City of Richmond

Agenda

Note: The staff report titled '**Referral: West Cambie Alexandra Neighbourhood Business Office Area Review**' will be considered at the Monday, July 14, 2014 City Council meeting.

City Council

Council Chambers, City Hall
6911 No. 3 Road

Monday, June 23, 2014
7:00 p.m.

Pg. # **ITEM**

MINUTES

1. ***Motion to:***

   (1) adopt the minutes of the Regular Council meeting held on Monday, June 9, 2014 (distributed previously)***; and***

CNCL-12 ***(2) adopt the minutes of the Regular Council meeting for Public Hearings held on Monday, June 16, 2014.***

AGENDA ADDITIONS & DELETIONS

PRESENTATIONS

(1) Jake Rudolph, Board representative of the Canadian Association of Municipal Administrators (CAMA), and Deputy CAO, City of Abbotsford, accompanied by Jeannette Austin, Ravenhill Group Inc., to present the 2014 CAMA Professional Development Award (Population over 100,000) for the City's Corporate Programs Management Group.

(2) Jerry Chong, Director, Finance and Ted Townsend, Senior Manager, Corporate Communications, to present the Canadian Award for Financial Report for 2012, and the Award for Outstanding Achievement in Popular Annual Financial Reporting for 2012 by the Government Finance Officers Association.

(3) Eric Portelance, Environmental Coordinator, to present Sustainability Certificates to the winning class for the 2013-2014 Climate Change Showdown.

COMMITTEE OF THE WHOLE

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

☐

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. 21.)

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
- 2013 Annual Report and 2013 Annual Report – Highlights
- Transportation of Dangerous Goods by Railway
- Takifugu Japanese Restaurant Ltd. Unit 133 – 4800 No. 3 Road

- Child Care Major Capital Funding Program 2014/15 – Province of BC
- Land use applications for first reading (to be further considered at the Public Hearing on Monday, July 21, 2014):
  - 3471 Chatham Street – Rezone from CS3 to ZMU26 (Cotter Architects Inc. – applicant)
  - 3391, 3411, 3451 No. 4 Road and Lot B, NWD PLAN 14909 – Rezone from RS1/E to RS2/B (Tien Sher Land Investment Group Ltd. – applicant)
  - 5280/5300 Moncton Street – Rezone from RD1 to RS2/B (Barbara Stylianou – applicant)
- Car2Go – City Centre Car-Share Pilot Program
- 2013 Annual Water Quality Report
- Proposed Policy for Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities
- Letter Supporting Continuation of Clean Energy Vehicles Rebate

5. ***Motion to adopt Items 6 through 17 by general consent.***

Consent Agenda Item

6. **COMMITTEE MINUTES**

That the minutes of:

CNCL-23 ***(1) the Community Safety Committee meeting held on Tuesday, June 10, 2014;***

CNCL-30 ***(2) the General Purposes Committee meeting held on Monday, June 16, 2014;***

CNCL-37 ***(3) the Planning Committee meeting held on Tuesday, June 17, 2014;***

CNCL-82 ***(4) the Public Works & Transportation Committee meeting held on Wednesday, June 18, 2014;***

CNCL-100 ***(5) the Council/School Board Liaison Committee meeting held on Tuesday, June 10, 2014;***

be received for information.

Pg. # ITEM

Consent Agenda Item

7. **2013 ANNUAL REPORT AND 2013 ANNUAL REPORT – HIGHLIGHTS**
(File Ref. No.) (REDMS No. 4224011)

CNCL-112

See Page **CNCL-112** for full report

FINANCE COMMITTEE RECOMMENDATION

That the reports titled, City of Richmond 2013 Annual Report and the 2013 Annual Report – Highlights, dated May 13, 2014, from the General Manager, Finance and Corporate Services, be approved.

Consent Agenda Item

8. **TRANSPORTATION OF DANGEROUS GOODS BY RAILWAY**
(File Ref. No. 09-5125-05-03) (REDMS No. 4229815 v.4)

CNCL-196

See Page **CNCL-196** for full report

COMMUNITY SAFETY COMMITTEE RECOMMENDATION

(1) That a letter be sent to the Federal Minister of Transport requesting Protective Direction 32 be amended to require rail companies to report the nature, exact volume and frequency of dangerous goods transported through municipalities, so that an assessment of the risk to the municipality can be made; and

(2) That Council submit a resolution to the Federation of Canadian Municipalities, requesting that the federal government issues an amendment to Protective Direction 32 requiring rail companies to provide to municipalities the nature, exact volume and frequency of dangerous goods transported.

Pg. # ITEM

Consent Agenda Item

9. **TAKIFUGU JAPANESE RESTAURANT LTD. UNIT 133 - 4800 NO. 3 ROAD**
(File Ref. No. 12-8275-05) (REDMS No. 4232054)

CNCL-199

See Page **CNCL-199** for full report

GENERAL PURPOSES COMMITTEE RECOMMENDATION

That the application from Takifugu Japanese Restaurant Ltd., for an amendment to increase their hours of liquor service under Food Primary Liquor Licence No. 047295 from ***Monday to Saturday 11:00 a.m. to 1:00 a.m. and Sunday 11:00 a.m. to Midnight*** to ***Monday to Saturday 11:00 a.m. to 2:00 a.m. and Sunday 11:00 a.m. to 1:00 a.m., be supported and that a letter be sent to the Liquor Control and Licensing Branch advising that:***

(1) Council supports the amendment for an increase in liquor service hours as the increase will not have a significant impact on the community.

(2) Council's comments on the prescribed criteria (set out in Section 53 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 extended hours of liquor service under the Food Primary Liquor Licence should not change the establishment such that it is operated contrary to its primary purpose.

(3) As the operation of a licenced establishment may affect nearby residents the City gathered the view of the residents as follows:

(a) Property owners and businesses within a 50 metre radius of the subject property were contacted by letter detailing the application, providing instructions on how community comments or concerns could be submitted.

(b) Signage was posted at the subject property and three public notices were published in a local newspaper. This signage and notice provided information on the application and instructions on how community comments or concerns could be submitted.

(4) Council's comments and recommendations respecting the views of the residents are as follows:

(a) That based on the number of letters sent and the lack of response received from all public notifications, Council considers that the amendments are acceptable to the majority of the residents in the area and the community.

Consent Agenda Item

10. **CHILD CARE MAJOR CAPITAL FUNDING PROGRAM 2014/15 - PROVINCE OF BC**
(File Ref. No. 07-3070-01) (REDMS No. 4235453)

CNCL-205

See Page **CNCL-205** for full report

PLANNING COMMITTEE RECOMMENDATION

(1) That "The Gardens" child care project located at 10640 No. 5 Road, be endorsed for submission to the Provincial Child Care Major Capital Funding Program 2014/15;

(2) That the Chief Administrative Officer and the General Manager, Community Services be authorized to sign grant applications and agreements as required for this submission; and

(3) That the City be authorized to grant a registrable charge in favour of the Province of BC against the title to the Lands restricting the ability of the City to sell, mortgage, transfer or lease (other than to the child care provider), or make other disposition of the property for a period of up to 10 years without the Province's prior written consent if necessary.

Consent Agenda Item

11. **APPLICATION BY COTTER ARCHITECTS INC. FOR REZONING AT 3471 CHATHAM STREET FROM THE "STEVESTON COMMERCIAL (CS3)" ZONE TO A SITE SPECIFIC "COMMERCIAL MIXED USE (ZMU26) – STEVESTON VILLAGE" ZONE**
(File Ref. No. 08-4105-20; RZ 13-643436) (REDMS No. 4236626)

CNCL-212

See Page **CNCL-212** for full report

PLANNING COMMITTEE RECOMMENDATION

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9138 to: create a site specific "Commercial Mixed Use (ZMU26) – Steveston Village" zone; and to rezone 3471 Chatham Street from the "Steveston Commercial (CS3)" zone to the "Commercial Mixed Use (ZMU26) – Steveston Village" zone, be introduced and given first reading.

Consent Agenda Item

12. **APPLICATION BY TIEN SHER LAND INVESTMENT GROUP LTD. FOR REZONING AT 3391, 3411, 3451 NO. 4 ROAD AND LOT B, NWD PLAN 14909 FROM SINGLE DETACHED (RS1/E) TO SINGLE DETACHED(RS2/B)**
(File Ref. No. 08-4105-20; RZ 10-552482) (REDMS No. 4235324)

CNCL-299 See Page **CNCL-299** for full report

PLANNING COMMITTEE RECOMMENDATION

(1) That third reading of Richmond Zoning Bylaw 8500, Amendment Bylaw 8789, for the rezoning of 3391, 3411, 3451 No. 4 Road and Lot B, NWD PLAN 14909, be rescinded; and

(2) That Richmond Zoning Bylaw 8500, Amendment Bylaw 8789 be referred to the Monday, July 21, 2014 Public Hearing at 7:00 pm in the Council Chambers of Richmond City Hall.

Consent Agenda Item

13. **APPLICATION BY BARBARA STYLIANOU FOR REZONING AT 5280/5300 MONCTON STREET FROM TWO-UNIT DWELLINGS (RD1) TO SINGLE DETACHED (RS2/B)**
(File Ref. No. 08-4105-20; RZ 13-650616) (REDMS No. 4245187)

CNCL-326 See Page **CNCL-326** for full report

PLANNING COMMITTEE RECOMMENDATION

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9157, for the rezoning of 5280/5300 Moncton Street from "Two-Unit Dwellings (RD1)" to "Single Detached (RS2/B)", be introduced and given first reading.

Consent Agenda Item

14. **CAR2GO - CITY CENTRE CAR-SHARE PILOT PROGRAM**
(File Ref. No. 10-6455-00) (REDMS No. 4234234)

CNCL-343 See Page **CNCL-343** for full report

PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION

That:

(1) the business terms (the "Business Terms") specified in Attachment 2 of the staff report titled, Car2Go – City Centre Car-Share Pilot Program, dated May 28, 2014, from the Director, Transportation, for the purpose of entering into an Agreement between Car2Go Canada Ltd. and the City of Richmond for the use of public parking spaces on a one-year trial basis be approved;

(2) the Chief Administrative Officer and the General Manager, Planning and Development be authorized to execute an Agreement based on the Business Terms; and

(3) staff be directed to monitor the outcomes of the pilot program and report back to Council after one year of implementation.

Consent Agenda Item

15. **2013 ANNUAL WATER QUALITY REPORT**
(File Ref. No. 10-6000-01) (REDMS No. 4227330)

CNCL-356

See Page **CNCL-356** for full report

PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION

That the 2013 Annual Water Quality Report, dated May 27, 2014, from the Director, Public Works, be received for information.

Consent Agenda Item

16. **PROPOSED POLICY FOR MANAGEMENT OF WASTE AND RECYCLABLE MATERIALS FROM CITY FACILITIES DEMOLITION AND CONSTRUCTION ACTIVITIES**
(File Ref. No. 10-6370-00) (REDMS No. 4239937)

CNCL-452

See Page **CNCL-452** for full report

PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION

That a new policy respecting the Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities, as outlined in Attachment 1 to the staff report titled, Proposed Policy for Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities, dated June 5, 2014, from the Director, Public Works, be adopted.

Pg. # ITEM

Consent Agenda Item

17. **LETTER SUPPORTING CONTINUATION OF CLEAN ENERGY VEHICLES REBATE**
(File Ref. No.) (REDMS No. 4221373)

CNCL-457

See Page **CNCL-457** for full report

PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION

That a letter supporting the continuation of the Clean Energy Vehicles for British Columbia be sent to the BC Minister of Energy and Mines and Responsible for Core Review under the Mayor's signature, with copies to Richmond MLAs, and Metro Vancouver members.

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CONSIDERATION OF MATTERS REMOVED FROM THE CONSENT AGENDA

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NON-CONSENT AGENDA ITEMS

PUBLIC WORKS & TRANSPORTATION COMMITTEE
Councillor Linda Barnes, Chair

18. **GEORGE MASSEY TUNNEL REPLACEMENT – STATUS UPDATE AND PROPOSED PROJECT OBJECTIVES**
(File Ref. No. 01-0150-20-THIG1/2014) (REDMS No. 4228713)

CNCL-463

See Page **CNCL-463** for full report

PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION

Opposed: Cllr. Steves

(1) That the proposed project objectives for the replacement of the George Massey Tunnel as described in the staff report dated May 23, 2014 from the Director, Transportation be endorsed and forwarded to the Ministry of Transportation & Infrastructure for its consideration in the development of a preferred project scope of improvements; and

(2) That the above Council resolution and a copy of the above report be forwarded to Richmond MLAs, TransLink, the Corporation of Delta and the Cities of Surrey, White Rock and Vancouver for information.

FINANCE AND CORPORATE SERVICES DEPARTMENT

19. **COUNCIL REMUNERATION AND EXPENSES FOR 2013**
(File Ref. No. 01-0105-08-01) (REDMS No. 4210947)

CNCL-473 See Page **CNCL-473** for full report

STAFF RECOMMENDATION

That the Council Remuneration and Expenses report for the year ended December 31, 2013 be received for information.

20. **2013 STATEMENT OF FINANCIAL INFORMATION**
(File Ref. No. 03-1200-03) (REDMS No. 4230953)

CNCL-475 See Page **CNCL-475** for full report

STAFF RECOMMENDATION

That the 2013 Statement of Financial Information as per the staff report dated June 20, 2014 from the Manager, Business Advisory Services, be approved.

PUBLIC ANNOUNCEMENTS AND EVENTS

NEW BUSINESS

Pg. # ITEM

BYLAWS FOR ADOPTION

CNCL-538 Richmond Zoning Bylaw No. 8500, Amendment **Bylaw No. 9028**
(6433 Dyke Road, RZ 13-631467)
Opposed at 1st Reading – None.
Opposed at 2nd/3rd Readings – None.

CNCL-542 Business Regulation Bylaw No. 7538, Amendment **Bylaw No. 9142**
Opposed at 1st/2nd/3rd Readings – None.

DEVELOPMENT PERMIT PANEL

21. RECOMMENDATION

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

CNCL-543
CNCL-584

(1) That the minutes of the Development Permit Panel meeting held on Wednesday, May 14, 2014 and Wednesday, June 11, 2014 and the Chair's report for the Development Permit Panel meeting held on Wednesday, June 11, 2014 be received for information; and

(2) That the recommendation of the Panel to authorize the issuance of a Development Variance Permit (DV 14-657986) for the property at 3800 Georgia Street be endorsed, and the Permit so issued.

ADJOURNMENT

City of Richmond

Minutes

Regular Council Meeting for Public Hearings
Monday, June 16, 2014

Place: Council Chambers
Richmond City Hall

Present: Mayor Malcolm D. Brodie
Councillor Chak Au
Councillor Linda Barnes
Councillor Derek Dang
Councillor Evelina Halsey-Brandt
Councillor Ken Johnston
Councillor Bill McNulty
Councillor Linda McPhail
Councillor Harold Steves

Michelle Jansson, Acting Corporate Officer

Call to Order: Mayor Brodie opened the proceedings at 7:00 p.m.

1. TEMPORARY USE PERMIT (TU 14-653009)
(Location: 8320 Cambie Road and 8431 Brownwood Road; Applicant: Fairchild Developments Limited)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

(a) Marian and Charles Dean, 8411 Browngate Road (Schedule 1)

(b) Zaynub Mia and Captain Zimmerman, 8451 Brownwood Road (Schedule 2)

Submissions from the floor:

In response to queries from Council, Wayne Craig, Director, Development, noted that access to the parking lot will be through Hazelbridge Way, and that the existing hedge on the property will be trimmed by the Applicant.

Discussion ensued regarding the existing sidewalk, and the length of the Temporary Use Permit.

Cameron Owen, IBI Group, was of the opinion that the current sidewalk in the area would sufficiently address pedestrian traffic for the duration of the Temporary Use Permit. Mr. Owen also advised that the Applicant will use the parking lot for a three-year term for contractors working on the site.

PH14/6-1 It was moved and seconded

That a Temporary Use Permit for the properties at 8320 Cambie Road and 8431 Brownwood Road, to allow an outdoor parking lot for a period not to exceed three years, be issued.

CARRIED

2. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9108 (RZ 13-641596)

(Location: 4160 Garry Street; Applicant: Penta Homes (Princess Lane) Ltd.)

Applicant's Comments:

Dana Westermark, Oris Consulting, provided an overview of the changes to the proposed development and listed several residents in the area who are now in support of the proposed development as a result of such changes. Mr. Westermark spoke of the recent Open House and noted that residents were primarily concerned with (i) vehicle access on Yoshida Court, and (ii) the increase in traffic in the area. In an effort to address these concerns, vehicle access to the site was changed from Yoshida Court to Garry Street. Mr. Westermark noted that the Transportation division has reviewed the proposal, and they do not believe that it will have a major impact on the neighbourhood. He also noted that as a result of these changes, green space will be slightly decreased.

Written Submissions:

(a) Stephanie Freiter, 11753 Yoshida Court (Schedule 3)

(b) Scott Silverthorm, 4051 Garry Street (Schedule 4)

Submissions from the floor:

In response to a query from Council, Wayne Craig, Director, Development, stated that this development will be more energy efficient than what is currently required of new townhouse developments.

Doug Shearer, 4111 Garry Street, spoke in favour of the proposed development and stated that he believes that the design of the townhouses will compliment the neighbourhood. Mr. Shearer was of the opinion that this townhouse complex will provide more affordable housing in Steveston, and it will not negatively impact the flow of traffic.

Mark Sakai, 11762 Fentiman Place, spoke in support of the proposed development, as he believes it will create more housing opportunities in the area. He also remarked that the proposal satisfies the requirements of the Official Community Plan, and that he is not concerned about parking.

Richard Hunter, 11720 Yoshida Court, spoke in favour of the proposed development and was of the opinion that the design will compliment the character of the neighbourhood, and thus, property values should not be impacted.

Anne Piche, 11800 6th Avenue, was opposed to the proposed development as she wished to see infrastructure in Steveston replaced prior to any future developments. Ms. Piche expressed her concern with regard to the rezoning sign on the site, and wished for the site to remained zoned RS1/E.

In response to a query from Council, Mr. Craig stated that, according to the Affordable Housing Strategy, if any lot is subdivided into two lots, one of those two lots is required to have a suite.

Discussion ensued regarding the Official Community Plan, and it was noted that this area is designated for townhouses.

Barbara Bunting, 11726 Yoshida Court, was of the opinion that the RS1/E zone should be maintained. She expressed her concern with regards to traffic and parking, noting that the proposed development would further exasperate the existing problems.

John Pitcairn, 3880 Garry Street, spoke in favour of the proposed development as he welcomed more housing options in Steveston.

Derek Gray, 11744 Yoshida Court, was in favour of the proposed development as the Applicant addressed his concern related to the access from Yoshida Court. He expressed his concern regarding parking and green space in the area; however, he did not believe that the proposed development would cause additional traffic problems.

PH14/6-2 It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9108 be given third reading.

The question on Resolution PH14/6-2 was not called as discussion ensued regarding the reduction of green space in the area, the increase of traffic on Garry Street due to the access point being changed, and the design of the proposed townhouse development in comparison to other homes in the area.

The question on Resolution PH14/6-2 was then called and it was **CARRIED**.

3. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9145 (ZT 14-660990)
(Location: 9111 Beckwith Road; Applicant: Traschet Holdings Ltd.)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

None.

Submissions from the floor:

None.

PH14/6-3 It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9145 be given second and third readings.

CARRIED

Regular Council meeting for Public Hearings
Monday, June 16, 2014

PH14/6-4 It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9145 be adopted.

CARRIED

ADJOURNMENT

PH14/6-5 It was moved and seconded

That the meeting adjourn (8:00 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 Monday, June 16, 2014.

Mayor (Malcolm D. Brodie)

Acting Corporate Officer
(Michelle Jansson)

Schedule 1 to the Minutes of the Council Meeting for Public Hearings held on Monday, June 16, 2014.

To Public Hearing
Date: June 16/14
Item # 1
Re: 8320 Cambie Rd
8431 Brownwood Rd
TU 14-653009

June 13, 2014

Marian & Charles Dean
8411 Browngate Road
Richmond, B.C.
V6X 1G7
Tel: 604-278-5204

City of Richmond
6911 No. 3 Road,
Richmond, B.C.
V6Y 2C1
Attention: Director, City Clerk's Office

Re: Temporary Use Permit (TU 14-653009)

Dear Sir,

My husband and I strongly oppose the recent proposal of Fairchild Developments Limited to build an outdoor parking lot in our neighbourhood. My husband and I were extremely surprised to read in our local newspaper of the pending Public Hearing this coming Monday evening, June 16th, 2014 at Richmond City Hall regarding the Temporary Use Permit to allow an outdoor parking lot for a period not to exceed 3 years on the green space area bordering the corner of Cambie Road, Hazelbridge Way and Brownwood Road. I was surprised a letter was not sent out to our home as we live in this neighbourhood and have been homeowners since 1978 (36 years). We feel that we will be harmed by the proposed temporary use permit.

Being homeowners there has been many changes in our once quiet residential subdivision. Fairchild has, over the years, radically changed the dynamics of this neighbourhood. They were allowed to build the Aberdeen Centre and after only a few short years, tore it down, moved the road over and rebuilt a second Aberdeen Centre. We have endured many years of construction and noise while they built around us. We now look out from our back garden patio, where we once had a quiet, peaceful garden, we now overlook Aberdeen Centre's dome roof which hovers over the roadway and hear the noise of the continual traffic congestion which goes day and night along Hazelbridge Way and Cambie.

This latest proposal is only another step in Fairchild's dominance in this area. Our neighbourhood is already under pressure with increased volume of traffic in and out of our subdivision, increased parking on our small roadways, increased pedestrian traffic which continues into the small hours of the early morning. There is a lack of green space within this area and now they want to "pave paradise and put up a parking lot" in a lovely green area where there are beautiful trees, grass, shrubbery and many small birds. This is an area that I walk by almost ever single day of the year. I always enjoy looking at the trees and feel calmed that at least we have a small green area that we can overlook and enjoy.

Where we once had a quiet neighbourhood, we now have to plan a route when we want to leave by car and now Fairchild wants to increase more cars within this neighbourhood area. We will very soon need a helicopter to get us in and out of this area.

You would think that as homeowners we would be happy with these changes as our home would have increased over time, especially being close now to the Canada Line which was recently built. But several years ago our residential properties were changed from residential / commercial to residential / industrial significantly decreasing the value of our properties. We note that Fairchild can get their property zoning changed depending on what they are building. The "city bows to the developers" was a recent quote in the Richmond News and as a homeowner in this neighbourhood, I believe this to be the case. Why doesn't Fairchild encourage drivers to use the Canada Line as it is right at their doorstep? After all, this was the intention for building this line to remove some of the congestion on our roadways.

CITY OF RICHMOND
JUN 13 2014
RECEIVED
CITY CLERK'S OFFICE

In conclusion we strongly oppose this recent proposal of Fairchild Developments Limited. We question what will happen after the temporary use permit of three (3) years. We feel this is a joke. If business decreases will they then get rid of this parking lot? Not likely! Or if business increases will they take over more green space?

We hope that you read our concerns and take them to heart. Once this is paved over we will never get this green space back and in light of what we are hearing, there is not enough green space and eventually the beautiful Richmond that we knew as children growing up here, will all be paved over.

Sincerely,

Charles Dean

Marian Dean

Marian and Charles Dean

Schedule 2 to the Minutes of the Council Meeting for Public Hearings held on Monday, June 16, 2014.

To Public Hearing
Date: June 16, 2014
Item # 1
Re: TU 14-653009
8320 Cambie Rd &
8431 Brownwood Road

MayorandCouncillors

From: Webgraphics
Sent: Friday, 13 June 2014 2:03 PM
To: MayorandCouncillors
Subject: Send a Submission Online (response #793)

Categories: 08-4105-20-2014653009 - 8320 Cambie Road & 8431 Brownwood Road

Send a Submission Online (response #793)

CITY OF RICHMOND DATE JUN 16 2014 RECEIVED CITY CLERK'S OFFICE

Survey Information

Site:	City Website
Page Title:	Send a Submission Online
URL:	http://cms.richmond.ca/Page1793.aspx
Submission Time/Date:	6/13/2014 2:03:06 PM

Survey Response

Your Name	Captain Zimmerman
Your Address	zimmer44@telus.net
Subject Property Address OR Bylaw Number	8320 Cambie Road & 8431 Brownwood Road (TU 14-653009)
Comments	Dear Mr. Hopkins Thank you for meeting with me on June 11, 2014 to explain some of the concerns I raised regarding the issuance of a temporary use permit to allow an outdoor parking lot on the property next to ours. I have listed some of the salient points we discussed as well as other concerns both my husband and I have regarding the parking lot. 1. Entry and egress into the parking lot, which you explained will be from Hazelbridge Road. 2. There is a gradient on the lot in question. We are concerned about the drainage run-off onto our property, especially during heavy rainfalls. You had explained to me that drainage is important and that it should not impact our property. 3. You mentioned that two trees will be planted in order to block off access to the lot from Brownwood Road. We are hoping that the trees to be planted will be of a low profile in nature so as to not block further sunshine on our property. In addition, we discussed the trimming of the hedge next door to have an

	even look and to allow sunshine into our yard. We are stressing the need to have sunshine as Aberdeen Centre already blocks the afternoon sun by about 4:30 pm. 4. Another concern we have is about having a proper sidewalk installed on Hazelbridge, as the current pathway is too narrow. It is also unsafe, especially when walking two abreast as we do when we have our grandchildren with us, as the sides are crumbling away. 5. Will the lot be fenced off on the sidewalk end as a safety measure for pedestrian traffic? 6. We are also concerned about increased noise (especially at night) and a proliferation of garbage. Our neighbourhood is quiet and we try to keep it clean, and we hope that it will remain this way. 7. We would like to ensure that no cars are allowed to back into parking stalls as we do not want exhaust fumes in our yard, as a precautionary measure for both our health and the health of the plants. 8. Will the parking lot affect our property value? As you know we are right next door to the proposed changes in the property, from green space to parking lot. 9. What will happen to after the expiration of the three year permit? Will the property revert back to a park-like setting? Thank you for addressing our concerns. Naturally, we would prefer to maintain the green space as there certainly is a lack of it in the downtown area. As you are aware, most cities understand the benefits of flora and fauna and are making efforts to protect it. Once again, thank you for your time and attention to this matter. Yours very truly, Zaynub Mia & Captain Zimmerman 8451 Brownwood Road 604-273-507l

Schedule 3 to the Minutes of the Council Meeting for Public Hearings held on Monday, June 16, 2014.

MAYOR & EACH COUNCILLOR
CITY CLERK'S OFFICE

To Public Hearing
Date: June 16, 2014
Item # 2
Re: BYLAW 9108
RZ 13-644596

		INIT
	DW	
	MJ	
	DB	
✓	HB	

June 4, 2014

12-8060-009108

Attention: City Clerk, Richmond BC

Regarding: Bylaw 9108, Development of 4160 Garry Street

I am writing in support of the revised proposal for the 4160 Garry site that was presented at the Public Information Meeting on May 6, 2014:

- Entrance on Garry Street (at east side of property)
- Additional articulation on the sides of these units, as first presented at the Public Information Meeting on April 2, 2014

After attending the two public information meetings and reflecting on the different options, I believe that this is the most favourable of the three possible development scenarios that have been presented by Oris Consulting.

I am very glad that the developers have been able to find a way to move the access roadway to Garry Street, and I appreciate their efforts to address this major neighbourhood concern. This change will mean less of an increase in traffic on Yoshida Court, keeping it safer for the many pedestrians who use it to access Steveston Park, as well as for the families on the cul-de-sac.

The increased 'articulation' is supposed to contribute to a visual integration with Yoshida Court and the surrounding neighbourhood.

Also on the subject of visual integration with the surrounding neighbourhood:

Regarding the replacement of the current cherry and evergreen trees along the side of the property, I hope and request that the new 'street trees' will fit in with the existing trees along Yoshida Court, and help to soften the side view of the town homes.

And given that the common garbage and recycling enclosure is necessary with the new layout, I am glad that it is going to be screened with a trellis and plant material, and hope that as much as possible is done in this regard.

Thank you.

Stephanie Freiter

PHOTOCOPIED

JUN 10 2014

CITY OF RICHMOND
DATE
JUN 06 2014
RECEIVED
CITY CLERKS OFFICE

Stephanie Freiter
11753 Yoshida Court, Richmond V7E 5C5

& DISTRIBUTED AW

To Public Hearing
Date: June 16, 2014
Item # 2
Re: Bylaw 9108
RZ 13-641596

MayorandCouncillors

From: Webgraphics
Sent: Monday, 16 June 2014 11:05 AM
To: MayorandCouncillors
Subject: Send a Submission Online (response #794)

Send a Submission Online (response #794)

Survey Information

Site:	City Website
Page Title:	Send a Submission Online
URL:	http://cms.richmond.ca/Page1793.aspx
Submission Time/Date:	6/16/2014 11:04:49 AM

Survey Response

Your Name	Scott Silverthorm
Your Address	4051 Garry St Richmond BC V7E2T9
Subject Property Address OR Bylaw Number	4160 Garry St
Comments	This is more a suggestion about dividing Lots into more than what the lots are zoned for. When the builders are creating more draw and energy consumption than what there was prior. The builders should have to build more energy efficient homes. Like energuide 80 or higher on the Energuide scale (NRCAN). It does cost more to build, but they can recieve upto $2000 or more from the PowerSmart Program. The house will use less energy than the houses being built to code.

CITY OF RICHMOND
DATE
JUN 16 2014
RECEIVED
CITY CLERK'S OFFICE

City of Richmond

Minutes

Community Safety Committee

Date: Tuesday, June 10, 2014

Place: Anderson Room
Richmond City Hall

Present: Councillor Derek Dang, Chair
Councillor Linda McPhail
Councillor Ken Johnston
Councillor Evelina Halsey-Brandt
Councillor Bill McNulty
Mayor Malcolm Brodie (entered at 4:22 p.m.)

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 Tuesday, May 13, 2014, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

Tuesday, July 15, 2014, (tentative date) at 4:00 p.m. in the Anderson Room

DELEGATION

1. With the aid of a PowerPoint Presentation (on file, City Clerk's Office) Dave Guscott, President and CEO, E-Comm, accompanied by Doug Watson, Vice-President, 9-1-1 Operations, E-Comm, provided an update on E-Comm's 2013/2014 activities.

Mr. Guscott commented on Vision 2020 – E-Comm's strategic plan – highlighting two key areas: (i) service excellence and collaborative partnerships, and (ii) service expansion. Additionally, Mr. Guscott provided an update on the following activities:

- tender submissions related to the infrastructure for the Next Generation Radio Program are currently being received and that a further tender for the individual apparatus component of the Program will take place in the fall;
- specialized 9-1-1 text service for members of the Deaf, Hard-of-Hearing, and Speech Impaired community was launched in March 2014;
- Fraser McCraig, the newly appointed the Director, Police Services, E-Comm, was introduced to Committee;
- Richmond's Diversity Services Committee toured E-Comm and expressed particular interested in the multilingual capacity of E-Comm; and
- a public educational video to address accidental 9-1-1 calls was released through social media in March 2014 to bring awareness to the burden accidental calls place on public safety resources.

In response to queries from Committee, Mr. Guscott provided the following information:

- social media has been an important tool for providing information to the general public;
- Cell-broadcasting technology, which allows emergency services to publicly broadcast emergency information to cell phones, will require federal legislation prior to any implementation by industry providers; and

Mayor Brodie entered the meeting (4:22 p.m.).

- E-Comm's operational model has generated significant interest; however, the model has been not developed as rapidly in other jurisdictions as in the Lower Mainland.

LAW AND COMMUNITY SAFETY DEPARTMENT

2. **COMMUNITY BYLAWS MONTHLY ACTIVITY REPORT – APRIL 2014**
(File Ref. No.) (REDMS No. 4229185 v.5)

Ed Warzel, Manager, Community Bylaws, advised that neighbourhood canvassing with regard to dog licensing has commenced and will continue over the next few weeks.

Committee expressed appreciation for the efforts of Community Bylaws in improving the situation on Saba Road. In reply to queries from Committee, Mr. Warzel provided the following information:

- in terms of the absence of a licence for dogs from other municipalities, violation tickets are rarely issued; however, dangerous dogs, particularly when not muzzled, are taken seriously and violation tickets may be issued in such cases; and
- there has been discussion regarding the possibility of incorporating the collection of unpaid municipal parking tickets into the Insurance Corporation of British Columbia (I.C.B.C.) licence renewal process; however, any initiative would likely be brought forward through the Union of British Columbia Municipalities (UBCM).

It was moved and seconded
That the staff report titled Community Bylaws Monthly Activity Report – April 2014, dated May 12, 2014, from the General Manager, Law & Community Safety, be received for information.

CARRIED

3. **RCMP'S MONTHLY REPORT – APRIL ACTIVITIES**
(File Ref. No. 09-5000-01) (REDMS No. 4229250 v.2)

Inspector Sean Maloney, Richmond RCMP, reviewed RCMP activities for April 2014 and commented on the following:

- the shooting and sexual assault incidents are actively being investigated;
- commercial and residential break and enter statistics are comparative with figures of other Lower Mainland municipalities;
- a public education campaign will be undertaken concerning the increase in thefts from motor vehicles, particularly with regard to garage door openers within sight in a vehicle; and

- staff is currently reviewing the upcoming Dolphin Classic Basketball Tournament and the Nations Cup Soccer Tournament with regard to the associated beer gardens for the events.

In response to a query from Committee, Insp. Maloney advised that the RCMP conduct internet safety programs for youth.

Committee requested that the McDonald Beach area be regularly patrolled on weekends in an effort to deter vehicular break-ins.

It was moved and seconded
That the report titled RCMP's Monthly Report – April 2014 Activities dated May 26, 2014, from the Officer in Charge, Richmond RCMP be received for information.

CARRIED

4. **RICHMOND FIRE-RESCUE – APRIL 2014 ACTIVITY REPORT**
(File Ref. No. 09-5000-01) (REDMS No. 4232169 v.2)

John McGowan, Fire Chief, Richmond Fire-Rescue (RFR), stated that the estimated building loss for April 2014 was primarily attributed to an arson and to smouldering material. He stated that RFR will be addressing the storage of bark mulch material in agricultural landscaping areas in the near future.

It was moved and seconded
That the staff report titled Richmond Fire-Rescue – April 2014 Activity Report dated May 26, 2014 from the Fire Chief, Richmond Fire-Rescue be received for information.

CARRIED

5. **RICHMOND FIRE-RESCUE BUSINESS PLAN UPDATE 2013-2014**
(File Ref. No.) (REDMS No. 4234853 v.4)

Fire Chief McGowan noted that RFR will be undertaking a review and update of the Business Plan for 2015-16.

It was moved and seconded
That the staff report titled Richmond Fire-Rescue Business Plan Update (2013-2014) dated May 26, 2014, from the Fire Chief, Richmond Fire-Rescue, be received for information.

CARRIED

6. **TRANSPORTATION OF DANGEROUS GOODS BY RAILWAY**
(File Ref. No. 09-5125-05-03) (REDMS No. 4229815 v.4)

Fire Chief McGowan, accompanied by Deborah Procter, Manager, Emergency Programs, commented that the Federal Minister of Transportation directed rail companies to share yearly aggregate information on the nature and amount of dangerous goods companies transport through municipalities. It was noted that, while the railway companies have fulfilled their reporting requirements under Protective Direction 32 of the *Transportation of Dangerous Goods Act* (1992), from an emergency planning perspective, aggregate information does not indicate whether a train has a thousand litres or half a litre of a hazardous material product.

Fire Chief McGowan acknowledged that such information is sensitive and as such, staff is bound by a confidentiality agreement from sharing said information for any purpose other than for emergency planning.

In reply to queries from Committee, Fire Chief McGowan provided the following information:

- in the event of a dangerous goods spill a request for information is submitted to the railway company and the information is provided immediately to the command centre; additionally, rail cars have placards that identify the material being transported; and
- generally, rail car movement within Richmond is limited to low speeds, which decreases the risk of derailment and of rupture in the event of a derailment.

It was moved and seconded

(1) ***That a letter be sent to the Federal Minister of Transport requesting Protective Direction 32 be amended to require rail companies to report the nature, exact volume and frequency of dangerous goods transported through municipalities, so that an assessment of the risk to the municipality can be made; and***

(2) ***That Council submit a resolution to the Federation of Canadian Municipalities, requesting that the federal government issues an amendment to Protective Direction 32 requiring rail companies to provide to municipalities the nature, exact volume and frequency of dangerous goods transported.***

CARRIED

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

(i) Firefighters Association Burn Fund

Fire Chief McGowan spoke of the Firefighters Association Burn Fund Camp Day Kick-Off event to be hosted at the South Arm Community Centre on Sunday, July 20, 2014. He noted that, since 1984, the camp has provided young burn survivors with an opportunity to share experiences with their peers and increase their understanding of firefighter and police careers.

(ii) Doors Open Richmond

Fire Chief McGowan noted that the Doors Open Richmond event held on May 7 and 8, 2014 was successful with over 1,600 people attending the Steveston Fire Hall No. 2.

8. **RCMP/OIC BRIEFING**
(Verbal Report)

None.

9. **JOINT BRIEFING – RCMP, FIRE-RESCUE, AND EMERGENCY PROGRAMS**
(Verbal Report)

(i) Ships to Shore Steveston 2014

(ii) Steveston Salmon Festival

Fire Chief McGowan, accompanied by Ms. Procter and Insp. Maloney, commented on the upcoming Ships to Shore Steveston 2014 event scheduled for June 29 and 30, 2014, and the following was noted: (i) RFR crews will be on site to provide safety and educational information; (ii) the RCMP operation safety plan includes extra crews on duty around Bayview Street and an additional Battalion Chief posted at the Mobile Command Centre; and (iii) a fireworks display is scheduled for Canada Day.

In reply to a query from Committee, Deputy Fire Chief Kim Howell advised that display permits issued under *Fireworks Regulation Bylaw No. 7917* requires the applicant to provide proof of Fireworks Supervisor or Pyrotechnician certification prior to a permit being issued by the Fire Chief.

Discussion ensued regarding the proposed fireworks display and issues related to crowd control. As a result of the discussion, the following **referral** motion was introduced:

It was moved and seconded
That the proposed fireworks display in association with the Ships to Shore Steveston 2014 event be referred to staff in order to provide further information and report to the Monday, June 16, 2014, General Purposes Committee meeting.

CARRIED

10. **MANAGER'S REPORT**

None.

ADJOURNMENT

It was moved and seconded
That the meeting adjourn (4:59 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, June 10, 2014.

Councillor Derek Dang
Chair

Heather Howey
Committee Clerk

City of Richmond

Minutes

General Purposes Committee

Date: Monday, June 16, 2014

Place: Anderson Room
Richmond City Hall

Present: Mayor Malcolm D. Brodie, Chair
Councillor Chak Au
Councillor Linda Barnes
Councillor Derek Dang
Councillor Evelina Halsey-Brandt
Councillor Ken Johnston
Councillor Bill McNulty
Councillor Linda McPhail
Councillor Harold Steves

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 General Purposes Committee held on Monday, June 2, 2014, be adopted as circulated.

CARRIED

FINANCE AND CORPORATE SERVICES DEPARTMENT

1. **TAKIFUGU JAPANESE RESTAURANT LTD. UNIT 133 - 4800 NO. 3 ROAD**
(File Ref. No. 12-8275-05) (REDMS No. 4232054)

It was moved and seconded
That the application from Takifugu Japanese Restaurant Ltd., for an amendment to increase their hours of liquor service under Food Primary Liquor Licence No. 047295 from *Monday to Saturday 11:00 a.m. to 1:00 a.m. and Sunday 11:00 a.m. to Midnight* to *Monday to Saturday 11:00 a.m. to 2:00 a.m. and Sunday 11:00 a.m. to 1:00 a.m., be supported and that a letter be sent to the Liquor Control and Licensing Branch advising that:*

(1) Council supports the amendment for an increase in liquor service hours as the increase will not have a significant impact on the community.

(2) Council's comments on the prescribed criteria (set out in Section 53 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 extended hours of liquor service under the Food Primary Liquor Licence should not change the establishment such that it is operated contrary to its primary purpose.

(3) As the operation of a licenced establishment may affect nearby residents the City gathered the view of the residents as follows:

(a) Property owners and businesses within a 50 metre radius of the subject property were contacted by letter detailing the application, providing instructions on how community comments or concerns could be submitted.

(b) Signage was posted at the subject property and three public notices were published in a local newspaper. This signage and notice provided information on the application and instructions on how community comments or concerns could be submitted.

(4) Council's comments and recommendations respecting the views of the residents are as follows:

(a) That based on the number of letters sent and the lack of response received from all public notifications, Council considers that the amendments are acceptable to the majority of the residents in the area and the community.

CARRIED

COMMUNITY SERVICES & ENGINEERING & PUBLIC WORKS DEPARTMENTS

2. **GUIDING PRINCIPLES AND OPTIONS FOR CONFIGURATION OF KEY PROGRAM ELEMENTS FOR MINORU RECREATION COMPLEX**
(File Ref. No. 06-2052-55-01) (REDMS No. 4237467 v. 12)

In response to queries from Committee, Serena Lusk, Senior Manager, Recreation and Sport Services, and Jim Young, Senior Manager, Project Development, provided the following information:

- washrooms, change rooms, and team rooms associated with the proposed Pavilion will be accessible from the exterior of the proposed building;
- staff reports on (i) key program elements and (ii) form and character design are scheduled for July and October respectively;
- the existing pavilion hosts programs from (i) the Richmond Fitness and Wellness, (ii) various rental groups (e.g. the Richmond Garden Club), and (iii) numerous sport groups; it is anticipated that the proposed new Pavilion would continue to facilitate existing programming, and potentially provide options for additional programming;
- dedicated space for the Older Adults Centre will consist of the following: Option 1 - approximately 28,050 ft^2 to 29,700 ft^2; Option 2 – approximately 17,000 ft^2 with an additional 17,000 ft^2 shared space; and Option 3 – approximately 33,000 ft^2;
- the proposed building will have several entrances with one main reception area for the three components;
- the Edmonds Community Centre, in Burnaby, is an example of integrated programming;
- the building design will include outdoor activity spaces;
- future business plans and user group operating agreements will determine programming priorities for the shared space; and
- an Olympic size pool and specific major event spacing elements will be considered in a forthcoming staff report.

Discussion ensued regarding (i) enhancing the proposed Pavilion, (ii) integrating complexities and autonomy for the Older Adults Centre as outlined in correspondence from Minoru Seniors Society, dated June 13, 2014 (attached to and forming part of these minutes as **Schedule 1**), (iii) determining the size of pool to be constructed for the proposed Aquatic Centre, (iv) attending the Edmonds and Hillcrest Community Centres, (v) receiving input from the Minoru Major Facility Stakeholder Advisory Committee, (vi) receiving information on best practices with regard to facility design, and (vii) examining the feasibility of combining the shared space between the Older Adults Centre and the Pavilion rather than the Aquatic Centre.

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

It was moved and seconded
That the staff report titled "Guiding Principles and Options for Configuration of Key Program Elements for Minoru Recreation Complex" be referred back to staff:

(1) to arrange tours of the Edmonds Community Centre in Burnaby and the Hillcrest Community Centre in Vancouver;

(2) for further analysis on the synergy between the Older Adults Centre and Pavilion;

(3) to meet with the Minoru Major Facility Stakeholder Advisory Committee for input; and

(4) to review best practices.

CARRIED

COMMUNITY SERVICES DEPARTMENT

3. **SHIPS TO SHORE 2014 UPDATE/FIREWORKS**
(File Ref. No.) (REDMS No.)

It was moved and seconded
That the staff memorandum titled Ships to Shore 2014 Update/Fireworks, dated June 13, 2014, from the General Manager, Community Services, be received for information.

CARRIED

ADJOURNMENT

It was moved and seconded
That the meeting adjourn (4:45 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 Monday, June 16, 2014.

Mayor Malcolm D. Brodie
Chair

Heather Howey
Committee Clerk

minoru
SENIORS SOCIETY

MINORU PLACE ACTIVITY CENTRE
7660 Minoru Gate, Richmond, BC Canada V6Y 1R9
Tel: 604-238-8450 Fax: 604-718-8462

"Recreation reduces isolation, loneliness and alienation"

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

GP - Jun. 16, 2014
Item No. 2

Schedule 1 to the Minutes of the General Purposes Committee Meeting of Monday, June 16, 2014.

June 13, 2014

City of Richmond
RECEIVED
JUN 13 2014
MAYOR'S OFFICE

DELIVERED BY HAND

Mayor and Council,
City of Richmond,
6911 N0.3 Road,
Richmond, B.C. V6Y 2C1

Your Worship and Councillors:

Subject: Minoru Major Facility Project:

I am writing on behalf of the Minoru Seniors Society to outline our concern about changes which have materially altered this project from the original vision of a facility co-inhabited by ourselves and the Aquatic Centre.

We are concerned that we will not have double the programmable space we now have, with space being lost to the Pavilion. A lot of study went into arriving at our space requirements going forward. A lot of people feel we should have lobbied for more space in the new complex, but we are trying to be responsible. The space we anticipated would meet our needs, but is a minimum after a careful analysis.

We are satisfied we can co-inhabit, but we have some serious concerns about the "integrated approach" we hear is under consideration. If we are going to be able to effectively deliver services and programs for seniors, we feel we must be able to operate independent of the Aquatic Centre or Pavilion. For example, a senior's gym requires seniors focused and adapted equipment, and staff focused on the needs of seniors. Also, seniors want to be able to exercise with their peers, and not integrated with younger people whose needs are quite different.

We had a meeting scheduled with Serena Lusk to discuss these concerns, and hopefully get clarification of the space allocation. This meeting was cancelled with little notice and to date has not been rescheduled.

We want to be assured we will still have a distinct Seniors Centre, run independent of the Aquatic Centre and/or Pavilion at the end of the day, so we can continue to fulfill our mandate to seniors in the community, as we have done since inception.

Thank you for your consideration.

Yours truly,

Bill Sorenson,
Chair, Minoru Building Expansion Committee
Minoru Seniors Society

BS/sp

Cc: Cathryn Carlile, General Manager, Community Services, City of Richmond.
John Foster, Manager, Community Social Development, City of Richmond.
Eva Busich-Veloso, Coordinator, Senior Services, City of Richmond.
Serena Lusk, Senior Manager, Recreation and Sport Services, City of Richmond.

City of Richmond

Minutes

Planning Committee

Date:	Tuesday, June 17, 2014
Place:	Anderson Room Richmond City Hall
Present:	Councillor Bill McNulty, Chair Councillor Evelina Halsey-Brandt Councillor Linda Barnes Councillor Harold Steves Mayor Malcolm Brodie
Absent:	Councillor Chak Au
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 Planning Committee held on Tuesday, June 3, 2014, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

Tuesday, July 8, 2014, (tentative date) at 4:00 p.m. in the Anderson Room

It was moved and seconded
That the agenda be varied to consider Item No. 2 last.

CARRIED

COMMUNITY SERVICES DEPARTMENT

1. **CHILD CARE MAJOR CAPITAL FUNDING PROGRAM 2014/15 - PROVINCE OF BC**
(File Ref. No. 07-3070-01) (REDMS No. 4235453)

Coralys Cuthbert, Child Care Coordinator, noted that the Province advised that local governments are not required to place a charge on the land title in favour of the Province if the City obtained the grant from the Child Care Major Capital Funding Program.

It was moved and seconded

(1) That "The Gardens" child care project located at 10640 No. 5 Road, be endorsed for submission to the Provincial Child Care Major Capital Funding Program 2014/15; and

(2) That the Chief Administrative Officer and the General Manager, Community Services be authorized to sign grant applications and agreements as required for this submission.

The question on the motion was not called as discussion ensued.

It was moved and seconded

(1) That "The Gardens" child care project located at 10640 No. 5 Road, be endorsed for submission to the Provincial Child Care Major Capital Funding Program 2014/15;

(2) That the Chief Administrative Officer and the General Manager, Community Services be authorized to sign grant applications and agreements as required for this submission; and

(3) That the City be authorized to grant a registrable charge in favour of the Province of BC against the title to the Lands restricting the ability of the City to sell, mortgage, transfer or lease (other than to the child care provider), or make other disposition of the property for a period of up to 10 years without the Province's prior written consent if necessary.

CARRIED

PLANNING & DEVELOPMENT DEPARTMENT

3. **APPLICATION BY HOLLYBRIDGE LIMITED PARTNERSHIP (INTRACORP) FOR REZONING AT 6888 RIVER ROAD AND 6900 PEARSON WAY FROM RESIDENTIAL/LIMITED COMMERCIAL (RCL3) TO RESIDENTIAL/LIMITED COMMERCIAL (ZMU27) - OVAL VILLAGE (CITY CENTRE)**
(File Ref. No. 08-4105-20; RZ 14-665416) (REDMS No. 4249044)

Wayne Craig, Director, Development, commented on the proposed application and noted the applicant is seeking to provide a cash-in-lieu contribution towards the City's capital Affordable Housing Reserve Fund.

In reply to comments made by Committee, Cathryn Volkering Carlile, General Manager, Community Services, advised that approximately $3 million in interim funds have been committed to the affordable housing projects in the city centre. Also, she noted that a portion of the proposed cash-in-lieu contribution can be allocated to offset the interim funding committed to the city centre affordable housing projects.

Discussion ensued with regard to whether (i) the interim funding allocated for the affordable housing projects in the city centre will be sufficient; (ii) the proposed cash-in-lieu contribution will be needed for affordable housing projects in the city centre; and (iii) the construction affordable housing units be preferenced over cash-in-lieu contributions.

In reply to queries from Committee, Dena Kae Beno, Affordable Housing Coordinator, advised that the interim funds, together with the proposed cash-in-lieu contribution, can support the city centre affordable housing projects as well as subsidize housing costs for low-income families.

Discussion ensued with regard to receiving a partial cash-in-lieu contribution, with the remaining contribution given as affordable housing units. In reply to queries from Committee, Mr. Craig advised that discussions with the applicant would have to take place with regard to a partial cash-in-lieu contribution.

Discussion then ensued regarding receiving full or partial cash-in-lieu contributions for the city centre affordable housing projects.

In reply to queries from Committee, Ms. Carlile noted that funding not used for the city centre affordable housing projects can be reserved for future projects. She added that there are advantages to accepting either the full or partial cash-in-lieu contribution.

Discussion took place about the preference to see affordable housing units constructed over receiving cash-in-lieu contributions.

In reply to queries from Committee, Mr. Craig noted that the proposed development is anticipated to have a LEED Silver equivalent rating and be serviced by the City's District Energy Utility.

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

It was moved and seconded
That staff examine the options for a partial cash-in-lieu contribution that would provide affordable housing units in the proposed Oval Village (City Centre) development and offset the interim funding committed for affordable housing projects in the city centre.

The question on the referral was not called as discussion ensued regarding other options to offset the interim funding and receive the contribution only as affordable units.

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

It was moved and seconded
That staff examine options:

(1) for a partial cash-in-lieu contribution that would provide affordable housing units in the proposed Oval Village (City Centre) development and offset the interim funding committed for affordable housing projects in the city centre;

(2) to accept the proposed contribution only as affordable units; and

(3) to offset the interim funding committed for the affordable housing projects in the city centre;

and report back.

CARRIED

4. **APPLICATION BY COTTER ARCHITECTS INC. FOR REZONING AT 3471 CHATHAM STREET FROM THE "STEVESTON COMMERCIAL (CS3)" ZONE TO A SITE SPECIFIC "COMMERCIAL MIXED USE (ZMU26) – STEVESTON VILLAGE" ZONE**
(File Ref. No. 08-4105-20; RZ 13-643436) (REDMS No. 4236626)

Mr. Craig briefed Committee on design revisions to the proposed development and noted the following:

- the proposed development remains three storeys in height, however design revisions were made to the roof structure;
- the rooftop amenities may be accessed by stairs or by elevator;
- a shadow analysis of the proposed development was completed; and

- the overall building design was reviewed for compliance with the Sakamoto Guidelines.

In reply to queries from Committee, Mr. Craig noted that (i) consideration for height variances will occur at the development permit process; (ii) the proposed development will be fully accessible; and (iii) the shadowing analysis indicated that the proposed structure did cast shadows to the west in the morning hours.

Sara Badyal, Planner 2, advised that the maximum height of the proposed development remains at three stories. However, she noted that changes to the overall design has resulted in a reduction in the massing on the roof.

In reply to queries from Committee, Ms. Badyal noted that after community feedback, the concrete art panels have been relocated to a highly visible location and the public bench has been removed.

Rob Whetter, Architect, Cotter Architects, briefed Committee on the design revisions to the proposed development after consultation with staff and highlighted the following:

- heritage elements incorporated in the design were based on the Sakamoto Guidlines;
- the massing on the roof was reduced;
- the proposed development will include 10 residential units;
- options are available to remove the elevator from the design;
- the roof deck is setback to eliminate any overlook;
- the proposed development is designed to transition with the single-family dwellings in the area;
- the number of decks have been reduced;
- the size of the windows have been reduced; and
- the shadow cast by the proposed development will be smaller.

Discussion ensued with regard to the location and design of the elevator shaft and in reply to queries from Committee, Mr. Whetter advised that the elevator shaft enclosure on the roof can be designed to be more visually pleasing.

Discussion then took place regarding accessibility to the proposed development and the demand for accessible units.

Mr. Whetter advised that the elevator shaft can be relocated to reduce its visibility from the street level.

Edith Turner, 3411 Chatham Street expressed concern with regard to the size of the proposed development in relation to exisiting buildings in Steveston Village and read from her submission (attached to and forming part of these minutes as **Schedule 1**).

Ralph Turner, 3411 Chatham Street expressed concern with regard to the size proposed development, and in particular, its shadowing over adjacent buildings. He read from his submission (attached to and forming part of these minutes as **Schedule 2**).

Discussion ensued with regard to options to reduce the elevation of the proposed development by removing the Steveston Village Heritage Conservation Grant requirement. In reply to queries from Committee, Mr. Craig advised that the Steveston Village Heritage Conservation Grant contribution from this development is approximately $296,000. Also, Mr. Craig noted that there are approximately 17 heritage buildings in Steveston Village and that the Steveston Village Heritage Conservation Grant provides funding for renovation of said heritage sites.

Discussion then ensued with regard to the number of active applications including provisions for the Steveston Village Heritage Conservation Grant and options to remove such requirement from these applications.

Loren Slye, 11911 3rd Avenue, expressed his support for the proposed development's design. Also, Mr. Slye read a submission from [redacted] (attached and forming part of these minutes as **Schedule 3**).

Ken Yoshikawa, 3571 Richmond Street, expressed his support for the proposed development and read from his submission (attached and forming part of these minutes as **Schedule 4**).

Discussion ensued with regard to the visibility of the elevator shaft on the rooftop of the proposed development and in reply to queries from Committee, Mr. Yoshikawa noted that the visibility of the elevator shaft did not concern him so long as it provides wheelchair access to the rooftop.

Dana Westermark, 13333 Princess Street, commented on the Steveston Village Heritage Conservation Grant and commented on different opportunities to utilize the Grant Fund.

Bob Hodder, 3506 Semlin Drive, commented on the shadowing effect of the proposed building. Mr. Hodder noted that there is a tree adjacent to the proposed development that currently casts a shadow on the neighbouring yard. In his opinion, due to the existing shadow from the adjacent tree, the shadowing effects from the proposed development on the adjacent yard would be minimal.

It was moved and seconded
That Richmond Zoning Bylaw 8500, Amendment Bylaw 9138 to: create a site specific "Commercial Mixed Use (ZMU26) – Steveston Village" zone; and to rezone 3471 Chatham Street from the "Steveston Commercial (CS3)" zone to the "Commercial Mixed Use (ZMU26) – Steveston Village" zone, be introduced and given first reading.

The question on the motion was not called as discussion ensued with regard to the proposed development's (i) height and shadowing effect; (ii) rooftop amenity space; (iii) accessibility; and (iv) elevator shaft.

Discussion then ensued regarding the Steveston Village Heritage Conservation Grant program and heritage buildings in Steveston Village.

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

5. **APPLICATION BY TIEN SHER LAND INVESTMENT GROUP LTD. FOR REZONING AT 3391, 3411, 3451 NO. 4 ROAD AND LOT B, NWD PLAN 14909 FROM SINGLE DETACHED (RS1/E) TO SINGLE DETACHED(RS2/B)**
(File Ref. No. 08-4105-20; RZ 10-552482) (REDMS No. 4235324)

Mr. Craig briefed Committee on the proposed application and noted that the proposed application will include changes to the lot configurations.

Discussion then ensued regarding the site's servicing requirements.

It was moved and seconded

(1) That third reading of Richmond Zoning Bylaw 8500, Amendment Bylaw 8789, for the rezoning of 3391, 3411, 3451 No. 4 Road and Lot B, NWD PLAN 14909, be rescinded; and

(2) That Richmond Zoning Bylaw 8500, Amendment Bylaw 8789 be referred to the Monday, July 21, 2014 Public Hearing at 7:00 pm in the Council Chambers of Richmond City Hall.

CARRIED

6. **APPLICATION BY BARBARA STYLIANOU FOR REZONING AT 5280/5300 MONCTON STREET FROM TWO-UNIT DWELLINGS (RD1) TO SINGLE DETACHED (RS2/B)**
(File Ref. No. 08-4105-20; RZ 13-650616) (REDMS No. 4245187)

Discussion ensued regarding potential for garage houses and access to the site from the front of the property.

It was moved and seconded
That Richmond Zoning Bylaw 8500, Amendment Bylaw 9157, for the rezoning of 5280/5300 Moncton Street from "Two-Unit Dwellings (RD1)" to "Single Detached (RS2/B)", be introduced and given first reading.

CARRIED

2. **REFERRAL: WEST CAMBIE ALEXANDRA NEIGHBOURHOOD BUSINESS OFFICE AREA REVIEW**
(File Ref. No. 08-4375-01) (REDMS No. 4242481)

Terry Crowe, Manager, Policy Planning, commented on the staff referral process and the staff recommendation included in the staff report.

Discussion ensued with regard to the procedural process associated with including the staff recommendation on the agenda and receiving the staff report for information.

Patrick Burke, Senior Planning Coordinator, briefed Committee on the West Cambie Alexandra Neighbourhood Business Office Area Review and highlighted the following:

- the Richmond Economic Advisory Committee (EAC) was consulted for feedback on business office development in the West Cambie Study Area (Study Area) and indicated that the existing Area Plan Business/Office designation be retained;
- office space is classified by a sliding scale with the more desirable sites rated as Class A and less desirable sites rated as Classes B and C;
- an eight percent vacancy rate is ideal;
- if Class A and B sites are considered, the vacancy rate in the Study Area would be approximately six percent;
- the Study Area is along the frequent transit network and is within 800 metres of the Canada Line;
- the Study Area would attract high quality employment opportunities;
- the Study Area is accessible to both public transit and private vehicles; and
- the development of the Study Area for employment supports the City's 2041 Official Community Plan (OCP).

Discussion ensued regarding the source of the statistics and differences between reported vacancy rates. In reply to queries from Committee, Blair Erb, Coriolis Consulting Corp., advised that the data used for the vacancy statistics were gathered from the Lower Mainland. He added that office vacancies are not evenly distributed, as often higher rates of vacancy are concentrated away from public transit, for instance in business parks.

Discussion ensued regarding the development mix in the Study Area. In reply to queries from Committee, Richard Wozny, Site Economics Ltd., noted that an area is typically considered residential in nature if the portion of employment space falls below 60% of the total area.

In reply to queries from Committee, Mr. Burke advised that the recommended development mix in the Study Area is 60% employment space and 40% residential space in order to minimize employment loss.

Discussion ensued with regard to total inventory of Class A and Class B space in the city. Mr. Burke noted that staff estimate that the city will require 12 million square feet of office space by 2041.

Discussion then ensued with regard to the demand for office space and a strategy to attract employment opportunities.

In reply to queries from Committee, Mr. Wozny commented on the employment lands available and density of the employment space in the Study Area and noted that development typically spreads out from the city centre into the suburban areas.

In reply to queries from Committee, Mr. Crowe noted that due to the future population growth in the region, he anticipates that the City will need to develop space for employment. Also, he added that the City's Employment Growth Strategy would be in line with the City's 2041 OCP and Metro Vancouver's 2040 Regional Growth Strategy (RGS).

Discussion ensued with regard to the option to designate the entire Study Area for mixed employment space.

In reply to queries from Committee, Neonila Lilova, Manager, Economic Development, spoke of the EAC's membership and noted that the EAC's feedback are reflected in the staff report.

In reply to queries from Committee, Mr. Wozny noted that office tenants will be attracted to sites that would meet their needs. He added that employment areas that are in proximity to residential areas tend not to be desirable to prospective tenants. Also, he noted that residential areas tend to develop faster than commercial areas, and spur commercial development.

Mr. Burke was of the opinion that development will occur if the residential component of the development mix is limited.

Blaire Chisholm, Brook Pooni Associates, referred to her submission, (attached and forming part of these minutes as **Schedule 5**) and spoke of the development mix proposed by Westmark Development Group in the Study Area.

David Bell, Colliers International, referred to a review of office market space in the city and commented on (i) the supply of office space; (ii) the vacancy rate; (iii) the absorption rate of Class A and Class B sites; and (iv) future demand for office space.

Mr. Bell noted that vacancy rates tend to increase exponentially outside an 800 metre radius around public transit access and the Study Area is outside of said radius. He was of the opinion that the city's office market is driven by airport activity and population growth, which generates demand for more localized, service-based office users.

Matt McLean, Cushman and Wakefield, spoke of the office market conditions in the city and commented on (i) the current vacancy rate; (ii) the ideal proximity of office space to transit access; (iii) the ideal development mix; (iv) integration of commercial tenants into the community; (v) the ideal location and layout for employment space; and (vi) the types of tenants that occupy employment space in the city.

Howie Charters, Colliers International, commented on the office market conditions in the city and noted that the demand for office space is driven by residential development.

Discussion ensued regarding the Study Area's current zoning designation and suitability for employment land development.

In reply to queries from Committee, Mr. McLean was of the opinion that Class A and Class B tenants gravitate towards sites that are close to transit and the city centre. Also, he was of the opinion that employment growth should be concentrated along transit corridors and the city centre.

Discussion ensued with regard to the addition of employment lands under current market conditions. Mr. Charters noted that based on current absorption rates, he projects that the absorption of the proposed addition of office space will take many years.

Discussion ensued with regard to the procedural process to receive either the staff recommendation or the staff report for information.

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

It was moved and seconded

(1) That Official Community Plan Bylaw 7100 and 9000, Amendment Bylaw 9122 to amend Schedule 2.11A in the 2041 Official Community Plan Bylaw 7100, to change the existing Business Office designation to Mixed Use (30% Employment:70% Residential) designation, be introduced and given first reading.

(2) That Official Community Plan Bylaw 7100 and 9000, Amendment Bylaw 9122, having been considered in conjunction with:

(a) the City's Financial Plan and Capital Program;

(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 882(3)(a) of the Local Government Act.

(3) That, in accordance with section 879 (2)(b) of the Local Government Act and OCP Bylaw Preparation Consultation Policy 5043, Official Community Plan Bylaw 7100 and 9000, Amendment Bylaw 9122, be referred to the following bodies for comment for the Public Hearing:

(a) Vancouver International Airport Authority (VIAA) (Federal Government Agency), and

(b) The Board of Education of School District No. 38 (Richmond).

(4) That City staff be directed to consult with VIAA staff regarding the proposed recommendation, prior to the Public Hearing.

The question on the motion was not called as discussion ensued with regard to aspects of the Study Area including (i) the proposed SmartCentres development adjacent to the site; (ii) the residential development and infrastructure already in place; (iii) current and future market demand for office space; (iv) the movement of office tenants into the city; (v) the absorption rate of office space; (vi) the ideal development mix; and (vii) the ideal location for employment lands.

In reply to queries from Committee, Mr. Crowe noted that a retail mix would have retail tenants on the ground floor with office space on the higher floors.

Discussion then ensued regarding aspects of the Study Area including (i) proximity to transit access; (ii) the types of commercial tenants; (iii) future capacity of employment lands; and (iv) preservation of agricultural land.

The question on the motion was then called and it was **DEFEATED** with Mayor Brodie, Cllrs. Barnes and Steves opposed.

Further discussion ensued regarding the suitable development mix for the Study Area.

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

It was moved and seconded

(1) That Official Community Plan Bylaw 7100 and 9000, Amendment Bylaw 9121 to amend Schedule 2.11A in the 2041 Official Community Plan Bylaw 7100, to change the existing Business Office designation to Mixed Use (60% Employment:40% Residential) designation, be introduced and given first reading.

(2) That Official Community Plan Bylaw 7100 and 9000, Amendment Bylaw 9121, having been considered in conjunction with:

(a) the City's Financial Plan and Capital Program;

(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 882(3)(a) of the Local Government Act.

(3) That, in accordance with section 879 (2)(b) of the Local Government Act and OCP Bylaw Preparation Consultation Policy 5043, Official Community Plan Bylaw 7100 and 9000, Amendment Bylaw 9121, be referred to the following bodies for comment for the Public Hearing:

(a) Vancouver International Airport Authority (VIAA) (Federal Government Agency), and

(b) The Board of Education of School District No. 38 (Richmond).

(4) That City staff be directed to consult with VIAA staff regarding the proposed recommendation, prior to the Public Hearing.

The question on the motion was not called as discussion ensued regarding market conditions for adding office space and the suitable development mix for the Study Area.

The question on the motion was then called and it was **CARRIED** with Cllrs. McNulty and Steves opposed.

7. MANAGER'S REPORT

None.

Discussion then ensued regarding the Regional Affordable Housing Strategy Update discussion paper from Metro Vancouver (attached to and forming part of these minutes as **Schedule 6**).

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

It was moved and seconded
That staff examine the Regional Affordable Housing Strategy Update from Metro Vancouver and report back.

CARRIED

Discussion then ensued regarding a report from the Richmond School District No. 38, (attached to and forming part of these minutes as **Schedule 7**) discussing the Seismic Mitigation Program.

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

It was moved and seconded
That staff examine the report from the Richmond School District No. 38 discussing the Seismic Mitigation Program and report back.

CARRIED

ADJOURNMENT

It was moved and seconded
That the meeting adjourn (6:33 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 Tuesday, June 17, 2014.

Councillor Bill McNulty
Chair

Evangel Biason
Auxiliary Committee Clerk

Notes for Planning Committee meeting June 17, 2014
Re: Steveston Flats

It is highly unlikely that a person's first mental image when they hear the word "village" is Vancouver's Georgia Street, or Yaletown, or the Olympic Athlete's Village in False Creek or even River Green here in Richmond. More likely it will be something that can described by the adjective "quaint". I don't think Steveston is a cute, whimsical place but according to the dictionary definition, which is that a village is a cluster of buildings larger than a hamlet but smaller than a town, I think Steveston qualifies as a village. So must a lot of other people, including this Council, since that is the way it is always described and advertised, and extensive measures are being taken to preserve it as such including the most recent idea to have it declared a UNESCO World Heritage Site.

One of the defining characteristics of a village is the relationship of buildings to people. Large structures dwarf people while smaller buildings make people, in comparison, appear larger, more important. This is what is referred to on page 14 of the 1987 Design Criteria for Steveston, also known as the Sakamoto Guidelines, as "human scale".

If we are going to continue using Steveston's village appeal as a selling point, we need to seriously think about protecting it from inappropriate development which alters its fundamental character. We need to learn from past experience. Case in point – the new building at Third Ave. and Bayview. It looked good on paper. It fit all the required criteria and bylaws and yet, when built, is absolutely monstrous. The reaction from everyone I've talked to, without exception, has been something akin to "Oh my God, that's awful, who let that happen? How on earth did that ever get approved?"

If you approve this proposal for Steveston Flats, you are letting it happen again. This will become another monument to bad judgment.

I appreciate the fact that the owner has made some cosmetic revisions to remove the industrial look of the building but putting peaks on the roof and painting it in sky blue or lime green or even "heritage" colours, whatever they may be, does not change the fact that the building is just too big.

I don't have a propensity for math but I can add simple numbers and when I total the elevations listed on the old and new architectural drawings, the height of the building remains the same at 13.49m – over the allowable 12m limit – and that's not including the elevator tower. When the owner says that he has lowered the roofline, he omitted the part about it being only a portion of the roofline not the entire roofline. And the totally illogical explanation by the planning department that there is some leeway in terms of height for a gable roof as opposed to a flat roof doesn't alter the fact that the peak of the roof is overheight. Does everyone think this portion is invisible? It won't be to us.

Removing the bench at the west lane entrance was a petty appeasement compared to my second major concern which has been pretty much ignored - that being the rooftop deck. Again, has nothing been learned from past mistakes? The rooftop living area on the

building at No. 1 and Chatham snuck in under the guise of "access". The others, on 1st Ave., and on Chatham at 5th Ave, weren't slip-ups. They were allowed even though Council said it would never happen again, and now it seems to have become the norm. As pleasant as it might be for the residents, whether it can be seen from the street or not, it is not something that should be approved in Steveston. You can pooh-pooh the notion if you want, but I don't think it would be far-fetched to find out that residents tired of conveying their lawn chairs in and out of winter storage on the ground level, and hauling their trowels and bags of potting soil and garden fertilizer up and down have installed a small garden shed on the roof. I'm not saying that's going to happen but how would any of us know if it did?

By eliminating the rooftop deck area you also remove the necessity of the elevator tower thus automatically getting rid of that annoying little height problem.

To see the huge impact of the size of this proposed structure on the privacy of our yard, I took a photograph I had taken of the Gulf and Fraser building in March of 2013 and scaled it to match the architect's drawing of the west elevation. The composite clearly shows how overbearing this building will be.

This massive building with its commercial base is out of scale and out of place in a block of single family residences. It does not, as the concluding paragraph of the city's report states, "respect the surrounding single detached housing".

Please do not approve this application.

Edith Turner
3411 Chatham Street.

March 26, 2013

WEST ELEVATION (with foregroud trees) Art panels scaled to match

Planning Committee Meeting June 17, 2014

Speaking notes:

1)
Granted that the owner/developer has made a few cosmetic changes to the proposed building; however, the building hasn't changed in size and thus it is the same in that it does not transition into the residential neighbourhood which is one of the requirements of the 'Steveston Conservation Area' guidelines- Section 9.2.2 (page 38) which states:

> "The form of new development should be guided by that of adjacent existing development; even where new uses are being introduced. For example, multiple family residential or commercial uses introduced adjacent to single family homes should adopt a scale and character similar to those existing dwellings…"

This proposed building certainly dose not do this and thus devalues the neighbouring properties with its size and shadowing results. Who would want to buy a home or property the back yard of which is devoid of sunlight?

2)
Speaking of shadowing, I find it quite interesting that the proposal only shows the shadowing effect of the building during the months March through September, a period when the sun's elevation is at its highest. This evaluation only supports the developer's situation. In order to be fair to the surrounding residents, I would ask the Planning Committee request of staff to prepare a shadowing report for the period September through March at such times of 9am, Noon and 3pm. Sunlight during

the winter months, when it is available, is a much valued commodity as we all know. I have attached a couple of photographs taken this morning to show the effect of the proposed building on shadowing and the availability of the morning sun.

In our situation, I find it quite peaceful and satisfying to sit out on our back porch in the early mornings (5-6am) enjoying my morning coffee and the morning sun. Once this building goes up that will be a thing of the past.

3)
It's not just the size of the building, but its proposed function as well that concerns us. Steveston doesn't really need more commercial space. It is my understanding that a number of the local merchants already have a difficult time making ends meet during the off season between September and May. I doubt that adding more commercial space will improve this situation especially when it is outside the Moncton Street core. Retail businesses absolutely won't compliment the single family homes in this block. One thing that could improve both situations, that of the mass of the proposed building and the abundance of commercial space, would be to eliminate the first floor of commercial space altogether.

Thank you,

Ralph Turner
3411 Chatham Street

East view JUNE 17, 2014 8:00am

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South View

JUNE 17, 2014 9:00 am

From: [redacted]
Subject: New Building Constructon - Opinion of [redacted]
Date: 17 June, 2014 3:20:53 PM PDT
To: "lkslye@gmail.com" <lkslye@gmail.com>

Good afternoon,

I would like to provide my input on the proposed building. My name is [redacted]

[redacted]

and [redacted] It is such an incredible community to live and grow up in. Like all of us, growth and change are necessities in life.

We are the [redacted] to the proposed building as [redacted]. The proposed building will be right up to the south side of the alley.

The old credit union building was a tired structure but it had panels on the back depicting fishing boats. We could see the panels from our deck and back widows and very much enjoyed viewing them. We appreciate the effort that was made to keep some on the back of the new building so we could continue to enjoy them. We like the sketches of the new building as it more pleasing to view than the more traditional residential/commercial buildings to the immediate east on Third Ave. The new building is tastefully designed.

We could see the Gulf of Georgia Cannery from our house over the old credit union and we liked the barn turrets on the top. As we understand that the new building cannot mimic the Gulf of Georgia's turrets because of an issue with the height. I did discover that these turrets are used to dress up the elevator shaft for wheel chair access to the roof top patio. We thought that was a great idea as we put 36" wide doors in our house to accommodate wheelchair access if need be in the future.

The metal roofing on the new building is a nice blend with the building to the east across the street. There is metal roofing on that building across the street and can be seen from Third Avenue. I can see the attempt to blend in the very old, moderately old and the new construction.

The old credit union was much lower which meant that we had to listen to 30 year air conditioning units. We are glad that the new building will have new air conditioning units positioned on the roof that will not be rattling and squealing 24 hours a day.

Thank you for your time today,

June 17, 2014

Planning Committee meeting

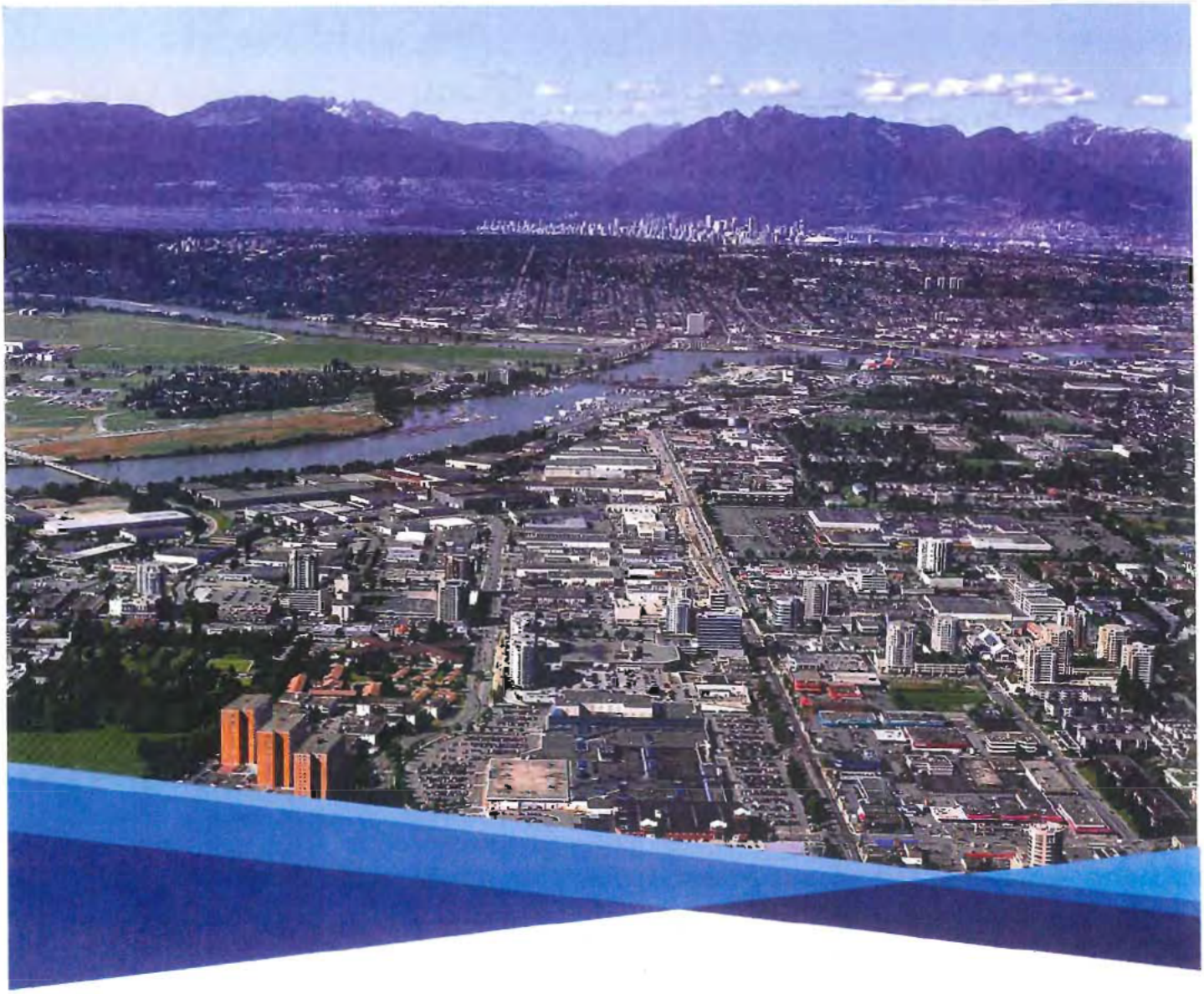
Re: 3471 Chatham Street

Good Afternoon, my name is Ken Yoshikawa and I live at 3571 Richmond Street here in Steveston. I have lived in Steveston for 25 years and I am an active fisherman and homebuilder based here. I have chosen to build my family home in Steveston because the town is quickly becoming a vibrant destination spot which includes the old and new. The fishing fleet may be depleted from past decades but the waterfront still attracts many locals and visitors.

I would like to say that I fully support the proposed CS3 Zoned development at 3471 Chatham Street, as it will continue to add quality product of both retail and residential to this vibrant village. and community

Thank you,

Ken Yoshikawa



June 17, 2014

West Cambie – Alexandra Business/Office Area Review

Richmond, BC

Richmond Planning Committee Meeting

PREPARED BY:

Colliers INTERNATIONAL

BROOK POONI

PREPARED FOR:

Richmond

West Cambie – Alexandra Neighbourhood Business / Office Area Review

Blaire Chisholm, Brook Pooni Associates (Urban Planning)
David Bell, Colliers (Market Assessment)

Westmark was established in 1986 and over the years has established a strong reputation for building communities in Richmond. They are a family-owned, hands-on business that understands the people and communities where they work.

Committed to Richmond - want to contribute to building a complete community in Alexandra. The neighbourhood remains dilapidated and needs a different land use designation to stimulate the development of desirable employment space, with better jobs than those that are projected with the existing land use designation.

Rezoning Application submitted in January 2014 for 5 acres of land owned by Westmark within the Business / Office Area designation. The proposal would create a liveable, mixed use development with commercial, office and residential uses. The project proposes a distinct street presence, sustainable building features and pedestrian orientation.

Land Use	Mixed Use - 80% residential (282,385SF) - 20% employment (71,780 SF)
Density	Base: 1.77 FAR
Bonus	Approx. 20 units to be provided as market rental units committed through a Housing Agreement
Jobs (@220SF/employee)	330 jobs (of total envisioned in the B/O designation)
Type of jobs: good paying, high quality	- Office including Westmark Corporate office - Wellness oriented - chiropractic, physiotherapy - Pharmaceutical - Ground-oriented commercial
No Precedent	A transition area between CCAP into Alexandra neighbourhood, it is a unique area with Garden City as the divider.

Westmark understands the City's economic development objectives and will work with staff to achieve these goals; however, the development community will not build office unless it makes sense to do so.

The current staff report includes a number of limitations that we would like to further address and have clarified.

Market/Economic Response to Staff Report Dated May 27, 2014

- **Richmond office market conditions are, and have been, much more challenging than implied by the staff report.** While *Colliers agrees that a "healthy office vacancy rate" is around 8% (say 7-8%), the Richmond city-wide rates by class are far beyond healthy levels and are in fact substantially oversupplied:*

Richmond Office Market
Vacancy by Class (at at Q1 2014)

	CLASS A		CLASS B		CLASS C	
Market	Vacant sf	Vacancy %	Vacant sf	Vacancy %	Vacant sf	Vacancy %
Richmond	321,527	16.6%	368,215	20.4%	85,803	25.8%
Metro Vancouver Suburban	1,693,361	11.8%	1,277,791	10.5%	258,266	8.1%
Richmond vs. Suburban:						
Richmond Vacancy as % of Suburban Vacancy	**19.0%**		**28.8%**		**33.2%**	
Richmond vs. Suburban Vacancy Index	140.7		194.3		318.5	

Source: Colliers International - Vancouver Office - 1st Quarter, 2014.

- **Colliers agrees that lower office vacancy rates are occurring in Richmond in proximity to SkyTrain stations.** ***See Map 1 – there is a strong relationship between proximity to SkyTrain stations and vacancy rates, with vacancy rates increasing significantly beyond 500 metres and dramatically beyond 800 metres.***
- Key assumptions driving staff report conclusions regarding study area office demand do not accurately reflect market realities:
    - **The study area is not "near transit" from a market or planning perspective and thus the assumption that a 6.8% study area vacancy rate is appropriate is false.** See Map 2 – actual walking distances to the subject site from Aberdeen Station (to the intersections of Cambie/Garden City and Garden City/Odlin Road range from 910 metres to 1.25 kms. The real estate market does not view this as being "near transit" or "easily walkable" due to walking times and exposure to adverse weather conditions, so new supply in this location will generate lower lease rates and suffer much higher vacancy.
    - **The staff report on page 7 references the 2009 City Centre Area Plan's 80 acres of zoned land for office uses, with "projected demand of 119 acres required by 2041 to accommodate the estimated 17.0 M square feet of new office space". This equates to annual demand, over 27 years, of 630,000 sf. Colliers' review of the last decade of activity (Q1 2004 to Q1 2014) indicates that actual net absorption in Richmond of both A and B class office space has averaged roughly 30,600 sf per year.**
    - **Richmond's office market is driven primarily by YVR activity and by population growth which generates demand for more localized, service-based office users. The Richmond office market inventory (all classes) currently tracked by Colliers stands at just under 4.1 million sf. Of this total, 775,000+ sf are currently vacant. Colliers cannot envision a scenario for Richmond that justifies projected demand of 17.0 million sf of new office space.**

- **Colliers acknowledges the importance of creating high quality employment in order to generate incremental property tax revenue and to improve the overall jobs-to-labour force balance. The jobs, however, must be real/delivered to the market to generate actual benefits.** The Westmark proposal for the Study Area includes a pharmacy-anchored professional medical/health & wellness centre which is market-supportable at the proposed scale. Properly phased, this will lead to fully leased space, quality employment, and property tax revenue over the short term. Colliers sees this as the best potential employment that can be delivered to the market in this location.
- **The West Cambie-Alexandra neighbourhood and its prime Garden City frontage deserve to be completed with high quality building and uses to match – a strong and attractive amenity for the neighbourhood and larger community.** *A properly-scaled and cohesive professional health services mix with ground level retail, fully leased along Garden City Road will send a positive signal to the market. A larger complex of struggling speculative office space or vacant land will at best perpetuate current conditions, and at worst, increase negative perception of the area.*

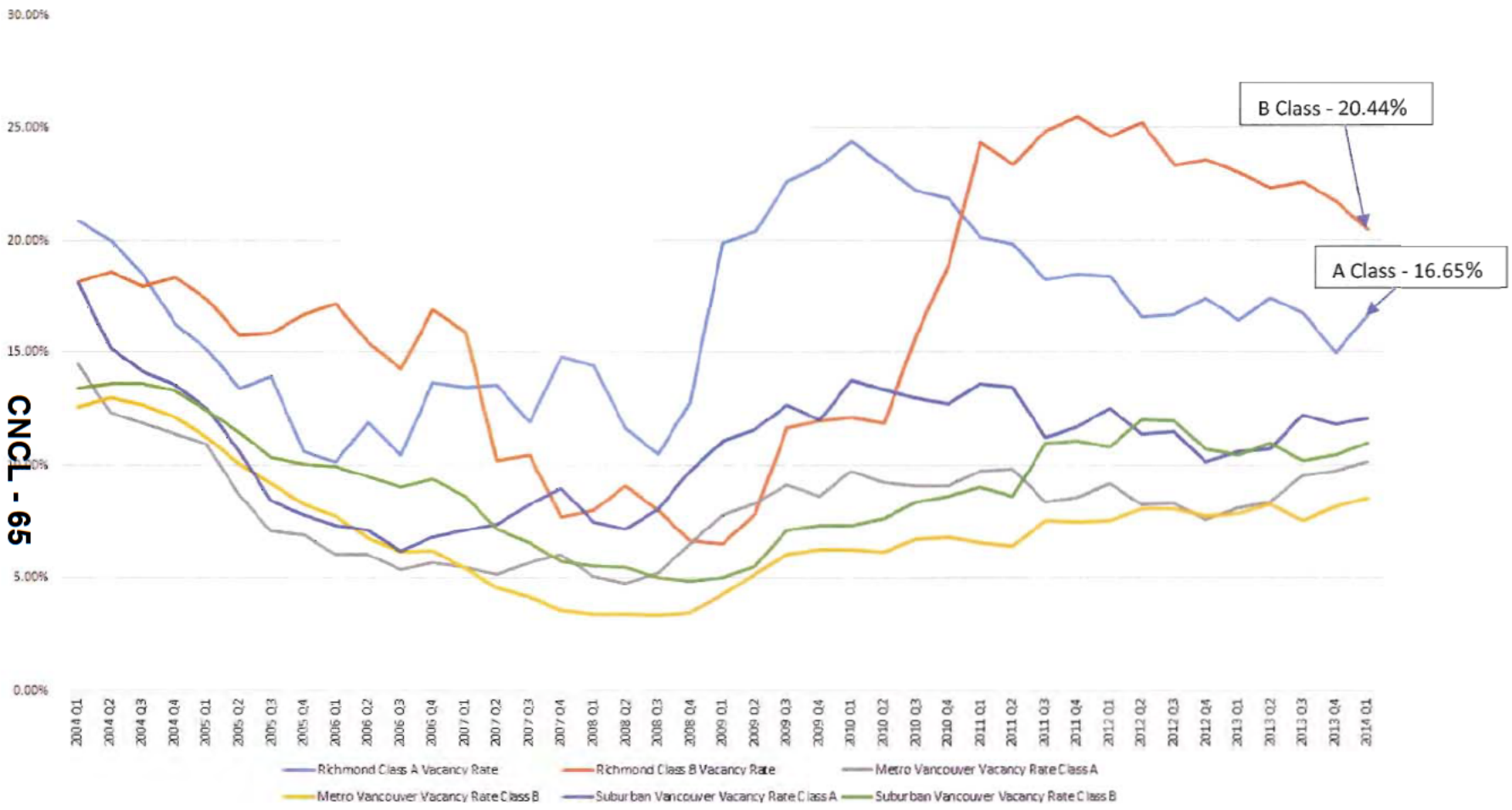
Marketable/Developable Index of Scenarios 1-4 in Richmond Market:

Based on a range of key factors, including ongoing Richmond market conditions, shifting area context and the various objectives/desires of the City, developers, lenders, and tenants, the following scale is relevant in evaluating the pros and cons of scenarios 1 through 4:

- Lower market risk (still challenging)
- Higher probability of materializing over the short-term, filling neighbourhood gap and creating attractive Garden City frontage
- Stronger likelihood of cohesive Garden City frontage (office + retail) will serve as a positive signal and local catalyst, which will assist in attracting further employment to the Study Area
- Brings real quality employment to the area in the short-term
- Higher likelihood of generating significant property tax revenue over the short term
- Lower risk of vacancy/creating poor impression along prime Garden City frontage
- Developers can build as they can achieve sufficient pre-leasing to secure financing
- Creates a market-supportable amenity that serves as an amenity for local area residents and seniors

- Extremely high market risk
- 0% probability of materializing over the short to medium term, leaving neighbourhood gap
- Strong likelihood of no development interest, providing no positive market signal for the larger Study Area
- May not bring quality employment to the area/higher risk of ultimately attracting lower quality office uses and over a much longer term
- 0% probability of generating significant property tax revenue over the short term
- High risk of vacancy/high risk of creating poor impression along prime Garden City frontage
- Developers cannot build as they cannot achieve sufficient pre-leasing to secure financing.

Richmond A & B Class Office Vacancy (2004-2014)



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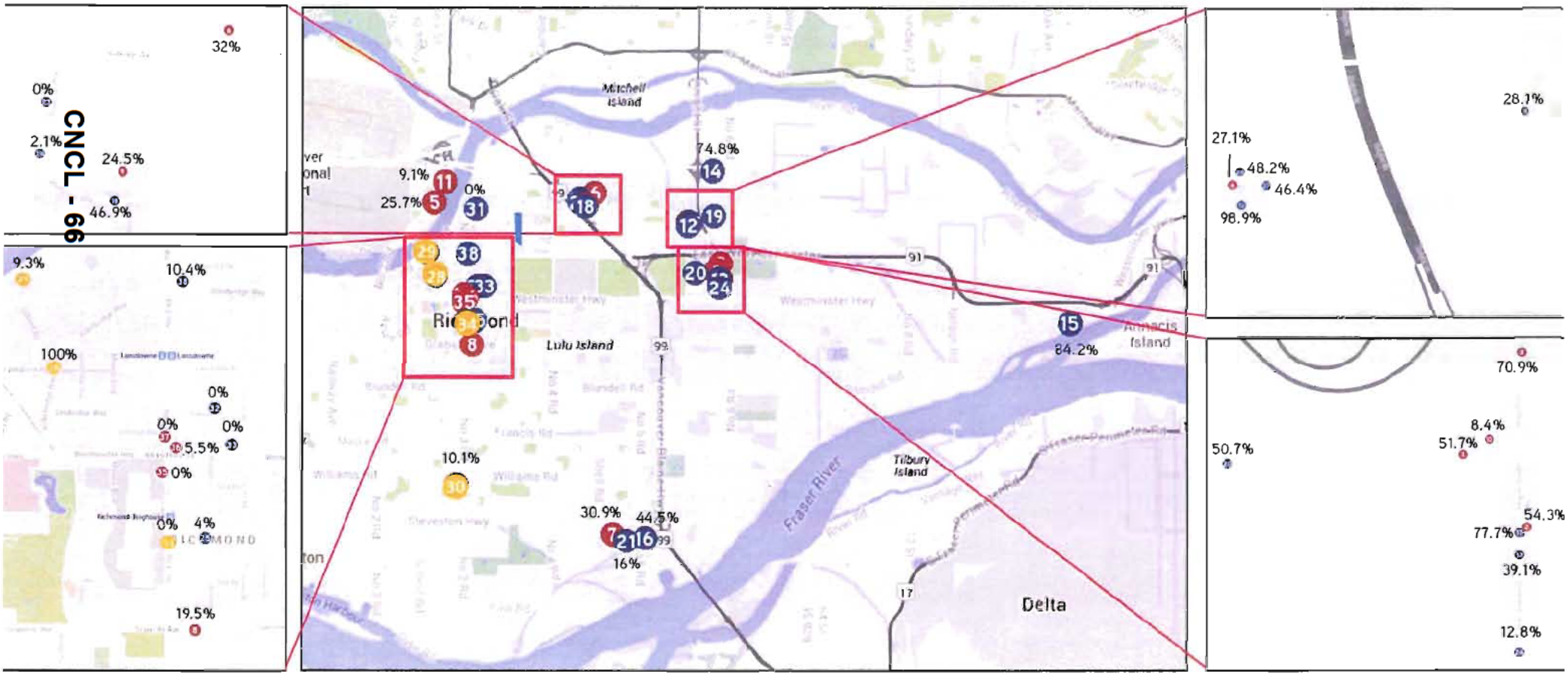
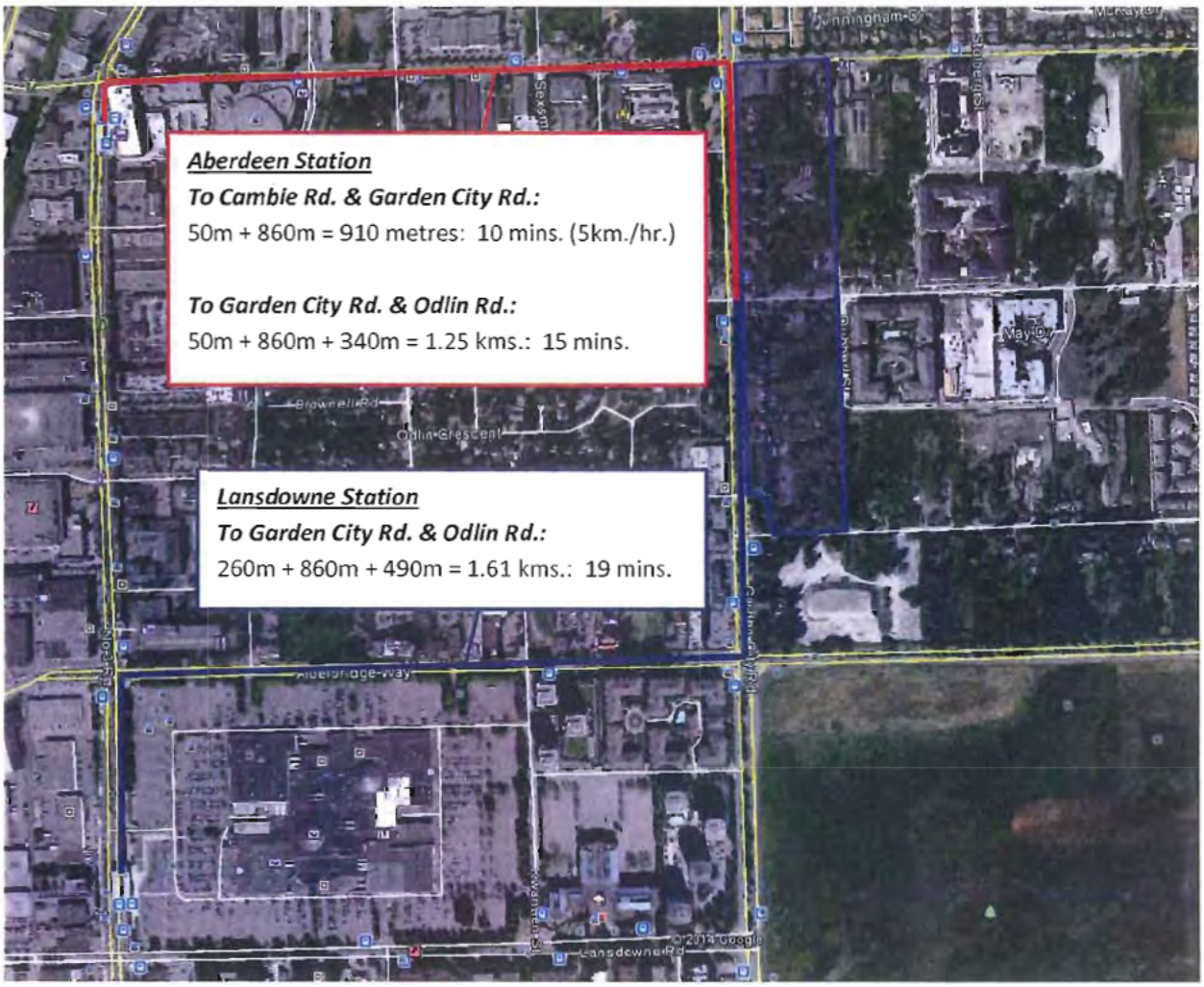
Map 1: Richmond Office Vacancies by Class & Location



Richmond Office Vacancies by Class & Location

Map #	Address	Class	Vacancy Rate (%)
1	13571 Commerce Pkwy	A	51.7
2	13700 International Pl	A	54.3
3	13777 Commerce Pkwy	A	70.9
4	13091 Vanier Pl	A	27.1
5	3820 Cessna Dr	A	25.7
6	10991 Shellbridge Way	A	32.0
7	11331 Coppersmith Way	A	30.9
8	8100 Granville Avenue	A	19.5
9	10271 Shellbridge Way	A	24.5
10	13575 Commerce Pkwy	A	8.4
11	3600 Lysander Lane	A	9.1
12	13120 Vanier Pl	B	98.9
13	13511 Commerce Pkwy	B	39.1
14	3011 Viking Way	B	74.8
15	6651 Fraserwood Pl	B	84.2
16	12033 Riverside Pl	B	44.5
17	13511 Commerce Pkwy	B	77.7
18	10760 Shellbridge Way	B	46.9
19	4020 Viking Way	B	28.1
20	5600 Parkwood Way	B	50.7
21	11120 Horseshoe Way	B	16.0
22	13071 Vanier Pl	B	48.2
23	10691 Shellbridge Way	B	0.0
24	13351 Commerce Pkwy	B	12.8
25	8171 Cook Road	B	4.0
26	10551 Shellbridge Way	B	2.1
27	13151 Vanier Pl	B	46.4
28	7671 Alderbridge Way	C	100.0
29	7080 River Road	C	9.3
30	10151 No 3 Road	C	10.1
31	8181 Cambie Road	B	0.0
32	8171 Ackroyd Road	B	0.0
33	5611 Cooney Road	B	0.0
34	6400 No 3 Road	C	0.0
35	6081 No 3 Road	A	0.0
36	5900 No 3 Road	A	5.5
37	5951 No 3 Road	A	0.0
38	4940 No 3 Road	B	10.4

Map 2: West Cambie-Alexandra SkyTrain Walking Distance



metrovancouver
SERVICES AND SOLUTIONS FOR A LIVABLE REGION

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

DW MJ DB

* Discussion Paper is available in the Councillor's Lounge

re: John Foster
Cathy Carlile

Office of the Chair
Tel. 604-432-6215 Fax. 604-451-6614

File: CR-12-01
Ref: RT 5244

MAY 2 3 2014

Mayor Brodie and Council
City of Richmond
6911 No 3 Rd
Richmond, BC V6Y 2C1

Dear Mayor ~~Brodie~~ MALCOLM and Council,

Re: Regional Affordable Housing Strategy Update - Discussion Paper

At its May 2, 2014 regular meeting, the Greater Vancouver Regional District Board of Directors adopted the following resolution:

> *That the GVRD Board endorse the report titled "Regional Affordable Housing Strategy Update – Discussion Paper" dated March 25, 2014, direct staff to initiate stakeholder consultation and forward the report to member municipalities and other interested agencies for their information and comment.*

Attached please find a copy of the report titled "Regional Affordable Housing Strategy Update - Discussion Paper" dated March 25, 2014 for your information and comment. The Discussion Paper is intended to facilitate the evaluation of directions for an updated Regional Affordable Housing Strategy (RAHS). The Paper aims to:

- summarize progress and highlight accomplishments since the 2007 RAHS and *Metro 2040* were adopted;
- identify current and pressing issued to be addressed by the updated strategy;
- note opportunities for maximizing housing affordability and diversity;
- present broad goals for an updated RAHS; and
- identify options for strategic directions for consideration by stakeholders.

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JUN 10

& DISTRIBUTED AW

CITY OF RICHMOND DATE JUN 09 2014 RECEIVED CITY CLERK'S OFFICE

The Discussion Paper proposes an emphasis on increasing affordable housing located close to TransLink's Frequent Transit Network. It includes an expanded role for non-profit housing providers, including the Metro Vancouver Housing Corporation, and housing co-ops. Finally, it continues to support the expansion of private market, purpose-built rental housing.

We look forward to receiving your comments and suggestions on the Discussion Paper.

Yours truly,

Greg Moore
Chair, Metro Vancouver Board

GM/DL/jh

Attachment: Regional Affordable Housing Strategy Update - Discussion Paper

9398481

TO: MAYOR
COUNCILLOR
FROM: CITY CLERK'S OFFICE
DW MJ DB

RICHMOND
SCHOOL DISTRICT NO.38

School District No. 38 (Richmond)
7811 Granville Avenue, Richmond, BC V6Y 3E3
Tel: (604) 668-6000 Fax: (604) 233-0150

cc: Jim Irving
Robert Gonzalez
FYI

June 5, 2014

The Honourable T. Wat, MLA (Richmond Centre)
300 - 8120 Granville Ave.,
Richmond, BC
V6Y 1P3

Dear Honourable Wat:

At its June 2, 2014 public meeting, the Board of Education (Richmond) received a staff report on the remediation of seismic issues at various schools. I have attached a copy of that report and have highlighted those schools in your constituency that have been deemed H1, H2 and H3 schools. The following are the definitions used by the Ministry of Education to determine the seismic ratings of schools.

High 1 (H1): Most vulnerable structure; at highest risk of widespread damage or structural failure; not reparable after event.
High 2 (H2): Vulnerable structure; at high risk of widespread damage or structural failure; likely not reparable after event.
High 3 (H3): Isolated failure of building elements such as walls are expected; building likely not reparable after event.

All three of the High Risk ratings require Structural and non-structural seismic upgrades.

Of the 25 High Risk Schools in Richmond, as reflected on the attached report, the following 5 High Risk schools are within the Richmond Centre Constituency:

H1
Sea Island
Thompson
Quilchena
Cook

H2
McKay

The Board then passed a resolution requesting staff to provide a strategy and timeline for prioritizing the funding applications to the Ministry of Education to remediate those high seismic risk schools.

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& DISTRIBUTED AW

CITY OF RICHMOND
DATE
JUN 09 2014
RECEIVED
CLERK'S OFFICE

Board of Education:
Donna Sargent - Chairperson
Eric Yung – Vice Chairperson
Rod Belleza Kenny Chiu Norm Goldstein
Debbie Tablotney Grace Tsang

As you are aware, the Ministry of Education is responsible to fund the cost of seismic mediation in schools and, as the Board is very concerned with the safety of our students and staff, we urge you to support the school district in our application for funding for these seismic remediation projects.

We would like to discuss this item further with you as we prepare our application for funding and will be in touch with you to arrange an appropriate meeting time.

Yours sincerely,

Donna Sargent

Mrs. Donna Sargent, Chairperson
On Behalf of the Board of Education (Richmond)

cc: Trustees
Mayor and City Councillors
Director, City Clerk's Office, Richmond
M. Pamer, Superintendent of Schools
M. De Mello, Secretary-Treasurer
C. Mason, Director of Facilities and Planning

RICHMOND
SCHOOL DISTRICT NO.38

Report to the Board of Education (Richmond)
Public Agenda

DATE: **May 29, 2014**

FROM: **Clive Mason Director of Facilities & Planning**

SUBJECT: **Seismic Mitigation Program**

RECOMMENDATION

That the Board of Education (Richmond) request Staff to provide a strategy and timeline for prioritizing the funding applications to the Ministry to remediate the high seismic risk schools listed in this report as part of the 5 Year Capital Plan process.

BACKGROUND

This report will be the first of a series of periodic updates that are intended to keep parents, staff, the Community and all stakeholders engaged in the remediation decision-making to follow.

The Ministry of Education has committed to the seismic upgrading of Richmond schools since its first seismic risk assessments undertaken in 2004. As a result of this commitment, the Ministry surveyed 38 Richmond schools. Subsequently, between 2005 and 2006 School District 38 applied to the Ministry to fund the repair or replacement of more than 30 schools identified in this survey. From the list of schools on the District's Capital Plans, the Ministry funded the rebuilding of Brighouse Elementary (2005 to 2011), the repair of Garden City Elementary (2005 to 2011), and the demolition of Old Mitchell Elementary (2006-2010). Steveston Secondary was also identified in this survey and was subsequently closed (2007).

In 2012, the Ministry announced new assessment results and a funding application process developed through the Association of Professional Engineers and Geoscientists (APEGBC). The assessments rated schools from the highest risk priority of High 1 (H1), through to High 2 (H2), and High 3 (H3). Medium risk (M) and Low risk (L) schools were also identified. The Ministry committed to fund the H1 schools first, followed by the H2 Schools, and so forth, and invited school districts to apply for this funding. In the new process, once an application from the District had been received and approved, the Ministry would commit to funding a school's seismic remediation. The 2012 list identified one Richmond school eligible for the District to apply for funding: Gilmore Elementary. In 2013 the Ministry committed to fund Gilmore's seismic remediation.

Because the new assessments had not been reviewed by the School District prior to the 2012 announcement, through APEGBC, the Ministry provided a way to have schools reassessed should there be a questionable difference between the new assessments and the assessments of 2004.

Over the past 18 months, the District has reassessed many Richmond schools and has submitted these to APEGBC and the Ministry for a risk assessment confirmation.

RICHMOND
SCHOOL DISTRICT NO.38

School District No. 38 (Richmond)
7811 Granville Avenue, Richmond, BC V6Y 3E3
Tel: (604) 668-6000 Fax: (604) 233-0150

June 5, 2014

J. Yap, MLA (Richmond-Steveston)
4011 Bayview Street
Richmond, BC
V7E 0A4

Dear Mr. Yap:

At its June 2, 2014 public meeting, the Board of Education (Richmond) received a staff report on the remediation of seismic issues at various schools. I have attached a copy of that report and have highlighted those schools in your constituency that have been deemed H1, H2 and H3 schools. The following are the definitions used by the Ministry of Education to determine the seismic ratings of schools.

High 1 (H1): Most vulnerable structure; at highest risk of widespread damage or structural failure; not reparable after event.
High 2 (H2): Vulnerable structure; at high risk of widespread damage or structural failure; likely not reparable after event.
High 3 (H3): Isolated failure of building elements such as walls are expected; building likely not repairable after event.

All three of the High Risk ratings require Structural and non-structural seismic upgrades.

Of the 24 recently reassessed High Risk Schools in Richmond, as reflected on the attached report, the following 12 High Risk schools are within the Richmond Steveston Constituency:

H1	**H2**	**H3**
Grauer	Kilgour	Westwind
Steves	Ferris	Diefenbaker
Blundell	Dixon	McKinney
Boyd	Errington	
Maple Lane		

The Board then passed a resolution requesting staff to provide a strategy and timeline for prioritizing the funding applications to the Ministry of Education to remediate those high seismic risk schools.

Board of Education:
Donna Sargent - Chairperson
Eric Yung – Vice Chairperson
Rod Belleza Kenny Chiu Norm Goldstein
Debbie Tablotney Grace Tsang

As you are aware, the Ministry of Education is responsible to fund the cost of seismic mediation in schools and, as the Board is very concerned with the safety of our students and staff, we urge you to support the school district in our application for funding for these seismic remediation projects.

We would like to discuss this item further with you as we prepare our application for funding and will be in touch with you to arrange an appropriate meeting time.

Yours sincerely,

Donna Sargent

Mrs. Donna Sargent, Chairperson
On Behalf of the Board of Education (Richmond)

cc: Trustees
Mayor and City Councillors
Director, City Clerk's Office, Richmond
M. Pamer, Superintendent of Schools
M. De Mello, Secretary-Treasurer
C. Mason, Director of Facilities and Planning

RICHMOND
SCHOOL DISTRICT NO.38

Report to the Board of Education (Richmond)
Public Agenda

DATE: May 29, 2014

FROM: Clive Mason Director of Facilities & Planning

SUBJECT: Seismic Mitigation Program

RECOMMENDATION

That the Board of Education (Richmond) request Staff to provide a strategy and timeline for prioritizing the funding applications to the Ministry to remediate the high seismic risk schools listed in this report as part of the 5 Year Capital Plan process.

BACKGROUND

This report will be the first of a series of periodic updates that are intended to keep parents, staff, the Community and all stakeholders engaged in the remediation decision-making to follow.

The Ministry of Education has committed to the seismic upgrading of Richmond schools since its first seismic risk assessments undertaken in 2004. As a result of this commitment, the Ministry surveyed 38 Richmond schools. Subsequently, between 2005 and 2006 School District 38 applied to the Ministry to fund the repair or replacement of more than 30 schools identified in this survey. From the list of schools on the District's Capital Plans, the Ministry funded the rebuilding of Brighouse Elementary (2005 to 2011), the repair of Garden City Elementary (2005 to 2011), and the demolition of Old Mitchell Elementary (2006-2010). Steveston Secondary was also identified in this survey and was subsequently closed (2007).

In 2012, the Ministry announced new assessment results and a funding application process developed through the Association of Professional Engineers and Geoscientists (APEGBC). The assessments rated schools from the highest risk priority of High 1 (H1), through to High 2 (H2), and High 3 (H3). Medium risk (M) and Low risk (L) schools were also identified. The Ministry committed to fund the H1 schools first, followed by the H2 Schools, and so forth, and invited school districts to apply for this funding. In the new process, once an application from the District had been received and approved, the Ministry would commit to funding a school's seismic remediation. The 2012 list identified one Richmond school eligible for the District to apply for funding: Gilmore Elementary. In 2013 the Ministry committed to fund Gilmore's seismic remediation.

Because the new assessments had not been reviewed by the School District prior to the 2012 announcement, through APEGBC, the Ministry provided a way to have schools reassessed should there be a questionable difference between the new assessments and the assessments of 2004.

Over the past 18 months, the District has reassessed many Richmond schools and has submitted these to APEGBC and the Ministry for a risk assessment confirmation.

Subject to receiving a letter to confirm the final designations by APEGBC, the following 24 schools (25 including Gilmore) have been evaluated as high seismic risk schools:

H1 Schools
Gilmore (Ministry Supported)
Grauer Elementary
Bridge Elementary
Woodward Elementary
Sea Island Elementary
Lee Elementary
Thompson Elementary
Steves Elementary
Blundell Elementary
Whiteside Elementary
Quilchena Elementary
Cook Elementary
Maple Lane Elementary
Hugh Boyd Secondary

H2 Schools
McKay Elementary
Kilgour Elementary
Tomsett Elementary
Ferris Elementary
Dixon Elementary
Errington Elementary
Mitchell Elementary

H3 Schools
Westwind Elementary
Diefenbaker Elementary
Tait Elementary
McKinney Elementary

Identification of a facility as a high seismic risk school does not mean that the building is structurally unsafe under regular conditions or that the occupants are in imminent danger. It does mean that the facility is at higher risk of structural failure from the shaking effects of an earthquake, and that it may be unusable following a seismic event of significant magnitude. Therefore, given the number of schools that have been identified as high seismic risk, a plan to prioritize remediation work is essential.

Clive Mason, Architect AIBC, LEED AP
Director of Facilities and Planning

RICHMOND
SCHOOL DISTRICT NO.38

School District No. 38 (Richmond)
7811 Granville Avenue, Richmond, BC V6Y 3E3
Tel: (604) 668-6000 Fax: (604) 233-0150

June 5, 2014

The Honourable L. Reid, MLA (Richmond East)
130 – 8040 Garden City Road
Richmond, BC
V6Y 2N9

Dear Honourable Reid:

At its June 2, 2014 public meeting, the Board of Education (Richmond) received a staff report on the remediation of seismic issues at various schools. I have attached a copy of that report and have highlighted those schools in your constituency that have been deemed H1, H2 and H3 schools. The following are the definitions used by the Ministry of Education to determine the seismic ratings of schools.

High 1 (H1): Most vulnerable structure; at highest risk of widespread damage or structural failure; not reparable after event.
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High 3 (H3): Isolated failure of building elements such as walls are expected; building likely not reparable after event.

All three of the High Risk ratings require Structural and non-structural seismic upgrades.

Of the 25 High Risk Schools in Richmond, as reflected on the attached report, the following 7 High Risk schools are within the Richmond East Constituency:

H1	**H2**	**H3**
Bridge	Tomsett	Tait
Woodward	Mitchell	
Lee		
Whiteside		

The Board then passed a resolution requesting staff to provide a strategy and timeline for prioritizing the funding applications to the Ministry of Education to remediate those high seismic risk schools.

Board of Education:
Donna Sargent - Chairperson
Eric Yung – Vice Chairperson
Rod Belleza Kenny Chiu Norm Goldstein
Debbie Tablotney Grace Tsang

As you are aware, the Ministry of Education is responsible to fund the cost of seismic mediation in schools and, as the Board is very concerned with the safety of our students and staff, we urge you to support the school district in our application for funding for these seismic remediation projects.

We would like to discuss this item further with you as we prepare our application for funding and will be in touch with you to arrange an appropriate meeting time.

Yours sincerely,

Donna Sargent

Mrs. Donna Sargent, Chairperson
On Behalf of the Board of Education (Richmond)

cc: Trustees
Mayor and City Councillors
Director, City Clerk's Office, Richmond
M. Pamer, Superintendent of Schools
M. De Mello, Secretary-Treasurer
C. Mason, Director of Facilities and Planning

RICHMOND
SCHOOL DISTRICT NO.38

Report to the Board of Education (Richmond)
Public Agenda

DATE: **May 29, 2014**

FROM: **Clive Mason Director of Facilities & Planning**

SUBJECT: **Seismic Mitigation Program**

RECOMMENDATION

That the Board of Education (Richmond) request Staff to provide a strategy and timeline for prioritizing the funding applications to the Ministry to remediate the high seismic risk schools listed in this report as part of the 5 Year Capital Plan process.

BACKGROUND

This report will be the first of a series of periodic updates that are intended to keep parents, staff, the Community and all stakeholders engaged in the remediation decision-making to follow.

The Ministry of Education has committed to the seismic upgrading of Richmond schools since its first seismic risk assessments undertaken in 2004. As a result of this commitment, the Ministry surveyed 38 Richmond schools. Subsequently, between 2005 and 2006 School District 38 applied to the Ministry to fund the repair or replacement of more than 30 schools identified in this survey. From the list of schools on the District's Capital Plans, the Ministry funded the rebuilding of Brighouse Elementary (2005 to 2011), the repair of Garden City Elementary (2005 to 2011), and the demolition of Old Mitchell Elementary (2006-2010). Steveston Secondary was also identified in this survey and was subsequently closed (2007).

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Because the new assessments had not been reviewed by the School District prior to the 2012 announcement, through APEGBC, the Ministry provided a way to have schools reassessed should there be a questionable difference between the new assessments and the assessments of 2004.

Over the past 18 months, the District has reassessed many Richmond schools and has submitted these to APEGBC and the Ministry for a risk assessment confirmation.

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Tomsett Elementary
Ferris Elementary
Dixon Elementary
Errington Elementary
Mitchell Elementary

H3 Schools
Westwind Elementary
Diefenbaker Elementary
Tait Elementary
McKinney Elementary

Identification of a facility as a high seismic risk school does not mean that the building is structurally unsafe under regular conditions or that the occupants are in imminent danger. It does mean that the facility is at higher risk of structural failure from the shaking effects of an earthquake, and that it may be unusable following a seismic event of significant magnitude. Therefore, given the number of schools that have been identified as high seismic risk, a plan to prioritize remediation work is essential.

