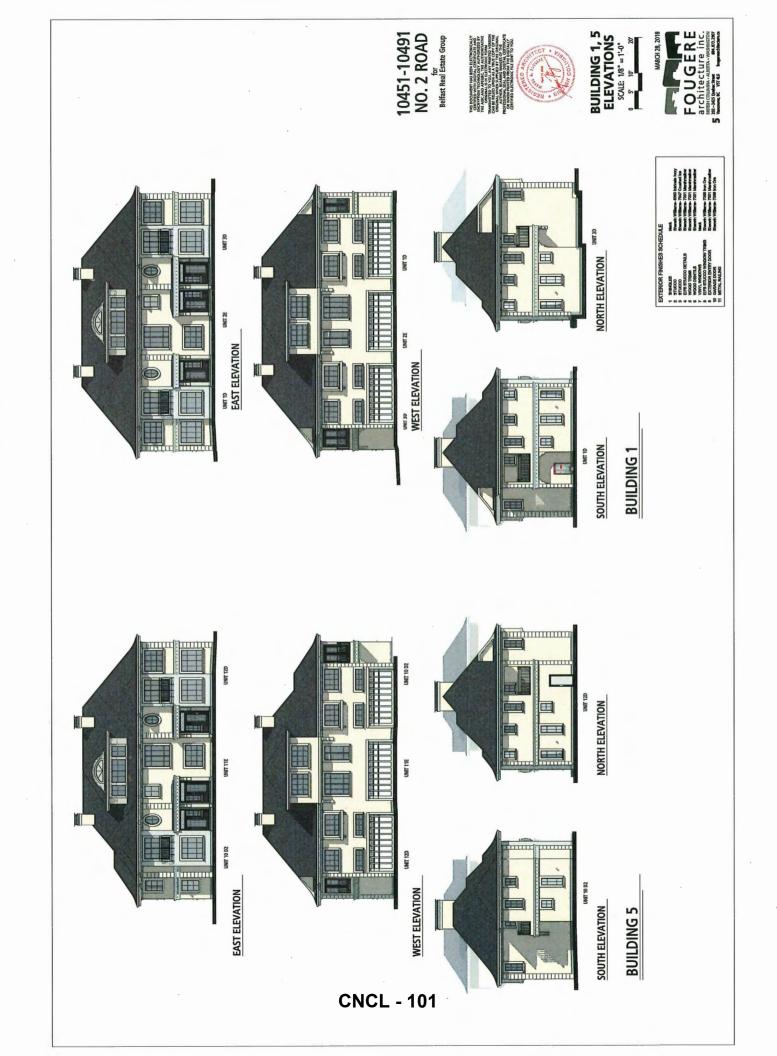


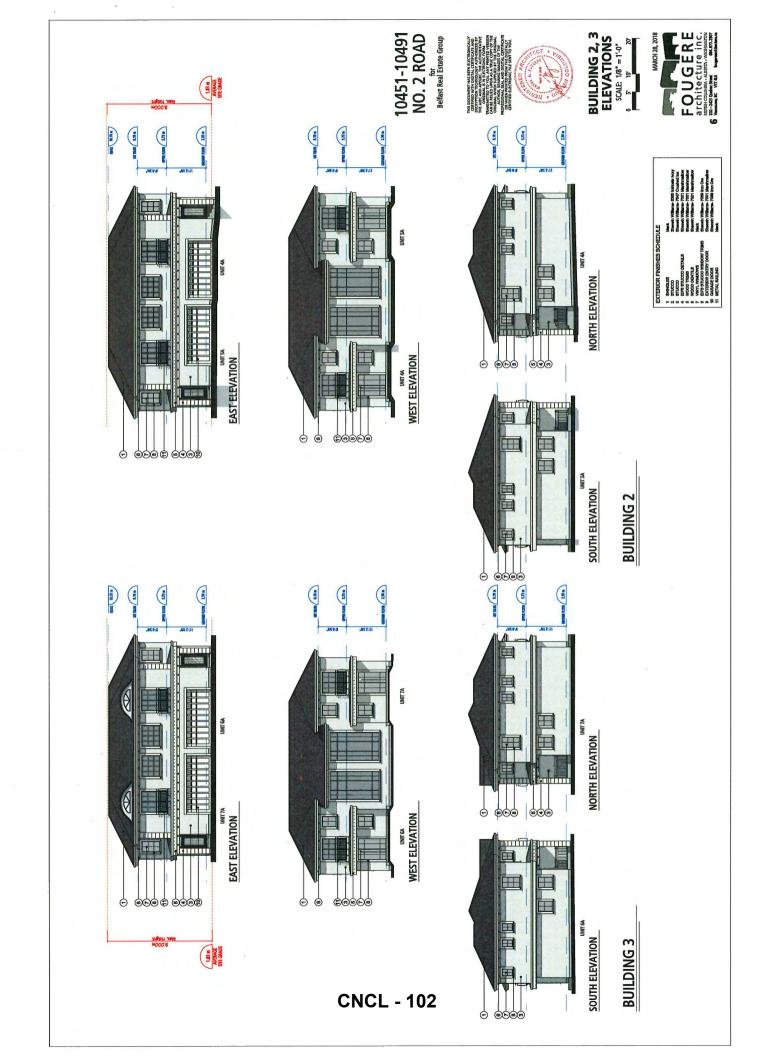


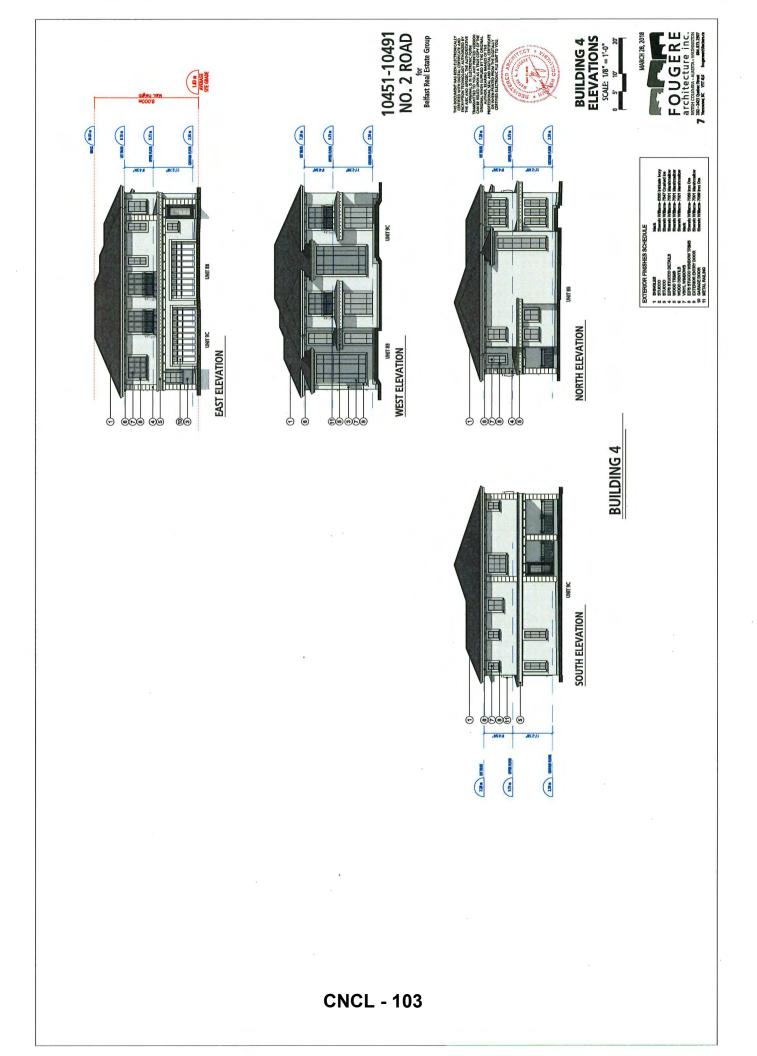


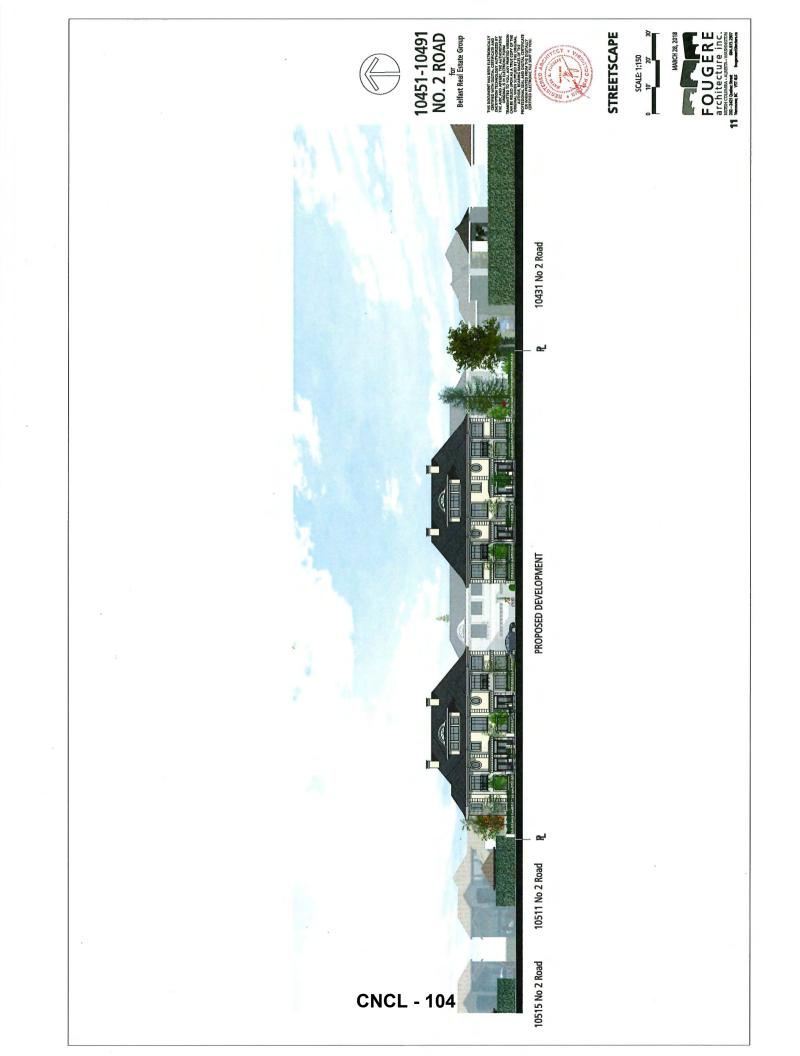






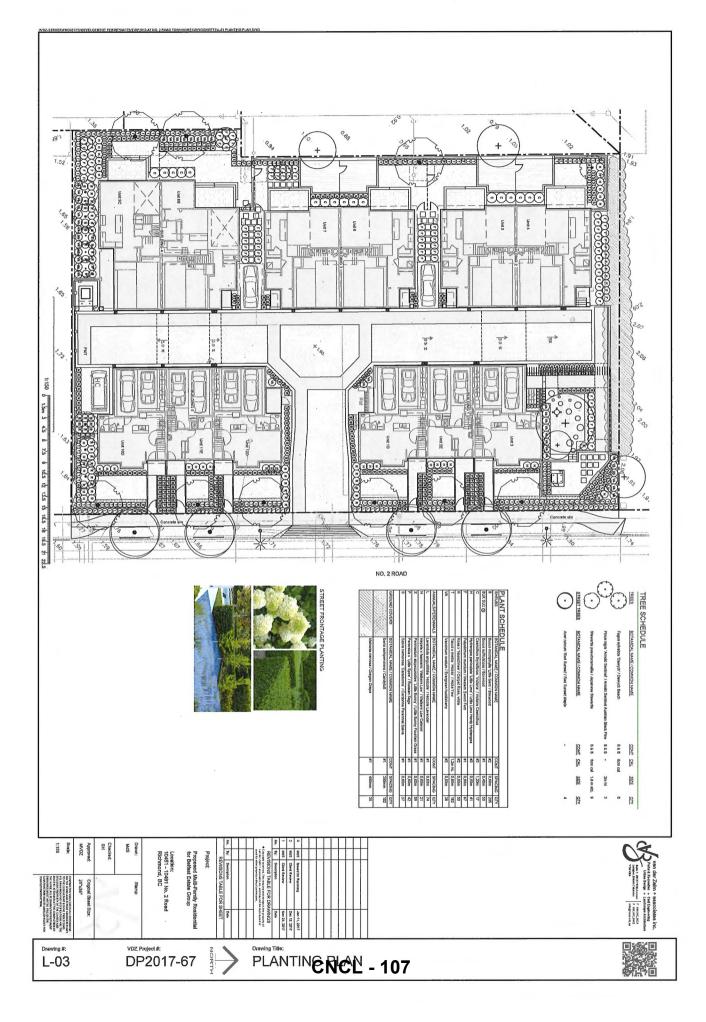


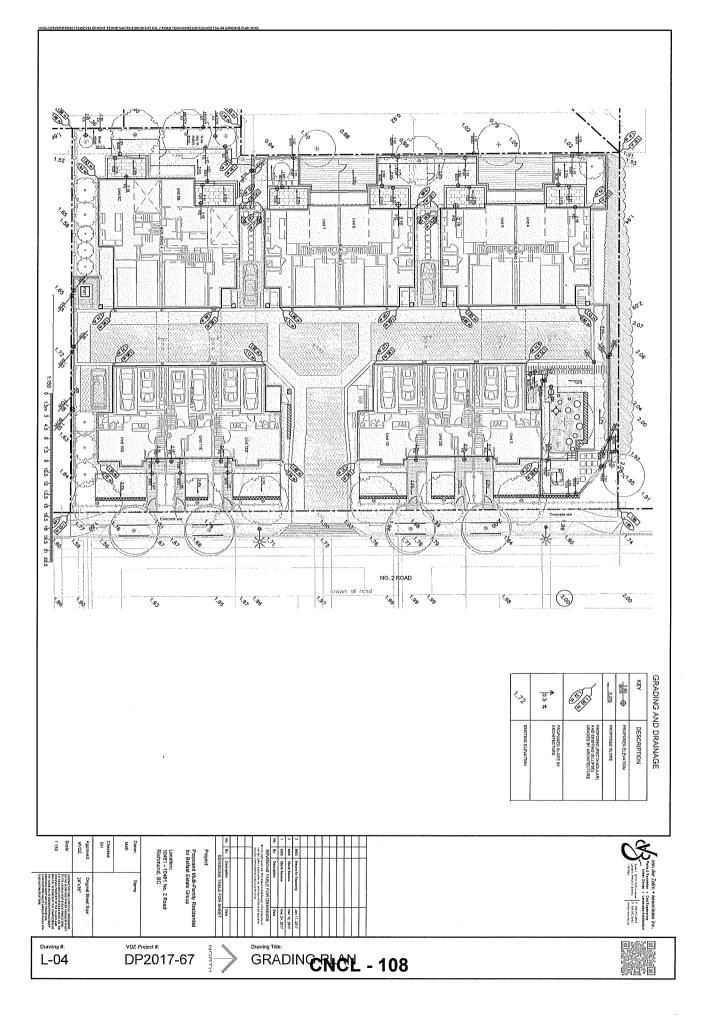


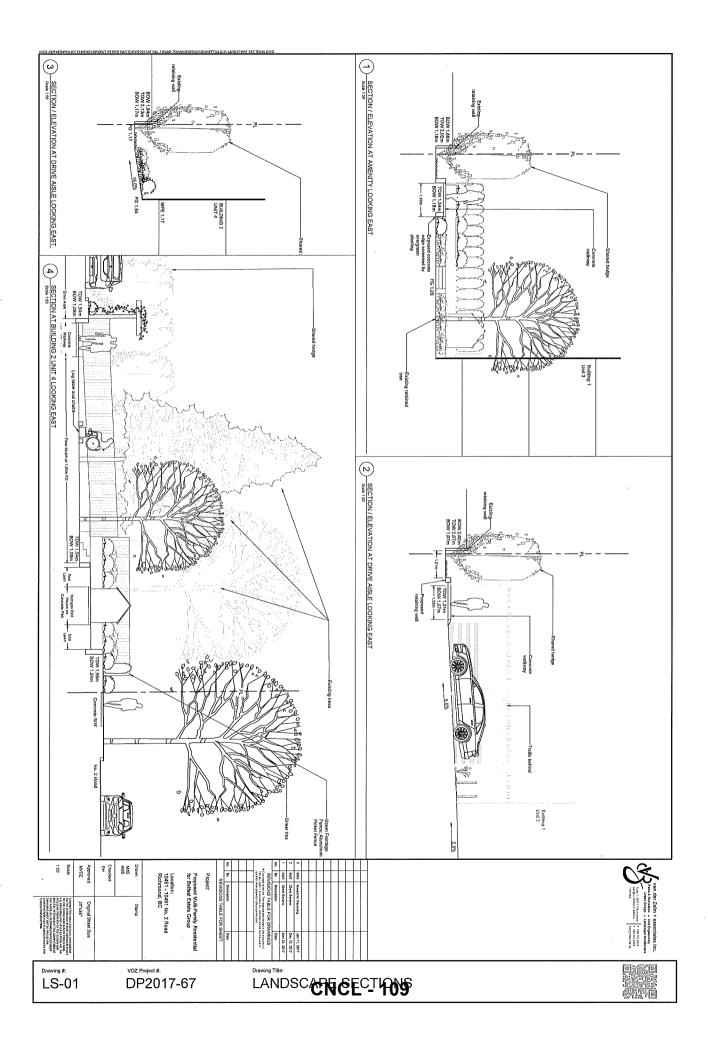


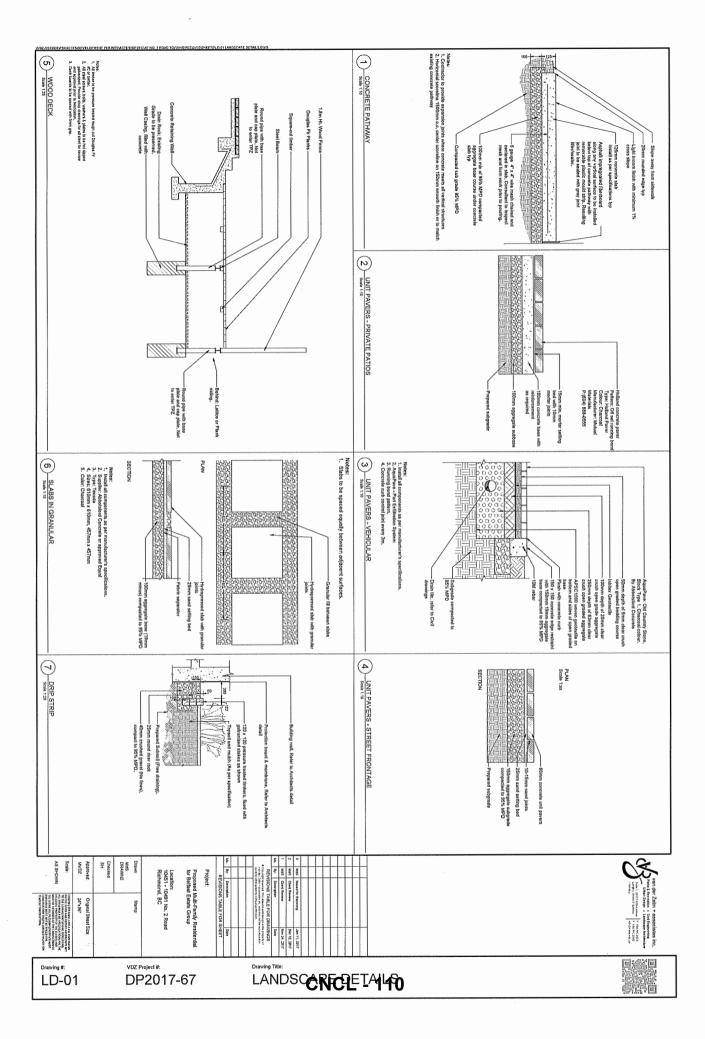


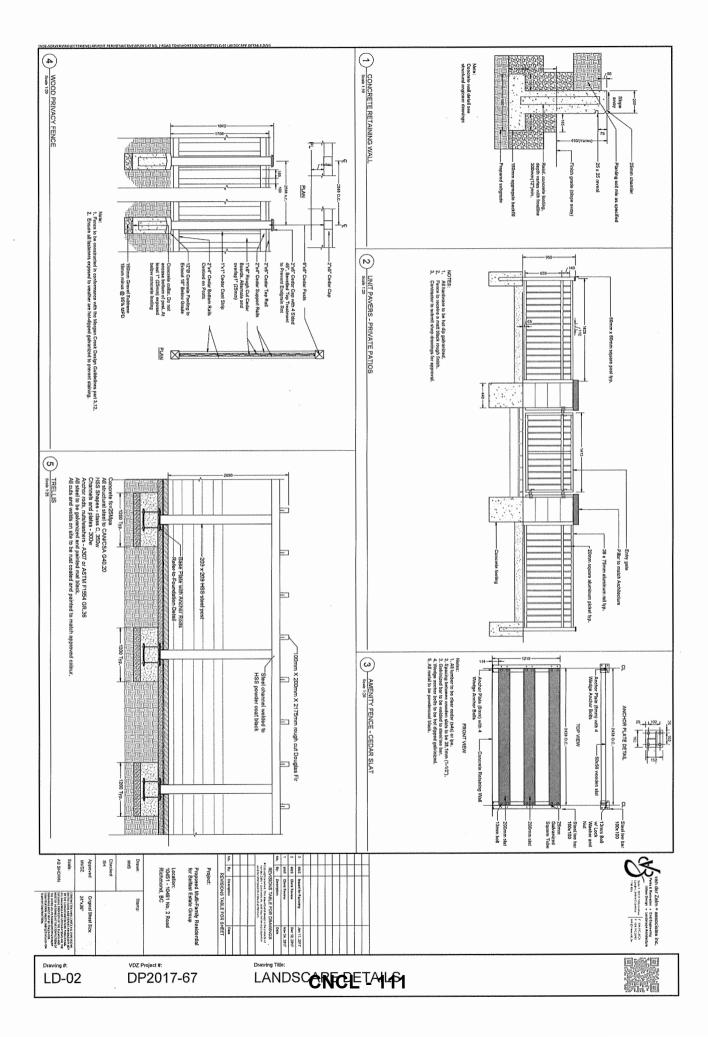


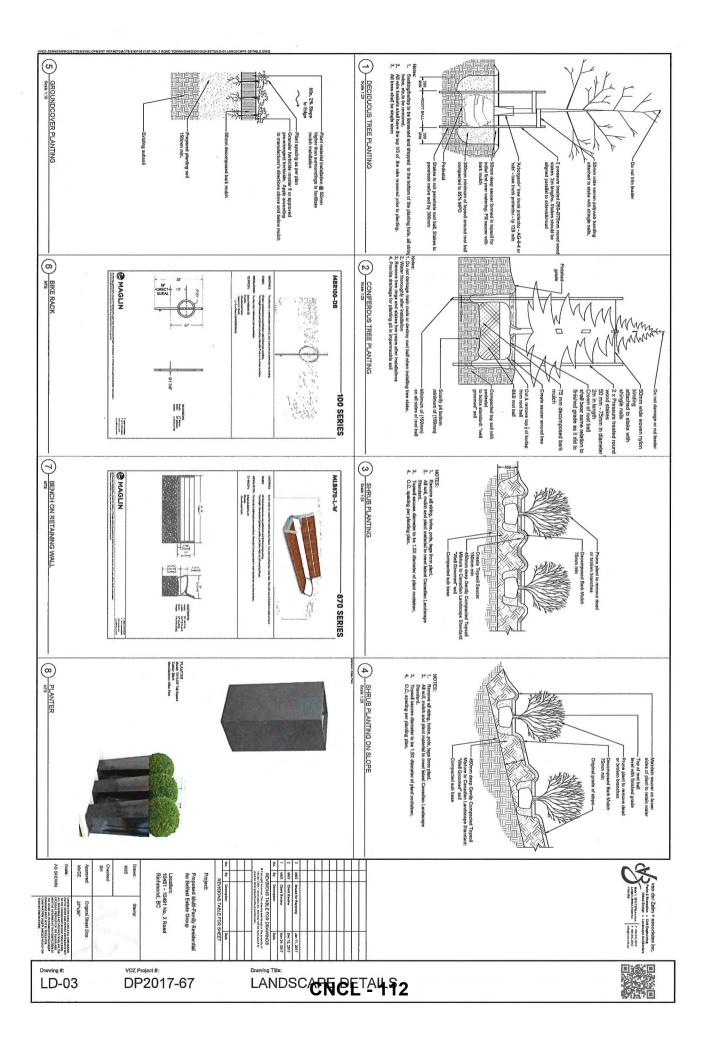


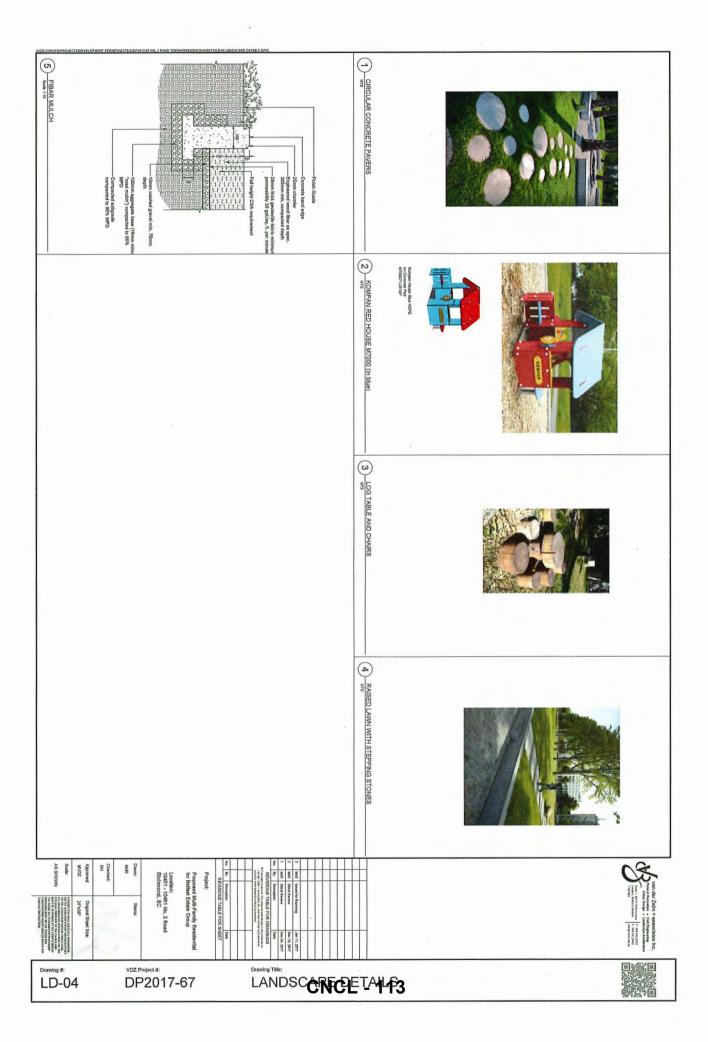














Development Application Data Sheet

Development Applications Department

RZ 17-778834

Attachment 3

Address: 10451, 10471 & 10491 No. 2 Road (RZ 17-778834)

Applicant: 1076694 B.C. Ltd.

Planning Area(s): Steveston

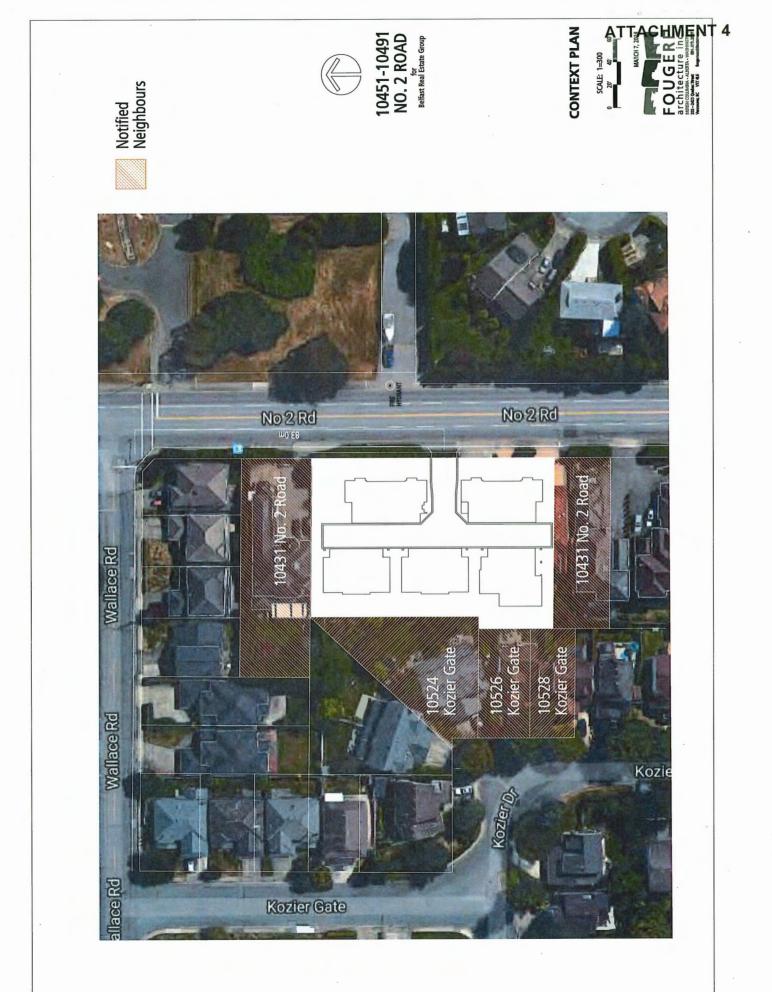
	Existing	Proposed	
Owner:	1076694 B.C. Ltd.	To be determined	
Site Size:	2,833.7 m ² (30,502 ft ²)	No change	
Land Uses:	Single-family residential	Multiple-family residential	
OCP Designation:	Neighbourhood Residential	No change	
Area Plan Designation:	Multiple-Family	No change	
702 Policy Designation:	N/A	N/A	
Zoning:	Single Detached (RS1/E)	Low Density Townhouses (RTL4)	
Number of Units:	3	12	

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.6	Max. 0.6	None permitted
Lot Coverage – Building:	Max. 40%	Max. 40%	None
Lot Coverage – Non-porous:	Max. 65%	Max. 65%	None
Lot Coverage – Live Landscaping:	Min. 25%	Min. 25%	None
Lot Area:	N/A	2,833.7 m ²	None
Lot Width:	Min. 50.0 m	65.3 m	None
Lot Depth:	Min. 35.0 m	42.3 m	None
Setbacks – Front:	Min. 6.0 m	4.5 m	Variance required
Setbacks – Rear:	Min. 3.0 m	6.0 m	None
Setbacks – Side:	Min. 3.0 m	3.0 m	None
Height:	Max. 12.0 m (3 storeys)	Front Buildings: 12.0 m (3 storeys) Rear Buildings: 9.0 m (2 storeys)	None
Off-street Parking Spaces – Regular (R) / Visitor (V):	2 (R) and 0.2 (V) per unit	2 (R) and 0.2 (V) per unit	None

	Bylaw Requirement	Proposed	Variance
Off-street Parking Spaces – Total:	24 (R) and 3 (V)	24 (R) and 3 (V)	None
Tandem Parking Spaces:	Permitted – Max. 50% of required spaces	0	None
Small Car Parking Spaces:	None when fewer than 31 spaces are provided on site	12	Variance required
Handicap Parking Spaces:	Min. 2% when three or more visitor stalls required = 1	1	None
Bicycle Parking Spaces – Class 1:	1.25 per dwelling unit	1.25 per dwelling unit	None
Bicycle Parking Spaces – Class 2:	0.2 per dwelling unit	0.2 per dwelling unit	None
Off-street Bicycle Parking Spaces – Total:	15 (Class 1) and 3 (Class 2)	16 (Class 1) and 3 (Class 2)	None
Amenity Space – Indoor:	Min. 50 m ² or cash-in-lieu	Cash-in-lieu	None
Amenity Space – Outdoor:	Min. 6 m ² per unit = 72 m ²	76 m ²	None
Private Space – Outdoor:	Min. 30 m ² per unit	Complies	None

Other: Tree replacement compensation required for loss of significant trees.

* Preliminary estimate; not inclusive of garage; exact building size to be determined through zoning bylaw compliance review at Building Permit stage.



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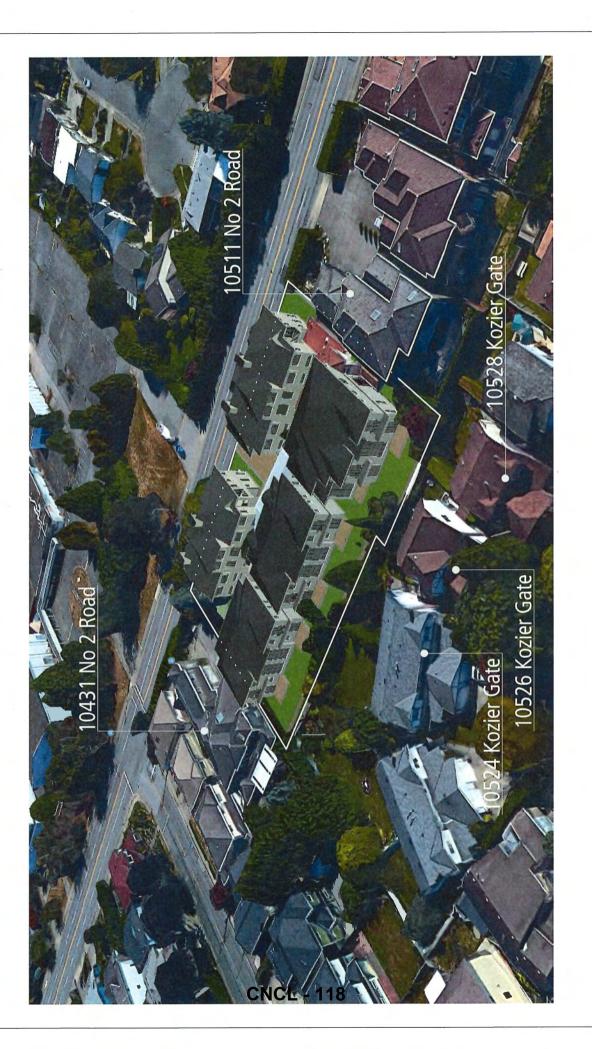
To whom it may concern,

December 22nd, 2017 City of Richmond Rezoning File Number: RZ 17-778834

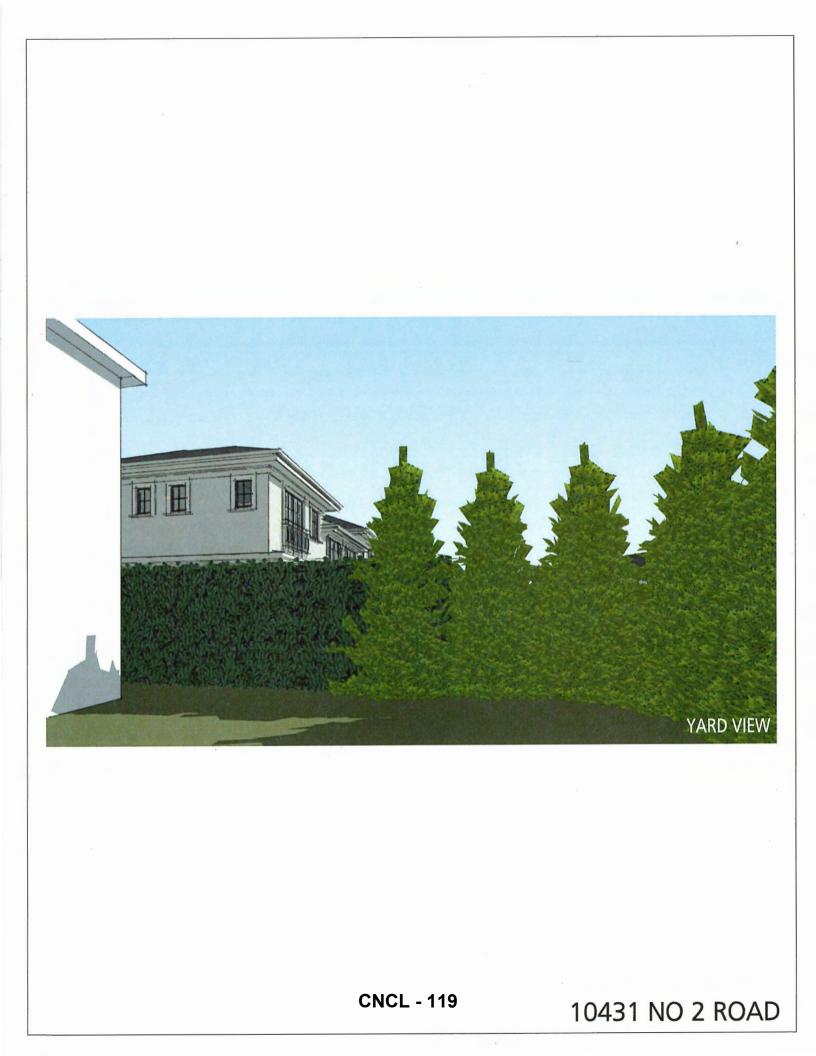
This letter is a public notification of adjacent neighbours to the properties 10451, 10471 and 10491 No 2 Road. My name is Allen Zu, Director and Development Manager of Belfast Real Estate Group. We are applying to re-zone these properties from single family use into low density two and three storey townhomes. I have attached pertinent documents which contain proposed building massing, heights, density and also perspective views from your property. If you have any concerns or would like to speak with me regarding this application, please do not hesitate to contact me. I will be including my business card with this package.

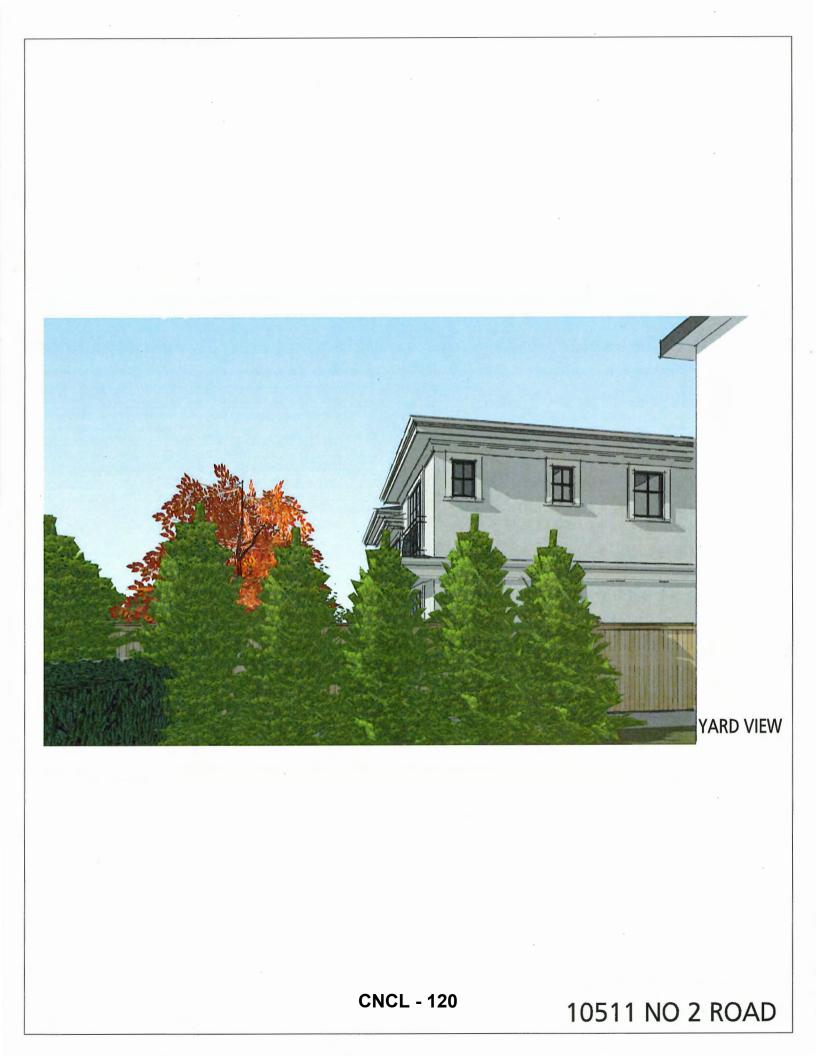
Warmest Regards,

Allen Zu



AERIAL VIEW_ South West



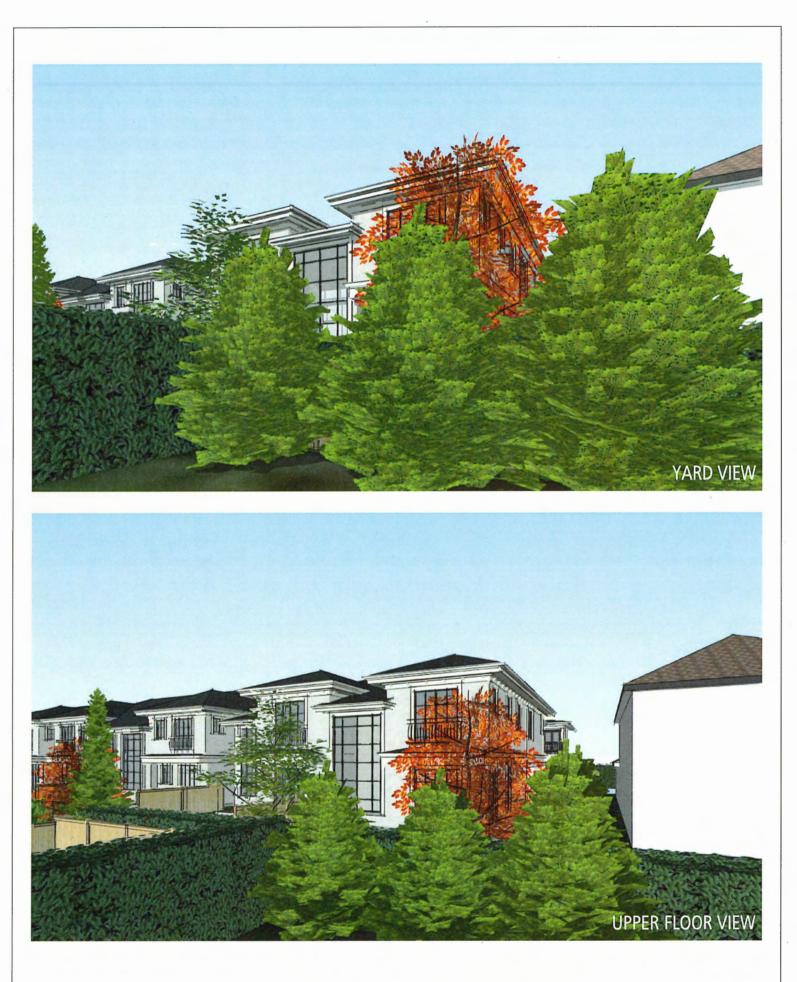




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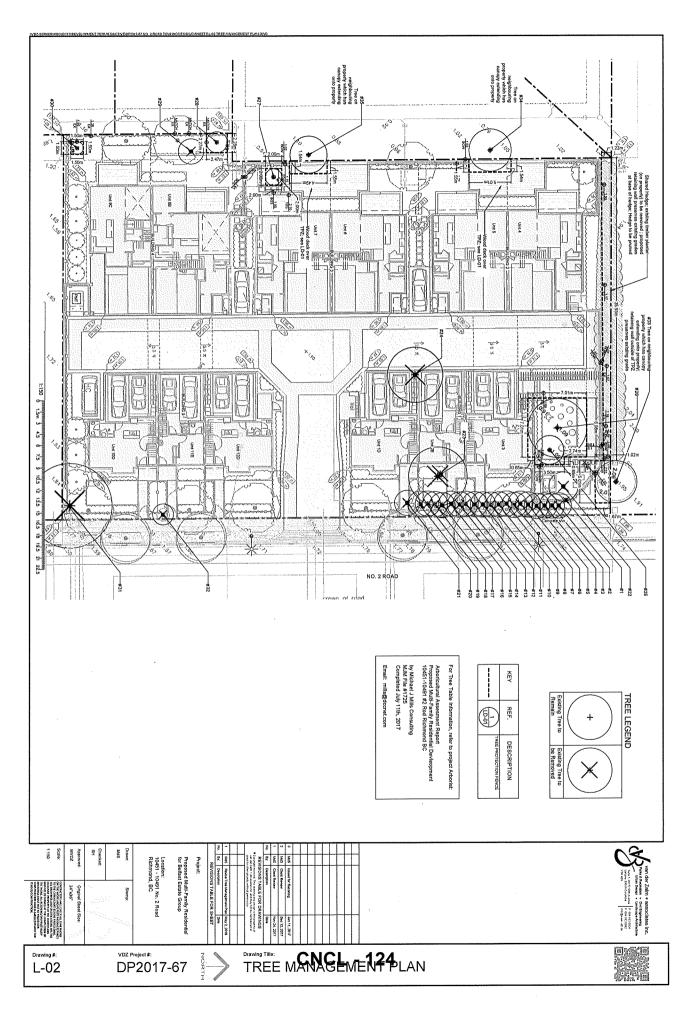
10524 KOZIER GATE





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10528 KOZIER GATE





Rezoning Considerations

Development Applications Department 6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 10451, 10471 & 10491 No. 2 Road (RZ 17-778834)

File No.: RZ 17-778834

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9872, the developer is required to complete the following:

- 1. Consolidation of all the lots into one development parcel (which will require the demolition of the existing dwellings).
- 2. Submission of a Contract entered into between the applicant and a Certified Arborist for supervision of any on-site works conducted within the tree protection zone of the trees to be retained. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the Arborist to submit a post-construction assessment report to the City for review.
- 3. Submission of a Tree Survival Security to the City in the amount of \$35,000 for the five on-site trees (tag# 25-28, & 30) trees to be retained.
- 4. Registration of a flood indemnity covenant on title.
- 5. Registration of a cross-access easement, statutory right-of-way, and/or other legal agreements or measures, as determined to the satisfaction of the Director of Development, over the entire internal drive-aisle on No. 2 Road and the entire length of all on-site drive aisles, in favour of the future developments located to the north and south of the subject development. The legal agreement to include that the City will not be responsible for maintenance or liability, no permanent structures are to be placed at the south end and north end of the north-south drive aisle, and the intent and existence of the legal agreements is to be made known to the purchasers of any unit(s) and the strata council of this development.
- 6. The submission and processing of a Development Permit* completed to a level deemed acceptable by the Director of Development.
- 7. City acceptance of the developer's offer to voluntarily contribute \$0.83 per buildable square foot (e.g. \$15,189.84) to the City's public art fund.
- 8. Contribution of \$1,000 per dwelling unit (e.g. \$12,000) in-lieu of on-site indoor amenity space.
- 9. City acceptance of the developer's offer to voluntarily contribute \$4.00 per buildable square foot (e.g. \$73,204.06) to the City's affordable housing fund.
- 10. Voluntary contribution of \$25,000 to go towards purchase and installation of a City standard bus shelter (Account # 2350 Developer Business Contribution).
- 11. Registration of a legal agreement on title identifying that the proposed development must be designed and constructed to meet or exceed EnerGuide 82 criteria for energy efficiency and that all dwellings are pre-ducted for solar hot water heating.
- 12. Enter into a Servicing Agreement* for the design and construction of required site servicing and frontage improvements. Works include, but may not be limited to, the following:

Water Works:

- Using the OCP Model, there is 414.0 L/s of water available at a 20 psi residual at the hydrant located at the frontage of 10451 No. 2 Road. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.
- The Developer is required to:
 - Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm the development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit designs at Building Permit stage.
- At the Developer's cost, the City will:

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- Install a new water service connection off of 200mm AC water main along No. 2 Rd, complete with water meter. The meter will be located on site (ex. Mechanical room), and will require a right of way at the Developer's cost to be finalized during the servicing agreement process.
- Cut, cap and remove all existing water service connections and meters serving the development site along the property frontage.

Storm Sewer Works:

- The Developer is required to:
 - Cut, cap, and remove the existing storm service connections and inspection chambers serving the proposed development along No. 2 Rd (STIC50669, STIC50671, & STIC50672).
 - Cut and cap the existing storm service connections at the inspection chambers located on the east and west property line of the proposed development (STCN127820 & STCN24256). The existing inspection chambers shall be retained.
 - Install a new storm service connection, complete with an Inspection Chamber off of the existing box culvert along No. 2 Rd to service the proposed development. If possible, re-use the existing opening for the new storm service connection.
- At the Developer's cost, the City will:
 - Complete all proposed storm sewer tie-ins to existing City infrastructure.

Sanitary Sewer Works:

- The Developer is required to:
 - Not start onsite foundation construction or excavation prior to completion of rear yard sanitary works by City crews.
- At the Developer's cost, the City will:
 - Cut, cap, and remove the existing sanitary service connection and IC (SIC1973, SCON13215) at the southwest corner of 10471 No. 2 Rd.
 - Cut and cap the existing sanitary service connection (SCON21084) at the southwest corner of the subject site. The existing inspection chamber shall be retained to serve 10511 No. 2 Rd.
 - Install a new sanitary service connection within the existing SRW along the west property line, complete with inspection chamber.

Frontage Improvements:

- The Developer is required to:
 - Provide other frontage improvements as per Transportation's requirements. Improvements shall be built to the ultimate condition wherever possible.
 - Coordinate with BC Hydro, Telus and other private communication service providers to:
 - Remove or put underground private utility service lines (e.g., BC Hydro, Telus and Shaw) along the property frontages.
 - Relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - Determine if above ground structures are required and coordinate their locations (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc). These should be located onsite, as described below.
 - Relocate or replace the existing street lighting as required by the proposed frontage improvements.
 - Locate all above ground utility cabinets and kiosks required to service the proposed development within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the development process design review. Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the right of way requirements and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of SRWs that shall be shown in the functional plan and registered prior to SA design approval:

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- BC Hydro Vista Confirm SRW dimensions with BC Hydro
- BC Hydro PMT Approximately 4mW X 5m (deep) Confirm SRW dimensions with BC Hydro
- BC Hydro LPT Approximately 3.5mW X 3.5m (deep) Confirm SRW dimensions with BC Hydro
- Street light kiosk Approximately 2mW X 1.5m (deep)
- Traffic signal controller cabinet Approximately 3.2mW X 1.8m (deep)
- Traffic signal UPS cabinet Approximately 1.8mW X 2.2m (deep)
- Shaw cable kiosk Approximately 1mW X 1m (deep) show possible location in functional plan. Confirm SRW dimensions with Shaw
- Telus FDH cabinet Approximately 1.1mW X 1m (deep) show possible location in functional plan. Confirm SRW dimensions with Telus
- Transportation requirements (works include, but are not limited to):
 - Remove the existing sidewalk along the No. 2 Road frontage and construct a new 1.5 m wide concrete sidewalk next to the new property line. Construct a new grass/tree boulevard over the remaining width between the new sidewalk and the existing west curb of No. 2 Road. The new sidewalk and boulevard are to transition to meet the existing frontage treatments to the north and south of the subject site.
 - All existing driveways along the No. 2 Road development frontage are to be closed permanently. The Developer is responsible for the removal of the existing driveway let-downs and the replacement with barrier curb/gutter, grass/tree boulevard and concrete sidewalk per standards described under Item 1 above.
 - Construct a 3.0 m x 9.0 m concrete bus pad at the existing southbound bus stop on No. 2 Road far-side of Wallace Road. The bus pad works are to include conduit pre-ducting for bus shelter electrical connections. This bus pad is to be constructed in accordance with TransLink's 'Universal Accessible Bus Stop Design Guidelines'.
 - Consult Parks on the requirements for tree protection/placement including tree species and spacing as part of the frontage works.
 - Consult Engineering on lighting and other utility requirements as part of the frontage works.

General Items:

- The Developer is required to:
 - Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required, including, but not limited to, site investigation, testing, monitoring, site preparation, dewatering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
 - Pre and post construction elevation surveys of adjacent roads, underground utilities (e.g. manhole rims, manhole inverts, service boxes, etc.) and property lines to determine settlement amounts. At their cost, the developer is responsible for rectifying construction damage.
 - Provide, prior to start of site preparation works, a geotechnical assessment of preload, soil densification, foundation excavation and dewatering impacts on the existing utilities fronting the development site (ex. 150mm perimeter drain within the rear-yard SRW, 150mm sanitary sewer within the SRW, and 600mm water trunk line along No. 2 Rd) and provide mitigation recommendations. The mitigation recommendations if necessary (e.g., removal of the 150mm sanitary sewer and its replacement with a 200mm sanitary sewer within the SRW, etc.) shall be constructed and operational, at developer's costs, prior to start of soil densification, pre-load and/or foundation excavation.
 - Video inspections of the existing 150mm sanitary sewer along the west property line to confirm its condition are required prior to start of soil densification and preload and after preload removal to check for any impact due to construction or site preparation. At their cost, the developer is responsible for rectifying any impact due to construction of site preparation.

• Use a sloped embankment (3:1) to address the grade difference between the existing elevation of the existing properties to the west and the proposed elevations for the subject site. The existing retaining wall at the northwest corner of 10491 No. 2 Rd. shall be replaced by a sloped embankment, at the Developer's cost.

Prior to a Development Permit^{*} being forwarded to the Development Permit Panel for consideration, the developer is required to:

- 1. Submission of a Landscape Plan, prepared by a Registered Landscape Architect, to the satisfaction of the Director of Development.
- 2. Complete a proposed townhouse energy efficiency report and recommendations prepared by a Certified Energy Advisor which demonstrates how the proposed construction will meet or exceed the required townhouse energy efficiency standards (EnerGuide 82 or better), in compliance with the City's Official Community Plan.

Prior to Development Permit* issuance, the developer must complete the following requirements:

1. Submission of a Landscape Security based on 100% of the cost estimate provided by the Landscape Architect, including all hard and soft materials, installation and a 10% contingency.

Prior to Building Permit Issuance, the developer must complete the following requirements:

- 1. Installation of appropriate tree protection fencing around all trees to be retained as part of the development prior to any construction activities, including building demolition, occurring on-site. Tree protection fencing must be installed to City standard in accordance with the City's Tree Protection Information Bulletin TREE-03, and must remain in place until construction and landscaping on-site is completed.
- Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management
 Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and
 proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of
 Transportation) and MMCD Traffic Regulation Section 01570.
- 3. Incorporation of energy efficiency, CPTED, sustainability and accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
- 4. If applicable, payment of latecomer agreement charges, plus applicable interest associated with eligible latecomer works.
- 5. If applicable, obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

Note:

- * This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.

All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.

The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.

Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

• Applicants for all City Permits are required to comply at all times with the conditions of the Provincial *Wildlife Act* and Federal *Migratory Birds Convention Act*, which contain prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

[Signed copy on file]

Signed

Date

Bylaw 9872



Richmond Zoning Bylaw 8500 Amendment Bylaw 9872 (RZ 17-778834) 10451, 10471 & 10491 No. 2 Road

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following area and by designating it **"LOW DENSITY TOWNHOUSES (RTL4)"**.

P.I.D. 003-671-071

Lot 67 Except: Firstly: Part Subdivided by Plan 38549; Secondly: Part Subdivided by Plan 61539; Section 36 Block 4 North Range 7 West New Westminster District Plan 8141

and

P.I.D. 004-049-357

Lot 103 Except: Part Subdivided by Plan 61539, Section 36 Block 4 North Range 7 West New Westminster District Plan 38549

and

P.I.D. 001-767-909 Lot 769 Section 36 Block 4 North Range 7 West New Westminster District Plan 56002

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9872".

FIRST READING	 CITY OF RICHMOND
A PUBLIC HEARING WAS HELD ON	 APPROVED by
SECOND READING	 APPROVED by Director or Solicitor
THIRD READING	 BK
OTHER CONDITIONS SATISFIED	
ADOPTED	

MAYOR

CORPORATE OFFICER



- To: Planning Committee
- From: Wayne Craig Director, Development

 Date:
 May 15, 2018

 File:
 RZ 16-754625

Re: Application by Brian Ross Motorsports Corp. (DBA Alfa Maserati of Richmond) for Rezoning at 5480 Parkwood Way from "Industrial Business Park (IB1)" to "Vehicle Sales (CV)"

Staff Recommendation

- 1. That Official Community Plan Bylaw 9000 and 7100, Amendment Bylaw 9874, to re-designate 5480 Parkwood Way:
 - a) from "Mixed Employment" to "Commercial" in the City of Richmond 2041 OCP Land Use Map to Schedule 1 of Official Community Plan Bylaw 9000; and
 - b) from "Industrial" to "Commercial" in the Land Use Map to Schedule 2.11B (East Cambie Area Plan) of the Official Community Plan;

be introduced and given first reading.

- 2. That Bylaw 9874, having been considered in conjunction with:
 - a) the City's Financial Plan and Capital Program; and
 - b) the Greater Vancouver Regional District Solid Waste and Liquid Waste Management Plans;

is hereby found to be consistent with said program and plans, in accordance with Section 477(3)(a) of the *Local Government Act*.

- 3. That Bylaw 9874, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, is hereby found not to require further consultation.
- 4. That Richmond Zoning Bylaw 8500, Amendment Bylaw 9875, for the rezoning of 5480 Parkwood Way from "Industrial Business Park (IB1)" to "Vehicle Sales (CV)", be introduced and given first reading.

agn

Wayne Craig Director, Development (604-247-4625)

WC:mm Att. 7

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Policy Planning Engineering Transportation		fitoda	

Staff Report

Origin

Brian Ross Motorsports Corp. (DBA Alfa Maserati of Richmond) has applied to the City of Richmond for permission to rezone a 0.40 ha (1.0 acre) site at 5480 Parkwood Way from "Industrial Business Park (IB1)" to "Vehicle Sales (CV)" for permission to undertake vehicle sales and repair/service within an 1,854 m² (19,960 ft²) existing building. The proposed rezoning will also require amendments to the Official Community Plan (OCP) and the East Cambie Area Plan.

The applicant has agreed to become a member of the Richmond Auto Mall Association (RAMA) and thus the subject site would become part of the auto mall after such time that the site is rezoned and building renovations area completed.

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached.

Surrounding Development

The site is located within an industrial park with light industrial buildings to the north and east, and automobile dealerships within the Richmond Auto Mall to the south.

- To the North: A lot, with a light industrial building zoned "Industrial Business Park (IB1)" on which a Development Permit application for a proposed 836 m² (9,000 ft²) addition to an industrial existing building (DP 17-778081) is in circulation for City staff review.
- To the South: Parkwood Way and a lot with an automobile dealership zoned "Vehicle Sales (CV)".
- To the East: Parkwood Place and a lot with a light industrial building zoned "Industrial Business Park (IB1)".
- To the West: Jacombs Road and the Richmond Nature Park on large site zoned "School & Institutional Use (SI)", located within the Agricultural Land Reserve (ALR).

Related Policies & Studies

Richmond 2041 Official Community Plan (OCP) - Schedule 1

The Richmond 2041 Official Community Plan (OCP) designates the subject property as "Mixed Employment". The "Mixed Employment" designation permits a range of industrial and stand-alone office and institutional uses (Attachment 3).

East Cambie Area Plan – Schedule 2.11B

The East Cambie Area Plan designates the subject property as "Industrial" to accommodate the production, manufacturing, storing, transporting, distributing, testing, cleaning, servicing or repair of goods (Attachment 4).

Proposed Amendments to the OCP and East Cambie Area Plan

OCP Amendment Bylaw 9874 proposes to designate the site as "Commercial" within both the OCP and East Cambie Area Plan to facilitate the proposed rezoning to "Vehicles Sales (CV)".

The proposed changes are consistent with the OCP and Area Plan "Commercial" land use designations of the nearby properties within the Richmond Auto Mall.

Metro Vancouver 2040 Regional Growth Strategy

The Metro Vancouver 2040 Regional Growth Strategy (RGS) provides land use policies to guide future development in the region. The RGS designates the subject property as "Mixed Employment", which is intended for industrial, commercial and other employment-related uses to help meet the needs of the regional economy which are not typically located in urban or neighbourhood centres. The proposed "Commercial" OCP land use designation would be consistent with the "Mixed Employment" designation in the RGS.

The properties within the Richmond Auto Mall are currently designated in the RGS as either "General Urban" or "Mixed Employment" as both designations permit commercial uses.

Legal Documents to be Registered on Title

The proposed development will require the following documents be registered on Title prior to zoning adoption:

- Flood indemnity covenant as required under Richmond Flood Protection Bylaw 8204.
- An aircraft noise indemnity covenant on title as required under the OCP Aircraft Noise Policy.

Public Consultation

A rezoning sign has been installed on the subject property. Staff have not received any comments from the public about the rezoning application in response to the placement of the rezoning sign on the property.

Should the Planning Committee endorse this application and Council grant first reading to the rezoning bylaw, the bylaw will be forwarded to a Public Hearing; where any area resident or interested party will have an opportunity to comment.

Staff have reviewed the proposed OCP and zoning amendments, with respect to the *Local Government Act* and the City's OCP Consultation Policy No. 5043 requirements, and recommend that this report does not require referral to external stakeholders.

The table below clarifies this recommendation as it relates to the proposed OCP.

Public notification for the Public Hearing will be provided as per the Local Government Act.

OCP Consultation Summary

The following stakeholders were considered during the review of the subject application.

Stakeholder	Referral Comment (No Referral necessary)
BC Land Reserve Co.	No referral necessary.
Richmond School Board	No referral necessary, as discussed below.
The Board of the Greater Vancouver Regional District (GVRD)	No referral necessary, as the proposed OCP amendment is consistent with the Regional Growth Strategy.
The Councils of adjacent Municipalities	No referral necessary, as adjacent municipalities are not affected.
First Nations (e.g., Sto:lo, Tsawwassen, Musqueam)	No referral necessary.
Translink	No referral necessary, as no transportation road network changes are proposed.
Port Authorities (Vancouver Port Authority and Steveston Harbour Authority)	No referral necessary.
Vancouver International Airport Authority (VIAA) (Federal Government Agency)	No referral necessary.
Richmond Coastal Health Authority	No referral necessary.
Stakeholder	Referral Comment (No Referral necessary)
Community Groups and Neighbours	The applicant and City have contacted the Richmond Auto Mall Association (RAMA). Feedback was received from RAMA who supported the applicant's proposal (see letter in Attachment 5).
All relevant Federal and Provincial Government Agencies	No referral necessary.

Richmond Official Community Plan Bylaw 9000, Amendment Bylaw 9874, having been considered in accordance with OCP Bylaw Preparation Consultation Policy 5043, is hereby found to not require further consultation.

The public will have an opportunity to comment further on all of the proposed amendments at the Public Hearing.

Analysis

The proposed OCP and Area Plan re-designations to "Commercial" are supported as commercial uses are already permitted in the current OCP "Mixed Employment" designation and Richmond's Employment Lands Strategy supports flexibility in land use designations. As the intent of this application is to expand the Richmond Auto Mall, the proposed "Commercial" designation best reflects the use of the site and ensures consistency with the other auto dealership properties within the adjacent Auto Mall.

The benefits of the proposal is that it: enables more opportunities for auto dealerships to colocate within the same area; improves comparative vehicle shopping for customers; removes the pressure on existing and displaced dealerships within the City Centre to relocate to other areas within the City; and improves stable employment opportunities in a concentrated area outside of the City Centre.

Furthermore, the site is located on the north side of Parkwood Way at the north entry point to the Richmond Auto Mall with "Vehicle Sales (CV)" zoned properties located on the south side Parkwood Way. While the current "Industrial Business Park (IB1)" zoning permits vehicle servicing and repair, it does not permit vehicle sales as do the adjacent properties zoned "Vehicle Sales (CV)" which permit both vehicle sales and service.

Based on the above factors, proximity of the complementary automobile dealership uses, the support from RAMA and the requirement for a Development Permit application, staff supports the proposed rezoning and OCP amendment bylaws.

Built Form and Architectural Character

The applicant plans to utilize the existing building with minor exterior design and functional changes to accommodate a sales showroom, car storage and service/repair work areas.

The applicant will be primarily undertaking renovation of the 1,854 m² (19,960 ft²) existing building which would include conversion of the warehouse and office uses on the ground floor to vehicle repair and vehicle showroom space. The office uses on the second floor mezzanine space will remain.

In addition to the interior renovation, the applicant is proposing the following exterior modifications (see Plan A-300 in Attachment 6) under a Development Permit application to:

- Re-paint, re-glaze, and change minor detailing on the existing building.
- Erect new building-mounted and free-standing signage.
- Increase the size of the parking to accommodate current parking, loading and aisle width requirements under Zoning Bylaw 8500 and provides landscape islands within the parking lot.

Existing Legal Encumbrances

The following legal documents should be discharged from the Title of the subject property:

- Statutory Right-of-Way (SROW) (LTO No. AC235881) for a sanitary main, as it pertains to the adjacent lot at 5355 Parkwood Place, but that is not related to the subject property.
- Flood Management Covenant (LTO No. AC169702A) as a new Flood Management Covenant is proposed to be registered on Title by the City as part of this rezoning.

• Covenant (LTO No. AC169703) prohibiting development prior to payment of Development Cost Charges (DCCs), as the current City DCC Bylaw would require payment of DCCs for any future additional building floor area to be constructed.

Transportation and Site Access

The existing building is located on a corner lot at the intersection of Parkwood Way and Parkwood Place (Attachment 1). There are a total of two existing driveways to be maintained with one driveway leading from each road frontage to the surface parking lot surrounding the building. The parking lot will be improved with minor changes to bring the parking space and aisle dimensions up to the current Zoning Bylaw 8500 requirements while maintaining 39 parking spaces as required for proposed vehicle sales and service use (Attachment 6). One new large (WB17) loading bay is proposed, in addition to the two existing medium (SU9) loading bays, as required under Zoning Bylaw 8500.

Tree Retention

The City's Tree Preservation Coordinator has reviewed a survey of all existing trees, with the following comments:

- 13 trees located on the development site to be retained.
- 15 trees located on City property to be retained.

The applicant has adjusted the parking lot plan to protect the existing trees. A full landscape plan that includes the existing trees will be provided and reviewed as part of the required Development Permit application.

Development Permit

The applicant will need to submit a Development Permit application with full landscape, signage and architectural plans. The application will be reviewed by staff and be considered by the Development Permit Panel prior to the Development Permit being forwarded to Council for consideration of issuance.

As the applicant has become a member of the Richmond Auto Mall Association (RAMA), the applicant will also need to work with RAMA in preparing these plans (see letter in Attachment 5).

Variance

The proposed development will require a minor variance to the north interior side yard required in the proposed "Vehicle Sales (CV)" zone from 3.0 m (9.8 ft.) to 0.46 m (1.5 ft.) for the existing building which will be considered through the forthcoming Development Permit application. This variance is supported by staff as there is no proposed change to the footprint of the building within this setback. It should also be noted that existing 0.46 m (1.5 ft.) building setback is permitted under the existing "Industrial Business Park (IB1)" zone which has no interior side setback requirement.

Site Servicing and Frontage Improvements

The applicant will enter into a Work Order to have the City construct a new 1.5 m (5.0 ft.) wide concrete sidewalk behind the existing curb along the entire Parkwood Way frontage and provide a new sidewalk let-down for the existing driveway entrance.

The existing water, sanitary sewer and storm sewer connections will be assessed and new connections will be installed by the City at the developer's cost if needed. An analysis of the municipal watermain pressure will be done to confirm if the development has adequate flow for on-site fire protection, or if a water service upgrade is needed.

A 4 m (13.1 ft.) by 4 m (13.1 ft.) statutory right-of-way (SROW) for an intersection corner cut-off at the southwest corner of the subject property at the intersection of Jacombs Road and Parkwood Way will be registered on Title to allow for City construction and maintenance of future possible transportation works in this area.

Financial Impact or Economic Impact

The rezoning application results in an insignificant Operational Budget Impact (OBI) for off-site City infrastructure (such as roadworks, waterworks, storm sewers, sanitary sewers, street lights, street trees and traffic signals).

Conclusion

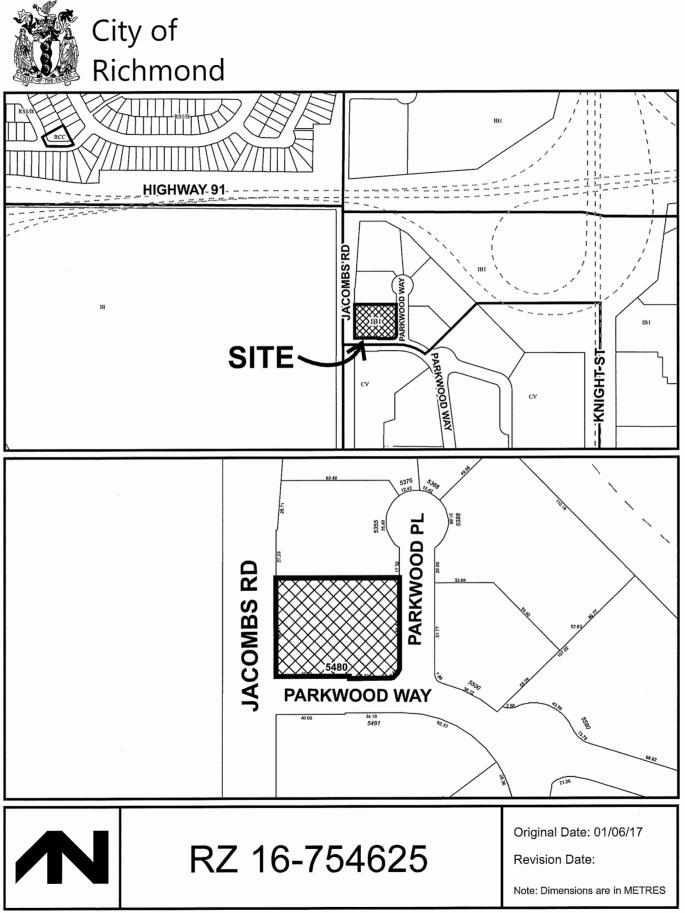
The proposed application to rezone the subject property from "Industrial Business Park (IB1)" to "Vehicle Sales (CV)" to allow for new vehicle sales in a renovated building would allow for the orderly expansion of the Richmond Auto Mall.

It is recommended that Official Community Plan Amendment Bylaw 9874 and Richmond Zoning Amendment Bylaw 9875, be introduced and given first reading.

Mark McMullen Senior Coordinator - Major Projects (604-276-4173)

MM:blg

Attachment 1: Location Map Attachment 2: Development Application Data Sheet Attachment 3: OCP Land Use Map Attachment 4: East Cambie Area Plan Land Use Map Attachment 5: Letter from Richmond Auto Mall Association dated January 18, 2018 Attachment 6: Conceptual Development Plans Attachment 7: Rezoning Considerations





City of Richmond





RZ 16-754625

Original Date: 01/06/17

Revision Date:

Note: Dimensions are in METRES



Development Application Data Sheet

Development Applications Department

RZ 16-754625

Attachment 2

Address: 5480 Parkwood Way

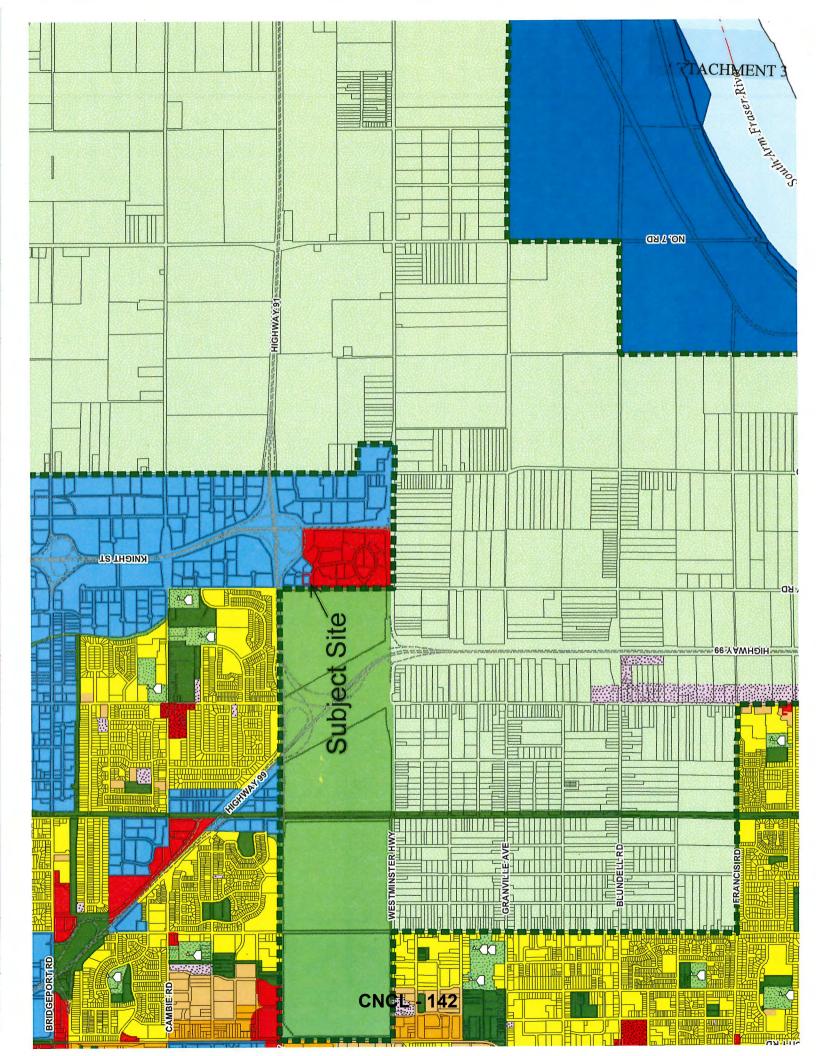
Applicant: Brian Ross Motorsports Corp. (dba Alfa Maserati of Richmond)

Planning Area(s): East Cambie Area Plan

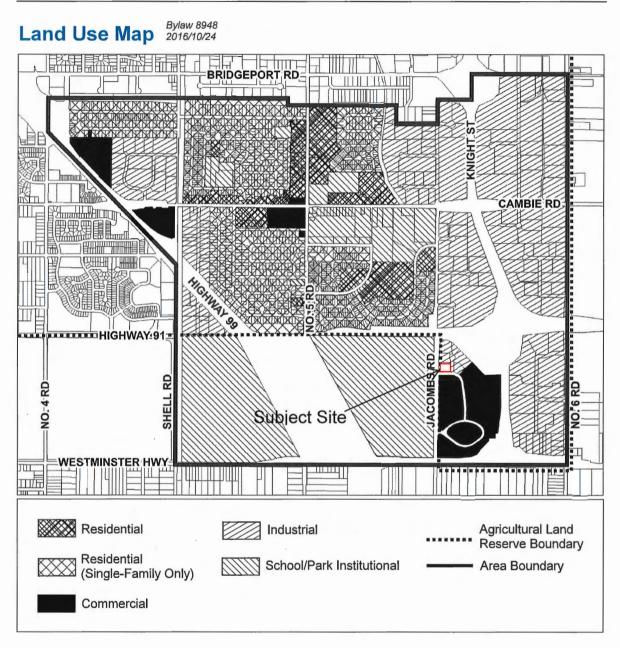
	Existing	Proposed
Owner:	L. Gillespie Holdings Ltd. (owner) Brian Ross Motorsports Corp. (leasee)	L. Gillespie Holdings Ltd. (owner) Brian Ross Motorsports Corp. (leasee)
Site Size (m ²):	4,044 m ²	4,044 m ²
Land Uses:	Warehouse and Office	Automobile Sales and Repair
OCP Designation:	Mixed Employment	Commercial
Area Plan Designation:	Industrial	Commercial
Zoning:	"Industrial Business Park (IB1)"	"Vehicle Sales (CV)"

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 1.0	0.58 (no change)	none permitted
Buildable Floor Area (m ²):*	1,854 m ²	1,854 m ²	none permitted
Lot Building Coverage (% of lot area):	50% (no change)	46% (no change)	none
Lot Size:	none	4,044 m²	none
Lot Dimensions (m):	none	Width: 51.41 m Depth: 65.32 m (no change)	none
Setbacks (m):	Front (Parkwood Place): Min. 3.0 m Rear(Jacombs Road): Min. 3.0 m Side (North): Min. 3.0 m Ext Side(Parkwood Way): Min. 3.0 m	Front (Parkwood Place): 15.5 m (no change) Rear(Jacombs Road): 6.1 m (no change) Side (North): 0.46 m (no change) Ext Side (Parkwood Way): 15.25 m (no change)	Variance from 3.0 m to 0.46 m for the side (north) setback for existing building
Height (m):	12.0 m	9.5 m (no change)	none
Off-street Parking Spaces - Total:	39	39	none

* Preliminary estimate.