Clive Mason, Architect AIBC, LEED AP
Director of Facilities and Planning

City of Richmond

Minutes

Public Works & Transportation Committee

Date:	Wednesday, June 18, 2014
Place:	Anderson Room Richmond City Hall
Present:	Councillor Linda Barnes, Chair Councillor Derek Dang Councillor Linda McPhail Councillor Harold Steves Mayor Malcolm Brodie
Absent:	Councillor Chak Au
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 & Transportation Committee held on Thursday, May 22, 2014, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

Wednesday, July 23, 2014, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING & DEVELOPMENT DEPARTMENT

1. **GEORGE MASSEY TUNNEL REPLACEMENT – STATUS UPDATE AND PROPOSED PROJECT OBJECTIVES**
(File Ref. No. 01-0150-20-THIG1/2014) (REDMS No. 4228713)

In reply to queries from Committee, Donna Chan, Manager, Transportation Planning advised that (i) the Ministry of Transportation and Infrastructure (MOTI) opened a project office in Richmond, which includes an area where members of the public may obtain additional information regarding the Project, and (ii) kiss-and-ride is another term for a drop-off zone adjacent to a transit hub.

Discussion ensued and it was suggested that the proposed recommendation and staff report also be forwarded to Richmond Members of the Legislative Assembly (MLAs).

In reply to queries from Committee, Victor Wei, Director, Transportation, advised that staff have had ongoing discussions with business stakeholders and the Richmond Chamber of Commerce regarding concerns related to the Project; therefore, at this time, staff do not believe there is a need for a dedicated advisory committee.

Ms. Chan commented on data provided by the MOTI, noting that staff are awaiting a detail breakdown of the statistics. Also, she advised that the MOTI utilized sophisticated Bluetooth technology to collect this data, and noted that personal information was not collected as part of this research.

Discussion ensued regarding how effective the proposed new bridge will be at addressing traffic flow concerns; it was noted that the Project must address traffic congestion along the entire corridor and simply not shift congestion from one area to another.

Mr. Wei commented on the preliminary concept of the proposed new bridge and advised that (i) the MOTI is considering an 8 to ten lane bridge, with outside lanes skewing off at existing and potentially additional future interchanges along the corridor.

The Chair commented on her visit to the project office, noting that the project scope is solely for a new bridge as no decisions have been made in regards to additional interchanges, and road improvement beyond those required to accommodate the proposed new bridge. Also, the Chair requested that statistical information be forwarded to all members of Council as it becomes available.

In reply to queries from the Chair, Mr. Wei advised that the iconic bridge objective encompasses two notions: (i) to design a bridge that acts as a visual gateway to Richmond, and (ii) to celebrate all modal uses, including sustainable transportation.

It was moved and seconded

(1) That the proposed project objectives for the replacement of the George Massey Tunnel as described in the staff report dated May 23, 2014 from the Director, Transportation be endorsed and forwarded to the Ministry of Transportation & Infrastructure for its consideration in the development of a preferred project scope of improvements; and

(2) That the above Council resolution and a copy of the above report be forwarded to Richmond MLAs, TransLink, the Corporation of Delta and the Cities of Surrey, White Rock and Vancouver for information.

CARRIED
Opposed: Cllr. Steves

2. **CAR2GO - CITY CENTRE CAR-SHARE PILOT PROGRAM**
(File Ref. No. 10-6455-00) (REDMS No. 4234234)

Katie Ferland, Business Development Liaison, accompanied by Sonali Hingorani, Transportation Engineer, provided background information.

In reply to queries from Committee, Ms. Ferland provided the following information:

- Car2Go is the last car share company in the Metro Vancouver region to enter Richmond's market;
- when selecting its next service location, Car2Go considers various factors such as population density, accessibility to transit and so forth;
- Car2Go pays for all parking fees on behalf of their users; and
- Car2Go's marketing program will focus on details such as where to obtain vehicles, and where to park vehicles.

Ms. Ferland spoke of Car2Go's program, noting that Car2Go users receive membership cards with embedded chips. These cards allow members to access any Car2Go vehicle by tapping the vehicle. Also, she commented on costs, fuel use, and a mobile application that enables members to reserve vehicles.

It was moved and seconded
That:

(1) the business terms (the "Business Terms") specified in Attachment 2 of the staff report titled, Car2Go – City Centre Car-Share Pilot Program, dated May 28, 2014, from the Director, Transportation, for the purpose of entering into an Agreement between Car2Go Canada Ltd. and the City of Richmond for the use of public parking spaces on a one-year trial basis be approved;

(2) the Chief Administrative Officer and the General Manager, Planning and Development be authorized to execute an Agreement based on the Business Terms; and

(3) staff be directed to monitor the outcomes of the pilot program and report back to Council after one year of implementation.

CARRIED

ENGINEERING & PUBLIC WORKS DEPARTMENT

3. **2013 ANNUAL WATER QUALITY REPORT**
(File Ref. No. 10-6000-01) (REDMS No. 4227330)

It was moved and seconded
That the 2013 Annual Water Quality Report, dated May 27, 2014, from the Director, Public Works, be received for information.

The question on the motion was not called as the Chair commended staff for the work that they do to ensure that Richmond residents continually receive the best quality water.

In reply to queries from Committee, Bryan Shepherd, Manager, Water Services, advised that the 2013 Annual Water Quality report is available on the City website. Also, Mr. Shepherd noted that staff have been metering the tap water stations in order to collect data regarding their use.

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

4. **NATIONAL PUBLIC WORKS WEEK – UPDATE**
(File Ref. No. 10-6000-01) (REDMS No. 4240804)

In reply to a query from Committee, Tom Stewart, Director, Public Works, advised that staff have discussed the possibility of extending the hours of the Public Works Open House due to its success.

It was moved and seconded
That the staff report titled National Public Works Week – Update, dated May 27, 2014, from the Director, Public Works, be received for information.

CARRIED

5. **PROPOSED POLICY FOR MANAGEMENT OF WASTE AND RECYCLABLE MATERIALS FROM CITY FACILITIES DEMOLITION AND CONSTRUCTION ACTIVITIES**
(File Ref. No. 10-6370-00) (REDMS No. 4239937)

In reply to queries from Committee, Suzanne Bycraft, Manager, Fleet and Environmental Programs, advised that (i) if the proposed policy is approved, staff will partner with local builders on a trial basis to gather feedback on four single-family home projects, and (ii) staff will report back to Committee in fall 2014 with the findings of the trial and recommended next steps.

Discussion ensued regarding the recycled building materials market, and Ms. Bycraft noted that industry often follows demand created by the implementation of a new regulation.

It was moved and seconded
That a new policy respecting the Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities, as outlined in Attachment 1 to the staff report titled, Proposed Policy for Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities, dated June 5, 2014, from the Director, Public Works, be adopted.

CARRIED

6. **LETTER SUPPORTING CONTINUATION OF CLEAN ENERGY VEHICLES REBATE**
(File Ref. No.) (REDMS No. 4221373)

It was moved and seconded
That a letter supporting the continuation of the Clean Energy Vehicles for British Columbia be sent to the BC Minister of Energy and Mines and Responsible for Core Review under the Mayor's signature, with copies to Richmond MLAs, and Metro Vancouver members.

CARRIED

7. **MANAGER'S REPORT**

(i) Parks Division Update

Mr. Stewart updated Committee on a matter related to Legionnaires' disease and spoke of a lunch-and-learn session scheduled for staff.

(ii) Works on Wheels Tours

Robert Gonzalez, General Manager, Engineering and Public Works, provided background information and introduced Dielle Saldanha, Public Works Clerk, and Pratima Cheung, Engineer-In-Training.

Ms. Saldanha and Ms. Cheung then spoke of Works on Wheels, an interactive bus tour showcasing some of Richmond's Engineering and Public Works projects. The tours provided a behind-the-scenes look at projects like the Alexandra District Energy Utility, the Williams Road Drainage Pump Station, and Fire Hall No. 4.

Ms. Saldanha and Ms. Cheung commented on the success of the tours, highlighting that public feedback was overwhelmingly positive.

Ms. Saldanha and Ms. Cheung distributed information regarding Works on Wheels (attached to and forming part of these Minutes as Schedule 1) and in reply to queries from Committee, advised that feedback received indicates a strong desire for additional tours and for tours of other infrastructure projects.

ADJOURNMENT

It was moved and seconded
That the meeting adjourn (4:57 p.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works & Transportation Committee of the Council of the City of Richmond held on Wednesday, June 18, 2014.

Councillor Linda Barnes
Chair

Hanieh Berg
Committee Clerk

Schedule 1 to the Minutes of the Public Works and Transportation Committee meeting held on Wednesday, June 18, 2014.

Works on Wheels

CNCL - 89

Infrastructure Bus Tour & Harvest Power

Agenda

- Itinerary
- Resources
- Attendance
- Budget
- Overall Assessment of the Tour
- Suggestions for Future Tours
- Conclusion

Prezi

Itinerary

WOW: May 24th, 2014

- ADEU
- Firehall No. 4
- Williams Rd PS

Duration: 1.5 hrs

WOW: June 7th & 8th, 2014

- Works Yard
- ADEU
- Firehall No. 4
- Watermain Project
- West Richmond CC
- Williams Rd PS
- Recycling Depot

Duration: 2.5 hrs

May 24th, 2014 & June 7th, 2014

- Harvest Power Plant

Duration: 2 hrs

Prezi

CNCL - 92

Resources

- WOW Bus Tour Team
- Anthony Fu
- Shawn Dubnov
- Alen Postolka
- Mark Timmons
- Firefighter Pete
- Firefighter Star
- Farrell Spence

Prezi

Attendance

WOW Bus Tour
May 24th, 2014 - 11:15am
Full Bus!

May 24th, 2014 - 1:00pm
Bus **Overload**!

June 7th, 2014 - 11:15am
Bus **Overload**!

June 8th, 2014 - 11:15am
18/22 seats full.

Prezi

Attendance

Harvest Power Tour

May 24th, 2014 - 11:45am
16/21 seats

June 7th, 2014 - 1:30pm
16/21 seats

Prezi

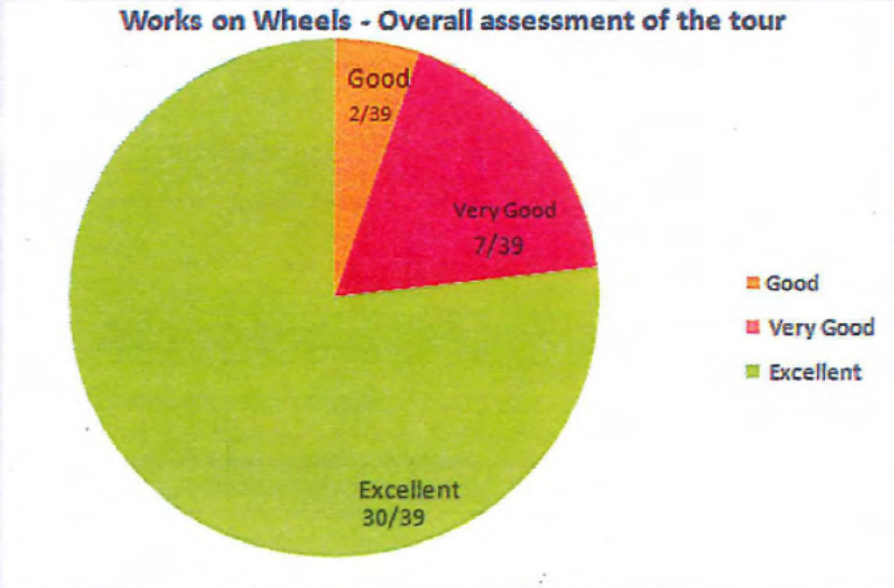
Budget

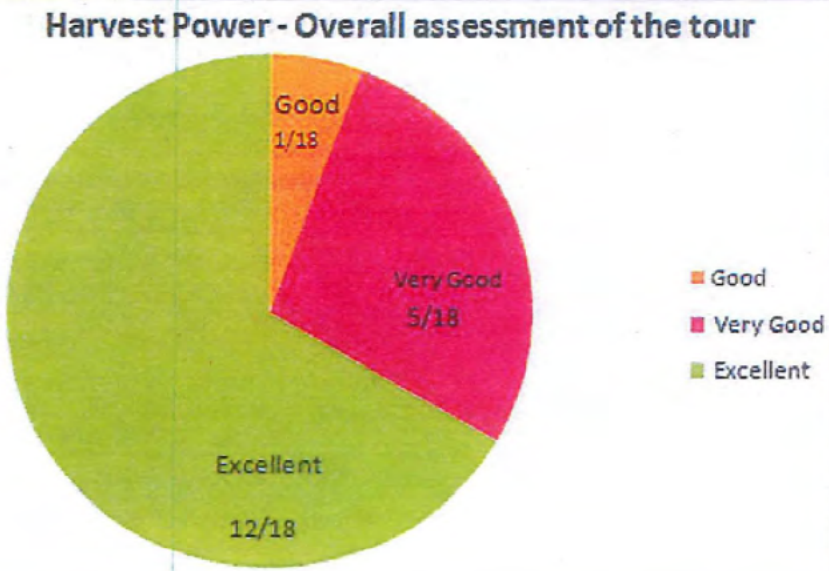
	Infrastructure Bus Tour (1.5 hr)	Infrastructure Bus Tour (2.5hrs)	Harvest Power Bus Tour (2 hrs)
Bus	$44.00	$44.00	$44.00
Bus Driver	$22.00	$38.50	$27.50
Water/Snacks	$13.54	$13.54	$13.54
Total	$79.54	$96.04	$85.04
Grand Total for All Tours	$525.00*		

*Does not include tour guide

Prezi

Overall Assessment of the Tour





CNCL - 96

Prezi

Suggestions for Future Tours

Re-target audience

Add New Sites

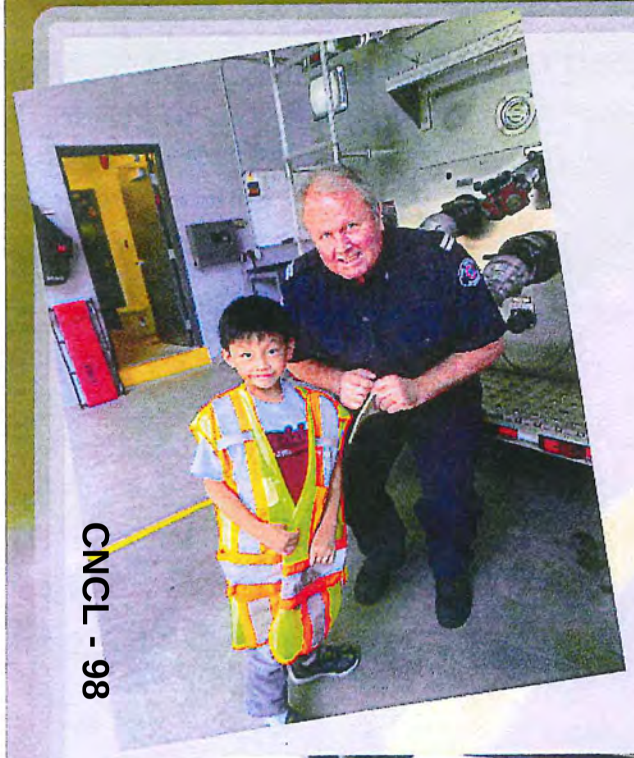
Improve Internal Communication

Pamphlets for Harvest Power Tour

Register for Doors Open early

Increase No. of Tours

Prezi



Conclusion

It was a SUCCESS!!

Cost of 6 tours: $525.00

Informative Tour Guides

Great Feedback

CNCL - 98

Prezi

"I really liked it. Amazing!"

"Very informative. Kids loved the prizes. Very fun!"

Thank you!

"Interesting tour with a very good explanation of the operation of the complex and by-products"

"Informative, educational, terrific. Very professional staff guiding the tour"

"Thanks so much for having these informative tours for the public."

City of Richmond

Minutes

Council/School Board Liaison Committee

Date:	Tuesday, June 10, 2014
Place:	Anderson Room Richmond City Hall
Present:	Councillor Linda Barnes, Chair Councillor Linda McPhail (entered at 9:26 a.m.) Trustee Donna Sargent Trustee Norm Goldstein
Also Present:	Trustee Grace Tsang
Call to Order:	The Chair called the meeting to order at 9:00 a.m.

AGENDA

It was moved and seconded
That the Council/School Board Liaison Committee agenda for the meeting of Tuesday, June 10, 2014, be adopted as circulated.

CARRIED

MINUTES

It was moved and seconded
That the minutes of the meeting of the Council/School Board Liaison Committee held on Wednesday, February 5, 2014, be adopted as circulated.

CARRIED

STANDING ITEMS

1. **JOINT SCHOOL DISTRICT / CITY MANAGEMENT COMMITTEE**
(COR – Dave Semple; RSD – Monica Pamer) (For Information)

Dave Semple, General Manager, Community Services, provided an overview of the last Joint School District / City Management Committee meeting, noting that there have been some issues with playground supervision; however, they have since been resolved.

It was moved and seconded
That the Joint School District / City Management Committee minutes be received for information.

CARRIED

BUSINESS ARISING

2. **MEMORANDUM DATED JANUARY 22, 2014 – RECENT SEISMIC STUDIES**
(COR – John Irving)

John Irving, Director, Engineering, provided background information, and noted that recent studies have revealed that there would be an increase in movement in the Georgia Basin, due to the underlying sedimentary soils. He advised that despite these findings, there are no structural concerns for Richmond. Also, Mr. Irving commented on non-seismically designed buildings, noting that most one and two-storey buildings would withstand an earthquake.

Discussion ensued regarding schools that may require seismic upgrades, and in reply to Committee comments, Clive Mason, Director of Facilities and Planning, Richmond School District (RSD), stated that several schools have been surveyed in order to determine their geotechnical conditions and advised that such information would be forwarded to Mr. Irving.

The Chair requested that City staff liaise with School District staff regarding seismic studies.

3. **FINE ARTS COMMITTEE**
(COR – Serena Lusk) (Verbal Update)

Serena Lusk, Senior Manager, Recreation and Sport Services, provided background information and clarified that, the reference to a Fine Arts Committee was merely a group of City staff meeting to discuss fine arts; therefore, there is no Fine Arts Committee.

NEW BUSINESS

The Chair advised that the order of the agenda would be varied to consider items with staff presentations first.

6. **MEMORANDUM DATED JUNE 4, 2014 – INSTALLATION OF NEW TRAFFIC CALMING SIGNAGE ON LOCAL ROADWAY**
(COR – Victor Wei)

7. **PEDESTRIAN ZONE SIGNS**
(For Discussion)

Victor Wei, Director, Transportation, provided background information and commented on feedback received from Maple Lane Elementary School area residents.

He noted that traffic calming signs have been successful in other parts of Canada and therefore, such signs have been posted on a trial basis on Tweedsmuir Avenue, across from Maple Lane Elementary School.

In reply to queries from the Committee regarding the durability of the signs and the length of the trial period, Mr. Wei noted that according to the supplier, the signs can withstand being hit by a motor vehicle at 80km/h. Also, he advised that the trial period will continue until summer break, at which point, the trial will be evaluated to determine its effectiveness.

The Chair requested that City staff follow-up with the School District regarding the possible expansion of the Traffic Calming Signs.

It was moved and seconded
That the memorandum dated June 4, 2014, titled Installation of New Traffic Calming Signage on Local Roadway be received for information.

CARRIED

Councillor McPhail entered the meeting (9:26 a.m.).

8. **RICHMOND'S ECOLOGICAL NETWORK MANAGEMENT STRATEGY**
(COR – Peter Russell)

The Chair advised that City staff are available to present Richmond's Ecological Network Management Strategy at a future School Board meeting.

Peter Russell, Senior Manager, Sustainability and District Energy, provided background information and advised that the Strategy identifies four goals: (i) to manage and enhance ecological assets, (ii) to strengthen the City's green infrastructure, (iii) to create, connect and protect diverse and healthy spaces; and (iv) to engage the community through stewardship and collaboration. Mr. Russell then advised that the next step in the Strategy is to engage the public, particularly farmers.

Discussion ensued and it was noted that the Strategy integrates the Official Community Plan, focusing on integrating private and public lands.

Trustee Sargent requested that Mr. Russell present the Strategy at an upcoming School Board meeting.

Mr. Russell distributed a memorandum, dated May 20, 2014, titled "Richmond Earth Day Youth Summit 2014" (attached to and forming part of these Minutes as Schedule 1), for information.

12. **BATH SLOUGH REVITALIZATION INITIATIVE**
(For Information)

The Chair noted that the Bath Slough Revitalization Initiative report is for information.

Mr. Russell distributed copies of the Bath Slough Open House notice (attached to and forming part of these Minutes as Schedule 2), and noted that the Open House is scheduled for Wednesday, June 11, 2014 at Cambie Community Centre to discuss further options for the area.

14. **RICHMOND ENERGY CHALLENGE AND THE CLIMATE SMART PROGRAM**
(For Information)

The Chair noted that the Richmond Energy Challenge and the Climate Smart Program is for information.

9. **OPTIONS FOR THE 2014 GENERAL LOCAL ELECTION**
(COR – David Weber)

David Weber, Director, City Clerk's Office, provided background information and noted the following regarding the 2014 General Local Election: (i) divisional voting has been re-implemented; and (ii) candidate profiles, voter guides, advanced voting opportunities and an increase in social media advertising will be utilized.

In response to queries from Committee regarding the difference in voter turn-out between the 2008 and 2011 General Local Election, Mr. Weber noted that there was a modest increase, which could be attributed to an increase in population.

The Committee requested that Ted Townsend, Senior Manager, Corporate Communications, attend the next Council / School Board Liaison Committee meeting to discuss the 2014 General Local Election social media plan and that Mr. Weber also attend to discuss ways to increase voter turn-out.

It was moved and seconded

That the staff report titled, Options for the 2014 General Local Election be received for information; and that the 2014 General Local Election be discussed further at the next Council / School Board Liaison Committee meeting.

CARRIED

10. **GARDEN CITY LANDS LEGACY LANDSCAPE PLAN**
(COR – Mike Redpath)

Mike Redpath, Senior Manager, Parks, provided background information and highlighted that the Garden City Lands Legacy Landscape Plan was endorsed by Council on June 9, 2014. Mr. Redpath also discussed how the City will be studying the hydrology in and around the bog.

Discussion ensued regarding the potential for Richmond students to aid in the planning and development in and around the bog.

The Chair requested City staff liaise with the School District to examine opportunities for students to be involved in the Garden City Lands Legacy Landscape Plan as it moves forward.

It was moved and seconded

That the Garden City Lands Legacy Landscape Plan be received for information.

CARRIED

13. **MULTI-MATERIAL BC PROGRAM IMPLEMENTATION**
(For Information)

Suzanne Bycraft, Manager, Fleet and Environmental Programs, provided background information, and noted that the most recent change to Richmond's recycling is the addition of the grey bins, for glass collection. Ms. Bycraft discussed costs associated with the new program, and advised that due to the initial start up costs of this Program, residents will not be refunded this year.

In reply to queries from Committee, Ms. Bycraft advised that the new recycling program is only for single-family and multi-family dwellings, and as such, there is no financial impact to the School District.

The Committee raised concern with regards to different recycling practices taught in schools versus at home, and it was noted that the School District is welcome to modify their recycling program to be consistent with that of the City's.

It was moved and seconded

That the Multi-Material BC Program Implementation be received for information.

CARRIED

15. **UNESCO WORLD HERITAGE DESIGNATION FOR STEVESTON**
(For Information)

The Chair noted that the UNESCO World Heritage Designation for Steveston is for information. The Chair also commented on Mystic Seaport, Connecticut, noting that a best practices visit had been made to investigate for Steveston village.

4. **VANCOUVER COASTAL HEALTH – ELECTRONIC CIGARETTES**
(RSD – Monica Pamer)

Monica Pamer, Superintendent of Schools, RSD, provided background information and advised that School District Policy 402.11 prevents students from using electronic cigarettes on school property.

In reply to a query regarding the use of electronic cigarettes on City property, Ms. Lusk advised that the Public Health Protection Bylaw No. 6989 addresses such concerns.

The Chair directed City staff to ensure that the City's signage and bylaws be updated, if required, to address electronic cigarettes.

It was moved and seconded

That the letter from the Vancouver Coastal Health on Electronic Cigarettes, dated February 6, 2014, be received for information.

CARRIED

5. **LETTER DATED APRIL 22, 2014 – THE MINISTRY OF EDUCATION**
(RSD – Mark De Mello)

Mark De Mello, Secretary Treasurer, RSD, provided background information on the School District's letter to the Ministry of Education regarding the requirement for Districts to share up to 50% of major capital costs. Mr. De Mello noted that this requirement is concerning as School Districts have no way of raising funds.

It was moved and seconded

That the letter, dated April 22, 2014, from the Ministry of Education, be received for information.

CARRIED

11. **SISTER CITY ADVISORY COMMITTEE 2013 YEAR IN REVIEW**
(For Information)

Discussion ensued on the need for effective communication among the Sister City Advisory Committee, the City and the School District, regarding visits from Sister City schools.

The Chair requested that Amarjeet Rattan, Director, Intergovernmental Relations and Protocol Unit, communicate protocols with all representatives of the Sister City Advisory Committee.

The Chair referenced correspondence received from the *Association of School Transportation Services of British Columbia* (attached to and forming part of these Minutes as Schedule 3), and noted that the Association has scheduled an event called, "2014 Mass Casualty Incident" on June 16, 2014.

NEXT COMMITTEE MEETING DATE

The Chair advised that the next Council/School Board Liaison Committee is tentatively scheduled for the end of September 2014 or the beginning of October 2014.

ADJOURNMENT

It was moved and seconded
That the meeting adjourn (10:40 a.m.).

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the City of Richmond Council/School Board Liaison Committee held on Tuesday, June 10, 2014.

Councillor Linda Barnes
Chair

Amelia White
Acting Assistant Committee Clerk

Schedule 1 to the Minutes of the Council / School Board Liaison Committee Meeting held on Tuesday, June 10, 2014.

City of Richmond

Memorandum
Engineering and Public Works
Sustainability

To:	Mayor and Councillors	**Date:**	May 20, 2014
From:	Lesley Douglas, B.Sc., R.P.Bio. Manager, Environmental Sustainability	**File:**	10-6125-07-01/2014-Vol 01
Re:	**Richmond Earth Day Youth Summit 2014**		

The City hosted the 3rd annual Richmond Earth Day Youth (REaDY) Summit at R.A. McMath School on April, 26th, 2014. The resounding success of this year's event includes attendance of approximately 575 delegates of all ages to hear Dr. Suzuki's message and participate in one of the 15 tailored workshops. 2014 REaDY Summit highlights include:

- Attendance from 40 different Richmond schools (159 high school students; 150 elementary students; 61 teachers and 16 school district staff members)
- More than 86 families, 16 organizations, 58 adults and 16 university students
- Residents attended from 18 municipalities, with the majority of participants from Richmond (approximately 80 per cent); 20 per cent participants from other Metro Vancouver municipalities; and a small number of participants (14) from municipalities beyond Metro Vancouver
- Weblink of Dr. Suzuki's speech to two remote sites: Kwantlen University's Surrey Campus and the Fraser River Discovery Centre in New Westminster
- More than 88 student volunteers
- Opportunity for Summit attendees to recycle light bulbs and old electronics with *LightRecycle* and *Electro-Cycle*
- A diversion of 97.5 per cent of waste generated by the Summit due to student efforts
- 13 per cent of attendees using their bicycle, 21 per cent carpooling and 9 per cent using transit to get to the Summit

While the promotion campaign included a very active social media component, peaking at 2371 views on Twitter, more than 50 per cent of registrants reported that they learned about the event through word of mouth, demonstrating that the event was actively engaging the community.

Our local sponsors, Harvest Power, VanCity and Nature's Path Foods were pleased by the organization of the event and indicated that they were looking forward to future events.

This year's event showcased how partners, sponsors and the community can come together to celebrate our past, our future, and our deep-rooted connection to our island and estuary environment on the Fraser River. The 2014 REaDY Summit embraced the full circle of its theme: We are the Fraser, We Are One!

Lesley Douglas, B.Sc., R.P.Bio.
Manager, Environmental Sustainability
604-247-4672

LD:jep

pc: Suzanne Bycraft, Manager, Fleet & Environmental Programs
Peter Russell, Senior Manager, Sustainability and District Energy

Bath Slough Open House

Did you know there's a hidden stream in your neighbourhood? Let's have a conversation about Bath Slough!

Wednesday, June 11, 2014
Cambie Community Centre
Main Floor Board Room

Three sessions:
3:00-4:00 pm (Youth focused)
5:30-6:30 pm
7:00-8:00 pm

The City of Richmond wants you to give us your thoughts on Bath Slough – a watercourse and trail network in the Bridgeport neighbourhood. Please join us at this drop-in session and let us know how you use the slough – and how you would like to.

The City is about to launch the Bath Slough Revitalization Initiative to enhance this valuable community amenity and we need your input. Come write, map and talk about your experiences with Bath Slough, even if you've never heard of it!

Refreshments will be available and City staff will be on hand to hear from you.

Live green RICHMOND

4246679

Richmond

Association of School Transportation Services of British Columbia

2014 Mass Casualty Incident

Final Planning Conference

Objectives of the conference will be:

- Conduct a comprehensive final review off all draft exercise documents (i.e. Master Scenario Events List, Ex Plan, Participant Handbook, Communications Plan).
- Finalize the full-scale exercise organization and staffing needs.
- Resolve any open exercise planning issues and verify logistical needs/supplies.

We hope to see you there and encourage you to forward this flyer to other professionals in your area who wish to collaborate with other emergency responders in planning for a crisis before it occurs!

CRISIS REALITY TRAINING

What: Final Planning Conference for the mass casualty exercise on a school bus

Where: Sheraton Vancouver Airport Hotel
7551 Westminster HWY
Richmond, B.C.
When: June 16th, 2014
10:00 a.m. – 12:00 p.m.
Cedarbridge room

RSVP and questions:
Jesus Villahermosa
(253) 381-0505 (U.S.A.)
jesus@crisisrealitytraining.com

Your participation is greatly appreciated and we look forward to seeing you there!

Crisis Reality Training
P.O. Box 64381
University Place, WA
98464-0381
Jesus@crisisrealitytraining.com

www.crisisrealitytraining.com

1+(253) 381-0505 (U.S.A)

Participants

Provincial

*Association of School Transportation Services of British Columbia
*British Columbia Ambulance
*Royal Canadian Mounted Police
*Health Emergency Management of British Columbia
* Commercial Vehicle Safety and Enforcement British Columbia

Municipalities/Cities

*Vancouver Fire and Rescue
*Richmond Fire and Rescue
*Langley Fire and Rescue
*West Vancouver Police Department

Boards of Education

*School District #22 - Vernon
*School District #83 – North Okanagan/Shuswap
*School District #73 – Kamloops/Thomas
*School District #38 - Richmond
*Vancouver School Board
*Southpointe Academy

Exercise Points of Contact:

- Robyn Stephenson
  ASTSBC President
  250-549-6083
- Dave Mell
  ASTSBC Vice President
  250-372-5853
- Frank Marasco
  ASTSBC Past President
  250-833-7530
- Jesus Villahermosa,
  Crisis Reality Training
  253-381-0505 (U.S.A.)

Association of School Transportation Services of British Columbia

Participant Handbook

DRAFT

Full-Scale Mass Casualty Incident Exercise

July 09, 2014

Objectives

To assist ASTSBC in the development of a response plan to an MCI school bus incident in partnership with local emergency responders.

To validate ASTSBC accountability system for students involved in an incident.

To assess ASTSBC ability to provide timely communication and reunification to parents of students involved in an incident.

Scenario

Police are on scene of a school bus crash with at least 10 students on board. The crash was reported about 8:45 a.m. near the intersection of Garden City Road and Westminster Hwy. The bus was on its side when police were called to the scene. Police dispatch reported a number of injuries, though the extent are unknown at this time. Fire and Ambulance have been dispatched. Law Enforcement is diverting traffic around the area.

Schedule of Events

07:30 – Participant Sign-In

08:30 – Participant Briefing

08:45 – Safety Briefing

08:55 – Start of Exercise

11:00 – End of Exercise

11:00 – Hotwash

11:30 – Participants depart back to hotel

City of Richmond

Report to Committee

To:	Finance Committee	**Date:**	May 13, 2014
From:	Andrew Nazareth General Manager, Finance and Corporate Services	**File:**	
Re:	**2013 Annual Report and 2013 Annual Report - Highlights**		

Staff Recommendation

That the reports titled, "City of Richmond 2013 Annual Report" and the "2013 Annual Report – Highlights" be approved.

Andrew Nazareth
General Manager, Finance and Corporate Services Department
(4095)

Att.

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

Staff Report

Origin

Pursuant to Section 98 of the Community Charter, before June 30th, in each year, a Council must

a) Prepare an annual report

b) Make the report available for public inspection

c) Make the report available for public inspection at a Council or other public meeting

Analysis

The City of Richmond's annual report formally presents the audited financial statements and other relevant financial, economic and demographic indicators to the public. In addition, the report highlights many of the City's significant achievements from 2013, in both delivery of basic civic services and in support of Council's Term Goals and objectives.

Staff have followed the award-winning format from past years in which two versions of the report are prepared. The first version is the comprehensive 2013 Annual Report, which meets all legislative requirements. This version will be publicly available through the City's website and printed only on an exception basis. The comprehensive version includes the City's audited consolidated financial statements; the City's corporate objectives and success indicators, as identified through Council's Term Goals and objectives; and a listing of permissive exemptions as required under the Community Charter for British Columbia's local governments. In addition to the statutorily required information, the comprehensive version provides information on City milestones from 2013, including awards and achievements, as well as relevant statistical data.

The second version is the popular financial report, or titled 2013 Annual Report – Highlights. It has been prepared to inform the general public about the City of Richmond, its services, highlights from 2013 and the City's financial condition. Copies of this simplified version will be mailed out and made available for the general public in hard copy at Richmond City Hall, Front of House and on the City's website.

This year, the Annual Report team will also be working with Information Technology to produce a more user-friendly and enhanced online version of the Annual Report. This further supports Council's Term Goal of better informing the public about the City's priorities, activities and achievements.

Financial Impact

None.

Conclusion

The City of Richmond 2013 Annual Report and the 2013 Annual Report – Highlights satisfy Community Charter requirements for financial reporting and provide important tools in ensuring public transparency and accountability for the management of City finances. The reports also provide useful information on the City's achievements during the 2013 fiscal year.

Jerry Chong
Director, Finance
(4064)

Ted Townsend
Senior Manager, Corporate Communications
(4399)

City of Richmond

British Columbia, Canada

2013 Annual Report

For the year ended December 31, 2013

GP - 115

Richmond

Government Finance Officers Association

Canadian Award for Financial Reporting

Presented to

City of Richmond

British Columbia

For its Annual
Financial Report
for the Year Ended

December 31, 2012

Executive Director/CEO

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Canadian Award for Financial Reporting to the City of Richmond for its annual financial report for the fiscal year ended December 31, 2012. The Canadian Award for Financial Reporting program was established to encourage municipal governments throughout Canada to publish high quality financial reports and to provide peer recognition and technical guidance for officials preparing these reports.

In order to be awarded a Canadian Award for Financial Reporting, a government unit must publish an easily readable and efficiently organized annual financial report, whose contents conform to the program standards. Such reports should go beyond the minimum requirements of generally accepted accounting principles and demonstrate an effort to clearly communicate the municipal government's financial picture, enhance an understanding of financial reporting by municipal governments, and address user needs.

A Canadian Award for Financial Reporting is valid for a period of one year only. We believe our current report continues to conform to the Canadian Award for Financial Reporting program requirements, and we are submitting it to the GFOA.

City of Richmond
British Columbia, Canada

2013 Annual Report

For the year ended December 31, 2013

Our vision is to be the most appealing, livable and well-managed community in Canada

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Cover photo: Richmond City Centre as viewed from the Canada Line's Aberdeen station.
Photo by Chung Chow.

This report was prepared by the City of Richmond Finance and Corporate Services Department and Corporate Communications Office. Design, layout and production was done by the City of Richmond Production Centre.

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Contents printed on Canadian made, 100% recycled stock, using environmentally friendly toners.

Message from the Mayor

The City of Richmond enjoyed another year of positive growth in 2013. With our population now over 200,000 and billions of dollars of investment in new development and public infrastructure planned for our community in the coming decade, Council has placed a strong focus on planning and building for our future.

In November, Council approved a comprehensive $124.1 million major capital program which will include much needed replacements for our major aquatic centre; a new, expanded older adult centre; completion of our new City Centre Community Centre and replacement of the City's No. 1 Fire Hall. These new facilities will replace aging and outdated buildings that no longer meet the growing and evolving needs of our community. All these new projects will be completed by 2017 and the construction costs will not impact property taxes.

Council was also pleased to conclude an innovative agreement with the province that will see a new joint fire hall/ambulance facility built in North Richmond, the first combined facility of this type in a major urban centre in BC.

The City also launched the master planning process for the Garden City Lands, a 136.5-acre parcel of open space on the edge of the City Centre, which will be entirely for community use. It is an extraordinary opportunity for any community to develop a plan for such a large area in a central location with all of it destined to remain in the public realm. Thousands of our residents have already participated in the planning process and we look forward to the Garden City Lands becoming a treasured public resource in the years to come.

As our City grows, our community social needs are also becoming greater. In 2013, Council approved a 10-year Social Development Strategy, one of the first such comprehensive community plans in the province. This plan identifies civic social development priorities and actions for the next decade. We've already made great strides towards implementing this plan. In December, Council committed more than $30 million to support two major affordable housing projects, which will result in more than 400 units of new affordable housing for seniors and low income/at risk residents.

As Council enters the final year of our current term in 2014, we will continue to work closely with staff, community groups and other partners to achieve our Council Term Goals, ensuring that Richmond residents and business will remain being well-served by the City today and in the future. I invite you to contact the Mayor's Office at any time to discuss or comment on any of the information contained in this Annual Report.

Malcolm Brodie
Mayor, City of Richmond

Richmond City Council

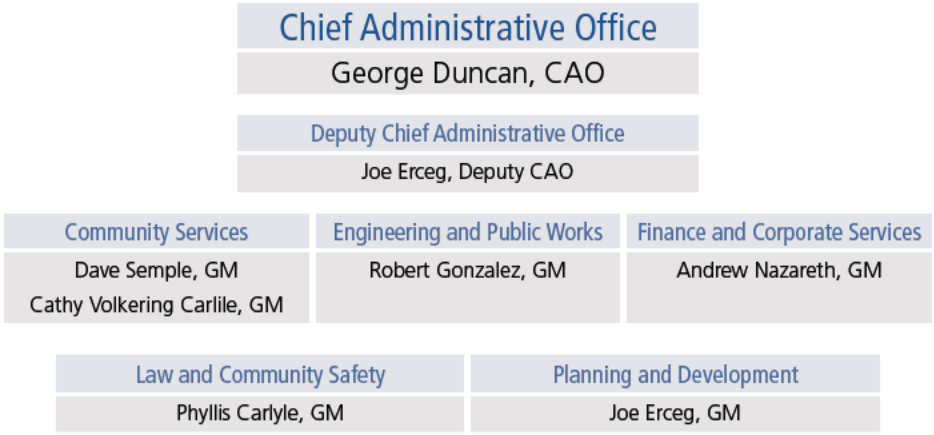
Front row, left to right:

Councillor Linda Barnes, Councillor Bill McNulty, Mayor Malcolm Brodie, Councillor Linda McPhail, Councillor Harold Steves

Back row, left to right:

Captain Dave Cullen, Richmond Fire-Rescue (retired), Councillor Chak Au, Councillor Derek Dang, Councillor Evelina Halsey-Brandt, Councillor Ken Johnston, Constable Melissa Lui, Richmond RCMP

City of Richmond organizational chart



Civic officials as at December 31, 2013

Chief Administrative Officer ..... George Duncan
Deputy Chief Administrative Officer ..... Joe Erceg
General Manager, Community Services ..... Cathy Volkering Carlile
General Manager, Community Services ..... Dave Semple
General Manager, Engineering and Public Works ..... Robert Gonzalez
General Manager, Finance and Corporate Services ..... Andrew Nazareth
General Manager, Law and Community Safety ..... Phyllis Carlyle
General Manager, Planning and Development ..... Joe Erceg
Director, City Clerk's Office ..... David Weber
City Solicitor ..... Doug Long
Chief, Richmond Fire-Rescue ..... John McGowan
Officer in Charge, Royal Canadian Mounted Police ..... Rendall Nessett
Chief Operating Officer, Richmond Olympic Oval ..... John Mills
Chief Librarian, Richmond Public Library ..... Greg Buss
Chief Executive Officer, Lulu Island Energy Corporation ..... Robert Gonzalez

Banker

Scotiabank

Auditors

KPMG

Message from the Chief Administrative Officer

I am delighted to present the City of Richmond's 2013 Annual Report, chronicling another year of innovation, progress and achievement and our continued strong financial position.

Our taxpayers enjoy the second lowest taxes among the largest cities in our region. Thanks to the City's Long Term Financial Management Strategy, which caps annual tax increases, the growth in our property taxes has also been the second lowest in the region over the past five years.

Our financial health has ensured that we have been able to maintain and build upon Richmond's reputation for outstanding quality of life and exceptional municipal services and amenities, while focusing on delivery of Council's Term Goals. Our prudent financial planning, which has reduced debt and built our reserves, allowed Council to achieve one of its major goals by approving a major $124.1 million capital building program for critically-needed new facilities, without having property taxes impacted by the construction costs.

Sustainability, another key Council Term Goal, has become a major focus for our organization. A highlight of our sustainability initiatives is our innovative district energy program. 2013 marked the first year of operation for the City's first district energy utility. By year's end, the Alexandra District Energy Utility (ADEU) was supplying heating and cooling to more than 600 new homes. When fully operational, the ADEU is projected to reduce greenhouse gas emissions by 6,000 tonnes annually. The City received both provincial and national awards in 2013 for the ADEU for its innovative solutions and commitment to sustainability. Richmond is aggressively pursuing other district energy projects and has formed a new municipal corporation to act as the operating entity for an anticipated expanding array of utility projects.

The City's other municipal corporation, the Richmond Olympic Oval Corporation, also continues to be hugely successful. The Oval Corporation again reported a profit for its latest fiscal year. This return on investment virtually offsets the City's operating contribution to the corporation, ensuring the long-term viability and success of this tremendous community asset. In addition, the Richmond Olympic Oval has continued to exceed all of its operational targets attracting more than 700,000 visits annually for its diverse array of programs, amenities and events.

Our organization remains committed to continuous improvement. While we are proud of the achievements highlighted in the Annual Report for 2013, they will now become a benchmark as we continue to work toward our vision for Richmond to be the most appealing, livable and well-managed community in Canada.

George Duncan
Chief Administrative Officer

Alexandra District Energy Utility

2013 Awards

The awards and recognition received by the City form an important part of our annual benchmarking of our achievements. In 2013, the City again received a number of awards for innovation and excellence.

- Richmond's success in creating a positive economic development climate was recognized for the second consecutive year by fDi (Foreign Direct Investment) magazine. Among over 400 North American cities rated, Richmond was ranked as a Top 10 Small City of the Future (third), as well as a Top 10 Small City in the Business Friendliness and Foreign Direct Investment Strategy categories.
- The City's development of the Alexandra District Energy Utility won two awards for innovation in both engineering and public works. Canadian Consulting Engineer magazine and the Association of Consulting Engineering Companies–Canada bestowed the ADEU with the Award of Excellence. This award is the most prestigious recognition in Canadian engineering and is given to projects that exhibit a high quality of engineering, imagination and innovation. The ADEU was also named Project of the Year by the Public Works Association of BC. This award is given to a municipality that constructs a major and complex public works or utilities project that meets specific criteria including innovative design with project benefits for the community and the environment.
- Richmond again won awards from the Government Financial Officers Association of North America for our 2012 Annual Report, marking a decade of excellence in financial reporting. Richmond received the Canadian Award for Financial Reporting for the eleventh consecutive year. The City also received the Association's Award for Outstanding Achievement in Popular Annual Financial Reporting for the fourth year in a row.

Council Term Goals and Objectives: 2011 to 2014

The Community Charter requires that all BC municipalities include a statement in the Annual Report of their objectives for the current and future years, along with measures to track success towards these objectives.

The City of Richmond's objectives and success indicators are expressed through the Council Term Goals for 2011–2014. At the beginning of each new term of Council, a term goal setting process is undertaken to help Council fulfil its governance role and achieve a successful term of office. This process is an integral part of City operations, helping to ensure the effective use of public resources by providing clear direction and guidance for City work programs. These goals are set based on an extensive review of issues, opportunities and trends affecting City business, and provide a sound framework for evaluating and monitoring the organization's progress towards achieving its vision "to be the most appealing, livable and well-managed community in Canada."

1. Community Safety

To ensure Richmond remains a safe and desirable community to live, work and play in, through the delivery of effective public safety services that are targeted to the City's specific needs and priorities.

2013 Achievement

The City and BC Emergency Health Services reached agreement to build a joint fire hall/ ambulance station in North Richmond. To open in 2016, it will be the first combined facility of this type in a major BC urban centre.

2. Community Social Services

To develop and implement an updated social services strategy that clearly articulates and communicates the City's roles, priorities and limitations with respect to social services issues and needs.

2013 Achievement

Council approved a 10-year Social Development Strategy. One of the first of its kind in BC, this comprehensive strategy identifies civic social development priorities and actions for the next decade.

2013 Achievement

The City guaranteed more than $30 million in land and funding to support two major new affordable housing projects. Together, these projects will see the creation of more than 400 new units for seniors and low income/at-risk residents.

3. Economic Development

To enhance the City's economic well-being and financial sustainability through the development and implementation of strategies and initiatives that lead to long-term business retention, expansion and attraction by clearly defining the businesses and industries we want to attract and retain; placing a stronger focus on tourism and Asia Pacific Gateway business development opportunities; and incorporating a broad business community engagement model.

2013 Achievement

The City's Sport Hosting Program helped secure more than 30 sports events for Richmond in 2013. These events generated more than 23,000 hotel room nights for Richmond plus millions of dollars in economic spinoffs.

4. Facility Development

To ensure that quality public facilities and amenities in Richmond keep pace with the rate of growth, the City is implementing an updated comprehensive Facility Development Plan. This plan includes an analysis of existing facilities, the identification of required new facilities and the recommended timing, financial strategies and public process for implementing the plan.

2013 Achievement

Council approved a new $124.1 million major facilities building program. The program will include construction of new aquatic and older adult centres and a new No. 1 Fire Hall to replace the aging and outdated facilities; and completion of the new City Centre Community Centre.

2013 Achievement

The new Tram Barn was opened at Steveston Park. The facility houses the historic Interurban Tram and has become a popular attraction for residents and visitors.

5. Financial Management

To develop and implement effective and innovative financial policies and strategies that help the City to successfully manage the challenges of tough economic times, while taking advantage of financial opportunities, and balance current and long-term financial needs.

2013 Achievement

The City retired $18.6 million of debt, initially incurred in the early 1990s to fund construction of the No. 2 Road Bridge and sewer works.

6. Intergovernmental Relations

To strengthen relationships with other levels of government and government agencies to ensure City needs and priorities are well represented, understood and proactively advanced.

2013 Achievement

A dredging program was completed in the Steveston Channel, improving movement of fishing industry and other marine traffic through Richmond's key small crafts harbour. This was accomplished through an innovative $10 million partnership between the City, Port Metro Vancouver and senior governments.

7. Managing Growth and Development

To ensure effective growth management for the City, including the adequate provision of facility, service and amenity requirements associated with growth.

2013 Achievement

An extensive master planning process for the Garden City Lands was launched. This plan will determine the future community use for this valuable 136.5-acre parcel on the edge of Richmond's City Centre.

8. Sustainability

To demonstrate leadership in sustainability through continued implementation of the City's Sustainability Framework.

2013 Achievement

The City's new Alexandra District Energy Utility (ADEU) successfully completed its first full year of operation. Working with the private sector, over 600 units are now connected to the system, leading to the reduction of greenhouse gas emissions by more than 330 tonnes to date.

2013 Achievement

Richmond introduced new Green Cart and Large Item Pickup Programs for single-family homes and 11,000 townhomes. This improved convenience for residents resulted in an increase in organics recycling by more than 4,000 tonnes in 2013.

9. Arts and Culture

To continue to support the development of a thriving, resilient and diverse cultural sector and related initiatives in creating a vibrant healthy and sustainable City.

2013 Achievement

The tenth annual Richmond Maritime Festival attracted 40,000 visitors to the Britannia Heritage Shipyards National Historic Site. During the Festival, a new Guinness World Record was set when 180 participants sang in sequence the nursery rhyme *Row, Row, Row Your Boat.*

10. Community Wellness

To continue to collaborate with community organizations and agencies to optimize resources in the implementation of the City's adopted Wellness Strategy.

2013 Achievement

The Richmond Olympic Oval marked its fifth anniversary in 2013. A major asset in promoting community wellness through active lifestyles, the Oval hosted more than 700,000 visits in 2013 and recorded 23,000 sport and fitness program registrations.

11. Municipal Infrastructure Improvement

To continue to invest in the City's infrastructure networks and systems in a manner that meets community needs and responds to the issues of aging components of the system, growth related capacity issues and the requirements due to changing climate and environmental impacts.

2013 Achievement

Phase 1 of a new Dike Master Plan, which includes Steveston and the West Dike, was endorsed in 2013. Implementation of this innovative long-term plan will ensure Richmond remains safe from flooding and addresses the long-term impacts of rising sea levels.

12. Waterfront Enhancement

To place greater emphasis on protecting and enhancing the City's waterfront while successfully integrating a balance between urban development, public access and events, and a healthy river environment.

2013 Achievement

The newly-restored Seine Net Loft at Britannia Heritage Shipyards National Historic Site was officially opened in 2013. The new facility provides a historic and versatile new amenity space for programs and events in a beautiful waterfront setting.

13. A Well-Informed Public

To ensure a well-informed public regarding Council priorities, activities and achievements.

2013 Achievement

City Council extended funding of the popular Let's Talk Richmond online discussion tool. This forum has allowed thousands of residents to conveniently participate in various public consultations on subjects ranging from the Official Community Plan to plans for the Garden City Lands.

Additional information on the success indicators in support of these objectives can be found at:

http://www.richmond.ca/cityhall/council/about/goals.htm

Report from the General Manager, Finance and Corporate Services

I am pleased to submit the City of Richmond's consolidated financial statements for the year ended December 31, 2013 pursuant to Section 167 of the Community Charter. The financial statements reflect a consolidation of the financial position and operating results for the City of Richmond, Lulu Island Energy Company, Richmond Olympic Oval Corporation and the Richmond Public Library. The Lulu Island Energy Company was incorporated on August 19, 2013 and is a municipal corporation wholly-owned by the City of Richmond. The primary business of the new corporation is to manage and operate district energy utilities.

The external auditors, KPMG LLP, conducted an independent examination and have expressed their opinion that the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the City of Richmond as at December 31, 2013 in accordance with Canadian public sector accounting standards.

The City continued to strengthen its financial condition and position in 2013; the City's net worth reached $2.4B (2012: $2.3B) and cash and investments increased to $754.4M (2012: $640.6M). Net financial assets increased to $549.0M (2012: $469.2M), while net debt outstanding was reduced to $1.1M (2012: $3.5M). Statutory reserves increased to $353.8M (2012: $295.0M). The City's 2013 operating revenues were $454.0M (2012: $400.3M) and operating expenses were $327.8M (2012: $317.4M).

In addition to prudently managing the City's finances, we are continuing to create a positive business climate in Richmond. The City's new business development program, including a dedicated business portal—www.businessinrichmond.ca—and a business outreach initiative, was launched to provide business with easy access to information, resources and City services. To provide flexibility to local business, Richmond participated in an innovative pilot program to streamline business licence requirements for mobile businesses which operate in multiple municipalities within the region. Increased economic activity in 2013 saw construction value of building permits exceeding $679M, the second highest on record while business licences increased to 13,371, all indicators of a thriving local economy.

Richmond's success in creating a positive economic environment was again recognized by fDi (Foreign Direct Investment) Magazine in 2013. Among over 400 North American cities rated, Richmond was ranked as a Top 10 Small City of the Future (3rd), as well as a Top 10 Small City in the Business Friendliness and Foreign Direct Investment Strategy categories.

Richmond's economy continues to thrive and the City's solid financial condition ensures that City Council is well positioned to address both current and emerging community needs.

Andrew Nazareth, BEc, CGA
General Manager, Finance and Corporate Services
May 13, 2014

City of Richmond audited financial statements

Year ended December 31, 2013

KPMG LLP
Chartered Accountants
Metrotower II
Suite 2400 - 4720 Kingsway
Burnaby BC V5H 4N2
Canada

Telephone (604) 527-3600
Fax (604) 527-3636
Internet www.kpmg.ca

INDEPENDENT AUDITORS' REPORT

To the Mayor and Council

We have audited the accompanying consolidated financial statements of the City of Richmond, which comprise the consolidated statement of financial position as at December 31, 2013 and the consolidated statements of operations, changes in net financial assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the City of Richmond as at December 31, 2013, and its consolidated results of operations, its changes in net consolidated financial assets and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

KPMG LLP

Chartered Accountants

May 12, 2014

Burnaby, Canada

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KPMG Canada provides services to KPMG LLP.

CITY OF RICHMOND

Consolidated Statement of Financial Position
(Expressed in thousands of dollars)

December 31, 2013, with comparative information for 2012

	2013	2012
Financial Assets		
Cash and cash equivalents	$ 38,368	$ 49,632
Investments (note 3)	716,114	590,961
Accrued interest receivable	3,224	3,122
Accounts receivable (note 4)	19,625	22,682
Taxes receivable	9,244	8,895
Development fees receivable	21,405	12,923
Debt reserve fund deposits (note 5)	200	386
	808,180	688,601
Liabilities		
Accounts payable and accrued liabilities (note 6)	83,146	75,325
Deposits and holdbacks (note 7)	51,841	40,669
Deferred revenue (note 8)	35,870	37,307
Development cost charges (note 9)	87,212	62,547
Obligations under capital leases (note 10)	58	106
Debt, net of MFA sinking fund deposits (note 11)	1,056	3,488
	259,183	219,442
Net financial assets	548,997	469,159
Non-Financial Assets		
Tangible capital assets (note 12)	1,877,298	1,830,619
Inventory of materials and supplies	2,363	2,276
Prepaid expenses	1,594	1,954
	1,881,255	1,834,849
Accumulated surplus (note 13)	$ 2,430,252	$ 2,304,008

Commitments and contingencies (note 17)

See accompanying notes to consolidated financial statements.

General Manager, Finance and Corporate Services

CITY OF RICHMOND

Consolidated Statement of Operations
(Expressed in thousands of dollars)

Year ended December 31, 2013, with comparative information for 2012

	Budget 2013 (notes 2(m) and 22)	2013	2012
Revenue:			
Taxation and levies	$ 174,825	$ 176,283	$ 167,529
Utility fees	74,321	79,613	74,222
Sales of services	40,366	45,941	41,449
Payments-in-lieu of taxes	13,199	14,406	13,189
Provincial and federal grants	7,256	7,092	9,487
Development cost charges	1,280	11,730	10,480
Other capital funding sources	71,768	55,542	19,306
Other revenues:			
Investment income	16,792	13,490	17,144
Gaming revenue	12,364	17,632	15,585
Licenses and permits	7,537	9,178	8,734
Other (note 20)	7,662	23,096	23,186
	427,370	454,003	400,311
Expenses:			
Law and Community safety	83,844	77,587	75,193
Utilities: water, sewerage and sanitation	73,862	73,764	72,682
Engineering, public works and project development	56,427	53,219	53,164
Community services	49,162	49,753	46,796
General government	47,931	41,677	38,570
Planning and development	12,513	11,854	11,961
Richmond Olympic Oval	11,432	10,509	9,826
Library services	9,540	9,396	9,245
	344,711	327,759	317,437
Annual surplus	82,659	126,244	82,874
Accumulated surplus, beginning of year	2,304,008	2,304,008	2,221,134
Accumulated surplus, end of year	$ 2,386,667	$ 2,430,252	$ 2,304,008

See accompanying notes to consolidated financial statements.

CITY OF RICHMOND

Consolidated Statement of Changes in Net Financial Assets
(Expressed in thousands of dollars)

Year ended December 31, 2013, with comparative information for 2012

	2013 budget (notes 2(m) and 22)	2013	2012
Surplus for the year	$ 82,659	$ 126,244	$ 82,874
Acquisition of tangible capital assets	(82,659)	(47,447)	(66,377)
Contributions of tangible capital assets	-	(50,887)	(12,784)
Amortization of tangible capital assets	-	50,334	49,566
Gain on disposal of tangible capital assets - land	-	(4,024)	(5,405)
Loss (gain) on disposal of tangible capital assets	-	434	(423)
Proceeds on sale of tangible capital assets	-	4,911	6,434
	-	79,565	53,885
Acquisition of inventories of supplies	-	(2,363)	(2,276)
Acquisition of prepaid expenses	-	(1,594)	(1,954)
Consumption of inventories of supplies	-	2,276	1,934
Use of prepaid expenses	-	1,954	1,847
Change in net financial assets	-	79,838	53,436
Net financial assets, beginning of year	469,159	469,159	415,723
Net financial assets, end of year	$ 469,159	$ 548,997	$ 469,159

See accompanying notes to consolidated financial statements.

CITY OF RICHMOND

Consolidated Statement of Cash Flows
(Expressed in thousands of dollars)

Year ended December 31, 2013, with comparative information for 2012

	2013	2012
Cash provided by (used in):		
Operations:		
Annual surplus	$ 126,244	$ 82,874
Items not involving cash:		
Amortization	50,334	49,566
Gain on disposal of tangible capital assets - land	(4,024)	(5,405)
Loss (gain) on disposal of tangible capital assets	434	(423)
Contributions of tangible capital assets	(50,887)	(12,784)
Change in non-cash operating working capital:		
Increase in accrued interest receivable	(102)	(412)
Decrease (increase) in accounts receivable	3,057	(587)
Increase in taxes receivable	(349)	(2,179)
(Increase) decrease in development fees receivable	(8,482)	3,903
Decrease in debt reserve fund	186	-
Decrease (increase) in prepaid expenses	360	(107)
Increase in inventory of materials and supplies	(87)	(342)
Increase (decrease) in accounts payable and accrued liabilities	7,821	(2,373)
Increase in deposits and holdbacks	11,172	3,916
(Decrease) increase in deferred revenue	(1,437)	2,506
Increase in development cost charges	24,665	10,168
Net change in cash from operating activities	158,905	128,321
Capital activities:		
Cash used to acquire tangible capital assets	(47,447)	(66,323)
Proceeds on disposal of tangible capital assets	4,911	6,434
Net change in cash from capital activities	(42,536)	(59,889)
Financing activities:		
Principal payments on debt	(2,432)	(2,320)
Principal payments on obligations under capital leases	(48)	(447)
Net change in cash from financing activities	(2,480)	(2,767)
Investing activities:		
Change in investments	(125,153)	(27,799)
Net change in cash and cash equivalents	(11,264)	37,866
Cash and cash equivalents, beginning of year	49,632	11,766
Cash and cash equivalents, end of year	$ 38,368	$ 49,632
Supplementary Information:		
Non-cash transactions:		
Tangible capital assets financed by capital leases	$ -	$ 54

See accompanying notes to consolidated financial statements.

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

1. Operations:

The City of Richmond (the "City") is incorporated under the Local Government Act of British Columbia. The City's principal activities include the provision of local government services to residents of the incorporated area. These include administrative, protective, transportation, environmental, recreational, water, and sewer.

2. Significant accounting policies:

The consolidated financial statements of the City are the representation of management prepared in accordance with Canadian Public Sector Accounting Board as prescribed by the Public Sector Accounting Board ("PSAB") of the Canadian Institute of Chartered Accountants.

(a) Basis of consolidation:

The consolidated financial statements reflect a combination of the City's General Revenue, General Capital and Loan, Waterworks and Sewerworks, and Reserve Funds consolidated with the Richmond Public Library (the "Library"), the Richmond Olympic Oval and the Lulu Island Energy Company Ltd. (LIEC). The Library is consolidated as the Library Board is appointed by the City. The Richmond Olympic Oval and LIEC are consolidated as they are wholly owned municipal corporations of the City and operate as other government organizations. Interfund transactions, fund balances and activities have been eliminated on consolidation.

(i) General Revenue Fund:

This fund is used to account for the current operations of the City as provided for in the Annual Budget, including collection of taxes, administering operations, policing, and servicing general debt.

(ii) General Capital and Loan Fund:

This fund is used to record the City's tangible capital assets and work-in-progress, including engineering structures such as roads and bridges, and the related long-term debt.

(iii) Waterworks and Sewerworks Funds:

These funds have been established to cover the costs of operating these utilities, with related capital and loan funds to record the related capital assets and long-term debt.

(iv) Reserve Funds:

Certain funds are established by bylaws for specific purposes. They are funded primarily by budgeted contributions from the General Revenue Fund plus interest earned on fund balances.

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

2. Significant accounting policies (continued):

(b) Basis of accounting:

The City follows the accrual method of accounting for revenues and expenses. Revenues are recognized in the year in which they are earned and measurable. Expenses are recognized as they are incurred and measurable as a result of receipt of goods and services and/or the creation of a legal obligation to pay.

(c) Government transfers:

Restricted transfers from governments are deferred and recognized as revenue as the related expenditures are incurred or the stipulations in the related agreement are met. Unrestricted transfers are recognized as revenue when received or if the amount to be received can be reasonably estimated and collection is reasonably assured.

(d) Cash and cash equivalents:

Cash and cash equivalents consist of cash, highly liquid money market investments and short-term investments with maturities of less than 90 days from date of acquisition.

(e) Investments:

Investments are recorded at cost, adjusted for amortization of premiums or discounts. Provisions for losses are recorded when they are considered to be other than temporary. At various times during the term of each individual investment, market value may be less than cost. Such declines in value are considered temporary for investments with known maturity dates as they generally reverse as the investments mature and therefore an adjustment to market value for these market declines is not recorded.

(f) Accounts receivable:

Accounts receivable are net of an allowance for doubtful accounts and therefore represent amounts expected to be collected.

(g) Development cost charges:

Development cost charges are restricted by legislation to expenditures on capital infrastructure. These amounts are deferred upon receipt and recognized as revenue when the expenditures are incurred in accordance with the restrictions.

(h) Post-employment benefits:

The City and its employees make contributions to the Municipal Pension Plan. As this plan is a multi-employee plan, contributions are expensed as incurred.

Post-employment benefits also accrue to the City's employees. The liabilities related to these benefits are actuarially determined based on service and best estimates of retirement ages and expected future salary and wage increases. The liabilities under these benefits plans are accrued based on projected benefits prorated as employees render services necessary to earn the future benefits.

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

2. Significant accounting policies (continued):

(i) Non-financial assets:

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

(i) Tangible capital assets:

Tangible capital assets are recorded at cost, which include amounts that are directly attributable to acquisition, construction, development, or betterment of the assets. The cost, less the residual value of the tangible capital assets, excluding land, is amortized on a straight-line basis over their estimated useful lives as follows:

Asset	Useful life - years
Buildings and building improvements	10 - 75
Infrastructure	5 - 100
Vehicles, machinery and equipment	3 - 40
Library's collections, furniture and equipment	4 - 20

Amortization is charged over the asset's useful life commencing when the asset is acquired. Assets under construction are not amortized until the asset is available for productive use.

(ii) Contributions of tangible capital assets:

Tangible capital assets received as contributions are recorded at their fair value at the date of receipt and also are recorded as revenue.

(iii) Natural resources:

Natural resources that have been purchased are not recognized as assets in the consolidated financial statements.

(iv) Works of art and cultural and historic assets:

Works of art and cultural and historic assets are not recorded as assets in these consolidated financial statements.

(v) Interest capitalization:

The City does not capitalize interest costs associated with the construction of a tangible capital asset.

(vi) Labour capitalization:

Internal labour directly attributable to the construction, development or implementation of a tangible capital asset is capitalized.

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

2. Significant accounting policies (continued):

(i) Non-financial assets (continued):

(vii) Leased tangible capital assets:

Leases, which transfer substantially all of the benefits and risks incidental to ownership of property, are accounted for as leased tangible capital assets. All other leases are accounted for as operating leases and the related payments are charged to expenses as incurred.

(viii) Impairment of tangible capital assets:

Tangible capital assets are written down when conditions indicate that they no longer contribute to the Company's ability to provide goods and services, or when the value of future economic benefits associated with the tangible capital assets are less than their net book value. The net write-downs are accounted for as expenses in the consolidated statement of operations.

(ix) Inventory of materials and supplies:

Inventory is recorded at cost, net of an allowance for obsolete stock. Cost is determined on a weighted average basis.

(j) Deferred revenue:

The City defers a portion of the revenue collected from permits, licenses and other fees and recognizes this revenue in the year in which related inspections are performed or other related expenditures are incurred.

(k) Deposits:

Receipts restricted by the legislation of senior governments or by agreement with external parties are deferred and reported as deposits and are refundable under certain circumstances. When qualifying expenditures are incurred, deposits are recognized as revenue at amounts equal to the qualifying expenditures.

(l) Debt:

Debt is recorded net of related sinking fund balances.

(m) Budget information:

Budget information, presented on a basis consistent with that used for actual results, was included in the City of Richmond's Five Year Financial Plan and was originally adopted through Bylaw No. 8990 on February 25, 2013.

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

2. Significant accounting policies (continued):

(n) Use of accounting estimates:

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amount of revenue and expenses during the reporting period. Significant areas requiring the use of management estimates relate to the value of contributed tangible capital assets, value of developer contributions, useful lives for amortization, determination of provisions for accrued liabilities, performing actuarial valuation of employee future benefits, allowance for doubtful accounts, and provision for contingencies. Actual results could differ from those estimates. Adjustments, if any, will be reflected in the consolidated financial statements in the period that the change in estimate is made, as well as in the period of settlement if the amount is different.

(o) Segment disclosures:

A segment is defined as a distinguishable activity of group of activities of a government for which it is appropriate to separately report financial information to achieve the objectives of the standard. The City of Richmond has provided definitions of segments used by the City as well as presented financial information in segment format (note 21).

3. Investments:

	2013		2012	
	Cost	Market value	Cost	Market value
Short-term notes and deposits	$ 205,162	$ 205,186	$ 61,835	$ 62,206
Government and government guaranteed bonds	442,963	444,447	466,984	468,382
Municipal Finance Authority Pooled Investment	22,033	22,033	21,691	21,692
Other bonds	45,956	47,100	40,451	42,192
	$ 716,114	$ 718,766	$ 590,961	$ 594,472

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

4. Accounts receivable:

	2013	2012
Water and sewer utilities	$ 8,949	$ 8,130
Casino revenues	4,292	3,580
Capital grant	1,350	3,054
Other trade receivables	5,034	7,918
	$ 19,625	$ 22,682

5. Debt reserve fund deposits and contingent demand notes:

The City issues its debt instruments through the Municipal Finance Authority (the "MFA"). As a condition of these borrowings, a portion of the debenture proceeds is withheld by the MFA in a Debt Reserve Fund. The City also executes demand notes in connection with each debenture whereby the City may be required to loan certain amounts to the MFA. These demand notes are contingent in nature and are not reflected in the City's accounts. The details of the cash deposits and contingent demand notes at December 31, 2013 are as follows:

	Cash deposits	Contingent demand notes
General Revenue Fund	$ 200	$ 868

6. Accounts payable and accrued liabilities:

	2013	2012
Trade and other liabilities	$ 53,104	$ 46,911
Post-employment benefits (note 15)	30,042	28,414
	$ 83,146	$ 75,325

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

7. Deposits and holdbacks:

	Balance December 31, 2012	Deposit contributions	Refund expenditures	Balance December 31, 2013
Security deposits	$ 27,490	$ 17,354	$ 8,985	$ 35,859
Developer contribution	6,002	162	-	6,164
Contract holdbacks	1,667	2,100	2,169	1,598
Transit Oriented Development Fund	1,523	-	-	1,523
Other	3,987	4,512	1,802	6,697
	$ 40,669	$ 24,128	$ 12,956	$ 51,841

8. Deferred revenue:

Deferred revenue represents revenues that are collected but not earned as of December 31, 2013. These revenues will be recognized in future periods as they are earned. Deferred revenue also represents funds received from external parties for specified purposes. These revenues are recognized in the period in which the related expenses are incurred.

	Balance December 31, 2012	External restricted inflows	Revenue earned	Balance December 31, 2013
Taxes and utilities	$ 18,026	$ -	$ 1,183	$ 16,843
Building permits/business licenses	7,710	4,800	3,275	9,235
Capital grants	4,351	1,527	2,691	3,187
Leased land	2,409	42	42	2,409
Other	4,811	315	930	4,196
	$ 37,307	$ 6,684	$ 8,121	$ 35,870

9. Development cost charges:

	2013	2012
Balance, beginning of year	$ 62,547	$ 52,379
Contributions	35,424	19,772
Interest	971	876
Revenue recognized	(11,730)	(10,480)
Balance, end of year	$ 87,212	$ 62,547

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

10. Obligations under capital leases:

The City has entered into capital lease agreements to finance certain equipment at an estimated cost of borrowing of 2% per year.

Future minimum lease payments, relating to obligations under capital leases expiring on various dates, are as follows:

Year ending December 31:	
2014	$ 31
2015	22
2016	6
Total future minimum lease payments	59
Less amount representing interest	(1)
Present value of capital lease payments	$ 58

11. Debt:

The rates of interest on the principal amount of the MFA debentures vary between 3.15% and 8.50% per annum. The average rate of interest for the year ended December 31, 2013 approximates 4.82%.

The City obtains debt instruments through the MFA pursuant to security issuing bylaws under authority of the Community Charter to finance certain capital expenditures.

Gross amount for the debt, less principal payments and actuarial adjustments to date, are as follows:

	Gross amount Borrowed	Repayments and actuarial adjustments	Net debt 2013	Net debt 2012
General Fund	$ 37,600	$ 36,544	$ 1,056	$ 3,412
Sewerworks Fund	1,000	1,000	-	76
	$ 38,600	$ 37,544	$ 1,056	$ 3,488

Repayments on net outstanding debenture debt over the next year are as follows:

	General	Sewerworks	Total
2014	$ 1,056	$ -	$ 1,056

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

12. Tangible capital assets:

Cost	Balance at December 31, 2012	Additions and transfers	Disposals	Balance at December 31, 2013
Land	$ 633,580	$ 39,137	$ (795)	$ 671,922
Buildings and building improvements	347,867	5,433	(363)	352,937
Infrastructure	1,529,191	36,739	(4,874)	1,561,056
Vehicles, machinery and equipment	88,288	7,846	(770)	95,364
Library's collections, furniture and equipment	9,193	2,415	(2,217)	9,391
Assets under construction	33,490	6,764	-	40,254
	$ 2,641,609	$ 98,334	$ (9,019)	$ 2,730,924

Accumulated amortization	Balance at December 31, 2012	Disposals	Amortization expense	Balance at December 31, 2013
Buildings and building improvements	$ 103,049	$ (163)	$ 12,506	$ 115,392
Infrastructure	647,597	(4,596)	30,783	673,784
Vehicles, machinery and equipment	55,243	(754)	5,405	59,894
Library's collections, furniture and equipment	5,101	(2,185)	1,640	4,556
	$ 810,990	$ (7,698)	$ 50,334	$ 853,626

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

12. Tangible capital assets (continued):

	Net book value December 31, 2013	Net book value December 31, 2012
Land	$ 671,922	$ 633,580
Buildings and building improvements	237,545	244,818
Infrastructure	887,272	881,594
Vehicles, machinery and equipment	35,470	33,045
Library's collection, furniture and equipment	4,835	4,092
Assets under construction	40,254	33,490
Balance, end of year	$ 1,877,298	$ 1,830,619

(a) Assets under construction:

Assets under construction, having a value of approximately $40,254,000 (2012 - $33,490,000), have not been amortized. Amortization of these assets will commence when the asset is put into service.

(b) Contributed tangible capital assets:

Contributed tangible capital assets have been recognized at fair market value at the date of contribution. The value of contributed assets received during the year is approximately $50,887,000 (2012 - $12,784,000), comprised of infrastructure in the amount of approximately $10,934,000 (2012 - $9,838,000), land in the amount of approximately $38,982,000 (2012 - $2,946,000), and Library books in the amount of approximately $971,000 (2012 - nil).

(c) Tangible capital assets disclosed at nominal values:

Where an estimate of fair value could not be made, the tangible capital assets were recognized at a nominal value.

(d) Works of Art and Historical Treasures:

The City manages and controls various works of art and non-operational historical cultural assets, including building, artifacts, paintings, and sculptures located at City sites and public display areas. The assets are not recorded as tangible capital assets and are not amortized.

(e) Writedown of tangible capital assets:

There were no writedowns of tangible capital assets during the year (2012 - nil).

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

13. Accumulated surplus:

	General Funds and Reserve	Water Utility Fund	Sanitary Sewer Utility Fund	Richmond Olympic Oval	Library Services	2013 Total	2012 Total
Investment in tangible capital assets	$ 1,868,683	$ -	$ -	$ 2,664	$ 4,837	$ 1,876,184	$ 1,827,025
Reserves (note 14)	349,073	-	-	4,732	-	353,805	295,001
Appropriated surplus	148,209	3,595	7,047	577	131	159,559	150,895
Obligations to be funded	-	-	-	-	-	-	(4)
Surplus	12,674	15,229	9,186	1,065	187	38,341	28,839
Other equity	2,363	-	-	-	-	2,363	2,252
Balance, end of year	$ 2,381,002	$ 18,824	$ 16,233	$ 9,038	$ 5,155	$ 2,430,252	$ 2,304,008

14. Reserves:

	2012	Change during year	2013
Reserve funds:			
Affordable housing	$ 18,082	$ 2,614	$ 20,696
Arts, culture and heritage	-	4,379	4,379
Capital building and infrastructure	36,686	9,708	46,394
Capital reserve	78,254	23,580	101,834
Capstan station	-	3,862	3,862
Child care development	1,995	701	2,696
Community legacy and land replacement	16,681	(328)	16,353
Drainage improvement	27,948	7,607	35,555
Equipment replacement	16,579	1,241	17,820
Leisure facilities	3,177	374	3,551
Local improvements	6,428	99	6,527
Neighborhood improvement	6,011	324	6,335
Public art program	1,967	315	2,282
Sanitary sewer	33,672	3,561	37,233
Steveston off-street parking	282	5	287
Steveston road ends	1,347	(663)	684
Waterfront improvement	112	(8)	104
Watermain replacement	41,680	801	42,481
Oval	4,100	632	4,732
	$ 295,001	$ 58,804	$ 353,805

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

15. Post-employment benefits:

The City provides certain post-employment benefits, non-vested sick leave, compensated absences, and termination benefits to its employees.

	2013	2012
Balance, beginning of year	$ 28,414	$ 26,890
Current service cost	2,212	2,095
Interest cost	1,038	1,021
Amortization of actuarial loss	389	460
Benefits paid	(2,011)	(2,052)
Balance, end of year	$ 30,042	$ 28,414

An actuarial valuation for these benefits was performed to determine the City's accrued benefit obligation as at December 31, 2013. The difference between the actuarially determined accrued benefit obligation of approximately $31,135,000 and the liability of approximately $30,042,000 as at December 31, 2013 is an unamortized net actuarial loss of $1,093,000. This actuarial loss is being amortized over a period equal to the employees' average remaining service lifetime of 10 years.

	2013	2012
Actuarial benefit obligation:		
Liability, end of year	$ 30,042	$ 28,414
Unamortized actuarial loss	1,093	412
Balance, end of year	$ 31,135	$ 28,826

Actuarial assumptions used to determine the City’s accrued benefit obligation are as follows:

	2013	2012
Discount rate	3.50%	3.50%
Expected future inflation rate	2.00%	2.50%
Expected wage and salary range increases	2.50%	3.50%

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

16. Pension plan:

The City and its employees contribute to the Municipal Pension Plan (the "Plan"), a jointly trusteed pension plan. The board of trustees, representing plan members and employers, is responsible for overseeing the management of the Plan, including the investment of the assets and administration of benefits. The Plan is a multi-employer contributory pension plan. Basic pension benefits provided are based on a formula. The Plan has about 179,000 active members and approximately 71,000 retired members. Active members include approximately 1,500 contributors from the City.

The most recent actuarial valuation as at December 31, 2012 indicated a $1,370 million funding deficit for basic pension benefits. The next valuation will be as at December 31, 2015 with results available in 2016. Employers participating in the Plan record their pension expense as the amount of employer contributions made during the year (defined contribution pension plan accounting). This is because Plan records accrued liabilities and accrued assets for the Plan in aggregate with the result that there is no consistent and reliable basis for allocating the obligation, assets and cost to individual employers participating in the Plan.

The City paid $10,311,445 (2012 - $9,970,567) for employer contributions to the Plan in fiscal 2013. Employees paid $8,677,397 (2012 - $8,324,541) for employee contributions to the Plan in fiscal 2013.

17. Commitments and contingencies:

(a) Joint and several liabilities:

The City has a contingent liability with respect to debentures of the Greater Vancouver Water District, Greater Vancouver Sewerage and Drainage District and Greater Vancouver Regional District, to the extent provided for in their respective Enabling Acts, Acts of Incorporation and Amending Acts. Management does not consider payment under this contingency to be likely and therefore, no amounts have been accrued.

(b) Lease payments:

In addition to the obligations under capital leases, at December 31, 2013, the City was committed to operating lease payments for premises and equipment in the following approximate amounts:

2014	$ 4,525
2015	4,472
2016	4,141
2017	4,032
2018 and thereafter	21,622

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

17. Commitments and contingencies (continued):

(c) Litigation:

As at December 31, 2013, there were a number of claims or risk exposures in various stages of resolution. The City has made no specific provision for those where the outcome is presently not determinable.

(d) Municipal Insurance Association of British Columbia:

The City is a participant in the Municipal Insurance Association of British Columbia (the "Association"). Should the Association pay out claims in excess of premiums received, it is possible that the City, along with other participants, would be required to contribute towards the deficit. Management does not consider external payment under this contingency to be likely and therefore, no amounts have been accrued.

(e) Contractual obligation:

The City has entered into various contracts for services and construction with periods ranging beyond one year. These commitments are in accordance with budgets passed by Council.

(f) E-Comm Emergency Communications for Southwest British Columbia ("E-Comm"):

The City is a shareholder of the Emergency Communications for Southwest British Columbia Incorporated (E-Comm) whose services provided include: regional 9-1-1 call centre for the Greater Vancouver Regional District; Wide Area Radio network; dispatch operations; and records management. The City has 2 Class A shares and 1 Class B share (of a total of 28 Class A and 23 Class B shares issued and outstanding as at December 31, 2013). As a Class A shareholder, the City shares in both funding the future operations and capital obligations of E-Comm (in accordance with a cost sharing formula), including any lease obligations committed to by E-Comm up to the shareholder's withdrawal date.

(g) Community Associations:

The City has a close relationship with the various community associations which operate the community centers throughout the City. While they are separate legal entities, the City does generally provide the buildings and grounds for the use of the community associations as well as pay the operating costs of the facilities. Typically the community associations are responsible for providing programming and services to the community. The community associations retain all revenue which they receive. The City provides the core staff for the facilities as well as certain additional services such as information technology services.

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

17. Commitments and contingencies (continued):

(h) Contingent liabilities:

The City has a contract with the federal government whereby the federal government provides Royal Canadian Mounted Police (RCMP) policing services. RCMP members and the federal government are currently in legal proceedings regarding pay raises for 2009 and 2010 that were retracted for RCMP members. As the final outcome of the legal action and the potential financial impact to the City is not determinable, the City has not recorded any provision for this matter in the consolidated financial statements as at December 31, 2013.

(i) Municipal Financing Authority:

City Council adopted Loan Authorization Bylaw No. 9075 on November 25, 2013 for the City to borrow up to $50,815,000 for a maximum term of 30 years. Subsequent to year-end, the City obtained statutory approval from the Ministry of Community, Sport and Cultural Development of British Columbia and obtained consent from Metro Vancouver to proceed with the long-term borrowing from the Municipal Financing Authority for a term of 10 years. The Municipal Finance Authority issued the long-term debt to the City at a rate of 3.30%.

18. Trust funds:

Certain assets have been conveyed or assigned to the City to be administered as directed by agreement or statute. The City holds the assets for the benefit of and stands in fiduciary relationship to the beneficiary. The following trust fund is excluded from the City's consolidated financial statements.

	2013	2012
Richmond Community Associations	$ 1,107	$ 1,091

19. Collections for other governments:

The City is obligated to collect certain taxation revenue on behalf of other government bodies. These funds are excluded from the City's consolidated financial statements since they are not revenue of the City. Such taxes collected and remitted to the government bodies during the year are as follows:

	2013	2012
Province of British Columbia - Schools	$ 133,660	$ 128,610
Greater Vancouver Regional District and others	39,918	39,498
	$ 173,578	$ 168,108

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

20. Other revenue:

	2013	2012
Developer reserve contribution	$ 9,248	$ 8,534
Tangible capital assets gain on land	4,024	5,405
Taxes and fines	2,433	2,003
Parking program	1,994	1,566
Debt funding	1,291	1,180
Sponsorship	188	200
Donation	1,022	53
Other	2,896	4,245
	$ 23,096	$ 23,186

21. Segmented reporting:

The City of Richmond provides a wide variety of services to its residents. For segment disclosure, these services are grouped and reported under service areas/departments that are responsible for providing such services. They are as follows:

Law and Community Safety brings together the City's public safety providers such as Police (RCMP), Fire-Rescue, Emergency Programs, and Community Bylaws, along with sections responsible for legal and regulatory matters. It is responsible for ensuring safe communities by providing protection services with a focus on law enforcement, crime prevention, emergency response, protection of life and properties, and legal services.

Utilities provide such services as planning, designing, constructing, operating, and maintaining the City’s infrastructure of water and sewer networks and sanitation and recycling.

Engineering, Public Works and Project Development comprises of General Public Works, Roads and Construction, Storm Drainage, Fleet Operations, Engineering, Project Development, and Facility Management. The services provided are construction and maintenance of the City's infrastructure and all City owned buildings, maintenance of the City’s road networks, managing and operating a mixed fleet of vehicles, heavy equipment and an assortment of specialized work units for the City operations, development of current and long-range engineering planning and construction of major projects.

Community Services comprises of Parks, Recreation, Arts, Culture and Heritage Services and Community Social Development. These departments ensure recreation opportunities in Richmond by maintaining a variety of facilities such as arenas, community centres, pools, etc. It designs, constructs and maintains parks and sports fields to ensure there is adequate open green space and sports fields available for Richmond residents. It also addresses the arts, culture, and community issues that the City encounters.

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

21. Segmented reporting (continued):

General Government comprises of Mayor and Council, Corporate Administration, and Finance and Corporate Services. It is responsible for adopting bylaws, effectively administering City operations, levying taxes, providing sound management of human resources, information technology, economic development, and City finance, and ensuring high quality services to Richmond residents.

Planning and Development is responsible for land use plans, developing bylaws and policies for sustainable development in the City, including the City's transportation systems.

Richmond Olympic Oval is formed as a wholly-owned subsidiary of the City. The City uses the Richmond Olympic Oval facility as a venue for a wide range of sports, business and community activities.

Richmond Public Library provides public access to information by maintaining 5 branches throughout the City.

Lulu Island Energy Company Ltd. (LIEC) was incorporated on August 19, 2013 under the Business Corporations Act of British Columbia as a municipal corporation wholly owned by the City of Richmond for the management of district energy utilities. There are no activities in 2013.

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

21. Segmented reporting (continued):

	Law and community safety	Utilities	Engineering, public works and project development	Community services	General government	Planning and development	Richmond Olympic Oval	Richmond Public Library	2013 Consolidated	2012 Consolidated
Revenues:										
Taxation and levies	$ -	$ -	$ -	$ -	$ 176,283	$ -	$ -	$ -	$ 176,283	$ 167,529
User fees	-	70,385	9,228	-	-	-	-	-	79,613	74,222
Sales of services	4,871	11,734	2,197	8,650	9,470	2,250	6,568	201	45,941	41,449
Payments-in-lieu of taxes	-	-	-	-	14,406	-	-	-	14,406	13,189
Provincial and federal grants	81	-	1,993	-	1,772	8	2,823	415	7,092	9,487
Development cost charges	-	396	2,183	3,839	5,312	-	-	-	11,730	10,480
Other capital funding sources	(40)	5,358	9,005	2,164	38,982	-	-	73	55,542	19,306
Other revenue from own sources:										
Investment Income	-	697	-	-	12,793	-	-	-	13,490	17,144
Gaming revenue	599	-	1,400	-	15,633	-	-	-	17,632	15,585
Licenses and permits	227	-	87	-	3,525	5,339	-	-	9,178	8,734
Other	2,154	81	510	281	17,563	87	1,235	1,185	23,096	23,186
	7,892	**88,651**	**26,603**	**14,934**	**295,739**	**7,684**	**10,626**	**1,874**	**454,003**	**400,311**
Expenses:										
Wages and salaries	35,276	10,039	20,717	27,467	19,337	9,318	6,713	6,599	135,466	129,980
Supplies and materials	2,586	45,768	(3,402)	11,281	6,911	1,379	3,443	1,044	69,010	63,684
Amortization of tangible capital assets	2,438	7,157	21,936	5,047	10,883	923	310	1,640	50,334	49,566
Contract services	37,259	5,868	487	2,320	2,677	109	43	173	48,936	47,945
Public works maintenance	8	4,121	11,960	2,426	137	72	-	3	18,727	20,901
Interest and finance	22	949	-	2	1,459	-	-	6	2,438	4,495
Transfer from (to) capital for tangible capital assets	(2)	(332)	1,494	1,210	77	51	-	(84)	2,414	1,289
Loss (gain) on disposal of tangible capital assets	-	194	27	-	196	2	-	15	434	(423)
	77,587	73,764	53,219	49,753	41,677	11,854	10,509	9,396	327,759	317,437
Annual surplus (deficit)	**$ (69,695)**	**$ 14,887**	**$ (26,616)**	**$ (34,819)**	**$ 254,062**	**$ (4,170)**	**$ 117**	**$ (7,522)**	**$ 126,244**	**$ 82,874**

CITY OF RICHMOND

Notes to Consolidated Financial Statements (continued)
(Tabular amounts expressed in thousands of dollars)

Year ended December 31, 2013

22. Budget data:

The budget data presented in these consolidated financial statements is based on the 2013 operating and capital budgets approved by Council on February 25, 2013 and the approved budget for Richmond Olympic Oval. Below is the reconciliation of the approved budget to the budget amount reported in these consolidated financial statements.

		Budget Amount
Revenues:		
Approved operating budget	$	392,829
Approved capital budget		169,290
Approved Oval budget		12,983
Less:		
Transfer from other funds		7,870
Intercity recoveries		39,195
Intercompany recoveries		3,145
Carried forward capital expenditures		97,522
Total revenue		427,370
Expenses:		
Approved operating budget		392,829
Approved capital budget		169,290
Approved Oval budget		11,432
Less:		
Transfer to other funds		16,047
Intercity payments		39,217
Intercompany payments		3,145
Capital expenditures		71,768
Debt principal payments		1,141
Carried forward capital expenditures		97,522
Total expenses		344,711
Annual surplus per statement of operations	$	82,659

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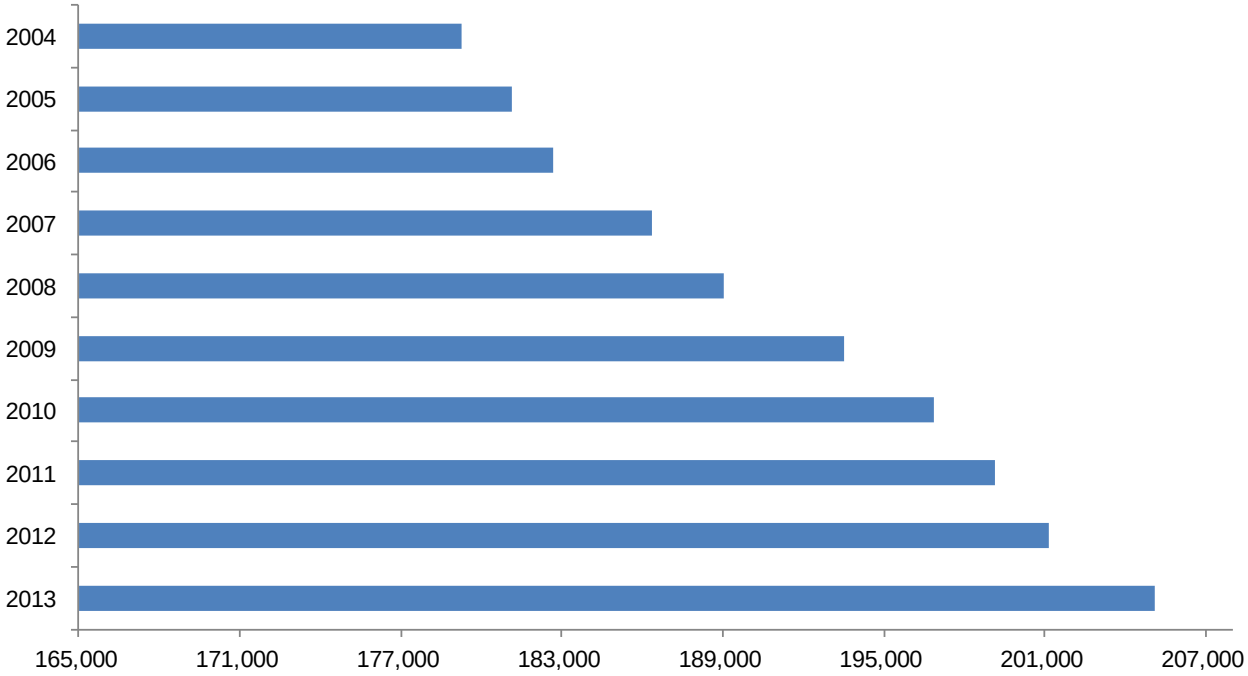
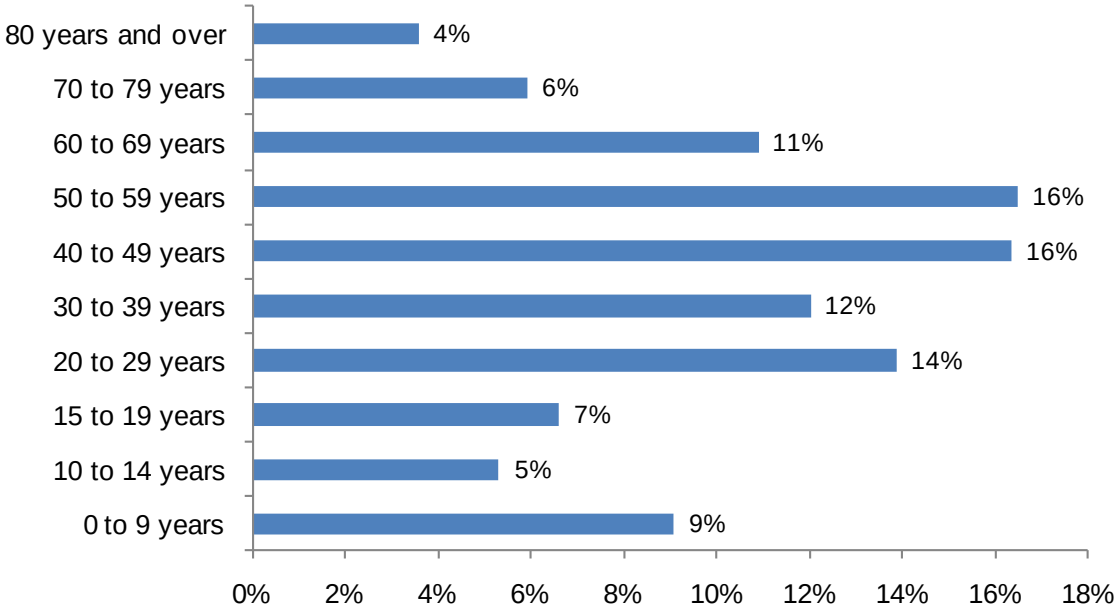
City of Richmond population 2004–2013



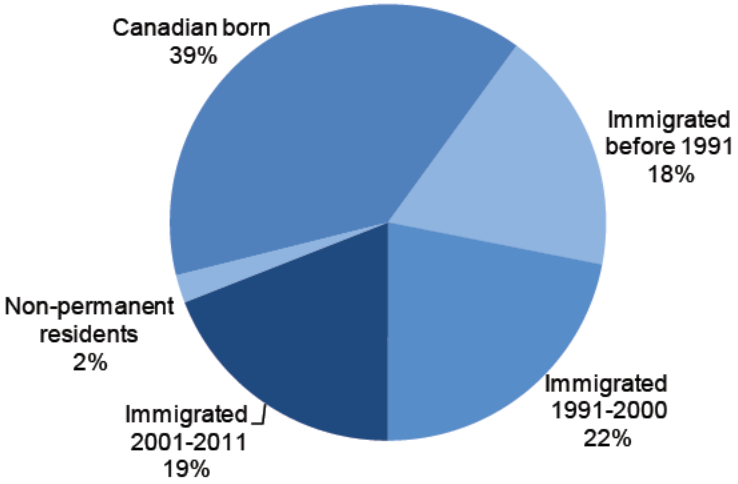
Source: City of Richmond Policy Planning Division

Total population by age groups



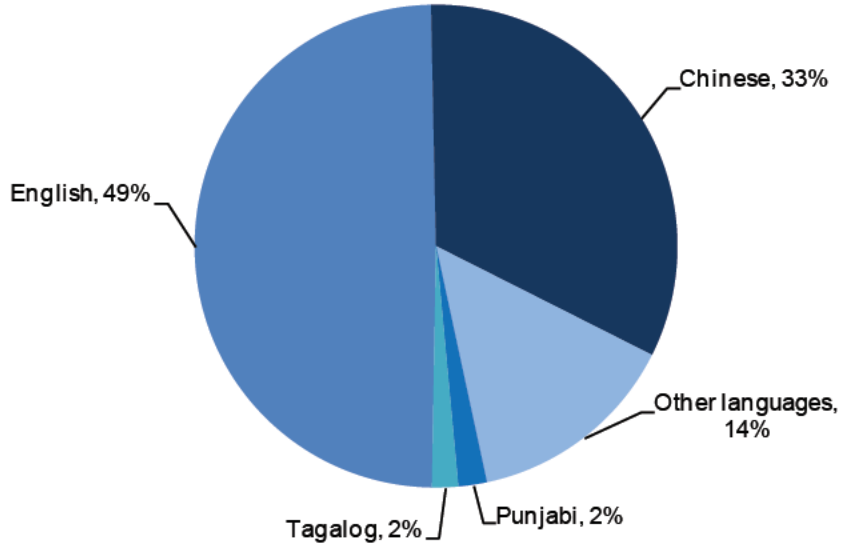
Source: Statistics Canada 2011 Census of Population

Immigrant status of Richmond residents by period of immigration



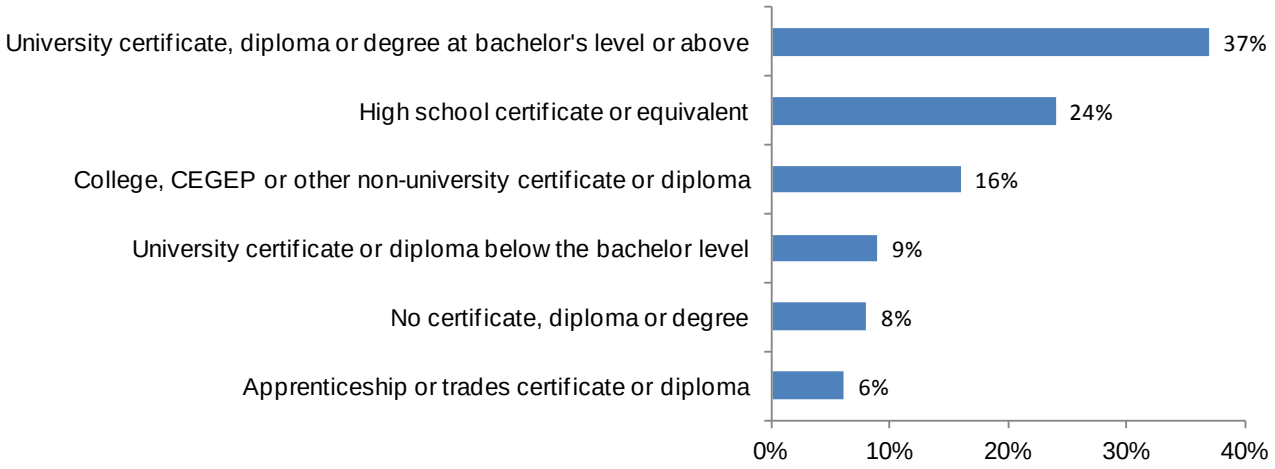
Source: Statistics Canada, 2011 National Household Survey (NHS)

Language spoken most often at home



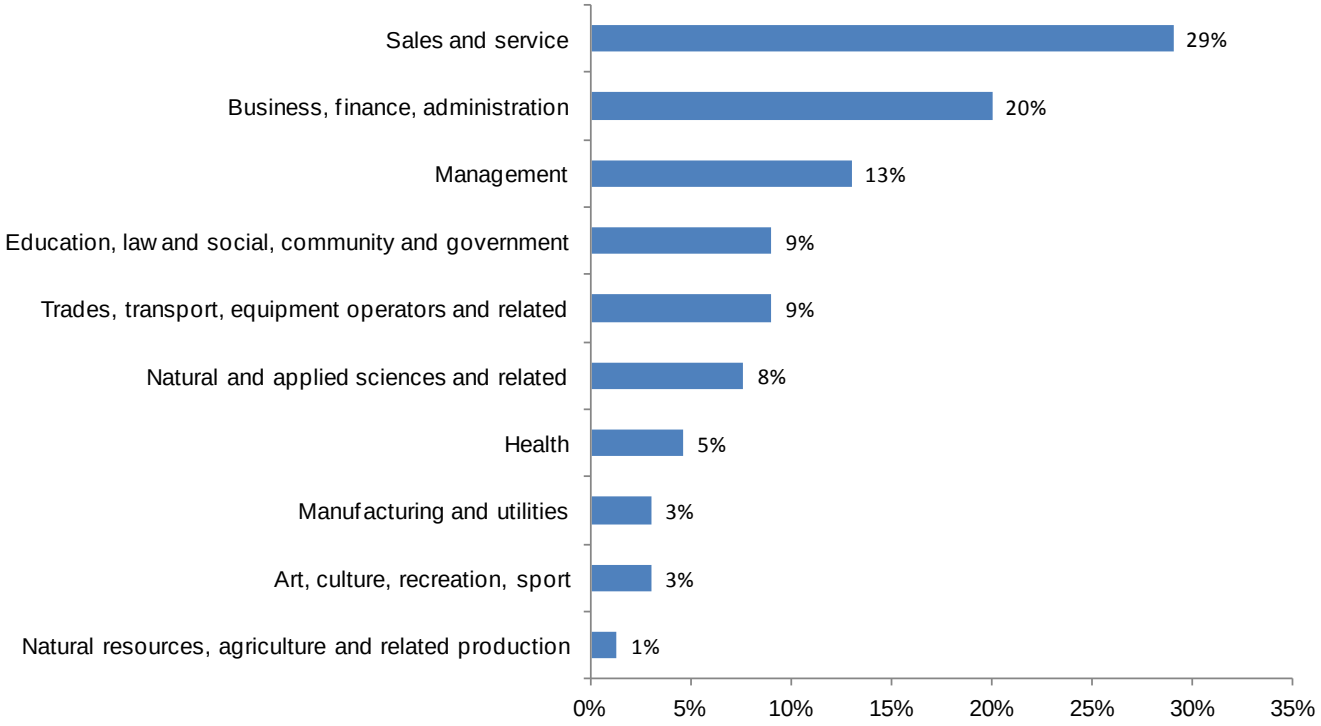
Source: Statistics Canada 2011 Census of Population

Highest level of education attainment for the population aged 25 to 64



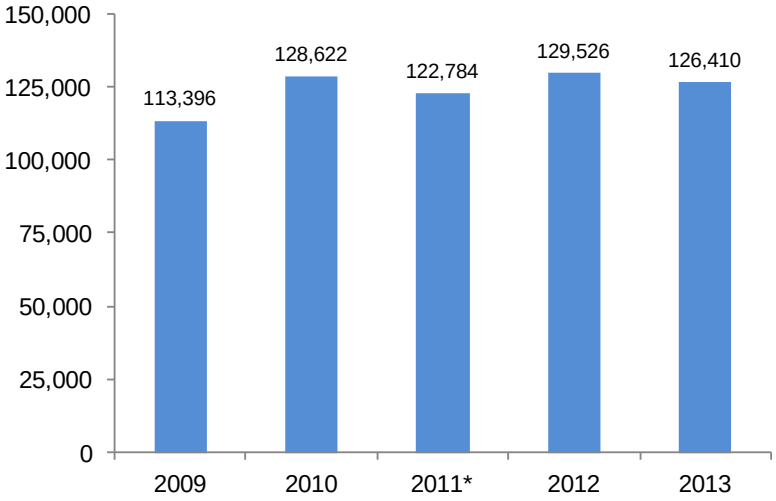
Source: Statistics Canada, 2011 National Household Survey (NHS)

Occupations of Richmond residents



Source: Statistics Canada, 2011 National Household Survey (NHS)

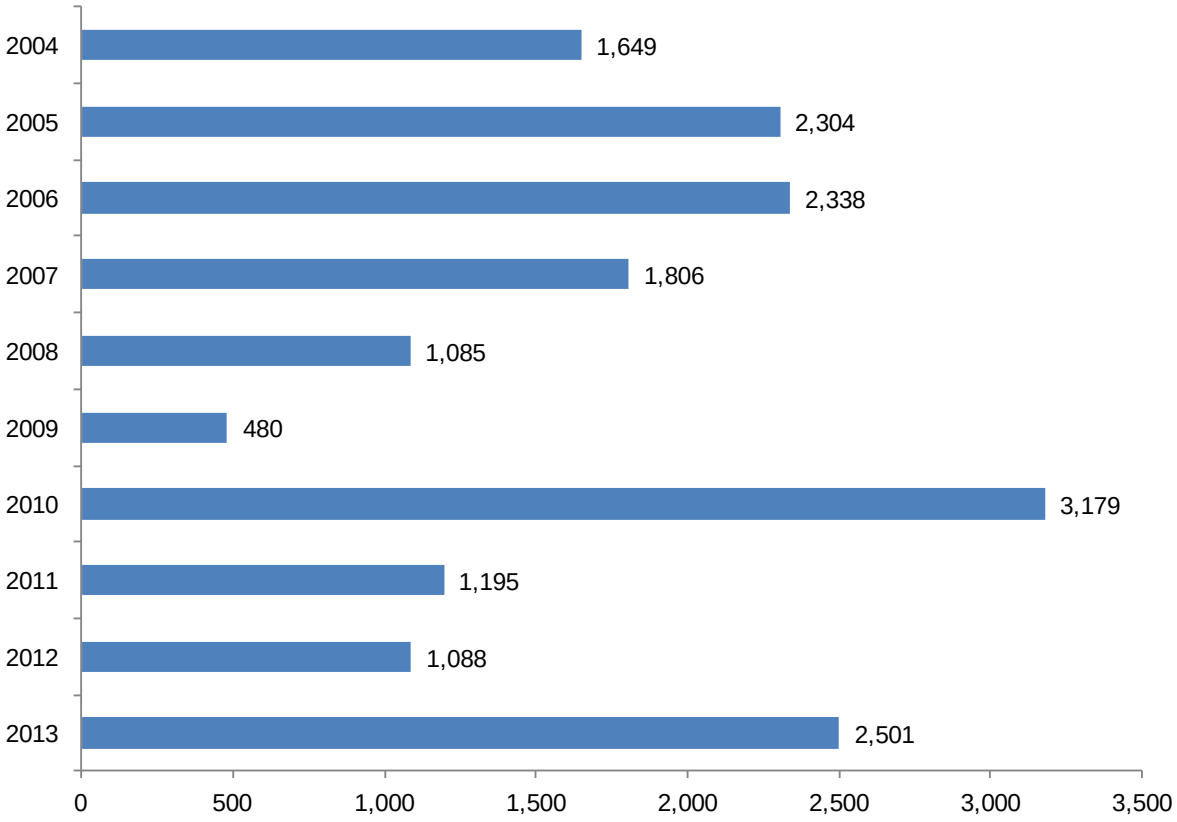
Registration in Richmond Recreation and Cultural Services programs 2009–2013



*Change in registration system 2011

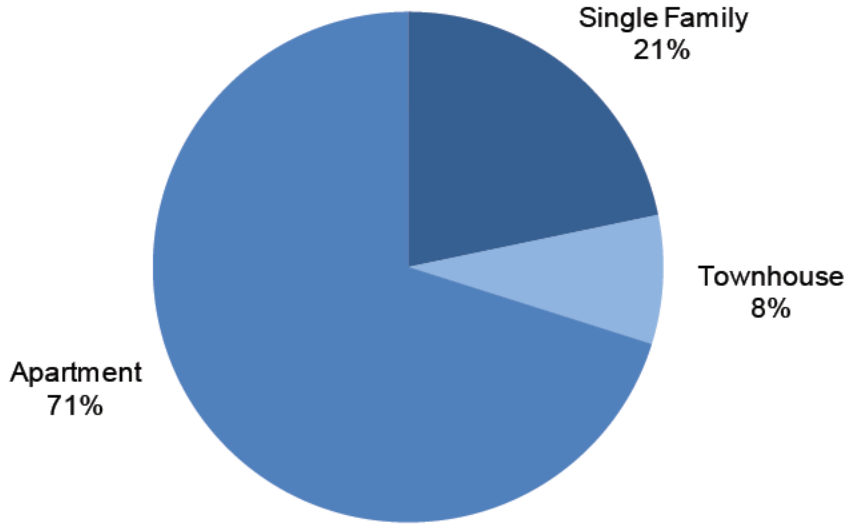
Source: City of Richmond Finance and Corporate Services

Housing starts in Richmond 2004–2013



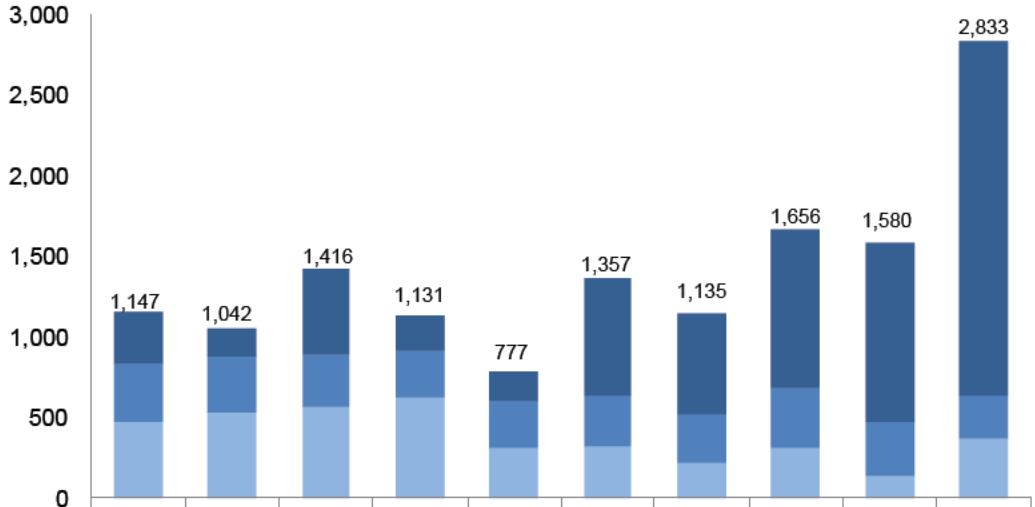
Source: City of Richmond building permit records. Includes only projects for new residential construction receiving final building permit in the given year.

Richmond housing starts by type of units 2013



Source: City of Richmond building permit records. Includes only projects for new residential construction receiving final building permit in the given year.

New dwelling units constructed 2004–2013

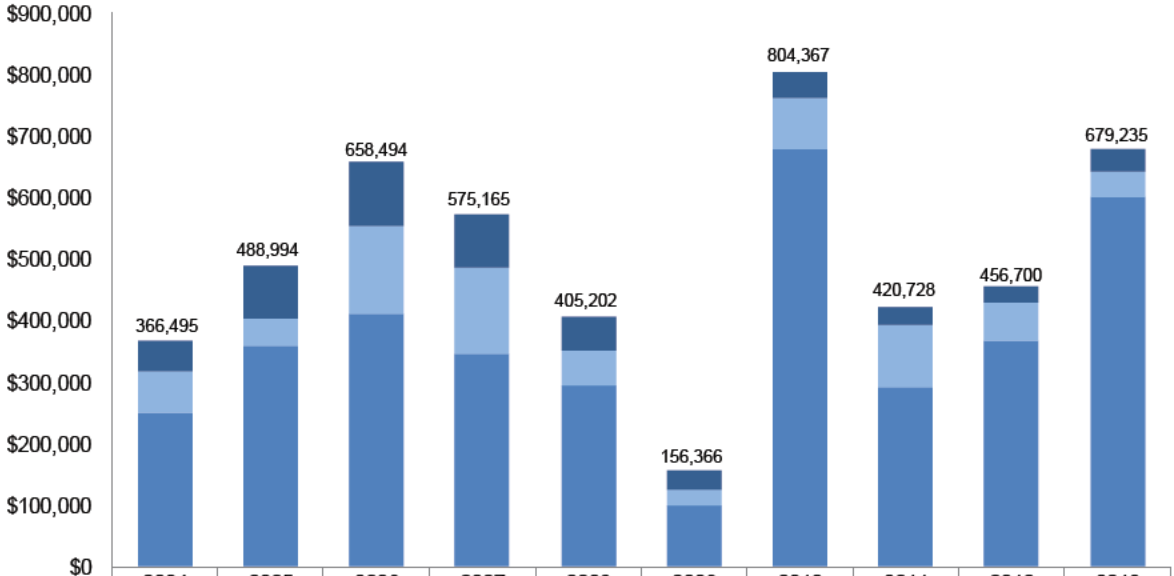


	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Apartment	322	171	531	225	182	728	619	974	1108	2204
Single Family *	356	346	319	281	286	306	304	374	343	265
Townhouse	469	525	566	625	309	323	212	308	129	364

**Includes one family and two family dwellings*

Source: City of Richmond building permit records. Includes only projects for new residential construction receiving final building permit in the given year.

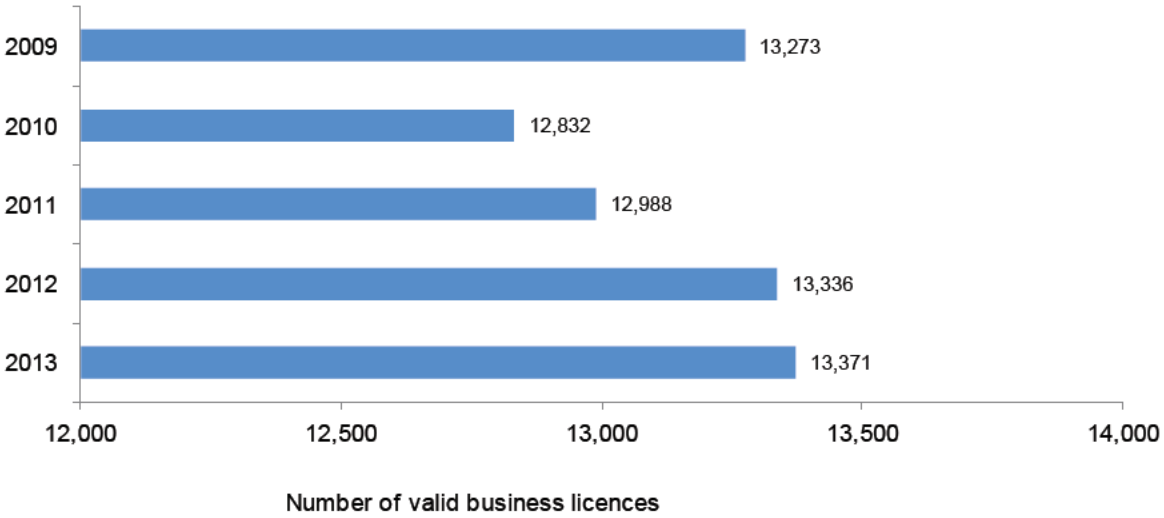
Construction value of building permits issued 2004–2013 (in $000s)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Industrial ($000)	$48,971	$85,201	$105,037	$86,129	$52,867	$29,634	$42,905	$28,710	$26,210	$35,560
Commercial ($000)	$66,519	$44,173	$142,676	$138,877	$58,923	$26,979	$82,834	$100,578	$64,134	$42,268
Residential ($000)	$251,005	$359,620	$410,781	$347,159	$293,412	$99,753	$678,628	$291,440	$366,356	$601,407

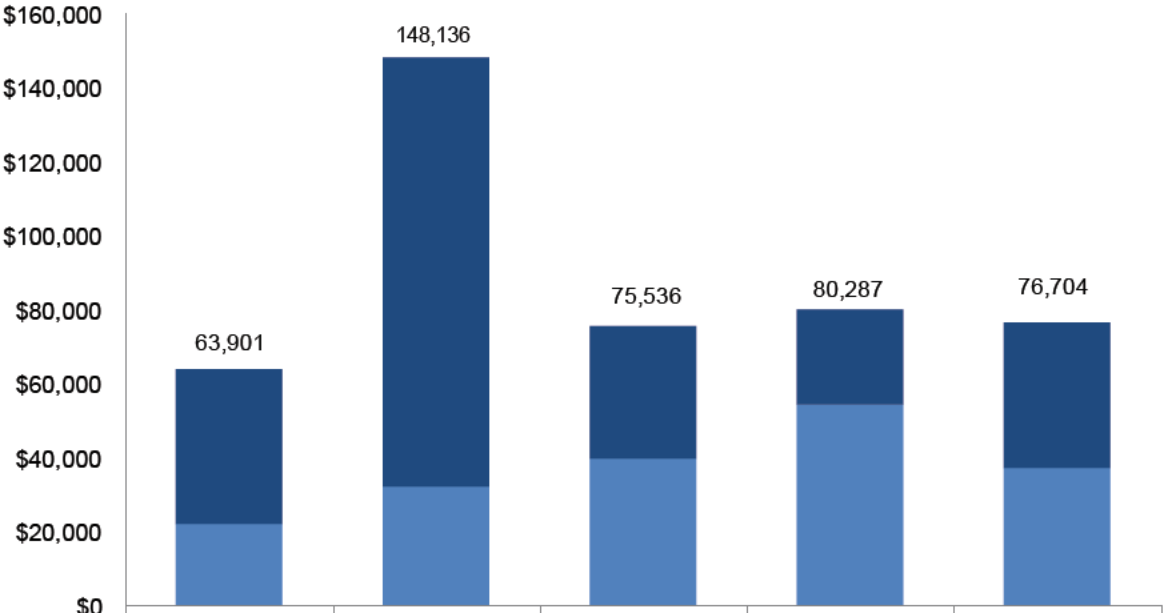
Source: Permits and Licence System, custom report

Richmond business licences 2009–2013



Source: 2012 City of Richmond Consolidated Financial Statements

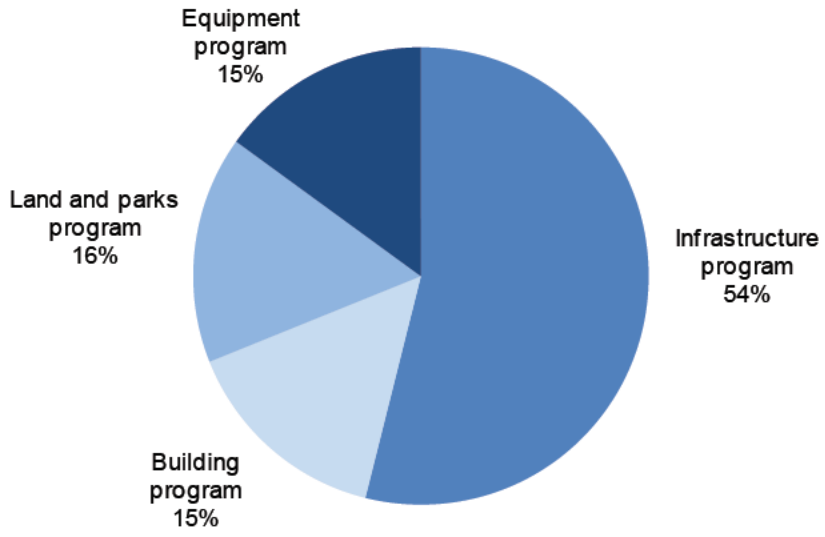
City of Richmond budgeted capital construction costs 2009–2013 (in $000s)



	2009	2010	2011	2012	2013
New Capital	$41,640	$115,968	$35,723	$25,925	$39,479
Replacement Capital	$22,261	$32,168	$39,813	$54,362	$37,225

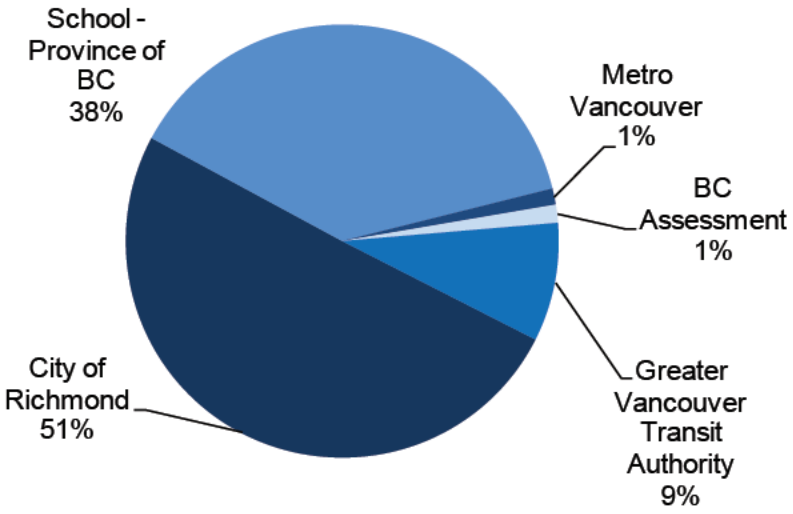
Source: City of Richmond Finance and Corporate Services

Capital program by type 2013



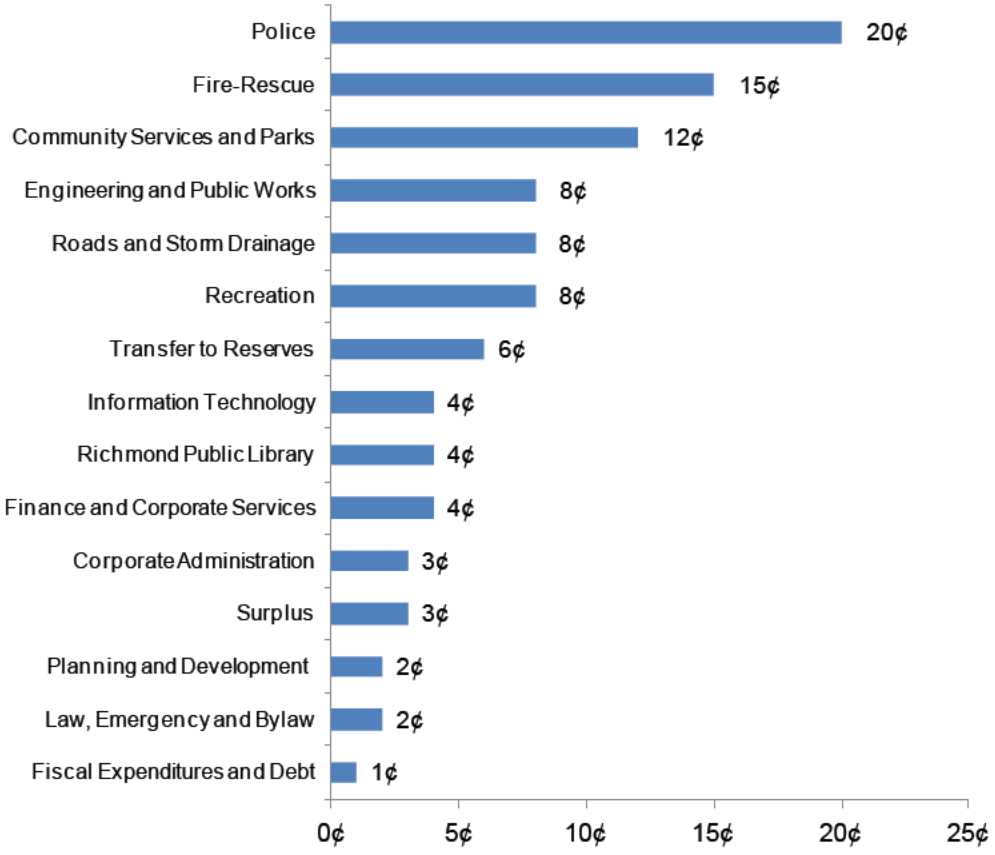
Source: City of Richmond Finance and Corporate Services

Breakdown of residential tax bill 2013



Source: City of Richmond Finance and Corporate Services

Breakdown of actual municipal tax dollar 2013



Source: City of Richmond Finance and Corporate Services

2013 tax rates

	City of Richmond	School - Province of BC	Metro Vancouver	BC Assessment	Municipal Finance Authority	TransLink
Residential	2.12246	1.59940	0.05915	0.06100	0.00020	0.32520
Business	7.62851	6.20000	0.14493	0.18110	0.00050	1.48890
Light industrial	8.13367	4.32000	0.20112	0.18110	0.00070	1.81480
Seasonal / Recreational	1.96366	3.40000	0.05915	0.06100	0.00020	0.31050
Major industrial	14.42822	2.48000	0.20112	0.52130	0.00070	2.25440
Farm	12.25825	3.45000	0.05915	0.06100	0.00020	0.36190
Utilities	39.91246	14.00000	0.20703	0.52130	0.00070	2.71970

Source: City of Richmond Finance and Corporate Services

2013 general revenue fund assessment and taxation by property class (in $000s)

	Assessment	% of assessment by class	Taxation	% of taxation by class
Residential	$44,663,439	81.13%	$94,796	53.87%
Business	8,197,372	14.89%	62,534	35.54%
Light industrial	1,902,602	3.46%	15,475	8.79%
Seasonal / Recreational	120,715	0.22%	237	0.13%
Major industrial	115,791	0.21%	1,671	0.95%
Farm	26,618	0.05%	326	0.19%
Utilities	23,064	0.04%	921	0.52%
Total	**$55,049,601**	**100.00%**	**$175,960**	**100.00%**

Source: City of Richmond Finance and Corporate Services
Amounts are based on Billing

Taxes collected on behalf of taxing authorities (in $000s)

	2009	2010	2011	2012	2013
City of Richmond	$148,563	$156,071	$161,821	$167,529	$176,283
School Board	115,122	118,391	122,465	128,610	133,660
Metro Vancouver	3,329	3,632	3,957	4,102	4,268
BC Assessment	3,791	4,013	4,258	4,593	4,667
TransLink	27,209	28,058	29,427	30,789	30,968
Other	11	11	13	14	15
Total taxes	**$298,025**	**$310,177**	**$321,941**	**$335,637**	**$349,861**

Source: City of Richmond Finance and Corporate Services
Amounts are less supplementary adjustments

2009–2013 general assessment by property class (in $000s)

	2009	2010	2011	2012	2013
Residential	$31,379,141	$32,706,544	$38,773,463	$45,026,858	$44,663,439
Business	7,382,861	7,441,015	7,753,426	8,046,568	8,197,372
Light industrial	1,178,324	1,371,608	1,480,246	1,614,402	1,902,602
Seasonal / Recreational	101,851	108,471	113,149	111,935	120,715
Major industrial	104,193	107,044	107,536	111,752	115,791
Farm	26,444	26,801	26,699	26,572	26,618
Utilities	17,888	19,543	21,094	19,685	23,064
Total	**$40,190,702**	**$41,781,026**	**$48,275,613**	**$54,957,772**	**$55,049,601**

Source: City of Richmond Finance and Corporate Services

2009–2013 property tax levies (in $000s)

	2009	2010	2011	2012	2013
Total Tax Levy	$303,853	$314,484	$325,814	$339,221	$363,129
Municipal portion of Total Tax Levy	148,878	156,482	162,214	168,205	175,960
% of current collections to current levy	98.08%	98.63%	98.81%	98.94%	96.35%

Source: City of Richmond Finance and Corporate Services

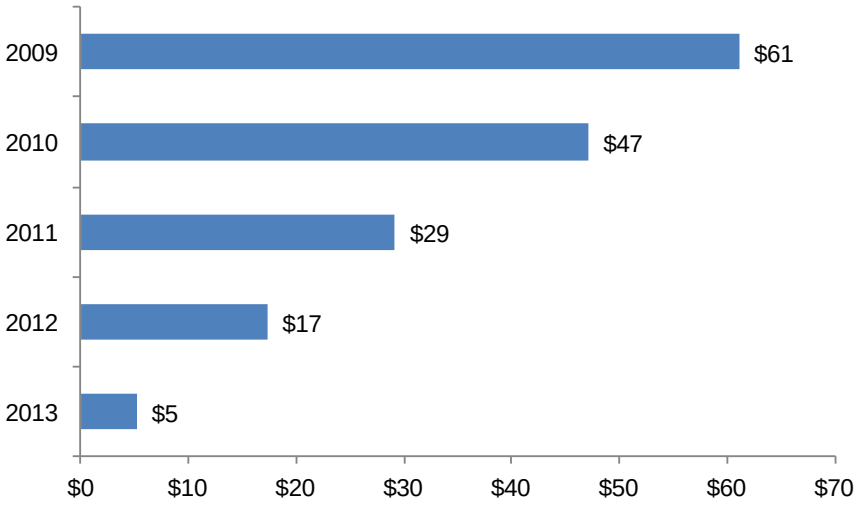
Long-term debt repayments relative to expenditures 2009–2013 (in $000s)

General revenue fund	**2009**	**2010**	**2011**	**2012**	**2013**
Long term debt repayments	8,235	$3,554	$3,413	$2,972	$2267
General expenditures	$191,976	$249,446	$257,155	$227,773	$234,089
Repayments as % of expenditures	4.3%	1.4%	1.3%	1.3%	1.0%
Sewerworks revenue fund					
Long term debt repayments	$115	$115	$115	$115	$30
Sewer expenditures	$23,269	$23,291	$24,724	$23,789	$26,916
Repayments as % of expenditures	0.5%	0.5%	0.5%	0.5%	0.0%

Note: Expenditures do not include capital and infrastructure investments.

Source: City of Richmond Finance and Corporate Services

City of Richmond debt per capita 2009–2013



Source: City of Richmond Finance and Corporate Services

Net debt 2009–2013 (in $000s)

	2009	**2010**	**2011**	**2012**	**2013**
Net debt	$11,808	$9,274	$5,808	$3,488	$1,056

Source: City of Richmond Finance and Corporate Services

Expenses by function 2009–2013 (in $000s)

	2009	2010	2011	2012	2013
Community Safety	$68,294	$70,838	$74,548	$75,193	$77,587
Engineering and Public Works	56,451	56,365	52,727	53,164	53,219
Community Services	41,474	43,647	45,345	46,796	49,753
General government	42,971	35,130	42,358	38,570	41,677
Utilities	62,795	69,214	69,430	72,682	73,764
Planning and Development	9,898	11,427	11,560	11,961	11,854
Library services	7,751	8,221	8,615	9,245	9,396
Richmond Olympic Oval	7,007	6,614	8,646	9,826	10,509
Total expenses	**$296,641**	**$301,456**	**$313,229**	**$317,437**	**$327,759**

Source: City of Richmond Finance and Corporate Services

Expenses by object 2009–2013 (in $000s)

	2009	2010	2011	2012	2013
Wages, salaries and benefits	$115,980	$121,244	$128,361	$129,981	$135,466
Public works maintenance	10,697	16,346	18,444	20,901	18,727
Contract services	46,994	46,582	45,687	47,945	48,936
Supplies, materials	63,550		63,765	63,684	69,010
Interest and finance	7,182	6,002	5,164	4,495	2,438
Transfer from (to) capital for tangible capital assets	7,476	(11,518)	2,755	1,289	2,414
Amortization of tangible capital assets	43,823	47,725	47,696	49,565	50,334
Loss/(gain) on disposal of tangible capital assets	939	(3,897)	1,373	(423)	434
Total expenses	**$296,641**	**$222,484**	**$313,245**	**$317,437**	**$327,759**

Source: City of Richmond Finance and Corporate Services

Revenue by source 2009–2013 (in $000s)

	2009	2010*	2011	2012	2013
Taxation and levies	$148,503	$156,071	$161,821	$167,529	$176,283
User fees	63,150	68,365	69,359	74,222	79,613
Sales of services	33,528	37,403	41,518	41,449	45,941
Licences and permits	5,844	7,328	7,524	8,734	9,178
Investment income	22,147	16,864	20,328	17,144	13,490
Grants including casino revenue	31,272	32,119	35,520	38,261	39,130
Development cost charges	22,932	17,804	14,321	10,480	11,730
Other capital funding sources	26,878	53,217	50,063	19,306	55,542
Other	14,673	10,335	23,588	23,186	23,096
Total revenue	**$368,927**	**$399,506**	**$424,042**	**$400,311**	**$454,003**

**Amounts have been restated*

Source: City of Richmond Finance and Corporate Services

Accumulated surplus 2009–2013 (in $000s)

	2009	2010*	2011	2012	2013
Accumulated surplus, beginning of year	$1,932,963	$2,012,287	$2,110,337	$2,221,134	$2,304,008
Annual surplus	72,286	98,050	110,797	82,874	126,244
Accumulated surplus, end of year	$2,005,249	$2,110,337	$2,221,134	$2,304,008	$2,430,252

**Amounts have been restated*

Source: City of Richmond Finance and Corporate Services

Net financial assets 2009–2013 (in $000s)

	2009	2010	2011	2012	2013
Change in net financial assets	$20,849	$(32,872)	$47,884	$53,436	$79,838
Net financial assets, end of year	$400,711	$367,839	$415,723	$469,159	$548,997

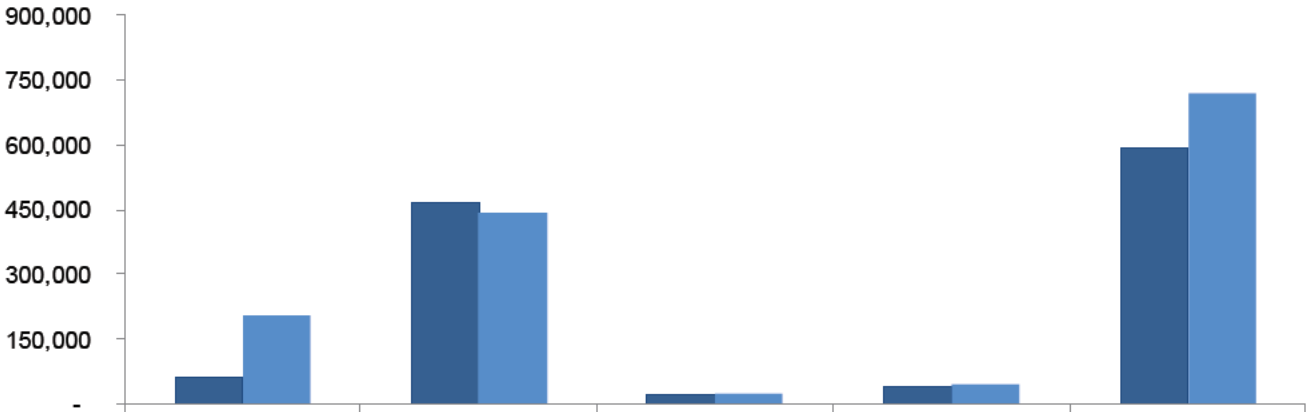
Source: City of Richmond Finance and Corporate Services

Reserves 2009–2013 (in $000s)

	2009	2010	2011	2012	2013
Affordable housing	$10,537	$10,728	$11,344	$18,082	$20,696
Arts, culture and heritage	-	-	-	-	4,379
Capital building and infrastructure	22,655	26,238	27,646	36,686	46,394
Capital reserve	70,799	76,229	81,820	78,254	101,834
Capstan Station	-	-	-	-	3,862
Child care development	854	1,789	2,146	1,995	2,696
Community legacy and land replacement	57,298	5,718	17,097	16,681	16,353
Drainage improvement	13,493	18,213	23,395	27,948	35,555
Equipment replacement	13,823	14,912	16,744	16,579	17,820
Leisure facilities	2,319	2,522	2,621	3,177	3,551
Local improvements	5,750	6,117	6,330	6,428	6,527
Neighbourhood improvement	6,276	5,649	6,057	6,011	6,335
Public art program	1,105	1,278	1,585	1,967	2,282
Sanitary sewer	24,332	27,661	30,254	33,672	37,233
Steveston off-street parking	256	266	277	282	287
Steveston road ends	204	2,930	2,723	1,347	684
Waterfront improvement	1,344	496	179	112	104
Watermain replacement	42,619	46,377	43,435	41,680	42,481
Oval	-	-	1,700	4,100	4,732
Total reserves	**$273,664**	**$247,123**	**$275,353**	**$295,001**	**$353,805**

Source: City of Richmond Finance and Corporate Services

Investment portfolio per type 2012–2013 ($000s)



	Short-term notes and deposits	Government and Government Guaranteed Bonds	MFA* pooled investments	Other bonds	Total Investments
2012	61,835	466,984	21,691	40,451	590,961
2013	205,163	442,963	22,033	45,955	716,114

Source: City of Richmond Finance and Corporate Services

**MFA: Municipal Finance Authority of BC*

Ratio analysis indicators of financial condition

	2012	2013
Sustainability ratios		
Assets to liabilities (times)	11.6	10.9
Financial assets to liabilities (times)	3.1	3.1
Net debt to total revenues	1.2%	0.5%
Net debt to the total assessment	0.0%	0.0%
Expenses to the total assessment	0.6%	0.5%
Flexibility ratios		
Public debt charges to revenues	1.2%	1.1%
Net book value of capital assets to its cost	70.4%	69.7%
Own source revenue to the assessment	0.8%	0.7%
Vulnerability ratios		
Government transfers to total revenues	1.9%	2.6%

Note: Based on average Balance Sheet amounts

Source: City of Richmond Finance and Corporate Services

2013 permissive property tax exemptions

In accordance with Section 98 (2)(b) of the Community Charter, we disclose that the following properties were provided permissive property tax exemptions by Richmond City Council in 2013. Permissive tax exemptions are those exemptions granted by bylaw in accordance with Section 224 of the Community Charter.

Property / Organization	Address	2013 Municipal tax exempted
Churches and religious properties		
B.C. Muslim Association	12300 Blundell Road	$ 3,722
Bakerview Gospel Chapel	8991 Francis Road	2,259
Beth Tikvah Congregation	9711 Geal Road	7,036
Bethany Baptist Church	22680 Westminster Highway	14,149
Brighouse United Church	8151 Bennett Road	5,265
Broadmoor Baptist Church	8140 Saunders Road	6,789
Canadian Martyrs Parish	5771 Granville Avenue	8,456
Christian and Missionary Alliance	3360 Sexmith Road	2,846
Christian Reformed Church	9280 No. 2 Road	7,088
Church in Richmond	4460 Brown Road	17,460
Church of God	10011 No. 5 Road	4,703
Church of Latter Day Saints	8440 Williams Road	9,990
Cornerstone Evangelical Baptist Church	12011 Blundell Road	1,027
Dharma Drum Mountain Buddhist Temple	8240 No. 5 Road	5,849
Emmanuel Christian Community	10351 No. 1 Road	4,370
Faith Evangelical Church	11960 Montego Street	2,866
Fraserview Mennonite Brethren Church	11295 Mellis Drive	8,646
Fujian Evangelical Church	12200 Blundell Road	5,324
Gilmore Park United Church	8060 No. 1 Road	5,827
I Kuan Tao (Fayi Chungder) Association	8866 Odlin Crescent	3,263
Immanuel Christian Reformed Church	7600 No. 4 Road	3,543
India Cultural Centre	8600 No. 5 Road	7,659
International Buddhist Society	9120 Steveston Highway	6,671
Ismaili Jamatkhama & Centre	7900 Alderbridge Way	5,969
Johrei Fellowship Inc	10380 Odlin Road	4,868
Lansdowne Congregation Jehovah's Witnesses	11014 Westminster Highway	2,604
Larch St. Gospel Meeting Room	8020 No. 5 Road	2,803
Ling Yen Mountain Temple	10060 No. 5 Road	3,417
Nanaksar Gurdwara Gursikh Temple	18691 Westminster Highway	3,802
North Richmond Alliance Church	9140 Granville Avenue	2,136
Our Savior Lutheran Church	6340 No. 4 Road	4,478

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Churches and religious properties continued . . .

Parish of St. Alban's	7260 St. Albans Road	$	4,847
Patterson Road Assembly	9291 Walford Street		777
Peace Evangelical Church	8280 No. 5 Road		5,819
Peace Mennonite Church	11571 Daniels Road		9,743
Richmond Alliance Church	11371 No. 3 Road		3,502
Richmond Baptist Church	6560 Blundell Road		1,287
Richmond Baptist Church	6640 Blundell Road		4,692
Richmond Bethel Mennonite Church	10160 No. 5 Road		10,738
Richmond Chinese Alliance Church	10100 No. 1 Road		6,367
Richmond Chinese Evangelical Free Church	8040 No. 5 Road		3,237
Richmond Emmanuel Church	7451 Elmbridge Way		8,498
Richmond Pentecostal Church	9300 Westminster Highway		8,720
Richmond Pentecostal Church	9260 Westminster Highway		729
Richmond Presbyterian Church	7111 No. 2 Road		4,209
Richmond Sea Island United Church	8711 Cambie Road		7,859
Salvation Army Church	8280 Gilbert Road		3,125
Science of Spirituality SKRM Inc	11011 Shell Road		1,407
Shia Muslim Community	8580 No. 5 Road		2,034
South Arm United Church	11051 No. 3 Road		1,896
St. Anne's Anglican Church	4071 Francis Road		3,846
St. Edward's Anglican Church	10111 Bird Road		3,782
St. Gregory Armenian Apostolic Church	13780 Westminster Highway		1,323
St. Joseph the Worker Roman Catholic Church	4451 Williams Road		7,954
St. Monica's Roman Catholic Church	12011 Woodhead Road		6,044
St. Paul's Roman Catholic Parish	8251 St. Albans Road		5,807
Steveston Buddhist Temple	4360 Garry Street		8,945
Steveston Congregation Jehovah's Witnesses	4260 Williams Road		4,411
Steveston United Church	3720 Broadway Street		2,988
Subramaniya Swamy Temple	8840 No. 5 Road		1,253
Thrangu Monastery Association	8140 No. 5 Road		4,597
Thrangu Monastery Association	8160 No. 5 Road		2,390
Towers Baptist Church	10311 Albion Road		6,251
Trinity Lutheran Church	7100 Granville Avenue		7,161
Ukrainian Catholic Church	8700 Railway Avenue		2,005
Vancouver Airport Chaplaincy	3211 Grant McConachie Way		521
Vancouver International Buddhist Progress Society	6690 - 8181 Cambie Road		8,885
Vancouver International Buddhist Progress Society	8271 Cambie Road		3,535
Vedic Cultural Society of B.C.	8200 No. 5 Road		3,061
West Richmond Gospel Hall	5651 Francis Road		2,698

Recreation, Child Care, and Community Service Properties

Cook Road Children's Centre	8300 Cook Road	$	1,851
Girl Guides of Canada	4780 Blundell Road		2,323
Kinsmen Club of Richmond	11851 Westminster Highway		299
Navy League of Canada	7411 River Road		9,557
Richmond Animal Protection Society	12071 No. 5 Road		10,978
Richmond Caring Place	7000 Minoru Boulevard		164,256
Richmond Center for Disabilities	100 - 5671 No. 3 Road		11,243
Richmond Family Place	8660 Ash Street		9,370
Richmond Ice Centre	14140 Triangle Road		130,667
Richmond Lawn Bowling Club	6131 Bowling Green Road		8,039
Richmond Public Library	11580 Cambie Road		3,332
Richmond Public Library	11688 Steveston Highway		6,203
Richmond Rod and Gun Club	7760 River Road		18,080
Richmond Tennis Club	6820 Gilbert Road		13,433
Richmond Watermania	14300 Entertainment Boulevard		201,069
Richmond Winter Club	5540 Hollybridge Way		138,490
Riverside Children's Centre	5862 Dover Crescent		1,045
Scotch Pond Heritage	2220 Chatham Street		6,325
Terra Nova Children's Centre	6011 Blanchard Drive		2,221
Treehouse Learning Centre	100 - 5500 Andrews Road		1,439

Private Educational Properties

B.C. Muslim Association	12300 Blundell Road	$	1,143
Choice Learning Centre	20411 Westminster Highway		999
Choice Learning Centre	20451 Westminster Highway		5,299
Cornerstone Christian Academy School	12011 Blundell Road		736
Richmond Christian School	10260 No. 5 Road		5,861
Richmond Christian School Association	5240 Woodwards Road		28,199
Richmond Jewish Day School	8760 No. 5 Road		13,768
St. Joseph the Worker Roman Catholic Church	4451 Williams Road		7,954

Senior Citizen Housing

Richmond Legion Senior Citizen Society	7251 Langton Road	$	16,166

Community Care Facilities

Canadian Mental Health Association	8911 Westminster Highway	$	6,324
Development Disabilities Association	6531 Azure Road		1,745
Development Disabilities Association	8400 Robinson Road		2,521
Development Disabilities Association	7611 Langton Road		2,399
Greater Vancouver Community Service	4811 Williams Road		2,020
Pinegrove Place, Mennonite Care Home Society	11331 Mellis Drive		13,959
Richmond Society for Community Living	303 - 7560 Moffatt Road		722
Richmond Society for Community Living	4433 Francis Road		1,414
Richmond Society for Community Living	5635 Steveston Highway		5,857
Richmond Society for Community Living	9 - 11020 No. 1 Road		954
Richmond Society for Community Living	9580 Pendleton Road		7,319
Rosewood Manor, Richmond Intermediate Care Society	6260 Blundell Road		29,683

Municipal Use

Richmond Oval	6111 River Road	$	2,038,855

2013 City Centre Area transitional tax exemptions

Organization	Address	2013 Municipal tax exempted
0737293 BC Ltd	4711 Garden City Road	$ 21,232
0815024 BC Ltd	5440 Hollybridge Way	51,836
0882892 BC Ltd	5600 Cedarbridge Way	10,635
0883911 BC Ltd	5740 Minoru Boulevard	16,955
2725312 Canada Inc	5900 No. 2 Road	37,322
2725312 Canada Inc	6191 Westminster Highway	19,421
2725312 Canada Inc	6751 Westminster Highway	28,898
317159 BC Ltd	4551 No. 3 Road	37,146
AAA Self Storage Depot Inc	8520 Cambie Road	19,832
Amacon Development (Alderbridge) Corp	7680 Alderbridge Way	17,406
Arthur Bell Holdings Ltd	7960 Alderbridge Way	20,727
Arthur Bell Holdings Ltd	5333 No. 3 Road	19,556
Canadian Tire Real Estate Ltd	3500 No. 3 Road	31,346
China Cereals & Oils Corp	8777 Odlin Road	12,043
Conway Richmond Estates Ltd	4800 No. 3 Road	19,350
Cressey Gilbert Holdings Ltd	5640 Hollybridge Way	25,547
EIG Alderbridge Investments Inc	7851 Alderbridge Way	41,988
Elmbridge Holdings Ltd	6791 Elmbridge Way	42,238
Grand Long Holdings Canada Ltd	8091 Park Road	34,231
HGL Investments Ltd	132-4940 No. 3 Road	31,721
Hallmark Holdings Ltd	7811 Alderbridge Way	38,854
Jiatai Realty Inc	5400 Minoru Boulevard	19,824
Marisco Holdings Ltd	7680 River Road	17,656
McDonald's Restaurants of Canada Ltd	7120 No. 3 Road	19,143
Munch Holdings Co. Ltd	5660 Minoru Boulevard	14,461
PLR Holdings Ltd	5840 Minoru Boulevard	21,178
Porte Industries Ltd	5560 Minoru Boulevard	14,001
Richmond Holdings Ltd	7880 Alderbridge Way	30,528
Richmond Holdings Ltd	7111 Elmbridge Way	16,228
Richmond Holdings Ltd	7671 Alderbridge Way	26,029
Richmond Holdings Ltd	5003 Minoru Boulevard	14,659
Richmond Holdings Ltd	6851 Elmbridge Way	18,967
Richmond Holdings Ltd	6871 Elmbridge Way	16,927

City of Richmond contacts

The City of Richmond offers many civic services to the community. Additional services to the community are provided through the Richmond Olympic Oval, Richmond Public Library and Gateway Theatre. For more information on City services contact:

City of Richmond
6911 No. 3 Road
Richmond, British Columbia
V6Y 2C1 Canada
Phone: 604-276-4000
Email: infocentre@richmond.ca
www.richmond.ca
/CityofRichmondBC
@Richmond_BC
/CityofRichmondBC

Gateway Theatre
6500 Gilbert Road
Information Line: 604-270-6500
Box Office: 604-270-1812
www.gatewaytheatre.com
/Gateway-Theatre
@Gateway_Theatre

Richmond Public Library
Hours: 604-231-6401
www.yourlibrary.ca
/yourlibraryRichmond
@RPL_YourLibrary
/YourLibraryRichmond

Richmond Olympic Oval
6111 River Road
Information Line: 778-296-1400
www.richmondoval.ca
/Richmondoval
@Richmondoval

Major services provided by the City of Richmond

Finance and Corporate Services

Includes customer service, information technology, finance, economic development, real estate services, City clerks, enterprise services, administration and compliance.

Engineering and Public Works

Comprises engineering design, construction and maintenance services for the infrastructure throughout the City as well as all City-owned buildings. Responsible for local water supply, sewer and drainage, dikes and irrigation system, roads, environmental services and corporate sustainability.

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Contents printed on Canadian made, 100% recycled stock using environmentally friendly toners.

Richmond

City of Richmond, B.C.

2013 Annual Report Highlights

For the year ended December 31, 2013

Government Finance Officers Association

Award for Outstanding Achievement in Popular Annual Financial Reporting

Presented to

City of Richmond

British Columbia

For its Annual
Financial Report
for the Fiscal Year Ended

December 31, 2012

Executive Director/CEO

The Government Finance Officers Association of the United States and Canada (GFOA) has given an Award for Outstanding Achievement in Popular Annual Financial Reporting to the City of Richmond for its Popular Annual Financial Report for the fiscal year ended December 31, 2012. The Award for Outstanding Achievement in Popular Financial Reporting is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government popular reports.

In order to achieve an Award for Outstanding Achievement in Popular Annual Financial Reporting, a government unit must publish a Popular Annual Financial Report, whose contents conform to program standards of creativity, presentation, understandability and reader appeal.

An Award for Outstanding Achievement in Popular Annual Financial Reporting is valid for a period of one year only. We believe our current report continues to conform to the Popular Annual Financial Reporting requirement, and we are submitting it to the GFOA.

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This report features highlights from Richmond's 2013 Annual Report. For the detailed 2013 Annual Report that meets legislated requirements, please visit www.richmond.ca (City Hall > Finance, Taxes & Budgets > Budgets & Financial Reporting > Annual Reports).

Cover photo: Richmond City Centre as viewed from the Canada Line's Aberdeen station.
Photo by Chung Chow.

This report was prepared by the City of Richmond Finance and Corporate Services Department and Corporate Communications Office. Design, layout and production
was done by the City of Richmond Production Centre. ©2014 City of Richmond

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Richmond City Council

Front row, left to right:

Councillor Linda Barnes, Councillor Bill McNulty, Mayor Malcolm Brodie, Councillor Linda McPhail, Councillor Harold Steves

Back row, left to right:

Captain Dave Cullen, Richmond Fire-Rescue (retired), Councillor Chak Au, Councillor Derek Dang, Councillor Evelina Halsey-Brandt, Councillor Ken Johnston, Constable Melissa Lui, Richmond RCMP

Message from the Mayor

The City of Richmond enjoyed another year of positive growth in 2013. With our population now over 200,000 and billions of dollars of investment in new development and public infrastructure planned for our community in the coming decade, Council has placed a strong focus on planning and building for our future.

In November, Council approved a comprehensive $124.1 million major capital program which will include much needed replacements for our major aquatic centre; a new, expanded older adult centre; completion of our new City Centre Community Centre and replacement of the City's No. 1 Fire Hall. These new facilities will replace aging and outdated buildings that no longer meet the growing and evolving needs of our community. All these new projects will be completed by 2017 and the construction costs will not impact property taxes.

Council was also pleased to conclude an innovative agreement with the province that will see a new joint fire hall/ambulance facility built in North Richmond, the first combined facility of this type in a major urban centre in BC.

The City also launched the master planning process for the Garden City Lands, a 136.5-acre parcel of open space on the edge of the City Centre, which will be entirely for community use. It is an extraordinary opportunity for any community to develop a plan for such a large area in a central location with all of it destined to remain in the public realm. Thousands of our residents have already participated in the planning process and we look forward to the Garden City Lands becoming a treasured public resource in the years to come.

As our City grows, our community social needs are also becoming greater. In 2013, Council approved a 10-year Social Development Strategy, one of the first such comprehensive community plans in the province. This plan identifies civic social development priorities and actions for the next decade. We've already made great strides towards implementing this plan. In December, Council committed more than $30 million to support two major affordable housing projects, which will result in more than 400 units of new affordable housing for seniors and low income/at-risk residents.

As Council enters the final year of our current term in 2014, we will continue to work closely with staff, community groups and other partners to achieve our Council Term Goals, ensuring that Richmond residents and business will remain being well-served by the City today and in the future. I invite you to contact the Mayor's Office at any time to discuss or comment on any of the information contained in this Annual Report.

Malcolm Brodie
Mayor, City of Richmond

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Message from the Chief Administrative Officer

I am delighted to present the City of Richmond's 2013 Annual Report, chronicling another year of innovation, progress and achievement and our continued strong financial position.

Our taxpayers enjoy the second lowest taxes among the largest cities in our region. Thanks to the City's Long Term Financial Management Strategy, which caps annual tax increases, the growth in our property taxes has also been the second lowest in the region over the past five years.

Our financial health has ensured that we have been able to maintain and build upon Richmond's reputation for outstanding quality of life and exceptional municipal services and amenities, while focusing on delivery of Council's Term Goals. Our prudent financial planning, which has reduced debt and built our reserves, allowed Council to achieve one of its major goals by approving a major $124.1 million capital building program for critically-needed new facilities, without having property taxes impacted by the construction costs.

Sustainability, another key Council Term Goal, has become a major focus for our organization. A highlight of our sustainability initiatives is our innovative district energy program. 2013 marked the first year of operation for the City's first district energy utility. By year's end, the Alexandra District Energy Utility (ADEU) was supplying heating and cooling to more than 600 new homes. When fully operational, the ADEU is projected to reduce greenhouse gas emissions by 6,000 tonnes annually. The City received both provincial and national awards in 2013 for the ADEU for its innovative solutions and commitment to sustainability. Richmond is aggressively pursuing other district energy projects and has formed a new municipal corporation to act as the operating entity for an anticipated expanding array of utility projects.

The City's other municipal corporation, the Richmond Olympic Oval Corporation, also continues to be hugely successful. The Oval Corporation again reported a profit for its latest fiscal year. This return on investment virtually offsets the City's operating contribution to the corporation, ensuring the long-term viability and success of this tremendous community asset. In addition, the Richmond Olympic Oval has continued to exceed all of its operational targets attracting more than 700,000 visits annually for its diverse array of programs, amenities and events.

Our organization remains committed to continuous improvement. While we are proud of the achievements highlighted in the Annual Report for 2013, they will now become a benchmark as we continue to work toward our vision for Richmond to be the most appealing, livable and well-managed community in Canada.

George Duncan
Chief Administrative Officer

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2013 highlights

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In 2013, the City achieved a number of milestones in fulfilling Council's Terms Goals for 2011–2014. Some of the more significant achievements of the year are highlighted on these pages:

Facility Development

Council approved a new $124.1 million major facilities building program. The program will include construction of new aquatic and older adult centres and new No. 1 Fire Hall to replace the aging and outdated facilities; and completion of the new City Centre Community Centre.

Community Social Services

Council approved a 10-year Social Development Strategy. One of the first of its kind in BC, this comprehensive strategy identifies civic social development priorities and actions for the next decade.

Managing Growth and Development

An extensive master planning process for the Garden City Lands was launched. This plan will determine the future community use for this valuable 136.5-acre parcel on the edge of Richmond's City Centre.

Community Social Services

The City guaranteed more than $30 million in land and funding to support two major new affordable housing projects. Together, these projects will see creation of more than 400 new units for seniors and low income/at-risk residents.

Sustainability

Richmond introduced new Green Cart and Large Item Pickup Programs for single-family homes and 11,000 townhomes. This improved convenience for residents resulted in an increase in organics recycling by more than 4,000 tonnes in 2013.

Community Safety

The City and BC Emergency Health Services reached an agreement to build a joint fire hall/ambulance station in North Richmond. To open in 2016, it will be the first combined facility of this type in a major BC urban centre.

Economic Development

The City's Sport Hosting Program helped secure more than 30 sports events for Richmond in 2013. These events generated more than 23,000 hotel room nights for Richmond plus millions of dollars in economic spinoffs.

Sustainability

The City's new Alexandra District Energy Utility (ADEU) successfully completed its first full year of operation. Working with the private sector, over 600 units are now connected to the system leading to the reduction of greenhouse gas emissions by more than 330 tonnes to date.

Community Wellness

The Richmond Olympic Oval marked its fifth anniversary in 2013. A major asset in promoting community wellness through active lifestyles, the Oval hosted more than 700,000 visits in 2013 and recorded 23,000 sport and fitness program registrations.

Municipal Infrastructure Improvement

Phase 1 of a new Dike Master Plan, which includes Steveston and the West Dike, was endorsed in 2013. Implementation of this innovative long-term plan will ensure Richmond remains safe from flooding and addresses the long-term impacts of rising sea levels.

Facility Development

The new Tram Barn was opened at Steveston Park. The facility houses the historic Interurban Tram and has become a popular attraction for residents and visitors.

Waterfront Enhancement

The newly-restored Seine Net Loft at Britannia Heritage Shipyards National Historic Site was officially opened in 2013. The new facility provides a historic and versatile new amenity space for programs and events in a beautiful waterfront setting.

Arts and Culture

The tenth annual Richmond Maritime Festival attracted 40,000 visitors to the Britannia Heritage Shipyards National Historic Site. During the Festival, a new Guinness World Record was set when 180 participants sang in sequence the nursery rhyme *Row, Row, Row Your Boat*.

2013 awards

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The awards and recognition received by the City form an important part of the annual benchmarking of our achievements. In 2013, the City again received a number of awards for innovation and excellence.

- Richmond's success in creating a positive economic development climate was recognized for the second consecutive year by fDi (Foreign Direct Investment) magazine. Among over 400 North American cities rated, Richmond was ranked as a Top 10 Small City of the Future (third), as well as a Top 10 Small City in the Business Friendliness and Foreign Direct Investment Strategy categories.
- The City's development of the Alexandra District Energy Utility won two awards for innovation in both engineering and public works. Canadian Consulting Engineer magazine and the Association of Consulting Engineering Companies–Canada bestowed the ADEU with the Award of Excellence. This award is the most prestigious recognition in Canadian engineering and is given to projects that exhibit a high quality of engineering, imagination and innovation. The ADEU was also named Project of the Year by the Public Works Association of BC. This award is given to a municipality that constructs a major and complex public works or utilities project that meets specific criteria including innovative design with project benefits for the community and the environment.
- Richmond again won awards from the Government Financial Officers Association of North America for our 2012 Annual Report, marking a decade of excellence in financial reporting. Richmond received the Canadian Award for Financial Reporting for the eleventh consecutive year. The City also received the Association's Award for Outstanding Achievement in Popular Annual Financial Reporting for the fourth year in a row.
- City Council awarded Freedom of the City to long time former mayor and councillor Greg Halsey-Brandt. He is only the fifth individual to receive this prestigious honour.

Report from the General Manager, Finance and Corporate Services

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I am pleased to submit the City of Richmond's consolidated financial statements for the year ended December 31, 2013 pursuant to Section 167 of the Community Charter. The financial statements reflect a consolidation of the financial position and operating results for the City of Richmond, Lulu Island Energy Company, Richmond Olympic Oval Corporation and the Richmond Public Library. The Lulu Island Energy Company was incorporated on August 19, 2013 and is a municipal corporation wholly-owned by the City of Richmond. The primary business of the new corporation is to manage and operate district energy utilities.

The external auditors, KPMG LLP, conducted an independent examination and have expressed their opinion that the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the City of Richmond as at December 31, 2013 in accordance with Canadian public sector accounting standards.

The City continued to strengthen its financial condition and position in 2013; the City's net worth reached $2.4B (2012: $2.3B) and cash and investments increased to $754.4M (2012: $640.6M). Net financial assets increased to $549.0M (2012: $469.2M), while net debt outstanding was reduced to $1.1M (2012: $3.5M). Statutory reserves increased to $353.8M (2012: $295.0M). The City's 2013 operating revenues were $454.0M (2012: $400.3M) and operating expenses were $327.8M (2012: $317.4M).

In addition to prudently managing the City's finances, we are continuing to create a positive business climate in Richmond. The City's new business development program, including a dedicated business portal—www.businessinrichmond.ca—and a business outreach initiative, was launched to provide business with easy access to information, resources and City services. To provide flexibility to local business, Richmond participated in an innovative pilot program to streamline business license requirements for mobile businesses which operate in multiple municipalities within the region. Increased economic activity in 2013 saw construction value of building permits exceeding $679M, the second highest on record while business licenses increased to 13,371, all indicators of a thriving local economy.

Richmond's success in creating a positive economic environment was again recognized by fDi (Foreign Direct Investment) Magazine in 2013. Among over 400 North American cities rated, Richmond was ranked as a Top 10 Small City of the Future (third), as well as a Top 10 Small City in the Business Friendliness and Foreign Direct Investment Strategy categories.

Richmond's economy continues to thrive and the City's solid financial condition ensures that City Council is well positioned to address both current and emerging community needs.

Andrew Nazareth, BEc, CGA
General Manager, Finance and Corporate Services

City of Richmond financial information

City of Richmond consolidated statement of financial position (expressed in thousands of dollars)

December 31, 2013, with comparative figures for 2012

	2013	2012
Financial assets[1]		
Cash and cash equivalents	$ 38,368	$ 49,632
Investments	716,114	590,961
Accrued interest receivable	3,224	3,122
Accounts receivable	19,625	22,682
Taxes receivable	9,244	8,895
Development fees receivable	21,405	12,923
Debt reserve fund—deposits	200	386
	808,180	688,601
Financial liabilities		
Accounts payable and accrued liabilities	83,146	75,325
Deposits and holdbacks	51,841	40,669
Deferred revenue	35,870	37,307
Development cost charges	87,212	62,547
Obligations under capital leases	58	106
Debt	1,056	3,488
	259,183	219,442
Net financial assets[2]	548,997	469,159
Non-financial assets[3]		
Tangible capital assets	1,877,298	1,830,619
Inventory of materials and supplies	2,363	2,276
Prepaid expenses	1,594	1,954
	1,881,255	1,834,849
Accumulated surplus[4]	**$ 2,430,252**	**$ 2,304,008**

1 Financial assets: cash resources.
2 Net financial assets: the net financial position, calculated as the difference between financial assets and liabilities.
3 Non-financial assets: assets that are owned and will be utilized for future services, including tangible capital assets, inventories and prepaid expenses.
4 Accumulated surplus: this is an indicator of the City's overall financial health. It is the difference between the combined financial assets and non-financial assets as compared to its liabilities and includes the investments in tangible capital assets (capital equity), total reserves (restricted funds), appropriated surplus (internally appropriated funds/provisions) and general or unrestricted surplus.

The Financial Statements are presented in comformity with generally accepted accounting practices (GAAP).

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City of Richmond consolidated statement of operations[1] (expressed in thousands of dollars)

Year ended December 31, 2013, with comparative figures for 2012

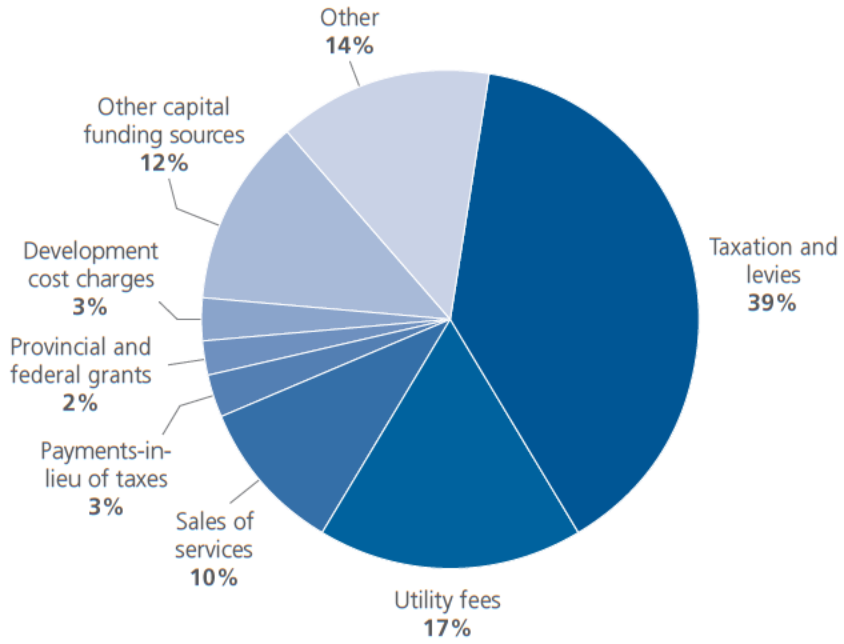
	Budget 2013	Actual 2013	Actual 2012
Revenues			
Taxation and levies	$ 174,825	$ 176,283	$ 167,529
Utility fees	74,321	79,613	74,222
Sales of services	40,366	45,941	41,449
Payments-in-lieu of taxes	13,199	14,406	13,189
Provincial and federal grants	7,256	7,092	9,487
Development cost charges	1,280	11,730	10,480
Other capital funding sources	71,768	55,542	19,306
Other revenues:			
Investment income	16,792	13,490	17,144
Gaming revenue	12,364	17,632	15,585
Licenses and permits	7,537	9,178	8,734
Other	7,662	23,096	23,186
	427,370	454,003	400,311
Expenses			
Law and Community Safety	83,844	77,587	75,193
Utilities: water, sewerage and sanitation	73,862	73,764	72,682
Engineering, Public Works and Project Development	56,427	53,219	53,164
Community Services	49,162	49,753	46,796
General government	47,931	41,677	38,570
Planning and Development	12,513	11,854	11,961
Richmond Olympic Oval	11,432	10,509	9,826
Library services	9,540	9,396	9,245
	344,711	327,759	317,437
Annual surplus[2]	82,659	126,244	82,874
Accumulated surplus, beginning of year	2,304,008	2,304,008	2,221,134
Accumulated surplus, end of year	**$ 2,386,667**	**$ 2,430,252**	**$ 2,304,008**

1 The statement of operations shows the sources of revenues and expenses, the annual surplus or deficit and the change in the accumulated surplus.

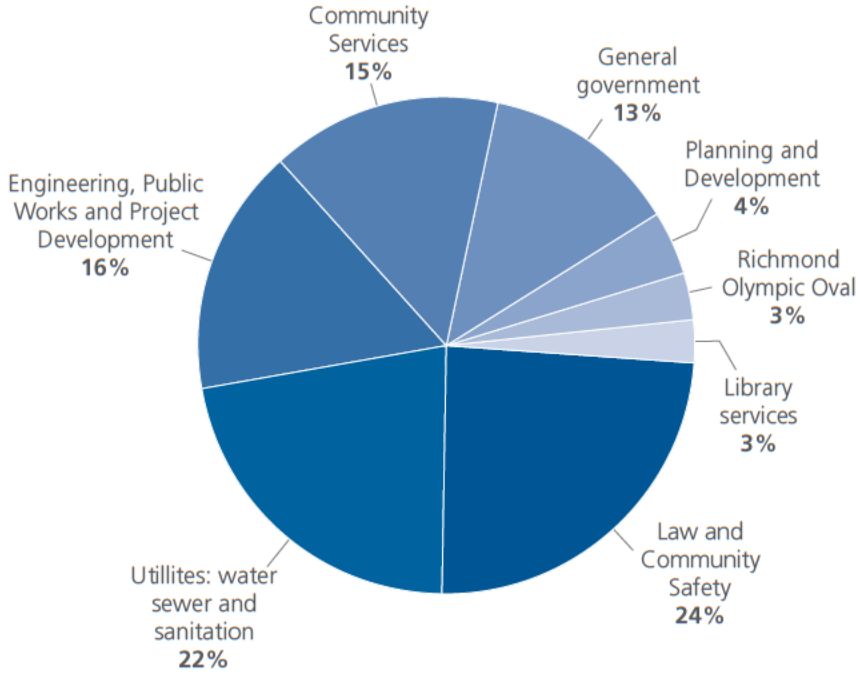
2 Annual surplus is shown on this statement as the difference between revenues recognized and the cost of government services provided in the fiscal year

City of Richmond financial information continued ...

2013 actual revenue



2013 actual expense

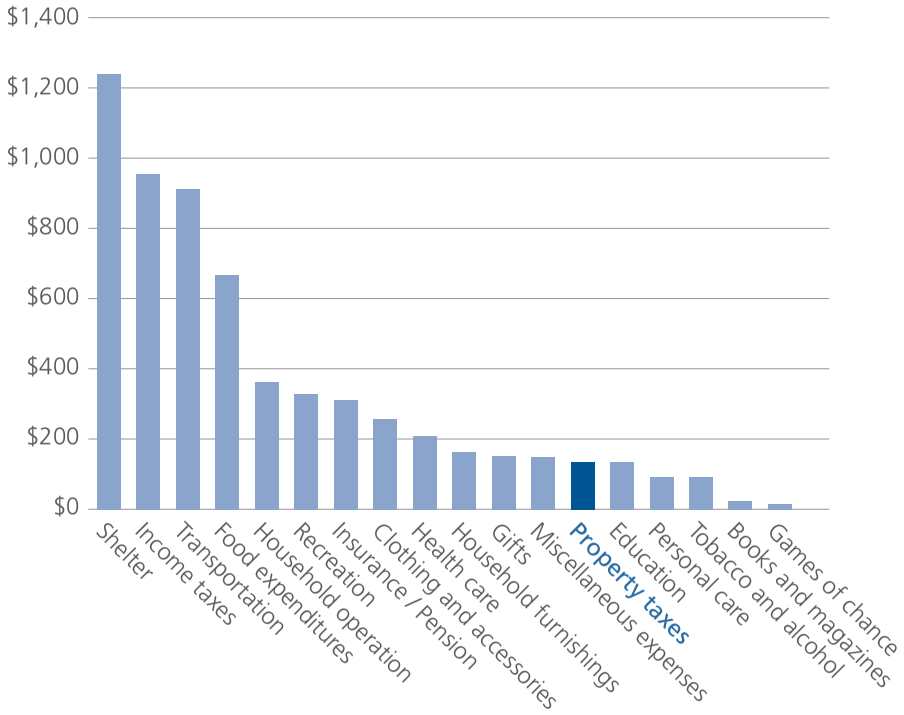


5 year trend—2009–2013

	2009	2010	2011	2012	2013
Consolidated Revenue:	368,927	378,703	424,042	400,311	454,003
Consolidated Expenses:	296,641	301,456	313,245	317,437	327,759
Annual Surplus:	72,286	77,247	110,797	82,874	126,244

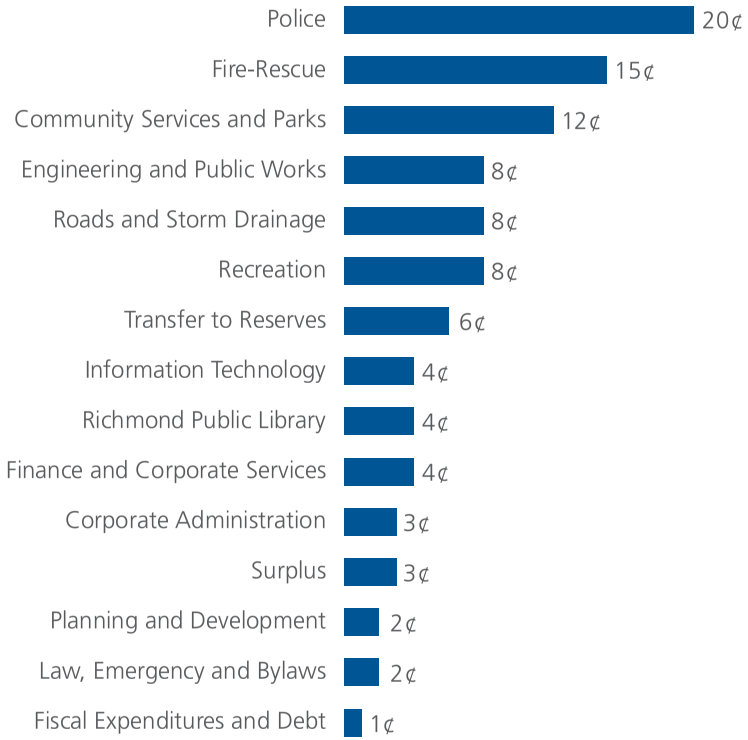
CNCL - 191

Monthly average household costs in British Columbia



Source: Statistics Canada—Survey of household spending in 2011

2013 actual breakdown of $1 municipal taxes



Source: City of Richmond Finance and Corporate Services

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Contacts and major services provided by the City of Richmond

City of Richmond contacts

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Gateway Theatre

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Box Office: 604-270-1812
www.gatewaytheatre.com
/Gateway-Theatre
@Gateway_Theatre

Richmond Public Library

Hours: 604-231-6401
www.yourlibrary.ca
/yourlibraryRichmond
@RPL_YourLibrary
/YourLibraryRichmond

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City of Richmond's Vision:

To be the most appealing, livable and well-managed community in Canada

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City of Richmond
6911 No. 3 Road, Richmond, BC V6Y 2C1
Telephone: 604-276-4000
www.richmond.ca

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City of Richmond

Report to Committee

To:	Community Safety Committee	**Date:**	May 12, 2014
From:	John McGowan Fire Chief	**File:**	09-5125-05-03/Vol 01
Re:	**Transportation of Dangerous Goods by Railway**		

Staff Recommendation

1. That a letter be sent to the Federal Minister of Transport requesting *Protective Direction 32* be amended to require rail companies to report the nature, exact volume and frequency of dangerous goods transported through municipalities, so that an assessment of the risk to the municipality can be made.

2. That a Council Resolution be submitted to the Federation of Canadian Municipalities, requesting that the federal government issues an amendment to Protective Direction 32 requiring rail companies to provide to municipalities the nature, exact volume and frequency of dangerous goods transported.

For John McGowan
Fire Chief
(604-303-2734)

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

Staff Report

Origin

On November 20, 2013, the Minister of Transport issued Protective Directions under Section 32 of the *Transportation of Dangerous Goods Act* (1992), directing rail companies to share yearly aggregate information on the nature and amount of dangerous goods the company transports by railway vehicle through the municipality, presented by quarter. This report responds to information received from Canadian National Railway Company (CN) and Canadian Pacific (CP).

This supports Council Term Goal 1:

> *To ensure Richmond remains a safe and desirable community to live, work and play in, through the delivery of effective public safety services that are targeted to the City's specific needs and priorities*

Analysis

Protective Direction 32 is important, as the City needs to plan for potential hazardous materials incidents that may impact the City. CN and CP have both sent information regarding the type and quantity (Railcar or Intermodal) of hazardous materials being transported by quarter and year, but not the actual quantity or the timing of hazardous products moving through the City. City staff recognizes that the information is security sensitive and staff are bound by a confidentiality agreement from sharing the information for any other purpose but emergency planning.

However, the information required by Protective Direction 32 provides insufficient detail for comprehensive emergency planning purposes or emergency response training. The railway companies have fulfilled their reporting requirements under Protective Direction 32, however, from an emergency planning perspective, aggregate information does not indicate whether a train has 130,000 litres of a hazardous material product or half a litre.

Current Situation

Rail car movement within the City is limited to low speeds, which decreases the risk of derailment and of rupture in the event of a derailment. In the event of a loss of product, rail companies are directed through legislation to have a trained emergency response team available for deployment.

Richmond Fire-Rescue is the default responder on all hazardous materials incidents in the City. RFR is trained and equipped to respond to and mitigate minor and moderate spill events. In major and disaster events, RFR would be the lead agency, coordinating resources from outside agencies as required. Richmond Fire-Rescue has a Hazardous Materials Team trained to the National Fire Protection Association (NFPA 472) Technician level and the entire department is trained to the Operations level.

Hazmat Operations training focuses on techniques used to protect people, ecosystems or property from a hazardous material emergency. Hazmat Technician training focuses on mitigating the source of a hazardous material emergency. Training is in-depth and addresses the key response functions of rescue, identification of spilled materials, containment and mitigation. Hazmat Technicians are not tasked with site cleanup.

Technicians train with rail industry experts from TRANSCAER (Transportation Community Awareness and Emergency Response), a voluntary national outreach focused on assisting communities prepare for and respond to a possible hazardous material transportation incident. TRANSCAER members are volunteer representatives from the chemical manufacturing, transportation, distributor and emergency response industries, and government.

Financial Impact

None.

Conclusion

Protective Direction 32 provides local authorities with base information for emergency planning purposes but does not provide enough detail to formulate a comprehensive emergency plan for mitigation of potential incidents. A greater level of detailed information would assist in emergency planning and emergency response training. This would also enable a better assessment of the risk to the City of the transportation of dangerous goods by railway.

John McGowan
Fire Chief
(604-303-2734)

Deborah Procter
Manager, Emergency Programs
(604-244-1211)

DP:dp

City of Richmond

Report to Committee

To:	General Purposes Committee	**Date:**	May 14, 2014
From:	W. Glenn McLaughlin Chief Licence Inspector & Risk Manager	**File:**	12-8275-05/2014-Vol 01
Re:	**Takifugu Japanese Restaurant Ltd. Unit 133 - 4800 No. 3 Road**		

Staff Recommendation

That the application from Takifugu Japanese Restaurant Ltd., for an amendment to increase their hours of liquor service under Food Primary Liquor Licence No. 047295 ***from*** Monday to Saturday 11:00 a.m. to 1:00 a.m. and Sunday 11:00 a.m. to Midnight **to** Monday to Saturday 11:00 a.m. to 2:00 a.m. and Sunday 11:00 a.m. to 1:00 a.m., be supported and that a letter be sent to the Liquor Control and Licensing Branch advising that:

1. Council supports the amendment for an increase in liquor service hours as the increase will not have a significant impact on the community.

2. Council's comments on the prescribed criteria (set out in Section 53 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 extended hours of liquor service under the Food Primary Liquor Licence should not change the establishment such that it is operated contrary to its primary purpose.

3. As the operation of a licenced establishment may affect nearby residents the City gathered the view of the residents as follows:

    a. Property owners and businesses within a 50 metre radius of the subject property were contacted by letter detailing the application, providing instructions on how community comments or concerns could be submitted.

    b. Signage was posted at the subject property and three public notices were published in a local newspaper. This signage and notice provided information on the application and instructions on how community comments or concerns could be submitted.

4. Council's comments and recommendations respecting the views of the residents are as follows:

    a. That based on the number of letters sent and the lack of response received from all public notifications, Council considers that the amendments are acceptable to the majority of the residents in the area and the community.

W. Glenn McLaughlin
Chief Licence Inspector & Risk Manager
(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 amendment to an application submitted to LCLB and to the City of Richmond by Takifugu Japanese Restaurant Ltd. (the "Applicant") for the following amendment to its Food Primary Liquor Licence No. 047295;

> Change the hours of liquor sales ***from*** Monday to Saturday 11:00 a.m. to 1:00 a.m. and Sunday 11:00 a.m. to Midnight ***to*** Monday to Saturday 11:00 a.m. to 2:00 a.m. and Sunday 11:00 a.m. to 1:00 a.m.

There is no entertainment proposed.

Local Government has been given the opportunity to provide comments and recommendations to the LCLB with respect to liquor licence applications and amendments. For amendments to Food Primary licences, the process requires 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

The Applicant has been operating a restaurant offering a Japanese Izakaya cuisine menu with a Food Primary Liquor Licence since April of 2010. The restaurant has an approved occupancy of 74 persons.

The zoning for the property is Auto-Oriented Commercial (CA) and the business use of a restaurant is consistent with the permitted uses for this zoning district. The restaurant is situated within a commercial shopping complex, where there are several other eateries, retail shops and personal services that cater to the day to day needs of the general public.

The Applicant is requesting the extended hours of service in order to offer liquor service to workers of neighbouring businesses who come in after 11 p.m. for a late night dinner /snack and would like to have a drink with their meal.

Summary of Application and Comments

The City's process for reviewing applications for liquor related permits is prescribed by the Development Application Fee's Bylaw No. 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*; or

(b) any of the following in relation to an existing licence to serve liquor:
(i) addition of a patio;
(ii) relocation of a licence;
(iii) change or hours; or
(iv) patron participation

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 April 5, 2014, and the three ads were verified as being published in the local newspaper on April 11, April 16, and April 18, 2014.

In addition to the advertised public notice requirements set out in Section 1.8.2, staff have adapted from a prior bylaw requirement, the process of the City sending letters to businesses, residents and property owners within a 50-metre radius of the establishment (Attachment 1). This letter provides details of the proposed liquor licence application and requests the public to communicate any concerns to the City.

There are 15 property parcels within the consultation area. On April 9, 2014, letters were sent to 195 businesses, residents and property owners to gather their view on the application. Forty-one letters were returned as undeliverable.

All public consultations ended May 9, 2014, and no responses were received from the public.

Potential for Noise

Staff believe that there would be no noticeable increase in noise if the additional hours of liquor service were supported.

Potential for Impact on the Community

Any typical potential impacts associated with extended hours of liquor sales such as drinking and driving, criminal activity and late-night traffic are not expected to be unduly increased with this amendment and taking into account the lack of response from those contacted in the consultation area and no responses from the city-wide public notifications, staff feel that the endorsement of the application is warranted.

Potential to operate contrary to its primary purpose

Staff is of the opinion that due to a lack of any non-compliance issues related to the operation of this business, there would be minimal potential of the business being operated in a manner that would be contrary to its primary purpose as a food establishment.

Other agency comments

As part of the review process, staff requested comments from Vancouver Coastal Health, Richmond RCMP, Richmond Fire-Rescue, Richmond Joint Task Force, the City Building Permit and Business Licence Departments. These agencies generally provide comments on the compliance history of the Applicant's operations and premises.

No objections to the application were received from any of the above mentioned agencies and divisions.

Financial Impact

None

Conclusion

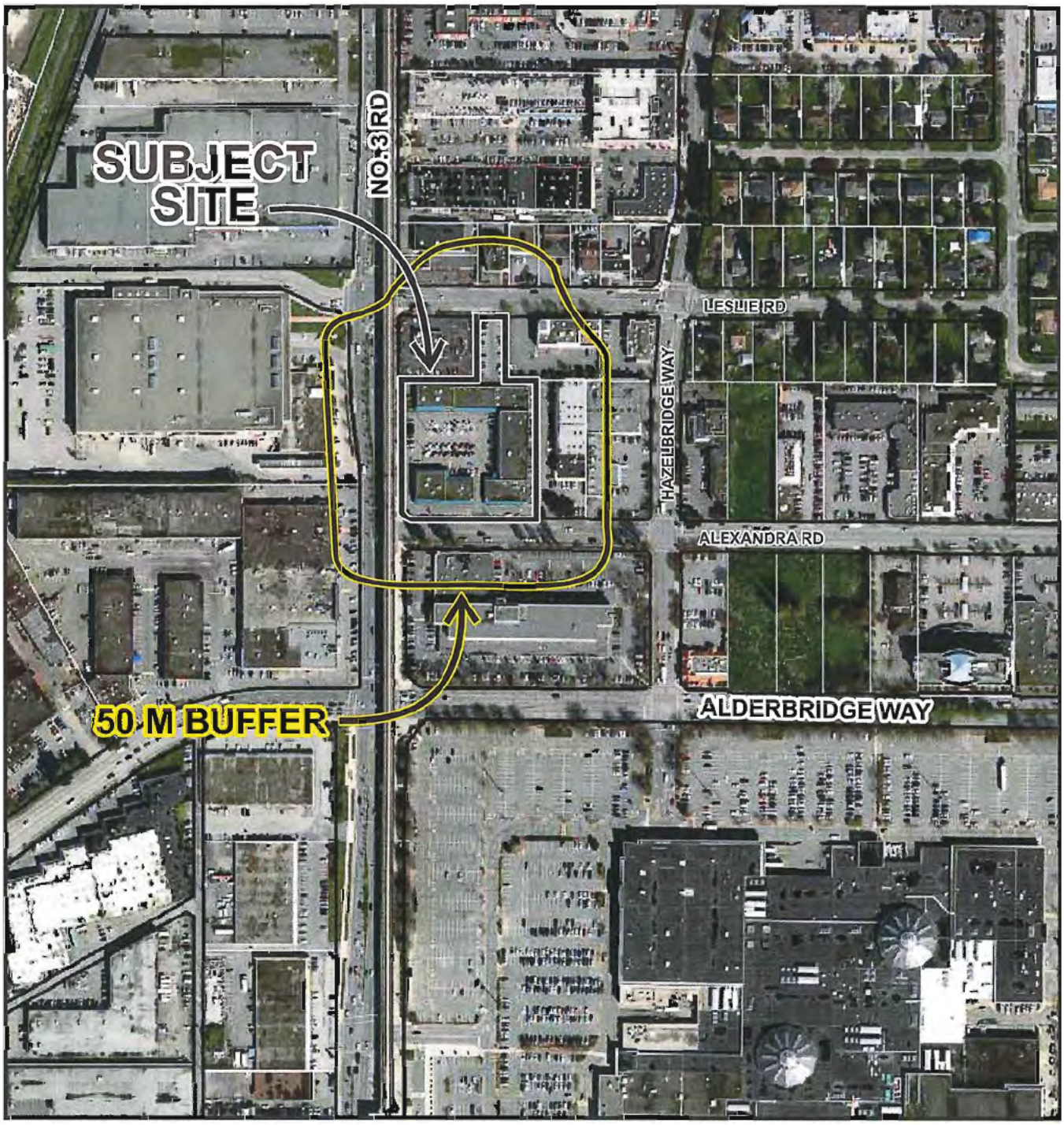
Following the public consultation period, staff reviewed the Food Primary Licence Amendment application against the legislated review criteria and recommends Council support the amendment to increase liquor service hours as the amendment is not expected to increase noise or have a negative impact on the community.

Joanne Hikida
Supervisor Business Licence
(604-276-4155)

JMH:jmh

Att. 1: Site Map

City of Richmond



133 - 4800 No. 3 Road

Original Date: 05/15/14

Revision Date:

Note: Dimensions are in METRES

City of Richmond

Report to Committee

To:	Planning Committee	**Date:**	June 3, 2014
From:	Cathryn Volkering Carlile General Manager, Community Services	**File:**	07-3070-01/2014-Vol 01
Re:	**Child Care Major Capital Funding Program 2014/15 - Province of BC**		

Staff Recommendation

1. That "The Gardens" child care project located at 10640 No. 5 Road, be endorsed for submission to the Provincial Child Care Major Capital Funding Program 2014/15.

2. That the Chief Administrative Officer and the General Manager, Community Services be authorized to sign grant applications and agreements as required for this submission.

3. That the City be authorized to grant a registrable charge in favour of the Province of BC against the title to the Lands restricting the ability of the City to sell, mortgage, transfer or lease (other than to the child care provider), or make other disposition of the property for a period of up to 10 years without the Province's prior written consent.

Cathryn Volkering Carlile
General Manager, Community Services
(604-276-4068)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	**CONCURRENCE**	**CONCURRENCE OF GENERAL MANAGER**
Finance Division	☑	
Engineering & Public Works	☑	
Law	☑	
Real Estate	☑	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	**INITIALS:**	**APPROVED BY CAO**

Staff Report

Origin

The Province of BC recently announced $14.8M in major capital funding for the creation of new child care spaces. This report proposes that the City apply for a grant to assist with the completion of "The Gardens" child care facility, located at 10640 No. 5 Road.

The report supports Council's Child Care Development Policy (4017) regarding partnering with senior levels of government and the private sector to develop quality and affordable child care space. It is also consistent with Council Term Goal #7 Managing Growth and Development:

> *To ensure effective growth management for the City, including the adequate provision of facility, service and amenity requirements associated with growth.*

Analysis

The Provincial 2014/15 Child Care Capital Funding Program

The Provincial Child Care Capital Funding Program 2014/15 is aimed at supporting the creation of up to 1000 child care spaces throughout British Columbia. Private sector organizations and non-profit organizations, inclusive of local government, are eligible to apply. Two types of funding are available: targeted major capital funding and regular major capital. The first is aimed at creating child care space on school grounds. The second are for child care spaces not in school settings. An outline of the program and the eligibility criteria is attached (Attachment 1). The Province is looking to fund projects that can be started within four months of funding approval.

The Gardens Child Care Facility

On July 25, 2011, a rezoning was adopted (RZ 08-450659) permitting Townline Gardens Inc. (Townline) to develop a medium-density, mixed use residential/commercial development. The City accepted a voluntary contribution of a 37 space child care facility to be located on City-owned land. Coevorden Castle was relocated and positioned next to an existing sales centre with the plan that the two buildings be combined and adapted to create the new child care facility. The developer was required to provide a minimum of 4,000 square feet of finished space, but was not obligated to finish the second floor of the castle.

The second level of the Coevorden Castle is currently uninhabitable and requires significant clean-up from bird occupation. In 2013, Council considered a capital plan submission to complete interior finishes to this portion of the building but other projects were a higher priority.

There is 1,914 square feet of floor area that could be renovated to provide multi-purpose space, offices, a washroom, kitchenette and storage. Installation of a lift would be required to make the space accessible. The additional square footage would provide the flexibility to expand the child care services and/or deliver other early childhood development and family support services.

The Provincial Major Capital Child Care Grant Program criteria for the Major Capital Child Care Grant Program permits funding to be used for renovating a building for the purposes of creating

licensable child care space. It also allows for the purchase of furnishings and equipment, which were not part of the negotiated arrangement with Townline, but will be required in order for the child care facility to be licensable. Provincial grant funding would relieve the City's operator of a significant cost to ready the facility for use.

Although the child care facility is still in the design development stage and a full costing of the design has not been completed, staff have prepared an order of magnitude estimate of $3.5M would be required to renovate the existing sales centre and the Coevorden Castle. The work will entail completing approximately 6,500 square feet of finished interior space, exterior upgrades to the building envelope, retention of heritage character elements for the Coevorden Castle, finished outdoor play areas, plus furnishings and equipment. The developer will be responsible for all major structural work and completion of up to 4,300 sq. ft. of finished space for an estimated cost of approximately $3M. With an additional Provincial contribution of $500,000 there would be an opportunity to finish the remaining 2,200 square feet to provide programmable space for early childhood development, family strengthening and potentially additional licensed child care services.

Successful grant applicants who own their building and receive a grant in the range of $25,000 to $500,000 must commit to providing a child care operation for up to ten years. This requires a registrable charge on land title in favour of the Province. It is also possible that a funding agreement with the Province may include an indemnity provision.

The Province requires projects be started within four months of a funding agreement. Townline anticipates applying for building permits in the Fall. The targeted completion for the building renovation and installation of outdoor play areas is July 2015.

Financial Implications

As part of the 2015 – 2019 budget process, there will be an Operating Budget Impact (OBI) submission for "The Gardens" child care facility for an estimated $31,500 annually to maintain "The Gardens" child care facility inclusive of the expanded program. The OBI funds will be used for preventative maintenance, surface parking lot maintenance, installation of security/fire phone lines, and lift maintenance. This submission will be included in a business case and be subject to Council approval. The child care service operating budget will be the responsibility of Council's selected operator, the Society of Richmond Children's Centres.

A condition of the grant is that if the child care facility ceases operation prior to the required ten years of service, the Province may seek repayment from the City for a portion of any capital grant.

Financial Impact

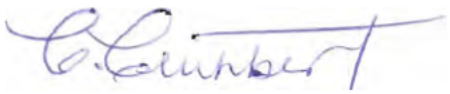
There is no financial impact to the 2014 Capital Budget as a result of applying for these grant funds.

Conclusion

The Provincial Child Care Major Capital Grants 2014/2015 Program offers an opportunity to engage the Province as a partner with Townline and the City of Richmond in the creation of new child care spaces to support families in the workforce or who are pursuing education.

Staff recommend that Council support "The Gardens" child care facility submission to the Provincial Child Care Capital Funding Program 2014/2015 and that the Chief administrative Officer and the General Manager, Community Services be authorized to sign grant applications and agreements related to the submission.

Should funding be approved, staff further recommend that the City be authorized to grant a registrable charge in favour of the Province of BC against the title to the Lands restricting the ability of the City to sell, mortgage, transfer or lease (other than to the child care provider), or make other disposition of the property for a period of up to 10 years without the Province's prior written consent.



Coralys Cuthbert
Child Care Coordinator
(604-204-8621)

Att. 1: British Columbia Ministry of Children and Family Development Child Care Capital Funding Program Guidelines 2014/15

Attachment 1

British Columbia Ministry of Children and Family Development
Child Care Capital Funding Program Guidelines 2014/15

Proposed budget: $14.8 million for the creation of up to 1,000 new licensed spaces.

Eligible Projects:
Child care funding is available for capital costs required for the creation of new licensed child care spaces as follows:

Non-Profit Organizations
Targeted Major Capital Funding
• 90% contribution by the Province to maximum of $500,000 for creation of licensed child care spaces located on school grounds
Regular Major Capital Funding
• 75% contribution by the Province to maximum of $500,000 for creation of licensed child care spaces in child care setting other than those listed under Targeted Major Capital funding.

Private Sector Organizations
Targeted Major Capital Funding
• 90% contribution by the Province to maximum of $250,000 for creation of licensed child care spaces located on school grounds
Regular Major Capital Funding
• 75% contribution by the Province to maximum of $250,000 for creation of licensed child care spaces in child care setting other than those listed under Targeted Major Capital funding.
Who is Eligible?
• Non-profit organizations - defined as non-profit societies in good standing with BC Corporate Registry, local government, public institutions, bands/tribal councils and First Nations Governments
• Private sector organizations - defined as sole proprietors, partnerships and limited companies.

All applications must include the following:
Organizations must prove that they:
• Are financially viable and have a solid business plan for operation of the child care facility
• Have the knowledge, skills and experience to undertake the project and if currently licensed, are in compliance with the *Community Care and Assisted Living Act* and Child Care Licensing Regulation, or if not yet operating, in the process of obtaining a license under the *Community Care and Assisted Living Act*.

All applications must include the following:
Clear evidence that:
• The project provides much needed child care that is not readily available in the community
• The project complements existing child care programs
• The facility will service families receiving Child Care Subsidy and children with special needs requiring extra supports
• The sponsoring organization is working with the Health Authority Licensing Officer to ensure that the proposed project will meet licensing regulations
• The project can be started within four months of the date of the funding agreement
• Written confirmation of the applicants full financial contribution is in place before approval of provincial funding will be considered

A commitment to continue the child care operation as follows:
• For projects under $25,000, applicants must demonstrate commitment to continuing the child care operation at a minimum to the end of their lease agreement and any extension up to a maximum of five years

• For projects between $25,000 and $300,000, where the applicant is renovating existing leased space or only requesting funding support for equipment and furnishings, applicants must demonstrate commitment to continuing the child care operation for a minimum period of five years

• For projects between $25,000 and $300,000, where the applicant owns the building and/or land, applicants, must demonstrate commitment to continuing the child care operation for a minimum period of 10 years

• For projects over $300,000, regardless of whether the applicant is renovating existing leased space or where the applicant owns the land and/or building, applicants must demonstrate commitment to continuing the child care operation for a minimum period of ten years
• Projects over $100,000 may also be subject to the *Human Resource Facility Act* (*HRFA*). Under the HRFA, the Ministry has authority and responsibility to create and maintain a pool of resources facilities, as well as provide financial accountability and security of the taxpayer's investment. The Minister is able to place a notation on title, which restricts the sale, transfer, mortgage, lease or other disposition of the facility without written consent of the Minister. If the human resources function ceases prior to the end of the funding agreement term, the recipient may be required to repay some of the capital funding provided.

Funding approval will be based on funding guidelines, selection criteria and availability of funds in the Child Care Major Capital Funding Program.

Program criteria considered includes, but is not limited to:
• Demonstrated community need and community support for the proposed project
• Viable business plan
• Socio economic need
• The number and type of child care spaces to be created

Funding will be considered for:
• Building a new child care facility including the cost of buying land or a building
• Assembly of a modular building and site development
• Renovations to a building
• Buying equipment and furnishings to support new child care spaces in an existing facility or as part of the above activities to create new spaces

Funding will not be considered for:
• The creation of Childminding, Occasional Child Care and Residential Care spaces
• Projects enhancing existing spaces without creating new licensed group child care spaces
• Projects that were completed prior to release of the application intake period (see below for intake period dates)
• Projects that commenced more than three months prior to the release of the application intake period (see below for intake period dates)
• Assets acquired prior to approval of the funding application
• Non-capital items such as toys, art supplies, books, games, and small appliances (see attached List of Eligible and Ineligible Items)

There are three application intake periods:
Applications will be accepted during three intake periods:
1. May 2 - June 30, 2014
2. September 1 – October 31, 2014
3. February 1 – March 31, 2015

Eligible Items for Major Capital Funding
Items not on this list are considered ineligible unless approved by the Child Care Major Capital Funding Committee/Program

Equipment **Large appliance** • Fridge/freezer • Stove • Dishwasher • Microwave • Washer/dryer • Vacuum cleaner • Carpet cleaner	**Furniture and equipment** • Sinks/toilets • Change table/cots • Strollers • Tables/chair/couches • Room dividers • Sleeping mats/cribs/mattresses/cots/bedding
Fixtures and Equipment required by Fire Regulations • Fire alarms/fire doors/exit signs/fire exiting/fire extinguishers • First Aid kits • Earthquake kits	**Permanently installed equipment** • Whiteboards/bulletin boards • Cubbies/storage units/permanent shelving/cupboards/locked medicine container • Lighting fixtures • Washroom dividers
Large educational materials • Sand/water tables • Art easels/art drying racks	**Dramatic play furniture** • Activity tables • Child-size sink/stove/fridge/work bench • Puppet theatre

City of Richmond

Report to Committee

Planning and Development Department

To:	Planning Committee	**Date:**	June 2, 2014
From:	Wayne Craig Director of Development	**File:**	RZ 13-643436
Re:	**Application by Cotter Architects Inc. for Rezoning at 3471 Chatham Street from the "Steveston Commercial (CS3)" zone to a site specific "Commercial Mixed Use (ZMU26) – Steveston Village" zone**		

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9138 to: create a site specific "Commercial Mixed Use (ZMU26) – Steveston Village" zone; and to rezone 3471 Chatham Street from the "Steveston Commercial (CS3)" zone to the "Commercial Mixed Use (ZMU26) – Steveston Village" zone, be introduced and given first reading.

Wayne Craig
Director of Development

SB:blg
Att. 6

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Affordable Housing	☑	

Staff Report

Origin

Cotter Architects Inc. has applied to the City of Richmond for permission to rezone 3471 Chatham Street (Attachment A) from the "Steveston Commercial (CS3)" zone to a new site specific "Commercial Mixed Use (ZMU26) – Steveston Village" zone in order to construct a three-storey mixed-use building containing approximately 10 residential units in the upper floors and 324 m^2 (3,485 ft^2) commercial space on the ground floor.

A staff report was reviewed by Planning Committee at the meeting of May 6, 2014 and referred back to staff (Attachment B). In response to the referral, the applicant has revised the design to address the building height and architectural form and character of the proposal (Attachments C and D). The applicant has also agreed to revised rezoning considerations (Attachment E), which no longer includes the installation of a public bench along Chatham Street. The proposed site specific zone has been revised to accommodate the setbacks of the revised proposal.

Background

The following referral motion was carried at the May 6, 2014 Planning Committee meeting:

> *"That the staff report titled, Application by Cotter Architects Inc. for Rezoning at 3471 Chatham Street from the "Steveston Commercial (CS3)" Zone to a Site Specific "Commercial Mixed Use (ZMU26) - Steveston Village" Zone, dated April 29, 2014, from the Director, Development, be referred back to staff to examine changes to the design of the proposed development that would address aspects of building height and architectural form and character."*

This staff report addresses the Planning Committee referral by providing a summary of proposed revisions to the building height and architectural form and character and presenting the zoning amendment bylaw for introduction and first reading.

Findings of Fact

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

Please refer to the original staff report dated April 29, 2014 (Attachment B) for information pertaining to the history of the site, surrounding development, Steveston Village Conservation Strategy, public input received prior to Planning Committee and responses, Richmond Heritage Commission comments, Richmond Public Art Advisory Committee comments, as well as staff comments on the proposal, original zoning amendment bylaw, original rezoning considerations and financial impact.

Public Input

Public input was received regarding the proposal and discussed in the original staff report (Attachment B). After the original staff report was written, the City received two (2) additional pieces of correspondence from the public (Attachment F). The majority of the concerns raised in the new correspondence were similar to other comments received by staff and were included and discussed in the original rezoning report. Two new concerns raised in the correspondence include (staff comments are included in ***'bold italics'***):

- The proposed building height would block views to the South from the property at 3500 Broadway Street – ***As noted in the original rezoning staff report, the three-storey building height included in the proposed ZMU26 zone complies with the current CS3 zoning of the subject site, the Steveston Village Conservation Strategy and the Steveston Area Plan (Steveston Village Land Use Density and Building Height Map). As part of the revised design concept (Attachment D), the applicant has submitted sun shadowing diagrams illustrating that the proposed development would not cast shadows on the Broadway Street properties so would not impact existing vegetation in the back yards.***

- The construction site has blocked access from the rear lane – ***The existing lane was used for vehicle access and manoeuvring for parking on the former credit union site. Most of the single detached home properties have driveways and parking areas along Broadway Street and 3rd Avenue, and most have solid fences and landscaping buffering them from the lane. The adjacent single detached home at 11931 3rd Avenue has a single-car garage access from the eastern portion of the lane. The developer has requested use of a portion of the lane for storage of the large heavy concrete wall panels until they can be mounted on the building and to facilitate pre-loading and construction activities. Access will be maintained for the neighbouring garage and the developer has offered to help any home owner that needs access to their rear yard. As part of the development proposal, the developer is required to upgrade the entire east-west rear lane through a Servicing Agreement to City lane design standards, including drainage.***

In addition, the applicant has revised the architectural design of the proposal in response to the previous concerns regarding building height, the transition to neighbouring single detached homes, the heritage character of the design, location and design of balconies, the number of artwork panels mounted on the west elevation of the building and the placement of a public bench along Chatham Street.

Analysis

Building Height and Architectural Form and Character

In their referral back to staff, Planning Committee asked staff to examine changes to the design of the proposed development that would address aspects of building height and architectural form and character.

In response to the referral, the applicant has submitted a revised design (Attachment D) with a lower building height, revised building character with revised massing, revised location and design of balconies, includes additional artwork panels on the West facade, revised building finishing of predominantly hardi-plank horizontal siding with additional details and heritage colours.

Building height was lowered overall in the revised design concept to comply with the Maximum 12 m building height specified in the proposed ZMU26 zone and the OCP Steveston Village Land Use Density and Building Height Map. The applicant is also showing an optional elevator to provide access to the roof deck for persons in wheelchairs. If the optional elevator is pursued, a height variance would be needed through the required Development Permit application process to allow the elevator structure. Sun shading diagrams in the revised design concept include neighbouring homes, the existing large trees and the revised design. The diagrams illustrate that building does not result in significant sun shading for the neighbouring properties. From the middle of March to the middle of September the proposed building would not cast a shadow on the properties to the north or the properties to the east during the day (9am to 3pm). The diagrams also show that the proposed building would cast a shadow over approximately the rear third of the properties to the west during the morning when the sun angle is lower.

The proposed design has been revised to appear as a number of narrower buildings. Making reference to the transition from the commercial village centre to the residential neighbourhood to the north and west, the building is designed to appear as a standard three-storey commercial character false front building at the southeast corner, adjacent to more residential character buildings with sloped gable roofs and shed roof dormers at the other edges of the site. The angled corner is a result of the corner cut dedication that the application was required to provide as a condition of the Heritage Alteration Permit approved by Council in September of 2013.

The proposed commercial character massing at the corner references historic false front buildings with simple facades, simple detailing, hardi-plank horizontal siding, a regular rhythm of large store front windows and smaller windows at the upper floor levels. The continuous sign band and raised awnings above the store front windows reference the higher traditional commercial ceiling heights while keeping the overall building height as low as possible.

The proposed use of larger gable and lower shed roof elements provide a more residential character building massing and lower the apparent building height as the design moves away from the corner. The treatment of roof massing, building articulation, facade design and colour visually break down the three store building to appear as large homes with ground floor store fronts and a corner false front building abutting each other. This would provide a desired transition from the corner commercial character false front massing to a more residential character massing as a transition from the village core to the adjacent single detached residential neighbourhood to the north and west.

The heritage character of the proposal's architectural form and character has been strengthened with revisions to the massing and design of the building and roof. There are two sets of guidelines commonly referred to as the Sakamoto guidelines: the *Design Criteria for the Steveston Revitalization Area* (1987) for new buildings and the *Steveston Downtown Revitalization Facade Guidelines* (1989) for existing buildings. The subject site is adjacent to

the Steveston Revitalization Area identified in the 1987 *Design Criteria for the Steveston Revitalization Area,* and the revised design concept complies with the intent of the guidelines. As part of the required Development Permit application process, design details would be further developed and the proposal would be reviewed by the Richmond Heritage Commission. In addition, any additional guidelines or policies resulting from the Steveston streetscape or conservation strategy reviews would be incorporated into the design as part of the required Development Permit and Servicing Agreement.

Interface to West

In response to comments from the neighbour to the west and discussion at the Planning Committee meeting; (i) the applicant revised the design to remove most west facing balconies and to place two additional sculptural artwork wall panels on the west side elevation to provide a more attractive and quiet interface; (ii) staff removed the requirement to install a bench along the Chatham Street sidewalk to prevent loitering; and (iii) the rezoning considerations and Servicing Agreement requirements were revised to include the installation and maintenance of low planting in the unconstructed side lane to the west to prevent loitering (Attachment E). The neighbours expressed concerns about loitering in this unconstructed side lane in the past. With the installation of low planting to make loitering uninviting and uncomfortable along with the change from a commercial building site that sat unoccupied at night to a mixed use development with residential units providing overlook into the lane at night, concerns of loitering in the unconstructed side lane should be resolved.

The only balcony that remains on the west elevation is a corner balcony at the second floor level with overlook to the rear lane, the unconstructed side lane to the west and the back corner of the neighbour's back yard across the unbuilt side lane. There are existing mature evergreen trees on the west side of the unconstructed side lane that provide screening to address privacy overlook.

Accessibility

In response to discussion at Planning Committee, the applicant has reviewed their accessibility strategy for the proposal and have provided two (2) options for access to the proposed roof deck.

All ten (10) of the proposed apartments will be Basic Universal Housing Features units. The apartment units will comply with section 4.16 of the Zoning Bylaw to provide features and sufficient clearances and heights to accommodate a resident in a wheelchair. These units could be easily renovated with installation of grab bars, accessible toilet and shower.

The proposal includes wheelchair access at all entries to the building and in all common areas inside the building. The owner would like to also provide wheelchair access to the roof deck, but this would trigger the need for a building height variance as part of the required Development Permit application process. The owner has had discussions with a potential purchaser who currently uses a wheelchair. They would like to accommodate potential purchasers who use wheelchairs or have difficulty with stairs and to provide an option for home owners to downsize from multi-level homes into a single level apartment that will accommodate aging in place closer to the village.

In response to discussion at Planning, the applicant has identified the following two (2) options, which staff will review as part of the required Development Permit application process:

- Option 1 With Elevator and Stair Access to Roof Deck (Recommended)

  The accessible option 1 would provide access to the roof deck with an elevator. This would accommodate a person in a wheelchair, a person who has difficulty managing stairs, as well as a convenient way to transport barbeques, deck chairs, food and beverages, small containers for gardening, gardening tools, supplies, compost and soil. The proposed elevator structure should not be significantly visible from the street as it would be located centrally on the roof, set back from Chatham Street and also set back from 3rd Avenue. The sun shading diagrams illustrate that the elevator structure located centrally on the roof deck would not cast shadows on neighbouring properties.

  The elevator over-run would not comply with the maximum 12 m building height restriction in the proposed ZMU26 zone. A height variance would be required through the required Development Permit application process to allow the elevator structure to have a maximum height of 15.4 m.

- Option 2 With Stair Access to Roof Deck

  The non-accessible option 2 would provide access to the roof deck with one (1) common stairwell. This option would not allow a person in a wheelchair, or a person that has difficulty managing stairs, to access the roof deck.

  The stairwell option would comply with the maximum 12 m building height of the proposed ZMU26 zone.

Proposed Zoning Amendment

To accommodate the revised proposed architectural form and character described above, the zoning amendment bylaw was revised to accommodate the proposed setbacks. The setback requirements in the proposed ZMU26 zone were revised to increase the maximum setback of the ground and second floors from 0.5 m to 2.5 m to allow the different building form components to have different setbacks. This allows a greater setback at the west end of the Chatham facade to transition to the neighbouring single detached home; allows recessed vertical slots to reinforce the appearance that the building is a number of narrower abutting buildings; and allows the gable roof forms to have overhangs.

Financial Impact

As noted in the original staff report (Attachment B).

Conclusion

In response to Planning Committee's referral and working with staff, the applicant has revised the proposal has been revised to lower the building height, strengthen the heritage and residential character of the design, reduce overlook potential from west facing balconies, include two additional artwork panels on the west facade and remove a previously proposed public bench along Chatham Street.

The proposal provides a medium density mixed use three (3) storey development with commercial space fronting onto Chatham Street, ten (10) residential apartment housing units, and the re-use of concrete sculptural relief artwork wall panels from the Gulf & Fraser Credit Union building that was formerly on the site. The development will anchor the northwest corner of the Steveston Village Heritage Conservation Area in a way that also provides a transition to the rest of the block, which is outside of the conservation area and consists of single detached housing. The proposal is consistent with the City's 2041 Official Community Plan (OCP) regarding mixed use development. The creation of the new "Commercial Mixed Use (ZMU26) –Steveston Village" zone is proposed to accommodate the proposal on the subject site, including density bonus provisions to support the City's Affordable Housing Strategy and Steveston Village Heritage Conservation Grant Program.

Overall, the proposed land use, density, site plan and building massing respects the surrounding single detached housing and future three-storey development potential to the south and east within the Steveston Village Heritage Conservation Area. Further review of the project design is required to be completed as part of the required Development Permit, Heritage Alteration Permit and Servicing Agreement application review processes. The proposed roadway improvements will enhance pedestrian safety in the neighbourhood.

The list of rezoning considerations included as Attachment E has been agreed to by the applicant.

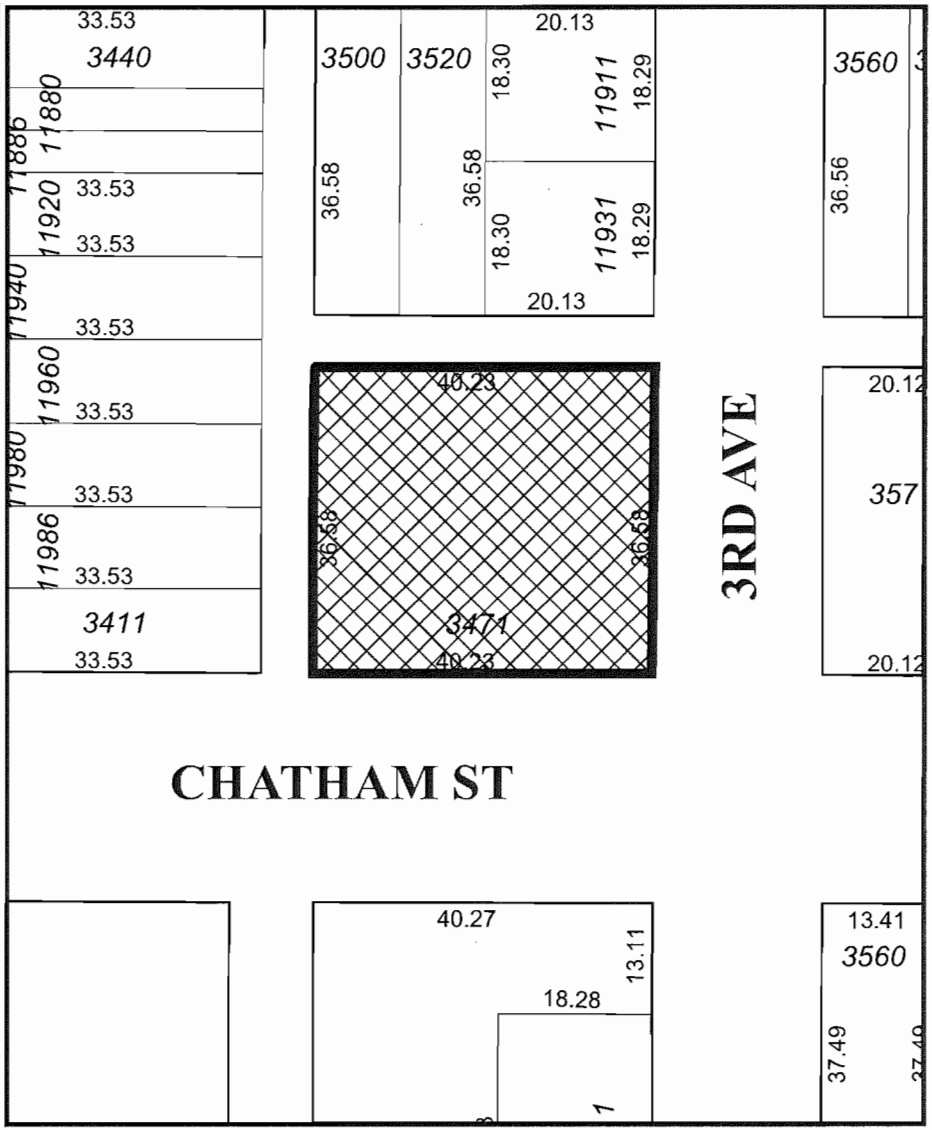
On this basis, staff recommend that Zoning Bylaw 8500, Amendment Bylaw 9138 be introduced and given first reading.

Sara Badyal.

Sara Badyal, M. Arch, MCIP, RPP
Planner 2
(604-276-4282)

SB:blg
Attachment A: Location Map and Aerial Photo
Attachment B: Report to Committee dated April 29, 2014
Attachment C: Development Application Data Sheet
Attachment D: Conceptual Development Plans
Attachment E: Rezoning Considerations
Attachment F: Public Input (received after April 29, 2014)

City of Richmond



RZ 13-643436

Original Date: 08/26/13

Revision Date:

Note: Dimensions are in METRES

CNCL - 219

Attachment A

	RZ 13-643436	Original Date: 08/26/13 Amended Date: Note: Dimensions are in METRES

City of Richmond

Report to Committee

Planning and Development Department

To:	Planning Committee	**Date:**	April 29, 2014
From:	Wayne Craig Director of Development	**File:**	RZ 13-643436
Re:	**Application by Cotter Architects Inc. for Rezoning at 3471 Chatham Street from the "Steveston Commercial (CS3)" Zone to a Site Specific "Commercial Mixed Use (ZMU26) - Steveston Village" Zone**		

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9138 to: create "Commercial Mixed Use (ZMU26) - Steveston Village"; and to rezone 3471 Chatham Street from "Steveston Commercial (CS3)" to "Commercial Mixed Use (ZMU26) - Steveston Village"; be introduced and given first reading.

Wayne Craig
Director of Development

SB:blg
Att. 9

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Affordable Housing	☑	

4188666

Staff Report

Origin

Cotter Architects Inc. has applied to the City of Richmond for permission to rezone 3471 Chatham Street (Attachment 1) from the "Steveston Commercial (CS3)" zone to a new site specific "Commercial Mixed Use (ZMU26) - Steveston Village" zone in order to construct a three-storey mixed use building containing approximately 10 residential units in the upper floors and 324 m^2 (3,485 ft^2) commercial space on the ground floor.

Background

The former building on the currently vacant site was a Gulf & Fraser credit union, which included sculptural concrete relief panels with images by artist Leonard Epp portraying the commercial fishery history of Steveston Village. When the building was demolished, the developer salvaged a number of the wall panels and is proposing to mount nine (9) of these panels on the proposed building elevations.

Heritage Alteration Permit HA 13-641865 was approved by Council September 23, 2013 to allow for the demolition of the former Gulf & Fraser credit union building, pre-construction activities and a corner cut road dedication at the intersection of 3rd Avenue and Chatham Street.

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (Attachment 2).

Surrounding Development

The site is located in the Steveston Village Heritage Conservation Area. The Steveston Area Plan includes the Steveston Village Land Use Density and Building Map (Attachment 3) to guide development within the conservation area. Surrounding development is as follows:

- To the north and west: Across the rear lane to the north and undeveloped lane to the west, are single detached homes, zoned "Single Detached (RSI/A)", with a maximum building height of 9 m and 2 ½ storeys.
- To the east: Across 3rd Avenue, are a number of three-storey mixed use buildings that are set back from Chatham Street behind surface parking areas and consisting of residential units above ground floor commercial space. The properties are zoned "Steveston Commercial (CS3)", with a permitted density of 1.0 floor area ratio (FAR) and a maximum permitted building height of 12 m and three (3) storeys.
- To the southeast: Diagonally, across both 3rd Avenue and Chatham Street, is an outdoor storage yard for Rod's Building Supplies, and a single-storey commercial building. All of these properties are zoned "Steveston Commercial (CS3)", with a permitted density of 1.0 floor area ratio (FAR) and a maximum permitted building height of 12 m and three (3) storeys.

- To the south: Across Chatham Street, are a surface parking area and identified heritage resources which front onto 3rd Avenue. The resources include the vacant southwest corner of 3rd Avenue and Chatham Street, the Steveston Courthouse, and the Sockeye Hotel (Steveston Hotel). The vacant southwest corner of 3rd Avenue and Chatham Street is the symbolic civic precinct formerly consisting of the Steveston Courthouse, the City jail and a former firehouse. All of these properties are zoned "Steveston Commercial (CS2)", with a permitted density of 1.0 FAR and a maximum permitted building height of 9 m and two (2) storeys.
- To the southwest: Across Chatham Street, are lands owned by crown federal and the Steveston Harbour Authority that extend from Chatham Street to the river, zoned "Light Industrial (IL)", with a permitted density of 1.0 FAR and a maximum permitted building height of 12 m. Existing land uses include surface parking areas fronting onto Chatham Street, a mix of buildings and storage areas, structures in the river for commercial boats, and the Gulf of Georgia Cannery.

Related Policies & Studies

General
The rezoning application has been reviewed in relation to the 2041 Official Community Plan (OCP), 2009 Steveston Village Conservation Strategy, Flood Plain Designation and Protection Bylaw 8204, the 2007 Affordable Housing Strategy and the Public Art Program. An overview of the review in relation to these policies is provided in the "Analysis" section of this report.

Steveston Village Conservation Strategy (Strategy) Review
As directed by Planning Committee on July 16, 2013, staff are clarifying the following matters to enhance the Strategy:

- Land use matters include: clarifying maximum densities and building heights in the Village, particularly along Moncton Street and the south side of Bayview Avenue, comparing pre 2009 Village building designs with the current Strategy requirements, indicating how the Sakamoto guidelines are included in the Strategy and providing information regarding eliminating rooftops.
- Transporting matters include: clarifying onsite parking requirements, Bayview Avenue and Chatham Street streetscape visions, exploring a no parking option on Bayview Street and its implications for parking within Steveston and vehicular traffic on Bayview Street, and providing heritage sidewalk design (i.e., plank) options and, parking options on 4th Avenue.

Staff anticipate addressing these matters in a report to Planning Committee in June, 2014. Staff suggest that it is appropriate to bring this rezoning proposal forward before the above Strategy review is completed, as the proposal meets to the current Strategy requirements and the above review is not anticipated to propose changes which would affect this site or proposal on Chatham Street.

If the strategy review results in a need to change the proposed frontage improvements, those changes will be incorporated into the required Servicing Agreement prior to rezoning approval.

Public Input

Informational signage is posted on the subject site to notify the public of the subject application and the statutory Public Hearing will provide local property owners and other interested parties with an additional opportunity to comment.

The applicant advises that they discussed the development proposal with all of the neighbours to the west across the unbuilt City lane right-of-way and to the north across the rear lane. The applicant also advises that they presented the development proposal to the Steveston 20/20 community group on September 10, 2013. City staff did not attend the meeting.

At the time of writing this report, the City has received public correspondence (Attachment 4), which includes the following concerns (staff comments are included in ***'bold italics'***):

- A development similar to that at Chatham Street and 5th Avenue would be preferred – ***At 11991 5th Avenue there is an existing non-conforming two-storey mixed use building on a site zoned Steveston Commercial (CS2). The development includes a small ground level corner commercial unit surrounded with two-storey townhouses that each has its own roof patio with stair access. The development was constructed under an older version of the CS2 zone that did not restrict the amount of residential floor area at street level. The proposed ZMU26 zone includes the requirement to locate residential units on the upper floors of the building to comply with the residential requirements in the Steveston Commercial CS2 and CS3 zones as well as the Development Permit guidelines for Steveston Village.***

- The proposed building character and use does not reflect the area or site history – ***The proposed permitted uses in the proposed ZMU26 zone include a mix of commercial uses and apartment housing , in compliance with the and Steveston Village Conservation Strategy and Steveston Area Plan (Steveston Village Land Use Density and Building Height Map). The mixed land use concept also complies with the site's existing CS3 zoning, although the list of permitted uses has been reduced to reflect the uses proposed by the applicant and the proposed parking provision on the subject site.***

- The proposed building size is larger than and not the same character as neighbouring single-family homes – ***The proposed ZMU26 zone includes a maximum permitted density of 1.6 FAR and a maximum permitted building height of 12 m and three (3) storeys, in compliance with the and Steveston Village Conservation Strategy and Steveston Area Plan (Steveston Village Land Use Density and Building Height Map). As part of the required Development Permit, the applicant will be requesting a variance to increase the building height from 12 m to 15.4. The purpose of the variance is to allow elevator access to the rooftop patio embedded in a sloped roof massing to soften the appearance of the roof and to provide the roof with a residential character for transition to the neighbouring single detached homes. Only small portions of the proposed roof massing are taller than 12 m.***

- Proposed building height will shadow neighbouring yards and balcony overlook will impact privacy of surrounding residents – ***As noted above, the three-storey building height included in the proposed ZMU26 zone complies with the Steveston Village Conservation Strategy and Steveston Area Plan (Steveston Village Land Use Density and Building Height Map)***

as well as the current CS3 zoning of the subject site. The proposed three-storey building includes balconies to provide the residential units with semi-private outdoor space. The proposal also is separated from the neighbouring single detached homes by a 6m wide unbuilt lane right-of-way on the west side of the property and a 6m building setback as well as a 6m wide rear lane right-of-way on the north side of the property. This separation provides mitigation for shadowing and privacy overlook concerns. The applicant has submitted a shadow analysis that demonstrates that the roof elements would not significantly increase the amount of shadow cast by the proposed building. Shadowing and privacy overlook would be reviewed in detail as part of the required Development Permit application process.

- Rooftop patios allow an extra storey of living space and do not reflect the village history – ***There are a few rooftop patios on newer buildings in Steveston Village, some of which are shared by residents and some of which are allocated to individual units. They offer residents with more generous space to garden in planters and spend time outside in a semi-private setting that does not impact the massing of the building in the same way that providing a generous patio for every apartment would. The proposal includes an open rooftop patio area in the centre portion of the roof, accessed from a shared stairwell and elevator. The patio area is not covered or enclosed and is not considered to be a building storey. Architectural form and character would be reviewed in detail as part of the required Development Permit application process and staff will work with the applicant to ensure that the apparent building height and massing of the building is minimized and no trees or tall hedges are planted in roof gardens.***

- The proposed building character should present frontages that look like a series of small buildings in accordance with the small historic lots as shown in the Steveston Village 1892 Historic Lot Lines Map – ***Architectural form and character would be reviewed in detail as part of the required Development Permit application process. The applicant advises that the 3rd Avenue frontage is broken down into three (3) zones; a commercial zone at the corner, a residential zone under a gable end, and a surface zone with landscaping and parking adjacent to the rear lane, providing a transition in massing from the commercial character of Chatham Street to the residential character across the lane to the North.***

- The building should have the same set back from Chatham Street as the mixed use development on the other side of 3rd Avenue to maintain the broad Chatham Street streetscape and to enhance the street-end view to Sturgeon Bank on the west – ***The proposed ZMU26 zone includes the requirement to locate the building tight to the public road property lines. This complies with the existing setback requirements in the Steveston Commercial CS2 and CS3 zones as well as the Development Permit guidelines for Steveston Village.***

- Brick and metal siding as wall sheathing is out of character for a residential building and the Steveston Area Plan states that corrugated metal siding is appropriate in the 'maritime mixed use' and industrial areas – ***Architectural form and character, including building cladding materials, would be reviewed in detail as part of the required Development Permit application process. The design was revised to replace brick with painted cement board horizontal siding. Metal cladding material does comply with the Development Permit***

guidelines for Steveston Village, which call for natural durable materials. While metal siding is particularly highlighted for use on industrial buildings, this material is not limited to industrial buildings.

- Proposed parking is inadequate – ***The proposal includes more parking than the zoning bylaw requires and parking, bicycle storage and loading would be reviewed in detail as part of the required Development Permit application process.***

Richmond Heritage Commission

The development proposal was presented to the Heritage Commission at their meeting on January 15, 2014 (Attachment 5). The Commission supported the proposal, endorsed the use of panels from the former Gulf & Fraser building in the proposal, and asked that the applicant and Planning Committee consider their comments.

In response to comments from the Commission, the placement of panels proposed to be mounted on the building elevations was revised to maximize visibility for the public and the design was revised to provide a more traditional scale and proportion for the storefront glazing. An interpretative didactic panel is proposed to be installed on the building exterior to provide information about the panel artwork, and bicycle racks were relocated away from an artwork panel to locations in the City boulevards. Detailed design would be provided through the required Development Permit and Servicing Agreement.

Richmond Public Art Advisory Committee

The development proposal was presented to the Public Art Advisory Committee at their meeting on February 18, 2014 (Attachment 6). The Committee accepted the use of the panels from the former Gulf & Fraser building in the proposal as the developer's contribution to Public Art and recommended that the developer contact and involve the original artist, Leonard Epp and select a designer to work on the interpretive panels.

In response to the Committee recommendation and staff comments, the developer has contacted artist Leonard Epp and will also soon be starting the interpretative panel design process.

Staff Comments

Based on a review of the subject application, staff are supportive of the subject rezoning application, provided that the developer fully satisfies the considerations of the rezoning (Attachment 7).

Analysis

Proposed Zoning Amendment

Amendments to the Richmond Zoning Bylaw 8500 are proposed to create the new site specific zone "Commercial Mixed Use (ZMU26) –Steveston Village" and to rezone the subject site from the "Steveston Commercial (CS3)" zone to this new zone. The proposed bylaw has been prepared to manage development on the subject site in accordance with the Steveston Area Plan and the Steveston Village Conservation Strategy.

The proposed ZMU26 zone includes a maximum density of 1.6 FAR in accordance with the Steveston Village Land Use Density and Building Map, including density bonus provisions in accordance with the City's Affordable Housing Strategy and the Steveston Village Heritage Conservation Grant Program Policy. Following the intent of the Steveston Village Development Permit guidelines and existing mixed use zoning in the village (CS2 & CS3), the proposed ZMU26 zone requires the building to be located at the fronting public road Chatham Street and 3rd Avenue property lines with limited recesses and restricts the amount of residential area at the ground floor level. The ZMU26 zone permits a 33% parking reduction for non-residential uses, which is supported by the Steveston Village Conservation Strategy.

Proposal Details

Staff's review of the proposed development shows it to be generally consistent with City policies, as indicated below:

a) Floodplain Management: In accordance with the City's Flood Plain Designation and Protection Bylaw 8204, the developer has agreed to register a floodplain covenant as a consideration of the rezoning specifying a minimum habitable elevation of no lower than the adjacent City sidewalk.

b) Village Density Bonusing Formulas: The Steveston Village Conservation Strategy requires that developers are to provide voluntarily financial contributions, for density increases in accordance with the Steveston Village Heritage Conservation Grant Program Policy 5900 (Attachment 8) as follows:
   i. For proposals above 1.2 FAR, $47.00 per buildable square foot (bft^2) of all building floor area above 1.2 FAR is to be contributed to the heritage grant program,
   ii. If the proposal involves residential uses, $4.00 per buildable square foot (bft^2) of all buildable residential floor area in the building is to be contributed to the Affordable Housing Strategy, and
   iii. Where an affordable housing contribution is provided, the final amount contributed to the heritage grant program shall be the total amount in (i) minus the total amount in (ii).

   Under this formula, the proposal involves developer contributions of $296,476, as follows, $86,992 for affordable housing and $209,484 for the heritage grant program, as explained below.

c) Affordable Housing: Based on the above village density bonusing formulas, the developer has agreed to provide a voluntary contribution of $86,992 (based on the buildable residential floor area), to the City's Affordable Housing Reserve as a consideration of the rezoning.

d) Heritage: Based on the above village density bonusing formulas, the developer has agreed to provide a voluntary contribution of $209,484 to the Steveston Village Heritage Conservation Grant Program as a consideration of the rezoning.

e) Public Art: The City's Public Art Program seeks developer participation through the installation of Public Art on development sites or the voluntary contribution $0.77 per buildable square foot of residential floor area and $0.41 per buildable square foot of commercial floor area, to the City's Public Art fund (e.g. $18,175). The developer has

agreed to participate in the City's Public Art Program through the installation of artwork wall panels on the subject site and has agreed to the following considerations of the rezoning:

i. Submission of a security will be held in the cash-in-lieu amount and returned to the developer upon completion of the following.

ii. Installation of at least nine (9) of the panels by artist, Leonard Epp, along with a didactic panel on the building facades (Attachment 9).

iii. A transfer of all of the artist's right, title and interest in the Public Art to the Strata, including a transfer of joint, worldwide copyright.

iv. Submission of a final report to the City and the Strata promptly after completion of the installation of the Public Art, which describes, among other things, the Public Art, the siting of the Public Art, a brief biography of the artist, the artist's statement on the Public Art, a maintenance plan for the Public Art; and 12 high resolution images in digital format of the Public Art showing it in context and revealing significant details.

f) Infrastructure Improvements: The developer has agreed to enter into a Servicing Agreement as a consideration of the rezoning, including design and construction of the following:

- Road Network Improvements – Chatham Street and 3rd Avenue streetscape improvements and upgrade of the existing east-west rear lane to City lane design standards. Streetscape improvements along Chatham Street and 3rd Avenue include a new concrete sidewalk at the property line and grass boulevards, with street tree planting behind the existing curb line extending across both frontages and across the west lane right-or-way, including a concrete pad, seating bench and low fence behind the Chatham Street sidewalk at the west edge of the site. Concrete pads and bicycle racks for Class 2 short-term bicycle parking are to be provided in the boulevards: on 3rd Avenue within 15 m of the residential lobby and on Chatham Street approximately mid way among the commercial units.

  The City is currently reviewing streetscape visions for Bayview and Chatham Streets in Steveston Village. It is anticipated that the proposed frontage improvements will relate well with the potential visions. Should the frontage improvements need to be adjusted as a result of changes to the visions, those adjustments will be incorporated into the required Servicing Agreement prior to rezoning approval.

- Fire Hydrant Improvements – Provide a new fire hydrant along 3rd Avenue, spaced as per City standards.

- Storm Sewer Improvements – Provide a new storm sewer system for the rear lane.

- Sanitary Sewer Improvements – Upgrade the existing sanitary sewer in the rear lane.

- Water Distribution Improvements – Provide a new water main along 3rd Avenue from Chatham Street to Broadway Street. The portion of the work between the north edge of the lane and Broadway Street will be funded by the City and will proceed subject to availability of City funds.

- Once the building design has been confirmed at the Building Permit stage, the applicant is required to submit fire flow calculations signed and sealed by a professional engineer

based on the Fire Underwriter Survey or ISO to confirm that there is adequate available water pressure in fire hydrants to accommodate fire fighting. Based on the proposed rezoning, the subject site requires a minimum fire flow of 220 L/s.

g) Tree Retention and Replacement

Bylaw-size trees	Existing	Retained	Compensation
On-site	3	0	5 new trees & $500 contribution to achieve 2:1 replacement ratio
On neighbouring properties	7	7	To be protected
In the City boulevard	6	6	To be protected

- There are three (3) bylaw size trees on the subject site and are proposed for removal. A Japanese Maple tree (0.35 m dbh) is located inside the property at the corner of Chatham Street and 3rd Avenue and two (2) Crimson King Maple trees (0.30 & 0.36 m dbh) are located on the shared property line between the site and 3rd Avenue. The trees conflict with the proposed building envelope.
- The City's Tree Preservation Coordinator has reviewed the proposal and agrees with the removal of the existing on-site tree and replacement with new tree planting.
- Based on the 2:1 tree replacement ratio goal stated in the Official Community Plan (OCP), six (6) replacement trees are required for the removal of three (3) bylaw-sized trees or compensation at a rate of $500 for each replacement tree that is not accommodated on the site. The preliminary development concept plans (Attachment 9) include five (5) new trees and the landscape plan would be further reviewed through the required Development Permit for tree planting opportunities.
- The developer is required to protect the seven (7) trees on neighbouring properties and in the unbuilt west lane right-of-way (ROW) adjacent to the subject development site. The developer is required to install any needed tree protection fencing prior to any construction activities occurring on the site as per City of Richmond Tree Protection Information Bulletin Tree-03.
- The developer is required to protect the row of six (6) Purple Plum trees in the Chatham Street city boulevard and additional street tree planting in new Chatham Street and 3rd Avenue grass boulevards will be provided through the required Servicing Agreement.

g) Sustainability: The developer proposes to construct a medium density mixed use development with the following sustainability features:

- Boilers will be 99.9% Efficient "Rennai" tankless on-demand systems. The Rennai tankless system (on average) delivers 29% reduction in annual energy cost over a gas hot water tank, and 66% reduction over an electric hot water tank.
- Windows will be ultra insulated triple glazed. In comparison to double glazed windows, triple glazed windows offer increased window strength, increased resistance to condensation problems, reduced sound transmission, and decreased heat loss.