City of Richmond





LETTER OF SUPPORT

January 18, 2018

To: City of Richmond Development Applications Department 6911 No. 3 Road Richmond, BC V6Y 2C1

Re: 5480 Parkwood Way, Richmond, BC

To Whom It May Concern,

This letter will confirm that the Member-Dealers of the Richmond Auto Mall Association (RAMA) fully support Brian Ross (Brian Ross Motorsports Corp.) in his efforts to conduct vehicle sales at 5480 Parkwood Way in Richmond and to act accordingly by rezoning the property to CV. The property is legally described as:

Parcel Identifier NO.: 014-965-151 Lot 17, Section 5 Block 4 North, Range 5 West New Westminster District, Plan 82969

Important to note, Mr. Ross has recently become a Member of RAMA; during the membership process, an agreement was executed that requires his company to adhere to all RAMA guidelines and policies including numerous conditions associated with development applications, construction, signage, etc.

The addition of Mr. Ross's dealership will certainly serve to enhance the Auto Mall. The proposed rezoning to permit his company to conduct new and used vehicle sales at this location is therefore appropriate and in the best interest of the Richmond Auto Mall Association.

Should you require any further info, please don't hesitate to contact me at 604-341-9928.

Gail Terry General Manager Richmond Auto Mall Association

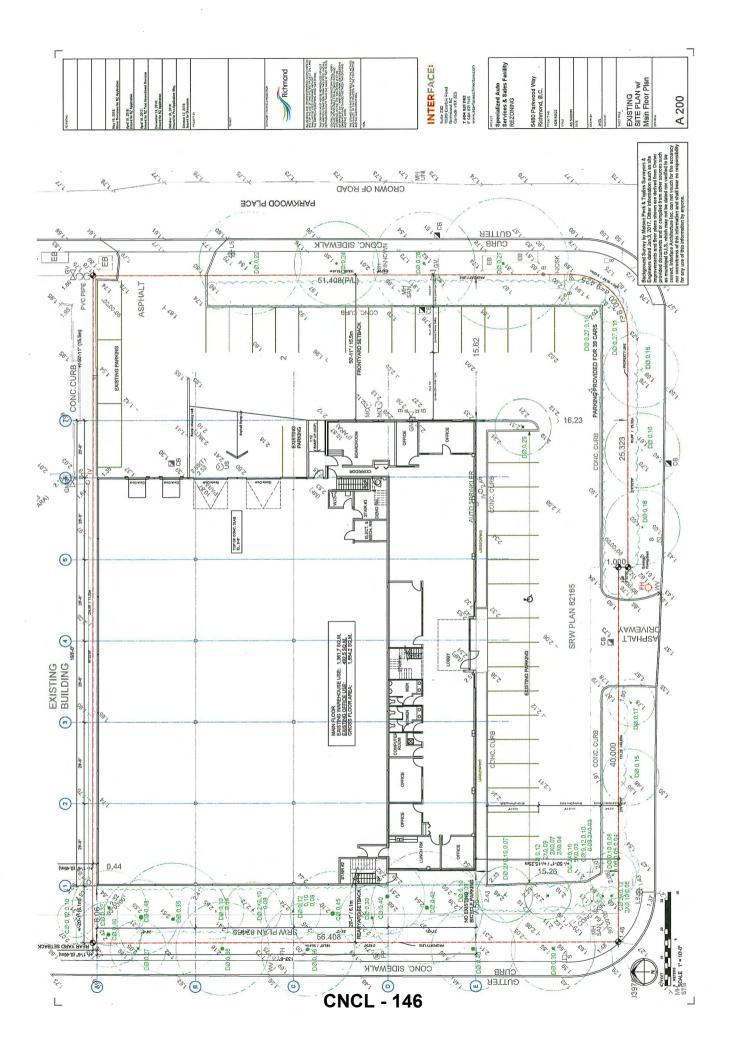
CC: RAMA Board of Directors

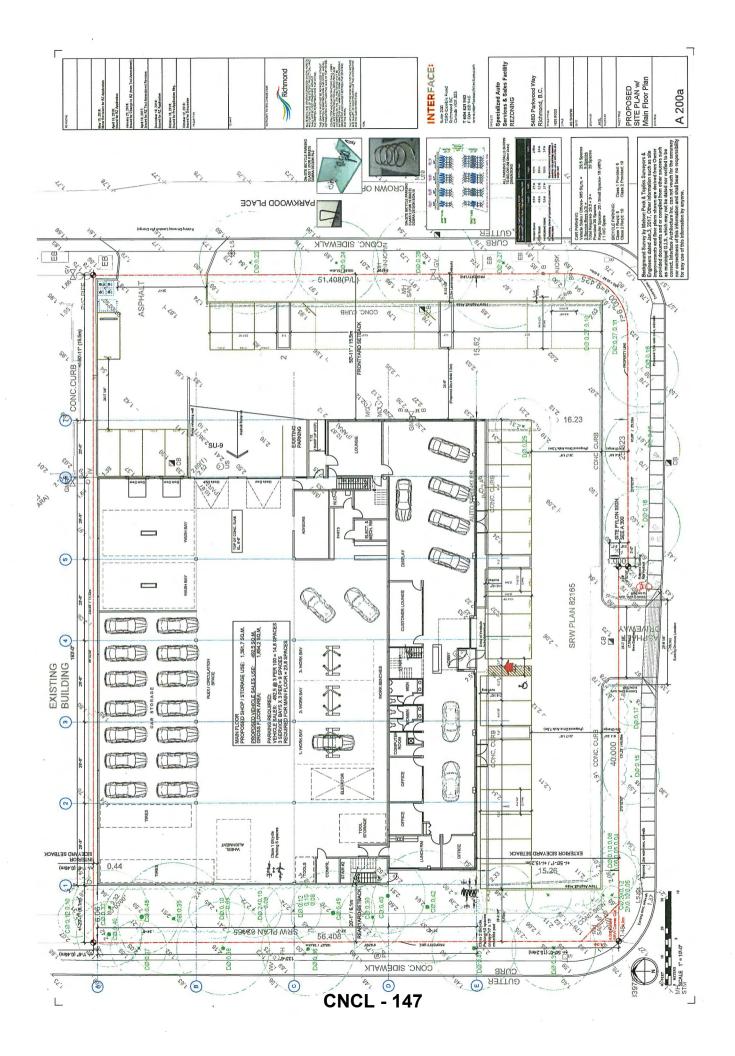


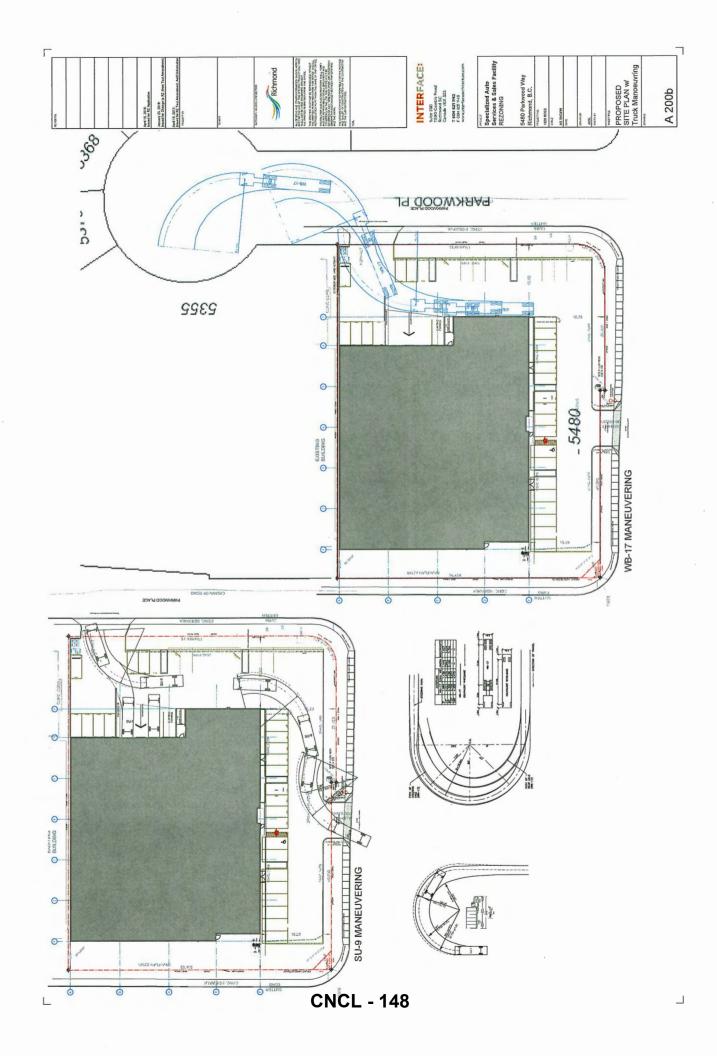
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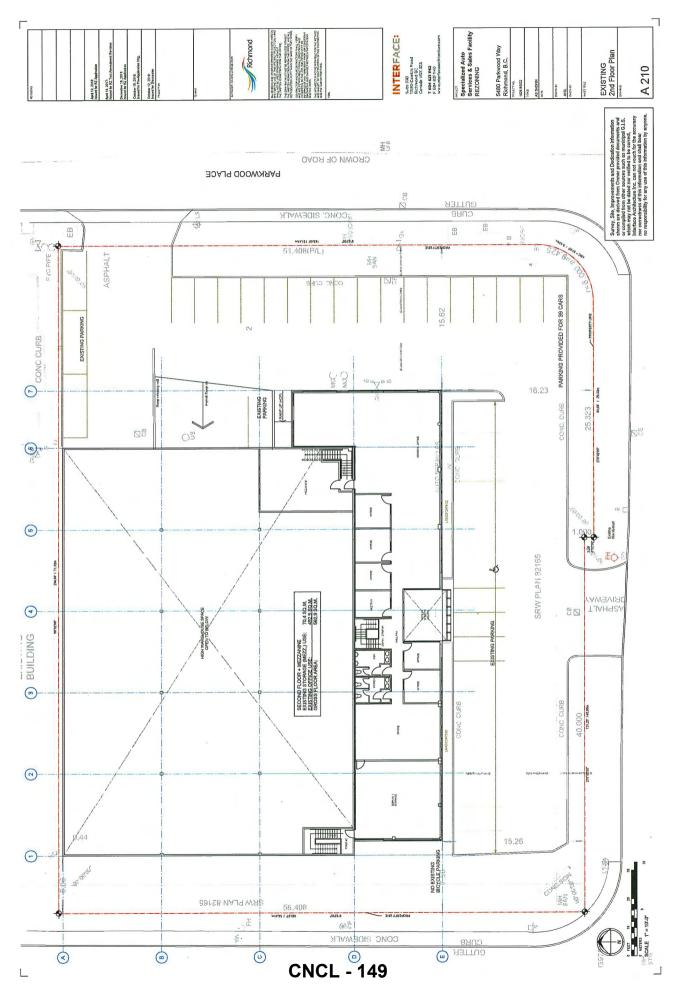
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ATTACHMENT 6

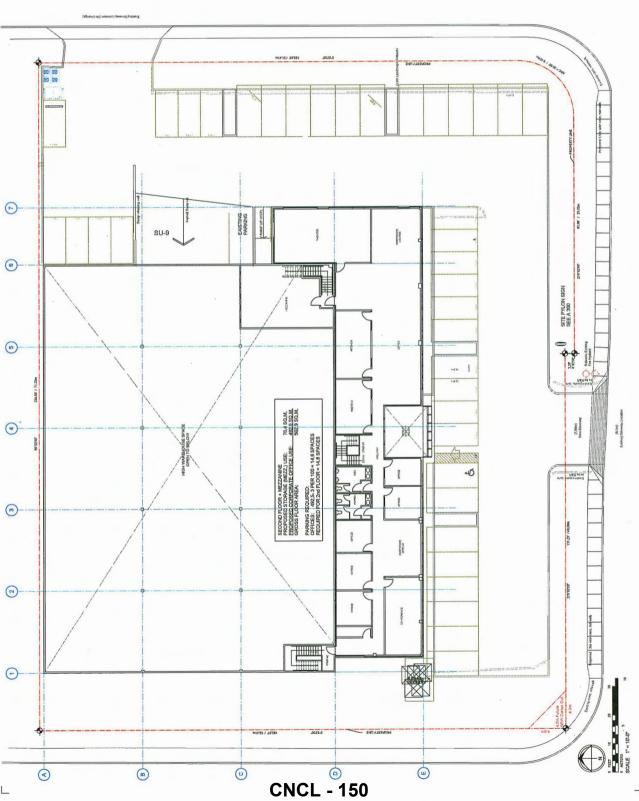






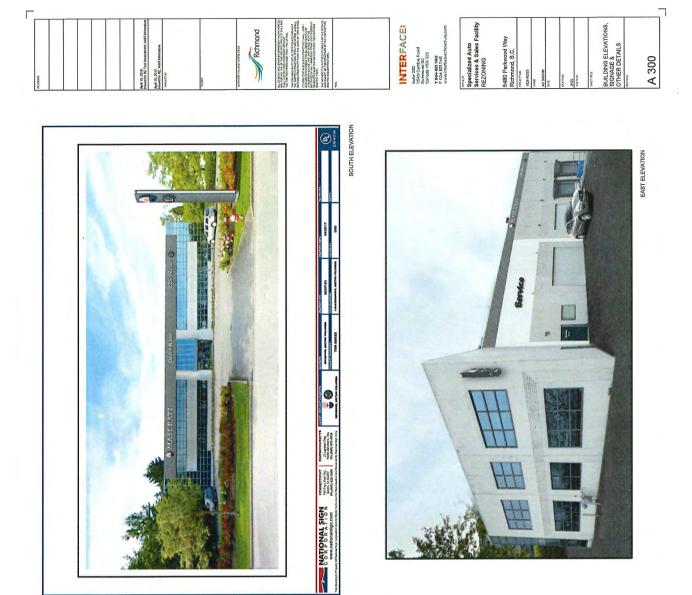


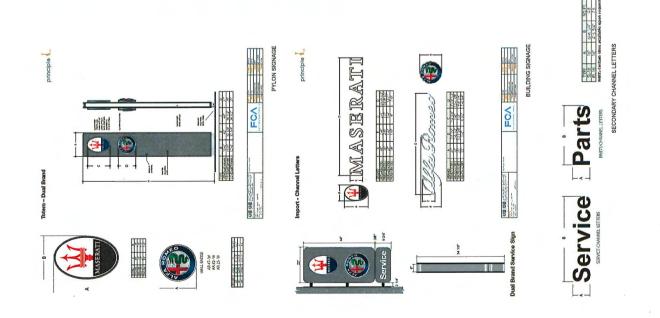




PARKWOOD PLACE

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CNCL - 151

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ATTACHMENT 7 Rezoning Considerations

Development Applications Department 6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 5480 Parkwood Way

File No.: RZ 16-754625

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9875, the developer is required to complete the following:

- 1. Final Adoption of OCP Amendment Bylaw 9874.
- 2. Provincial Ministry of Transportation & Infrastructure Approval.
- 3. Granting of an approximately 4 m by 4 m corner cut (triangular) statutory right-of-way (SROW) for future transportation works at the southwest corner of the subject property at the Jacombs Road/Parkwood Way intersection (to be measured from the property lines). The SROW will provide for City construction of the works, maintenance, and liability for the works.
- 4. Registration of an aircraft noise indemnity covenant on Title.
- 5. Registration of a flood plain covenant on Title identifying a minimum habitable elevation of 2.9 m GSC.
- 6. The submission and processing of a Development Permit* completed to a level deemed acceptable by the Director of Development.
- 7. Discharge of a redundant statutory right-of-way (LTO No. AC235881) for sanitary services, as these services and the related SROW Plan 82970 pertain to the adjacent lot at 5355 Parkwood Place; and discharge of a Covenant (LTO No. AC169702A), as a new Flood Management Covenant is being registered on Title by the City (the discharge is subject to receiving approval from Provincial Government as co-grantee). Covenant (LTO No. AC169703) prohibiting development prior to payment of Development Cost Charges (DCC) is to be discharged as the current City DCC Bylaw would require payment of DCCs for any future additional building floor area to be constructed.
- 8. City staff to confirm in writing the scope of the engineering/servicing works as described in Appendix A to be constructed under a Work Order* and for the developer to confirm the civil consultant to be engaged to design these works to the satisfaction of the City.

Prior to Building Permit Issuance, the developer must complete the following requirements:

- 1. Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
- 2. The works within Appendix A are to be designed and payment provided by the developer for the City Work Order.
- 3. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

Note:

- * This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.

All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.

The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development - 152

Initial: _____

- Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- Applicants for all City Permits are required to comply at all times with the conditions of the Provincial *Wildlife Act* and Federal *Migratory Birds Convention Act*, which contain prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

Signed

Date

Appendix A

Servicing Requirements under a Work Order

As a Servicing Agreement is not required, the following may be completed under a City Work Order.

- 1. Water Works:
 - Using the OCP Model, there is 432.0 L/s of water available at 20 psi residual west of the property along Jacombs Road, 422.0 L/s south of the property along Parkwood Way and 374.0 L/s east of the property along Parkwood Place. Based on your proposed development, your site requires a minimum fire flow of 200 L/s.
 - The Developer is required to:
 - Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm the development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage Building designs.
 - At the Developer's cost, the City is to:
 - Disconnect existing water connection and cap existing lead at main along Parkwood Place.
 - Install new water connection along the east property line complete with meter and meter box off of the 300 mm PVC water main along Parkwood Place
 - Relocate the existing hydrant on Parkwood Way to the ultimate location outside of the proposed sidewalk

2. Storm Sewer Works:

- The Developer is required to:
 - Check the existing storm service connection at the northwest corner to confirm the material, capacity, and condition of the inspection chambers and pipes by video inspection. If deemed acceptable by the City, the existing service connection may be retained. In the case that the service connection is not in a condition to be re-used, a new service connection, complete with inspection chamber, shall be installed at the west property line off of the existing 450 mm storm main along Jacombs Road at the Developer's cost.
 - Check the existing storm service connection at the east property line to confirm whether connection is in use. If connection is not in use, cap existing lead at main.

3. Sanitary Sewer Works:

- The Developer is required to:
 - Check the existing sanitary service connection at the east property line to confirm the material, capacity, and condition of the inspection chambers and pipes by video inspection. If deemed acceptable by the City, the existing service connections may be retained. In the case that the service connection is not in a condition to be re-used, a new service connection, complete with inspection chamber, shall be installed off of the sanitary main along Parkwood Place at the Developer's cost.

4. Frontage Improvements:

- Developer is required to coordinate with BC Hydro, Telus and other private communication service providers:
 - To determine if above ground structures are required and coordinate their locations (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc.). These shall be located on-site.
 - When relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
- Other frontage improvements as per Transportation's requirements in item no. 6. Below.

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Initial: _____

5. General Engineering Items:

- The developer is required to:
 - Not encroach into the rights-of-ways along the Parkwood Way or Jacombs Road frontage with trees, parking, fencing, or other on-site elements.
 - Enter into, if required, additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering, including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

6. Transportation Works Requirements:

- Along the entire Parkwood Way frontage, a new 1.5 m wide concrete sidewalk is to be constructed behind the existing curb.
- Replacement of existing driveway entrance on Parkwood Way with a 7.5 m wide sidewalk let-down with any additional width for truck turning to be permitted subject to the satisfaction of Transportation staff.



Richmond Official Community Plan Bylaw 9000 and 7100 Amendment Bylaw 9874 (RZ 16-754625) 5480 Parkwood Way

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. Richmond Official Community Plan Bylaw 9000 is amended by repealing the existing land use designation in the City of Richmond 2041 OCP Land Use Map to Schedule 1 thereof of the following area and by designating it "Commercial".

P.I.D. 014-965-151 Lot 17 Section 5 Block 4 North Range 5 West New Westminster District Plan 82969

2. Richmond Official Community Plan Bylaw 7100 is amended by repealing the existing land use designation in the Land Use Map to Schedule 2.11B (East Cambie Area Plan) thereof of the following area by designating it "Commercial".

P.I.D. 014-965-151 Lot 17 Section 5 Block 4 North Range 5 West New Westminster District Plan 82969

3. This Bylaw may be cited as "Richmond Official Community Plan Bylaw 9000, Amendment Bylaw 9874".

FIRST READING	CITY OF RICHMOND
	APPROVED
PUBLIC HEARING	
SECOND READING	 APPROVED by Manager
	or Solicitor
THIRD READING	 KK
OTHER CONDITIONS SATISFIED	 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
ADOPTED	

MAYOR

CORPORATE OFFICER

Bylaw 9875



Richmond Zoning Bylaw 8500 Amendment Bylaw 9875 (RZ 16-754625) 5480 Parkwood Way

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following area and by designating it "VEHICLE SALES (CV)".

P.I.D. 014-965-151 Lot 17 Section 5 Block 4 North Range 5 West New Westminster District Plan 82969

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9875".

FIRST READING

A PUBLIC HEARING WAS HELD ON

SECOND READING

THIRD READING

OTHER CONDITIONS SATISFIED

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE APPROVAL

ADOPTED

MAYOR

CORPORATE OFFICER

APPROVED by Director or Solicitor

CITY OF

RICHMOND



То:	Public Works and Transportation Committee	Date:	May 15, 2018
From:	Victor Wei, P. Eng. Director, Transportation	File:	01-0150-20-ICBC1- 01/2018-Vol 01
Re:	ICBC-City of Richmond <i>Road Improvement Program</i> 2018	m – Proj	oosed Projects for

Staff Recommendation

- That the list of proposed road safety improvement projects, as described in Attachment 2 of the staff report titled "ICBC-City of Richmond *Road Improvement Program* – Proposed Projects for 2018," dated May 15, 2018 from the Director, Transportation be endorsed for submission to the ICBC 2018 *Road Improvement Program* for consideration of cost-share funding; and
- 2. That should the above applications be successful, the Chief Administrative Officer and General Manager, Planning and Development be authorized to negotiate and execute the cost-share agreements, and that the 5-Year Financial Plan (2018-2022) be amended accordingly.

Victor Wei, P. Eng. Director, Transportation (604-276-4131)

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Finance Engineering Law RCMP	R R R R R	Merceg
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: CJ	APPROVED BY CAO

Staff Report

Origin

At the March 27, 2017 Council meeting, Council endorsed a number of proposed joint ICBC-City of Richmond road safety improvement projects for 2017. This report summarizes the projects implemented in 2017 with funding from ICBC and presents a list of projects proposed to be implemented with funding contributions from ICBC as part of the 2018 ICBC-City of Richmond *Road Improvement Program* partnership.

This report supports Council's 2014-2018 Term Goal #3 A Well-Planned Community:

Adhere to effective planning and growth management practices to maintain and enhance the livability, sustainability and desirability of our City and its neighbourhoods, and to ensure the results match the intentions of our policies and bylaws.

3.3. *Effective transportation and mobility networks.*

This report supports Council's 2014-2018 Term Goal #5 Partnerships and Collaboration:

Continue development and utilization of collaborative approaches and partnerships with intergovernmental and other agencies to help meet the needs of the Richmond community.

5.2. Strengthened strategic partnerships that help advance City priorities.

Analysis

The City has been in partnership with ICBC in the *Road Improvement Program* since 1994. This partnership is a vital component of the City's traffic safety program as it enables the City not only to undertake more traffic safety enhancements than it could alone, but also to expedite some of these road safety improvement projects. Each year, a list of potential eligible capital projects is developed for inclusion in the *Road Improvement Program* based on community requests and input from the Traffic Safety Advisory Committee and other stakeholders.

Completed 2017 ICBC-City of Richmond Road Improvement Projects

As shown in Attachment 1, a number of City projects fully or substantially completed in 2017 will receive a total of \$179,890 in funding from ICBC's 2017 *Road Improvement Program*.

Proposed 2018 ICBC-City of Richmond Road Improvement Projects

Attachment 2 identifies a range of projects proposed for submission to the 2018 *Road Improvement Program* for funding contribution from ICBC that would provide benefits for all road users (i.e., motorists, cyclists, pedestrians, transit users).

ICBC's potential funding contribution to these projects will be determined by historical traffic crash rates at these locations and the estimated reduction in ICBC claim costs resulting from the

proposed traffic safety improvements as well as eligibility of the project vis-à-vis the funding guidelines. The outcome of ICBC's review of the projects will be reported back as part of the 2019 ICBC *Road Improvement Program*.

Upon approval of a project by ICBC, the City would be required to enter into a funding agreement with ICBC. The agreement is provided by ICBC and generally includes an indemnity in favour of ICBC. Staff recommend that the Chief Administrative Officer and General Manager, Planning and Development be authorized to execute the funding agreements for the approved projects and that the 2018 Capital Plan and 5-Year Financial Plan (2018-2022) be amended accordingly to reflect the receipt of external grants. Should any submitted projects receive funding from ICBC, the City's portion of the total capital cost would be reduced accordingly.

Financial Impact

The total estimated cost of all the projects identified in Attachment 2 is \$20,290,800. As indicated in Attachment 2, the City's portions of the costs of the projects (\$17,958,050) are fully funded with the funding sources having been previously approved by Council as part of past or current Capital Budgets.

Conclusion

ICBC is a significant long-time partner working with the City to promote traffic safety in Richmond. The traffic safety initiatives jointly implemented by ICBC and the City, including various road and traffic management enhancements, educational efforts and enforcement measures, have resulted in safer streets for all road users in Richmond. Therefore, staff recommend that Council endorse the various local road safety improvement projects for submission to the 2018 joint ICBC-City of Richmond *Road Improvement Program*.

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Fred Lin, P.Eng., PTOE Senior Transportation Engineer (604-247-4627)

Joan Caravan Transportation Planner (604-276-4035)

Att. 1: 2017 Road Improvement Projects receiving ICBC Funding Att. 2: Proposed 2018 City-ICBC Road Improvement Projects

Location	Project Description	ICBC Contribution	Estimated Total Cost	
Garden City Road-Odlin Road	Installation of southbound left-turn turn	\$58,000	\$200,000	
 Westminster Hwy-Tiffany Blvd Williams Road-Lassam Road Granville Ave-Bridge Street 	Installation of Special Crosswalk	\$7,000 \$3,000 \$3,000	\$70,000 \$70,000 \$45,000	
No. 4 Road-Albion Road	Upgrade of Special Crosswalk to Pedestrian Signal	\$5,000	\$120,000	
Steveston Hwy-Mortfield GateNo. 1 Road-Garry Street	Upgrade of Special Crosswalk to Full Traffic Signal	\$37,500 \$31,500	\$350,000 \$350,000	
Granville Ave-Minoru Gate	Upgrade of Pedestrian Signal to Full Traffic Signal	\$19,500	\$350,000	
Granville Ave-Minoru Complex Access	Installation of Pedestrian Signal	\$7,000	\$150,000	
Seacote Road (Williams Road-150 m north)	Pedestrian Walkway	\$4,000	\$200,000	
No. 2 Road-Francis Road	Safety & Operation Review	\$4,390	\$9,000	
Total		\$179,890		

2017 Road Improvement Projects receiving ICBC Funding

Attachment 2

Proposed 2018 ICBC-City of Richmond Road Improvement Program Project	Estimated Total Cost	Source & Amount of City	y Funds ⁽¹⁾	External Agency Funding: TransLink ⁽²⁾
Installation of special crosswalk: • No. 1 Road-Tucker Ave • Cedarbridge Way-Elmbridge Way • Woodwards Road-Railway Ave • Deagle Road-Williams Road • 8200-block Ackroyd Road • Other locations to be determined ⁽⁴⁾	\$100,000 \$100,000 \$100,000 \$60,000 \$60,000	2016 Special Crosswalk Program 2017 Special Crosswalk Program	\$200,000 \$220,000	-
 Installation of pedestrian signal: Locations to be determined⁽⁴⁾ 	-	2018 Traffic Signal Program	\$300,000	-
 Installation of full traffic signal: Kwantlen St-Lansdowne Road Other locations to be determined⁽⁴⁾ 	\$350,000	2018 Traffic Signal Program	\$350,000	-
Emergency Vehicle Pre-Emption System: Pilot Program	\$100,000	2018 Traffic Signal Pre- Emption Program	\$100,000	-
 Installation of LED street name signs: Russ Baker Way-Miller Road Garden City Rd/Great Canadian Way-Sea Island Way Great Canadian Way- Bridgeport Road Knight Street-Westminster Hwy No. 6 Road-Westminster Hwy Garden City Road-Westminster Hwy Garden City Road-Westminster Hwy Lynas Lane-Westminster Hwy Fraserwood PI-Westminster Hwy Russ Baker Way-Gilbert Road Minoru Blvd-Granville Ave Other locations to be determined⁽⁴⁾ 	\$15,000 \$15,000 \$12,000 \$15,000 \$15,000 \$15,000 \$15,000 \$15,000 \$12,000 \$15,000	2018 LED Street Name Sign Program	\$144,000	-
 Installation of traffic video cameras: Lynas Lane-Westminster Hwy No. 3 Road-Lansdowne Rd No. 3 Road-Cook Road Viking Way-Bridgeport Road No. 6 Road-Cambie Road Other locations to be determined⁽⁴⁾ 	\$35,000 \$35,000 \$35,000 \$35,000 \$35,000	2018 Traffic Video and Communication Program	\$175,000	-
Installation of UPS (uninterruptible power supply): Shell Road-Cambie Road No. 5 Road-Bridgeport Road Viking Way-Bridgeport Road No. 6 Road-Bridgeport Road Coppersmith PI -Steveston Hwy Other locations to be determined ⁽⁴⁾	\$17,000 \$17,000 \$17,000 \$17,000 \$17,000	2018 Public Works Minor Capital – Traffic	\$85,000	-
 Construction of multi-use pathway: Westminster Hwy (No. 8 Rd-Nelson Rd) 	\$400,000	2015 Active Transportation Program	\$200,000	\$200,000 (Confirmed)
• River Dr (No. 4 Road-Van Horne Way)	\$1,344,000	2017 Roads DCC Program	\$379,250	\$964,750 (Confirmed)
No. 2 Road (Steveston Hwy-Dyke Rd)	\$1,240,000	2016 Roads DCC Program	\$620,000	\$620,000 (Confirmed)
 Sexsmith Rd (Beckwith Rd-Charles St) Alderbridge Way (Shell Rd-No. 4 Road) 	\$495,000 \$1,200,000	Developer Contribution (TOD Fund) 2018 Roads DCC Program	\$247,000 \$600,000	\$248,000 (Confirmed) \$600,000 (Pending)

Proposed 2018 ICBC-City of Richmond Road Improvement Program Project	Estimated Total Cost	Source & Amount of Cit	y Funds ⁽¹⁾	External Agency Funding: TransLink ⁽²⁾
Construction of pedestrian pathway:				
River Road (Oval Way-Brighouse Way)	\$100,000	2017 Arterial Roadway Improvement Program	\$100,000	-
River Road (No. 6 Road-Burdette Ave)	\$350,000	2018 Arterial Roadway	\$350,000	-
Riverside Industrial Park (various roadways)	\$500,000	Improvement Program 2018 Neighbourhood Walkway Program	\$500,000	\$250,000 (Pending)
Other locations to be determined ⁽⁴⁾				
Traffic calming measures in various locations pending results of traffic studies ⁽³⁾	\$95,000	2018 Traffic Calming Program	\$95,000	-
Installation of pedestrian zone markers pending results of traffic studies ⁽³⁾ : • Locations to be determined ⁽⁴⁾	\$5,000	2018 Traffic Calming Program	\$5,000	-
River Parkway (Gilbert Rd-Cambie Rd): new road with pedestrian and cycling facilities	\$10,500,000	2018 Roads DCC Program	\$10,500,000	\$2,266,000 (Pending)
Leslie Road (River Parkway-150 m East): road and pedestrian enhancements	\$1,200,000	2018 Roads DCC Program	\$1,200,000	-
Cambie Road (River Road-No. 3 Road): road, pedestrian and cycling enhancements	\$1,500,000	2018 Roads DCC Program	\$1,500,000	\$288,750 (Pending)
River Road (No. 6 Road-Westminster Hwy): road safety measures ⁽³⁾ 4 speed reader boards Conversion of centreline Shoulder-mounted delineator posts Revised cycling-related signage 	\$38,500 \$21,600 \$10,500 \$17,200	2015 Traffic Calming Program	\$87,800	-
Total	\$20,290,800		\$17,958,050	\$2,032,750 (Confirmed) \$3,404,750 (Pending)

Proposed 2018 City-ICBC Road Improvement Projects

(1) (2) Should the submitted project receive funding from ICBC, the City's portion of the total cost would be reduced accordingly. The amount shown represents the maximum funding contribution to be received from the external agency based on the City's cost estimate for the project. The actual approved amount may be lower than requested. The actual invoiced amount follows project completion and is based on incurred costs. Should the project receive funding from an external agency, the City's portion of the total cost would be reduced accordingly.

Implementation is subject to consultation with and support from affected residents.

(3) (4) Additional locations may be identified for submission to ICBC prior to its annual program deadline.

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То:	Public Works and Transportation Committee	Date:	April 26, 2018
From:	Lloyd Bie, P.Eng. Acting Director, Engineering	File:	12-8060-20- 009833/Vol 01
Re:	Underpinning Works and Construction Fence E	ncroach	ment Bylaw No. 9833

Staff Recommendation

That Underpinning Works and Construction Fence Encroachment Bylaw No. 9833 and Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9868, be introduced and given first, second and third readings.

Lloyd Bie, P.Eng.

Acting Director, Engineering (604-276-4075)

Att. 2

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Law	J (
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS:	APPROVED BY SAO	

Staff Report

Origin

When new developments excavate their property for the purpose of constructing below grade, they are typically required to install underpinning works to maintain support for the adjacent City roadway. These underpinning works, which include cut-off walls, rods and anchors, may extend into City roadway and, as such, a license agreement is required.

The first underpinning works license agreement was executed in 2014 and it is becoming increasingly common for private developments to construct below grade. As this trend continues, there is a greater need to streamline the licensing and permitting process in order to improve operational efficiency and maintain a high level of service to developers.

This report outlines the proposed Underpinning Works and Construction Fence Encroachment Bylaw No. 9833 (the "Bylaw"), which would eliminate the need to enter into a license agreement for every instance an underpinning works or construction fence encroachment is requested.

This report supports Council's 2014-2018 Term Goal #6 Quality Infrastructure Networks:

Continue diligence towards the development of infrastructure networks that are safe, sustainable, and address the challenges associated with aging systems, population growth, and environmental impact.

Analysis

The following is a summary of the proposed key terms and regulations of the Bylaw, and Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9868 (the "Fees Bylaw"). The terms of the proposed Bylaw are similar to those in past agreements for underpinning works and construction fence encroachments.

General

- No person shall install underpinning works or construction fence that encroaches into City property unless they have an underpinning works or construction fence encroachment permit.
- The applicant shall submit to the City a sealed report from a Professional Engineer detailing the underpinning works or construction fence.
- The applicant shall carry general liability insurance and indemnify the City from and against all claims and damages.
- The General Manager, Engineering and Public Works (the "General Manager"), may grant permission to install the proposed underpinning works or construction fence encroachment if the engineered plans are deemed acceptable and the following fees are paid and the specified security deposit is provided:
 - A Permit fee based on the estimated administrative time for reviewing and processing the application;
 - An encroachment fee calculated per square meter of encroachment, calculated based on the estimated value of the impact to City land;

- An Inspection fee consistent with the rates specified for the Boulevard and Roadway Protection and Regulation Bylaw No. 6366, calculated based on approximately equipment and labour costs incurred by the City to complete the inspection. If additional inspections are required as a result of the final inspection showing deficiencies, a charge for the additional inspection will be applicable; and
- A refundable deposit is provided, the value of which is consistent with the existing City bylaws for similar work.
- If underpinning works or construction fence have been installed without a permit, all work must cease and a permit application must be submitted immediately with a fee of twice the amount specified in the Fees Bylaw.
- Every permit issued under the Bylaw shall expire 12 months following the date of issuance or upon such earlier date as may be specified in the permit.
- The General Manager may suspend any permit where there is a contravention of, or noncompliance with, the terms and conditions of the permit or any City bylaw.
- If the applicant or property owner contravenes a provision of the Bylaw, the General Manager may instruct the applicant or owner to correct the contravention. If they fail to do so, the City may carry out the necessary actions and the expense of doing so shall be paid by the property owner.

Underpinning Works

- Upon completion and decommissioning of the underpinning works, all components of the works:
 - within two metres of finished ground surface, or such other depth as determined by the General Manager, will be removed; and
 - below two metres of finished ground surface, or such other depth as determined by the General Manager, will be de-tensioned or fully grouted.
- The applicant shall pay the following fees:
 - Permit fee of \$500;
 - Encroachment fee of \$52.21 per square meter of excavation face that will be supported by the underpinning works, as consistent with the rate charged by the City of Vancouver for such encroachment; and
 - Inspection fee of \$237, plus a fee of \$89 for additional inspections if required to address deficiencies identified during final inspection.
- The applicant shall provide a security deposit of \$5,000 plus 105% of the amount required to decommission the works. Security deposits that remain unclaimed 6 months after completion and decommissioning of the works will be assessed an annual \$500 administrative fee.

Construction Fence

- The applicant shall pay the following fees:
 - \circ Permit fee of \$100;
 - Encroachment fee of \$10 per year per square meter of encroachment; and
 - Inspection fee of \$237, plus a fee of \$89 for additional inspections if required to address deficiencies identified during final inspection.

• The applicant shall provide a security deposit of \$5,000. Security deposits that remain unclaimed 6 months after completion and decommissioning of the works will be assessed an annual \$500 administrative fee.

Financial Impact

None.

Conclusion

When new developments excavate their property for the purpose of constructing below grade, they are typically required to install underpinning works to maintain support for the adjacent City roadway. These underpinning works may extend into City roadway and, as such, a license agreement would be required. Staff recommend that the Bylaw and the Fees Bylaw be implemented in order to streamline the permitting process and to improve operational efficiency and maintain a high level of service to developers.

for

Jason Ho, P.Eng. Project Engineer (1281)

LB:jh

- Att. 1: Underpinning Works and Construction Fence Encroachment Bylaw No. 9833
 - 2: Consolidated Fees Bylaw 8636, Amendment Bylaw No. 9868



UNDERPINNING WORKS AND CONSTRUCTION FENCE ENCROACHMENT BYLAW NO. 9833

WHEREAS Part 2, Division 1, Section 8 of the *Community Charter* confers upon the City authority to, by bylaw, regulate, prohibit, and impose requirements in relation to public places and buildings and other structures;

AND WHEREAS Part 7, Division 2, Section 194 of the *Community Charter* confers upon the City authority to, by bylaw, impose a fee in respect of the exercise of authority to regulate, prohibit or impose requirements;

AND WHEREAS the Council deems it desirable to regulate Underpinning Works and Construction Fences during the development and construction of buildings and structures;

NOW THEREFORE, the Council enacts as follows:

PART ONE: UNDERPINNING WORKS AND CONSTRUCTION FENCE

1.1 Underpinning Works Permit

1.1.1 No person shall excavate for, construct, use or maintain for Underpinning Works any encroachment upon, under or over City Property without first making application for and obtaining an Underpinning Works Permit and every such excavation, construction, use or maintenance shall be undertaken in all respects to the requirements and regulations of this Bylaw and the terms and conditions of the Underpinning Works Permit.

1.2 Construction Fence Permit

1.2.1 No person shall build, install or maintain a Construction Fence upon or over City Property without first making application for and obtaining a Construction Fence Permit and every such excavation, construction, use or maintenance shall be undertaken in all respects to the requirements and regulations of this Bylaw and the terms and conditions of the Construction Fence Permit.

PART TWO: UNDERPINNING WORKS PERMIT AND CONSTRUCTION FENCE PERMIT APPLICATION PROCESS

2.1 Application Requirements

- 2.1.1 Unless exempted by the General Manager, an application for a Permit must:
 - (a) be made in the form provided from time to time by the City for the purpose of excavating for, constructing, using or maintaining Underpinning Works or building, installing or maintaining a Construction Fence, as applicable;
 - (b) be made by the Owner of the Subject Property to, or by an agent of the Owner, provided that such agent has been granted written authority to act on behalf of the Owner;
 - (c) be accompanied by sufficient information, as required or determined as necessary by the General Manager, to adequately review the proposed Underpinning Works or Construction Fence;
 - (d) include the applicable fees as specified in the *Consolidated Fees Bylaw No.* 8636;
 - (e) include written confirmation from the Owner that the Owner will waive, remise, release, indemnify and save harmless the City Personnel from and against all claims, demands, losses, costs (including legal costs), damages, actions, suits, or proceedings whatsoever brought by reason of, or arising from, the issuance of a Permit by the City or the proposed Underpinning Works or Construction Fence by or on behalf of the Owner;
 - (f) if applying for an Underpinning Works Permit, include a sealed report from a Professional Engineer containing some or all of the following, as required by the General Manager;
 - (i) depth, length, number and description of Underpinning Works;
 - (ii) area of excavation face abutting City property;
 - (iii) details of which Underpinning Works will be removed, de-tensioned or fully grouted and the time by which they will be removed, detensioned or fully grouted; and
 - (iv) such other details as the general manager may require;
 - (g) if applying for an Construction Fence Permit, include a sealed report from a Professional Engineer containing some or all of the following, as required by the General Manager:

- (i) depth, length and description of the Construction Fence;
- (ii) area where the Construction Fence will be placed; and
- (iii) such other details as the general manager may require.
- 2.1.2 An application will be deemed to have been abandoned if the Applicant fails to fully and completely respond to a request by the General Manager for documentation or information under this Bylaw within 6 months of the date the request is made. Once abandoned, all application fee(s) collected will be forfeited to the City. If the Applicant wishes to proceed with an Underpinning Works or a Construction Fence after any such abandonment, the Applicant must, unless exempted in writing by the General Manager, submit a new application for a Permit and must pay an additional non-refundable application fee as specified in the *Consolidated Fees Bylaw No. 8636*. If the Security Deposit has been forfeited, a Security Deposit in accordance with section 2.2 must also be provided to the City.
- 2.1.3 If it is determined by the General Manager that any Underpinning Works has been constructed or a Construction Fence has been installed without a valid Permit, all work must cease and the appropriate Permit application must be immediately submitted with a non-refundable application fee of twice the amount as specified in the *Consolidated Fees Bylaw No. 8636*.

2.2 Security Deposit

- 2.2.1 Prior to the issuance of a Permit, every Applicant must provide a Security Deposit to the General Manager. The amount of the Security Deposit will be equal to the fee specified in the *Consolidated Fees Bylaw No. 8636*.
- 2.2.2 If applying for an Underpinning Works Permit:
 - (a) in addition to such amounts as set out in section 2.2.1, the amount of the Security Deposit will be 105% of such amount equal to the Applicant's Professional Engineer's reasonable estimate of the amount required to:
 - (i) remove all Underpinning Works within two meters, or such other depth as determined by the General Manager, of the finished grade; and
 - (ii) de-tension or fully grout all Underpinning Works below two meters, or such other depth as determined by the General manager, of the finished grade; and
 - (b) the Security Deposit will be sealed by a Professional Engineer.
- 2.2.3 If the Security Deposit is not sufficient for the City to rectify any contravention or non-compliance with the Permit, this Bylaw, or any other City bylaw relevant to

the matter that is subject to the applicable Permit, the Owner will pay any deficiency to the City within seven days of receiving a written demand for same from the City.

- 2.2.4 If a Security Deposit which takes the form of a letter of credit will expire prior to the Permittee complying with the provisions of this Bylaw, or prior to the performance of all of the terms and conditions expressed in the applicable Permit, the Permittee will deliver to the City, at least 30 days prior to its expiry, a replacement letter of credit on the same terms as the original letter of credit provided to the City, unless otherwise approved by the General Manager. If the Permittee fails to do so, the City may realize the letter of credit and hold the Security Deposit in lieu thereof.
- 2.2.5 Where the Security Deposit is drawn upon for any reason, the Permittee will, within 15 days of receipt of written notice from the City, replenish the Security Deposit to the amount required by section 2.2.1 and section 2.2.2, unless exempted in writing by the General Manager.
- 2.2.6 Subject to section 2.2.7, if the Permittee complies with the provisions of the Bylaw and performs all of the terms and conditions expressed in the applicable Permit, the City will then have up to six months, after the earlier of the expiration of the Permit and the completion and decommissioning of the Underpinning Works or removal of the Construction Fence, as applicable, to return the Security Deposit with no interest to the Permittee, or if the Permittee is no longer authorized by the Owner of the Subject Property, to the Owner of the Subject Property, upon written request by the Owner or the Owner's agent. If, after making reasonable efforts to locate the Permittee, or the Owner if the Permittee is no longer authorized by the Owner of the Subject Property, a non-refundable administrative fee of \$500 will be charged by the City and paid from the Security Deposit for each year that the City retains the Security Deposit commencing six months after the earlier of the expiration of the Permit completion and decommissioning of the Underpinning Works or removal of the Construction Fence, as applicable.
- 2.2.7 Upon expiry of a Permit (including any renewal thereof), or completion and decommissioning of the Underpinning Works or removal of the Construction Fence, as applicable, whichever occurs earlier, the Permittee, or if no longer authorized by the Owner, the Owner, will undertake any activity required by the General Manager to ensure that the provisions of this Bylaw, and the terms and conditions of the Permit, have been complied with.
- 2.2.8 The City will not be required to release any Security Deposit, or issue a new permit, or renew an existing Permit, until all requirements imposed by the General Manager pursuant to section 2.2.7 have been complied with to the satisfaction of the General Manager.

2.3 Permit Issuance

- 2.3.1 Subject to section 2.3.2, the General Manager may issue an Underpinning Works Permit or a Construction Fence Permit upon being satisfied that:
 - (a) the proposed Underpinning Works or Construction Fence, as applicable, complies with this Bylaw and all Applicable Laws;
 - (b) the Underpinning Works or Construction Fence operation, as applicable, can be carried out safely, without undue nuisance or interference to adjacent Properties or the public, or damage or injury to persons or Property;
 - (c) the Applicant has complied with the applicable requirements of section 2.1 [*Permit Application Requirements*] and section 2.2 [*Security Deposit*];
 - (d) the Applicant has paid to the City all applicable fees required under the *Consolidated Fees Bylaw No. 8636*; and
 - (e) the Applicant has provided proof of general liability insurance coverage in an amount and on terms satisfactory to the General Manager.
- 2.3.2 The General Manager may refuse to issue an Underpinning Works Permit or a Construction Fence Permit if the requirements of section 2.3.1 have not been met or the General Manager is of the opinion that the proposed Underpinning Works or Construction Fence will or is reasonably likely to:
 - (a) endanger, damage, or otherwise adversely affect any adjacent Property, structure, Highway, easement, utility works and services or right-of-way, whether privately or publicly owned;
 - (b) foul, obstruct, destroy, impede, divert, or otherwise adversely affect any waterway, watercourse, waterworks, ditch, drain, sewer or other established drainage facility, whether privately or publicly owned;
 - (c) contravene any Applicable Laws;
 - (d) threaten the health, safety, or welfare of the public or be otherwise contrary to the public interest;
 - (e) result in the use of the Subject Property in a manner inconsistent with the current zoning for the Subject Property; or
 - (f) cause a Governmental Authority to incur excessive costs to provide public utilities, works, or services to the Subject Property, or an adjoining or reasonably adjacent Property.

PART THREE – REGULATIONS

3.1 General Regulations

- 3.1.1 In addition to any terms and conditions contained in a Permit, no person shall perform any Underpinning Works or install a Construction Fence except in accordance with the following requirements, unless exempted in writing by the General Manager:
 - (a) when acting pursuant to the terms and conditions of a Permit, the Permittee shall at all times act reasonably and with due consideration for the interests of the City and the users of City Property and shall cause as little disturbance to the City and the users of City Property as is reasonably possible;
 - (b) that neither the Owner nor any of its directors, officers, employees, agents or contractors shall deviate in a material way from the materials submitted to the City as part of the application package, or the construction and construction monitoring methods and procedures set out by a Professional Engineer and accepted by the City unless any plans and specifications or other information with respect to any deviation are first approved by the City;
 - (c) the design, construction and installation of the Underpinning Works or the Construction Fence, as applicable, occurs at all times in accordance with sound engineering and construction practices and is carried out in accordance with the terms of this Bylaw and the applicable Permit;
 - (d) the installation of the Underpinning Works or the Construction Fence, as applicable, will not interfere with or cause damage to any existing underground utilities or services, whether such utilities or services are owned by the City, by the Greater Vancouver Regional District or by any private or public utility. The Owner shall be solely responsible for all costs of determining the location of any and all such relevant utilities and services;
 - (e) the construction of Underpinning Works and the installation of Construction Fence will be designed and supervised by a Professional Engineer who shall be insured against professional liability arising from errors and omissions occurring in the performance of professional services rendered in relation to the construction of the Underpinning Works or installation of a Construction Fence, as applicable, including such policy limits as are reasonably required by a prudent engineer in such circumstances;
 - (f) the Underpinning Works and installation of a Construction Fence will be carried out expeditiously with reasonable diligence and in a good workmanlike manner by competent tradesmen, skilled in this particular work and at all times having consideration for the interests of the City, and

will at times ensure the City has free and unobstructed use and access to all City Property;

- (g) the Owner shall obtain any and all approvals and authorizations required by any applicable governmental authority, public utility or other governmental agency in connection with the construction, installation and commissioning of the Underpinning Works or the installation of a Construction Fence;
- (h) the Owner will take all proper precautions to secure and protect the City streets and City infrastructure and buildings from structural or superficial damage and injury arising out of or in any way connected with the Underpinning Works or Construction Fence;
- the Owner will be solely responsible throughout the construction of the Underpinning Works or installation of the Construction Fence to protect persons and property in the vicinity of the Underpinning Works or Construction Fence from injury, loss or damage;
- (j) the Owner will be responsible for the prompt payment of all fees, permits and construction expenses of the Underpinning Works or Construction Fence of any kind whatsoever including, without limitation, reasonable legal fees and disbursements incurred by the City in connection with or arising out of the preparation and interpretation of this Bylaw or a Permit and any dispute or enforcement in connection therewith.

3.2 Underpinning Works Regulations

- **3.2.1** In addition to any terms and conditions contained in a Permit or listed in section 3.1, no person shall perform any Underpinning Works except in accordance with the following requirements, unless exempted in writing by the General Manager:
 - (a) the Owner will ensure that upon completion and decommissioning of the Underpinning Works:
 - (i) all anchor rods comprising components of the Underpinning Works:
 - (I) within two metres, or such other depth as determined by the General Manager, of finished ground surface will be removed; and
 - (II) below two metres, or such other depth as determined by the General Manager, of finished ground surface will be detensioned or fully grouted for their entire length after the lock-off load has been applied, which removal, detensioning and grouting will be completed concurrently with any backfill placement undertaken by the Owner;

- (ii) no part of the Underpinning Works will be located within 1.5 metres horizontally of the any existing or currently proposed service or utility;
- (iii) all of the Underpinning Works will be least one metre below any existing or currently-proposed services or utilities; and
- (iv) all components of the Deep Soil Mix Wall are removed to a depth of at least two metres, or such other depth as determined by the General Manager, below the projected finished street grade specified by the City;
- (b) prior to the commencement of construction of the Underpinning Works, and at regular intervals during the course of excavation and construction of the foundation walls in connection with the development of the Subject Property, and upon completion and decommissioning of such work, the Owner shall carry out such inspections and surveys of the Subject Property and any adjacent Properties as are reasonably required at reasonable times to monitor and evidence the effect of the Underpinning Works;
- (c) within 30 days after the completion and decommissioning of the excavation phase of construction of the Underpinning Works, the Owner shall deliver to the General Manager a certificate prepared by a Professional Engineer evidencing that the Underpinning Works have been completed and identifying any movement, damage or adverse effects on any improvements caused by the Underpinning Works. The Owner shall promptly repair any such movement, damage or adverse effects after notifying the General Manager in writing of the Owner's proposed corrective action and obtaining the General Manager's acceptance of such action;
- (d) after the partial reduction, de-tensioning and/or grouting of the Underpinning Works as contemplated in section 3.2.1(a), the Owner shall provide to the City the As-Built Drawings and the Completion Certificate;
- (e) title to the Underpinning Works shall remain in the Owner until completion and decommissioning of the Underpinning Works whereupon the title to that part of the Underpinning Works located on or under City Property shall pass to and vest in the City automatically; and
- (f) the City makes no representations or warranties as to:
 - (i) the subsurface soil conditions within any Property adjacent to the Subject Property, including as to whether the soil or ground water within the License Area contains any contamination, special waste or prescribed substance in a quantity or concentration which exceeds

the standards permitted under the relevant provisions of the *Environmental Management Act* and Regulations thereto; and

(ii) the accuracy of any plans or documentation provided by the City.

3.3 Expiry

3.3.1 Every Permit issued under this Bylaw shall expire and cease to authorize any Underpinning Works or Construction Fence 12 months following the date of issue or upon such earlier date as may be specified in the Permit unless an expiry date for a different term is specified in the Permit or a renewal for the Underpinning Works Permit has been issued in accordance with section 3.4.

3.4 Renewal, Extension, or Modification

- 3.4.1 If the Underpinning Works operations are not completed before the Underpinning Works Permit expires or if a Construction Fence is still required at the time the Construction Works Permit expires, the General Manager may renew, extend, or modify the Permit upon written request of the Permittee, subject to the following:
 - (a) there is no obligation on the City to renew any Permit;
 - (b) the Permittee shall pay the appropriate non-refundable Permit renewal fee as specified in the *Consolidated Fees Bylaw No. 8636*;
 - (c) the application for a renewal, extension, or modification is received no later than 30 days before the expiry date of the existing Permit;
 - (d) the General Manager may require that the Permittee provide additional information authorized by this Bylaw as a pre-condition to considering an application for a Permit renewal, extension or modification.

PART FOUR: ENFORCEMENT

4.1 Suspension of a Permit

4.1.1 The General Manager may suspend any Permit where, in the opinion of the General Manager there is a contravention of or non-compliance with the terms and conditions of the Permit, this Bylaw, or any other City bylaw relevant to Underpinning Works or Construction Fence that is the subject of the Permit. The Permit shall remain suspended and will cease to authorize the Underpinning Works until, in the opinion of the General Manager, compliance is obtained. During a Permit suspension, the General Manager may require an Owner to remove the Construction Fence which the Owner will do within five days of notice.

- 4.1.2 Where a Permit is suspended, the General Manager will cause written notice of suspension to be delivered to the Owner of the Subject Property by registered mail and to be posted on the Subject Property where possible.
- 4.1.3 Sections 4.1 and 4.1.2 are without prejudice to any other remedies available to the City under this Bylaw, any other law, or in equity.

4.2 Enforcement

- 4.2.1 If a Permittee or the Owner of the Subject Property contravenes a provision of this Bylaw or a term of a Permit, or if the Underpinning Works or Construction Fence contravenes any provision of this Bylaw, the General Manager may notify the Permittee or the Owner in writing of such contravention and may instruct the Permittee or the Owner to correct the contravention by a date specified in the notice. If the correction of the contravention will not be completed by the date specified in the notice, the Permittee or the Owner as instructed by the General Manager must:
 - (a) immediately take all reasonable steps to begin to correct the contravention;
 - (b) provide the General Manager with a schedule acceptable to the General Manager for such correction; and
 - (c) complete the correction in accordance with such schedule.
- 4.2.2 If a Permittee or the Owner of the Subject Property fails to correct a contravention referenced in section 4.2.1 by the date specified in the notice, or otherwise instructed by the General Manager:
 - (a) the City may carry out such works and undertake such actions as the City deems necessary to correct the contravention;
 - (b) the General Manager may revoke or suspend the relevant Permit; and
 - (c) in the event that any person having received notice fails to correct a contravention within the time specified in the notice, the City or its appointed agents may enter upon the Property or any part thereof and carry out the works required to remedy the contravention, and the expense of doing so, plus a reasonable sum as determined by the General Manager as a charge for the City's overhead, shall be paid by the Owner. If not paid within 90 days, the expense, with interest at the prescribed rate and costs, shall be recovered in the same manner and with the same remedies as municipal taxes.
- 4.2.3 Other than in case of emergency (in the opinion of the General Manager), in which case no notice is required, the City will give ten days' written notice to the Permittee of the City's intention to carry out works pursuant to section 4.2.2.

- 4.2.4 If the City carries out works pursuant to section 4.2.2, the Permittee or the Owner of the Subject Property will reimburse the City for the City's cost of carrying out such works, within ten days of receiving a written request by the City for such reimbursement.
- 4.2.5 The City may cash and use the Security Deposit for one or more of the following purposes:
 - to remedy a contravention of this Bylaw, a Permit or any other City bylaws relevant to the Underpinning Works or Construction Fence that is the subject of the Permit;
 - (b) to remedy any emergency condition which, in the opinion of the General Manager, is associated with, arises from, or is the result of a contravention of this Bylaw, a Permit, or any other City bylaw relevant to the Underpinning Works or Construction Fence that is the subject of the Permit, and requires immediate action; and
 - (c) to satisfy any outstanding fee payable under this Bylaw.
- 4.2.6 The City will not be liable for any damage, loss or expense of any nature or kind whatsoever, arising out of or in connection with the issuance of a Permit, or the Underpinning Works or Construction Fence, or any other action by the City under this Bylaw or a Permit.
- 4.2.7 In the event of damage to City or privately-owned drainage facilities, watercourses, Highways, lands, or other City Property or privately-owned Property or facilities, resulting from a Underpinning Works or Construction Fence operation, the Permittee, or an agent of the Permittee, will promptly and properly repair the damage to the satisfaction of the General Manager

PART FIVE – OFFENCES AND PENALTIES

5.1. Offences and Penalties

- 5.1.1 Any person who contravenes or violates any provision of this Bylaw, or who suffers or allows any act or thing to be done in contravention or violation of this Bylaw, or who fails or neglects to do anything required to be done under this Bylaw, commits an offence and upon conviction shall be liable to a fine of not more than \$10,000.00, in addition to the costs of the prosecution, and where the offence is a continuing one, each day that the offence is continued shall constitute a separate offence.
- 5.1.2 A violation of any of the provisions identified in this bylaw shall result in liability for penalties and late payment amounts established in Schedule A of the *Notice of Bylaw Violation Dispute Adjudication Bylaw No. 8122*, as amended or replaced from time to time.
- 5.1.3 A violation of any of the provisions identified in this bylaw shall be subject to the procedures, restrictions, limits, obligations and rights established in the

Notice of Bylaw Violation Dispute Adjudication Bylaw No. 8122 in accordance with the Local Government Bylaw Notice Enforcement Act, SBC 2003, c. 60, as they may be amended or replaced from time to time.

5.1.4 Any person who gives false information required under this Bylaw is deemed to have committed an infraction of, or an offence against, this Bylaw, and is liable on summary conviction to a penalty of not more than \$2,000 in addition to the costs of the prosecution, and each day that such violation is caused or allowed to continue constitutes a separate offence.

PART SIX: INTERPRETATION

6.1 In this bylaw, unless the context requires otherwise:

APPLICABLE LAWS	means all enactments, regulations, bylaws, standards, ordinances, codes, rules, orders, judgments, directions, directives, guidelines, and policies enacted, adopted, issued or published by a Governmental Authority which are applicable in the City, other than this Bylaw.
APPLICANT	means the person who has applied for a Underpinning Works Permit or a Construction Fence Permit.
AS-BUILT DRAWINGS	means a set of engineered drawings, prepared by a Professional Engineer which will identify, in cross sections and plan views, the completed locations of all of the Underpinning Works.
CITY	means the City of Richmond.
CITY PERSONNEL	means the City, its elected officials, agents, employees, officers and servants.
CITY PROPERTY	means all Property owned by the City including, without limitation, City owned streets, roads, grassed areas, access sidewalks, steps, fences, rockeries, hedges or garden areas, water mains, sewer conveyance systems, pipes and street lighting.
COMMUNITY CHARTER	means <i>Community Charter</i> , SBC 2003, c. 26, as amended or replaced from time to time.

COMPLETION CERTIFICATE

means a letter, prepared by a Professional Engineer and bearing the Professional Engineer's professional seal, certifying that the Underpinning Works have been installed in accordance with the As-Built Drawings and that all anchor rods comprising a portion of the Underpinning Works have been de-tensioned and grouted or removed as required by this Bylaw.

means a fence built, installed or enacted for the purpose or effect of enclosing an area under construction or development.

means an authorization by the City to install a Construction Fence issued under this bylaw.

means the Council of the City.

means the below grade retaining wall that is to be constructed by a property owner by mixing grout and/or cement into the soil that is located on the lands with an auger or cutting head in such a manner that so as to create a continuous wall of columns that are comprised of the soil grout/cement mixture and other structural supports all as approved by the City.

means the General Manager, Engineering and Public Works, his or her designates and authorized agents.

means any government, parliament, legislature, administrative or regulatory agency, board, tribunal or commission; any other authority charged with the administration or enforcement of legal requirements or any person under the authority of any of the foregoing, other than the City.

includes a street, road, lane, bridge, viaduct and any other way open to public use, other than a private right of way on private Property.

CONSTRUCTION FENCE

CONSTRUCTION FENCE PERMIT

COUNCIL

DEEP SOIL MIX WALL

GENERAL MANAGER

GOVERNMENTAL AUTHORITY

HIGHWAY

OWNER	means a person registered in the records of the Land Title Office as the fee simple owner of the Property to which the Underpinning Works or Construction Fence, as applicable, relate.
PERMIT	means, as applicable, either or both of an Underpinning Works Permit or a Construction Fence Permit issued under this Bylaw.
PERMITEE	means the holder of a Permit.
PROFESSIONAL ENGINEER	means a professional engineer registered and in good standing with the Association of Professional Engineers and Geoscientists of British Columbia and maintaining professional liability and errors and omissions insurance in the amount of not less than \$2,000,000 per occurrence during the term of his or her engagement.

PROPERTY

SECURITY DEPOSIT

SUBJECT PROPERTY

UNDERPINNING WORKS

means any lot, block or other area in which land is held or into which it is subdivided, including unopened road allowances but excluding a Highway.

means a security deposit in the form of cash or an unconditional, irrevocable letter of credit drawn on a Canadian financial institution, in a form acceptable to the General Manager.

means the Property to which an Underpinning Works Permit or a Construction Fence Permit relates.

means any tie-back rods, steel sheet piles, anchor rods, soldier piles and any related anchors, plates and underpinnings, concrete facing and other necessary structural supports and the Deep Soil Mix Wall required in connection with the development and construction of lands, buildings and structures.

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UNDERPINNING WORKS PERMIT

means an authorization by the City to perform Underpinning Works issued under this bylaw.

6.2 References in this Bylaw to enactments, bylaws of the City, include those enactments, bylaws, and plans as they may be amended or replaced from time to time.

PART SEVEN: SEVERABILITY AND CITATION

- 7.1 If any section, section, paragraph, clause or phrase of this bylaw is for any reason held to be invalid by the decision of a court of competent jurisdiction, such decision does not affect the validity of the remaining portions of this bylaw.
- 7.2 This Bylaw is cited as "Underpinning Works and Construction Fence Encroachment Bylaw No. 9833"

PART EIGHT: FEES BYLAW

8.1 The *Consolidated Fees Bylaw* No. 8636, as may be amended from time to time, applies to this bylaw.

 FIRST READING
 CITY OF

 SECOND READING
 APPROVED

 THIRD READING
 Get.

 ADOPTED
 APPROVED

MAYOR

CORPORATE OFFICER

CITY OF

RICHMOND APPROVED for content by



Bylaw 9868

CONSOLIDATED FEES BYLAW NO. 8636, AMENDMENT BYLAW NO. 9868

The Council of the City of Richmond enacts as follows:

- 1. The **Consolidated Fees Bylaw No. 8636**, as amended, is further amended by adding Schedule A attached to and forming part of this bylaw as a schedule to Consolidated Fees Bylaw No. 8636, in alphabetical order.
- 2. This Bylaw is cited as "Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9868."

FIRST READING

SECOND READING

THIRD READING

ADOPTED

originating dept. BN APPROVED for legality by Solicitor

MAYOR

CORPORATE OFFICER

<u>SCHEDULE – Underpinning Works and Construction Fence Encroachment</u>

Underpinning Works and Construction Fence Encroachment Bylaw No. 9833 Sections 2.1 and 2.2

Description	
Underpinning Works	Fee
Application Fee	\$500.00 per Underpinning Works Permit application
Encroachment Fee	\$52.21 per square meter of excavation face that will be supported by the Underpinning Works
Inspection Fee	\$237
Additional Inspection Fees	\$89.00 per additional inspection if additional inspection(s) are required as a result of initial inspection showing deficiencies
Security Deposit	\$5,000 plus such additional amounts set forth in section 2.2 of Bylaw No. 9833
Construction Fence	Fee
Application Fee	\$100.00 per Construction Fence Permit application
Encroachment Fee	\$10 per year per square meter of encroachment
Inspection Fee	\$237
Additional Inspection Fees	\$89.00 per additional inspection if additional inspection(s) are required as a result of initial inspection showing deficiencies
Security Deposit	\$5,000



Re:	Energy 2017 Climate Action Revenue Incentive Program Progress Report	n and Ca	rbon Neutral
From:	Peter Russell Senior Manager, Sustainability and District	File:	10-6125-07-03/2017- Vol 01
То:	Public Works and Transportation Committee	Date:	April 27, 2018

Staff Recommendation

That, in accordance with Provincial requirements, the Climate Action Revenue Incentive Program Report and Carbon Neutral Progress Report be posted on the City's website for public access.

Peter Russell Senior Manager, Sustainability and District Energy (604-276-4130)

Att. 3

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	
APPROVED BY CAO	

Staff Report

Origin

The City of Richmond is committed to maintaining carbon neutral corporate operations, first achieved in 2013. The purpose of this report is to update Council on the 2017 corporate greenhouse gas (GHG) emissions and on the City's carbon neutrality strategy and activities.

This report supports Council's 2014-2018 Term Goal #4 Leadership in Sustainability:

- 4.1. Continued implementation of the Sustainability Framework.
- 4.2. Innovative projects and initiatives to advance sustainability.

Background

In September 2008, Council signed the BC Climate Action Charter, voluntarily committing the City to annual corporate GHG emissions reporting and to achieving carbon neutral operations. In 2013, Richmond City Council adopted the *"Towards Carbon Neutrality: Implementation Strategy,"* which put in place an effective framework defined by four key steps for meeting carbon neutrality commitments: measure, reduce, compensate (or offset) and report.

Key mechanisms identified in the 2013 strategy to address the need for compensation included assessing and quantifying beyond "business as usual" corporate activities that reduce GHG emissions and the implementation of the Richmond Carbon Market (RCM) pilot program to purchase offsets from Richmond-based projects.

Guided by the City's 2013 Green Fleet Action Plan and Energy Management Program for buildings and infrastructure, the City is constantly working on reducing its corporate GHG emissions footprint and energy use. To meet the City's community commitment of 33% reduction from 2007 levels by 2020, Council has endorsed a 20% GHG emissions reduction target for Fleet by 2020 from 2011 levels and a 65% reduction for corporate buildings by 2020 from 2007 levels.

Analysis

The City has achieved carbon neutral operations for the past four reporting years (2013-2016). According to this report's findings, the City has again achieved carbon neutral corporate operations for the 2017 calendar year. Achieving carbon neutrality for corporate operations entails that the City reduces corporate emissions where possible and offsets corporate emissions as necessary. Due to the City's involvement in and completion of several emissions reduction projects since 2013, the City has been carrying forward a surplus of credits. The surplus has been allocated to following years as needed to achieve carbon neutrality. Based on the ongoing work to reduce corporate emissions and the ongoing accumulation of verified emission credits, the City is projecting that carbon neutrality will be maintained through to the 2021 reporting year and potentially in perpetuity, as shown below in Figure 1. The source of credits that the City has achieved and projects to achieve up to 2021 is shown below in Figure 2.

2017 Corporate Carbon Emissions and Offsets

Based on the figures in Table 1 and 2 below, outlining GHG emissions associated with corporate operations in City buildings, civic infrastructure and fleet activities for 2017 and the associated credits to offset these emissions, staff anticipate that the City will again be eligible for a "Level 3: Achievement of Carbon Neutrality" in 2017 through the Climate Action Recognition Program. A formal announcement is expected to be provided at the Union of British Columbia Municipalities' annual conference. It is estimated that the City will carry forward approximately 6,594 tonnes of GHG (tCO₂e) emission offsets for use in future years.

The reported corporate value adheres to the BC Ministry of Environment's reporting methodology, and includes GHG reductions resulting from the City's purchase of renewable natural gas. The 2017 total includes GHG emissions associated with "traditional municipal services," including those that are contracted out (community waste collection). Compared to the year prior to the City signing the BC Climate Action Charter, corporate emissions in 2017 were approximately 14% lower than in 2007. This reduction was achieved despite an increase in population of approximately 18% and corresponding increases in corporate services that are associated with this growth.

It is noted that over the previous two years corporate emissions have increased as compared to 2015. This is mostly a result of significantly more natural gas use at corporate buildings during an unusually cold weather period between December 2016 and March 2017. During this time heating requirements for buildings was 17% higher than the previous 5 year average. During this past winter (2017/2018) heating requirements were more in line with past averages, and it is anticipated that natural gas use at corporate buildings will be reduced accordingly as planned projects are implemented. In addition, with the replacement of the Minoru Aquatic Centre in 2018 with the new Minoru Centre for Active Living facility, which will use less natural gas for heating purposes, corporate natural gas use and emissions are expected to drop in 2019.

	Tonnes CO2e	Quantification Method
Emissions from services delivered directly by the City	7,285	Derived from metered energy consumption and associated GHG emissions from stationary sources (buildings, lighting, and pumps – except police services energy use) and corporate mobile sources (fleet – except construction related fuel use) used directly by the City
Emissions from contracted services delivering services on the City's behalf	1,925	The BC government standard methodology and guidance for estimated contracted emissions. Fuel usage values and Option 3 (Vehicle/Equipment Type and Hours of Usage) were used to determine the contracted emissions value.
TOTAL	9,210	

Table 1: 2017 Emission Sources

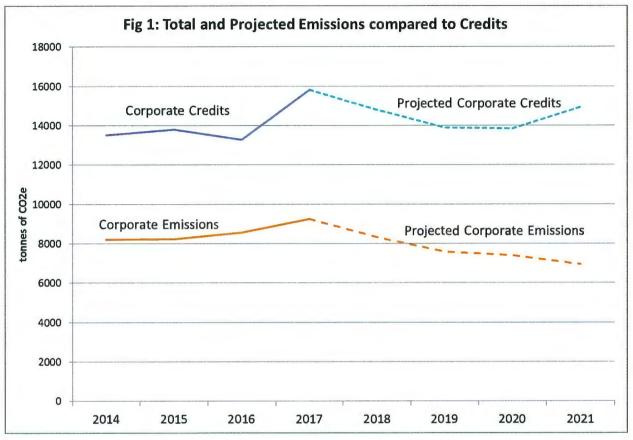
2017 Corporate and Community Carbon Credits (Offset Projects)

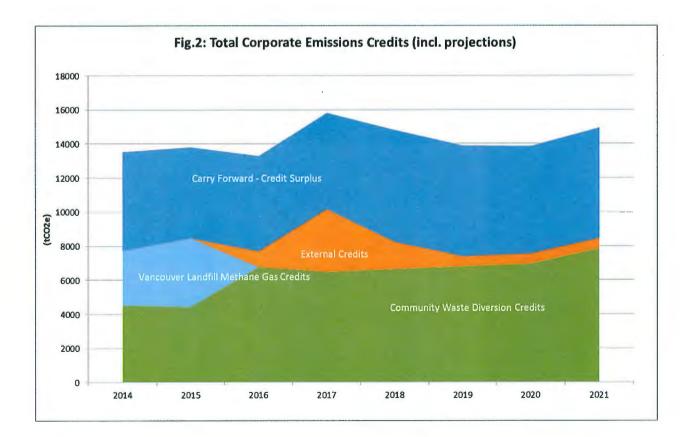
As shown below in Table 2, emission credits from diverted household organic waste contributed significantly to offsetting the City's corporate emissions footprint in 2017. The total diverted organics for 2017 (20,921 tonnes) corresponds to avoided GHG emissions of 6,490 tonnes of CO_2e , representing 70% of the City's 2017 total corporate emissions. In addition to receiving credits for diverted organics waste, the City also received credits from internal corporate projects and from external projects through the RCM program.