- Insulation will be icynene foam which provides 35% higher insulation value than equivalent thickness batt insulation.
- Toilets will be low-flow dual flush.
- Lighting will be energy efficient LED dimmable lighting, some with daylight sensors and/or timer switches
- Residential units will have heat recovery ventilation units.

h) Parking

- Vehicle access to the proposed development is from the existing rear north lane.
- Garbage/recycling storage/collection – The proposal includes an interior enclosed room for garbage and recycling storage at the northeast corner of the building.
- Loading – The subject proposal does not include a designated on-site truck loading space. The proposal is not required to provide an on-site loading space as the subject site fronts onto a public road where on-street parking is allowed and the proposal contains only 10 apartment units and 324m^2 of commercial space.
- Resident parking – The proposal includes an enclosed secure parking area with 20 parking spaces for residents, or 2 parking spaces for each apartment unit.
- Visitor and Commercial parking – The proposal includes a shared pool of 8 surface parking spaces for the use of the commercial space and residential visitors. To support this shared use, the developer has agreed to enter into a legal agreement to ensure that non-residential parking is shared by visitors and commercial uses. The legal agreement will prohibit the assignment of parking spaces to any particular unit or user.
- Bicycle parking – The proposal includes interior bicycle storage rooms and exterior bicycle parking racks. The developer has agreed to enter into a legal agreement to ensure that bicycle parking areas are available for shared common use for the sole purpose of bicycle storage and are not used for or converted into habitable space (e.g. storage).
- Electric vehicles – In accordance with the OCP, the proposal includes the provision of electric vehicle charging features. The developer has agreed to enter into a legal agreement to ensure the provision of a minimum of 20% of parking stalls with a 120V receptacle to accommodate electric vehicle charging equipment and an additional 25% of parking stalls to accommodate the future installation of electric vehicle charging equipment (e.g. pre-ducted for future wiring).

i) Form of Development

The developer proposes to construct a medium density mixed use development with approximately 324 m^2 (3,485 ft^2) of street fronting commercial area and 10 apartments in a three (3) storey building (Attachment 9), which generally conforms to OCP policies, the Steveston Area Plan and Development Permit guidelines.

Development Permit and Heritage Alteration Permit approval to the satisfaction of the Director of Development is required prior to rezoning adoption, which will include the following:

- Detailed architectural and open space design. Review proportion, spacing, symmetry and vertical alignment of windows. Review proportion and material of the cornice (e.g. wood or cast concrete) as well as continuous treatment (e.g. extend balcony railings round length of parapet on the east and west facades). Maximize opportunities to screen parking from 3rd Avenue and strengthening the transition to the residential character to the west and north, including reviewing openings and landscape buffer. The proposed building form: includes recesses to visually break down the long building elevation along Chatham Street; provides a building setback transition at the west edge of the building as a transition to the neighbouring single detached home across the City right-of-way; and provides a unique character to the building elevation along 3rd Avenue as a transition from the commercial character of Chatham Street to the residential character across the lane to the north.
- Detailed review of the requested variance to increase permitted building height from 12 m to 15.4 m. The increased building height accommodates elevator access to the rooftop patio and allows the elevator housing to be embedded in a sloped roof massing to soften the appearance of the roof and provide the roof with a residential character for transition to the neighbouring single detached homes.
- Detailed review of canopies or awnings along the Chatham Street or 3rd Avenue, minimizing a modern metal canopy structure as much as possible or consider using simple fabric awnings over the storefront windows (e.g. Hepworth Block, 12211 No 1 Road, and 3993 Chatham St). Any structures located in the right-of-ways must be easily removable (i.e. not cast in place and not permanently attached to any other structures) and require a separate encroachment agreement as part of the future Building Permit process.
- Provide signage guidelines for the project identifying signage locations, sizes, material and design.
- Review of sustainability features of the development.
- Review of adaptable and aging in place features. At least one (1) Basic Universal Housing Features unit is proposed, aging in place features are proposed in all units and elevator access is proposed to all levels of the building, including the roof deck.
- Provide indoor amenity space or cash-in-lieu in accordance with the OCP (e.g. $10,000 for 10 dwelling units)

- Vehicle and bicycle parking, electric vehicle charging equipment, parking gate locations, truck loading, garbage, recycling and food scraps storage and collection, including truck manoeuvring, and private utility servicing.

Financial Impact or Economic Impact

As noted in the report.

Conclusion

The proposal provides a medium density mixed use three (3) storey development with commercial space fronting onto Chatham Street, residential apartment housing, and the re-use of concrete sculptural relief wall panels from the Gulf & Fraser credit union building that was formerly on the site. The development will anchor the northwest corner of the Steveston Village Heritage Conservation Area in a way that also provides a transition to the rest of the block, which is outside of the conservation area and consists of single detached housing. The proposal can be considered under the City's 2041 Official Community Plan (OCP) regarding mixed use development. The creation of the new zone "Commercial Mixed Use (ZMU26) –Steveston Village" is proposed to accommodate the proposal on the subject site, including density bonus provisions to support the City's Affordable Housing Strategy and Steveston Village Heritage Conservation Grant Program.

Overall, the proposed land use, density, site plan and building massing respects the surrounding single detached housing and future three-storey development potential to the south and east within the Steveston Village Heritage Conservation Area. Further review of the project design is required to be completed as part of the required Development Permit, Heritage Alteration Permit and Servicing Agreement application review processes. The proposed roadway improvements will enhance pedestrian safety in the neighbourhood

It is recommended that Zoning Bylaw 8500, Amendment Bylaw 9138 be introduced and given first reading.

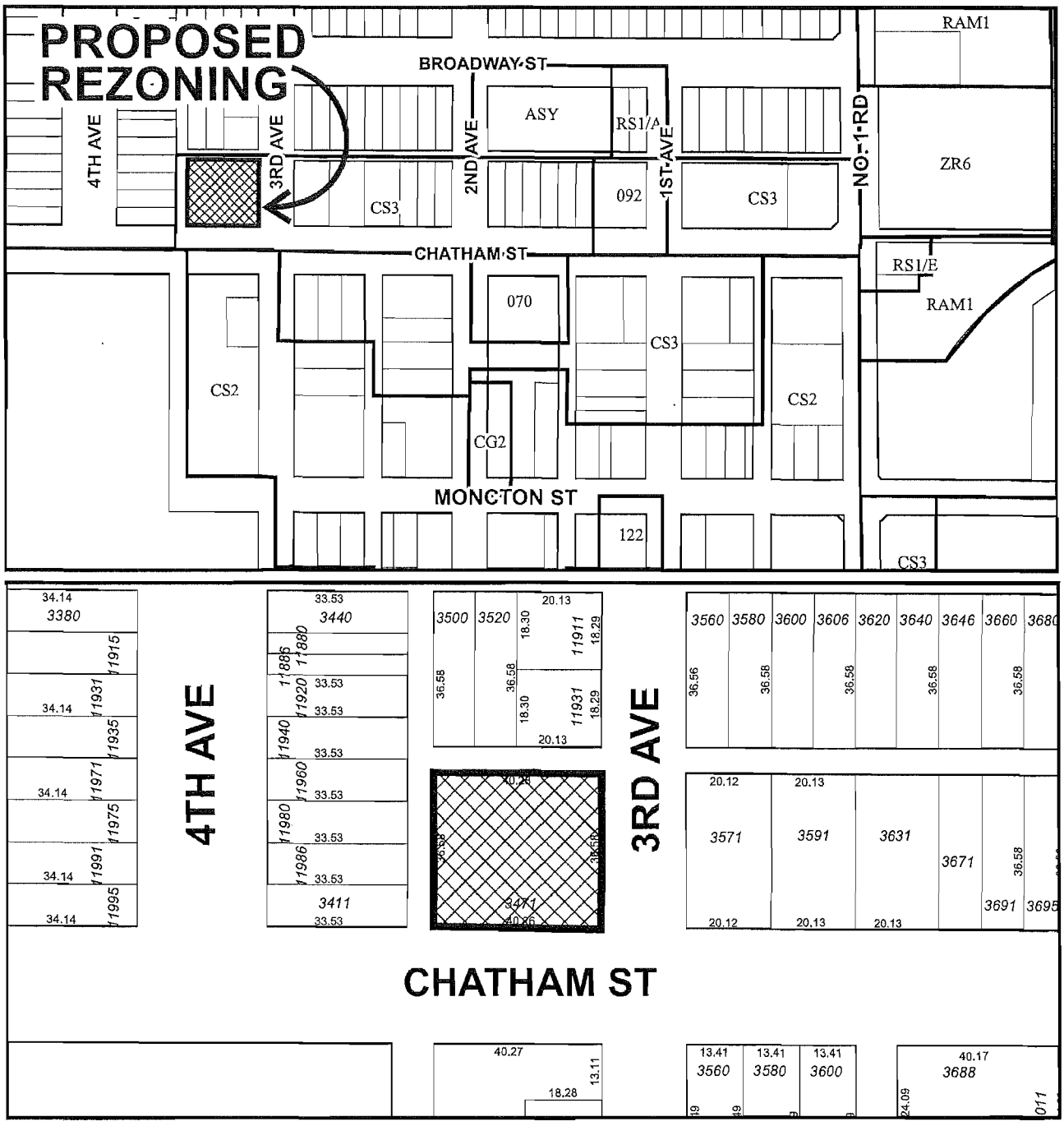
Sara Badyal.

Sara Badyal, M. Arch, MCIP, RPP
Planner 2

SB:bg

Attachment 1: Location Map & Aerial Photo
Attachment 2: Development Application Data Sheet
Attachment 3: Steveston Village Land Use Density and Building Site Context Map
Attachment 4: Public Correspondence
Attachment 5: Richmond Heritage Commission Minutes Excerpt (January 15, 2014)
Attachment 6: Richmond Public Art Advisory Committee Minutes Excerpt (February 18, 2014)
Attachment 7: Rezoning Considerations
Attachment 8: Steveston Village Heritage Conservation Grant Program Policy 5900
Attachment 9: Conceptual Development Plans

City of Richmond



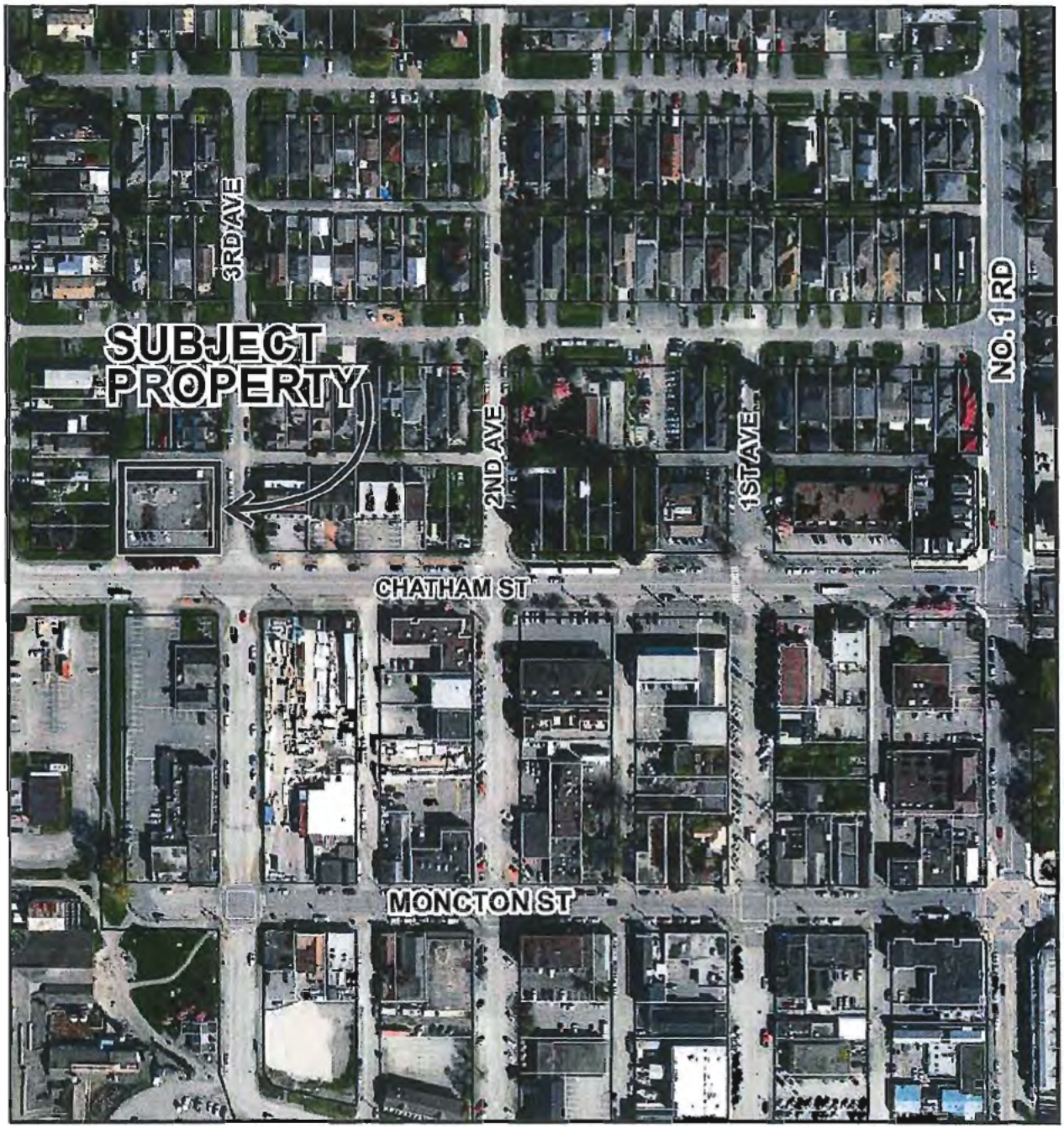
RZ 13-643436

Original Date: 03/24/14

Revision Date:

Note: Dimensions are in METRES

City of
Richmond



RZ 13-643436

Original Date: 03/24/14

Revision Date:

Note: Dimensions are in METRES

City of Richmond

Development Application Data Sheet

Development Applications Division

RZ 13-643436 **Attachment 2**

Address: 3471 Chatham Street

Applicant: Cotter Architects Inc.

Planning Area(s): Steveston Village

	Existing	Proposed
Owner:	Steveston Flats Development Corp. Inc. No. BC0968919	Unknown
Site Size (m^2):	1,473 m2	1,465 m2
Land Uses:	Vacant	Mixed Use Commercial and Residential
Area Plan Designation:	Heritage Mixed Use (Commercial-Industrial with Residential & Office Above)	Complies
Zoning:	Steveston Commercial (SC3)	Commercial Mixed Use (ZMU26) – Steveston Village
Number of Units:	None	3 CRU and 10 apartments

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 1.6	1.6	None Permitted
Lot Coverage	Max. 100%	81%	None
Setbacks: 3rd Avenue Chatham Street Rear lane West side yard	 0 m 0 m None None	 0.35 m (0 m to cornice) 0.35 m (0 m to cornice) 6 m 0.35 m (0 m to cornice)	None
Height	**Max. 12 m & Three Storey**	**Up to 15.4 m for limited portions of the roof**	**3.4 m Increase**
Parking Spaces: Commercial/Visitor Resident Accessible Total	As per the Steveston Village Conservation Strategy: 7 10 (1) 19	 8 20 (1) 28	None
Tandem Parking Spaces	Permitted	None	None
Amenity Space – Indoor	Min. 50 m2	Cash-in-lieu	None
Amenity Space – Outdoor	Min. 60 m^2	139 m^2	None

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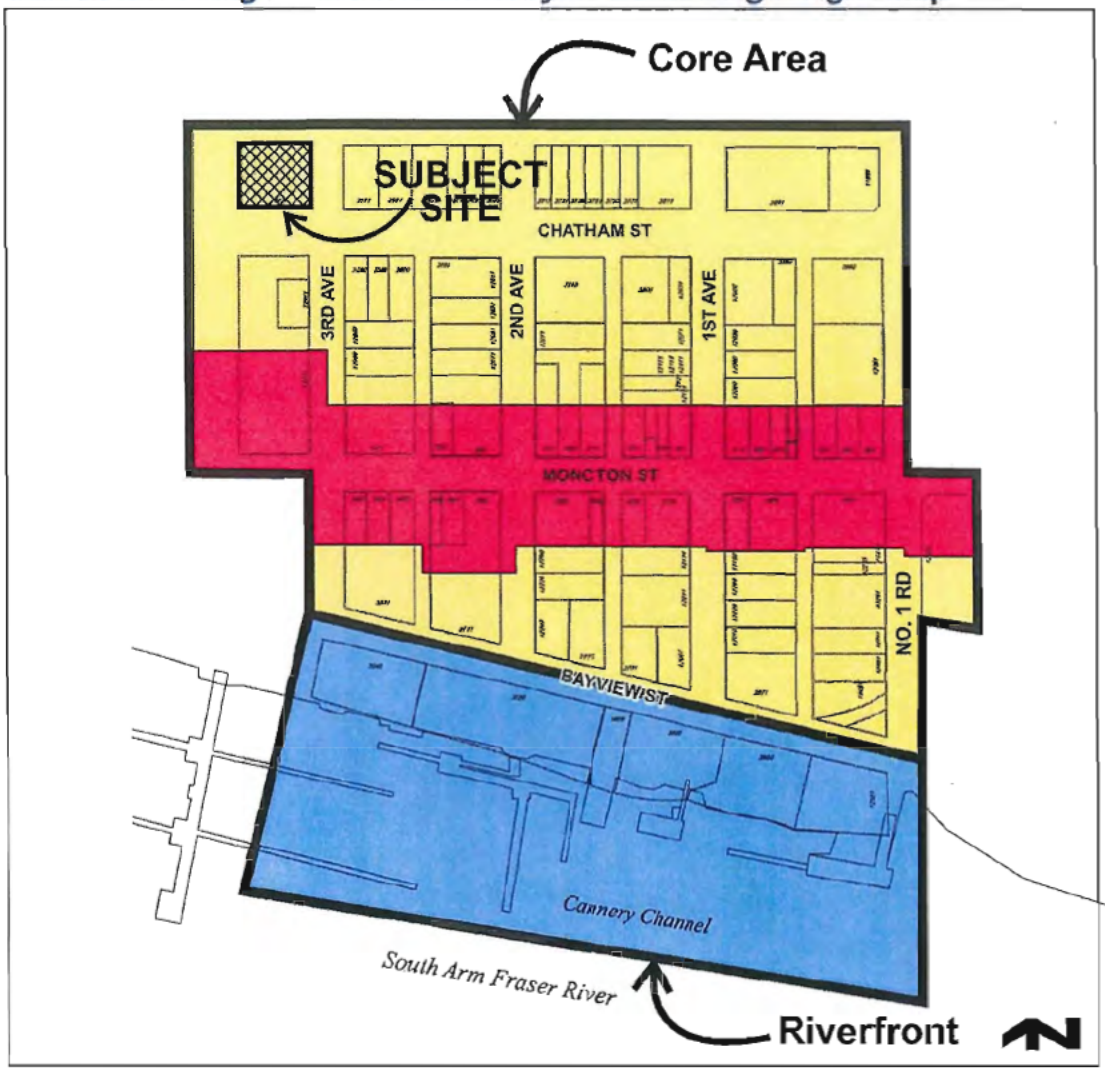
Steveston Village Land Use Density and Building Height Map



	Maximum FAR	Maximum Storeys	Maximum Building Height
Core Area, generally	1.6	3	12 m *
Moncton Street **	1.2	2	9 m *
Riverfront Area	1.6	3	20 m GSC ***

* Maximum building height may increase where needed to improve the interface with adjacent existing buildings and streetscape, but may not exceed the maximum storeys.

** Three-storey building height with additional appropriate density may be considered in special circumstances (See Section 4.0 Heritage).

*** Maximum building height may not exceed the height of the Gulf of Georgia Cannery, which is approximately 22 meters GSC.

ATTACHMENT 4

February 17, 2014

Planning Committee
City of Richmond

To whom it may concern,

Re: Proposed development at 3471 Chatham Street, Richmond, BC

We are writing this letter to voice our concerns about the above noted development. As proposed, it is inappropriate in both scale and design.

The maximum height for buildings in the site's CS3 Zoning is 12 metres but the proposed building has a design height of more than 14 metres.

Section 9.2.2 (page 38) of the Steveston Conservation Area guidelines, "Cohesive Character Areas", states:
"The form of new development should be guided by that of adjacent existing development, even where new uses are being introduced. For example, multiple family residential or commercial uses introduced adjacent to single family homes should adopt a scale and character similar to those existing dwellings...."

The proposed building hardly fits with the above requirement. This proposal sits in a block of entirely single family residences. It is a massive building that is not complimentary to its surroundings and does not look beyond its boundaries in order to knit in. Even the developer's own 'streetscape' shows the proposed development as larger than the buildings on all sides of it along Chatham Street and 3rd Avenue. Being bigger than everything around you is certainly not an effort of transitioning. An example of a multi-use development which does, in our opinion, transition into a residential area exists at the northwest corner of Chatham and 5th Avenue. We have attached photos of that development. A similar development at 3471 Chatham St. would definitely be much more welcome.

The suggestion that pulling back the top floor from Chatham Street will "break down the three-storey massing" is simply visual deception. It does nothing to alter the overall height of the building.

The Steveston Conservation Area guidelines, Section 9.2.1 (page 36), subsection c) states:
"New development should look beyond the boundaries of its own site in order that it may knit into not only what exists today, but what existed in the past....."

The proposed building does not reflect the area or site's architectural history. Until the G&F building was constructed in 1976, there was no large building on that site. From our cursory look at aerial and heritage photographs, we're not aware of any commercial use on that site unless one considers bootlegging from a private home during the late 1940's and early 1950's a commercial use.

The developer has maximized the available lot area but in doing so has eliminated any opportunity for landscaping and created an oversized block of a building with little imaginative styling. While undeniably practical, the generally flat front façade is neither interesting nor appealing. The Steveston Area Plan 9.3.2.2.ac) says that buildings should **"retain or re-establish the small historic lots as shown in the Steveston Village 1892 Historic Lot Lines Map".** In other words, buildings should present frontages that look like a series of small buildings rather than one continuous frontage. The original plans for both the Mukai building at the southwest corner of No.! Rd. and Moncton and the E.A Towns site at Third Ave. and Bayview were rejected by the City partly because they didn't adhere to this requirement. This sets a precedent for the City to reject the proposed design of this building as well.

While the suggested minimal number of parking spaces may be acceptable to the City, we feel it is inadequate for the staff and customers of the proposed retail space, not to mention the visitors to the residential units above. The overflow will simply add to the parking congestion already existing along Chatham St. and Third Ave. Relocating the parking to the rear of the building, thus pushing the building forward to the Chatham Street property line, does not solve the problem. This also disrupts the existing broad Chatham Street streetscape and view corridor to the west which would not agree with the objective in section 9.2.1 Settlement Patterns – Views a) and c) of the Steveston guidelines which state "**Most importantly, new development should enhance street-end views towards the river on the south and Sturgeon Bank on the west" and "contribute to the attractiveness of public streets and open spaces.**" A smaller building in line with the rest of the existing buildings along Chatham Street would address these two issues.

With regard to the Steveston guidelines Section 9.2.3 Architectural Elements (page 42) Exterior Walls and Finishes, Clause b) states:
"Materials should be of high quality, natural and durable, and should avoid artificial 'heritage' looks (e.g. old looking new brick) and misappropriated images (e.g. river rock façade treatments). The preferred material is wood in the form of narrow-board lap siding, board and batten, and shingles. Unpatterned stucco (preferably with a heavy texture, such as 'slop-dash') is an acceptable alternative to wood, while corrugated metal siding is appropriate in the 'maritime mixed use' and industrial areas. Typically, combinations of two or more materials on a single building should be avoided."

There was no significant use of brick in Steveston other than the unique Hepworth building, and metal only appeared sparsely on some cannery complexes, and then primarily as roofing and not siding. It would be not only totally out of character for a residential building to use these materials but flies in the face of the guidelines.

The guidelines (Section 9.3.2.1; page 53) further suggest in part that **"...new development of greater scale should ensure that larger structures do not unnecessarily block views from or impact the privacy of smaller ones."**

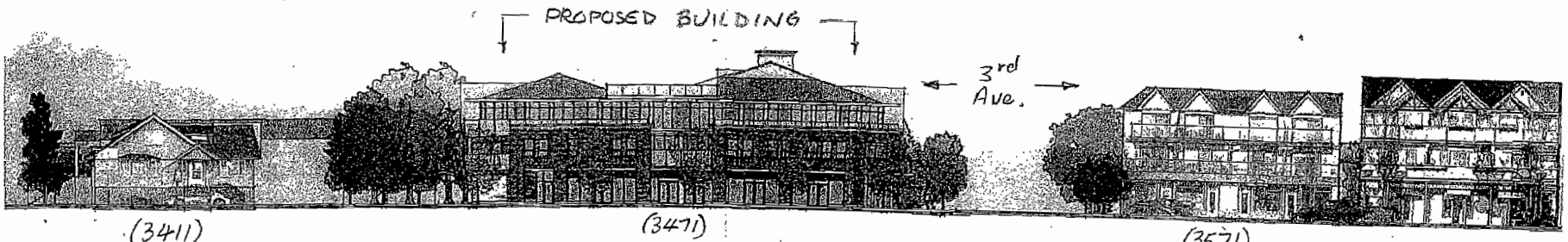
This proposed building with its unacceptable height will shadow the neighbourhood yards and together with balconies overlooking the adjacent properties will definitely impact the privacy of surrounding residents.

In principle, we object to rooftop patios in Steveston as they allow an extra storey of living space not counted in the building's design height and are not reflective of the village history.

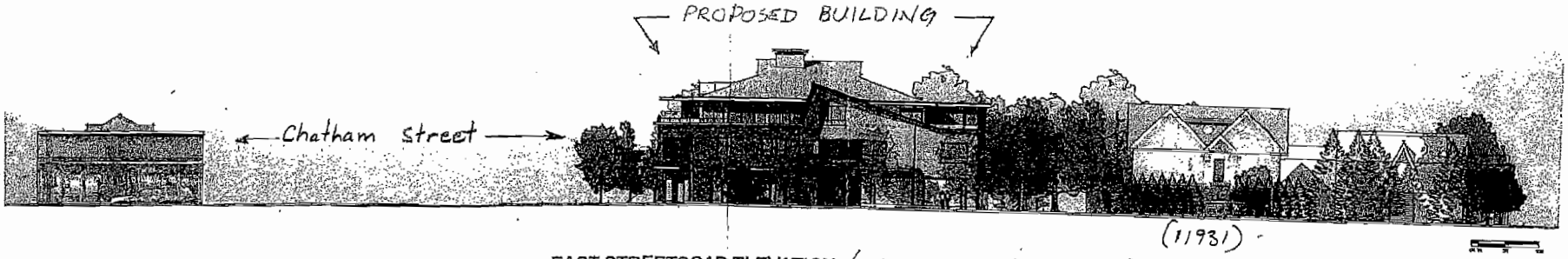
New growth should not **"disrupt the character and existing fabric of the community which is so valued" (Steveston Area Plan Overview 1.0)**. Unfortunately, this proposal is intrusive and disruptive and we would appreciate it if the City would abide by its own regulations and reject this proposal as currently presented.

Ralph and Edith Turner
3411 Chatham Street

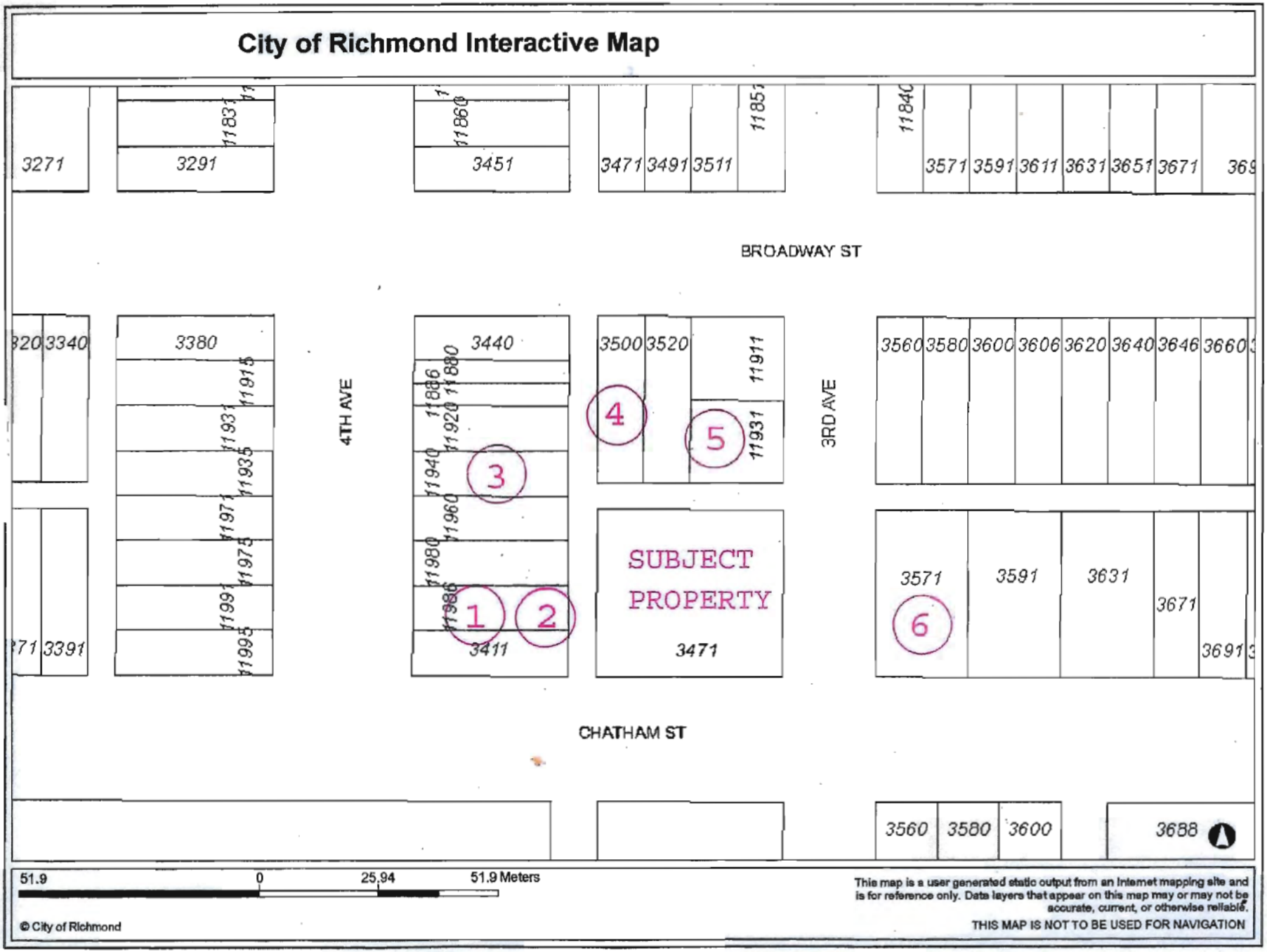
STREETSCAPE PLAN



1 SOUTH STREETSCAPE ELEVATION (ALONG CHATHAM STREET)
1/16"=1'-0"



2 EAST STREETSCAP ELEVATION (ALONG 3rd AVENUE)
1/16"=1'-0"


City of Richmond Interactive Map
BROADWAY ST
CHATHAM ST
4TH AVE
3RD AVE
SUBJECT PROPERTY
3471
3271
3291
3451
3471
3491
3511
3571
3591
3611
3631
3651
3671
3320
3340
3380
3440
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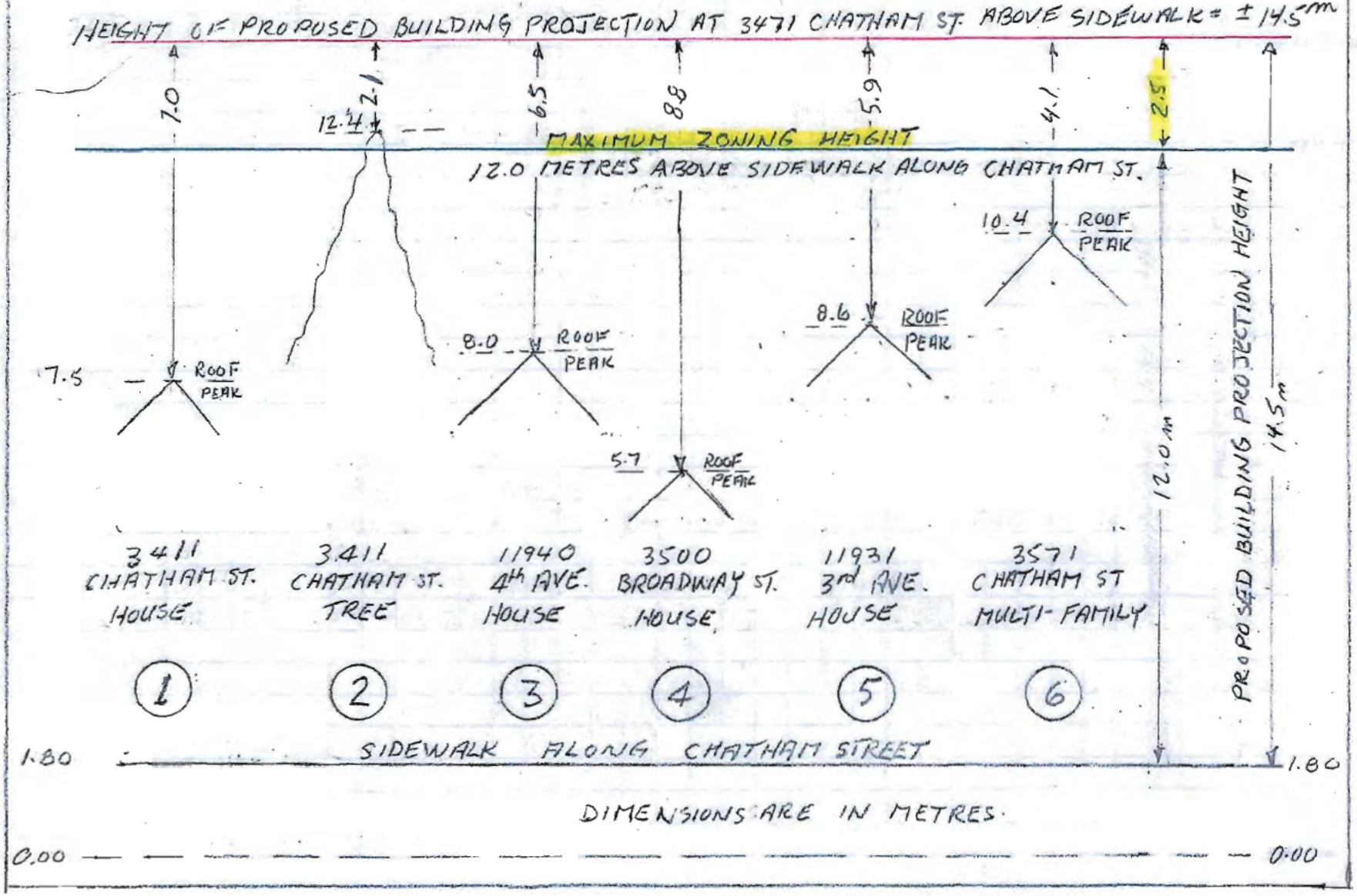
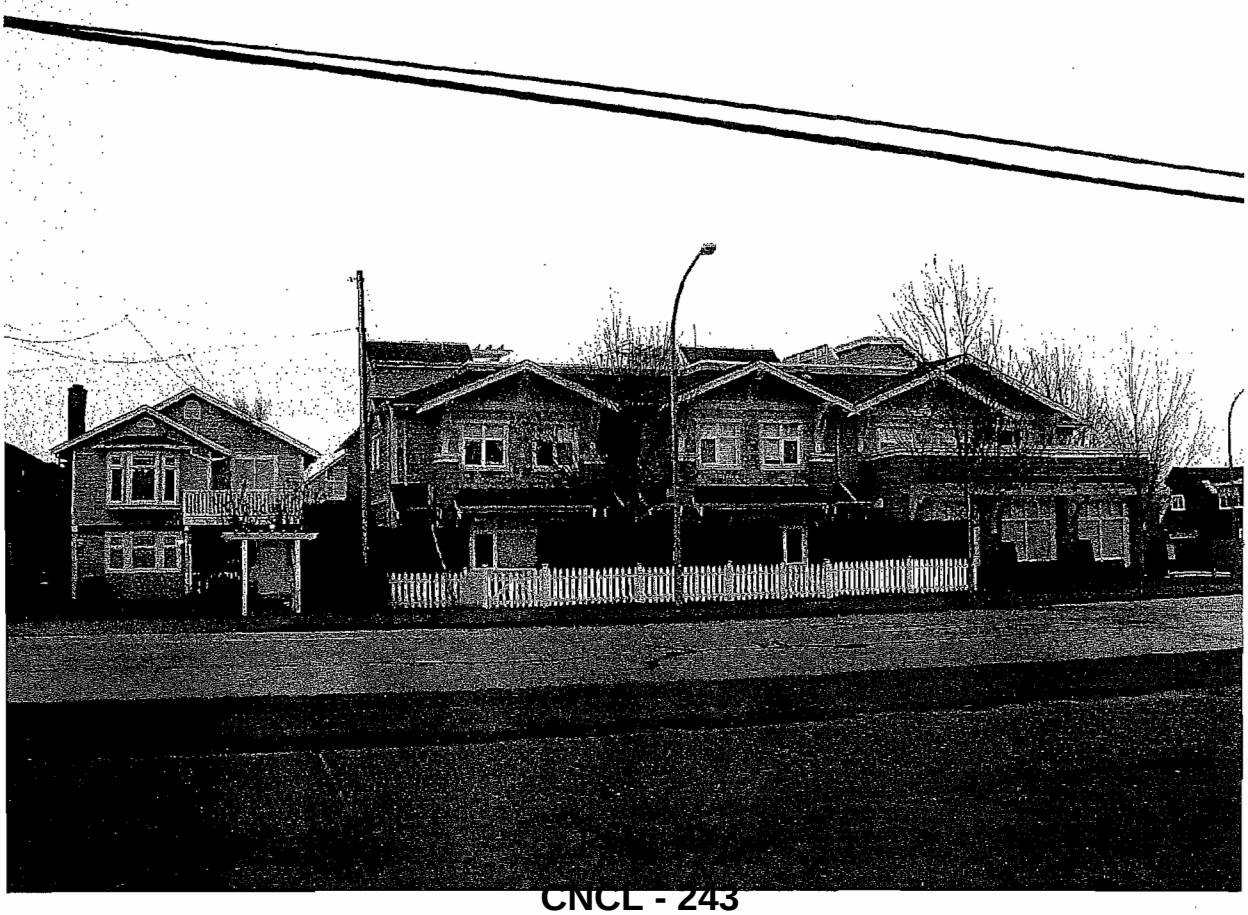
3631
3671
3691
3560
3580
3600
3688
1
2
3
4
5
6
51.9
0
25.94
51.9 Meters
© City of Richmond
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

RELATIVE HEIGHTS OF PROPOSED BUILDING AT 3471 CHATHAM STREET AND ADJACENT STRUCTURES — WITH REFERENCE TO SIDEWALK.



STRATA COMPLEX AT CHATHAM ST. AND 5th AVE.



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City of Richmond

Excerpt from Minutes
Heritage Commission
Development Applications Division
6911 No. 3 Road, Richmond, BC V6Y 2C1

Wednesday, January 15, 2014

3. DEVELOPMENT PROPOSAL - 3471 CHATHAM STREET (RZ 13-643436)

Rob Whetter and Bob Hodder joined the Commission to make a presentation on the Cotter Developments building in the former Gulf of Fraser Credit Union building.

It was noted that this is a 1/3 acre space in the Steveston core that will be a 3 storey mixed-use building with 2 storeys of residential above retail space. Discussion ensued on the history of the site, principle design concepts, materials, ways to reflect Steveston's heritage, the neighbours, the laneways, the roof and elevator.

Discussion further ensued on incorporating the 9 or 10 of the panels (salvaged from the previous building) on the exterior of the building. It was noted that the remainder would be donated to the city. It was noted that there is a building on East Hastings that has similar concrete panels.

Commission members expressed concern over a lack of parking spaces for the public. It was noted that street parking is available and it meets the city's bylaw requirements (approved by the Transportation Department) for parking in Steveston.

Commission members also recommended cleaning up the laneway and upgrading the landscaping to fit within the character of the neighbourhood. It was also noted that softening the fronts of buildings (with window boxes or plantings) to reflect the characteristic of buildings nearby would also be recommended. Commission members also discussed the placement of the panels to ensure visibility and potentially including one in the lobby area –

The unbuilt City lane right-of-way along the west edge of the site will be cleaned up and a bench and low fence will be provided behind the Chatham Street sidewalk to provide an opportunity to site and look at the panels proposed for the west elevation of the building.

To provide a more traditional smaller scale pedestrian retail interface, the applicant revised the design to decrease the width of the storefront glazing, provide additional pilasters and provide a more traditional proportion for the window bases.

The panel placement in the proposed design maximizes visibility for the public and the applicant is reviewing whether or not a portion of an additional panel can be installed inside the residential lobby. A didactic panel is also proposed to be installed on the building exterior to provide information about the panel artwork. Detailed design would be designed through the required Development Permit.

Discussion ensued on the location of a bike pad. Staff noted that they can look into seeing if it can be on public property – ***Transportation staff reviewed the proposal and the class 2 bicycle racks have been relocated into the Chatham Street and 3rd Avenue boulevards. The location and design would be detailed as part of the required Servicing Agreement application.***

Discussion further ensued on the siding materials (corrugated metal, instead of wood) and not shying away from the industrial aesthetic. Maintenance considerations were noted. Commission members also noted that framing the bottom of the windows with a larger, painted wood base may make this building more consistent with the Hepworth building. Commission members also discussed the columns, use of concrete, lighting issues and potential businesses to occupy these storefronts (including a possible clinic, learning centre, Cyclone Taylors shop or "light" retail services) – ***Storefront window framing was revised to address Commission comments and would be further refined as part of the required Development Permit application.***

Staff will keep in touch with the developer and will report back on progress on a monthly basis.

It was moved and seconded

That Richmond Heritage Commission support the design of the rezoning proposal at 3471 Chatham Street as presented on Jan 15, 2014 and that Planning Committee give consideration to the feedback presented by the Heritage Commission. The Commission also endorses the use of the panels.

CARRIED

City of Richmond

Excerpt from Minutes
Public Art Advisory Committee

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

Tuesday, February 18, 2014

1. PRELIMINARY PUBLIC ART PLAN FOR 3471 CHATHAM STREET

Rob Whetter, of Cotter Architects presented the preliminary Public Art Plan for 3471 Chatham Street. It was noted that this is the 1/3 acre site of the former GF Financial building. Due to its location, it requires rezoning and a Heritage Alteration Permit.

Mr. Whetter noted that twelve bas relief concrete panels comprising the exterior facade of the original building were salvaged and will be incorporated into the new design. The panels depict a nod to Steveston's fishing heritage. It was also noted that there is a Vancouver branch which retains similar concrete panels.

It was noted that the design of the new building incorporates nine of the eleven intact panels and they will donate any unused panels to the City or other interested parties. The locations of the panels were discussed. The artist for the panels was identified as Leonard Epp, a former Richmond resident and owner of the Parsons House in Terra Nova, with his spouse, the noted artist Ann Kippling. Epp designed the stained glass panels which are surviving in the Parsons House.

It was noted that with these ready-made heritage panels, this project is different than most public art projects. It was noted that the Public Art contribution will go into salvaging, detailing and installing these salvaged art pieces. Committee members commended the developer on preserving significant heritage artwork and using it as a public art contribution.

Discussion ensued on how to involve an artist and the public. It was noted that a designer could be enlisted to help with the display. Commission members also recommended trying to reach the original artist to involve him in the project.

The developer will contact the artist and work with a designer to include and artist statement in a plaque or interpretive panel. Ms. Jones noted that she will try to get the artist's contact information.

Discussion ensued on an open call for this project and if it is necessary given the circumstances.

It was moved and seconded

That the Richmond Public Art Advisory Committee accept the panels as the developer's contribution to public art and recommend that the developer contact and involve the original artist, Leonard Epp and select a designer to work on the interpretive panels.

CARRIED

City of Richmond

Rezoning Considerations
Development Applications Division
6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 3471 Chatham Street **File No.:** RZ 13-643436

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9138, the developer is required to complete the following:

1. Register a 4m by 4m corner cut road dedication at the southeast corner of the site (as per approved HA 13-641865).
2. Register a flood indemnity covenant on title.
3. Enter into a legal agreement that identifies the building as a mixed use building indicating that they are required to mitigate unwanted noise and demonstrate that the building envelope is designed to avoid noise generated by the internal use from penetrating into residential areas that exceed noise levels allowed in the City's Noise Bylaw and noise generated from HVAC units will comply with the City's Noise Bylaw.
4. Enter into a legal agreement to prohibit the conversion of bicycle parking area into habitable space (e.g. storage) and requiring that the rooms remain available for shared common use for the sole purpose of bicycle storage.
5. Enter into a legal agreement to ensure the shared use of residential visitor and commercial parking spaces and prohibiting assignment of any of these parking spaces to a particular unit or user.
6. Enter into a legal agreement to ensure the provision of electric vehicle charging features: a minimum of 20% of parking stalls to be provided with a 120V receptacle to accommodate electric vehicle charging equipment; and an additional 25% of parking stalls to be constructed to accommodate the future installation of electric vehicle charging equipment (e.g. pre-ducted for future wiring).
7. Submit confirmation 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 protected off-site. 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.
8. Install 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.
9. Voluntarily contribute $4.00 per buildable square foot of residential floor area to the City's affordable housing strategy (e.g. $86,992).
10. Voluntarily contribute $47.00 per buildable square foot of floor area for the density increase from 1.2 to 1.6 FAR (e.g. 0.4 FAR) as per Steveston Village Heritage Conservation Grant Program Policy 5900 (e.g. $ 296,476). In accordance with the policy, the contribution is reduced by the amount of the Affordable Housing contribution (e.g. total payable of $209,484).
11. Provide on-site indoor amenity space in accordance with the OCP, or contribute cash-in-lieu in accordance with Council Policy 5041 (e.g. $10,000 for 10 apartments).
12. Voluntarily participate in the City's Public Art Program through the installation of the artwork onsite or contribute cash-in-lieu in the amount of $0.77 per buildable square foot of residential floor area and $0.41 per buildable square foot of commercial floor area (e.g. cash-in-lieu amount of $18,175). A security will be held in the cash-in-lieu amount and returned to the developer upon completion of the following:
    a) Installation of at least 9 of the panels by artist Leonard Epp along with a didactic panel on the building facades.
    b) A transfer of all of the artist's right, title and interest in the Public Art to the Strata, including a transfer of joint, worldwide copyright, in a form satisfactory to the Director, Arts, Culture and Heritage Services, executed by the owner and delivered to the Strata within thirty (30) days of the date on which the Public Art is installed.
    c) Submission of the Final Report to the City and the Strata promptly after completion of the installation of the Public Art. The Final Report" means a final report in form and content satisfactory to the Director of Development and Director, Arts, Culture and Heritage which describes, among other things, the Public Art, the siting of the Public Art, a brief biography of the artist, the artist's statement on the Public Art, and such other

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details as the Director of Development and Director, Arts, Culture and Heritage, in their sole discretion, may request, which final report will include enclosures as follows:

(i) maintenance plan for the Public Art; and

(ii) twelve (12) high resolution images in digital format of the Public Art showing it in context and revealing significant details;

13. Submit a Development Permit* and Heritage Alteration Permit* completed to a level deemed acceptable by the Director of Development.

14. Enter into a Servicing Agreement* for the design and construction of road and infrastructure works, including, but may not be limited to:

a) Chatham Street and 3rd Avenue improvements – New concrete sidewalk at the property line and 2.5 m wide grass boulevards with street tree planting behind existing curb. The sidewalks are to occupy the remaining right-of-way between the boulevard and the property line. Works to extend across both frontages and west lane right-or-way, including removal of existing driveways and installation of barrier curb with gutter and installation of a concrete pad, seating bench and low fence behind the Chatham Street sidewalk at the west edge of the site. Concrete pads and bicycle racks for class 2 short-term bicycle parking are to be provided in the boulevards: on 3rd Avenue within 15 m of the residential lobby and on Chatham Street approximately mid way among the commercial units.

Should Council adopt streetscape visions for Bayview and Chatham Streets prior to the adoption of the subject rezoning, the frontage improvements above shall be adjusted, if necessary, to be in keeping with Streetscape Visions for Bayview and Chatham Streets as approved by Council.

b) Lane improvements – Reconstruct the existing east-west lane along the north property line of the site, including the driveway crossing on 3rd Avenue, to City lane design standards (Min. 5.4 m wide pavement). Ensure the unbuilt north-south lane right-of-way along the west property line of the site is cleaned up, levelled and planted with grass.

c) Storm sewer improvements – Provide a new storm sewer (200mm diameter) for the rear lane located along the north property line, including a new manhole to connect to the existing 3rd Avenue storm sewer.

d) Sanitary sewer improvements – Upgrade the existing sanitary sewer in the rear lane from 150mm to 200mm diameter from manhole SMH5503 to the centre of 3rd Avenue (Approximately 55 m length), including a new manhole to connect to the existing system.

e) Water distribution improvements –

i. Design and construct a new water main along 3rd Avenue (200mm diameter) from the existing 300mm diameter Chatham Street water main to the existing water main along Broadway Street (Approximately 105 m length).

ii. The City will pay for the construction of the portion of new water main along 3rd Avenue (200mm diameter) from the north edge of the rear lane to the existing water main along Broadway Street (Approximately 45 m length).

f) Fire Hydrant improvements – Provide a new fire hydrant along 3rd Avenue, spaced as per City standards.

g) Private Utilities –

i. Developer to provide private utility companies rights-of-ways to accommodate any above ground equipment (e.g. transformers, kiosks, cabinets) and future under-grounding of overhead lines.

ii. Existing BC Hydro poles along 3rd Avenue may conflict with the required frontage improvements. Alteration and relocation of any private utilities will be at the Developer's cost.

iii. If BC Hydro requires a new PMT to service this development, it is required to be located on the subject site. Please note that BC Hydro had indicated that the proposed site may require a PMT for the proposed mixed use development, they prefer PMT to be installed near the electrical room, and that the developer has not provided electrical details/information to them at this stage.

iv. It is recommended that the developer contact the private utility companies to learn of their requirements.

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

1. Provide an acoustical report and recommendations prepared by an appropriate registered professional, which demonstrates that the interior noise levels and noise mitigation standards comply with the City's Official Community Plan and Noise Bylaw requirements. Maximum interior noise levels (decibels) within the dwelling units must achieve CMHC standards follows:

Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35 decibels
Living, dining, recreation rooms	40 decibels
Kitchen, bathrooms, hallways, and utility rooms	45 decibels

2. Provide landscaping security (in an amount based on a cost estimate sealed by a registered Landscape Architect for materials, installation and a 10% contingency)

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

3. Incorporate sustainability, accessibility and public art measures in Building Permit (BP) plans as determined via the Rezoning, Development Permit and/or Heritage Alteration Permit processes.
4. Enter into an Encroachment Agreement* for any canopies/awnings/signs that encroach into the Chatham Street and 3rd Avenue road rights-of-way. Any overhead structure located within the rights-of-way must be safe and easily removable (i.e. not cast in place and not permanently attached to any other structure).
5. Submit a Construction Parking and Traffic Management Plan to the Transportation Division. 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 Infrastructure) and MMCD Traffic Regulation Section 01570.
6. Submit fire flow calculations signed and sealed by a professional engineer based on the Fire Underwriter Survey or ISO to confirm that there is adequate available flow for fire-fighting purposes. Based on the proposed rezoning and using the OCP model, there is sufficient water available from Chatham Street, but not from Broadway Street (411 L/s available at 20 psi residual from the Chatham Street hydrant and 125 L/s available at 20 psi residual from the Broadway Street hydrant for a minimum fire flow requirement of 220 L/s). The required SA includes a new hydrant along 3rd Avenue.
7. If applicable, pay latecomer agreement charges associated with eligible latecomer works.
8. 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 Division 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,

Initial: _____

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

Policy No. 5900:

Steveston Village Heritage Conservation Grant Program

1. Purpose

   The purpose of this program is to establish, for Steveston Village, as identified in the Steveston Area Plan, a City grant program to financially cost share in conserving the exteriors of private and City owned identified heritage properties.

2. Program Funding Sources

   - The sources of funds will include moneys contributed from:
     - Private sector density bonusing contributions as per the Steveston Area Plan (e.g., for rezonings to the Steveston Village Conservation Zone) with over 1.2 floor area ratio (FAR),
     - Other private donations, and
     - Senior government and NGO grants.
   - If an owner who is rezoning to the Steveston Village Conservation Zone and increasing density to over 1.2 FAR, wishes to apply for a City grant, the developer shall provide the required contribution to the City prior to final approval of a rezoning and may later apply for a cost sharing grant.
   - Private sector density bonusing contributions shall be calculated as $47.00 per buildable square foot for densities over 1.2 FAR. (This is a portion of the increased land value which private landowners receive due to increased density over 1.2 FAR).
   - Where a developer is required to meet the City's Affordable Housing Policy, the $47.00 is to be reduced accordingly.
   - The rate may be reviewed and modified by Council periodically.

3. City Accounts

   For the grant program, the City will maintain the existing Heritage Trust Account No 2207 (a capital and non capital heritage account) to manage received funds and may, as necessary, establish new heritage accounts.

4. The Use Of Program Funds

   The collected funds are to be used to cost share:
   - For Privately owned identified heritage buildings: the private capital costs of conserving their exteriors, on a 50/50 cost sharing basis.
   - For City owned identified heritage buildings: the City's capital costs of conserving their exteriors, on a 50/50 cost sharing basis.
   - The Program is not to pay for all private or City heritage conservation costs.

5. Council Approval is Required
   - Council approval is required to allocate any program funds.

6. Maximum Private Grant Amount
   - Private owners may apply to receive up to:
     - Initial Funding: $50,000 per identified heritage building - with private matching funds.
     - Optional Funding: Council may consider an additional $25,000 per identified heritage building - with additional matching private funding to achieve exceptional heritage conservation, as determined by Council.
   - As heritage conservation may occur in stages, a private owner may apply more than once, however, the maximum grant which may be allocated is $75,000 per identified heritage building.

7. Private Owner Application Requirements and Procedures
   - Step 1: Private Owner – City Discussion
     - Owners are encouraged to discuss their grant application intentions as early as possible when considering to apply and before undertaking any work, to discuss the implications and timing of a possible grant,
     - No grant is to be provided for work which is undertaken before Council approves the grant.
   - Step 2: Owner Application
     - Owners are to submit a completed application form accompanied by:
       - A cover letter describing the proposed work and how it complies with program objectives,
       - Architectural drawings and coloured renderings,
       - An outline of conservation work and specifications,
       - Current color photographs of the building,
       - Any archival photographs and historical documentation.
       - A minimum of three (3) competitive estimates for the proposed work. (Note: This is not a pro forma analysis,)
       - Other, as necessary.
   - Step 3: Application Review Procedure
     - Applications will be reviewed by staff who will make a recommendation to Council.
     - Council approval is required for all grants
   - Step 4: Actual Grant Issuance
     - Council authorizes a grant,
     - Owners submit actual costs of completed work,
     - Staff review costs,
     - Staff may issue the approved grant if it meets the program criteria and Council has approved it, and
     - Staff notify Council of issued grants.

8. Eligible Private Owner Grant Items
   - Program grants for private sector work are for the conservation of the exteriors if identified heritage buildings (e.g., roof, foundation, walls, siding, doors, widows).
   - This includes directly related costs to prepare drawings, etc.
   - Maintenance work will not be funded.

9. No Grant, If Funds Are Not Available
   - If no program funds are available when a grant application is made:
     - No grant application will be considered,
     - No City grant will be given, and
     - A grant is not to be deferred until grant funds become available.

10. Maximum Grant Amount For City Owned Identified Heritage Buildings
    - A City division may apply to receive up to:
      - Initial Funding: $50,000 per identified heritage building - with other matching funds.
      - Optional Funding: Council may consider an additional $25,000 per identified heritage building - with additional other matching funding to achieve exceptional heritage conservation, as determined by Council.
    - As heritage conservation may occur in stages, a City division may apply more than once, however, the maximum grant which may be allocated is $75,000 per identified heritage building,

11. City Application Requirements and Procedures
    - Step 1: City Division Discussion
      - Applying City divisions are encouraged to discuss their grant application intentions as early as possible when considering to apply and before undertaking any work, to discuss the implications and timing of a possible grant,
      - No grant is to be provided for work which is undertaken before Council approves the grant.
    - Step 2: City Division Application
      The relevant City division is to submit a completed application form accompanied by:
      - A cover letter describing the proposed work and how it complies with program objectives,
      - Architectural drawings and coloured renderings,
      - An outline of conservation work and specifications,
      - Current color photographs of the building,
      - Any archival photographs and historical documentation.
      - If the City is doing the work itself, an itemized estimate of the proposed work.
      - If the City is contracting out the work, proposals as per City policy.
      - Other, as necessary.
    - Step 3: Application Review Procedure
      - Applications will be reviewed by staff who will make a recommendation to Council,
      - Council approval is required for all grants.
    - Step 4: Grant Issuance
      - Council authorizes a grant,
      - Once approved, the grant may be issued to do the work.

12. Eligible City Grant Items
    - Program grants for City owned identified heritage buildings are for the conservation of their exteriors (e.g., roof, foundation, walls, siding, doors, widows).
    - This includes directly related costs to prepare drawings, etc.
    - Maintenance work will not be funded

13. No Grant If Funds Are Not Available
    - If no program funds are available when a grant application is made:
      - No grant application will be consider
      - No City grant will be given, and
      - A grant is not to be deferred until grant funds become available.

14. Program Review
    - The Program will be reviewed and modified by Council, as necessary.

DEVELOPMENT DATA

GROSS SITE AREA:	15,856 SF	(1,473 SM)
LESS CORNER CUT:	86 SF	(8 SM)
NET SITE AREA:	15,770 SF	(1,465 SM)
BUILDING FOOTPRINT:	12,828 SF	(1,192 SM)
SITE COVERAGE:	81%	
COMMERCIAL AREA:	3,485 SF	(324 SM)
RESIDENTIAL AREA	20,396 SF	(1,895 SM)
GROSS FLOOR AREA:	25,866 SF	(2,403 SM)
FLOOR AREA RATIO:	1.6	(25,866 SF/15,770 SF)
GROSS SALEABLE:	23,880 SF	(2,219 SM)
GROSS SALEABLE/GFA:	92%	

UNIT SUMMARY

LEVEL 3:	2 BEDROOM + DEN	4 UNITS
LEVEL 2:	2 BEDROOM + DEN	6 UNITS
TOTAL RESIDENTIAL:	**2 BEDROOM + DEN**	**10 UNITS**

GFA SUMMARY

LEVEL 3:		
UNIT 301	2,383 SF	(221 SM)
UNIT 302	2,324 SF	(216 SM)
UNIT 303	2,269 SF	(211 SM)
UNIT 304	2,388 SF	(222 SM)
L3 TOTAL RESIDENTIAL:	**9,364 SF**	**(870 SM)**
L3 COMMON AREA:	397 SF	(37 SM)
L3 GFA:	**9,761 SF**	**(907 SM)**
LEVEL 2:		
UNIT 201	1,878 SF	(174 SM)
UNIT 202	1,838 SF	(171 SM)
UNIT 203	1,693 SF	(157 SM)
UNIT 204	1,904 SF	(177 SM)
UNIT 205	1,761 SF	(164 SM)
UNIT 206	1,957 SF	(182 SM)
L2 TOTAL RESIDENTIAL:	**11,032 SF**	**(1,025 SM)**
L2 COMMON AREA:	421 SF	(39 SM)
L2 GFA:	**11,452 SF**	**(1,064 SM)**
LEVEL 1 / GROUND FLOOR:		
TOTAL CRU:	**3,486 SF**	**(324 SM)**
L1 COMMON AREA:	1,168 SF	(108 SM)
L1 PARKING, STO., GARBAGE & MECH:*	7,814 SF	(726 SM)
L1 GFA:	**4,653 SF**	**(432 SM)**
		* NOT INCLUDED IN GFA
TOTAL RESIDENTIAL:	**20,396 SF**	**(1,895 SM)**
TOTAL CRU:	**3,485 SF**	**(324 SM)**
TOTAL GFA:	**25,866 SF**	**(2,403 SM)**

PARKING CALCULATIONS

- PARKING SPACES REQUIRED:

MIXED COMMERCIAL/RESIDENTIAL USES:

10 APARTMENTS:	1.5 PARKING SPACES/UNIT		0.2 VISITOR SPACES/UNIT
TOTAL REQUIRED:	**15**	**RESIDENTIAL SPACES**	**2 VISITOR SPACES**

COMMERCIAL (GENERAL RETAIL):

@ 3 / 100 m² UP TO 350 m²:	4	COMMERCIAL SPACES
@ 4 / 100 m² OVER 350 m²:	-	
TOTAL REQUIRED:	**4**	**COMMERCIAL SPACES**

TOTAL PARKING SP. REQUIRED: 21 SPACES

- PARKING SPACES PROVIDED:

RESIDENTIAL:	20	RESIDENTIAL SPACES	2 VISITOR SPACES
COMMERCIAL:	6	COMMERCIAL SPACES	
TOTAL PARKING SP. PROVIDED:	**28**	**PARKING SPACES**	

BICYCLE PARKING CALCULATIONS

- BICYCLE PARKING REQUIRED:

MIXED COMMERCIAL/RESIDENTIAL USES:

	CLASS 1	CLASS 2
10 APARTMENTS:	1.25 SPACES/UNIT	0.20 SPACES/UNIT
TOTAL REQUIRED:	**13 SPACES**	**2 SPACES**

COMMERCIAL (GENERAL RETAIL):

	CLASS 1	CLASS 2
	@ 0.27 / 100 m² GFA (LEASABLE) > 100 m²:	@ 0.4 / 100 m² GFA (LEASABLE) > 100 m²:
TOTAL REQUIRED:	**1 SPACE**	**2 SPACES**

TOTAL BICYCLE SP. REQUIRED: 14 CLASS 1 SPACES 4 CLASS 2 SPACES

- BICYCLE PARKING PROVIDED:

	CLASS 1	CLASS 2
TOTAL BICYCLE SP. PROVIDED:	14 SPACES (WITHIN L1 STORAGE ROOMS)	**4 SPACES**

CONCEPTUAL ONLY

NOTES:

A	15/10/07	ISSUED FOR REZONING RESUBMITTAL
B	15/10/24	ISSUED FOR REZONING RESUBMITTAL
C	15/11/13	REVISED PER CITY COMMENTS
D	15/11/24	REVISED PER CITY COMMENTS
E	15/12/10	REVISED PER CITY COMMENTS
F	16/03/07	REVISED PER CITY COMMENTS
G	16/03/17	REVISED PER CITY COMMENTS
ISSUE		

cotter
ARCHITECTS
#256 - 13880 NO. 1 ROAD, RICHMOND, BC V7A 5J7
TEL: 604 [illegible]

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT
8471 Chatham Street
Richmond, BC

CLIENT:
Steveston Flats Development Corporation

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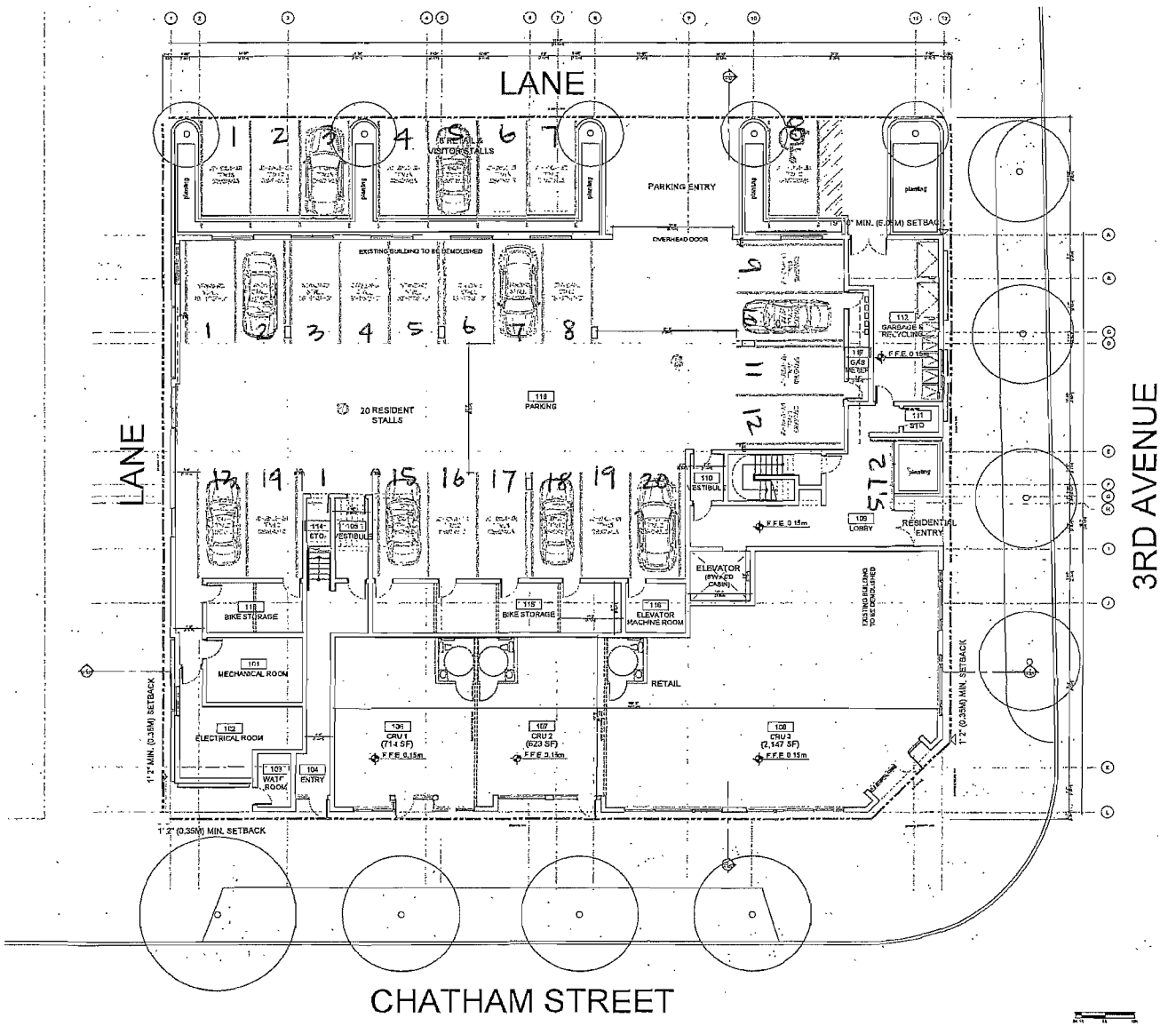
DRAWN:	SP
CHECKED:	PC
SCALE:	
DATE:	MARCH 2016

SHEET TITLE:
DEVELOPM NT AT

DRAWING NO.:
A-010

ATTACHMENT 9

CNCL - 259



1 LEVEL 1
1/8"=1'-0"

NOTES:

9	140107	ISSUED FOR HERITAGE ADVISORY COMMITTEE
8	131213	DEVELOPMENT PERMIT PROGRESS SET
7	131104	DEVELOPMENT PERMIT PROGRESS SET
6	130910	REZoning APPLICATION
5	130807	PRELIMINARY DP ISSUE
4	130725	PRELIMINARY FLOOR PLANS & ELEVATIONS
NUMBER	YYMMDD	DESCRIPTION

ISSUE

cotter ARCHITECTS
4255 - 13300 NO. 5 ROAD, RICHMOND, BC V7A 5J7

PROJECT:
CHATHAM & 3RD RESIDENTIAL/COMMERCIAL MIXED USE DEVELOPMENT
3474 Chatham Street
Richmond, BC

CLIENT:
Steveston Flats Development Corporation

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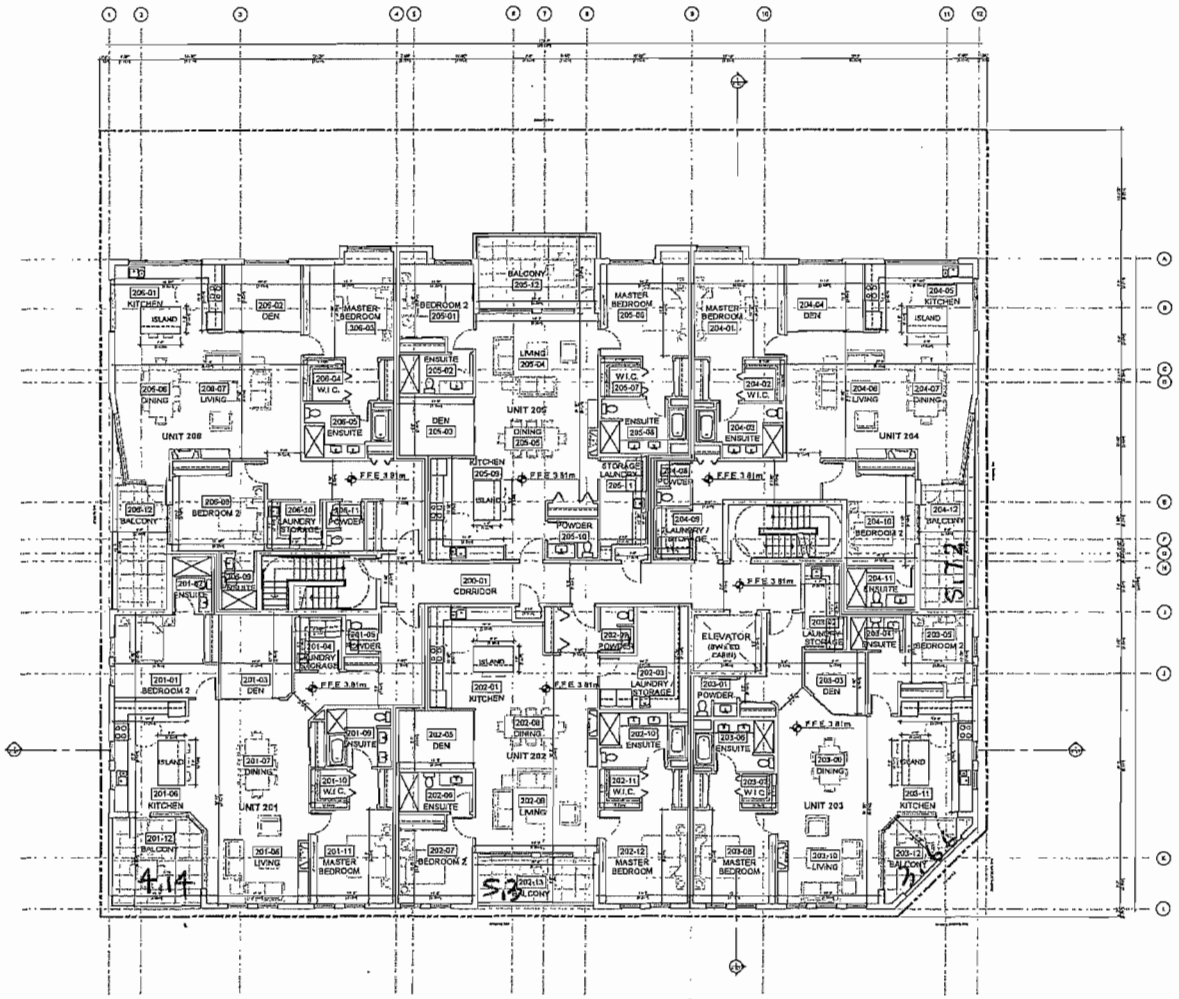
DRAWN	CP
REVIEWED	RR
SCALE	1/8"=1'-0"
JOB No.	0944
DATE	FEBRUARY 2014

SCALE:

SHEET TITLE:
PARKING LEVEL / LEVEL 1 FLOOR PLAN / SITE PLAN

DRAWING NO.: A-111
REV.:

CNCL - 260



NOTES:

CNCL - 261

F	140107	ISSUED FOR HERITAGE ADVISORY COMMITTEE
E	131213	DEVELOPMENT PERMIT RESPONSE SET
D	131204	DEVELOPMENT PERMIT RESUBMISSION SET
C	130912	REZONING APPLICATION
B	130807	PRELIMINARY DRAWINGS
A	130725	PRELIMINARY FLOOR PLANS & ELEVATIONS
MARK	YYMMDD	DESCRIPTION
ISSUE		

cotter
ARCHITECTS
#285 - 13280 NO. 5 ROAD, RICHMOND, BC V7A 5J7
TEL 604-270-1512 FAX 604-270-1417 EMAIL info@cotter.ca
www.cotter.ca

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT
3471 Chatham Street
Richmond, BC

CLIENT:
Steveston Flats Development Corporation

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DRAWN	CP
CHECKED	MB
SCALE	1/8"=1'-0"
JOB No.	Chat
DATE	FEBRUARY 2014

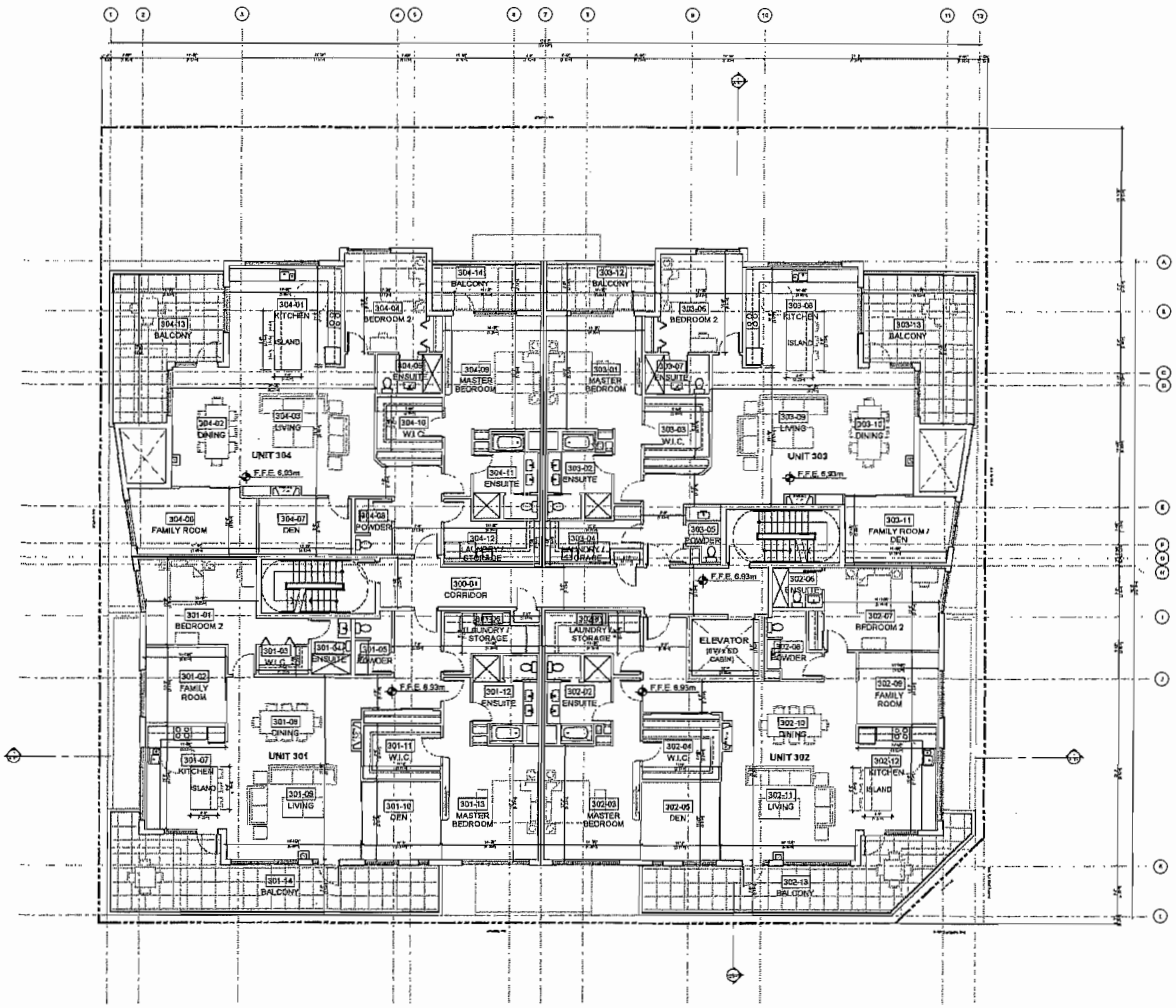
SCALE:

SHEET TITLE:
LEVEL 2 FLOOR PLAN

DRAWING NO.: A-112
REV.:

1 LEVEL 2
1/8"=1'-0"

CNCL - 262



NOTES:

F	14/11/07	ISSUED FOR HERITAGE ADVISORY COMMITTEE
E	13/11/01	DEVELOPMENT PERMIT PROGRESS SET
D	13/10/04	DEVELOPMENT PERMIT PROGRESS SET
C	13/04/12	REZONING APPLICATION
B	13/02/07	PRELIMINARY DRAWINGS
A	13/02/27	PRELIMINARY FLOOR PLANS & ELEVATIONS
MARK	PLANNED	DESCRIPTION

ISSUING

cotter ARCHITECTS

#238 - 13300 NO. 5 ROAD, RICHMOND, BC V7A 5J7

PROJECT:

CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

3431 Chatham Street
Richmond, BC

CLIENT:

Steveston Flats Development Corporation

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DRAWN:	CP
CHECKED:	RP
SCALE:	1/8" = 1'-0"
JOB No.:	CHH
DATE:	FEBRUARY 2014

SEAL

SHEET TITLE:

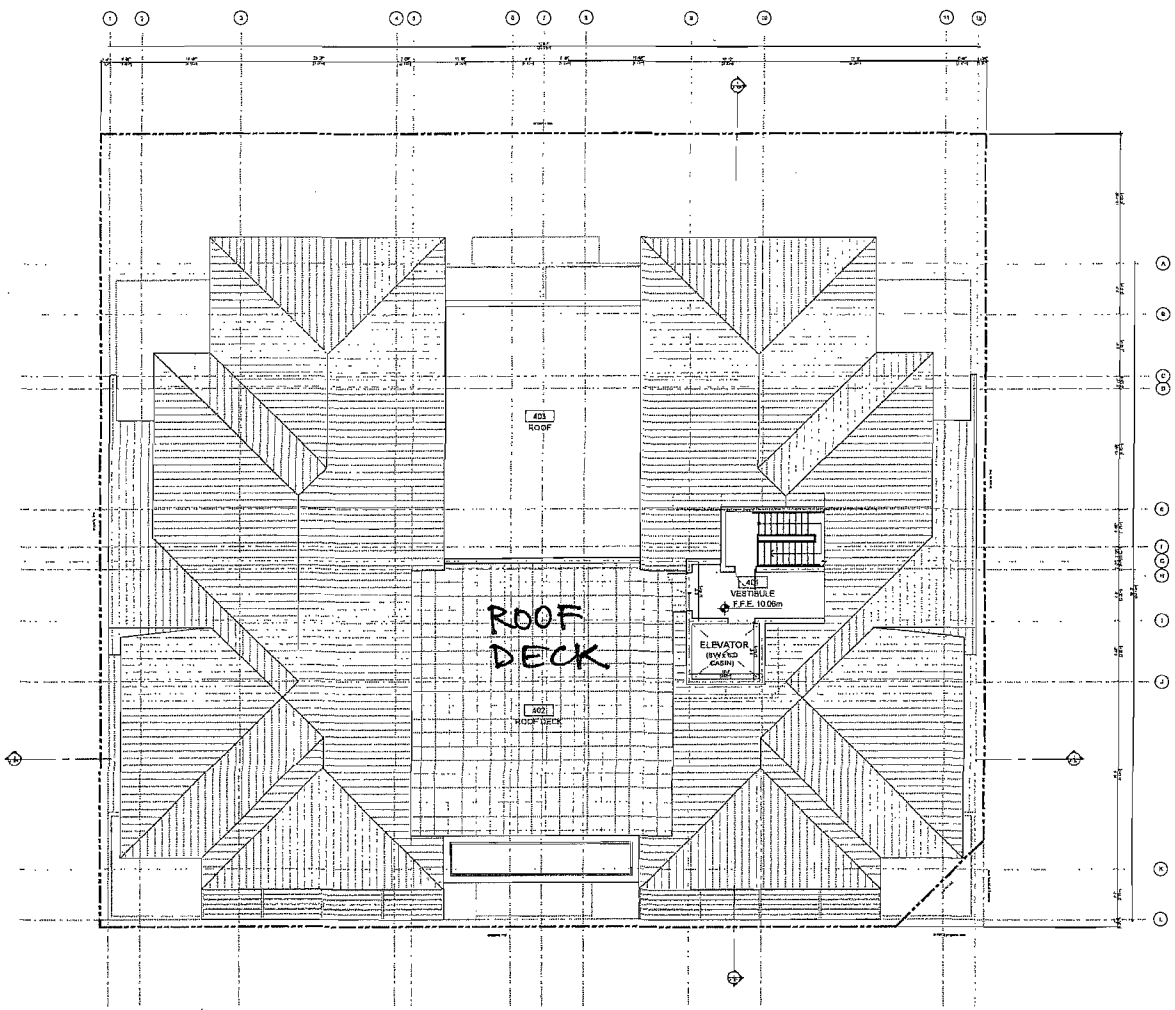
LEVEL 3 FLOOR PLAN

DRAWING No.: A-113

REV.

1 LEVEL 3
1/8" = 1'-0"

CNCL - 263



1 ROOF DECK
1/8" = 1'-0"

NOTES:

F	14/10/31	ISSUED FOR HERITAGE ADVISORY COMMITTEE
E	13/12/13	DEVELOPMENT PERMIT PROGRESS SET
D	13/12/04	DEVELOPMENT PERMIT PROGRESS SET
C	13/10/10	REZONING APPLICATION
B	13/09/27	PRELIMINARY DRAWINGS
A	13/09/05	PRELIMINARY FLOOR PLANS & ELEVATIONS
MARK	YY/MM/DD	DESCRIPTION

ISSUE

cotter
ARCHITECTS
9235 – 11300 NO. 5 ROAD, RICHMOND, BC V7A 5J7

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT
3471 Chatham Street
Richmond, BC

CLIENT:
Steveston Flats Development Corporation

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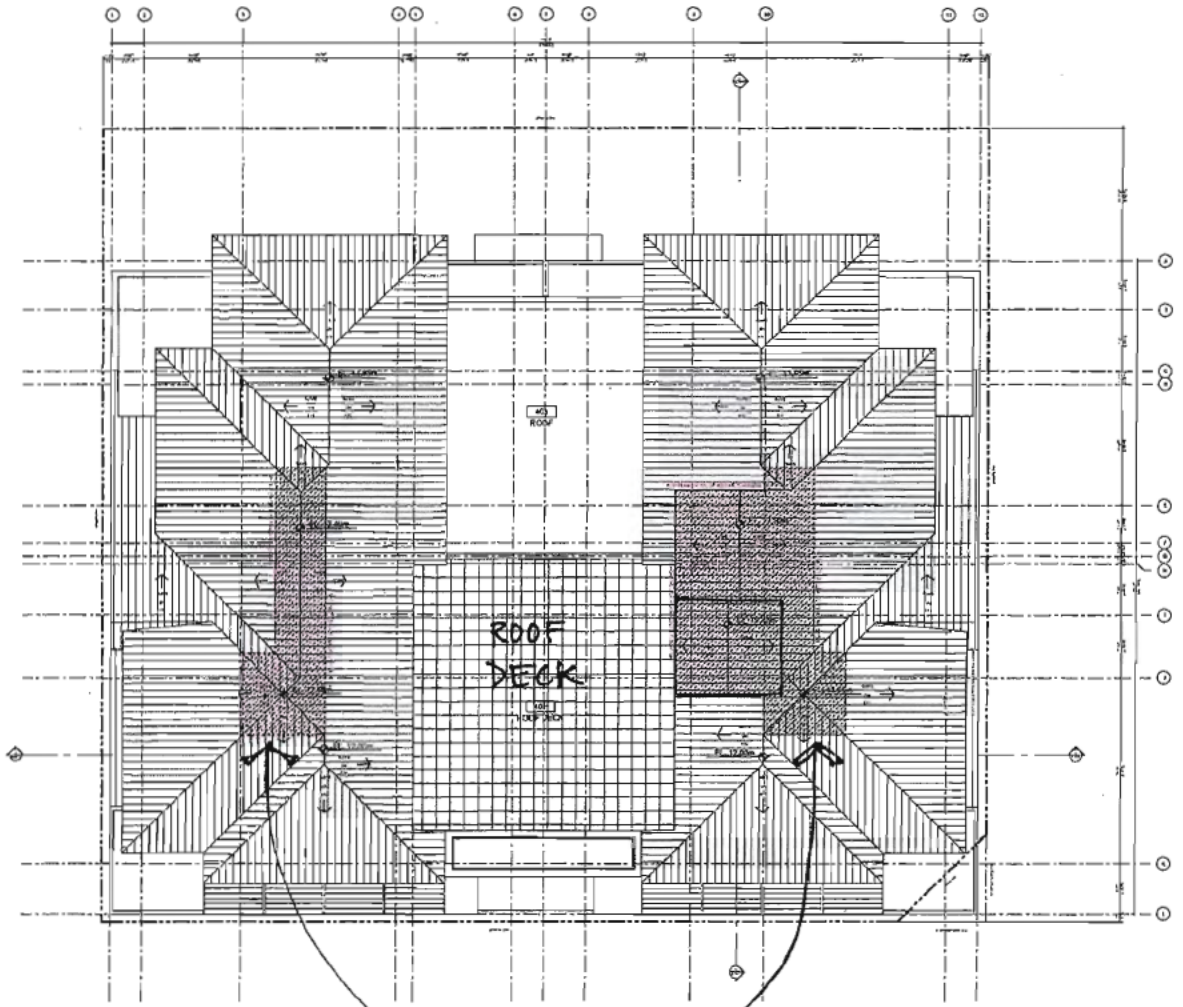
DRAWN:	SP
CHECKED:	RM
SCALE:	1/8" = 1'-0"
JOB No.:	CNH
DATE:	MARCH 2014

SEAL:

SHEET TITLE:
ROOF DECK FLOOR PLAN

DRAWING NO.: A-114
REV.:



NOTES:

cotter
ARCHITECTS

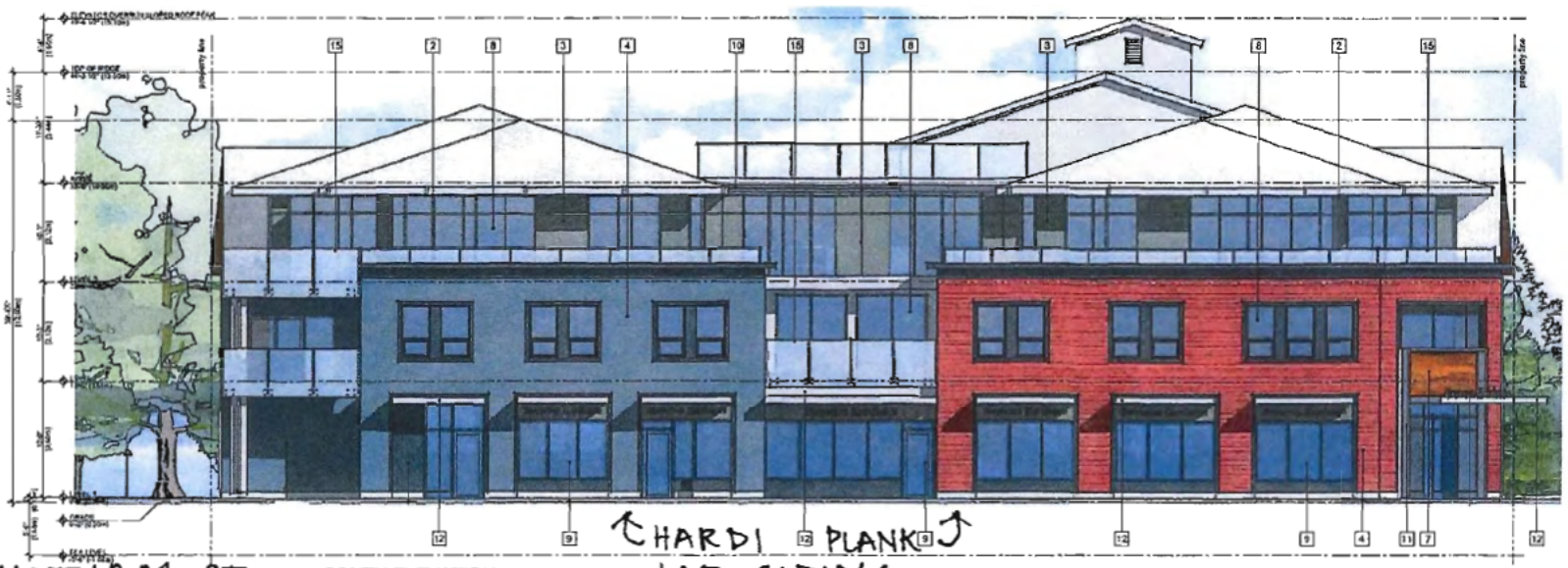
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

Steveston Flats Development Corporation

ROOF PLAN

A-115

1 ROOF



NOTES: MATERIAL LEGEND

1 STANDING SEAM METAL ROOFING
2 STAINED CEDAR SOFFIT
3 HARDIE PANEL WITH REVEALS
4 PAINTED LAP SIDING
5 GALVANIZED CORRUGATED METAL CLADDING
6 EXPOSED CONCRETE - SANDBLASTED
7 STAINED WOOD FLASHING
8 METAL-CLAD VINYL WINDOWS
9 ANODIZED ALUMINUM STOREFRONT GLAZING
10 EXTRUDED ALUMINUM SUNSHADE
11 EXTRUDED ALUMINUM FRAME
12 PAINTED METAL & GLASS CANOPY
13 SALVAGED SCULPTURAL CONCRETE PANEL
14 FACE-ILLUMINATED SIGNAGE
15 STRUCTURAL CLEAR GLASS GUARD

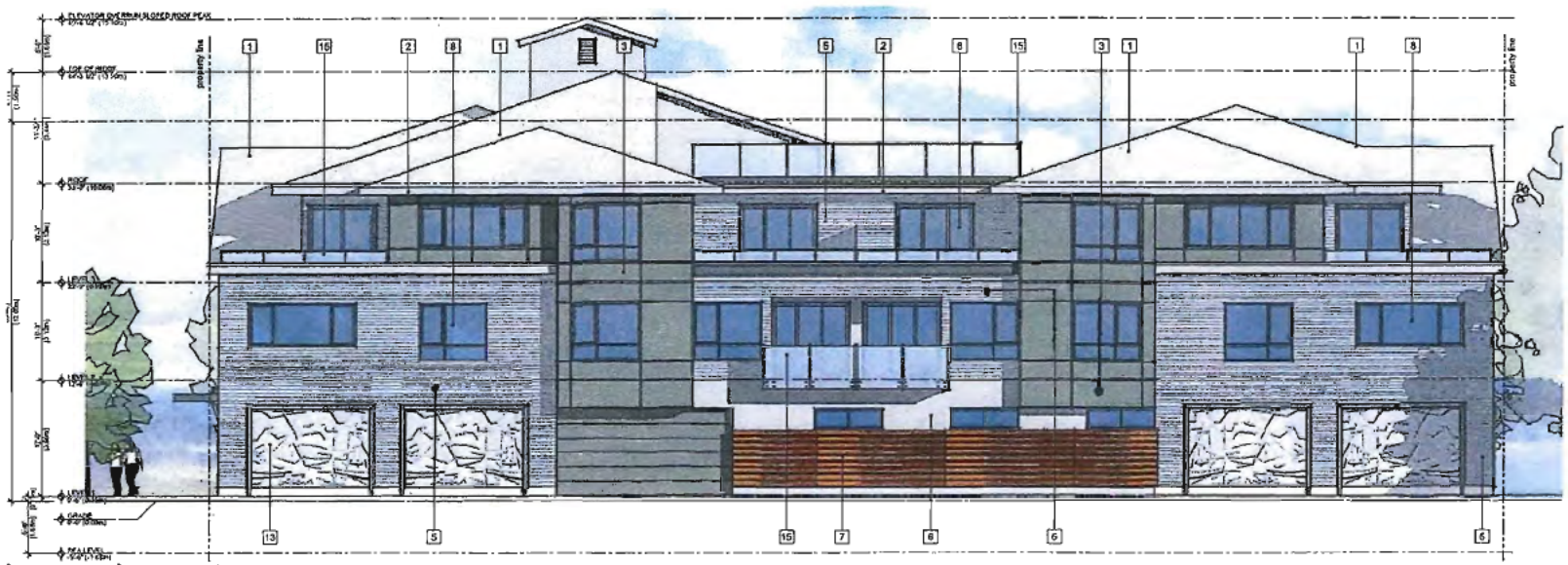
cotter ARCHITECTS

CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

Steveston Flats Development Corporation

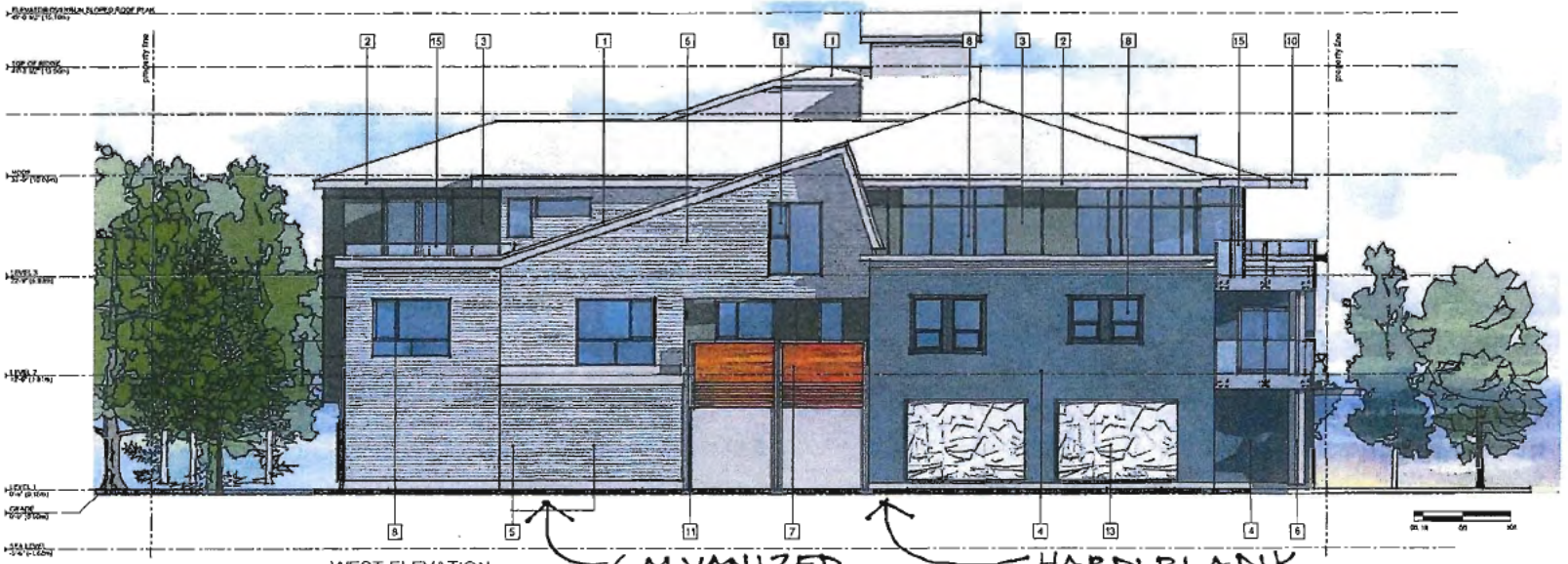
SOUTH & EAST
BUILDING ELEVATIONS

A-201



EAR LANE

① NORTH ELEVATION
3/16"=1'-0"



UNDEVELOPED 'LANE'

② WEST ELEVATION
3/16"=1'-0"

GALVANIZED CORRUGATED METAL CLADDING

HARDI PLANK LAP SIDING

NOTES: MATERIAL LEGEND

1 STANDING-SEAM METAL ROOFING
2 STAINED CEDAR SOFFIT
3 HARDIE PANEL WITH EASYTRAU REVEALS
4 HARDIEPLANK LAP SIDING
5 GALVANIZED CORRUGATED METAL CLADDING
6 EXPOSED CONCRETE - SANDBLASTED
7 STAINED WOOD PLANKS
8 METAL-CLAD VINYL WINDOWS
9 ANODIZED ALUMINUM STOREFRONT GLAZING
10 EXTRUDED ALUMINUM ELEMENTS
11 EXTRUDED ALUMINUM FRAME
12 PAINTED METAL & GLASS CANOPY
13 SALVAGED SCULPTURAL CONCRETE PANEL
14 FACE ILLUMINATED SIGNAGE
15 STRUCTURAL CLEAR GLASS CURTAIN

*Refer to Heritage Alteration Permit Guidelines Package
**Refer to approved window and door shop drawings

ISSUE

cotter ARCHITECTS

#335 - 11300 NO. 5 ROAD, RICHMOND, BC V7A 5J7

CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

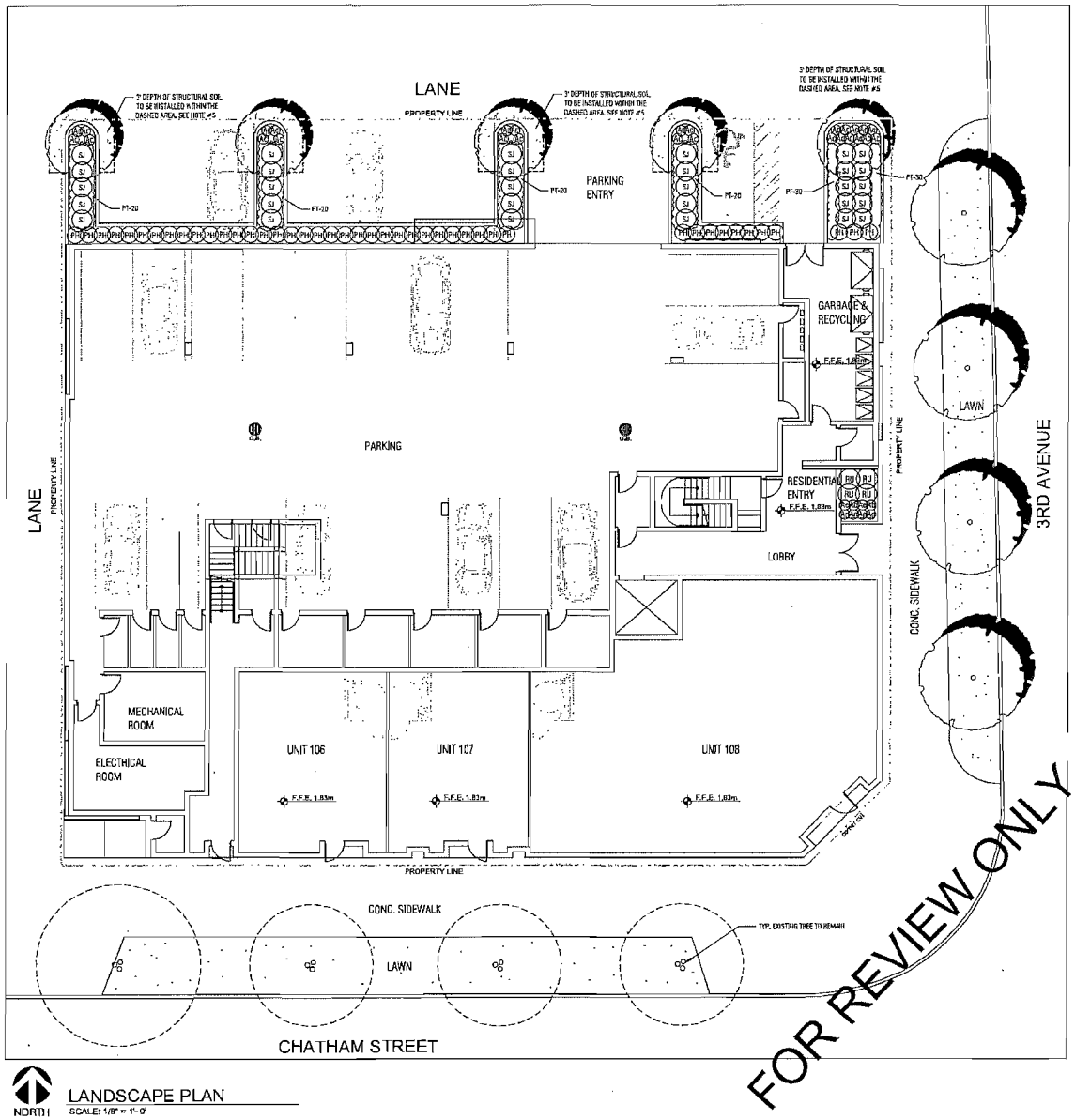
Steveston Flats Development Corporation

NORTH & WEST
BUILDING ELEVATIONS

A-202

CNCL - 266

1 SOUTH-EAST CORNER
NTS



LANDSCAPE PLAN
SCALE: 1/8" = 1'-0"

FOR REVIEW ONLY

NOTE:

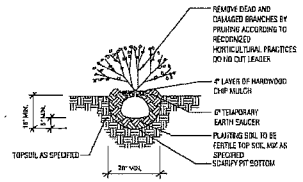
1. ALL PLANT MATERIAL SHALL MEET OR EXCEED STANDARDS REQUIRED BY BCNTA OR BCSLA GUIDELINES.
2. TOPSOIL SUPPLIED SHALL BE FROM A REPUTABLE SOURCE. A FULL ANALYSIS OF THE TOPSOIL WILL BE REQUIRED AT THE CONTRACTORS EXPENSE. SUBMIT TO LANDSCAPE CONSULTANT FOR APPROVAL.
3. AMEND TOPSOIL PER SOIL ANALYSIS RECOMMENDATIONS PRIOR TO SPREADING ON SITE. REJECTED TOPSOIL SHALL BE REMOVED OFF SITE IMMEDIATELY AT THE LANDSCAPE CONTRACTORS EXPENSE.
4. TOPSOIL DEPTHS FOR PLANTING AS FOLLOWS:
   A. GRASSED AREAS: 150MM
   B. GROUND COVERS: 300MM
   C. SHRUBS: 450MM
   D. TREE PITS: 1000MM WITH 300MM (BELOW ROOT BALL)
5. INSTALL 3 DEPTH OF STRUCTURAL SOIL TO THE AREAS INDICATED ON THE LANDSCAPE PLAN
   STRUCTURAL SOIL MIX COMPOSITION: 2" IS ANGULAR QUARRY ROCK (#10 TO #56), GROWING MEDIUM: SOIL STABILIZER
   GROWING MEDIUM CONTENT: 50-60% SAND, 20-40% FINES (SILT & CLAY), 2-12% ORGANIC MATTER
6. LAWN AREAS SHALL BE SODDED WITH #1 PREMIUM RESIDENTIAL SOD.
7. ALL SHRUB PLANTING AREAS SHALL HAVE GROUND COVERS 14"O.C.
8. 3" DEPTH OF 1" MINUS COMPOST MULCH TO BE INSTALLED IN ALL SHRUB PLANTING AREAS.
9. IRRIGATION SYSTEM - (AUTOMATIC IRRIGATION SYSTEM TO BE REQUIRED.
10. ROAD GRADING AND INSTALL SITE GRADING BY CIVIL ENGINEER/OR ARCHITECTURAL
11. FINAL STREET TREE LOCATION AND TREE SPECIES SELECTION TO BE DETERMINED BY CITY OF RICHMOND, AT TIME OF INSTALLATION. CITY BOULEVARD SHALL BE LAWN.

PLANT LIST:

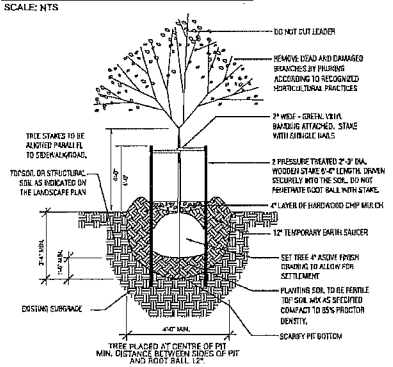
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COND.
		DECIDUOUS TREES			
ARO	5	ACER RUBRUM BOWHALL	BOWHALL RED MAPLE	60MM CAL.	B & B
		DEC. TREES - OFF SITE			
FOO	4	FRAXINUS OXYCARPA RAYWOOD	RAYWOOD ASH	6 CM CAL.	B & B
		SHRUBS			
PH	44	PHORMIUM TENAX ATROPURPUREUM	NEWZEALAND FLAX	#3	CONTAINER
RU	4	RHODODENDRON UNIQUE	UNIQUE RHODOL	#3	CONTAINER
SJ	30	SKIMMIA JAPONICA REEVESIANA	JAPANESE SKIMMIA	#3	CONTAINER
		GROUND COVERS			
AC	35	ASTILBE CHINENSIS 'VISIONS'	ASTILBE	#1	CONTAINER
PT	148	PACHYSANDRA TERMINALIS	JAPANESE SPURGE	10CM POT	40CM O.C.

LEGEND:

DECIDUOUS TREES | SHRUBS | DECORATIVE RIVER STONE
EXISTING TREE TO REMAIN | PERENNIAL AND GROUNDCOVERS | LAWN



SHRUB PLANTING DETAIL
SCALE: NTS



DECIDUOUS TREE PLANTING DETAIL
SCALE: NTS

NOTES:

MARUYAMA & ASSOCIATES
LANDSCAPE ARCHITECTS

cotter ARCHITECTS

NO.	MM/DD/YY	REVISION DESCRIPTION
ISSUED / PLANNED		
ISSUE		

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

CLIENT:
Steveston Flats Development Corporation

DRAWINGS, SPECIFICATIONS, THEIR IDEAS AND DESIGNS ARE, AND AT ALL TIMES REMAIN THE EXCLUSIVE PROPERTY OF MARUYAMA & ASSOCIATES INC. AND CANNOT BE USED OR REPRODUCED WITHOUT THE LANDSCAPE ARCHITECT'S WRITTEN CONSENT.

DRAWN:	JC
CHECKED:	RMM
SCALE:	1/8"=1'-0"
JOB No.:	M13008
DATE:	NOV. 28-13

SCALE:

SHEET TITLE:
LANDSCAPE PLAN

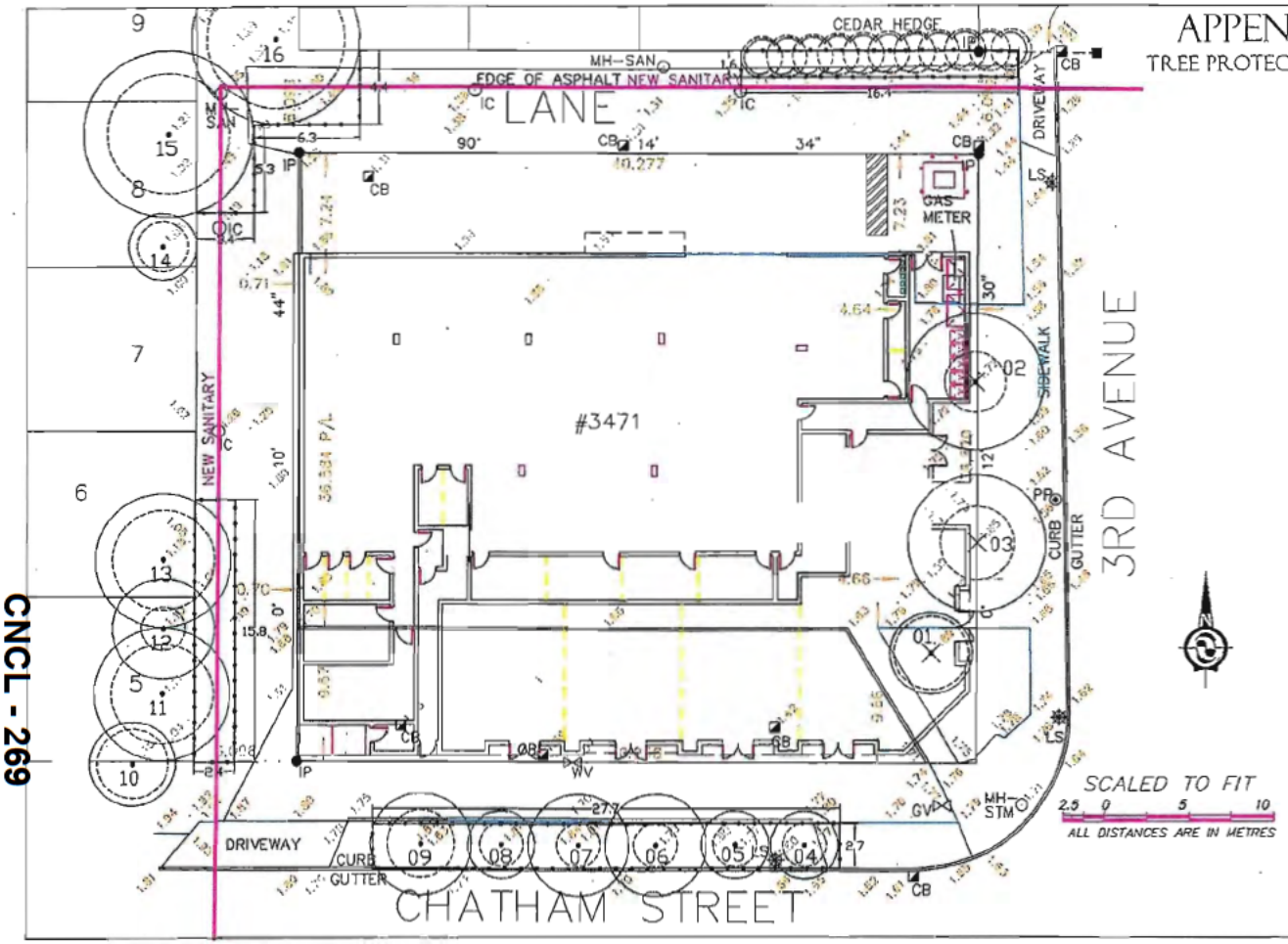
AS UPDATED NOV. 28, 2013

DRAWING NO.:	REV.
L-1	

CNCL - 268

APPENDIX 3

TREE PROTECTION PLAN



TREE INVENTORY

#	Type	Action	DBH	MPZ
1	Japanese Maple	Remove	35cm	2.1m
2	Crimson King Maple	Remove	30cm	1.8m
3	Crimson King Maple	Remove	36cm	2.2m
4	Purple Plum	Retain	22cm	1.3m
5	Purple Plum	Retain	20cm	1.2m
6	Purple Plum	Retain	19cm	1.1m
7	Purple Plum	Retain	22cm	1.3m
8	Purple Plum	Retain	22cm	1.3m
9	Purple Plum	Retain	33cm	2.0m
10	English Holly	Retain	35cm	2.1m
11	Western Redcedar	Retain	50cm	3.0m
12	Hawthorne	Retain	22cm	1.3m
13	Western Redcedar	Retain	50cm	3.0m
14	Mountain Ash	Retain	25cm	1.5m
15	Cherry	Retain	40/40/40	3.6m
16	Alder	Retain	68cm	4.1m
17	Cedar Hedge	Retain	20cm	1.2m

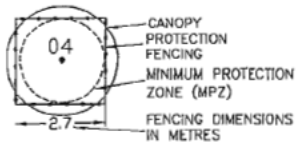
TREE PROTECTION FENCING

Minimum Radial Distance from trunk

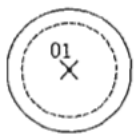
#	Type	DBH	Metres	Feet
4	Purple Plum	22cm	2.0m	6.6ft
5	Purple Plum	20cm	2.0m	6.6ft
6	Purple Plum	19cm	3.0m	9.8ft
7	Purple Plum	22cm	3.0m	9.8ft
8	Purple Plum	22cm	2.0m	6.6ft
9	Purple Plum	33cm	3.0m	9.8ft
10	English Holly	35cm	2.0m	6.6ft
11	Western Redcedar	50cm	4.0m	13.1ft
12	Hawthorne	22cm	3.0m	9.8ft
13	Western Redcedar	50cm	4.0m	13.1ft
14	Mountain Ash	25cm	2.0m	6.6ft
15	Cherry	40/40/40	6.0m	16.4ft
16	Alder	68cm	6.0m	16.4ft
17	Cedar Hedge	20cm	1.2m	3.9ft

LEGEND

TREE PROPOSED FOR RETENTION



TREE PROPOSED FOR REMOVAL



NOTES:
1. SITE LAYOUT INFORMATION AND TREE SURVEY DATA PER SUPPLIED DRAWING
2. REFER TO ATTACHED TREE PROTECTION REPORT FOR INFORMATION CONCERNING TREE SPECIES, STEM DIAMETER, HEIGHT, CANOPY SPREAD AND CONDITION.
3. PROPOSED TREE REMOVAL AND RETENTION REFLECTS PRELIMINARY DRIVEWAY AND SERVICE CORRIDOR ALIGNMENT CONSIDERATIONS.
4. ALL MEASUREMENTS ARE METRIC

Froggers Creek Tree Consultants Ltd
7763 McGregor Avenue Burnaby BC V5J 4N4
Telephone: 604-721-8002 Fax: 604-437-0970

3471 CHATHAM STREET, RICHMOND

TREE PROTECTION PLAN

THE DRAWING PLOTS ALL SURVEYED TREES, PROPOSED FOR RETENTION, REMOVAL, THEIR CANOPIES, PROTECTION ZONES AND PROTECTION FENCING IN RELATION TO PROPOSED LAYOUT

DRAWN BY: CH
November 26, 2013

CNCL - 269

City of Richmond

Development Application Data Sheet

Development Applications Division

RZ 13-643436 **Attachment C**

Address: 3471 Chatham Street

Applicant: Cotter Architects Inc.

Planning Area(s): Steveston Village

	Existing	Proposed
Owner:	Steveston Flats Development Corp. Inc. No. BC0968919	Unknown
Site Size (m^2):	Previously 1,473 m^2	1,465 m^2
Land Uses:	Vacant	Mixed Use Commercial and Residential
Area Plan Designation:	Heritage Mixed Use (Commercial-Industrial with Residential & Office Above)	Complies
Zoning:	Steveston Commercial (SC3)	Commercial Mixed Use (ZMU26) – Steveston Village
Number of Units:	None	Approx. 3 CRU and 10 apartments

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio	Max. 1.6	1.6	None Permitted
Lot Coverage	Max. 100%	78%	None
Setbacks: 3rd Avenue Chatham Street Rear Lane West side yard	 0 m 0 m None None	 0.5 m to 2 m (0 m to 1.5 m to cornice/overhang) 0.5 m to 2.5 m (0 m to 2 m to cornice/overhang) 6 m 0.5 m (0 m to overhang)	None
Height – **Option 1 with Elevator** Option 2 without Elevator	Three Storey & Max. 12 m	Three Storey & **15.4 m for elevator** 12 m	**3.4 m Increase** None
Parking Spaces: Commercial/Visitor Resident Accessible Total	As per the Steveston Village Conservation Strategy: 7 10 (1) 19	 8 20 (1) 28	None
Tandem Parking Spaces	Permitted	None	None
Amenity Space – Indoor	Min. 50 m^2	Cash-in-lieu	None
Amenity Space – Outdoor	Min. 60 m^2	139 m^2	None

Attachment D

NOTES:

cotter ARCHITECTS

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

CLIENT:
Steveston Flats Development Corporation

1 SOUTH ELEVATION
1/8"=1'-0"

CHATHAM STREET

2 WEST ELEVATION
1/8"=1'-0"

F	14/10/31	90% CITY HERITAGE ADVISORY COMMITTEE
E	13/12/13	DEVELOPMENT PERMIT PROGRESS SET
D	13/11/26	DEVELOPMENT PERMIT PROGRESS SET
C	13/09/12	REZONING APPLICATION
B	13/06/07	50% REVIEW DRAWINGS
A	13/05/28	TRIM & REVIEW PLANS & ELEVATIONS
ISSUE		DESCRIPTION

cotter ARCHITECTS
#235 - 11900 NO. 3 ROAD, RICHMOND, BC V7A 5G7
TEL: 604.270.8627 FAX: 604.270.3431 EMAIL: info@cotterarchitects.com
WEB: www.cotterarchitects.com

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT
3471 Chatham Street
Richmond, BC

CLIENT:
Steveston Flats Development
Corporation

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DRAWN:	JB
CHECKED:	RW
SCALE:	1/8"=1'-0"
JOB No.:	CHA
DATE:	JUNE 2014

SCALE:

SHEET TITLE:
SOUTH ELEVATION
WEST ELEVATION

DRAWING NO.: A-201
REV.:

OPTIONAL ELEVATOR

1 EAST ELEVATION
3/16"=1'-0"

3RD AVENUE

OPTIONAL ELEVATOR

2 NORTH ELEVATION
3/16"=1'-0"

REAR LANE

NOTES:

cotter ARCHITECTS

CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

Steveston Flats Development Corporation

NORTH ELEVATION
EAST ELEVATION

A-202

2 NORTH ELEVATION (with foreground trees)
3/16"=1'-0"

1 WEST ELEVATION (with foregroud trees)
3/16"=1'-0"

NOTES:

cotter ARCHITECTS

#235 - 13320 NO. 3 ROAD, RICHMOND, BC V7A 1J7

CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

Steveston Flats Development Corporation

NORTH ELEVATION
EAST ELEVATION

A-203

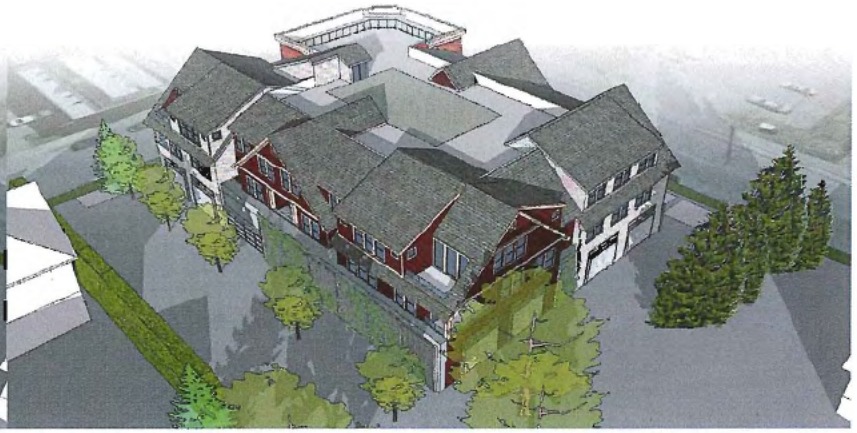
ELEVATIONS SHOWING EXISTING NEIGHBOURING TREES/HEDGES

NOTES:

1 SOUTH-EAST CORNER
NTS

2 SOUTH-WEST CORNER-without elevator overrun
NTS

3 NORTH-WEST CORNER
NTS



3 NORTH-WEST CORNER-without elevator overrun
NTS

CNCL - 275

cotter
ARCHITECTS

CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT

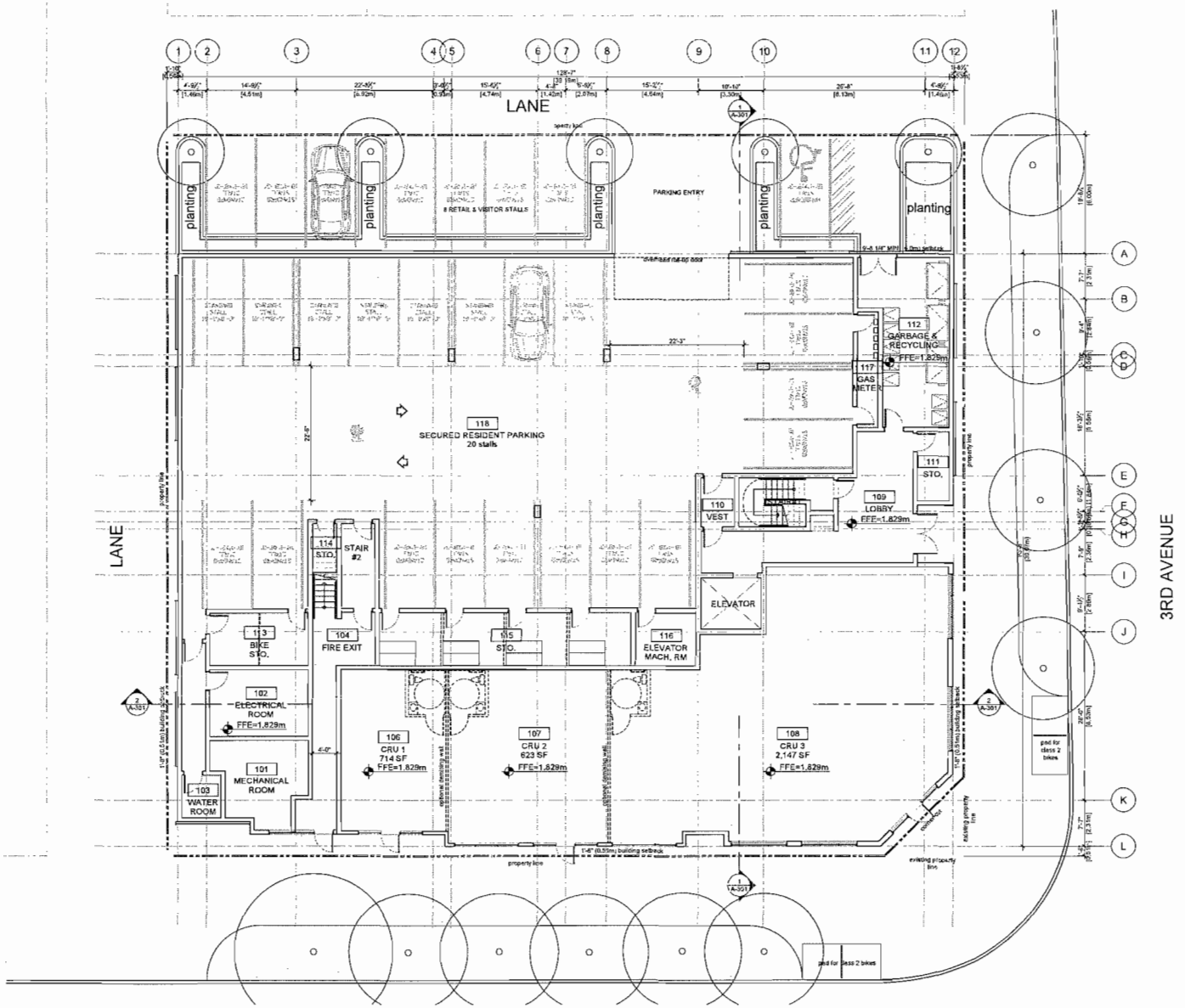
Steveston Flats Development Corporation

PERSPECTIVES

A-911a

CNCL - 276

NOTES:



1 LEVEL 1
1/8"=1'-0"

F	14/05/07	REVISED FOR HERITAGE ADVISORY COMMITTEE
E	13/12/13	DEVELOPMENT PERMIT PROGRESS SET
D	13/12/04	DEVELOPMENT PERMIT PROGRESS SET
C	13/09/12	REZONING APPLICATION
B	13/04/05	PRELIMINARY DP ISSUE
A	13/02/25	PRELIMINARY FLOOR PLANS & ELEVATIONS
MARK	PLANNED	DESCRIPTION
ISSUE		

cotter ARCHITECTS
#235 - 11300 NO 5 ROAD, RICHMOND, BC V7A 5J7

PROJECT:
CHATHAM & 3RD RESIDENTIAL/COMMERCIAL MIXED USE DEVELOPMENT
3471 Chatham Street
Richmond, BC

CLIENT:
Steveston Flats Development Corporation

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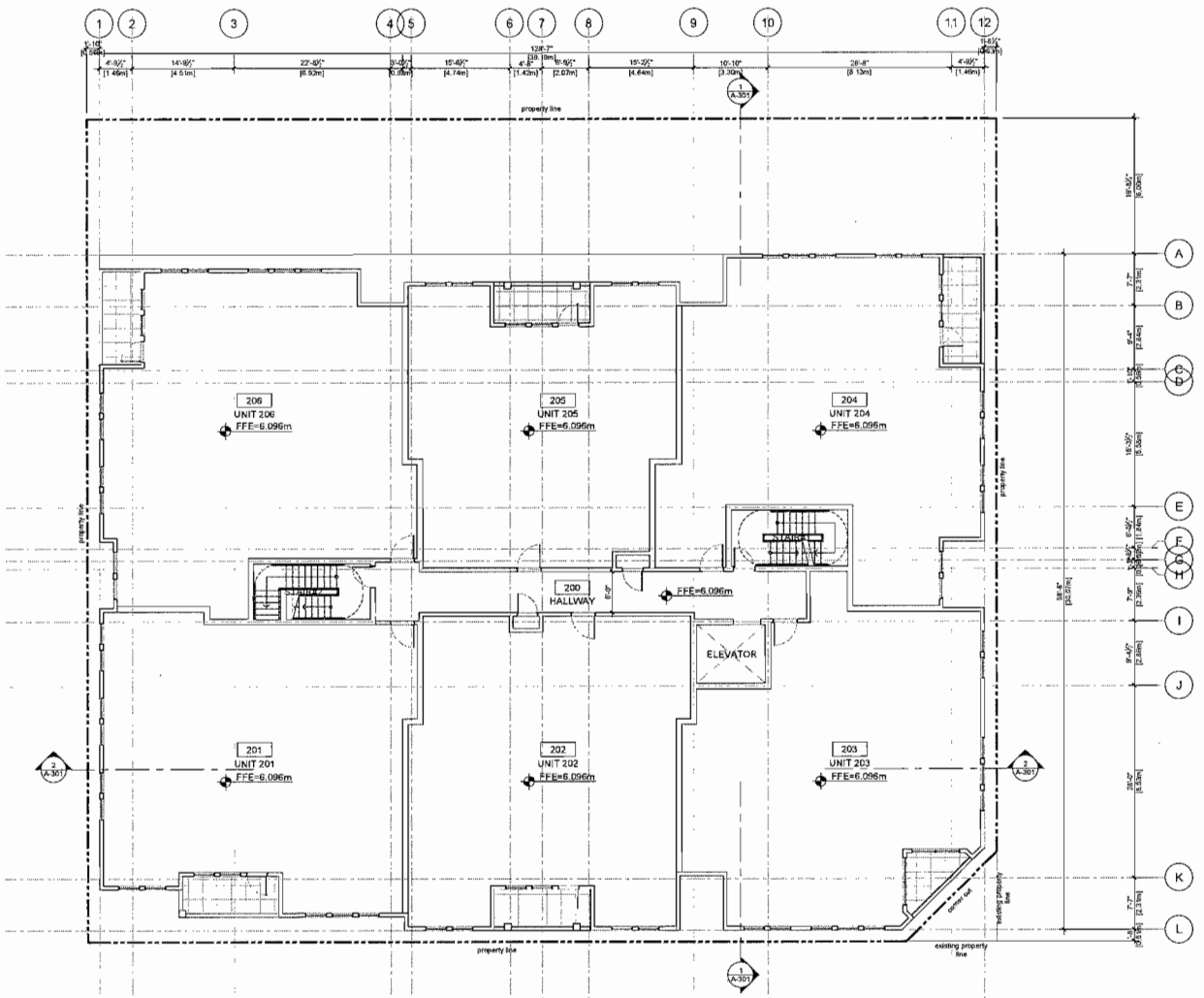
DRAWN:	CP, JS
CHECKED:	KM
SCALE:	1/8"=1'-0"
JOB No.:	1341
DATE:	APRIL 2014

SEAL:

SHEET TITLE:
PARKING LEVEL / LEVEL 1 FLOOR PLAN / SITE PLAN

DRAWING NO.: A-111
REV.

NOTES:



1 LEVEL 2
1/8"=1'-0"

CNCL - 277

F	14/10/07	ISSUED FOR HERITAGE ADVISORY COMMITTEE
E	13/12/11	DEVELOPMENT PERMIT RESUBMISSION
D	13/12/04	DEVELOPMENT PERMIT RESUBMISSION
C	13/09/12	RESUBMISSION
B	13/08/07	PRELIMINARY DRAWINGS
A	13/07/25	PRELIMINARY FLOORPLANS & ELEVATIONS
MARK	YY/MM/DD	DESCRIPTION

ISSUE

cotter ARCHITECTS
#235 – 11300 NO. 5 ROAD, RICHMOND, BC V7A 5J7
TEL: 604.270.5411 FAX: 604.270.5413 EMAIL: info@cotterarchitects.ca
WEB: www.cotterarchitects.ca

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT
3471 Chatham Street
Richmond, BC

CLIENT:
Steveston Flats Development Corporation

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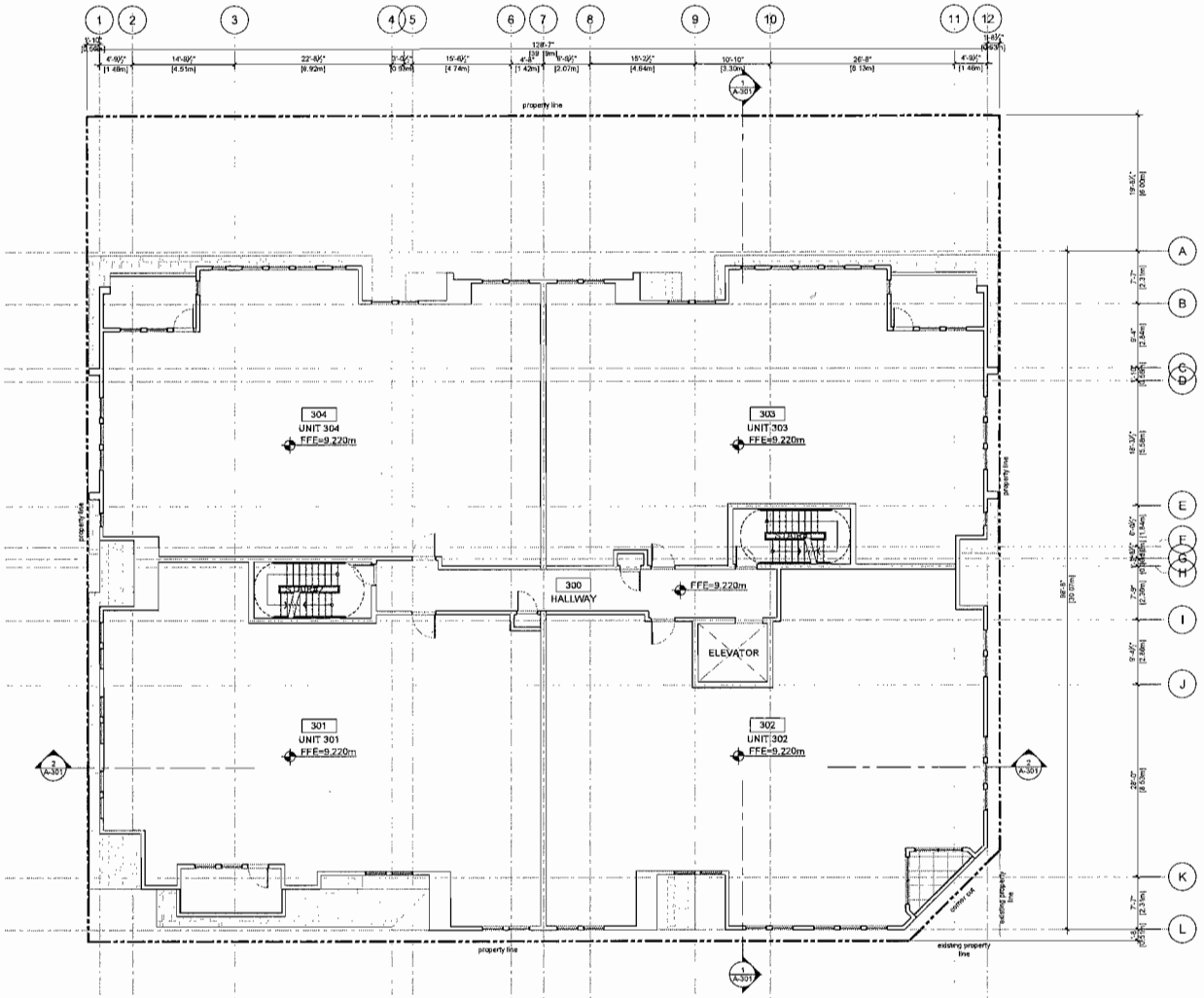
DRAWN:	CP, JB
CHECKED:	RR
SCALE:	1/8"=1'-0"
JOB No.:	CHH
DATE:	APRIL 2014

SEAL:

SHEET TITLE:
LEVEL 2 FLOOR PLAN

DRAWING NO.: A-112
REV.

CNCL - 278



1 LEVEL 3
1/8" = 1'-0"

NOTES:

F	14.09.17	ISSUED FOR HERITAGE ADVISORY COMMITTEE
E	13.12.11	DEVELOPMENT PERMIT PROGRESS SET
D	13.12.04	DEVELOPMENT PERMIT PROGRESS SET
C	13.08.12	REZONING APPLICATION
B	13.06.07	PRELIMINARY DRAWINGS
A	13.03.25	PRELIMINARY FLOOR PLANS & ELEVATIONS
MARK	YY.MM.DD	DESCRIPTION

ISSUE

cotter ARCHITECTS
#235 – 11300 NO. 5 ROAD, RICHMOND, BC V7A 5J7
TEL: (...) ... FAX: (...) ... EMAIL: ...@cotterarchitects.ca
WEB: www.cotterarchitects.ca

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT
3471 Chatham Street
Richmond, BC

CLIENT:
Steveston Flats Development Corporation

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DRAWN:	VP, JD
CHECKED:	PW
SCALE:	1/8" = 1'-0"
JOB No.:	CHH
DATE:	APRIL 2014

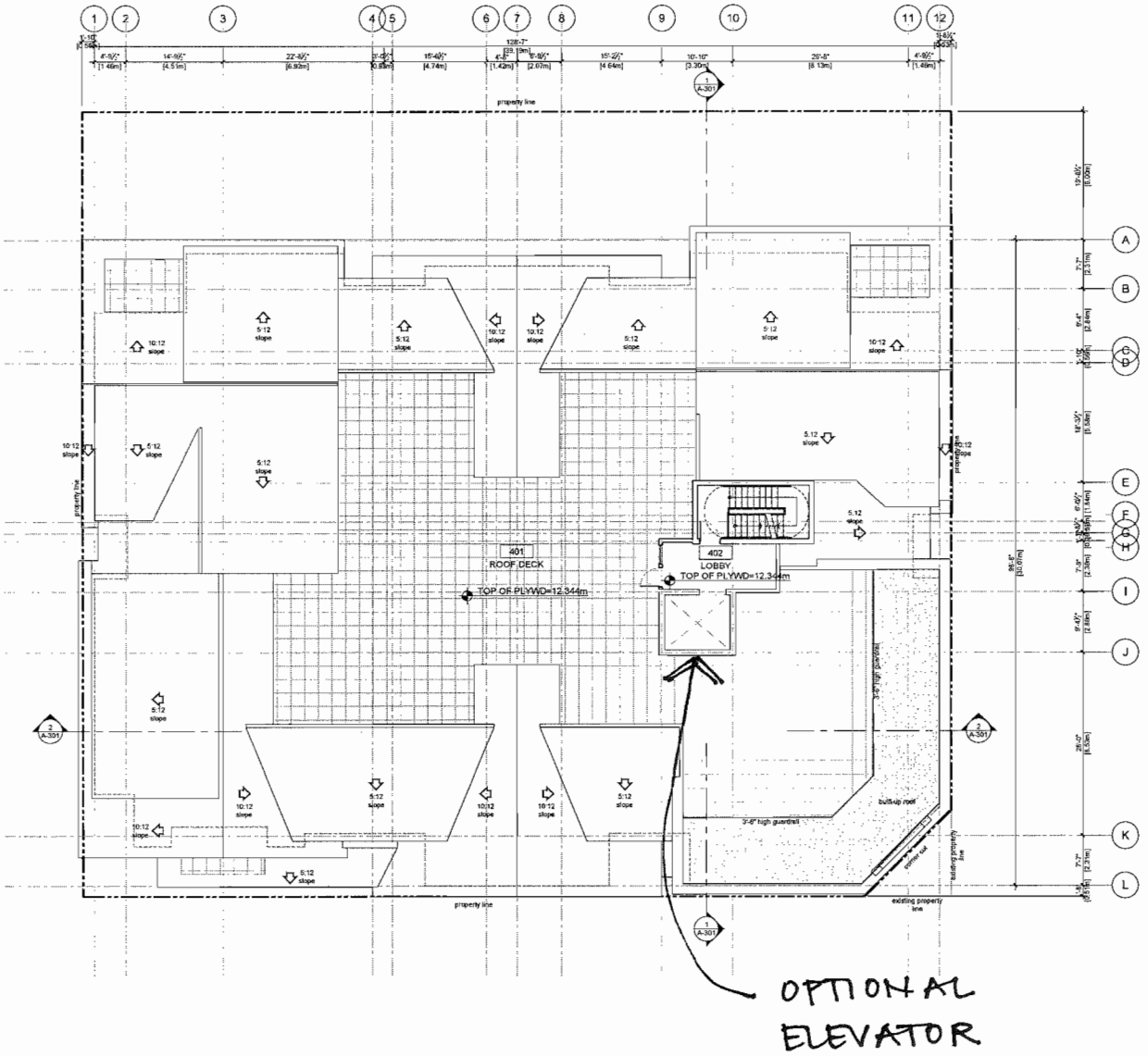
SEAL:

SHEET TITLE:
LEVEL 3 FLOOR PLAN

DRAWING NO.: A-113
REV.

CNCL - 279

NOTES:



1 ROOF DECK
1/8" = 1'-0"

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E	131211	DEVELOPMENT PERMIT PROGRESS SET
D	131126	DEVELOPMENT PERMIT PROGRESS SET
C	130617	REZONING APPLICATION
B	130407	PRELIMINARY DRAWINGS
A	130125	PRELIMINARY FLOOR PLANS & ELEVATIONS
mm/dd/yy		NUMBER DESCRIPTION

ISSUE

cotter ARCHITECTS
#235 - 11300 NO. 5 ROAD, RICHMOND, BC V7A 5J2

PROJECT:
CHATHAM & 3RD
RESIDENTIAL/COMMERCIAL
MIXED USE DEVELOPMENT
3471 Chatham Street
Richmond, BC

CLIENT:
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DRAWN:	DF JR
CHECKED:	PC
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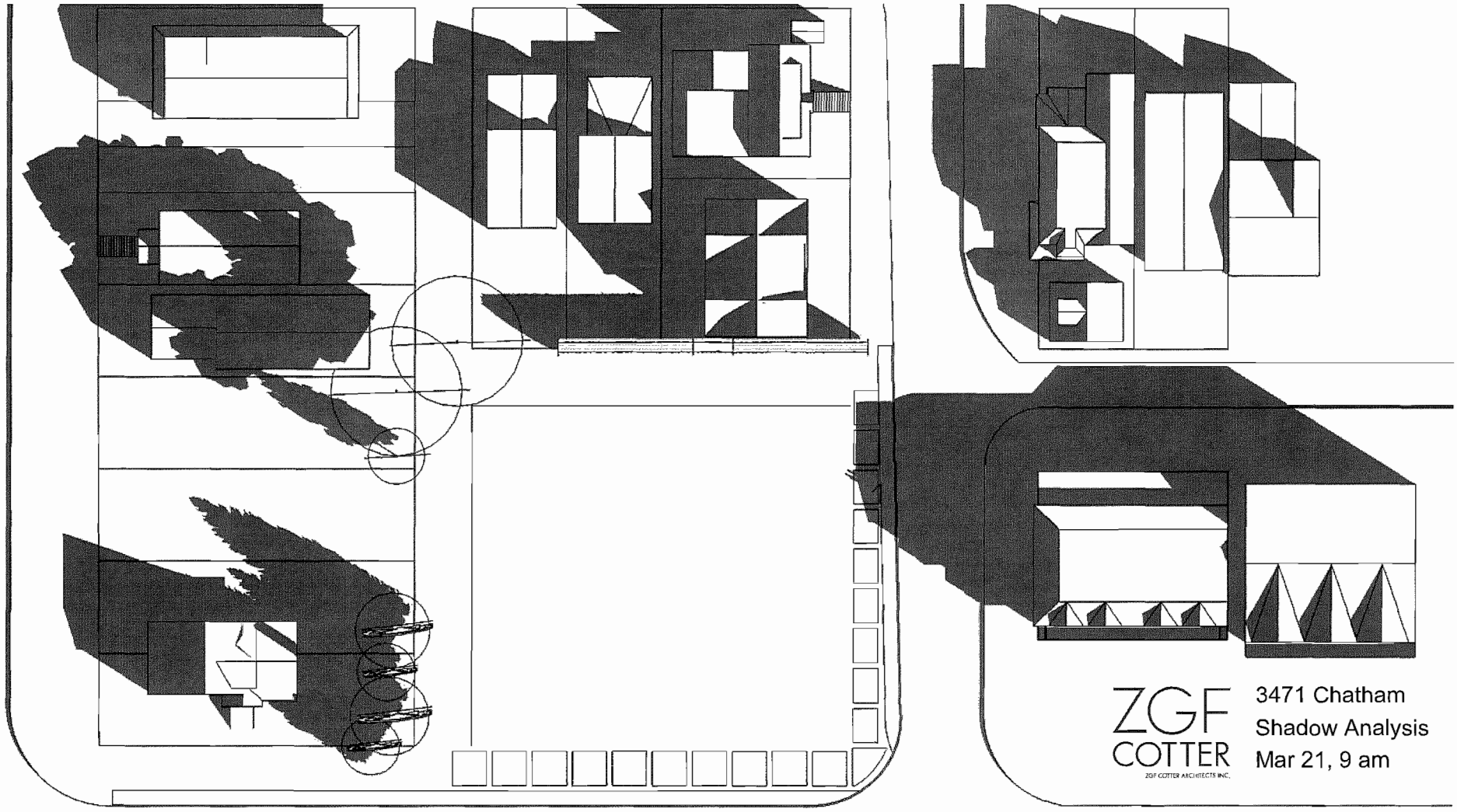
JOB No.:	CH1
DATE:	APRIL 2014

SEAL:

SHEET TITLE:
ROOF DECK FLOOR PLAN

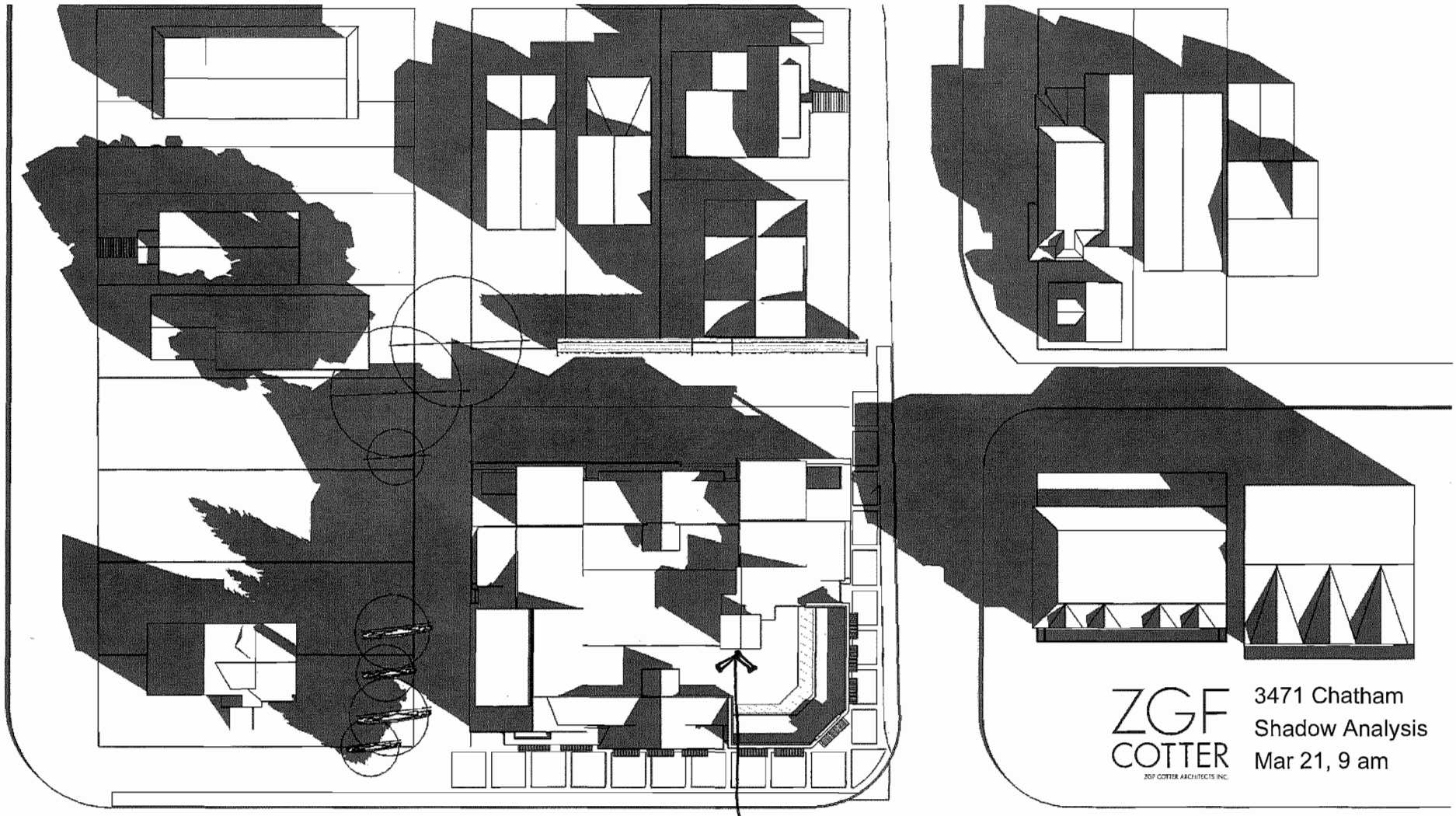
DRAWING NO.: A-114
REV.



ZGF COTTER
ZGF COTTER ARCHITECTS INC.

3471 Chatham
Shadow Analysis
Mar 21, 9 am

EXISTING



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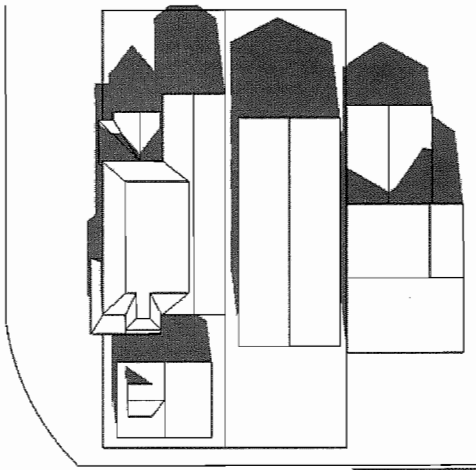
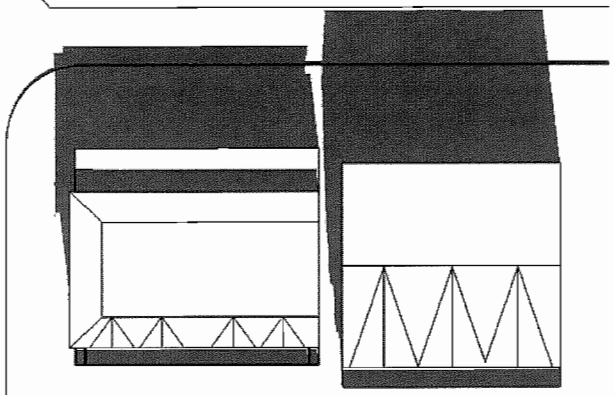
ZGF COTTER ARCHITECTS INC.

3471 Chatham
Shadow Analysis
Mar 21, 9 am





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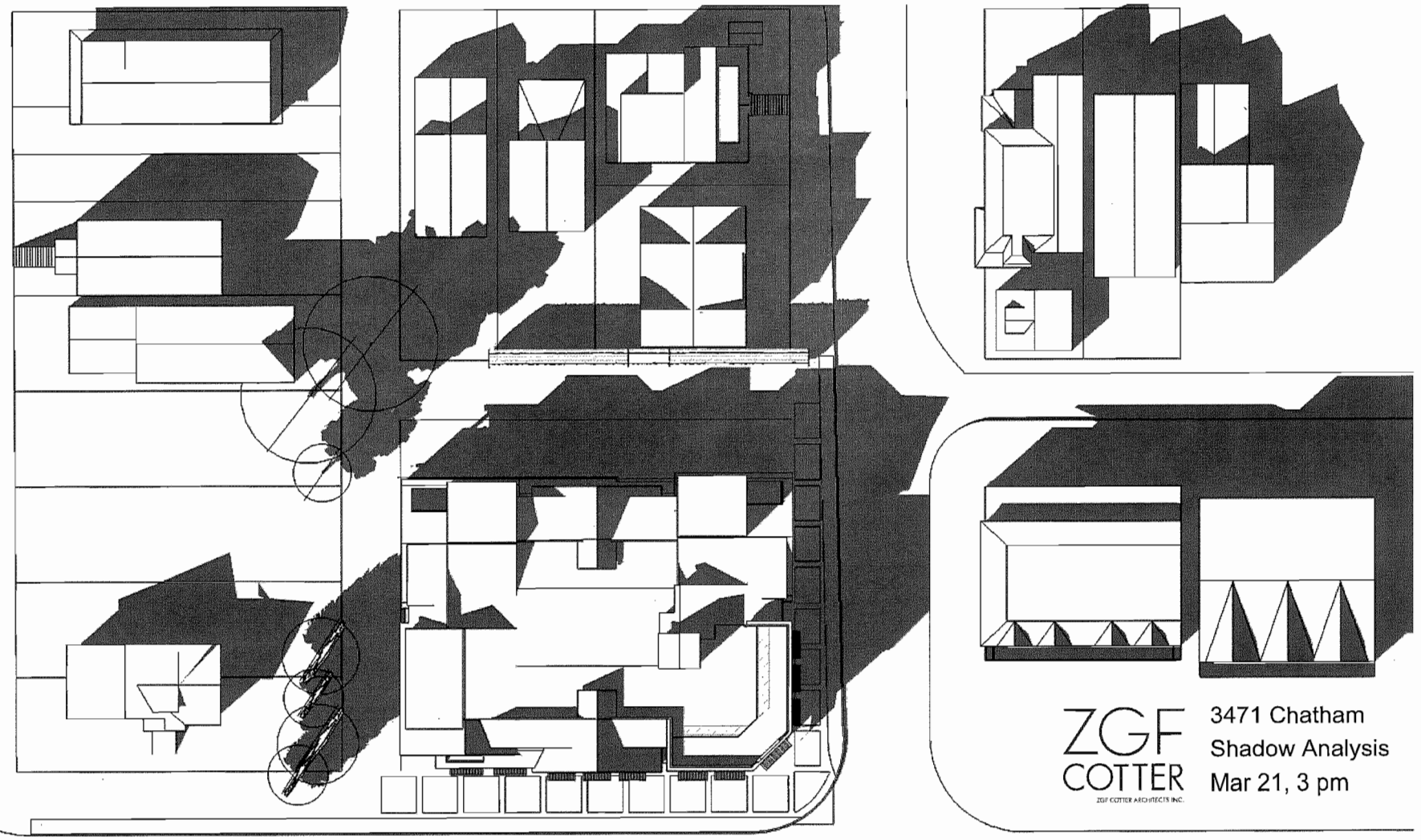
3471 Chatham
Shadow Analysis
Mar 21, 12 pm



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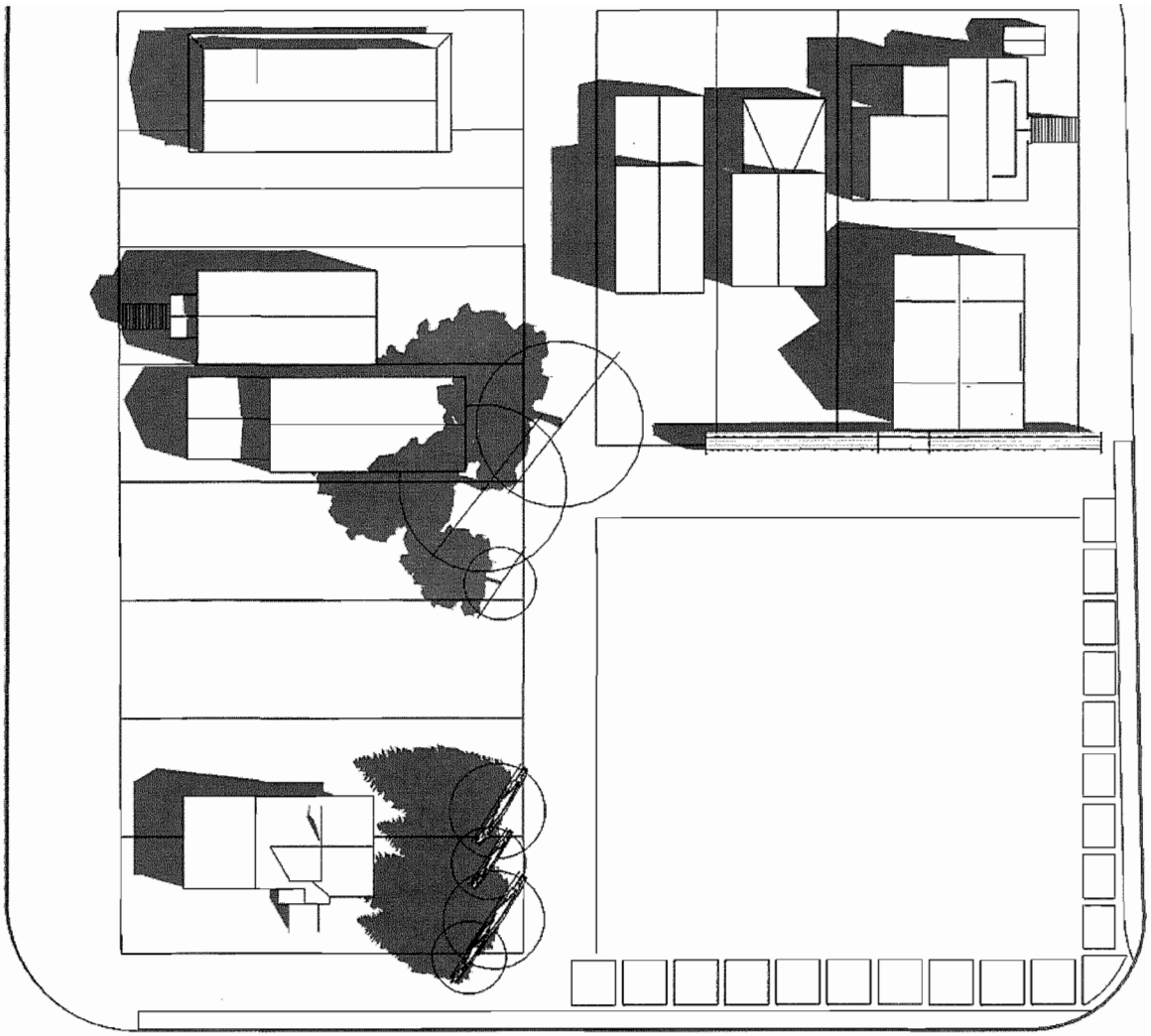
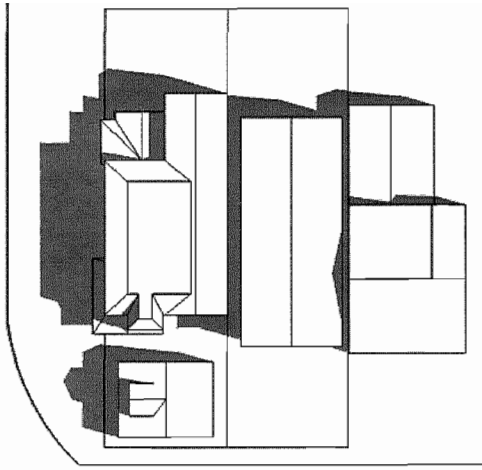
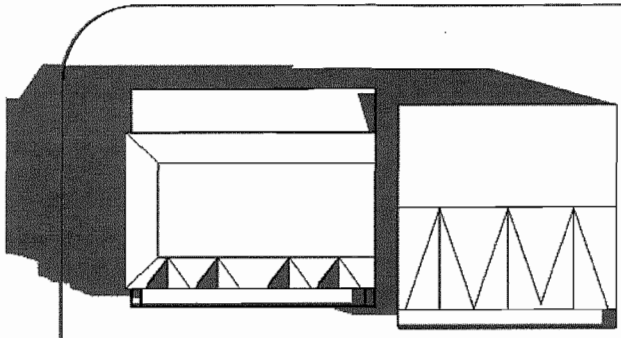
ZGF COTTER ARCHITECTS INC.

3471 Chatham
Shadow Analysis
Mar 21, 3 pm



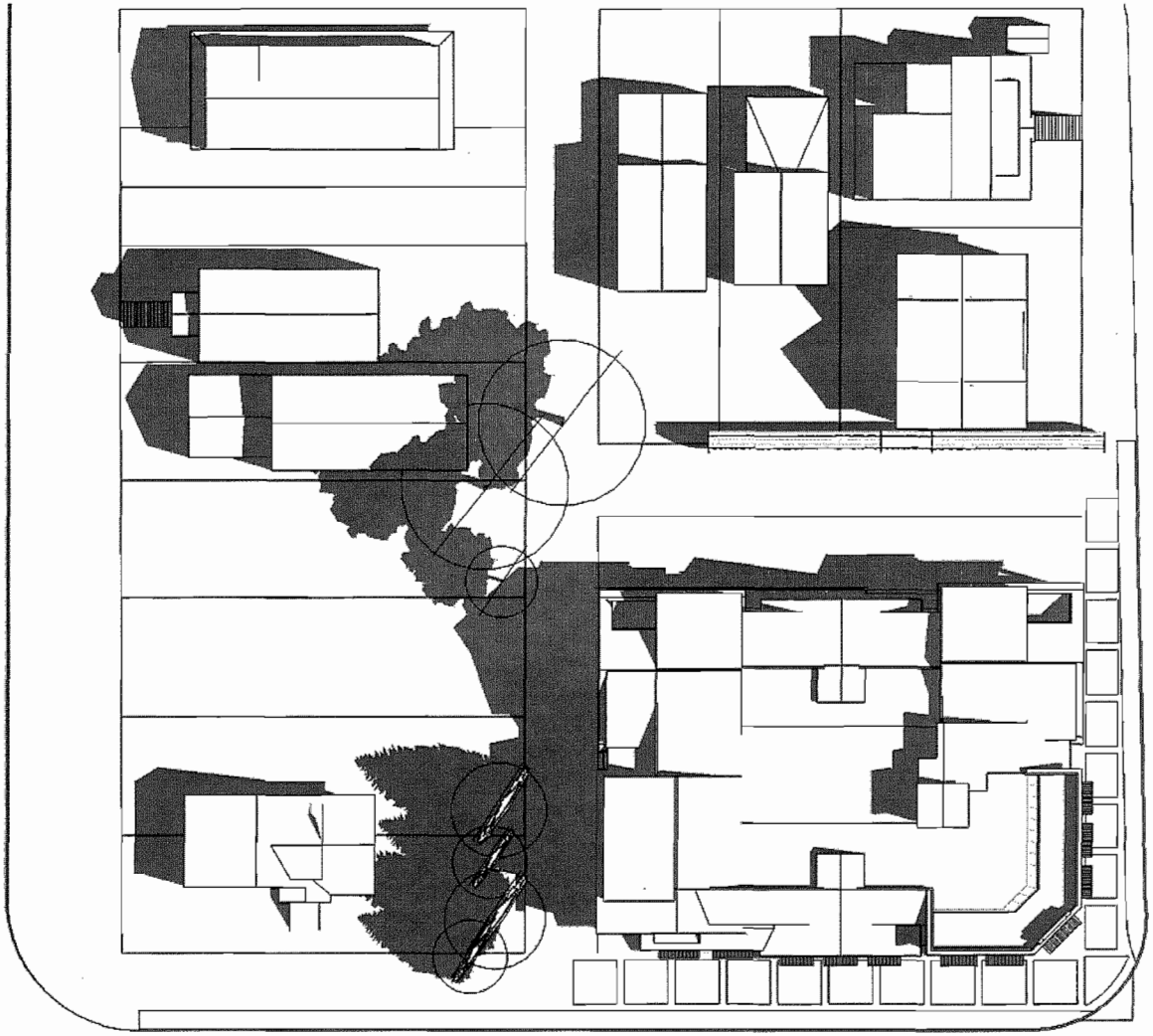


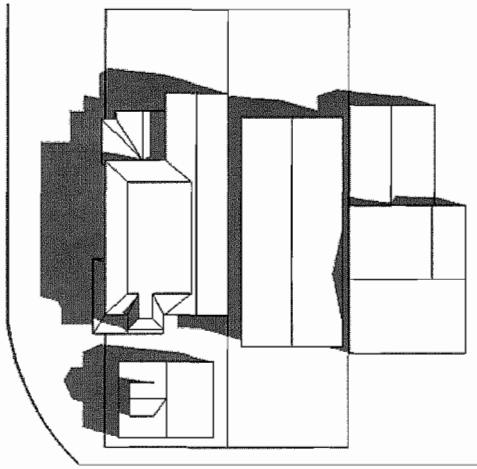


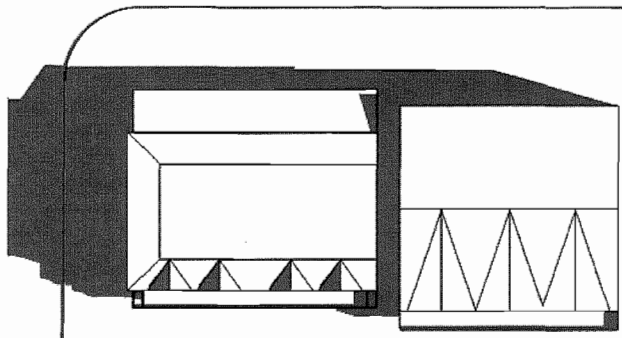
ZGF COTTER
ZGF COTTER ARCHITECTS INC.

3471 Chatham
Shadow Analysis
Jun 21, 9 am

EXISTING



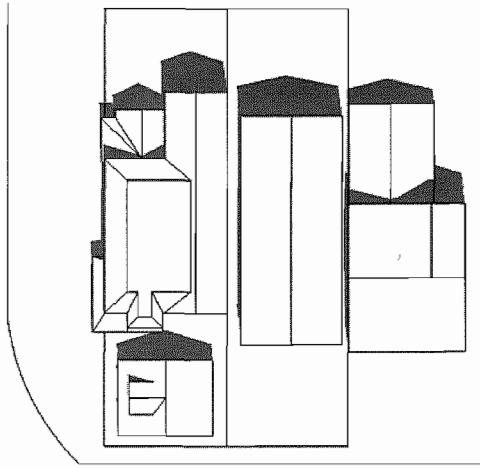


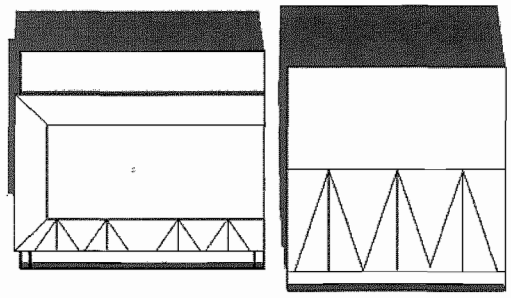


ZGF COTTER
ZGF COTTER ARCHITECTS INC.

3471 Chatham
Shadow Analysis
Jun 21, 9 am

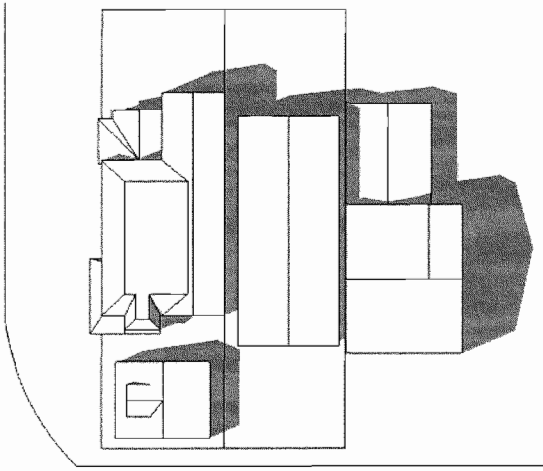
PROPOSED

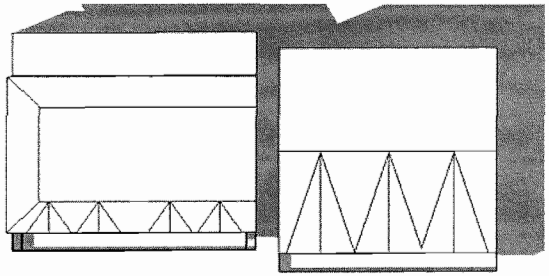




ZGF COTTER
ZGF COTTER ARCHITECTS INC.

3471 Chatham
Shadow Analysis
Jun 21, 12 pm





ZGF COTTER

ZGF COTTER ARCHITECTS INC.

3471 Chatham
Shadow Analysis
Jun 21, 3 pm

City of Richmond

Attachment E

Rezoning Considerations
Development Applications Division
6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 3471 Chatham Street **File No.:** RZ 13-643436

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9138, the developer is required to complete the following:

1. Register a 4 m x 4 m corner cut road dedication at the southeast corner of the site (as per approved HA 13-641865).
2. Register a flood indemnity covenant on title.
3. Enter into a legal agreement that identifies the building as a mixed use building indicating that they are required to mitigate unwanted noise and demonstrate that the building envelope is designed to avoid noise generated by the internal use from penetrating into residential areas that exceed noise levels allowed in the City's Noise Bylaw and noise generated from HVAC units will comply with the City's Noise Bylaw.
4. Enter into a legal agreement to prohibit the conversion of bicycle parking area into habitable space (e.g. storage) and requiring that the rooms remain available for shared common use for the sole purpose of bicycle storage.
5. Enter into a legal agreement to ensure the shared use of residential visitor and commercial parking spaces and prohibiting assignment of any of these parking spaces to a particular unit or user.
6. Enter into a legal agreement to ensure the provision of electric vehicle charging features: a minimum of 20% of parking stalls to be provided with a 120V receptacle to accommodate electric vehicle charging equipment; and an additional 25% of parking stalls to be constructed to accommodate the future installation of electric vehicle charging equipment (e.g. pre-ducted for future wiring).
7. Enter into a legal agreement requiring the owner to maintain landscaping in the portion of the north-south unconstructed lane adjacent to the subject property as if it were a City boulevard.
8. Submit confirmation 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 protected off-site. 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.
9. Install 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.
10. Voluntarily contribute $4.00 per buildable square foot of residential floor area to the City's affordable housing strategy (e.g. $86,992).
11. Voluntarily contribute $47.00 per buildable square foot of floor area for the density increase from 1.2 to 1.6 FAR (e.g. 0.4 FAR) as per Steveston Village Heritage Conservation Grant Program Policy 5900 (e.g. $ 296,476). In accordance with the policy, the contribution is reduced by the amount of the Affordable Housing contribution (e.g. total payable of $209,484).
12. Provide on-site indoor amenity space in accordance with the OCP, or contribute cash-in-lieu in accordance with Council Policy 5041 (e.g. $10,000 for 10 apartments).
13. Voluntarily participate in the City's Public Art Program through the installation of the artwork onsite or contribute cash-in-lieu in the amount of $0.77 per buildable square foot of residential floor area and $0.41 per buildable square foot of commercial floor area (e.g. cash-in-lieu amount of $18,175). A security will be held in the cash-in-lieu amount and returned to the developer upon completion of the following:
    a) Installation of at least 9 of the panels by artist Leonard Epp, along with a didactic panel on the building facades.
    b) A transfer of all of the artist's right, title and interest in the Public Art to the Strata, including a transfer of joint, worldwide copyright, in a form satisfactory to the Director, Arts, Culture and Heritage Services, executed by the owner and delivered to the Strata within 30 days of the date on which the Public Art is installed.

Initial: _____

c) Submission of the Final Report to the City and the Strata promptly after completion of the installation of the Public Art. The Final Report" means a final report in form and content satisfactory to the Director of Development and Director, Arts, Culture and Heritage which describes, among other things, the Public Art, the siting of the Public Art, a brief biography of the artist, the artist's statement on the Public Art, and such other details as the Director of Development and Director, Arts, Culture and Heritage, in their sole discretion, may request, which final report will include enclosures as follows:

i. maintenance plan for the Public Art; and

ii. 12 high resolution images in digital format of the Public Art showing it in context and revealing significant details.

14. Submit a Development Permit* and Heritage Alteration Permit* completed to a level deemed acceptable by the Director of Development.

15. Enter into a Servicing Agreement* for the design and construction of road and infrastructure works, including, but may not be limited to:

a) Chatham Street and 3rd Avenue improvements – New concrete sidewalk at the property line and 2.5 m wide grass boulevards with street tree planting behind existing curb. The sidewalks are to occupy the remaining right-of-way between the boulevard and the property line. Works to extend across both frontages and west lane right-or-way, including removal of existing driveways and installation of barrier curb with gutter and installation of a low fence behind the Chatham Street sidewalk at the west edge of the site. Concrete pads and bicycle racks for class 2 short-term bicycle parking are to be provided in the boulevards: on 3rd Avenue within 15 m of the residential lobby and on Chatham Street approximately mid way among the commercial units.

Should Council adopt streetscape visions for Bayview and Chatham Streets prior to the adoption of the subject rezoning, the frontage improvements above shall be adjusted, if necessary, to be in keeping with Streetscape Visions for Bayview and Chatham Streets as approved by Council.

b) Lane improvements – Reconstruct the existing east-west lane along the north property line of the site, including the driveway crossing on 3rd Avenue, to City lane design standards (Min. 5.4 m wide pavement). Ensure the unbuilt north-south lane right-of-way along the west property line of the site is cleaned up, levelled and planted with ground cover (Maximum 0.3 m to 0.9 m mature height).

c) Storm sewer improvements – Provide a new storm sewer (200 mm diameter) for the rear lane located along the north property line, including a new manhole to connect to the existing 3rd Avenue storm sewer.

d) Sanitary sewer improvements – Upgrade the existing sanitary sewer in the rear lane from 150 mm to 200 mm diameter from manhole SMH5503 to the centre of 3rd Avenue (Approximately 55 m length), including a new manhole to connect to the existing system.

e) Water distribution improvements –

i. Design and construct a new water main along 3rd Avenue (200 mm diameter) from the existing 300 mm diameter Chatham Street water main to the existing water main along Broadway Street (Approximately 105 m length).

ii. The City will pay for the construction of the portion of new water main along 3rd Avenue (200 mm diameter) from the north edge of the rear lane to the existing water main along Broadway Street (Approximately 45 m length).

f) Fire Hydrant improvements – Provide a new fire hydrant along 3rd Avenue, spaced as per City standards.

g) Private Utilities –

i. Developer to provide private utility companies rights-of-ways to accommodate any above ground equipment (e.g. transformers, kiosks, cabinets) and future under-grounding of overhead lines.

ii. Existing BC Hydro poles along 3rd Avenue may conflict with the required frontage improvements. Alteration and relocation of any private utilities will be at the Developer's cost.

iii. If BC Hydro requires a new PMT to service this development, it is required to be located on the subject site. Please note that BC Hydro had indicated that the proposed site may require a PMT for the proposed mixed use development, they prefer PMT to be installed near the electrical room, and that the developer has not provided electrical details/information to them at this stage.

iv. It is recommended that the developer contact the private utility companies to learn of their requirements.

Initial: _____

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

1. Provide an acoustical report and recommendations prepared by an appropriate registered professional, which demonstrates that the interior noise levels and noise mitigation standards comply with the City's Official Community Plan and Noise Bylaw requirements. Maximum interior noise levels (decibels) within the dwelling units must achieve CMHC standards follows:

Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35 decibels
Living, dining, recreation rooms	40 decibels
Kitchen, bathrooms, hallways, and utility rooms	45 decibels

2. Provide a landscaping security (in an amount based on a cost estimate sealed by a registered Landscape Architect for materials, installation and a 10% contingency).

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

1. Incorporate sustainability, accessibility and public art measures in Building Permit (BP) plans as determined via the Rezoning, Development Permit and/or Heritage Alteration Permit processes.
2. Enter into an Encroachment Agreement* for any canopies/awnings/signs that encroach into the Chatham Street and 3rd Avenue road rights-of-way. Any overhead structure located within the rights-of-way must be safe and easily removable (i.e. not cast in place and not permanently attached to any other structure).
3. Submit a Construction Parking and Traffic Management Plan to the Transportation Division. 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 Infrastructure) and MMCD Traffic Regulation Section 01570.
4. Submit fire flow calculations signed and sealed by a professional engineer based on the Fire Underwriter Survey or ISO to confirm that there is adequate available flow for fire-fighting purposes. Based on the proposed rezoning and using the OCP model, there is sufficient water available from Chatham Street, but not from Broadway Street (411 L/s available at 20 psi residual from the Chatham Street hydrant and 125 L/s available at 20 psi residual from the Broadway Street hydrant for a minimum fire flow requirement of 220 L/s). The required SA includes a new hydrant along 3rd Avenue.
5. If applicable, pay latecomer agreement charges associated with eligible latecomer works.
6. 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 Division 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.

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

- almost my worst nightmare
- wrong in so many ways - where to begin - not enough time
- Feb. Lengthy letter - staff managed to turn everything in favour of developer - PLN 27 - conservation strategy overview Jun

Meeting Initiate a process to rezone.
- rezone back to residential
  - 1928
  - commercial - we were non conforming
  - late 1970's arbitrarily changed to residential. - commercial sprawl outside village core - Do Duck Inn
  - preference for 5th Ave style that fit - the neighborhood
  - this one's a bad fit

- doesn't "transition" from village commercial to residential when it's bigger than everything around it
- doesn't "anchor" the corner - it overwhelms the corner overshadowing adjacent residences on N & W.

(1) Massive size is our biggest concern
- over allowable height - add 10X10 tower. 15 m.
PLN 44 - unnecessarily makes our house looks like a vacation cottage

(2) Design - reflection of small buildings on small lots
- 1 & Hamilton / Mukai bldg
- 3rd & Bayview

(3) Cladding - corrugated metal - we're going to be looking at a whole wall of it. - backdrop for our yard.
Dev. Permit Guidelines on industrial buildings
staff accepts PLN 30
- last summer - owner moved panel to west side → Jan plan - now they've been moved to rear

- placement of bench in lane to allow people to admire panel
- push petitions - after hours waterhole
- garbage / glass / cigarettes
- pruning of trees - perfect screening
- camp site.

- I could go on - haven't even touched the
  - roof top garden issue
  - privacy concern from 3rd floor balconies overlooking our back yard

The guidelines (Section 9.3.2.1; page 53) further suggest in part that **"...new development of greater scale should ensure that larger structures do not unnecessarily block views from or impact the privacy of smaller ones."**

New growth should not **"disrupt the character and existing fabric of the community which is so valued" (Steveston Area Plan Overview 1.0)**. Unfortunately, this proposal is intrusive and disruptive and we would appreciate it if the City would abide by its own regulations and reject this proposal as currently presented.

contravenes accepted written policy of the city for building in Steveston

Badyal, Sara

From: Badyal, Sara
Sent: Tuesday, 03 June 2014 12:37 PM
To: Badyal, Sara
Subject: FW: Proposed Development At 3471 Chatham St.

From: Rafiq Shaikh [mailto:shaikhrafiq@hotmail.com]
Sent: June 3, 2014 11:20 AM
To: Garnett, Cathie
Subject: Proposed Development At 3471 Chatham St.

Hello Chathey ,

I am concern about above development.
We are the owner of 3500 Broadway street property ,which is North to above development.
Following are my concern :
Building Ht. proposed 46'-8 1/2". CS2 and CS3 allows Max ht.9M (29.5') and 12 M.(39.37 ')
I am concern of loosing South view ,dew to proposed building Ht.
Sun light,
Shadow of proposed building to North side properties,
Privacy .
Proposed development has blocked lane access to my and property.
I hope City Planning department will look into my above concern.
Thank You,

Rafiq Shaikh

City of Richmond

Bylaw 9138

Richmond Zoning Bylaw 8500
Amendment Bylaw 9138 (RZ 13-643436)
3471 Chatham Street

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

1. Richmond Zoning Bylaw 8500, as amended, is further amended by

   a. Inserting the following into the end of the table contained in Section 5.15.1 regarding Affordable Housing density bonusing provisions:

Zone	Sum Per Buildable Square Foot of Permitted **Principal Building**
"ZMU26	$4.00"

   b. Inserting the following into Section 20 (Site Specific Mixed Use Zones), in numerical order:

"20.26 **Commercial Mixed Use (ZMU26) – Steveston Village**

20.26.1 **Purpose**

The **zone** provides for incentives to support conservation of the heritage character of Steveston Village, while providing for the shopping, personal service, business, entertainment, mixed commercial/residential and industrial needs of the Steveston area.

20.26.2 **Permitted Uses**

- **animal grooming**
- **broadcasting studio**
- **child care**
- **education**
- **education, commercial**
- **entertainment, spectator**
- **government service**
- **greenhouse & plant nursery**
- **health service, minor**
- **hotel**

- **housing, apartment**
- **industrial, general**
- **liquor primary establishment**
- **manufacturing, custom indoor**
- **office**
- **parking, non-accessory**
- **recreation, indoor**
- **recycling depot**
- **restaurant**
- **retail, convenience**
- **retail, general**
- **retail, second hand**
- **service, business support**
- **service, financial**
- **service, household repair**
- **service, personal**
- **studio**
- **veterinary service**

20.26.3 **Secondary Uses**

- **boarding and lodging**
- **community care facility, minor**
- **home business**

20.26.4 **Permitted Density**

1. The maximum **floor area ratio** is 1.0.

2. Notwithstanding Section 20.26.4.1, the reference to "1.0" is increased to a higher **density** of "1.2" if the **owner** pays into the **affordable housing reserve** the sum specified in Section 5.15 of this bylaw, at the time **Council** adopts a zoning amendment bylaw to include the **owner's lot** in the ZMU26 **zone**.

3. Notwithstanding Section 20.26.4.2, the reference to "1.2" is increased to a higher density of "1.6" if the **owner** pays into the City's Heritage Trust Account, Steveston Village Conservation Program the sum of $209,484 (calculated at $47/sq.ft. multiplied by the 0.4 **density** increase from 1.2 to 1.6 FAR multiplied by the **lot area** less the sum paid into the **affordable housing reserve** in accordance with Section 20.26.4.2).

4. For the purposes of this **zone** only, **floor area ratio** shall not include those parts of the **building** used for public pedestrian passage **right-of-way**.

5. There is no maximum **floor area ratio** for **non-accessory parking** as a principal use.

20.26.5 **Permitted Lot Coverage**

1. The maximum **lot coverage** is 100% for **buildings**.

20.26.6 **Yards & Setbacks**

1. There is no minimum **front yard**, **side yard** or **rear yard**.

2. **Building** front facades facing a public road shall not be set back from the public **road lot line**, except for the following elements:

   a) a maximum **setback** of 2.5 m of a ground floor and second floor **building face** (to the underside of floor or roof **structure** above);

   b) a recessed **balcony** opening shall have a maximum width of 5.8 m, and the total aggregate width shall be a maximum of 30% of the **lot width**;

   c) a recessed third floor **building face**; and

   d) the aggregate area of all recesses and openings in items b) and c) shall not exceed a maximum of 33% of the **building** facade as measured from the ground level to the parapet cap by the facade width.

20.26.7 **Permitted Heights**

1. The maximum **height** for **buildings** is 12.0 m (not to exceed 3 **storeys**).

20.26.8 **Subdivision Provisions/Minimum Lot Size**

1. There are no minimum **lot width**, **lot depth** or **lot area** requirements.

20.26.9 **Landscaping & Screening**

1. **Landscaping** and **screening** shall be provided according to the provisions of Section 6.0.

20.26.10 **On-Site Parking**

1. On-site **vehicle** and bicycle parking shall be provided according to the standards set out in Section 7.0. except that:

   a) Required **parking spaces** for residential **use** visitors and non-residential **uses** may be shared; and

b) On-site vehicle parking shall be provided at the following rate:

i) residential visitors – 0.2 space per **dwelling unit**; and

ii) all other **uses** – on-site parking requirements contained in this bylaw are reduced by 33%.

20.26.11 **Other Regulation**

1. For **apartment housing**, no portion of the **first storey** of a **building** within 9.0 m of the **lot line** abutting a **road** shall be used for residential purposes.

2. For **apartment housing**, an entrance to the residential **use** or parking area above or behind the commercial space is permitted if the entrance does not exceed 6.0 m in width.

3. Signage must comply with the City of Richmond's Sign Bylaw No. 5560, as it applies to **development** in the Steveston Commercial (CS3) **zone**.

4. In addition to the regulations listed above, the general development regulations in Section 4.0 and the Specified 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 by designating it **"COMMERCIAL MIXED USE (ZMU26) – STEVESTON VILLAGE".**

P.I.D. 029-139-741
Lot 1 Section 20 Block 3 North Range 7 West New Westminster District Plan EPP30378

3. This Bylaw may be cited as **"Richmond Zoning Bylaw 8500, Amendment Bylaw 9138".**

FIRST READING _____

A PUBLIC HEARING WAS HELD ON _____

SECOND READING _____

THIRD READING _____

OTHER CONDITIONS SATISFIED _____

ADOPTED _____

CITY OF RICHMOND
APPROVED by
APPROVED by Director or Solicitor

_____ _____
MAYOR CORPORATE OFFICER

City of Richmond

Report to Committee

Planning and Development Department

To:	Planning Committee	**Date:**	May 30, 2014
From:	Wayne Craig Director of Development	**File:**	RZ 10-552482
Re:	**Application by Tien Sher Land Investment Group Ltd. for Rezoning at 3391, 3411, 3451 No. 4 Road and Lot B, NWD PLAN 14909 from Single Detached (RS1/E) to Single Detached (RS2/B)**		

Staff Recommendation

1. That third reading of Richmond Zoning Bylaw 8500, Amendment Bylaw 8789, for the rezoning of 3391, 3411, 3451 No. 4 Road and Lot B, NWD PLAN 14909, be rescinded; and

2. That Richmond Zoning Bylaw 8500, Amendment Bylaw 8789 be referred to the Monday, July 21, 2014 Public Hearing at 7:00 pm in the Council Chambers of Richmond City Hall.

Wayne Craig
Director of Development

WC:blg
Att.

REPORT CONCURRENCE		
ROUTED TO:	**CONCURRENCE**	**CONCURRENCE OF GENERAL MANAGER**
Affordable Housing	☑	

Staff Report

Origin

Tien Sher Land Investment Group Ltd. has applied to the City of Richmond for permission to rezone 3391, 3411, 3451 No. 4 Road and Lot B, NWD Plan 14909 (Attachment 1) from "Single Detached (RS1/E)" zone to "Single Detached (RS2/B)" zone in order to permit the property to be subdivided into seven (7) single-family residential lots (Attachment 2).

Background

BC Transportation Financing Authority (BCTFA) submitted an application in 2010 to rezone the subject site from "Single Detached (RS1/E)" to "Single Detached (RS2/B)" with an intention to subdivide the site into six (6) single-family residential lots all fronting Patterson Road. Council granted Second and Third Readings to the proposal on September 7, 2011. Tien Sher Land Investment Group Ltd. has recently acquired this site and is proposing to create a seven (7) lot subdivision under the same zoning (RS2/B); four (4) lots fronting on Patterson Road and three (3) lots fronting on Tuttle Avenue.

Due to the proposed changes to the lot configuration, revisions to a number of the rezoning consideration items are required. To provide a clear understanding of the changes, Attachment 3 included in this report will outline the required modifications and how they would affect this application.

Due to the proposed changes in lot orientation and the time since Public Hearing (September 7, 2011), staff recommend Council rescind third reading of Bylaw 8789 and the bylaw be referred to the July 21, 2014 Public Hearing. No changes to the content of the bylaw are required for the revised proposal (i.e., 7 lots instead of 6 lots). The applicant has been consulted on this matter and is aware a new Public Hearing is required.

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (Attachment 4).

Surrounding Development

The subject site is bounded by Highway 99 to the north, Tuttle Avenue to the south, the No. 4 Road off-ramp to the east, and Patterson Road to the west. The surrounding area is an established residential neighbourhood (west of No. 4 Road) consisting predominantly of single-family dwellings on lots zoned "Single Detached (RS1/B)".

Related Policies & Studies

Lot Size Policy 5413

The subject site is located within the area covered by Lot Size Policy 5413 (adopted by Council August 28, 1989) (Attachment 5), which permits rezoning and subdivision of lots in accordance with "Single Detached (RS2/B)" (minimum 12 m wide and 360 m^2 in area). This redevelopment proposal would be consistent with the Lot Size Policy, and the site could be subdivided into seven (7) lots, all of which could meet the RS2/B requirements.

Affordable Housing

The Richmond Affordable Housing Strategy requires a secondary suite on at least 50% of new lots, or a cash-in-lieu contribution of $1.00 per square foot of total building area toward the Affordable Housing Reserve Fund for single-family rezoning applications.

The applicant has agreed to provide a voluntary cash contribution for affordable housing based on $1.00 per square foot of building area for single-family developments (i.e. $ 18,999.19).

Should the applicant change their mind about the Affordable Housing option selected to providing a legal secondary suite on four (4) of the seven (7) future lots at the subject site, the applicant will be required to enter into a legal agreement registered on Title, stating that no final Building Permit inspection will be granted until the secondary suites are constructed to the satisfaction of the City, in accordance with the BC Building Code and the City's Zoning Bylaw. This legal agreement will be a condition of rezoning adoption. This agreement will be discharged from Title on the lot without the secondary suite, at the initiation of the applicant, after the requirements are satisfied.

Floodplain Management Implementation Strategy

The applicant is required to comply with the requirement of Richmond Flood Plain Designation and Protection Bylaw 8204, and the Flood Management Strategy. A Flood Indemnity Restrictive Covenant specifying the minimum flood construction level of 2.9 m GSC, or at least 0.3 m above the highest elevation of the crown of any road that is adjacent to the parcel is required prior to rezoning bylaw adoption.

OCP Aircraft Noise Sensitive Development (ANSD) Policy

The subject site is located within the Aircraft Noise Sensitive Development (ANSD) Policy Area within a designation that permits new single-family development that is support by an existing Lot Size Policy. As the site is affected by Airport Noise Contours, the development is required to register an aircraft noise sensitive use covenant on title to address aircraft noise mitigation and public awareness, prior to final adoption of the rezoning bylaw.

Public Input

There were no concerns at the previous Public Hearing.

The applicant has forwarded confirmation that the wording on the development sign installed on site has been revised to reflect the new proposal of a seven (7) lot subdivision. Staff did not receive any written correspondence expressing concerns in association with the revised proposal.

Staff Comments

Tree Retention and Replacement

A Tree Survey and a Certified Arborist's report were submitted in 2011, which identified 26 bylaw-sized trees on site. The City's Tree Preservation Coordinator and Parks Operations staff have reviewed the Arborist Report and concurred with the Arborist's recommendations to remove all trees identified on the Tree Survey except a Western Red Cedar tree located on the City boulevard along the Patterson Road frontage. A Tree Preservation Plan is included in Attachment 6. Among the 25 trees proposed for removal:

- Six (6) bylaw-sized trees are located on the City boulevard along the Patterson Road frontage. Parks Operations staff agreed to the proposed removal based on the health and condition of the trees, as well as the required frontage improvement works (including pavement widening and new sidewalk at property line) along Patterson Road. A cash compensation for the street tree removal in the amount of $5,850 will be required.
- 19 bylaw-sized trees are located on the subject site, where:
  - Ten (10) trees have significant structural defects (cavities, trunk decay, previously topped or inclusions) such that they should not be considered for retention.
  - Seven (7) trees are either dead or dying; and
  - Two (2) trees are in good condition but warranted for removal due to their marginal form as a result of scaffold limbs, their close proximity to the proposed dwelling, and the 0.6 m grade change as a result of Flood Plain Bylaw requirements.

Based on the 2:1 tree replacement ratio goal stated in the Official Community Plan (OCP), 38 replacement trees are required. Based on the size requirements for replacement tree in the Tree Protection Bylaw No. 8057, replacement trees with the following minimum calliper sizes are required:

# Trees to be removed	dbh	**# trees to be replaced**	**Min. calliper of deciduous tree**	**or**	**Min. height of coniferous tree**
10	20-30 cm	**20**	**6 cm**		3.5 m
1	31-40 cm	**2**	**8 cm**		4.0 m
1	41-50 cm	**2**	**9 cm**		5.0 m
3	51-60 cm	**6**	**10 cm**		5.5 m
4	60 cm +	**8**	**11 cm**		6.0 m

tree. Tree protection fencing must be installed to City standards prior to any construction activities occurring on-site, and a contract with a Certified Arborist to monitor all works to be done near or within the tree protection zone must be submitted prior to final adoption of the rezoning bylaw. As a condition of rezoning, the applicant is required to submit a $6,000 tree survival security. The City will retain 50% of the security until Final Inspection of the Building Permits of the affected future lots are issued. The City will retain the remaining 50% of the security for an additional two (2) years after the Final Inspection of the Building Permits to ensure that the tree has survived.

Landscape Buffer

To provide an aesthetically pleasing edge along the No. 4 Road off-ramp and to enhance traffic noise attenuation, the applicant will install a landscape buffer along the east and north property line of the subject site. A preliminary plan for the landscape buffer is included in Attachment 7. The buffer will be 1.5 m wide and will be composed of a solid 1.8 m high concrete noise attenuation fence and continuous planting of trees and shrubs on the highway side of the fence. The combination of the fencing and landscaping will both screen the view of the highways and arterial roads from the proposed lots and partially mitigate noise generated by nearby traffic. Staff will work with the developer to fine tune the buffer plan to accommodate any grade changes as a result of Flood Plain Bylaw requirements.

Prior to final adoption of the rezoning bylaw, a final landscape plan and associated cost estimates, including installation costs, provided by the Landscape Architect, must be submitted. Registration of a restrictive covenant to identify the entire 1.5 m rear yard space as a buffer area is required to prevent the removal of the buffer landscaping. In order to ensure that this landscape buffer work is undertaken, the applicant has agreed to provide a landscaping security based on 100% of the cost estimate.

Preliminary Architectural Elevation Plans & Landscape Plan

To illustrate how the future corner lot interfaces will be treated, the applicant has submitted proposed building elevations (Attachment 8) for the corner lots (proposed Lot 5 and Lot 7 as shown in Attachment 2). Prior to final adoption of the rezoning bylaw, the applicant is required to register a legal agreement on Title to ensure that the building design is generally consistent with the attached building design. Future Building Permit plans must comply with all City regulations and staff will ensure that Building Permit plans are generally consistent with the registered legal agreement for building design.

The applicant has also submitted preliminary landscape plans for the corner lots (Attachment 9). In order to ensure that this landscaping work is undertaken, the applicant has agreed to provide a landscape security based on 100% of the cost estimates, including installation cost, provided by the Landscape Architect, prior to final adoption of the rezoning bylaw.

Ministry of Transportation and Infrastructure (MOTI) Approval

MOTI approval is a condition of final approval for this site. No direct access to Highway 99 or the off-ramp is permitted.

Vehicle Access

Vehicular access to No. 4 Road is not permitted in accordance with Residential Lot (Vehicular) Access Regulation Bylaw 7222. The applicant is proposing to access the future lots from Patterson Road and Tuttle Avenue.

Site Servicing

An updated, independent review of servicing requirements (sanitary and water) has been conducted by the applicant's Engineering consultant based on the revised 7-lot proposal, which has been reviewed by the City's Engineering Department. The Capacity Analysis concludes that no upgrades are required to support the proposed development; however, the applicant is required to provide a new sanitary main to service the proposed lots:

- along the Patterson Road frontage, the sanitary main will be located within the roadway (i.e., west of the required curb and gutter).
- along the Tuttle Road frontage, an alignment underneath the required sidewalk can be explored. A 3.0 m wide Statutory Right-of-way (SRW) for utilities, to accommodate the sanitary main may be required. Details of the required utility SRW along Tuttle Avenue will be determined through the Servicing Agreement.

Prior to final adoption, the applicant is required to enter into a Servicing Agreement for the design and construction of the sanitary-main. The applicant is also required to discharge the existing SRW (Ref. BH88865) on Lot B and register a new SRW on title to provide a 3.0 m clearance from the existing watermain located in the eastern portion of Lot B.

The applicant is required to dedicate a 4 m x 4 m corner cut at the southwest corner of the site at the Patterson Road / Tuttle Avenue intersection and a 5 m x 5 m corner cut at the southeast corner of the site at the No. 4 Road / Tuttle Avenue intersection. Frontage improvements along the entire frontage on Patterson Road and Tuttle Avenue will be required (as part of the Servicing Agreement, see Attachment 10 for details). All works are to be at developer's sole cost, and no Development Cost Charge credits will be available.

Subdivision

At future Subdivision stage, the applicant will be required to pay Development Cost Charges (City and GVS & DD), School Site Acquisition Charge, Address Assignment Fee, and Servicing Costs. The applicant will also be required to provide underground hydro, telephone, and cable service connections for each lot.

Analysis

This is a relatively straightforward redevelopment proposal. This development proposal is consistent with Lot Size Policy 5413 and is located within an established residential neighbourhood that has a strong presence of single-family lots zoned Single Detached (RS1/B).

There were no concerns at the previous Public Hearing and Council has granted Second and Third Readings to Bylaw 8789 (rezoning to RS2/B for a 6-lot subdivision) on September 7,

2011. While the proposal has been revised from a 6-lot subdivision to a 7-lot subdivision, no changes to Bylaw 8789 is required (still rezoning to RS2/B). Staff support the revised lot layout as it meets with the RS2/B requirements. All the relevant technical issues related to the proposed changes to the lot configuration have been addressed.

Financial Impact or Economic Impact

None.

Conclusion

The proposed rezoning to permit subdivision of three (3) existing large lot and a small remnant parcel into seven (7) medium sized lots complies with Lot Size Policy 5413 and all applicable policies and land use designations contained within the Official Community Plan (OCP). The proposal is also consistent with the direction of redevelopment in the surrounding area. On this basis, staff recommend support of the application.

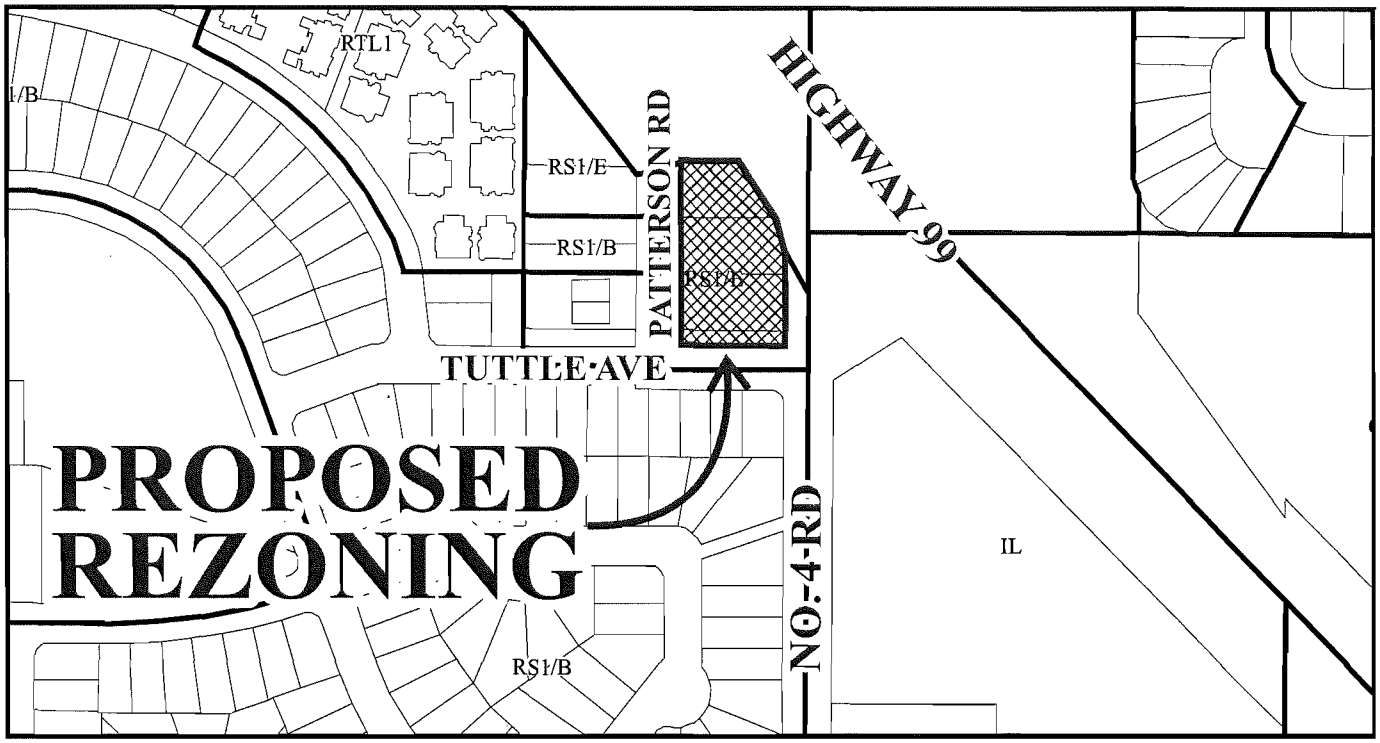
Council granted Second and Third Readings to the proposal on September 7, 2011.
It is recommended that Third Reading to Zoning Bylaw 8500, Amendment Bylaw 8789 be rescinded and the Bylaw be referred to the July 21, 2014 Public Hearing.

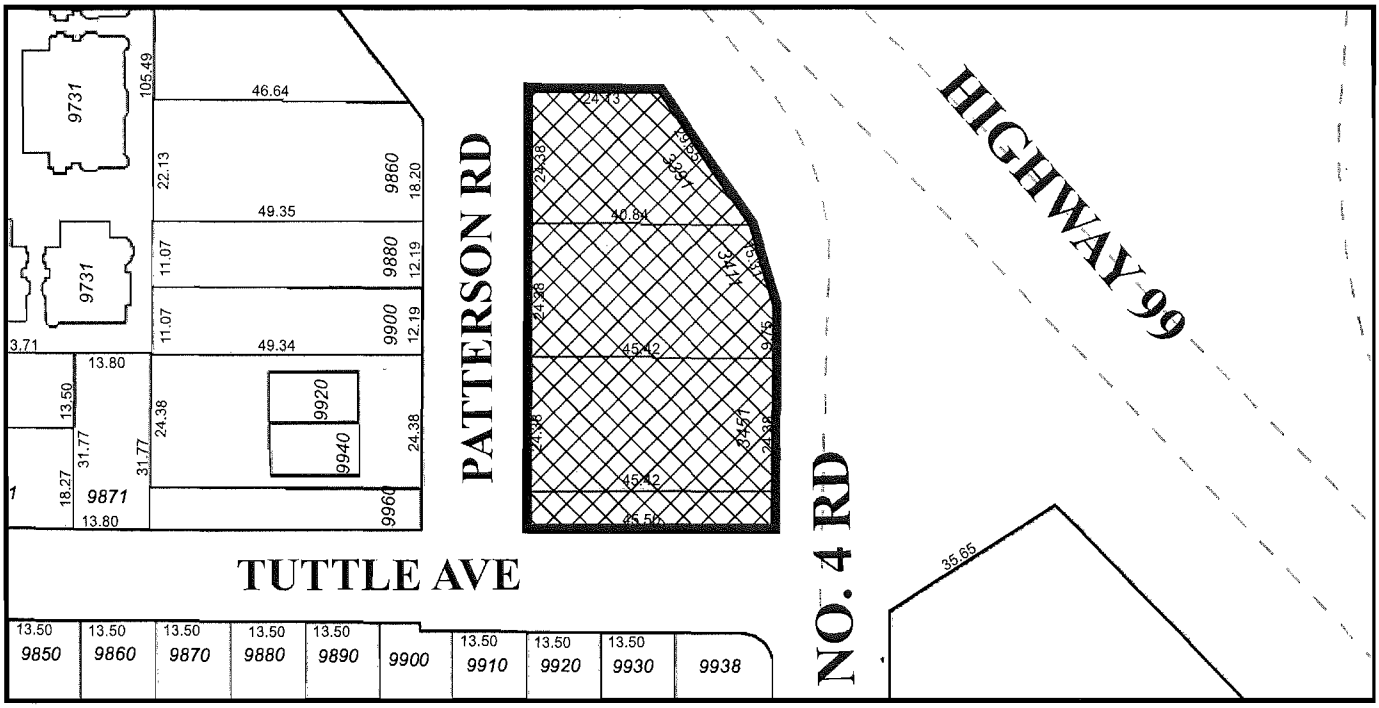
Edwin Lee
Planning Technician-Design

EL:blg

Attachment 1: Location Map
Attachment 2: Proposed Subdivision Layout
Attachment 3: Applicability of Approved Conditions
Attachment 4: Development Application Data Sheet
Attachment 5: Lot Size Policy 5413
Attachment 6: Tree Preservation Plan
Attachment 7: Preliminary Buffer Plan
Attachment 8: Preliminary Building Elevations (Lot 5 & Lot 7)
Attachment 9: Preliminary Landscape Plans (Lot 5 & Lot 7)
Attachment 10: Rezoning Considerations

City of Richmond





RZ 10-552482

Original Date: 05/26/14

Revision Date:

Note: Dimensions are in METRES

City of
Richmond

N	RZ 10-552482	Original Date: 05/26/14 Revision Date: Note: Dimensions are in METRES

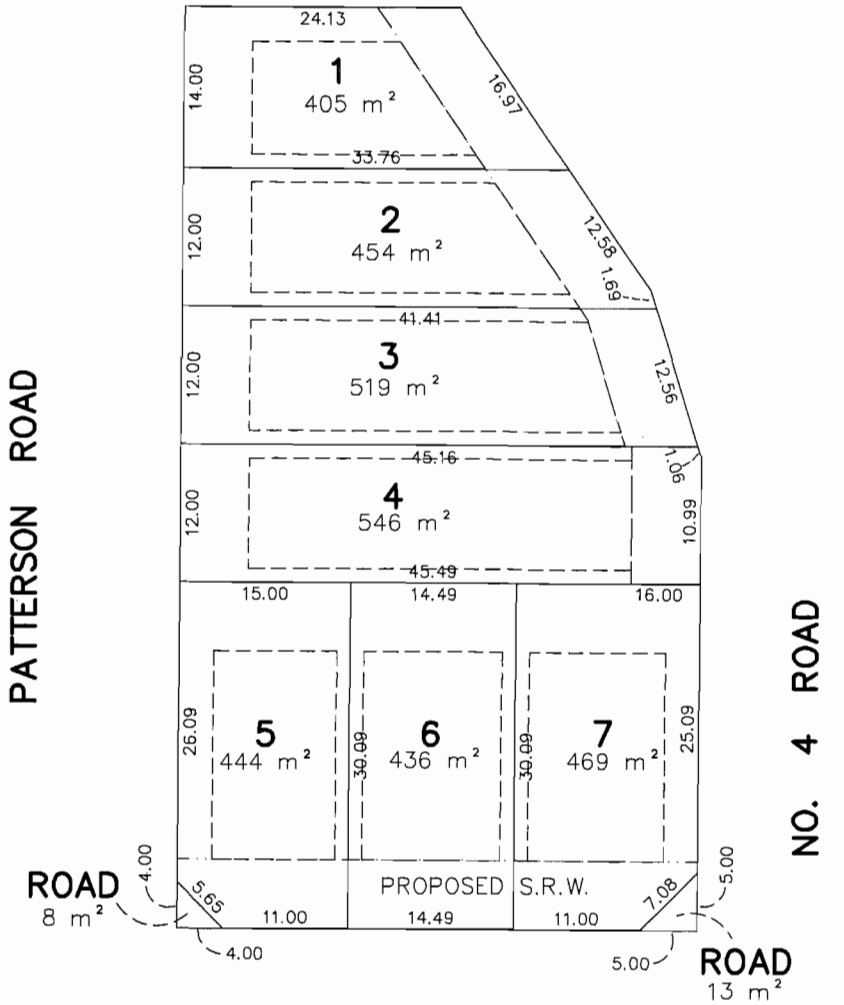
PROPOSED SUBDIVISION PLAN OF LOTS A AND B PLAN 14909, AND C AND D PLAN 15919, ALL EXCEPT: PART ON STATUTORY RIGHT OF WAY PLAN 22045; SECTION 27 BLOCK 5 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT

3391–3451 NO. 4 ROAD
RICHMOND, B.C.
ZONING RS2/B

SCALE: 1:500

0 5 10 20 30 40

ALL DISTANCES ARE IN METRES AND DECIMALS THEREOF UNLESS OTHERWISE INDICATED



J. C. Tam and Associates
Canada and B.C. Land Surveyor
115 – 8833 Odlin Crescent
Richmond, B.C. V6X 3Z7
Telephone: 214–8928
Fax: 214–8929
E–mail: office@jctam.com
Website: www.jctam.com
Job No. 5417
Drawn By: MY

DWG No. 5417–PROSUB–02

JUNE 3RD, 2014.

Applicability of Approved Conditions for RZ 10-552482

1. Dedication of a 4 m x 4 m corner cut at the southwest corner of the site at the Patterson Road/Tuttle Avenue intersection and a 5 m x 5 m corner cut at the southeast corner of the site at the No. 4 Road/Tuttle Avenue intersection.	1. Still applies.
2. The City's acceptance of the applicant's voluntary contribution of $1.00 per buildable square foot of the single-family developments (i.e. $18,136.60) to the City's Affordable Housing Reserve Fund. Note: Should the applicant change their mind about the Affordable Housing option selected prior to final adoption of the Rezoning Bylaw, the City will accept a proposal to build a secondary suite on three (3) of the six (6) future lots at the subject site.	2. Still applies; but based on the new proposal, the voluntary contribution amount is $18,999.19. Should the applicant change their mind about the Affordable Housing option selected prior to final adoption of the Rezoning Bylaw, the City will accept a proposal to build a secondary suite on four (4) of the seven (7) future lots at the subject site.
3. Registration of a flood indemnity covenant on Title.	3. Still applies.
4. Registration of an aircraft noise sensitive use covenant on Title.	4. Still applies.
5. Issuance of a separate Tree Cutting Permit for the removal of six (6) street trees along the site frontages. The City's Parks Division has reviewed the proposed tree removal and concurs with it. Identified compensation in the amount of $5,850 is required.	5. A separate permit is no longer required but the developer/contractor must contact Parks Division four (4) business days prior to the removal to allow proper signage to be posted. Voluntary contribution of $5,850 to Parks Division's Tree Compensation Fund still applies.
6. City acceptance of the developer's offer to voluntarily contribute $10,000 to the City's Tree Compensation Fund for the planting of 20 replacement trees within the City.	6. Still applies.
7. Submission of a Landscaping Security to the City of Richmond in the amount of $9,000 ($500/tree) for the planting and maintenance of 18 replacement trees.	7. Still applies.
8. 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 on City boulevard.	8. Still applies.

9. Submission of a Tree Survival Security to the City in the amount of $6000 for the Western Red Cedar tree on the city boulevard along Patterson Road trees.	9. Still applies.
10. Registration of a legal agreement on title to identify the entire 1.5 m north side and rear yard space as a buffer area and to ensure that landscaping planted within this buffer is maintained and will not be abandoned or removed.	10. Still applies.
11. Submission of a Landscaping Security to the City of Richmond in the amount of $35,508 for the buffer works as per the landscape plan prepared by Urban Systems, dated April 20, 2011, and attached to the Report to Committee dated June 24, 2011.	11. Still applies. Final landscape plan and cost estimates to be submitted prior to final adoption. Amount of landscaping security to be determined (based on 100% of the cost estimates including installation costs).
12. Provincial Ministry of Transportation & Infrastructure Approval.	12. Still applies.
13. Discharge a portion of the existing Statutory Right-of-Way (Ref. BH88865) on Lot B (except for a 3 m clearance from the existing watermain located in the eastern portion of Lot B).	13. Replace the existing SRW (Ref. BH88865) on Lot B with a new SRW to provide a 3.0 m clearance from the existing watermain located in the eastern portion of Lot B. Details of the required SRW to be determined through the Servicing Agreement.
14a. Granting of a 6.0 m wide Sanitary SRW along the rear property line.	14a. No longer applicable. Sanitary servicing will be through a new sanitary main located at the road frontages.
14b. Registration of a 1.5 m side yard setback covenant to address watermain capacity issue.	14b. No longer applicable based on updated FUS calculations.
14c. Enter into a Servicing Agreement for the design and construction of frontage improvements along the entire frontage on Patterson Road and Tuttle Avenue.	14c. Still applies and combined with item 13 in the new Rezoning Considerations letter.

City of Richmond

Development Application Data Sheet

Development Applications Division

RZ 10-552482 **Attachment 4**

Address: 3391, 3411, 3451 No. 4 Road and Lot B, NWD PLAN 14909

Applicant: Tien Sher Land Investment Group Ltd.

Planning Area(s): West Cambie

	Existing	Proposed
Owner:	Tien Sher Land Investment Group Ltd.	No Change
Site Size (m^2):	3,291 m^2 (35,425 ft^2)	Seven (7) lots – range from 405 m^2 to 546 m^2
Land Uses:	Four (4) vacant lots	Seven (7) single-family dwellings
OCP Designation:	Neighbourhood Residential	No change
Area Plan Designation:	West Cambie Area Plan – Residential (Single Family only)	No change
702 Policy Designation:	Policy 5413 permits subdivision to "Single Detached (RS2/B)"	No change
Zoning:	Single Detached (RS1/E)	Single Detached (RS2/B)
Number of Units:	0	7
Other Designations:	N/A	N/A

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.55	Max. 0.55	none permitted
Lot Coverage – Building:	Max. 45%	Max. 45%	none
Lot Coverage – Non-porous:	Max. 70%	Max. 70%	none
Lot Coverage – Landscaping:	Min. 25%	Min. 25%	none
Setback – Front & Rear Yards (m):	Min. 6 m	Min. 6 m	none
Setback – Interior Side Yard (m):	Min. 1.2 m	Min. 1.2 m	none
Setback – Exterior Side Yard (m):	Min. 3.0 m	Min. 3.0 m	none
Height (m):	Max. 2 ½ storeys	Max. 2 ½ storeys	none
Lot Width:	Min. 12 m	12 m to 16 m	none
Lot Size:	Min. 360 m^2	405 m^2 to 546 m^2	none

Other: Tree replacement compensation required for removal of bylaw-sized trees.

City of Richmond Policy Manual

Page 1of 2	Adopted by Council: August 28,1989	POLICY 5413
File Ref: 4045-00	SINGLE-FAMILY LOT SIZE POLICY IN QUARTER-SECTION 27-5-6	

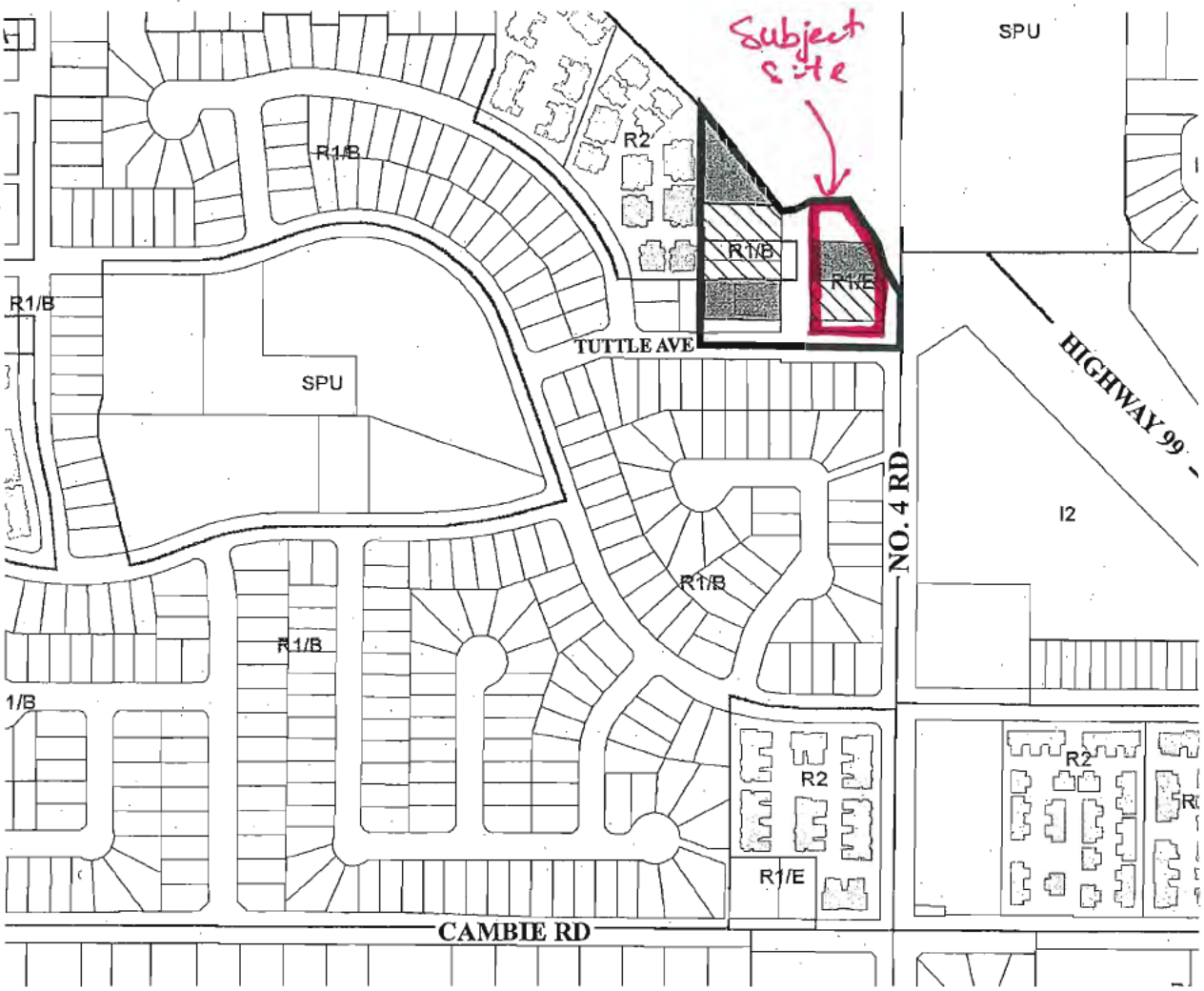
POLICY 5413:

The following policy establishes lot sizes for the area bounded by properties on both sides of the **eastern end of Patterson Drive**, in a portion of Section 27-5-6:

1. All properties be permitted to subdivide as per Single-Family Housing District (R1/B), as per Zoning and Development Bylaw 5300.

2. Area boundaries are outlined on the accompanying plan.

3. This policy is to be used in determining the disposition of future applications in this area for a period of not less than five years, except as per the amending procedures in Zoning and Development Bylaw 5300.



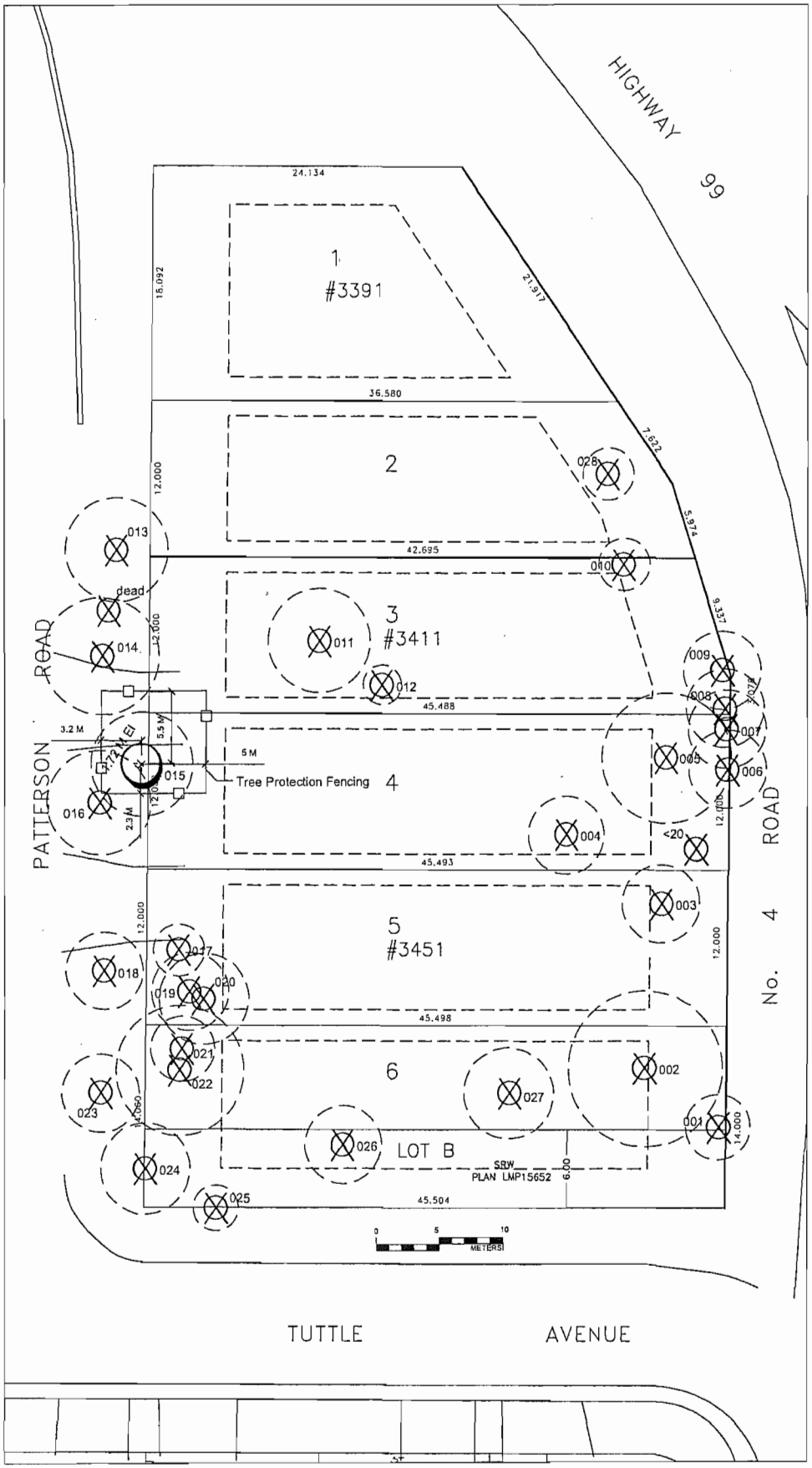
Subdivision permitted as per **(R1/B)** providing no direct accesses are created on to arterial roads.

Duplexes eligible to be split into two lots.

POLICY 5413
SECTION 27, 5-6

Adopted Date: 08/28/89

Amended Date:



LEGEND

- TREE TO BE REMOVED
- DRIP LINE OF TREE
- TREE TO BE RETAINED
- TREE PROTECTION FENCING

MIKE FADUM AND ASSOCIATES LTD.
VEGETATION CONSULTANTS

11140 – 92A Avenue
Delta, British Columbia
V4C 3L8
Ph: (604) 582-0309
Fax: (604) 589-2888
Email: mfadum@fadum.ca

CLIENT

MINISTRY OF TRANSPORTATION
LAND MANAGEMENT BRANCH

FILE NO.

R2 10-552482

PROJECT TITLE

TREE PRESERVATION AND PROTECTION PLAN

3391/3411/3451 & LOT B,
NWD PLAN 14909
NO. 4 RD.,
URBAN SYSTEMS
RICHMOND, B.C.

REVISIONS:

NO.	DATE	BY	RECORD OF ISSUE
1	JAN0411	SL	EDITS FROM FIELD WORK
2	JAN2511	SL	CITY COMMENTS
3	June 2011	MF	TREE 15 - RETAIN

NOTES:

REFER TO TREE ASSESSMENT REPORT FOR TREE SPECIES AND DATA

TREE 15 TO BE RETAINED.

LAYOUT AND CIVIL PLANS PROVIDED BY URBAN SYSTEMS LTD.

SURVEY PROVIDED BY UNDERHILL GEOMATICS LTD.

SHEET TITLE

T1 – TREE PRESERVATION AND REMOVAL PLAN

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DRAWN

SL

SCALE

AS SHOWN

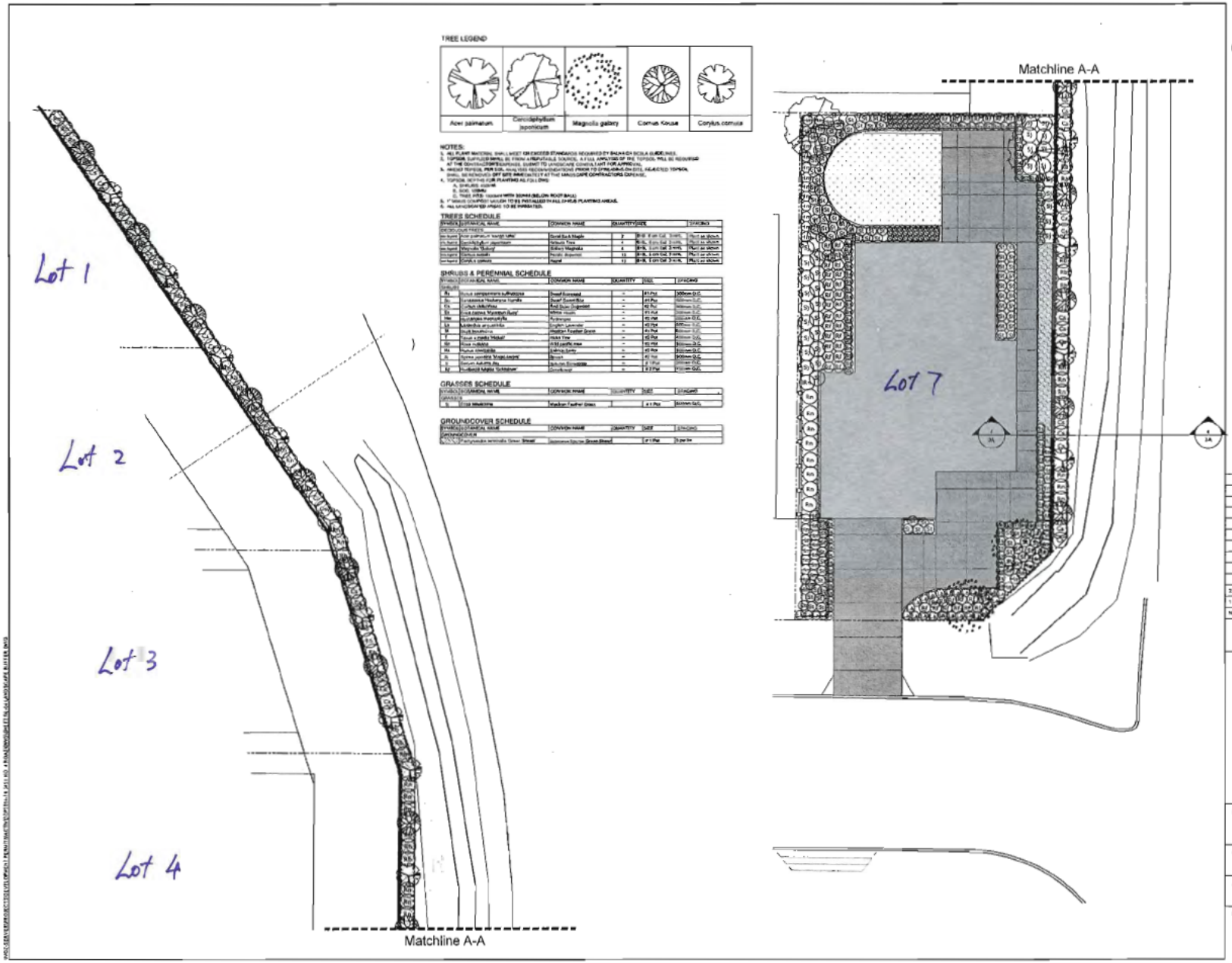
DATE

DECEMBER 20, 2010

T – 1

SHEET 1 OF 1

CNCL - 315



TREE LEGEND

Acer palmatum	Cercidiphyllum japonicum	Magnolia gallery	Cornus Kousa	Corylus cornuta

NOTES:

TREES SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING
DECIDUOUS TREES					
	Acer palmatum 'Bloodgood'	Bloodgood Japanese Maple	3	B&B, 6cm Cal, 3.5m Ht,	As shown
	Cercidiphyllum japonicum	Katsura Tree	4	B&B, 6cm Cal, 3.5m Ht,	As shown
	Magnolia 'Galaxy'	Galaxy Magnolia	4	B&B, 6cm Cal, 3.5m Ht,	As shown
	Prunus serrulata	Kwanzan Cherry	13	B&B, 6cm Cal, 3.5m Ht,	As shown
	Cornus kousa	Kousa	12	B&B, 6cm Cal, 3.5m Ht,	As shown

SHRUBS & PERENNIAL SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING
SHRUBS					
Rs	Rosa rugosa 'Scabrosa'	Dwarf Rugosa	-	#1 Pot	300mm O.C.
Sc	Lonicera 'Honeybee Tomtis'	Dwarf Sweet Box	-	#1 Pot	300mm O.C.
Cs	Cornus sibirica	Red Twig Dogwood	-	#2 Pot	900mm O.C.
Ea	Euonymus alatus 'Compactus'	Winged Euonymus	-	#1 Pot	750mm O.C.
Hm	Hydrangea macrophylla	Hydrangea	-	#2 Pot	1000mm O.C.
La	Lavandula angustifolia	English Lavender	-	#2 Pot	600mm O.C.
M	Miscanthus sinensis	Maiden Grass	-	#2 Pot	900mm O.C.
T	Taxus x media 'Hicksii'	Hicks Yew	-	#2 Pot	2400mm O.C.
Vd	Viburnum davidii	David Viburnum	-	#2 Pot	900mm O.C.
Wf	Weigela florida 'Minuet'	Minuet Weigela	-	#2 Pot	900mm O.C.
Zs	Zamioculcas zamiifolia 'Magic Jade'	ZZ Plant	-	#2 Pot	900mm O.C.
S	Sarcococca hookeriana 'Humilis'	Sweet Box	-	#2 Pot	900mm O.C.
Ky	Kniphofia 'Mango Popsicle'	Torch Lily	-	#2 Pot	900mm O.C.

GRASSES SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING
GRASSES					
C	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Grass		#1 Pot	600mm O.C.