Table 2: Anticipated Emission Credits (Offsets)

Offsets	Tonnes CO2e	Quantification Method
Household Organic Waste	6,490	BC Government Option 1 GHG Reduction
Composting – Municipally		Projects reporting method.
Collected		······································
Corporate concrete and asphalt	573	BC Government Option 2 GHG Reduction
recycling – Sidaway Yard		Projects reporting methods (for 2014-2016).
Alexandra District Energy Utility	550	BC Government Option 2 GHG Reduction
		Projects reporting methods (for 2013-2016)
Richmond Carbon Market -	191	BC Government Option 1 GHG Reduction
Pacific Gateway Hotel energy		Projects reporting method.
efficiency credits		
Richmond Carbon Market -	2,365	BC Government Option 2 GHG Reduction
Lafarge Canada asphalt recycling		Projects reporting methods (2016 reductions)
emissions credits		
Surplus GHG emission credits	5,636	As per BC Government reporting protocol.
from 2016 Reporting Year		
Northeast Bog Conservation area	Over 1,000*	BC Government Option 2 GHG Reduction
(2019)		Projects reporting methods
Total projected credits	16,805*	
Estimated surplus carry forward for	7,594	
2018-2019		۰

*) current estimates, project to still be quantified





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Richmond Carbon Market

As described below in the separate phases of the program, Council endorsed the Richmond Carbon Market (RCM) program in 2017. The program is designed to reduce GHG emissions and build community resilience by re-investing Climate Action Revenue Incentive Program funds in Richmond-based emissions reduction projects.

- Phase 1: Determine the Potential for Local GHG Reduction Projects (through outreach)
- Phase 2: Identify Potential Local GHG Reduction / Offset Projects, and complete prefeasibility assessments
- Phase 3: Complete final assessments and quantify the RCM submissions, and enter into agreements with proponents to offset corporate GHG emissions
- Phase 4: Maintain corporate carbon neutrality
- Phase 5: Continue to help grow the City's low carbon economy

After completing Phases 1 to 3 of the RCM program in 2017 and quantifying the first project with Pacific Gateway Hotel, the City of Richmond solicited project plan submissions for a second time from local businesses as set out in Phases 4 and 5. Three proponents submitted project plans for Council consideration in early 2018; Pacific Gateway Hotel for its building energy efficiency project completed in 2015, Lafarge Canada for its asphalt recycling operations at Mitchell Island, Richmond in 2016, and Panevo Services for upcoming energy efficiency and equipment upgrade projects in Richmond. Council approved the execution of purchase and transfer agreements with each of the proponents, with agreements with Pacific Gateway and Lafarge Canada expected to be completed for the 2017 reporting year.

As needed to help maintain carbon neutral corporate operations, the City remains committed to identifying potential community partners with quantifiable GHG emissions reduction projects through the RCM program.

2017 Carbon Credit Projects Summary

In accordance with BC Government Carbon Neutral reporting protocol, the City completed the necessary reporting, quantification and verification of two corporate projects outside of the City's traditional services boundary, and two external projects delivered by City of Richmond businesses.

 <u>Concrete/Asphalt Recycling:</u> Since 2014, the City has been periodically recycling concrete and asphalt at its Sidaway Yard, which is then used as road base material on City construction sites. This activity helps to displace the use of mined and processed virgin road base material. A third-party certifier reviewed the GHG emissions reductions associated with this recycling activity, and developed a methodology for quantification. Based on this approved methodology, an estimated total of 573 tonnes of GHG emissions was avoided due to concrete recycling activities at Sidaway Yard in 2017. As further recycling and reprocessing is conducted in the future, emissions reductions associated with this activity will continue to be used to offset corporate emissions. 2. <u>Building renewable energy use in the Cambie Neighbourhood:</u> Emission reductions from past Alexandra District Energy Utility (ADEU) operations (2014-2016), through the displacement of conventional energy sources with renewable energy, has been quantified and verified, and a total of 550 tonnes of GHG emissions credits were used to offset corporate emissions in 2017. Since operations and assets at ADEU were transferred to the City's separate corporation Lulu Island Energy Corporation (LIEC) on January 1, 2017, future quantification and associated credits will need to be done through LIEC.

As LIEC is a separate corporation, it will have the opportunity to continue to quantify and verify emissions reduction on a yearly basis for ADEU, as well as for other district utility systems. Based on Provincial reporting protocols, those reduction credits could be transferred back to the City through a purchase agreement or sold to a third party, if desired.

- 3. <u>Building Energy Efficiency Retrofit:</u> Through the Richmond Carbon Market program, the City worked with Pacific Gateway Hotels to assess and quantify the emissions reductions the facility achieved from various energy efficiency upgrades completed prior to 2015. This project was the first project the City completed through the Richmond Carbon Market program, with the credits being transferred to the City through a purchase and transfer agreement for the 2016 reporting year. Utilizing the same reporting methodology for this project, council approved purchasing further credits for the 2016 and 2017 calendar years. Based on BC government approved reporting protocol, a total of 191 tonnes of GHG emissions credits will be transferred to the City for the 2017 reporting year to offset corporate emissions.
- 4. <u>Asphalt Recycling:</u> Through the Richmond Carbon Market program, the City worked with Lafarge to have the assessment and quantification of the GHG emissions reductions associated with the use of recycled asphalt material at their production plant on Mitchell Island, Richmond BC completed. By modifying the asphalt production plant at Mitchell Island, Lafarge was able to accept recycled asphalt material displacing the amount of virgin material they use, and reducing the transportation required for that material. The greater amounts of recycled material the plant uses, the greater the energy and emissions savings they can achieve. As quantified and verified by a third party in accordance with BC government regulations, the reduction of virgin asphalt material used at Lafarge's Mitchell Island plant in 2016 resulted in 2,365 tonnes of GHG emissions reduction as compared to baseline emissions. As approved by Council, these credits will transferred to the City to offset corporate GHG emissions in 2017, through a purchase and transfer agreement.

Northeast Bog Conservation Area Project Status

The GHG emission offsets associated with the Northeast Bog can be pursued since the City purchased the land for conservation purposes in 2011, and conserving the land will maintain the carbon storage capacity of the bog. The quantified carbon storage amount of the Northeast Bog will be compared to a scenario where the land would have otherwise been developed for agricultural purposes with most of the stored carbon released. This quantification project is very unique, in terms of the type of ecosystem being assessed, the focus on carbon storage capacity of the Site, and the development of a carbon quantification methodology. It is believed that this work will help to inform the City and the region on the importance of conserving and enhancing this type of

ecosystem. Once quantified, it is expected that the associated credits from these projects will be used to offset corporate emissions in 2018.

Public Reporting

Another tool to build community awareness regarding the importance of GHG emissions reduction is through public reporting. The City will carry out public reporting on the City's website (Climate Action Charter related reports Attachments 1-3). Staff will continue to use the City's Richmond Carbon Market as a means to engage Richmond business to develop potential credits, and promote its general objectives to the business community to encourage greater awareness and focus on overall community GHG emissions reductions.

Financial Impact

None.

Conclusion

The City of Richmond is a leader amongst BC municipalities through its innovative corporate projects and programs to reduce community and corporate GHG emissions. Through the continued strategic implementation of the *Towards Carbon Neutrality – Implementation Strategy*, and the focus on completing projects that maximize the reduction of natural gas and fuel use by City operations, the City is well positioned to maximize corporate and community benefits of transitioning towards a low carbon community and maintain carbon neutral corporate operations in the long term.

Levi Higgs, CEM Corporate Energy Manager (604-244-1239)

LH:lh

- Att. 1: Carbon Emissions Provincial Reporting Worksheet 2017
- Att. 2: Climate Action Revenue Incentive Public Report 2017
- Att. 3: Contracted Emissions Estimates (Hired Equipment and Cascade) 2017

Local Government Name:	The City of Richmond
Year:	2017
Contact Information:	
Name:	Andrew Nazareth
Position:	General Manager of Finance and Coporate Services
Telephone Number:	604-276-4095
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Building and Infrastructure Fue	1	Unit of Measure	Quantity	Emissions (tCO2e)
Electricity		KWH	38,437,213.00	410.13
Natural Gas		GJ	88,993.60	4,438.11
		-		
Mobile Emission Sources:				
Vehicle Class	Vehicle Fuel	Unit of Measure	Quantity	Emissions (tCO2e)
Light Duty Vehicle	Gasoline	L	37,725	84.13
Light Duty Vehicle	Diesel	L	918	2.4
Light Duty Truck	Gasoline	L	227,400	514.6
Light Duty Truck	Diesel	L	9,158	24.03
Heavy Duty Truck	Gasoline	L	246,892	529.8
Heavy Duty Truck	Diesel	L	367,028	955.3
Off Road Vehicle	Gasoline	L	13,743	29.7
Off Road Vehicle	Diesel	L	95,395	275.4
Off Road Vehicle	Propane	L	14,238	21.5
Light Duty Truck - Contractor	Gasoline	L	14,038	31.7
Heavy Duty Truck - Contractor	Diesel	L	526,548	1,370.6
Heavy Duty Truck - Contractor	Natural Gas	GJ	253	12.6
Estimated Contractor	Diesel/Gas	L	-	510.4
Total Emissions (all Sources)				9,210.75
Credits: Estimated 2016				
Organic Waste Di	version	Baseline	Estimated tonnes	Estimated credits
Diverted Household Organic		7,783		6,490
Diverted Organic Waste (Waste	Drop off Service)	4,709		
2015 Surplus Carbon Credits				5,63
Richmond Carbon Marketplace	(Pacific Gateway H	otel)		19
Richmond Carbon Marketplace				2,36
Corporate Concrete Recycling a				57
Alexandra DEU				55
NE Bog Forest Conservation			-	
Total Estimated Credits				15,805.1

Total Estimated Balance

6,594.42

Climate Action Revenue Incentive Program (CARIP) Public Report

Climate Action Revenue Incentive (CARIP) Public Report for YEAR 2017

City of Richmond



Report Submitted by Levi Higgs Energy Manager lhiggs@richmond.ca 604-244-1239

The City of Richmond has completed the 2017 Climate Action Revenue Incentive Program (CARIP) Public Report as required by the Province of BC. The CARIP report summarizes actions taken in 2017 and proposed for 2018 to reduce corporate and community-wide energy consumption and greenhouse gas emissions (GHG), as well as general sustainability related initiatives, and reports on progress towards achieving carbon neutrality.

April 27, 2018

Richmond

General Information

Name of Local Government	City of Richmond
Member of Regional District (RD)	Metro Vancouver
Regional Growth Strategy (RGS) in region	Yes
Population	218,000

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1. GENERAL REPORT INFORMATION

This 2017 Climate Action Revenue Incentive Program (CARIP) Public Report documents the actions that the City of Richmond has taken corporately and in the community to support the reduction of greenhouse gas (GHG) emissions and energy use, as well as other sustainability related initiatives. The actions are separated into seven main categories; Broad Planning, Buildings and Lighting, Energy Generation, Greenspace/Natural Resource Protection, Solid Waste, Transportation, Water and Wastewater, and Climate Adaptation. There is also an Innovation category, which the City has inputted action items. The categories are further divided into corporate and community related actions, with general climate action questions at the beginning of each category.

This report encompasses a majority of the action items that the City is involved in support of GHG emissions and energy use reduction, but does not cover all sustainability related initiatives that the City conducts or supports. The report represents a "snapshot" of City activities in the past year, and proposed actions for 2018.

2. BROAD PLANNING

Broad planning refers to high level planning that sets the stage for GHG emissions reductions, including plans such as Official Community Plans, Integrated Community Sustainability Plans, Climate Action Plans or Community Energy Emissions Plans. Land use planning that focuses on Smart Growth principles (compact, complete, connected, and centred communities) plays an especially important role in energy and GHG reduction. Summarized below are the City of Richmond's responses to the Provincial inquiries regarding broad planning issues, and summary of initiatives conducted in 2017 and planned in 2018.

General Climate Action Questions		
What is (are) your current GHG reduction target(s)?	GHG reduction targets of 33% by 2020, and 80% by 2050, below 2007 levels. Reduce energy use by 10%.	
Has your local government used the Community Energy and Emissions Inventory (CEEI) to measure progress?	Yes	
Which of the following does your local government use to guide climate action implementation?		
 Community Energy and Emissions Plan Integrated Community Sustainability Plan Community-Wide Action Plan 	Yes Yes Yes	
Does your local government have a corporate GHG reduction plan?	Yes	
Does your local government have a climate reserve fund or something similar?	Yes	

Co	mmunity-Wide Actions Taken in 2017
	Revised the OCP and Zoning Bylaw to update the City's electric vehicle charging infrastructure
	requirements which supports charging stations in all new residential buildings.
	Adopted a number of bylaw amendments to regulate the size of houses on properties located
	within the Agricultural Land Reserve (ALR). The changes established a maximum floor area for
	all residential buildings in agricultural zones and a "farm home plate" - the area on which all
	residential improvements must be located.
	Updated Steveston Village Area Plan was approved by Council following public consultation.
	The update clarifies building height, density, parking, waterfront access, alternative energy, and
	streetscape options for the village.
	Approved amendments to the Zoning Bylaw to allow secondary suites in standard townhouse
	zones. The amendments provide additional opportunities to increase the supply and diversity
	of housing in Richmond.
	Worked with Translink in developing the Southwest Area Transport Plan to define Richmond's
	long-term transportation network and priorities.
	Met regularly with Richmond's Small Home Builders and Urban Development Institute when
	preparing new community building related sustainability initiatives.
	Requested that the Metro Vancouver Board reaffirm acceptance of Richmond's Regional
	Context Statement (RCS). The RCS continues to be consistent with the Regional Growth
	Strategy in supporting the goals of a compact urban area and a sustainable economy, among
	others.

Continue to implement OCP and CCAP policies as new development applications are processed. Continue to follow City by-law requirements and implement "DEU" ready development in the City Centre and West Cambie neighborhood areas

Continue to meet with Richmond's Small Home Builders and Urban Development Institute when preparing new community building related sustainability initiatives.

Continue consultation with the City's construction sector stakeholders regarding local

implementation of the BC Energy Step Code policy for Part 3 and Part 9 new construction

Complete development of the Southwest Area Transport Plan, and obtain Council endorsement.

2.2. Corporate Actions

Corporate Wide Actions Taken in 2017

Continued to implement the corporate High Performance Building Sustainability Policy. This policy sets targets for the construction of energy efficient new corporate buildings and sets in place processes to ensure that energy and resources are used efficiently in existing buildings. Continued to implement action items from the City's Green Fleet Action Plan, to reduce GHG emissions associated with the City's vehicle and equipment use.

Corporate Wide Actions Proposed for 2018

When the City reviews the City Centre Area Plan (CCAP) building height requirements, in association with YVR's Airport Zoning Regulations (AZR), consideration will be given to maximizing energy efficiency through increased density.

Work with Sustainability staff to incorporate an energy efficiency step code for new corporate buildings.

Continue to implement the corporate High Performance Building Sustainability Policy. Continue to implement action items from the City's Green Fleet Action Plan

3. BUILDINGS AND LIGHTING

Low-carbon buildings use the minimum amount of energy needed to provide comfort and safety for their inhabitants and tap into renewable energy sources for heating, cooling and power. These buildings can save money, especially when calculated over the long term. This category also includes reductions realized from energy efficient street lights and lights in parks or other public spaces. Below are the City of Richmond's responses to the Provincial inquiries regarding building and lighting initiatives conducted in 2017 and planned for 2018.

Building and Lighting

The Province has committed to taking incremental steps to increase energy-efficiency requirements in the BC Building Code to make buildings net-zero energy ready by 2032. The BC Energy Step Code--a part of the BC Building Code--supports that effort

Is your local government aware of the BC Energy Step Cost?	Yes
Is your local government implementing the BC Energy Step Code?	Under
	consideration

Co	Community-Wide Actions Taken in 2017				
	Continued to implement building and district energy policies. Secure commitments from new				
	development in the City Centre to achieve higher energy efficiency standards.				
	Conducted numerous consultation and information sessions with the City's construction sector				
	stakeholders regarding local implementation of the BC Energy Step Code policy for Part 3 and				
	Part 9 new construction				
	Developed building energy benchmarking, reporting and disclosure model in partnership with				
	Energy Utilities for future implementation.				
	Continued with the following EnergySave Richmond suite of programs.				
	• Richmond Carbon Market program, which supports community based GHG emissions				
	reduction projects through facilitation and funding				
	Climate Smart program that provides coaching to Richmond-based businesses on cos				
	effective opportunities to reduce GHG emissions, energy use, and waste generation				
	Supported implementation of the Cool It! Climate education in 20 Richmond Grades 4-7				
	classrooms.				

Col	mmunity-Wide Actions Proposed for 2018				
	Implement electric vehicle direct current fast charging stations in the City and EV residential				
	parking standard requirements for new buildings, to further encourage the use of electrical				
	vehicles.				
	Continue consultation with the City's construction sector stakeholders regarding local				
	implementation of the BC Energy Step Code policy for Part 3 and Part 9 new construction				
	Continue development of municipal regulatory and enforcement policies and guidelines				
	regarding BC Energy Step Code implementation				
	Propose a benchmarking, reporting and disclosure bylaw for buildings.				
	Continue to implement EnergySave Richmond suite of programs.				
	Climate Smart program for businesses.				
	Water and energy saving programs.				
	Richmond Carbon Market program to Richmond businesses as needed.				
	Continue to support climate change education in up to 20 Richmond classrooms.				

3.2. Corporate Actions

Corporate Wide Actions Taken in 2017

Completed mechanical and building control upgrades at Watermania

Completed Phase 2 of the City of Richmond street lighting conversion project, with the replacement of over 1,500 less energy efficient street light fixtures with new more efficient LED technology, for an estimated energy savings of over 460,000 kWh annually.

Completed the upgrade of the building automation systems at Fire Hall No.6 and the Library Cultural Centre to improve overall occupant comfort and equipment scheduling and monitoring. Continued providing corporate staff Energy Statement information to engage and inform City

staff on corporate energy use and costs in their areas of responsibility on a quarterly basis.

Corporate Wide Actions Proposed for 2018

Complete mechanical upgrades at Richmond Ice Centre and Library Cultural Centre . Complete the upgrade of the building automation systems at Fire Hall No.4 and No.5 and at the Community Safety Building to improve overall occupant comfort and equipment scheduling and monitoring

Secure funding for Phase 3 of the City of Richmond street lighting conversion project, with the replacement of approximately 1,000 less energy efficient street light fixtures with new more efficient LED technology

Continue to work towards achieving key targets in the City's High Performance Building Policy for new and existing facilities, with focus on energy efficiency, reduced resource use, and environmental sustainability.

4. ENERGY GENERATION

A transition to renewable or low-emission energy sources for heating, cooling and power supports large, long-term GHG emissions reductions. Renewable energy including waste heat recovery, geo-exchange, micro hydroelectric, solar thermal and solar photovoltaic, heat pumps, tidal, wave, and wind energy can be implemented at different scales, e.g. in individual homes, or integrated across neighbourhoods through district energy or co-generation systems. Below are the City of Richmond's responses to the Provincial inquiries regarding energy generation, and summary of initiatives conducted in 2017 and planned in 2018.

General Climate Action Questions	
Is your local government developing, or constructing:	
A district energy system	Yes
A renewable energy system	Yes
Is your local government operating:	
A district energy system	Yes
A renewable energy system	Yes
Is your local government connected to a district energy system that is operated by another energy provider?	No
Are you aware of the Integrated Resource Recovery guidance page on the <u>BC Climate</u> <u>Action Toolkit</u> ?	
Are you familiar with the 2017 " <u>List of Funding Opportunities for Clean Energy Projects</u> Led by First Nations and Local Governments?"	Yes

Co	mmunity-Wide Actions Taken in 2017
	Continued to expand and connect the Alexandra District Energy Utility (ADEU) to new customers in the West Cambie neighbourhood. The latest expansion included the construction of a new energy centre to service the ADEU's first commercial customers – total space now connected to ADEU = over 1,200,000 ft2 of residential space and over 335,000 ft ² non-residential space
	Continued to implement connections of new customers with the Oval Village District Energy Utility (OVDEU) in the Oval Village area. Three new developments with a total of 573 units and 693,000 ft ² of building gross floor area were connected to the OVDEU system in 2017.
	Completed a city-wide assessment of the available energy resource in the City's municipal wastewater system, which could be extracted in conjunction with new development to reduce conventional energy use.
	Participated in Metro Vancouver Integrated Resource and Recovery Plan developed for Lulu Island Sewerage Area. Identified opportunities to implement sewer heat recovery from the Lulu Island Treatment Plant and displace conventional energy use • SpAce
	Worked with a private utility partner to develop plans and complete due diligence, feasibility analysis, and implementation plan for the design, finance, construction and operation of a City Centre District Energy Utility (CCDEU) which would encompass the entire city centre core.
	Continued to implement DEU infrastructure and developments using dedicated DEU operating funds and capital program, financed through ratepayer funds.

Community-Wide Actions Proposed for 2018

Continue to connect buildings and expand the ADEU distribution system as development requires. Three new residential buildings (432,000 ft²) are scheduled for connection in 2018-2019.

Expand the geoexchange field at ADEU to provide additional renewable heating and cooling capacity for the West Cambie neighbourhood.

Continue Oval Village District Energy Utility construction and planning in partnership with a private utility partner, with the installation of additional distribution piping and the design for a third interim energy centre.

Complete the design and planning for the connection of four new developments with a total of over 1,000,000 ft² of building gross floor area to the OVDEU system.

4.2. Corporate Actions

Corporate Wide Actions Taken in 2017

Completed a feasibility study on the potential energy savings at the Library and Cultural Centre from major equipment replacement project, and a connection to a nearby renewable energy system, like an underground geo-exchange system.

Initiated installation of a solar photovoltaic array at Fire Hall No.1 to offset electrical demand.

Corporate Wide Actions Proposed for 2018

Continue to target renewable energy integration, a key component of the City's High Performance Building Policy, during design development of new corporate facilities. Further assess the potential to provide renewable energy to the Library and Cultural Centre with an installation of a geo-exchange system in the location of the current Minoru Aquatic Centre, which is planned to be removed.

5. GREENSPACE/NATURAL RESOURCE PROTECTION

Greenspace/Natural Resource Protection refers to the creation of parks and greenways, boulevards, community forests, urban agriculture, riparian areas, gardens, recreation/school sites, and other green spaces, such as remediated brownfield/contaminated sites as well as the protection of wetlands, waterways and other naturally occurring features. Greenspaces support climate change mitigation (reducing emissions by absorbing and sequestering GHG) and adaptation (providing shade, cooling, deflecting strong wind, and improving air quality). Below are the City of Richmond responses to the Provincial inquiry regarding "greenspace" management in the City, and summary of community initiatives conducted in 2017 and planned in 2018.

General Climate Action Questions		
Does your local government have urban forest policies, plans or programs?	Yes	
Does your local government have policies, plans or programs to support local food production?	Yes	

Community-Wide Actions Taken in 2017

Planted 779 trees on City streets and parks, as per the City Tree Management Plan.

Collected LIDAR data capturing the City's urban forest in order to allow for ongoing monitoring of tree canopy coverage and health.

Enhanced approximately 2.1 ha (21,000 m²) of disturbed riparian habitat with native plantings through residential, commercial and industrial developments approvals.

Delivered 30 free workshops that have attracted over 500 residents and included topics such as Natural Lawn Care and Organic Gardening, to Bee Identification and Fruit Tree Management.

Community-Wide Actions Proposed for 2018

Complete a GIS inventory of all trees on public property, to be included as part of the Urban Forest Management Strategy.

Begin implementation of Urban Forest Management Strategy recommendations.

Begin planning for restoration of the Bath Slough area which will include the removal of various invasive species, and replacing this area with native trees and shrubs and ongoing success monitoring.

Implement a Riparian Response Strategy update to formalize and streamline the RMA application process to improve customer service and allow for success monitoring.

Continue the successful partnership with Emily Carr University to establish a new 2,500 m² pollinator meadow at Terra Nova Rural Park.

5.2. Corporate Actions

Co	Corporate-Wide Actions Taken in 2017				
Completed an initial Northeast Bog Conservation Area carbon storage and sequestration					
to quantify the tangible GHG emissions reduction of conserving habitat in Richmond.					
	Began construction of Aberdeen Park in July 2017. When completed, it will include trees, nat				
	planting, and a water feature that also serves as a stormwater detention facility.				
Began the development of an Urban Forest Management Strategy to improve management					
practices, encourage tree planting, and ultimately expand upon Richmond's urban for					
	canopy.				
	Opened Tait West Park to the public. The approximately 1.5-acre park on the North Arm of the				
	Fraser River includes rain gardens, trees, native and drought-tolerant plants. In addition to the				
	park development, planting occurred along the adjacent dike and riverfront.				

Corporate-Wide Actions Taken in 2017				
	Completed London's Landing Waterfront Park, a public space along the South Arm of the Fras			
	River. Its ecological features include terraced foreshore planting, a bioswale, and a lookout that			
invites park users to experience the waterfront. As an environmentally sensitive area				
	monitoring will be ongoing over the next three years.			
Constructed the final portion of the Railway Greenway, along McCallan Road between River				
Road and Westminster Highway. This important corridor encourages active transportation,				
	offering a safe travel route for cyclists and pedestrians, and incorporates new trees and shared			
	use crossings.			
	Created a stormwater detention pond and installed a clay seepage barrier to protect the			
	existing bog ecosystem at the Garden City Lands. Fill was placed on top of existing peat in areas			
	designated for agriculture to prevent release of C02. It is estimated that 500 trees and 20,000			
	shrubs were planted in 2017.			
	Realized the first phase of Lansdowne Linear Park. It serves as an active transportation			
	corridor that encourages multimodal travel, and features native planting and rain gardens.			

	Co	Corporate Wide Actions Proposed for 2018				
Continue planting trees and shrubs, capping peat areas with fill, and digging addition						
bodies to serve as detention ponds at Garden City Lands.						
Complete a new pollinator pasture in Terra Nova's cultural precinct, and add native shrubs						
trees (through a tree planting grant secured by Parks Programs) along the east edg						
		Nova Rural Park.				
	Update the Riparian Response Strategy to formalize and streamline the RMA application					
	process to improve customer service and allow for success monitoring.					

6. SOLID WASTE

Reducing, reusing, recycling, recovering and managing the disposal of solid waste minimizes environmental impacts and supports sustainable environmental management, greenhouse gas reductions, and improved air and water quality. Below are the City of Richmond responses to the Provincial inquiries regarding solid waste management in the City, and summary of initiatives conducted in 2017 and planned in 2018.

General Climate Action Questions		
Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes	
Does your local government have organics reduction/diversion policies, plans or programs?	Yes	

Community-Wide Actions Taken in 2017

Served over 160,000 residents at the City recycling depot. providing drop off recycling for materials such as small & large appliances, batteries, cell phones, lights, Styrofoam, plastic bags and more.

Promoted the new Richmond Collection Schedule app and Recycling Wizard to provide residents with collection day reminders and drop off locations for recyclable items. Since its launch in 2016, there have been 38,358 addresses searched, 7,482 active reminders in place and 65,571 materials searched in the Recycling Wizard.

Launched "Let's Recycle Correctly" campaign to engage with residents directly to increase awareness of the expanded range of materials accepted, and created instructional recycling videos to assist in improving the quality of recycling to reduce contamination levels.

Provided recycling containers at 69 Special Events to improve waste diversion.

Green Ambassadors participated in 23 events, volunteering 3,130 hours to help promote recycling and green initiatives.

Completed approximately 90 community engagement activities, including Recycling Depot tours, information sessions, workshops and outreach displays at community events.

	Communit	y-Wide Actions	Proposed for	r 2018
1			1.	

Install new public spaces recycling containers that are a newer design at various parks throughout the City.

Provide updated and user friendly Commercial and Multi-Family Development Guidelines to assist developers & planners in design of recycling and waste spaces to support increased diversion.

Prepare Richmond specific Disaster Debris Management Plan.

Add features to the Richmond Collection Schedule app to include a Recycling Challenge Game and the ability to order recycling supplies.

Continue public engagement through workshops, Recycling Depot tours, theatrical shows, community outreach, and education sessions at multi-family buildings to promote waste reduction and recycling.

Continue to operate a Recycling Depot for drop off of recyclable items not commonly accepted through curbside collection programs.

Help to maintain a litter-free City by servicing and inspecting litter and recycling containers approximately 5,400 times per week.

6.2. Corporate Actions

Corporate Wide Actions Taken in 2017

Supported Community Services department with their Annual Purge Event to properly recycle paper, small appliances, batteries, electronics and hazardous materials.

Continued to install recycling stations at various City Facilities.

Completed a waste composition study at City Facilities to compare data with 2014 results and provide a report card to those facilities to identify areas for improvement.

Corporate Wide Actions Proposed for 2018

Update signage on existing City Facility recycling containers to ensure they represent the materials accepted in the recycling program and provide consistency at all facilities. Expand the We Recycle campaign on the intranet to provide staff with additional recycling information and tips.

7. TRANSPORTATION

Transportation actions that increase transportation system efficiency, emphasize the movement of people and goods, and give priority to more efficient modes, e.g. walking, cycling, ridesharing, and public transit, can contribute to reductions in greenhouse gas emissions and more livable communities. Below are the City of Richmond responses to the Provincial inquiries regarding transportation system management in the City, and summary of initiatives conducted in 2017 and planned in 2018.

Does your local government have policies, plans or programs to support:	
Walking	Yes
• Cycling	Yes
Transit Use	Yes
Electric Vehicle Use	Yes
Other: car-sharing, carpooling	Yes
Does your local government have a transportation demand management (TDM) strategy (e.g. to reduce single-vehicle occupancy trips, increase travel options, provide incentives to encourage individuals to modify travel behavior)?	Yes
Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?	Yes

Co	mmunity-Wide Actions Taken in 2017		
	Completed upgrade of special crosswalk on an arterial road (No. 2 Road) to a pedestrian signal		
with a new crossing on additional leg of the intersection to support the implementation of the			
Crosstown local street bikeway that utilizes local streets and off-street connecting pathwa Installed the City's first on-street bike corral in Steveston to provide needed bike parking area where off-street boulevard space is constrained.			
	Upgraded or installed five arterial road crosswalks to include overhead downward lighting, pedestrian-actuated flashing beacons and verbal wayfinding message.		
	Constructed numerous sidewalk and walkways in Richmond to support walking and greater access to transit services.		
	Upgraded 20 bus stops to allow greater accessibility, and replaced or installed multiple new transit shelters to support transit use.		
	Staged 17 th annual "Island City, by Bike" tour for the community to encourage cycling as a mode of transportation.		
	Upgraded 20 existing signalized intersections to include accessible pedestrian signal (APS) features including pole locator tone, yellow pushbutton with 3 raised dots (indicates APS device), verbal wayfinding message, audible walk indication tone when Walk light on, and Braille and raised letter street name.		
	Supported education and encouragement programs for cycling and walking through the ddelivery of cycling education courses to elementary school students and new immigrants.		
	Completed numerous bike lane improvements throughout the City to support cycling transportation in the City.		
	Advanced \$3.5M of voluntary developer contributions to TransLink to initiate design work for new Canada Line Capstan Station.		

Community-Wide Actions Proposed for 2018		
	Initiate construction of Phase 1 of River Parkway (Gilbert Road-Cambie Road) that includes protected bike lanes.	
	Initiate construction of road, pedestrian and cycling improvements on No. 2 Road (Steveston Hwy-Dyke Road) that includes an off-street multi-use pathway and upgraded bus stops to provide accessibility.	
	Initiate improvements to Cambie Road (River Road-No. 3 Road) including a multi-use pathway on the south side with crossing enhancements.	
	Construct pedestrian pathways and ramps within the Riverside Industrial Park to provide pedestrian access to all bus stops in the area.	
	Construct pedestrian pathway on north side of River Road (No. 6 Road-Burdette Road) including crosswalk.	
	Construct pedestrian pathway on north side of River Road (Brighouse Way-Oval Way).	

Community-Wide Actions Proposed for 2018

Construct multi-use off-street pathways on River Drive (No. 4 Road-Van Horne Way) and Sexsmith Road (Beckwith Road-Charles St).

Extend north end of Parkside Bikeway from Garden City Park through Anderson School to Alberta Road and Westminster Hwy.

Continue the upgrade of bus stops to become fully accessible by converting up to 18 additional locations, and install 10 new transit shelters at bus stops.

Continue expansion of the special crosswalk program and the upgrading of traffic signals to include accessible pedestrian signal features.

Continue to facilitate expansion of car-share services in Richmond.

Explore potential for pilot public bike share program in Richmond.

Continue support for education and encouragement programs for cycling and walking.

Continue funding partnerships with external agencies (e.g., ICBC, MoTI, TransLink) to

implement pedestrian, cycling, transit amenity, and traffic safety improvements.

Continue to participate in stakeholder consultation process to develop recommendations for a mobility pricing system for Metro Vancouver.

7.2. Corporate Actions

Co	Corporate Actions Taken in 2017		
	Continued existing initiatives that encourage the use of alternative modes of transportation for		
	commuting to and from work and corporate travel such as sponsorship and promotion of Bike		
	to Work week, use of corporate bike fleet, pilot use of pedal-electric bike, and promotion of		
	transit fare passes for work travel.		
	Continued use of City Intranet site to promote Bike to Work Week and other sustainable		
	transportation initiatives.		
	Replaced three gas-powered passenger vehicles with hybrid/electric vehicles.		
	Expanded car sharing program to included 24/7 availability for both staff and the public.		
	Initiated a capital project to expand public electric vehicle charging stations, including level III		
	charging stations that are owned and operated by the City.		
	Conducted feasibility study at four major City sites to determine electrical capacity for all		
	parking stall to be potentially electrified to support EV expansion.		
	Installed electrical vehicle infrastructure to allow for the addition of six dual port level two		
	charging stations at the City of Richmond Annex.		
	Installed 1 level two charging station at the RCMP headquarters and upgraded two level one		
	charging stations to level two charging stations at City Hall underground parking stalls.		

Corporate Actions Proposed for 2018

Update the existing cycling network plan and develop conceptual designs for different types of cycling facilities for the City Centre.

Continue to promote car-sharing services for corporate use.

Corporate Actions Proposed for 2018

Increase electrical vehicle infrastructure and charging stations at City facilities to support electric vehicle charging requirements for future vehicle replacements.

Replace approximately six gas-powered vehicles with hybrid/electric vehicles in 2018.

Use data analytics to encourage reduction of idling and emissions.

Complete design to the electrification of parking stall at City Facilities for fleet employees and public charging.

Undertake Alternative Fuel Pilot (Propane) initiative with corporate vehicles to evaluate emission reduction benefits.

8. WATER AND WASTEWATER

Managing and reducing water consumption and wastewater is an important aspect of developing a sustainable built environment that supports healthy communities, protects ecological integrity, and reduces greenhouse gas emissions. Below are the City of Richmond responses to the Provincial inquiry regarding water and wastewater management in the City, and summary of initiatives conducted in 2017 and planned in 2018.

General Climate Action Questions

Does your local government have water conservation policies, plans or programs?

Yes

8.1. Community Actions

Co	mmunity-Wide Actions Taken in 2017		
	Supported the implementation of Metro Vancouver water sprinkling restrictions throughout		
	Richmond.		
	Installed 826 water meters at single-family residences (100% of single-family homes in the City		
	of Richmond are now metered).		
	Issued 662 toilet rebates to homeowners that replaced old toilets with a low-flush toilet to		
	reduce residential water use. The total incentive paid to homeowners through this program in		
	2017 was \$66,200.		
	Partnered with BC Hydro in May/June & October/November 2017 to provide a clothes washer		
rebate program to reduce home water use and electricity. To date, 765 rebates have been issued to homeowners who replace their less efficient (water and electricity) washer for a			
			efficient model at a total cost of \$54,700 to the City. It is estimated that this program achieved
	annual savings in water and energy of 3,114,000 liters per year and 73,750 kilowatt hours per		
	year, respectively.		

Co	mmunity-Wide Actions Taken in 2017			
	Installed usage meters under the Volunteer Multi-Family Water Meter Program in 146 complexes (comprising 9,119 multi-family dwelling units) including 61 apartment complexes			
(6,577 units) and 85 townhouse complexes (2,542 units). It is mandatory for new multi-fam residences to have a water meter. A total of 40% of multi-family units in Richmond are water				
	Assessed and helped to reduce water waste at single-family homes by providing notification on properties with consumption greater than 250 m3 quarterly.			
	Installed mobile drinking fountains for use at 56 community events to provide the public with			
_	portable tap water.			
Sold 153 rain barrels through the City's Rain Barrel Program to Richmond residents, to h				
	promote the use of rain water for gardening purposes and reduce the use of potable water in			
	gardens.			
	Coordinated a booth at the annual Capital Works Open House and the Public Works Open			
House educating residents about water meter installations and water conservation measure				
	Hosted Project WET, an interactive elementary school program that teaches classes about			
	water consumption, conservation, quality and supply. In 2017, over 360 students and teachers			
	attended.			
	Hosted a series of Works on Wheels bus tours for the public to learn about water and			
	wastewater infrastructure maintained by the City.			

GU	Continue the volunteer Multi-Family water meter program.		
	Continue the toilet rebate program (\$100,000 in funding for 2018)		
	Continue offering the water saving kits to homeowners with a newly installed water meter.		
Continue to participate in the clothes washer rebate joint program in May/June and			
	October/November with BC Hydro in 2018 (pending Council approval).		
	Continue the City's Rain Barrel Program and promote the use of rain water for gardening and irrigation purposes.		
	Distribute, if necessary, educational brochures on water restrictions, describing the stages and what they entail.		
Maintain updated water conservation information on the City's website for public use.			
	Continue to organize and host the Public Works Open House for the public to learn about all of Richmond's operations and sustainable programs.		
	Continue to host Project WET, an interactive elementary school program that teaches classes about water consumption, conservation, quality and supply.		
	Continue to provide community events with the portable drinking fountains to encourage tap water consumption.		
	Fund and organize the presentation of "H2Whoa!", a theatrical production that focuses on positive actions and educating students about the use of water, the need to protect it and its importance to everyday living.		
	Deploy a universal Fixed Based Network for water meter reading in order for leaks to be identified earlier and to decrease manual reading of water meters.		

8.2. Corporate Actions

Cornorate	Actions	Taken in 2017	
corporate	Actions	ranch m 2017	

Participated in the Metro Vancouver Municipal Water Conservation Coordinator Committee. The meetings revolve around networking with other municipalities and discussing initiatives, progresses, updates in policies and results.

Replaced all domestic hot and water copper mains at City Hall with Aquatherm pipe to address pin hole leaks, and reduce waste.

Implemented a timer-based pressure management program to decrease system pressures during off-peak hours in the summer months to reduce water loss to system leakage.

Introduced a full-time grease inspector to improve education and enforcement of liquid waste source control initiatives.

Participated in Metro Vancouver's local government working group in the Regional Assessment of Residential Water Metering project to assess the costs and benefits of water metering and share Richmond's experience and expertise with regards to successes in water metering.

Co	rporate Actions Proposed for 2018
	Continue to take part in the Metro Vancouver Municipal Water Conservation Coordinator
	Committee.
	Update the City's Water Use Restriction Bylaw to reflect changes in Metro Vancouver's Drinking
	Water Conservation Plan.

9. CLIMATE ADAPTION

For local governments, adaptation to a changing climate can take the form of changes in policy, management, technology and behaviour that minimize negative impacts or exploit opportunities. It can involve both "hard" and "soft" solutions, including: changes in infrastructure engineering, planning, zoning, bylaws and public education. Below are the City of Richmond responses to the Provincial inquiries regarding climate change adaption, and summary of initiatives conducted in 2017 and planned in 2018.

Please identify th	THREE climate impacts that are most relevant to your Local Government.

- Sea level rise and storms causing coastal flooding and/or erosion
- Changing temperatures influencing species migration and ecosystem shifts
- Warmer winter temperatures reducing snowpack

Other:

In 2017 has your local government addressed the impacts of a changing climate using any of		
the following?		
Risk and Vulnerability Assessments	Yes	
Risk Reduction Strategies	Yes	
Emergency response planning	Yes	
Asset management	Yes	
Natural/Eco asset management strategies	Yes	
Infrastructure upgrades (e.g. storm water system upgrades)	Yes	
Beach Nourishment projects	No	
Economic diversification initiatives	Yes	
Strategic and financial planning	Yes	
Cross-department working groups	Yes	
OCP policy changes	Yes	
Changes to zoning and other bylaws and regulations	Yes	
Incentives for property owner (e.g. reducing storm water run-off)	Yes	
Public education and awareness	Yes	
Research	Yes	
Mapping	Yes	
Partnerships	Yes	

The following are key resources that may be helpful to your local government in identifying climate impacts, as well as, strategies, actions and funding to deal with them. For those resources that you have used, please indicate whether they were useful in advancing your work in climate change adaptation?	
Resources	
Indicators of Climate Change for British Columbia, 2016	Haven't used
<u>Plan2Adapt</u>	
Climate Projections for Metro Vancouver	Haven't used
Province of BC's BC Adapts Video Series	Haven't used
Preparing for Climate Change: An Implementation Guide for Local Governments	Have reviewed –
	somewhat useful
The Public Infrastructure and Engineering Vulnerability Committee's (PIEVC) protocol Sea Level Rise Primer	Haven't used
BC Regional Adaptation Collaborative Webinars	Haven't used
www.ReTooling.ca	Haven't used
Water Balance Model	Haven't used
The Water Conservation Calculator	Haven't used
Funding	
National Disaster Mitigation Program (NDMP)	Have used - useful
Community Emergency Preparedness Fund (CEPF)	Haven't used
Municipalities for Climate Innovation Program (MCIP)	Have applied – waiting on decision
Climate Adaptation Partner Grants (FCM)	Have used – useful
Infrastructure Planning Grants (MAH)	Haven't used
Federal Gas Tax Fund	Have used - useful

Community-Wide Actions Taken in 2017		
	Engaged key stakeholders and hosted two public open houses to gather feedback for Dike	
	Master Plan Phase 2.	
	Began Phase 3 and 4 of the Dike Master Plan which looks at the long term plan to improve the	
	dike.	
	Established the Integrated Rainwater Resource Management Strategy which provides a	
	strategic approach to address Richmond's unique stormwater management issues and needs.	
	The strategy aims to protect and enhance the City's stormwater conveyance infrastructure and	
	ecological assets under more frequent rainfall events and considers rainwater as a resource to	
	be utilized, promoting water conservation.	
	Treated 260 knotweed infestations throughout the city, equal to approximately 2.5 ha.	

Community-Wide Actions Proposed for 2018

Consider maximizing energy efficiency through increased density when the City reviews the City Centre Area Plan (CCAP) building height requirements, in association with YVR's Airport Zoning Regulations (AZR).

Upgrade 3 drainage pump stations.

Raise approximately 1.8 km of dike .

Prepare the Flood Protection Management Strategy Update 🔐

Complete Phases 3 and 4 of the Dike Master Plan.

Initiate Phase 5 of the Dike Master Plan

Continue detailed design of dike raising projects, and commence construction of South Dike raising from Gilbert Rd to No 3 Rd.

10.INNOVATION

This section is intended to give the opportunity to describe any innovative Corporate and/or Community-Wide GHG reduction or climate change adaptation activity that have been undertaken over the past year(s) that your local government is particularly proud of and would like to share with other local governments. Below is summary of two of the innovated initiatives that the City implemented in 2017.

Community-Wide Innovative Action

"Introduction to Electric Vehicles (EV)" free workshops were being offered in partnership with the Richmond Library to residents to reduce any fears around owning one of these specialty cars and answer any questions residents might have. The course is taught by a Richmond resident that owns an electric vehicle.

Produced a "Sustainability in Action" series of videos informing the public on a variety of energy saving and sustainability related initiatives

Corporate Innovative Action

All new staff orientation sessions also include a session on Green Fleet Driving techniques and our Green Fleet Policy.

All new drivers are assessed by our Fleet training officer and are required to study and sign off on the requirements defined in our Driver's program, which includes everything outlined in the course materials before they can operate a City owned vehicle.

Monthly analytic reports are produced to identify idling levels of vehicles and these figures are used to educate and also to find innovative methods of reducing idling on high idling units, for instance solar panels, LED Lighting and auxiliary power.

11.PROGRAMS, PARTNERSHIPS AND FUNDING OPPORTUNITIES

Local governments often rely on programs, partnerships and funding opportunities to achieve their climate action goals. Please share the names of programs and organizations that have supported your local government's climate actions by listing each entry in the box below.

Programs and Funding		
	The Provincial organization TransLink: provides funding support towards cycling education	
	and promotion initiatives including Bike to Work/School Week, cycling education courses for	
	elementary students, cycling education courses for adults, and community bike ride.	
	The Provincial organization TransLink: provides capital funding on a 50-50 cost-share basis for	
	the construction of pedestrian and cycling-related infrastructure including wayfinding, and for	
	the upgrade of existing bus stops to become fully accessible.	
	BikeBC (Ministry of Transportation & Infrastructure): provides capital funding on a 50-50 cost-	
	share basis for the construction of cycling-related infrastructure.	
	ICBC: provides funding support towards the construction of pedestrian-related infrastructure	
	including pathways and crosswalks.	
	The City received federal and provincial funding from the National Disaster Mitigation Program	
	for the Flood Mitigation Strategy Update, which consists of three projects: Dike Master Plan	
	Phase 3, Flood Management Strategy Update and Pump Station Condition Assessment	
	The City received federal and provincial funding from the National Disaster Mitigation Program	
_	for the Steveston Island Flood Risk Investigation Project.	
	The City received funding from UBCM for Dike Master Plan Phase 5.	
	In 2016, The City received \$16.6 million provincial funding through the EMBC program to	
	upgrade drainage pump stations and dikes to prepare for climate change-	
	Utilized Clean Energy Vehicles for BC funding when the City purchased new electric vehicles.	
	Funding was also received for new electric vehicle purchases through the Provincial SCRAP-IT	
	BC program for scraping old gasoline vehicles that are being replaced with efficient electric or	
	plug in electric vehicles.	
	Staff are in the process of applying for Federal Funding through NRCAN to expand Electric	
	vehicle infrastructure/Charging stations for public use.	
	Worked with the Richmond Butterflyway Rangers who are responsible for planting pollinator	
	patches in 21 locations throughout Richmond, including City Hall.	
	Partnered with Emily Carr University to establish a new 2,500 m ² pollinator meadow at Terra Nova Rural Park.	
	City received funding from the Federation of Canadian Municipalities, for two feasibility study related to corporate renewable energy generation (solar PV installation) and to community	
	energy generation (micro-sewer heat recovery opportunities),	
	energy generation (micro-sewer near recovery opportunities),	

12.CONCLUSION

This report highlights a wide range of initiatives that the City is undertaking to continue to advance sustainability corporately and in the community, with focus on reducing greenhouse gas emissions, and energy and resource use. This report does not encompass all of the sustainability related initiatives and actions that the City is involved in, but simply provides a "snapshot" of some of the key areas and work that the City has completed and is planning on completing. These efforts help to position the City as a leader in our region and beyond. The City has set aggressive sustainability targets on a range of fronts, including for greenhouse gas emissions reduction and waste diversion. The City will continue to pursue best practices and innovation to achieve its sustainability related goals, which are recognized as critical to Richmond's Vision of "being the most appealing, liveable and well-managed community in Canada".

CARIP/Carbon Neutral Progress Report Reporting Year 2017

Supporting Documentation Contracted Emissions Template

LOCAL GOVERNMENT

City of Richmond 6911 No. 3 Road Richmond, BC V6Y 2C1

PROJECT DESIGNATE

Levi Higgs, Corporate Energy Manager, Sustainability & District Energy Direct 604-244-1239 <u>Ihiggs@richmond.ca</u>

RATIONALE

An estimation methodology for hired equipment contractor emissions is being utilized for 2017 since actual emissions for some contracts over \$25,000 have not provided fuel usage values.

The City has identified four main contract areas that deliver traditional municipal services:

- 1. Cascades Recovery Inc. and Supersave Waste Services provide recycling depot container collection and recycling services
- 2. Sierra Waste Services provide residential solid waste and recycling services;
- Progressive Waste Solutions provides waste and recycling collection services at City facilities.
- 4. Individual Hired Equipment.

Contractor emissions associated with the delivery of traditional municipal services by Sierra Waste Services and Progressive Waste Solutions have been included in our mobile fleet emissions reporting spreadsheet, as fuel usage and vehicle type information was provided for 2017. Contractor emissions associated with the delivery of services by Cascades Recovery and Hired Equipment were estimated by from total kilometers and hours driven, respectively.

The hired equipment contracted emissions, with the exception of equipment used outside of the defined traditional service boundaries or for construction rather than maintenance activities, is listed in the table below by traditional service area.

Option 3 is the estimation methodology used:

- 1. Hired equipment records sorted to exclude out of scope contracts;
- City equipment operating records assessed to determine average consumption factors in litres per charge hour or kilometers driven for each equipment family;
- Consumption factors used to estimated fuel consumption for contractor or hired equipment;
- 4. BC GHG emissions factors applied to calculate GHG emissions.

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CONTRACTED EMISSIONS Option 3: Vehicle/Equipment Type and Kilometers or Hou	rs of Usage
Traditional Service Area	Estimated Annual GHGs (tonnes)
Drinking, Storm and Wastewater	377.0
Solid Waste Collection, Transportation and Diversion	8.3
Roads and Traffic Operations	97.9
Parks, Recreation, Arts, and Cultural Services	24.4
Corporate Operations	2.8
Total	510.4



Report to Committee

То:	Public Works and Transportation Committee	Date:	April 23, 2018
From:	Tom Stewart, AScT. Acting General Manager, Public Works	File:	10-6000-01/2018-Vol 01
Re:	2017 Annual Water Quality Report		

Staff Recommendation

That the staff report titled "2017 Annual Water Quality Report" dated April 23, 2018 from the Acting General Manager, Public Works, be endorsed and made available to the community through the City's website and through various communication tools including social media and as part of community outreach activities.

Tom Stewart, AScT. Acting General Manager, Public Works (604-233-3301)

Att. 2

REPORT CONCURRENCE							
CONCURRENCE OF GENERAL MANAGER							
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE							
APPROVED BY CAO							

Staff Report

Origin

In 2001, the Province of British Columbia enacted the Drinking Water Protection Act, which provided the Minister of Health with the authority to implement and enforce standards for water supply systems in British Columbia. In May 2003, regulations to be implemented under the Drinking Water Protection Act were adopted by the legislature as the Drinking Water Protection Regulation. These Acts were updated on April 29, 2014 under Bill 18 - 2014: the Water Sustainability Act.

This report presents the City's "2017 Annual Water Quality Report" (Attachment 1), which enables the City to meet its obligations for public reporting to comply with applicable requirements in accordance with these regulations. A summary of the 2017 Annual Water Quality Report is also presented as Attachment 2.

This report supports Council's 2014-2018 Term Goal #6 Quality Infrastructure Networks:

Continue diligence towards the development of infrastructure networks that are safe, sustainable, and address the challenges associated with aging systems, population growth, and environmental impact.

6.1. Safe and sustainable infrastructure.

This report supports Council's 2014-2018 Term Goal #9 A Well-Informed Citizenry:

Continue to develop and provide programs and services that ensure the Richmond community is well-informed and engaged on City business and decision making.

9.1. Understandable, timely, easily accessible public communication.

Analysis

The Drinking Water Protection Regulation requires water purveyors in BC to possess an operating permit, which confirms the Drinking Water Officer for the area has approved the water supply. The Drinking Water Officer is given the authority to monitor water purveyors to ensure they are providing safe drinking water through compliance with the British Columbia Drinking Water Protection Regulation, and any other conditions of the operating permit.

Under the Regulation, the City of Richmond is required to:

- Develop and maintain a process to notify the Medical Health Officer and the Drinking Water Officer of situations or conditions that render or could render the water unfit to drink;
- Implement and maintain a plan for collecting, shipping and analyzing water samples in compliance with the direction set by the Drinking Water Officer; and

Richmond thrives on its ability to provide water to residents and businesses, and to Richmond Fire-Rescue in the event of a fire. To ensure a consistent supply, the capital watermain replacement program is a proactive approach to avoiding breaks and has proven to be a reliable and valuable tool in water distribution management. In 2017, Public Works staff attended to 19 watermain breaks. Repairs for a single watermain break can amount to \$100,000 plus damages to private properties and service disruptions to businesses and residents. As such, a proactive replacement and maintenance program is essential to minimizing costs and ensuring minimal to no disruptions in water quality and supply.

Highlights of the 2017 Annual Water Quality Report include:

- Richmond residents enjoy high-quality, reliable drinking water.
- 2,065 water samples were collected to ensure water quality and each passed with outstanding results.
- Test results confirm high quality water and demonstrate continuous improvement.
- 35.3M cubic metres of water were purchased in 2017 compared to 34.8M cubic metres in 2016.
- Richmond's tap water stations are used in many community events providing potable water to the public and promoting tap water usage.
- The educational program Project WET, where students learn about water conservation, water quality and water distribution, represents the partnership between Richmond School Board and Public Works.

These and many other initiatives are detailed in the attached "2017 Annual Water Quality Report".

Proposed Communication

Subject to Council's approval, the "2017 Annual Water Quality Report" will be posted on the City's website and made available through various communication tools including social media channels and as part of community outreach activities.

Financial Impact

None.

Conclusion

The 2017 Annual Water Quality Report outlines the methods in which the City manages its water system to ensure compliance with applicable provincial requirements under the Drinking

April 23, 2018

Water Protection Act. In 2017, the City's water quality met and exceeded the required standards to ensure residents enjoyed high quality, reliable and safe drinking water.

This report has been reviewed and endorsed by the Medical Health Officer of Vancouver Coastal Health Authority as part of the City's reporting obligations.

Bryan Shepherd Manager, Water Services (604-233-3334)

BS:nk

Att. 1: 2017 Annual Water Quality Report Summary2: 2017 Annual Water Quality Report

City of Richmond

2017 Annual Water Quality Report Summary

In 2017, Richmond residents enjoyed high-quality and reliable drinking water. Water Services staff collected 2,065 water samples from 40 sampling sites to ensure excellent water quality.

Richmond is dedicated to promoting the value of municipal tap water, maximizing opportunities for use of tap water in municipal facilities and developing strategies for making tap water the "water of choice" in our community.



Taking a sample



Testing a sample



Proiect WET



How does Richmond provide high-quality tap water?

- By testing all 40 water quality sites on a regular basis.
- By continuous preventative maintenance and monitoring.
- By providing the water system with the highest degree of care to ensure that it's an inhospitable environment for any harmful bacteria or toxins.
- By proactive watermain replacement and maintenance projects.

Multi-Barrier Approach

Richmond recognizes that in order to provide the highest quality water, several methods must be used to ensure its superiority – hence the "Multi-Barrier Approach".

The "Multi-Barrier Approach" includes:

- disinfection of the water at the source;
- water quality monitoring capabilities at seven pressure reducing valve (PRV) stations;
- weekly microbiological testing;
- system operators that are certified by the Environmental Operators Certification Program of BC:
- maintenance practices that are of the highest standard.

Heterotrophic Plate Count (HPC)

- The HPC count indicates the presence of nutrients that could facilitate the growth of harmful bacteria such as E. coli.
- By reducing the HPC levels, the possibility of bacteriological re-growth is essentially reduced.
- The minimal positive chlorine residual in our water also disinfects and eliminates harmful substances within our distribution system.

2017 Results

- Provided 35.3 million m³ of the highest quality drinking water to over 218,300 Richmond residents.
- Conducted 2,065 microbiological tests from 40 test locations.
- Maintained 12 pressure reducing valve (PRV) stations.
- Maintained 4,848 fire hydrants to ensure water is available during an emergency.
- Repaired 19 watermain breaks without compromising the integrity of the water distribution system while maintaining positive pressure.
- Discovered and repaired six non-visible underground leaks through Richmond's leak detection program using noise loggers measuring sound frequencies in the targeted pipe allowing any leaks to be heard and recorded.
- Hosted over 360 students and teachers from Richmond elementary schools as part of the annual educational program: Project WET.
- Repaired 251 service connections.
- Installed 4,800 m of new Capital watermain.
- Installed 474 water services for new developments.

Summary

Richmond residents will continue to enjoy drinking water that is fresh, reliable and of high-quality. It is without a doubt that the City of Richmond consistently excels at providing tap water of excellent quality!



PRV station

City of Richmond 2017 Annual Water Quality Report

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CNCL - 224

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Richmond is dedicated to promoting the value of municipal tap water, maximizing opportunities for use of tap water in municipal facilities and developing strategies for making tap water the "water of choice" in our community.

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CNCL - 227 2017 City of Richmond Annual Water Quality Report

D

Executive Summary

The purpose of this report is to fulfill the requirements set out in the British Columbia Drinking Water Protection Act (BCDWPA) by giving an overview of the water distribution system, describing the maintenance conducted, detailing some of the unique features of the system and providing the results of Richmond's water quality testing program.

Test results confirm high-quality water and demonstrate continuous improvement. Richmond's water system is provided with the highest degree of care to ensure that it's an inhospitable environment for any harmful bacteria or toxins. Also, Water Utility funding contributes to proactive watermain replacement and maintenance projects that will ensure the overall health of the system well into the future.

In 2017, the City of Richmond's Water Services staff undertook the following:

- provided 35.3 million m³ of the highest quality drinking water to over 218,300 Richmond residents;
- conducted 2,065 microbiological tests from 40 test locations;
- maintained 12 pressure reducing valve (PRV) stations;
- maintained 4,848 fire hydrants to ensure water is available during an emergency;
- repaired 19 watermain breaks without compromising the integrity of the water distribution system while maintaining positive pressure;
- discovered and repaired six non-visible underground leaks through Richmond's leak detection program using noise loggers measuring sound frequencies in the targeted pipe allowing any leaks to be heard and recorded;
- hosted over 360 students and teachers from Richmond elementary schools as part of the annual educational program: Project WET;
- repaired 251 service connections;
- installed 4,800 m of new Capital watermain;
- installed 474 water services for new developments.

The City of Richmond's Water Services section takes its role as a water purveyor very seriously and is proud to be the guardian of such a precious resource.

CNCL - 229 2017 City of Richmond Annual Water Quality Report

D

Introduction

In 2002, the City of Richmond implemented a Drinking Water Quality Monitoring Program. This program was developed with input from the Vancouver Coastal Health Authority and is in accordance with the British Columbia Drinking Water Protection Act (BCDWPA), the Water Quality Monitoring and Reporting Plan for Metro Vancouver and member municipalities and the Guidelines for Canadian Drinking Water Quality (GCDWQ).

The Vancouver Coastal Health Authority requires the City of Richmond to provide the Annual Drinking Water Quality Report so that Richmond can maintain its operating permit. Richmond's Medical Health Officer reviews the report and upon request, the report is made public. It provides important information concerning Richmond's water distribution system and water quality.

The conditions set out in the British Columbia Drinking Water Protection Act (BCDWPA) require that all water systems in BC be classified as a Level I through IV facility. Richmond's system is classified as a Level III facility so all staff are responsible for possessing a valid Level I to Level III Equipment Operators Certification Program (EOCP) certificate. To obtain and maintain a level of certification, staff successfully complete the annual training. This is done to ensure that staff are able to respond appropriately and immediately to problems prior to becoming a risk to health or property.

As a water purveyor, Richmond complies with provincial legislation, including the British Columbia Drinking Water Protection Act (BCDWPA), and the British Columbia Drinking Water Protection Regulations (BCDWPR). Information is also compared to the federal Guidelines for Canadian Drinking Water Quality (GCDWQ). Under these various pieces of legislation the City of Richmond is required to:

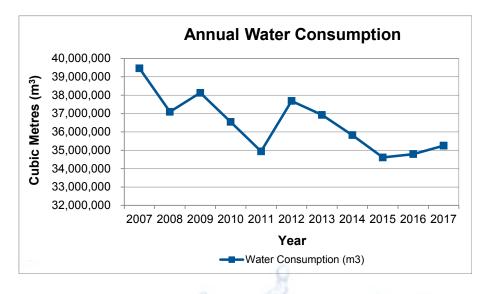
- develop a process to notify the Medical Health Officer of any condition that could render unsafe drinking water;
- implement a sampling program that adequately represents all areas within the City;
- meet the requirements of the British Columbia Drinking Water Protection Act (BCDWPA), and ensure test results are immediately available to the Medical Health Officer;
- receive an annual construction permit for the construction, installation and extension of the water distribution system;
- ensure that the City's water distribution system is classified under the criteria for the Environmental Operators Certification Program (EOCP) and that Water Services staff are certified to the same level as the distribution system;
- produce an annual public report detailing the results of the City's water quality monitoring program.

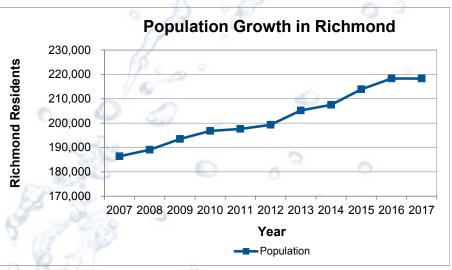
According to Metro Vancouver, the average person uses 270 litres of water per day. Toilets 24% Faucets 20%

Shower 20% Clothes washers 16% Leaks 13% Baths 3% Other 3% Dishwashers 2% An average garden hose delivers around 45 litres of water each minute. Install a shut-off nozzle on your hose so it runs only when in use.

Metro Vancouver Water District

In 2017, the City of Richmond purchased 35.3 million m³ of drinking water from the Metro Vancouver Water District.





Three watersheds supply regional water: Capilano Reservoir, Seymour Reservoir, and Coquitlam Reservoir. The Capilano and Seymour Reservoirs supply two thirds of the water for the region. The Coquitlam Reservoir supplies the remaining third. Richmond receives the majority of its water from the Capilano and Seymour reservoir.

Water from these reservoirs can be directed through a series of valves and transmission watermains to any city or municipality within the Metro Vancouver region. Source water is provided directly from the watersheds by Metro Vancouver and is tested for a number of microbiological, chemical, and physical parameters. There are two drinking water treatment facilities, Seymour-Capilano Filtration Plant (SCFP) and Coquitlam Water Treatment Plant (CWTP). The SCFP is the largest filtration plant in Canada and has the capacity to filter up to 1.8 billion litres of water per day. Water is carried from the Capilano watershed to the SCFP by two underground tunnels over 7 km long and 3.8 m in diameter. The CWTP has the capacity to treat 380 million litres of water per day.



Each day, Metro Vancouver residents use enough water to fill BC Place.

Instead of running the tap until the water cools, keep a pitcher of cold drinking water on standby in the fridge.

Metro Vancouver Watersheds

Choose plants that love dry heat. Embrace the dry heat by planting tomatoes, basil, beans, melon, eggplant and more in your garden.

The average garden hose delivers 2,700 litres of water per hour. Small leaks or a loose coupling can quickly add up to a lot of wasted water.

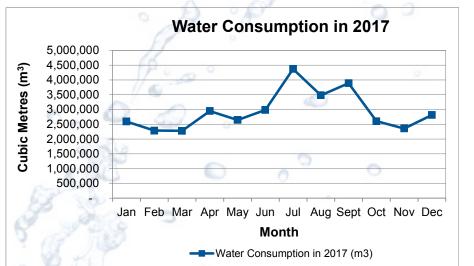
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Water Distribution System Overview

The City of Richmond's water distribution system begins at 12 separate connection points along Metro Vancouver's transmission mains. At each connection point there is a City owned pressure reducing valve (PRV) chamber. The City's responsibility for water quality begins at this chamber and ends at the residential or commercial property line.

Table 1 – Overview of Richmond's Water Distribution Network

Water Assets	2017
Hydrants	4,848
Valves	11,195
PRV chambers (active)	12
Pigging chambers (sponge vault)	10
Blow-offs	298
End caps	480
Watermains (City)	633 km
Service connections	31,772



Pressure Reducing Valves (PRV)

The Water Services section maintains 12 pressure reducing valve (PRV) stations throughout Richmond. PRV stations decrease the pressure of Metro Vancouver's water feed to one that is manageable for Richmond's water distribution system. The stations are connected to a supervisory control and data acquisition (SCADA) system that provides information to the Works Yard such as water pressure, quality and volume. This allows for certified Water Services staff to react to problems quickly and effectively 24 hours a day, seven days a week.

Table 1 indicates the monthly water consumption in Richmond. It is estimated that most municipalities in North America lose anywhere from 12% to 15% of their potable water to undiscovered, underground leakage. The Water Loss Management Program allows City Engineering and Water Services staff to determine the total amount of water consumed through normal operational programs and practices such as single-family residential, multi-family residential and commercial metering programs. While combining these programs with watermain flushing, parks and median irrigation, and Richmond Fire Rescue water usage, it is reasonable to assume that the unidentified portion of the annual water consumption is attributed to water loss within the distribution system.



Data acquisition inside the PRV

Service Renewals

This program aims to prevent breaks and leaks by continuously upgrading and replacing older water services from the watermain to the property line. This preventative maintenance construction occurs throughout the year and requires minimal restoration.

Watermain Replacement Program

The watermain replacement program replaces older mains that are past their useful service life with new mains that are designed to serve Richmond residents well into the future. New watermains are more reliable and significantly reduce the number of watermain breaks, ensuring better flows for fighting fires and providing higher resistance to seismic events. In the past three years, the number of watermain breaks has decreased by half: from 38 watermain breaks in 2016 to 19 watermain breaks in 2017.

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2017 City of Richmond Annual Water Quality Report

An hour of sprinkling uses as much water as 25 toilet flushes, five loads of laundry, and five dishwasher loads combined.

PRV inspection

Run full loads in the dishwasher. 84% of homes have an automatic dishwasher. The average cycle uses 23 litres of water, down from older models at 38 litres. A half-full dishwasher uses the same amount of water as a full one.



Sample station

Water Quality Monitoring

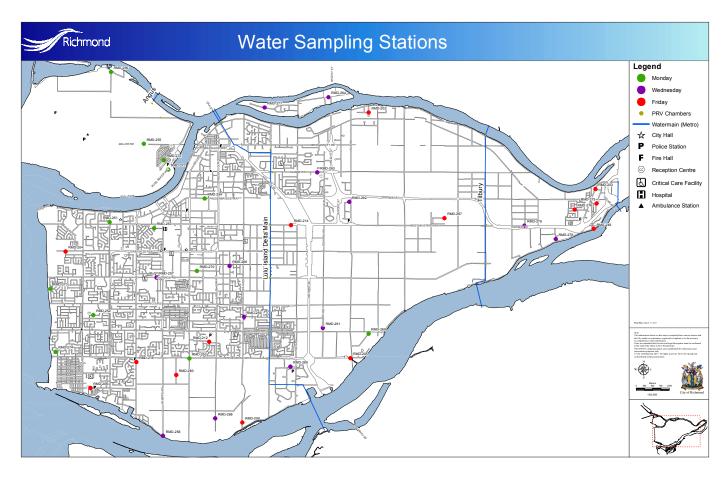
In 2017, the City of Richmond collected samples on a weekly basis at 40 dedicated sampling sites. These sites are strategically located throughout the City to give a good representation of the City's water quality across the distribution network. In 2017, 2,065 water samples were collected by Water Services staff and sent for analysis at Metro Vancouver laboratories. These sample results were reviewed by the Vancouver and Richmond Coastal Health Authority to ensure the drinking water met the standards outlined in the British Columbia Drinking Water Protection Regulations (BCDWPR).

Table 2 – Number of Annual Samples

Annual Samples	
1,649	
1,936	
1,957	
1,997	
1,993	
2,027	
2,040	
2,065	
	1,649 1,936 1,957 1,997 1,993 2,027 2,040



Taking a sample



Bacteriological Tests

The City of Richmond and Metro Vancouver conduct bacteriological tests for total coliform, fecal coliform and heterotrophic plate counts (HPC). The presence of these organisms in drinking water indicates that the water may be contaminated and may contain potentially harmful bacteria, viruses or parasites.

Multi-Barrier Approach

Richmond recognizes that in order to provide the highest quality water, several methods must be used to ensure its superiority.

The "Multi-Barrier Approach" includes:

- disinfection of the water at the source;
- water quality monitoring capabilities at six PRV sites;
- weekly microbiological testing at 40 sites throughout Richmond;
- system operators are certified by Environmental Operators Certification Program (EOCP) of BC;
- maintenance practices that are of the highest standard.

Leave grass clippings on your lawn. They'll help trap moisture to reduce evaporation and break down to feed your lawn naturally.

You should recycle unused water. While waiting for hot water to flow when preparing for a shower, catch the cool water in a bucket or water can. Later it could be used for your plants, pets or cleaning.



Samples for lab analysis

Total Coliforms

Total coliform bacteria reproduce in water, soil or digestive systems of animals. The presence of total coliforms indicates water may have been contaminated and that the disinfection process is inadequate. In distribution systems where more than 10 samples are collected in a given sampling period, as is the case in Richmond, no consecutive samples from the same site or no more than 10% of samples should show the presence of total coliform bacteria.

Testing for total coliforms should be carried out in all drinking water systems. The number, frequency and location of samples for total coliform testing will vary according to the type and size of the system and jurisdictional requirements.

Provincial standards state that no sample can contain more than 10 total coliforms per 100 ml, and that 90% of samples in a 30-day period must have zero coliform organisms.

Fecal Coliforms

Fecal coliforms are present in large numbers in the feces and intestinal tracts of humans and other warm-blooded animals, and can enter water bodies from human and animal waste. They are key indicators of sewerage contamination. Due to diseases and parasites, which are spread through sewerage, provincial standards state there can be no detectable fecal coliforms per 100 ml sample.

2017 Results

In 2017, 2,065 water samples were collected by City staff and analyzed by Metro Vancouver laboratory staff. All final results met drinking water requirements for fecal and total coliforms. The City of Richmond was in compliance with British Columbia Drinking Water Protection Regulations (BCDWPR) for bacteria in 2017.

Heterotrophic Plate Count

Heterotrophic Plate Counts (HPC) tests measure aerobic heterotrophic bacteria. This test indicates the presence of nutrients that could facilitate the growth of harmful bacteria such as E.coli, and in determines changes in water quality during treatment and distribution. HPC tests indicate the onset of bacterial re-growth within the distribution system commonly due to stagnant water contained in dead end and low flow watermains. By reducing the HPC levels, the possibility of bacteriological re-growth is essentially reduced because the pipes are an inhospitable environment for bacteria to grow. The minimal amount of positive chlorine residual in our water also disinfects and eliminates harmful substances within our distribution system. In 2017, none of the 2,065 water samples exceeded regulated levels for HPC's at >500 CFU/mls. In fact, none of the 2,065 water samples exceeded 100 CFU/mls.

Flushing

As part of a five-year program, Water Services successfully executed the annual flushing program. This important maintenance practice ensuring high-quality tap water by moving water through the pipes and eliminating stagnant water at dead-ends. By doing so, the pipes are cleared and the risk of high HPC levels which lead to bacteria re-growth is significantly reduced.

Failed samples

The standard response to a failed water sample is:

- re-sample at the site;
- flush the watermain extensively;
- re-sample;
- the watermain is then isolated to one feed until test results confirm compliance with the British Columbia Drinking Water Protection Regulations (BCDWPR).



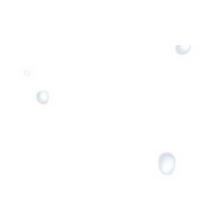
Use a broom instead of a hose. Sweep driveways, decks, patios and sidewalks with a broom instead of using a hose. That 15-minute job could use 675 litres of water.

Water used in the kitchen for rinsing and cooking can be used again to water house plants.



Testing the sample

Watering between 4 AM and 9 AM complies with sprinkling regulations, and reduces the amount of water lost to wind and evaporation.



Physical Parameters

Water in Richmond's distribution system is tested for the physical parameters of turbidity and temperature at the same time as bacteriological testing. Information is also collected on the taste and odour of Richmond's water by actively tracking water quality complaints.

Turbidity

Metro Vancouver is responsible for the quality of Richmond's source water. Turbidity is a measure of water clarity and cloudiness. Turbidity is measured in Nephelometric Turbidity Units (NTU). The guideline allows for turbidity levels up to 5 NTUs providing that source water protection, monitoring, and water treatment requirements are met including increased levels of residual chlorine. Turbidity is a concern because increased turbidity compromises the drinking water disinfection process. In 2017, the highest level of turbidity was measured at 3.8 NTU. Only 19 samples had turbidity levels of more than 1 NTU.

In general, sites with elevated turbidity are located in sections of the distribution network where there is low demand on the water system or where dead-end watermains exist. The increase may be attributed to sediment disturbance in the distribution system. During the year, when sampling indicates a turbidity level greater than >5 NTU's, affected watermains in the test area are flushed, and re-tested until a satisfactory result is obtained.

Temperature

High temperatures in the distribution system can affect the residual level of chlorine and can contribute to bacterial re-growth. Typically, the temperature of drinking water in the distribution system rises during summer months. Although there were no customer complaints regarding Richmond's water temperature, samples exceeded the aesthetic guideline of 15 °C 257 times out of 2,065; some temperatures as high as 21 °C were recorded. The majority of these elevated temperatures were recorded during the summer months.

Taste and Odour

Taste and odour are only monitored in response to customer complaints. Records indicate that 11 complaints were received regarding taste and three complaints were received regarding odour in 2017. These complaints generally relate to high levels of residual chlorine in that part of the system at that particular time. Residents who complained about taste or odour problems were advised to flush their internal system. If the problem was not resolved, Water Services staff were dispatched to the location until a satisfactory result was obtained and verified through laboratory analysis.

Chemical Parameters

The City of Richmond, in partnership with Metro Vancouver, tests for the following chemical parameters: chlorine residual, trihalomethanes (THM), haloacetic acids (HAA), and pH. Periodic testing is also performed to determine heavy metals levels in the water system.

Free Chlorine Residual

Chlorine residual is a measurement of the disinfecting agent remaining in the distribution system at the point of delivery to the customer. Ensuring proper levels of chlorine in the distribution system is essential in protecting Richmond's water supply from bacteriological contamination or re-growth. In recent years, the City has made great progress in improving chlorine residuals by implementing various flushing programs.

Disinfection By-Products

Disinfection by-products are potentially harmful compounds produced by the reaction of a water disinfectant (such as chlorine or ozone) with naturally occurring organic matter in water. Two common chlorination by-products are Trihalomethanes (THMs) and Haloacetic Acids (HAAs). In drinking water, THMs can enter the human body via multiple routes of exposure. These include ingestion by consuming water and inhalation and skin absorption from showering and bathing. Under the Guidelines for Canadian Drinking Water Quality (GCDWQ), the maximum acceptable concentration (IMAC) for THMs is 100 parts per billion (ppb). The 100 ppb level for THMs is based on an annual average of samples taken quarterly. High levels on a particular day are not of concern unless they are consistently high over a period of time. Typically, THM levels will be highest in the summer and lowest in the winter months. Likewise, under the GCDWD, the maximum acceptable concentration (IMAC) for HAAs is 0.08 mg/L. In 2017, the City utilized the Metro Vancouver laboratory to perform quarterly tests for HAA's and THM's. These were carried out at representative sampling sites in accordance with a joint Metro Vancouver/ Richmond monitoring plan. In 2017, all results were within acceptable levels as defined in the GCDWQ. (Appendix 5).