GROUNDCOVER SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING
GROUNDCOVER					
Ps	Pachysandra terminalis 'Green Sheen'	Japanese Spurge 'Green Sheen'		#1 Pot	300mm

van der Zalm + associates inc.
Parks & Recreation + Environmental Consulting
Urban Design + Landscape Architecture

No.	By	Description	Date
2	MS	Issued for Rezoning	June 11, 2014
1	JT	Issued for Review	June 9, 2014

REVISIONS TABLE FOR DRAWINGS

Project:
3451 NO. 4 RD

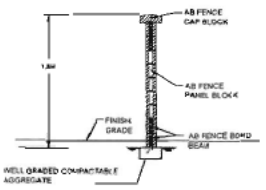
Location:
3451 NO.4 RD
RICHMOND, BC

Drawn: MW
Checked: MS
Approved: MVDZ
Stamp
Original Start Date: JUN 05, 2014
Scale: 1:100

VDZ Project #: DP14-16
Drawing Title: LANDSCAPE BUFFER
Drawing #: L-03

ATTACHMENT 7

CNCL - 316



1 SOUNDPROOF FENCE - PANEL DETAIL
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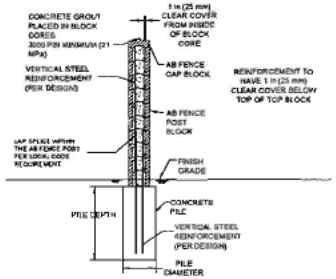

2 SOUNDPROOF FENCE - POST DETAIL
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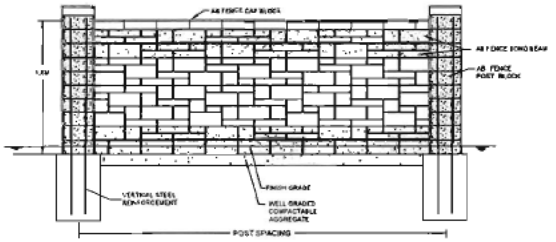

3 SOUNDPROOF FENCE - FRONT ELEVATION
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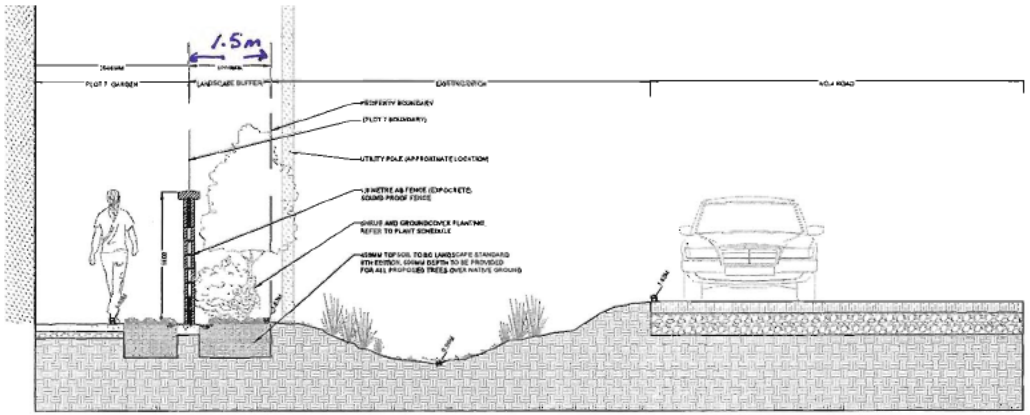

4 CROSS SECTION A-A - TYPICAL DETAIL THROUGH EASTERN LANDSCAPE BUFFER AND SOUNDBARRIER
Scale: 1:20

van der Zalm + associates inc.
Planning Consultants
Landscape Architects

No.	By	Description	Date
2	MS	Issued for Rezoning	June 11, 2014
1	JT	Issued for Review	June 9, 2014

REVISIONS TABLE FOR DRAWINGS

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Project:
3451 NO. 4 RD

Location:
3451 NO.4 RD
RICHMOND, BC

Drawn: MW
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Approved: MVDZ
Scale: 1:100
Stamp:
Original Start Date: JUN 05, 2014

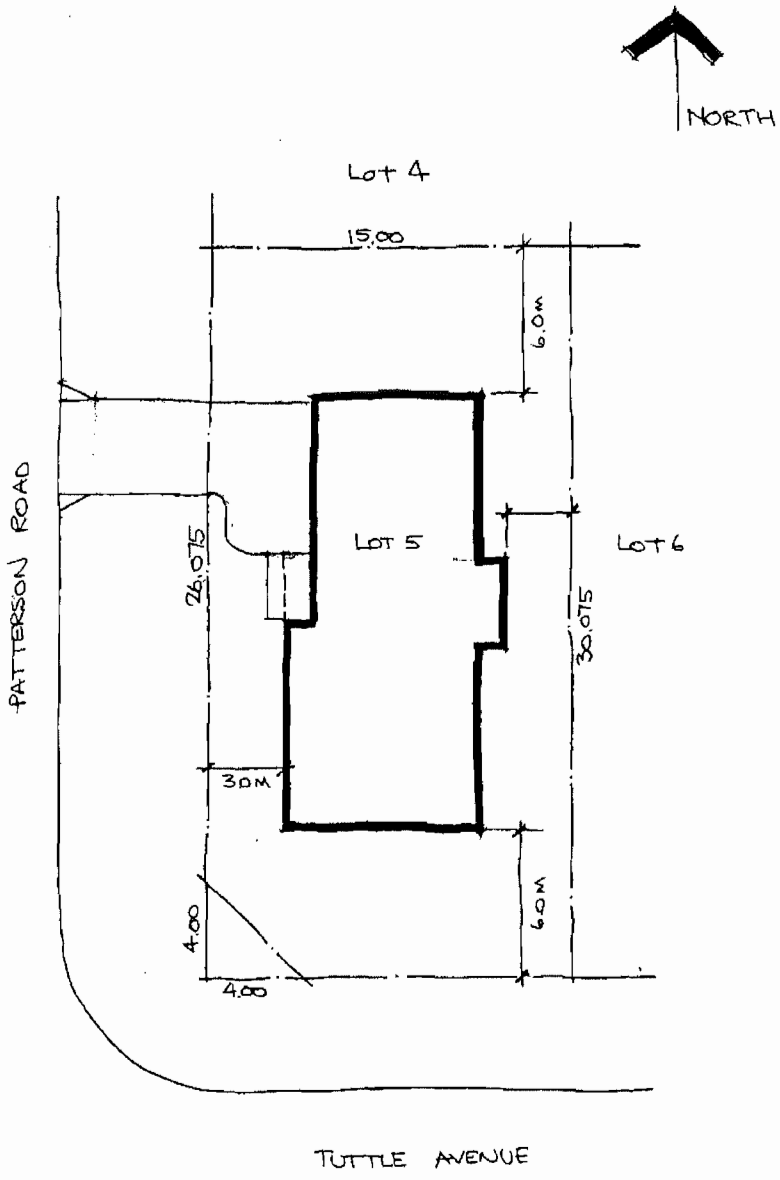
CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK.

Drawing Title: LANDSCAPE BUFFER - DETAILS & CROSS SECTION

VDZ Project #: DP14-16

Drawing #: L-03A

NORTH



3391 - 3451 No. 4 ROAD
RICHMOND, BC
LOT 5 - SITE PLAN
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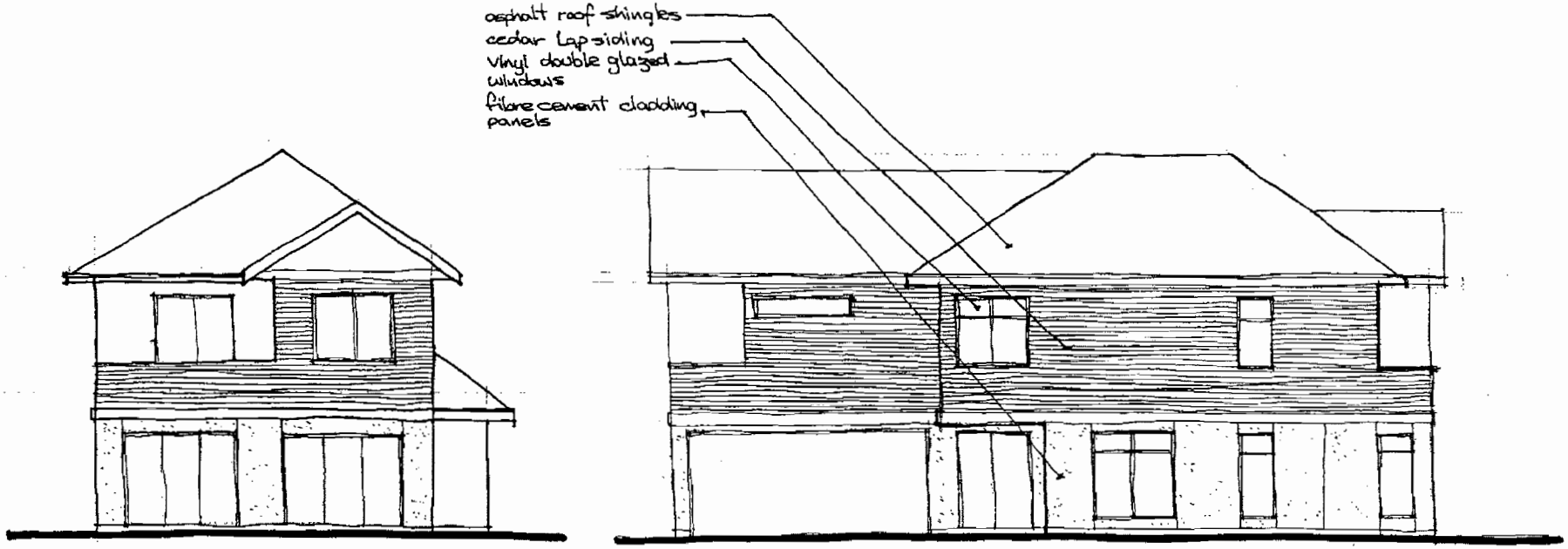
MAY 28, 2014

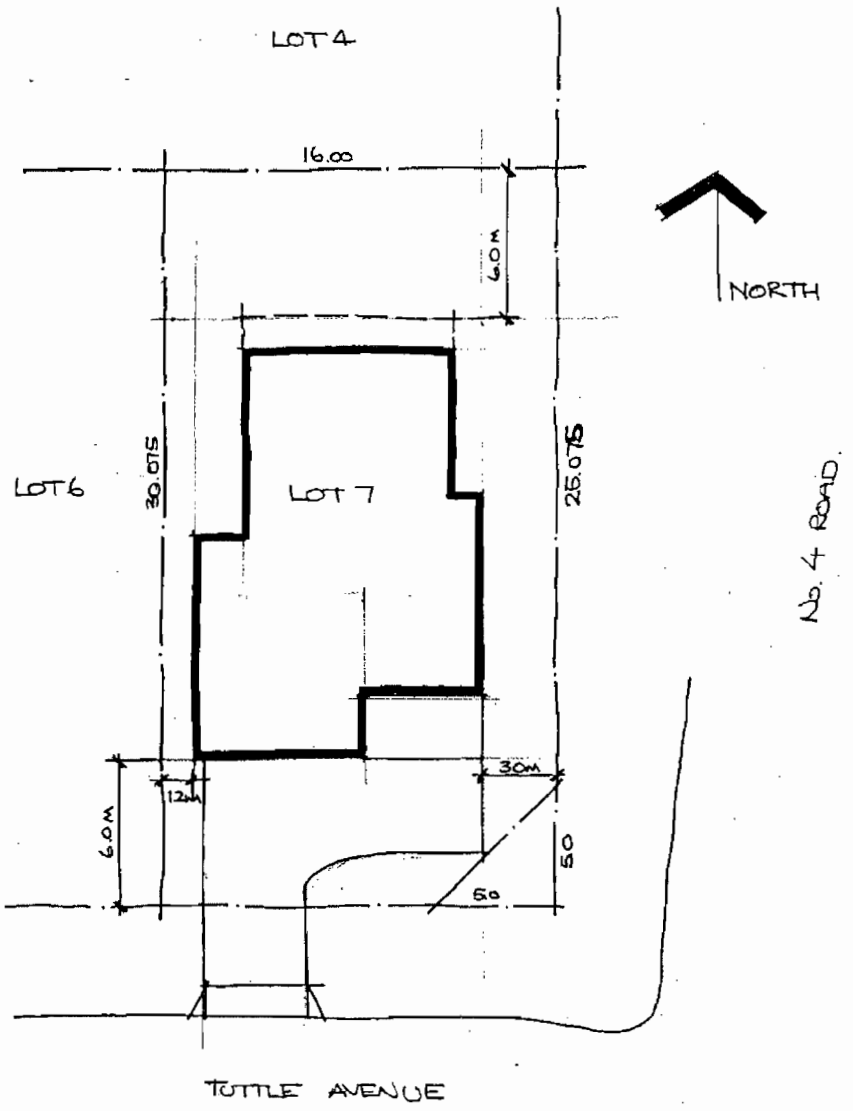


SOUTH ELEVATION

WEST ELEVATION

3391 - 3451 No.4 ROAD
RICHMOND, BC
LOT 5 ELEVATIONS
SCALE 1/8" = 1'-0"
MAY 28, 2014

ATTACHMENT 8



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RICHMOND, B.C.
LOT 7 – SITE PLAN
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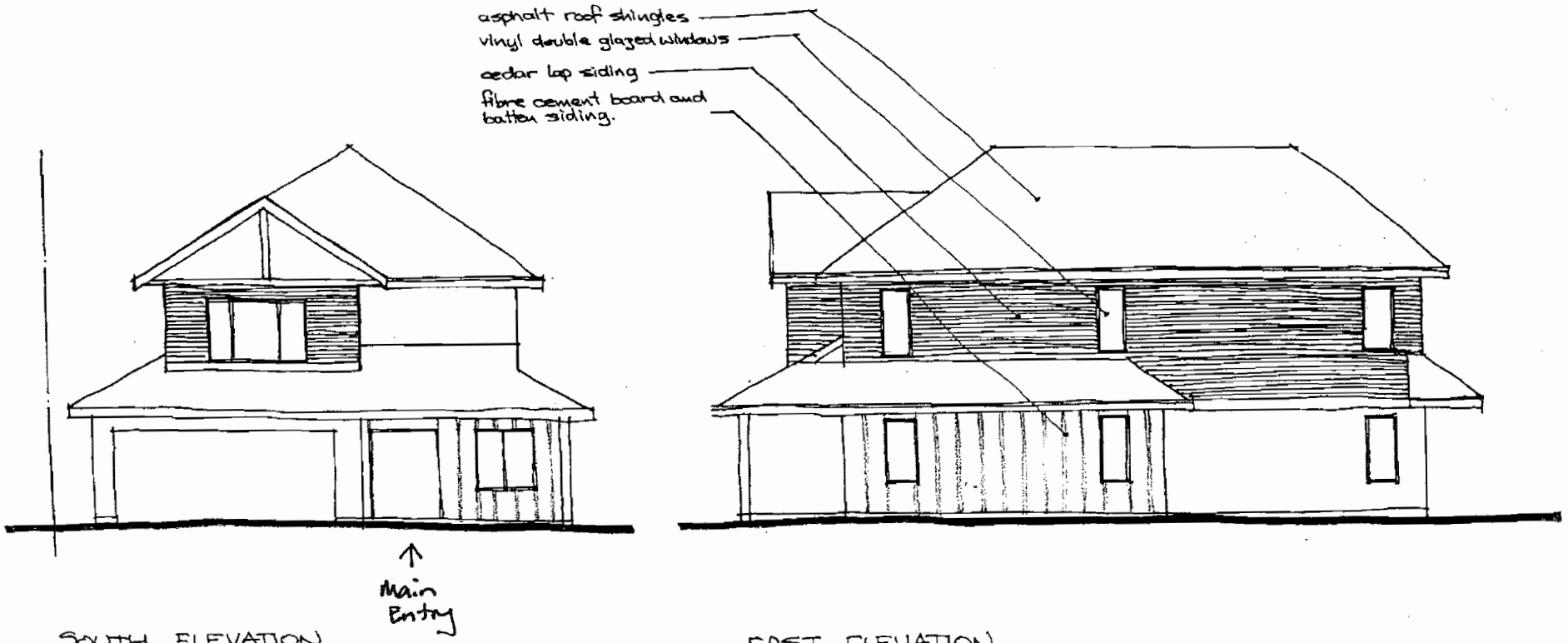
JUNE 02, 2014

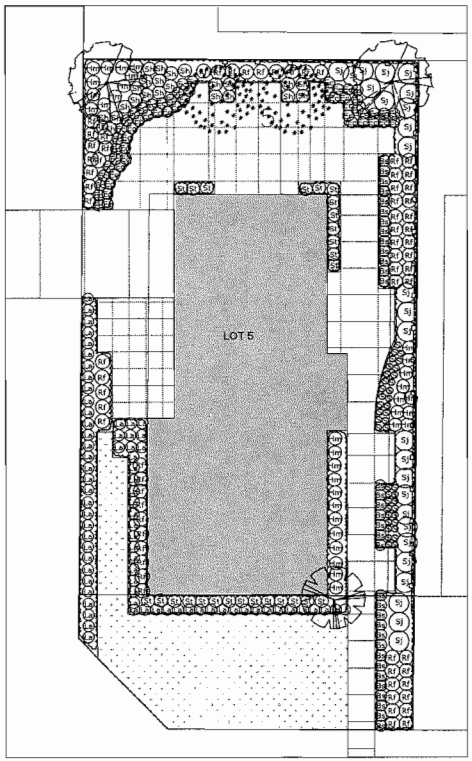


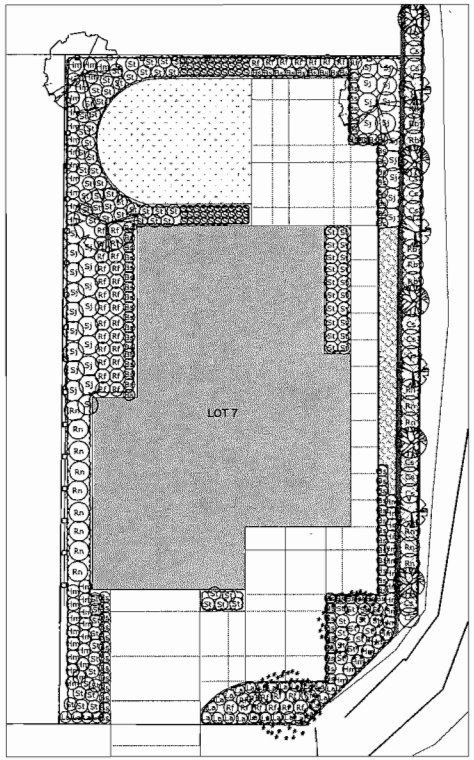
SOUTH ELEVATION

EAST ELEVATION

3391 - 3451 NO. 4 ROAD
RICHMOND, B.C.
LOT 7 ELEVATIONS
SCALE 1/8" = 1'-0"
JUNE 02, 2014

CNCL - 321





LEGEND

- PLANTING BED
- SCORED CONCRETE
- WOOD FENCE
- LAWN
- CONCRETE SOUND ATTENUATION FENCE
- PROPOSED TREE
- EXISTING TREE

TREE LEGEND

Acer palmatum	Cercidiphyllum japonicum	Magnolia galaxy	Cornus Kousa	Corylus cornuta

NOTES:
1. ALL PLANT MATERIAL SHALL MEET OR EXCEED STANDARDS REQUIRED BY BCLNA OR BCSLA GUIDELINES.
2. TOPSOIL SUPPLIED SHALL BE FROM A REPUTABLE SOURCE. A FULL ANALYSIS OF THE TOPSOIL WILL BE REQUIRED AT THE CONTRACTORS EXPENSE, SUBMIT TO LANDSCAPE CONSULTANT FOR APPROVAL.
3. AVERAGE TOPSOIL PER SOIL ANALYSIS RECOMMENDATIONS PRIOR TO SPREADING ON SITE. REJECTED TOPSOIL SHALL BE REMOVED OFF SITE IMMEDIATELY AT THE LANDSCAPE CONTRACTORS EXPENSE.
4. TOPSOIL DEPTHS FOR PLANTING AS FOLLOWS:
   a. SHRUBS: 450MM
   b. SOD: 150MM
   c. TREE PITS: 1000MM WITH 300MM (BELOW ROOT BALL)
5. 1" MINUS COMPOST MULCH TO BE INSTALLED IN ALL SHRUB PLANTING AREAS.
6. ALL LANDSCAPED AREAS TO BE IRRIGATED.

TREES SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING
DECIDUOUS TREES					
see layout	Acer palmatum 'orango maki'	Coral Bark Maple	2	B+B, 6 cm Cal. 3 HWL	Plant as shown
see layout	Cercidiphyllum japonicum	Katsura Tree	4	B+B, 6 cm Cal. 2 HWL	Plant as shown
see layout	Magnolia 'Galaxy'	Galaxy Magnolia	4	B+B, 6 cm Cal. 2 HWL	Plant as shown
see layout	Cornus nuttallii	Pacific dogwood	13	B+B, 5 cm Cal. 3 HWL	Plant as shown
see layout	Corylus cornuta	Hazel	13	B+B, 5 cm Cal. 3 HWL	Plant as shown

SHRUBS & PERENNIAL SCHEDULE

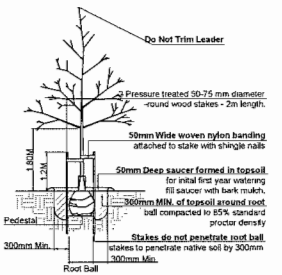
SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING
SHRUBS					
Bs	Buxus sempervirens suffruticosa	Dwarf Boxwood	--	#1 Pot	300mm O.C.
Sh	Sarcococca Hookeriana Humilis	Dwarf Sweet Box	--	#1 Pot	600mm O.C.
Ca	Cistus skanbergii	Rock Rose/ Cistus	--	#2 Pot	900mm O.C.
Fz	Edgeworthia chrysantha 'Ruby'	Winter Heath	--	#1 Pot	1400mm O.C.
Hm	Hydrangea macrophylla	Hydrangea	--	#2 Pot	1200mm O.C.
La	Lavandula angustifolia	English Lavender	--	#2 Pot	900mm O.C.
St	Stipa tenacissima	Mexican Feather Grass	--	#1 Pot	600mm O.C.
T	Taxus x media 'Hicksii'	Hicks Yew	--	#3 Pot	1100mm O.C.
Ro	Rosa rubiginosa	Wild pacific rose	--	#2 Pot	1000mm O.C.
Rs	Rubus spectabilis	Salmon berry	--	#2 Pot	900mm O.C.
Sj	Spiraea japonica 'Magic carpet'	Spirea	--	#2 Pot	900mm O.C.
S	Sweet Autumn Joy	Autumn Stonecrop	--	# 1 Pot	300mm O.C.
Rf	Rudbeckia fulgida 'Goldsturm'	Coneflower	--	# 2 Pot	750mm O.C.

GRASSES SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING
GRASSES					
St	Stipa tenacissima	Mexican Feather Grass		# 1 Pot	600mm O.C.

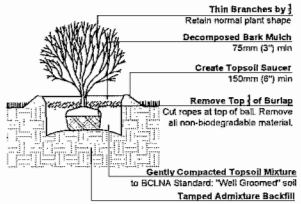
GROUNDCOVER SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE	SPACING
GROUNDCOVER					
Ajs	Ajuga reptans 'Jungle Queen'	Bugleweed		# 1 Pot	300mm O.C.
Hh	Hakonechloa macra 'Aureola'	Japanese Forest Grass		# 1 Pot	450mm O.C.
Pa	Pachysandra terminalis 'Green Sheen'	Japanese Spurge		# 1 Pot	8 per lin. m

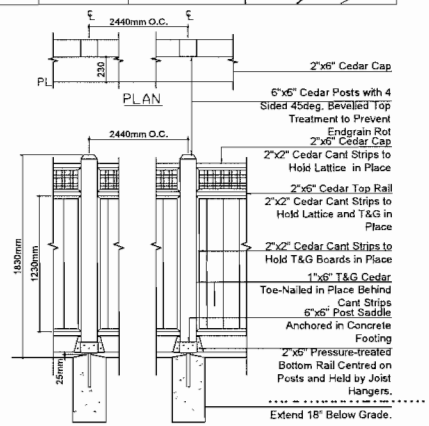


NOTES
1) Sacking/burlap to be loosened and dropped to the bottom of the planting hole, all string, twine, etc,to be removed.
2) All were baskets shall have the top 1/3 of the were removed prior to planting.
3) All trees shall be single stem

1 L-02 TREE PLANTING DETAIL
Scale: NTS



2 L-02 SHRUB PLANTING DETAIL
Scale: NTS



3 L-02 WOOD FENCE DETAIL
Scale: NTS

Van der Zalm + associates inc.
Parks & Recreation • Environmental Consulting
Urban Design • Landscape Architecture

No.	By:	Description	Date
2	MS	Issued for Rezoning	June 13, 2014
1	JT	Issued for Review	June 9, 2014

REVISIONS TABLE FOR DRAWINGS

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Project:
3451 NO. 4 RD

Location:
3451 NO.4 RD
RICHMOND, BC

Drawn: MW	Stamp
Checked: MS	
Approved: MVDZ	Original Start Date: JUN 05, 2014
Scale: AS NOTED	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK.

Drawing Title: PLANTING PLAN
VDZ Project #: DP14-16
Drawing #: L-02

ATTACHMENT 9

City of Richmond

Rezoning Considerations

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

Address: 3391, 3411, 3451 No. 4 Road and Lot B, NWD PLAN 14909 **File No.:** RZ 10-552482

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 8789, the developer is required to complete the following:

1. Dedication of a 4 m x 4 m corner cut at the southwest corner of the site at the Patterson Road/Tuttle Avenue intersection and a 5 m x 5 m corner cut at the southeast corner of the site at the No. 4 Road/Tuttle Avenue intersection.
2. The City's acceptance of the applicant's voluntary contribution of $1.00 per buildable square foot of the single-family developments (i.e. $18,999.19) to the City's Affordable Housing Reserve Fund.

   Note: Should the applicant change their mind about the Affordable Housing option selected prior to final adoption of the Rezoning Bylaw, the City will accept a proposal to build a secondary suite on four (4) of the seven (7) future lots at the subject site. To ensure that a secondary suite is built to the satisfaction of the City in accordance with the Affordable Housing Strategy, the applicant is required to enter into a legal agreement registered on Title as a condition of rezoning, stating that no final Building Permit inspection will be granted until a secondary suite is constructed to the satisfaction of the City, in accordance with the BC Building Code and the City's Zoning Bylaw.
3. Registration of a flood indemnity covenant on Title.
4. Registration of an aircraft noise sensitive use covenant on Title.
5. City acceptance of the developer's offer to voluntarily contribute $5,850.00 to Parks Division's Tree Compensation Fund for the removal of six (6) trees located on the City boulevard in front of the site.

   Note: Developer/contractor must contact the Parks Division (604-244-1208 ext. 1342) four (4) business days prior to the removal to allow proper signage to be posted. All costs of removal and compensation are the responsibility borne by the applicant.
6. City acceptance of the developer's offer to voluntarily contribute $10,000.00 to the City's Tree Compensation Fund for the planting of replacement trees within the City.
7. Submission of a Landscaping Security to the City in the amount of $9,000.00 for the planting and maintenance of 18 replacement trees with the following minimum sizes:

No. of Replacement Trees	Minimum Caliper of Deciduous Tree	or	Minimum Height of Coniferous Tree
2	8 cm		4.0 m
2	9 cm		5.0 m
6	10 cm		5.5 m
8	11 cm		6.0 m

   If required replacement trees cannot be accommodated on-site, a cash-in-lieu contribution in the amount of $500/tree to the City's Tree Compensation Fund for off-site planting is required.
8. 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 on the City boulevard. 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.
9. Submission of a Tree Survival Security to the City in the amount of $6,000.00 for the Western Red Cedar tree on the City boulevard along Patterson Road to be retained. 50% of the security will be released at Final Inspection of the Building Permits of the affected future lots and 50% of the security will be release two (2) years after final inspection of the Building Permits in order to ensure that the tree has survived.
10. Registration of a legal agreement on Title to identify the 1.5 m wide strip of land along the entire north and east property line of the site as a buffer area and to ensure that landscaping planted within this buffer is maintained and

Initial: _____

will not be abandoned or removed. Final buffer plan prepared by a Registered Landscape Architect will be attached to the legal agreement.

11. Submission of a Landscape Plan for the buffer area along the north and east property line of the site, prepared by a Registered Landscape Architect, to the satisfaction of the Director of Development, and deposit of a Landscaping Security based on 100% of the cost estimate provided by the Landscape Architect, including installation costs.
12. Provincial Ministry of Transportation & Infrastructure Approval.
13. Enter into a Servicing Agreement* for the design and construction of a new sanitary main and frontage improvements. Works include, but may not be limited to,

    Frontage improvements:

    - Patterson Road - curb and gutter, pavement widening to local road standards (i.e., 8.5 m ultimate pavement width), 1.5 m wide boulevard, and 1.5m wide sidewalk and road widening along site's frontage. It is noted that the new sidewalk must be designed to meander around the protected tree along Patterson Road.
    - Tuttle Avenue - 1.5 m concrete sidewalk and 1.5 m (min.) wide grass boulevard c/w street trees at 9 m spacing.

    Sanitary:

    - Sanitary servicing will be through a new sanitary main located at the road frontages.
    - The new sanitary main at Patterson Road frontage shall be located within the roadway (i.e., west of the required curb and gutter).
    - At Tuttle Road frontage, an alignment underneath the required sidewalk can be explored. A 3.0 m utility SRW for the sanitary main on Tuttle Avenue frontage will be required.

    Water:

    - Using the OCP Model, there is 191 L/s available at 20 psi residual at the hydrant located at 9860 Patterson Road.
    - Based on the proposed rezoning, the site requires a minimum fire flow of 220 L/s.
    - Per Fire Underwriter Survey (FUS) calculations prepared by Core Concept Consulting dated May 15, 2014, the proposed site requires 183 L/s.
    - The FUS calculation shall be included in the Servicing Agreement design.
    - No watermain upgrade is required.
    - Fire flow calculations signed and sealed by a professional engineer based on the FUS or ISO to confirm that there is adequate available flow must be submitted once the building design is confirmed at the Building Permit stage.
    - Discharge the existing SRW (Ref. BH88865) on Lot B.
    - Register a new SRW to provide a 3.0 m clearance from the existing watermain located in the eastern portion of Lot B.

    Note: Design to include water, storm and sanitary service connections for each lot. All works at developer's sole cost.

14. Registration of a legal agreement on title to ensure that the building designs of Lot 5 and Lot 7, at future development stage, are generally consistent with the preliminary architectural plans of the proposed building elevations included as Attachment 8 to this report.
15. Submission of a Landscape Plan for proposed Lot 5 and Lot 7 as shown in Attachment 2, prepared by a Registered Landscape Architect, to the satisfaction of the Director of Development, and deposit of a Landscaping Security based on 100% of the cost estimate provided by the Landscape Architect, including installation costs.

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 Division. 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.

Initial: _____

2. Incorporation of aircraft noise mitigation measures in Building Permit (BP) plans.
3. If applicable, payment of latecomer agreement charges associated with eligible latecomer works.
4. 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 Division 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 _____ Date _____

City of Richmond

Bylaw 8789

Richmond Zoning Bylaw 8500
Amendment Bylaw 8789 (RZ 10-552482)
3391, 3411, 3451 NO. 4 ROAD AND LOT B, NWD PLAN 14909

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 **SINGLE DETACHED (RS2/B).**

   P.I.D. 004-229-487
   Lot "A" Except: Part on Statutory Right of Way Plan 22045; Section 27 Block 5 North Range 6 West New Westminster District Plan 14909

   P.I.D. 014-343-835
   Lot "B" Except: Part on Statutory Right of Way Plan 22045; Section 27 Block 5 North Range 6 West New Westminster District Plan 14909

   P.I.D. 004-229-550
   Lot "C" Except: Portions on Statutory Right of Way Plan 22045; Section 27 Block 5 North Range 6 West New Westminster District Plan 15919

   P.I.D. 014-399-831
   Lot "D" Except: Portions on Statutory Right of Way Plan 22045; Section 27 Block 5 North Range 6 West New Westminster District Plan 15919

2. This Bylaw may be cited as **"Richmond Zoning Bylaw 8500, Amendment Bylaw 8789".**

FIRST READING	JUL 25 2011
A PUBLIC HEARING WAS HELD ON	SEP 07 2011
SECOND READING	SEP 07 2011
THIRD READING	SEP 07 2011
MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE APPROVAL	OCT 19 2011
OTHER REQUIREMENTS SATISFIED	
ADOPTED	

CITY OF RICHMOND
APPROVED by
APPROVED by Director or Solicitor

MAYOR

CORPORATE OFFICER

3245598

City of Richmond

Report to Committee

Planning and Development Department

To:	Planning Committee	**Date:**	June 6, 2014
From:	Wayne Craig Director of Development	**File:**	RZ 13-650616
Re:	**Application by Barbara Stylianou for Rezoning at 5280/5300 Moncton Street from Two-Unit Dwellings (RD1) to Single Detached (RS2/B)**		

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9157, for the rezoning of 5280/5300 Moncton Street from "Two-Unit Dwellings (RD1)" to "Single Detached (RS2/B)", be introduced and given first reading.

Wayne Craig
Director of Development

CL:blg
Att.

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Affordable Housing	☑	

Staff Report

Origin

Barbara Stylianou has applied to the City of Richmond for permission to rezone the property at 5280/5300 Moncton Street from "Two-Unit Dwellings (RD1)" to "Single Detached (RS2/B)", to permit the property to be subdivided to create two (2) lots, each approximately 12.5 m wide and 532 m^2 in area (Attachment 1). There is currently a duplex on the property, which will be demolished. A preliminary subdivision plan associated with this development proposal is included in Attachment 2.

Findings of Fact

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

Surrounding Development

Existing development immediately surrounding the subject site is as follows:

- To the north, immediately across Moncton Street, are dwellings on large lots zoned "Single Detached (RS1/B)" and "Single Detached (RS1/E)".
- To the east, is a dwelling on a large lot zoned "Single Detached (RS1/B)".
- To the south, are dwellings on medium lots zoned "Single Detached (RS1/B)", which front Imperial Drive.
- To the west, is a dwelling on a large lot zoned "Single Detached (RS1/E)".

Related Policies & Studies

Official Community Plan (OCP) & Steveston Area Plan Designations
The OCP land use designation for the subject site is "Neighbourhood Residential". The Steveston Area Plan land use designation for the subject site is "Single-Family". The proposed rezoning and subdivision is consistent with these designations.

Lot Size Policy 5429
The subject property is located within the area governed by Lot Size Policy 5429, adopted by City Council in 1990, and amended in 2005 (Attachment 4). The Lot Size Policy permits properties on portions of Moncton Street to rezone and subdivide in accordance with the "Single Detached (RS1-2/C)" zone where there is no lane or internal road access.

The subject site contains a duplex. The zoning amendment provisions of Richmond Zoning Bylaw 8500 indicate that the Lot Size Policy does not apply to a rezoning application on a site that contains a duplex and that is intended to be subdivided into no more than two (2) lots.

Potential exists for other large lots in the area that contain a duplex to redevelop in a similar manner.

Affordable Housing Strategy

For single-family rezoning applications, Richmond's Affordable Housing Strategy requires a secondary suite within a dwelling on 50% of new lots created through rezoning and subdivision, or a cash-in-lieu contribution of $1.00/ft^2$ of total building area towards the City's Affordable Housing Reserve Fund.

The applicant proposes to provide a contribution of $1.00 per buildable square foot of the single-detached dwellings (i.e. $5,941.00) to the City's Affordable Housing Reserve Fund in-lieu of providing a legal secondary suite in a dwelling on one (1) of the two (2) lots proposed at the subject site. The cash-in-lieu contribution must be submitted prior to final adoption of the rezoning bylaw.

Note: Should the applicant change their mind about the Affordable Housing option selected prior to final adoption of the rezoning bylaw, the City will accept a proposal to build a secondary suite on one (1) of the two (2) future lots at the subject site. To ensure that a secondary suite is built to the satisfaction of the City in accordance with the Affordable Housing Strategy, the applicant is required to enter into a legal agreement registered on Title as a condition of rezoning, stating that no final Building Permit inspection will be granted until a secondary suite is constructed to the satisfaction of the City, in accordance with the BC Building Code and the City's Zoning Bylaw.

Public Input

There have been no concerns expressed by the public about the development proposal in response to the placement of the rezoning sign on the property.

Staff Comments

Background

The subject property is located on the south side of Moncton Street, between Railway Avenue and Trites Road in an area that contains a mix of older and newer single-detached homes and duplexes.

Trees & Landscaping

A Tree Survey and Certified Arborist's Report have been submitted by the applicant. The survey and report identify five (5) bylaw-sized trees on the subject property and one (1) bylaw-sized on the neighbouring property to the east at 5320 Moncton Street. The Arborist's Report identifies tree species, assesses the condition of the trees, and provides recommendations on tree retention and removal relative to the development proposal. The proposed Tree Retention Plan is shown in Attachment 5.

The City's Tree Preservation Coordinator has reviewed the Arborist's Report, conducted an on-site visual tree assessment, and concurs with the Arborist's recommendations to remove all five (5) of the on-site trees due to very poor condition from previous topping and Tortrix Borer infestation (Trees # 1, 2, 3, 5 and 6), and to protect the Pine tree on the neighbouring site to the east at 5320 Moncton Street (Tree # 4).

To ensure protection of the Pine tree on the neighbouring site to the east at 5320 Moncton Street (Tree # 4), the applicant is required to submit a contract entered into between the applicant and a Certified Arborist for supervision of any works conducted within close proximity to the Tree Protection Zone.

Tree protection fencing must be installed on-site to City standard around the dripline of Tree #4 in accordance with the City's Tree Protection Bulletin (Tree-03). Tree protection fencing must be installed prior to demolition of the existing dwelling and must remain in place until construction and landscaping on the proposed lots is completed.

Consistent with the tree replacement ratio of 2:1 in the City's Official Community Plan, the applicant proposes to plant and maintain 10 replacement trees on the proposed lots.

To ensure that the replacement trees are planted and maintained, and that the front yards of the proposed lots are enhanced, the applicant is required to submit a Landscape Plan, Cost Estimate, and Landscaping Security prior to final adoption of the rezoning bylaw. The Landscape Plan must be prepared by a Registered Landscape Architect, to the satisfaction of the Director of Development, and the Landscape Security must be based on 100% of the cost estimate provided by the Landscape Architect (including trees, fencing, paving surfaces, and installation costs).

Suitable tree species for replacement trees on the proposed lots, as recommended by the project Arborist and the City's Tree Protection division staff, include: Golden Cedar (*Cedrus deodara* 'Aurea'), Dove Tree (*Davidia involucrata*), Purple Fountain European Beech (*Fagus sylvatica* 'Purple Fountain'), Japanese Tree Lilac 'Ivory Silk' (*Syringa reticulata* 'Ivory Silk'), and Japanese Maple (*Acer palmatum sp.*). The final selection of replacement tree species will be confirmed in the Landscape Plan required prior to final adoption of the rezoning bylaw.

Existing Covenant

There is an existing covenant registered on Title of the subject lot, which restricts the use of the property to a duplex (i.e., AC310347), which must be discharged from Title prior to final adoption of the rezoning bylaw.

Flood Management

Prior to final adoption of the rezoning bylaw, the applicant is required to register a flood indemnity covenant on Title. The flood construction level is a minimum of 0.3 m above the highest elevation of the crown of the road adjacent to the subject site (i.e., Moncton Street).

Site Servicing & Vehicle Access

There are no servicing concerns with the proposed rezoning.

Vehicle access to the proposed lots is to be from Moncton Street via the two (2) existing driveway crossings.

Subdivision and Building Permit Stage
At subdivision stage, the applicant is required to pay servicing costs.

At Building Permit stage, the applicant will be required to complete the following works:

- The existing storm services are to be abandoned; a new connection complete with inspection chamber is required along the new common property line within the City boulevard on Moncton Street to service the proposed lots.
- The existing sanitary service is to be abandoned; a new connection complete with inspection chamber is required along the new common property line within the existing utility right-of-way at the south end of the subject site to service the proposed lots.
- The existing water service is to be removed/abandoned; two (2) new connections complete with meter boxes are required to service the proposed subdivided lots.

Analysis

This development proposal is consistent with the land use designation contained within the OCP and with the zoning amendment provisions of Richmond Zoning Bylaw 8500, which permit a rezoning application on a site that contains a duplex and that is intended to be subdivided into no more than two (2) lots.

Potential exists for other large lots in the area that contain a duplex to redevelop in a similar manner.

Financial Impact

None.

Conclusion

This rezoning application to permit subdivision of an existing large lot containing a duplex into two (2) lots complies with the applicable policies and land use designations contained within the OCP, and with Richmond Zoning Bylaw 8500.

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

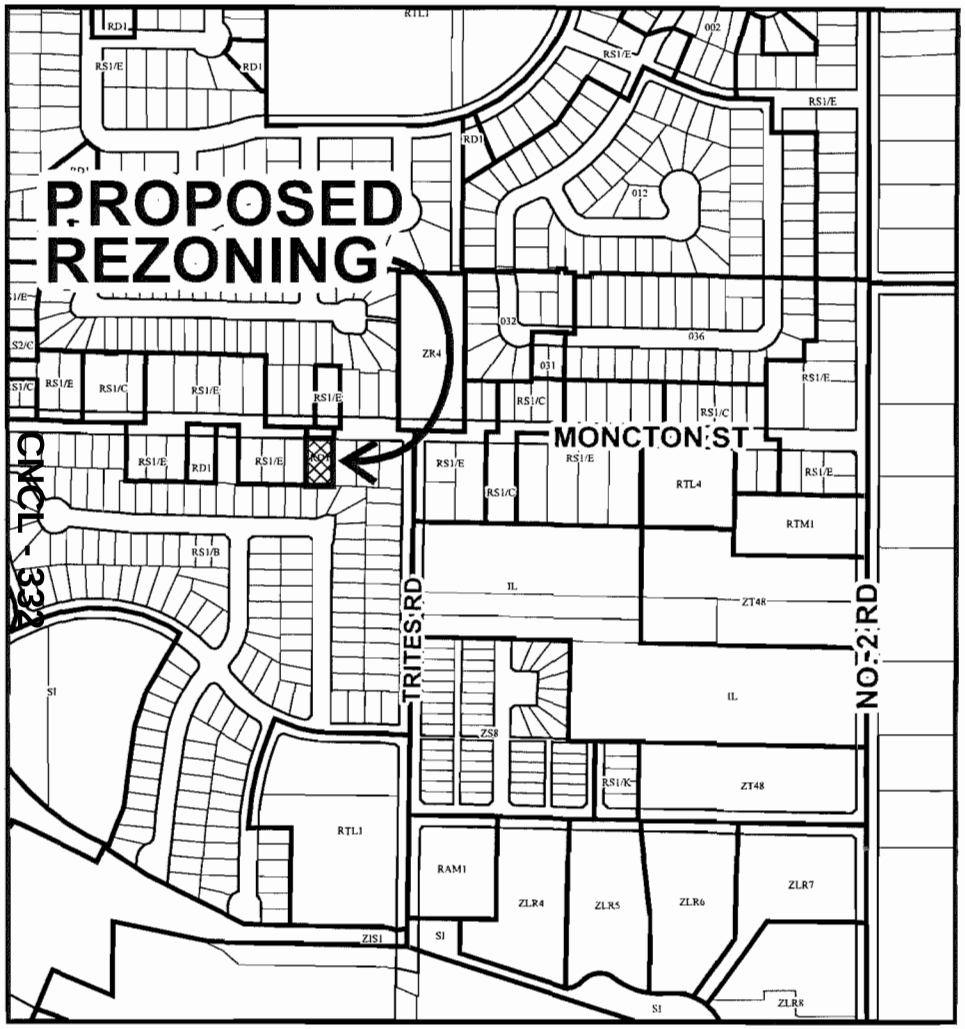
It is recommended that Zoning Bylaw 8500, Amendment Bylaw 9157 be introduced and given first reading.

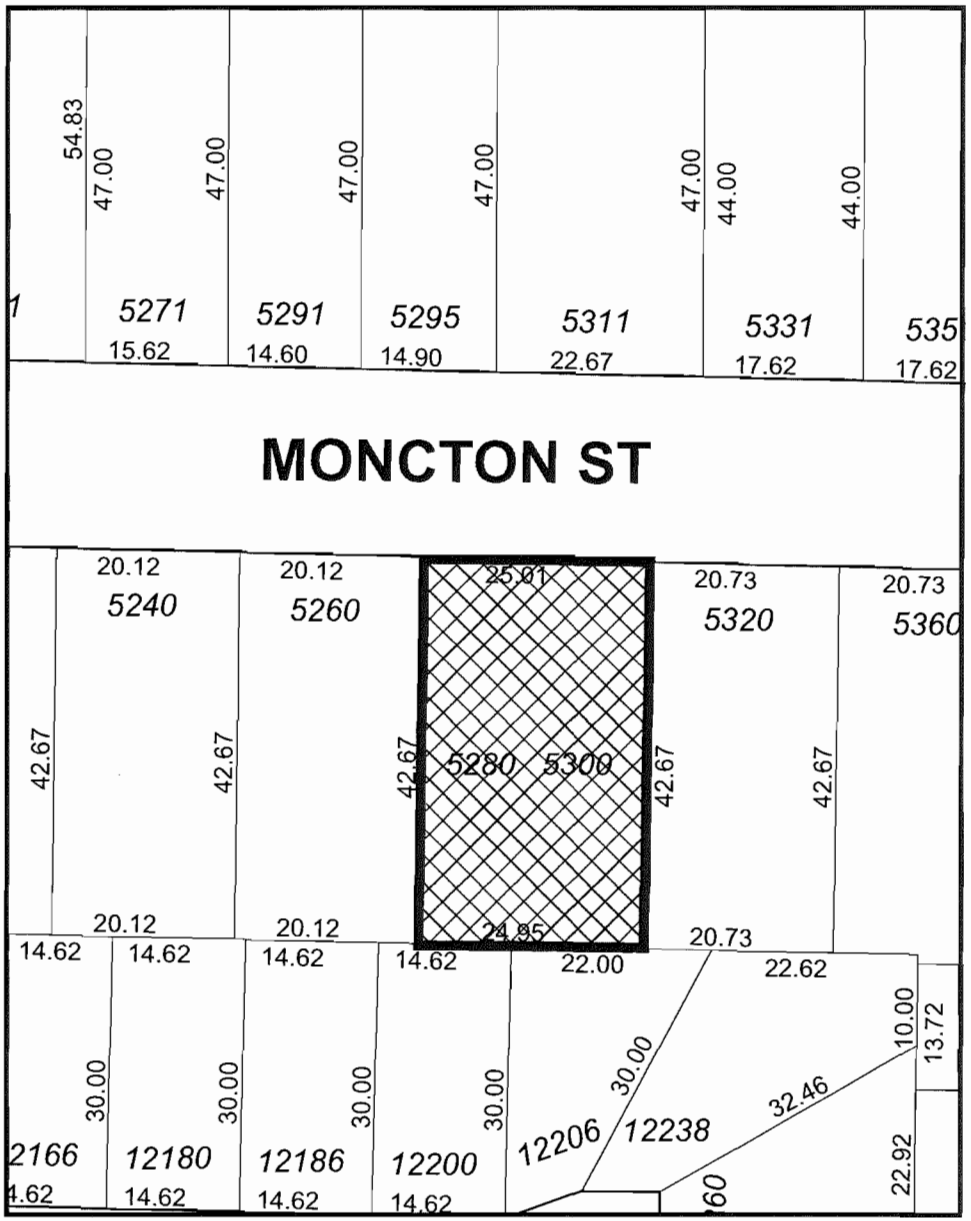
Cynthia Lussier
Planning Technician
CL:blg

Attachments:

Attachment 1: Location Map/Aerial Photo
Attachment 2: Preliminary subdivision plan
Attachment 3: Development Application Data Sheet
Attachment 4: Lot Size Policy 5429
Attachment 5: Proposed Tree Retention Plan
Attachment 6: Rezoning Considerations

City of Richmond





RZ 13-650616

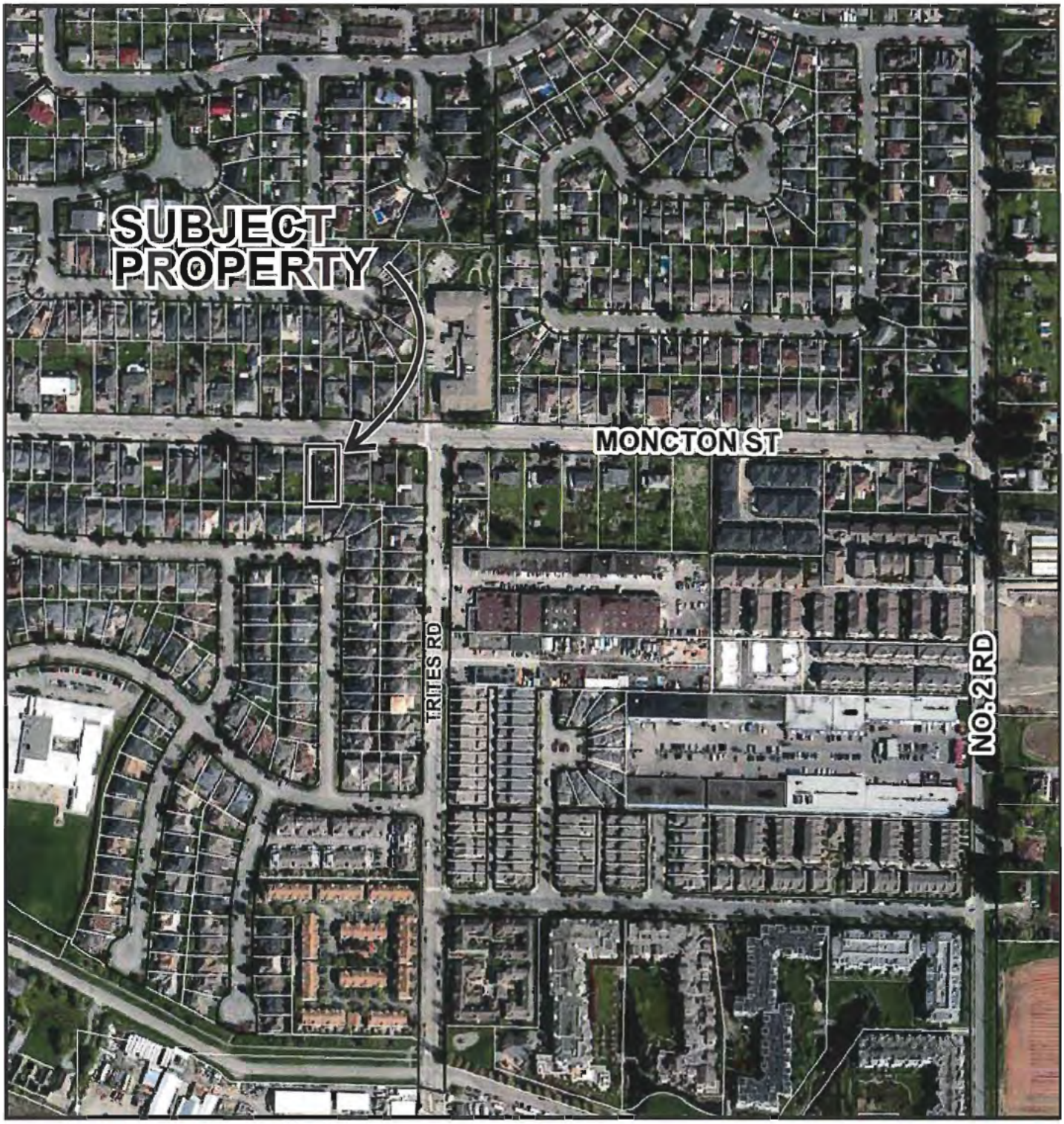
Original Date: 12/02/13

Revision Date:

Note: Dimensions are in METRES

ATTACHMENT 1

City of Richmond



RZ 13-650616

Original Date: 12/02/13

Revision Date:

Note: Dimensions are in METRES

R-13-17397-TPG

ATTACHMENT 2

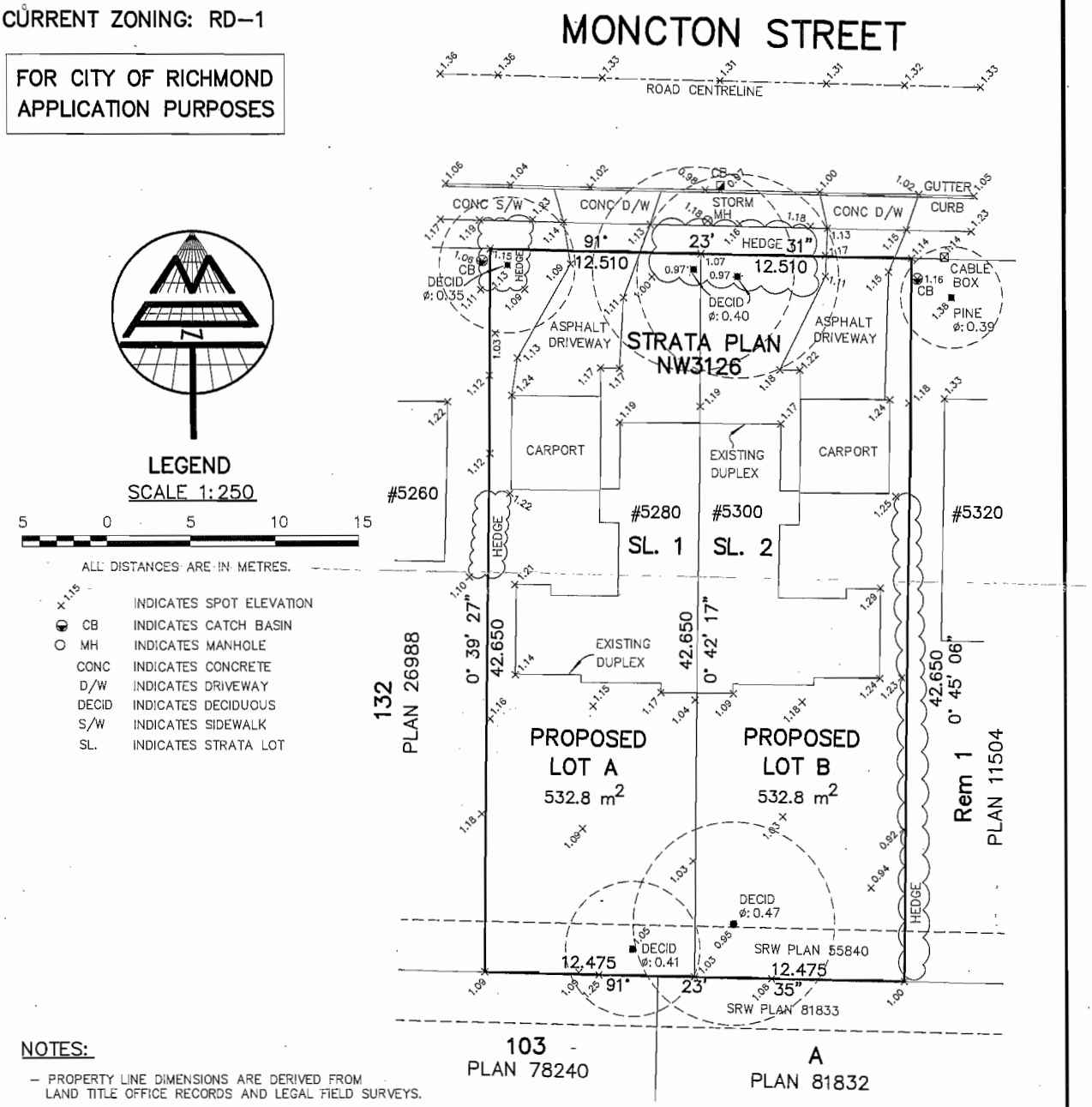
SURVEY OF STRATA PLAN NW3126
SECTION 12 BLOCK 3 NORTH
RANGE 7 WEST NWD

CIVIC ADDRESS

#5280/#5300 MONCTON STREET
RICHMOND, B.C.

CURRENT ZONING: RD-1

FOR CITY OF RICHMOND APPLICATION PURPOSES



LEGEND

SCALE 1:250

5 0 5 10 15

ALL DISTANCES ARE IN METRES.

x1.15	INDICATES SPOT ELEVATION
CB	INDICATES CATCH BASIN
MH	INDICATES MANHOLE
CONC	INDICATES CONCRETE
D/W	INDICATES DRIVEWAY
DECID	INDICATES DECIDUOUS
S/W	INDICATES SIDEWALK
SL.	INDICATES STRATA LOT

NOTES:

- PROPERTY LINE DIMENSIONS ARE DERIVED FROM LAND TITLE OFFICE RECORDS AND LEGAL FIELD SURVEYS.
- ELEVATIONS ARE IN METRES AND ARE DERIVED FROM CITY OF RICHMOND HPN MONUMENT #205 (77H4827) ELEVATION=1.044 METRES.
- ALL DESIGNATED TREES AS DEFINED BY CITY OF RICHMOND BYLAW No. 8057, ARE SHOWN HEREON.

MATSON PECK & TOPLISS
SURVEYORS & ENGINEERS
#320 – 11120 HORSESHOE WAY
RICHMOND, B.C., V7A 5H7
PH: 604-270-9331
FAX: 604-270-4137

CADFILE: 17397-001-TPG-000.DWG

CERTIFIED CORRECT
THIS 9TH DAY OF OCTOBER, 2013

B.C.L.S.

R-13-17397-TPG | CLIENT REF: BARBARA STYLIANOU | DATE OF SURVEY: OCTOBER 01, 2013

City of Richmond

Development Application Data Sheet

Development Applications Division

RZ 13-650616 **Attachment 3**

Address: 5280/5300 Moncton Street

Applicant: Barbara Stylianou

Planning Area(s): Steveston

	Existing	Proposed
Owner:	Stelios Andreas Stylianou Barbara Monika Stylianou	To be determined
Site Size (m^2):	1,065 m² (11,470 ft²)	Two (2) lots – each approximately 532.8 m² (5,735 ft²)
Land Uses:	One (1) two-unit dwelling	Two (2) single detached dwellings
OCP Designation:	Neighbourhood Residential	No change
Area Plan Designation:	Single-Family	No change
Zoning:	Two-Unit Dwellings (RD1)	Single Detached (RS2/B)

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.55	Max. 0.55	none permitted
Lot Coverage – Building:	Max. 45%	Max. 45%	none
Lot Coverage – Buildings, Structures, and Non-Porous Surfaces	Max. 70%	Max. 70%	none
Lot Coverage – Live Plant Material	Min. 25%	Min. 25%	none
Lot Size (min. dimensions):	360 m²	532.8 m²	none
Setback – Front & Rear Yard (m):	Min. 6 m	Min. 6 m	none
Setback – Interior Side Yard (m):	Min. 1.2 m	Min. 1.2 m	none
Height (m):	2 ½ storeys	2 ½ storeys	none

Other: Tree replacement compensation required for loss of bylaw-sized trees.

City of Richmond Policy Manual

Page 1 of 2	Adopted by Council: January 15, 1990 Area Boundary Amended: January 17th, 2005	POLICY 5429
File Ref: 4045-00	SINGLE-FAMILY LOT SIZE POLICY IN QUARTER-SECTION 11-3-7/12-3-7	

POLICY 5429:

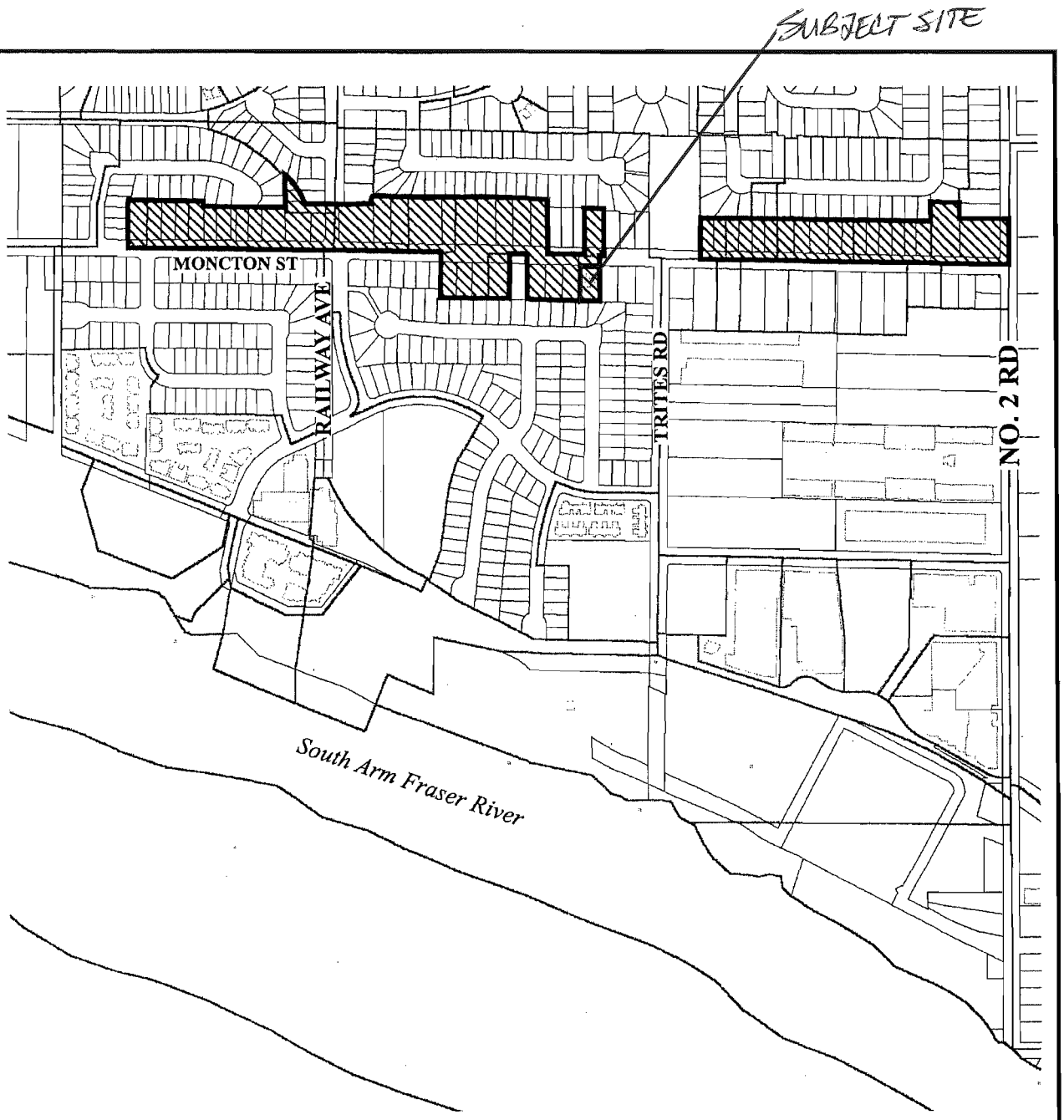
The following policy establishes lot sizes in a portion of Sections 11-3-7/12-3-7 located on **Moncton Street generally bounded by No. 2 Road and Hayashi Court:**

That properties within the area bounded by Moncton Street and Hayashi Court, in a portion of Sections 11-3-7/12-3-7, be permitted to subdivide in accordance with the provisions of Single-Family Housing District (R1/B) in Zoning and Development Bylaw 5300 with the following provisions:

a) if there is no lane or internal road access then properties along Moncton Street will be restricted to Single-Housing District (R1/C); and

b) if there is no lane or internal road access then properties along Railway Avenue and No. 2 Road will be restricted to Single-Family Housing District (R1/E); and

that this policy, as shown on the accompanying plan, be used to determine the disposition of future rezoning applications in this area, for a period of not less than five years, unless changed by the amending procedures contained in the Zoning and Development Bylaw.



Subdivision permitted as per **R1/B** Except

1. Moncton St.: **R1/C** unless there is a lane or internal road access, then **R1/B**.

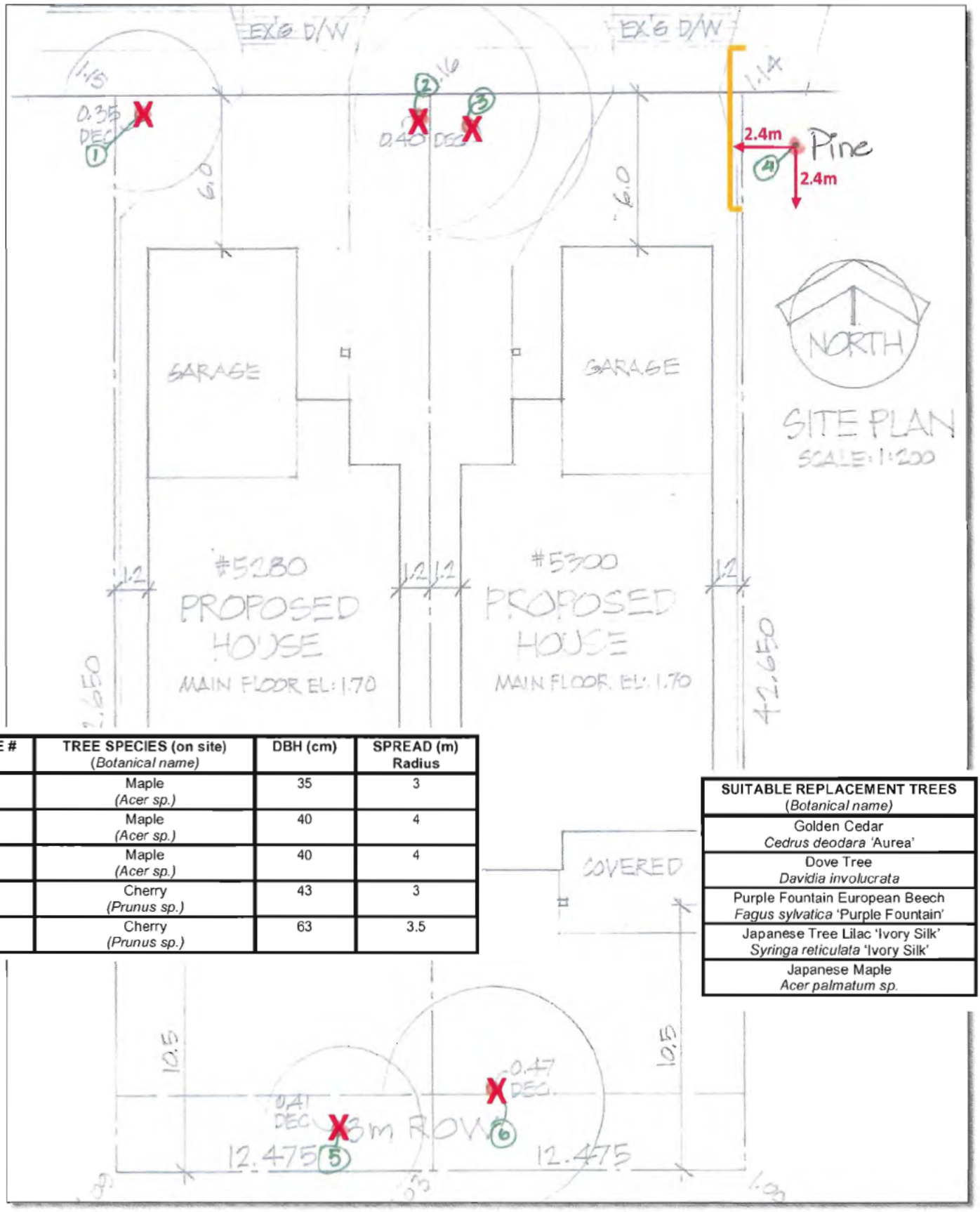
2. Railway Ave. and No. 2 Rd.: **R1/E** unless there is a lane or internal road access, then **R1/B**.

Policy 5429
Section 11 & 12, 3-7

Adopted Date: 01/15/90

Amended Date: 01/17/05

Tree Retention & Removal Plan, Scale 1:200



TREE #	TREE SPECIES (on site) (*Botanical name*)	DBH (cm)	SPREAD (m) Radius
1	Maple *(Acer sp.)*	35	3
2	Maple *(Acer sp.)*	40	4
3	Maple *(Acer sp.)*	40	4
5	Cherry *(Prunus sp.)*	43	3
6	Cherry *(Prunus sp.)*	63	3.5

SUITABLE REPLACEMENT TREES (*Botanical name*)
Golden Cedar *Cedrus deodara* 'Aurea'
Dove Tree *Davidia involucrata*
Purple Fountain European Beech *Fagus sylvatica* 'Purple Fountain'
Japanese Tree Lilac 'Ivory Silk' *Syringa reticulata* 'Ivory Silk'
Japanese Maple *Acer palmatum sp.*

City of Richmond

Rezoning Considerations

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

Address: 5280/5300 Moncton Street **File No.:** RZ 13-650616

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9157, the following items must be completed:

1. Submission of a Landscape Plan, prepared by a Registered Landscape Architect (to the satisfaction of the Director of Development), and deposit of a Landscaping Security based on 100% of the cost estimate provided by the Landscape Architect (including trees, fencing, hard surfaces, and installation costs). The Landscape Plan must:
   - Include a mix of coniferous and deciduous trees;
   - Not include continuous hedges within the front yard;
   - Include the dimensions of tree protection fencing as illustrated on the Tree Retention Plan attached to this report; and
   - Include the 10 required replacement trees with the following minimum sizes:

No. of Replacement Trees	Minimum Caliper of Deciduous Tree	or	Minimum Height of Coniferous Tree
2	11 cm		6 m
2	9 cm		5 m
6	8 cm		4 m

   If required replacement trees cannot be accommodated on-site, a cash-in-lieu contribution in the amount of $500/tree to the City's Tree Compensation Fund for off-site planting is required.

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 Pine tree on the neighbouring site to the east at 5320 Moncton Street (Tree # 4). 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. The City's acceptance of the applicant's voluntary contribution of $1.00 per buildable square foot of the single-family developments to the City's Affordable Housing Reserve Fund (i.e. $5,941.00).

   Note: Should the applicant change their mind about the Affordable Housing option selected prior to final adoption of the Rezoning Bylaw, the City will accept a proposal to build a secondary suite on one (1) of the two (2) future lots at the subject site to the satisfaction of the City in accordance with the Affordable Housing Strategy. In such a case, the applicant is required to enter into a legal agreement registered on Title prior to rezoning, stating that no final Building Permit inspection will be granted until a secondary suite is constructed to the satisfaction of the City, in accordance with the BC Building Code and the City's Zoning Bylaw.

4. Registration of a flood indemnity covenant on title.

5. Discharge of the existing covenant registered on Title of the subject lot (i.e., AC310347), which restricts the use of the property to a duplex.

At Demolition* stage, the following items must be completed:

- Tree protection fencing must be installed on-site to City standard around the dripline of the Pine tree on the neighbouring site to the east at 5320 Moncton Street (Tree #4) in accordance with the City's Tree Protection Bulletin (Tree-03). Tree protection fencing must be installed prior to demolition of the existing dwelling and must remain in place until construction and landscaping on the proposed lots is completed.

At Subdivision* and Building Permit* stage, the following items must be completed:

- Payment of servicing costs.
- The existing storm services are to be abandoned; a new connection complete with inspection chamber is required along the new common property line within the City boulevard on Moncton Street to service the proposed lots.
- The existing sanitary service is to be abandoned; a new connection complete with inspection chamber is required along the new common property line within the existing utility right-of-way at the south end of the subject site to service the proposed lots.
- The existing water service is to be removed/abandoned; two (2) new connections complete with meter boxes are required to service the proposed subdivided lots.
- Submission of a Construction Parking and Traffic Management Plan to the Transportation Division (if applicable). The 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.
- 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 Division 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 original on file)

Signed

Date

City of Richmond

Bylaw 9157

Richmond Zoning Bylaw 8500
Amendment Bylaw 9157 (RZ 13-650616)
5280/5300 Moncton Street

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 **"SINGLE DETACHED (RS2/B)".**

   P.I.D. 029-302-714
   Lot A Section 12 Block 3 North Range 7 West New Westminster District Plan EPP37394

2. This Bylaw may be cited as **"Richmond Zoning Bylaw 8500, Amendment Bylaw 9157".**

FIRST READING	
A PUBLIC HEARING WAS HELD ON	
SECOND READING	
THIRD READING	
OTHER REQUIREMENTS SATISFIED	
ADOPTED	

CITY OF RICHMOND
APPROVED by
APPROVED by Director or Solicitor

MAYOR

CORPORATE OFFICER

City of Richmond

Report to Committee

To:	Public Works and Transportation Committee	**Date:**	May 28, 2014
From:	Victor Wei, P. Eng. Director, Transportation	**File:**	10-6455-00/Vol 01
Re:	**Car2Go - City Centre Car-Share Pilot Program**		

Staff Recommendation

That Council:

1. Approve the business terms (the "Business Terms") specified in Attachment 2 of the report titled "Car2Go – City Centre Car-Share Pilot Program" dated May 28, 2014, from the Director, Transportation for the purpose of entering into an Agreement between Car2Go Canada Ltd. and the City of Richmond for the use of public parking spaces on a one-year trial basis.

2. Authorize the Chief Administrative Officer and the General Manager, Planning and Development to execute an Agreement based on the Business Terms.

3. Direct staff to monitor the outcomes of the pilot program and report back to Council after one year of implementation.

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

Cecilia Achiam, BCSLA, MCIP
Director, Administration and Compliance
(604-276-4122)

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	**CONCURRENCE**	**CONCURRENCE OF GENERAL MANAGER**
Sustainability	☑	
Community Bylaws	☑	
Law	☑	
Customer Service	☑	
Parks & Community Services	☑	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	**INITIALS:**	**APPROVED BY CAO**

4234234

Staff Report

Origin

The City's Business Development Program was established in 2013 to provide support to businesses wishing to expand or locate in Richmond. In late 2013, the Vancouver-based company Car2Go Canada Ltd. accessed this program to seek support in expanding its car-share service into Richmond. With a view to welcome this new business to Richmond, while meeting the City's goal in expanding car-share opportunities for the community, staff have worked with Car2Go to adapt its proposal to identify suitable parking locations while adhering to applicable bylaws and regulations.

The availability of this car-share service in Richmond will provide additional alternative transportation for residents and employees, encourage visitation to local amenities and attractions by up to 50,000 regional Car2Go members, while reducing the number of private vehicles on the roads.

This initiative supports the following Council Term Goals #3 Economic Development and #8 Sustainability:

> *3.2 Foster a collaborative economic development culture within the City where the City and businesses are working together to build on and seize opportunities in a faster, more efficient manner, with critical mass.*
>
> *8.1. Continued implementation and significant progress towards achieving the City's Sustainability Framework, and associated targets.*

Additionally, Richmond's Community Energy and Emissions Plan (CEEP), adopted by Council in 2014, includes the following strategies to reduce greenhouse gas emissions and energy consumption:

> *Strategy #6 "Facilitate Changes in Transportation Behaviour and Mode Choice";* car-sharing has been shown to reduce the extent of peoples' reliance on vehicles and support greater walking, biking and transit use.
>
> *Strategy #7 "Promote Low Carbon Personal Vehicles";* car-share vehicles are typically lower-carbon, more fuel efficient models.

The terms presented in this report would allow Car2Go access to a number of City-owned on- and off-street parking locations within a specified area for a trial period of one year, subject to regular parking fees, rates and regulations. As the availability of car-share services in Richmond supports multiple Council goals related to sustainability, economic development and transportation, this report recommends that the City Centre Car-Share Pilot Program be endorsed

Analysis

Car-Sharing in Richmond

At its September 24, 2012 meeting, Council endorsed the introduction of car-share services in Richmond, including the provision of twelve reserved on-street car-share parking spaces near Canada Line stations. These spaces are available to car-share companies for a fee by entering into a licence agreement with the City. Two of these stalls are currently used by car-share company Modo. Ten on-street dedicated parking spaces remain available, four of which have been requested by Car2Go. A third car-share company operating in the region, Zip Car, has secured private parking at Richmond Centre Mall.

Different Car-Share Models

Benefits of car sharing are widely recognized and they help members by way of increased mobility and decreased private vehicle use and associated costs. Research indicates that communities also benefit by way of reduced road congestion, air pollution, and increased public transit use and access to employment locations not well served by public transportation.[1] Car-share services give members 24-hour access to private vehicles stationed conveniently around a city or region on a self-serve, pay-per-use basis.

Car2Go Canada Ltd., a wholly owned subsidiary of Daimler Auto Group, operates the only free floating car-share model in Metro Vancouver. Instead of returning a vehicle to a designated location as with the traditional model, members may start and end their trip in any approved parking location within a defined area, called the "Home Area". These parking locations typically include a mix of public and private on- and off-street spaces in highly visible and frequented areas. When the trip has ended and the vehicle is parked at any approved location within the Home Area, the billing is stopped and the vehicle is made available for any other member's use. Members may make stopovers or drive the vehicle outside of the Home Area, but continue to be billed for time used, even after parking.

Car2Go's business model relies on having a large fleet of vehicles in areas with high population density, and gaining access to a large number of public and private parking locations.

The company employs advanced technology including a fleet of fuel-efficient Smart microcars, a mobile app for users to find vehicles near them, an in-car navigation display outlining the Home Area and approved parking locations, the capability to integrate into municipalities' cellular payment systems, and a chip engrained access card which serves as a key to unlock and lock the vehicle.

Car2Go operates in 25 cities worldwide, including Calgary, Montreal and Toronto. Recently the company expanded its model to allow members international access to Car2Go vehicles in all cities where the company operates, not just their home city.

[1] Submitted to San Diego Association of Governments (SANDAG) by IBI Group: *On-Street Parking Carshare Demonstration Project* (June 2009).

Table 1: Key Differences between Traditional versus Car2Go Car-Share Models

Traditional Car-Share	Car2Go
• Reservation required	• No reservation required
• Time limit on usage • Pay by minute, hour or day	• No time limit on usage • Pay by minute, hour or day
• Return vehicle to starting location when trip completed • Billing continues until vehicle returned to starting location	• No requirement to return vehicle to initial pickup point • Park in any approved location within Home Area • Billing stopped when vehicle is parked and trip has ended
• Typically used for longer, two-way trips	• Typically used for shorter, one-way trips
• Member pays parking fees outside of designated parking space	• Member pays parking fees outside of designated Home Area

Car2Go in Metro Vancouver

Car2Go launched its first Canadian service in Vancouver in 2011 with a fleet of 225 vehicles in a trial area. The company has recently grown to a fleet of over 500 vehicles, and a regional membership base of nearly 50,000. Car2Go has since expanded its Home Area in Metro Vancouver to include most of Vancouver, as well as the City of North Vancouver.

Information collected by Car2Go through a survey of its Vancouver members reveals that 34% are now using a private vehicle less often than they did prior to obtaining a membership, and that 23% have sold or are reconsidering the need for a private car. This is consistent with a study recently presented to the Metro Vancouver Regional Planning Advisory Committee meeting which noted the following:

- 51% of car-share households have no private vehicles. The regional average number of households with 2 or more vehicles is 47%; only 12% of car-share households have 2 or more vehicles.
- 39% of car-share households stated that their number of private vehicles owned decreased compared to the period 12 months prior to joining a car-share program. [2]

Similar to the twelve on-street dedicated car-share spaces along the Canada Line in Richmond mentioned above, North Vancouver and Vancouver have also designated on-street car-share parking locations in proximity to transit and near shopping, dining and entertainment. Car2Go has reserved use of these spaces for a fee based on their market value. Vehicles in those cities may also park in resident only zones with special permits, privately secured off-street locations, or any unregulated areas within their existing Home Area.

[2] Submitted to Metro Vancouver Regional Planning Advisory Committee: *Metro Vancouver Car Share Study – Preliminary Findings* (May 6, 2014).

Figure 1 below shows a Car2Go vehicle, and Figure 2 shows Car2Go's existing Home Area within Metro Vancouver.

Figure 1: A Sample Car2Go Vehicle

Figure 2: Car2Go's Current Home Area in Metro Vancouver

Car2Go in Richmond

Upon successful implementation of its service in Vancouver and North Vancouver, Car2Go conducted market research that identified Richmond as a desirable location in which to expand its Home Area. The company secured parking spaces at Kwantlen Polytechnic University's Richmond campus in 2011, and recently presented a proposal to the City of Richmond seeking access to publicly owned parking locations and advice on an appropriate trial area.

Due to its ongoing urban densification, Richmond's City Centre has been identified as an ideal trial area within which to pilot this program for area residents, businesses, workers and visitors.

The company proposes to launch this expanded service in summer or fall 2014 for a trial period of one year. All vehicles in the company's fleet would then have the ability to move freely within the Home Area (Vancouver, North Vancouver and Richmond). Based on a demand study, Car2Go anticipates initially having up to 51 vehicles out of its total fleet in Richmond at any given time. Ultimately, Car2Go may elect to expand its Home Area to encompass all of Richmond, following an evaluation of the trial program in the City Centre.

The following suitable parking locations for use by Car2Go have been identified and are outlined in the section below.

Use of City On- and Off-Street Parking Spaces

The City owns a number of on- and off-street parking locations within the City Centre that would well serve residents wishing to use Car2Go. Under the one-year pilot program, Car2Go would be provided access to the public parking locations described and outlined in Table 2 below, and identified on the map in Attachment 1. The use of these parking spaces is subject to existing parking rates and regulations.

Table 2: Proposed Car2Go Use of City Centre Public Parking Areas

Area	Type of Parking	Location	Regulation	Facilitated By
1.	On-street permit parking	Within City Centre Parking Permit Zone	Traffic Control and Regulation Bylaw No. 5870	City assignment of parking permits
2.	On-street metered (pay station) parking	Within City Centre Parking Pay Station Zone	Traffic Control and Regulation Bylaw No. 5870	Legal agreement with Car2Go for automatic billing of existing public pay parking zones
3.	Off-street metered parking lots	• 7840 Granville Avenue (Brighouse Park) • 6131 Bowling Green Road (Bowling Green) • 6500 Gilbert Road (Gateway Theatre)	Parking (Off Street) Regulation Bylaw No. 7403	Legal agreement with Car2Go for automatic billing of existing public pay parking zones
4.	On-street reserved car-share parking spaces	• 6560 Buswell Street (near Richmond-Brighouse Station) • 8888 River Road (near Bridgeport Station) • 7760 River Road (near Aberdeen Station) • 8120 Lansdowne Road (near Lansdowne Station)	Traffic Control and Regulation Bylaw No. 5870	Licence agreement with Car2Go
5.	City surface parking general car share spaces	2 spaces at 6911 No. 3 Road (City Hall)	Parking (Off Street) Regulation Bylaw No. 7403	Customer Service to initiate signage changes to City Hall surface parking area

A description of each of the applicable parking spaces is found below.

1. On-Street Permit Parking

Car2Go has requested access to on-street permit parking spaces for the number of vehicles it anticipates will be in Richmond at any given time. Staff have determined that these permit zones have surplus capacity to accommodate the 51 permits requested by Car2Go.

The 51 permits will be assigned to Car2Go vehicles at current standard rates, recognizing that only a portion of the 51 vehicles will ever be parked in permit zones at any one time. Car2Go vehicles will be allowed to park interchangeably in the three different parking permit zones currently designated within the City Centre. The number of permits issued may increase or decrease after the first six months, based on actual Car2Go use of these permit zones, as identified by an electronic and field audit conducted by the City.

2. On Street Metered (Pay Station) Parking

The City will provide Car2Go users, on a first-come, first-served basis, access to the public metered parking spaces with the City Centre, as outlined in Table 2 above. Fees charged will be consistent with what is currently charged to any member of the public wishing to access these spaces, as per the posted regulatory signage.

The cellular payment system currently used by the City, *Verrus Pay by Phone*, will be integrated with the company's web-based open API system to automatically track all parking usage of these paid locations, for which the City will invoice Car2Go monthly. This will synchronize with the company's business model, whereby Car2Go pays for all ancillary fees (including parking fees within the Home Area) on behalf of its members.

3. Off-Street Metered Parking Lots

The three City-owned parking lots in the City Centre, referenced in Table 2 above, are available to the public by either purchasing a monthly parking permit or purchasing incremental time at a parking meter. Because these lots are frequently used by a variety of groups and operate near capacity during peak times, no permits are to be assigned to Car2Go for these lots.

Car2Go access to these locations (which provide users access to Gateway Theatre, Brighouse Park and Minoru Park) will be granted on a first-come, first-served basis, similar to on-street metered locations. Through integration with the *Verrus Pay by Phone* system, all use of these lots by Car2Go members will be tracked automatically and billed monthly.

4. On-Street Reserved Car-Share Parking Spaces

On September 24, 2012, Council approved an amendment to Traffic Control & Regulation Bylaw No. 5870 to allow for the designation of up to 12 reserved on-street car-share parking spaces in proximity to the Canada Line stations. Under that authority, Car2Go would enter into a separate licence agreement with the City to access four of those spaces (one at each Canada Line station in Richmond) at a rate of $300 per space per year.

These spaces are the only parking spaces in Richmond to be designated for Car2Go's exclusive use. As Modo currently has a license to use two of the 12 spaces, six spaces would remain available for any other car-share company on a first-come, first-served basis.

5. City Hall Surface Parking General Car Share Spaces

Two general car-share parking spaces will be designated in the City Hall parking lot, adjacent to the existing electric vehicle charging stations. These spaces will be reserved for use by Car2Go or any other car-share company, and subject to the established time limit.

6. Private Parking Spaces

Car2Go is also working to secure privately owned parking locations at strategic, high visibility areas of the City Centre such as shopping malls, universities and community attractions. In addition, the City has secured through the development application process nine car-share spaces within new developments in the City Centre; one has been completed for Maclean Homes (6600 Cooney Rd. / 6611 Eckersley Rd.), and eight have yet to be constructed (see Attachment 1). Staff will facilitate discussions between Car2Go and the developers towards pursuing any private agreements for the use of these spaces.

Consultation with Richmond Parking Advisory Committee

Staff discussed Car2Go's interest in expanding into Richmond with the Richmond Parking Advisory Committee (RPAC) at its March 5, 2014 meeting. At that meeting, members expressed support for car-share services and suggested that more education and awareness of the services are needed for the general public, which could also forestall any potential complaints associated with reserving parking spaces for car-share operators. To this end, Car2Go will commence a marketing program for launching the new service in Richmond. Staff will share any further comments from RPAC made at its next meeting to be held June 4, 2014 meeting and provide a verbal update when this report is presented to the Public Works & Transportation Committee.

Business Terms

Based on the above arrangement, a list of proposed material terms is found in Attachment 2. These proposed terms, if endorsed by Council, will be used to develop a legal agreement for establishing a trial period of one year for the program and facilitate automatic billing for City-owned pay parking locations within Richmond's City Centre. As with the general public, Car2Go and its members will be subject to all applicable fees, bylaws and regulations.

Monitoring and Follow-Up

Provided the proposed pilot program is endorsed and launched, staff will review the program upon completion of the one-year trial period. Outcomes will be reported back to Council with recommendations regarding its continuation, including a possible expansion of the Home Area to other parts of Richmond.

Financial Impact

Upon pilot launch Car2Go will pay the following fees to the City for access of City-owned parking locations:

- $1,200 plus tax per year for exclusive use of four on-street reserved parking spaces near the Canada Line
- $2.50 plus tax per vehicle, per hour, for use of on- and off-street metered parking
- $50 plus tax per month, per vehicle, for use of on-street permit parking (subject to volume discounts as per Bylaw No. 5870)

Actual parking revenue received through this program will be realized monthly and total revenue reported back to Council after the completion of the one-year pilot period. Directly related to the car share program, any parking sign amendments, in the form of re-decaling will be financed through program permit fees, therefore resulting in no negative financial impacts to the City.

Conclusion

Car2Go has identified Richmond as a desirable growth market in which to expand its Metro Vancouver car sharing service, and has approached the City to facilitate access to publicly owned parking locations. Consistent with the 2041 Official Community Plan (OCP) adopted by Council, the use of more sustainable modes of transportation such as walking, transit and car sharing is encouraged. Recognizing that car-sharing supports several Council goals and policies related to public transportation, environmental sustainability and economic development, staff have identified a variety of suitable parking locations within the City Centre and have worked with Car2Go to develop business terms for a trial program.

All proposed fees are consistent with existing rates charged to the public for access to these locations, and all existing parking regulations would apply. This approach would support car-sharing by giving Car2Go access to high profile locations without negatively impacting the City's operating budget or amending existing parking bylaws. In order to further encourage car-sharing in Richmond, staff recommend the endorsement of this pilot program in the City Centre on a one-year basis, with a review of outcomes to occur upon its conclusion.

Katie Ferland
Business Development Liaison
(604) 247-4923

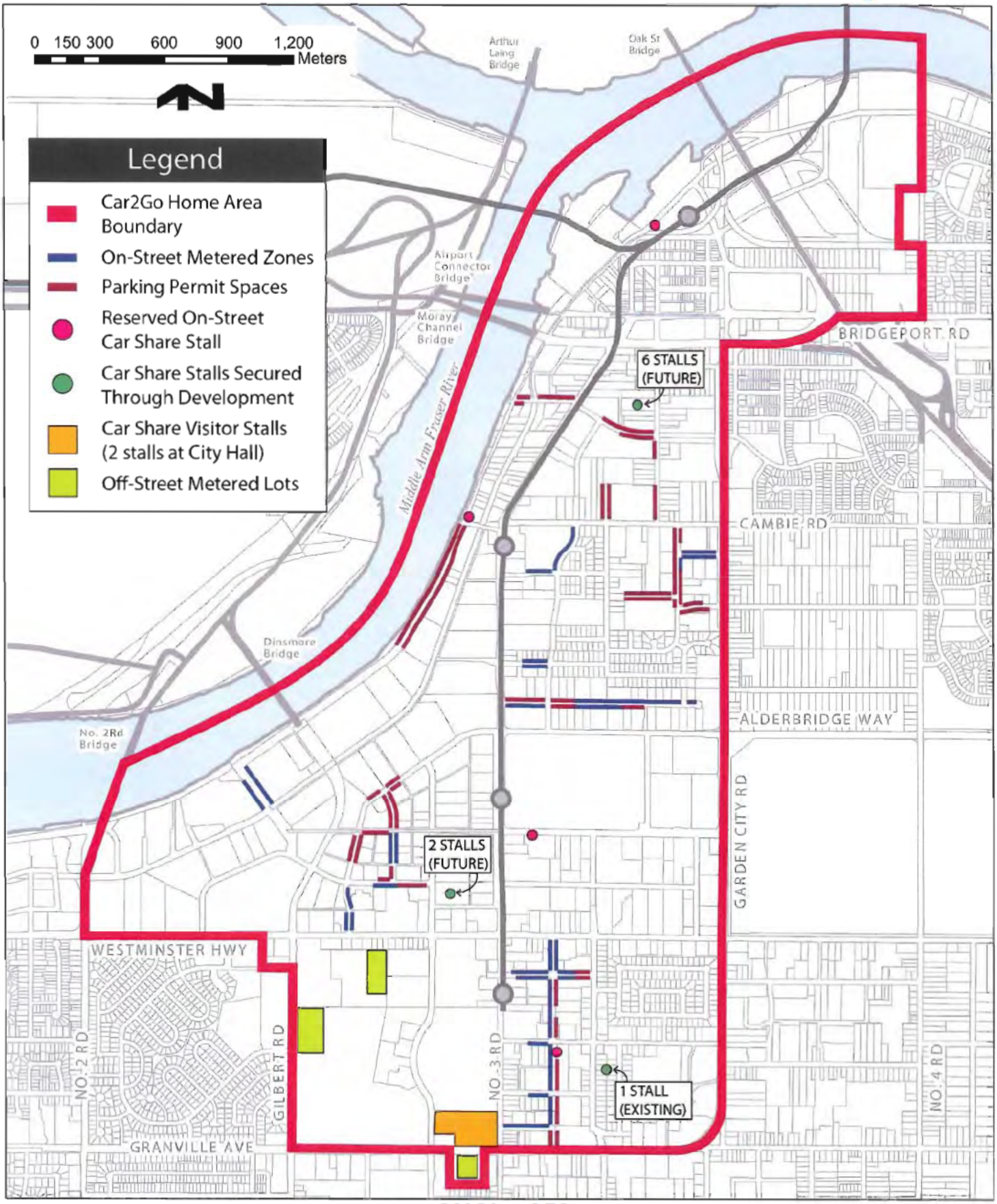
Sonali Hingorani, P. Eng.
Transportation Engineer
(604) 276-4049

KF/SH:kf/sh

Att. 1: Map of Public Parking Spaces to be Used by Car2Go
2: City of Richmond-Car2Go Key Business Terms

Attachment 1

Car2Go Richmond Home Area Map



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City of Richmond / Car2Go Agreement
Proposed Business Terms - May 28, 2014

1. *Home Area*:

   (a) The Richmond Home Area is defined by the boundary of the map enclosed as Attachment 1.

   (b) The City will provide Car2Go access to City-owned parking locations within this Home Area, as described in Section 2 below.

   (c) It is Car2Go's responsibility to communicate the Home Area boundary to its members.

2. *Access to City-owned Parking Locations*:

   Car2Go vehicles may be parked in the following City-owned locations, in accordance with respective regulatory signage and applicable bylaws:

   (a) On-street permit areas identified as "Zone 1", "Zone 2" and "Zone 3" in Schedule M to Bylaw No. 5870. A parking permit assigned by the City to Car2Go allows Car2Go vehicles to park interchangeably in all three zones.

   (b) On-street metered areas as per Schedule L to Traffic Control and Regulation Bylaw No. 5870.

   (c) Off-street metered parking lots identified as Items 1, 2 and 4 in the Parking (Off Street) Regulation Bylaw No. 7403 at the following locations:

      (i) 7840 Granville Avenue (Brighouse Park parking lot);
      (ii) 6131 Bowling Green Road (Bowling Green parking lot);
      (iii) 6500 Gilbert Road (Gateway Theatre parking lot).

3. *Payment of Fees*:

   (a) On-Street Permit Areas

      (i) The City will invoice Car2Go monthly for each permit assigned, as per the fees and subject to applicable volume discounts set out in Section 12B.5 of Bylaw No. 5870.
      (ii) The initial number of permits issued will be 51, based on Car2Go's projected maximum vehicle occupancy throughout Richmond permit zones at any given time.
      (iii) At the end of six months, if more than 51 Car2Go vehicles have been found to occupy Richmond Permit Zones 1, 2 and 3 combined at any given time, the City may require Car2Go to purchase additional permits for the next six months. Likewise, if the maximum number of vehicles parked in these zones at any given time during the six-month period has been less than 51, the City may assign Car2Go fewer permits for the next period.

(b) On-Street and Off-Street Metered Areas

(i) At the beginning of each month, the City will invoice Car2Go for the previous month's use of the following locations:
   a. On-street metered parking as per the fees and pay periods designated in Bylaw No. 5870.
   b. Off-street metered parking as per the fees and pay periods designated in Bylaw No. 7403.

(ii) Where the terms, including pay periods and rates, differ between the applicable bylaw and posted signage, the signage will be deemed correct and rates charged accordingly.

(iii) In any on-street or off-street metered area, the City retains the right to charge Car2Go for any stays beyond the maximum allowed time within the pay period, at the standard meter rates per hour or issue violation notices and/or tickets under existing regulations as per Section 4 below.

4. *Parking Enforcement*:

(a) Car2Go and its users are required to comply with all City Bylaws including Traffic Control & Regulation Bylaw No. 5870 and Parking (Off-Street) Regulation Bylaw No. 7403, and are otherwise subject to enforcement through issuance of "Notice of Bylaw Violations" and in accordance with the fines and conditions as specified under City Bylaw No. 8122.

(b) Parking fees within the Home Area and bylaw violation notices throughout Richmond incurred by any Car2Go vehicle will be directed to Car2Go for payment.

(c) Car2Go vehicles found to be in breach of any time limits as stated in the above bylaws must be relocated within 24 hours of receipt of written notification from the City.

(d) Car2Go vehicles not re-located beyond the above prescribed 24 hour period will be subject to ticketing and/or towing and all such costs will be charged to Car2Go.

(e) Car2Go vehicles parked in such a way to pose a safety hazard, as deemed by a Bylaw Officer, will be subject to immediate towing, without notice and all such costs will be charged to Car2Go.

5. *Pay by Phone Integration*:

(a) Car2Go will integrate into the Verrus Pay by Phone cellular payment system in order to track, compute and remit payment to the City for all metered area occupancy in Richmond.

(b) Car2Go will provide the City with read-only access of their Verrus Pay by Phone cellular payment system account data for Richmond, for the purpose of validating &/or auditing metered area occupancy.

6. *Vehicle Re-distribution*:

   To address any undesirable concentration of Car2Go vehicles in a particular area, Car2Go will manually re-distribute its vehicle(s) within 48 hours of receipt of notification by the City.

7. *Term*:

   The initial pilot program shall be for one (1) year. Continuation of agreement will be subject to review of pilot program and subsequent Council approval.

8. *Auditing*:

   Car2Go will provide detailed usage reports as requested by the City up to 4 times per year. Reports will include the number, location and duration of stay of vehicles in Richmond throughout the period.

9. *Decals*:

   Car2Go owned vehicles will be recognized as authorized Richmond parking permit holders by way of their vehicle identification/branding. Therefore, any vehicles not publically displaying the prescribed identification will be excluded from this agreement.

10. *Right to Terminate*:

    Subject to a six-week written notification period by either party.

City of Richmond

Report to Committee

To:	Public Works and Transportation Committee	**Date:**	May 27, 2014
From:	Tom Stewart, AScT. Director, Public Works	**File:**	10-6000-01/2014-Vol 01
Re:	**2013 Annual Water Quality Report**		

Staff Recommendation

That the "2013 Annual Water Quality Report", dated May 27, 2014 be received for information.

Tom Stewart, AScT.
Director, Public Works
(604-233-3301)

Att. 2

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS:
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 modernized on April 29, 2014 under Bill 18 – 2014: the Water Sustainability Act. This report enables the City to meet its obligations for public reporting.

Analysis

The Drinking Water Protection Regulation requires water purveyors in BC to possess an operating permit, which in effect, confirms that 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 (BCDWPR), and any other conditions of the operating permit.

Under the BCDWPR, 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
- Implement and maintain a plan for reporting monitoring results to the Drinking Water Officer and to water users.

Richmond thrives on its ability to provide water for not only the Fire Department in the event of a fire, but for residents and businesses seeking a glass of the world's finest tap water. To ensure a consistent supply, the capital watermain replacement program is a proactive approach to avoiding breaks and has proved to be a reliable and valuable tool in water distribution management. In 2013, Public Works staff attended to 20 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.

Highlights of the 2013 Annual Water Quality Report include:

- Richmond residents enjoyed high-quality, reliable drinking water
- 1,997 water samples were collected to ensure water quality and passed with outstanding results
- Test results confirm high quality water and demonstrate continuous improvement
- 36.9M cubic metres of water were purchased in 2013 compared to 37.7M cubic metres in 2012
- Richmond's tap water stations are used in many community events providing potable water to the public and promoting tap water usage

- The educational programs Project WET and "H2Whoa!", where elementary students learn about the benefits of water conservation, represents the partnership between Richmond School Board and Public Works

These and many other initiatives are detailed in the attached "2013 Annual Water Quality Report".

Financial Impact

None

Conclusion

This plan has been reviewed and endorsed by the Medical Health Officer of Vancouver Coastal Health Authority for the City of Richmond and satisfies Provincial requirements under the Drinking Water Protection Act.

Bryan Shepherd
Manager, Water Services
(604-233-3334)

BS:nk

Att. 1: Report to Committee
2: 2013 Annual Water Quality Report
3: 2013 Annual Water Quality Report Summary

City of Richmond

2013 Annual Water Quality Report Summary

In 2013, Richmond residents enjoyed high-quality and reliable drinking water. Water Services staff collected 1,997 water samples from 39 sampling sites to ensure 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.

Water quality sampling

Using a logger for leak detection

Project WET

Installing a PVC pipe

How does Richmond provide high-quality tap water?

- By testing all 39 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 six PRV sites;
- weekly microbiological testing;
- system operators that are certified by the Environmental Operators Certification Program of BC;
- employment of maintenance practices that are of the highest standard.

Heterotrophic Plate Count (HPC)

- The HPC indicates the presence of nutrients that could facilitate the growth of harmful bacteria such as E. coli.
- HPCs indicate the presence of nutrients in the water system.
- 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.

2013 Results

- Provided 36.9 million cubic metres of the highest quality drinking water to nearly 205,200 Richmond residents. Staff anticipate that this 2% decrease from 2012 (37.7 million cubic metres) is because of the leak detection program, the water meter program and the water conservation programs offered to Richmond residents.
- Conducted 1,997 microbiological tests.
- Maintained 14 pressure reducing value (PRV) stations.
- Maintained 4,700 fire hydrants to ensure water is available during an emergency.
- Repaired 20 watermain breaks without compromising the integrity of the water distribution system.
- Discovered and repaired 48 non-visible underground leaks through Richmond's leak detection program.
- Hosted over 500 students from Richmond elementary schools as part of the annual educational program: Project WET.
- Identified 24 watermain leaks with loggers, devices are used to measure sound frequencies in the targeted pipe allowing any leaks to be heard and recorded.

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!

Richmond

City of Richmond

2013 Annual Water Quality Report

Richmond

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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Water Conservation Programs 18
Water Education Programs 19
Conclusion 23
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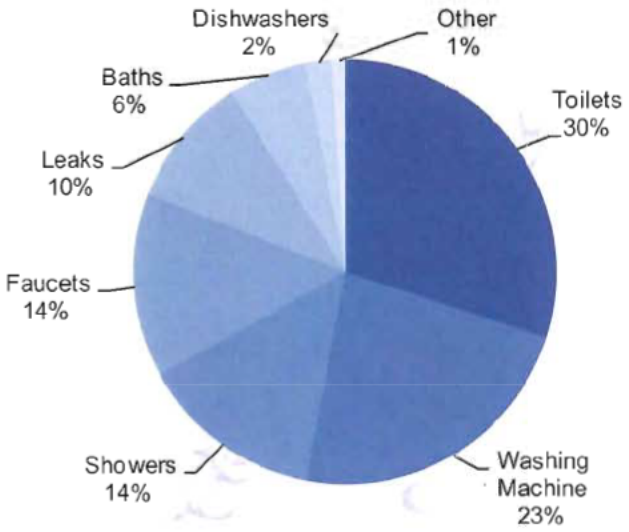
Typical Household Water Usage

Fixture/Appliance	Percentage Used
Toilets	30%
Washing Machine	23%
Showers	14%
Faucets	14%
Leaks	10%
Baths	6%
Dishwashers	2%
Other	1%

Table from Metro Vancouver 2013 www.metrovancouver.org



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 2013, the City of Richmond's Water Services staff undertook the following:

- provided 36.9 million cubic metres of the highest quality drinking water to nearly 205,200 Richmond residents. Staff anticipate that this 2% decrease from 2012 (37.7 million cubic metres) is because of the leak detection program, the water meter program and the water conservation programs offered to Richmond residents;
- conducted 1,997 microbiological tests;
- maintained 14 pressure reducing value (PRV) stations;
- maintained 4700 fire hydrants to ensure water is available during an emergency;
- repaired 20 watermain breaks without compromising the integrity of the water distribution system;
- discovered and repaired 48 leaks through Richmond's leak detection program;
- hosted over 500 students from Richmond elementary schools as part of the annual educational program: Project WET;
- organized the "H2Whoa!" theatrical presentations at 16 Richmond elementary schools, teaching students in grades K-7 all about water, the water cycle and water conservation;
- identified 24 watermain leaks with loggers, devices are used to measure sound frequencies in the targeted pipe allowing any leaks to be heard and recorded.

The City of Richmond's Water Services division takes its role as a water purveyor very seriously and is proud to be the guardian of such a precious resource.

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 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 III Equipment Operators Certification Program (EOCP) certificate. To obtain and maintain a Level III certificate, 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:

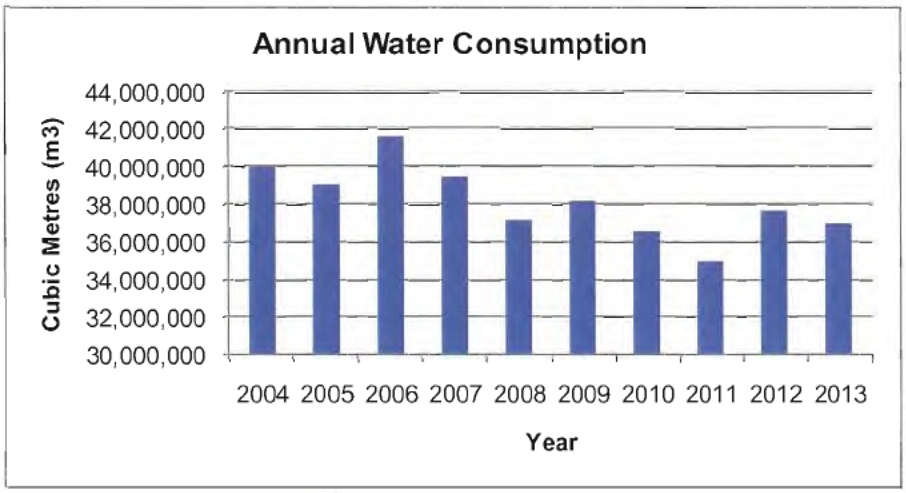
- develop a process to notify the Medical Health Officer of any condition that could render unsafe drinking water;
- implement a sampling program that adequately represents all areas within the City;
- meet the requirements of the *British Columbia Drinking Water Protection Act (BCDWPA)*, and ensure 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.

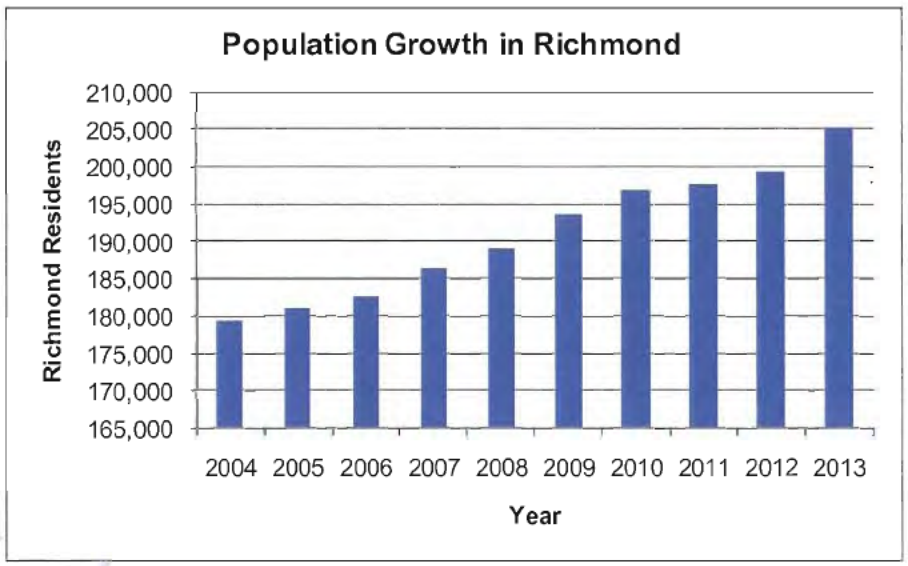
Water leads to overall greater health by flushing out wastes and bacteria that can cause health problems and is the primary mode of transportation for all nutrients in the body and is essential for proper circulation.

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.

Metro Vancouver Water District

In 2013, the City of Richmond purchased 36.9 million cubic meters of drinking water from the Metro Vancouver Water District. The 2013 water consumption represents a 2% drop from 2012. Staff anticipate that this reduction is because of the leak detection program, the water meter program and the water conservation programs offered to Richmond residents.





Three watersheds supply regional water: Capilano Reservoir, Seymour Reservoir, and Coquitlam Reservoir. The Capilano and Seymour Reservoirs combined, supply approximately 70% of the water for the region. The Coquitlam Reservoir supplies the remaining approximate 30%. 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.

During periods of turbidity (cloudy water), a reservoir may be taken out of service if turbidity levels become elevated. Water is then supplied by the remaining reservoirs. The plant has the capacity to filter up to 1.8 billion liters of water per day.

Metro Vancouver Watersheds

Lawns need only 25 millimetres of water per week, including rain. Longer, infrequent watering will help to develop deeper, healthier roots. Keep your grass two to two and half inches high and you will help the soil retain moisture and reduce evaporation from sunlight and wind.

Capilano Watershed

Source Water Quality

Source water is provided directly from the watersheds by Metro Vancouver. Source water is tested for a number of microbiological, chemical, and physical parameters. For information related to source water, refer to *The Greater Vancouver Water District Quality Control Annual Report* available on the Metro Vancouver's website.

www.metrovancouver.org/services/water/qualitytreatment/pages/default.aspx

A high-efficiency washing machine uses up to 40% less water and 50% less energy than top-loading machines. They also use less detergent.

Water Distribution System Overview

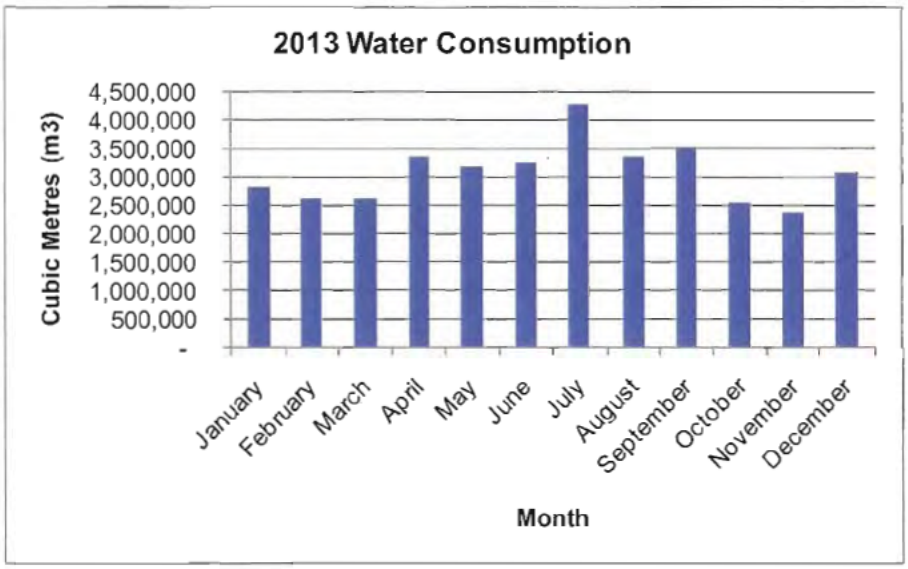
The City of Richmond's water distribution system begins at 14 separate connection points along Metro Vancouver's transmission mains. At each connection point there is a City owned pressure reducing valve (PRV) chamber. The City's responsibility for water quality begins at this chamber and ends at the residential or commercial property line.

Table 1—Overview of Richmond's Water Distribution Network

Water Assets	2013
Hydrants	4,694
Valves	10,586
PRV chambers	14
Pigging chambers	11
End caps	501
Watermains	649 km
Service connections	30,212

The Water Services division maintains 14 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.

Nelson Road PRV Station



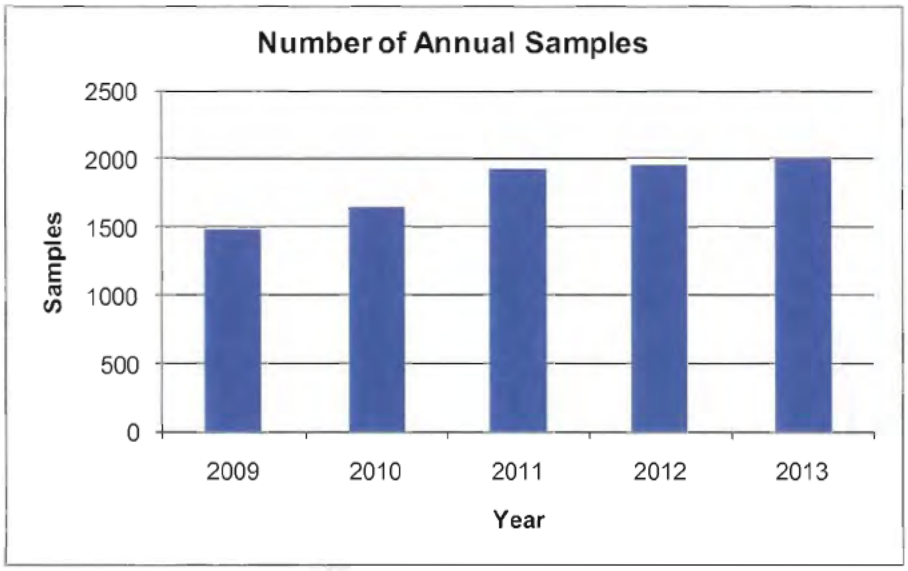
The City of Richmond rain barrel program continues to assist residents by reducing the amount of water used for irrigation during the summer months.

The table above indicates the monthly water consumption in Richmond. It is estimated that most municipalities in North America lose approximately 10% 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.

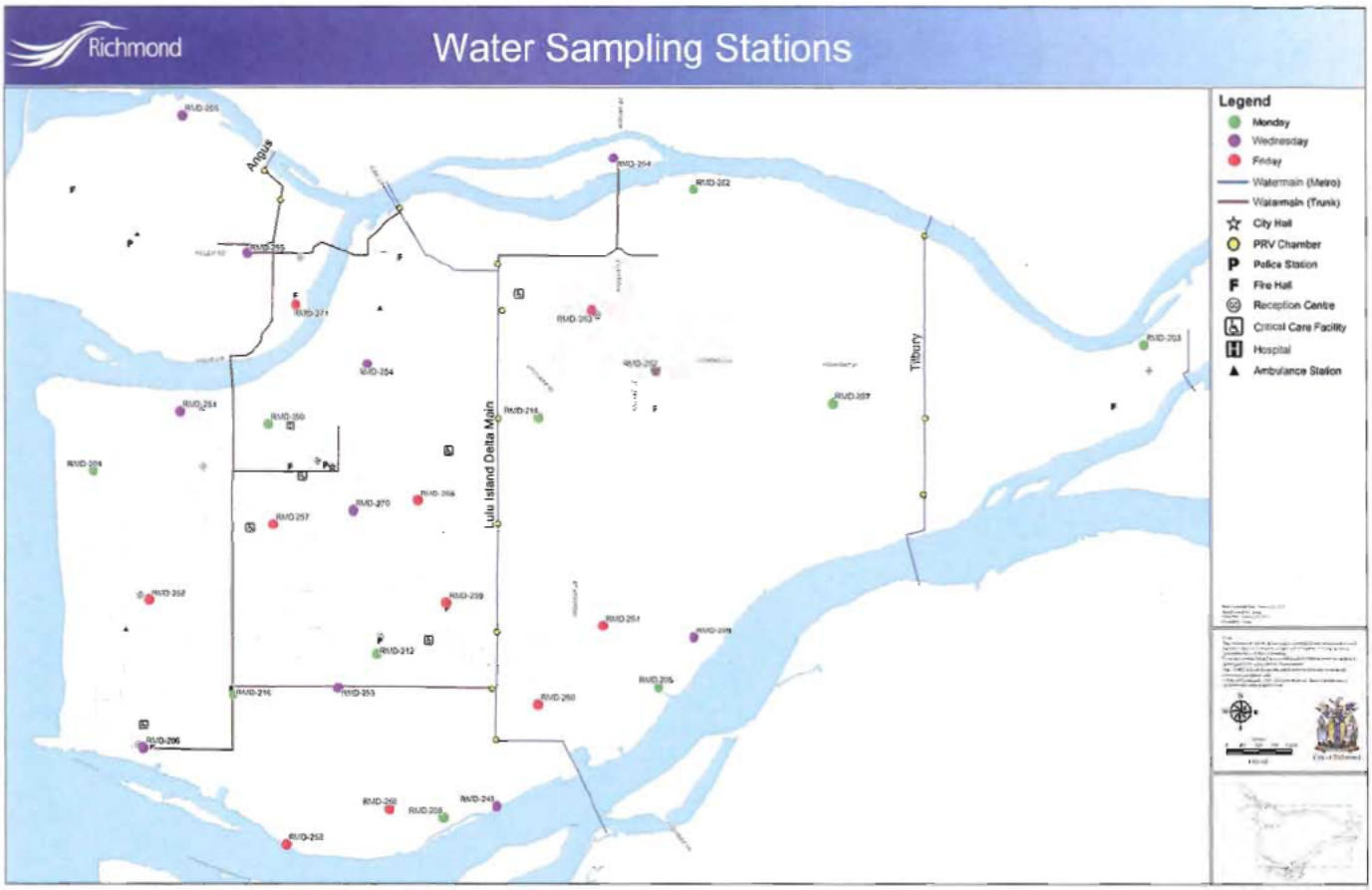
Water quality sampling

Water Quality Monitoring

In 2013, the City of Richmond collected samples on a weekly basis at 39 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 2013, 1,997 water samples were collected by Richmond 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)*.