The pH Value

The measurement of acidity is known as pH. A pH below 7.0 is considered acidic, above 7.0 is considered basic, with 7.0 being neutral. It is recognized that acidic water will accelerate the corrosion of metal pipes, often causing blue-green staining in household fixtures.

The Seymour-Capilano filtration plant includes pH adjustment and corrosion control in its treatment processes. It is expected that the pH of drinking water will rise in the coming years as the filtration plant reaches its full potential. This will extend the lifespan of water plumbing systems and enhance water quality.

Metals

The City's water quality program also includes testing for metals, such as copper, iron, lead, and zinc. All results were within GCDWQ limits for 2017. Complete test results are included in Appendix 6.

Dual-flush toilets give the option of a water-saving half flush.



Taking a sample inside the PRV

About one quarter of indoor water use is from flushing the toilet. A family of four washes about 300 loads of laundry per year. Running half loads uses more water to do the same amount of laundry. Even with an efficient washer, one load a day uses 340 litres over a week.

0

Mobile Emergency Response Unit

65

Water Services staff are trained to operate the water treatment trailer for use during a major emergency where Richmond's water is contaminated. The treatment trailer is capable of producing 55,000 litres of potable water per day from non-potable sources such as the Fraser River. It is maintained and continuously tested by Water Services staff to ensure that the water is safe to serve Richmond residents in an emergency situation.



Rear view of the unit



Educating students on the unit at Project WET

Public Notification

At the direction of the Medical Health Officer, water quality advisories will be issued to the general public if necessary. Similarly, the notification will be issued to the general public for any work being done that will affect the guality of their drinking water. An example is included in Appendix 7.

Table 3 – Agency Notification for Situations Drinking Water Safety

Situation	Notifying Agency	Agency Notified	Time Frame For Notification	
Fecal positive sample	City of Richmond Metro Vancouver Lab	City of Richmond / Medical Health Officer	Immediate	
Chemical/biological contamination	City of Richmond Metro Vancouver Lab	City of Richmond / Medical Health Officer	Immediate	
Turbidity > 5 NTU	City of Richmond Metro Vancouver Control Centre Metro Vancouver Lab	City of Richmond / Medical Health Officer	Immediate	
Disinfection failure primary or secondary disinfection	City of Richmond Metro Vancouver Control Centre Metro Vancouver Lab	City of Richmond / Medical Health Officer	Immediate, where BC DWPR or GCDWQ guidelines may not be met	
Loss of pressure due to high demand	City of Richmond Metro Vancouver Control Centre	Medical Health Officer City of Richmond Metro Vancouver Control Centre	Immediate	
Watermain break where the pressure drops below 20 psi	City of Richmond Metro Vancouver Control Centre	Medical Health Officer City of Richmond	Immediate	

Plants protected by mulch require less watering. Mulch can preserve moisture by reducing soil temperature and slowing evaporation. Scrape dishes instead of rinsing them under running water before loading your dishwasher. For heavy cleaning of grills or oven parts pre-soak overnight.



Water meter

Water Conservation Programs

Water Conservation Program

The City of Richmond continues to succeed in reducing annual water consumption despite a growing population. Since 2012, population has grown by approximately 10% and overall water consumption has decreased by 7%. This equates to a total annual savings of over \$1,750,000. This can be explained by corporate and community wide initiatives including water metering, pressure management, the toilet rebate program, the clothes washer rebate program and the City's leak reduction program.

Reduction of water system pressure in lower demand periods such as the winter season extends water infrastructure service life and also reduces system water loss.

The leak reduction program identifies single-family properties with continuous leaks and educates the homeowner about the leak and significantly reduces overall private property leakage.

Universal Single-Family Water Meter Program

The universal single-family water meter program was completed in 2017. Advanced notification was provided to flat rate customers prior to meter installation. Water meters are a fair and equitable way of charging residents for water and will reduce the overall water consumption throughout the City.

Multi-Family Water Meter Program

The volunteer multi-family water meter program allows residents to pay for the actual amount of water they use, rather than being billed on the flat-rate system. To date, 146 multi-family complexes have been completed, comprising of 9,119 dwelling units.

Pressure Management Program

The City of Richmond reduces water pressure by 10 PSI between October and May, causing the system pressure to change from 90 PSI to 80 PSI. The purpose of this practice is to reduce the volume of leakage and extend the life of our water infrastructure. A decrease in nighttime flows and private leaks has been observed. Richmond is actively pursuing automated pressure management, where fluctuation would happen on a more regular basis through pilot systems on our pressure reducing valve (PRV) stations, which could recognize demand periods. Each one of Richmond's 12 PRV stations is turned down until the operating pressure is reached. In 2017, the City introduced a new timer-based pressure management program which lowered the pressure from 90 PSI to 80 PSI in the summer months from 1:00 to 5:00 a.m. This program will further reduce leakage volume and extend the life of the water infrastructure.

Toilet Rebate Program

The City of Richmond's Toilet Rebate Program provides a utility account rebate of \$100.00 to homeowners who install a low-flush toilet. Single and multi-family homeowners are eligible to apply for a lifetime maximum of two rebates per property. Industrial, commercial and other non-residential properties are not eligible at this time. The purpose of the toilet rebate program is to encourage homeowners to replace high volume toilets with low-flush toilets to conserve water and to reduce costs. Homeowners enjoy a reduction in their utility bill while contributing to a sustainable water conservation initiative. In 2017, there were 662 rebates submitted.

Clothes Washer Rebate Program

Through a partnership program with BC Hydro, residents could receive a rebate of up to \$200, equally cost shared between BC Hydro and the City of Richmond for the replacement of an inefficient clothes washer with a new high efficiency one. The bi-annual rebate program encourages homeowners to conserve water and energy. As of January 1, 2017, 765 clothes washer rebates have been issued to Richmond residents.

Rain Barrels

Rain barrels are excellent outdoor water-saving devices that collect and store rainwater from rooftops for lawn and garden use. Rain water is a great water source for lawns, plants and gardens. For water metered households, using rainwater will reduce the amount of tap water used for your garden therefore decreasing the utility bill.

Rain barrels are available for purchase at the City's Recycling Depot by Richmond residents only. Installation instructions are included. In 2017, 153 rain barrels were sold; a decline from the 270 rain barrels sold in 2016.

SYSTERN rain barrel features:

- unique shape and neutral color suitable for any home and garden;
- 208 litre (55 gallon) capacity;
- mosquito mesh keeps out bugs and leaves;
- BPA free;
- made from recycled content;
- UV stabilizer is added to resist deterioration from sunlight;
- overflow hose can be linked to another SYSTERN or can be directed away from the house.

Metro Vancouver Water Restrictions

Due to dry and hot weather, continued high water demand and declining reservoir levels, Metro Vancouver imposed stage one water sprinkling restrictions from May 15 until October 15. All Public Works sections and Parks Operations were involved in collecting and using recycled water for Richmond's parks, plants, street sweeping and vactor operation.

Vegetables love the warm water stores in rain barrels, and you'll save treated drinking water.



Rain barrel

Shorten your shower by two minutes. Reducing your shower by two minutes can save 460 litres of water in one month.



Water distribution station at Project WET



Meter Shop station at Project WET



Leak detection station at Project WET

Water Education Programs

Project WET

Project WET is an interactive elementary school water education program aimed at teaching students about the importance of water, environmental programs, sewerage and drainage. Largely targeted for Richmond students in grades four through seven, this program is designed to educate students on the importance of water quality and supply.

The acronym "WET" stands for "Water Education Team". Touring from station to station, the objective is to promote higher-level thinking skills while learning about the fundamentals of water. In 2017, over 360 students and teachers participated in the program.

During the tour to the Works Yard, students can expect to learn many exciting areas of water and drainage systems such as:

- Richmond's water distribution system and how water reaches the taps;
- water sampling and water quality testing;
- the importance of fire hydrants and how they work;
- portable drinking fountains and Richmond's high-quality tap water;
- water conservation and what students can do to help;
- the uses of watermains, automatic flushing units, valves and meters;
- inspection camera technology;
- sewerage and drainage pipes and systems;
- the importance of keeping toxic materials out of ditches and storm sewers;
- pump stations and how they work;
- recycling and other environmentally sustainable practices;
- how our dykes help to keep our island afloat;
- Richmond's emergency water treatment trailer.

Tap Water Initiative

In 2010, Metro Vancouver initiated its tap water campaign. The intent of this initiative is to encourage tap water consumption by the public and highlight public drinking fountains so that the public can refill water bottles or simply get a drink of water. On April 14, 2009, Mayor Malcom Brodie endorsed this campaign indicating that the City of Richmond is dedicated to promoting the value of municipal tap water, maximizing opportunities for use of tap water in municipal facilities and developing strategies for making tap water the "water of choice".

To support this initiative, Richmond's Water Services section is proud to maintain several portable drinking fountains that are used at numerous community events to provide the public with potable tap water and to promote tap water usage as an alternative to bottled water consumption. Samples are tested upon installation ensuring good quality water for the public to enjoy. In 2017, Water Services' portable tap water stations were installed at 56 community events.

The 24 water fountains found on Richmond's dykes and in parks are maintained by Water Services. They are tested and inspected ensuring accessible and high-quality drinking water. They must be turned off in winter months to prevent freezing and costly damage. They are turned on in the spring for the public to enjoy. An auto-flushing unit was installed on one of the longer pipes, to a fountain, to turn over the water and maintain an accurate chlorine residual.

Public Works Open House

The Water Services section plays a large role in the annual Public Works Open House that takes place in May. This is an opportunity for staff to show residents some of the critical services that are provided such as maintaining our infrastructure. Likewise, staff showcase the work that is done on a daily basis to ensure the safety and health of the community. This event draws attention to the importance of public works in community life.

"H2Whoa!" Theatrical Presentation by DreamRider Productions

"H2Whoa!" teaches students in grades K-7 all about water, the water cycle and water conservation. The focus is on positive actions and educating family and friends about the use of water, the need to protect it and its importance to everyday living. Several Richmond elementary schools have and will continue to have the opportunity to view this theatrical presentation. A healthy lawn only needs one hour of water per week. Too much water will drown its roots and encourage weeds.



Automated drinking fountain



Public Works Open House

Conclusion

In 2017, Richmond residents enjoyed high-quality drinking water. From the protected watersheds to the local taps, both Metro Vancouver and the City of Richmond focus immensely on safe and high-quality drinking water.

Test results confirm high-quality water and demonstrate continuous improvement. Richmond's water system is provided with the highest degree of care to ensure that it's an inhospitable environment for any harmful bacteria or toxins. The City of Richmond's Water Services section takes its role as a water purveyor very seriously and is proud to be the guardian of such a precious resource.

Water Services staff continue to employ best management practices in the operation and maintenance of the water system. Certified by the Equipment Operators Certification Program (EOCP), staff meet all requirements of the British Columbia Drinking Water Protection Act (BCDWPA) and are well equipped to operate and maintain all aspects of the water system from source to property line

The City appreciates the good working relationship with Vancouver Coastal Health Authority and acknowledges them as important partners in maintaining high quality drinking water throughout the City of Richmond.

Sincerely,

Bryan Shepherd *Manager, Water Services* City of Richmond 604-233-3334 bshepherd@richmond.ca

Appendices

APPENDIX 1: REFERENCES APPENDIX 2: WATER SAMPLING SITES APPENDIX 3: 2017 WATER QUALITY RESULTS APPENDIX 4: SCADA AND PRESSURE TESTING SITES APPENDIX 5: 2017 THM AND HAA TEST RESULTS APPENDIX 6: 2017 HEAVY METAL AND VINYL CHLORIDE TESTING RESULTS APPENDIX 7: SAMPLE DRINKING WATER QUALITY ADVISORY APPENDIX 8: SPECIFIC EMERGENCY RESPONSE PLANS

APPENDIX 1: REFERENCES

- 1. Health Canada Drinking Water Guidelines www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/index_e.html
- Provincial Drinking Water Protection Act (2003) www.qp.gov.bc.ca/statreg/reg/D/200_2003.htm#section8
- 3. Greater Vancouver Regional District Source Water Quality and Supply www.gvrd.ca/water/index.htm
- 4. Richmond Health Services (Regional Health Authority) www.rhss.bc.ca/bins/index.asp
- 5. British Columbia Water Works Association www.bcwwa.org/
- 6. American Water Works Association www.awwa.org/
- 7. Metro Vancouver www.metrovancouver.org/services/water/Pages/default.aspx
- 8. City of Richmond www.richmond.ca/discover/about/demographics.htm
- 9. City of Richmond Richmond GVWD Water Consumption Document No. 555456
- **10.** Earth Easy Solutions for Sustainable Living http://eartheasy.com/live_water_saving.htm
- 11. Metro Vancouver We Love Water http://www.metrovancouver.org/welovewater/Pages/default.aspx
- City of Richmond
 Engineering Benchmarking Statistics Underground Utilities Inventory 0 Drainage and Sanitary and Water (3) Jan 2018

APPENDIX 2: WATER SAMPLING SITES

	SAMPLING STATION NUMBER	WATER SAMPLING SITES
	RMD-250	6071 Azure Road
	RMD-251	5951McCallan Road
	RMD-252	9751 Pendleton Road
	RMD-253	11051 No 3 Road
	RMD-254	5300 No. 3 Road
AV V	RMD-255	6000 Blk. Miller Road
MONDAY	RMD-256	1000 Blk. McDonald Road
Σ	RMD-269	14951 Triangle Road
	RMD-270	8200 Jones Road
	RMD-271	3800 Cessna Drive
	RMD-272	751 Catalina Crescent
	RMD-273	Opp. 8331 Fairfax Place
	RMD-274	10920 Springwood Court
	RMD-257	6640 Blundell Road
	RMD-258	7000 Blk. Dyke Road
	RMD-259	10020 Amethyst Avenue
	RMD-260	11111 Horseshoe Way
>	RMD-261	9911 Sidaway Road
WEDNESDAY	RMD-262	13799 Commerce Pkwy
DNE	RMD-263	12560 Cambie Road
WE	RMD-264	13100 Mitchell Road
	RMD-266	9380 General Currie Road
	RMD-268	13800 No. 3 Road
	RMD-277	Opp. 11280 Twigg Place
	RMD-278	6651 Fraserwood Place
	RMD-279	Opp. 20371 Westminster Highway
	RMD-202	1500 Valemont Way
	RMD-203	23260 Westminster Highway
	RMD-204	3180 Granville Avenue
	RMD-205	13851 Steveston Highway
	RMD-206	4251 Moncton Street
>	RMD-208	13200 No. 4 Road
FRIDAY	RMD-212	Opposite 8600 Ryan Road
۲. E	RMD-214	11720 Westminster Highway
	RMD-216	11080 No. 2 Road
	RMD-267	17240 Fedoruk Road
	RMD-249	23000 Block Dyke Road
	RMD-275	5180 Smith Crescent
	RMD-276	22271 Cochrane Drive
	RMD-280	11500 McKenzie Road

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APPENDIX 3: 2017 WATER QUALITY RESULTS

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-251	GRAB	5951McCallan Rd.	3-Jan-17	0.7	<1	-	<2	5	<1		0.16
RMD-273	GRAB	Opp. 8331 Fairfax Place	3-Jan-17	0.69	<1		<2	5	<1		0.12
RMD-252	GRAB	9751 Pendleton Rd.	3-Jan-17	0.71	<1		<2	5	<1		0.21
RMD-274	GRAB	10920 Springwood Court	3-Jan-17	0.75	<1		<2	5	<1		0.17
RMD-269	GRAB	14951 Triangle Rd.	3-Jan-17	0.66	<1		<2	6	<1		0.19
RMD-270	GRAB	8200 Jones Rd.	3-Jan-17	0.87	<1		<2	5	<1		0.12
RMD-254	GRAB	5300 No. 3 Rd.	3-Jan-17	0.81	<1		<2	5	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	3-Jan-17	0.68	<1		<2	5	<1		0.26
RMD-255	GRAB	6000 Blk. Miller Rd.	3-Jan-17	0.98	<1		<2	5	<1		0.35
RMD-271	GRAB	3800 Cessna Drive	3-Jan-17	0.73	<1		<2	5	<1		0.11
RMD-272	GRAB	751 Catalina Cres.	3-Jan-17	0.94	<1		<2	5	<1		0.19
RMD-250	GRAB	6071 Azure Rd.	3-Jan-17	0.8	<1		<2	5	<1		0.18
RMD-263	GRAB	12560 Cambie Rd.	4-Jan-17	0.78	<1		<2	5	<1		0.09
RMD-264	GRAB	13100 Mitchell Rd.	4-Jan-17	0.8	<1		<2	5	<1		0.13
RMD-277	GRAB	Opp. 11280 Twigg Place	4-Jan-17	0.73	<1		<2	4	<1		0.12
RMD-262	GRAB	13799 Commerce Pkwy.	4-Jan-17	0.65	<1		<2	5	<1		0.09
RMD-278	GRAB	6651 Fraserwood Place	4-Jan-17	0.62	<1		<2	3	<1		0.11
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	4-Jan-17	0.67	<1		<2	5	<1		0.16
RMD-261	GRAB	9911 Sidaway Rd.	4-Jan-17	0.64	<1		<2	4	<1		0.1
RMD-260	GRAB	11111 Horseshoe Way	4-Jan-17	0.59	<1		<2	4	<1		0.11
RMD-266	GRAB	9380 General Currie Rd.	4-Jan-17	0.76	<1		<2	4	<1		0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	4-Jan-17	0.76	<1		<2	4	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	4-Jan-17	0.7	<1		<2	4	<1		0.16
RMD-204	GRAB	3180 Granville Ave.	5-Jan-17	0.59	<1		<2	3	<1		0.1
RMD-206	GRAB	4251 Moncton St.	5-Jan-17	0.42	<1		<2	3	<1		0.12
RMD-216	GRAB	11080 No. 2 Rd.	5-Jan-17	0.87	<1		<2	3	<1		0.18
RMD-280	GRAB	11500 McKenzie Rd.	5-Jan-17	0.6	<1		<2	3	<1		0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	5-Jan-17	0.72	<1		<2	4	<1		0.16
RMD-208	GRAB	13200 No. 4 Rd.	5-Jan-17	0.7	<1		<2	3	<1		0.15
RMD-214	GRAB	11720 Westminster Hwy.	5-Jan-17	0.95	<1		<2	4	<1		0.12
RMD-267	GRAB	, 17240 Fedoruk	5-Jan-17	0.75	<1		<2	4	<1		0.16
RMD-276	GRAB	22271 Cochrane Drive	5-Jan-17	0.85	<1		<2	4	<1		0.08
RMD-275	GRAB	5180 Smith Cres.	5-Jan-17	0.9	<1		<2	4	<1		0.16
RMD-203	GRAB	23260 Westminster Hwy.	5-Jan-17	0.83	<1		<2	3	<1		0.13
RMD-251	GRAB	5951McCallan Rd.	9-Jan-17	0.84	<1		<2	5	<1		0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	9-Jan-17	0.66	<1		<2	5	<1		0.14
RMD-252	GRAB	9751 Pendleton Rd.	9-Jan-17	0.7	<1		2	5	<1		0.12
RMD-274	GRAB	10920 Springwood Court	9-Jan-17	0.77	<1		<2	5	<1		0.13
RMD-253	GRAB	11051 No 3 Rd.	9-Jan-17	0.71	<1		2	5	<1		0.17
RMD-269	GRAB	14951 Triangle Rd.	9-Jan-17	0.69	<1		<2	5	<1		0.15
RMD-270	GRAB	8200 Jones Rd.	9-Jan-17	0.84	<1		<2	5	<1		0.1
RMD-254	GRAB	5300 No. 3 Rd.	9-Jan-17	0.86	<1		<2	5	<1		0.12
RMD-256	GRAB	1000 Blk. McDonald Rd.	9-Jan-17	0.56	<1		<2	5	<1		1.1
RMD-255	GRAB	6000 Blk. Miller Rd.	9-Jan-17	0.87	<1		2	3	<1		0.18
RMD-271	GRAB	3800 Cessna Drive	9-Jan-17	0.93	<1		2	4	<1		0.23
RMD-271	GRAB	751 Catalina Cres.	9-Jan-17	0.89	<1		<2	4	<1		0.13
RMD-250	GRAB	6071 Azure Rd.	9-Jan-17	0.78	<1		<2	4	<1		0.12
RMD-263	GRAB	12560 Cambie Rd.	11-Jan-17	0.83	<1		<2	4	<1		0.12
RMD-264	GRAB	13100 Mitchell Rd.	11 Jan 17	0.92	<1		<2	4	<1		0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	11 Jan 17	0.91	<1		<2	4	<1		0.11
RMD-262	GRAB	13799 Commerce Pkwy.	11-Jan-17	0.69	<1		<2	3	<1		0.11
202		•	11-Jan-17				<2	3	<1		0.13
RMD-278	GRAB	6651 Fraserwood Place	11-140-17	0.72	<1						

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-261	GRAB	9911 Sidaway Rd.	11-Jan-17	0.81	<1		<2	3	<1		0.12
RMD-260	GRAB	11111 Horseshoe Way	11-Jan-17	0.62	<1		<2	3	<1		0.14
RMD-266	GRAB	9380 General Currie Rd.	11-Jan-17	0.9	<1		<2	4	<1		0.09
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	11-Jan-17	0.81	<1		<2	4	<1		0.1
RMD-257	GRAB	6640 Blundell Rd.	11-Jan-17	0.8	<1		<2	4	<1		0.09
RMD-204	GRAB	3180 Granville Ave.	13-Jan-17	0.71	<1		<2	3	<1		0.16
RMD-206	GRAB	4251 Moncton St.	13-Jan-17	0.8	<1		<2	3	<1		0.12
RMD-216	GRAB	11080 No. 2 Rd.	13-Jan-17	0.89	<1		<2	3	<1		0.16
RMD-280	GRAB	11500 McKenzie Rd.	13-Jan-17	0.86	<1		<2	4	<1		0.15
RMD-212	GRAB	Opp. 8600 Ryan Rd.	13-Jan-17	0.88	<1		<2	3	<1		0.09
RMD-208	GRAB	13200 No. 4 Rd.	13-Jan-17	0.82	<1		6	3	<1		0.13
RMD-214	GRAB	11720 Westminster Hwy.	13-Jan-17	0.76	<1		<2	2	<1		0.12
RMD-267	GRAB	17240 Fedoruk	13-Jan-17	0.71	<1		<2	2	<1		0.11
RMD-276	GRAB	22271 Cochrane Drive	13-Jan-17	0.64	<1		<2	3	<1		0.22
RMD-275	GRAB	5180 Smith Cres.	13-Jan-17 13-Jan-17	0.73	<1		<2	3	<1		0.22
RMD-273	GRAB	23260 Westminster Hwy.	13-Jan-17	0.73	<1		<2	3	<1		0.11
RMD-203	GRAB	5951McCallan Rd.	16-Jan-17	0.78	<1		<2	3	<1		0.10
								3			
RMD-273	GRAB	Opp. 8331 Fairfax Place	16-Jan-17	0.71	<1		<2		<1		0.18
RMD-252	GRAB	9751 Pendleton Rd.	16-Jan-17	0.7	<1		<2	3	<1		0.09
RMD-274	GRAB	10920 Springwood Court	16-Jan-17	0.8	<1		<2	4	<1		0.13
RMD-250	GRAB	6071 Azure Rd.	16-Jan-17	0.75	<1		<2	3	<1		0.09
RMD-271	GRAB	3800 Cessna Drive	16-Jan-17	0.93	<1		<2	2	<1		0.18
RMD-272	GRAB	751 Catalina Cres.	16-Jan-17	0.95	<1		<2	3	<1		0.23
RMD-255	GRAB	6000 Blk. Miller Rd.	16-Jan-17	1.01	<1		<2	2	<1		0.29
RMD-256	GRAB	1000 Blk. McDonald Rd.	16-Jan-17	0.58	<1		<2	4	<1		0.27
RMD-254	GRAB	5300 No. 3 Rd.	16-Jan-17	0.93	<1		<2	3	<1		0.12
RMD-270	GRAB	8200 Jones Rd.	16-Jan-17	0.67	<1		<2	4	<1		0.13
RMD-269	GRAB	14951 Triangle Rd.	16-Jan-17	0.6	<1		2	4	<1		0.13
RMD-253	GRAB	11051 No 3 Rd.	16-Jan-17	0.7	<1		[Poor spreader] LA	3	<1		0.1
RMD-263	GRAB	12560 Cambie Rd.	18-Jan-17	0.93	<1		<2	6	<1		0.34
RMD-264	GRAB	13100 Mitchell Rd.	18-Jan-17	1.13	<1		<2	4	<1		0.17
RMD-277	GRAB	Opp. 11280 Twigg Place	18-Jan-17	1.06	<1		<2	5	<1		0.22
RMD-262	GRAB	13799 Commerce Pkwy.	18-Jan-17	0.79	<1		<2	5	<1		0.21
RMD-278	GRAB	6651 Fraserwood Place	18-Jan-17	0.79	<1		<2	5	<1		0.33
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	18-Jan-17	0.74	<1		<2	5	<1		0.63
RMD-261	GRAB	9911 Sidaway Rd.	18-Jan-17	0.76	<1		<2	5	<1		0.13
RMD-260	GRAB	11111 Horseshoe Way	18-Jan-17	0.6	<1		54	4	<1		0.18
RMD-259	GRAB	10020 Amethyst Ave.	18-Jan-17	0.85	<1		<2	5	<1		0.21
RMD-266	GRAB	9380 General Currie Rd.	18-Jan-17	0.7	<1		<2	4	<1		0.17
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	18-Jan-17	0.95	<1		2	5	<1		0.19
RMD-258	GRAB	7000 Blk. Dyke Rd.	18-Jan-17	1.02	<1		<2	3	<1		0.18
RMD-257	GRAB	6640 Blundell Rd.	18-Jan-17	0.83	<1		<2	4	<1		0.18
RMD-204	GRAB	3180 Granville Ave.	19-Jan-17	0.67	<1		<2	4	<1		0.1
RMD-206	GRAB	4251 Moncton St.	19-Jan-17	0.81	<1		<2	3	<1		0.18
RMD-216	GRAB	11080 No. 2 Rd.	19-Jan-17	0.86	<1		<2	3	<1		0.15
RMD-280	GRAB	11500 McKenzie Rd.	19-Jan-17	0.79	<1		2	4	<1		0.19
RMD-212	GRAB	Opp. 8600 Ryan Rd.	19-Jan-17	0.74	<1		<2	4	<1	1	0.11
RMD-208	GRAB	13200 No. 4 Rd.	19-Jan-17	0.88	<1		<2	3	<1		0.22
RMD-205	GRAB	13851 Steveston Hwy.	19-Jan-17	0.67	<1		<2	3	<1		0.15
RMD-202	GRAB	1500 Valemont Way	19-Jan-17	0.56	<1		<2	2	<1		0.21
RMD-214	GRAB	11720 Westminster Hwy.	19-Jan-17	1.06	<1		<2	3	<1	1	0.16
RMD-267	GRAB	17240 Fedoruk	19-Jan-17	0.66	<1		4	2	<1		0.23
RMD-249	GRAB	23000 Blk. Dyke Rd.	19 Jan 17 19-Jan-17	0.65	<1		<2	3	<1		0.22
RMD-276	GRAB	22271 Cochrane Drive	19 Jan 17 19-Jan-17	0.62	<1		<2	3	<1		0.17
1110 270	GRAB	5180 Smith Cres.	19-Ja CIN				<2	4	<1		0.17

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-203	GRAB	23260 Westminster Hwy.	19-Jan-17	0.46	<1		<2	4	<1		0.28
RMD-251	GRAB	5951McCallan Rd.	23-Jan-17	0.48	<1		<2	4	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	23-Jan-17	0.68	<1		<2	5	<1		0.12
RMD-252	GRAB	9751 Pendleton Rd.	23-Jan-17	0.63	<1		<2	5	<1		0.14
RMD-274	GRAB	10920 Springwood Court	23-Jan-17	0.68	<1		<2	5	<1		0.12
RMD-253	GRAB	11051 No 3 Rd.	23-Jan-17	1	<1		2	4	<1		0.13
RMD-269	GRAB	14951 Triangle Rd.	23-Jan-17	0.78	<1		<2	4	<1		0.11
RMD-270	GRAB	8200 Jones Rd.	23-Jan-17	0.75	<1		<2	5	<1		0.13
RMD-254	GRAB	5300 No. 3 Rd.	23-Jan-17	0.81	<1		<2	4	<1		0.15
RMD-256	GRAB	1000 Blk. McDonald Rd.	23-Jan-17	0.55	<1		<2	5	<1		0.67
RMD-255	GRAB	6000 Blk. Miller Rd.	23-Jan-17	1.01	<1		<2	3	<1		0.24
RMD-271	GRAB	3800 Cessna Drive	23-Jan-17	0.91	<1		<2	5	<1		0.13
RMD-272	GRAB	751 Catalina Cres.	23-Jan-17	1.09	<1		<2	5	<1		0.09
RMD-250	GRAB	6071 Azure Rd.	23-Jan-17	0.76	<1		<2	6	<1		0.11
RMD-263	GRAB	12560 Cambie Rd.	25-Jan-17	0.93	<1		<2	3	<1		0.09
RMD-264	GRAB	13100 Mitchell Rd.	25-Jan-17	0.33	<1		<2	4	<1		0.23
RMD-277	GRAB	Opp. 11280 Twigg Place	25-Jan-17	0.83	<1		2	4	<1		0.23
RMD-262	GRAB	13799 Commerce Pkwy.	25-Jan-17 25-Jan-17	0.66	<1		<2	3	<1		0.23
RMD-202	GRAB	6651 Fraserwood Place	25-Jan-17 25-Jan-17	0.00	<1		<2	4	<1		0.03
RMD-278	GRAB			0.55			<2	3	-		0.11
		Opp. 20371 Westminster Hwy.	25-Jan-17		<1				<1		
RMD-261	GRAB	9911 Sidaway Rd.	25-Jan-17	0.96	<1		<2	3	<1		0.09
RMD-260	GRAB	11111 Horseshoe Way	25-Jan-17	0.75	<1		<2	3	<1		0.1
RMD-259	GRAB	10020 Amethyst Ave.	25-Jan-17	0.86	<1		<2	3	<1		0.1
RMD-266	GRAB	9380 General Currie Rd.	25-Jan-17	0.82	<1		2	3	<1		0.11
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	25-Jan-17	0.92	<1		<2	4	<1		0.11
RMD-258	GRAB	7000 Blk. Dyke Rd.	25-Jan-17	0.91	<1		<2	4	<1		0.08
RMD-257	GRAB	6640 Blundell Rd.	25-Jan-17	0.86	<1		<2	3	<1		0.09
RMD-204	GRAB	3180 Granville Ave.	27-Jan-17	0.76	<1		<2	4	<1		0.08
RMD-206	GRAB	4251 Moncton St.	27-Jan-17	0.86	<1		<2	3	<1		0.08
RMD-216	GRAB	11080 No. 2 Rd.	27-Jan-17	0.79	<1		<2	3	<1		0.07
RMD-280	GRAB	11500 McKenzie Rd.	27-Jan-17	0.9	<1		<2	4	<1		0.11
RMD-212	GRAB	Opp. 8600 Ryan Rd.	27-Jan-17	0.9	<1		2	2	<1		0.11
RMD-208	GRAB	13200 No. 4 Rd.	27-Jan-17	0.89	<1		<2	3	<1		0.09
RMD-205	GRAB	13851 Steveston Hwy.	27-Jan-17	0.64	<1		<2	3	<1		0.09
RMD-202	GRAB	1500 Valemont Way	27-Jan-17	0.66	<1		<2	2	<1		0.12
RMD-214	GRAB	11720 Westminster Hwy.	27-Jan-17	0.95	<1		<2	4	<1		0.07
RMD-267	GRAB	17240 Fedoruk	27-Jan-17	0.69	<1		<2	4	<1		0.07
RMD-249	GRAB	23000 Blk. Dyke Rd.	27-Jan-17	0.65	<1		<2	3	<1		0.08
RMD-276	GRAB	22271 Cochrane Drive	27-Jan-17	0.71	<1		<2	4	<1		0.08
RMD-275	GRAB	5180 Smith Cres.	27-Jan-17	0.63	<1		<2	4	<1		0.1
RMD-203	GRAB	23260 Westminster Hwy.	27-Jan-17	0.64	<1		<2	3	<1		0.09
RMD-251	GRAB	5951McCallan Rd.	30-Jan-17	0.87	<1		<2	4	<1		0.09
RMD-273	GRAB	Opp. 8331 Fairfax Place	30-Jan-17	0.68	<1		<2	5	<1		0.09
RMD-252	GRAB	9751 Pendleton Rd.	30-Jan-17	0.71	<1		<2	4	<1		0.09
RMD-274	GRAB	10920 Springwood Court	30-Jan-17	0.77	<1		<2	5	<1		0.09
RMD-250	GRAB	6071 Azure Rd.	30-Jan-17	0.8	<1		<2	5	<1		0.08
RMD-271	GRAB	3800 Cessna Drive	30-Jan-17	1	<1		<2	5	<1		0.1
RMD-272	GRAB	751 Catalina Cres.	30-Jan-17	0.98	<1		<2	5	<1		0.24
RMD-255	GRAB	6000 Blk. Miller Rd.	30-Jan-17	1.03	<1		<2	4	<1		0.35
RMD-256	GRAB	1000 Blk. McDonald Rd.	30-Jan-17	0.62	<1		<2	5	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	30-Jan-17	0.88	<1		<2	5	<1		0.08
RMD-270	GRAB	8200 Jones Rd.	30-Jan-17	0.91	<1		<2	4	<1		0.09
RMD-269	GRAB	14951 Triangle Rd.	30-Jan-17	0.79	<1		<2	4	<1		0.09
RMD-253	GRAB	11051 No 3 Rd.	30-Jan-17	0.91	<1		<2	4	<1		0.08
	5.0.0		55 Juli 1/	0.01	-			-		1	0.00

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mIs	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-264	GRAB	13100 Mitchell Rd.	1-Feb-17	1.01	<1		<2	4	<1		0.12
RMD-277	GRAB	Opp. 11280 Twigg Place	1-Feb-17	0.96	<1		<2	4	<1		0.13
RMD-262	GRAB	13799 Commerce Pkwy.	1-Feb-17	0.7	<1		<2	5	<1		0.11
RMD-278	GRAB	6651 Fraserwood Place	1-Feb-17	0.65	<1		<2	4	<1		0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	1-Feb-17	0.72	<1		<2	4	<1		0.12
RMD-261	GRAB	9911 Sidaway Rd.	1-Feb-17	0.91	<1		<2	4	<1		0.13
RMD-260	GRAB	11111 Horseshoe Way	1-Feb-17	0.69	<1	-	<2	5	<1		0.1
RMD-259	GRAB	10020 Amethyst Ave.	1-Feb-17	0.81	<1	-	<2	4	<1		0.13
RMD-266	GRAB	9380 General Currie Rd.	1-Feb-17	0.99	<1		<2	4	<1		0.11
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	1-Feb-17	0.96	<1		<2	4	<1		0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	1-Feb-17	1.36	<1		<2	4	<1		0.09
RMD-257	GRAB	6640 Blundell Rd.	1-Feb-17	0.73	<1		<2	5	<1		0.09
RMD-204	GRAB	3180 Granville Ave.	2-Feb-17	0.95	<1		<2	4	<1		0.12
RMD-206	GRAB	4251 Moncton St.	2-Feb-17	0.88	<1		<2	4	<1		0.13
RMD-216	GRAB	11080 No. 2 Rd.	2-Feb-17	0.93	<1		<2	4	<1		0.1
RMD-280	GRAB	11500 McKenzie Rd.	2-Feb-17	0.65	<1		<2	5	<1		0.15
RMD-212	GRAB	Opp. 8600 Ryan Rd.	2-Feb-17	0.84	<1		<2	4	<1		0.11
RMD-212	GRAB	13200 No. 4 Rd.	2-Feb-17	0.93	<1		<2	4	<1		0.11
RMD-208	GRAB		2-Feb-17 2-Feb-17	0.95			<2	4	<1		0.11
		13851 Steveston Hwy.			<1			4			
RMD-202	GRAB	1500 Valemont Way	2-Feb-17	0.7	<1		<2		<1		0.11
RMD-214	GRAB	11720 Westminster Hwy.	2-Feb-17	1.05	<1		6	4	<1		0.1
RMD-267	GRAB	17240 Fedoruk	2-Feb-17	0.69	<1		<2	5	<1		0.09
RMD-249	GRAB	23000 Blk. Dyke Rd.	2-Feb-17	0.69	<1		2	5	<1		0.1
RMD-276	GRAB	22271 Cochrane Drive	2-Feb-17	0.7	<1		<2	4	<1		0.1
RMD-275	GRAB	5180 Smith Cres.	2-Feb-17	0.68	<1		<2	5	<1		0.1
RMD-203	GRAB	23260 Westminster Hwy.	2-Feb-17	0.69	<1		2	5	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	6-Feb-17	0.89	<1		<2	4	<1		0.07
RMD-252	GRAB	9751 Pendleton Rd.	6-Feb-17	0.7	<1		<2	4	<1		0.09
RMD-253	GRAB	11051 No 3 Rd.	6-Feb-17	0.79	<1		<2	4	<1		0.14
RMD-269	GRAB	14951 Triangle Rd.	6-Feb-17	0.71	<1		<2	2	<1		0.09
RMD-270	GRAB	8200 Jones Rd.	6-Feb-17	0.91	<1		<2	4	<1		0.08
RMD-254	GRAB	5300 No. 3 Rd.	6-Feb-17	0.87	<1		<2	3	<1		0.09
RMD-256	GRAB	1000 Blk. McDonald Rd.	6-Feb-17	0.64	<1		<2	3	<1		0.46
RMD-255	GRAB	6000 Blk. Miller Rd.	6-Feb-17	0.97	<1		<2	3	<1		0.08
RMD-271	GRAB	3800 Cessna Drive	6-Feb-17	0.98	<1		<2	3	<1		0.08
RMD-272	GRAB	751 Catalina Cres.	6-Feb-17	1.03	<1		<2	4	<1		0.09
RMD-250	GRAB	6071 Azure Rd.	6-Feb-17	0.79	<1		<2	3	<1		0.1
RMD-263	GRAB	12560 Cambie Rd.	8-Feb-17	0.96	<1		<2	4	<1		0.11
RMD-264	GRAB	13100 Mitchell Rd.	8-Feb-17	1.1	<1		<2	4	<1		0.19
RMD-277	GRAB	Opp. 11280 Twigg Place	8-Feb-17	0.88	<1		<2	4	<1		0.15
RMD-262	GRAB	13799 Commerce Pkwy.	8-Feb-17	0.71	<1		<2	3	<1		0.1
RMD-278	GRAB	6651 Fraserwood Place	8-Feb-17	0.71	<1		<2	3	<1		0.28
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	8-Feb-17	0.71	<1		<2	4	<1		0.12
RMD-261	GRAB	9911 Sidaway Rd.	8-Feb-17	0.89	<1		<2	3	<1		0.13
RMD-260	GRAB	11111 Horseshoe Way	8-Feb-17	0.7	<1		<2	4	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	8-Feb-17	0.99	<1		<2	4	<1		0.1
RMD-266	GRAB	9380 General Currie Rd.	8-Feb-17	0.94	<1		<2	4	<1		0.09
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	8-Feb-17	0.78	<1		<2	5	<1		0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	8-Feb-17	0.82	<1		<2	4	<1		0.21
RMD-257	GRAB	6640 Blundell Rd.	8-Feb-17	1.1	<1		<2	3	<1		0.1
RMD-204	GRAB	3180 Granville Ave.	10-Feb-17	0.72	<1		<2	4	<1		0.11
RMD-206	GRAB	4251 Moncton St.	10-Feb-17	0.72	<1	<u> </u>	<2	4	<1		0.08
RMD-216	GRAB	11080 No. 2 Rd.	10-Feb-17	0.85	<1		<2	4	<1		0.08
RMD-280	GRAB	11500 McKenzie Rd.	10 Feb-17	0.75	<1		<2	5	<1		0.09
200	SILAD	11000 Michenzie Mu.	10.001/	0.75	-1		~2	5	~+	1	0.05

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-208	GRAB	13200 No. 4 Rd.	10-Feb-17	0.96	<1		<2	4	<1		0.09
RMD-205	GRAB	13851 Steveston Hwy.	10-Feb-17	0.72	<1		<2	4	<1		0.12
RMD-202	GRAB	1500 Valemont Way	10-Feb-17	0.7	<1		<2	4	<1		0.08
RMD-214	GRAB	11720 Westminster Hwy.	10-Feb-17	0.96	<1		<2	4	<1		0.11
RMD-267	GRAB	17240 Fedoruk	10-Feb-17	0.59	<1		<2	5	<1		0.08
RMD-249	GRAB	23000 Blk. Dyke Rd.	10-Feb-17	0.93	<1		<2	4	<1		0.09
RMD-276	GRAB	22271 Cochrane Drive	10-Feb-17	0.91	<1		<2	4	<1		0.07
RMD-275	GRAB	5180 Smith Cres.	10-Feb-17	0.58	<1		<2	4	<1		0.1
RMD-203	GRAB	23260 Westminster Hwy.	10-Feb-17	0.66	<1		<2	4	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	14-Feb-17	0.66	<1		<2	4	<1		0.15
RMD-273	GRAB	Opp. 8331 Fairfax Place	14-Feb-17	0.78	<1		<2	5	<1		0.11
RMD-252	GRAB	9751 Pendleton Rd.	14-Feb-17	0.7	<1		<2	5	<1		0.12
RMD-274	GRAB	10920 Springwood Court	14-Feb-17	0.89	<1		<2	4	<1		0.09
RMD-253	GRAB	11051 No 3 Rd.	14-Feb-17	0.64	<1		<2	4	<1		0.18
RMD-269	GRAB	14951 Triangle Rd.	14-Feb-17	0.75	<1		<2	5	<1		0.1
RMD-270	GRAB	8200 Jones Rd.	14-Feb-17	0.63	<1		2	4	<1		0.19
RMD-254	GRAB	5300 No. 3 Rd.	14-Feb-17	0.65	<1		<2	4	<1		0.23
RMD-256	GRAB	1000 Blk. McDonald Rd.	14-Feb-17	0.64	<1		<2	5	<1		0.58
RMD-255	GRAB	6000 Blk. Miller Rd.	14-Feb-17	0.62	<1		<2	5	<1		0.75
RMD-271	GRAB	3800 Cessna Drive	14-Feb-17	0.94	<1		<2	6	<1		0.17
RMD-271	GRAB	751 Catalina Cres.	14-Feb-17	0.6	<1		<2	4	<1		0.34
RMD-250	GRAB	6071 Azure Rd.	14-Feb-17	0.62	<1		<2	5	<1		0.18
RMD-263	GRAB	12560 Cambie Rd.	15-Feb-17	0.62	<1		<2	7	<1		0.10
RMD-264	GRAB	13100 Mitchell Rd.	15-Feb-17	0.62	<1		<2	7	<1		0.19
RMD-204	GRAB	Opp. 11280 Twigg Place	15-Feb-17	0.03	<1	-	<2	5	<1		0.13
RMD-262	GRAB	13799 Commerce Pkwy.	15-Feb-17	0.6	<1		<2	5	<1		0.09
RMD-278	GRAB	6651 Fraserwood Place	15-Feb-17	0.76	<1		<2	6	<1		0.05
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	15-Feb-17	0.73	<1		<2	6	<1		0.11
RMD-261	GRAB	9911 Sidaway Rd.	15-Feb-17	0.63	<1		<2	6	<1		0.09
RMD-261	GRAB	11111 Horseshoe Way	15 Feb-17	0.67	<1		<2	6	<1		0.08
RMD-259	GRAB	10020 Amethyst Ave.	15-Feb-17	0.65	<1		<2	6	<1		0.00
RMD-266	GRAB	9380 General Currie Rd.	15-Feb-17	0.68	<1		<2	6	<1		0.11
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	15 Feb-17	0.64	<1		<2	6	<1		0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	15 Feb-17	0.62	<1		<2	6	<1		0.13
RMD-257	GRAB	6640 Blundell Rd.	15-Feb-17	0.67	<1	-	<2	6	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	16-Feb-17	0.57	<1		<2	5	<1		0.13
RMD-204	GRAB	4251 Moncton St.	16-Feb-17	0.64	<1		<2	4	<1		0.11
RMD-206	GRAB	11080 No. 2 Rd.	16-Feb-17 16-Feb-17	0.64	<1		<2	4	<1		0.11
RMD-210	GRAB	11500 McKenzie Rd.	16-Feb-17	0.53	<1	-	<2	5	<1		0.13
RMD-212	GRAB	Opp. 8600 Ryan Rd.	16-Feb-17	0.65	<1		<2	3	<1		0.12
RMD-212	GRAB	13200 No. 4 Rd.	16-Feb-17	0.05	<1		<2	4	<1		0.09
RMD-205	GRAB	13851 Steveston Hwy.	16-Feb-17	0.30	<1		<2	3	<1		0.09
RMD-203	GRAB	1500 Valemont Way	16-Feb-17	0.74			<2	4			0.03
		<i>.</i>			<1				<1		
RMD-214	GRAB	11720 Westminster Hwy.	16-Feb-17	0.67	<1		<2	3	<1		0.14
RMD-267	GRAB	17240 Fedoruk	16-Feb-17	0.66	<1		<2		<1		0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	16-Feb-17	0.68	<1		<2	4	<1		0.11
RMD-276	GRAB	22271 Cochrane Drive	16-Feb-17	0.55	<1		<2	4	<1		0.08
RMD-275	GRAB	5180 Smith Cres.	16-Feb-17	0.66	<1		<2	5	<1		0.08
RMD-203	GRAB	23260 Westminster Hwy.	16-Feb-17	0.56	<1		<2	3	<1		0.12
RMD-251	GRAB	5951McCallan Rd.	20-Feb-17	0.66	<1		<2	6	<1		0.08
RMD-273	GRAB	Opp. 8331 Fairfax Place	20-Feb-17	0.59	<1		<2	6	<1		0.12
RMD-252	GRAB	9751 Pendleton Rd.	20-Feb-17	0.62	<1		<2	6	<1		0.09
RMD-274	GRAB	10920 Springwood Court	20-Feb-17	0.64	<1		<2	6	<1		0.08
RMD-253	GRAB	11051 No 3 Rd.	20-Feb-17	0.68	<1	_	<2	6	<1		0.11
RMD-269	GRAB	14951 Triangle Rd.	20-F@ 1 N	JU.69	25	5	<2	6	<1		0.09

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-270	GRAB	8200 Jones Rd.	20-Feb-17	0.68	<1		<2	6	<1		0.12
RMD-254	GRAB	5300 No. 3 Rd.	20-Feb-17	0.61	<1		<2	7	<1		0.09
RMD-256	GRAB	1000 Blk. McDonald Rd.	20-Feb-17	0.74	<1		<2	6	<1		0.33
RMD-255	GRAB	6000 Blk. Miller Rd.	20-Feb-17	0.57	<1		<2	5	<1		0.26
RMD-271	GRAB	3800 Cessna Drive	20-Feb-17	0.52	<1		<2	6	<1		0.1
RMD-272	GRAB	751 Catalina Cres.	20-Feb-17	0.61	<1		<2	6	<1		0.09
RMD-250	GRAB	6071 Azure Rd.	20-Feb-17	0.63	<1		<2	6	<1		0.08
RMD-263	GRAB	12560 Cambie Rd.	22-Feb-17	0.64	<1		<2	5	<1		0.1
RMD-264	GRAB	13100 Mitchell Rd.	22-Feb-17	0.62	<1		<2	6	<1		0.09
RMD-277	GRAB	Opp. 11280 Twigg Place	22-Feb-17	0.67	<1		<2	5	<1		0.1
RMD-262	GRAB	13799 Commerce Pkwy.	22-Feb-17	0.68	<1		<2	4	<1		0.1
RMD-278	GRAB	6651 Fraserwood Place	22-Feb-17	0.65	<1		<2	5	<1		0.09
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	22-Feb-17	0.67	<1		<2	5	<1		0.1
RMD-261	GRAB	9911 Sidaway Rd.	22-Feb-17	0.7	<1		<2	5	<1		0.1
RMD-260	GRAB	11111 Horseshoe Way	22-Feb-17	0.65	<1		<2	5	<1		0.09
RMD-259	GRAB	10020 Amethyst Ave.	22-Feb-17	0.63	<1		<2	5	<1		0.09
RMD-266	GRAB	9380 General Currie Rd.	22-Feb-17	0.72	<1		<2	5	<1		0.1
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	22-Feb-17	0.58	<1		<2	5	<1		0.18
RMD-258	GRAB	7000 Blk. Dyke Rd.	22-Feb-17	0.63	<1		<2	6	<1		0.08
RMD-257	GRAB	6640 Blundell Rd.	22-Feb-17	0.69	<1		2	6	<1		0.08
RMD-204	GRAB	3180 Granville Ave.	24-Feb-17	0.67	<1		<2	4	<1		0.14
RMD-206	GRAB	4251 Moncton St.	24-Feb-17	0.62	<1		<2	3	<1		0.22
RMD-216	GRAB	11080 No. 2 Rd.	24-Feb-17	0.62	<1		<2	2	<1		0.26
RMD-280	GRAB	11500 McKenzie Rd.	24-Feb-17	0.66	<1		2	2	<1		0.12
RMD-212	GRAB	Opp. 8600 Ryan Rd.	24-Feb-17	0.68	<1		<2	3	<1		0.13
RMD-208	GRAB	13200 No. 4 Rd.	24-Feb-17	0.67	<1		<2	3	<1		0.11
RMD-205	GRAB	13851 Steveston Hwy.	24-Feb-17	0.65	<1		<2	3	<1		0.15
RMD-202	GRAB	1500 Valemont Way	24-Feb-17	0.67	<1		<2	3	<1		0.11
RMD-214	GRAB	11720 Westminster Hwy.	24-Feb-17	0.67	<1		<2	2	<1		0.12
RMD-267	GRAB	17240 Fedoruk	24-Feb-17	0.64	<1		<2	3	<1		0.23
RMD-249	GRAB	23000 Blk. Dyke Rd.	24-Feb-17	0.64	<1		<2	3	<1		0.11
RMD-276	GRAB	22271 Cochrane Drive	24-Feb-17	0.62	<1		<2	3	<1		0.14
RMD-275	GRAB	5180 Smith Cres.	24-Feb-17	0.58	<1		<2	3	<1		0.1
RMD-203	GRAB	23260 Westminster Hwy.	24-Feb-17	0.64	<1		<2	3	<1		0.2
RMD-251	GRAB	5951McCallan Rd.	27-Feb-17	0.51	<1		<2	6	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	27-Feb-17	0.56	<1		<2	8	<1		0.14
RMD-252	GRAB	9751 Pendleton Rd.	27-Feb-17	0.6	<1		<2	7	<1		0.13
RMD-274	GRAB	10920 Springwood Court	27-Feb-17	0.62	<1		<2	7	<1		0.17
RMD-250	GRAB	6071 Azure Rd.	27-Feb-17	0.61	<1		2	6	<1		0.18
RMD-271	GRAB	3800 Cessna Drive	27-Feb-17	0.58	<1		<2	7	<1		0.16
RMD-272	GRAB	751 Catalina Cres.	27-Feb-17	0.62	<1		<2	6	<1		0.11
RMD-255	GRAB	6000 Blk. Miller Rd.	27-Feb-17	0.62	<1		<2	6	<1		0.35
RMD-256	GRAB	1000 Blk. McDonald Rd.	27-Feb-17	0.64	<1		<2	6	<1		0.36
RMD-254	GRAB	5300 No. 3 Rd.	27-Feb-17	0.57	<1		<2	6	<1		0.13
RMD-270	GRAB	8200 Jones Rd.	27-Feb-17	0.63	<1		2	7	<1		0.12
RMD-269	GRAB	14951 Triangle Rd.	27-Feb-17	0.47	<1		<2	7	<1		0.22
RMD-253	GRAB	11051 No 3 Rd.	27-Feb-17	0.61	<1		<2	6	<1		0.1
RMD-263	GRAB	12560 Cambie Rd.	28-Feb-17	0.71	<1		<2	3	<1		0.13
RMD-264	GRAB	13100 Mitchell Rd.	28-Feb-17	0.65	<1		<2	3	<1		0.14
RMD-262	GRAB	13799 Commerce Pkwy.	28-Feb-17	0.61	<1		<2	3	<1		0.15
RMD-278	GRAB	6651 Fraserwood Place	28-Feb-17	0.67	<1		<2	4	<1		0.14
RMD-261	GRAB	9911 Sidaway Rd.	28-Feb-17	0.65	<1		<2	3	<1		0.12
RMD-260	GRAB	11111 Horseshoe Way	28-Feb-17	0.67	<1		<2	3	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	28-Feb-17	0.61	<1		<2	4	<1		0.14
RMD-266	GRAB	9380 General Currie Rd.	28-FECIN	0.7	915	6	<2	3	<1		0.13

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mIs	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	28-Feb-17	0.62	<1		<2	5	<1		0.15
RMD-258	GRAB	7000 Blk. Dyke Rd.	28-Feb-17	0.66	<1		<2	5	<1		0.15
RMD-257	GRAB	6640 Blundell Rd.	28-Feb-17	0.71	<1		2	5	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	1-Mar-17	0.73	<1		<2	5	<1		0.14
RMD-206	GRAB	4251 Moncton St.	1-Mar-17	0.65	<1		<2	5	<1		0.18
RMD-216	GRAB	11080 No. 2 Rd.	1-Mar-17	0.67	<1		<2	5	<1		0.12
RMD-280	GRAB	11500 McKenzie Rd.	1-Mar-17	0.62	<1		<2	5	<1		0.2
RMD-212	GRAB	Opp. 8600 Ryan Rd.	1-Mar-17	0.65	<1		<2	5	<1		0.12
RMD-208	GRAB	13200 No. 4 Rd.	1-Mar-17	0.79	<1		<2	4	<1		0.14
RMD-205	GRAB	13851 Steveston Hwy.	1-Mar-17	0.64	<1		<2	5	<1		0.38
RMD-202	GRAB	1500 Valemont Way	1-Mar-17	0.51	<1		<2	5	<1		0.11
RMD-214	GRAB	, 11720 Westminster Hwy.	1-Mar-17	0.74	<1		<2	4	<1		0.1
RMD-267	GRAB	17240 Fedoruk	1-Mar-17	0.63	<1		<2	5	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	1-Mar-17	0.61	<1		<2	5	<1		0.09
RMD-276	GRAB	22271 Cochrane Drive	1-Mar-17	0.64	<1		<2	5	<1		0.05
RMD-275	GRAB	5180 Smith Cres.	1-Mar-17	0.6	<1		<2	5	<1		0.20
RMD-203	GRAB	23260 Westminster Hwy.	1-Mar-17	0.63	<1		<2	5	<1		0.13
RMD-203	GRAB	5951McCallan Rd.	6-Mar-17	0.03	<1		<2	5	<1		0.13
RMD-231	GRAB			0.66	<1		<2	5	<1		0.12
RMD-275	GRAB	Opp. 8331 Fairfax Place	6-Mar-17	0.66			<2 <2	5			0.12
		9751 Pendleton Rd.	6-Mar-17		<1				<1		
RMD-274	GRAB	10920 Springwood Court	6-Mar-17	0.63	<1		<2	4	<1		0.13
RMD-253	GRAB	11051 No 3 Rd.	6-Mar-17	0.66	<1		<2	4	<1		0.1
RMD-269	GRAB	14951 Triangle Rd.	6-Mar-17	0.55	<1		<2	5	<1		0.1
RMD-270	GRAB	8200 Jones Rd.	6-Mar-17	0.67	<1		<2	5	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	6-Mar-17	0.58	<1		<2	5	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	6-Mar-17	0.64	<1		<2	4	<1		0.37
RMD-255	GRAB	6000 Blk. Miller Rd.	6-Mar-17	0.67	<1		<2	4	<1		0.21
RMD-271	GRAB	3800 Cessna Drive	6-Mar-17	0.69	<1		<2	4	<1		0.11
RMD-272	GRAB	751 Catalina Cres.	6-Mar-17	0.64	<1		<2	4	<1		0.11
RMD-250	GRAB	6071 Azure Rd.	6-Mar-17	0.67	<1		<2	5	<1		0.15
RMD-263	GRAB	12560 Cambie Rd.	8-Mar-17	0.87	<1		<2	5	<1		0.23
RMD-264	GRAB	13100 Mitchell Rd.	8-Mar-17	0.79	<1		<2	4	<1		0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	8-Mar-17	1.13	<1		<2	4	<1		0.29
RMD-262	GRAB	13799 Commerce Pkwy.	8-Mar-17	0.7	<1		<2	4	<1		0.15
RMD-278	GRAB	6651 Fraserwood Place	8-Mar-17	0.66	<1		<2	4	<1		0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	8-Mar-17	0.7	<1		<2	4	<1		0.14
RMD-261	GRAB	9911 Sidaway Rd.	8-Mar-17	0.79	<1		<2	4	<1		0.16
RMD-260	GRAB	11111 Horseshoe Way	8-Mar-17	1.07	<1		<2	4	<1		0.26
RMD-259	GRAB	10020 Amethyst Ave.	8-Mar-17	1.08	<1		<2	5	<1		0.2
RMD-266	GRAB	9380 General Currie Rd.	8-Mar-17	0.83	<1		<2	4	<1		0.16
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	8-Mar-17	0.99	<1		<2	4	<1		0.14
RMD-258	GRAB	7000 Blk. Dyke Rd.	8-Mar-17	1.06	<1		<2	4	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	8-Mar-17	0.79	<1		<2	4	<1		0.22
RMD-204	GRAB	3180 Granville Ave.	10-Mar-17	0.72	<1		<2	5	<1		0.14
RMD-206	GRAB	4251 Moncton St.	10-Mar-17	0.79	<1		<2	5	<1		0.16
RMD-216	GRAB	11080 No. 2 Rd.	10-Mar-17	0.8	<1		<2	5	<1		0.17
RMD-280	GRAB	11500 McKenzie Rd.	10-Mar-17	0.78	<1		<2	5	<1	1	0.12
RMD-212	GRAB	Opp. 8600 Ryan Rd.	10-Mar-17	0.73	<1		<2	5	<1		0.15
RMD-208	GRAB	13200 No. 4 Rd.	10-Mar-17	0.9	<1		<2	5	<1		0.12
RMD-205	GRAB	13851 Steveston Hwy.	10-Mar-17	0.63	<1		<2	5	<1		0.17
RMD-202	GRAB	1500 Valemont Way	10-Mar-17	0.56	<1		<2	5	<1		0.1
RMD-214	GRAB	11720 Westminster Hwy.	10-Mar-17	0.81	<1		<2	5	<1		0.2
RMD-267	GRAB	17240 Fedoruk	10 Mar-17	0.61	<1		<2	6	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	10 Mar-17	0.6	<1		<2	5	<1		0.15
RMD-249	GRAB	22271 Cochrane Drive	10-Mai-17				<2	7	<1		0.13

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-275	GRAB	5180 Smith Cres.	10-Mar-17	0.57	<1		<2	5	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	10-Mar-17	0.6	<1		<2	5	<1		0.21
RMD-251	GRAB	5951McCallan Rd.	13-Mar-17	0.79	<1		<2	3	<1		0.11
RMD-273	GRAB	Opp. 8331 Fairfax Place	13-Mar-17	0.63	<1		<2	5	<1		0.13
RMD-252	GRAB	9751 Pendleton Rd.	13-Mar-17	0.7	<1		<2	4	<1		0.18
RMD-274	GRAB	10920 Springwood Court	13-Mar-17	0.68	<1		[Poor spreading.] LA	5	<1		0.12
RMD-253	GRAB	11051 No 3 Rd.	13-Mar-17	0.78	<1		<2	3	<1		0.13
RMD-269	GRAB	14951 Triangle Rd.	13-Mar-17	0.55	<1		<2	5	<1		0.13
RMD-270	GRAB	8200 Jones Rd.	13-Mar-17	0.78	<1		<2	3	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	13-Mar-17	0.73	<1		<2	4	<1		0.16
RMD-256	GRAB	1000 Blk. McDonald Rd.	13-Mar-17	0.62	<1		<2	4	<1		0.27
RMD-255	GRAB	6000 Blk. Miller Rd.	13-Mar-17	0.82	<1		<2	3	<1		0.3
RMD-271	GRAB	3800 Cessna Drive	13-Mar-17	0.73	<1		<2	4	<1		0.12
RMD-272	GRAB	751 Catalina Cres.	13-Mar-17	0.82	<1		<2	3	<1		0.12
RMD-250	GRAB	6071 Azure Rd.	13-Mar-17	0.66	<1		<2	4	<1		0.09
RMD-263	GRAB	12560 Cambie Rd.	15-Mar-17	0.83	<1		2	3	<1		0.13
RMD-264	GRAB	13100 Mitchell Rd.	15-Mar-17	0.88	<1		<2	4	<1		0.13
RMD-277	GRAB	Opp. 11280 Twigg Place	15-Mar-17	0.83	<1		<2	4	<1		0.13
RMD-262	GRAB	13799 Commerce Pkwy.	15-Mar-17	0.63	<1		<2	4	<1		0.14
RMD-278	GRAB	6651 Fraserwood Place	15-Mar-17	0.69	<1		<2	3	<1		0.14
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	15-Mar-17	0.72	<1		<2	4	<1		0.18
RMD-261	GRAB	9911 Sidaway Rd.	15-Mar-17	0.76	<1		2	4	<1		0.22
RMD-260	GRAB	11111 Horseshoe Way	15-Mar-17	0.6	<1		<2	4	<1		0.11
RMD-259	GRAB	10020 Amethyst Ave.	15-Mar-17	0.76	<1		<2	4	<1		0.21
RMD-266	GRAB	9380 General Currie Rd.	15-Mar-17	0.85	<1		<2	3	<1		0.11
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	15-Mar-17	0.82	<1		<2	4	<1		0.24
RMD-258	GRAB	7000 Blk. Dyke Rd.	15-Mar-17	0.8	<1		<2	4	<1		0.1
RMD-257	GRAB	6640 Blundell Rd.	15-Mar-17	0.75	<1		<2	4	<1		0.13
RMD-204	GRAB	3180 Granville Ave.	16-Mar-17	0.44	<1		<2	5	<1		0.11
RMD-206	GRAB	4251 Moncton St.	16-Mar-17	0.81	<1		<2	3	<1		0.13
RMD-216	GRAB	11080 No. 2 Rd.	16-Mar-17	0.82	<1		<2	3	<1		0.13
RMD-280	GRAB	11500 McKenzie Rd.	16-Mar-17	0.65	<1		<2	4	<1		0.14
RMD-212	GRAB	Opp. 8600 Ryan Rd.	16-Mar-17	0.79	<1		4	4	<1		0.13
RMD-208	GRAB	13200 No. 4 Rd.	16-Mar-17	0.82	<1		<2	4	<1		0.12
RMD-205	GRAB	13851 Steveston Hwy.	16-Mar-17	0.69	<1		<2	4	<1		0.11
RMD-202	GRAB	1500 Valemont Way	16-Mar-17	0.67	<1		<2	3	<1		0.1
RMD-214	GRAB	11720 Westminster Hwy.	16-Mar-17	0.78	<1		<2	4	<1		0.16
RMD-267	GRAB	17240 Fedoruk	16-Mar-17	0.7	<1		<2	3	<1		0.12
RMD-249	GRAB	23000 Blk. Dyke Rd.	16-Mar-17	0.87	<1		<2	4	<1		0.09
RMD-276	GRAB	22271 Cochrane Drive	16-Mar-17	0.69	<1		<2	4	<1		0.09
RMD-275	GRAB	5180 Smith Cres.	16-Mar-17	0.63	<1		<2	4	<1		0.14
RMD-203	GRAB	23260 Westminster Hwy.	16-Mar-17	0.68	<1		<2	4	<1		0.09
RMD-251	GRAB	5951McCallan Rd.	20-Mar-17	0.83	<1		<2	5	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	20-Mar-17	0.8	<1		<2	8	<1		0.16
RMD-252	GRAB	9751 Pendleton Rd.	20-Mar-17	0.65	<1		<2	6	<1		0.08
RMD-274	GRAB	10920 Springwood Court	20-Mar-17	0.97	<1		<2	7	<1	1	0.13
RMD-253	GRAB	11051 No 3 Rd.	20-Mar-17	0.91	<1		2	5	<1		0.18
RMD-269	GRAB	14951 Triangle Rd.	20-Mar-17	0.71	<1		<2	4	<1		0.25
RMD-270	GRAB	8200 Jones Rd.	20-Mar-17	0.91	<1		<2	5	<1	1	0.16
RMD-254	GRAB	5300 No. 3 Rd.	20-Mar-17	0.87	<1		<2	6	<1	1	0.12
RMD-256	GRAB	1000 Blk. McDonald Rd.	20-Mar-17	0.72	<1		<2	6	<1	1	0.26
RMD-255	GRAB	6000 Blk. Miller Rd.	20-Mar-17	1	<1		<2	5	<1	1	0.3
RMD-271	GRAB	3800 Cessna Drive	20-Mar-17	0.81	<1		<2	6	<1	1	0.1
RMD-272	GRAB	751 Catalina Cres.	20-Mar-17	0.94	<1		<2	6	<1	1	0.13
RMD-250	GRAB	6071 Azure Rd.	20-MCN(0	<2	5	<1		0.19

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-263	GRAB	12560 Cambie Rd.	22-Mar-17	0.84	<1		<2	5	<1		0.14
RMD-277	GRAB	Opp. 11280 Twigg Place	22-Mar-17	0.71	<1		<2	5	<1		0.1
RMD-264	GRAB	13100 Mitchell Rd.	22-Mar-17	0.83	<1		<2	4	<1		0.14
RMD-262	GRAB	13799 Commerce Pkwy.	22-Mar-17	0.68	<1		<2	4	<1		0.16
RMD-278	GRAB	6651 Fraserwood Place	22-Mar-17	0.61	<1		2	4	<1		0.16
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	22-Mar-17	0.66	<1		<2	4	<1		0.23
RMD-261	GRAB	9911 Sidaway Rd.	22-Mar-17	0.65	<1		<2	4	<1		0.11
RMD-260	GRAB	11111 Horseshoe Way	22-Mar-17	0.72	<1		<2	5	<1		0.12
RMD-259	GRAB	10020 Amethyst Ave.	22-Mar-17	0.72	<1		<2	5	<1		0.27
RMD-266	GRAB	9380 General Currie Rd.	22-Mar-17	0.73	<1		<2	4	<1		0.14
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	22-Mar-17	0.79	<1		<2	4	<1		0.1
RMD-258	GRAB	7000 Blk. Dyke Rd.	22-Mar-17	0.75	<1		<2	5	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	22-Mar-17	0.82	<1		<2	4	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	24-Mar-17	1.23	<1		<2	6	<1		0.14
RMD-206	GRAB	4251 Moncton St.	24-Mar-17	0.76	<1		2	5	<1		0.19
RMD-216	GRAB	11080 No. 2 Rd.	24-Mar-17	0.8	<1		<2	5	<1		0.15
RMD-280	GRAB	11500 McKenzie Rd.	24-Mar-17	0.91	<1		<2	5	<1		0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	24-Mar-17	0.78	<1		<2	5	<1		0.1
RMD-208	GRAB	13200 No. 4 Rd.	24-Mar-17	0.69	<1		<2	4	<1		0.14
RMD-205	GRAB	13851 Steveston Hwy.	24-Mar-17	0.7	<1		<2	4	<1		0.12
RMD-202	GRAB	1500 Valemont Way	24-Mar-17	0.51	<1		<2	4	<1		0.24
RMD-214	GRAB	11720 Westminster Hwy.	24-Mar-17	0.89	<1		<2	4	<1		0.22
RMD-267	GRAB	17240 Fedoruk	24-Mar-17	0.65	<1		4	5	<1		0.16
RMD-249	GRAB	23000 Blk. Dyke Rd.	24-Mar-17	0.66	<1		<2	4	<1		0.13
RMD-276	GRAB	22271 Cochrane Drive	24-Mar-17	0.62	<1		<2	5	<1		0.13
RMD-275	GRAB	5180 Smith Cres.	24-Mar-17	0.59	<1		<2	5	<1		0.14
RMD-203	GRAB	23260 Westminster Hwy.	24-Mar-17	0.65	<1		<2	4	<1		0.14
RMD-251	GRAB	5951McCallan Rd.	27-Mar-17	0.9	<1		<2	4	<1		0.45
RMD-273	GRAB	Opp. 8331 Fairfax Place	27-Mar-17	0.7	<1		2	8	<1		0.37
RMD-252	GRAB	9751 Pendleton Rd.	27-Mar-17	0.75	<1		<2	5	<1		0.42
RMD-274	GRAB	10920 Springwood Court	27-Mar-17	0.82	<1		<2	6	<1		0.33
RMD-253	GRAB	11051 No 3 Rd.	27-Mar-17	0.89	<1		<2	4	<1		0.37
RMD-269	GRAB	14951 Triangle Rd.	27-Mar-17	0.66	<1		<2	5	<1		0.55
RMD-270	GRAB	8200 Jones Rd.	27-Mar-17	0.84	<1		<2	5	<1		0.31
RMD-254	GRAB	5300 No. 3 Rd.	27-Mar-17	0.88	<1		<2	4	<1		0.28
RMD-255	GRAB	6000 Blk. Miller Rd.	27-Mar-17	0.86	<1		<2	4	<1		0.32
RMD-255	GRAB	1000 Blk. McDonald Rd.	27-Mar-17	0.93	<1		<2	5	<1		0.34
RMD-230	GRAB	3800 Cessna Drive	27-Mar-17	0.95	<1		<2	5	<1		0.34
RMD-271	GRAB	751 Catalina Cres.	27-Mar-17	0.84	<1		<2	5	<1		0.37
RMD-250	GRAB	6071 Azure Rd.	27-Mar-17	0.84	<1		<2	5	<1		0.13
RMD-263	GRAB	12560 Cambie Rd.	29-Mar-17	0.83	<1		<2	5	<1		0.08
RMD-263	GRAB	13799 Commerce Pkwy.	29-Mar-17	0.75	<1		<2	4	<1		0.00
RMD-278	GRAB	6651 Fraserwood Place	29-Mar-17	0.72	<1		<2	4	<1		0.18
RMD-278	GRAB	Opp. 20371 Westminster Hwy.	29-Mar-17	0.72	<1		<2	3	<1		0.18
RMD-261	GRAB	9911 Sidaway Rd.	29-Mar-17	0.74	<1		2	4	<1		0.00
RMD-261	GRAB	11111 Horseshoe Way	29-Mar-17	0.62	<1		<2	4	<1		0.11
RMD-260 RMD-259	GRAB	10020 Amethyst Ave.	29-Mar-17 29-Mar-17	0.62	<1		<2	4	<1		0.1
RMD-259	GRAB	9380 General Currie Rd.	29-Mar-17 29-Mar-17	0.78	<1		<2	4	<1		0.20
				0.61	<1		<2	4	<1		
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	29-Mar-17				<2 <2				0.53
RMD-258	GRAB	7000 Blk. Dyke Rd.	29-Mar-17	0.82	<1		<2 <2	4	<1		0.21
RMD-257	GRAB	6640 Blundell Rd.	29-Mar-17	0.89	<1		<2 <2	5	<1		0.1
RMD-204	GRAB	3180 Granville Ave.	30-Mar-17	0.67	<1				<1		0.12
RMD-206	GRAB	4251 Moncton St.	30-Mar-17	0.79	<1		<2	4	<1		0.11
RMD-216	GRAB	11080 No. 2 Rd.	30-Mar-17	0.84	<1 915	_	<2		<1		0.09
RMD-280	GRAB	11500 McKenzie Rd.	30-MC N	- <u>''</u> ار	25	5	<2	6	<1		0.12

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-212	GRAB	Opp. 8600 Ryan Rd.	30-Mar-17	0.86	<1		<2	5	<1		0.09
RMD-208	GRAB	13200 No. 4 Rd.	30-Mar-17	0.86	<1		<2	4	<1		0.09
RMD-205	GRAB	13851 Steveston Hwy.	30-Mar-17	0.72	<1		<2	4	<1		0.08
RMD-202	GRAB	1500 Valemont Way	30-Mar-17	0.68	<1	-	<2	5	<1		0.09
RMD-214	GRAB	11720 Westminster Hwy.	30-Mar-17	0.94	<1		<2	4	<1		0.1
RMD-267	GRAB	17240 Fedoruk	30-Mar-17	0.71	<1		<2	5	<1		0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	30-Mar-17	0.67	<1		<2	5	<1		0.09
RMD-276	GRAB	22271 Cochrane Drive	30-Mar-17	0.72	<1	-	<2	4	<1		0.07
RMD-275	GRAB	5180 Smith Cres.	30-Mar-17	0.65	<1		<2	5	<1		0.09
RMD-203	GRAB	23260 Westminster Hwy.	30-Mar-17	0.69	<1		<2	5	<1		0.09
RMD-251	GRAB	5951McCallan Rd.	3-Apr-17	0.79	<1		<2	5	<1		0.11
RMD-273	GRAB	Opp. 8331 Fairfax Place	3-Apr-17	0.51	<1		<2	4	<1		0.12
RMD-252	GRAB	9751 Pendleton Rd.	3-Apr-17	0.73	<1		<2	4	<1		0.11
RMD-274	GRAB	10920 Springwood Court	3-Apr-17	0.85	<1		<2	7	<1		0.11
RMD-253	GRAB	11051 No 3 Rd.	3-Apr-17	0.05	<1		<2	5	<1		0.09
RMD-269	GRAB	14951 Triangle Rd.	3-Apr-17	0.64	<1		<2	5	<1		0.09
RMD-270	GRAB	8200 Jones Rd.	3-Apr-17	0.88	<1		<2	4	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	3-Apr-17	0.75	<1		<2	4	<1		0.09
RMD-254	GRAB	1000 Blk. McDonald Rd.	3-Apr-17 3-Apr-17	0.73	<1		<2	6	<1		0.09
RMD-255	GRAB	6000 Blk. Miller Rd.		0.02	<1		<2	4	<1		0.42
			3-Apr-17					5			
RMD-271	GRAB	3800 Cessna Drive	3-Apr-17	0.84	<1		<2	_	<1		0.12
RMD-272	GRAB	751 Catalina Cres.	3-Apr-17	0.85	<1		<2	5	<1		0.1
RMD-250	GRAB	6071 Azure Rd.	3-Apr-17	0.83	<1		2	6	<1		0.13
RMD-263	GRAB	12560 Cambie Rd.	5-Apr-17	1.17	<1		<2	5	<1		0.08
RMD-264	GRAB	13100 Mitchell Rd.	5-Apr-17	0.89	<1		<2	5	<1		0.1
RMD-277	GRAB	Opp. 11280 Twigg Place	5-Apr-17	0.9	<1		<2	5	<1		0.15
RMD-262	GRAB	13799 Commerce Pkwy.	5-Apr-17	0.76	<1		<2	5	<1		0.15
RMD-278	GRAB	6651 Fraserwood Place	5-Apr-17	0.69	<1		4	5	<1		0.16
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	5-Apr-17	0.73	<1		<2	5	<1		0.11
RMD-261	GRAB	9911 Sidaway Rd.	5-Apr-17	0.72	<1		<2	5	<1		0.09
RMD-260	GRAB	11111 Horseshoe Way	5-Apr-17	0.91	<1		<2	5	<1		0.11
RMD-259	GRAB	10020 Amethyst Ave.	5-Apr-17	0.83	<1		<2	5	<1		0.31
RMD-266	GRAB	9380 General Currie Rd.	5-Apr-17	0.83	<1		<2	4	<1		0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	5-Apr-17	0.77	<1		<2	5	<1		0.09
RMD-258	GRAB	7000 Blk. Dyke Rd.	5-Apr-17	0.98	<1		<2	5	<1		0.11
RMD-257	GRAB	6640 Blundell Rd.	5-Apr-17	0.93	<1		<2	5	<1		0.1
RMD-204	GRAB	3180 Granville Ave.	7-Apr-17	0.71	<1		<2	5	<1		0.11
RMD-206	GRAB	4251 Moncton St.	7-Apr-17	0.71	<1		<2	5	<1		0.15
RMD-216	GRAB	11080 No. 2 Rd.	7-Apr-17	0.84	<1		<2	4	<1		0.1
RMD-280	GRAB	11500 McKenzie Rd.	7-Apr-17	0.7	<1		<2	6	<1		0.09
RMD-212	GRAB	Opp. 8600 Ryan Rd.	7-Apr-17	0.83	<1		<2	6	<1		0.08
RMD-208	GRAB	13200 No. 4 Rd.	7-Apr-17	0.75	<1		<2	5	<1		0.09
RMD-205	GRAB	13851 Steveston Hwy.	7-Apr-17	0.67	<1		<2	5	<1		0.11
RMD-202	GRAB	1500 Valemont Way	7-Apr-17	0.66	<1		<2	5	<1		0.1
RMD-214	GRAB	11720 Westminster Hwy.	7-Apr-17	0.83	<1		<2	4	<1		0.09
RMD-267	GRAB	17240 Fedoruk	7-Apr-17	0.67	<1		<2	5	<1		0.08
RMD-249	GRAB	23000 Blk. Dyke Rd.	7-Apr-17	0.71	<1		<2	5	<1		0.09
RMD-276	GRAB	22271 Cochrane Drive	7-Apr-17	0.72	<1		<2	5	<1		0.11
RMD-275	GRAB	5180 Smith Cres.	7-Apr-17	0.69	<1		<2	5	<1		0.08
RMD-203	GRAB	23260 Westminster Hwy.	7-Apr-17	0.55	<1		<2	4	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	10-Apr-17	0.82	<1		8	5	<1		0.08
RMD-270	GRAB	8200 Jones Rd.	10-Apr-17	0.83	<1		<2	5	<1		0.09
RMD-253	GRAB	11051 No 3 Rd.	10-Apr-17	0.81	<1		<2	5	<1		0.09
RMD-269	GRAB	14951 Triangle Rd.	10-Apr-17	0.68	<1		<2	5	<1		0.07
RMD-274	GRAB	10920 Springwood Court	10-ACIN (36	n	<2	6	<1	1	0.08

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-252	GRAB	9751 Pendleton Rd.	10-Apr-17	0.77	<1		<2	6	<1		0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	10-Apr-17	0.67	<1		2	8	<1		0.1
RMD-250	GRAB	6071 Azure Rd.	10-Apr-17	0.77	<1		<2	5	<1		0.07
RMD-256	GRAB	1000 Blk. McDonald Rd.	10-Apr-17	0.71	<1		<2	6	<1		0.12
RMD-255	GRAB	6000 Blk. Miller Rd.	10-Apr-17	0.95	<1		<2	5	<1		0.11
RMD-272	GRAB	751 Catalina Cres.	10-Apr-17	0.94	<1		<2	5	<1		0.08
RMD-251	GRAB	5951McCallan Rd.	11-Apr-17	0.69	<1		<2	5	<1		0.08
RMD-271	GRAB	3800 Cessna Drive	11-Apr-17	0.74	<1		<2	5	<1		0.08
RMD-263	GRAB	12560 Cambie Rd.	11-Apr-17	0.86	<1		<2	7	<1		0.14
RMD-264	GRAB	13100 Mitchell Rd.	11-Apr-17	0.66	<1		<2	7	<1		0.16
RMD-277	GRAB	Opp. 11280 Twigg Place	11-Apr-17	0.59	<1		<2	8	<1		0.18
RMD-262	GRAB	13799 Commerce Pkwy.	11-Apr-17	0.75	<1		<2	7	<1		0.1
RMD-278	GRAB	6651 Fraserwood Place	11-Apr-17	0.52	<1		<2	7	<1		0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	11-Apr-17	0.66	<1		<2	5	<1		0.15
RMD-261	GRAB	9911 Sidaway Rd.	11-Apr-17	0.76	<1		<2	7	<1		0.15
RMD-260	GRAB	11111 Horseshoe Way	11-Apr-17	0.79	<1		<2	7	<1		0.11
RMD-259	GRAB	10020 Amethyst Ave.	11-Apr-17	0.83	<1		<2	7	<1		0.26
RMD-266	GRAB	9380 General Currie Rd.	11-Apr-17	0.79	<1		<2	7	<1		0.3
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	11-Apr-17	0.83	<1		<2	6	<1		0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	11-Apr-17	0.89	<1		<2	7	<1		0.15
RMD-257	GRAB	6640 Blundell Rd.	11-Apr-17	0.92	<1		<2	7	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	12-Apr-17	0.6	<1		<2	7	<1		0.18
RMD-206	GRAB	4251 Moncton St.	12-Apr-17	0.81	<1		<2	8	<1		0.23
RMD-216	GRAB	11080 No. 2 Rd.	12-Apr-17	0.85	<1		<2	8	<1		0.11
RMD-280	GRAB	11500 McKenzie Rd.	12-Apr-17	0.72	<1		<2	8	<1		0.18
RMD-212	GRAB	Opp. 8600 Ryan Rd.	12-Apr-17	0.8	<1		<2	8	<1		0.13
RMD-208	GRAB	13200 No. 4 Rd.	12-Apr-17	0.8	<1		<2	9	<1		0.16
RMD-205	GRAB	13851 Steveston Hwy.	12-Apr-17	0.79	<1		<2	8	<1		0.16
RMD-202	GRAB	1500 Valemont Way	12-Apr-17	0.59	<1		<2	8	<1		0.13
RMD-214	GRAB	11720 Westminster Hwy.	12-Apr-17	0.94	<1		<2	8	<1		0.15
RMD-267	GRAB	17240 Fedoruk	12-Apr-17	0.69	<1		<2	9	<1		0.16
RMD-249	GRAB	23000 Blk. Dyke Rd.	12-Apr-17	0.7	<1		<2	8	<1		0.14
RMD-276	GRAB	22271 Cochrane Drive	12-Apr-17	0.67	<1		<2	8	<1		0.1
RMD-275	GRAB	5180 Smith Cres.	12-Apr-17	0.76	<1		<2	8	<1		0.14
RMD-203	GRAB	23260 Westminster Hwy.	12-Apr-17	0.77	<1		<2	8	<1		0.07
RMD-251	GRAB	5951McCallan Rd.	18-Apr-17	0.84	<1		<2	5	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	18-Apr-17	0.78	<1		<2	10	<1		0.12
RMD-252	GRAB	9751 Pendleton Rd.	18-Apr-17	0.73	<1		54	5	<1		0.11
RMD-274	GRAB	10920 Springwood Court	18-Apr-17	0.75	<1		4	6	<1		0.13
RMD-253	GRAB	11051 No 3 Rd.	18-Apr-17	0.77	<1		<2	5	<1		0.09
RMD-269	GRAB	14951 Triangle Rd.	18-Apr-17	0.74	<1		<2	5	<1		0.08
RMD-270	GRAB	8200 Jones Rd.	18-Apr-17	0.84	<1		<2	5	<1		0.18
RMD-254	GRAB	5300 No. 3 Rd.	18-Apr-17	0.73	<1		<2	5	<1		0.1
RMD-256	GRAB	1000 Blk. McDonald Rd.	18-Apr-17	0.63	<1		<2	6	<1		0.62
RMD-255	GRAB	6000 Blk. Miller Rd.	18-Apr-17	0.81	<1		<2	5	<1		0.18
RMD-271	GRAB	3800 Cessna Drive	18-Apr-17	0.88	<1		<2	5	<1		0.22
RMD-272	GRAB	751 Catalina Cres.	18-Apr-17	0.68	<1		<2	5	<1		0.09
RMD-250	GRAB	6071 Azure Rd.	18-Apr-17	0.78	<1		<2	6	<1		0.1
RMD-263	GRAB	12560 Cambie Rd.	19-Apr-17	0.84	<1		<2	6	<1		0.13
RMD-277	GRAB	Opp. 11280 Twigg Place	19-Apr-17	0.75	<1		<2	5	<1		0.22
RMD-264	GRAB	13100 Mitchell Rd.	19-Apr-17	0.86	<1		<2	5	<1		0.09
RMD-262	GRAB	13799 Commerce Pkwy.	19-Apr-17	0.83	<1		<2	5	<1		0.13
RMD-278	GRAB	6651 Fraserwood Place	19-Apr-17	0.72	<1		<2	6	<1		0.23
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	19-Apr-17	0.69	<1		<2	5	<1		0.11
RMD-261	GRAB	9911 Sidaway Rd.	19-A CINO	0.87	26	1	<2	5	<1		0.15

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-260	GRAB	11111 Horseshoe Way	19-Apr-17	0.88	<1		<2	5	<1	-	0.13
RMD-259	GRAB	10020 Amethyst Ave.	19-Apr-17	0.78	<1		<2	7	<1		0.32
RMD-266	GRAB	9380 General Currie Rd.	19-Apr-17	0.83	<1		<2	5	<1		0.18
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	19-Apr-17	0.98	<1		<2	5	<1		0.17
RMD-258	GRAB	7000 Blk. Dyke Rd.	19-Apr-17	0.95	<1		<2	6	<1		0.13
RMD-257	GRAB	6640 Blundell Rd.	19-Apr-17	0.91	<1		<2	5	<1		0.16
RMD-204	GRAB	3180 Granville Ave.	21-Apr-17	0.73	<1		<2	8	<1		0.1
RMD-206	GRAB	4251 Moncton St.	21-Apr-17	0.75	<1		<2	6	<1		0.12
RMD-216	GRAB	11080 No. 2 Rd.	21-Apr-17	0.82	<1		<2	5	<1		0.13
RMD-280	GRAB	11500 McKenzie Rd.	21-Apr-17	0.87	<1		<2	7	<1		0.17
RMD-212	GRAB	Opp. 8600 Ryan Rd.	21-Apr-17	0.91	<1		2	5	<1		0.11
RMD-208	GRAB	13200 No. 4 Rd.	21-Apr-17	0.78	<1		<2	6	<1		0.09
RMD-205	GRAB	13851 Steveston Hwy.	21-Apr-17	0.67	<1		<2	6	<1		0.12
RMD-202	GRAB	1500 Valemont Way	21-Apr-17	0.72	<1		<2	6	<1		0.12
RMD-214	GRAB	11720 Westminster Hwy.	21-Apr-17	0.93	<1		<2	5	<1		0.15
RMD-267	GRAB	17240 Fedoruk	21-Apr-17	0.65	<1		<2	7	<1		0.11
RMD-249	GRAB	23000 Blk. Dyke Rd.	21-Apr-17	0.76	<1		<2	6	<1		0.11
RMD-276	GRAB	22271 Cochrane Drive	21-Apr-17	0.68	<1		<2	6	<1		0.09
RMD-275	GRAB	5180 Smith Cres.	21-Apr-17	0.64	<1		<2	7	<1		0.17
RMD-203	GRAB	23260 Westminster Hwy.	21-Apr-17	0.72	<1		<2	6	<1		0.14
RMD-251	GRAB	5951McCallan Rd.	24-Apr-17	0.8	<1		<2	9	<1		0.09
RMD-273	GRAB	Opp. 8331 Fairfax Place	24-Apr-17	0.74	<1		<2	12	<1		0.11
RMD-252	GRAB	9751 Pendleton Rd.	24-Apr-17	0.7	<1		2	10	<1		0.09
RMD-274	GRAB	10920 Springwood Court	24-Apr-17	0.69	<1		<2	10	<1		0.1
RMD-250	GRAB	6071 Azure Rd.	24-Apr-17	0.79	<1		<2	7	<1		0.11
RMD-271	GRAB	3800 Cessna Drive	24-Apr-17	0.72	<1		<2	8	<1		0.08
RMD-272	GRAB	751 Catalina Cres.	24-Apr-17	0.8	<1		<2	7	<1		0.17
RMD-255	GRAB	6000 Blk. Miller Rd.	24-Apr-17	0.87	<1		<2	7	<1		0.17
RMD-256	GRAB	1000 Blk. McDonald Rd.	24-Apr-17	0.52	<1		<2	9	<1		0.17
RMD-254	GRAB	5300 No. 3 Rd.	24-Apr-17	0.7	<1		<2	7	<1		0.1
RMD-270	GRAB	8200 Jones Rd.	24-Apr-17	0.8	<1		<2	7	<1		0.09
RMD-269	GRAB	14951 Triangle Rd.	24-Apr-17	0.66	<1		<2	7	<1		0.07
RMD-253	GRAB	11051 No 3 Rd.	24-Apr-17	0.72	<1		2	6	<1		0.09
RMD-263	GRAB	12560 Cambie Rd.	26-Apr-17	0.72	<1		4	6	<1		0.16
RMD-264	GRAB	13100 Mitchell Rd.	26-Apr-17	0.86	<1		<2	6	<1		0.16
RMD-277	GRAB	Opp. 11280 Twigg Place	26-Apr-17	0.76	<1		<2	6	<1		0.21
RMD-262	GRAB	13799 Commerce Pkwy.	26-Apr-17	0.7	<1		<2	7	<1		0.1
RMD-278	GRAB	6651 Fraserwood Place	26-Apr-17	0.64	<1		<2	7	<1		0.18
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	26-Apr-17	0.74	<1		<2	7	<1		0.21
RMD-261	GRAB	9911 Sidaway Rd.	26-Apr-17	0.72	<1		<2	7	<1		0.36
RMD-260	GRAB	11111 Horseshoe Way	26-Apr-17	0.83	<1		<2	6	<1		0.23
RMD-259	GRAB	10020 Amethyst Ave.	26-Apr-17	0.79	<1		<2	7	<1		0.3
RMD-266	GRAB	9380 General Currie Rd.	26-Apr-17	0.83	<1		<2	7	<1		0.17
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	26-Apr-17	0.82	<1		<2	7	<1		0.27
RMD-258	GRAB	7000 Blk. Dyke Rd.	26-Apr-17	0.8	<1		2	7	<1	1	0.17
RMD-257	GRAB	6640 Blundell Rd.	26-Apr-17	0.75	<1		<2	7	<1	1	0.26
RMD-204	GRAB	3180 Granville Ave.	27-Apr-17	0.69	<1		2	6	<1	1	0.09
RMD-206	GRAB	4251 Moncton St.	27-Apr-17	0.77	<1		<2	6	<1	1	0.1
RMD-216	GRAB	11080 No. 2 Rd.	27-Apr-17	0.82	<1		<2	6	<1	1	0.12
RMD-280	GRAB	11500 McKenzie Rd.	27-Apr-17	0.59	<1		<2	9	<1		0.13
RMD-212	GRAB	Opp. 8600 Ryan Rd.	27-Apr-17	0.74	<1		<2	7	<1		0.1
RMD-208	GRAB	13200 No. 4 Rd.	27-Apr-17	0.76	<1		<2	7	<1	1	0.14
RMD-205	GRAB	13851 Steveston Hwy.	27-Apr-17	0.62	<1		<2	7	<1		0.15
RMD-202	GRAB	1500 Valemont Way	27-Apr-17	0.63	<1		<2	7	<1		0.09
RMD-214	GRAB	, 11720 Westminster Hwy.	27-ACN(36	2	<2	7	<1		0.26

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-267	GRAB	17240 Fedoruk	27-Apr-17	0.64	<1		<2	7	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	27-Apr-17	0.65	<1		<2	7	<1		0.13
RMD-276	GRAB	22271 Cochrane Drive	27-Apr-17	0.64	<1		<2	7	<1		0.11
RMD-275	GRAB	5180 Smith Cres.	27-Apr-17	0.66	<1		2	7	<1		0.12
RMD-203	GRAB	23260 Westminster Hwy.	27-Apr-17	0.69	<1		<2	7	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	1-May-17	0.8	<1		<2	7	<1		0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	1-May-17	0.67	<1		<2	10	<1		0.11
RMD-252	GRAB	9751 Pendleton Rd.	1-May-17	0.79	<1		<2	7	<1		0.12
RMD-274	GRAB	10920 Springwood Court	1-May-17	0.56	<1		<2	8	<1		0.11
RMD-253	GRAB	11051 No 3 Rd.	1-May-17	0.62	<1		<2	7	<1		0.13
RMD-269	GRAB	14951 Triangle Rd.	1-May-17	0.63	<1		<2	6	<1		0.15
RMD-270	GRAB	8200 Jones Rd.	1-May-17	0.87	<1		<2	7	<1		0.18
RMD-254	GRAB	5300 No. 3 Rd.	1-May-17	0.86	<1		<2	7	<1		0.21
RMD-256	GRAB	1000 Blk. McDonald Rd.	1-May-17	0.49	<1		<2	7	<1		0.76
RMD-255	GRAB	6000 Blk. Miller Rd.	1-May-17	0.88	<1		<2	7	<1		0.21
RMD-271	GRAB	3800 Cessna Drive	, 1-May-17	0.67	<1		<2	7	<1		0.1
RMD-272	GRAB	751 Catalina Cres.	1-May-17	0.67	<1		<2	7	<1		0.1
RMD-250	GRAB	6071 Azure Rd.	1-May-17	0.6	<1		2	7	<1		0.1
RMD-263	GRAB	12560 Cambie Rd.	3-May-17	0.64	<1		<2	7	<1		0.13
RMD-264	GRAB	13100 Mitchell Rd.	3-May-17	0.65	<1		<2	6	<1		0.15
RMD-277	GRAB	Opp. 11280 Twigg Place	3-May-17	0.62	<1		<2	7	<1		0.14
RMD-262	GRAB	13799 Commerce Pkwy.	3-May-17	0.73	<1		<2	8	<1		0.39
RMD-278	GRAB	6651 Fraserwood Place	3-May-17	0.69	<1		4	7	<1		0.15
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	3-May-17	0.71	<1		6	7	<1		0.13
RMD-261	GRAB	9911 Sidaway Rd.	3-May-17	0.71	<1		<2	7	<1		0.10
RMD-261	GRAB	11111 Horseshoe Way	3-May-17	0.79	<1		<2	8	<1		0.10
RMD-259	GRAB	10020 Amethyst Ave.	3-May-17	0.96	<1		<2	7	<1		0.31
RMD-266	GRAB	9380 General Currie Rd.	3-May-17	0.87	<1		<2	7	<1		0.33
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	3-May-17	0.91	<1		<2	7	<1		0.11
RMD-258	GRAB	7000 Blk. Dyke Rd.	3-May-17	0.8	<1		<2	8	<1		0.12
RMD-257	GRAB	6640 Blundell Rd.	3-May-17	0.81	<1		<2	7	<1		0.25
RMD-204	GRAB	3180 Granville Ave.	5-May-17	0.68	<1		<2	10	<1		0.11
RMD-204	GRAB	4251 Moncton St.	5-May-17	0.73	<1		<2	10	<1		0.11
RMD-216	GRAB	11080 No. 2 Rd.	5-May-17	0.72	<1		<2	8	<1		0.10
RMD-280	GRAB	11500 McKenzie Rd.	5-May-17	0.72	<1		<2	9	<1		0.15
RMD-212	GRAB	Opp. 8600 Ryan Rd.	5-May-17	0.85	<1		<2	8	<1		0.19
RMD-212	GRAB	13200 No. 4 Rd.	5-May-17 5-May-17	0.85	<1		<2	8	<1		4.5
RMD-205	GRAB	13851 Steveston Hwy.	5-May-17	0.70	<1		<2	8	<1		1.1
RMD-202	GRAB	1500 Valemont Way	5-May-17	0.73	<1		<2	8	<1		0.09
RMD-202	GRAB	11720 Westminster Hwy.					<2	7			
			5-May-17	0.68	<1				<1		0.18
RMD-267	GRAB	17240 Fedoruk	5-May-17	0.61	<1		<2	10	<1		0.11
RMD-249	GRAB	23000 Blk. Dyke Rd.	5-May-17	0.6	<1		<2	8	<1		0.13
RMD-275	GRAB	5180 Smith Cres.	5-May-17	0.59	<1		<2	9	<1		0.12
RMD-276	GRAB	22271 Cochrane Drive	5-May-17	0.65	<1		<2	10	<1		0.1
RMD-203	GRAB	23260 Westminster Hwy.	5-May-17	0.71	<1		<2	8	<1		0.25
RMD-251	GRAB	5951McCallan Rd.	8-May-17	0.9	<1		<2	9	<1		0.36
RMD-273	GRAB	Opp. 8331 Fairfax Place	8-May-17	0.68	<1		<2	14	<1		0.18
RMD-252	GRAB	9751 Pendleton Rd.	8-May-17	0.61	<1		<2	10	<1		0.17
RMD-274	GRAB	10920 Springwood Court	8-May-17	0.75	<1		<2	12	<1		0.13
RMD-253	GRAB	11051 No 3 Rd.	8-May-17	0.69	<1		<2	10	<1		0.22
RMD-269	GRAB	14951 Triangle Rd.	8-May-17	0.69	<1		<2	10	<1		0.35
RMD-270	GRAB	8200 Jones Rd.	8-May-17	0.85	<1		<2	10	<1		0.19
RMD-254	GRAB	5300 No. 3 Rd.	8-May-17	0.73	<1		2	10	<1		0.32
RMD-256	GRAB	1000 Blk. McDonald Rd.	8-May-17	0.56	<1		<2	12	<1		0.76
RMD-255	GRAB	6000 Blk. Miller Rd.	8-MaC1N(. 94	26	3	2	9	<1		2

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-271	GRAB	3800 Cessna Drive	8-May-17	0.87	<1		<2	9	<1		0.16
RMD-272	GRAB	751 Catalina Cres.	8-May-17	0.92	<1		<2	9	<1		0.16
RMD-250	GRAB	6071 Azure Rd.	, 8-May-17	0.89	<1		<2	10	<1		0.55
RMD-263	GRAB	12560 Cambie Rd.	, 10-May-17	0.73	<1		<2	9	<1		0.16
RMD-264	GRAB	13100 Mitchell Rd.	, 10-May-17	0.77	<1		<2	10	<1		0.16
RMD-277	GRAB	Opp. 11280 Twigg Place	10-May-17	0.8	<1		<2	10	<1		0.16
RMD-262	GRAB	13799 Commerce Pkwy.	10-May-17	0.68	<1		<2	10	<1		0.43
RMD-278	GRAB	6651 Fraserwood Place	10-May-17	0.68	<1		<2	10	<1		0.16
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	10-May-17	0.69	<1		<2	10	<1		0.1
RMD-261	GRAB	9911 Sidaway Rd.	10-May-17	0.65	<1		<2	10	<1		0.13
RMD-260	GRAB	11111 Horseshoe Way	10-May-17	0.75	<1		<2	10	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	10-May-17	0.71	<1		<2	12	<1		0.64
RMD-266	GRAB	9380 General Currie Rd.	10 May 17	0.84	<1		2	10	<1		0.16
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	10 May 17	0.81	<1		<2	10	<1		0.10
RMD-258	GRAB	7000 Blk. Dyke Rd.	10-May-17	0.73	<1		<2	10	<1		0.11
RMD-258	GRAB	6640 Blundell Rd.	10-May-17	0.73	<1		<2	10	<1		0.17
RMD-204	GRAB	3180 Granville Ave.	10-Way-17 11-May-17	0.92	<1		<2	10	<1		0.14
-								9	_		
RMD-216	GRAB	11080 No. 2 Rd.	11-May-17	0.79	<1		<2		<1		0.1
RMD-280	GRAB	11500 McKenzie Rd.	11-May-17	0.55	<1		<2	11	<1		0.15
RMD-212	GRAB	Opp. 8600 Ryan Rd.	11-May-17	1.02	<1		2	9	<1		0.11
RMD-208	GRAB	13200 No. 4 Rd.	11-May-17	0.8	<1		<2	9	<1		0.11
RMD-205	GRAB	13851 Steveston Hwy.	11-May-17	0.81	<1		<2	9	<1		0.11
RMD-202	GRAB	1500 Valemont Way	11-May-17	0.76	<1		2	9	<1		0.08
RMD-214	GRAB	11720 Westminster Hwy.	11-May-17	1.15	<1		<2	10	<1		0.09
RMD-206	GRAB	4251 Moncton St.	11-May-17	0.73	<1		<2	10	<1		0.12
RMD-267	GRAB	17240 Fedoruk	11-May-17	1	<1		<2	11	<1		0.09
RMD-249	GRAB	23000 Blk. Dyke Rd.	11-May-17	0.7	<1		<2	11	<1		0.1
RMD-276	GRAB	22271 Cochrane Drive	11-May-17	0.69	<1		<2	9	<1		0.1
RMD-275	GRAB	5180 Smith Cres.	11-May-17	0.94	<1		<2	10	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	11-May-17	0.67	<1		4	10	<1		0.08
RMD-251	GRAB	5951McCallan Rd.	15-May-17	0.88	<1		<2	10	<1		0.15
RMD-273	GRAB	Opp. 8331 Fairfax Place	15-May-17	0.59	<1		<2	15	<1		0.19
RMD-252	GRAB	9751 Pendleton Rd.	15-May-17	0.67	<1		<2	10	<1		0.21
RMD-274	GRAB	10920 Springwood Court	15-May-17	0.7	<1		<2	12	<1		0.34
RMD-253	GRAB	11051 No 3 Rd.	15-May-17	0.81	<1		<2	10	<1		0.64
RMD-269	GRAB	14951 Triangle Rd.	15-May-17	0.7	<1		<2	10	<1		0.14
RMD-270	GRAB	8200 Jones Rd.	15-May-17	0.82	<1		<2	10	<1		0.18
RMD-254	GRAB	5300 No. 3 Rd.	15-May-17	0.77	<1		<2	11	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	15-May-17	0.58	<1		<2	11	<1		0.37
RMD-255	GRAB	6000 Blk. Miller Rd.	15-May-17	0.9	<1		<2	10	<1		0.49
RMD-271	GRAB	3800 Cessna Drive	15-May-17	0.85	<1		<2	10	<1		0.14
RMD-272	GRAB	751 Catalina Cres.	15-May-17	0.92	<1		<2	10	<1		0.16
RMD-250	GRAB	6071 Azure Rd.	15-May-17	0.9	<1		<2	10	<1		0.17
RMD-263	GRAB	12560 Cambie Rd.	17-May-17	0.84	<1		<2	7	<1		0.17
RMD-264	GRAB	13100 Mitchell Rd.	17-May-17	0.91	<1		<2	7	<1		0.22
RMD-277	GRAB	Opp. 11280 Twigg Place	17-May-17	0.86	<1		<2	7	<1		0.17
RMD-262	GRAB	13799 Commerce Pkwy.	17-May-17	0.8	<1		<2	7	<1	[0.34
RMD-278	GRAB	6651 Fraserwood Place	17-May-17	0.75	<1		<2	7	<1		0.17
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	17-May-17	0.79	<1		2	7	<1	[0.12
RMD-261	GRAB	9911 Sidaway Rd.	17-May-17	0.68	<1		<2	7	<1		0.16
RMD-260	GRAB	11111 Horseshoe Way	17-May-17	0.79	<1		<2	7	<1		0.12
RMD-259	GRAB	10020 Amethyst Ave.	17-May-17	0.8	<1		<2	9	<1		0.47
RMD-266	GRAB	9380 General Currie Rd.	17-May-17	0.84	<1		<2	7	<1		0.55
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	, 17-May-17	0.78	<1		<2	8	<1		0.15
RMD-258	GRAB	7000 Blk. Dyke Rd.	17-MC N		00	4	<2	9	<1		0.11

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-257	GRAB	6640 Blundell Rd.	17-May-17	0.88	<1		<2	7	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	19-May-17	0.83	<1		<2	8	<1		0.78
RMD-206	GRAB	4251 Moncton St.	19-May-17	0.79	<1		<2	8	<1		0.24
RMD-216	GRAB	11080 No. 2 Rd.	19-May-17	1.38	<1		<2	7	<1		0.1
RMD-280	GRAB	11500 McKenzie Rd.	19-May-17	0.82	<1		6	10	<1		0.11
RMD-212	GRAB	Opp. 8600 Ryan Rd.	19-May-17	0.72	<1		<2	7	<1		0.13
RMD-208	GRAB	13200 No. 4 Rd.	19-May-17	0.76	<1		<2	8	<1		0.09
RMD-205	GRAB	13851 Steveston Hwy.	19-May-17	0.78	<1		<2	8	<1		0.1
RMD-202	GRAB	1500 Valemont Way	19-May-17	0.83	<1		2	7	<1		0.09
RMD-214	GRAB	11720 Westminster Hwy.	19-May-17	0.95	<1		<2	8	<1		0.12
RMD-267	GRAB	17240 Fedoruk	19-May-17	0.76	<1		<2	7	<1		0.09
RMD-249	GRAB	23000 Blk. Dyke Rd.	19-May-17	0.8	<1		<2	8	<1		0.13
RMD-276	GRAB	22271 Cochrane Drive	19-May-17	0.84	<1		<2	8	<1		0.12
RMD-275	GRAB	5180 Smith Cres.	19-May-17	0.72	<1		<2	8	<1		0.1
RMD-203	GRAB	23260 Westminster Hwy.	19-May-17	1.22	<1		<2	8	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	23-May-17	0.77	<1		<2	7	<1		0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	23-May-17	0.82	<1		<2	15	<1		0.21
RMD-252	GRAB	9751 Pendleton Rd.	23-May-17	0.84	<1		<2	9	<1		0.09
RMD-274	GRAB	10920 Springwood Court	23-May-17	0.54	<1		<2	10	<1		0.1
RMD-253	GRAB	11051 No 3 Rd.	23-May-17	0.76	<1		<2	8	<1		0.1
RMD-269	GRAB	14951 Triangle Rd.	23-May-17	0.79	<1		<2	8	<1		0.1
RMD-270	GRAB	8200 Jones Rd.	23-May-17	0.89	<1		<2	9	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	23-May-17	0.85	<1		<2	9	<1		0.09
RMD-256	GRAB	1000 Blk. McDonald Rd.	23-May-17	0.8	<1		<2	9	<1		0.51
RMD-255	GRAB	6000 Blk. Miller Rd.	23-May-17	0.88	<1		<2	7	<1		1.8
RMD-271	GRAB	3800 Cessna Drive	23-May-17	0.91	<1		<2	9	<1		0.09
RMD-272	GRAB	751 Catalina Cres.	23-May-17	1.16	<1		<2	7	<1		0.1
RMD-250	GRAB	6071 Azure Rd.	23-May-17	1.49	<1		<2	8	<1		0.09
RMD-263	GRAB	12560 Cambie Rd.	24-May-17	0.82	<1		<2	7	<1		0.09
RMD-264	GRAB	13100 Mitchell Rd.	24-May-17	0.63	<1		<2	8	<1		0.1
RMD-277	GRAB	Opp. 11280 Twigg Place	24-May-17	0.59	<1		<2	8	<1		0.11
RMD-262	GRAB	13799 Commerce Pkwy.	24-May-17	0.67	<1		2	7	<1		0.09
RMD-278	GRAB	6651 Fraserwood Place	24-May-17	0.6	<1		<2	9	<1		0.1
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	24-May-17	0.68	<1		<2	9	<1		0.09
RMD-261	GRAB	9911 Sidaway Rd.	24-May-17	0.68	<1		<2	7	<1		0.1
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	24-May-17	0.73	<1		<2	8	<1		0.22
RMD-260	GRAB	11111 Horseshoe Way	24-May-17	0.79	<1		<2	7	<1		0.1
RMD-259	GRAB	10020 Amethyst Ave.	24-May-17	0.7	<1		4	9	<1		0.64
RMD-266	GRAB	9380 General Currie Rd.	24-May-17	0.73	<1		<2	9	<1		0.1
RMD-258	GRAB	7000 Blk. Dyke Rd.	24-May-17	0.86	<1		<2	8	<1		0.09
RMD-257	GRAB	6640 Blundell Rd.	24-May-17	0.84	<1		<2	7	<1		0.09
RMD-204	GRAB	3180 Granville Ave.	25-May-17	0.58	<1		2	9	<1		0.17
RMD-206	GRAB	4251 Moncton St.	25-May-17	0.77	<1		<2	9	<1		0.11
RMD-216	GRAB	11080 No. 2 Rd.	25-May-17	0.85	<1		<2	9	<1		0.12
RMD-280	GRAB	11500 McKenzie Rd.	, 25-May-17	0.6	<1		<2	10	<1		0.1
RMD-212	GRAB	Opp. 8600 Ryan Rd.	, 25-May-17	0.81	<1		<2	10	<1		0.12
RMD-208	GRAB	13200 No. 4 Rd.	25-May-17	0.92	<1		<2	10	<1		0.13
RMD-205	GRAB	13851 Steveston Hwy.	25-May-17	0.71	<1		<2	7	<1		0.12
RMD-202	GRAB	1500 Valemont Way	, 25-May-17	0.73	<1		<2	10	<1		0.11
RMD-214	GRAB	11720 Westminster Hwy.	25-May-17	0.82	<1		<2	10	<1		0.1
RMD-267	GRAB	17240 Fedoruk	25-May-17	0.69	<1		<2	10	<1		0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	25-May-17	0.76	<1		<2	8	<1	1	0.15
RMD-276	GRAB	22271 Cochrane Drive	25-May-17	0.73	<1		<2	9	<1		0.1
RMD-275	GRAB	5180 Smith Cres.	25-May-17	0.69	<1		<2	9	<1		0.13
RMD-203	GRAB	23260 Westminster Hwy.	25-MCN			6	<2	8	<1		0.11

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mIs	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-251	GRAB	5951McCallan Rd.	29-May-17	0.76	<1		2	8	<1		0.16
RMD-273	GRAB	Opp. 8331 Fairfax Place	29-May-17	0.57	<1		<2	15	<1		0.88
RMD-252	GRAB	9751 Pendleton Rd.	29-May-17	0.7	<1		<2	10	<1		0.11
RMD-274	GRAB	10920 Springwood Court	29-May-17	0.64	<1		<2	10	<1		0.1
RMD-253	GRAB	11051 No 3 Rd.	29-May-17	0.69	<1		<2	10	<1		0.16
RMD-269	GRAB	14951 Triangle Rd.	29-May-17	0.72	<1		<2	9	<1		0.17
RMD-270	GRAB	8200 Jones Rd.	29-May-17	0.77	<1		<2	9	<1		0.12
RMD-254	GRAB	5300 No. 3 Rd.	29-May-17	0.7	<1		<2	10	<1		0.11
RMD-256	GRAB	1000 Blk. McDonald Rd.	29-May-17	0.66	<1		<2	10	<1		0.79
RMD-255	GRAB	6000 Blk. Miller Rd.	29-May-17	0.84	<1		2	8	<1		0.35
RMD-271	GRAB	3800 Cessna Drive	29-May-17	0.82	<1		<2	9	<1		0.12
RMD-272	GRAB	751 Catalina Cres.	29-May-17	0.8	<1		<2	10	<1		0.1
RMD-250	GRAB	6071 Azure Rd.	29-May-17	0.74	<1		<2	10	<1		0.12
RMD-263	GRAB	12560 Cambie Rd.	31-May-17	0.78	<1		2	10	<1		0.13
RMD-264	GRAB	13100 Mitchell Rd.	31-May-17	0.7	<1		<2	10	<1		0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	31-May-17	0.59	<1		<2	10	<1		0.11
RMD-262	GRAB	13799 Commerce Pkwy.	31-May-17	0.75	<1		<2	10	<1		0.13
RMD-202	GRAB	6651 Fraserwood Place	31-May-17	0.79	<1		<2	9	<1		0.15
RMD-278	GRAB		-	0.73	<1		2	9	<1		0.10
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	31-May-17	0.75			6	9	<1		0.14
		9911 Sidaway Rd.	31-May-17		<1			-	_		
RMD-260	GRAB	11111 Horseshoe Way	31-May-17	0.81	<1		2	10	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	31-May-17	1.08	<1		<2	9	<1		0.92
RMD-266	GRAB	9380 General Currie Rd.	31-May-17	0.62	<1		<2	9	<1		0.13
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	31-May-17	0.76	<1		<2	9	<1		0.15
RMD-258	GRAB	7000 Blk. Dyke Rd.	31-May-17	0.78	<1		<2	10	<1		0.11
RMD-257	GRAB	6640 Blundell Rd.	31-May-17	0.68	<1		<2	10	<1		0.23
RMD-204	GRAB	3180 Granville Ave.	2-Jun-17	0.46	<1		<2	13	<1		0.14
RMD-206	GRAB	4251 Moncton St.	2-Jun-17	0.76	<1		<2	12	<1		0.11
RMD-216	GRAB	11080 No. 2 Rd.	2-Jun-17	0.74	<1		<2	11	<1		0.12
RMD-280	GRAB	11500 McKenzie Rd.	2-Jun-17	0.62	<1		<2	12	<1		0.11
RMD-212	GRAB	Opp. 8600 Ryan Rd.	2-Jun-17	0.72	<1		<2	12	<1		0.12
RMD-208	GRAB	13200 No. 4 Rd.	2-Jun-17	0.63	<1		<2	12	<1		0.13
RMD-205	GRAB	13851 Steveston Hwy.	2-Jun-17	0.56	<1		<2	11	<1		0.08
RMD-202	GRAB	1500 Valemont Way	2-Jun-17	0.58	<1		<2	11	<1		0.11
RMD-214	GRAB	11720 Westminster Hwy.	2-Jun-17	0.71	<1		<2	12	<1		0.1
RMD-267	GRAB	17240 Fedoruk	2-Jun-17	0.65	<1		<2	12	<1		0.09
RMD-249	GRAB	23000 Blk. Dyke Rd.	2-Jun-17	0.68	<1		<2	12	<1		0.1
RMD-276	GRAB	22271 Cochrane Drive	2-Jun-17	0.65	<1		<2	12	<1		0.14
RMD-275	GRAB	5180 Smith Cres.	2-Jun-17	0.64	<1		2	12	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	2-Jun-17	0.55	<1		<2	12	<1		0.08
RMD-251	GRAB	5951McCallan Rd.	5-Jun-17	0.79	<1		<2	8	<1		0.09
RMD-273	GRAB	Opp. 8331 Fairfax Place	5-Jun-17	0.63	<1		<2	17	<1		0.15
RMD-252	GRAB	9751 Pendleton Rd.	5-Jun-17	0.72	<1		<2	12	<1		0.15
RMD-274	GRAB	10920 Springwood Court	5-Jun-17	0.69	<1		<2	13	<1		0.1
RMD-253	GRAB	11051 No 3 Rd.	5-Jun-17	0.65	<1		<2	9	<1		0.12
RMD-269	GRAB	14951 Triangle Rd.	5-Jun-17	0.7	<1		2	9	<1		0.13
RMD-270	GRAB	8200 Jones Rd.	5-Jun-17	0.78	<1		2	10	<1		0.16
RMD-254	GRAB	5300 No. 3 Rd.	5-Jun-17	0.73	<1		<2	10	<1		0.12
RMD-256	GRAB	1000 Blk. McDonald Rd.	5-Jun-17	0.58	<1		2	12	<1		0.15
RMD-255	GRAB	6000 Blk. Miller Rd.	5-Jun-17	0.8	<1		2	7	<1		0.21
RMD-271	GRAB	3800 Cessna Drive	5-Jun-17	0.81	<1		<2	10	<1		0.18
RMD-272	GRAB	751 Catalina Cres.	5-Jun-17	0.86	<1		<2	9	<1		0.1
RMD-250	GRAB	6071 Azure Rd.	5-Jun-17	0.75	<1		<2	10	<1		0.14
RMD-263	GRAB	12560 Cambie Rd.	7-Jun-17	0.73	<1		<2	10	<1		0.15
RMD-264	GRAB	13100 Mitchell Rd.	7-JuCNC			6	2	10	<1		0.16

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-277	GRAB	Opp. 11280 Twigg Place	7-Jun-17	0.75	<1		<2	10	<1	-	0.17
RMD-262	GRAB	13799 Commerce Pkwy.	7-Jun-17	0.67	<1		<2	11	<1		0.17
RMD-278	GRAB	6651 Fraserwood Place	7-Jun-17	0.68	<1		<2	10	<1		0.25
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	7-Jun-17	0.83	<1		4	9	<1		0.19
RMD-261	GRAB	9911 Sidaway Rd.	7-Jun-17	0.74	<1		<2	10	<1		0.2
RMD-260	GRAB	11111 Horseshoe Way	7-Jun-17	0.73	<1		<2	10	<1		0.18
RMD-259	GRAB	10020 Amethyst Ave.	7-Jun-17	0.71	<1		<2	12	<1		0.59
RMD-266	GRAB	9380 General Currie Rd.	7-Jun-17	0.88	<1		<2	10	<1		0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	7-Jun-17	0.62	<1		<2	10	<1		0.15
RMD-258	GRAB	7000 Blk. Dyke Rd.	7-Jun-17	0.71	<1		<2	11	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	7-Jun-17	0.76	<1		<2	9	<1		0.13
RMD-204	GRAB	3180 Granville Ave.	8-Jun-17	0.69	<1		<2	12	<1		0.19
RMD-206	GRAB	4251 Moncton St.	8-Jun-17	0.88	<1		<2	12	<1		0.16
RMD-216	GRAB	11080 No. 2 Rd.	8-Jun-17	0.93	<1		<2	12	<1		0.15
RMD-280	GRAB	11500 McKenzie Rd.	8-Jun-17	0.59	<1		<2	14	<1		0.52
RMD-212	GRAB	Opp. 8600 Ryan Rd.	8-Jun-17	0.77	<1		2	12	<1		0.14
RMD-208	GRAB	13200 No. 4 Rd.	8-Jun-17	0.69	<1		2	13	<1		0.13
RMD-205	GRAB	13851 Steveston Hwy.	8-Jun-17	0.76	<1		<2	12	<1		0.12
RMD-202	GRAB	1500 Valemont Way	8-Jun-17	0.6	<1		<2	12	<1		0.1
RMD-214	GRAB	11720 Westminster Hwy.	8-Jun-17	0.69	<1		<2	12	<1		0.2
RMD-267	GRAB	17240 Fedoruk	8-Jun-17	0.7	<1		<2	11	<1		0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	8-Jun-17	0.66	<1		<2	12	<1		0.1
RMD-276	GRAB	22271 Cochrane Drive	8-Jun-17	0.7	<1		[Contaminated colony	12	<1		0.13
RMD-275	GRAB	5180 Smith Cres.	8-Jun-17	0.71	<1		spread on plate] LA <2	12	<1		0.1
RMD-203	GRAB	23260 Westminster Hwy.	8-Jun-17	0.74	<1		<2	12	<1		0.14
RMD-251	GRAB	5951McCallan Rd.	12-Jun-17	0.79	<1		<2	12	<1		0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	12-Jun-17	0.63	<1		<2	19	<1		0.55
RMD-252	GRAB	9751 Pendleton Rd.	12-Jun-17	0.68	<1		<2	10	<1		0.1
RMD-274	GRAB	10920 Springwood Court	12-Jun-17	0.65	<1		<2	10	<1		0.11
RMD-253	GRAB	11051 No 3 Rd.	12-Jun-17	0.66	<1		<2	9	<1		0.08
RMD-269	GRAB	14951 Triangle Rd.	12-Jun-17	0.65	<1		<2	10	<1		0.1
RMD-270	GRAB	8200 Jones Rd.	12-Jun-17	0.76	<1		<2	10	<1		0.1
RMD-254	GRAB	5300 No. 3 Rd.	12-Jun-17	0.76	<1		<2	10	<1		0.1
RMD-256	GRAB	1000 Blk. McDonald Rd.	12-Jun-17	0.64	<1		<2	10	<1		0.42
RMD-255	GRAB	6000 Blk. Miller Rd.	12-Jun-17	0.65	<1		<2	9	<1		0.22
RMD-271	GRAB	3800 Cessna Drive	12-Jun-17	0.8	<1		<2	12	<1		0.18
RMD-272	GRAB	751 Catalina Cres.	12-Jun-17	0.75	<1		<2	10	<1		0.09
RMD-250	GRAB	6071 Azure Rd.	12-Jun-17	0.78	<1		<2	10	<1		0.09
RMD-263	GRAB	12560 Cambie Rd.	14-Jun-17	0.79	<1		<2	12	<1		0.15
RMD-277	GRAB	Opp. 11280 Twigg Place	14-Jun-17	0.77	<1		10	12	<1		0.15
RMD-262	GRAB	13799 Commerce Pkwy.	14-Jun-17	0.74	<1		2	10	<1		0.24
RMD-278	GRAB	6651 Fraserwood Place	14-Jun-17	0.57	<1		<2	11	<1		0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	14-Jun-17	0.64	<1		<2	8	<1		0.13
RMD-261	GRAB	9911 Sidaway Rd.	14-Jun-17	0.72	<1		<2	10	<1		0.19
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	14-Jun-17	0.79	<1		<2	10	<1	[0.19
RMD-260	GRAB	11111 Horseshoe Way	14-Jun-17	0.75	<1		<2	10	<1		0.2
RMD-259	GRAB	10020 Amethyst Ave.	14-Jun-17	0.69	<1		<2	12	<1		0.36
RMD-266	GRAB	9380 General Currie Rd.	14-Jun-17	0.74	<1		<2	8	<1		0.19
RMD-258	GRAB	7000 Blk. Dyke Rd.	14-Jun-17	0.78	<1		<2	10	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	14-Jun-17	0.73	<1		<2	9	<1		0.15
RMD-204	GRAB	3180 Granville Ave.	16-Jun-17	0.45	<1		2	12	<1		0.11
RMD-206	GRAB	4251 Moncton St.	16-Jun-17	0.77	<1		<2	9	<1		0.14
RMD-216	GRAB	11080 No. 2 Rd.	16-Jun-17	0.79	<1		<2	9	<1		0.11
RMD-280	GRAB	11500 McKenzie Rd.	16-Jun-17	0.73	5 ¹	7	<2	12	<1		0.1
RMD-212	GRAB	Opp. 8600 Ryan Rd.		0.82	26	1	<2	9	<1		0.1

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mIs	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-208	GRAB	13200 No. 4 Rd.	16-Jun-17	0.78	<1		<2	9	<1		0.12
RMD-205	GRAB	13851 Steveston Hwy.	16-Jun-17	0.75	<1		<2	9	<1		0.09
RMD-202	GRAB	1500 Valemont Way	16-Jun-17	0.67	<1		<2	8	<1		0.15
RMD-214	GRAB	11720 Westminster Hwy.	16-Jun-17	0.78	<1		<2	10	<1		0.13
RMD-267	GRAB	17240 Fedoruk	16-Jun-17	0.64	<1		<2	12	<1		0.12
RMD-249	GRAB	23000 Blk. Dyke Rd.	16-Jun-17	0.71	<1		<2	10	<1		0.12
RMD-276	GRAB	22271 Cochrane Drive	16-Jun-17	0.74	<1		<2	12	<1		0.11
RMD-275	GRAB	5180 Smith Cres.	16-Jun-17	0.66	<1		<2	12	<1		0.12
RMD-203	GRAB	23260 Westminster Hwy.	16-Jun-17	0.68	<1		<2	12	<1		0.12
RMD-251	GRAB	5951McCallan Rd.	19-Jun-17	0.76	<1		<2	9	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	19-Jun-17	0.68	<1		<2	18	<1		0.37
RMD-252	GRAB	9751 Pendleton Rd.	19-Jun-17	0.6	<1		<2	12	<1		0.12
RMD-274	GRAB	10920 Springwood Court	19-Jun-17	0.62	<1		<2	12	<1		0.09
RMD-253	GRAB	11051 No 3 Rd.	19-Jun-17	0.81	<1		<2	11	<1		0.1
RMD-269	GRAB	14951 Triangle Rd.	19-Jun-17	0.68	<1		<2	10	<1		0.13
RMD-270	GRAB	8200 Jones Rd.	19-Jun-17	0.75	<1		<2	10	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	19 Jun 17	0.71	<1		2	12	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	19 Jun 17	0.58	<1		<2	12	<1		0.55
RMD-255	GRAB	6000 Blk. Miller Rd.	19 Jun 17 19-Jun-17	0.78	<1		<2	10	<1		0.34
RMD-233	GRAB	3800 Cessna Drive	19-Jun-17	0.78	<1		<2	10	<1		0.34
RMD-271	GRAB		19-Jun-17 19-Jun-17	0.08	<1		<2	12	<1		0.11
		751 Catalina Cres.									
RMD-250	GRAB	6071 Azure Rd.	19-Jun-17	0.73	<1		<2	12	<1		0.16
RMD-263	GRAB	12560 Cambie Rd.	21-Jun-17	0.78	<1		<2	11	<1		0.15
RMD-264	GRAB	13100 Mitchell Rd.	21-Jun-17	0.68	<1		<2	12	<1		0.13
RMD-277	GRAB	Opp. 11280 Twigg Place	21-Jun-17	0.87	<1		<2	12	<1		0.14
RMD-262	GRAB	13799 Commerce Pkwy.	21-Jun-17	0.7	<1		<2	10	<1		0.12
RMD-278	GRAB	6651 Fraserwood Place	21-Jun-17	0.66	<1		<2	11	<1		0.15
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	21-Jun-17	0.69	<1		<2	11	<1		0.12
RMD-261	GRAB	9911 Sidaway Rd.	21-Jun-17	0.75	<1		<2	11	<1		0.1
RMD-260	GRAB	11111 Horseshoe Way	21-Jun-17	0.81	<1		<2	11	<1		0.19
RMD-259	GRAB	10020 Amethyst Ave.	21-Jun-17	0.77	<1		<2	12	<1		0.35
RMD-266	GRAB	9380 General Currie Rd.	21-Jun-17	0.88	<1		2	11	<1		0.16
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	21-Jun-17	0.81	<1		<2	11	<1		0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	21-Jun-17	0.84	<1		<2	10	<1		0.11
RMD-257	GRAB	6640 Blundell Rd.	21-Jun-17	0.75	<1		<2	11	<1		0.11
RMD-204	GRAB	3180 Granville Ave.	22-Jun-17	0.78	<1		<2	11	<1		0.32
RMD-206	GRAB	4251 Moncton St.	22-Jun-17	0.86	<1		<2	12	<1		0.17
RMD-216	GRAB	11080 No. 2 Rd.	22-Jun-17	0.76	<1		<2	10	<1		0.19
RMD-280	GRAB	11500 McKenzie Rd.	22-Jun-17	0.63	<1		<2	15	<1		0.18
RMD-212	GRAB	Opp. 8600 Ryan Rd.	22-Jun-17	0.77	<1		<2	10	<1		0.13
RMD-208	GRAB	13200 No. 4 Rd.	22-Jun-17	0.84	<1		6	12	<1		0.11
RMD-205	GRAB	13851 Steveston Hwy.	22-Jun-17	0.72	<1		<2	11	<1		0.15
RMD-202	GRAB	1500 Valemont Way	22-Jun-17	0.69	<1		<2	11	<1		0.16
RMD-214	GRAB	11720 Westminster Hwy.	22-Jun-17	0.78	<1		<2	8	<1		0.14
RMD-267	GRAB	17240 Fedoruk	22-Jun-17	0.75	<1		<2	12	<1		0.11
RMD-249	GRAB	23000 Blk. Dyke Rd.	22-Jun-17	0.61	<1		<2	11	<1	[0.17
RMD-276	GRAB	22271 Cochrane Drive	22-Jun-17	0.66	<1		6	12	<1		0.1
RMD-275	GRAB	5180 Smith Cres.	22-Jun-17	0.63	<1		<2	13	<1		0.13
RMD-203	GRAB	23260 Westminster Hwy.	22-Jun-17	0.74	<1		<2	13	<1	[0.13
RMD-251	GRAB	5951McCallan Rd.	26-Jun-17	0.75	<1		2	11	<1	1	0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	26-Jun-17	0.84	<1		<2	18	<1		0.71
RMD-252	GRAB	9751 Pendleton Rd.	26-Jun-17	0.64	<1		<2	14	<1		0.1
RMD-274	GRAB	10920 Springwood Court	26-Jun-17	0.72	<1		<2	14	<1		0.11
RMD-253	GRAB	11051 No 3 Rd.	26-Jun-17	0.75	<1		<2	12	<1	1	0.12
RMD-269	GRAB	14951 Triangle Rd.	26-JuCIN			Q	<2	11	<1		0.18

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-270	GRAB	8200 Jones Rd.	26-Jun-17	0.74	<1		<2	13	<1		0.14
RMD-254	GRAB	5300 No. 3 Rd.	26-Jun-17	0.92	<1		<2	13	<1		0.17
RMD-256	GRAB	1000 Blk. McDonald Rd.	26-Jun-17	0.63	<1		<2	13	<1		0.24
RMD-255	GRAB	6000 Blk. Miller Rd.	26-Jun-17	0.89	<1		<2	12	<1		0.17
RMD-271	GRAB	3800 Cessna Drive	26-Jun-17	0.91	<1		<2	13	<1		0.18
RMD-272	GRAB	751 Catalina Cres.	26-Jun-17	0.96	<1		<2	13	<1		0.12
RMD-250	GRAB	6071 Azure Rd.	26-Jun-17	0.81	<1		<2	13	<1		0.11
RMD-263	GRAB	12560 Cambie Rd.	28-Jun-17	0.88	<1		2	12	<1		0.14
RMD-264	GRAB	13100 Mitchell Rd.	28-Jun-17	0.74	<1		<2	12	<1		0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	28-Jun-17	0.72	<1		<2	11	<1		0.15
RMD-262	GRAB	13799 Commerce Pkwy.	28-Jun-17	0.67	<1		<2	12	<1		0.1
RMD-278	GRAB	6651 Fraserwood Place	28-Jun-17	0.74	<1		<2	13	<1		0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	28-Jun-17	0.73	<1		<2	11	<1		0.16
RMD-261	GRAB	9911 Sidaway Rd.	28-Jun-17	0.69	<1		<2	12	<1		0.14
RMD-260	GRAB	11111 Horseshoe Way	28-Jun-17	0.85	<1		<2	12	<1		0.2
RMD-259	GRAB	10020 Amethyst Ave.	28 Jun 17 28-Jun-17	0.82	<1		<2	12	<1		0.2
RMD-266	GRAB	9380 General Currie Rd.	28 Jun 17 28-Jun-17	0.81	<1		<2	14	<1		0.23
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	28-Jun-17 28-Jun-17	0.61	<1		2	11	<1		0.23
RMD-208	GRAB		28-Jun-17	0.01	<1		<2	12	<1		0.14
	GRAB	7000 Blk. Dyke Rd.		0.79			<2	13			0.09
RMD-257		6640 Blundell Rd.	28-Jun-17		<1				<1		
RMD-204	GRAB	3180 Granville Ave.	30-Jun-17	0.59	<1		<2	14	<1		0.12
RMD-206	GRAB	4251 Moncton St.	30-Jun-17	0.74	<1		<2	13	<1		0.37
RMD-216	GRAB	11080 No. 2 Rd.	30-Jun-17	0.66	<1		<2	12	<1		0.12
RMD-280	GRAB	11500 McKenzie Rd.	30-Jun-17	0.53	<1		<2	13	<1		0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	30-Jun-17	0.69	<1		<2	12	<1		0.11
RMD-208	GRAB	13200 No. 4 Rd.	30-Jun-17	0.65	<1		4	13	<1		0.16
RMD-205	GRAB	13851 Steveston Hwy.	30-Jun-17	0.58	<1		<2	12	<1		0.1
RMD-202	GRAB	1500 Valemont Way	30-Jun-17	0.68	<1		<2	12	<1		0.1
RMD-214	GRAB	11720 Westminster Hwy.	30-Jun-17	0.68	<1		<2	12	<1		0.12
RMD-267	GRAB	17240 Fedoruk	30-Jun-17	0.71	<1		8	14	<1		0.14
RMD-249	GRAB	23000 Blk. Dyke Rd.	30-Jun-17	0.59	<1		<2	14	<1		0.15
RMD-276	GRAB	22271 Cochrane Drive	30-Jun-17	0.62	<1		<2	13	<1		0.1
RMD-275	GRAB	5180 Smith Cres.	30-Jun-17	0.65	<1		<2	14	<1		0.12
RMD-203	GRAB	23260 Westminster Hwy.	30-Jun-17	0.71	<1		<2	12	<1		0.1
RMD-251	GRAB	5951McCallan Rd.	4-Jul-17	0.71	<1		<2	12	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	4-Jul-17	0.97	<1		2	19	<1		2
RMD-252	GRAB	9751 Pendleton Rd.	4-Jul-17	1.81	<1		<2	14	<1		0.17
RMD-274	GRAB	10920 Springwood Court	4-Jul-17	1.63	<1		<2	14	<1		0.12
RMD-253	GRAB	11051 No 3 Rd.	4-Jul-17	0.68	<1		<2	12	<1		0.14
RMD-269	GRAB	14951 Triangle Rd.	4-Jul-17	0.56	<1		<2	12	<1		0.15
RMD-270	GRAB	8200 Jones Rd.	4-Jul-17	0.83	<1		<2	14	<1		0.12
RMD-254	GRAB	5300 No. 3 Rd.	4-Jul-17	0.66	<1		<2	14	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	4-Jul-17	0.6	<1		<2	15	<1		0.24
RMD-255	GRAB	6000 Blk. Miller Rd.	4-Jul-17	1.06	<1		<2	13	<1		0.32
RMD-271	GRAB	3800 Cessna Drive	4-Jul-17	0.8	<1		2	14	<1		0.1
RMD-272	GRAB	751 Catalina Cres.	4-Jul-17	0.9	<1		<2	12	<1		0.2
RMD-250	GRAB	6071 Azure Rd.	4-Jul-17	0.79	<1		2	14	<1		0.2
RMD-263	GRAB	12560 Cambie Rd.	5-Jul-17	0.91	<1		<2	12	<1		0.13
RMD-264	GRAB	13100 Mitchell Rd.	5-Jul-17	0.71	<1		<2	13	<1		0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	5-Jul-17	0.72	<1		<2	13	<1		0.33
RMD-262	GRAB	13799 Commerce Pkwy.	5-Jul-17	0.69	<1		<2	13	<1		0.11
RMD-278	GRAB	6651 Fraserwood Place	5-Jul-17	0.65	<1		2	13	<1	1	0.17
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	5-Jul-17	0.74	<1		<2	13	<1		0.11
RMD-261	GRAB	9911 Sidaway Rd.	5-Jul-17	0.7	<1		<2	12	<1		0.15
		,	5-JuCN(<2	13	+ -	<u> </u>	0.13

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-259	GRAB	10020 Amethyst Ave.	5-Jul-17	0.73	<1		<2	13	<1		0.26
RMD-266	GRAB	9380 General Currie Rd.	5-Jul-17	0.98	<1		<2	12	<1		0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	5-Jul-17	0.67	<1		<2	13	<1		0.2
RMD-258	GRAB	7000 Blk. Dyke Rd.	5-Jul-17	0.68	<1		<2	13	<1		0.11
RMD-257	GRAB	6640 Blundell Rd.	5-Jul-17	0.73	<1		<2	12	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	6-Jul-17	0.74	<1		<2	14	<1		0.32
RMD-206	GRAB	4251 Moncton St.	6-Jul-17	0.77	<1		<2	12	<1		0.17
RMD-216	GRAB	11080 No. 2 Rd.	6-Jul-17	0.79	<1		<2	12	<1		0.12
RMD-280	GRAB	11500 McKenzie Rd.	6-Jul-17	0.69	<1		<2	16	<1		0.13
RMD-212	GRAB	Opp. 8600 Ryan Rd.	6-Jul-17	0.74	<1		<2	12	<1		0.15
RMD-208	GRAB	13200 No. 4 Rd.	6-Jul-17	0.68	<1		<2	12	<1		0.28
RMD-205	GRAB	13851 Steveston Hwy.	6-Jul-17	0.68	<1		<2	12	<1		0.11
RMD-202	GRAB	NULL	6-Jul-17	0.69	<1		2	13	<1		0.1
RMD-214	GRAB	11720 Westminster Hwy.	6-Jul-17	0.85	<1		<2	13	<1		0.16
RMD-267	GRAB	17240 Fedoruk	6-Jul-17	0.58	<1		2	13	<1		0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	6-Jul-17	0.67	<1		<2	12	<1		0.1
RMD-276	GRAB	22271 Cochrane Drive	6-Jul-17	0.73	<1		<2	13	<1		0.13
RMD-275	GRAB	5180 Smith Cres.	6-Jul-17	0.62	<1		<2	15	<1		0.15
RMD-203	GRAB	23260 Westminster Hwy.	6-Jul-17	0.73	<1		<2	12	<1		0.13
RMD-251	GRAB	5951McCallan Rd.	10-Jul-17	0.71	<1		<2	11	<1		0.16
RMD-273	GRAB	Opp. 8331 Fairfax Place	10-Jul-17	0.62	<1		<2	19	<1		1.4
RMD-252	GRAB	9751 Pendleton Rd.	10-Jul-17	0.76	<1		<2	13	<1		0.18
RMD-274	GRAB	10920 Springwood Court	10-Jul-17	0.57	<1		<2	15	<1		0.18
RMD-253	GRAB	11051 No 3 Rd.	10-Jul-17	0.59	<1		<2	11	<1		0.3
RMD-269	GRAB	14951 Triangle Rd.	10 Jul 17	0.71	<1		<2	11	<1		0.24
RMD-254	GRAB	5300 No. 3 Rd.	10 Jul 17	0.76	<1		<2	13	<1		0.21
RMD-270	GRAB	8200 Jones Rd.	10-Jul-17	0.75	<1		2	13	<1		0.18
RMD-256	GRAB	1000 Blk. McDonald Rd.	10-Jul-17	0.63	<1		<2	13	<1		0.62
RMD-255	GRAB	6000 Blk. Miller Rd.	10 Jul 17	0.86	<1		<2	10	<1		0.02
RMD-271	GRAB	3800 Cessna Drive	10-Jul-17	0.82	<1		<2	14	<1		0.15
RMD-272	GRAB	751 Catalina Cres.	10-Jul-17	1.17	<1		<2	12	<1		0.23
RMD-250	GRAB	6071 Azure Rd.	10-Jul-17	0.68	<1		<2	12	<1		0.23
RMD-263	GRAB	12560 Cambie Rd.	12-Jul-17	0.75	<1		<2	12	<1		0.13
RMD-264	GRAB	13100 Mitchell Rd.	12-Jul-17	0.72	<1		<2	12	<1		0.23
RMD-277	GRAB	Opp. 11280 Twigg Place	12-Jul-17	0.76	<1		2	12	<1		0.25
RMD-262	GRAB	13799 Commerce Pkwy.	12-Jul-17	0.68	<1		<2	12	<1		0.24
RMD-278	GRAB	6651 Fraserwood Place	12-Jul-17	0.63	<1		<2	12	<1		0.15
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	12-Jul-17	0.69	<1		<2	12	<1		0.38
RMD-261	GRAB	9911 Sidaway Rd.	12-Jul-17	0.85	<1		<2	11	<1		0.17
RMD-260	GRAB	11111 Horseshoe Way	12-Jul-17	0.68	<1		<2	11	<1		0.15
RMD-259	GRAB	10020 Amethyst Ave.	12-Jul-17	0.45	<1		<2	11	<1		0.38
RMD-266	GRAB	9380 General Currie Rd.	12-Jul-17	0.76	<1		<2	12	<1		0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	12-Jul-17	0.72	<1		<2	13	<1		0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	12-Jul-17	0.72	<1		<2	13	<1		0.10
RMD-257	GRAB	6640 Blundell Rd.	12-Jul-17 12-Jul-17	0.74	<1		<2	12	<1		0.15
RMD-204	GRAB	3180 Granville Ave.	12-Jul-17 14-Jul-17	0.7	<1		<2	11	<1		0.13
RMD-204	GRAB	4251 Moncton St.	14-Jul-17 14-Jul-17	0.66	<1		<2	14	<1		0.1
RMD-200	GRAB	11080 No. 2 Rd.	14-Jul-17 14-Jul-17	0.00	<1		<2	12	<1		0.1
RMD-210					<1		<2	12	<1		
	GRAB	11500 McKenzie Rd.	14-Jul-17	0.71			<2				0.09
RMD-212	GRAB	Opp. 8600 Ryan Rd.	14-Jul-17	0.78	<1		<2 <2	12	<1		0.1
RMD-208	GRAB	13200 No. 4 Rd.	14-Jul-17	0.74	<1			12	<1		0.1
RMD-205	GRAB	13851 Steveston Hwy.	14-Jul-17	0.66	<1		<2	11	<1		0.12
RMD-202	GRAB	1500 Valemont Way	14-Jul-17	0.69	<1		<2	12	<1		0.12
RMD-214	GRAB	11720 Westminster Hwy.	14-Jul-17	0.67	<1	_	<2	12	<1		0.13
RMD-267	GRAB	17240 Fedoruk	14-J CINO	JU.68	- 27	U	<2	14	<1		0.11

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-249	GRAB	23000 Blk. Dyke Rd.	14-Jul-17	0.65	<1		2	13	<1		0.11
RMD-276	GRAB	22271 Cochrane Drive	14-Jul-17	0.66	<1		<2	13	<1		0.15
RMD-275	GRAB	5180 Smith Cres.	14-Jul-17	0.57	<1		<2	14	<1		0.09
RMD-203	GRAB	23260 Westminster Hwy.	14-Jul-17	0.6	<1		<2	13	<1		0.09
RMD-251	GRAB	5951McCallan Rd.	17-Jul-17	0.66	<1		<2	10	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	17-Jul-17	0.52	<1		<2	19	<1		0.22
RMD-252	GRAB	9751 Pendleton Rd.	17-Jul-17	0.6	<1		<2	12	<1		0.13
RMD-274	GRAB	10920 Springwood Court	17-Jul-17	0.75	<1		<2	15	<1		0.13
RMD-250	GRAB	6071 Azure Rd.	17-Jul-17	0.72	<1		<2	[Not recorded] NA	<1		0.15
RMD-271	GRAB	3800 Cessna Drive	17-Jul-17	0.77	<1		<2	14	<1		0.15
RMD-272	GRAB	751 Catalina Cres.	17-Jul-17	0.89	<1		<2	10	<1		0.13
RMD-255	GRAB	6000 Blk. Miller Rd.	17-Jul-17	0.82	<1		<2	12	<1		0.35
RMD-256	GRAB	1000 Blk. McDonald Rd.	17-Jul-17	0.46	<1		<2	15	<1		0.32
RMD-254	GRAB	5300 No. 3 Rd.	17-Jul-17	0.7	<1		<2	13	<1		0.14
RMD-270	GRAB	8200 Jones Rd.	17-Jul-17	0.73	<1		<2	10	<1		0.11
RMD-269	GRAB	14951 Triangle Rd.	17-Jul-17	0.84	<1	-	<2	10	<1		0.15
RMD-253	GRAB	11051 No 3 Rd.	17-Jul-17	0.73	<1	-	<2	10	<1		0.17
RMD-263	GRAB	12560 Cambie Rd.	19-Jul-17	0.65	<1		<2	11	<1		0.12
RMD-264	GRAB	13100 Mitchell Rd.	19-Jul-17	0.75	<1		<2	12	<1		0.14
RMD-277	GRAB	Opp. 11280 Twigg Place	19-Jul-17	0.71	<1		<2	11	<1		0.12
RMD-262	GRAB	13799 Commerce Pkwy.	19-Jul-17	0.71	<1		<2	11	<1		0.11
RMD-278	GRAB	6651 Fraserwood Place	19-Jul-17	0.68	<1		<2	13	<1		0.13
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	19-Jul-17	0.67	<1		<2	11	<1		0.13
RMD-261	GRAB	9911 Sidaway Rd.	19-Jul-17	0.72	<1		<2	11	<1		0.12
RMD-260	GRAB	11111 Horseshoe Way	19-Jul-17	0.67	<1		<2	13	<1		0.11
RMD-259	GRAB	10020 Amethyst Ave.	19-Jul-17	0.73	<1		<2	12	<1		0.23
RMD-266	GRAB	9380 General Currie Rd.	19-Jul-17	0.72	<1		<2	10	<1		0.17
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	19-Jul-17	0.72	<1		<2	12	<1		0.11
RMD-258	GRAB	7000 Blk. Dyke Rd.	19-Jul-17	0.68	<1		<2	13	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	19-Jul-17	0.78	<1		<2	11	<1		0.16
RMD-204	GRAB	3180 Granville Ave.	20-Jul-17	0.7	<1		<2	13	<1		0.22
RMD-206	GRAB	4251 Moncton St.	20-Jul-17	0.83	<1		<2	13	<1		0.13
RMD-216	GRAB	11080 No. 2 Rd.	20-Jul-17	0.86	<1		<2	11	<1		0.14
RMD-280	GRAB	11500 McKenzie Rd.	20-Jul-17	0.46	<1		<2	16	<1		0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	20-Jul-17	0.79	<1		<2	13	<1		0.11
RMD-208	GRAB	13200 No. 4 Rd.	20-Jul-17	0.84	<1		<2	13	<1		0.29
RMD-205	GRAB	13851 Steveston Hwy.	20-Jul-17	0.71	<1		4	13	<1		0.1
RMD-202	GRAB	1500 Valemont Way	20-Jul-17	0.69	<1		<2	14	<1		0.1
RMD-214	GRAB	11720 Westminster Hwy.	20-Jul-17	0.77	<1		<2	12	<1		0.14
RMD-267	GRAB	17240 Fedoruk	20-Jul-17	0.64	<1		<2	14	<1		0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	20-Jul-17	0.66	<1		<2	13	<1		0.11
RMD-276	GRAB	22271 Cochrane Drive	20-Jul-17	0.62	<1		<2	14	<1		0.12
RMD-275	GRAB	5180 Smith Cres.	20-Jul-17	0.59	<1		2	13	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	20-Jul-17	0.62	<1		<2	12	<1		0.09
RMD-251	GRAB	5951McCallan Rd.	24-Jul-17	0.82	<1		<2	12	<1		0.17
RMD-273	GRAB	Opp. 8331 Fairfax Place	24-Jul-17	0.69	<1	<u>.</u>	<2	18	<1		1.2
RMD-252	GRAB	9751 Pendleton Rd.	24-Jul-17	0.74	<1	<u>.</u>	<2	14	<1		0.18
RMD-274	GRAB	10920 Springwood Court	24-Jul-17	0.79	<1		<2	16	<1		0.13
RMD-253	GRAB	11051 No 3 Rd.	24-Jul-17	0.76	<1	<u>.</u>	<2	11	<1		0.27
RMD-269	GRAB	14951 Triangle Rd.	24-Jul-17	0.79	<1		<2	11	<1		0.14
RMD-270	GRAB	8200 Jones Rd.	24-Jul-17	0.76	<1		<2	13	<1		0.2
RMD-254	GRAB	5300 No. 3 Rd.	24-Jul-17	0.73	<1		4	12	<1		0.23
RMD-256	GRAB	1000 Blk. McDonald Rd.	24-Jul-17	0.55	<1		<2	15	<1		0.29
RMD-255	GRAB	6000 Blk. Miller Rd.	24-Jul-17	0.87	<1		4	12	<1		0.2
100		3800 Cessna Drive	24-JICNO				<2	14	<1		0.21