Water quality testing



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.

Keep a bottle of drinking water in the refrigerator instead of running the tap for cold water.

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;
- system operators that are certified by the Environmental Operators Certification Program (EOCP) of BC;
- employment of maintenance practices that are of the highest standard.

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

Leave grass clippings on your lawn. They'll help trap moisture to reduce evaporation and break down to feed your lawn naturally.

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 milliliters, and that 90 percent 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 100ml sample.

2013 Results

In 2013, 1,997 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 2013.

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 2013, two of 1,997 samples exceeded regulated levels for HPC's at >500 CFU/mls. Water Services staff flushed the corresponding section of watermain until an acceptable result was obtained and verified through additional sampling procedure.

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)*.

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 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.

Turbidity sensor

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. Samples exceeded the aesthetic guideline of 15°C 65 times out of 1,997 samples with temperatures as high as 20°C were recorded. The majority of these elevated temperatures were recorded during the summer months.

If you shorten your shower time from 10 minutes to five minutes or less while using a 9.5 litre per minute (lpm) showerhead, you can save up to 40 litres of water each time you shower. You can also save water by turning off the water while lathering in the shower.

CNCL - 374

Scrape dishes instead of rinsing them under running water before loading your dishwasher. For heavy cleaning of grills or oven parts pre-soak overnight.

Taste and Odour

Taste and odour are only monitored in response to customer complaints. Records indicate that six complaints were received regarding taste and four complaints were received regarding odour in 2013. 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 2012, 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 2013, 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 2013. Complete test results are included in Appendix 6.

You should replace your old toilet with a high efficiency 4.8 lpf model (HET), or a dual 3/6 lpf model. Older models can use as much as 13 to 26 litres of water per flush. A family of four can save up to 30,000 litres of water a year with a HET toilet. That's a 20% reduction in household consumption. The City of Richmond's Toilet Rebate Program is a great incentive to promote water conservation.

The average Canadian uses 329 litres of fresh water on a daily basis. However in a recent study just 4% of Canadians were able to properly identify that Canadians use, on average, 329 litres of water a day. Most guessed that a significantly lower amount of water was used.

Mobile Emergency Response Unit

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.

Mobile Emergency Response Unit

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 quality of their drinking water. An example is included in Appendix 7.

Table 2—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

One house of lawn sprinkling uses as much water as 25 toilet flushes, five loads of laundry and five dishwasher loads combined.

Quality standards for bottled water and tap water are similar. Both bottled water and municipally distributed tap water that meet or exceed their required health and safety standards, are considered to be safe.

Rain barrel

Water Conservation Programs

Toilet Rebate Program

The City of Richmond's Toilet Rebate Program provides a utility tax 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 household. 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 2013, there were 852 rebates submitted.

Rain Barrel

Rain barrels are excellent outdoor water-saving devices that collect and store rainwater from rooftops for lawn and garden use. Rain water is an excellent 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.

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.

Single-Family and Multi-Family Water Meter Programs

The water meter program was endorsed by Richmond City Council in 2003, and is designed as a strategy for fairness and equity of water use. The City of Richmond is working with Neptune Technology Group (Canada) Ltd. implementing a program that will allow residents to pay only for the actual amount of water they use, rather than being billed on the flat-rate system.

For more information, please contact:

Richmond Water Meter Program: 604-271-9700
www.watermeter.ca

Water Education Programs

Project WET

Project WET is an interactive elementary school water education program aimed at teaching students about the importance of water. Largely targeted for grades four through seven, this program is designed to educate students on the importance of water quality, supply.

Project WET is an exciting partnership program between the City of Richmond and the Richmond School District No. 38. 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 2013, over 500 students participated in the program.

Four Key Elements of the Project WET are:

1. **Water as a System**—Tracing how water falls on the local mountains in the form of rain or snow, making its way through the water infrastructure system and arriving in our homes when we turn on the tap.
2. **Water Conservation and Water Quality**—Why water conservation and water quality are important, what the City is doing to sustain our water capacity and what students can do to help.
3. **Why Drainage is so Important**—The storm system carries wastewater to the river, in compliment with an essential ditch-drainage system in Richmond. Students will learn how these drainage systems work and the importance of keeping toxic materials out of ditches and storm sewers.
4. **Richmond is a Unique Island**—Richmond is the only city in North America completely surrounded by dykes. Students will learn why dykes are critical in Richmond and how important it is to maintain them.

Within the four key areas of discussion during the tour to the Works Yard, students can expect to learn many exciting areas of water and drainage systems such as:

- water sampling and quality testing;
- technological changes;
- the importance of fire hydrants and how they work;
- the uses of watermains, automatic flushing units, valves and meters;
- inspection camera technology;
- storm sewer pipes and systems;
- pump stations and how they work;
- how our dykes help to keep our island afloat;
- Richmond's emergency water treatment trailer.

Washing machines use anywhere between 100–200 litres of water per load. Operate washing machines at full capacity and/or if your machine has a "suds-saver" feature, be sure to use it as this feature reuses the clean rinse water for washing the next load.

Do not use the toilet as a garbage can. Tissues and other items are often flushed away instead of going into appropriate disposal containers. Unnecessary flushing of the toilet even once a day can waste up to 1,000 litres of water per year.

Drinking water/bottle refill unit at Garry Point

Staff demonstrating the City's water systems

Staff educating students on acoustics

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 Malcolm Brodie endorsed this campaign indicating that the City of Richmond is dedicated

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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 division is proud to maintain several tap water stations 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.

A healthy lawn only needs to be watered one hour a week, or less if it rains.

Tap water station at a community event

Public Works Open House

The Water Services division 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.

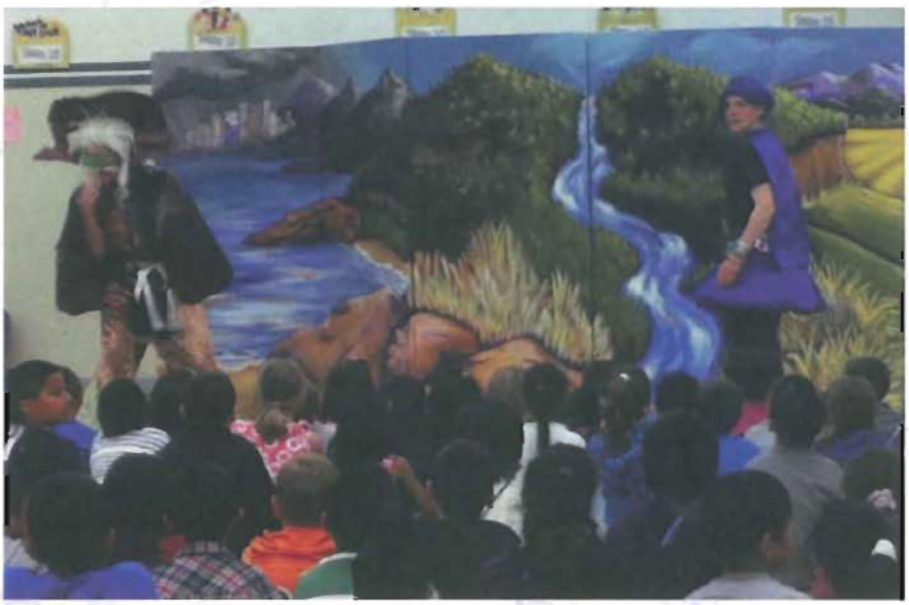
A leaking service line or pipe in your home can add up to serious water waste. A small hole in a pipe (1.5 mm) wastes 280,000 litres of water in a three-month period. That is enough water to do about 900 loads of laundry.

Annual Public Works Open House

"H2Whoa!" Theatrical presentation by DreamRider Productions

The City of Richmond Water Services division organized 16 "H2Whoa!" theatrical presentations at Richmond elementary schools. "H2Whoa!" teaches students in grades K-7 all about water, the water cycle and water conservation.

The focus of this presentation is on positive actions and educating family and friends on the use of water, the need to protect it and its importance to everyday living. In addition, at the request of the City of Richmond Water Services, information regarding Richmond's high quality and very drinkable tap water was included in the script. In 2013, 16 Richmond elementary schools viewed the educational production.



"H2Whoa!" performance by DreamRider Theatre

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Conclusion

In 2013, 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. To be used on other parts of the MV website.

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 division 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.

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: 2013 WATER QUALITY RESULTS

APPENDIX 4: SCADA AND PRESSURE TESTING SITES

APPENDIX 5: 2013 THM AND HAA TEST RESULTS

APPENDIX 6: 2013 HEAVY METAL TESTING RESULTS AND VINYL CHLORIDE 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
2. 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

APPENDIX 2: WATER SAMPLING SITES

	SAMPLING STATION NUMBER	WATER SAMPLING SITES
MONDAY	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
	RMD-212	Opposite 8600 Ryan Road
	RMD-214	11720 Westminster Highway
	RMD-216	11080 No. 2 Road
	RMD-267	17240 Fedoruk Road
	RMD-275	5180 Smith Crescent
	RMD-276	22271 Cochrane Drive
TUESDAY	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
	RMD-262	13799 Commerce Pkwy
	RMD-263	12560 Cambie Road
	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
WEDNESDAY	RMD-249	23000 Block Dyke Road
	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
	RMD-255	6000 Blk. Miller Road
	RMD-256	1000 Blk. McDonald Road
	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

APPENDIX 3: 2013 WATER QUALITY RESULTS

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-263	GRAB	12560 Cambie Rd.	2-Jan-13	0.66	<1	<2	5	<1	0.13
RMD-264	GRAB	13100 Mitchell Rd.	2-Jan-13	0.63	<1	<2	3	<1	0.28
RMD-277	GRAB	Opp. 11280 Twigg Place	2-Jan-13	0.67	<1	<2	3	<1	0.37
RMD-262	GRAB	13799 Commerce Pkwy.	2-Jan-13	0.51	<1	<2	3	<1	0.19
RMD-278	GRAB	6651 Fraserwood Place	2-Jan-13	0.67	<1	<2	5	<1	0.24
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	2-Jan-13	0.71	<1	2	5	<1	0.21
RMD-261	GRAB	9911 Sidaway Rd.	2-Jan-13	0.62	<1	<2	5	<1	0.21
RMD-260	GRAB	11111 Horseshoe Way	2-Jan-13	0.69	<1	<2	4	<1	0.2
RMD-259	GRAB	10020 Amethyst Ave.	2-Jan-13	0.61	<1	<2	5	<1	0.12
RMD-266	GRAB	9380 General Currie Rd.	2-Jan-13	0.48	<1	<2	5	<1	0.15
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	2-Jan-13	0.67	<1	<2	5	<1	0.16
RMD-258	GRAB	7000 Blk. Dyke Rd.	2-Jan-13	0.7	<1	<2	5	<1	0.08
RMD-257	GRAB	6640 Blundell Rd.	2-Jan-13	0.76	<1	<2	5	<1	0.13
RMD-204	GRAB	3180 Granville Ave.	4-Jan-13	0.34	<1	<2	5	<1	0.11
RMD-206	GRAB	4251 Moncton St.	4-Jan-13	0.56	<1	<2	5	<1	0.19
RMD-216	GRAB	11080 No. 2 Rd.	4-Jan-13	0.62	<1	<2	5	<1	0.28
RMD-212	GRAB	Opp. 8600 Riyan Rd.	4-Jan-13	0.46	<1	<2	5	<1	0.18
RMD-208	GRAB	13200 No. 4 Rd.	4-Jan-13	0.68	<1	<2	5	<1	0.09
RMD-205	GRAB	13851 Steveston Hwy.	4-Jan-13	0.7	<1	<2	5	<1	0.11
RMD-202	GRAB	1500 Valemont Way	4-Jan-13	0.69	<1	<2	6	<1	0.22
RMD-214	GRAB	11720 Westminster Hwy.	4-Jan-13	0.6	<1	<2	6	<1	0.1
RMD-267	GRAB	17240 Fedoruk	4-Jan-13	0.61	<1	<2	6	<1	0.18
RMD-249	GRAB	23000 Blk. Dyke Rd.	4-Jan-13	0.71	<1	<2	7	<1	0.19
RMD-276	GRAB	22271 Cochrane Drive	4-Jan-13	0.65	<1	<2	6	<1	0.18
RMD-275	GRAB	5180 Smith Cres.	4-Jan-13	0.63	<1	<2	6	<1	0.24
RMD-203	GRAB	23260 Westminster Hwy.	4-Jan-13	0.81	<1	<2	6	<1	0.23
RMD-251	GRAB	5951McCallan Rd.	7-Jan-13	0.67	<1	<2	4	<1	0.11
RMD-250	GRAB	6071 Azure Rd.	7-Jan-13	0.66	<1	<2	4	<1	0.24
RMD-271	GRAB	3800 Cessna Drive	7-Jan-13	0.65	<1	<2	2	<1	0.17
RMD-272	GRAB	751 Catalina Cres.	7-Jan-13	0.64	<1	<2	3	<1	0.1
RMD-255	GRAB	6000 Blk. Miller Rd.	7-Jan-13	0.6	<1	<2	3	<1	1.2
RMD-256	GRAB	1000 Blk. McDonald Rd.	7-Jan-13	0.58	<1	<2	3	<1	0.13
RMD-254	GRAB	5300 No. 3 Rd.	7-Jan-13	0.69	<1	<2	3	<1	0.11
RMD-270	GRAB	8200 Jones Rd.	7-Jan-13	0.57	<1	<2	4	<1	0.12
RMD-269	GRAB	14951 Triangle Rd.	7-Jan-13	0.56	<1	<2	4	<1	0.09
RMD-253	GRAB	11051 No 3 Rd.	7-Jan-13	0.58	<1	2	4	<1	0.1

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-274	GRAB	10920 Springwood Court	7-Jan-13	0.53	<1	<2	6	<1	0.11
RMD-252	GRAB	9751 Pendleton Rd.	7-Jan-13	0.63	<1	<2	5	<1	0.11
RMD-273	GRAB	Opp. 8331 Fairfax Place	7-Jan-13	0.59	<1	2	5	<1	0.13
RMD-257	GRAB	6640 Blundell Rd.	9-Jan-13	0.67	<1	<2	6	<1	0.16
RMD-258	GRAB	7000 Blk. Dyke Rd.	9-Jan-13	0.56	<1	<2	6	<1	0.15
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	9-Jan-13	0.18	<1	<2	6	<1	0.15
RMD-259	GRAB	10020 Amethyst Ave.	9-Jan-13	0.54	<1	<2	6	<1	0.19
RMD-260	GRAB	11111 Horseshoe Way	9-Jan-13	0.67	<1	<2	6	<1	0.17
RMD-261	GRAB	9911 Sidaway Rd.	9-Jan-13	0.5	<1	<2	6	<1	0.2
RMD-278	GRAB	6651 Fraserwood Place	9-Jan-13	0.43	<1	2	7	<1	0.23
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	9-Jan-13	0.62	<1	<2	6	<1	0.29
RMD-264	GRAB	13100 Mitchell Rd.	9-Jan-13	0.64	<1	<2	6	<1	0.23
RMD-277	GRAB	Opp. 11280 Twigg Place	9-Jan-13	0.62	<1	<2	5	<1	0.21
RMD-263	GRAB	12560 Cambie Rd.	9-Jan-13	0.64	<1	<2	5	<1	0.18
RMD-262	GRAB	13799 Commerce Pkwy.	9-Jan-13	0.56	<1	<2	6	<1	0.23
RMD-266	GRAB	9380 General Currie Rd.	9-Jan-13	0.65	<1	<2	5	<1	0.28
RMD-204	GRAB	3180 Granville Ave.	11-Jan-13	0.35	<1	<2	4	<1	0.17
RMD-206	GRAB	4251 Moncton St.	11-Jan-13	0.38	<1	<2	5	<1	0.23
RMD-216	GRAB	11080 No. 2 Rd.	11-Jan-13	0.54	<1	<2	5	<1	0.75
RMD-212	GRAB	Opp. 8600 Riyan Rd.	11-Jan-13	0.59	<1	<2	4	<1	0.93
RMD-208	GRAB	13200 No. 4 Rd.	11-Jan-13	0.54	<1	2	4	<1	0.42
RMD-205	GRAB	13851 Steveston Hwy.	11-Jan-13	0.44	<1	<2	4	<1	0.23
RMD-202	GRAB	1500 Valemont Way	11-Jan-13	0.42	<1	<2	4	<1	0.27
RMD-214	GRAB	11720 Westminster Hwy.	11-Jan-13	0.39	<1	<2	3	<1	0.3
RMD-267	GRAB	17240 Fedoruk	11-Jan-13	0.43	<1	<2	5	<1	0.23
RMD-249	GRAB	23000 Blk. Dyke Rd.	11-Jan-13	0.6	<1	<2	4	<1	1.4
RMD-276	GRAB	22271 Cochrane Drive	11-Jan-13	0.59	<1	<2	5	<1	0.27
RMD-275	GRAB	5180 Smith Cres.	11-Jan-13	0.55	<1	<2	5	<1	0.27
RMD-203	GRAB	23260 Westminster Hwy.	11-Jan-13	0.68	<1	<2	3	<1	0.41
RMD-251	GRAB	5951McCallan Rd.	14-Jan-13	0.54	<1	<2	5	<1	0.16
RMD-250	GRAB	6071 Azure Rd.	14-Jan-13	0.56	<1	<2	5	<1	0.17
RMD-271	GRAB	3800 Cessna Drive	14-Jan-13	0.22	<1	2	7	<1	0.18
RMD-272	GRAB	751 Catalina Cres.	14-Jan-13	0.58	<1	<2	5	<1	0.19
RMD-255	GRAB	6000 Blk. Miller Rd.	14-Jan-13	0.59	<1	<2	4	<1	1.2
RMD-256	GRAB	1000 Blk. McDonald Rd.	14-Jan-13	0.6	<1	2	4	<1	0.17
RMD-254	GRAB	5300 No. 3 Rd.	14-Jan-13	0.48	<1	<2	4	<1	0.17
RMD-270	GRAB	8200 Jones Rd.	14-Jan-13	0.39	<1	<2	5	<1	0.19

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-269	GRAB	14951 Triangle Rd.	14-Jan-13	0.57	<1	<2	5	<1	0.19
RMD-253	GRAB	11051 No 3 Rd.	14-Jan-13	0.57	<1	<2	4	<1	0.2
RMD-274	GRAB	10920 Springwood Court	14-Jan-13	0.38	<1	<2	6	<1	0.17
RMD-252	GRAB	9751 Pendleton Rd.	14-Jan-13	0.53	<1	2	5	<1	0.17
RMD-273	GRAB	Opp. 8331 Fairfax Place	14-Jan-13	0.36	<1	<2	7	<1	0.17
RMD-263	GRAB	12560 Cambie Rd.	16-Jan-13	0.59	<1	<2	4	<1	0.16
RMD-264	GRAB	13100 Mitchell Rd.	16-Jan-13	0.35	<1	<2	4	<1	0.14
RMD-277	GRAB	Opp. 11280 Twigg Place	16-Jan-13	0.33	<1	<2	5	<1	0.17
RMD-262	GRAB	13799 Commerce Pkwy.	16-Jan-13	0.58	<1	<2	5	<1	0.14
RMD-278	GRAB	6651 Fraserwood Place	16-Jan-13	0.34	<1	<2	5	<1	0.2
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	16-Jan-13	0.65	<1	<2	4	<1	0.19
RMD-261	GRAB	9911 Sidaway Rd.	16-Jan-13	0.28	<1	<2	3	<1	0.21
RMD-260	GRAB	11111 Horseshoe Way	16-Jan-13	0.48	<1	<2	4	<1	0.23
RMD-259	GRAB	10020 Amethyst Ave.	16-Jan-13	0.43	<1	4	4	<1	0.23
RMD-266	GRAB	9380 General Currie Rd.	16-Jan-13	0.47	<1	<2	4	<1	0.23
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	16-Jan-13	0.56	<1	<2	5	<1	0.22
RMD-258	GRAB	7000 Blk. Dyke Rd.	16-Jan-13	0.57	<1	<2	4	<1	0.26
RMD-257	GRAB	6640 Blundell Rd.	16-Jan-13	0.44	<1	<2	3	<1	0.72
RMD-204	GRAB	3180 Granville Ave.	18-Jan-13	0.61	<1	<2	5	<1	0.24
RMD-206	GRAB	4251 Moncton St.	18-Jan-13	0.5	<1	<2	5	<1	0.16
RMD-216	GRAB	11080 No. 2 Rd.	18-Jan-13	0.53	<1	<2	5	<1	0.16
RMD-212	GRAB	Opp. 8600 Riyan Rd.	18-Jan-13	0.53	<1	<2	6	<1	0.18
RMD-208	GRAB	13200 No. 4 Rd.	18-Jan-13	0.6	<1	<2	5	<1	0.15
RMD-205	GRAB	13851 Steveston Hwy.	18-Jan-13	0.51	<1	<2	5	<1	0.18
RMD-202	GRAB	1500 Valemont Way	18-Jan-13	0.57	<1	2	5	<1	0.2
RMD-214	GRAB	11720 Westminster Hwy.	18-Jan-13	0.52	<1	<2	4	<1	0.17
RMD-249	GRAB	23000 Blk. Dyke Rd.	18-Jan-13	0.42	<1	<2	5	<1	0.16
RMD-276	GRAB	22271 Cochrane Drive	18-Jan-13	0.48	<1	<2	5	<1	0.15
RMD-275	GRAB	5180 Smith Cres.	18-Jan-13	0.5	<1	<2	5	<1	0.22
RMD-203	GRAB	23260 Westminster Hwy.	18-Jan-13	0.46	<1	<2	5	<1	0.2
RMD-251	GRAB	5951McCallan Rd.	21-Jan-13	0.57	<1	<2	6	<1	0.37
RMD-273	GRAB	Opp. 8331 Fairfax Place	21-Jan-13	0.23	<1	<2	5	<1	0.15
RMD-252	GRAB	9751 Pendleton Rd.	21-Jan-13	0.34	<1	<2	4	<1	0.14
RMD-274	GRAB	10920 Springwood Court	21-Jan-13	0.43	<1	<2	5	<1	0.17
RMD-250	GRAB	6071 Azure Rd.	21-Jan-13	0.54	<1	<2	4	<1	0.16
RMD-271	GRAB	3800 Cessna Drive	21-Jan-13	0.64	<1	<2	3	<1	0.15
RMD-272	GRAB	751 Catalina Cres.	21-Jan-13	0.73	<1	<2	4	<1	0.15

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-255	GRAB	6000 Blk. Miller Rd.	21-Jan-13	0.73	<1	2	4	<1	0.16
RMD-256	GRAB	1000 Blk. McDonald Rd.	21-Jan-13	0.05	<1	120	2	<1	0.21
RMD-254	GRAB	5300 No. 3 Rd.	21-Jan-13	0.58	<1	<2	4	<1	0.21
RMD-270	GRAB	8200 Jones Rd.	21-Jan-13	0.54	<1	<2	4	<1	0.15
RMD-269	GRAB	14951 Triangle Rd.	21-Jan-13	0.54	<1	<2	4	<1	0.18
RMD-253	GRAB	11051 No 3 Rd.	21-Jan-13	0.64	<1	<2	3	<1	0.28
RMD-263	GRAB	12560 Cambie Rd.	23-Jan-13	0.62	<1	4	4	<1	0.21
RMD-264	GRAB	13100 Mitchell Rd.	23-Jan-13	0.49	<1	<2	6	<1	0.2
RMD-277	GRAB	Opp. 11280 Twigg Place	23-Jan-13	0.6	<1	<2	6	<1	0.19
RMD-262	GRAB	13799 Commerce Pkwy.	23-Jan-13	0.61	<1	<2	6	<1	0.21
RMD-278	GRAB	6651 Fraserwood Place	23-Jan-13	0.57	<1	<2	6	<1	0.22
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	23-Jan-13	0.6	<1	<2	6	<1	0.32
RMD-261	GRAB	9911 Sidaway Rd.	23-Jan-13	0.5	<1	<2	6	<1	0.15
RMD-260	GRAB	11111 Horseshoe Way	23-Jan-13	0.52	<1	<2	6	<1	0.14
RMD-259	GRAB	10020 Amethyst Ave.	23-Jan-13	0.56	<1	<2	6	<1	0.17
RMD-266	GRAB	9380 General Currie Rd.	23-Jan-13	0.61	<1	2	6	<1	0.15
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	23-Jan-13	0.46	<1	<2	6	<1	0.18
RMD-258	GRAB	7000 Blk. Dyke Rd.	23-Jan-13	0.47	<1	<2	6	<1	0.31
RMD-257	GRAB	6640 Blundell Rd.	23-Jan-13	0.49	<1	4	6	<1	0.23
RMD-204	GRAB	3180 Granville Ave.	25-Jan-13	0.55	<1	<2	5	<1	0.21
RMD-206	GRAB	4251 Moncton St.	25-Jan-13	0.46	<1	<2	7	<1	0.16
RMD-216	GRAB	11080 No. 2 Rd.	25-Jan-13	0.56	<1	<2	5	<1	0.16
RMD-212	GRAB	Opp. 8600 Riyan Rd.	25-Jan-13	0.5	<1	<2	5	<1	0.2
RMD-208	GRAB	13200 No. 4 Rd.	25-Jan-13	0.48	<1	<2	6	<1	0.16
RMD-205	GRAB	13851 Steveston Hwy.	25-Jan-13	0.68	<1	<2	4	<1	0.1
RMD-202	GRAB	1500 Valemont Way	25-Jan-13	0.66	<1	<2	5	<1	0.19
RMD-214	GRAB	11720 Westminster Hwy.	25-Jan-13	0.46	<1	2	4	<1	0.15
RMD-267	GRAB	17240 Fedoruk	25-Jan-13	0.6	<1	<2	5	<1	0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	25-Jan-13	0.67	<1	2	4	<1	0.2
RMD-275	GRAB	5180 Smith Cres.	25-Jan-13	0.61	<1	2	5	<1	0.27
RMD-276	GRAB	22271 Cochrane Drive	25-Jan-13	0.58	<1	<2	6	<1	0.22
RMD-203	GRAB	23260 Westminster Hwy.	25-Jan-13	0.7	<1	<2	4	<1	0.25
RMD-251	GRAB	5951McCallan Rd.	28-Jan-13	0.52	<1	<2	5	<1	0.15
RMD-250	GRAB	6071 Azure Rd.	28-Jan-13	0.47	<1	4	5	<1	0.17
RMD-271	GRAB	3800 Cessna Drive	28-Jan-13	0.54	<1	6	5	<1	0.13
RMD-272	GRAB	751 Catalina Cres.	28-Jan-13	0.46	<1	2	5	<1	0.15
RMD-255	GRAB	6000 Blk. Miller Rd.	28-Jan-13	0.58	<1	<2	4	<1	0.31

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-256	GRAB	1000 Blk. McDonald Rd.	28-Jan-13	0.52	<1	2	5	<1	0.17
RMD-254	GRAB	5300 No. 3 Rd.	28-Jan-13	0.52	<1	4	5	<1	0.13
RMD-270	GRAB	8200 Jones Rd.	28-Jan-13	0.49	<1	<2	5	<1	0.16
RMD-269	GRAB	14951 Triangle Rd.	28-Jan-13	0.65	<1	2	4	<1	0.1
RMD-253	GRAB	11051 No 3 Rd.	28-Jan-13	0.51	<1	2	5	<1	0.14
RMD-274	GRAB	10920 Springwood Court	28-Jan-13	0.49	<1	12	5	<1	0.12
RMD-252	GRAB	9751 Pendleton Rd.	28-Jan-13	0.45	<1	<2	6	<1	0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	28-Jan-13	0.4	<1	<2	7	<1	0.13
RMD-263	GRAB	12560 Cambie Rd.	30-Jan-13	0.53	<1	26	5	<1	0.16
RMD-264	GRAB	13100 Mitchell Rd.	30-Jan-13	0.41	<1	<2	5	<1	0.14
RMD-277	GRAB	Opp. 11280 Twigg Place	30-Jan-13	0.39	<1	<2	6	<1	0.17
RMD-262	GRAB	13799 Commerce Pkwy.	30-Jan-13	0.51	<1	<2	6	<1	0.16
RMD-278	GRAB	6651 Fraserwood Place	30-Jan-13	0.48	<1	<2	6	<1	0.22
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	30-Jan-13	0.9	<1	<2	5	<1	0.2
RMD-261	GRAB	9911 Sidaway Rd.	30-Jan-13	0.59	<1	<2	5	<1	0.12
RMD-260	GRAB	11111 Horseshoe Way	30-Jan-13	0.47	<1	<2	5	<1	0.14
RMD-259	GRAB	10020 Amethyst Ave.	30-Jan-13	0.51	<1	<2	5	<1	0.17
RMD-266	GRAB	9380 General Currie Rd.	30-Jan-13	0.53	<1	<2	5	<1	0.16
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	30-Jan-13	0.52	<1	<2	5	<1	0.16
RMD-258	GRAB	7000 Blk. Dyke Rd.	30-Jan-13	0.56	<1	<2	5	<1	0.15
RMD-257	GRAB	6640 Blundell Rd.	30-Jan-13	0.47	<1	<2	5	<1	0.22
RMD-204	GRAB	3180 Granville Ave.	1-Feb-13	0.38	<1	<2	7	<1	0.13
RMD-206	GRAB	4251 Moncton St.	1-Feb-13	0.44	<1	<2	4	<1	0.15
RMD-216	GRAB	11080 No. 2 Rd.	1-Feb-13	0.5	<1	<2	5	<1	0.18
RMD-212	GRAB	Opp. 8600 Riyan Rd.	1-Feb-13	0.55	<1	2	5	<1	0.19
RMD-208	GRAB	13200 No. 4 Rd.	1-Feb-13	0.52	<1	<2	5	<1	0.16
RMD-205	GRAB	13851 Steveston Hwy.	1-Feb-13	0.69	<1	<2	4	<1	0.11
RMD-202	GRAB	1500 Valemont Way	1-Feb-13	0.65	<1	<2	5	<1	0.15
RMD-214	GRAB	11720 Westminster Hwy.	1-Feb-13	0.5	<1	<2	4	<1	0.19
RMD-267	GRAB	17240 Fedoruk	1-Feb-13	0.61	<1	<2	5	<1	0.11
RMD-249	GRAB	23000 Blk. Dyke Rd.	1-Feb-13	0.54	<1	<2	5	<1	0.15
RMD-276	GRAB	22271 Cochrane Drive	1-Feb-13	0.63	<1	<2	6	<1	0.17
RMD-275	GRAB	5180 Smith Cres.	1-Feb-13	0.65	<1	<2	5	<1	0.16
RMD-203	GRAB	23260 Westminster Hwy.	1-Feb-13	0.74	<1	<2	5	<1	0.17
RMD-251	GRAB	5951McCallan Rd.	4-Feb-13	0.46	<1	<2	6	<1	0.13
RMD-273	GRAB	Opp. 8331 Fairfax Place	4-Feb-13	0.36	<1	<2	7	<1	0.13
RMD-252	GRAB	9751 Pendleton Rd.	4-Feb-13	0.53	<1	<2	7	<1	0.17

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-274	GRAB	10920 Springwood Court	4-Feb-13	0.36	<1	<2	7	<1	0.16
RMD-250	GRAB	6071 Azure Rd.	4-Feb-13	0.51	<1	<2	6	<1	0.18
RMD-271	GRAB	3800 Cessna Drive	4-Feb-13	0.61	<1	<2	6	<1	0.26
RMD-272	GRAB	751 Catalina Cres.	4-Feb-13	0.65	<1	<2	6	<1	0.13
RMD-255	GRAB	6000 Blk. Miller Rd.	4-Feb-13	0.64	<1	<2	5	<1	0.21
RMD-256	GRAB	1000 Blk. McDonald Rd.	4-Feb-13	0.04	<1	480	6	<1	0.19
RMD-254	GRAB	5300 No. 3 Rd.	4-Feb-13	0.55	<1	<2	5	<1	0.16
RMD-270	GRAB	8200 Jones Rd.	4-Feb-13	0.55	<1	<2	6	<1	0.15
RMD-269	GRAB	14951 Triangle Rd.	4-Feb-13	0.68	<1	<2	5	<1	0.08
RMD-253	GRAB	11051 No 3 Rd.	4-Feb-13	0.66	<1	<2	6	<1	0.14
RMD-257	GRAB	6640 Blundell Rd.	6-Feb-13	0.47	<1	<2	6	<1	0.16
RMD-258	GRAB	7000 Blk. Dyke Rd.	6-Feb-13	0.48	<1	2	6	<1	0.2
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	6-Feb-13	0.52	<1	<2	6	<1	0.18
RMD-260	GRAB	11111 Horseshoe Way	6-Feb-13	0.51	<1	<2	6	<1	0.16
RMD-259	GRAB	10020 Amethyst Ave.	6-Feb-13	0.59	<1	<2	6	<1	0.17
RMD-266	GRAB	9380 General Currie Rd.	6-Feb-13	0.64	<1	<2	6	<1	0.18
RMD-263	GRAB	12560 Cambie Rd.	6-Feb-13	0.55	<1	<2	6	<1	0.11
RMD-264	GRAB	13100 Mitchell Rd.	6-Feb-13	0.51	<1	<2	6	<1	0.16
RMD-277	GRAB	Opp. 11280 Twigg Place	6-Feb-13	0.63	<1	<2	6	<1	0.16
RMD-262	GRAB	13799 Commerce Pkwy.	6-Feb-13	0.54	<1	<2	5	<1	0.17
RMD-278	GRAB	6651 Fraserwood Place	6-Feb-13	0.69	<1	2	6	<1	0.21
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	6-Feb-13	0.67	<1	<2	6	<1	0.18
RMD-261	GRAB	9911 Sidaway Rd.	6-Feb-13	0.64	<1	<2	6	<1	0.14
RMD-204	GRAB	3180 Granville Ave.	8-Feb-13	0.36	<1	<2	5	<1	0.26
RMD-206	GRAB	4251 Moncton St.	8-Feb-13	0.3	<1	<2	6	<1	0.15
RMD-216	GRAB	11080 No. 2 Rd.	8-Feb-13	0.44	<1	<2	5	<1	0.14
RMD-212	GRAB	Opp. 8600 Riyan Rd.	8-Feb-13	0.49	<1	2	5	<1	0.12
RMD-208	GRAB	13200 No. 4 Rd.	8-Feb-13	0.47	<1	<2	5	<1	0.13
RMD-205	GRAB	13851 Steveston Hwy.	8-Feb-13	0.5	<1	<2	4	<1	0.09
RMD-202	GRAB	1500 Valemont Way	8-Feb-13	0.58	<1	<2	6	<1	0.19
RMD-214	GRAB	11720 Westminster Hwy.	8-Feb-13	0.35	<1	<2	4	<1	0.15
RMD-267	GRAB	17240 Fedoruk	8-Feb-13	0.47	<1	<2	6	<1	0.12
RMD-249	GRAB	23000 Blk. Dyke Rd.	8-Feb-13	0.59	<1	<2	5	<1	0.24
RMD-276	GRAB	22271 Cochrane Drive	8-Feb-13	0.56	<1	<2	6	<1	0.21
RMD-275	GRAB	5180 Smith Cres.	8-Feb-13	0.58	<1	<2	5	<1	0.2
RMD-203	GRAB	23260 Westminster Hwy.	8-Feb-13	0.75	<1	<2	4	<1	0.27
RMD-251	GRAB	5951McCallan Rd.	12-Feb-13	0.55	<1	<2	5	<1	0.15

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-250	GRAB	6071 Azure Rd.	12-Feb-13	0.42	<1	<2	5	<1	0.19
RMD-271	GRAB	3800 Cessna Drive	12-Feb-13	0.11	<1	4	7	<1	0.19
RMD-272	GRAB	751 Catalina Cres.	12-Feb-13	0.61	<1	<2	6	<1	0.16
RMD-255	GRAB	6000 Blk. Miller Rd.	12-Feb-13	0.54	<1	<2	4	<1	0.31
RMD-256	GRAB	1000 Blk. McDonald Rd.	12-Feb-13	0.36	<1	800	5	<1	0.41
RMD-254	GRAB	5300 No. 3 Rd.	12-Feb-13	0.64	<1	<2	5	<1	0.15
RMD-270	GRAB	8200 Jones Rd.	12-Feb-13	0.62	<1	<2	5	<1	0.17
RMD-269	GRAB	14951 Triangle Rd.	12-Feb-13	0.42	<1	<2	5	<1	0.14
RMD-253	GRAB	11051 No 3 Rd.	12-Feb-13	0.44	<1	<2	5	<1	0.15
RMD-274	GRAB	10920 Springwood Court	12-Feb-13	0.49	<1	<2	6	<1	0.15
RMD-252	GRAB	9751 Pendleton Rd.	12-Feb-13	0.48	<1	<2	5	<1	0.18
RMD-273	GRAB	Opp. 8331 Fairfax Place	12-Feb-13	0.31	<1	<2	7	<1	0.13
RMD-263	GRAB	12560 Cambie Rd.	13-Feb-13	0.55	<1	4	5	<1	0.18
RMD-264	GRAB	13100 Mitchell Rd.	13-Feb-13	0.48	<1	<2	5	<1	0.16
RMD-277	GRAB	Opp. 11280 Twigg Place	13-Feb-13	0.44	<1	<2	6	<1	0.19
RMD-262	GRAB	13799 Commerce Pkwy.	13-Feb-13	0.51	<1	<2	5	<1	0.15
RMD-278	GRAB	6651 Fraserwood Place	13-Feb-13	0.38	<1	<2	6	<1	0.2
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	13-Feb-13	0.57	<1	<2	5	<1	0.19
RMD-261	GRAB	9911 Sidaway Rd.	13-Feb-13	0.46	<1	<2	5	<1	0.12
RMD-260	GRAB	11111 Horseshoe Way	13-Feb-13	0.4	<1	<2	5	<1	0.16
RMD-259	GRAB	10020 Amethyst Ave.	13-Feb-13	0.55	<1	<2	5	<1	0.14
RMD-266	GRAB	9380 General Currie Rd.	13-Feb-13	0.56	<1	<2	5	<1	0.23
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	13-Feb-13	0.28	<1	<2	5	<1	0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	13-Feb-13	0.58	<1	<2	5	<1	0.17
RMD-257	GRAB	6640 Blundell Rd.	13-Feb-13	0.52	<1	<2	5	<1	0.17
RMD-204	GRAB	3180 Granville Ave.	15-Feb-13	0.7	<1	2	5	<1	0.13
RMD-206	GRAB	4251 Moncton St.	15-Feb-13	0.75	<1	<2	5	<1	0.1
RMD-216	GRAB	11080 No. 2 Rd.	15-Feb-13	0.61	<1	<2	5	<1	0.13
RMD-212	GRAB	Opp. 8600 Riyan Rd.	15-Feb-13	0.63	<1	<2	5	<1	0.2
RMD-208	GRAB	13200 No. 4 Rd.	15-Feb-13	0.49	<1	<2	5	<1	0.15
RMD-205	GRAB	13851 Steveston Hwy.	15-Feb-13	0.76	<1	<2	5	<1	0.09
RMD-202	GRAB	1500 Valemont Way	15-Feb-13	0.64	<1	2	5	<1	0.17
RMD-214	GRAB	11720 Westminster Hwy.	15-Feb-13	0.47	<1	<2	5	<1	0.14
RMD-267	GRAB	17240 Fedoruk	15-Feb-13	0.55	<1	<2	6	<1	0.11
RMD-249	GRAB	23000 Blk. Dyke Rd.	15-Feb-13	0.69	<1	2	5	<1	0.17
RMD-276	GRAB	22271 Cochrane Drive	15-Feb-13	0.54	<1	<2	6	<1	0.13
RMD-275	GRAB	5180 Smith Cres.	15-Feb-13	0.71	<1	<2	6	<1	0.14

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-203	GRAB	23260 Westminster Hwy.	15-Feb-13	0.73	<1	<2	6	<1	0.17
RMD-251	GRAB	5951McCallan Rd.	18-Feb-13	0.46	<1	<2	6	<1	0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	18-Feb-13	0.33	<1	<2	8	<1	0.2
RMD-252	GRAB	9751 Pendleton Rd.	18-Feb-13	0.49	<1	<2	7	<1	0.13
RMD-274	GRAB	10920 Springwood Court	18-Feb-13	0.38	<1	<2	8	<1	0.11
RMD-253	GRAB	11051 No 3 Rd.	18-Feb-13	0.54	<1	<2	6	<1	0.14
RMD-269	GRAB	14951 Triangle Rd.	18-Feb-13	0.67	<1	<2	6	<1	0.12
RMD-270	GRAB	8200 Jones Rd.	18-Feb-13	0.54	<1	<2	6	<1	0.14
RMD-250	GRAB	6071 Azure Rd.	18-Feb-13	0.51	<1	<2	7	<1	0.13
RMD-254	GRAB	5300 No. 3 Rd.	18-Feb-13	0.49	<1	<2	6	<1	0.12
RMD-271	GRAB	3800 Cessna Drive	18-Feb-13	0.64	<1	<2	7	<1	0.18
RMD-272	GRAB	751 Catalina Cres.	18-Feb-13	0.81	<1	<2	6	<1	0.12
RMD-255	GRAB	6000 Blk. Miller Rd.	18-Feb-13	0.66	<1	<2	6	<1	0.15
RMD-256	GRAB	1000 Blk. McDonald Rd.	18-Feb-13	0.02	<1	780	7	<1	0.21
RMD-263	GRAB	12560 Cambie Rd.	20-Feb-13	0.54	<1	<2	5	<1	0.13
RMD-264	GRAB	13100 Mitchell Rd.	20-Feb-13	0.64	<1	<2	5	<1	0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	20-Feb-13	0.53	<1	<2	5	<1	0.15
RMD-262	GRAB	13799 Commerce Pkwy.	20-Feb-13	0.47	<1	<2	5	<1	0.1
RMD-278	GRAB	6651 Fraserwood Place	20-Feb-13	0.63	<1	<2	5	<1	0.2
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	20-Feb-13	0.36	<1	2	5	<1	0.24
RMD-261	GRAB	9911 Sidaway Rd.	20-Feb-13	0.58	<1	4	5	<1	0.07
RMD-260	GRAB	11111 Horseshoe Way	20-Feb-13	0.55	<1	<2	5	<1	0.15
RMD-259	GRAB	10020 Amethyst Ave.	20-Feb-13	0.5	<1	<2	5	<1	0.13
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	20-Feb-13	0.55	<1	<2	5	<1	0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	20-Feb-13	0.51	<1	<2	5	<1	0.1
RMD-266	GRAB	9380 General Currie Rd.	20-Feb-13	0.65	<1	<2	5	<1	0.14
RMD-257	GRAB	6640 Blundell Rd.	20-Feb-13	0.39	<1	2	5	<1	0.12
RMD-204	GRAB	3180 Granville Ave.	22-Feb-13	0.43	<1	<2	5	<1	0.19
RMD-206	GRAB	4251 Moncton St.	22-Feb-13	0.33	<1	<2	6	<1	0.12
RMD-216	GRAB	11080 No. 2 Rd.	22-Feb-13	0.52	<1	<2	5	<1	0.13
RMD-212	GRAB	Opp. 8600 Riyan Rd.	22-Feb-13	0.55	<1	<2	5	<1	0.19
RMD-208	GRAB	13200 No. 4 Rd.	22-Feb-13	0.53	<1	<2	5	<1	0.15
RMD-205	GRAB	13851 Steveston Hwy.	22-Feb-13	0.63	<1	<2	5	<1	0.09
RMD-202	GRAB	1500 Valemont Way	22-Feb-13	0.61	<1	2	6	<1	0.15
RMD-214	GRAB	11720 Westminster Hwy.	22-Feb-13	0.57	<1	<2	5	<1	0.12
RMD-267	GRAB	17240 Fedoruk	22-Feb-13	0.64	<1	<2	6	<1	0.14
RMD-249	GRAB	23000 Blk. Dyke Rd.	22-Feb-13	0.72	<1	<2	5	<1	0.18

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-276	GRAB	22271 Cochrane Drive	22-Feb-13	0.66	<1	<2	6	<1	0.14
RMD-275	GRAB	5180 Smith Cres.	22-Feb-13	0.69	<1	<2	5	<1	0.17
RMD-203	GRAB	23260 Westminster Hwy.	22-Feb-13	0.75	<1	<2	5	<1	0.2
RMD-251	GRAB	5951McCallan Rd.	25-Feb-13	0.55	<1	<2	5	<1	0.14
RMD-250	GRAB	6071 Azure Rd.	25-Feb-13	0.65	<1	<2	5	<1	0.16
RMD-271	GRAB	3800 Cessna Drive	25-Feb-13	0.55	<1	30	5	<1	0.18
RMD-272	GRAB	751 Catalina Cres.	25-Feb-13	0.52	<1	<2	5	<1	0.17
RMD-255	GRAB	6000 Blk. Miller Rd.	25-Feb-13	0.61	<1	<2	4	<1	0.29
RMD-256	GRAB	1000 Blk. McDonald Rd.	25-Feb-13	0.43	<1	2	5	<1	0.15
RMD-254	GRAB	5300 No. 3 Rd.	25-Feb-13	0.58	<1	<2	5	<1	0.18
RMD-270	GRAB	8200 Jones Rd.	25-Feb-13	0.6	<1	<2	5	<1	0.16
RMD-269	GRAB	14951 Triangle Rd.	25-Feb-13	0.69	<1	2	5	<1	0.3
RMD-253	GRAB	11051 No 3 Rd.	25-Feb-13	0.54	<1	<2	4	<1	0.18
RMD-274	GRAB	10920 Springwood Court	25-Feb-13	0.41	<1	<2	6	<1	0.16
RMD-252	GRAB	9751 Pendleton Rd.	25-Feb-13	0.48	<1	<2	5	<1	0.15
RMD-273	GRAB	Opp. 8331 Fairfax Place	25-Feb-13	0.39	<1	<2	7	<1	0.16
RMD-263	GRAB	12560 Cambie Rd.	27-Feb-13	0.61	<1	<2	6	<1	0.15
RMD-264	GRAB	13100 Mitchell Rd.	27-Feb-13	0.62	<1	2	5	<1	0.15
RMD-277	GRAB	Opp. 11280 Twigg Place	27-Feb-13	0.46	<1	<2	5	<1	0.14
RMD-278	GRAB	6651 Fraserwood Place	27-Feb-13	0.58	<1	2	5	<1	0.19
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	27-Feb-13	0.62	<1	<2	5	<1	0.25
RMD-261	GRAB	9911 Sidaway Rd.	27-Feb-13	0.68	<1	<2	5	<1	0.13
RMD-260	GRAB	11111 Horseshoe Way	27-Feb-13	0.59	<1	<2	5	<1	0.17
RMD-259	GRAB	10020 Amethyst Ave.	27-Feb-13	0.61	<1	<2	6	<1	0.13
RMD-266	GRAB	9380 General Currie Rd.	27-Feb-13	0.64	<1	<2	5	<1	0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	27-Feb-13	0.53	<1	<2	5	<1	0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	27-Feb-13	0.57	<1	<2	6	<1	0.14
RMD-257	GRAB	6640 Blundell Rd.	27-Feb-13	0.55	<1	<2	5	<1	0.15
RMD-204	GRAB	3180 Granville Ave.	1-Mar-13	0.45	<1	<2	5	<1	0.13
RMD-206	GRAB	4251 Moncton St.	1-Mar-13	0.38	<1	<2	5	<1	0.13
RMD-216	GRAB	11080 No. 2 Rd.	1-Mar-13	0.39	<1	2	5	<1	0.18
RMD-212	GRAB	Opp. 8600 Riyan Rd.	1-Mar-13	0.45	<1	<2	5	<1	0.16
RMD-208	GRAB	13200 No. 4 Rd.	1-Mar-13	0.56	<1	<2	5	<1	0.14
RMD-205	GRAB	13851 Steveston Hwy.	1-Mar-13	0.52	<1	<2	5	<1	0.09
RMD-262	GRAB	13799 Commerce Pkwy.	1-Mar-13	0.42	<1	<2	5	<1	0.15
RMD-202	GRAB	1500 Valemont Way	1-Mar-13	0.54	<1	<2	5	<1	0.17
RMD-214	GRAB	11720 Westminster Hwy.	1-Mar-13	0.41	<1	<2	5	<1	0.15

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-267	GRAB	17240 Fedoruk	1-Mar-13	0.55	<1	<2	5	<1	0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	1-Mar-13	0.84	<1	<2	5	<1	0.19
RMD-276	GRAB	22271 Cochrane Drive	1-Mar-13	0.58	<1	2	5	<1	0.14
RMD-275	GRAB	5180 Smith Cres.	1-Mar-13	0.53	<1	<2	5	<1	0.18
RMD-203	GRAB	23260 Westminster Hwy.	1-Mar-13	0.64	<1	<2	5	<1	0.18
RMD-251	GRAB	5951McCallan Rd.	4-Mar-13	0.51	<1	<2	5	<1	0.14
RMD-250	GRAB	6071 Azure Rd.	4-Mar-13	0.48	<1	<2	6	<1	0.17
RMD-271	GRAB	3800 Cessna Drive	4-Mar-13	0.53	<1	<2	5	<1	0.13
RMD-272	GRAB	751 Catalina Cres.	4-Mar-13	0.49	<1	<2	5	<1	0.14
RMD-255	GRAB	6000 Blk. Miller Rd.	4-Mar-13	0.52	<1	<2	4	<1	0.13
RMD-256	GRAB	1000 Blk. McDonald Rd.	4-Mar-13	0.43	<1	<2	6	<1	0.15
RMD-254	GRAB	5300 No. 3 Rd.	4-Mar-13	0.52	<1	<2	6	<1	0.14
RMD-270	GRAB	8200 Jones Rd.	4-Mar-13	0.53	<1	2	6	<1	0.14
RMD-269	GRAB	14951 Triangle Rd.	4-Mar-13	0.69	<1	<2	6	<1	0.1
RMD-253	GRAB	11051 No 3 Rd.	4-Mar-13	0.5	<1	<2	5	<1	0.13
RMD-274	GRAB	10920 Springwood Court	4-Mar-13	0.55	<1	<2	7	<1	0.12
RMD-252	GRAB	9751 Pendleton Rd.	4-Mar-13	0.53	<1	<2	6	<1	0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	4-Mar-13	0.41	<1	2	8	<1	0.11
RMD-263	GRAB	12560 Cambie Rd.	6-Mar-13	0.46	<1	<2	5	<1	0.22
RMD-264	GRAB	13100 Mitchell Rd.	6-Mar-13	0.4	<1	<2	5	<1	0.15
RMD-277	GRAB	Opp. 11280 Twigg Place	6-Mar-13	0.38	<1	<2	6	<1	0.22
RMD-262	GRAB	13799 Commerce Pkwy.	6-Mar-13	0.42	<1	<2	6	<1	0.18
RMD-278	GRAB	6651 Fraserwood Place	6-Mar-13	0.65	<1	<2	5	<1	0.86
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	6-Mar-13	0.72	<1	<2	5	<1	0.9
RMD-261	GRAB	9911 Sidaway Rd.	6-Mar-13	0.64	<1	<2	5	<1	0.25
RMD-260	GRAB	11111 Horseshoe Way	6-Mar-13	0.63	<1	<2	5	<1	0.17
RMD-259	GRAB	10020 Amethyst Ave.	6-Mar-13	0.52	<1	<2	6	<1	0.17
RMD-266	GRAB	9380 General Currie Rd.	6-Mar-13	0.55	<1	<2	5	<1	0.15
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	6-Mar-13	0.62	<1	2	6	<1	0.18
RMD-258	GRAB	7000 Blk. Dyke Rd.	6-Mar-13	0.64	<1	<2	5	<1	0.16
RMD-257	GRAB	6640 Blundell Rd.	6-Mar-13	0.54	<1	<2	5	<1	0.15
RMD-204	GRAB	3180 Granville Ave.	8-Mar-13	0.58	<1	<2	5	<1	0.38
RMD-206	GRAB	4251 Moncton St.	8-Mar-13	0.49	<1	<2	5	<1	0.12
RMD-216	GRAB	11080 No. 2 Rd.	8-Mar-13	0.55	<1	<2	4	<1	0.14
RMD-212	GRAB	Opp. 8600 Riyan Rd.	8-Mar-13	0.56	<1	<2	5	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	8-Mar-13	0.53	<1	<2	5	<1	0.15
RMD-205	GRAB	13851 Steveston Hwy.	8-Mar-13	0.65	<1	<2	4	<1	0.15

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-202	GRAB	1500 Valemont Way	8-Mar-13	0.53	<1	<2	6	<1	0.37
RMD-214	GRAB	11720 Westminster Hwy.	8-Mar-13	0.62	<1	<2	4	<1	0.19
RMD-267	GRAB	17240 Fedoruk	8-Mar-13	0.45	<1	<2	6	<1	0.3
RMD-249	GRAB	23000 Blk. Dyke Rd.	8-Mar-13	0.74	<1	<2	4	<1	0.42
RMD-276	GRAB	22271 Cochrane Drive	8-Mar-13	0.6	<1	<2	6	<1	0.31
RMD-275	GRAB	5180 Smith Cres.	8-Mar-13	0.66	<1	<2	5	<1	0.3
RMD-203	GRAB	23260 Westminster Hwy.	8-Mar-13	0.83	<1	<2	4	<1	0.4
RMD-251	GRAB	5951McCallan Rd.	11-Mar-13	0.64	<1	<2	3	<1	0.1
RMD-250	GRAB	6071 Azure Rd.	11-Mar-13	0.57	<1	<2	5	<1	0.14
RMD-271	GRAB	3800 Cessna Drive	11-Mar-13	0.59	<1	<2	5	<1	0.15
RMD-272	GRAB	751 Catalina Cres.	11-Mar-13	0.63	<1	<2	5	<1	0.1
RMD-255	GRAB	6000 Blk. Miller Rd.	11-Mar-13	0.62	<1	<2	4	<1	0.33
RMD-256	GRAB	1000 Blk. McDonald Rd.	11-Mar-13	0.54	<1	<2	4	<1	0.08
RMD-270	GRAB	8200 Jones Rd.	11-Mar-13	0.63	<1	<2	5	<1	0.1
RMD-254	GRAB	5300 No. 3 Rd.	11-Mar-13	0.64	<1	<2	5	<1	0.11
RMD-269	GRAB	14951 Triangle Rd.	11-Mar-13	0.7	<1	10	6	<1	0.12
RMD-253	GRAB	11051 No 3 Rd.	11-Mar-13	0.58	<1	<2	6	<1	0.09
RMD-274	GRAB	10920 Springwood Court	11-Mar-13	0.64	<1	<2	6	<1	0.13
RMD-252	GRAB	9751 Pendleton Rd.	11-Mar-13	0.56	<1	<2	6	<1	0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	11-Mar-13	0.51	<1	<2	6	<1	0.09
RMD-263	GRAB	12560 Cambie Rd.	13-Mar-13	0.38	<1	<2	4	<1	0.13
RMD-264	GRAB	13100 Mitchell Rd.	13-Mar-13	0.48	<1	<2	5	<1	0.2
RMD-277	GRAB	Opp. 11280 Twigg Place	13-Mar-13	0.47	<1	2	5	<1	0.14
RMD-262	GRAB	13799 Commerce Pkwy.	13-Mar-13	0.54	<1	<2	5	<1	0.15
RMD-278	GRAB	6651 Fraserwood Place	13-Mar-13	0.57	<1	<2	6	<1	0.29
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	13-Mar-13	0.6	<1	<2	5	<1	0.19
RMD-261	GRAB	9911 Sidaway Rd.	13-Mar-13	0.6	<1	<2	5	<1	0.09
RMD-260	GRAB	11111 Horseshoe Way	13-Mar-13	0.42	<1	<2	5	<1	0.15
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	13-Mar-13	0.48	<1	<2	5	<1	0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	13-Mar-13	0.55	<1	<2	6	<1	0.13
RMD-257	GRAB	6640 Blundell Rd.	13-Mar-13	0.48	<1	<2	5	<1	0.23
RMD-259	GRAB	10020 Amethyst Ave.	13-Mar-13	0.5	<1	2	6	<1	0.12
RMD-266	GRAB	9380 General Currie Rd.	13-Mar-13	0.56	<1	<2	5	<1	0.11
RMD-204	GRAB	3180 Granville Ave.	15-Mar-13	0.75	<1	2	5	<1	0.08
RMD-206	GRAB	4251 Moncton St.	15-Mar-13	0.48	<1	<2	5	<1	0.11
RMD-216	GRAB	11080 No. 2 Rd.	15-Mar-13	0.64	<1	<2	5	<1	0.07
RMD-212	GRAB	Opp. 8600 Ryan Rd.	15-Mar-13	0.47	<1	2	5	<1	0.07

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-208	GRAB	13200 No. 4 Rd.	15-Mar-13	0.57	<1	<2	5	<1	0.1
RMD-205	GRAB	13851 Steveston Hwy.	15-Mar-13	0.62	<1	<2	4	<1	0.08
RMD-202	GRAB	1500 Valemont Way	15-Mar-13	1	<1	<2	5	<1	0.44
RMD-214	GRAB	11720 Westminster Hwy.	15-Mar-13	0.52	<1	<2	4	<1	0.1
RMD-267	GRAB	17240 Fedoruk	15-Mar-13	0.7	<1	<2	5	<1	0.21
RMD-249	GRAB	23000 Blk. Dyke Rd.	15-Mar-13	0.94	<1	<2	5	<1	0.47
RMD-276	GRAB	22271 Cochrane Drive	15-Mar-13	0.97	<1	<2	5	<1	0.37
RMD-275	GRAB	5180 Smith Cres.	15-Mar-13	0.93	<1	<2	5	<1	0.36
RMD-203	GRAB	23260 Westminster Hwy.	15-Mar-13	0.97	<1	2	5	<1	0.58
RMD-251	GRAB	5951McCallan Rd.	18-Mar-13	0.6	<1	2	6	<1	0.12
RMD-250	GRAB	6071 Azure Rd.	18-Mar-13	0.58	<1	<2	7	<1	0.18
RMD-271	GRAB	3800 Cessna Drive	18-Mar-13	0.6	<1	<2	5	<1	0.12
RMD-272	GRAB	751 Catalina Cres.	18-Mar-13	0.57	<1	<2	5	<1	0.1
RMD-255	GRAB	6000 Blk. Miller Rd.	18-Mar-13	0.6	<1	[conta	5	<1	0.31
RMD-256	GRAB	1000 Blk. McDonald Rd.	18-Mar-13	0.43	<1	<2	6	<1	0.17
RMD-254	GRAB	5300 No. 3 Rd.	18-Mar-13	0.59	<1	<2	6	<1	0.11
RMD-270	GRAB	8200 Jones Rd.	18-Mar-13	0.61	<1	<2	6	<1	0.1
RMD-269	GRAB	14951 Triangle Rd.	18-Mar-13	0.67	<1	8	6	<1	0.12
RMD-253	GRAB	11051 No 3 Rd.	18-Mar-13	0.58	<1	<2	5	<1	0.13
RMD-274	GRAB	10920 Springwood Court	18-Mar-13	0.6	<1	<2	7	<1	0.13
RMD-252	GRAB	9751 Pendleton Rd.	18-Mar-13	0.5	<1	2	7	<1	0.13
RMD-273	GRAB	Opp. 8331 Fairfax Place	18-Mar-13	0.56	<1	<2	8	<1	0.19
RMD-263	GRAB	12560 Cambie Rd.	20-Mar-13	0.55	<1	2	5	<1	0.13
RMD-264	GRAB	13100 Mitchell Rd.	20-Mar-13	0.6	<1	2	5	<1	0.13
RMD-277	GRAB	Opp. 11280 Twigg Place	20-Mar-13	0.58	<1	<2	6	<1	0.11
RMD-262	GRAB	13799 Commerce Pkwy.	20-Mar-13	0.49	<1	<2	6	<1	0.16
RMD-278	GRAB	6651 Fraserwood Place	20-Mar-13	0.65	<1	<2	7	<1	0.37
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	20-Mar-13	0.52	<1	<2	5	<1	0.32
RMD-261	GRAB	9911 Sidaway Rd.	20-Mar-13	0.52	<1	<2	5	<1	0.09
RMD-260	GRAB	11111 Horseshoe Way	20-Mar-13	0.61	<1	<2	5	<1	0.15
RMD-259	GRAB	10020 Amethyst Ave.	20-Mar-13	0.57	<1	<2	5	<1	0.11
RMD-266	GRAB	9380 General Currie Rd.	20-Mar-13	0.56	<1	<2	5	<1	0.14
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	20-Mar-13	0.55	<1	<2	6	<1	0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	20-Mar-13	0.51	<1	<2	6	<1	0.13
RMD-257	GRAB	6640 Blundell Rd.	20-Mar-13	0.54	<1	<2	5	<1	0.14
RMD-204	GRAB	3180 Granville Ave.	22-Mar-13	0.54	<1	<2	5	<1	0.31
RMD-206	GRAB	4251 Moncton St.	22-Mar-13	0.46	<1	<2	5	<1	0.17

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-216	GRAB	11080 No. 2 Rd.	22-Mar-13	0.56	<1	<2	5	<1	0.11
RMD-212	GRAB	Opp. 8600 Ryan Rd.	22-Mar-13	0.5	<1	<2	6	<1	0.09
RMD-208	GRAB	13200 No. 4 Rd.	22-Mar-13	0.52	<1	<2	5	<1	0.08
RMD-205	GRAB	13851 Steveston Hwy.	22-Mar-13	0.7	<1	<2	5	<1	[Misla
RMD-202	GRAB	1500 Valemont Way	22-Mar-13	0.7	<1	<2	6	<1	[Misla
RMD-214	GRAB	11720 Westminster Hwy.	22-Mar-13	0.61	<1	<2	4	<1	0.09
RMD-267	GRAB	17240 Fedoruk	22-Mar-13	0.52	<1	<2	6	<1	0.15
RMD-249	GRAB	23000 Blk. Dyke Rd.	22-Mar-13	0.63	<1	<2	5	<1	0.3
RMD-276	GRAB	22271 Cochrane Drive	22-Mar-13	0.72	<1	2	6	<1	0.31
RMD-275	GRAB	5180 Smith Cres.	22-Mar-13	0.73	<1	<2	5	<1	0.32
RMD-203	GRAB	23260 Westminster Hwy.	22-Mar-13	0.74	<1	<2	5	<1	0.42
RMD-251	GRAB	5951McCallan Rd.	25-Mar-13	0.59	<1	<2	6	<1	0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	25-Mar-13	0.43	<1	<2	5	<1	0.16
RMD-252	GRAB	9751 Pendleton Rd.	25-Mar-13	0.49	<1	<2	6	<1	0.1
RMD-274	GRAB	10920 Springwood Court	25-Mar-13	0.42	<1	<2	7	<1	0.09
RMD-250	GRAB	6071 Azure Rd.	25-Mar-13	0.54	<1	<2	6	<1	0.13
RMD-271	GRAB	3800 Cessna Drive	25-Mar-13	0.4	<1	2	5	<1	0.09
RMD-272	GRAB	751 Catalina Cres.	25-Mar-13	0.62	<1	<2	6	<1	0.11
RMD-255	GRAB	6000 Blk. Miller Rd.	25-Mar-13	0.58	<1	<2	5	<1	0.21
RMD-256	GRAB	1000 Blk. McDonald Rd.	25-Mar-13	0.41	<1	<2	6	<1	0.18
RMD-254	GRAB	5300 No. 3 Rd.	25-Mar-13	0.57	<1	<2	4	<1	0.1
RMD-270	GRAB	8200 Jones Rd.	25-Mar-13	0.41	<1	<2	6	<1	0.13
RMD-253	GRAB	11051 No 3 Rd.	25-Mar-13	0.35	<1	<2	5	<1	0.1
RMD-263	GRAB	12560 Cambie Rd.	27-Mar-13	0.56	<1	<2	6	<1	0.09
RMD-264	GRAB	13100 Mitchell Rd.	27-Mar-13	0.52	<1	<2	6	<1	0.08
RMD-277	GRAB	Opp. 11280 Twigg Place	27-Mar-13	0.51	<1	<2	6	<1	0.09
RMD-262	GRAB	13799 Commerce Pkwy.	27-Mar-13	0.6	<1	<2	7	<1	0.14
RMD-278	GRAB	6651 Fraserwood Place	27-Mar-13	0.57	<1	<2	7	<1	0.25
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	27-Mar-13	0.69	<1	<2	7	<1	0.26
RMD-261	GRAB	9911 Sidaway Rd.	27-Mar-13	0.67	<1	<2	7	<1	0.24
RMD-260	GRAB	11111 Horseshoe Way	27-Mar-13	0.54	<1	<2	6	<1	0.11
RMD-259	GRAB	10020 Amethyst Ave.	27-Mar-13	0.61	<1	<2	6	<1	0.12
RMD-266	GRAB	9380 General Currie Rd.	27-Mar-13	0.56	<1	<2	7	<1	0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	27-Mar-13	0.56	<1	<2	6	<1	0.1
RMD-258	GRAB	7000 Blk. Dyke Rd.	27-Mar-13	0.49	<1	<2	6	<1	0.14
RMD-257	GRAB	6640 Blundell Rd.	27-Mar-13	0.58	<1	<2	6	<1	0.1
RMD-263	GRAB	12560 Cambie Rd.	3-Apr-13	0.64	<1	<2	6	<1	0.16

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-264	GRAB	13100 Mitchell Rd.	3-Apr-13	0.58	<1	<2	6	<1	0.1
RMD-277	GRAB	Opp. 11280 Twigg Place	3-Apr-13	0.39	<1	<2	7	<1	0.14
RMD-262	GRAB	13799 Commerce Pkwy.	3-Apr-13	0.61	<1	2	6	<1	0.27
RMD-278	GRAB	6651 Fraserwood Place	3-Apr-13	0.59	<1	<2	7	<1	0.27
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	3-Apr-13	0.71	<1	<2	5	<1	0.22
RMD-261	GRAB	9911 Sidaway Rd.	3-Apr-13	0.73	<1	<2	5	<1	0.08
RMD-260	GRAB	11111 Horseshoe Way	3-Apr-13	0.98	<1	<2	5	<1	0.19
RMD-259	GRAB	10020 Amethyst Ave.	3-Apr-13	0.56	<1	<2	6	<1	0.14
RMD-266	GRAB	9380 General Currie Rd.	3-Apr-13	0.59	<1	<2	5	<1	0.17
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	3-Apr-13	0.37	<1	<2	7	<1	0.13
RMD-258	GRAB	7000 Blk. Dyke Rd.	3-Apr-13	0.59	<1	<2	6	<1	0.12
RMD-257	GRAB	6640 Blundell Rd.	3-Apr-13	0.42	<1	<2	6	<1	0.18
RMD-204	GRAB	3180 Granville Ave.	5-Apr-13	0.58	<1	<2	6	<1	0.3
RMD-206	GRAB	4251 Moncton St.	5-Apr-13	0.54	<1	<2	6	<1	0.1
RMD-216	GRAB	11080 No. 2 Rd.	5-Apr-13	0.63	<1	2	5	<1	0.06
RMD-212	GRAB	Opp. 8600 Ryan Rd.	5-Apr-13	0.6	<1	<2	6	<1	0.09
RMD-208	GRAB	13200 No. 4 Rd.	5-Apr-13	0.62	<1	<2	6	<1	0.18
RMD-205	GRAB	13851 Steveston Hwy.	5-Apr-13	0.68	<1	2	5	<1	0.06
RMD-202	GRAB	1500 Valemont Way	5-Apr-13	0.7	<1	<2	7	<1	0.22
RMD-214	GRAB	11720 Westminster Hwy.	5-Apr-13	0.65	<1	2	5	<1	0.09
RMD-267	GRAB	17240 Fedoruk	5-Apr-13	0.56	<1	<2	8	<1	0.28
RMD-249	GRAB	23000 Blk. Dyke Rd.	5-Apr-13	0.67	<1	<2	6	<1	0.29
RMD-276	GRAB	22271 Cochrane Drive	5-Apr-13	0.69	<1	<2	7	<1	0.22
RMD-275	GRAB	5180 Smith Cres.	5-Apr-13	0.75	<1	<2	6	<1	0.21
RMD-203	GRAB	23260 Westminster Hwy.	5-Apr-13	0.85	<1	<2	5	<1	0.33
RMD-251	GRAB	5951McCallan Rd.	8-Apr-13	0.56	<1	<2	10	<1	0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	8-Apr-13	0.52	<1	<2	15	<1	0.69
RMD-274	GRAB	10920 Springwood Court	8-Apr-13	0.59	<1	<2	11	<1	0.1
RMD-252	GRAB	9751 Pendleton Rd.	8-Apr-13	0.55	<1	<2	9	<1	0.11
RMD-250	GRAB	6071 Azure Rd.	8-Apr-13	0.54	<1	2	9	<1	0.09
RMD-271	GRAB	3800 Cessna Drive	8-Apr-13	0.53	<1	<2	8	<1	0.09
RMD-272	GRAB	751 Catalina Cres.	8-Apr-13	0.64	<1	<2	8	<1	0.08
RMD-255	GRAB	6000 Blk. Miller Rd.	8-Apr-13	0.61	<1	<2	7	<1	0.17
RMD-256	GRAB	1000 Blk. McDonald Rd.	8-Apr-13	0.48	<1	<2	8	<1	0.12
RMD-253	GRAB	11051 No 3 Rd.	8-Apr-13	0.58	<1	<2	8	<1	0.1
RMD-269	GRAB	14951 Triangle Rd.	8-Apr-13	0.66	<1	<2	8	<1	0.13
RMD-270	GRAB	8200 Jones Rd.	8-Apr-13	0.58	<1	<2	9	<1	0.08

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-254	GRAB	5300 No. 3 Rd.	8-Apr-13	0.55	<1	<2	8	<1	0.12
RMD-263	GRAB	12560 Cambie Rd.	10-Apr-13	0.62	<1	<2	8	<1	0.11
RMD-264	GRAB	13100 Mitchell Rd.	10-Apr-13	0.68	<1	<2	8	<1	0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	10-Apr-13	0.43	<1	<2	9	<1	0.14
RMD-262	GRAB	13799 Commerce Pkwy.	10-Apr-13	0.57	<1	<2	9	<1	0.16
RMD-278	GRAB	6651 Fraserwood Place	10-Apr-13	0.69	<1	<2	8	<1	0.56
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	10-Apr-13	0.74	<1	<2	8	<1	0.53
RMD-261	GRAB	9911 Sidaway Rd.	10-Apr-13	0.62	<1	<2	7	<1	0.19
RMD-260	GRAB	11111 Horseshoe Way	10-Apr-13	0.62	<1	<2	7	<1	0.23
RMD-259	GRAB	10020 Amethyst Ave.	10-Apr-13	0.52	<1	<2	8	<1	0.11
RMD-266	GRAB	9380 General Currie Rd.	10-Apr-13	0.67	<1	<2	7	<1	0.16
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	10-Apr-13	0.57	<1	<2	8	<1	0.19
RMD-258	GRAB	7000 Blk. Dyke Rd.	10-Apr-13	0.59	<1	<2	9	<1	0.11
RMD-257	GRAB	6640 Blundell Rd.	10-Apr-13	0.6	<1	<2	8	<1	0.11
RMD-204	GRAB	3180 Granville Ave.	12-Apr-13	0.5	<1	<2	7	<1	0.18
RMD-206	GRAB	4251 Moncton St.	12-Apr-13	0.39	<1	<2	8	<1	0.11
RMD-216	GRAB	11080 No. 2 Rd.	12-Apr-13	0.53	<1	<2	6	<1	0.12
RMD-212	GRAB	Opp. 8600 Ryan Rd.	12-Apr-13	0.52	<1	<2	6	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	12-Apr-13	0.57	<1	6	6	<1	0.09
RMD-205	GRAB	13851 Steveston Hwy.	12-Apr-13	0.59	<1	<2	6	<1	0.08
RMD-202	GRAB	1500 Valemont Way	12-Apr-13	0.72	<1	<2	6	<1	0.27
RMD-214	GRAB	11720 Westminster Hwy.	12-Apr-13	0.58	<1	<2	6	<1	0.18
RMD-267	GRAB	17240 Fedoruk	12-Apr-13	0.55	<1	<2	7	<1	0.17
RMD-249	GRAB	23000 Blk. Dyke Rd.	12-Apr-13	0.91	<1	<2	6	<1	0.28
RMD-276	GRAB	22271 Cochrane Drive	12-Apr-13	0.59	<1	<2	7	<1	0.28
RMD-275	GRAB	5180 Smith Cres.	12-Apr-13	0.73	<1	<2	7	<1	0.37
RMD-203	GRAB	23260 Westminster Hwy.	12-Apr-13	0.56	<1	<2	7	<1	0.29
RMD-251	GRAB	5951McCallan Rd.	15-Apr-13	0.62	<1	<2	7	<1	0.11
RMD-250	GRAB	6071 Azure Rd.	15-Apr-13	0.55	<1	<2	7	<1	0.13
RMD-271	GRAB	3800 Cessna Drive	15-Apr-13	0.65	<1	<2	6	<1	0.1
RMD-272	GRAB	751 Catalina Cres.	15-Apr-13	0.57	<1	<2	6	<1	0.13
RMD-255	GRAB	6000 Blk. Miller Rd.	15-Apr-13	0.48	<1	<2	5	<1	0.45
RMD-256	GRAB	1000 Blk. McDonald Rd.	15-Apr-13	0.45	<1	6	6	<1	0.11
RMD-254	GRAB	5300 No. 3 Rd.	15-Apr-13	0.57	<1	<2	6	<1	0.11
RMD-270	GRAB	8200 Jones Rd.	15-Apr-13	0.53	<1	<2	7	<1	0.2
RMD-269	GRAB	14951 Triangle Rd.	15-Apr-13	0.72	<1	<2	6	<1	0.11
RMD-253	GRAB	11051 No 3 Rd.	15-Apr-13	0.56	<1	<2	6	<1	0.1

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-274	GRAB	10920 Springwood Court	15-Apr-13	0.52	<1	2	7	<1	0.15
RMD-252	GRAB	9751 Pendleton Rd.	15-Apr-13	0.55	<1	<2	6	<1	0.14
RMD-273	GRAB	Opp. 8331 Fairfax Place	15-Apr-13	0.5	<1	<2	8	<1	0.25
RMD-263	GRAB	12560 Cambie Rd.	17-Apr-13	0.63	<1	<2	6	<1	0.12
RMD-264	GRAB	13100 Mitchell Rd.	17-Apr-13	0.57	<1	<2	6	<1	0.12
RMD-277	GRAB	Opp. 11280 Twigg Place	17-Apr-13	0.54	<1	6	7	<1	0.11
RMD-262	GRAB	13799 Commerce Pkwy.	17-Apr-13	0.57	<1	<2	6	<1	0.23
RMD-278	GRAB	6651 Fraserwood Place	17-Apr-13	0.58	<1	<2	7	<1	0.36
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	17-Apr-13	0.6	<1	<2	6	<1	0.33
RMD-261	GRAB	9911 Sidaway Rd.	17-Apr-13	0.69	<1	<2	6	<1	0.08
RMD-260	GRAB	11111 Horseshoe Way	17-Apr-13	0.64	<1	<2	6	<1	0.11
RMD-259	GRAB	10020 Amethyst Ave.	17-Apr-13	0.62	<1	<2	7	<1	0.1
RMD-266	GRAB	9380 General Currie Rd.	17-Apr-13	0.57	<1	<2	6	<1	0.09
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	17-Apr-13	0.59	<1	<2	6	<1	0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	17-Apr-13	0.63	<1	4	6	<1	0.1
RMD-257	GRAB	6640 Blundell Rd.	17-Apr-13	0.56	<1	2	6	<1	0.09
RMD-204	GRAB	3180 Granville Ave.	19-Apr-13	0.54	<1	<2	7	<1	0.13
RMD-206	GRAB	4251 Moncton St.	19-Apr-13	0.5	<1	<2	7	<1	0.16
RMD-216	GRAB	11080 No. 2 Rd.	19-Apr-13	0.53	<1	<2	6	<1	0.11
RMD-212	GRAB	Opp. 8600 Ryan Rd.	19-Apr-13	0.52	<1	2	6	<1	0.16
RMD-208	GRAB	13200 No. 4 Rd.	19-Apr-13	0.63	<1	<2	6	<1	0.14
RMD-205	GRAB	13851 Steveston Hwy.	19-Apr-13	0.69	<1	<2	6	<1	0.14
RMD-202	GRAB	1500 Valemont Way	19-Apr-13	0.66	<1	<2	6	<1	0.31
RMD-214	GRAB	11720 Westminster Hwy.	19-Apr-13	0.5	<1	<2	6	<1	0.12
RMD-267	GRAB	17240 Fedoruk	19-Apr-13	0.54	<1	<2	7	<1	0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	19-Apr-13	0.75	<1	<2	6	<1	0.33
RMD-276	GRAB	22271 Cochrane Drive	19-Apr-13	0.58	<1	<2	7	<1	0.3
RMD-275	GRAB	5180 Smith Cres.	19-Apr-13	0.6	<1	<2	7	<1	0.23
RMD-203	GRAB	23260 Westminster Hwy.	19-Apr-13	0.81	<1	<2	6	<1	0.34
RMD-251	GRAB	5951McCallan Rd.	22-Apr-13	0.61	<1	<2	7	<1	0.11
RMD-250	GRAB	6071 Azure Rd.	22-Apr-13	0.59	<1	<2	7	<1	0.13
RMD-271	GRAB	3800 Cessna Drive	22-Apr-13	0.25	<1	4	8	<1	0.14
RMD-272	GRAB	751 Catalina Cres.	22-Apr-13	0.5	<1	<2	7	<1	0.13
RMD-255	GRAB	6000 Blk. Miller Rd.	22-Apr-13	0.59	<1	2	6	<1	0.4
RMD-256	GRAB	1000 Blk. McDonald Rd.	22-Apr-13	0.33	<1	<2	7	<1	0.24
RMD-254	GRAB	5300 No. 3 Rd.	22-Apr-13	0.55	<1	<2	7	<1	0.23
RMD-270	GRAB	8200 Jones Rd.	22-Apr-13	0.55	<1	<2	7	<1	0.12

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-269	GRAB	14951 Triangle Rd.	22-Apr-13	0.69	<1	<2	7	<1	0.11
RMD-253	GRAB	11051 No 3 Rd.	22-Apr-13	0.57	<1	<2	6	<1	0.13
RMD-274	GRAB	10920 Springwood Court	22-Apr-13	0.48	<1	<2	7	<1	0.16
RMD-252	GRAB	9751 Pendleton Rd.	22-Apr-13	0.49	<1	<2	7	<1	0.39
RMD-273	GRAB	Opp. 8331 Fairfax Place	22-Apr-13	0.41	<1	<2	8	<1	0.19
RMD-263	GRAB	12560 Cambie Rd.	24-Apr-13	0.6	<1	<2	6	<1	0.11
RMD-264	GRAB	13100 Mitchell Rd.	24-Apr-13	0.61	<1	<2	6	<1	0.22
RMD-277	GRAB	Opp. 11280 Twigg Place	24-Apr-13	0.57	<1	<2	7	<1	0.11
RMD-262	GRAB	13799 Commerce Pkwy.	24-Apr-13	0.62	<1	2	7	<1	0.09
RMD-278	GRAB	6651 Fraserwood Place	24-Apr-13	0.56	<1	<2	7	<1	0.3
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	24-Apr-13	0.66	<1	<2	7	<1	0.33
RMD-261	GRAB	9911 Sidaway Rd.	24-Apr-13	0.61	<1	<2	7	<1	0.08
RMD-260	GRAB	11111 Horseshoe Way	24-Apr-13	0.54	<1	<2	7	<1	0.17
RMD-259	GRAB	10020 Amethyst Ave.	24-Apr-13	0.52	<1	<2	7	<1	0.11
RMD-266	GRAB	9380 General Currie Rd.	24-Apr-13	0.6	<1	<2	7	<1	0.1
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	24-Apr-13	0.62	<1	<2	8	<1	0.14
RMD-258	GRAB	7000 Blk. Dyke Rd.	24-Apr-13	0.61	<1	<2	6	<1	0.19
RMD-257	GRAB	6640 Blundell Rd.	24-Apr-13	0.59	<1	<2	7	<1	0.19
RMD-204	GRAB	3180 Granville Ave.	26-Apr-13	0.57	<1	<2	8	<1	0.11
RMD-206	GRAB	4251 Moncton St.	26-Apr-13	0.43	<1	<2	8	<1	0.14
RMD-216	GRAB	11080 No. 2 Rd.	26-Apr-13	0.4	<1	<2	7	<1	0.17
RMD-212	GRAB	Opp. 8600 Ryan Rd.	26-Apr-13	0.54	<1	2	7	<1	0.19
RMD-208	GRAB	13200 No. 4 Rd.	26-Apr-13	0.62	<1	<2	7	<1	0.13
RMD-205	GRAB	13851 Steveston Hwy.	26-Apr-13	0.61	<1	<2	7	<1	0.07
RMD-202	GRAB	1500 Valemont Way	26-Apr-13	0.62	<1	<2	7	<1	0.23
RMD-267	GRAB	17240 Fedoruk	26-Apr-13	0.55	<1	<2	9	<1	0.19
RMD-214	GRAB	11720 Westminster Hwy.	26-Apr-13	0.6	<1	<2	8	<1	0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	26-Apr-13	0.71	<1	<2	6	<1	0.34
RMD-276	GRAB	22271 Cochrane Drive	26-Apr-13	0.62	<1	<2	7	<1	0.26
RMD-275	GRAB	5180 Smith Cres.	26-Apr-13	0.6	<1	2	8	<1	0.22
RMD-203	GRAB	23260 Westminster Hwy.	26-Apr-13	0.69	<1	6	7	<1	0.33
RMD-251	GRAB	5951McCallan Rd.	29-Apr-13	0.55	<1	<2	8	<1	0.12
RMD-250	GRAB	6071 Azure Rd.	29-Apr-13	0.56	<1	<2	8	<1	0.13
RMD-271	GRAB	3800 Cessna Drive	29-Apr-13	0.57	<1	<2	8	<1	0.12
RMD-272	GRAB	751 Catalina Cres.	29-Apr-13	0.51	<1	<2	8	<1	0.13
RMD-255	GRAB	6000 Blk. Miller Rd.	29-Apr-13	0.6	<1	<2	7	<1	0.61
RMD-256	GRAB	1000 Blk. McDonald Rd.	29-Apr-13	0.39	<1	<2	8	<1	0.1

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-254	GRAB	5300 No. 3 Rd.	29-Apr-13	0.52	<1	<2	7	<1	0.16
RMD-270	GRAB	8200 Jones Rd.	29-Apr-13	0.5	<1	<2	8	<1	0.18
RMD-269	GRAB	14951 Triangle Rd.	29-Apr-13	0.66	<1	<2	7	<1	0.09
RMD-253	GRAB	11051 No 3 Rd.	29-Apr-13	0.62	<1	<2	7	<1	0.25
RMD-274	GRAB	10920 Springwood Court	29-Apr-13	0.59	<1	2	8	<1	0.11
RMD-252	GRAB	9751 Pendleton Rd.	29-Apr-13	0.59	<1	<2	8	<1	0.25
RMD-273	GRAB	Opp. 8331 Fairfax Place	29-Apr-13	0.46	<1	<2	9	<1	0.18
RMD-263	GRAB	12560 Cambie Rd.	1-May-13	0.61	<1	<2	8	<1	0.16
RMD-264	GRAB	13100 Mitchell Rd.	1-May-13	0.5	<1	<2	8	<1	0.19
RMD-277	GRAB	Opp. 11280 Twigg Place	1-May-13	0.46	<1	4	9	<1	0.17
RMD-262	GRAB	13799 Commerce Pkwy.	1-May-13	0.48	<1	20	8	<1	0.21
RMD-278	GRAB	6651 Fraserwood Place	1-May-13	0.67	<1	<2	9	<1	0.58
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	1-May-13	0.53	<1	<2	8	<1	0.53
RMD-261	GRAB	9911 Sidaway Rd.	1-May-13	0.58	<1	<2	8	<1	0.07
RMD-260	GRAB	11111 Horseshoe Way	1-May-13	0.61	<1	2	8	<1	0.11
RMD-259	GRAB	10020 Amethyst Ave.	1-May-13	0.52	<1	2	9	<1	0.11
RMD-266	GRAB	9380 General Currie Rd.	1-May-13	0.59	<1	<2	8	<1	0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	1-May-13	0.61	<1	<2	8	<1	0.1
RMD-258	GRAB	7000 Blk. Dyke Rd.	1-May-13	0.64	<1	4	8	<1	0.1
RMD-257	GRAB	6640 Blundell Rd.	1-May-13	0.56	<1	<2	8	<1	0.11
RMD-204	GRAB	3180 Granville Ave.	3-May-13	0.57	<1	<2	8	<1	0.11
RMD-206	GRAB	4251 Moncton St.	3-May-13	0.58	<1	<2	8	<1	0.15
RMD-216	GRAB	11080 No. 2 Rd.	3-May-13	0.6	<1	<2	7	<1	0.14
RMD-212	GRAB	Opp. 8600 Ryan Rd.	3-May-13	0.59	<1	<2	8	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	3-May-13	0.66	<1	<2	8	<1	0.13
RMD-205	GRAB	13851 Steveston Hwy.	3-May-13	0.69	<1	<2	7	<1	0.07
RMD-202	GRAB	1500 Valemont Way	3-May-13	0.52	<1	<2	9	<1	0.32
RMD-214	GRAB	11720 Westminster Hwy.	3-May-13	0.67	<1	<2	7	<1	0.14
RMD-267	GRAB	17240 Fedoruk	3-May-13	0.49	<1	<2	9	<1	0.16
RMD-249	GRAB	23000 Blk. Dyke Rd.	3-May-13	0.59	<1	<2	8	<1	0.26
RMD-276	GRAB	22271 Cochrane Drive	3-May-13	0.68	<1	<2	8	<1	0.24
RMD-275	GRAB	5180 Smith Cres.	3-May-13	0.7	<1	<2	8	<1	0.22
RMD-203	GRAB	23260 Westminster Hwy.	3-May-13	0.77	<1	<2	7	<1	0.38
RMD-251	GRAB	5951McCallan Rd.	6-May-13	0.75	<1	<2	7	<1	0.27
RMD-273	GRAB	Opp. 8331 Fairfax Place	6-May-13	0.68	<1	<2	15	<1	0.76
RMD-252	GRAB	9751 Pendleton Rd.	6-May-13	0.69	<1	<2	9	<1	0.28
RMD-274	GRAB	10920 Springwood Court	6-May-13	0.61	<1	<2	11	<1	0.19

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-250	GRAB	6071 Azure Rd.	6-May-13	0.75	<1	2	8	<1	0.26
RMD-271	GRAB	3800 Cessna Drive	6-May-13	0.57	<1	<2	9	<1	0.21
RMD-272	GRAB	751 Catalina Cres.	6-May-13	0.59	<1	<2	9	<1	0.29
RMD-255	GRAB	6000 Blk. Miller Rd.	6-May-13	0.69	<1	<2	8	<1	0.26
RMD-256	GRAB	1000 Blk. McDonald Rd.	6-May-13	0.12	<1	<2	12	<1	0.31
RMD-254	GRAB	5300 No. 3 Rd.	6-May-13	0.83	<1	<2	8	<1	0.24
RMD-270	GRAB	8200 Jones Rd.	6-May-13	0.64	<1	<2	10	<1	0.27
RMD-269	GRAB	14951 Triangle Rd.	6-May-13	0.77	<1	<2	9	<1	0.15
RMD-253	GRAB	11051 No 3 Rd.	6-May-13	0.69	<1	<2	8	<1	0.23
RMD-263	GRAB	12560 Cambie Rd.	8-May-13	0.97	<1	2	8	<1	0.4
RMD-264	GRAB	13100 Mitchell Rd.	8-May-13	0.83	<1	<2	8	<1	0.72
RMD-277	GRAB	Opp. 11280 Twigg Place	8-May-13	0.97	<1	<2	8	<1	1.3
RMD-262	GRAB	13799 Commerce Pkwy.	8-May-13	0.57	<1	<2	11	<1	0.17
RMD-278	GRAB	6651 Fraserwood Place	8-May-13	0.38	<1	<2	11	<1	0.37
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	8-May-13	0.42	<1	<2	11	<1	0.3
RMD-261	GRAB	9911 Sidaway Rd.	8-May-13	0.68	<1	<2	10	<1	0.07
RMD-260	GRAB	11111 Horseshoe Way	8-May-13	1	<1	<2	8	<1	0.42
RMD-259	GRAB	10020 Amethyst Ave.	8-May-13	0.95	<1	<2	8	<1	0.38
RMD-266	GRAB	9380 General Currie Rd.	8-May-13	1	<1	<2	8	<1	0.58
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	8-May-13	0.59	<1	<2	8	<1	0.43
RMD-258	GRAB	7000 Blk. Dyke Rd.	8-May-13	0.59	<1	2	8	<1	0.39
RMD-257	GRAB	6640 Blundell Rd.	8-May-13	0.73	<1	<2	10	<1	0.41
RMD-204	GRAB	3180 Granville Ave.	10-May-13	0.48	<1	<2	9	<1	0.33
RMD-206	GRAB	4251 Moncton St.	10-May-13	0.49	<1	<2	8	<1	0.34
RMD-216	GRAB	11080 No. 2 Rd.	10-May-13	0.58	<1	<2	8	<1	0.45
RMD-212	GRAB	Opp. 8600 Ryan Rd.	10-May-13	0.57	<1	<2	8	<1	0.51
RMD-208	GRAB	13200 No. 4 Rd.	10-May-13	0.64	<1	<2	8	<1	0.67
RMD-205	GRAB	13851 Steveston Hwy.	10-May-13	0.64	<1	<2	8	<1	0.07
RMD-202	GRAB	1500 Valemont Way	10-May-13	0.53	<1	2	9	<1	0.16
RMD-214	GRAB	11720 Westminster Hwy.	10-May-13	0.68	<1	2	7	<1	0.44
RMD-267	GRAB	17240 Fedoruk	10-May-13	0.69	<1	<2	11	<1	0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	10-May-13	0.43	<1	<2	8	<1	0.29
RMD-276	GRAB	22271 Cochrane Drive	10-May-13	0.34	<1	<2	9	<1	0.17
RMD-275	GRAB	5180 Smith Cres.	10-May-13	0.4	<1	<2	9	<1	0.18
RMD-203	GRAB	23260 Westminster Hwy.	10-May-13	0.44	<1	2	9	<1	0.27
RMD-251	GRAB	5951McCallan Rd.	13-May-13	0.74	<1	<2	7	<1	0.37
RMD-273	GRAB	Opp. 8331 Fairfax Place	13-May-13	0.28	<1	<2	14	<1	0.38

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-252	GRAB	9751 Pendleton Rd.	13-May-13	0.48	<1	<2	9	<1	0.34
RMD-274	GRAB	10920 Springwood Court	13-May-13	0.36	<1	12	14	<1	0.44
RMD-250	GRAB	6071 Azure Rd.	13-May-13	0.72	<1	<2	7	<1	0.42
RMD-255	GRAB	6000 Blk. Miller Rd.	13-May-13	0.63	<1	<2	7	<1	0.67
RMD-272	GRAB	751 Catalina Cres.	13-May-13	0.64	<1	6	9	<1	0.39
RMD-271	GRAB	3800 Cessna Drive	13-May-13	0.74	<1	<2	8	<1	0.35
RMD-254	GRAB	5300 No. 3 Rd.	13-May-13	0.66	<1	12	8	<1	0.38
RMD-270	GRAB	8200 Jones Rd.	13-May-13	0.72	<1	<2	9	<1	0.43
RMD-269	GRAB	14951 Triangle Rd.	13-May-13	0.77	<1	4	9	<1	0.11
RMD-253	GRAB	11051 No 3 Rd.	13-May-13	0.68	<1	<2	7	<1	0.34
RMD-263	GRAB	12560 Cambie Rd.	15-May-13	0.61	<1	2	8	<1	0.4
RMD-264	GRAB	13100 Mitchell Rd.	15-May-13	0.71	<1	<2	7	<1	0.36
RMD-277	GRAB	Opp. 11280 Twigg Place	15-May-13	0.69	<1	<2	8	<1	0.41
RMD-262	GRAB	13799 Commerce Pkwy.	15-May-13	0.67	<1	<2	10	<1	0.1
RMD-278	GRAB	6651 Fraserwood Place	15-May-13	0.45	<1	<2	11	<1	0.16
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	15-May-13	0.51	<1	<2	10	<1	0.17
RMD-261	GRAB	9911 Sidaway Rd.	15-May-13	0.72	<1	<2	10	<1	0.1
RMD-260	GRAB	11111 Horseshoe Way	15-May-13	0.68	<1	<2	8	<1	0.41
RMD-259	GRAB	10020 Amethyst Ave.	15-May-13	0.66	<1	<2	8	<1	0.35
RMD-266	GRAB	9380 General Currie Rd.	15-May-13	0.65	<1	<2	8	<1	0.36
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	15-May-13	0.69	<1	2	8	<1	0.39
RMD-258	GRAB	7000 Blk. Dyke Rd.	15-May-13	0.73	<1	<2	9	<1	0.36
RMD-257	GRAB	6640 Blundell Rd.	15-May-13	0.69	<1	<2	8	<1	0.38
RMD-204	GRAB	3180 Granville Ave.	17-May-13	0.51	<1	<2	10	<1	0.31
RMD-206	GRAB	4251 Moncton St.	17-May-13	0.47	<1	<2	11	<1	0.26
RMD-216	GRAB	11080 No. 2 Rd.	17-May-13	0.69	<1	<2	9	<1	0.35
RMD-212	GRAB	Opp. 8600 Ryan Rd.	17-May-13	0.6	<1	<2	10	<1	0.38
RMD-208	GRAB	13200 No. 4 Rd.	17-May-13	0.75	<1	<2	9	<1	0.43
RMD-205	GRAB	13851 Steveston Hwy.	17-May-13	0.64	<1	<2	8	<1	0.11
RMD-202	GRAB	1500 Valemont Way	17-May-13	0.5	<1	<2	11	<1	0.17
RMD-214	GRAB	11720 Westminster Hwy.	17-May-13	0.81	<1	<2	7	<1	0.39
RMD-267	GRAB	17240 Fedoruk	17-May-13	0.67	<1	<2	10	<1	0.11
RMD-249	GRAB	23000 Blk. Dyke Rd.	17-May-13	0.54	<1	<2	9	<1	0.19
RMD-276	GRAB	22271 Cochrane Drive	17-May-13	0.42	<1	<2	11	<1	0.21
RMD-275	GRAB	5180 Smith Cres.	17-May-13	0.39	<1	<2	11	<1	0.17
RMD-203	GRAB	23260 Westminster Hwy.	17-May-13	0.54	<1	<2	9	<1	0.19
RMD-251	GRAB	5951McCallan Rd.	21-May-13	0.78	<1	<2	7	<1	0.4

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-273	GRAB	Opp. 8331 Fairfax Place	21-May-13	0.24	<1	<2	16	<1	0.51
RMD-274	GRAB	10920 Springwood Court	21-May-13	0.39	<1	<2	13	<1	0.29
RMD-252	GRAB	9751 Pendleton Rd.	21-May-13	0.56	<1	<2	9	<1	0.35
RMD-250	GRAB	6071 Azure Rd.	21-May-13	0.64	<1	<2	7	<1	0.58
RMD-271	GRAB	3800 Cessna Drive	21-May-13	0.58	<1	<2	8	<1	0.57
RMD-272	GRAB	751 Catalina Cres.	21-May-13	0.45	<1	2	10	<1	0.41
RMD-255	GRAB	6000 Blk. Miller Rd.	21-May-13	0.77	<1	2	6	<1	0.48
RMD-254	GRAB	5300 No. 3 Rd.	21-May-13	0.67	<1	<2	7	<1	0.41
RMD-270	GRAB	8200 Jones Rd.	21-May-13	0.62	<1	2	9	<1	0.34
RMD-269	GRAB	14951 Triangle Rd.	21-May-13	0.75	<1	<2	8	<1	0.18
RMD-253	GRAB	11051 No 3 Rd.	21-May-13	0.44	<1	<2	7	<1	0.38
RMD-263	GRAB	12560 Cambie Rd.	22-May-13	0.6	<1	2	7	<1	0.32
RMD-264	GRAB	13100 Mitchell Rd.	22-May-13	0.71	<1	<2	7	<1	1
RMD-277	GRAB	Opp. 11280 Twigg Place	22-May-13	0.61	<1	<2	7	<1	1.5
RMD-262	GRAB	13799 Commerce Pkwy.	22-May-13	0.61	<1	<2	10	<1	0.33
RMD-278	GRAB	6651 Fraserwood Place	22-May-13	0.58	<1	<2	9	<1	0.62
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	22-May-13	0.5	<1	<2	9	<1	0.76
RMD-261	GRAB	9911 Sidaway Rd.	22-May-13	0.81	<1	<2	8	<1	0.11
RMD-260	GRAB	11111 Horseshoe Way	22-May-13	0.48	<1	<2	7	<1	0.36
RMD-259	GRAB	10020 Amethyst Ave.	22-May-13	0.59	<1	<2	8	<1	0.31
RMD-266	GRAB	9380 General Currie Rd.	22-May-13	0.7	<1	2	7	<1	0.37
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	22-May-13	0.46	<1	<2	8	<1	0.4
RMD-258	GRAB	7000 Blk. Dyke Rd.	22-May-13	0.68	<1	<2	9	<1	0.35
RMD-257	GRAB	6640 Blundell Rd.	22-May-13	0.48	<1	10	9	<1	0.31
RMD-204	GRAB	3180 Granville Ave.	24-May-13	0.48	<1	<2	10	<1	0.28
RMD-206	GRAB	4251 Moncton St.	24-May-13	0.52	<1	<2	8	<1	0.33
RMD-216	GRAB	11080 No. 2 Rd.	24-May-13	0.69	<1	<2	8	<1	0.36
RMD-212	GRAB	Opp. 8600 Ryan Rd.	24-May-13	0.66	<1	4	8	<1	0.44
RMD-208	GRAB	13200 No. 4 Rd.	24-May-13	0.77	<1	<2	8	<1	0.38
RMD-205	GRAB	13851 Steveston Hwy.	24-May-13	0.66	<1	<2	9	<1	0.09
RMD-202	GRAB	1500 Valemont Way	24-May-13	0.76	<1	<2	8	<1	0.1
RMD-214	GRAB	11720 Westminster Hwy.	24-May-13	0.65	<1	<2	7	<1	0.35
RMD-267	GRAB	17240 Fedoruk	24-May-13	0.73	<1	<2	11	<1	0.16
RMD-249	GRAB	23000 Blk. Dyke Rd.	24-May-13	0.55	<1	<2	8	<1	0.25
RMD-276	GRAB	22271 Cochrane Drive	24-May-13	0.6	<1	4	8	<1	0.23
RMD-275	GRAB	5180 Smith Cres.	24-May-13	0.53	<1	<2	9	<1	0.27
RMD-203	GRAB	23260 Westminster Hwy.	24-May-13	0.57	<1	<2	8	<1	0.31

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-251	GRAB	5951McCallan Rd.	27-May-13	0.77	<1	<2	7	<1	0.36
RMD-250	GRAB	6071 Azure Rd.	27-May-13	0.77	<1	<2	7	<1	0.43
RMD-271	GRAB	3800 Cessna Drive	27-May-13	0.85	<1	<2	8	<1	0.49
RMD-272	GRAB	751 Catalina Cres.	27-May-13	0.73	<1	2	9	<1	0.37
RMD-255	GRAB	6000 Blk. Miller Rd.	27-May-13	0.75	<1	<2	7	<1	0.43
RMD-254	GRAB	5300 No. 3 Rd.	27-May-13	0.77	<1	<2	6	<1	0.35
RMD-270	GRAB	8200 Jones Rd.	27-May-13	0.64	<1	<2	10	<1	0.37
RMD-269	GRAB	14951 Triangle Rd.	27-May-13	0.79	<1	2	9	<1	0.23
RMD-253	GRAB	11051 No 3 Rd.	27-May-13	0.8	<1	<2	7	<1	0.35
RMD-274	GRAB	10920 Springwood Court	27-May-13	0.73	<1	2	14	<1	0.32
RMD-252	GRAB	9751 Pendleton Rd.	27-May-13	0.6	<1	<2	9	<1	0.37
RMD-273	GRAB	Opp. 8331 Fairfax Place	27-May-13	0.23	<1	2	16	<1	0.33
RMD-257	GRAB	6640 Blundell Rd.	29-May-13	0.68	<1	<2	9	<1	0.32
RMD-266	GRAB	9380 General Currie Rd.	29-May-13	0.78	<1	<2	7	<1	0.33
RMD-259	GRAB	10020 Amethyst Ave.	29-May-13	0.61	<1	<2	9	<1	0.31
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	29-May-13	0.58	<1	<2	8	<1	0.4
RMD-258	GRAB	7000 Blk. Dyke Rd.	29-May-13	0.67	<1	<2	9	<1	0.3
RMD-260	GRAB	11111 Horseshoe Way	29-May-13	0.69	<1	<2	7	<1	0.33
RMD-261	GRAB	9911 Sidaway Rd.	29-May-13	0.64	<1	<2	10	<1	0.12
RMD-264	GRAB	13100 Mitchell Rd.	29-May-13	0.66	<1	2	8	<1	0.34
RMD-277	GRAB	Opp. 11280 Twigg Place	29-May-13	0.76	<1	<2	8	<1	0.5
RMD-278	GRAB	6651 Fraserwood Place	29-May-13	0.65	<1	<2	10	<1	0.24
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	29-May-13	0.71	<1	<2	10	<1	0.26
RMD-262	GRAB	13799 Commerce Pkwy.	29-May-13	0.62	<1	<2	10	<1	0.12
RMD-263	GRAB	12560 Cambie Rd.	29-May-13	0.72	<1	<2	8	<1	0.29
RMD-204	GRAB	3180 Granville Ave.	31-May-13	0.51	<1	<2	10	<1	0.34
RMD-206	GRAB	4251 Moncton St.	31-May-13	0.46	<1	<2	10	<1	0.29
RMD-216	GRAB	11080 No. 2 Rd.	31-May-13	0.68	<1	<2	8	<1	0.4
RMD-212	GRAB	Opp. 8600 Ryan Rd.	31-May-13	0.71	<1	<2	9	<1	0.33
RMD-208	GRAB	13200 No. 4 Rd.	31-May-13	0.69	<1	<2	9	<1	0.33
RMD-205	GRAB	13851 Steveston Hwy.	31-May-13	0.6	<1	<2	9	<1	0.14
RMD-202	GRAB	1500 Valemont Way	31-May-13	0.44	<1	<2	11	<1	0.67
RMD-214	GRAB	11720 Westminster Hwy.	31-May-13	0.79	<1	<2	7	<1	0.34
RMD-267	GRAB	17240 Fedoruk	31-May-13	0.57	<1	<2	11	<1	0.14
RMD-275	GRAB	5180 Smith Cres.	31-May-13	0.62	<1	<2	10	<1	0.21
RMD-276	GRAB	22271 Cochrane Drive	31-May-13	0.58	<1	<2	10	<1	0.27
RMD-249	GRAB	23000 Blk. Dyke Rd.	31-May-13	0.61	<1	<2	11	<1	0.26

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-203	GRAB	23260 Westminster Hwy.	31-May-13	0.72	<1	<2	8	<1	0.28
RMD-251	GRAB	5951McCallan Rd.	3-Jun-13	0.48	<1	<2	7	<1	0.34
RMD-273	GRAB	Opp. 8331 Fairfax Place	3-Jun-13	0.34	<1	2	15	<1	0.31
RMD-252	GRAB	9751 Pendleton Rd.	3-Jun-13	0.58	<1	<2	9	<1	0.32
RMD-274	GRAB	10920 Springwood Court	3-Jun-13	0.43	<1	<2	13	<1	0.25
RMD-250	GRAB	6071 Azure Rd.	3-Jun-13	0.72	<1	<2	7	<1	0.36
RMD-271	GRAB	3800 Cessna Drive	3-Jun-13	0.52	<1	<2	8	<1	0.32
RMD-272	GRAB	751 Catalina Cres.	3-Jun-13	0.6	<1	<2	10	<1	0.31
RMD-255	GRAB	6000 Blk. Miller Rd.	3-Jun-13	0.72	<1	<2	8	<1	0.4
RMD-254	GRAB	5300 No. 3 Rd.	3-Jun-13	0.61	<1	<2	10	<1	0.3
RMD-270	GRAB	8200 Jones Rd.	3-Jun-13	0.46	<1	<2	10	<1	0.32
RMD-269	GRAB	14951 Triangle Rd.	3-Jun-13	0.51	<1	2	10	<1	0.12
RMD-253	GRAB	11051 No 3 Rd.	3-Jun-13	0.63	<1	2	8	<1	0.34
RMD-263	GRAB	12560 Cambie Rd.	5-Jun-13	0.57	<1	<2	8	<1	0.34
RMD-264	GRAB	13100 Mitchell Rd.	5-Jun-13	0.69	<1	<2	8	<1	0.54
RMD-277	GRAB	Opp. 11280 Twigg Place	5-Jun-13	0.46	<1	<2	7	<1	0.56
RMD-262	GRAB	13799 Commerce Pkwy.	5-Jun-13	0.5	<1	<2	10	<1	0.18
RMD-278	GRAB	6651 Fraserwood Place	5-Jun-13	0.46	<1	10	11	<1	0.43
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	5-Jun-13	0.34	<1	<2	10	<1	0.35
RMD-261	GRAB	9911 Sidaway Rd.	5-Jun-13	0.61	<1	<2	10	<1	0.13
RMD-260	GRAB	11111 Horseshoe Way	5-Jun-13	0.55	<1	<2	8	<1	0.24
RMD-259	GRAB	10020 Amethyst Ave.	5-Jun-13	0.74	<1	<2	9	<1	0.2
RMD-266	GRAB	9380 General Currie Rd.	5-Jun-13	0.79	<1	4	9	<1	0.22
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	5-Jun-13	0.58	<1	4	8	<1	1.9
RMD-258	GRAB	7000 Blk. Dyke Rd.	5-Jun-13	0.53	<1	4	9	<1	0.48
RMD-257	GRAB	6640 Blundell Rd.	5-Jun-13	0.64	<1	<2	10	<1	0.24
RMD-204	GRAB	3180 Granville Ave.	7-Jun-13	0.65	<1	<2	10	<1	0.2
RMD-206	GRAB	4251 Moncton St.	7-Jun-13	0.64	<1	<2	9	<1	0.24
RMD-216	GRAB	11080 No. 2 Rd.	7-Jun-13	0.69	<1	<2	9	5	0.2
RMD-212	GRAB	Opp. 8600 Ryan Rd.	7-Jun-13	0.69	<1	<2	10	<1	0.27
RMD-208	GRAB	13200 No. 4 Rd.	7-Jun-13	0.65	<1	2	9	<1	0.23
RMD-205	GRAB	13851 Steveston Hwy.	7-Jun-13	0.56	<1	<2	9	<1	0.08
RMD-202	GRAB	1500 Valemont Way	7-Jun-13	0.66	<1	<2	10	<1	0.13
RMD-214	GRAB	11720 Westminster Hwy.	7-Jun-13	0.7	<1	4	8	<1	0.22
RMD-267	GRAB	17240 Fedoruk	7-Jun-13	0.59	<1	<2	11	<1	0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	7-Jun-13	0.75	<1	<2	9	<1	0.85
RMD-276	GRAB	22271 Cochrane Drive	7-Jun-13	0.58	<1	<2	10	<1	0.84

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-275	GRAB	5180 Smith Cres.	7-Jun-13	0.68	<1	<2	10	<1	0.27
RMD-203	GRAB	23260 Westminster Hwy.	7-Jun-13	0.7	<1	<2	10	<1	0.36
RMD-251	GRAB	5951McCallan Rd.	10-Jun-13	0.8	<1	<2	8	<1	0.25
RMD-250	GRAB	6071 Azure Rd.	10-Jun-13	0.7	<1	<2	9	<1	0.26
RMD-271	GRAB	3800 Cessna Drive	10-Jun-13	0.65	<1	<2	9	<1	0.24
RMD-272	GRAB	751 Catalina Cres.	10-Jun-13	0.63	<1	<2	11	<1	0.25
RMD-255	GRAB	6000 Blk. Miller Rd.	10-Jun-13	0.74	<1	<2	8	<1	0.27
RMD-256	GRAB	1000 Blk. McDonald Rd.	10-Jun-13	0.53	<1	2	9	<1	0.26
RMD-254	GRAB	5300 No. 3 Rd.	10-Jun-13	0.73	<1	<2	9	<1	0.26
RMD-270	GRAB	8200 Jones Rd.	10-Jun-13	0.67	<1	<2	9	<1	0.25
RMD-269	GRAB	14951 Triangle Rd.	10-Jun-13	0.65	<1	<2	9	<1	0.11
RMD-253	GRAB	11051 No 3 Rd.	10-Jun-13	0.66	<1	<2	8	<1	0.25
RMD-274	GRAB	10920 Springwood Court	10-Jun-13	0.32	<1	4	14	<1	0.21
RMD-252	GRAB	9751 Pendleton Rd.	10-Jun-13	0.68	<1	<2	10	<1	0.24
RMD-273	GRAB	Opp. 8331 Fairfax Place	10-Jun-13	0.3	<1	<2	16	<1	0.3
RMD-263	GRAB	12560 Cambie Rd.	12-Jun-13	0.66	<1	<2	8	<1	0.23
RMD-264	GRAB	13100 Mitchell Rd.	12-Jun-13	0.72	<1	<2	9	<1	0.31
RMD-277	GRAB	Opp. 11280 Twigg Place	12-Jun-13	0.72	<1	<2	9	<1	0.34
RMD-262	GRAB	13799 Commerce Pkwy.	12-Jun-13	0.51	<1	<2	9	<1	0.19
RMD-278	GRAB	6651 Fraserwood Place	12-Jun-13	0.55	<1	<2	10	<1	0.35
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	12-Jun-13	0.61	<1	<2	10	<1	0.35
RMD-261	GRAB	9911 Sidaway Rd.	12-Jun-13	0.57	<1	<2	10	<1	0.1
RMD-260	GRAB	11111 Horseshoe Way	12-Jun-13	0.57	<1	<2	8	<1	0.23
RMD-259	GRAB	10020 Amethyst Ave.	12-Jun-13	0.64	<1	<2	8	<1	0.25
RMD-266	GRAB	9380 General Currie Rd.	12-Jun-13	0.68	<1	4	9	<1	0.28
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	12-Jun-13	0.6	<1	<2	8	<1	0.22
RMD-203	GRAB	23260 Westminster Hwy.	12-Jun-13	0.73	<1	<2	10	<1	0.3
RMD-258	GRAB	7000 Blk. Dyke Rd.	12-Jun-13	0.57	<1	<2	8	<1	0.25
RMD-257	GRAB	6640 Blundell Rd.	12-Jun-13	0.5	<1	<2	10	<1	0.26
RMD-204	GRAB	3180 Granville Ave.	14-Jun-13	0.61	<1	<2	11	<1	0.13
RMD-206	GRAB	4251 Moncton St.	14-Jun-13	0.68	<1	<2	9	<1	0.13
RMD-216	GRAB	11080 No. 2 Rd.	14-Jun-13	0.69	<1	<2	9	<1	0.24
RMD-212	GRAB	Opp. 8600 Ryan Rd.	14-Jun-13	0.71	<1	<2	10	<1	0.27
RMD-208	GRAB	13200 No. 4 Rd.	14-Jun-13	0.79	<1	<2	9	<1	0.29
RMD-205	GRAB	13851 Steveston Hwy.	14-Jun-13	0.67	<1	<2	10	<1	0.08
RMD-202	GRAB	1500 Valemont Way	14-Jun-13	0.68	<1	<2	11	<1	0.1
RMD-214	GRAB	11720 Westminster Hwy.	14-Jun-13	0.77	<1	<2	8	<1	0.18

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-267	GRAB	17240 Fedoruk	14-Jun-13	0.61	<1	<2	12	<1	0.09
RMD-249	GRAB	23000 Blk. Dyke Rd.	14-Jun-13	0.82	<1	4	10	<1	0.23
RMD-276	GRAB	22271 Cochrane Drive	14-Jun-13	0.52	<1	<2	12	<1	0.16
RMD-275	GRAB	5180 Smith Cres.	14-Jun-13	0.7	<1	<2	12	<1	0.18
RMD-203	GRAB	23260 Westminster Hwy.	14-Jun-13	0.79	<1	2	9	<1	0.25
RMD-251	GRAB	5951McCallan Rd.	17-Jun-13	0.61	<1	<2	8	<1	0.19
RMD-273	GRAB	Opp. 8331 Fairfax Place	17-Jun-13	0.58	<1	<2	17	<1	0.59
RMD-274	GRAB	10920 Springwood Court	17-Jun-13	0.56	<1	<2	14	<1	0.14
RMD-252	GRAB	9751 Pendleton Rd.	17-Jun-13	0.66	<1	<2	10	<1	0.28
RMD-250	GRAB	6071 Azure Rd.	17-Jun-13	0.59	<1	2	9	<1	0.23
RMD-271	GRAB	3800 Cessna Drive	17-Jun-13	0.68	<1	<2	9	<1	0.19
RMD-272	GRAB	751 Catalina Cres.	17-Jun-13	0.68	<1	<2	9	<1	0.23
RMD-256	GRAB	1000 Blk. McDonald Rd.	17-Jun-13	0.86	<1	<2	9	<1	0.14
RMD-255	GRAB	6000 Blk. Miller Rd.	17-Jun-13	0.94	<1	2	8	<1	0.23
RMD-254	GRAB	5300 No. 3 Rd.	17-Jun-13	0.75	<1	<2	9	<1	0.2
RMD-270	GRAB	8200 Jones Rd.	17-Jun-13	0.69	<1	<2	10	<1	0.13
RMD-269	GRAB	14951 Triangle Rd.	17-Jun-13	0.62	<1	<2	9	<1	0.08
RMD-253	GRAB	11051 No 3 Rd.	17-Jun-13	0.94	<1	<2	8	<1	0.19
RMD-263	GRAB	12560 Cambie Rd.	19-Jun-13	0.76	<1	<2	9	<1	0.17
RMD-262	GRAB	13799 Commerce Pkwy.	19-Jun-13	0.7	<1	<2	11	<1	0.12
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	19-Jun-13	0.69	<1	<2	12	<1	0.22
RMD-278	GRAB	6651 Fraserwood Place	19-Jun-13	0.73	<1	<2	11	<1	0.22
RMD-261	GRAB	9911 Sidaway Rd.	19-Jun-13	0.45	<1	<2	12	<1	0.14
RMD-260	GRAB	11111 Horseshoe Way	19-Jun-13	0.68	<1	<2	10	<1	0.23
RMD-259	GRAB	10020 Amethyst Ave.	19-Jun-13	0.62	<1	<2	10	<1	0.2
RMD-266	GRAB	9380 General Currie Rd.	19-Jun-13	0.7	<1	<2	9	<1	0.2
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	19-Jun-13	0.71	<1	<2	10	<1	0.16
RMD-258	GRAB	7000 Blk. Dyke Rd.	19-Jun-13	0.74	<1	<2	13	<1	0.12
RMD-257	GRAB	6640 Blundell Rd.	19-Jun-13	0.7	<1	<2	11	<1	0.16
RMD-264	GRAB	13100 Mitchell Rd.	19-Jun-13	0.45	<1	<2	10	<1	0.23
RMD-277	GRAB	Opp. 11280 Twigg Place	19-Jun-13	0.7	<1	<2	11	<1	0.28
RMD-204	GRAB	3180 Granville Ave.	21-Jun-13	0.64	<1	<2	12	<1	0.16
RMD-206	GRAB	4251 Moncton St.	21-Jun-13	0.64	<1	<2	11	<1	0.16
RMD-216	GRAB	11080 No. 2 Rd.	21-Jun-13	0.69	<1	<2	11	<1	0.15
RMD-212	GRAB	Opp. 8600 Ryan Rd.	21-Jun-13	0.67	<1	2	11	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	21-Jun-13	0.71	<1	<2	11	<1	0.14
RMD-205	GRAB	13851 Steveston Hwy.	21-Jun-13	0.48	<1	<2	11	<1	0.29