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-272	GRAB	751 Catalina Cres.	24-Jul-17	0.84	<1		<2	14	<1		0.29
RMD-250	GRAB	6071 Azure Rd.	24-Jul-17	0.75	<1		4	12	<1		0.18
RMD-263	GRAB	12560 Cambie Rd.	26-Jul-17	0.87	<1		<2	11	<1		0.2
RMD-264	GRAB	13100 Mitchell Rd.	26-Jul-17	0.89	<1		<2	13	<1		0.37
RMD-277	GRAB	Opp. 11280 Twigg Place	26-Jul-17	0.8	<1		2	12	<1		0.28
RMD-262	GRAB	13799 Commerce Pkwy.	26-Jul-17	0.74	<1		<2	11	<1		0.25
RMD-278	GRAB	6651 Fraserwood Place	26-Jul-17	0.91	<1		<2	12	<1		0.19
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	26-Jul-17	0.81	<1		<2	11	<1		0.2
RMD-261	GRAB	9911 Sidaway Rd.	26-Jul-17	0.7	<1		<2	11	<1		0.17
RMD-260	GRAB	11111 Horseshoe Way	26-Jul-17	0.79	<1		<2	11	<1		0.31
RMD-259	GRAB	10020 Amethyst Ave.	26-Jul-17	0.74	<1		<2	14	<1		0.97
RMD-266	GRAB	9380 General Currie Rd.	26-Jul-17	0.97	<1		<2	10	<1		0.18
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	26-Jul-17	0.93	<1		<2	11	<1		3.5
RMD-258	GRAB	7000 Blk. Dyke Rd.	26-Jul-17	0.85	<1		<2	12	<1		2.2
RMD-257	GRAB	6640 Blundell Rd.	26-Jul-17	0.92	<1		2	11	<1		0.15
RMD-204	GRAB	3180 Granville Ave.	28-Jul-17	0.73	<1		<2	13	<1		0.12
RMD-206	GRAB	4251 Moncton St.	28-Jul-17	0.8	<1		<2	11	<1		0.13
RMD-216	GRAB	11080 No. 2 Rd.	28-Jul-17	0.82	<1		<2	11	<1		0.1
RMD-280	GRAB	11500 McKenzie Rd.	28-Jul-17	0.77	<1		<2	13	<1		0.1
RMD-212	GRAB	Opp. 8600 Ryan Rd.	28-Jul-17	0.8	<1		<2	11	<1		0.13
RMD-208	GRAB	13200 No. 4 Rd.	28-Jul-17	0.96	<1		2	12	<1		0.1
RMD-205	GRAB	13851 Steveston Hwy.	28-Jul-17	0.78	<1		<2	11	<1		0.09
RMD-203	GRAB	1500 Valemont Way	28-Jul-17	0.77	<1		<2	12	<1		0.03
RMD-202	GRAB	11720 Westminster Hwy.	28-Jul-17	0.79	<1		<2	11	<1		0.13
RMD-214	GRAB	17240 Fedoruk	28-Jul-17 28-Jul-17	0.75	<1		<2	11	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	28-Jul-17	0.66	<1		<2	12	<1		0.13
RMD-275	GRAB	5180 Smith Cres.	28-Jul-17	0.77	<1		<2	12	<1		0.12
RMD-275	GRAB	22271 Cochrane Drive	28-Jul-17	0.74	<1		<2	12	<1		0.09
RMD-203	GRAB	23260 Westminster Hwy.	28-Jul-17	0.59	<1		<2	13	<1		0.05
RMD-251	GRAB	5951McCallan Rd.	31-Jul-17	0.72	<1		2	11	<1		0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	31-Jul-17	0.67	<1		<2	17	<1		0.73
RMD-252	GRAB	9751 Pendleton Rd.	31-Jul-17	0.68	<1		<2	14	<1		0.12
RMD-274	GRAB	10920 Springwood Court	31-Jul-17	0.71	<1		<2	16	<1		0.12
RMD-253	GRAB	11051 No 3 Rd.	31-Jul-17	0.79	<1		<2	10	<1		0.14
RMD-269	GRAB	14951 Triangle Rd.	31-Jul-17 31-Jul-17	0.75	<1		<2	11	<1		0.14
RMD-270	GRAB	8200 Jones Rd.	31-Jul-17	0.72	<1		<2	12	<1		0.15
RMD-254	GRAB	5300 No. 3 Rd.	31-Jul-17	0.72	<1		<2	13	<1		0.11
RMD-256	GRAB	1000 Blk. McDonald Rd.	31-Jul-17 31-Jul-17	0.78	<1		<2	13	<1		0.11
RMD-255	GRAB	6000 Blk. Miller Rd.	31-Jul-17 31-Jul-17	0.03	<1		<2	13	<1		0.10
RMD-271	GRAB	3800 Cessna Drive	31-Jul-17	0.86	<1		<2	14	<1		0.20
RMD-271	GRAB	751 Catalina Cres.	31-Jul-17 31-Jul-17	0.80	<1		<2	14	<1		0.17
RMD-272	GRAB	6071 Azure Rd.	31-Jul-17 31-Jul-17	0.30	<1		<2	12	<1		0.03
RMD-263	GRAB	12560 Cambie Rd.		0.79	<1		<2	11	<1		0.23
			2-Aug-17								
RMD-264	GRAB	13100 Mitchell Rd.	2-Aug-17	0.86	<1		<2	13	<1		0.1
RMD-277	GRAB	Opp. 11280 Twigg Place	2-Aug-17	0.78	<1		<2	12	<1		0.13
RMD-262	GRAB	13799 Commerce Pkwy.	2-Aug-17	0.59	<1		<2	12	<1		0.12
RMD-278	GRAB	6651 Fraserwood Place	2-Aug-17	0.56	<1		<2	12	<1		0.13
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	2-Aug-17	0.68	<1		<2	12	<1		0.09
RMD-261	GRAB	9911 Sidaway Rd.	2-Aug-17	0.65	<1		2	12	<1		0.09
RMD-260	GRAB	11111 Horseshoe Way	2-Aug-17	0.67	<1		<2	13	<1		0.1
RMD-259	GRAB	10020 Amethyst Ave.	2-Aug-17	0.59	<1		2	13	<1		0.92
RMD-266	GRAB	9380 General Currie Rd.	2-Aug-17	0.71	<1		<2	12	<1		0.11
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	2-Aug-17	0.67	<1		<2	13	<1		0.1
RMD-258	GRAB	7000 Blk. Dyke Rd.	2-Aug-17	0.72	<1		2	12	<1		0.08
RMD-257	GRAB	6640 Blundell Rd.	2-Au CIN	<u>9</u> .74	27	2	<2	12	<1		0.19

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-204	GRAB	3180 Granville Ave.	3-Aug-17	0.74	<1		<2	13	<1		0.21
RMD-206	GRAB	4251 Moncton St.	3-Aug-17	0.77	<1		2	13	<1		0.1
RMD-216	GRAB	11080 No. 2 Rd.	3-Aug-17	1.07	<1		2	12	<1		0.12
RMD-280	GRAB	11500 McKenzie Rd.	3-Aug-17	0.63	<1		<2	16	<1		0.11
RMD-212	GRAB	Opp. 8600 Ryan Rd.	3-Aug-17	0.88	<1		<2	12	<1		0.11
RMD-208	GRAB	13200 No. 4 Rd.	3-Aug-17	0.92	<1		<2	11	<1		0.16
RMD-205	GRAB	13851 Steveston Hwy.	3-Aug-17	0.58	<1		<2	12	<1		0.15
RMD-202	GRAB	1500 Valemont Way	3-Aug-17	0.67	<1		<2	12	<1		0.16
RMD-214	GRAB	11720 Westminster Hwy.	3-Aug-17	0.75	<1		<2	12	<1		0.11
RMD-267	GRAB	17240 Fedoruk	3-Aug-17	0.57	<1		<2	13	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	3-Aug-17	0.66	<1		<2	15	<1		0.11
RMD-276	GRAB	22271 Cochrane Drive	3-Aug-17	0.63	<1		<2	13	<1		0.15
RMD-275	GRAB	5180 Smith Cres.	3-Aug-17	0.66	<1		<2	13	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	3-Aug-17	0.79	<1		<2	13	<1		0.13
RMD-251	GRAB	5951McCallan Rd.	8-Aug-17	0.8	<1		<2	11	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	8-Aug-17	0.79	<1		<2	20	<1		1.1
RMD-252	GRAB	9751 Pendleton Rd.	8-Aug-17	0.73	<1		<2	15	<1		0.17
RMD-274	GRAB	10920 Springwood Court	8-Aug-17	0.78	<1		<2	15	<1		0.15
RMD-253	GRAB	11051 No 3 Rd.	8-Aug-17	0.83	<1		<2	13	<1		0.14
RMD-269	GRAB	14951 Triangle Rd.	8-Aug-17	0.81	<1		<2	10	<1		0.11
RMD-270	GRAB	8200 Jones Rd.	8-Aug-17	0.85	<1		<2	15	<1		0.23
RMD-254	GRAB	5300 No. 3 Rd.	8-Aug-17	0.76	<1		<2	14	<1		0.17
RMD-256	GRAB	1000 Blk. McDonald Rd.	8-Aug-17	0.62	<1		<2	15	<1		0.51
RMD-255	GRAB	6000 Blk. Miller Rd.	8-Aug-17	0.86	<1		<2	13	<1		0.18
RMD-271	GRAB	3800 Cessna Drive	8-Aug-17	0.76	<1		<2	16	<1		0.17
RMD-272	GRAB	751 Catalina Cres.	8-Aug-17	0.82	<1		<2	14	<1		0.15
RMD-250	GRAB	6071 Azure Rd.	8-Aug-17	0.88	<1		<2	13	<1		0.25
RMD-263	GRAB	12560 Cambie Rd.	9-Aug-17	0.7	<1		<2	11	<1		0.16
RMD-262	GRAB	13799 Commerce Pkwy.	9-Aug-17	0.68	<1		<2	11	<1		0.12
RMD-278	GRAB	6651 Fraserwood Place	9-Aug-17	0.66	<1		<2	15	<1		0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	9-Aug-17	0.64	<1		<2	10	<1		0.1
RMD-261	GRAB	9911 Sidaway Rd.	9-Aug-17	0.62	<1		<2	13	<1		0.1
RMD-260	GRAB	11111 Horseshoe Way	9-Aug-17	0.67	<1		<2	13	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	9-Aug-17	0.8	<1		<2	14	<1		0.36
RMD-266	GRAB	9380 General Currie Rd.	9-Aug-17	0.81	<1		<2	12	<1		0.19
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	9-Aug-17	0.82	<1		<2	13	<1		0.1
RMD-258	GRAB	7000 Blk. Dyke Rd.	9-Aug-17	0.71	<1		18	15	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	9-Aug-17	0.75	<1		<2	12	<1		0.13
RMD-264	GRAB	13100 Mitchell Rd.	9-Aug-17	0.75	<1		<2	15	<1		0.2
RMD-277	GRAB	Opp. 11280 Twigg Place	9-Aug-17	0.61	<1		<2	20	<1		0.11
RMD-204	GRAB	3180 Granville Ave.	11-Aug-17	0.69	<1		<2	15	<1		0.12
RMD-206	GRAB	4251 Moncton St.	11-Aug-17	0.74	<1		<2	13	<1		0.1
RMD-216	GRAB	11080 No. 2 Rd.	11-Aug-17	0.67	<1		2	13	<1		0.12
RMD-280	GRAB	11500 McKenzie Rd.	11-Aug-17	0.64	<1		2	15	<1		0.18
RMD-212	GRAB	Opp. 8600 Ryan Rd.	11-Aug-17	0.77	<1		<2	14	<1		0.12
RMD-208	GRAB	13200 No. 4 Rd.	11-Aug-17	0.79	<1		2	13	<1		0.11
RMD-205	GRAB	13851 Steveston Hwy.	11-Aug-17	0.71	<1		<2	13	<1		0.12
RMD-202	GRAB	1500 Valemont Way	11-Aug-17	0.75	<1		<2	13	<1		0.12
RMD-214	GRAB	11720 Westminster Hwy.	11-Aug-17	0.48	<1		<2	14	<1		0.12
RMD-267	GRAB	17240 Fedoruk	11-Aug-17	0.81	<1		<2	15	<1		0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	11-Aug-17	0.73	<1		<2	15	<1		0.12
RMD-276	GRAB	22271 Cochrane Drive	11-Aug-17	0.76	<1		<2	15	<1		0.11
RMD-275	GRAB	5180 Smith Cres.	11-Aug-17	0.61	<1		<2	15	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	11-Aug-17	0.75	<1		<2	13	<1		0.12
100	GRAB	5951McCallan Rd.	14-ACN(<2	13	<1	+	0.12

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-273	GRAB	Opp. 8331 Fairfax Place	14-Aug-17	0.54	<1		<2	21	<1		0.19
RMD-252	GRAB	9751 Pendleton Rd.	14-Aug-17	0.65	<1		<2	14	<1		0.09
RMD-274	GRAB	10920 Springwood Court	14-Aug-17	0.5	<1		<2	13	<1		0.09
RMD-253	GRAB	11051 No 3 Rd.	14-Aug-17	0.83	<1		<2	13	<1		0.1
RMD-269	GRAB	14951 Triangle Rd.	14-Aug-17	0.73	<1		<2	14	<1		0.37
RMD-270	GRAB	8200 Jones Rd.	14-Aug-17	0.76	<1		<2	14	<1		0.15
RMD-254	GRAB	5300 No. 3 Rd.	14-Aug-17	0.8	<1		<2	13	<1		0.17
RMD-256	GRAB	1000 Blk. McDonald Rd.	14-Aug-17	0.57	<1		<2	14	<1		0.36
RMD-255	GRAB	6000 Blk. Miller Rd.	14-Aug-17	0.88	<1		<2	13	<1		0.19
RMD-271	GRAB	3800 Cessna Drive	14-Aug-17	0.7	<1		2	14	<1		0.12
RMD-272	GRAB	751 Catalina Cres.	14-Aug-17	0.85	<1		<2	12	<1		0.11
RMD-250	GRAB	6071 Azure Rd.	14-Aug-17	0.73	<1		36	13	<1		0.18
RMD-263	GRAB	12560 Cambie Rd.	16-Aug-17	0.77	<1		<2	14	<1		0.4
RMD-264	GRAB	13100 Mitchell Rd.	16-Aug-17	0.53	<1		<2	14	<1		0.22
RMD-277	GRAB	Opp. 11280 Twigg Place	16-Aug-17	0.77	<1		<2	16	<1		0.2
RMD-262	GRAB	13799 Commerce Pkwy.	16-Aug-17	0.67	<1		<2	14	<1		0.16
RMD-278	GRAB	6651 Fraserwood Place	16-Aug-17	0.73	<1		<2	14	<1		0.19
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	16-Aug-17	0.65	<1		<2	14	<1		0.16
RMD-261	GRAB	9911 Sidaway Rd.	16-Aug-17	0.63	<1		16	13	<1		0.19
RMD-260	GRAB	11111 Horseshoe Way	16-Aug-17	0.72	<1		<2	15	<1		0.3
RMD-259	GRAB	10020 Amethyst Ave.	16-Aug-17	0.77	<1		<2	14	<1		1.1
RMD-266	GRAB	9380 General Currie Rd.	16-Aug-17	0.76	<1		<2	14	<1		0.17
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	16-Aug-17	0.77	<1		<2	15	<1		0.17
RMD-258	GRAB	7000 Blk. Dyke Rd.	16-Aug-17	0.48	<1		34	13	<1		0.17
RMD-257	GRAB	6640 Blundell Rd.	16-Aug-17 16-Aug-17	0.48	<1		<2	14	<1		0.14
RMD-204	GRAB	3180 Granville Ave.	17-Aug-17	0.68	<1		<2	15	<1		0.18
RMD-204	GRAB	4251 Moncton St.	17-Aug-17	0.8	<1		<2	13	<1		0.18
RMD-200	GRAB	11080 No. 2 Rd.	17 Aug 17 17-Aug-17	0.91	<1		<2	13	<1		0.10
RMD-280	GRAB	11500 McKenzie Rd.	17 Aug 17 17-Aug-17	0.51	<1		<2	17	<1		0.10
RMD-212	GRAB	Opp. 8600 Ryan Rd.	17-Aug-17	0.86	<1		<2	14	<1		0.15
RMD-208	GRAB	13200 No. 4 Rd.	17-Aug-17	0.91	<1		<2	14	<1		0.31
RMD-205	GRAB	13851 Steveston Hwy.	17 Aug 17 17-Aug-17	0.77	<1		<2	14	<1		0.45
RMD-203	GRAB	1500 Valemont Way	17-Aug-17	0.77	<1		<2	13	<1		0.36
RMD-202	GRAB	11720 Westminster Hwy.	17-Aug-17	0.77	<1		2	13	<1		0.17
RMD-267	GRAB	17240 Fedoruk	17 Aug 17 17-Aug-17	0.75	<1		<2	13	<1		0.36
RMD-249	GRAB	23000 Blk. Dyke Rd.	17 Aug 17 17-Aug-17	0.66	<1		2	15	<1		0.30
RMD-276	GRAB	22271 Cochrane Drive	17 Aug 17 17-Aug-17	0.66	<1		<2	13	<1		0.34
RMD-275	GRAB	5180 Smith Cres.	17-Aug-17 17-Aug-17	0.61	<1		<2	14	<1		0.18
RMD-203	GRAB	23260 Westminster Hwy.	17 Aug 17 17-Aug-17	0.01	<1		<2	13	<1		0.10
RMD-251	GRAB	5951McCallan Rd.	21-Aug-17	0.75	<1		<2	13	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	21-Aug-17 21-Aug-17	0.75	<1		2	20	<1		5
RMD-252	GRAB	9751 Pendleton Rd.	21-Aug-17 21-Aug-17	0.65	<1		<2	16	<1		0.28
RMD-232	GRAB	10920 Springwood Court	-	0.03	<1		<2				0.28
			21-Aug-17				4	16	<1		
RMD-253	GRAB	11051 No 3 Rd.	21-Aug-17	0.76	<1			14	<1		0.32
RMD-269	GRAB	14951 Triangle Rd.	21-Aug-17	0.75	<1		<2	14	<1		0.66
RMD-270	GRAB	8200 Jones Rd.	21-Aug-17	0.8	<1		2	15	<1		0.15
RMD-254	GRAB	5300 No. 3 Rd.	21-Aug-17	0.78	<1		<2	15	<1		0.18
RMD-256	GRAB	1000 Blk. McDonald Rd.	21-Aug-17	0.5	<1		<2	18	<1		0.75
RMD-255	GRAB	6000 Blk. Miller Rd.	21-Aug-17	0.96	<1		4	14	<1		0.26
RMD-271	GRAB	3800 Cessna Drive	21-Aug-17	0.87	<1		<2	16	<1		0.13
RMD-272	GRAB	751 Catalina Cres.	21-Aug-17	0.99	<1		<2	14	<1		0.13
RMD-250	GRAB	6071 Azure Rd.	21-Aug-17	0.78	<1		<2	15	<1		0.3
RMD-263	GRAB	12560 Cambie Rd.	23-Aug-17	0.68	<1		<2	16	<1		0.17
RMD-264	GRAB	13100 Mitchell Rd.	23-Aug-17	0.69	<1	4	<2	14	<1		0.26
RMD-277	GRAB	Opp. 11280 Twigg Place	23-AICIN (JU.87	27	4	<2	15	1		0.24

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-262	GRAB	13799 Commerce Pkwy.	23-Aug-17	0.64	<1		<2	15	<1		0.28
RMD-273	GRAB	Opp. 8331 Fairfax Place	23-Aug-17	0.71	<1		<2	20	<1		0.21
RMD-278	GRAB	6651 Fraserwood Place	23-Aug-17	0.74	<1		<2	15	<1		0.3
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	23-Aug-17	0.8	<1		<2	16	<1		0.12
RMD-261	GRAB	9911 Sidaway Rd.	23-Aug-17	0.65	<1		<2	16	<1		0.23
RMD-260	GRAB	11111 Horseshoe Way	23-Aug-17	0.73	<1		2	15	<1		0.17
RMD-259	GRAB	10020 Amethyst Ave.	23-Aug-17	0.66	<1		<2	16	<1		0.5
RMD-266	GRAB	9380 General Currie Rd.	23-Aug-17	0.63	<1		<2	15	<1		0.26
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	23-Aug-17	0.74	<1		<2	16	<1		0.2
RMD-258	GRAB	7000 Blk. Dyke Rd.	23-Aug-17	0.75	<1		<2	15	<1		0.18
RMD-257	GRAB	6640 Blundell Rd.	23-Aug-17	0.67	<1		<2	16	<1		0.2
RMD-204	GRAB	3180 Granville Ave.	25-Aug-17	0.7	<1		<2	17	<1		0.11
RMD-206	GRAB	4251 Moncton St.	25-Aug-17	0.81	<1		<2	17	<1		0.15
RMD-216	GRAB	11080 No. 2 Rd.	25-Aug-17	0.76	<1		2	16	<1		0.11
RMD-280	GRAB	11500 McKenzie Rd.	25-Aug-17	0.69	<1		<2	18	<1		0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	25-Aug-17	0.74	<1		<2	17	<1		0.15
RMD-208	GRAB	13200 No. 4 Rd.	25-Aug-17	0.75	<1		<2	18	<1		0.13
RMD-205	GRAB	13851 Steveston Hwy.	25-Aug-17	0.66	<1		<2	17	<1		0.1
RMD-203	GRAB	1500 Valemont Way	25 Aug 17 25-Aug-17	0.69	<1		<2	18	<1		0.11
RMD-214	GRAB	11720 Westminster Hwy.	25 Aug 17 25-Aug-17	0.05	<1		<2	18	<1		0.11
RMD-214	GRAB	17240 Fedoruk	-	0.78	<1		<2	20	<1		0.14
			25-Aug-17	0.82	<1		4	18	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	25-Aug-17		<1		<2	20	<1		
RMD-276	GRAB	22271 Cochrane Drive	25-Aug-17	0.73					-		0.1
RMD-275	GRAB	5180 Smith Cres.	25-Aug-17	0.67	<1		<2	18	<1		0.13
RMD-203	GRAB	23260 Westminster Hwy.	25-Aug-17	0.65	<1		<2	18	<1		0.1
RMD-251	GRAB	5951McCallan Rd.	28-Aug-17	0.56	<1		<2	19	<1		0.14
RMD-273	GRAB	Opp. 8331 Fairfax Place	28-Aug-17	0.69	<1		4	22	<1		0.15
RMD-252	GRAB	9751 Pendleton Rd.	28-Aug-17	0.57	<1		<2	20	<1		0.16
RMD-274	GRAB	10920 Springwood Court	28-Aug-17	0.88	<1		<2	20	<1		0.15
RMD-253	GRAB	11051 No 3 Rd.	28-Aug-17	0.71	<1		2	17	<1		0.17
RMD-269	GRAB	14951 Triangle Rd.	28-Aug-17	0.69	<1		<2	18	<1		0.13
RMD-270	GRAB	8200 Jones Rd.	28-Aug-17	0.66	<1		<2	19	<1		0.16
RMD-254	GRAB	5300 No. 3 Rd.	28-Aug-17	0.73	<1		<2	18	<1		0.35
RMD-255	GRAB	6000 Blk. Miller Rd.	28-Aug-17	1.01	<1		<2	17	<1		0.23
RMD-256	GRAB	1000 Blk. McDonald Rd.	28-Aug-17	0.54	<1		<2	18	<1		0.48
RMD-271	GRAB	3800 Cessna Drive	28-Aug-17	0.67	<1		<2	19	<1		0.14
RMD-272	GRAB	751 Catalina Cres.	28-Aug-17	0.82	<1		<2	17	<1		0.18
RMD-250	GRAB	6071 Azure Rd.	28-Aug-17	0.71	<1		2	19	<1		0.15
RMD-263	GRAB	12560 Cambie Rd.	30-Aug-17	0.8	<1		<2	18	<1		0.22
RMD-264	GRAB	13100 Mitchell Rd.	30-Aug-17	0.64	<1		2	18	<1		0.26
RMD-277	GRAB	Opp. 11280 Twigg Place	30-Aug-17	0.75	<1		<2	18	<1		0.16
RMD-262	GRAB	13799 Commerce Pkwy.	30-Aug-17	0.73	<1		<2	19	<1		0.16
RMD-278	GRAB	6651 Fraserwood Place	30-Aug-17	0.7	<1		<2	18	<1		0.17
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	30-Aug-17	0.82	<1		<2	18	<1		0.19
RMD-261	GRAB	9911 Sidaway Rd.	30-Aug-17	0.65	<1		<2	18	<1		0.35
RMD-260	GRAB	11111 Horseshoe Way	30-Aug-17	0.78	<1		<2	18	<1		0.21
RMD-259	GRAB	10020 Amethyst Ave.	30-Aug-17	0.83	<1		<2	18	<1		0.75
RMD-266	GRAB	9380 General Currie Rd.	30-Aug-17	0.85	<1		<2	19	<1		0.21
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	30-Aug-17	0.83	<1		<2	18	<1		0.18
RMD-258	GRAB	7000 Blk. Dyke Rd.	30-Aug-17	0.86	<1		26	18	<1		0.12
RMD-257	GRAB	6640 Blundell Rd.	30-Aug-17	0.76	<1		<2	18	<1		0.18
RMD-204	GRAB	3180 Granville Ave.	31-Aug-17	0.54	<1		<2	18	<1	[0.17
RMD-206	GRAB	4251 Moncton St.	31-Aug-17	0.72	<1		<2	18	<1		0.32
RMD-216	GRAB	11080 No. 2 Rd.	31-Aug-17	0.88	<1		<2	17	<1	1	0.19
RMD-280	GRAB	11500 McKenzie Rd.	31-A CN	0.56	917	5	<2	19	<1		0.14

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-212	GRAB	Opp. 8600 Ryan Rd.	31-Aug-17	0.98	<1		<2	18	<1		0.17
RMD-208	GRAB	13200 No. 4 Rd.	31-Aug-17	0.85	<1		<2	17	<1		0.18
RMD-205	GRAB	13851 Steveston Hwy.	31-Aug-17	0.78	<1		<2	18	<1		0.24
RMD-202	GRAB	1500 Valemont Way	31-Aug-17	0.7	<1		<2	18	<1		0.23
RMD-214	GRAB	11720 Westminster Hwy.	31-Aug-17	0.82	<1		<2	17	<1		0.21
RMD-267	GRAB	17240 Fedoruk	31-Aug-17	0.71	<1		<2	18	<1		0.16
RMD-249	GRAB	23000 Blk. Dyke Rd.	31-Aug-17	0.66	<1		<2	18	<1		0.18
RMD-276	GRAB	22271 Cochrane Drive	31-Aug-17	0.69	<1		<2	19	<1		0.14
RMD-275	GRAB	5180 Smith Cres.	31-Aug-17	0.66	<1		<2	18	<1		0.12
RMD-203	GRAB	23260 Westminster Hwy.	31-Aug-17	0.62	<1		2	18	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	5-Sep-17	0.69	<1		<2	17	<1		0.15
RMD-273	GRAB	Opp. 8331 Fairfax Place	5-Sep-17	0.68	<1		<2	21	<1		0.31
RMD-252	GRAB	9751 Pendleton Rd.	5-Sep-17	0.61	<1		<2	17	<1		0.12
RMD-274	GRAB	10920 Springwood Court	5-Sep-17	0.72	<1		2	19	<1		0.14
RMD-253	GRAB	11051 No 3 Rd.	5-Sep-17	0.85	<1		<2	18	<1		0.09
RMD-269	GRAB	14951 Triangle Rd.	5-Sep-17	0.73	<1		<2	17	<1		0.14
RMD-270	GRAB	8200 Jones Rd.	5-Sep-17	0.74	<1		<2	18	<1		0.13
RMD-254	GRAB	5300 No. 3 Rd.	5-Sep-17	0.74	<1		<2	18	<1		0.14
RMD-256	GRAB	1000 Blk. McDonald Rd.	5-Sep-17	0.58	<1		<2	19	<1		0.68
RMD-255	GRAB	6000 Blk. Miller Rd.	5-Sep-17	0.88	<1		2	18	<1		0.19
RMD-271	GRAB	3800 Cessna Drive	5-Sep-17	0.86	<1		4	17	<1		0.12
RMD-272	GRAB	751 Catalina Cres.	5-Sep-17	0.91	<1		<2	17	<1		0.13
RMD-250	GRAB	6071 Azure Rd.	5-Sep-17	0.96	<1		4	17	<1		0.16
RMD-263	GRAB	12560 Cambie Rd.	6-Sep-17	0.75	<1		<2	18	<1		0.18
RMD-264	GRAB	13100 Mitchell Rd.	6-Sep-17	0.93	<1		2	18	<1		0.14
RMD-277	GRAB	Opp. 11280 Twigg Place	6-Sep-17	0.67	<1		<2	21	<1		0.16
RMD-262	GRAB	13799 Commerce Pkwy.	6-Sep-17	0.65	<1		<2	18	<1		0.14
RMD-278	GRAB	6651 Fraserwood Place	6-Sep-17	0.66	<1		<2	18	<1		0.19
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	6-Sep-17	0.58	<1		<2	17	<1		0.12
RMD-261	GRAB	9911 Sidaway Rd.	6-Sep-17	0.55	<1		<2	18	<1		0.1
RMD-260	GRAB	11111 Horseshoe Way	6-Sep-17	1	<1		<2	18	<1		0.12
RMD-259	GRAB	10020 Amethyst Ave.	6-Sep-17	0.77	<1		8	19	<1		1.4
RMD-266	GRAB	9380 General Currie Rd.	6-Sep-17	0.75	<1		2	17	<1		1.3
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	6-Sep-17	0.75	<1		2	18	<1		0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	6-Sep-17	0.73	<1		46	19	<1		0.12
RMD-257	GRAB	6640 Blundell Rd.	6-Sep-17	0.74	<1		[overgrown] LA	18	<1		0.11
RMD-204	GRAB	3180 Granville Ave.	8-Sep-17	0.72	<1		<2	19	<1		0.14
RMD-206	GRAB	4251 Moncton St.	8-Sep-17	0.74	<1		<2	18	<1		0.17
RMD-216	GRAB	11080 No. 2 Rd.	8-Sep-17	0.88	<1		<2	17	<1		0.16
RMD-280	GRAB	11500 McKenzie Rd.	8-Sep-17	0.73	<1		<2	19	<1		0.14
RMD-212	GRAB	Opp. 8600 Ryan Rd.	8-Sep-17	0.89	<1		<2	18	<1		0.16
RMD-208	GRAB	13200 No. 4 Rd.	8-Sep-17	0.92	<1		<2	19	<1		0.16
RMD-205	GRAB	13851 Steveston Hwy.	8-Sep-17	0.79	<1		<2	17	<1		0.17
RMD-202	GRAB	1500 Valemont Way	8-Sep-17	0.77	<1		<2	17	<1		0.2
RMD-214	GRAB	11720 Westminster Hwy.	8-Sep-17	0.74	<1		<2	19	<1		0.13
RMD-267	GRAB	17240 Fedoruk	8-Sep-17	0.74	<1		<2	18	<1		0.16
RMD-249	GRAB	23000 Blk. Dyke Rd.	8-Sep-17	0.76	<1		<2	18	<1		0.18
RMD-276	GRAB	22271 Cochrane Drive	8-Sep-17	0.71	<1		<2	18	<1		0.10
RMD-275	GRAB	5180 Smith Cres.	8-Sep-17	0.68	<1		<2	19	<1		0.14
RMD-203	GRAB	23260 Westminster Hwy.	8-Sep-17	0.75	<1		<2	18	<1		0.14
RMD-251	GRAB	5951McCallan Rd.	11-Sep-17	0.69	<1		<2	17	<1		0.14
RMD-273	GRAB	Opp. 8331 Fairfax Place	11-Sep-17	0.58	<1		2	21	<1		0.38
RMD-252	GRAB	9751 Pendleton Rd.	11-Sep-17	0.63	<1		<2	18	<1		0.11
RMD-232	GRAB	10920 Springwood Court	11-Sep-17 11-Sep-17	0.69	<1		<2	18	<1		0.11
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Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mis	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-269	GRAB	14951 Triangle Rd.	11-Sep-17	0.6	<1		<2	18	<1		0.11
RMD-270	GRAB	8200 Jones Rd.	11-Sep-17	0.66	<1		<2	18	<1		0.14
RMD-254	GRAB	5300 No. 3 Rd.	11-Sep-17	0.6	<1		<2	18	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	11-Sep-17	0.53	<1		<2	19	<1		0.54
RMD-255	GRAB	6000 Blk. Miller Rd.	11-Sep-17	0.88	<1		6	18	<1		0.17
RMD-271	GRAB	3800 Cessna Drive	11-Sep-17	0.79	<1		<2	19	<1		0.14
RMD-272	GRAB	751 Catalina Cres.	11-Sep-17	0.98	<1		<2	18	<1		0.11
RMD-250	GRAB	6071 Azure Rd.	11-Sep-17	0.72	<1		<2	18	<1		0.12
RMD-263	GRAB	12560 Cambie Rd.	13-Sep-17	0.72	<1		<2	16	<1		0.13
RMD-264	GRAB	13100 Mitchell Rd.	13-Sep-17	0.67	<1		<2	17	<1		0.19
RMD-277	GRAB	Opp. 11280 Twigg Place	13-Sep-17	0.68	<1		2	18	<1		0.12
RMD-262	GRAB	13799 Commerce Pkwy.	13-Sep-17	0.66	<1		<2	17	<1		0.1
RMD-278	GRAB	6651 Fraserwood Place	13-Sep-17	0.64	<1		<2	17	<1		0.09
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	13-Sep-17	0.66	<1		<2	17	<1		0.09
RMD-261	GRAB	9911 Sidaway Rd.	13-Sep-17	0.64	<1		<2	17	<1		0.12
RMD-260	GRAB	11111 Horseshoe Way	13-Sep-17	0.67	<1	-	<2	17	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	13-Sep-17	0.8	<1	-	2	18	<1		1.9
RMD-266	GRAB	9380 General Currie Rd.	13-Sep-17	0.73	<1		<2	17	<1		0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	13-Sep-17	0.69	<1		<2	17	<1		0.11
RMD-258	GRAB	7000 Blk. Dyke Rd.	13-Sep-17	0.64	<1		22	17	<1		0.1
RMD-257	GRAB	6640 Blundell Rd.	13-Sep-17	0.7	<1		<2	17	<1		0.13
RMD-204	GRAB	3180 Granville Ave.	14-Sep-17	0.94	<1		<2	17	<1		0.18
RMD-206	GRAB	4251 Moncton St.	14-Sep-17	0.68	<1		4	17	<1		0.31
RMD-216	GRAB	11080 No. 2 Rd.	14-Sep-17	0.61	<1		<2	17	<1		0.18
RMD-280	GRAB	11500 McKenzie Rd.	14-Sep-17	0.37	<1		<2	17	<1		0.26
RMD-212	GRAB	Opp. 8600 Ryan Rd.	14-Sep-17	0.67	<1		<2	17	<1		0.23
RMD-208	GRAB	13200 No. 4 Rd.	14-Sep-17	0.66	<1		<2	17	<1		0.16
RMD-205	GRAB	13851 Steveston Hwy.	14-Sep-17	0.58	<1		<2	17	<1		0.13
RMD-202	GRAB	1500 Valemont Way	14-Sep-17	0.71	<1		<2	17	<1		0.14
RMD-214	GRAB	11720 Westminster Hwy.	14-Sep-17	0.8	<1		<2	17	<1		0.16
RMD-267	GRAB	, 17240 Fedoruk	14-Sep-17	0.7	<1		<2	17	<1		0.21
RMD-249	GRAB	23000 Blk. Dyke Rd.	14-Sep-17	0.64	<1		6	18	<1		0.24
RMD-276	GRAB	22271 Cochrane Drive	14-Sep-17	0.72	<1		2	18	<1		0.27
RMD-275	GRAB	5180 Smith Cres.	14-Sep-17	0.58	<1		<2	17	<1		0.23
RMD-203	GRAB	23260 Westminster Hwy.	14-Sep-17	0.61	<1		<2	18	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	18-Sep-17	0.7	<1		<2	17	<1		0.11
RMD-273	GRAB	Opp. 8331 Fairfax Place	18-Sep-17	0.65	<1		4	20	<1		0.43
RMD-252	GRAB	9751 Pendleton Rd.	18 Sep 17	0.67	<1		<2	17	<1		0.18
RMD-274	GRAB	10920 Springwood Court	18-Sep-17	0.73	<1		<2	18	<1		0.12
RMD-253	GRAB	11051 No 3 Rd.	18-Sep-17	0.68	<1		<2	17	<1		0.12
RMD-269	GRAB	14951 Triangle Rd.	18-Sep-17	0.64	<1		<2	18	<1		0.11
RMD-270	GRAB	8200 Jones Rd.	18-Sep-17	0.79	<1		<2	18	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	18-Sep-17	0.74	<1		<2	18	<1		0.12
RMD-254	GRAB	1000 Blk. McDonald Rd.	18 Sep 17	0.59	<1		<2	18	<1		0.33
RMD-255	GRAB	6000 Blk. Miller Rd.	18 Sep 17 18-Sep-17	0.9	<1		2	16	<1		0.21
RMD-271	GRAB	3800 Cessna Drive	18 Sep 17 18-Sep-17	0.86	<1		<2	18	<1		0.12
RMD-271	GRAB	751 Catalina Cres.	18-Sep-17 18-Sep-17	0.80	<1		10	18	<1		0.12
RMD-250	GRAB	6071 Azure Rd.	18 Sep 17 18-Sep-17	0.72	<1		<2	17	<1		0.14
RMD-263	GRAB	12560 Cambie Rd.	20-Sep-17	0.74	<1		<2	16	<1		0.11
RMD-263	GRAB	13100 Mitchell Rd.	20-Sep-17 20-Sep-17	0.74	<1		<2	16	<1		0.10
RMD-204	GRAB	Opp. 11280 Twigg Place	20-Sep-17 20-Sep-17	0.80	<1		2	16	<1		0.17
RMD-277	GRAB	13799 Commerce Pkwy.	20-Sep-17 20-Sep-17	0.79	<1		<2	16	<1		0.10
RMD-202	GRAB	6651 Fraserwood Place	20-Sep-17 20-Sep-17	0.7	<1		<2	16	<1		0.15
RMD-278	GRAB	Opp. 20371 Westminster Hwy.	20-Sep-17 20-Sep-17	0.65	<1		<2 <2	16	<1		0.10
	JIVAD	opp. 2007 I WESTIMUSTER LIMA.	20-2ch=11	0.70	~1	1	~4	10	1 ~1	1	0.12

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-260	GRAB	11111 Horseshoe Way	20-Sep-17	0.81	<1		<2	15	<1		0.14
RMD-259	GRAB	10020 Amethyst Ave.	20-Sep-17	0.8	<1		<2	16	<1		5.6
RMD-266	GRAB	9380 General Currie Rd.	20-Sep-17	0.86	<1		4	17	<1		0.13
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	20-Sep-17	0.79	<1		<2	17	<1		0.22
RMD-258	GRAB	7000 Blk. Dyke Rd.	20-Sep-17	0.79	<1		12	17	<1		0.16
RMD-257	GRAB	6640 Blundell Rd.	20-Sep-17	0.75	<1		<2	14	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	22-Sep-17	0.55	<1		<2	18	<1		0.12
RMD-206	GRAB	4251 Moncton St.	22-Sep-17	0.92	<1		<2	16	<1		0.61
RMD-216	GRAB	11080 No. 2 Rd.	22-Sep-17	0.72	<1		<2	16	<1		0.13
RMD-280	GRAB	11500 McKenzie Rd.	22-Sep-17	0.87	<1		<2	17	<1		0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	22-Sep-17	0.77	<1		<2	17	<1		0.12
RMD-208	GRAB	13200 No. 4 Rd.	22-Sep-17	0.97	<1		<2	16	<1		0.12
RMD-259	GRAB	10020 Amethyst Ave.	22-Sep-17	1.03		<1	<2	17		<1	6.8
RMD-205	GRAB	13851 Steveston Hwy.	22-Sep-17	0.8	<1		2	17	<1		0.21
RMD-202	GRAB	1500 Valemont Way	22-Sep-17	0.65	<1		2	16	<1		0.16
RMD-202	GRAB	11720 Westminster Hwy.	22-Sep-17	0.05	<1		<2	16	<1		0.10
RMD-267	GRAB	17240 Fedoruk	22-Sep-17	0.72	<1		<2	16	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	22-Sep-17 22-Sep-17	0.72	<1		2	16	<1		0.13
RMD-249	GRAB	•	22-Sep-17 22-Sep-17	0.58	<1		4	10	<1		0.12
	GRAB	22271 Cochrane Drive		0.65			<2	17	<1		0.10
RMD-275		5180 Smith Cres.	22-Sep-17		<1						
RMD-203	GRAB	23260 Westminster Hwy.	22-Sep-17	0.95	<1		2	17	<1		0.15
RMD-251	GRAB	5951McCallan Rd.	25-Sep-17	0.77	<1		<2	17	<1		0.14
RMD-273	GRAB	Opp. 8331 Fairfax Place	25-Sep-17	0.66	<1		<2	19	<1		0.28
RMD-252	GRAB	9751 Pendleton Rd.	25-Sep-17	0.65	<1		<2	17	<1		0.15
RMD-274	GRAB	10920 Springwood Court	25-Sep-17	0.76	<1		<2	17	<1		0.12
RMD-253	GRAB	11051 No 3 Rd.	25-Sep-17	0.67	<1		2	19	<1		0.14
RMD-269	GRAB	14951 Triangle Rd.	25-Sep-17	0.64	<1		<2	18	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	25-Sep-17	0.74				18			0.67
RMD-270	GRAB	8200 Jones Rd.	25-Sep-17	0.74	<1		<2	18	<1		0.69
RMD-254	GRAB	5300 No. 3 Rd.	25-Sep-17	0.75	<1		<2	17	<1		0.25
RMD-256	GRAB	1000 Blk. McDonald Rd.	25-Sep-17	0.5	<1		<2	20	<1		0.47
RMD-255	GRAB	6000 Blk. Miller Rd.	25-Sep-17	0.93	<1		<2	17	<1		0.26
RMD-271	GRAB	3800 Cessna Drive	25-Sep-17	0.8	<1		<2	18	<1		0.12
RMD-272	GRAB	751 Catalina Cres.	25-Sep-17	0.94	<1		<2	17	<1		0.12
RMD-250	GRAB	6071 Azure Rd.	25-Sep-17	0.84	<1		<2	17	<1		0.16
RMD-263	GRAB	12560 Cambie Rd.	27-Sep-17	0.8	<1		<2	16	<1		0.11
RMD-264	GRAB	13100 Mitchell Rd.	27-Sep-17	0.74	<1		6	18	<1		0.15
RMD-277	GRAB	Opp. 11280 Twigg Place	27-Sep-17	0.69	<1		<2	18	<1		0.14
RMD-262	GRAB	13799 Commerce Pkwy.	27-Sep-17	0.78	<1		2	18	<1		0.12
RMD-278	GRAB	6651 Fraserwood Place	27-Sep-17	0.79	<1		2	18	<1		0.11
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	27-Sep-17	0.76	<1		<2	18	<1		0.13
RMD-261	GRAB	9911 Sidaway Rd.	27-Sep-17	0.76	<1		<2	17	<1		0.11
RMD-260	GRAB	11111 Horseshoe Way	27-Sep-17	0.76	<1		<2	18	<1		0.18
RMD-259	GRAB	10020 Amethyst Ave.	27-Sep-17	0.79	<1		8	18	<1		0.49
RMD-266	GRAB	9380 General Currie Rd.	27-Sep-17	0.7	<1		<2	19	<1		0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	27-Sep-17	0.76	<1		2	17	<1		0.11
RMD-258	GRAB	7000 Blk. Dyke Rd.	27-Sep-17	0.83	<1		30	18	<1		0.1
RMD-257	GRAB	6640 Blundell Rd.	27-Sep-17	0.72	<1		<2	17	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	28-Sep-17	0.68	<1		4	16	<1		0.15
RMD-206	GRAB	4251 Moncton St.	28-Sep-17	0.67	<1		<2	16	<1		0.51
RMD-216	GRAB	11080 No. 2 Rd.	28-Sep-17	0.64	<1		<2	15	<1		0.14
RMD-280	GRAB	11500 McKenzie Rd.	28-Sep-17	0.53	<1		16	16	<1	[0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	28-Sep-17	0.7	<1		2	16	<1		0.32
RMD-208	GRAB	13200 No. 4 Rd.	28-Sep-17	0.71	<1		2	15	<1	1	0.13
RMD-205	GRAB	13851 Steveston Hwy.	28-SECIN	0.6	917	8	<2	16	<1	1	0.19

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-202	GRAB	1500 Valemont Way	28-Sep-17	0.51	<1		<2	15	<1		0.11
RMD-214	GRAB	11720 Westminster Hwy.	28-Sep-17	0.63	<1		<2	16	<1		0.13
RMD-267	GRAB	17240 Fedoruk	28-Sep-17	0.66	<1		2	16	<1		0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	28-Sep-17	0.62	<1		2	16	<1		0.13
RMD-276	GRAB	22271 Cochrane Drive	28-Sep-17	0.69	<1		6	16	<1		0.12
RMD-275	GRAB	5180 Smith Cres.	28-Sep-17	0.65	<1		<2	16	<1		0.1
RMD-203	GRAB	23260 Westminster Hwy.	28-Sep-17	0.64	<1		<2	16	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	2-Oct-17	0.81	<1		<2	14	<1		0.16
RMD-273	GRAB	Opp. 8331 Fairfax Place	2-Oct-17	0.67	<1		2	18	<1		0.26
RMD-252	GRAB	9751 Pendleton Rd.	2-Oct-17	0.92	<1		<2	15	<1		0.16
RMD-274	GRAB	10920 Springwood Court	2-Oct-17	0.72	<1		<2	16	<1		0.22
RMD-253	GRAB	11051 No 3 Rd.	2-Oct-17	0.72	<1		<2	15	<1		0.13
RMD-269	GRAB	14951 Triangle Rd.	2-Oct-17	0.63	<1		2	16	<1		0.12
RMD-270	GRAB	8200 Jones Rd.	2-Oct-17	0.73	<1		<2	15	<1		0.15
RMD-254	GRAB	5300 No. 3 Rd.	2-Oct-17	0.78	<1		<2	15	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	2-Oct-17	0.56	<1		2	16	<1		0.28
RMD-255	GRAB	6000 Blk. Miller Rd.	2-Oct-17	0.77	<1		10	14	<1		0.37
RMD-271	GRAB	3800 Cessna Drive	2-Oct-17	0.89	<1		2	16	<1		0.13
RMD-272	GRAB	751 Catalina Cres.	2-Oct-17	0.76	<1		<2	15	<1		0.19
RMD-250	GRAB	6071 Azure Rd.	2-Oct-17	0.83	<1		<2	15	<1		0.17
RMD-263	GRAB	12560 Cambie Rd.	4-Oct-17	0.75	<1		<2	15	<1		0.15
RMD-263	GRAB	13100 Mitchell Rd.	4-Oct-17	0.65	<1		2	16	<1		0.13
RMD-277	GRAB	Opp. 11280 Twigg Place	4-Oct-17	0.77	<1		<2	15	<1		0.15
RMD-262	GRAB	13799 Commerce Pkwy.	4-Oct-17	0.85	<1		<2	14	<1		0.13
RMD-202	GRAB	6651 Fraserwood Place	4-Oct-17 4-Oct-17	0.62	<1		<2	14	<1		0.18
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	4-Oct-17	0.67	<1		2	13	<1		0.12
RMD-261	GRAB	9911 Sidaway Rd.	4-Oct-17	0.82	<1		<2	15	<1		0.12
RMD-261	GRAB	11111 Horseshoe Way	4-Oct-17	0.76	<1		<2	15	<1		0.12
RMD-259	GRAB	10020 Amethyst Ave.	4-Oct-17	0.77	<1		<2	16	<1		0.65
RMD-266	GRAB	9380 General Currie Rd.	4-Oct-17	0.82	<1		<2	15	<1		0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	4-Oct-17	0.78	<1		<2	16	<1		0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	4-Oct-17	0.83	<1		10	15	<1		0.15
RMD-250	GRAB	6640 Blundell Rd.	4-Oct-17	0.82	<1		<2	14	<1		0.11
RMD-204	GRAB	3180 Granville Ave.	6-Oct-17	0.78	<1		<2	14	<1		0.14
RMD-204	GRAB	4251 Moncton St.	6-Oct-17	0.78	<1	-	<2	13	<1		0.28
RMD-216	GRAB	11080 No. 2 Rd.	6-Oct-17	0.87	<1		<2	14	<1		0.19
RMD-210	GRAB	11500 McKenzie Rd.	6-Oct-17	0.68	<1		6	14	<1		0.13
RMD-280	GRAB	Opp. 8600 Ryan Rd.	6-Oct-17	0.08	<1		<2	14	<1		0.17
RMD-212	GRAB	13200 No. 4 Rd.	6-Oct-17	0.87	<1		<2	15	<1		0.13
RMD-205	GRAB	13851 Steveston Hwy.	6-Oct-17	0.65	<1		2	14	<1		0.12
RMD-203	GRAB	1500 Valemont Way		0.65	<1		<2	15	<1		0.17
RMD-202	GRAB	11720 Westminster Hwy.	6-Oct-17 6-Oct-17	0.78	<1		<2	10	<1		0.22
RMD-214	GRAB			0.72			<2	15			
		23260 Westminster Hwy.	6-Oct-17		<1				<1		0.25
RMD-267	GRAB	17240 Fedoruk	6-Oct-17	0.78	<1		<2	15	<1		0.17
RMD-249	GRAB	23000 Blk. Dyke Rd.	6-Oct-17	0.63	<1		<2	16	<1		0.3
RMD-276	GRAB	22271 Cochrane Drive	6-Oct-17	0.82	<1		6	15	<1		0.35
RMD-275	GRAB	5180 Smith Cres.	6-Oct-17	0.71	<1		<2	14	<1		0.38
RMD-251	GRAB	5951McCallan Rd.	10-Oct-17	0.82	<1		<2	13	<1		0.14
RMD-273	GRAB	Opp. 8331 Fairfax Place	10-Oct-17	0.73	<1		<2	16	<1		0.21
RMD-252	GRAB	9751 Pendleton Rd.	10-Oct-17	0.73	<1		<2	15	<1		0.14
RMD-274	GRAB	10920 Springwood Court	10-Oct-17	0.81	<1		<2	15	<1		0.14
RMD-253	GRAB	11051 No 3 Rd.	10-Oct-17	0.78	<1		6	14	<1		0.16
RMD-269	GRAB	14951 Triangle Rd.	10-Oct-17	0.83	<1		<2	14	<1		0.11
RMD-270	GRAB	8200 Jones Rd.	10-Oct-17	0.85	<1	•	<2	15	<1		0.27
RMD-254	GRAB	5300 No. 3 Rd.	10-0 CIN (J ^{U.86}	27	9	<2	14	<1		0.17

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mIs	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-256	GRAB	1000 Blk. McDonald Rd.	10-Oct-17	0.57	<1		<2	14	<1	· -	0.26
RMD-255	GRAB	6000 Blk. Miller Rd.	10-Oct-17	0.94	<1		4	13	<1		0.24
RMD-271	GRAB	3800 Cessna Drive	10-Oct-17	0.57	<1		<2	16	<1		0.16
RMD-272	GRAB	751 Catalina Cres.	10-Oct-17	0.9	<1		<2	14	<1		0.14
RMD-250	GRAB	6071 Azure Rd.	10-Oct-17	0.85	<1		<2	14	<1		0.27
RMD-257	GRAB	6640 Blundell Rd.	11-Oct-17	0.74	<1		<2	13	<1		0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	11-Oct-17	0.9	<1		10	15	<1		0.15
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	11-Oct-17	0.79	<1		<2	14	<1		0.15
RMD-260	GRAB	11111 Horseshoe Way	11-Oct-17	0.92	<1		<2	13	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	11-Oct-17	0.83	<1		[spreading error -	16	<1		0.55
RMD-266	GRAB	9380 General Currie Rd.	11-Oct-17	0.87	<1		clustered colonies] LA <2	14	1		0.22
RMD-261	GRAB	9911 Sidaway Rd.	11-Oct-17	0.83	<1	-	<2	14	<1		0.13
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	11-Oct-17	0.05	<1		<2	13	<1		0.13
RMD-275	GRAB	6651 Fraserwood Place	11-Oct-17	0.66	<1		<2	13	<1		0.10
RMD-262	GRAB	13799 Commerce Pkwy.	11-Oct-17	0.7	<1		<2	14	<1		0.18
RMD-263	GRAB	12560 Cambie Rd.	11-Oct-17	0.81	<1		<2	13	<1		0.15
RMD-264	GRAB	13100 Mitchell Rd.	11-Oct-17	0.77	<1		<2	13	<1		0.28
RMD-277	GRAB	Opp. 11280 Twigg Place	11-Oct-17	0.81	<1		<2	13	<1		0.21
RMD-204	GRAB	3180 Granville Ave.	12-Oct-17	0.67	<1		<2	15	<1		0.18
RMD-206	GRAB	4251 Moncton St.	12-Oct-17	0.6	<1		2	14	<1		0.12
RMD-216	GRAB	11080 No. 2 Rd.	12-Oct-17	0.71	<1		<2	14	<1		0.17
RMD-280	GRAB	11500 McKenzie Rd.	12-Oct-17	0.62	<1		4	14	<1		0.27
RMD-212	GRAB	Opp. 8600 Ryan Rd.	12-Oct-17	0.95	<1		2	14	<1		0.15
RMD-208	GRAB	13200 No. 4 Rd.	12-Oct-17	0.84	<1		2	13	<1		0.12
RMD-205	GRAB	13851 Steveston Hwy.	12-Oct-17	0.64	<1		<2	14	<1		0.33
RMD-202	GRAB	1500 Valemont Way	12-Oct-17	0.88	<1		2	14	<1		0.24
RMD-214	GRAB	, 11720 Westminster Hwy.	12-Oct-17	0.8	<1		<2	14	<1		0.14
RMD-267	GRAB	17240 Fedoruk	12-Oct-17	0.68	<1		<2	14	<1		0.23
RMD-249	GRAB	23000 Blk. Dyke Rd.	12-Oct-17	0.55	<1		<2	14	<1		0.32
RMD-276	GRAB	22271 Cochrane Drive	12-Oct-17	0.58	<1		<2	14	<1		0.32
RMD-275	GRAB	5180 Smith Cres.	12-Oct-17	0.61	<1		<2	14	<1		0.24
RMD-203	GRAB	23260 Westminster Hwy.	12-Oct-17	0.6	<1		<2	15	<1		0.17
RMD-251	GRAB	5951McCallan Rd.	16-Oct-17	0.84	<1		<2	14	<1		0.15
RMD-273	GRAB	Opp. 8331 Fairfax Place	16-Oct-17	0.71	<1		<2	16	<1		0.28
RMD-252	GRAB	9751 Pendleton Rd.	16-Oct-17	0.74	<1		<2	14	<1		0.37
RMD-274	GRAB	10920 Springwood Court	16-Oct-17	0.77	<1		<2	15	<1		0.13
RMD-253	GRAB	11051 No 3 Rd.	16-Oct-17	0.79	<1		2	15	<1		0.12
RMD-269	GRAB	14951 Triangle Rd.	16-Oct-17	0.63	<1		<2	15	<1		0.2
RMD-270	GRAB	8200 Jones Rd.	16-Oct-17	0.83	<1		2	14	<1		0.17
RMD-254	GRAB	5300 No. 3 Rd.	16-Oct-17	0.92	<1		2	14	<1		0.2
RMD-256	GRAB	1000 Blk. McDonald Rd.	16-Oct-17	0.62	<1		<2	15	<1		0.47
RMD-255	GRAB	6000 Blk. Miller Rd.	16-Oct-17	0.66	<1		2	15	<1		0.25
RMD-271	GRAB	3800 Cessna Drive	16-Oct-17	0.82	<1		<2	15	<1		0.15
RMD-272	GRAB	751 Catalina Cres.	16-Oct-17	0.68	<1		<2	14	<1		0.16
RMD-250	GRAB	6071 Azure Rd.	16-Oct-17	0.8	<1		<2	14	<1		0.21
RMD-258	GRAB	7000 Blk. Dyke Rd.	18-Oct-17	0.66	<1		8	15	<1		0.16
RMD-257	GRAB	6640 Blundell Rd.	18-Oct-17	0.76	<1		<2	15	<1		0.2
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	18-Oct-17	0.64	<1		<2	14	<1		0.28
RMD-260	GRAB	11111 Horseshoe Way	18-Oct-17	0.66	<1		<2	15	<1		0.16
RMD-266	GRAB	9380 General Currie Rd.	18-Oct-17	0.71	<1		<2	14	<1		0.19
RMD-259	GRAB	10020 Amethyst Ave.	18-Oct-17	0.64	<1		<2	14	<1		0.51
RMD-261	GRAB	9911 Sidaway Rd.	18-Oct-17	0.71	<1		<2	14	<1		0.25
RMD-278	GRAB	6651 Fraserwood Place	18-Oct-17	0.74	<1		<2	15	<1		0.22
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	18-0c <u>t-17</u>	0.82	1		<2	14	<1	1	0.42

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-263	GRAB	12560 Cambie Rd.	18-Oct-17	0.72	<1		<2	14	<1		0.2
RMD-264	GRAB	13100 Mitchell Rd.	18-Oct-17	0.67	<1		<2	15	<1		0.2
RMD-277	GRAB	Opp. 11280 Twigg Place	18-Oct-17	0.79	<1		<2	14	<1		0.27
RMD-204	GRAB	3180 Granville Ave.	20-Oct-17	0.77	<1		<2	12	<1		0.13
RMD-206	GRAB	4251 Moncton St.	20-Oct-17	0.72	<1		<2	12	<1		0.18
RMD-216	GRAB	11080 No. 2 Rd.	20-Oct-17	0.7	<1		<2	12	<1		0.16
RMD-280	GRAB	11500 McKenzie Rd.	20-Oct-17	0.74	<1		<2	13	<1		0.18
RMD-212	GRAB	Opp. 8600 Ryan Rd.	20-Oct-17	0.85	<1		<2	12	<1		0.16
RMD-208	GRAB	13200 No. 4 Rd.	20-Oct-17	0.82	<1		<2	13	<1		0.14
RMD-205	GRAB	13851 Steveston Hwy.	20-Oct-17	0.8	<1		<2	11	<1		0.15
RMD-202	GRAB	1500 Valemont Way	20-Oct-17	0.81	<1		<2	11	<1		0.14
RMD-214	GRAB	11720 Westminster Hwy.	20-Oct-17	0.88	<1		<2	11	<1		0.22
RMD-267	GRAB	17240 Fedoruk	20-Oct-17	0.7	<1		4	13	<1		0.15
RMD-249	GRAB	23000 Blk. Dyke Rd.	20-Oct-17	0.64	<1		2	14	<1		0.17
RMD-276	GRAB	22271 Cochrane Drive	20-Oct-17	0.73	<1		6	12	<1		0.27
RMD-275	GRAB	5180 Smith Cres.	20-Oct-17	0.77	<1		2	12	<1		0.27
RMD-203	GRAB	23260 Westminster Hwy.	20-Oct-17	0.8	<1		2	11	<1		0.27
RMD-251	GRAB	5951McCallan Rd.	23-Oct-17	0.58	<1		<2	11	<1		0.11
RMD-273	GRAB	Opp. 8331 Fairfax Place	23-Oct-17	0.51	<1		<2	14	<1		0.17
RMD-252	GRAB	9751 Pendleton Rd.	23-Oct-17	0.66	<1		<2	12	<1		0.58
RMD-274	GRAB	10920 Springwood Court	23-Oct-17	0.6	<1		<2	13	<1	-	0.5
RMD-253	GRAB	11051 No 3 Rd.	23-Oct-17	0.54	<1		<2	11	<1		0.13
RMD-269	GRAB	14951 Triangle Rd.	23-Oct-17	0.54	<1		<2	13	<1		0.13
RMD-200	GRAB	8200 Jones Rd.	23-Oct-17	0.88	<1		<2	13	<1		0.24
RMD-254	GRAB	5300 No. 3 Rd.	23-Oct-17 23-Oct-17	0.88	<1		<2	12	<1		0.4
RMD-271	GRAB	3800 Cessna Drive	23-Oct-17 23-Oct-17	0.80	<1		<2	12	<1		0.41
RMD-271	GRAB			0.74	<1		<2	13	<1		0.13
RMD-272	GRAB	751 Catalina Cres. 6000 Blk. Miller Rd.	23-Oct-17 23-Oct-17	0.75	<1		4	13	<1		0.14
RMD-256	GRAB	1000 Blk. McDonald Rd.	23-Oct-17 23-Oct-17	0.70	<1		4 <2	10	<1		0.28
RMD-250	GRAB	6071 Azure Rd.	23-Oct-17 23-Oct-17	0.45	<1		2	14	<1		0.21
RMD-263	GRAB		25-Oct-17	0.82	<1		<2	13	<1		0.14
RMD-264	GRAB	12560 Cambie Rd. 13100 Mitchell Rd.	25-Oct-17 25-Oct-17	0.82	<1		2	13	<1		0.12
RMD-204	GRAB	Opp. 11280 Twigg Place	25-Oct-17	0.74	<1		<2	11	<1		0.13
RMD-262	GRAB	13799 Commerce Pkwy.	25-Oct-17 25-Oct-17	0.74	<1		<2	12			0.71
RMD-262		6651 Fraserwood Place			<1		2		<1		
	GRAB		25-Oct-17	0.68				12	<1		0.13
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	25-Oct-17	0.71	<1		<2	11	<1		0.13
RMD-261	GRAB	9911 Sidaway Rd.	25-Oct-17	0.73	<1		<2	10	<1		0.13
RMD-260	GRAB	11111 Horseshoe Way	25-Oct-17	0.83	<1		<2	11	<1		0.15
RMD-259	GRAB	10020 Amethyst Ave.	25-Oct-17	0.82	<1		<2	14	<1		0.62
RMD-266	GRAB	9380 General Currie Rd.	25-Oct-17	0.82	<1		<2	12	<1		0.17
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	25-Oct-17	0.9	<1		<2	12	<1		0.76
RMD-258	GRAB	7000 Blk. Dyke Rd.	25-Oct-17	0.85	<1		8	12	<1		0.15
RMD-257	GRAB	6640 Blundell Rd.	25-Oct-17	0.96	<1		<2	12	<1		0.12
RMD-204	GRAB	3180 Granville Ave.	26-Oct-17	0.67	<1		<2	13	<1		0.14
RMD-206	GRAB	4251 Moncton St.	26-Oct-17	0.69	<1		<2	13	<1		0.17
RMD-216 RMD-280	GRAB GRAB	11080 No. 2 Rd. 11500 McKenzie Rd.	26-Oct-17 26-Oct-17	0.79 0.57	<1 <1		<2 [Contaminated colony	10	<1		0.19
RMD-212	GRAB	Opp. 8600 Ryan Rd.	26-Oct-17	0.94	<1		spread on plate.] LA <2	12	<1		0.12
RMD-212	GRAB	13200 No. 4 Rd.	26-Oct-17	0.94	<1		<2	12	<1		0.12
RMD-205	GRAB	13851 Steveston Hwy.	26-Oct-17	0.85	<1		<2	12	<1		0.14
RMD-202	GRAB	1500 Valemont Way	26-Oct-17	0.7	<1		<2	12	<1		0.13
RMD-214	GRAB	11720 Westminster Hwy.	26-Oct-17	1.01	<1		<2	11	<1	'	0.18
RMD-267	GRAB	17240 Fedoruk	26-Oct-17	0.75	<1		<2	10	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	26-Oct-17 26-Oct-1	0.72	2 ¹ 8	1	<2	10	<1		0.13
RMD-276	GRAB	22271 Cochrane Drive	26-0ct-17	0.74		•	<2	10	<1		0.21

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-275	GRAB	5180 Smith Cres.	26-Oct-17	0.57	<1		<2	10	<1		0.17
RMD-203	GRAB	23260 Westminster Hwy.	26-Oct-17	0.63	<1		<2	12	<1		0.14
RMD-251	GRAB	5951McCallan Rd.	30-Oct-17	0.82	<1		<2	10	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	30-Oct-17	0.58	<1		<2	14	<1		0.84
RMD-252	GRAB	9751 Pendleton Rd.	30-Oct-17	0.63	<1		<2	12	<1		0.14
RMD-274	GRAB	10920 Springwood Court	30-Oct-17	0.53	<1		<2	13	<1		0.2
RMD-253	GRAB	11051 No 3 Rd.	30-Oct-17	0.59	<1		<2	13	<1		0.16
RMD-269	GRAB	14951 Triangle Rd.	30-Oct-17	0.42	<1		<2	12	<1		0.15
RMD-270	GRAB	8200 Jones Rd.	30-Oct-17	0.7	<1		<2	13	<1		0.37
RMD-254	GRAB	5300 No. 3 Rd.	30-Oct-17	0.8	<1		<2	12	<1		0.15
RMD-256	GRAB	1000 Blk. McDonald Rd.	30-Oct-17	0.44	<1		<2	12	<1		0.64
RMD-255	GRAB	6000 Blk. Miller Rd.	30-Oct-17	0.79	<1		<2	12	<1		0.27
RMD-271	GRAB	3800 Cessna Drive	30-Oct-17	0.78	<1		<2	12	<1		0.21
RMD-272	GRAB	751 Catalina Cres.	30-Oct-17	0.73	<1		2	11	<1		0.23
RMD-250	GRAB	6071 Azure Rd.	30-Oct-17	0.67	<1		2	11	<1		0.13
RMD-263	GRAB	12560 Cambie Rd.	1-Nov-17	0.75	<1		2	10	<1		0.14
RMD-264	GRAB	13100 Mitchell Rd.	1-Nov-17	0.63	<1		<2	11	<1		0.15
RMD-277	GRAB	Opp. 11280 Twigg Place	1-Nov-17	0.69	<1		<2	11	<1		0.32
RMD-262	GRAB	13799 Commerce Pkwy.	1-Nov-17	0.6	<1		<2	11	<1		0.13
RMD-278	GRAB	6651 Fraserwood Place	1-Nov-17	0.58	<1		2	11	<1		0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	1-Nov-17	0.66	<1		2	11	<1		0.13
RMD-261	GRAB	9911 Sidaway Rd.	1-Nov-17	0.76	<1		2	11	<1		0.13
RMD-261	GRAB	11111 Horseshoe Way	1-Nov-17	0.69	<1		<2	11	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	1-Nov-17	0.75	<1		<2	11	<1		0.83
RMD-266	GRAB	9380 General Currie Rd.	1-Nov-17	0.75	<1		<2	11	<1		0.85
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	1-Nov-17	0.84	<1		2	11	<1		0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	1-Nov-17	0.81	<1		10	11	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	1-Nov-17	0.01	<1		<2	10	<1		0.14
RMD-204	GRAB	3180 Granville Ave.	3-Nov-17	0.57	<1		<2	10	<1		0.14
RMD-204	GRAB	4251 Moncton St.	3-Nov-17	0.8	<1		<2	8	<1		0.35
RMD-216	GRAB	11080 No. 2 Rd.	3-Nov-17	0.86	<1		<2	7	<1		0.21
RMD-280	GRAB	11500 McKenzie Rd.	3-Nov-17	0.75	<1		<2	10	<1		0.21
RMD-212	GRAB	Opp. 8600 Ryan Rd.	3-Nov-17	0.89	<1		<2	7	<1		0.55
RMD-208	GRAB	13200 No. 4 Rd.	3-Nov-17	0.79	<1		<2	8	<1		0.44
RMD-205	GRAB	13851 Steveston Hwy.	3-Nov-17 3-Nov-17	0.75	<1		<2	8	<1		0.44
RMD-203	GRAB	1500 Valemont Way	3-Nov-17	0.56	<1		<2	8	<1		0.36
RMD-214	GRAB	11720 Westminster Hwy.	3-Nov-17	0.9	<1		<2	7	<1		0.29
RMD-214 RMD-267	GRAB	17240 Fedoruk	3-Nov-17	0.9	<1		<2	8	<1		0.29
RMD-249	GRAB	23000 Blk. Dyke Rd.	3-Nov-17 3-Nov-17	0.59	<1		<2	8	<1		0.33
RMD-276	GRAB	22271 Cochrane Drive	3-Nov-17	0.52	<1		2	8	<1		0.10
RMD-276	GRAB	5180 Smith Cres.	3-Nov-17 3-Nov-17	0.6	<1		<2	8	<1		0.37
RMD-203	GRAB	23260 Westminster Hwy.	3-Nov-17 3-Nov-17	0.57	<1		<2	8	<1		0.20
RMD-203	GRAB	5951McCallan Rd.	6-Nov-17	0.0	<1		<2	9			
RMD-231	GRAB			0.9	<1		<2	9	<1		0.24 0.9
		Opp. 8331 Fairfax Place	6-Nov-17						<1		
RMD-252	GRAB	9751 Pendleton Rd.	6-Nov-17	0.71	<1		<2	9	<1		0.2
RMD-274	GRAB	10920 Springwood Court	6-Nov-17	0.77	<1		<2	9	<1		0.2
RMD-253	GRAB	11051 No 3 Rd.	6-Nov-17	0.81	<1		[Poor spreading.] LA	9	<1		0.16
RMD-269	GRAB	14951 Triangle Rd.	6-Nov-17	0.62	<1		<2	12	<1		0.21
RMD-270	GRAB	8200 Jones Rd.	6-Nov-17	0.82	<1		<2	9	<1		0.19
RMD-254	GRAB	5300 No. 3 Rd.	6-Nov-17	0.68	<1		<2	9	<1		0.22
RMD-256	GRAB	1000 Blk. McDonald Rd.	6-Nov-17	0.55	<1		2	9	<1		0.32
RMD-255	GRAB	6000 Blk. Miller Rd.	6-Nov-17	0.88	<1		<2	10	<1		0.4
RMD-271	GRAB	3800 Cessna Drive	6-Nov-17	0.86	<1		<2	9	<1		0.42
RMD-272	GRAB	751 Catalina Cres.	6-Nov-17	0.92	<1	_	<2	9	<1		0.21
RMD-250	GRAB	6071 Azure Rd.	6-NoCIN	J ^{U 79}	28	2	<2	9	<1		0.12

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-263	GRAB	12560 Cambie Rd.	8-Nov-17	0.92	<1		<2	9	<1		0.21
RMD-264	GRAB	13100 Mitchell Rd.	8-Nov-17	0.8	<1		<2	9	<1		0.24
RMD-277	GRAB	Opp. 11280 Twigg Place	8-Nov-17	0.78	<1		<2	9	<1		0.17
RMD-262	GRAB	13799 Commerce Pkwy.	8-Nov-17	0.73	<1		<2	9	<1		0.24
RMD-278	GRAB	6651 Fraserwood Place	8-Nov-17	0.6	<1		<2	9	<1		0.1
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	8-Nov-17	0.64	<1		<2	8	<1		0.12
RMD-261	GRAB	9911 Sidaway Rd.	8-Nov-17	0.6	<1		<2	7	<1		0.12
RMD-260	GRAB	11111 Horseshoe Way	8-Nov-17	0.8	<1		<2	9	<1		0.13
RMD-259	GRAB	10020 Amethyst Ave.	8-Nov-17	0.74	<1		<2	9	<1		0.59
RMD-266	GRAB	9380 General Currie Rd.	8-Nov-17	0.86	<1		<2	9	<1		0.13
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	8-Nov-17	0.9	<1		<2	8	<1		0.19
RMD-258	GRAB	7000 Blk. Dyke Rd.	8-Nov-17	0.91	<1		6	8	<1		0.14
RMD-257	GRAB	6640 Blundell Rd.	8-Nov-17	0.73	<1		<2	8	<1		0.16
RMD-204	GRAB	3180 Granville Ave.	9-Nov-17	0.7	<1		<2	9	<1		0.16
RMD-206	GRAB	4251 Moncton St.	9-Nov-17	0.8	<1		<2	10	<1		0.13
RMD-216	GRAB	11080 No. 2 Rd.	9-Nov-17	0.8	<1		<2	9	<1		0.14
RMD-280	GRAB	11500 McKenzie Rd.	9-Nov-17	0.61	<1		<2	9	<1		0.18
RMD-212	GRAB	Opp. 8600 Ryan Rd.	9-Nov-17	0.84	<1		<2	9	<1		0.21
RMD-208	GRAB	13200 No. 4 Rd.	9-Nov-17	0.82	<1		<2	9	<1		0.12
RMD-205	GRAB	13851 Steveston Hwy.	9-Nov-17	0.67	<1		<2	9	<1		0.23
RMD-202	GRAB	1500 Valemont Way	9-Nov-17	0.65	<1		<2	10	<1		0.13
RMD-214	GRAB	11720 Westminster Hwy.	9-Nov-17	0.93	<1		2	9	<1		0.13
RMD-267	GRAB	17240 Fedoruk	9-Nov-17	0.63	<1		<2	9	<1		0.25
RMD-249	GRAB	23000 Blk. Dyke Rd.	9-Nov-17	0.65	<1		<2	10	<1		0.14
RMD-275	GRAB	5180 Smith Cres.	9-Nov-17	0.6	<1		<2	9	<1		0.14
RMD-276	GRAB	22271 Cochrane Drive	9-Nov-17	0.62	<1		2	9	<1		0.12
RMD-203	GRAB	23260 Westminster Hwy.	9-Nov-17	0.62	<1		2	9	<1		0.16
RMD-251	GRAB	5951McCallan Rd.	14-Nov-17	0.68	<1		<2	8	<1		0.23
RMD-273	GRAB	Opp. 8331 Fairfax Place	14-Nov-17	0.59	<1		<2	11	<1		3.2
RMD-252	GRAB	9751 Pendleton Rd.	14-Nov-17	0.62	<1		2	11	<1		0.32
RMD-274	GRAB	10920 Springwood Court	14-Nov-17	0.67	<1		<2	11	<1		0.24
RMD-253	GRAB	11051 No 3 Rd.	14-Nov-17	0.68	<1		<2	9	<1		0.17
RMD-269	GRAB	14951 Triangle Rd.	14-Nov-17	0.56	<1		<2	10	<1		0.26
RMD-270	GRAB	8200 Jones Rd.	14-Nov-17	0.54	<1		<2	10	<1		0.15
RMD-254	GRAB	5300 No. 3 Rd.	14 Nov 17 14-Nov-17	0.69	<1		<2	10	<1		0.15
RMD-254	GRAB	1000 Blk. McDonald Rd.	14 Nov 17 14-Nov-17	0.44	<1		2	10	<1		0.49
RMD-255	GRAB	6000 Blk. Miller Rd.	14 Nov 17 14-Nov-17	0.88	<1		2	10	<1		0.34
RMD-233	GRAB	3800 Cessna Drive	14-Nov-17 14-Nov-17	0.64	<1	-	2	10	<1		0.24
RMD-271	GRAB	751 Catalina Cres.	14 Nov 17 14-Nov-17	0.9	<1		12	9	<1		0.19
RMD-250	GRAB	6071 Azure Rd.	14 Nov 17 14-Nov-17	0.63	<1		<2	10	<1		0.15
RMD-263	GRAB	12560 Cambie Rd.	14-N0V-17 15-Nov-17	0.03	<1		4	9	<1		0.13
RMD-203	GRAB	Opp. 11280 Twigg Place	15-Nov-17	0.78	<1		<2	9	<1		0.24
RMD-264	GRAB	13100 Mitchell Rd.	15-Nov-17 15-Nov-17	0.78	<1		2	9	<1		0.14
RMD-262 RMD-278	GRAB GRAB	13799 Commerce Pkwy. 6651 Fraserwood Place	15-Nov-17	0.63 0.64	<1 <1		<2	9	<1 <1		0.11 0.13
RMD-278 RMD-279			15-Nov-17	0.64	<1		8	8			
	GRAB	Opp. 20371 Westminster Hwy. 9911 Sidaway Rd.	15-Nov-17	0.65	<1 <1		8 <2	9	<1		0.11
RMD-261	GRAB GRAB		15-Nov-17	0.81	<1		4	9	<1 <1	-	0.1
RMD-260		11111 Horseshoe Way	15-Nov-17				4 <2	9			0.12
RMD-259	GRAB	10020 Amethyst Ave.	15-Nov-17	0.72	<1				<1		0.65
RMD-266	GRAB	9380 General Currie Rd.	15-Nov-17	0.8	<1		<2 <2	9	<1		0.13
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	15-Nov-17	0.71	<1			9	<1		0.1
RMD-258	GRAB	7000 Blk. Dyke Rd.	15-Nov-17	0.82	<1		4		<1		0.09
RMD-257	GRAB	6640 Blundell Rd.	15-Nov-17	0.7	<1		<2	9	<1		0.1
RMD-204	GRAB	3180 Granville Ave.	17-Nov-17	0.6	<1 21 0	2	<2		<1		0.14
RMD-206	GRAB	4251 Moncton St.	17-NCN	<u>,</u> 4./2	28	ა	<2	7	<1		0.11

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-216	GRAB	11080 No. 2 Rd.	17-Nov-17	0.74	<1	-	<2	9	<1		0.1
RMD-280	GRAB	11500 McKenzie Rd.	17-Nov-17	0.75	<1		<2	9	<1		0.1
RMD-212	GRAB	Opp. 8600 Ryan Rd.	17-Nov-17	0.82	<1		<2	9	<1		0.11
RMD-208	GRAB	13200 No. 4 Rd.	17-Nov-17	0.84	<1		<2	9	<1		0.1
RMD-205	GRAB	13851 Steveston Hwy.	17-Nov-17	0.69	<1		<2	9	<1		0.11
RMD-202	GRAB	1500 Valemont Way	17-Nov-17	0.67	<1		<2	9	<1		0.1
RMD-214	GRAB	11720 Westminster Hwy.	17-Nov-17	0.73	<1		<2	7	<1		0.1
RMD-267	GRAB	17240 Fedoruk	17-Nov-17	0.68	<1		<2	9	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	17-Nov-17	0.55	<1		<2	8	<1		0.11
RMD-275	GRAB	5180 Smith Cres.	17-Nov-17	0.62	<1		<2	9	<1		0.13
RMD-276	GRAB	22271 Cochrane Drive	17-Nov-17	0.65	<1		<2	9	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	17-Nov-17	0.63	<1		<2	8	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	20-Nov-17	0.84	<1		2	6	<1		0.11
RMD-273	GRAB	Opp. 8331 Fairfax Place	20-Nov-17	0.8	<1		52	9	<1		0.99
RMD-252	GRAB	9751 Pendleton Rd.	20-Nov-17	0.77	<1		<2	8	<1		0.13
RMD-274	GRAB	10920 Springwood Court	20-Nov-17	0.65	<1		<2	9	<1		0.12
RMD-253	GRAB	11051 No 3 Rd.	20-Nov-17	0.62	<1		<2	7	<1		0.13
RMD-269	GRAB	14951 Triangle Rd.	20-Nov-17	0.51	<1	-	<2	9	<1		0.1
RMD-270	GRAB	8200 Jones Rd.	20-Nov-17	0.67	<1		<2	7	<1		0.11
RMD-254	GRAB	5300 No. 3 Rd.	20-Nov-17	0.64	<1	-	<2	7	<1		0.12
RMD-255	GRAB	6000 Blk. Miller Rd.	20-Nov-17	0.89	<1		<2	6	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	20-Nov-17	0.71	<1		2	8	<1		0.15
RMD-271	GRAB	3800 Cessna Drive	20-Nov-17	0.73	<1		<2	7	<1		0.15
RMD-272	GRAB	751 Catalina Cres.	20-Nov-17	0.83	<1		<2	6	<1		0.13
RMD-250	GRAB	6071 Azure Rd.	20-Nov-17	0.8	<1		<2	7	<1		0.2
RMD-263	GRAB	12560 Cambie Rd.	22-Nov-17	0.79	<1		<2	8	<1		0.11
RMD-264	GRAB	13100 Mitchell Rd.	22-Nov-17	0.81	<1	-	<2	8	<1		0.13
RMD-277	GRAB	Opp. 11280 Twigg Place	22-Nov-17	0.77	<1	-	<2	8	<1		0.13
RMD-262	GRAB	13799 Commerce Pkwy.	22-Nov-17	0.57	<1		<2	7	<1		0.14
RMD-278	GRAB	6651 Fraserwood Place	22-Nov-17	0.65	<1		<2	8	<1		0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	22-Nov-17	0.59	<1	-	<2	8	<1		0.11
RMD-261	GRAB	9911 Sidaway Rd.	22-Nov-17	0.58	<1		<2	9	<1		0.18
RMD-260	GRAB	11111 Horseshoe Way	22-Nov-17	0.63	<1		<2	8	<1		0.17
RMD-259	GRAB	10020 Amethyst Ave.	22-Nov-17	0.78	<1	-	<2	10	<1		0.36
RMD-266	GRAB	9380 General Currie Rd.	22-Nov-17	0.74	<1		<2	8	<1		0.1
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	22-Nov-17	0.75	<1		<2	9	<1		0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	22-Nov-17	0.81	<1		4	9	<1		0.1
RMD-257	GRAB	6640 Blundell Rd.	22-Nov-17	0.91	<1		<2	8	<1		0.1
RMD-204	GRAB	3180 Granville Ave.	23-Nov-17	0.65	<1		<2	9	<1		0.12
RMD-206	GRAB	4251 Moncton St.	23-Nov-17	0.61	<1		2	9	<1		0.12
RMD-216	GRAB	11080 No. 2 Rd.	23-Nov-17	0.64	<1		<2	9	<1		0.11
RMD-280	GRAB	11500 McKenzie Rd.	23-Nov-17	0.62	<1		<2	9	<1		0.08
RMD-212	GRAB	Opp. 8600 Ryan Rd.	23-Nov-17	0.6	<1		4	9	<1		0.1
RMD-208	GRAB	13200 No. 4 Rd.	23-Nov-17	0.54	<1		<2	10	<1		0.11
RMD-205	GRAB	13851 Steveston Hwy.	23-Nov-17	0.63	<1		<2	9	<1		0.21
RMD-202	GRAB	1500 Valemont Way	23-Nov-17	0.53	<1	<u>.</u>	<2	8	<1		0.09
RMD-214	GRAB	11720 Westminster Hwy.	23-Nov-17	0.7	<1	<u>.</u>	<2	7	<1		0.11
RMD-267	GRAB	17240 Fedoruk	23-Nov-17	0.75	<1	<u>.</u>	<2	10	<1		0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	23-Nov-17	0.56	<1		<2	9	<1		0.1
RMD-276	GRAB	22271 Cochrane Drive	23-Nov-17	0.76	<1		<2	10	<1		0.13
RMD-275	GRAB	5180 Smith Cres.	23-Nov-17	0.68	<1		<2	9	<1		0.09
RMD-203	GRAB	23260 Westminster Hwy.	23-Nov-17	0.71	<1		2	9	<1		0.08
RMD-273	GRAB	Opp. 8331 Fairfax Place	27-Nov-17	0.65	<1		2	10	<1		0.23
RMD-252	GRAB	9751 Pendleton Rd.	27-Nov-17	0.58	<1		<2	10	<1		0.11
RMD-274	GRAB	10920 Springwood Court	27-NCN(1	<2	10	<1		0.14

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-269	GRAB	14951 Triangle Rd.	27-Nov-17	0.59	<1		<2	10	<1		0.1
RMD-270	GRAB	8200 Jones Rd.	27-Nov-17	0.68	<1		2	10	<1		0.1
RMD-254	GRAB	5300 No. 3 Rd.	27-Nov-17	0.64	<1		<2	8	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	27-Nov-17	0.54	<1		<2	10	<1		0.75
RMD-255	GRAB	6000 Blk. Miller Rd.	27-Nov-17	0.97	<1		<2	7	<1		0.12
RMD-271	GRAB	3800 Cessna Drive	27-Nov-17	0.67	<1		<2	9	<1		0.1
RMD-272	GRAB	751 Catalina Cres.	27-Nov-17	0.84	<1		<2	7	<1		0.15
RMD-251	GRAB	5951McCallan Rd.	27-Nov-17	0.7	<1		<2	7	<1		0.15
RMD-263	GRAB	12560 Cambie Rd.	29-Nov-17	0.8	<1		<2	8	<1		0.11
RMD-264	GRAB	13100 Mitchell Rd.	29-Nov-17	0.78	<1		<2	8	<1		0.22
RMD-277	GRAB	Opp. 11280 Twigg Place	29-Nov-17	0.76	<1		<2	8	<1		0.38
RMD-262	GRAB	13799 Commerce Pkwy.	29-Nov-17	0.8	<1		<2	8	<1		0.13
RMD-278	GRAB	6651 Fraserwood Place	29 Nov 17 29-Nov-17	0.82	<1		<2	9	<1		0.13
RMD-278	GRAB	Opp. 20371 Westminster Hwy.	29-Nov-17	0.82	<1		4	8	<1		0.13
				0.89	<1			-	<1		
RMD-261	GRAB	9911 Sidaway Rd.	29-Nov-17 29-Nov-17				<2	8			0.15
RMD-260	GRAB	11111 Horseshoe Way		0.8	<1		<2	-	<1		0.17
RMD-259	GRAB	10020 Amethyst Ave.	29-Nov-17	0.81	<1		<2	8	<1		0.56
RMD-266	GRAB	9380 General Currie Rd.	29-Nov-17	0.79	<1		<2	8	<1		0.14
RMD-253	GRAB	11051 No 3 Rd.	29-Nov-17	0.66	<1		<2	9	<1		0.11
RMD-258	GRAB	7000 Blk. Dyke Rd.	29-Nov-17	0.66	<1		44	8	<1		0.1
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	29-Nov-17	0.67	<1		<2	9	<1		0.19
RMD-257	GRAB	6640 Blundell Rd.	29-Nov-17	0.7	<1		2	8	<1		0.11
RMD-250	GRAB	6071 Azure Rd.	29-Nov-17	0.69	<1		<2	8	<1		0.11
RMD-204	GRAB	3180 Granville Ave.	1-Dec-17	0.66	<1		<2	9	<1		0.14
RMD-206	GRAB	4251 Moncton St.	1-Dec-17	0.72	<1		<2	9	<1		0.18
RMD-216	GRAB	11080 No. 2 Rd.	1-Dec-17	0.63	<1		<2	8	<1		0.13
RMD-280	GRAB	11500 McKenzie Rd.	1-Dec-17	0.77	<1		<2	10	<1		0.13
RMD-212	GRAB	Opp. 8600 Ryan Rd.	1-Dec-17	0.85	<1		<2	8	<1		0.14
RMD-208	GRAB	13200 No. 4 Rd.	1-Dec-17	0.63	<1		2	9	<1		0.14
RMD-205	GRAB	13851 Steveston Hwy.	1-Dec-17	0.77	<1		<2	8	<1		0.2
RMD-202	GRAB	1500 Valemont Way	1-Dec-17	0.74	<1		<2	8	<1		0.11
RMD-214	GRAB	11720 Westminster Hwy.	1-Dec-17	0.96	<1		2	8	<1		0.14
RMD-267	GRAB	17240 Fedoruk	1-Dec-17	0.82	<1		<2	9	<1		0.14
RMD-249	GRAB	23000 Blk. Dyke Rd.	1-Dec-17	0.81	<1		<2	9	<1		0.14
RMD-275	GRAB	5180 Smith Cres.	1-Dec-17	0.77	<1		2	9	<1		0.11
RMD-276	GRAB	22271 Cochrane Drive	1-Dec-17	0.76	<1		<2	9	<1		0.13
RMD-203	GRAB	23260 Westminster Hwy.	1-Dec-17	0.76	<1		8	9	<1		0.12
RMD-251	GRAB	5951McCallan Rd.	4-Dec-17	0.88	<1		<2	8	<1		0.11
RMD-273	GRAB	Opp. 8331 Fairfax Place	4-Dec-17	0.5	<1		<2	10	<1		0.49
RMD-252	GRAB	9751 Pendleton Rd.	4-Dec-17	0.87	<1		<2	8	<1		0.14
RMD-274	GRAB	10920 Springwood Court	4-Dec-17	0.84	<1		<2	9	<1		0.11
RMD-253	GRAB	11051 No 3 Rd.	4-Dec-17	0.71	<1		<2	8	<1		0.1
RMD-269	GRAB	14951 Triangle Rd.	4-Dec-17	0.69	<1		<2	9	<1		0.25
RMD-270	GRAB	8200 Jones Rd.	4-Dec-17	0.75	<1		<2	9	<1		0.11
RMD-250	GRAB	6071 Azure Rd.	4-Dec-17	0.75	<1		<2	9	<1		0.11
RMD-271	GRAB	3800 Cessna Drive	4-Dec-17	0.89	<1		2	8	<1		0.12
RMD-272	GRAB	751 Catalina Cres.	4-Dec-17	0.94	<1		<2	8	<1		0.15
RMD-255	GRAB	6000 Blk. Miller Rd.	4-Dec-17	0.94	<1		<2	9	<1	1	0.21
RMD-256	GRAB	1000 Blk. McDonald Rd.	4-Dec-17	0.6	<1		<2	9	<1		0.36
RMD-250	GRAB	5300 No. 3 Rd.	4-Dec-17 4-Dec-17	0.75	<1		<2	9	<1	1	0.30
RMD-204	GRAB	3180 Granville Ave.	6-Dec-17	0.69	<1		<2	8	<1		0.11
RMD-204	GRAB	6640 Blundell Rd.	6-Dec-17	0.68	<1		<2	4	<1		0.11
	GRAB	4251 Moncton St.			<1		<2 <2	8	<1		
RMD-206		9380 General Currie Rd.	6-Dec-17 6-Dec-17	0.75 0.81	<1		<2 <2	5	<1		0.12
RMD-266	GRAB										

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-259	GRAB	10020 Amethyst Ave.	6-Dec-17	0.77	<1		<2	7	<1		0.36
RMD-280	GRAB	11500 McKenzie Rd.	6-Dec-17	0.81	<1		<2	8	<1		0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	6-Dec-17	0.76	<1		<2	6	<1		0.1
RMD-212	GRAB	Opp. 8600 Ryan Rd.	6-Dec-17	0.79	<1		2	8	<1		0.11
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	6-Dec-17	0.87	<1		<2	6	<1		0.12
RMD-208	GRAB	13200 No. 4 Rd.	6-Dec-17	0.86	<1		<2	9	<1		0.17
RMD-260	GRAB	11111 Horseshoe Way	6-Dec-17	0.98	<1		<2	4	<1		0.12
RMD-205	GRAB	13851 Steveston Hwy.	6-Dec-17	0.73	<1		<2	8	<1		0.13
RMD-261	GRAB	9911 Sidaway Rd.	6-Dec-17	0.83	<1		<2	5	<1		0.1
RMD-202	GRAB	1500 Valemont Way	6-Dec-17	0.73	<1		<2	8	<1		0.11
RMD-262	GRAB	13799 Commerce Pkwy.	6-Dec-17	0.75	<1		<2	4	<1		0.11
RMD-214	GRAB	11720 Westminster Hwy.	6-Dec-17	0.89	<1		<2	8	<1		0.14
RMD-263	GRAB	12560 Cambie Rd.	6-Dec-17	0.85	<1		<2	5	<1		0.11
RMD-264	GRAB	13100 Mitchell Rd.	6-Dec-17	0.77	<1		<2	5	<1		0.21
RMD-267	GRAB	17240 Fedoruk	6-Dec-17	0.82	<1		<2	8	<1		0.14
RMD-249	GRAB	23000 Blk. Dyke Rd.	6-Dec-17	0.7	<1		<2	8	<1		0.14
RMD-277	GRAB	Opp. 11280 Twigg Place	6-Dec-17	0.72	<1		<2	6	<1		0.23
RMD-276	GRAB	22271 Cochrane Drive	6-Dec-17	0.83	<1		<2	8	<1		0.11
RMD-278	GRAB	6651 Fraserwood Place	6-Dec-17	0.35	<1		<2	5	<1		0.11
RMD-275	GRAB	5180 Smith Cres.	6-Dec-17	0.68	<1		2	8	<1		0.19
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	6-Dec-17	0.96	<1		<2	5	<1		0.15
RMD-203	GRAB	23260 Westminster Hwy.	6-Dec-17	0.78	<1		<2	8	<1		0.11
RMD-251	GRAB	5951McCallan Rd.	11-Dec-17	0.81	<1		<2	5	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	11 Dec 17	0.58	<1		<2	7	<1		0.18
RMD-252	GRAB	9751 Pendleton Rd.	11-Dec-17 11-Dec-17	0.58	<1		<2	6	<1		0.18
RMD-274	GRAB	10920 Springwood Court	11 Dec 17 11-Dec-17	0.67	<1		<2	7	<1		0.12
RMD-253	GRAB	11051 No 3 Rd.	11 Dec 17	0.57	<1		2	7	<1		0.11
RMD-269	GRAB	14951 Triangle Rd.	11 Dec 17 11-Dec-17	0.56	<1		<2	7	<1		0.11
RMD-270	GRAB	8200 Jones Rd.	11 Dec 17	0.61	<1		<2	7	<1		0.12
RMD-254	GRAB	5300 No. 3 Rd.	11-Dec-17	0.63	<1		<2	6	<1		0.12
RMD-255	GRAB	6000 Blk. Miller Rd.	11-Dec-17	0.87	<1		<2	6	<1		0.35
RMD-255	GRAB	1000 Blk. McDonald Rd.	11 Dec 17 11-Dec-17	0.53	<1		<2	7	<1		0.33
RMD-271	GRAB	3800 Cessna Drive	11-Dec-17	0.65	<1		<2	7	<1		0.12
RMD-272	GRAB	751 Catalina Cres.	11-Dec-17	0.9	<1		<2	7	<1		0.1
RMD-250	GRAB	6071 Azure Rd.	11 Dec 17 11-Dec-17	0.66	<1		<2	5	<1		0.09
RMD-263	GRAB	12560 Cambie Rd.	11 Dec 17 12-Dec-17	0.59	<1		<2	5	<1		0.05
RMD-264	GRAB	13100 Mitchell Rd.	12 Dec 17 12-Dec-17	0.82	<1		2	5	<1		0.14
RMD-204	GRAB	Opp. 11280 Twigg Place	12-Dec-17 12-Dec-17	0.82	<1		<2	6	<1		0.13
RMD-262	GRAB	13799 Commerce Pkwy.	12 Dec 17 12-Dec-17	0.75	<1		<2	6	<1		0.16
RMD-278	GRAB	6651 Fraserwood Place	12 Dec 17 12-Dec-17	0.7	<1		<2	5	<1		0.10
RMD-278	GRAB	Opp. 20371 Westminster Hwy.	12-Dec-17 12-Dec-17	0.77	<1		<2	4	<1		0.24
RMD-273	GRAB			0.74	<1		<2	5			
		9911 Sidaway Rd.	12-Dec-17						<1		0.13
RMD-260	GRAB	11111 Horseshoe Way	12-Dec-17	0.7	<1		2	6	<1		0.16
RMD-259	GRAB	10020 Amethyst Ave.	12-Dec-17	0.68	<1		<2	6 5	<1		0.16
RMD-266	GRAB	9380 General Currie Rd.	12-Dec-17	0.7	<1		<2	5	<1		0.37
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	12-Dec-17	0.5	<1		<2	6	<1		0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	12-Dec-17	0.66	<1		4	6	<1		0.21
RMD-257	GRAB	6640 Blundell Rd.	12-Dec-17	0.7	<1		<2	6	<1		0.14
RMD-204	GRAB	3180 Granville Ave.	15-Dec-17	0.59	<1		<2	7	<1		0.1
RMD-206	GRAB	4251 Moncton St.	15-Dec-17	0.65	<1		<2	7	<1		0.11
RMD-216	GRAB	11080 No. 2 Rd.	15-Dec-17	0.64	<1		<2	8	<1		0.1
RMD-280	GRAB	11500 McKenzie Rd.	15-Dec-17	0.62	<1		<2	10	<1		0.19
RMD-212	GRAB	Opp. 8600 Ryan Rd.	15-Dec-17	0.6	<1		<2	8	<1		0.11
RMD-208	GRAB	13200 No. 4 Rd.	15-Dec-17	0.67	<1		<2	7	<1		0.15
RMD-205	GRAB	13851 Steveston Hwy.	15-DCN	J.7 -	28	6	<2	8	<1		0.12

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-202	GRAB	1500 Valemont Way	15-Dec-17	0.68	<1		<2	7	<1		0.09
RMD-214	GRAB	11720 Westminster Hwy.	15-Dec-17	0.83	<1		<2	7	<1		0.15
RMD-267	GRAB	17240 Fedoruk	15-Dec-17	0.57	<1		<2	8	<1		0.12
RMD-249	GRAB	23000 Blk. Dyke Rd.	15-Dec-17	0.6	<1		<2	8	<1		0.1
RMD-276	GRAB	22271 Cochrane Drive	15-Dec-17	0.63	<1		<2	8	<1		0.12
RMD-275	GRAB	5180 Smith Cres.	15-Dec-17	0.61	<1		<2	8	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	15-Dec-17	0.68	<1		2	7	<1		0.12
RMD-251	GRAB	5951McCallan Rd.	18-Dec-17	0.8	<1		NA	6	<1		0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	18-Dec-17	0.72	<1		NA	9	<1		0.54
RMD-252	GRAB	9751 Pendleton Rd.	18-Dec-17	0.71	<1		NA	8	<1		0.15
RMD-274	GRAB	10920 Springwood Court	18-Dec-17	0.77	<1		NA	8	<1		0.17
RMD-253	GRAB	11051 No 3 Rd.	18-Dec-17	0.7	<1		NA	8	<1		0.17
RMD-269	GRAB	14951 Triangle Rd.	18-Dec-17	0.61	<1		NA	9	<1		0.12
RMD-270	GRAB	8200 Jones Rd.	18-Dec-17	0.78	<1		NA	8	<1		0.15
RMD-254	GRAB	5300 No. 3 Rd.	18-Dec-17	0.82	<1		NA	8	<1		0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	18-Dec-17	0.69	<1		NA	7	<1		0.21
RMD-255	GRAB	6000 Blk. Miller Rd.	18-Dec-17	0.89	<1		NA	6	<1		0.22
RMD-271	GRAB	3800 Cessna Drive	18-Dec-17	0.82	<1		NA	8	<1		0.13
RMD-272	GRAB	751 Catalina Cres.	18-Dec-17	0.93	<1		NA	8	<1		0.18
RMD-250	GRAB	6071 Azure Rd.	18-Dec-17	0.87	<1		NA	7	<1		0.14
RMD-263	GRAB	12560 Cambie Rd.	20-Dec-17	0.63	<1		NA	6	<1		0.16
RMD-264	GRAB	13100 Mitchell Rd.	20-Dec-17	0.74	<1		NA	7	<1		0.14
RMD-277	GRAB	Opp. 11280 Twigg Place	20-Dec-17	0.68	<1		NA	6	<1		0.17
RMD-262	GRAB	13799 Commerce Pkwy.	20-Dec-17	0.64	<1		NA	6	<1		0.13
RMD-278	GRAB	6651 Fraserwood Place	20 Dec 17	0.65	<1		NA	6	<1		0.13
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	20 Dec 17 20-Dec-17	0.65	<1		NA	7	<1		0.22
RMD-261	GRAB	9911 Sidaway Rd.	20 Dec 17	0.68	<1		NA	7	<1		0.22
RMD-261	GRAB	11111 Horseshoe Way	20 Dec 17	0.78	<1		NA	5	<1		0.14
RMD-259	GRAB	10020 Amethyst Ave.	20 Dec 17	0.67	<1		NA	8	<1		0.27
RMD-266	GRAB	9380 General Currie Rd.	20-Dec-17	0.76	<1		NA	6	<1		0.26
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	20-Dec-17	0.64	<1		NA	6	<1		0.21
RMD-258	GRAB	7000 Blk. Dyke Rd.	20 Dec 17 20-Dec-17	0.63	<1		NA	6	<1		0.21
RMD-257	GRAB	6640 Blundell Rd.	20-Dec-17	0.68	<1		NA	5	<1		0.18
RMD-204	GRAB	3180 Granville Ave.	21-Dec-17	0.62	<1		NA	4	<1		0.2
RMD-204	GRAB	4251 Moncton St.	21 Dec 17 21-Dec-17	0.02	<1		NA	4	<1		0.15
RMD-216	GRAB	11080 No. 2 Rd.	21 Dec 17 21-Dec-17	0.81	<1		NA	4	<1		0.15
RMD-280	GRAB	11500 McKenzie Rd.	21 Dec 17 21-Dec-17	0.44	<1		NA	6	<1		0.10
RMD-280	GRAB	Opp. 8600 Ryan Rd.	21-Dec-17 21-Dec-17	0.44	<1		NA	4	<1		0.19
RMD-212	GRAB	13200 No. 4 Rd.	21-Dec-17 21-Dec-17	0.76	<1		NA	4	<1		0.23
RMD-205	GRAB	13851 Steveston Hwy.	21 Dec 17 21-Dec-17	0.73	<1		NA	5	<1		0.19
RMD-203	GRAB	1500 Valemont Way	21 Dec 17 21-Dec-17	0.67	<1		NA	5	<1		0.15
RMD-202	GRAB	11720 Westminster Hwy.	21 Dec 17 21-Dec-17	0.86	<1		NA	5	<1		0.24
RMD-214	GRAB	17240 Fedoruk	21-Dec-17 21-Dec-17	0.62	<1		NA	5	<1		0.21
RMD-249	GRAB	23000 Blk. Dyke Rd.	21-Dec-17 21-Dec-17	0.58	<1		NA	5	<1		0.4
				0.63			NA	5	<1		
RMD-276	GRAB	22271 Cochrane Drive	21-Dec-17 21-Dec-17	0.63	<1 <1			5			0.14
RMD-275	GRAB	5180 Smith Cres.		0.59	<1		NA	5	<1		0.24
RMD-203	GRAB	23260 Westminster Hwy.	21-Dec-17 27-Dec-17	0.62	<1		NA	6	<1 <1		0.24
RMD-251	GRAB	5951McCallan Rd.									0.13
RMD-273	GRAB	Opp. 8331 Fairfax Place	27-Dec-17	0.82	<1		NA	6	<1		0.5
RMD-252	GRAB	9751 Pendleton Rd.	27-Dec-17	0.84	<1		NA	8	<1		0.1
RMD-274	GRAB	10920 Springwood Court	27-Dec-17	0.76	<1		NA		<1		0.13
RMD-253	GRAB	11051 No 3 Rd.	27-Dec-17	0.84	<1		NA	7	<1		0.11
RMD-269	GRAB	14951 Triangle Rd.	27-Dec-17	0.7	<1		NA	9	<1		0.14
RMD-270	GRAB	8200 Jones Rd.	27-Dec-17	0.89	<1	-	NA	6	<1		0.1
RMD-254	GRAB	5300 No. 3 Rd.	27-D CN	JU.85	28	1	NA	7	1		0.14

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	E. coli MF/100mLs	E. coli MPN/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Total Coliform MPN/100mLs	Turbidity NTU
RMD-256	GRAB	1000 Blk. McDonald Rd.	27-Dec-17	0.47	<1		NA	5	<1		0.27
RMD-255	GRAB	6000 Blk. Miller Rd.	27-Dec-17	1.2	<1		NA	5	<1		0.26
RMD-271	GRAB	3800 Cessna Drive	27-Dec-17	0.82	<1		NA	6	<1		0.09
RMD-272	GRAB	751 Catalina Cres.	27-Dec-17	1.09	<1		NA	5	<1		0.09
RMD-250	GRAB	6071 Azure Rd.	27-Dec-17	0.83	<1		NA	6	<1		0.12
RMD-263	GRAB	12560 Cambie Rd.	28-Dec-17	0.67	<1		NA	5	<1		0.11
RMD-264	GRAB	13100 Mitchell Rd.	28-Dec-17	0.79	<1		NA	5	<1		0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	28-Dec-17	0.89	<1		NA	5	<1		0.09
RMD-262	GRAB	13799 Commerce Pkwy.	28-Dec-17	0.75	<1		NA	5	<1		0.1
RMD-278	GRAB	6651 Fraserwood Place	28-Dec-17	0.65	<1		NA	6	<1		0.08
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	28-Dec-17	0.68	<1		NA	5	<1		0.09
RMD-261	GRAB	9911 Sidaway Rd.	28-Dec-17	0.63	<1		NA	5	<1		0.08
RMD-260	GRAB	11111 Horseshoe Way	28-Dec-17	0.66	<1		NA	5	<1		0.09
RMD-259	GRAB	10020 Amethyst Ave.	28-Dec-17	0.78	<1		NA	5	<1		0.21
RMD-266	GRAB	9380 General Currie Rd.	28-Dec-17	0.77	<1		NA	5	<1		0.2
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	28-Dec-17	0.71	<1		NA	5	<1		0.09
RMD-258	GRAB	7000 Blk. Dyke Rd.	28-Dec-17	0.68	<1		NA	5	<1		0.1
RMD-257	GRAB	6640 Blundell Rd.	28-Dec-17	0.6	<1		NA	5	<1		0.13
RMD-204	GRAB	3180 Granville Ave.	29-Dec-17	0.81	<1		NA	7	<1		0.12
RMD-206	GRAB	4251 Moncton St.	29-Dec-17	0.94	<1		NA	7	<1		0.1
RMD-216	GRAB	11080 No. 2 Rd.	29-Dec-17	0.95	<1		NA	6	<1		0.09
RMD-280	GRAB	11500 McKenzie Rd.	29-Dec-17	0.87	<1		NA	7	<1		0.12
RMD-212	GRAB	Opp. 8600 Ryan Rd.	29-Dec-17	0.91	<1		NA	9	<1		0.12
RMD-208	GRAB	13200 No. 4 Rd.	29-Dec-17	0.89	<1		NA	7	<1		0.11
RMD-205	GRAB	13851 Steveston Hwy.	29-Dec-17	0.79	<1		NA	6	<1		0.1
RMD-202	GRAB	1500 Valemont Way	29-Dec-17	0.81	<1		NA	7	<1		0.08
RMD-214	GRAB	11720 Westminster Hwy.	29-Dec-17	0.97	<1		NA	5	<1		0.13
RMD-267	GRAB	17240 Fedoruk	29-Dec-17	0.61	<1		NA	5	<1		0.09
RMD-249	GRAB	23000 Blk. Dyke Rd.	29-Dec-17	0.67	<1		NA	6	<1		0.16
RMD-276	GRAB	22271 Cochrane Drive	29-Dec-17	0.71	<1		NA	5	<1		0.12
RMD-275	GRAB	5180 Smith Cres.	29-Dec-17	0.68	<1		NA	6	<1		0.11
RMD-203	GRAB	23260 Westminster Hwy.	29-Dec-17	0.81	<1		NA	5	<1		0.15

APPENDIX 4: SCADA AND PRESSURE TESTING SITES

	STATION NAME	STATION TYPE	INSTALLATION
216	SHELL & STEVESTON PRV	WATER PRV	PERMANENT
217	NELSON & BLUNDELL PRV	WATER PRV	PERMANENT
218	SHELL & BLUNDELL PRV	WATER PRV	PERMANENT
219	SHELL & WILLIAMS PRV	WATER PRV	PERMANENT
220	SHELL & BIRD PRV	WATER PRV	PERMANENT
251	NELSON & WESTMINSTER PRV	WATER PRV	WIP
252	FERGUSON PRV	WATER PRV	PERMANENT
253	GRAUER PRV	WATER PRV	PERMANENT
254	OAKSTREET PRV	WATER PRV	PERMANENT
	NELSON NORTH PRV	WATER PRV	PERMANENT
	CAMBIE PRV	WATER PRV	NO SCADA
	OAK & RIVER	WATER PRV	NO SCADA
	SHELL & MONTEITH	WATER PRV	NO SCADA
	SHELL & WESTMINSTER	WATER PRV	NO SCADA
1	PRESSURE SITES		
5	QUEENSBOROUGH	DRAINAGE	PERMANENT
40	NO 6 ROAD SOUTH	DRAINAGE	PERMANENT
48	STEVESTON	SANI PUMPS	PERMANENT
80	BARNARD	SANI PUMPS	PERMANENT
106	LYNAS	SANI PUMPS	PERMANENT
167	BRIGHOUSE	SANI PUMPS	PERMANENT
206	EDGEMERE	SANI PUMPS	PERMANENT
42	GRAYBAR	SANI PUMPS	PERMANENT
110	RICHMOND PARK	SANI PUMPS	PERMANENT
174	LESLIE	SANI PUMPS	PERMANENT
189	SIMPSON	SANI PUMPS	PERMANENT
193	BURROWS	SANI PUMPS	PERMANENT
190	BURKEVILLE	SANI PUMPS	PERMANENT
119	TWIGG	SANI PUMPS	PERMANENT
180	RICHMOND CENTRE	SANI PUMPS	PERMANENT
89	WOODHEADEAST	SANI PUMPS	PERMANENT
122	MAPLE	SANI PUMPS	PERMANENT
	ROBINSON	SANI PUMPS	PERMANENT

APPENDIX 5: 2017 THM AND HAA TEST RESULTS

				тн	M (ppb))					HAA (j	opb)		
Sample	Date Sampled	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Total THM Quarterly Average (Guileline Limit 100ppb/mL)	Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	Total HAA Quarterly Average (Guileline Limit 80ppb/mL)
RMD-250	2015/08/19	<1	<1	<1	16	16.9		<0.5	12	<1	10	11.9	34.7	
RMD-250	2015/11/25	<1	<1	<1	26	27.6		<0.5	10	<1	9	9.8	30.5	
RMD-250	2016/03/02	<1	<1	<1	25	26.1		<0.5	9	<1	3	11.3	25.3	
RMD-250	2016/06/01	<1	<1	<1	21	21.7	23	<0.5	8	<1	4	6	18.9	27
RMD-250	2016/08/31	1	<1	<1	21	24.0	25	<0.5	9	<1	4	7.3	20.9	24
RMD-250	2016/10/19	<1	<1	<1	24	26.0	24	<0.5	9	<1	5	12.7	27.3	23
RMD-250	2017/03/06	<1	<1	<1	17	19.0	23	<0.5	7	<1	<2	9.7	17.9	21
RMD-251	2015/08/19	2	<1	<1	27	28.6		<0.5	14	<1	10	15	40.1	
RMD-251	2015/11/25	<1	<1	<1	23	24.2		<0.5	9	<1	7	7.2	23.9	
RMD-251	2016/03/02	<1	<1	<1	23	24.3		<0.5	9	<1	4	10.9	25.5	
RMD-251	2016/06/01	<1	<1	<1	20	20.6	24	<0.5	8	<1	4	6.4	18.6	27
RMD-251	2016/08/31	1	<1	<1	26	28.0	24	<0.5	9	<1	3	7	20.4	22
RMD-251	2016/10/19	<1	<1	<1	23	25.0	24	<0.5	9	<1	6	10.9	26.2	23
RMD-251	2017/03/06	<1	<1	<1	17	18.0	23	<0.5	7	<1	<2	10.7	19.9	21
RMD-258	2015/08/19	2	<1	<1	29	30.5		<0.5	18	<1	8	16.7	43.6	
RMD-258	2015/11/25	<1	<1	<1	25	26.6		<0.5	10	<1	9	9.1	29.7	
RMD-258	2016/03/02	<1	<1	<1	23	23.8		<0.5	9	<1	9	10.4	29.0	
RMD-258	2016/06/01	<1	<1	<1	21	21.0	25	<0.5	7	<1	5	5.6	18.0	30
RMD-258	2016/08/31	1	<1	<1	26	28.0	25	<0.5	10	<1	4	7.9	22.8	25
RMD-258	2016/10/19	1	<1	<1	24	26.0	25	<0.5	11	<1	7	17	35.7	26
RMD-258	2017/03/06	<1	<1	<1	18	20.0	24	<0.5	7	<1	<2	10.5	19.0	24
RMD-259	2015/08/19	1	<1	<1	34	35.1		<0.5	19	<1	9	20.2	48.9	
RMD-259	2015/11/25	<1	<1	<1	25	26.3		<0.5	10	<1	7	10.7	29.7	
RMD-259	2016/03/02	<1	<1	<1	24	25.5		<0.5	9	<1	3	10.8	23.5	
RMD-259	2016/06/01	<1	<1	<1	26	26.8	28	<0.5	12	<1	6	14.1	33.2	34
RMD-259	2016/08/31	2	<1	<1	29	32.0	28	<0.5	12	<1	5	10.1	27.7	29
RMD-259	2016/10/19	1	<1	<1	27	29.0	28	<0.5	12	<1	7	17.2	36.4	30
RMD-259	2017/03/06	<1	<1	<1	18	20.0	27	<0.5	8	<1	<2	10.5	19.8	29
RMD-250	2015/11/25	<1	<1	<1	26	27.6		<0.5	10	<1	9	9.8	30.5	
RMD-250	2016/03/02	<1	<1	<1	25	26.1		<0.5	9	<1	3	11.3	25.3	
RMD-250	2016/06/01	<1	<1	<1	21	21.7		<0.5	8	<1	4	6	18.9	
RMD-250	2016/08/31	1	<1	<1	21	24	25	<0.5	9	<1	4	7.3	20.9	24
RMD-250	2016/10/19	<1	<1	<1	24	26	24	<0.5	9	<1	5	12.7	27.3	23
RMD-250	2017/03/06	<1	<1	<1	17	19	23	<0.5	7	<1	<2	9.7	17.9	21
RMD-250	2017/05/15	<1	<1	<1	19	21	23	<0.5	10	<1	<2	11.6	23.6	22
RMD-251	2015/11/25	<1	<1	<1	23	24.2		<0.5	9	<1	7	7.2	23.9	
RMD-251	2016/03/02	<1	<1	<1	23	C ₂ NC	L - 290	<0.5	9	<1	4	10.9	25.5	

				тн	M (ppb)						HAA (j	opb)		
Sample	Date Sampled	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Total THM Quarterly Average (Guileline Limit 100ppb/mL)	Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	Total HAA Quarterly Average (Guileline Limit 80ppb/mL)
RMD-251	2016/06/01	<1	<1	<1	20	20.6		<0.5	8	<1	4	6.4	18.6	
RMD-251	2016/08/31	1	<1	<1	26	28	24	<0.5	9	<1	3	7	20.4	22
RMD-251	2016/10/19	<1	<1	<1	23	25	24	<0.5	9	<1	6	10.9	26.2	23
RMD-251	2017/03/06	<1	<1	<1	17	18	23	<0.5	7	<1	<2	10.7	19.9	21
RMD-251	2017/05/15	<1	<1	<1	19	21	23	<0.5	10	<1	<2	10.8	23.3	22
RMD-258	2015/11/25	<1	<1	<1	25	26.6		<0.5	10	<1	9	9.1	29.7	
RMD-258	2016/03/02	<1	<1	<1	23	23.8		<0.5	9	<1	9	10.4	29	
RMD-258	2016/06/01	<1	<1	<1	21	21		<0.5	7	<1	5	5.6	18	
RMD-258	2016/08/31	1	<1	<1	26	28	25	<0.5	10	<1	4	7.9	22.8	25
RMD-258	2016/10/19	1	<1	<1	24	26	25	<0.5	11	<1	7	17	35.7	26
RMD-258	2017/03/06	<1	<1	<1	18	20	24	<0.5	7	<1	<2	10.5	19	24
RMD-258	2017/05/15	<1	<1	<1	17	18	23	<0.5	11	<1	<2	11.1	24.3	25
RMD-259	2015/11/25	<1	<1	<1	25	26.3		<0.5	10	<1	7	10.7	29.7	
RMD-259	2016/03/02	<1	<1	<1	24	25.5		<0.5	9	<1	3	10.8	23.5	
RMD-259	2016/06/01	<1	<1	<1	26	26.8		<0.5	12	<1	6	14.1	33.2	
RMD-259	2016/08/31	2	<1	<1	29	32	28	<0.5	12	<1	5	10.1	27.7	29
RMD-259	2016/10/19	1	<1	<1	27	29	28	<0.5	12	<1	7	17.2	36.4	30
RMD-259	2017/03/06	<1	<1	<1	18	20	27	<0.5	8	<1	<2	10.5	19.8	29
RMD-259	2017/05/15	<1	<1	<1	21	23	26	<0.5	11	<1	<2	10.7	23.8	27
RMD-250	2016/03/02	<1	<1	<1	25	26.1		<0.5	9	<1	3	11.3	25.3	
RMD-250	2016/06/01	<1	<1	<1	21	21.7		<0.5	8	<1	4	6	18.9	
RMD-250	2016/08/31	1	<1	<1	21	24		<0.5	9	<1	4	7.3	20.9	
RMD-250	2016/10/19	<1	<1	<1	24	26	24	<0.5	9	<1	5	12.7	27.3	23
RMD-250	2017/03/06	<1	<1	<1	17	19	23	<0.5	7	<1	<2	9.7	17.9	21
RMD-250	2017/05/15	<1	<1	<1	19	21	23	<0.5	10	<1	<2	11.6	23.6	22
RMD-250	2017/08/23	<1	<1	<1	21	21	22	<0.5	9	<1	<2	6.5	16.9	21
RMD-251	2016/03/02	<1	<1	<1	23	24.3		<0.5	9	<1	4	10.9	25.5	
RMD-251	2016/06/01	<1	<1	<1	20	20.6		<0.5	8	<1	4	6.4	18.6	
RMD-251	2016/08/31	1	<1	<1	26	28		<0.5	9	<1	3	7	20.4	
RMD-251	2016/10/19	<1	<1	<1	23	25	24	<0.5	9	<1	6	10.9	26.2	23
RMD-251	2017/03/06	<1	<1	<1	17	18	23	<0.5	7	<1	<2	10.7	19.9	21
RMD-251	2017/05/15	<1	<1	<1	19	21	23	<0.5	10	<1	<2	10.8	23.3	22
RMD-251	2017/08/23	<1	<1	<1	21	21	21	<0.5	10	<1	<2	5.9	16	21
RMD-258	2016/03/02	<1	<1	<1	23	23.8		<0.5	9	<1	9	10.4	29	
RMD-258	2016/06/01	<1	<1	<1	21	21		<0.5	7	<1	5	5.6	18	
RMD-258	2016/08/31	1	<1	<1	26	28		<0.5	10	<1	4	7.9	22.8	
RMD-258	2016/10/19	1	<1	<1	24	26	25	<0.5	11	<1	7	17	35.7	26
RMD-258	2017/03/06	<1	<1	<1	18	~29~	L - ²⁴ 291	<0.5	7	<1	<2	10.5	19	24

				тн	M (ppb)						HAA (p	opb)		
Sample	Date Sampled	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Total THM Quarterly Average (Guileline Limit 100ppb/mL)	Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	Total HAA Quarterly Average (Guileline Limit 80ppb/mL)
RMD-258	2017/05/15	<1	<1	<1	17	18	23	<0.5	11	<1	<2	11.1	24.3	25
RMD-258	2017/08/23	<1	<1	<1	25	25	22	<0.5	11	<1	<2	7.7	19.7	25
RMD-259	2016/03/02	<1	<1	<1	24	25.5		<0.5	9	<1	3	10.8	23.5	
RMD-259	2016/06/01	<1	<1	<1	26	26.8		<0.5	12	<1	6	14.1	33.2	
RMD-259	2016/08/31	2	<1	<1	29	32		<0.5	12	<1	5	10.1	27.7	
RMD-259	2016/10/19	1	<1	<1	27	29	28	<0.5	12	<1	7	17.2	36.4	30
RMD-259	2017/03/06	<1	<1	<1	18	20	27	<0.5	8	<1	<2	10.5	19.8	29
RMD-259	2017/05/15	<1	<1	<1	21	23	26	<0.5	11	<1	<2	10.7	23.8	27
RMD-259	2017/08/23	<1	<1	<1	26	26	25	<0.5	11	<1	<2	7.3	18.9	25
RMD-250	2016/06/01	<1	<1	<1	21	21.7		<0.5	8	<1	4	6	18.9	
RMD-250	2016/08/31	1	<1	<1	21	24		<0.5	9	<1	4	7.3	20.9	
RMD-250	2016/10/19	<1	<1	<1	24	26		<0.5	9	<1	5	12.7	27.3	
RMD-250	2017/03/06	<1	<1	<1	17	19	23	<0.5	7	<1	<2	9.7	17.9	21
RMD-250	2017/05/15	<1	<1	<1	19	21	23	<0.5	10	<1	<2	11.6	23.6	22
RMD-250	2017/08/23	<1	<1	<1	21	21	22	<0.5	9	<1	<2	6.5	16.9	21
RMD-250	2017/11/29	<1	<1	<1	24	25	22	<0.5	10	<1	<2	10.6	21.4	20
RMD-251	2016/06/01	<1	<1	<1	20	20.6		<0.5	8	<1	4	6.4	18.6	
RMD-251	2016/08/31	1	<1	<1	26	28		<0.5	9	<1	3	7	20.4	
RMD-251	2016/10/19	<1	<1	<1	23	25		<0.5	9	<1	6	10.9	26.2	
RMD-251	2017/03/06	<1	<1	<1	17	18	23	<0.5	7	<1	<2	10.7	19.9	21
RMD-251	2017/05/15	<1	<1	<1	19	21	23	<0.5	10	<1	<2	10.8	23.3	22
RMD-251	2017/08/23	<1	<1	<1	21	21	21	<0.5	10	<1	<2	5.9	16	21
RMD-251	2017/11/29	<1	<1	<1	25	26	22	<0.5	8	<1	<2	5.7	14.7	18
RMD-258	2016/06/01	<1	<1	<1	21	21		<0.5	7	<1	5	5.6	18	
RMD-258	2016/08/31	1	<1	<1	26	28		<0.5	10	<1	4	7.9	22.8	
RMD-258	2016/10/19	1	<1	<1	24	26		<0.5	11	<1	7	17	35.7	
RMD-258	2017/03/06	<1	<1	<1	18	20	24	<0.5	7	<1	<2	10.5	19	24
RMD-258	2017/05/15	<1	<1	<1	17	18	23	<0.5	11	<1	<2	11.1	24.3	25
RMD-258	2017/08/23	<1	<1	<1	25	25	22	<0.5	11	<1	<2	7.7	19.7	25
RMD-258	2017/11/29	<1	<1	<1	25	25	22	<0.5	11	<1	<2	9.7	22	21
RMD-259	2016/06/01	<1	<1	<1	26	26.8		<0.5	12	<1	6	14.1	33.2	
RMD-259	2016/08/31	2	<1	<1	20	32		<0.5	12	<1	5	14.1	27.7	
RMD-259	2016/10/19	1	<1	<1	29	29		<0.5	12	<1	7	17.2	36.4	
RMD-259	2017/03/06	<1	<1	<1	18	29	27	<0.5	8	<1	<2	17.2	19.8	29
RMD-259	2017/05/05	<1	<1	<1	21	20	26	<0.5	0 11	<1	<2	10.3	23.8	23
RMD-259	2017/03/13	<1	<1	<1	21	25	25	<0.5	11	<1	<2	7.3	18.9	27
RMD-259	2017/08/23	<1	<1	<1	20	20	25	<0.5	11	<1	<2	13.8	26.7	23
11010-233	2017/11/25	~1	, <u>,</u>	1	20			-0.5		1	~2	13.0	20.7	

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				TI	НМ (рр	b)				HAA	(ppb)			E	xtras
Sample	Sample Reported Name	Date Sampled	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	(dpd) AAA	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid		pH units pH
RMD-250	6071 Azure Rd.	2017/03/06	<1	<1	<1	17	19	<0.5	7	<1	<2	9.7	17.9		
RMD-251	5951McCallan Rd.	2017/03/06	<1	<1	<1	17	18	<0.5	7	<1	<2	10.7	19.9		
RMD-258	7000 Blk. Dyke Rd.	2017/03/06	<1	<1	<1	18	20	<0.5	7	<1	<2	10.5	19		
RMD-259	10020 Amethyst Ave.	2017/03/06	<1	<1	<1	18	20	<0.5	8	<1	<2	10.5	19.8		7.2
RMD-250	6071 Azure Rd.	2017/05/15	<1	<1	<1	19	21	<0.5	10	<1	<2	11.6	23.6		
RMD-251	5951McCallan Rd.	2017/05/15	<1	<1	<1	19	21	<0.5	10	<1	<2	10.8	23.3		
RMD-258	7000 Blk. Dyke Rd.	2017/05/15	<1	<1	<1	17	18	<0.5	11	<1	<2	11.1	24.3		
RMD-259	10020 Amethyst Ave.	2017/05/15	<1	<1	<1	21	23	<0.5	11	<1	<2	10.7	23.8		
RMD-250	6071 Azure Rd.	23-Aug-17	<1	<1	<1	21	21	<0.5	9	<1	<2	6.5	16.9		
RMD-251	5951McCallan Rd.	23-Aug-17	<1	<1	<1	21	21	<0.5	10	<1	<2	5.9	16		
RMD-258	7000 Blk. Dyke Rd.	23-Aug-17	<1	<1	<1	25	25	<0.5	11	<1	<2	7.7	19.7		
RMD-259	10020 Amethyst Ave.	23-Aug-17	<1	<1	<1	26	26	<0.5	11	<1	<2	7.3	18.9		7.5
RMD-250	6071 Azure Rd.	2017-11-29 00:00	<1	<1	<1	24	25	<0.5	10	<1	<2	10.6	21.4		
RMD-251	5951McCallan Rd.	2017-11-29 00:00	<1	<1	<1	25	26	<0.5	8	<1	<2	5.7	14.7		
RMD-258	7000 Blk. Dyke Rd.	2017-11-29 00:00	<1	<1	<1	25	25	<0.5	11	<1	<2	9.7	22		
RMD-259	10020 Amethyst Ave.	2017-11-29 00:00	<1	<1	<1	28	29	<0.5	11	<1	<2	13.8	26.7		7.3

APPENDIX 6: 2017 HEAVY METAL AND VINYL CHLORIDE TESTING RESULTS

Parameter	Canadian Guideline Limit	Reason Guideline Established
Aluminium Total (µg/L)	200	Aesthetic
Antimony Total (μg/L)	6	Health
Arsenic Total (µg/L)	10	Health
Barium Total (μg/L)	1000	Health
Boron Total (μg/L)	5000	Health
Cadmium Total (μg/L)	5	Health
Calcium Total (μg/L)	none	
Chromium Total (µg/L)	50	Health
Cobalt Total (µg/L)	none	
Copper Total (µg/L)	≤1000	Aesthetic
Iron Total (μg/L)	≤ 300	Aesthetic
Lead Total (µg/L)	10	Health
Magnesium Total (µg/L)	none	
Manganese Total (µg/L)	≤ 50	Aesthetic
Mercury Total (µg/L)	1.0	Health
Molybdenum Total (µg/L)	none	
Nickel Total (µg/L)	none	
Potassium Total (µg/L)	none	
Selenium Total (µg/L)	50	Health
Silver Total (µg/L)	none	
Sodium Total (µg/L)	≤ 200,000	Aesthetic
Zinc Total (μg/L)	≤ 5000	Aesthetic

*Checked June 2017

pple Description Sample Date Sample Type μg/L μg/L <th< th=""><th>6071 Azure Rd. 2017/05/03 15:55 GRAB 35 <0.5 <0.2 5300 <0.05 <0.5</th><th>6640 Blundell Rd. 2017/05/03 16:05 GRAB 39 <0.5 <0.5 3.1 <10 <0.2 5370 0.13</th><th>12560 Cambie Rd. 2017/05/03 12:30 GRAB 28 <0.5 <0.5 <0.5 3.1 <10 <0.2</th></th<>	6071 Azure Rd. 2017/05/03 15:55 GRAB 35 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.2 5300 <0.05 <0.5	6640 Blundell Rd. 2017/05/03 16:05 GRAB 39 <0.5 <0.5 3.1 <10 <0.2 5370 0.13	12560 Cambie Rd. 2017/05/03 12:30 GRAB 28 <0.5 <0.5 <0.5 3.1 <10 <0.2
Sample Type μg/L	GRAB 35 <0.5 <0.5 3.2 <10 <0.2 5300 <0.05	GRAB 39 <0.5 <0.5 3.1 <10 <0.2 5370	GRAB 28 <0.5 <0.5 3.1 <10 <0.2
μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	35 <0.5 <0.5 3.2 <10 <0.2 5300 <0.05	39 <0.5 <0.5 3.1 <10 <0.2 5370	28 <0.5 <0.5 3.1 <10 <0.2
μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	<0.5 <0.5 3.2 <10 <0.2 5300 <0.05	<0.5 <0.5 3.1 <10 <0.2 5370	<0.5 <0.5 3.1 <10 <0.2
μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	<0.5 3.2 <10 <0.2 5300 <0.05	<0.5 3.1 <10 <0.2 5370	<0.5 3.1 <10 <0.2
μg/L μg/L μg/L μg/L μg/L μg/L μg/L	3.2 <10 <0.2 5300 <0.05	3.1 <10 <0.2 5370	3.1 <10 <0.2
μg/L μg/L μg/L μg/L μg/L μg/L μg/L	<10 <0.2 5300 <0.05	<10 <0.2 5370	<10 <0.2
μg/L μg/L μg/L μg/L μg/L μg/L	<0.2 5300 <0.05	<0.2 5370	<0.2
μg/L μg/L μg/L μg/L μg/L	5300 <0.05	5370	
μg/L μg/L μg/L μg/L	<0.05		5040
μg/L μg/L μg/L		0.13	5040
μg/L μg/L	<0.5	0.15	<0.05
μg/L		<0.5	<0.5
	8.6	1.3	1.4
	13	17	8
μg/L	1.1	<0.5	<0.5
μg/L	155	154	154
μg/L	8.7	11.4	3.2
μg/L	<0.05	<0.05	<0.05
μg/L	<0.5	<0.5	<0.5
μg/L	<0.5	<0.5	<0.5
μg/L	137	138	141
μg/L	<0.5	<0.5	<0.5
μg/L	<0.5	<0.5	<0.5
μg/L	1500	1460	1520
μg/L	4.8	<3.0	<3.0
μg/ -	+.0	(3.0	
	RMD-250	RMD-257	RMD-263
ple Description	6071 Azure Rd.	6640 Blundell Rd.	12560 Cambie Rd.
Sample Date	2017/10/25 15:45	2017/10/25 15:40	2017/10/25 12:30
Sample Type	GRAB	GRAB	GRAB
	23	23	23
	<0.5	<0.5	<0.5
μg/L	<0.5	<0.5	<0.5
	3.2	3.3	3.3
	<10	<10	<10
	<0.2	<0.2	<0.2
	4160	4140	4150
	<0.05	<0.05	<0.05
	<0.5	<0.5	<0.5
μg/L		1.9	1.9
μg/L μg/L	1.8	-	5
μg/L	<5	<5	
μg/L μg/L	<5		
μg/L μg/L μg/L	<5 <0.5	<0.5	<0.5
μg/L μg/L μg/L μg/L	<5 <0.5 167	<0.5 168	<0.5 165
μg/L μg/L μg/L μg/L μg/L	<5 <0.5 167 3.6	<0.5 168 3.6	<0.5 165 3.7
μg/L μg/L μg/L μg/L μg/L μg/L	<5 <0.5 167 3.6 <0.05	<0.5 168 3.6 <0.05	<0.5 165 3.7 <0.05
μg/L μg/L μg/L μg/L μg/L μg/L μg/L	<5 <0.5 167 3.6 <0.05 <0.5	<0.5 168 3.6 <0.05 <0.5	<0.5 165 3.7 <0.05 <0.5
μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	<5 <0.5 167 3.6 <0.05 <0.5 <0.5	<0.5 168 3.6 <0.05 <0.5 <0.5	<0.5 165 3.7 <0.05 <0.5 <0.5
μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	<5 <0.5 167 3.6 <0.05 <0.5 <0.5 <0.5 199	<0.5 168 3.6 <0.05 <0.5 <0.5 198	<0.5 165 3.7 <0.05 <0.5 <0.5 198
μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	<5	<0.5 168 3.6 <0.05 <0.5 <0.5 198 <0.5	<0.5 165 3.7 <0.05 <0.5 <0.5 198 <0.5
μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	<5 <0.5 167 3.6 <0.05 <0.5 <0.5 <0.5 199	<0.5 168 3.6 <0.05 <0.5 <0.5 198	<0.5 165 3.7 <0.05 <0.5 <0.5 198
· · · · ·	μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L μg/L	μg/L 23 μg/L <0.5	μg/L 23 23 μg/L <0.5

Sample Site Number	Sample Reported Name	Sampled date	Vinyl Chloride (mg/L)
RMD-205	13851 Steveston Hwy.	12-Jun-17	<0.00040
RMD-206	4251 Moncton St.	12-Jun-17	<0.00040
RMD-253	11051 No 3 Rd.	12-Jun-17	<0.00040
RMD-256	1000 Blk. McDonald Rd.	12-Jun-17	<0.00040
RMD-263	12560 Cambie Rd.	12-Jun-17	<0.00040
RMD-205	13851 Steveston Hwy.	16-Nov-18	<0.00040
RMD-206	4251 Moncton St.	16-Nov-18	<0.00040
RMD-253	11051 No 3 Rd.	16-Nov-18	<0.00040
RMD-256	1000 Blk. McDonald Rd.	16-Nov-18	<0.00040
RMD-263	12560 Cambie Rd.	16-Nov-18	<0.00040

APPENDIX 7: SAMPLE DRINKING WATER QUALITY ADVISORY

CITY OF RICHMOND ANNUAL WATERMAIN FLUSHING NOTIFICATION

On Monday, February 20, the Water Services section will begin the annual watermain flushing program. To minimize disruptions, this work will be conducted from Monday to Thursday, 8:00 p.m. to 6:30 a.m. The program will continue for up to six weeks.

Flushing watermains is required to maintain water quality. Your water will not be turned off; however, during this time you may experience water pressure fluctuation or discolouration. This is not a health concern and should only last for a short time. It is recommended that you run the cold water until the discolouration clears.

If you have any questions, please contact 604-270-8721. For more information on Richmond's high-quality tap water and other water education programs, visit: **www.richmond.ca/water**.

APPENDIX 8: SPECIFIC EMERGENCY RESPONSE PLANS

Positive Response for Fecal or E. coli

If a water sample tests positive for fecal coliform, the following response plan will occur:

- the municipality's water quality personnel and the Medical Health Officer will be notified by the Metro Vancouver laboratory;
- interim samples from the site will be examined. Interim samples are samples in the period between when the fecal positive sample was taken, and when it was determined to be fecal positive;
- arrangements will be made for the immediate collection of a repeat sample including, where possible, samples from upstream and downstream of the fecal positive sample;
- the chlorine residual for the sample noted on the sampler's Water Sample Data Sheet will be reviewed to determine if a localized loss of disinfectant occurred;
- all water utility personnel will be contacted to determine if there was any loss of pressure, or other unusual events, that may have led to contaminants entering the system;
- the need for a boil-water advisory will be evaluated by the City and the Medical Health Officer. If a boil-water advisory is deemed necessary, the municipality will carry out various means to inform the public. Metro Vancouver will be informed of this public advisory;
- the City, in consultation with the Medical Health Officer, will determine the need and extent for a boil-water advisory;
- the Metro Vancouver laboratory will initiate procedures to identify species of the fecal positive organism with standard biochemical tests;
- the Medical Health Officer will be contacted with the repeat sample results and the results of the species identification on the fecal positive sample when these tests are complete.

In the event of possible E. coli or fecal coliform contamination, all steps to ensure public health and safety will be taken including banning water usage if necessary.

Chemical or Biological Contamination Response

In the event of chemical or biological contamination, in source waters or the City's distribution system, the following actions will be taken by both, the City of Richmond and Metro Vancouver:

- immediately notify Vancouver Coastal Health;
- identify the chemical and any public health risk factors associated with its presence in potable water;
- isolate the contaminated zone area and determine the level of contamination;
- ilssue a public advisory in consultation with the Medical Health Officer.

In the event of possible biological or chemical contamination, all steps to safety will be taken to ensure public health including banning water usage if necessary.

Turbidity Response

Turbidity (cloudy water) occurs during periods of heavy rain at and surrounding Metro Vancouver water sources. The City of Richmond, in conjunction with Vancouver Coastal Health, has developed a turbidity response plan, which considers the City's responsibility for due diligence without unreasonably constraining the water utility's ability to operate the system.

During turbidity events of >1 NTU the staff will:

- begin a rigorous sampling program for microbiological activity and residual chlorine;
- monitor the City's supervisory control and data acquisition (SCADA) system with updates sent to Vancouver Coastal Health on a predetermined schedule;
- issue a public communication in consultation with the regional Health Authority;
- if necessary, issue a boil-water advisory to residents receiving turbid water.

Response to Interruption of Primary and/or Secondary Disinfection

Upon notification by Metro Vancouver Operations that an interruption in disinfection has occurred:

- staff will monitor residual levels of chlorine at strategic locations in the Metro Vancouver supply area;
- the City's SCADA system will be monitored with updates sent to Vancouver Coastal Health on a predetermined schedule, as set by the health authority;
- in cases where chlorine residual is less than 0.2 ppm, City crews will flush the affected area until an acceptable level is achieved;
- these actions will continue until disinfection is resumed and adequate levels of residual chlorine have been reached in the distribution system.

Response to Loss of Pressure Due to High Demand

In the event of a pressure loss due to high demand:

- City staff will attempt to rectify the problem as soon as possible using various demands management techniques and by supplementing supply to problem areas;
- Metro Vancouver and the Medical Health Officer will be notified of any water quality issues;
- City staff will perform chlorine residual tests at various locations to determine if adequate disinfectant is present in the distribution;
- all water quality complaints from the public will be thoroughly investigated due to the potential for water contamination during low water pressure.

Response to Watermain Breaks with Suspected Contamination

All watermain breaks where chemical or microbiological contamination of the system is suspected will be immediately reported to the Medical Health Officer. The municipality will isolate the contaminated section from the rest of the distribution system. Once the watermain has been repaired, chlorine residual testing will be conducted at various locations affected by the main break. If low chlorine residuals are found, necessary actions to increase the levels of free chlorine will be carried out. If bacterial contamination is suspected, water samples will be analyzed and appropriate action taken.





Re:	UBCM Resolutions - Provincial Action on Zero E Carbon Fuels	missior	ns Vehicles and Low
From:	Peter Russell Senior Manager, Sustainability and District Energy	File:	10-6125-07-02/2018- Vol 01
То:	Public Works and Transportation Committee	Date:	April 11, 2018

Staff Recommendation

That the proposed UBCM resolutions titled "Zero Emissions Vehicle Mandate" and "Strengthen Low Carbon Fuel Requirement" be submitted to the Union of BC Municipalities, as attached to the staff report titled "UBCM Resolutions - Provincial Action on Zero Emissions Vehicles and Low Carbon Fuels" dated April 11, 2018, from the Senior Manager, Sustainability and District Energy.

Peter Russell Senior Manager, Sustainability and District Energy (604-276-4130)

A ++	2
All.	2

REPORT CONCURRENCE								
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER						
Transportation	e	Chling						
REVIEWED BY STAFF REPORT / Agenda Review Subcommittee	INITIALS:	APPROVED BY CAO						

Staff Report

Origin

This report supports Council's 2014-2018 Term Goal #4 Leadership in Sustainability:

Continue advancement of the City's sustainability framework and initiatives to improve the short and long term livability of our City, and that maintain Richmond's position as a leader in sustainable programs, practices and innovations.

4.1. Continued implementation of the sustainability framework.

Analysis

Background

In 2010, Council adopted targets in Richmond's Official Community Plan to reduce community greenhouse gas (GHG) emissions 33% below 2007 levels by 2020, and 80% below 2007 levels by 2050. Transportation accounts for more than half of the greenhouse gas (GHG) emissions in Richmond's Community Energy and Emissions Inventory, with personal transportation accounting for more than 40% of emissions.

Richmond's 2014 Community Energy and Emissions Plan (CEEP) outlines strategies and actions for the City to take to reduce community energy use and GHG emissions, including:

- Strategy 7: Promote Low Carbon Personal Vehicles
- Strategy 12: Encourage Sustained Action by Senior Levels of Government

Modeling undertaken as part of the CEEP indicates Richmond's 2050 emissions reduction targets can only be achieved with the near-universal adoption of zero emissions personal vehicles by the 2040s. In addition, achieving these targets requires that transit ridership, walking, bicycling and rolling increase as a share of transportation; Richmond's 2041 Official Community Plan OCP includes a target that over 50% of trips made by year 2041 be made by transit, walking or biking.

Federal and provincial policies likewise are necessary to the adoption of low carbon personal transportation and attaining GHG emissions targets. Notably, the Pan-Canadian Framework on Clean Growth and Climate Change calls for the development of a national zero-emission vehicles strategy, and the implementation of a clean fuel standard to reduce emissions from fuels used in transportation, buildings and industry. The B.C. government established the Climate Leadership Team in May 2015 to provide advice and recommendations for the development of the provincial Climate Leadership Plan.

City Action

The City of Richmond is a leader in supporting the transition to low carbon personal vehicles, as well as the shift towards walking, biking, transit and ride-sharing. The City's leadership actions span the City-owned fleet, provision of public charging infrastructure, and facilitating electric vehicle (EV) charging in private developments.

City Fleet Vehicles

Corporately, the City has adopted the Green Fleet Action Plan, which establishes a target to reduce greenhouse gas (GHG) emissions by 20% by 2020 (using 2011 as the baseline year). The key strategies of the plan are to:

- 1. Down-size & right-size vehicles
- 2. Buy best-in-class vehicles with improved emission & fuel consumption ratings
- 3. Make best use of electric & hybrid vehicles
- 4. Reduce demand for vehicle use overall

In November 2016, Council endorsed a tiered approach to vehicle procurement:

- 1. Full electric vehicle as a first priority consideration
- 2. Electric vehicle with gasoline back up as a second priority consideration
- 3. Hybrid vehicle as a third priority consideration
- 4. Most fuel-efficient gasoline vehicle where an electric or hybrid unit is not feasible

The City is implementing this tiered approach for its vehicle fleet, including evaluating fleet EV charging opportunities at various locations. The City was honoured in 2016 with the "E3 Fleet" Platinum level certification award from the Fraser Basin Council, the first and only municipality to be so rated.

Public Charging Infrastructure

In March, 2013 the City installed four public "Level 2" EV charging stations (total of eight charging ports) at the following locations:

- Steveston Community Centre
- Thompson Community Centre
- Cambie Community Centre
- City Hall

An additional station is in operation at the Richmond Olympic Oval. Usage of these stations has grown, suggesting growing demand for public charging. On November 28th, 2016, Council directed that staff investigate the potential expansion of the City-owned network of public EV charging stations, including DC Fast Charging infrastructure, and report back. In 2017, the City undertook a consultation on expanding EV charging infrastructure. The City has applied for federal funding for EV charging infrastructure expansion and staff will report back with recommended expansion options in 2018.

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In addition to City-owned public EV charging infrastructure, there has also been an increase in the number of charging stations available for public use provided by other organizations; there were 36 publicly accessible L2 charging stations and 4 DC Fast Charging station locations in Richmond where drivers can charge their EVs as of April 2018.

Supporting EV Charging in Private Developments

On December 18th, 2017, City Council adopted a requirement in the Parking and Loading section of the Richmond Zoning Bylaw that all residential parking spaces in new developments, excluding visitor parking, feature an energized electrical outlet capable of providing Level 2 charging. The City was the first jurisdiction in Canada to make such a requirement. Other jurisdictions are now building from Richmond's leadership – the City of Vancouver adopted essentially the same requirement in March 2018, and a number of other local governments are considering such a requirement, The policy is also attracting provincial, federal and international interest. Notably, the City has been invited to participate as part of the Global EV Pilot City program to share Richmond's international best practice. The Global EV Pilot City program is an initiative of the Clean Energy Ministerial "EV 30@30" campaign, an effort to deploy at least 30 percent new electric vehicle sales by 2030; it is co-chaired by the governments of Canada and China, under the auspices of the International Energy Agency¹.

Need for Provincial Leadership on Low Carbon Transportation

In addition to action taken at the local level, there is need for provincial and federal leadership to ensure the transition to low carbon transportation. Notably, the Climate Leadership Team's November 2015 recommendations to the BC government included two key transportation policies the province should pursue: Establishing Zero Emission Vehicle targets, and increasing the Low Carbon Fuel Standard.

Zero Emissions Vehicle mandate

Zero emissions vehicles (ZEVs), such as EVs or hydrogen vehicles, are a key opportunity to reduce emissions. ZEVs are capable of achieving zero GHG emissions on BC's clean electrical grid, and also result in zero local air pollution, reduce noise pollution, and reduce operating costs.

ZEV legislation sets minimum percentages of ZEVs that vehicle manufacturers have to sell in the province by a certain date. If a manufacturer does not meet the required percentage, they can purchase credits from manufacturers that exceed it. In Canada, Quebec has a ZEV mandate (2018 is the first compliance year), and California and nine other states have also established such requirements. These mandates are a key policy to ensure sufficient availability of ZEVs to achieve climate targets.

¹ The International Energy Agency (IEA) is an autonomous intergovernmental organization established in the framework of the Organisation for Economic Co-operation. The IEA mission statement is to work to ensure reliable, affordable and clean energy for its 29 member countries and beyond.

The BC Climate Leadership Team's 2015 recommendations include establishing a Zero Emission Vehicle target of 30 per cent of sales by 2030 for light duty vehicles. This aligns with the Clean Energy Ministerial EV30@30 campaign, and is relatively modest compared to the levels of EV uptake already being achieved and targeted elsewhere. EVs already comprise over 4% of passenger cars (excluding light trucks) sold in BC, and market share is projected to increase. A growing number of countries have announced they will phase out sales of gasoline-only vehicles, including China, England (by 2040), France (by 2040), and Norway (by 2025), and other countries.

Increasing the Low Carbon Fuel Standard

BC's *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements)* Act and the associated Renewable & Low Carbon Fuel Requirements Regulation make requirements for renewable and low carbon fuel requirements. Since 2010, fuel suppliers have been required to include 5 per cent renewable fuel content in gasoline, and 4 per cent in diesel. Fuel suppliers are also required to reduce the GHG intensity of the transportation fuel mix they supply. Compliance is measured in terms of trade-able credits which account for the different carbon intensity of transportation energy sources; transportation fuels encompassed by the regulation include gasoline, diesel, ethanol, biodiesel, electricity, hydrogen, and others. City staff are in the process of exploring the City's ability to generate revenue through the sale of carbon credits from the provision of low carbon electricity via the City-owned public EV charging network as part of the market for trade-able credits under the regulation.

Fuel suppliers must adhere to a schedule that will reduce the GHG intensity of the fuel mix in BC by 10% by 2020, relative to 2010. The province reports that these requirements reduced GHG emissions by 6.4 million tonnes between 2010 and 2016 – for reference, Richmond's total annual community emissions are approximately 500,000 tonnes.

The BC Climate Leadership team recommended increasing the Low Carbon Fuel Standard to 20 per cent by 2030, and broadening the LCFS coverage to include all vehicle fuel use with the exception of aviation fuel.

UBCM Resolutions

It is recommended that two resolutions be forwarded to the Union of BC Municipalities calling for the province to establish requirements for Zero Emissions Vehicles to comprise at least 30 per cent of passenger vehicle sales by 2030 (Attachment 1), and to increase the Low Carbon Fuel Standard to 20 per cent by 2030, and account for indirect land use change (Attachment 2). This action supports timely adoption of key policies that are critical to the City and province pursuing their respective climate targets.

Financial Impact

None.

Conclusion

Continuing to encourage zero emissions vehicles and low carbon fuels is essential to meeting City, provincial, national and international climate change, air quality and sustainability goals. This report recommends that resolutions be forwarded to the Union of BC Municipalities calling for the province to establish requirements for Zero Emissions Vehicles to comprise at least 30 per cent of passenger vehicle sales by 2030, and to increase the Low Carbon Fuel Standard to 20 per cent by 2030.

Brendan McEwen Sustainability Manager (604-247-4676)

BM:bm

Att. 1: Proposed UBCM Resolution – Zero Emissions Vehicle Mandate Att. 2: Proposed UBCM Resolution – Strengthen Low Carbon Fuel Standard

Attachment 1: Proposed UBCM Resolution - Zero Emissions Vehicle Mandate

ZERO EMISSIONS VEHICLE MANDATE

City of Richmond

WHEREAS ten US states and the province of Quebec have adopted Zero Emissions Vehicle standards that require a progressively increasing share of new passenger vehicle sales to be zero emissions vehicles (such as electric vehicles or hydrogen fuel cell vehicles);

AND WHEREAS the Climate Leadership Team's 2015 Recommendations to the BC Government included establishing Zero Emission Vehicle targets of 30 per cent of sales by 2030;

AND WHEREAS Canada and China are the co-chairs of the EV30@30 campaign under the Clean Energy Ministerial, which is working towards 30 per cent of vehicle sales across participating jurisdictions to be zero emissions vehicles by 2030:

THEREFORE be it resolved that the Province be requested to develop requirements for Zero Emissions Vehicles to comprise at least 30 per cent of passenger vehicle sales by 2030.

Attachment 2: Proposed UBCM Resolution – Strengthen Low Carbon Fuel Requirement

STRENGTHEN LOW CARBON FUEL REQUIREMENT City of Richmond

WHEREAS The Pan-Canadian Framework on Clean Growth and Climate Change calls the implementation of a clean fuel standard to reduce emissions from fuels used in transportation, buildings and industry;

AND WHEREAS British Columbia's Renewable and Low Carbon Fuel Requirements Regulation requires an increasing percentage of renewable content in transportation fuels reaching 10% by 2020, which has prevented 6.4 million tonnes of CO₂e greenhouse gas emissions between 2010 and 2016;

AND WHEREAS the Climate Leadership Team's 2015 Recommendations to the BC Government included increasing the Low Carbon Fuel Requirement to 20 per cent by 2030:

THEREFORE be it resolved that the Province be requested to increase the Low Carbon Fuel Requirement to 20 per cent by 2030.

Bylaw 9786



Traffic Bylaw No. 5870 Amendment Bylaw No. 9786

The Council of the City of Richmond enacts as follows:

1. **Traffic Bylaw No. 5870**, as amended, is further amended at Section 1 – "[Interpretation]" by inserting the following definitions in alphabetical order:

- **Time Period** means the amount of time purchased through a **block meter machine** or **cellular payment system**, as indicated by a purchase time and date and an expiration time and date.".
- 2. **Traffic Bylaw No. 5870**, as amended, is further amended at Section 1 "[Interpretation]" by deleting the definition of "Parking" and replacing it with the following:
 - "**Parking** means the **standing** of a **vehicle**, whether occupied or not, other than up to 5 minutes for the purpose of, and while actually engaged in, loading or unloading of property, goods, or the discharging or taking on of passengers, or in compliance with the directions of:
 - (a) a **police officer**, a **bylaw enforcement officer**, or a person contracted by the **City** for traffic regulation purposes, or
 - (b) a **traffic control device**.".
- 3. **Traffic Bylaw No. 5870**, as amended, is further amended at Section 12 "[Parking and Stopping of Vehicles]" by deleting subsection 12.4(s) and replacing it with the following:
 - "(s) in any public park or school ground between the hours of 11:00 p.m. and 5:00 a.m.;"
- 4. **Traffic Bylaw No. 5870**, as amended, is further amended at Section 12A "[Parking in Block Meter Zone]" by replacing the existing paragraph 12A.2 with the following:

"12A.2 A person may only park a vehicle in a block meter zone when:

(a) (i) a **time period** has been selected and payment has been accepted by the **block meter machine** and a **parking receipt** has been obtained and

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[&]quot;Stall Number means the number assigned to a designated parking stall as identified by a City sign or marking.

placed face-up inside the windshield of the **vehicle**, with the amount paid, time and date of purchase, and time and date of expiration clearly visible from outside the **vehicle**, and the purchased **time period** remains valid; or

- (ii) a **stall number** has been entered and payment has been accepted by the **block meter machine** and the purchased **time period** remains valid; or
- (iii) a **number plate** has been entered and payment has been accepted by the **block meter machine** and the purchase **time period** remains valid.
- (b) (i) payment for a pre-determined **time period** has been made through a designated **cellular payment system** based on the **number plate** of the parked **vehicle**; and
 - (ii) the **time period** for which payment has been made, as indicated by the **number plate** on the **cellular enforcement system**, has not expired.".
- 5. This Bylaw is cited as "Traffic Bylaw No. 5870, Amendment Bylaw No. 9786".

FIRST READING	MAY 1 4 2018	CITY OF RICHMOND
SECOND READING	MAY 1 4 2018	APPROVED for content by originating
THIRD READING	MAY 1.4 2018	APPROVED
ADOPTED		for legality by Solicitor

MAYOR

CORPORATE OFFICER



Parking (Off-Street) Regulation Bylaw No. 7403 Amendment Bylaw No. 9787

The Council of the City of Richmond enacts as follows:

- 1. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting and replacing subsection 1.1(a) with the following:
 - "(a) to the **City properties**; and".
- 2. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting the text in subsection 1.1(b) and replacing it with "deleted".
- 3. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting the words "in any of the areas designated in Schedule A" from subsection 2.1.1 and replacing them with "on any **City properties**".
- 4. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by inserting the word "actively" between "when" and "loading" in subsection 2.1.1(g)(i).
- 5. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting the words "in the areas designated in Schedule A" from subsection 3.1.1 and replacing them with "on all **City properties**".
- 6. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting the words "on a property as outlines in Schedule A" from subsection 3.3.1(b)(ii) and replacing them with "on any **City property**".
- 7. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting the words "an area identified in Schedule A" from subsection 3.3.2 and replacing them with "any **City properties**".
- 8. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by adding the following as new subsection 3.3.3:
 - "3.3.3 No person shall park a **trailer** on any **City property** without the motive power unit attached.".
- 9. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting the words "in all areas designated in Schedule A" from subsection 4.1.1 and replacing them with "on all **City properties**".

- 10. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting subsection 5.1.2(a) and replacing it with the following:
 - "(a) (i) a **time period** has been selected and payment has been accepted by the **parking lot meter** and a **parking receipt** has been obtained and placed face-up inside the windshield of the **vehicle**, with the amount paid, time and date of purchase and time and date of expiration clearly visible from outside the **vehicle** and the purchased **time period** remains valid or;
 - (ii) a **stall number** has been entered and payment has been accepted by the **parking lot meter** and the purchased **time period** remains valid or;
 - (iii) a **number plate** has been entered and payment has been accepted by the **parking lot meter** and the purchased **time period** remains valid.".
- 11. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting subsection 5.1.3 and replacing it with the following:
 - "5.1.3 The fees payable for parking in designated pay parking lots in the **City** are set out in the **City's** *Consolidated Fees Bylaw No.* 8636.".
- 12. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting subsection 6.1.2 and replacing it with the following:
 - "6.1.2 A person applying for a **parking permit** or **permit decal** must pay the applicable fees as set out in the **City's** *Consolidated Fees Bylaw No. 8636.*".
- 13. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by inserting the following as new subsection 6.2.3:
 - "6.2.3 No refunds shall be issued for fees paid in respect of **parking permits** or **permit** decals.".
- 14. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting Part 7 and replacing it with the following:

"PART SEVEN: IMPOUNDMENT

- 7.1 Any vehicle unlawfully standing, parked, or driven on any street, City property, or other public place, may be, or cause to be, impounded by any Police Officer, the General Manager, Engineering & Public Works, the Fire Chief, any Bylaw Enforcement Officer, or their designates, or any traffic enforcement agent, and removed to such place as directed by such person and shall be kept there at the owner's risk and expense.
- 7.2 An **impounded vehicle** may not be released to its **owner** until the **impounding charges** are paid.

- 7.3 The **City** will give notice to the **owner** of every **vehicle** impounded pursuant to this Part 7 by mailing the notice by registered mail to the **owner** at the address of such **owner** as shown in the records of the Superintendent of Motor Vehicles at the date of **impoundment**.
- 7.4 If such **impounded vehicle** is not claimed by its **owner** within 14 days of the date such **impoundment** notice was sent by registered mail to the **owner**, such **vehicle** may be sold by the **City** at public auction and any monies received on its sale shall be applied,
 - 7.4.1 firstly, to the cost of the sale;
 - 7.4.2 secondly, to the cost of the removal and impoundment of the vehicle; and
 - 7.4.3 thirdly, to the recovery of any monies owed for any outstanding fines levied under this Bylaw.

The surplus, if any, shall be sent by registered mail to the registered **owner** of the **vehicle** at the address shown for such **owner** in the records of the Superintendent of Motor Vehicles.

- 7.5 The **City** will give notice to the **owner** of every **vehicle impounded** pursuant to this Part 7, of the **City's** intention to sell such **vehicle** on the date set out in the notice, by mailing the notice by registered mail to the **owner** at the address of such **owner** as shown in the records of the Superintendent of Motor Vehicles at the date of **impoundment**.
- 7.6 The **owner** of a **vehicle** shall incur the penalties provided for any violation of this Bylaw with respect to any **vehicle** owned by them unless at the time of such violation the **vehicle** was in the possession of some person other than the **owner** without the **owner's** consent; but nothing in this section shall relieve the operator of a **vehicle**, not being the **owner**, from incurring the penalties provided for such violation.".
- 15. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended at Section 8.1 "[Interpretation]" by inserting the following definitions in alphabetical order:

"City Property	means any lot or parcel of land owned or leased by the City.
Fire Chief	means the Fire Chief of the Richmond Fire Department.
Impound	includes the seizure, towing, removal and detention of any vehicle , whether being driven or not, and any other chattel, which is unlawfully placed, left, kept or driven upon a street , City property , or other public space.

means all expenses of removal and detention or impounding of a vehicle , and all related towing, storage and other charges.
means a vehicle designed to provide temporary living accommodation for travel, vacation or recreational use, and designed to be driven, towed or transported.
means the number assigned to a parking stall .
has the meaning ascribed to in the City's Traffic Bylaw No. 5870.
means the amount of time purchased through a parking lot meter or cellular payment system , as indicated by a purchase time and date and an expiration time and date.
means every vehicle without motive power designed for carrying persons or property, and for being drawn by a motor vehicle, and includes a semi-trailer as defined in the <i>Commercial Transport Act</i> .".

16. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended at Section 8.1 – "[Interpretation]" by deleting the definition of "overnight parking" and replacing it with the following:

"Overnight Parking means the standing of a vehicle, for a period of three (3) hours or more, between 2300 hours and 500 hours each day, whether the vehicle is occupied or not.".

17. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting Section 9.1 and replacing it with the following:

"9.1 Liability of Vehicle Owner

- 9.1.1 The **owner** of a **vehicle** is liable for any violation of the regulations in this bylaw, notwithstanding that, at the time of the violation, the **vehicle** is unattended or in the possession of another person.
- 9.1.2 Upon notification of a violation to the **owner** of a **vehicle**, the burden of proving:
 - (a) that the person in charge of the **vehicle** was not a person entrusted with the possession of that **vehicle** by the **owner**; or
 - (b) that the legal registered **owner** is not the **owner**;

is on the owner.".

18. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting Section 9.3 and replacing it with the following:

"9.3 Tampering with Markings

No person may remove, obliterate, or otherwise interfere with any markings made by a **police officer**, **bylaw enforcement officer**, or **traffic enforcement agent** to determine the length of time a **vehicle** remains **parked** in one location.".

19. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by inserting the following as new PART TWELVE:

"PART TWELVE: FEES BYLAW

- 12.1 The *Consolidated Fees Bylaw No. 8636*, as may be amended from time to time, applies to this bylaw."
- 20. **Parking (Off-Street) Regulation Bylaw No. 7403**, as amended, is further amended by deleting the content of Schedules A, D and E and replacing it with the word "DELETED".
- 21. This Bylaw is cited as "Parking (Off-Street) Regulation Bylaw No. 7403, Amendment Bylaw No. 9787".

FIRST READING	MAY 1 4 2018	CITY OF RICHMOND
SECOND READING	MAY 1 4 2018	APPROVED for content by originating
THIRD READING	MAY 1 4 2018	APPROVED
ADOPTED		for legality by Solicitor

MAYOR

CORPORATE OFFICER

Bylaw 9827



CONSOLIDATED FEES BYLAW NO. 8636, AMENDMENT BYLAW NO. 9827

The Council of the City of Richmond enacts as follows:

- 1. The **Consolidated Fees Bylaw No. 8636**, as amended, is further amended by adding Schedule A attached to and forming part of this bylaw as new SCHEDULE PARKING (OFF-STREET) REGULATION to Consolidated Fees Bylaw No. 8636.
- 2. This Bylaw is cited as "Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9827".

FIRST READING	MAY 1 4 2018	CITY OF RICHMOND
SECOND READING	MAY 1 4 2018	APPROVED for content by originating
THIRD READING	MAY 1 4 2018	APPROVED
ADOPTED		for legality by Solicitor

MAYOR

CORPORATE OFFICER

SCHEDULE - PARKING (OFF-STREET) REGULATION

PARKING (OFF-STREET) REGULATION Bylaw No. 7403

Section 5.1.3, 6.1.2

Description	Fee
Pay Parking Fees:	All rates include applicable taxes.
All Off-Street City Property Locations, other than those set out below.	\$2.50 per hour – 7:00 am to 9:00 pm
6131 Bowling Green Road	\$2.50 per hour – 7:00 am to 9:00 pm
65000 Gilbert Road	\$2.50 per hour – 7:00 am to 9:00 pm Gateway Theater Productions - \$5.00 for maximum stay
7840 Granville Avenue	\$2.00 per hour – 7:00 am to 4:00 pm
Parking Permit / Decal Fees:	
All Off-Street City Property Locations, other than those set out below.	\$40.00 per calendar month plus applicable taxes, subject to discounts of: 10% for groups of 11 to 25 permit decals 15% for groups of 26 to 50 permit decals 25% for groups of 51 or more permit decals
Gateway Theater Staff Parking (6500 Gilbert Road)	\$5.00 per calendar year, plus applicable taxes
Richmond Lawn Bowling Club Members Parking (6131 Bowling Green Road)	\$5.00 per calendar year, plus applicable taxes
	\$8.00 per calendar year, plus applicable taxes
Richmond Seniors' Centre Members Parking (Minoru Park)	\$5.00 per calendar year, plus applicable taxes
Richmond Tennis Club Members Parking (Minoru Park)	



Notice of Bylaw Violation Dispute Adjudication Bylaw No. 8122, Amendment Bylaw No. 9829

The Council of the City of Richmond enacts as follows:

- 1. Notice of Bylaw Violation Dispute Adjudication Bylaw No. 8122, as amended, is further amended by adding the content of the table in Schedule A attached to and forming part of this bylaw, to "Schedule Parking (Off-Street) Regulation Bylaw No. 7403 (2002)" in Bylaw No. 8122 in numerical order.
- 2. This Bylaw is cited as "Notice of Bylaw Violation Dispute Adjudication Bylaw No. 8122, Amendment Bylaw No. 9829".

FIRST READING SECOND READING THIRD READING

ADOPTED

MAY 1 4 2018 MAY 1 4 2018 MAY 1 4 2018



MAYOR

CORPORATE OFFICER

Bylaw No. 9829

SCHEDULE A to BYLAW NO. 9829

A1	A2	A3	A4	A5	AG	A7	A8
Bylaw	Description of Contravention	Section	Compliance Agreement Available	Penalty	Early Payment Option	Late Payment Amount	Compliance Agreement Discount
Parking (Off- Street) Regulation Bylaw No. 7403	Period of Time from Receipt (inclusive)		n/a	29 to 60 days	1 to 28 days	61 days or more	n/a
	Parking an unattached trailer	3.3.3	No	\$ 110.00	\$ 65.00	\$ 135.00	n/a
	Remove, obliterate or otherwise interfere with any markings made by a bylaw enforcement officer, police officer or traffic enforcement officer	9.3	No	\$ 70.00	\$ 45.00	\$ 90.00	n/a

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Housing Agreement (8511 Capstan Way & 3360 No. 3 Road) Bylaw No. 9854

The Council of the City of Richmond enacts as follows:

1. The Mayor and City Clerk for the City of Richmond are authorized to execute and deliver a housing agreement, substantially in the form set out as Schedule A to this Bylaw, with the owner of the lands located at 8511 Capstan Way & 3360 No. 3 Road and legally described as:

PID: 024-898-899

LOT 1 EXCEPT PORTIONS IN PLANS 76290 AND LMP47234 SECTION 28 BLOCK 5 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 72421

LOT 3 SECTION 28 BLOCK 5 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN LMP4771

2. This Bylaw is cited as "Housing Agreement (8511 Capstan Way & 3360 No. 3 Road) Bylaw No. 9854".

FIRST READING	MAY 1 4 2018	CITY OF RICHMOND
SECOND READING	MAY 1 4 2018	APPROVED for content by originating
THIRD READING	MAY 1 4 2018	
ADOPTED		for legality

MAYOR

CORPORATE OFFICER

Schedule A

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To Housing Agreement (8511 Capstan Way & 3360 No. 3 Road) Bylaw No. 9854

HOUSING AGREEMENT BETWEEN SUN TECH CITY DEVELOPMENT CORP., INC. AND THE CITY OF RICHMOND

HOUSING AGREEMENT (Section 483 Local Government Act)

THIS AGREEMENT is dated for reference , 2018,

BETWEEN:

Sun Tech City Development Corp. (Inc. No. BC0533040), a corporation pursuant to the *Business Corporations Act* and having an address at 900 – 1095 West Pender Street, Vancouver, British Columbia, V6K 1M6

(the "Owner")

AND:

CITY OF RICHMOND, a municipal corporation pursuant to the *Local Government Act* and having its offices at 6911 No. 3 Road, Richmond, British Columbia, V6Y 2C1

(the "City")

WHEREAS:

- A. Section 483 of the *Local Government Act* permits the City to enter into and, by legal notation on title, note on title to lands, housing agreements which may include, without limitation, conditions in respect to the form of tenure of housing units, availability of housing units to classes of persons, administration of housing units and rent which may be charged for housing units;
- B. The Owner is the registered owner of the Lands (as hereinafter defined); and
- C. The Owner and the City wish to enter into this Agreement (as hereinafter defined) to provide for affordable housing on the terms and conditions set out in this Agreement.

NOW THEREFORE in consideration of \$10.00 and other good and valuable consideration (the receipt and sufficiency of which is acknowledged by both parties), and in consideration of the promises exchanged below, the Owner and the City covenant and agree as follows:

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ARTICLE 1 DEFINITIONS AND INTERPRETATION

- 1.1 In this Agreement the following words have the following meanings:
 - (a) "Affordable Housing Strategy" means the Richmond Affordable Housing Strategy approved by the City on May 28, 2007, and containing a number of recommendations, policies, directions, priorities, definitions and annual targets for affordable housing, as may be amended or replaced from time to time;
 - (b) "Affordable Housing Unit" means a Dwelling Unit or Dwelling Units designated as such in accordance with a building permit and/or development permit issued by the City and/or, if applicable, in accordance with any rezoning consideration applicable to the development on the Lands and includes, without limiting the generality of the foregoing, the Dwelling Units charged by this Agreement;
 - (c) **"Agreement**" means this agreement together with all schedules, attachments and priority agreements attached hereto;
 - (d) **"Building Permit"** means the building permit(s) authorizing construction on the Lands, or any portion(s) thereof;
 - (e) "City" means the City of Richmond;
 - (f) "Commercial Tenants" means the owners, tenants and employees of businesses and non-residential spaces located on the Lands, including employees and/or contractors working for the benefit of the Affordable Housing Units, but excluding businesses carried out within a Dwelling Unit, and excluding residents or occupants of Dwelling Units;
 - (g) "CPI" means the All-Items Consumer Price Index for Canada published from time to time by Statistics Canada, or its successor in function;
 - (h) "Daily Amount" means \$100.00 per day as of January 1, 2009 adjusted annually thereafter by adding thereto an amount calculated by multiplying \$100.00 by the percentage change in the CPI since January 1, 2009, to January 1 of the year that a written notice is delivered to the Owner by the City pursuant to section 6.1 of this Agreement. In the absence of obvious error or mistake, any calculation by the City of the Daily Amount in any particular year shall be final and conclusive;
 - (i) **"Development"** means the high-rise, high-density, mixed-use development to be constructed on the Lands, with the expansion of an existing City-owned neighbourhood park, in the City Centre's Capstan Village area;

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- (j) **"Development Permit"** means development permit number DP 17-787403 and/or any other development permit authorizing development on the Lands or any portion(s) thereof;
- (k) "Director of Development" means the individual appointed to be the chief administrator from time to time of the Development Applications Division of the City and his or her designate;
- (1) **"Dwelling Unit"** means a residential dwelling unit or units located or to be located on the Lands whether those dwelling units are lots, strata lots or parcels, or parts or portions thereof, and includes single family detached dwellings, duplexes, townhouses, auxiliary residential dwelling units, rental apartments and strata lots in a building strata plan and includes, where the context permits, an Affordable Housing Unit;
- (m) "East Lot" means Lot 1 Section 28 Block 5 North Range 6 West New Westminster District Plan EPP80548 to be created by the subdivision of the Lands in accordance with the rezoning considerations applicable to the Development;
- (n) "Eligible Tenant" means a Family having a cumulative annual income of:
 - (i) in respect to a bachelor unit, \$34,650 or less;
 - (ii) in respect to a one-bedroom unit, \$38,250 or less;
 - (iii) in respect to a two-bedroom unit, \$46,800 or less; or
 - (iv) in respect to a three or more bedroom unit, \$58,050 or less,

provided that, commencing January 1, 2019, the annual incomes set-out above shall be adjusted annually on January 1st of each year this Agreement is in force and effect, by a percentage equal to the percentage of the increase in the CPI for the period January 1 to December 31 of the immediately preceding calendar year. If there is a decrease in the CPI for the period January 1 to December 31 of the immediately preceding calendar year, the annual incomes set-out above for the subsequent year shall remain unchanged from the previous year. In the absence of obvious error or mistake, any calculation by the City of an Eligible Tenant's permitted income in any particular year shall be final and conclusive;

- (o) **"Family"** means:
 - (i) a person;
 - (ii) two or more persons related by blood, marriage or adoption; or

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(iii) a group of not more than 6 persons who are not related by blood, marriage or adoption;

Housing Agreement (Section 483 Local Government Act) [Parent Parcels comprising Lot 1 East and Lot 2 West] Concord Pacific/Sun Tech – Capstan Way Project Rezoning Application No, RZ 17-769242 Rezoning Conditions No, 15

- (p) "Housing Covenants" means the agreements, covenants and charges granted by the Owner to the City (which includes covenants pursuant to Section 219 of the *Land Title Act*) charging the East Lot and the West Lot, dated for reference ______, 2018, and registered under numbers CA______ and CA______, respectively, as it may be amended or replaced from time to time;
- (q) *"Interpretation Act"* means the *Interpretation Act*, R.S.B.C. 1996, Chapter 238, together with all amendments thereto and replacements thereof;
- (r) *"Land Title Act"* means the *Land Title Act*, R.S.B.C. 1996, Chapter 250, together with all amendments thereto and replacements thereof;
- (s) "Lands" means, collectively:
 - PID: 004-838-254 Lot 1 Except Portion in Plans 76290 and LMP47234 Section 28 Block 5 North Range 6 west New Westminster District Plan 72421; and
 - (ii) PID: 024-898-899 Lot 3 Section 28 Block 5 North Range 6 West New Westminster District Plan LMP47718;
- (t) *"Local Government Act"* means the *Local Government Act*, R.S.B.C. 2015, Chapter 1, together with all amendments thereto and replacements thereof;
- (u) "LTO" means the New Westminster Land Title Office or its successor;
- (v) "Manager, Community Social Development" means the individual appointed to be the Manager, Community Social Development from time to time of the Community Services Department of the City and his or her designate;
- (w) "Owner" means the party described on page 1 of this Agreement as the Owner and any subsequent owner of the Lands or of any part into which the Lands are Subdivided, and includes any person who is a registered owner in fee simple of an Affordable Housing Unit from time to time;
- (x) "Permitted Rent" means no greater than:
 - (i) \$811.00 a month for a bachelor unit;
 - (ii) \$975.00 a month for a one-bedroom unit;
 - (iii) \$1,218.00 a month for a two-bedroom unit; and
 - (iv) \$1,480.00 a month for a three (or more) bedroom unit,

provided that, commencing January 1, 2019, the rents set-out above shall be adjusted annually on January 1st of each year this Agreement is in force and effect, by a percentage equal to the percentage of the increase in the CPI for the period January 1 to December 31 of the immediately preceding calendar year. In the event that, in applying the values set-out above, the rental increase is at any time greater than the rental increase permitted by the *Residential Tenancy Act*, then the increase will be reduced to the maximum amount permitted by the *Residential Tenancy Act*. If there is a decrease in the CPI for the period January 1 to December 31 of the immediately preceding calendar year, the permitted rents set-out above for the subsequent year shall remain unchanged from the previous year. In the absence of obvious error or mistake, any calculation by the City of the Permitted Rent in any particular year shall be final and conclusive;

- (y) "*Real Estate Development Marketing Act*" means the *Real Estate Development Marketing Act*, S.B.C. 2004, Chapter 41, together with all amendments thereto and replacements thereof;
- (z) "*Residential Tenancy Act*" means the *Residential Tenancy Act*, S.B.C. 2002, Chapter 78, together with all amendments thereto and replacements thereof;
- (aa) "Strata Property Act" means the Strata Property Act S.B.C. 1998, Chapter 43, together with all amendments thereto and replacements thereof;
- (bb) "Subdivide" means to divide, apportion, consolidate or subdivide the Lands, or the ownership or right to possession or occupation of the Lands into two or more lots, strata lots, parcels, parts, portions or shares, whether by plan, descriptive words or otherwise, under the *Land Title Act*, the *Strata Property Act*, or otherwise, and includes the creation, conversion, organization or development of "cooperative interests" or "shared interest in land" as defined in the *Real Estate Development Marketing Act*;
- (cc) **"Tenancy Agreement"** means a tenancy agreement, lease, license or other agreement granting rights to occupy an Affordable Housing Unit;
- (dd) **"Tenant"** means an occupant of an Affordable Housing Unit by way of a Tenancy Agreement; and
- (ee) "West Lot" means Lot 2 Section 28 Block 5 North Range 6 West New Westminster District Plan EPP80548 to be created by the subdivision of the Lands in accordance with the rezoning considerations applicable to the Development.
- 1.2 In this Agreement:
 - (a) reference to the singular includes a reference to the plural, and *vice versa*, unless the context requires otherwise;

Housing Agreement (Section 483 Local Government Act) [Parent Parcels comprising Lot 1 East and Lot 2 West] Concord Pacific/Sun Tech – Capstan Way Project Rezoning Application No. RZ 17-76242 Rezoning Conditions No. 15 V,3

- (b) article and section headings have been inserted for ease of reference only and are not to be used in interpreting this Agreement;
- (c) if a word or expression is defined in this Agreement, other parts of speech and grammatical forms of the same word or expression have corresponding meanings;
- (d) reference to any enactment includes any regulations, orders or directives made under the authority of that enactment;
- (e) any reference to any enactment is to the enactment in force on the date the Owner signs this Agreement, and to subsequent amendments to or replacements of the enactment;
- (f) the provisions of section 25 of the *Interpretation Act* with respect to the calculation of time apply;
- (g) time is of the essence;
- (h) all provisions are to be interpreted as always speaking;
- (i) reference to a "party" is a reference to a party to this Agreement and to that party's respective successors, assigns, trustees, administrators and receivers. Wherever the context so requires, reference to a "party" also includes an Eligible Tenant, agent, officer and invitee of the party;
- (j) reference to a "day", "month", "quarter" or "year" is a reference to a calendar day, calendar month, calendar quarter or calendar year, as the case may be, unless otherwise expressly provided; and
- (k) where the word "including" is followed by a list, the contents of the list are not intended to circumscribe the generality of the expression preceding the word "including".

ARTICLE 2 USE AND OCCUPANCY OF AFFORDABLE HOUSING UNITS

- 2.1 The Owner agrees that each Affordable Housing Unit may only be used as a permanent residence occupied by one Eligible Tenant. An Affordable Housing Unit must not be occupied by the Owner, the Owner's family members (unless the Owner's family members qualify as Eligible Tenants), or any tenant or guest of the Owner, other than an Eligible Tenant. For the purposes of this Article, "permanent residence" means that the Affordable Housing Unit is used as the usual, main, regular, habitual, principal residence, abode or home of the Eligible Tenant.
- 2.2 Within 30 days after receiving notice from the City, the Owner must, in respect of each Affordable Housing Unit, provide to the City a statutory declaration, substantially in the

form (with, in the City Solicitor's discretion, such further amendments or additions as deemed necessary) attached as Appendix A, sworn by the Owner, containing all of the information required to complete the statutory declaration. The City may request such statutory declaration in respect to each Affordable Housing Unit no more than once in any calendar year; provided, however, notwithstanding that the Owner may have already provided such statutory declaration in the particular calendar year, the City may request and the Owner shall provide to the City such further statutory declarations as requested by the City in respect to an Affordable Housing Unit if, in the City's absolute determination, the City believes that the Owner is in breach of any of its obligations under this Agreement.

- 2.3 The Owner hereby irrevocably authorizes the City to make such inquiries as it considers necessary in order to confirm that the Owner is complying with this Agreement.
- 2.4 The Owner agrees that notwithstanding that the Owner may otherwise be entitled, the Owner will not:
 - (a) be issued with a Development Permit for the East Lot or West Lot, as applicable, unless the Development Permit includes the Affordable Housing Units;
 - (b) be issued with a Building Permit (except for a Building Permit for parking intended as an ancillary use to non-parking uses) for the East Lot or the West Lot, as applicable, unless the Building Permit includes those Affordable Housing Units to be constructed as part of the Development on the East Lot or West Lot, as applicable, in accordance with the Development Permit; and
 - (c) occupy, nor permit any person to occupy any Dwelling Unit or any portion of any building (except for parking), in part or in whole, constructed on the East Lot or the West Lot, as applicable, and the City will not be obligated to permit occupancy of any Dwelling Unit or building (except for parking) constructed on the East Lot or the West Lot, as applicable, until all of the following conditions are satisfied:
 - (i) the Affordable Housing Units and related uses and areas have been constructed on the East Lot or the West Lot, as applicable, to the satisfaction of the City;
 - (ii) the Affordable Housing Units on the East Lot or the West Lot, as applicable, have received final building permit inspection granting occupancy; and
 - (iii) the Owner is not otherwise in breach of any of its obligations under this Agreement or any other agreement between the City and the Owner in connection with the development of the Lands.

Housing Agreement (Section 483 Local Government Act) [Parent Parcels comprising Lot 1 East and Lot 2 West] Concord Pacific/Sun Tech – Capstan Way Project Rezoning Application No. RZ 17-769242 Rezoning Conditions No. 15 V 3

ARTICLE 3 DISPOSITION AND ACQUISITION OF AFFORDABLE HOUSING UNITS

- 3.1 The Owner may sub-contract the operation and management of the Affordable Housing Units to a qualified and reputable non-profit provider of affordable housing, provided that any such subcontract and non-profit affordable housing provider is pre-approved by the Manager, Community Social Development or other authorized City personnel, in their sole discretion.
- 3.2 The Owner will not permit an Affordable Housing Unit Tenancy Agreement to be subleased or assigned, except where the Owner believes, acting reasonably, that refusing to consent to a sublease or assignment would be a breach of its obligations under the *Residential Tenancy Act* (British Columbia), and provided such sublease or assignment is to an Eligible Tenant.
- 3.3 If this Housing Agreement encumbers more than one Affordable Housing Unit, then the Owner may not, without the prior written consent of the City Solicitor, sell or transfer less than five (5) Affordable Housing Units in a single or related series of transactions with the result that when the purchaser or transferee of the Affordable Housing Units becomes the owner, the purchaser or transferee will be the legal and beneficial owner of not less than five (5) Affordable Housing Units.
- 3.4 If the Owner sells or transfers one (1) or more Affordable Housing Units, the Owner will notify the City Solicitor of the sale or transfer within 3 days of the effective date of sale or transfer.
- 3.5 The Owner must not rent, lease, license or otherwise permit occupancy of any Affordable Housing Unit except to an Eligible Tenant and except in accordance with the following additional conditions:
 - (a) the Affordable Housing Unit will be used or occupied only pursuant to a Tenancy Agreement;
 - (b) the monthly rent payable for the Affordable Housing Unit will not exceed the Permitted Rent applicable to that class of Affordable Housing Unit;
 - (c) the Owner will allow the Tenant of an Affordable Housing Unit on the East Lot and any permitted occupant and visitor to have full access to and use and enjoy all on-site common indoor and outdoor amenity spaces on the East Lot and will allow the Tenant of an Affordable Housing Unit on the West Lot and any permitted occupant and visitor to have full access to and use and enjoy all on-site common indoor and outdoor amenity spaces on the West Lot (except, for greater certainty, the bicycle storage rooms and end-of-trip cycling facilities on the West Lot reserved for the exclusive use of Commercial Tenants), all in accordance with the bylaws and rules and regulations of the applicable strata corporation, provided

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Housing Agreement (Section 483 Local Government Act) [Parent Parcels comprising Lot 1 East and Lot 2 West] Concord Pacific/Sun Tech – Capstan Way Project Rezoning Application No. RZ 17-769242 Rezoning Conditions No. 15 V.3 that such bylaws and rules and regulations of the applicable strata corporation do not conflict with Article 5 of this Agreement;

- (d) if the Owner elects, in its sole, absolute and unfettered discretion, to provide for the sharing of any on-site common indoor and/or outdoor amenity spaces between the East Lot and the West Lot, then the Tenant of an Affordable Housing Unit, and any permitted occupant and visitor thereof, will have full access to and use and enjoyment of such shared on-site common indoor and/or outdoor amenity spaces on the same terms and conditions as the owners, tenants or other permitted occupants of the Dwelling Unit(s) which benefit from such sharing, but which are not Affordable Housing Units, all in accordance with the bylaws and rules and regulations of the applicable strata corporation(s), provided that such bylaws and rules and regulations of the applicable strata corporation(s) do not conflict with Article 5 of this Agreement;
- (e) the Owner will not require the Tenant or any permitted occupant of an Affordable Housing Unit to pay any:
 - (i) move-in/move-out fees, strata fees, strata property contingency reserve fees; or
 - (ii) extra charges or fees for:

(A) the use of that common property, limited common property, or other common areas, facilities or amenities, including without limitation parking, bicycle storage, electric vehicle charging stations or related facilities, which the Owner is required pursuant to the Development Permit or any agreement with the City to make available to the Tenant or permitted occupants of an Affordable Housing Unit (for greater certainty, whether on an exclusive or shared basis); or

(B) sanitary sewer, storm sewer, water, other utilities, property or similar tax,

provided, however, that if the Affordable Housing Unit is a strata unit and the following costs are not part of strata or similar fees, an Owner may charge the Tenant the Owner's cost, if any, of providing cable television, telephone, other telecommunications, gas, or electricity fees, charges or rates;

- (f) the Owner will attach a copy of this Agreement to every Tenancy Agreement;
- (g) the Owner will include in the Tenancy Agreement a clause requiring the Tenant and each permitted occupant of the Affordable Housing Unit to comply with this Agreement;

Housing Agreement (Section 483 Local Government Act) [Parent Parcels comprising Lot 1 East and Lot 2 West] Concord Pacific/Sun Tech – Capstan Way Project Rezoning Application No. RZ 17-769242 Rezoning Conditions No. 15 V.3

- (h) the Owner will include in the Tenancy Agreement a clause entitling the Owner to terminate the Tenancy Agreement if:
 - (i) an Affordable Housing Unit is occupied by a person or persons other than an Eligible Tenant;
 - (ii) the annual income of an Eligible Tenant rises above the applicable maximum amount specified in section 1.1(m) of this Agreement;
 - (iii) the Affordable Housing Unit is occupied by more than the number of people the City's building inspector determines can reside in the Affordable Housing Unit given the number and size of bedrooms in the Affordable Housing Unit and in light of any relevant standards set by the City in any bylaws of the City;
 - (iv) the Affordable Housing Unit remains vacant for three consecutive months or longer, notwithstanding the timely payment of rent; and/or
 - (v) the Tenant subleases the Affordable Housing Unit or assigns the Tenancy Agreement in whole or in part, without the prior written consent of the Owner,

and in the case of each breach, the Owner hereby agrees with the City to forthwith provide to the Tenant a notice of termination. Except for section 3.5(g)(ii) of this Agreement *[Termination of Tenancy Agreement if Annual Income of Tenant rises above amount prescribed in section 1.1(m) of this Agreement]*, the notice of termination shall provide that the termination of the tenancy shall be effective 30 days following the date of the notice of termination. In respect to section 3.5(g)(ii) of this Agreement, termination shall be effective on the day that is six (6) months following the date that the Owner provided the notice of termination to the Tenant;

- (i) the Tenancy Agreement will identify all occupants of the Affordable Housing Unit and will stipulate that anyone not identified in the Tenancy Agreement will be prohibited from residing at the Affordable Housing Unit for more than 30 consecutive days or more than 45 days total in any calendar year; and
- (j) the Owner will forthwith deliver a certified true copy of the Tenancy Agreement to the City upon demand.
- 3.6 If the Owner has terminated the Tenancy Agreement, then the Owner shall use best efforts to cause the Tenant and all other persons that may be in occupation of the Affordable Housing Unit to vacate the Affordable Housing Unit on or before the effective date of termination.

ARTICLE 4 DEMOLITION OF AFFORDABLE HOUSING UNIT

- 4.1 The Owner will not demolish an Affordable Housing Unit unless:
 - (a) the Owner has obtained the written opinion of a professional engineer or architect who is at arm's length to the Owner that it is no longer reasonable or practical to repair or replace any structural component of the Affordable Housing Unit, and the Owner has delivered to the City a copy of the engineer's or architect's report; or
 - (b) the Affordable Housing Unit is damaged or destroyed, to the extent of 40% or more of its value above its foundations, as determined by the City in its sole discretion,

and, in each case, a demolition permit for the Affordable Housing Unit has been issued by the City and the Affordable Housing Unit has been demolished under that permit.

Following demolition, the Owner will use and occupy any replacement Dwelling Unit in compliance with this Agreement and the applicable Housing Covenant both of which will apply to any replacement Dwelling Unit to the same extent and in the same manner as those agreements apply to the original Dwelling Unit, and the Dwelling Unit must be approved by the City as an Affordable Housing Unit in accordance with this Agreement.

ARTICLE 5 STRATA CORPORATION BYLAWS

- 5.1 Subject to discharge in accordance with Section 7.1(c), this Agreement will be binding upon all strata corporations created upon the strata title Subdivision of the Lands or any Subdivided parcel of the Lands.
- 5.2 Any strata corporation bylaw which prevents, restricts or abridges the right to use the Affordable Housing Units as rental accommodation will have no force and effect.
- 5.3 No strata corporation shall pass any bylaws preventing, restricting or abridging the use of the Affordable Housing Units as rental accommodation.
- 5.4 No strata corporation shall pass any bylaw or approve any levies which would result in only the Owner or the Tenant or any other permitted occupant of an Affordable Housing Unit (and not all the owners, tenants, or any other permitted occupants of all the strata lots in the applicable strata plan which are not Affordable Housing Units) paying any extra charges or fees for the use of any common property, limited common property or other common areas, facilities, or indoor or outdoor amenities of the strata corporation.

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- 5.5 No strata corporation shall pass any bylaws or approve any levies, charges or fees which would result in the Owner or the Tenant or any other permitted occupant of an Affordable Housing Unit paying for the use of parking, bicycle storage, electric vehicle charging stations or related facilities, notwithstanding that the Strata Corporation may levy such parking, bicycle storage, electric vehicle charging stations or other related facilities charges or fees on all the other owners, tenants, any other permitted occupants or visitors of all the strata lots in the applicable strata plan which are not Affordable Housing Units; provided, however, that the electricity fees, charges or rates for use of electric vehicle charging stations are excluded from this provision.
- 5.6 The strata corporation shall not pass any bylaw or make any rule which would restrict the Owner or the Tenant or any other permitted occupant of an Affordable Housing Unit from using and enjoying any common property, limited common property or other common areas, facilities or amenities of the strata corporation, including parking, bicycle storage, electric vehicle charging stations or related facilities, except, subject to section 5.5 of this Agreement, on the same basis that governs the use and enjoyment of any common property, limited common property and other common areas, facilities or amenities of the strata corporation, including parking, bicycle storage, electric vehicle charging stations and related facilities, by all the owners, tenants, or any other permitted occupants of all the strata lots in the applicable strata plan which are not Affordable Housing Units.

ARTICLE 6 DEFAULT AND REMEDIES

- 6.1 The Owner agrees that, in addition to any other remedies available to the City under this Agreement or the Housing Covenants or at law or in equity, if an Affordable Housing Unit is used or occupied in breach of this Agreement or rented at a rate in excess of the Permitted Rent or the Owner is otherwise in breach of any of its obligations under this Agreement or a Housing Covenant, the Owner will pay the Daily Amount to the City for every day that the breach continues after forty-five (45) days written notice from the City to the Owner stating the particulars of the breach. For greater certainty, the City is not entitled to give written notice with respect to any breach of the Agreement until any applicable cure period, if any, has expired. The Daily Amount is due and payable five (5) business days following receipt by the Owner of an invoice from the City for the same.
- 6.2 The Owner acknowledges and agrees that a default by the Owner of any of its promises, covenants, representations or warranties set-out in a Housing Covenant shall also constitute a default under this Agreement.

ARTICLE 7 MISCELLANEOUS

7.1 Housing Agreement

The Owner acknowledges and agrees that:

- (a) this Agreement includes a housing agreement entered into under section 483 of the Local Government Act;
- (b) where an Affordable Housing Unit is a separate legal parcel the City may file notice of this Agreement in the LTO against the title to the Affordable Housing Unit and, in the case of a strata corporation, may note this Agreement on the common property sheet; and
- where the Lands have not yet been Subdivided to create the separate parcels to be (c) charged by this Agreement, the City may file a notice of this Agreement in the LTO against the title to the Lands. If this Agreement is filed in the LTO as a notice under section 483 of the Local Government Act prior to the Lands having been Subdivided, once separate legal parcels are created and/or the Lands are Subdivided (including, for greater certainty, by way of air space subdivision of the East Lot or West Lot), this Agreement will charge and secure only the legal parcels or Subdivided Lands (or, for greater certainty, Subdivided East Lot or West Lot) which contain the Affordable Housing Units, then the City Solicitor shall be entitled, without further City Council approval, authorization or bylaw, to partially discharge this Agreement accordingly. The Owner acknowledges and agrees that notwithstanding a partial discharge of this Agreement, this Agreement shall be and remain in full force and effect and, but for the partial discharge, otherwise unamended. Further, the Owner acknowledges and agrees that in the event that the Affordable Housing Unit is in a strata corporation, this Agreement shall remain noted on the strata corporation's common property sheet.

7.2 No Compensation

The Owner acknowledges and agrees that no compensation is payable, and the Owner is not entitled to and will not claim any compensation from the City, for any decrease in the market value of the Lands or for any obligations on the part of the Owner and its successors in title which at any time may result directly or indirectly from the operation of this Agreement.

7.3 Modification

Subject to section 7.1 of this Agreement, this Agreement may be modified or amended from time to time, by consent of the Owner and a bylaw duly passed by the Council of the City and thereafter if it is signed by the City and the Owner.

7.4 Management

The Owner covenants and agrees that it will furnish good and efficient management of the Affordable Housing Units and will permit representatives of the City to inspect the Affordable Housing Units at any reasonable time, subject to the notice provisions in the *Residential Tenancy Act*. The Owner further covenants and agrees that it will maintain the Affordable Housing Units in a good state of repair and fit for habitation and will

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comply with all laws, including health and safety standards applicable to the Lands. Notwithstanding the foregoing, the Owner acknowledges and agrees that the City, in its absolute discretion, may require the Owner, at the Owner's expense, to hire a person or company with the skill and expertise to manage the Affordable Housing Units.

7.5 Indemnity

The Owner will indemnify and save harmless the City and each of its elected officials, officers, directors, and agents, and their heirs, executors, administrators, personal representatives, successors and assigns, from and against all claims, demands, actions, loss, damage, costs and liabilities, which all or any of them will or may be liable for or suffer or incur or be put to by reason of or arising out of:

- (a) any negligent act or omission of the Owner, or its officers, directors, agents, contractors or other persons for whom at law the Owner is responsible relating to this Agreement;
- (b) the City refusing to issue a development permit, building permit or refusing to permit occupancy of any building, or any portion thereof, constructed on the Lands;
- (c) the construction, maintenance, repair, ownership, lease, license, operation, management or financing of the Lands or any Affordable Housing Unit or the enforcement of any Tenancy Agreement; and/or
- (d) without limitation, any legal or equitable wrong on the part of the Owner or any breach of this Agreement by the Owner.

7.6 Release

The Owner hereby releases and forever discharges the City and each of its elected officials, officers, directors, and agents, and its and their heirs, executors, administrators, personal representatives, successors and assigns, from and against all claims, demands, damages, actions, or causes of action by reason of or arising out of or which would or could not occur but for the:

- (a) construction, maintenance, repair, ownership, lease, license, operation or management of the Lands or any Affordable Housing Unit under this Agreement;
- (b) the City refusing to issue a development permit, building permit or refusing to permit occupancy of any building, or any portion thereof, constructed on the Lands; and/or
- (c) the exercise by the City of any of its rights under this Agreement or an enactment.

7.7 Survival

The obligations of the Owner set out in this Agreement will survive termination or discharge of this Agreement, but only, for greater certainty, to the extent such obligations arose prior to such termination or discharge.

7.8 Priority

The Owner will do everything necessary, at the Owner's expense, to ensure that this Agreement, if required by the City Solicitor, will be noted against title to the Lands in priority to all financial charges and encumbrances which may have been registered or are pending registration against title to the Lands save and except those specifically approved in advance in writing by the City Solicitor or in favour of the City, and that a notice under section 483(5) of the *Local Government Act* will be filed on the title to the Lands.

7.9 City's Powers Unaffected

This Agreement does not:

- (a) affect or limit the discretion, rights, duties or powers of the City under any enactment or at common law, including in relation to the use or subdivision of the Lands;
- (b) impose on the City any legal duty or obligation, including any duty of care or contractual or other legal duty or obligation, to enforce this Agreement;
- (c) affect or limit any enactment relating to the use or subdivision of the Lands; or
- (d) relieve the Owner from complying with any enactment, including in relation to the use or subdivision of the Lands.

7.10 Agreement for Benefit of City Only

The Owner and the City agree that:

- (a) this Agreement is entered into only for the benefit of the City;
- (b) this Agreement is not intended to protect the interests of the Owner, any Tenant, or any future owner, lessee, occupier or user of the Lands or the building or any portion thereof, including any Affordable Housing Unit; and
- (c) the City may at any time execute a release and discharge of this Agreement, without liability to anyone for doing so, and without obtaining the consent of the Owner.

7.11 No Public Law Duty

Where the City is required or permitted by this Agreement to form an opinion, exercise a discretion, express satisfaction, make a determination or give its consent, the Owner agrees that the City is under no public law duty of fairness or natural justice in that regard and agrees that the City may do any of those things in the same manner as if it were a private party and not a public body.

7.12 Notice

Any notice required to be served or given to a party herein pursuant to this Agreement will be sufficiently served or given if delivered, to the postal address of the Owner set out in the records at the LTO and in the case of the City addressed:

To: Clerk, City of Richmond 6911 No. 3 Road Richmond, BC V6Y 2C1

And to: City Solicitor City of Richmond 6911 No. 3 Road Richmond, BC V6Y 2C1

or to the most recent postal address provided in a written notice given by each of the parties to the other. Any notice which is delivered is to be considered to have been given on the first day after it is dispatched for delivery.

7.13 Enuring Effect

This Agreement will extend to and be binding upon and enure to the benefit of the parties hereto and their respective successors and permitted assigns.

7.14 Severability

If any provision of this Agreement is found to be invalid or unenforceable, such provision or any part thereof will be severed from this Agreement and the resultant remainder of this Agreement will remain in full force and effect.

7.15 Waiver

All remedies of the City will be cumulative and may be exercised by the City in any order or concurrently in case of any breach and each remedy may be exercised any number of times with respect to each breach. Waiver of or delay in the City exercising any or all remedies will not prevent the later exercise of any remedy for the same breach or any similar or different breach.

7.16 Sole Agreement

This Agreement, and any documents signed by the Owners contemplated by this Agreement (including, without limitation, the Housing Covenants), represent the whole agreement between the City and the Owner respecting the use and occupation of the Affordable Housing Units, and there are no warranties, representations, conditions or collateral agreements made by the City except as set forth in this Agreement. In the event of any conflict between this Agreement and the Housing Covenants, this Agreement shall, to the extent necessary to resolve such conflict, prevail.

7.17 Further Assurance

Upon request by the City the Owner will forthwith do such acts and execute such documents as may be reasonably necessary in the opinion of the City to give effect to this Agreement.

7.18 Covenant Runs with the Lands

Subject to discharge in accordance with Section 7.1(c), this Agreement burdens and runs with the Lands and every parcel into which it is Subdivided in perpetuity. All of the covenants and agreements contained in this Agreement are made by the Owner for itself, its personal administrators, successors and assigns, and all persons who after the date of this Agreement, acquire an interest in the Lands.

7.19 Equitable Remedies

The Owner acknowledges and agrees that damages would be an inadequate remedy for the City for any breach of this Agreement and that the public interest strongly favours specific performance, injunctive relief (mandatory or otherwise), or other equitable relief, as the only adequate remedy for a default under this Agreement.

7.20 No Joint Venture

Nothing in this Agreement will constitute the Owner as the agent, joint venturer, or partner of the City or give the Owner any authority to bind the City in any way.

7.21 Applicable Law

Unless the context otherwise requires, the laws of British Columbia (including, without limitation, the *Residential Tenancy Act*) will apply to this Agreement and all statutes referred to herein are enactments of the Province of British Columbia.

7.22 **Deed and Contract**

By executing and delivering this Agreement the Owner intends to create both a contract and a deed executed and delivered under seal.

7.23 Joint and Several

If the Owner is comprised of more than one person, firm or body corporate, then the covenants, agreements and obligations of the Owner shall be joint and several.

7.24 Limitation on Owner's Obligations

The Owner is only liable for breaches of this Agreement that occur while the Owner is the registered owner of the Lands provided however that notwithstanding that the Owner is no longer the registered owner of the Lands, the Owner will remain liable for breaches of this Agreement that occurred while the Owner was the registered owner of the Lands.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the day and year first above written.

SUN TECH CITY DEVELOPMENT CORP. (INC. NO. BC0533040)

by its authorized signatory(ies): Per:

Per:

Name:

CITY OF RICHMOND

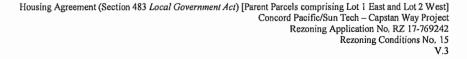
by its authorized signatory(ies):

Per:

Malcolm D. Brodie, Mayor

Per:

David Weber, Corporate Officer





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CITY OF RICIMOND APPROVED for content by originating dept. APPROVED for legality by Software DATE OF COUNCIL APPROVAL

Appendix A to Housing Agreement

STATUTORY DECLARATION

CANADA)	IN THE MATTER OF A
)	HOUSING AGREEMENT WITH
PROVINCE OF BRITISH COLUMBIA)	THE CITY OF RICHMOND
)	("Housing Agreement")

TO WIT:

I,	of,	British	Columbia,	do
solemnly declare that:				

- 1. I am the owner or authorized signatory of the owner of ______ (the "Affordable Housing Unit"), and make this declaration to the best of my personal knowledge.
- 2. This declaration is made pursuant to the Housing Agreement in respect of the Affordable Housing Unit.
- 3. For the period from _______ to ______, the Affordable Housing Unit was occupied only by the Eligible Tenants (as defined in the Housing Agreement) whose names and current addresses and whose employer's names and current addresses appear below:

[Names, addresses and phone numbers of Eligible Tenants and their employer(s)]

- 4. The rent charged each month for the Affordable Housing Unit is as follows:
 - (a) the monthly rent on the date 365 days before this date of this statutory declaration:
 \$______ per month;
 - (b) the rent on the date of this statutory declaration: \$_____; and
 - (c) the proposed or actual rent that will be payable on the date that is 90 days after the date of this statutory declaration: \$_____.
- 5. I acknowledge and agree to comply with the Owner's obligations under the Housing Agreement, and other charges in favour of the City noted or registered in the Land Title Office against the land on which the Affordable Housing Unit is situated and confirm that the Owner has complied with the Owner's obligations under the Housing Agreement.

6. I make this solemn declaration, conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and pursuant to the *Canada Evidence Act*.

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DECLARED BEFORE ME at the City of ______, in the Province of British Columbia, this _____ day of _____, 20___.

A Commissioner for Taking Affidavits in the Province of British Columbia DECLARANT

Housing Agreement (Section 483 Local Government Act) [Parent Parcels comprising Lot 1 East and Lot 2 West] Concord Pacific/Sun Tech – Capstan Way Project Rezoning Application No. RZ 17-769242 Rezoning Conditions No. 15 V.3

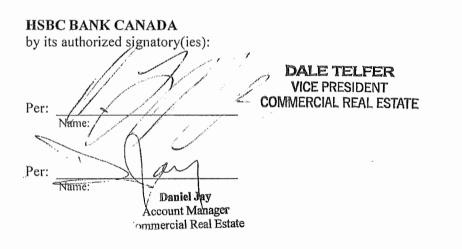
PRIORITY AGREEMENT

HSBC BANK CANADA (the "Chargeholder") is the holder of a Mortgage and Assignment of Rents (and any related extensions thereof):

- (i) Mortgage CA934111;
- (ii) Assignment of Rents CA934112,

registered in the Land Title Office (together, the "Bank Charges") against title to the Lands (as further defined and legally described in the agreement to which this priority agreement is attached).

The Chargeholder, being the holder of the Charges, by signing below, in consideration of the payment of Ten Dollars (\$10.00) and other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged and agreed to by the Chargeholder), hereby consents to the granting of the covenants in the Housing Agreement by the Owner and hereby covenants that the Housing Agreement shall rank in priority upon the Lands over the Charges as if the Housing Agreement had been signed, sealed and delivered and noted on title to the Lands prior to the Charges and prior to the advance of any monies pursuant to the Charges. The grant of priority is irrevocable, unqualified and without reservation or limitation.



Housing Agreement (Section 483 Local Government Act) [Parent Parcels comprising Lot 1 East and Lot 2 West] Concord Pacific/Sun Tech – Capstan Way Project Rezoning Application No. RZ 17-769242 Rezoning Conditions No. 15 V.3

Bylaw 9755



Richmond Zoning Bylaw 8500 Amendment Bylaw 9755 (RZ17-778596) 9211, 9251, 9271, 9291 Odlin Road

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. Richmond Zoning Bylaw 8500 is amended by inserting as Section 18.31 thereof the following:

"18.31Low Rise Apartment (ZLR31) – Alexandra Neighbourhood (West Cambie)

18.31.1 Purpose

The zone provides for medium density residential apartment **development** with a **density bonus** for the construction of affordable housing.

18.31.2 Permitted Uses

18.31.3 Secondary Uses

• housing, apartment

- boarding and lodging
- community care facility, minor
- home business

18.31.4 Permitted Density

- 1. The maximum floor area ratio is 1.50, together with an additional 0.1 floor area ratio provided that it is entirely used to accommodate amenity space.
- 2. Notwithstanding Section 18.31.4.1, the reference to "1.50" is increased to a higher **density** of "1.70" if, prior to first occupancy of a **building**, the **owner**:
 - a) Provides on the lot not less than 13 affordable housing units having a combined habitable space of at least 0.066 of the "0.2" floor area density bonus; and
 - b) Enters into a **housing agreement** for the **affordable housing units** with the **City** and registers the **housing agreement** against the title to the **lot**, and files a notice in the Land Title Office.

18.31.5 Permitted Lot Coverage

1. Maximum Lot Coverage is 40% for buildings.

18.31.6 Yards & Setbacks

- 1. The minimum property line setback is:
 - a. 5.0 m from the west **property line**;
 - b. 6.0 m from the north or south **property lines**;
 - c. 7.5 m from the east **property line** provided that a minimum **building** face to **building** face separation of 15.0 m is maintained between the **buildings** on the **site** and any **buildings** on 9399 Odlin Road.
- 2. Notwithstanding Section 18.31.6:
 - a. A parking structure may project into the property line setback a maximum of 2.4 m provided that such encroachment is landscaped or screened by a combination of trees, shrubs, ornamental plants or lawn as specified by a Development Permit approved by the City; and
 - b. Entry stairs may project into the public **road setback** or the **property line setback** for a maximum distance of 2.5 m.

18.31.7 Permitted Heights

- 1. The maximum **height** for **buildings** is 19.5 m and 5 habitable **storeys**, except that:
 - a. The maximum **height** for portions of the **buildings** within 48 m of the north **property line** is 16.5 m and may contain not more than 4 habitable **storeys** and;
 - b. The maximum height for portions of the buildings within 54 m of the south property line and within 39 m of the west property line is 22.6 m and may contain not more than 6 habitable storeys.
- 2. The maximum **height** for **accessory buildings** and **structures** is 9.0 m.

18.31.8 Subdivision Provisions/Minimum Lot Size

- 1. There are no minimum lot width, lot depth or lot area requirements.
- 2. The minimum lot size is $14,500 \text{ m}^2$.

18.31.9 Landscaping & Screening

1. **Landscaping** and **screening** shall be provided according to the provisions of Section 6.0.

18.31.10 On-Site Parking and Loading

- 1. On-site **vehicle** and bicycle parking and loading shall be provided according to the standards set out in Section 7.0, except that the number of on-site **parking spaces** required for **apartment housing** shall be:
 - a) 1.26 spaces per **dwelling unit** for residents; and
 - b) 0.18 spaces per dwelling unit for visitors.

18.31.11 Other Regulations

- 1. In addition to the regulations listed above, the General Development Regulations in Section 4.0 and the Specific Use Regulations in Section 5.0 apply."
- 2. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following area and designating it LOW RISE APARTMENT (ZLR31) ALEXANDRA NEIGHBOURHOOD (WEST CAMBIE):

P.I.D. 003-888-975

South Half of the East Half Lot 25 Except: Parcel "A" (Explanatory Plan 11474); Block "A" of Section 34 Block 5 North Range 6 West New Westminster District Plan 1224.

P.I.D. 012-030-830

East Half Lot 26 Block "A" Section 34 Block 5 North Range 6 West New Westminster District Plan 1224.

P.I.D. 011-654-066

West Half Lot 25 Except: Part Subdivided by Plan 85360, Block A Section 34 Block 5 North Range 6 West New Westminster District Plan 1224.

P.I.D. 016-036-344

Lot 1 Section 34 Block 5 North Range 6 West New Westminster District Plan 85360.

3. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9755".

FIRST READING

A PUBLIC HEARING WAS HELD ON

SECOND READING

THIRD READING

OTHER CONDITIONS SATISFIED

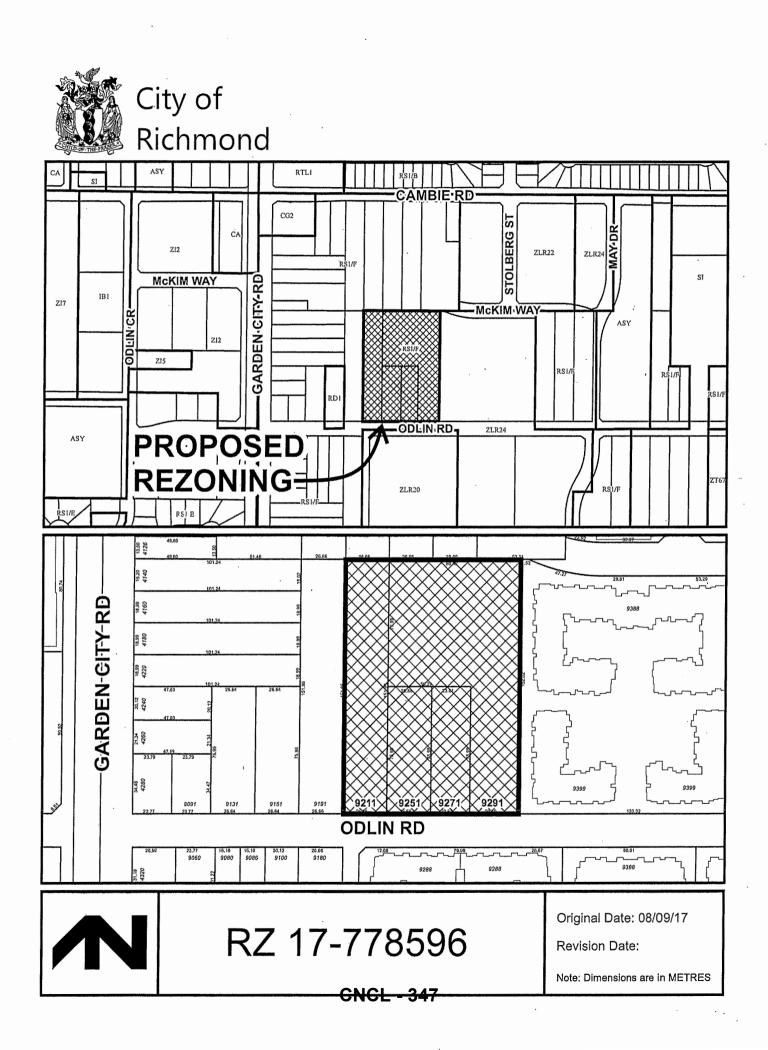
ADOPTED

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ITY OF PROVED B PROVED Director Solicitor

MAYOR

CORPORATE OFFICER





Minutes

Development Permit Panel Wednesday, May 16, 2018

Time: 3:30 p.m.

- Place: Council Chambers Richmond City Hall
- Present: Joe Erceg, Chair Robert Gonzalez, General Manager, Engineering and Public Works John Irving, Director, Engineering

The meeting was called to order at 3:30 p.m.

Minutes

It was moved and seconded That the minutes of the meeting of the Development Permit Panel held on April 25, 2018 be adopted.

CARRIED

1. Development Permit 15-715522 (REDMS No. 5671953)

APPLICANT: Matthew Cheng Architect Inc.

PROPERTY LOCATION: 9251/9271 Beckwith Road

INTENT OF PERMIT:

- 1. Permit the construction of a church at 9251 and 9271 Beckwith Road on a site zoned "Auto Oriented Commercial (CA)" and partially designated as an Environmentally Sensitive Area (ESA); and
- 2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum interior side yard under the "Auto-Oriented Commercial (CA)" zone for the subject site from 3.0 m to 0.0 m.

Applicant's Comments

Matthew Cheng, Matthew Cheng Architect Inc., provided background information on the proposed development and highlighted the following:

- a single-storey 700 square meter church building is proposed for the subject site which is partially designated as an Environmentally Sensitive Area (ESA);
- the church building consists of, among others, a sanctuary, offices and classrooms for Sunday school uses and small group meetings only;
- the proposed building height is nine meters, which is below the maximum permitted height of 12 meters;
- the proposed 52 parking spaces exceed the minimum Zoning Bylaw requirement;
- the main floor elevation of the proposed church building is higher than the crown of the road and meets the existing flood plain requirement; and
- a variance for the minimum interior side yard setback is requested as there is an existing two-storey building on the property to the west that is located at the property boundary and to avoid a narrow three-meter gap between the two buildings.

John Black, JBL Environmental Services, with the aid of a video presentation (attached to and forming part of these Minutes as <u>Schedule 1</u>) reviewed the environmental assessment and planting plan for on-site and off-site ESA.

Mr. Black advised that (i) the property contains many ornamental trees and shrubs with limited habitat features, (ii) there is limited habitat in the area due to the extensive growth of invasive vegetation, (iii) existing on-site trees which are in poor condition will be removed and replaced, (iv) 400 square meters of ESA on City-owned Bridgeport Trail adjacent to the subject property will be cleared of invasive species, (v) an on-site and off-site planting plan is proposed to offset habitat loss due to tree removal and vegetation clearing within the ESA, and (vi) a three-year monitoring plan and post-planting maintenance for landscaping is proposed for on-site and off-site landscaping enhancements.

In response to queries from the Panel, Mr. Black acknowledged that (i) wildlife habitat could be better enhanced on a section of Bridgeport Trail than on the subject property, (ii) existing trees proposed to be removed are in poor condition and/or in conflict with the proposed development, (iii) on-site ESA is already overrun with invasive vegetation, and (iv) the applicant worked with Parks staff regarding the proposed off-site ESA enhancement scheme.

Cameron Woodruff, PMG Landscape Architects, reviewed the proposed on-site landscaping scheme for the proposed development, noting that (i) significant native planting is proposed on the north and east boundaries of the subject site, (ii) proposed on-site planting includes some species which are symbolically related to the beliefs of the church, (iii) a significant number of smaller caliper trees are proposed to be planted on the site, (iv) the row of six trees and native shrubs on the northern boundary of the site will be retained, and (v) the Horse Chestnut tree that will be removed will be replaced by two specimen trees.

In response to a query from the Panel, Mr. Cheng noted that the proposed size of the loading space adjacent to the north property line meets the Zoning Bylaw requirement.

In response to a query from the Panel, Wayne Craig, Director, Development, advised that staff will work with the applicant to investigate opportunities for enhancing the landscaping on the north edge of the proposed loading space considering that the loading space will not be used frequently.

Staff Comments

Mr. Craig noted that (i) a variance is proposed to allow for the building to be located along the west property line in keeping with the existing two-storey building that is located to the west of the subject site, (ii) the applicant had reviewed the development plans with the owner of the adjacent property to the west and reported that the adjacent owner has no concerns with the proposal, (iii) there will be a Servicing Agreement for frontage improvements prior to Building Permit stage as well as for the proposed ESA restoration on Bridgeport Trail which was reviewed by Parks Department, and (iv) the City will be securing a three-year landscaping monitoring period and a landscape security will be held by the City and released proportionally over the three-year period.

Gallery Comments

None.

Correspondence

None.

Panel Decision

It was moved and seconded *That a Development Permit be issued which would:*

- 1. permit the construction of a church at 9251 and 9271 Beckwith Road on a site zoned "Auto Oriented Commercial (CA)" and partially designated as an Environmentally Sensitive Area (ESA); and
- 2. vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum interior side yard under the "Auto-Oriented Commercial (CA)" zone for the subject site from 3.0 m to 0.0 m.

CARRIED

2. Date of Next Meeting: May 30, 2018

3. Adjournment

It was moved and seconded *That the meeting be adjourned at 4:51 p.m.*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Development Permit Panel of the Council of the City of Richmond held on Wednesday, May 16, 2018.

Joe Erceg Chair Rustico Agawin Committee Clerk Schedule 1 to the Minutes of the Development Permit Panel meeting held on Wednesday, May 16, 2018.

Pacific Grace MB Church

Environmental Assessment and Planting Plan for 9251-9271 Beckwith Road, Richmond BC



John Black May 16, 2018

Background

- The property was a residential single family home, with in an commercial area in the City of Richmond,
- The residence has been demolished, and the property overgrown, and
- Large accumulation of garbage present

Purpose of the Assessment

- Was to conduct a base line inventory significant biophysical features of the site and describe any
- Assess the potential of the property to support bird and wildlife species, The environmental impact of the proposed development
- Erosion and Sediment Control Plan
- Planting Plan.



Methods

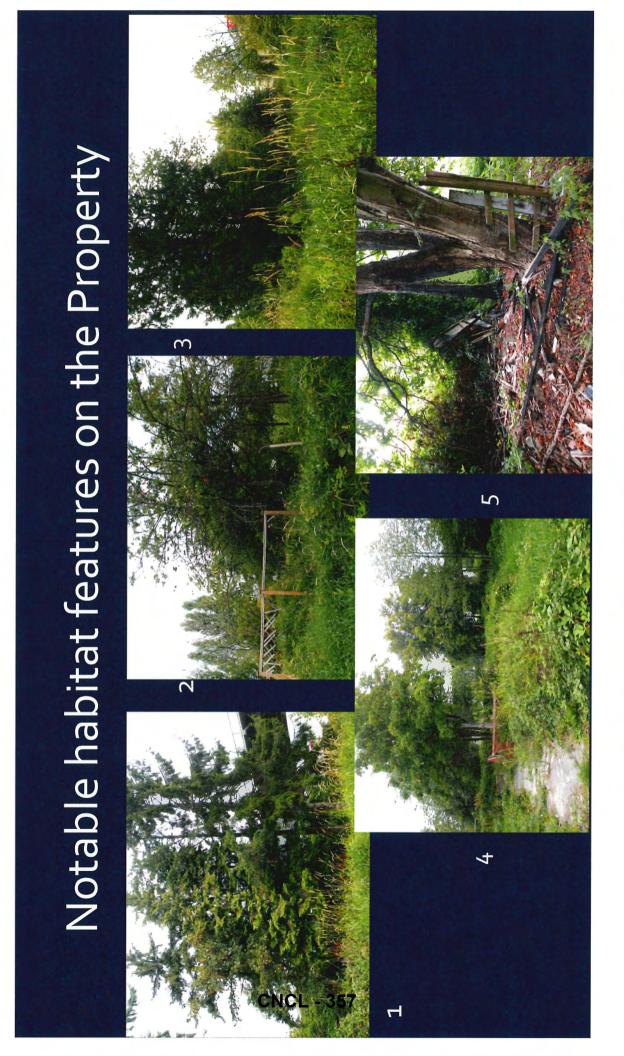
JBL conducted an inventory surveys on August 15, 2015 Including:

- Reviewed existing environmental information on the site
 - Inventoried existing vegetation
- A raptor nest survey and recorded wildlife trees and evidence of wildlife sign,
- Assessment of the potential for properties vegetation nesting bird species at risk as well as habitat corridors habitats to support small mammals, amphibians and

Results

The Property contains numerous ornamental trees and shrubs Notable habitat features Included :

- Row of maturing conifer trees on the north boundary
- Small group of mature fruit trees in the west-centre of the Property
- 3. One mature western redcedar tree in the north-centre of the Property
- 4. mature cherry tree adjacent to the western redcedar in the northcentre of the Property
- Multi-trunked mature European horse chestnut



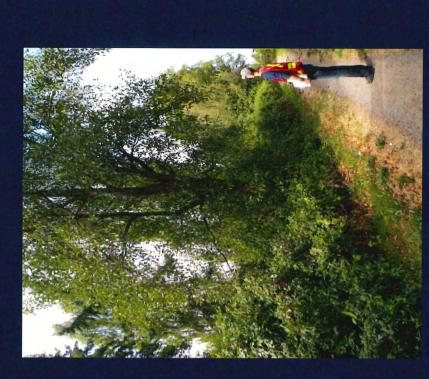
Results

- The lack of surface water restricts any aquatic or amphibian species.
- No raptor or songbird nests were observed.
- present in the study area (Band-tailed pigeons, Oregon forest Although 3 wildlife species at risk have the potential to be snail, Pacific sideband snails). Non were observed.
- The area provides limited habitat as a result of the extensive growth of invasive vegetation.
- Bridgeport Trail and the ROW below the Highway 99 may act Raccoon (Procyon lotor) tracks were identified in the ROW as a wildlife corridor for small to medium sized mammals,



Detailed Planting Plan

- To offset habitat loss as a result of vegetation clearing within an environmentally sensitive area
- 27 significant trees will be lost on the Property
- adjacent to the property that is over run 400-m2 section of the Bridgeport Trail We have proposed to replanting of a by invasive species



Invasive species

- Himalayan blackberry and English ivy will be eliminated by manual removal
- Japanese knotweed is exempt from the Pesticide Use Control Bylaw and will require 2 application of foliar spray herbicide prior to removal
- After removal organic material will be taken directly to Harves Power for composting.

Site Preparation

- •The removal of vegetation will be mindful of migratory bird nesting window, from March 15 to August 15
- After removal of any invasive plant
- 600 mm of growing medium will be placed over the planting areas



Planting

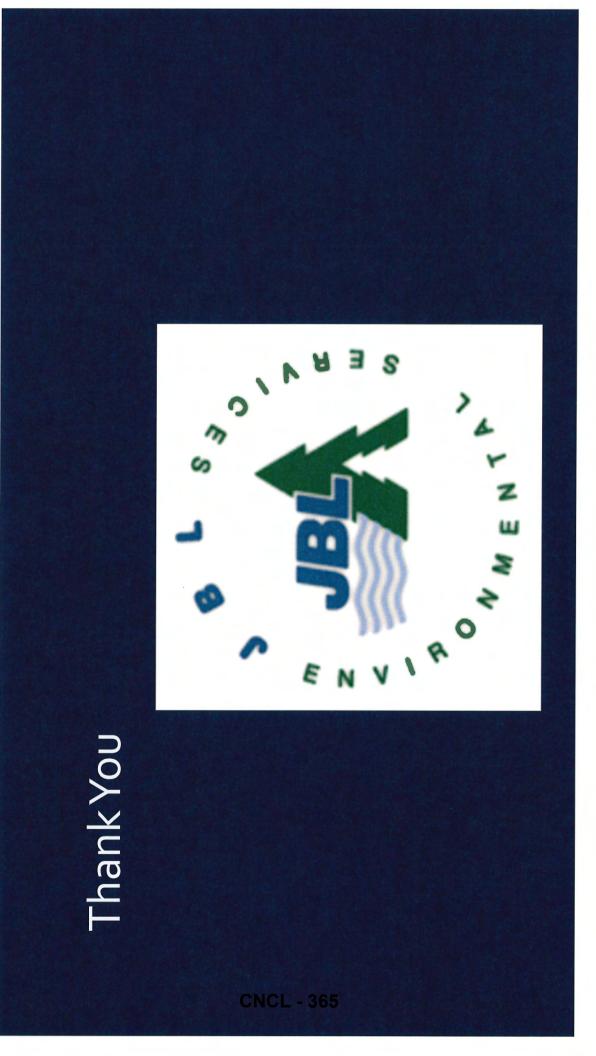
- Forty-eight trees and 452 shrubs will be planted in the 400 m2 area.
- Plants will be planted at a density of 1 plant per o.8 m2 (1.25 plants /m2) -
- Plantings will be composed of nursery stock in 1- and 2-gallon pots
- Tree plantings will comply with the City's Tree **Protection Bylaw** -

Monitoring

- An as-built report will be submitted to the City of Richmond after completion of the planting
- Monitoring will take place for 3 years and will include:
 - Count all plants to determine survival,
- Percent cover to determine percentage of invasive species.
- The success of the replanting project will be defined as:
 - Less than 5 % cover of non-native shrubs; and
- Establishment and persistence of 80 % of planted species

Post-Planting Maintenance

- seedlings and re-sprouts will occurs on a yearly bases Ongoing invasive plant removal of all invasive shrub for 3 years and will include,
- Annual replacement of plants that have died during the maintenance period.





То:	Richmond City Council	Date:	May 22, 2018		
From:	Joe Erceg Chair, Development Permit Panel	File:	01-0100-20-DPER1- 01/2018-Vol 01		
Re:	Development Permit Panel Meeting Held on March 28, 2018				

Staff Recommendation

That the recommendation of the Panel to authorize the issuance of a Development Permit (DP 17-791769) for the property at 9211, 9251, 9271, 9291 Odlin Road be endorsed, and the Permit so issued.

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Joe Erceg Chair, Development Permit Panel

Panel Report

The Development Permit Panel considered the following item at its meeting held on March 28, 2018.

DP 17-791769 – POLYGON BERKELEY HOUSE LTD. – 9211/9251/9271/9291 ODLIN ROAD (March 28, 2018)

The Panel considered a Development Permit application to permit the construction of 265 residential units in two four-storey to six-storey multi-family apartment buildings over a common parkade on a site zoned "Low Rise Apartment (ZLR31) – Alexandra Neighbourhood (West Cambie)". No variances are included in the proposal.

Applicant Scott Baldwin, of Polygon Development, Architect James Bussey, of Raymond Letkeman Architecture Inc., Landscape Architect Marina Rommel, of Connect Landscape Architecture provided a brief presentation on the proposal, noting:

- The majority of the units are family-oriented with two or three bedrooms.
- Dubbert Street will be constructed to an interim "half-road" along the site's western frontage and the greenway will be completed along the eastern edge of the site.
- Buildings height is stepped down to four storeys and massing pulled southward to provide a generous interface with the townhouse development under construction to the north.
- Brick exterior wall framing structures help break up the massing into three distinct segments.
- The interior courtyard has been designed as a series of rooms with specialized uses, including open lawn, a central plaza, a mound and raised patio over a mechanical/electrical room, a children's play area, and social rooms with more intimate seating areas.
- Semi-private walkways connect the greenway to Dubbert Street and the internal courtyard.

In response to Panel queries, Mr. Bussey and Ms. Rommel noted that (i) the project will be built in phases and the greenway will be constructed concurrently with the project, and (ii) wheelchair access to the internal courtyard from Odlin Road is through elevators in the lobby entrances.

Staff noted that there is a Servicing Agreement associated with the proposal for (i) the construction of Dubbert Street, (ii) frontage improvements along Odlin Road, and (iii) modification of the greenway to its ultimate design. Staff further noted that (i) the development will be connected to the Alexandra District Energy Utility (DEU) facility, (ii) the project has been designed to achieve the City's Aircraft Noise Sensitive Development requirements, (iii) a 1.5 meter wide Odlin Road walkway will be constructed from Dubbert Street to Garden City Road as part of the proposed Transportation Demand Management (TDM) package, and (iv) the project includes 13 affordable housing units and 21 basic universal housing (BUH) units.

In response to Panel queries, staff noted that (i) the grade of the small townhouse development under construction to the north will match up with the proposed parking podium grade, (ii) similar developments have also modified an interim greenway to its ultimate configuration, (iii) the proposed building height and massing are consistent with the proposal presented by the

applicant during the rezoning process, and (iv) there is other six-storey development in the West Cambie Area to the northeast and southeast of the subject development.

No correspondence was submitted to the Development Permit Panel regarding the application.

The Panel expressed support to the project, noting that (i) the project design is well thought out, (ii) the proposed Traffic Development Management (TDM) initiatives are appreciated, (iii) the design of the internal courtyard is thoughtful, and (iv) the provision for a dog wash will be appreciated by future residents of the proposed development.

The Panel recommends that the Permit be issued.