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-202	GRAB	1500 Valemont Way	21-Jun-13	0.37	<1	<2	12	<1	0.2
RMD-214	GRAB	11720 Westminster Hwy.	21-Jun-13	0.67	<1	2	9	<1	0.14
RMD-267	GRAB	17240 Fedoruk	21-Jun-13	0.64	<1	<2	15	<1	0.08
RMD-249	GRAB	23000 Blk. Dyke Rd.	21-Jun-13	0.67	<1	<2	11	<1	0.2
RMD-276	GRAB	22271 Cochrane Drive	21-Jun-13	0.66	<1	<2	11	<1	0.2
RMD-275	GRAB	5180 Smith Cres.	21-Jun-13	0.64	<1	<2	11	<1	0.29
RMD-203	GRAB	23260 Westminster Hwy.	21-Jun-13	0.84	<1	2	10	<1	0.22
RMD-251	GRAB	5951McCallan Rd.	24-Jun-13	0.81	<1	2	10	<1	0.2
RMD-250	GRAB	6071 Azure Rd.	24-Jun-13	0.65	<1	<2	12	<1	0.1
RMD-271	GRAB	3800 Cessna Drive	24-Jun-13	0.83	<1	<2	12	<1	0.18
RMD-272	GRAB	751 Catalina Cres.	24-Jun-13	0.78	<1	<2	11	<1	0.18
RMD-255	GRAB	6000 Blk. Miller Rd.	24-Jun-13	0.85	<1	2	10	<1	0.9
RMD-256	GRAB	1000 Blk. McDonald Rd.	24-Jun-13	0.14	<1	12	16	<1	0.12
RMD-254	GRAB	5300 No. 3 Rd.	24-Jun-13	0.73	<1	2	11	<1	0.16
RMD-270	GRAB	8200 Jones Rd.	24-Jun-13	0.84	<1	2	10	<1	0.15
RMD-269	GRAB	14951 Triangle Rd.	24-Jun-13	0.74	<1	2	11	<1	0.2
RMD-253	GRAB	11051 No 3 Rd.	24-Jun-13	0.69	<1	<2	10	<1	0.14
RMD-274	GRAB	10920 Springwood Court	24-Jun-13	0.6	<1	<2	16	<1	0.33
RMD-252	GRAB	9751 Pendleton Rd.	24-Jun-13	0.73	<1	<2	11	<1	0.21
RMD-273	GRAB	Opp. 8331 Fairfax Place	24-Jun-13	0.63	<1	<2	17	<1	0.57
RMD-263	GRAB	12560 Cambie Rd.	26-Jun-13	0.73	<1	<2	10	<1	0.19
RMD-264	GRAB	13100 Mitchell Rd.	26-Jun-13	0.86	<1	4	10	<1	0.45
RMD-277	GRAB	Opp. 11280 Twigg Place	26-Jun-13	0.89	<1	<2	10	<1	0.32
RMD-262	GRAB	13799 Commerce Pkwy.	26-Jun-13	0.44	<1	<2	11	<1	0.11
RMD-278	GRAB	6651 Fraserwood Place	26-Jun-13	0.7	<1	<2	11	<1	0.34
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	26-Jun-13	0.19	<1	<2	14	<1	0.39
RMD-261	GRAB	9911 Sidaway Rd.	26-Jun-13	0.51	<1	<2	11	<1	0.12
RMD-260	GRAB	11111 Horseshoe Way	26-Jun-13	0.37	<1	<2	10	<1	0.16
RMD-259	GRAB	10020 Amethyst Ave.	26-Jun-13	0.73	<1	<2	10	<1	0.13
RMD-266	GRAB	9380 General Currie Rd.	26-Jun-13	0.74	<1	<2	10	<1	0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	26-Jun-13	0.55	<1	4	11	<1	0.18
RMD-258	GRAB	7000 Blk. Dyke Rd.	26-Jun-13	0.6	<1	<2	11	<1	0.14
RMD-204	GRAB	3180 Granville Ave.	27-Jun-13	0.69	<1	<2	11	<1	0.24
RMD-206	GRAB	4251 Moncton St.	27-Jun-13	0.66	<1	<2	11	<1	0.17
RMD-216	GRAB	11080 No. 2 Rd.	27-Jun-13	0.73	<1	<2	11	<1	0.17
RMD-212	GRAB	Opp. 8600 Ryan Rd.	27-Jun-13	0.68	<1	<2	11	<1	0.14
RMD-208	GRAB	13200 No. 4 Rd.	27-Jun-13	0.65	<1	<2	10	<1	0.13

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-205	GRAB	13851 Steveston Hwy.	27-Jun-13	0.55	<1	<2	11	<1	0.15
RMD-202	GRAB	1500 Valemont Way	27-Jun-13	0.57	<1	<2	11	<1	0.25
RMD-214	GRAB	11720 Westminster Hwy.	27-Jun-13	0.73	<1	<2	9	<1	0.16
RMD-267	GRAB	17240 Fedoruk	27-Jun-13	0.62	<1	8	13	<1	0.09
RMD-249	GRAB	23000 Blk. Dyke Rd.	27-Jun-13	0.55	<1	2	11	<1	0.24
RMD-276	GRAB	22271 Cochrane Drive	27-Jun-13	0.79	<1	6	11	<1	0.2
RMD-275	GRAB	5180 Smith Cres.	27-Jun-13	0.56	<1	<2	11	<1	0.22
RMD-203	GRAB	23260 Westminster Hwy.	27-Jun-13	0.76	<1	<2	[Not	<1	0.24
RMD-251	GRAB	5951McCallan Rd.	2-Jul-13	0.81	<1	<2	8	<1	0.28
RMD-250	GRAB	6071 Azure Rd.	2-Jul-13	0.6	<1	<2	11	<1	0.21
RMD-271	GRAB	3800 Cessna Drive	2-Jul-13	0.28	<1	<2	13	<1	0.18
RMD-272	GRAB	751 Catalina Cres.	2-Jul-13	0.7	<1	<2	9	<1	0.23
RMD-255	GRAB	6000 Blk. Miller Rd.	2-Jul-13	0.74	<1	2	8	<1	0.34
RMD-254	GRAB	5300 No. 3 Rd.	2-Jul-13	0.7	<1	<2	10	<1	0.34
RMD-270	GRAB	8200 Jones Rd.	2-Jul-13	0.57	<1	<2	11	<1	0.32
RMD-269	GRAB	14951 Triangle Rd.	2-Jul-13	0.68	<1	<2	10	<1	0.12
RMD-253	GRAB	11051 No 3 Rd.	2-Jul-13	0.75	<1	<2	8	<1	0.3
RMD-274	GRAB	10920 Springwood Court	2-Jul-13	0.62	<1	<2	14	<1	0.26
RMD-252	GRAB	9751 Pendleton Rd.	2-Jul-13	0.62	<1	<2	11	<1	0.21
RMD-273	GRAB	Opp. 8331 Fairfax Place	2-Jul-13	0.41	<1	<2	16	<1	0.55
RMD-263	GRAB	12560 Cambie Rd.	3-Jul-13	0.8	<1	<2	9	<1	0.3
RMD-264	GRAB	13100 Mitchell Rd.	3-Jul-13	0.7	<1	<2	11	<1	0.21
RMD-277	GRAB	Opp. 11280 Twigg Place	3-Jul-13	0.8	<1	<2	10	<1	0.26
RMD-278	GRAB	6651 Fraserwood Place	3-Jul-13	0.66	<1	<2	12	<1	0.31
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	3-Jul-13	0.66	<1	44	12	<1	0.49
RMD-262	GRAB	13799 Commerce Pkwy.	3-Jul-13	0.78	<1	<2	10	<1	0.24
RMD-261	GRAB	9911 Sidaway Rd.	3-Jul-13	0.24	<1	<2	13	<1	0.21
RMD-260	GRAB	11111 Horseshoe Way	3-Jul-13	0.83	<1	<2	9	<1	0.22
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	3-Jul-13	0.68	<1	<2	10	<1	0.18
RMD-258	GRAB	7000 Blk. Dyke Rd.	3-Jul-13	0.69	<1	<2	12	<1	0.17
RMD-257	GRAB	6640 Blundell Rd.	3-Jul-13	0.52	<1	<2	12	<1	0.22
RMD-266	GRAB	9380 General Currie Rd.	3-Jul-13	0.84	<1	<2	9	<1	0.19
RMD-259	GRAB	10020 Amethyst Ave.	3-Jul-13	0.65	<1	<2	10	<1	0.19
RMD-204	GRAB	3180 Granville Ave.	5-Jul-13	0.59	<1	<2	12	<1	0.16
RMD-206	GRAB	4251 Moncton St.	5-Jul-13	0.69	<1	<2	10	<1	0.2
RMD-216	GRAB	11080 No. 2 Rd.	5-Jul-13	0.45	<1	<2	9	<1	0.25
RMD-212	GRAB	Opp. 8600 Ryan Rd.	5-Jul-13	0.69	<1	<2	10	<1	0.18

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-208	GRAB	13200 No. 4 Rd.	5-Jul-13	0.7	<1	2	9	<1	0.21
RMD-205	GRAB	13851 Steveston Hwy.	5-Jul-13	0.44	<1	<2	10	<1	0.19
RMD-202	GRAB	1500 Valemont Way	5-Jul-13	0.54	<1	<2	12	<1	0.21
RMD-214	GRAB	11720 Westminster Hwy.	5-Jul-13	0.78	<1	<2	10	<1	0.19
RMD-267	GRAB	17240 Fedoruk	5-Jul-13	0.44	<1	56	14	<1	0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	5-Jul-13	0.76	<1	<2	10	<1	0.32
RMD-276	GRAB	22271 Cochrane Drive	5-Jul-13	0.52	<1	<2	13	<1	0.22
RMD-275	GRAB	5180 Smith Cres.	5-Jul-13	0.5	<1	<2	14	<1	0.2
RMD-203	GRAB	23260 Westminster Hwy.	5-Jul-13	0.64	<1	<2	10	<1	0.22
RMD-251	GRAB	5951McCallan Rd.	8-Jul-13	0.68	<1	<2	10	<1	0.21
RMD-273	GRAB	Opp. 8331 Fairfax Place	8-Jul-13	0.35	<1	<2		<1	0.23
RMD-252	GRAB	9751 Pendleton Rd.	8-Jul-13	0.61	<1	2	12	<1	0.22
RMD-274	GRAB	10920 Springwood Court	8-Jul-13	0.37	<1	<2	15	<1	0.18
RMD-250	GRAB	6071 Azure Rd.	8-Jul-13	0.56	<1	<2	13	<1	0.18
RMD-271	GRAB	3800 Cessna Drive	8-Jul-13	0.82	<1	2	9	<1	0.23
RMD-272	GRAB	751 Catalina Cres.	8-Jul-13	0.66	<1	<2	11	<1	0.29
RMD-255	GRAB	6000 Blk. Miller Rd.	8-Jul-13	0.76	<1	2	9	<1	0.24
RMD-256	GRAB	1000 Blk. McDonald Rd.	8-Jul-13	0.52	<1	<2	12	<1	0.21
RMD-254	GRAB	5300 No. 3 Rd.	8-Jul-13	0.76	<1	2	10	<1	0.17
RMD-270	GRAB	8200 Jones Rd.	8-Jul-13	0.57	<1	<2	13	<1	0.19
RMD-269	GRAB	14951 Triangle Rd.	8-Jul-13	0.63	<1	<2	14	<1	0.14
RMD-253	GRAB	11051 No 3 Rd.	8-Jul-13	0.76	<1	<2	12	<1	0.27
RMD-263	GRAB	12560 Cambie Rd.	10-Jul-13	0.75	<1	<2	9	<1	0.44
RMD-264	GRAB	13100 Mitchell Rd.	10-Jul-13	0.77	<1	<2	10	<1	0.38
RMD-277	GRAB	Opp. 11280 Twigg Place	10-Jul-13	0.68	<1	<2	10	<1	0.33
RMD-262	GRAB	13799 Commerce Pkwy.	10-Jul-13	0.67	<1	<2	10	<1	0.23
RMD-278	GRAB	6651 Fraserwood Place	10-Jul-13	0.38	<1	<2	10	<1	0.53
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	10-Jul-13	0.49	<1	<2	13	<1	0.39
RMD-261	GRAB	9911 Sidaway Rd.	10-Jul-13	0.7	<1	<2	11	<1	0.24
RMD-260	GRAB	11111 Horseshoe Way	10-Jul-13	0.75	<1	4	10	<1	0.22
RMD-259	GRAB	10020 Amethyst Ave.	10-Jul-13	0.72	<1	<2	10	<1	0.27
RMD-266	GRAB	9380 General Currie Rd.	10-Jul-13	0.92	<1	<2	8	<1	0.25
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	10-Jul-13	0.41	<1	<2	10	<1	0.22
RMD-258	GRAB	7000 Blk. Dyke Rd.	10-Jul-13	0.69	<1	<2	12	<1	0.29
RMD-257	GRAB	6640 Blundell Rd.	10-Jul-13	0.46	<1	<2	12	<1	0.23
RMD-204	GRAB	3180 Granville Ave.	12-Jul-13	0.45	<1	<2	13	<1	0.21
RMD-206	GRAB	4251 Moncton St.	12-Jul-13	0.49	<1	<2	10	<1	0.22

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-216	GRAB	11080 No. 2 Rd.	12-Jul-13	0.7	<1	2	10	<1	0.22
RMD-212	GRAB	Opp. 8600 Ryan Rd.	12-Jul-13	0.67	<1	<2	10	<1	0.22
RMD-208	GRAB	13200 No. 4 Rd.	12-Jul-13	0.74	<1	<2	9	<1	0.28
RMD-205	GRAB	13851 Steveston Hwy.	12-Jul-13	0.48	<1	4	9	<1	0.24
RMD-202	GRAB	1500 Valemont Way	12-Jul-13	0.53	<1	<2	13	<1	0.11
RMD-214	GRAB	11720 Westminster Hwy.	12-Jul-13	0.67	<1	<2	9	<1	0.24
RMD-267	GRAB	17240 Fedoruk	12-Jul-13	0.61	<1	<2	16	<1	0.12
RMD-249	GRAB	23000 Blk. Dyke Rd.	12-Jul-13	0.57	<1	<2	11	<1	0.3
RMD-276	GRAB	22271 Cochrane Drive	12-Jul-13	0.54	<1	8	12	<1	0.23
RMD-275	GRAB	5180 Smith Cres.	12-Jul-13	0.46	<1	<2	12	<1	0.25
RMD-203	GRAB	23260 Westminster Hwy.	12-Jul-13	0.62	<1	<2	13	<1	0.25
RMD-251	GRAB	5951McCallan Rd.	15-Jul-13	0.7	<1	<2	8	<1	0.24
RMD-273	GRAB	Opp. 8331 Fairfax Place	15-Jul-13	0.05	<1	<2	20	<1	0.42
RMD-252	GRAB	9751 Pendleton Rd.	15-Jul-13	0.4	<1	<2	11	<1	0.2
RMD-274	GRAB	10920 Springwood Court	15-Jul-13	0.46	<1	<2	14	<1	0.3
RMD-250	GRAB	6071 Azure Rd.	15-Jul-13	0.61	<1	<2	12	<1	0.34
RMD-271	GRAB	3800 Cessna Drive	15-Jul-13	0.81	<1	<2	9	<1	0.33
RMD-272	GRAB	751 Catalina Cres.	15-Jul-13	0.64	<1	<2	11	<1	0.24
RMD-255	GRAB	6000 Blk. Miller Rd.	15-Jul-13	0.76	<1	<2	8	<1	0.27
RMD-256	GRAB	1000 Blk. McDonald Rd.	15-Jul-13	0.36	<1	10	10	<1	0.34
RMD-254	GRAB	5300 No. 3 Rd.	15-Jul-13	0.65	<1	<2	10	<1	0.22
RMD-270	GRAB	8200 Jones Rd.	15-Jul-13	0.58	<1	2	11	<1	0.26
RMD-269	GRAB	14951 Triangle Rd.	15-Jul-13	0.49	<1	2	13	<1	0.15
RMD-253	GRAB	11051 No 3 Rd.	15-Jul-13	0.72	<1	<2	9	<1	0.24
RMD-263	GRAB	12560 Cambie Rd.	17-Jul-13	0.64	<1	2	9	<1	0.33
RMD-264	GRAB	13100 Mitchell Rd.	17-Jul-13	0.12	<1	<2	14	<1	0.22
RMD-277	GRAB	Opp. 11280 Twigg Place	17-Jul-13	0.08	<1	46	15	<1	0.17
RMD-262	GRAB	13799 Commerce Pkwy.	17-Jul-13	0.67	<1	<2	10	<1	0.21
RMD-278	GRAB	6651 Fraserwood Place	17-Jul-13	0.57	<1	<2	14	<1	0.32
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	17-Jul-13	0.56	<1	<2	13	<1	0.28
RMD-261	GRAB	9911 Sidaway Rd.	17-Jul-13	0.65	<1	<2	10	<1	0.21
RMD-260	GRAB	11111 Horseshoe Way	17-Jul-13	0.74	<1	<2	9	<1	0.28
RMD-259	GRAB	10020 Amethyst Ave.	17-Jul-13	0.64	<1	2	10	<1	0.23
RMD-266	GRAB	9380 General Currie Rd.	17-Jul-13	0.75	<1	<2	9	<1	0.43
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	17-Jul-13	0.65	<1	<2	10	<1	0.23
RMD-258	GRAB	7000 Blk. Dyke Rd.	17-Jul-13	0.51	<1	<2	10	<1	0.18
RMD-257	GRAB	6640 Blundell Rd.	17-Jul-13	0.62	<1	2	12	<1	0.27

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-204	GRAB	3180 Granville Ave.	19-Jul-13	0.54	<1	<2	12	<1	0.28
RMD-206	GRAB	4251 Moncton St.	19-Jul-13	0.59	<1	<2	10	<1	0.25
RMD-216	GRAB	11080 No. 2 Rd.	19-Jul-13	0.72	<1	2	9	<1	0.22
RMD-212	GRAB	Opp. 8600 Ryan Rd.	19-Jul-13	0.74	<1	4	11	<1	0.21
RMD-208	GRAB	13200 No. 4 Rd.	19-Jul-13	0.77	<1	<2	10	1	0.2
RMD-205	GRAB	13851 Steveston Hwy.	19-Jul-13	0.67	<1	2	12	<1	0.22
RMD-202	GRAB	1500 Valemont Way	19-Jul-13	0.56	<1	<2	18	<1	0.13
RMD-214	GRAB	11720 Westminster Hwy.	19-Jul-13	0.64	<1	<2	8	<1	0.25
RMD-267	GRAB	17240 Fedoruk	19-Jul-13	0.59	<1	<2	16	<1	0.1
RMD-249	GRAB	23000 Blk. Dyke Rd.	19-Jul-13	0.55	<1	<2	12	<1	0.34
RMD-276	GRAB	22271 Cochrane Drive	19-Jul-13	0.57	<1	2	14	<1	0.25
RMD-275	GRAB	5180 Smith Cres.	19-Jul-13	0.5	<1	18	13	<1	0.2
RMD-203	GRAB	23260 Westminster Hwy.	19-Jul-13	0.52	<1	2	14	<1	0.35
RMD-251	GRAB	5951McCallan Rd.	22-Jul-13	0.8	<1	<2	10	<1	0.31
RMD-250	GRAB	6071 Azure Rd.	22-Jul-13	0.58	<1	<2	12	<1	0.33
RMD-271	GRAB	3800 Cessna Drive	22-Jul-13	0.51	<1	<2	10	<1	0.22
RMD-272	GRAB	751 Catalina Cres.	22-Jul-13	0.83	<1	<2	10	<1	0.21
RMD-255	GRAB	6000 Blk. Miller Rd.	22-Jul-13	0.78	<1	2	9	<1	0.24
RMD-256	GRAB	1000 Blk. McDonald Rd.	22-Jul-13	0.44	<1	<2	14	<1	0.41
RMD-254	GRAB	5300 No. 3 Rd.	22-Jul-13	0.71	<1	<2	9	<1	0.21
RMD-270	GRAB	8200 Jones Rd.	22-Jul-13	0.55	<1	<2	12	<1	0.22
RMD-269	GRAB	14951 Triangle Rd.	22-Jul-13	0.49	<1	<2	12	<1	0.15
RMD-253	GRAB	11051 No 3 Rd.	22-Jul-13	0.7	<1	<2	9	<1	0.24
RMD-274	GRAB	10920 Springwood Court	22-Jul-13	0.58	<1	<2	16	<1	0.91
RMD-252	GRAB	9751 Pendleton Rd.	22-Jul-13	0.52	<1	<2	12	<1	0.21
RMD-273	GRAB	Opp. 8331 Fairfax Place	22-Jul-13	0.23	<1	2	19	<1	0.51
RMD-263	GRAB	12560 Cambie Rd.	24-Jul-13	0.91	<1	<2	9	<1	0.2
RMD-264	GRAB	13100 Mitchell Rd.	24-Jul-13	0.84	<1	<2	11	<1	0.33
RMD-277	GRAB	Opp. 11280 Twigg Place	24-Jul-13	0.86	<1	<2	10	<1	0.33
RMD-278	GRAB	6651 Fraserwood Place	24-Jul-13	0.43	<1	<2	15	<1	0.37
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	24-Jul-13	0.59	<1	<2	15	<1	0.35
RMD-262	GRAB	13799 Commerce Pkwy.	24-Jul-13	0.84	<1	<2	10	<1	0.61
RMD-261	GRAB	9911 Sidaway Rd.	24-Jul-13	0.66	<1	<2	12	<1	0.19
RMD-260	GRAB	11111 Horseshoe Way	24-Jul-13	0.86	<1	<2	9	<1	0.32
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	24-Jul-13	0.7	<1	<2	11	<1	0.21
RMD-258	GRAB	7000 Blk. Dyke Rd.	24-Jul-13	0.62	<1	<2	13	<1	0.2
RMD-257	GRAB	6640 Blundell Rd.	24-Jul-13	0.7	<1	<2	12	<1	0.19

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-266	GRAB	9380 General Currie Rd.	24-Jul-13	0.77	<1	<2	9	<1	0.21
RMD-259	GRAB	10020 Amethyst Ave.	24-Jul-13	0.7	<1	<2	9	<1	0.21
RMD-204	GRAB	3180 Granville Ave.	26-Jul-13	0.88	<1	<2	11	<1	0.24
RMD-206	GRAB	4251 Moncton St.	26-Jul-13	0.54	<1	<2	10	<1	0.22
RMD-216	GRAB	11080 No. 2 Rd.	26-Jul-13	1.2	<1	<2	10	<1	0.24
RMD-212	GRAB	Opp. 8600 Ryan Rd.	26-Jul-13	0.85	<1	<2	9	<1	0.2
RMD-208	GRAB	13200 No. 4 Rd.	26-Jul-13	1.2	<1	<2	10	<1	0.2
RMD-205	GRAB	13851 Steveston Hwy.	26-Jul-13	0.77	<1	4	10	<1	0.22
RMD-202	GRAB	1500 Valemont Way	26-Jul-13	0.61	<1	2	13	<1	0.15
RMD-214	GRAB	11720 Westminster Hwy.	26-Jul-13	0.59	<1	<2	10	<1	0.28
RMD-267	GRAB	17240 Fedoruk	26-Jul-13	0.48	<1	<2	17	<1	0.18
RMD-249	GRAB	23000 Blk. Dyke Rd.	26-Jul-13	0.58	<1	2	12	<1	0.35
RMD-276	GRAB	22271 Cochrane Drive	26-Jul-13	0.41	<1	2	14	21	0.2
RMD-275	GRAB	5180 Smith Cres.	26-Jul-13	0.68	<1	<2	13	<1	0.23
RMD-203	GRAB	23260 Westminster Hwy.	26-Jul-13	0.86	<1	<2	14	<1	0.61
RMD-251	GRAB	5951McCallan Rd.	29-Jul-13	0.83	<1	<2	10	<1	0.24
RMD-273	GRAB	Opp. 8331 Fairfax Place	29-Jul-13	0.28	<1	<2	20	<1	0.38
RMD-252	GRAB	9751 Pendleton Rd.	29-Jul-13	0.55	<1	<2	11	<1	0.34
RMD-274	GRAB	10920 Springwood Court	29-Jul-13	0.33	<1	22	15	<1	1.9
RMD-250	GRAB	6071 Azure Rd.	29-Jul-13	0.49	<1	4	12	<1	0.22
RMD-271	GRAB	3800 Cessna Drive	29-Jul-13	0.61	<1	<2	11	<1	0.35
RMD-272	GRAB	751 Catalina Cres.	29-Jul-13	0.68	<1	2	10	<1	0.31
RMD-255	GRAB	6000 Blk. Miller Rd.	29-Jul-13	0.81	<1	10	10	<1	0.3
RMD-256	GRAB	1000 Blk. McDonald Rd.	29-Jul-13	0.89	<1	220	14	<1	0.29
RMD-254	GRAB	5300 No. 3 Rd.	29-Jul-13	0.84	<1	2	12	<1	0.24
RMD-270	GRAB	8200 Jones Rd.	29-Jul-13	0.6	<1	<2	15	<1	0.3
RMD-269	GRAB	14951 Triangle Rd.	29-Jul-13	0.61	<1	4	17	<1	0.21
RMD-253	GRAB	11051 No 3 Rd.	29-Jul-13	0.71	<1	4	12	<1	0.26
RMD-263	GRAB	12560 Cambie Rd.	31-Jul-13	0.56	<1	<2	12	<1	0.27
RMD-264	GRAB	13100 Mitchell Rd.	31-Jul-13	0.5	<1	2	13	<1	0.27
RMD-277	GRAB	Opp. 11280 Twigg Place	31-Jul-13	0.76	<1	<2	13	<1	0.43
RMD-262	GRAB	13799 Commerce Pkwy.	31-Jul-13	0.7	<1	<2	13	<1	0.25
RMD-278	GRAB	6651 Fraserwood Place	31-Jul-13	0.48	[Conta	<2	17	[Conta	0.3
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	31-Jul-13	0.52	<1	<2	17	<1	0.41
RMD-261	GRAB	9911 Sidaway Rd.	31-Jul-13	0.52	<1	<2	17	<1	0.16
RMD-260	GRAB	11111 Horseshoe Way	31-Jul-13	0.62	<1	<2	12	<1	0.26
RMD-259	GRAB	10020 Amethyst Ave.	31-Jul-13	0.73	<1	<2	13	<1	0.24

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-266	GRAB	9380 General Currie Rd.	31-Jul-13	0.77	<1	2	13	<1	0.25
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	31-Jul-13	0.62	<1	<2	13	<1	0.28
RMD-258	GRAB	7000 Blk. Dyke Rd.	31-Jul-13	0.61	<1	6	16	<1	0.27
RMD-257	GRAB	6640 Blundell Rd.	31-Jul-13	0.49	<1	<2	16	<1	0.23
RMD-204	GRAB	3180 Granville Ave.	2-Aug-13	0.34	<1	<2	16	<1	0.23
RMD-206	GRAB	4251 Moncton St.	2-Aug-13	0.45	<1	<2	13	<1	0.33
RMD-216	GRAB	11080 No. 2 Rd.	2-Aug-13	0.52	<1	<2	13	<1	0.32
RMD-212	GRAB	Opp. 8600 Ryan Rd.	2-Aug-13	0.71	<1	<2	14	<1	0.26
RMD-208	GRAB	13200 No. 4 Rd.	2-Aug-13	0.4	<1	<2	13	<1	0.27
RMD-205	GRAB	13851 Steveston Hwy.	2-Aug-13	0.53	<1	<2	17	<1	0.16
RMD-202	GRAB	1500 Valemont Way	2-Aug-13	0.52	<1	4	17	<1	0.17
RMD-214	GRAB	11720 Westminster Hwy.	2-Aug-13	0.47	<1	10	12	<1	0.29
RMD-267	GRAB	17240 Fedoruk	2-Aug-13	0.61	<1	<2	19	<1	0.22
RMD-278	GRAB	6651 Fraserwood Place	2-Aug-13	0.27	<1	2	19	<1	[Turb
RMD-249	GRAB	23000 Blk. Dyke Rd.	2-Aug-13	0.76	<1	2	16	<1	0.29
RMD-276	GRAB	22271 Cochrane Drive	2-Aug-13	0.6	<1	<2	18	<1	0.26
RMD-275	GRAB	5180 Smith Cres.	2-Aug-13	0.69	<1	8	17	<1	0.28
RMD-203	GRAB	23260 Westminster Hwy.	2-Aug-13	0.63	<1	<2	16	<1	0.31
RMD-251	GRAB	5951McCallan Rd.	6-Aug-13	0.58	<1	<2	9	<1	0.27
RMD-273	GRAB	Opp. 8331 Fairfax Place	6-Aug-13	0.24	<1	<2	17	<1	0.54
RMD-252	GRAB	9751 Pendleton Rd.	6-Aug-13	0.46	<1	<2	11	<1	0.27
RMD-274	GRAB	10920 Springwood Court	6-Aug-13	0.37	<1	6	15	<1	1.5
RMD-250	GRAB	6071 Azure Rd.	6-Aug-13	0.5	<1	<2	11	<1	0.27
RMD-272	GRAB	751 Catalina Cres.	6-Aug-13	0.73	<1	<2	9	<1	0.24
RMD-255	GRAB	6000 Blk. Miller Rd.	6-Aug-13	0.62	<1	20	8	<1	0.28
RMD-254	GRAB	5300 No. 3 Rd.	6-Aug-13	0.75	<1	<2	10	<1	0.3
RMD-270	GRAB	8200 Jones Rd.	6-Aug-13	0.6	<1	<2	12	<1	0.26
RMD-269	GRAB	14951 Triangle Rd.	6-Aug-13	0.51	<1	4	13	<1	0.16
RMD-253	GRAB	11051 No 3 Rd.	6-Aug-13	0.76	<1	<2	9	<1	0.29
RMD-263	GRAB	12560 Cambie Rd.	7-Aug-13	0.76	<1	<2	9	<1	0.32
RMD-264	GRAB	13100 Mitchell Rd.	7-Aug-13	0.7	<1	<2	10	<1	0.34
RMD-277	GRAB	Opp. 11280 Twigg Place	7-Aug-13	0.75	<1	<2	10	<1	0.35
RMD-262	GRAB	13799 Commerce Pkwy.	7-Aug-13	0.62	<1	<2	11	<1	0.28
RMD-278	GRAB	6651 Fraserwood Place	7-Aug-13	0.38	<1	<2	13	<1	0.16
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	7-Aug-13	0.58	<1	<2	15	<1	0.19
RMD-261	GRAB	9911 Sidaway Rd.	7-Aug-13	0.4	<1	<2	15	<1	0.2
RMD-260	GRAB	11111 Horseshoe Way	7-Aug-13	0.67	<1	2	10	<1	0.26

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-259	GRAB	10020 Amethyst Ave.	7-Aug-13	0.61	<1	<2	11	<1	0.28
RMD-266	GRAB	9380 General Currie Rd.	7-Aug-13	0.83	<1	20	10	<1	0.29
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	7-Aug-13	0.63	<1	<2	10	<1	0.27
RMD-258	GRAB	7000 Blk. Dyke Rd.	7-Aug-13	0.56	<1	2	13	<1	0.27
RMD-257	GRAB	6640 Blundell Rd.	7-Aug-13	0.43	<1	<2	12	<1	0.25
RMD-204	GRAB	3180 Granville Ave.	9-Aug-13	0.62	<1	<2	11	<1	0.25
RMD-206	GRAB	4251 Moncton St.	9-Aug-13	0.52	<1	<2	10	<1	0.23
RMD-216	GRAB	11080 No. 2 Rd.	9-Aug-13	0.43	<1	<2	9	<1	0.25
RMD-212	GRAB	Opp. 8600 Ryan Rd.	9-Aug-13	0.86	<1	<2	10	<1	0.24
RMD-208	GRAB	13200 No. 4 Rd.	9-Aug-13	0.56	<1	<2	9	<1	0.25
RMD-205	GRAB	13851 Steveston Hwy.	9-Aug-13	0.52	<1	<2	13	<1	0.21
RMD-202	GRAB	1500 Valemont Way	9-Aug-13	0.55	<1	<2	14	<1	0.14
RMD-214	GRAB	11720 Westminster Hwy.	9-Aug-13	0.73	<1	<2	8	<1	0.25
RMD-267	GRAB	17240 Fedoruk	9-Aug-13	0.52	<1	<2	15	<1	0.12
RMD-249	GRAB	23000 Blk. Dyke Rd.	9-Aug-13	0.83	<1	<2	13	<1	0.31
RMD-276	GRAB	22271 Cochrane Drive	9-Aug-13	0.66	<1	<2	14	<1	0.39
RMD-275	GRAB	5180 Smith Cres.	9-Aug-13	0.63	<1	<2	13	<1	0.26
RMD-203	GRAB	23260 Westminster Hwy.	9-Aug-13	0.72	<1	<2	14	<1	0.28
RMD-251	GRAB	5951McCallan Rd.	12-Aug-13	0.64	<1	<2	10	<1	0.29
RMD-273	GRAB	Opp. 8331 Fairfax Place	12-Aug-13	0.25	<1	<2	18	<1	0.43
RMD-252	GRAB	9751 Pendleton Rd.	12-Aug-13	0.57	<1	8	12	<1	0.23
RMD-274	GRAB	10920 Springwood Court	12-Aug-13	0.26	<1	2	15	<1	0.21
RMD-250	GRAB	6071 Azure Rd.	12-Aug-13	0.42	<1	<2	12	<1	0.39
RMD-271	GRAB	3800 Cessna Drive	12-Aug-13	0.66	<1	2	11	<1	0.3
RMD-272	GRAB	751 Catalina Cres.	12-Aug-13	0.88	<1	2	11	<1	0.24
RMD-255	GRAB	6000 Blk. Miller Rd.	12-Aug-13	0.65	<1	22	10	<1	0.29
RMD-256	GRAB	1000 Blk. McDonald Rd.	12-Aug-13	0.52	<1	40	11	<1	0.27
RMD-254	GRAB	5300 No. 3 Rd.	12-Aug-13	0.68	<1	2	12	<1	0.24
RMD-270	GRAB	8200 Jones Rd.	12-Aug-13	0.51	<1	2	13	<1	0.27
RMD-269	GRAB	14951 Triangle Rd.	12-Aug-13	0.68	<1	<2	14	<1	0.18
RMD-253	GRAB	11051 No 3 Rd.	12-Aug-13	0.46	<1	2	10	<1	0.24
RMD-263	GRAB	12560 Cambie Rd.	14-Aug-13	0.48	<1	<2	10	<1	0.25
RMD-264	GRAB	13100 Mitchell Rd.	14-Aug-13	0.63	<1	<2	11	<1	0.35
RMD-277	GRAB	Opp. 11280 Twigg Place	14-Aug-13	0.69	<1	<2	11	<1	0.34
RMD-262	GRAB	13799 Commerce Pkwy.	14-Aug-13	0.54	<1	<2	14	<1	0.16
RMD-278	GRAB	6651 Fraserwood Place	14-Aug-13	0.73	<1	<2	14	<1	0.43
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	14-Aug-13	0.97	<1	<2	15	<1	0.4

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-261	GRAB	9911 Sidaway Rd.	14-Aug-13	0.74	<1	<2	14	<1	0.14
RMD-260	GRAB	11111 Horseshoe Way	14-Aug-13	0.68	<1	2	9	<1	0.24
RMD-259	GRAB	10020 Amethyst Ave.	14-Aug-13	0.63	<1	<2	11	<1	0.34
RMD-266	GRAB	9380 General Currie Rd.	14-Aug-13	0.89	<1	<2	9	<1	0.35
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	14-Aug-13	0.67	<1	<2	11	<1	0.26
RMD-258	GRAB	7000 Blk. Dyke Rd.	14-Aug-13	0.82	<1	2	12	<1	0.27
RMD-257	GRAB	6640 Blundell Rd.	14-Aug-13	0.24	<1	<2	13	<1	0.29
RMD-204	GRAB	3180 Granville Ave.	16-Aug-13	0.43	<1	4	13	<1	0.24
RMD-206	GRAB	4251 Moncton St.	16-Aug-13	0.49	<1	<2	10	<1	0.22
RMD-216	GRAB	11080 No. 2 Rd.	16-Aug-13	0.15	<1	2	10	<1	0.23
RMD-212	GRAB	Opp. 8600 Ryan Rd.	16-Aug-13	0.54	<1	<2	10	<1	0.23
RMD-208	GRAB	13200 No. 4 Rd.	16-Aug-13	0.64	<1	<2	10	<1	0.28
RMD-205	GRAB	13851 Steveston Hwy.	16-Aug-13	0.6	<1	2	14	<1	0.13
RMD-202	GRAB	1500 Valemont Way	16-Aug-13	0.53	<1	<2	13	<1	0.28
RMD-214	GRAB	11720 Westminster Hwy.	16-Aug-13	0.79	<1	<2	9	<1	0.23
RMD-267	GRAB	17240 Fedoruk	16-Aug-13	0.51	<1	<2	15	<1	0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	16-Aug-13	0.65	<1	4	14	<1	0.34
RMD-276	GRAB	22271 Cochrane Drive	16-Aug-13	0.61	<1	8	15	<1	0.2
RMD-275	GRAB	5180 Smith Cres.	16-Aug-13	0.6	<1	2	14	<1	0.33
RMD-203	GRAB	23260 Westminster Hwy.	16-Aug-13	0.71	<1	<2	14	<1	0.29
RMD-251	GRAB	5951McCallan Rd.	19-Aug-13	0.77	<1	<2	10	<1	0.3
RMD-273	GRAB	Opp. 8331 Fairfax Place	19-Aug-13	0.27	<1	<2	18	<1	0.49
RMD-252	GRAB	9751 Pendleton Rd.	19-Aug-13	0.46	<1	<2	12	<1	0.3
RMD-274	GRAB	10920 Springwood Court	19-Aug-13	0.47	<1	2	13	<1	0.29
RMD-250	GRAB	6071 Azure Rd.	19-Aug-13	0.25	<1	<2	12	<1	0.29
RMD-271	GRAB	3800 Cessna Drive	19-Aug-13	0.77	<1	<2	10	<1	0.26
RMD-272	GRAB	751 Catalina Cres.	19-Aug-13	0.4	<1	<2	10	<1	0.23
RMD-255	GRAB	6000 Blk. Miller Rd.	19-Aug-13	0.38	<1	42	10	<1	0.3
RMD-256	GRAB	1000 Blk. McDonald Rd.	19-Aug-13	0.46	<1	20	12	<1	0.27
RMD-254	GRAB	5300 No. 3 Rd.	19-Aug-13	0.55	<1	<2	10	<1	0.28
RMD-270	GRAB	8200 Jones Rd.	19-Aug-13	0.69	<1	4	12	<1	0.29
RMD-269	GRAB	14951 Triangle Rd.	19-Aug-13	0.55	<1	<2	14	<1	0.22
RMD-253	GRAB	11051 No 3 Rd.	19-Aug-13	0.33	<1	<2	10	<1	0.32
RMD-263	GRAB	12560 Cambie Rd.	21-Aug-13	0.76	<1	<2	10	<1	0.3
RMD-264	GRAB	13100 Mitchell Rd.	21-Aug-13	0.3	<1	<2	11	<1	0.36
RMD-277	GRAB	Opp. 11280 Twigg Place	21-Aug-13	0.26	<1	<2	13	<1	0.24
RMD-262	GRAB	13799 Commerce Pkwy.	21-Aug-13	0.55	<1	2	12	<1	0.23

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-278	GRAB	6651 Fraserwood Place	21-Aug-13	0.63	<1	<2	14	<1	0.36
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	21-Aug-13	0.7	<1	<2	14	<1	0.52
RMD-261	GRAB	9911 Sidaway Rd.	21-Aug-13	0.53	<1	<2	14	<1	0.64
RMD-260	GRAB	11111 Horseshoe Way	21-Aug-13	0.74	<1	<2	10	<1	0.28
RMD-259	GRAB	10020 Amethyst Ave.	21-Aug-13	0.66	<1	<2	11	<1	0.27
RMD-266	GRAB	9380 General Currie Rd.	21-Aug-13	0.74	<1	<2	11	<1	0.26
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	21-Aug-13	0.59	<1	<2	11	<1	0.26
RMD-258	GRAB	7000 Blk. Dyke Rd.	21-Aug-13	0.61	<1	<2	13	<1	0.24
RMD-257	GRAB	6640 Blundell Rd.	21-Aug-13	0.33	<1	<2	12	<1	0.27
RMD-204	GRAB	3180 Granville Ave.	23-Aug-13	0.52	<1	<2	12	<1	0.23
RMD-206	GRAB	4251 Moncton St.	23-Aug-13	0.45	<1	<2	10	<1	0.26
RMD-216	GRAB	11080 No. 2 Rd.	23-Aug-13	0.79	<1	4	10	<1	0.29
RMD-212	GRAB	Opp. 8600 Ryan Rd.	23-Aug-13	0.57	<1	2	11	<1	0.27
RMD-208	GRAB	13200 No. 4 Rd.	23-Aug-13	0.5	<1	<2	12	<1	0.16
RMD-205	GRAB	13851 Steveston Hwy.	23-Aug-13	0.48	<1	<2	9	<1	0.2
RMD-202	GRAB	1500 Valemont Way	23-Aug-13	0.53	<1	2	15	<1	0.18
RMD-214	GRAB	11720 Westminster Hwy.	23-Aug-13	0.32	<1	<2	10	<1	0.27
RMD-267	GRAB	17240 Fedoruk	23-Aug-13	0.55	<1	2	16	<1	0.25
RMD-249	GRAB	23000 Blk. Dyke Rd.	23-Aug-13	0.65	<1	2	11	<1	0.36
RMD-276	GRAB	22271 Cochrane Drive	23-Aug-13	0.46	<1	<2	14	<1	0.23
RMD-275	GRAB	5180 Smith Cres.	23-Aug-13	0.67	<1	<2	14	<1	0.34
RMD-203	GRAB	23260 Westminster Hwy.	23-Aug-13	0.76	<1	<2	13	<1	0.32
RMD-251	GRAB	5951McCallan Rd.	26-Aug-13	0.83	<1	<2	12	<1	0.29
RMD-250	GRAB	6071 Azure Rd.	26-Aug-13	0.89	<1	<2	12	<1	0.35
RMD-271	GRAB	3800 Cessna Drive	26-Aug-13	0.71	<1	2	12	<1	0.3
RMD-272	GRAB	751 Catalina Cres.	26-Aug-13	0.73	<1	<2	14	<1	0.28
RMD-255	GRAB	6000 Blk. Miller Rd.	26-Aug-13	0.39	<1	50	12	<1	0.35
RMD-256	GRAB	1000 Blk. McDonald Rd.	26-Aug-13	0.51	<1	<2	13	<1	0.28
RMD-254	GRAB	5300 No. 3 Rd.	26-Aug-13	0.79	<1	2	12	<1	0.3
RMD-270	GRAB	8200 Jones Rd.	26-Aug-13	0.66	<1	<2	12	<1	0.59
RMD-269	GRAB	14951 Triangle Rd.	26-Aug-13	0.65	<1	24	16	<1	0.25
RMD-253	GRAB	11051 No 3 Rd.	26-Aug-13	0.7	<1	<2	12	<1	0.26
RMD-274	GRAB	10920 Springwood Court	26-Aug-13	0.47	[CG	2	17	[CG	0.31
RMD-252	GRAB	9751 Pendleton Rd.	26-Aug-13	0.58	<1	<2	15	<1	0.4
RMD-273	GRAB	Opp. 8331 Fairfax Place	26-Aug-13	0.34	<1	<2	18	<1	0.4
RMD-263	GRAB	12560 Cambie Rd.	28-Aug-13	0.66	<1	2	12	<1	0.26
RMD-264	GRAB	13100 Mitchell Rd.	28-Aug-13	0.88	<1	<2	12	<1	0.25

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-277	GRAB	Opp. 11280 Twigg Place	28-Aug-13	0.29	<1	<2	15	<1	0.28
RMD-262	GRAB	13799 Commerce Pkwy.	28-Aug-13	0.57	<1	<2	15	<1	0.18
RMD-278	GRAB	6651 Fraserwood Place	28-Aug-13	0.74	<1	<2	16	<1	0.3
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	28-Aug-13	0.73	<1	<2	15	<1	0.4
RMD-261	GRAB	9911 Sidaway Rd.	28-Aug-13	0.56	<1	<2	15	<1	0.11
RMD-260	GRAB	11111 Horseshoe Way	28-Aug-13	0.58	<1	<2	12	<1	0.42
RMD-259	GRAB	10020 Amethyst Ave.	28-Aug-13	0.92	<1	<2	13	<1	0.29
RMD-266	GRAB	9380 General Currie Rd.	28-Aug-13	0.95	<1	<2	11	<1	0.34
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	28-Aug-13	0.88	<1	<2	12	<1	0.25
RMD-258	GRAB	7000 Blk. Dyke Rd.	28-Aug-13	0.79	<1	<2	13	<1	0.26
RMD-257	GRAB	6640 Blundell Rd.	28-Aug-13	0.58	<1	<2	11	<1	0.27
RMD-204	GRAB	3180 Granville Ave.	30-Aug-13	0.32	<1	<2	13	<1	0.29
RMD-206	GRAB	4251 Moncton St.	30-Aug-13	0.59	<1	2	12	<1	0.26
RMD-216	GRAB	11080 No. 2 Rd.	30-Aug-13	0.98	<1	<2	12	<1	0.25
RMD-212	GRAB	Opp. 8600 Ryan Rd.	30-Aug-13	0.8	<1	2	12	<1	0.23
RMD-208	GRAB	13200 No. 4 Rd.	30-Aug-13	0.98	<1	<2	10	<1	0.27
RMD-205	GRAB	13851 Steveston Hwy.	30-Aug-13	0.69	<1	<2	14	<1	0.14
RMD-202	GRAB	1500 Valemont Way	30-Aug-13	0.65	<1	<2	14	<1	0.14
RMD-214	GRAB	11720 Westminster Hwy.	30-Aug-13	0.7	<1	4	11	<1	0.24
RMD-267	GRAB	17240 Fedoruk	30-Aug-13	0.64	<1	<2	16	<1	0.13
RMD-249	GRAB	23000 Blk. Dyke Rd.	30-Aug-13	0.79	<1	6	14	<1	0.4
RMD-276	GRAB	22271 Cochrane Drive	30-Aug-13	0.79	<1	4	16	<1	0.27
RMD-275	GRAB	5180 Smith Cres.	30-Aug-13	0.69	<1	<2	14	<1	0.28
RMD-203	GRAB	23260 Westminster Hwy.	30-Aug-13	0.86	<1	<2	14	<1	0.32
RMD-251	GRAB	5951McCallan Rd.	3-Sep-13	0.87	<1	<2	15	<1	0.14
RMD-250	GRAB	6071 Azure Rd.	3-Sep-13	0.83	<1	2	15	<1	0.14
RMD-271	GRAB	3800 Cessna Drive	3-Sep-13	0.85	<1	<2	16	<1	0.15
RMD-272	GRAB	751 Catalina Cres.	3-Sep-13	0.59	<1	<2	14	<1	0.19
RMD-255	GRAB	6000 Blk. Miller Rd.	3-Sep-13	0.68	<1	6	14	<1	0.32
RMD-256	GRAB	1000 Blk. McDonald Rd.	3-Sep-13	0.01	<1	4	18	<1	0.35
RMD-254	GRAB	5300 No. 3 Rd.	3-Sep-13	0.75	<1	2	14	<1	0.25
RMD-270	GRAB	8200 Jones Rd.	3-Sep-13	0.75	<1	2	16	<1	0.2
RMD-269	GRAB	14951 Triangle Rd.	3-Sep-13	0.59	<1	<2	16	<1	0.19
RMD-253	GRAB	11051 No 3 Rd.	3-Sep-13	0.68	<1	<2	14	<1	0.19
RMD-274	GRAB	10920 Springwood Court	3-Sep-13	0.73	<1	<2	14	<1	0.29
RMD-252	GRAB	9751 Pendleton Rd.	3-Sep-13	0.65	<1	<2	15	<1	0.14
RMD-273	GRAB	Opp. 8331 Fairfax Place	3-Sep-13	0.46	<1	<2	20	<1	0.32

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-263	GRAB	12560 Cambie Rd.	4-Sep-13	0.66	<1	<2	15	<1	0.18
RMD-264	GRAB	13100 Mitchell Rd.	4-Sep-13	0.71	<1	<2	15	<1	0.22
RMD-277	GRAB	Opp. 11280 Twigg Place	4-Sep-13	0.45	<1	2	17	<1	0.21
RMD-278	GRAB	6651 Fraserwood Place	4-Sep-13	0.67	<1	<2	16	<1	0.39
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	4-Sep-13	0.72	<1	<2	16	<1	0.42
RMD-262	GRAB	13799 Commerce Pkwy.	4-Sep-13	0.52	<1	2	16	<1	0.21
RMD-261	GRAB	9911 Sidaway Rd.	4-Sep-13	0.57	<1	<2	16	<1	0.16
RMD-260	GRAB	11111 Horseshoe Way	4-Sep-13	0.51	<1	<2	15	<1	0.2
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	4-Sep-13	0.7	<1	<2	15	<1	0.15
RMD-258	GRAB	7000 Blk. Dyke Rd.	4-Sep-13	0.76	<1	<2	16	<1	0.21
RMD-257	GRAB	6640 Blundell Rd.	4-Sep-13	0.74	<1	<2	15	<1	0.21
RMD-266	GRAB	9380 General Currie Rd.	4-Sep-13	0.76	<1	<2	15	<1	0.18
RMD-259	GRAB	10020 Amethyst Ave.	4-Sep-13	0.71	<1	<2	15	<1	0.18
RMD-204	GRAB	3180 Granville Ave.	6-Sep-13	0.53	<1	<2	15	<1	0.19
RMD-206	GRAB	4251 Moncton St.	6-Sep-13	0.54	<1	<2	14	<1	0.14
RMD-216	GRAB	11080 No. 2 Rd.	6-Sep-13	0.82	<1	2	14	<1	0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	6-Sep-13	0.84	<1	<2	14	<1	0.16
RMD-208	GRAB	13200 No. 4 Rd.	6-Sep-13	0.81	<1	4	14	<1	0.15
RMD-205	GRAB	13851 Steveston Hwy.	6-Sep-13	0.56	<1	4	14	<1	0.12
RMD-202	GRAB	1500 Valemont Way	6-Sep-13	0.54	<1	<2	14	<1	0.13
RMD-214	GRAB	11720 Westminster Hwy.	6-Sep-13	0.86	<1	4	14	<1	0.19
RMD-267	GRAB	17240 Fedoruk	6-Sep-13	0.59	<1	<2	15	<1	0.14
RMD-249	GRAB	23000 Blk. Dyke Rd.	6-Sep-13	0.9	<1	2	14	<1	0.3
RMD-276	GRAB	22271 Cochrane Drive	6-Sep-13	0.64	<1	<2	15	<1	0.23
RMD-275	GRAB	5180 Smith Cres.	6-Sep-13	0.74	<1	2	14	<1	0.27
RMD-203	GRAB	23260 Westminster Hwy.	6-Sep-13	1	<1	<2	15	<1	0.32
RMD-251	GRAB	5951McCallan Rd.	9-Sep-13	0.58	<1	<2	14	<1	0.29
RMD-273	GRAB	Opp. 8331 Fairfax Place	9-Sep-13	0.35	<1	2	19	<1	0.33
RMD-252	GRAB	9751 Pendleton Rd.	9-Sep-13	0.47	<1	<2	15	<1	0.22
RMD-274	GRAB	10920 Springwood Court	9-Sep-13	0.61	<1	6	17	<1	0.2
RMD-250	GRAB	6071 Azure Rd.	9-Sep-13	0.63	<1	<2	15	<1	0.22
RMD-271	GRAB	3800 Cessna Drive	9-Sep-13	0.61	<1	<2	15	<1	0.19
RMD-272	GRAB	751 Catalina Cres.	9-Sep-13	0.57	<1	<2	15	<1	0.22
RMD-255	GRAB	6000 Blk. Miller Rd.	9-Sep-13	0.87	<1	10	14	<1	0.3
RMD-256	GRAB	1000 Blk. McDonald Rd.	9-Sep-13	0.29	<1	<2	15	<1	0.26
RMD-254	GRAB	5300 No. 3 Rd.	9-Sep-13	0.52	<1	<2	14	<1	0.24
RMD-270	GRAB	8200 Jones Rd.	9-Sep-13	0.66	<1	2	16	<1	0.3

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-269	GRAB	14951 Triangle Rd.	9-Sep-13	0.62	<1	<2	14	<1	0.16
RMD-253	GRAB	11051 No 3 Rd.	9-Sep-13	0.82	<1	<2	15	<1	0.23
RMD-263	GRAB	12560 Cambie Rd.	11-Sep-13	0.75	<1	<2	16	<1	0.24
RMD-264	GRAB	13100 Mitchell Rd.	11-Sep-13	0.79	<1	<2	11	<1	0.39
RMD-277	GRAB	Opp. 11280 Twigg Place	11-Sep-13	0.51	<1	<2	13	<1	0.27
RMD-278	GRAB	6651 Fraserwood Place	11-Sep-13	0.68	<1	<2	12	<1	0.38
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	11-Sep-13	0.59	<1	<2	12	<1	0.31
RMD-262	GRAB	13799 Commerce Pkwy.	11-Sep-13	0.56	<1	<2	12	<1	0.16
RMD-266	GRAB	9380 General Currie Rd.	11-Sep-13	0.79	<1	<2	8	<1	0.19
RMD-259	GRAB	10020 Amethyst Ave.	11-Sep-13	0.77	<1	<2	10	<1	0.17
RMD-260	GRAB	11111 Horseshoe Way	11-Sep-13	0.76	<1	2	10	<1	0.18
RMD-261	GRAB	9911 Sidaway Rd.	11-Sep-13	0.76	<1	<2	10	<1	0.17
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	11-Sep-13	0.72	<1	<2	10	<1	0.18
RMD-258	GRAB	7000 Blk. Dyke Rd.	11-Sep-13	0.87	<1	<2	12	<1	0.17
RMD-257	GRAB	6640 Blundell Rd.	11-Sep-13	0.78	<1	<2	9	<1	0.18
RMD-204	GRAB	3180 Granville Ave.	13-Sep-13	0.67	<1	<2	15	<1	0.22
RMD-206	GRAB	4251 Moncton St.	13-Sep-13	0.74	<1	2	13	<1	0.21
RMD-216	GRAB	11080 No. 2 Rd.	13-Sep-13	0.9	<1	<2	14	<1	0.22
RMD-212	GRAB	Opp. 8600 Ryan Rd.	13-Sep-13	0.85	<1	<2	13	<1	0.26
RMD-208	GRAB	13200 No. 4 Rd.	13-Sep-13	0.9	<1	<2	14	<1	0.24
RMD-205	GRAB	13851 Steveston Hwy.	13-Sep-13	0.73	<1	2	14	<1	0.14
RMD-202	GRAB	1500 Valemont Way	13-Sep-13	0.7	<1	<2	14	<1	0.22
RMD-214	GRAB	11720 Westminster Hwy.	13-Sep-13	0.88	<1	<2	14	<1	0.27
RMD-267	GRAB	17240 Fedoruk	13-Sep-13	0.52	<1	2	15	<1	0.21
RMD-249	GRAB	23000 Blk. Dyke Rd.	13-Sep-13	0.8	<1	<2	14	<1	0.33
RMD-276	GRAB	22271 Cochrane Drive	13-Sep-13	0.74	<1	2	15	<1	0.3
RMD-275	GRAB	5180 Smith Cres.	13-Sep-13	0.76	<1	2	15	<1	0.32
RMD-203	GRAB	23260 Westminster Hwy.	13-Sep-13	0.87	<1	2	14	<1	0.34
RMD-251	GRAB	5951McCallan Rd.	16-Sep-13	0.83	<1	<2	10	<1	0.31
RMD-250	GRAB	6071 Azure Rd.	16-Sep-13	0.55	<1	<2	11	<1	0.21
RMD-271	GRAB	3800 Cessna Drive	16-Sep-13	0.84	<1	<2	11	<1	0.21
RMD-272	GRAB	751 Catalina Cres.	16-Sep-13	1	<1	2	10	<1	0.19
RMD-255	GRAB	6000 Blk. Miller Rd.	16-Sep-13	0.93	<1	4	9	<1	0.23
RMD-256	GRAB	1000 Blk. McDonald Rd.	16-Sep-13	0.54	<1	<2	11	<1	0.28
RMD-254	GRAB	5300 No. 3 Rd.	16-Sep-13	0.88	<1	<2	10	<1	0.22
RMD-270	GRAB	8200 Jones Rd.	16-Sep-13	0.78	<1	<2	11	<1	0.18
RMD-269	GRAB	14951 Triangle Rd.	16-Sep-13	0.73	<1	<2	10	<1	0.21

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-253	GRAB	11051 No 3 Rd.	16-Sep-13	0.94	<1	2	10	<1	0.19
RMD-274	GRAB	10920 Springwood Court	16-Sep-13	0.64	<1	<2	13	<1	0.32
RMD-252	GRAB	9751 Pendleton Rd.	16-Sep-13	0.53	<1	<2	11	<1	0.22
RMD-273	GRAB	Opp. 8331 Fairfax Place	16-Sep-13	0.31	<1	<2	14	<1	0.53
RMD-263	GRAB	12560 Cambie Rd.	18-Sep-13	0.67	<1	<2	10	<1	0.25
RMD-264	GRAB	13100 Mitchell Rd.	18-Sep-13	0.75	<1	2	10	<1	0.21
RMD-277	GRAB	Opp. 11280 Twigg Place	18-Sep-13	0.78	<1	<2	10	<1	0.24
RMD-262	GRAB	13799 Commerce Pkwy.	18-Sep-13	0.73	<1	<2	11	<1	0.27
RMD-278	GRAB	6651 Fraserwood Place	18-Sep-13	0.55	<1	8	11	<1	0.46
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	18-Sep-13	0.51	<1	<2	10	<1	0.59
RMD-261	GRAB	9911 Sidaway Rd.	18-Sep-13	0.67	<1	<2	9	<1	0.21
RMD-260	GRAB	11111 Horseshoe Way	18-Sep-13	0.71	<1	<2	10	<1	0.23
RMD-259	GRAB	10020 Amethyst Ave.	18-Sep-13	0.75	<1	<2	10	<1	0.21
RMD-266	GRAB	9380 General Currie Rd.	18-Sep-13	0.69	<1	2	9	<1	0.21
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	18-Sep-13	0.66	<1	<2	10	<1	0.2
RMD-258	GRAB	7000 Blk. Dyke Rd.	18-Sep-13	0.76	<1	<2	10	<1	0.26
RMD-257	GRAB	6640 Blundell Rd.	18-Sep-13	0.7	<1	<2	9	<1	0.32
RMD-204	GRAB	3180 Granville Ave.	20-Sep-13	0.52	<1	<2	15	<1	0.21
RMD-206	GRAB	4251 Moncton St.	20-Sep-13	0.6	<1	<2	14	<1	0.4
RMD-216	GRAB	11080 No. 2 Rd.	20-Sep-13	0.85	<1	<2	14	<1	0.23
RMD-212	GRAB	Opp. 8600 Ryan Rd.	20-Sep-13	0.8	<1	<2	14	<1	0.29
RMD-208	GRAB	13200 No. 4 Rd.	20-Sep-13	0.82	<1	<2	13	<1	0.18
RMD-205	GRAB	13851 Steveston Hwy.	20-Sep-13	0.58	<1	2	12	<1	0.22
RMD-202	GRAB	1500 Valemont Way	20-Sep-13	0.68	<1	400	14	<1	0.2
RMD-214	GRAB	11720 Westminster Hwy.	20-Sep-13	0.74	<1	[conta	11	<1	0.19
RMD-267	GRAB	17240 Fedoruk	20-Sep-13	0.56	<1	<2	15	<1	0.23
RMD-249	GRAB	23000 Blk. Dyke Rd.	20-Sep-13	0.8	<1	2	13	<1	0.48
RMD-276	GRAB	22271 Cochrane Drive	20-Sep-13	0.64	<1	2	13	<1	0.39
RMD-275	GRAB	5180 Smith Cres.	20-Sep-13	0.45	<1	14	12	<1	0.4
RMD-203	GRAB	23260 Westminster Hwy.	20-Sep-13	0.74	<1	<2	11	<1	0.36
RMD-251	GRAB	5951McCallan Rd.	23-Sep-13	0.93	<1	<2	14	<1	0.17
RMD-273	GRAB	Opp. 8331 Fairfax Place	23-Sep-13	0.27	<1	4	19	<1	0.21
RMD-252	GRAB	9751 Pendleton Rd.	23-Sep-13	0.58	<1	<2	16	<1	0.21
RMD-274	GRAB	10920 Springwood Court	23-Sep-13	0.66	<1	<2	17	<1	0.25
RMD-250	GRAB	6071 Azure Rd.	23-Sep-13	0.49	<1	<2	17	<1	0.21
RMD-271	GRAB	3800 Cessna Drive	23-Sep-13	0.56	<1	<2	16	<1	0.22
RMD-272	GRAB	751 Catalina Cres.	23-Sep-13	0.57	<1	2	14	<1	0.24

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-255	GRAB	6000 Blk. Miller Rd.	23-Sep-13	0.55	<1	18	15	<1	0.25
RMD-256	GRAB	1000 Blk. McDonald Rd.	23-Sep-13	0.27	<1	<2	16	<1	0.26
RMD-254	GRAB	5300 No. 3 Rd.	23-Sep-13	0.54	<1	<2	15	<1	0.26
RMD-270	GRAB	8200 Jones Rd.	23-Sep-13	0.7	<1	<2	16	<1	0.21
RMD-269	GRAB	14951 Triangle Rd.	23-Sep-13	0.62	<1	<2	15	<1	0.19
RMD-253	GRAB	11051 No 3 Rd.	23-Sep-13	0.5	<1	<2	15	<1	0.23
RMD-263	GRAB	12560 Cambie Rd.	25-Sep-13	0.82	<1	<2	13	<1	0.25
RMD-264	GRAB	13100 Mitchell Rd.	25-Sep-13	0.83	<1	<2	13	<1	0.28
RMD-277	GRAB	Opp. 11280 Twigg Place	25-Sep-13	0.8	<1	<2	14	<1	0.26
RMD-262	GRAB	13799 Commerce Pkwy.	25-Sep-13	0.49	<1	<2	13	<1	0.24
RMD-278	GRAB	6651 Fraserwood Place	25-Sep-13	0.56	<1	<2	14	<1	0.34
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	25-Sep-13	0.69	<1	2	12	<1	0.33
RMD-261	GRAB	9911 Sidaway Rd.	25-Sep-13	0.66	<1	<2	11	<1	1.1
RMD-260	GRAB	11111 Horseshoe Way	25-Sep-13	0.81	<1	<2	12	<1	0.67
RMD-259	GRAB	10020 Amethyst Ave.	25-Sep-13	0.78	<1	<2	13	<1	0.66
RMD-266	GRAB	9380 General Currie Rd.	25-Sep-13	0.72	<1	<2	12	<1	0.22
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	25-Sep-13	0.62	<1	<2	15	<1	0.2
RMD-258	GRAB	7000 Blk. Dyke Rd.	25-Sep-13	0.82	<1	2	14	<1	0.22
RMD-257	GRAB	6640 Blundell Rd.	25-Sep-13	0.84	<1	2	12	<1	0.21
RMD-267	GRAB	17240 Fedoruk	26-Sep-13	0.56	<1	4	14	<1	0.19
RMD-249	GRAB	23000 Blk. Dyke Rd.	26-Sep-13	0.61	<1	<2	13	<1	0.29
RMD-276	GRAB	22271 Cochrane Drive	26-Sep-13	0.68	<1	<2	15	<1	0.29
RMD-275	GRAB	5180 Smith Cres.	26-Sep-13	0.65	<1	<2	15	<1	0.33
RMD-203	GRAB	23260 Westminster Hwy.	26-Sep-13	0.68	<1	<2	15	<1	0.36
RMD-202	GRAB	1500 Valemont Way	26-Sep-13	0.72	<1	2	14	<1	0.23
RMD-214	GRAB	11720 Westminster Hwy.	26-Sep-13	0.69	<1	<2	15	<1	0.19
RMD-205	GRAB	13851 Steveston Hwy.	26-Sep-13	0.62	<1	2	14	<1	0.22
RMD-208	GRAB	13200 No. 4 Rd.	26-Sep-13	0.74	<1	<2	15	<1	0.3
RMD-204	GRAB	3180 Granville Ave.	26-Sep-13	0.48	<1	2	15	<1	0.24
RMD-206	GRAB	4251 Moncton St.	26-Sep-13	0.74	<1	<2	15	<1	0.24
RMD-216	GRAB	11080 No. 2 Rd.	26-Sep-13	0.62	<1	2	15	<1	0.22
RMD-212	GRAB	Opp. 8600 Ryan Rd.	26-Sep-13	0.73	<1	<2	15	<1	0.2
RMD-251	GRAB	5951McCallan Rd.	30-Sep-13	0.55	<1	<2	13	<1	0.13
RMD-273	GRAB	Opp. 8331 Fairfax Place	30-Sep-13	0.39	<1	<2	16	<1	0.22
RMD-252	GRAB	9751 Pendleton Rd.	30-Sep-13	0.5	<1	<2	15	<1	0.21
RMD-274	GRAB	10920 Springwood Court	30-Sep-13	0.48	<1	2	15	<1	0.21
RMD-250	GRAB	6071 Azure Rd.	30-Sep-13	0.29	<1	<2	15	<1	0.12

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-271	GRAB	3800 Cessna Drive	30-Sep-13	0.4	<1	<2	15	<1	0.12
RMD-272	GRAB	751 Catalina Cres.	30-Sep-13	0.73	<1	<2	13	<1	0.14
RMD-255	GRAB	6000 Blk. Miller Rd.	30-Sep-13	0.76	<1	4	12	<1	0.2
RMD-256	GRAB	1000 Blk. McDonald Rd.	30-Sep-13	0.25	<1	2	14	<1	0.13
RMD-254	GRAB	5300 No. 3 Rd.	30-Sep-13	0.32	<1	<2	13	<1	0.17
RMD-270	GRAB	8200 Jones Rd.	30-Sep-13	0.52	<1	<2	15	<1	0.18
RMD-269	GRAB	14951 Triangle Rd.	30-Sep-13	0.06	<1	6	12	<1	0.17
RMD-253	GRAB	11051 No 3 Rd.	30-Sep-13	0.73	<1	<2	15	<1	0.22
RMD-263	GRAB	12560 Cambie Rd.	2-Oct-13	0.57	<1	<2	7	<1	0.14
RMD-264	GRAB	13100 Mitchell Rd.	2-Oct-13	0.52	<1	<2	6	<1	0.26
RMD-277	GRAB	Opp. 11280 Twigg Place	2-Oct-13	0.59	<1	<2	8	<1	0.34
RMD-262	GRAB	13799 Commerce Pkwy.	2-Oct-13	0.29	<1	<2	8	<1	0.19
RMD-278	GRAB	6651 Fraserwood Place	2-Oct-13	0.58	<1	<2	7	<1	0.8
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	2-Oct-13	0.71	<1	<2	7	<1	0.5
RMD-261	GRAB	9911 Sidaway Rd.	2-Oct-13	0.45	<1	<2	7	<1	0.17
RMD-260	GRAB	11111 Horseshoe Way	2-Oct-13	0.64	<1	<2	7	<1	0.15
RMD-259	GRAB	10020 Amethyst Ave.	2-Oct-13	0.51	<1	<2	8	<1	0.14
RMD-266	GRAB	9380 General Currie Rd.	2-Oct-13	0.68	<1	<2	9	<1	0.13
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	2-Oct-13	0.57	<1	<2	8	<1	4.2
RMD-258	GRAB	7000 Blk. Dyke Rd.	2-Oct-13	0.61	<1	<2	8	<1	0.11
RMD-257	GRAB	6640 Blundell Rd.	2-Oct-13	0.56	<1	<2	7	<1	0.23
RMD-204	GRAB	3180 Granville Ave.	4-Oct-13	0.54	<1	<2	8	<1	0.19
RMD-206	GRAB	4251 Moncton St.	4-Oct-13	0.69	<1	<2	7	<1	2.2
RMD-216	GRAB	11080 No. 2 Rd.	4-Oct-13	0.84	<1	<2	6	<1	0.13
RMD-212	GRAB	Opp. 8600 Ryan Rd.	4-Oct-13	0.83	<1	<2	7	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	4-Oct-13	0.68	<1	<2	6	<1	0.13
RMD-205	GRAB	13851 Steveston Hwy.	4-Oct-13	0.44	<1	<2	6	<1	0.13
RMD-202	GRAB	1500 Valemont Way	4-Oct-13	0.59	<1	<2	7	<1	0.25
RMD-214	GRAB	11720 Westminster Hwy.	4-Oct-13	0.77	<1	<2	7	<1	0.16
RMD-267	GRAB	17240 Fedoruk	4-Oct-13	0.39	<1	<2	8	<1	0.14
RMD-249	GRAB	23000 Blk. Dyke Rd.	4-Oct-13	0.47	<1	<2	8	<1	0.37
RMD-276	GRAB	22271 Cochrane Drive	4-Oct-13	0.67	<1	16	9	<1	0.29
RMD-275	GRAB	5180 Smith Cres.	4-Oct-13	0.73	<1	<2	7	<1	0.31
RMD-203	GRAB	23260 Westminster Hwy.	4-Oct-13	0.71	<1	2	6	<1	0.35
RMD-251	GRAB	5951McCallan Rd.	7-Oct-13	0.65	<1	<2	10	<1	0.17
RMD-273	GRAB	Opp. 8331 Fairfax Place	7-Oct-13	0.51	<1	4	14	<1	0.29
RMD-252	GRAB	9751 Pendleton Rd.	7-Oct-13	0.64	<1	<2	12	<1	0.12

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-274	GRAB	10920 Springwood Court	7-Oct-13	0.74	<1	<2	14	<1	0.13
RMD-250	GRAB	6071 Azure Rd.	7-Oct-13	0.6	<1	<2	14	<1	0.13
RMD-271	GRAB	3800 Cessna Drive	7-Oct-13	0.95	<1	<2	10	<1	0.13
RMD-272	GRAB	751 Catalina Cres.	7-Oct-13	0.85	<1	2	10	<1	0.18
RMD-255	GRAB	6000 Blk. Miller Rd.	7-Oct-13	0.94	<1	<2	10	<1	0.16
RMD-256	GRAB	1000 Blk. McDonald Rd.	7-Oct-13	0.67	<1	2	12	<1	0.13
RMD-254	GRAB	5300 No. 3 Rd.	7-Oct-13	0.44	<1	<2	11	<1	0.17
RMD-270	GRAB	8200 Jones Rd.	7-Oct-13	0.62	<1	<2	12	<1	0.13
RMD-269	GRAB	14951 Triangle Rd.	7-Oct-13	0.48	<1	4	10	<1	0.14
RMD-253	GRAB	11051 No 3 Rd.	7-Oct-13	0.87	<1	<2	10	<1	0.15
RMD-263	GRAB	12560 Cambie Rd.	9-Oct-13	0.72	<1	<2	11	<1	0.15
RMD-264	GRAB	13100 Mitchell Rd.	9-Oct-13	0.66	<1	<2	10	<1	0.17
RMD-277	GRAB	Opp. 11280 Twigg Place	9-Oct-13	0.86	<1	<2	10	<1	0.16
RMD-262	GRAB	13799 Commerce Pkwy.	9-Oct-13	0.18	<1	<2	14	<1	0.17
RMD-278	GRAB	6651 Fraserwood Place	9-Oct-13	0.59	<1	<2	13	<1	0.34
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	9-Oct-13	0.63	<1	<2	11	<1	0.59
RMD-261	GRAB	9911 Sidaway Rd.	9-Oct-13	0.45	<1	2	10	<1	0.13
RMD-260	GRAB	11111 Horseshoe Way	9-Oct-13	0.79	<1	<2	10	<1	0.14
RMD-259	GRAB	10020 Amethyst Ave.	9-Oct-13	0.68	<1	<2	10	<1	0.11
RMD-266	GRAB	9380 General Currie Rd.	9-Oct-13	0.89	<1	<2	10	<1	0.14
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	9-Oct-13	0.65	<1	<2	11	<1	0.11
RMD-258	GRAB	7000 Blk. Dyke Rd.	9-Oct-13	0.34	<1	<2	10	<1	0.27
RMD-257	GRAB	6640 Blundell Rd.	9-Oct-13	0.82	<1	<2	10	<1	0.17
RMD-204	GRAB	3180 Granville Ave.	11-Oct-13	1	<1	<2	12	<1	1.1
RMD-206	GRAB	4251 Moncton St.	11-Oct-13	0.75	<1	<2	10	<1	0.13
RMD-216	GRAB	11080 No. 2 Rd.	11-Oct-13	0.88	<1	<2	10	<1	0.22
RMD-212	GRAB	Opp. 8600 Ryan Rd.	11-Oct-13	0.82	<1	<2	10	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	11-Oct-13	0.82	<1	<2	11	<1	0.16
RMD-205	GRAB	13851 Steveston Hwy.	11-Oct-13	0.54	<1	<2	10	<1	0.22
RMD-202	GRAB	1500 Valemont Way	11-Oct-13	0.68	<1	<2	12	<1	0.33
RMD-214	GRAB	11720 Westminster Hwy.	11-Oct-13	0.81	<1	<2	10	<1	0.14
RMD-267	GRAB	17240 Fedoruk	11-Oct-13	0.55	<1	<2	12	<1	0.17
RMD-249	GRAB	23000 Blk. Dyke Rd.	11-Oct-13	0.98	<1	12	12	<1	0.39
RMD-276	GRAB	22271 Cochrane Drive	11-Oct-13	0.83	<1	<2	11	<1	0.29
RMD-275	GRAB	5180 Smith Cres.	11-Oct-13	0.77	<1	10	12	<1	0.29
RMD-203	GRAB	23260 Westminster Hwy.	11-Oct-13	0.96	<1	<2	11	<1	0.31
RMD-251	GRAB	5951McCallan Rd.	15-Oct-13	0.89	<1	<2	10	<1	0.14

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-273	GRAB	Opp. 8331 Fairfax Place	15-Oct-13	0.47	<1	<2	15	<1	0.15
RMD-252	GRAB	9751 Pendleton Rd.	15-Oct-13	0.64	<1	2	13	<1	0.16
RMD-274	GRAB	10920 Springwood Court	15-Oct-13	0.74	<1	<2	13	<1	0.42
RMD-250	GRAB	6071 Azure Rd.	15-Oct-13	0.71	<1	<2	12	<1	0.12
RMD-271	GRAB	3800 Cessna Drive	15-Oct-13	0.89	<1	<2	10	<1	0.15
RMD-272	GRAB	751 Catalina Cres.	15-Oct-13	0.88	<1	<2	10	<1	0.1
RMD-255	GRAB	6000 Blk. Miller Rd.	15-Oct-13	0.88	<1	<2	10	<1	0.2
RMD-256	GRAB	1000 Blk. McDonald Rd.	15-Oct-13	0.66	<1	<2	13	<1	0.14
RMD-254	GRAB	5300 No. 3 Rd.	15-Oct-13	0.72	<1	<2	11	<1	0.14
RMD-270	GRAB	8200 Jones Rd.	15-Oct-13	0.7	<1	<2	12	<1	0.18
RMD-269	GRAB	14951 Triangle Rd.	15-Oct-13	0.41	<1	2	11	<1	0.12
RMD-253	GRAB	11051 No 3 Rd.	15-Oct-13	0.83	<1	<2	10	<1	0.14
RMD-263	GRAB	12560 Cambie Rd.	16-Oct-13	0.83	<1	2	10	<1	0.16
RMD-264	GRAB	13100 Mitchell Rd.	16-Oct-13	0.33	<1	<2	10	<1	0.14
RMD-277	GRAB	Opp. 11280 Twigg Place	16-Oct-13	0.89	<1	2	11	<1	0.14
RMD-262	GRAB	13799 Commerce Pkwy.	16-Oct-13	0.25	<1	<2	13	<1	0.09
RMD-278	GRAB	6651 Fraserwood Place	16-Oct-13	0.57	<1	<2	13	<1	0.27
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	16-Oct-13	0.65	<1	<2	12	<1	0.29
RMD-261	GRAB	9911 Sidaway Rd.	16-Oct-13	0.41	<1	<2	12	<1	0.09
RMD-260	GRAB	11111 Horseshoe Way	16-Oct-13	0.84	<1	<2	11	<1	0.09
RMD-259	GRAB	10020 Amethyst Ave.	16-Oct-13	0.82	<1	<2	11	<1	0.09
RMD-266	GRAB	9380 General Currie Rd.	16-Oct-13	0.93	<1	<2	11	<1	0.1
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	16-Oct-13	0.74	<1	2	12	<1	0.11
RMD-258	GRAB	7000 Blk. Dyke Rd.	16-Oct-13	0.71	<1	<2	12	<1	0.1
RMD-257	GRAB	6640 Blundell Rd.	16-Oct-13	0.8	<1	<2	11	<1	0.09
RMD-204	GRAB	3180 Granville Ave.	18-Oct-13	0.86	<1	<2	12	<1	0.3
RMD-206	GRAB	4251 Moncton St.	18-Oct-13	0.81	<1	<2	10	<1	0.16
RMD-216	GRAB	11080 No. 2 Rd.	18-Oct-13	0.81	<1	<2	9	<1	0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	18-Oct-13	0.76	<1	<2	11	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	18-Oct-13	0.86	<1	<2	10	<1	0.1
RMD-205	GRAB	13851 Steveston Hwy.	18-Oct-13	0.47	<1	<2	9	<1	0.14
RMD-202	GRAB	1500 Valemont Way	18-Oct-13	0.69	<1	<2	10	<1	0.27
RMD-214	GRAB	11720 Westminster Hwy.	18-Oct-13	0.64	<1	<2	8	<1	0.11
RMD-267	GRAB	17240 Fedoruk	18-Oct-13	0.36	<1	<2	11	<1	0.21
RMD-249	GRAB	23000 Blk. Dyke Rd.	18-Oct-13	0.65	<1	<2	10	<1	0.44
RMD-276	GRAB	22271 Cochrane Drive	18-Oct-13	0.57	<1	4	12	<1	0.45
RMD-275	GRAB	5180 Smith Cres.	18-Oct-13	0.55	<1	<2	11	<1	0.32

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-203	GRAB	23260 Westminster Hwy.	18-Oct-13	0.71	<1	<2	9	<1	0.39
RMD-251	GRAB	5951McCallan Rd.	21-Oct-13	0.82	<1	<2	9	<1	0.13
RMD-273	GRAB	Opp. 8331 Fairfax Place	21-Oct-13	0.64	<1	<2	13	<1	0.14
RMD-252	GRAB	9751 Pendleton Rd.	21-Oct-13	0.77	<1	<2	11	<1	0.27
RMD-274	GRAB	10920 Springwood Court	21-Oct-13	1.1	<1	<2	12	<1	0.15
RMD-250	GRAB	6071 Azure Rd.	21-Oct-13	0.72	<1	<2	10	<1	0.15
RMD-271	GRAB	3800 Cessna Drive	21-Oct-13	0.82	<1	<2	9	<1	0.16
RMD-272	GRAB	751 Catalina Cres.	21-Oct-13	0.95	<1	<2	8	<1	0.15
RMD-255	GRAB	6000 Blk. Miller Rd.	21-Oct-13	0.95	<1	<2	8	<1	0.22
RMD-256	GRAB	1000 Blk. McDonald Rd.	21-Oct-13	0.72	<1	<2	9	<1	0.14
RMD-254	GRAB	5300 No. 3 Rd.	21-Oct-13	0.88	<1	<2	8	<1	0.16
RMD-270	GRAB	8200 Jones Rd.	21-Oct-13	0.83	<1	2	10	<1	0.16
RMD-269	GRAB	14951 Triangle Rd.	21-Oct-13	0.61	<1	<2	8	<1	0.12
RMD-253	GRAB	11051 No 3 Rd.	21-Oct-13	0.85	<1	<2	8	<1	0.12
RMD-263	GRAB	12560 Cambie Rd.	23-Oct-13	0.66	<1	<2	10	<1	0.14
RMD-264	GRAB	13100 Mitchell Rd.	23-Oct-13	0.62	<1	<2	10	<1	0.32
RMD-277	GRAB	Opp. 11280 Twigg Place	23-Oct-13	0.52	<1	<2	10	<1	0.49
RMD-278	GRAB	6651 Fraserwood Place	23-Oct-13	0.16	<1	<2	12	<1	0.3
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	23-Oct-13	0.64	<1	<2	12	<1	0.34
RMD-262	GRAB	13799 Commerce Pkwy.	23-Oct-13	0.21	<1	<2	12	<1	0.17
RMD-261	GRAB	9911 Sidaway Rd.	23-Oct-13	0.48	<1	<2	10	<1	0.13
RMD-260	GRAB	11111 Horseshoe Way	23-Oct-13	0.48	<1	<2	10	<1	0.1
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	23-Oct-13	0.68	<1	<2	11	<1	0.12
RMD-258	GRAB	7000 Blk. Dyke Rd.	23-Oct-13	0.78	<1	<2	11	<1	0.15
RMD-257	GRAB	6640 Blundell Rd.	23-Oct-13	0.7	<1	<2	10	<1	0.18
RMD-266	GRAB	9380 General Currie Rd.	23-Oct-13	0.58	<1	<2	10	<1	0.13
RMD-259	GRAB	10020 Amethyst Ave.	23-Oct-13	0.53	<1	2	11	<1	0.09
RMD-204	GRAB	3180 Granville Ave.	25-Oct-13	0.89	<1	<2	11	<1	0.43
RMD-206	GRAB	4251 Moncton St.	25-Oct-13	0.66	<1	<2	10	<1	0.16
RMD-216	GRAB	11080 No. 2 Rd.	25-Oct-13	0.74	<1	<2	10	<1	0.15
RMD-212	GRAB	Opp. 8600 Ryan Rd.	25-Oct-13	0.79	<1	2	11	<1	0.17
RMD-208	GRAB	13200 No. 4 Rd.	25-Oct-13	0.81	<1	<2	10	<1	0.16
RMD-205	GRAB	13851 Steveston Hwy.	25-Oct-13	0.48	<1	<2	11	<1	0.28
RMD-202	GRAB	1500 Valemont Way	25-Oct-13	0.61	<1	2	12	<1	0.3
RMD-214	GRAB	11720 Westminster Hwy.	25-Oct-13	0.71	<1	6	10	<1	0.15
RMD-267	GRAB	17240 Fedoruk	25-Oct-13	0.46	<1	<2	12	<1	0.26
RMD-249	GRAB	23000 Blk. Dyke Rd.	25-Oct-13	0.71	<1	<2	12	<1	0.31

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-276	GRAB	22271 Cochrane Drive	25-Oct-13	0.58	<1	4	12	<1	0.32
RMD-275	GRAB	5180 Smith Cres.	25-Oct-13	0.65	<1	<2	12	<1	0.61
RMD-203	GRAB	23260 Westminster Hwy.	25-Oct-13	0.69	<1	<2	12	<1	0.32
RMD-251	GRAB	5951McCallan Rd.	28-Oct-13	0.73	<1	<2	10	<1	0.2
RMD-273	GRAB	Opp. 8331 Fairfax Place	28-Oct-13	0.15	<1	<2	13	<1	0.22
RMD-252	GRAB	9751 Pendleton Rd.	28-Oct-13	0.63	<1	<2	11	<1	0.19
RMD-274	GRAB	10920 Springwood Court	28-Oct-13	0.73	<1	<2	13	<1	0.24
RMD-250	GRAB	6071 Azure Rd.	28-Oct-13	0.58	<1	<2	12	<1	0.19
RMD-271	GRAB	3800 Cessna Drive	28-Oct-13	0.75	<1	2	11	<1	0.29
RMD-272	GRAB	751 Catalina Cres.	28-Oct-13	0.81	<1	<2	9	<1	0.25
RMD-255	GRAB	6000 Blk. Miller Rd.	28-Oct-13	0.78	<1	<2	8	<1	0.35
RMD-256	GRAB	1000 Blk. McDonald Rd.	28-Oct-13	0.71	<1	<2	11	<1	0.27
RMD-254	GRAB	5300 No. 3 Rd.	28-Oct-13	0.79	<1	<2	9	<1	0.23
RMD-270	GRAB	8200 Jones Rd.	28-Oct-13	0.66	<1	<2	11	<1	0.24
RMD-269	GRAB	14951 Triangle Rd.	28-Oct-13	0.48	<1	4	11	<1	0.35
RMD-253	GRAB	11051 No 3 Rd.	28-Oct-13	0.63	<1	<2	10	<1	0.22
RMD-263	GRAB	12560 Cambie Rd.	30-Oct-13	0.65	<1	<2	10	<1	0.2
RMD-264	GRAB	13100 Mitchell Rd.	30-Oct-13	0.75	<1	<2	9	<1	0.18
RMD-277	GRAB	Opp. 11280 Twigg Place	30-Oct-13	0.45	<1	<2	12	<1	0.18
RMD-262	GRAB	13799 Commerce Pkwy.	30-Oct-13	0.26	<1	<2	11	<1	0.25
RMD-278	GRAB	6651 Fraserwood Place	30-Oct-13	0.69	<1	<2	11	<1	0.28
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	30-Oct-13	0.64	<1	<2	11	<1	0.25
RMD-261	GRAB	9911 Sidaway Rd.	30-Oct-13	0.1	<1	<2	11	<1	0.26
RMD-260	GRAB	11111 Horseshoe Way	30-Oct-13	0.55	<1	<2	10	<1	0.33
RMD-259	GRAB	10020 Amethyst Ave.	30-Oct-13	0.67	<1	<2	10	<1	0.22
RMD-266	GRAB	9380 General Currie Rd.	30-Oct-13	0.86	<1	2	11	<1	0.2
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	30-Oct-13	0.71	<1	<2	12	<1	0.21
RMD-258	GRAB	7000 Blk. Dyke Rd.	30-Oct-13	0.67	<1	<2	12	<1	0.24
RMD-257	GRAB	6640 Blundell Rd.	30-Oct-13	0.76	<1	<2	11	<1	0.18
RMD-204	GRAB	3180 Granville Ave.	1-Nov-13	0.78	<1	<2	10	<1	0.3
RMD-206	GRAB	4251 Moncton St.	1-Nov-13	0.6	<1	<2	9	<1	0.21
RMD-216	GRAB	11080 No. 2 Rd.	1-Nov-13	0.64	<1	<2	10	<1	0.26
RMD-212	GRAB	Opp. 8600 Ryan Rd.	1-Nov-13	0.65	<1	2	8	<1	0.2
RMD-208	GRAB	13200 No. 4 Rd.	1-Nov-13	0.61	<1	2	9	<1	0.18
RMD-205	GRAB	13851 Steveston Hwy.	1-Nov-13	0.45	<1	<2	11	<1	0.18
RMD-214	GRAB	11720 Westminster Hwy.	1-Nov-13	0.67	<1	<2	9	<1	0.21
RMD-202	GRAB	1500 Valemont Way	1-Nov-13	0.72	<1	<2	8	<1	0.18

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-267	GRAB	17240 Fedoruk	1-Nov-13	0.43	<1	<2	11	<1	0.21
RMD-249	GRAB	23000 Blk. Dyke Rd.	1-Nov-13	0.64	<1	<2	9	<1	0.24
RMD-276	GRAB	22271 Cochrane Drive	1-Nov-13	0.68	<1	<2	10	<1	0.21
RMD-275	GRAB	5180 Smith Cres.	1-Nov-13	0.63	<1	<2	10	<1	0.23
RMD-203	GRAB	23260 Westminster Hwy.	1-Nov-13	0.79	<1	2	9	<1	0.27
RMD-251	GRAB	5951McCallan Rd.	4-Nov-13	0.83	<1	<2	10	<1	0.31
RMD-273	GRAB	Opp. 8331 Fairfax Place	4-Nov-13	0.45	<1	<2	12	<1	0.16
RMD-252	GRAB	9751 Pendleton Rd.	4-Nov-13	0.55	<1	<2	9	<1	0.23
RMD-274	GRAB	10920 Springwood Court	4-Nov-13	0.65	<1	<2	13	<1	0.18
RMD-250	GRAB	6071 Azure Rd.	4-Nov-13	0.86	<1	<2	11	<1	0.33
RMD-271	GRAB	3800 Cessna Drive	4-Nov-13	0.71	<1	<2	10	<1	0.2
RMD-272	GRAB	751 Catalina Cres.	4-Nov-13	0.8	<1	<2	11	<1	0.2
RMD-255	GRAB	6000 Blk. Miller Rd.	4-Nov-13	0.67	<1	<2	8	<1	0.32
RMD-256	GRAB	1000 Blk. McDonald Rd.	4-Nov-13	0.71	<1	<2	10	<1	0.28
RMD-254	GRAB	5300 No. 3 Rd.	4-Nov-13	0.68	<1	<2	12	<1	0.2
RMD-270	GRAB	8200 Jones Rd.	4-Nov-13	0.7	<1	<2	10	<1	0.23
RMD-269	GRAB	14951 Triangle Rd.	4-Nov-13	0.44	<1	<2	11	<1	0.22
RMD-253	GRAB	11051 No 3 Rd.	4-Nov-13	0.8	<1	<2	11	<1	0.2
RMD-263	GRAB	12560 Cambie Rd.	6-Nov-13	0.48	<1	<2	10	<1	0.88
RMD-264	GRAB	13100 Mitchell Rd.	6-Nov-13	0.8	<1	2	9	<1	0.34
RMD-277	GRAB	Opp. 11280 Twigg Place	6-Nov-13	0.81	<1	<2	9	<1	0.33
RMD-262	GRAB	13799 Commerce Pkwy.	6-Nov-13	0.43	<1	4	10	<1	0.35
RMD-278	GRAB	6651 Fraserwood Place	6-Nov-13	0.51	<1	<2	11	<1	0.5
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	6-Nov-13	0.57	<1	<2	8	<1	0.33
RMD-261	GRAB	9911 Sidaway Rd.	6-Nov-13	0.42	<1	<2	9	<1	0.19
RMD-260	GRAB	11111 Horseshoe Way	6-Nov-13	0.72	<1	2	8	<1	0.18
RMD-259	GRAB	10020 Amethyst Ave.	6-Nov-13	0.82	<1	<2	10	<1	0.17
RMD-266	GRAB	9380 General Currie Rd.	6-Nov-13	0.73	<1	<2	8	<1	0.2
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	6-Nov-13	0.8	<1	<2	9	<1	0.2
RMD-258	GRAB	7000 Blk. Dyke Rd.	6-Nov-13	0.8	<1	<2	11	<1	0.18
RMD-257	GRAB	6640 Blundell Rd.	6-Nov-13	0.48	<1	2	11	<1	0.17
RMD-204	GRAB	3180 Granville Ave.	8-Nov-13	0.64	<1	<2	10	<1	0.24
RMD-206	GRAB	4251 Moncton St.	8-Nov-13	0.44	<1	<2	10	<1	0.22
RMD-216	GRAB	11080 No. 2 Rd.	8-Nov-13	0.57	<1	2	10	<1	0.2
RMD-212	GRAB	Opp. 8600 Ryan Rd.	8-Nov-13	0.8	<1	<2	11	<1	0.21
RMD-208	GRAB	13200 No. 4 Rd.	8-Nov-13	0.79	<1	<2	9	<1	0.24
RMD-205	GRAB	13851 Steveston Hwy.	8-Nov-13	0.46	<1	4	10	<1	0.22

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-202	GRAB	1500 Valemont Way	8-Nov-13	0.5	<1	<2	9	<1	0.29
RMD-214	GRAB	11720 Westminster Hwy.	8-Nov-13	0.46	<1	<2	10	<1	0.2
RMD-267	GRAB	17240 Fedoruk	8-Nov-13	0.43	<1	<2	10	<1	0.21
RMD-249	GRAB	23000 Blk. Dyke Rd.	8-Nov-13	0.5	<1	<2	9	<1	0.45
RMD-276	GRAB	22271 Cochrane Drive	8-Nov-13	0.49	<1	2	10	<1	0.21
RMD-275	GRAB	5180 Smith Cres.	8-Nov-13	0.72	<1	<2	10	<1	0.24
RMD-203	GRAB	23260 Westminster Hwy.	8-Nov-13	0.61	<1	<2	10	<1	0.33
RMD-251	GRAB	5951McCallan Rd.	12-Nov-13	0.85	<1	2	9	<1	0.17
RMD-273	GRAB	Opp. 8331 Fairfax Place	12-Nov-13	0.5	<1	<2	10	<1	0.17
RMD-252	GRAB	9751 Pendleton Rd.	12-Nov-13	0.68	<1	<2	10	<1	0.19
RMD-274	GRAB	10920 Springwood Court	12-Nov-13	0.81	<1	<2	10	<1	0.19
RMD-250	GRAB	6071 Azure Rd.	12-Nov-13	0.66	<1	<2	10	<1	0.19
RMD-271	GRAB	3800 Cessna Drive	12-Nov-13	0.76	<1	<2	10	<1	0.2
RMD-272	GRAB	751 Catalina Cres.	12-Nov-13	1.1	<1	2	10	<1	0.19
RMD-255	GRAB	6000 Blk. Miller Rd.	12-Nov-13	0.92	<1	<2	9	<1	0.35
RMD-256	GRAB	1000 Blk. McDonald Rd.	12-Nov-13	0.53	<1	<2	10	<1	0.19
RMD-254	GRAB	5300 No. 3 Rd.	12-Nov-13	0.67	<1	<2	10	<1	0.2
RMD-270	GRAB	8200 Jones Rd.	12-Nov-13	0.36	<1	2	10	<1	0.17
RMD-269	GRAB	14951 Triangle Rd.	12-Nov-13	0.47	<1	<2	10	<1	0.24
RMD-253	GRAB	11051 No 3 Rd.	12-Nov-13	0.54	<1	<2	10	<1	0.19
RMD-263	GRAB	12560 Cambie Rd.	13-Nov-13	0.71	<1	<2	10	<1	0.19
RMD-264	GRAB	13100 Mitchell Rd.	13-Nov-13	0.67	<1	<2	9	<1	0.23
RMD-277	GRAB	Opp. 11280 Twigg Place	13-Nov-13	0.89	<1	<2	9	<1	0.22
RMD-262	GRAB	13799 Commerce Pkwy.	13-Nov-13	0.34	<1	<2	11	<1	0.25
RMD-278	GRAB	6651 Fraserwood Place	13-Nov-13	0.58	<1	<2	10	<1	0.31
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	13-Nov-13	0.66	<1	2	11	<1	0.28
RMD-261	GRAB	9911 Sidaway Rd.	13-Nov-13	0.33	<1	<2	8	<1	0.18
RMD-260	GRAB	11111 Horseshoe Way	13-Nov-13	0.66	<1	<2	9	<1	0.2
RMD-259	GRAB	10020 Amethyst Ave.	13-Nov-13	0.86	<1	<2	9	<1	0.2
RMD-266	GRAB	9380 General Currie Rd.	13-Nov-13	0.93	<1	<2	8	<1	0.26
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	13-Nov-13	0.69	<1	<2	10	<1	0.18
RMD-258	GRAB	7000 Blk. Dyke Rd.	13-Nov-13	0.78	<1	<2	9	<1	0.27
RMD-257	GRAB	6640 Blundell Rd.	13-Nov-13	0.73	<1	<2	9	<1	0.2
RMD-204	GRAB	3180 Granville Ave.	15-Nov-13	0.91	<1	2	8	<1	0.45
RMD-206	GRAB	4251 Moncton St.	15-Nov-13	0.64	<1	<2	7	<1	0.21
RMD-216	GRAB	11080 No. 2 Rd.	15-Nov-13	0.93	<1	4	6	<1	0.2
RMD-212	GRAB	Opp. 8600 Ryan Rd.	15-Nov-13	0.65	<1	<2	7	<1	0.24

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-208	GRAB	13200 No. 4 Rd.	15-Nov-13	0.85	<1	<2	6	<1	0.22
RMD-205	GRAB	13851 Steveston Hwy.	15-Nov-13	0.65	<1	<2	6	<1	0.19
RMD-202	GRAB	1500 Valemont Way	15-Nov-13	0.57	<1	2	7	<1	0.27
RMD-214	GRAB	11720 Westminster Hwy.	15-Nov-13	0.53	<1	2	8	<1	0.2
RMD-267	GRAB	17240 Fedoruk	15-Nov-13	0.39	<1	<2	8	<1	0.18
RMD-249	GRAB	23000 Blk. Dyke Rd.	15-Nov-13	0.57	<1	<2	7	<1	0.3
RMD-276	GRAB	22271 Cochrane Drive	15-Nov-13	0.36	<1	<2	9	<1	0.23
RMD-275	GRAB	5180 Smith Cres.	15-Nov-13	0.29	<1	4	8	<1	0.26
RMD-203	GRAB	23260 Westminster Hwy.	15-Nov-13	0.44	<1	<2	9	<1	0.28
RMD-251	GRAB	5951McCallan Rd.	18-Nov-13	0.84	<1	<2	8	<1	0.22
RMD-273	GRAB	Opp. 8331 Fairfax Place	18-Nov-13	0.54	<1	2	10	<1	0.19
RMD-252	GRAB	9751 Pendleton Rd.	18-Nov-13	0.56	<1	2	10	<1	0.2
RMD-274	GRAB	10920 Springwood Court	18-Nov-13	0.65	<1	<2	10	<1	0.23
RMD-250	GRAB	6071 Azure Rd.	18-Nov-13	0.65	<1	<2	10	<1	0.22
RMD-271	GRAB	3800 Cessna Drive	18-Nov-13	0.88	<1	<2	10	<1	0.21
RMD-272	GRAB	751 Catalina Cres.	18-Nov-13	0.95	<1	<2	8	<1	0.23
RMD-255	GRAB	6000 Blk. Miller Rd.	18-Nov-13	0.92	<1	<2	8	<1	0.45
RMD-256	GRAB	1000 Blk. McDonald Rd.	18-Nov-13	0.64	<1	<2	9	<1	0.21
RMD-254	GRAB	5300 No. 3 Rd.	18-Nov-13	0.96	<1	<2	9	<1	0.21
RMD-270	GRAB	8200 Jones Rd.	18-Nov-13	0.66	<1	<2	9	<1	0.26
RMD-269	GRAB	14951 Triangle Rd.	18-Nov-13	0.64	<1	<2	9	<1	0.29
RMD-253	GRAB	11051 No 3 Rd.	18-Nov-13	0.99	<1	<2	9	<1	0.23
RMD-263	GRAB	12560 Cambie Rd.	20-Nov-13	0.58	<1	<2	9	<1	0.18
RMD-264	GRAB	13100 Mitchell Rd.	20-Nov-13	0.65	<1	<2	8	<1	0.3
RMD-277	GRAB	Opp. 11280 Twigg Place	20-Nov-13	0.74	<1	<2	7	<1	0.21
RMD-262	GRAB	13799 Commerce Pkwy.	20-Nov-13	0.34	<1	2	9	<1	0.2
RMD-278	GRAB	6651 Fraserwood Place	20-Nov-13	0.63	<1	<2	8	<1	0.28
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	20-Nov-13	0.65	<1	<2	7	<1	0.32
RMD-261	GRAB	9911 Sidaway Rd.	20-Nov-13	0.38	<1	<2	9	<1	0.17
RMD-260	GRAB	11111 Horseshoe Way	20-Nov-13	0.63	<1	2	8	<1	0.18
RMD-259	GRAB	10020 Amethyst Ave.	20-Nov-13	0.69	<1	2	9	<1	0.16
RMD-266	GRAB	9380 General Currie Rd.	20-Nov-13	0.73	<1	<2	6	<1	0.19
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	20-Nov-13	0.44	<1	<2	9	<1	0.16
RMD-258	GRAB	7000 Blk. Dyke Rd.	20-Nov-13	0.51	<1	2	7	<1	0.18
RMD-257	GRAB	6640 Blundell Rd.	20-Nov-13	0.58	<1	<2	8	<1	0.15
RMD-204	GRAB	3180 Granville Ave.	22-Nov-13	0.89	<1	<2	9	<1	0.48
RMD-206	GRAB	4251 Moncton St.	22-Nov-13	0.62	<1	<2	8	<1	0.13

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-216	GRAB	11080 No. 2 Rd.	22-Nov-13	0.69	<1	<2	7	<1	0.1
RMD-212	GRAB	Opp. 8600 Ryan Rd.	22-Nov-13	0.58	<1	2	8	<1	0.11
RMD-208	GRAB	13200 No. 4 Rd.	22-Nov-13	0.65	<1	<2	8	<1	0.13
RMD-205	GRAB	13851 Steveston Hwy.	22-Nov-13	0.52	<1	<2	8	<1	0.19
RMD-202	GRAB	1500 Valemont Way	22-Nov-13	0.75	<1	<2	9	<1	0.23
RMD-214	GRAB	11720 Westminster Hwy.	22-Nov-13	0.69	<1	<2	7	<1	0.14
RMD-267	GRAB	17240 Fedoruk	22-Nov-13	0.56	<1	<2	8	<1	0.14
RMD-249	GRAB	23000 Blk. Dyke Rd.	22-Nov-13	0.74	<1	<2	8	<1	0.29
RMD-276	GRAB	22271 Cochrane Drive	22-Nov-13	0.58	<1	<2	8	<1	0.24
RMD-275	GRAB	5180 Smith Cres.	22-Nov-13	0.73	<1	<2	7	<1	0.23
RMD-203	GRAB	23260 Westminster Hwy.	22-Nov-13	0.84	<1	<2	8	<1	0.25
RMD-251	GRAB	5951McCallan Rd.	25-Nov-13	0.68	<1	<2	7	<1	0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	25-Nov-13	0.5	<1	<2	9	<1	0.17
RMD-252	GRAB	9751 Pendleton Rd.	25-Nov-13	0.57	<1	<2	8	<1	0.39
RMD-274	GRAB	10920 Springwood Court	25-Nov-13	0.62	<1	<2	8	<1	0.1
RMD-250	GRAB	6071 Azure Rd.	25-Nov-13	0.55	<1	<2	8	<1	0.18
RMD-271	GRAB	3800 Cessna Drive	25-Nov-13	0.58	<1	2	6	<1	0.14
RMD-272	GRAB	751 Catalina Cres.	25-Nov-13	0.53	<1	<2	7	<1	0.15
RMD-255	GRAB	6000 Blk. Miller Rd.	25-Nov-13	0.65	<1	<2	6	<1	0.25
RMD-256	GRAB	1000 Blk. McDonald Rd.	25-Nov-13	0.58	<1	<2	7	<1	0.27
RMD-254	GRAB	5300 No. 3 Rd.	25-Nov-13	0.65	<1	<2	6	<1	0.16
RMD-270	GRAB	8200 Jones Rd.	25-Nov-13	0.56	<1	2	7	<1	0.17
RMD-269	GRAB	14951 Triangle Rd.	25-Nov-13	0.61	<1	<2	8	<1	0.16
RMD-253	GRAB	11051 No 3 Rd.	25-Nov-13	0.64	<1	<2	7	<1	0.13
RMD-263	GRAB	12560 Cambie Rd.	27-Nov-13	0.71	<1	2	6	<1	0.13
RMD-264	GRAB	13100 Mitchell Rd.	27-Nov-13	0.67	<1	<2	7	<1	0.17
RMD-277	GRAB	Opp. 11280 Twigg Place	27-Nov-13	0.62	<1	<2	8	<1	0.18
RMD-262	GRAB	13799 Commerce Pkwy.	27-Nov-13	0.44	<1	<2	8	<1	0.15
RMD-278	GRAB	6651 Fraserwood Place	27-Nov-13	0.74	<1	<2	8	<1	0.23
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	27-Nov-13	0.72	<1	<2	8	<1	0.27
RMD-261	GRAB	9911 Sidaway Rd.	27-Nov-13	0.23	<1	<2	9	<1	0.19
RMD-260	GRAB	11111 Horseshoe Way	27-Nov-13	0.6	<1	2	6	<1	0.13
RMD-259	GRAB	10020 Amethyst Ave.	27-Nov-13	0.65	<1	<2	6	<1	0.13
RMD-266	GRAB	9380 General Currie Rd.	27-Nov-13	0.7	<1	2	5	<1	0.13
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	27-Nov-13	0.59	<1	<2	6	<1	0.23
RMD-258	GRAB	7000 Blk. Dyke Rd.	27-Nov-13	0.67	<1	2	7	<1	0.13
RMD-257	GRAB	6640 Blundell Rd.	27-Nov-13	0.71	<1	<2	7	<1	0.1

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-204	GRAB	3180 Granville Ave.	29-Nov-13	0.78	<1	<2	7	<1	0.4
RMD-206	GRAB	4251 Moncton St.	29-Nov-13	0.62	<1	<2	6	<1	0.11
RMD-216	GRAB	11080 No. 2 Rd.	29-Nov-13	0.67	<1	<2	6	<1	0.1
RMD-212	GRAB	Opp. 8600 Ryan Rd.	29-Nov-13	0.56	<1	<2	8	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	29-Nov-13	0.6	<1	<2	7	<1	0.08
RMD-205	GRAB	13851 Steveston Hwy.	29-Nov-13	0.42	<1	<2	6	<1	0.2
RMD-202	GRAB	1500 Valemont Way	29-Nov-13	0.75	<1	<2	8	<1	0.22
RMD-214	GRAB	11720 Westminster Hwy.	29-Nov-13	0.63	<1	<2	5	<1	0.12
RMD-267	GRAB	17240 Fedoruk	29-Nov-13	0.53	<1	<2	8	<1	0.21
RMD-249	GRAB	23000 Blk. Dyke Rd.	29-Nov-13	0.88	<1	<2	7	<1	0.25
RMD-276	GRAB	22271 Cochrane Drive	29-Nov-13	0.72	<1	<2	7	<1	0.2
RMD-275	GRAB	5180 Smith Cres.	29-Nov-13	0.81	<1	<2	8	<1	0.21
RMD-203	GRAB	23260 Westminster Hwy.	29-Nov-13	0.89	<1	<2	9	<1	0.24
RMD-251	GRAB	5951McCallan Rd.	2-Dec-13	0.67	<1	<2	6	<1	0.1
RMD-273	GRAB	Opp. 8331 Fairfax Place	2-Dec-13	0.6	<1	<2	8	<1	0.13
RMD-252	GRAB	9751 Pendleton Rd.	2-Dec-13	0.62	<1	<2	6	<1	0.16
RMD-274	GRAB	10920 Springwood Court	2-Dec-13	0.61	<1	2	8	<1	0.15
RMD-250	GRAB	6071 Azure Rd.	2-Dec-13	0.64	<1	<2	4	<1	0.13
RMD-271	GRAB	3800 Cessna Drive	2-Dec-13	0.78	<1	<2	6	<1	0.13
RMD-272	GRAB	751 Catalina Cres.	2-Dec-13	0.79	<1	<2	5	<1	0.11
RMD-255	GRAB	6000 Blk. Miller Rd.	2-Dec-13	0.77	<1	<2	5	<1	0.36
RMD-256	GRAB	1000 Blk. McDonald Rd.	2-Dec-13	0.52	<1	<2	6	<1	0.16
RMD-254	GRAB	5300 No. 3 Rd.	2-Dec-13	0.77	<1	<2	4	<1	0.12
RMD-270	GRAB	8200 Jones Rd.	2-Dec-13	0.62	<1	<2	7	<1	0.13
RMD-269	GRAB	14951 Triangle Rd.	2-Dec-13	0.66	<1	2	5	<1	0.14
RMD-253	GRAB	11051 No 3 Rd.	2-Dec-13	0.71	<1	<2	5	<1	0.15
RMD-263	GRAB	12560 Cambie Rd.	4-Dec-13	0.68	<1	<2	7	<1	0.1
RMD-264	GRAB	13100 Mitchell Rd.	4-Dec-13	0.66	<1	<2	6	<1	0.11
RMD-277	GRAB	Opp. 11280 Twigg Place	4-Dec-13	0.8	<1	<2	6	<1	0.13
RMD-262	GRAB	13799 Commerce Pkwy.	4-Dec-13	0.43	<1	<2	8	<1	0.16
RMD-278	GRAB	6651 Fraserwood Place	4-Dec-13	0.61	<1	<2	7	<1	0.36
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	4-Dec-13	0.71	<1	<2	8	<1	0.33
RMD-261	GRAB	9911 Sidaway Rd.	4-Dec-13	0.04	<1	<2	8	<1	0.21
RMD-260	GRAB	11111 Horseshoe Way	4-Dec-13	0.05	<1	<2	7	<1	0.1
RMD-259	GRAB	10020 Amethyst Ave.	4-Dec-13	0.77	<1	<2	7	<1	0.11
RMD-266	GRAB	9380 General Currie Rd.	4-Dec-13	0.82	<1	<2	6	<1	0.09
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	4-Dec-13	0.64	<1	<2	7	<1	0.09

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-258	GRAB	7000 Blk. Dyke Rd.	4-Dec-13	0.69	<1	<2	7	<1	0.09
RMD-257	GRAB	6640 Blundell Rd.	4-Dec-13	0.74	<1	<2	6	<1	0.09
RMD-206	GRAB	4251 Moncton St.	6-Dec-13	0.66	<1	<2	5	<1	0.13
RMD-216	GRAB	11080 No. 2 Rd.	6-Dec-13	0.4	<1	<2	6	<1	0.1
RMD-212	GRAB	Opp. 8600 Ryan Rd.	6-Dec-13	0.74	<1	<2	6	<1	0.11
RMD-208	GRAB	13200 No. 4 Rd.	6-Dec-13	0.68	<1	<2	5	<1	0.09
RMD-205	GRAB	13851 Steveston Hwy.	6-Dec-13	0.78	<1	<2	6	<1	0.2
RMD-202	GRAB	1500 Valemont Way	6-Dec-13	0.67	<1	<2	7	<1	0.2
RMD-214	GRAB	11720 Westminster Hwy.	6-Dec-13	0.72	<1	<2	5	<1	0.11
RMD-267	GRAB	17240 Fedoruk	6-Dec-13	0.51	<1	<2	7	<1	0.18
RMD-249	GRAB	23000 Blk. Dyke Rd.	6-Dec-13	0.71	<1	<2	6	<1	0.18
RMD-276	GRAB	22271 Cochrane Drive	6-Dec-13	0.58	<1	<2	7	<1	0.19
RMD-275	GRAB	5180 Smith Cres.	6-Dec-13	0.74	<1	<2	7	<1	0.18
RMD-203	GRAB	23260 Westminster Hwy.	6-Dec-13	0.86	<1	<2	6	<1	0.22
RMD-273	GRAB	Opp. 8331 Fairfax Place	9-Dec-13	0.55	<1	<2	5	<1	0.13
RMD-252	GRAB	9751 Pendleton Rd.	9-Dec-13	0.63	<1	<2	7	<1	0.13
RMD-274	GRAB	10920 Springwood Court	9-Dec-13	0.66	<1	<2	6	<1	0.16
RMD-250	GRAB	6071 Azure Rd.	9-Dec-13	0.63	<1	<2	5	<1	0.1
RMD-271	GRAB	3800 Cessna Drive	9-Dec-13	0.53	<1	<2	6	<1	0.12
RMD-272	GRAB	751 Catalina Cres.	9-Dec-13	0.54	<1	<2	7	<1	0.12
RMD-255	GRAB	6000 Blk. Miller Rd.	9-Dec-13	0.76	<1	<2	5	<1	0.21
RMD-256	GRAB	1000 Blk. McDonald Rd.	9-Dec-13	0.53	<1	<2	5	<1	0.12
RMD-254	GRAB	5300 No. 3 Rd.	9-Dec-13	0.6	<1	<2	5	<1	0.12
RMD-270	GRAB	8200 Jones Rd.	9-Dec-13	0.57	<1	<2	6	<1	0.13
RMD-263	GRAB	12560 Cambie Rd.	11-Dec-13	0.74	<1	<2	5	<1	0.26
RMD-264	GRAB	13100 Mitchell Rd.	11-Dec-13	0.61	<1	<2	5	<1	0.18
RMD-277	GRAB	Opp. 11280 Twigg Place	11-Dec-13	0.73	<1	<2	4	<1	0.3
RMD-262	GRAB	13799 Commerce Pkwy.	11-Dec-13	0.51	<1	<2	6	<1	0.24
RMD-278	GRAB	6651 Fraserwood Place	11-Dec-13	0.58	<1	<2	6	<1	0.22
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	11-Dec-13	0.63	<1	<2	4	<1	0.21
RMD-261	GRAB	9911 Sidaway Rd.	11-Dec-13	0.48	<1	<2	6	<1	0.23
RMD-260	GRAB	11111 Horseshoe Way	11-Dec-13	0.29	<1	<2	4	<1	0.17
RMD-259	GRAB	10020 Amethyst Ave.	11-Dec-13	0.6	<1	<2	5	<1	0.2
RMD-266	GRAB	9380 General Currie Rd.	11-Dec-13	0.71	<1	<2	4	<1	0.19
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	11-Dec-13	0.56	<1	<2	5	<1	0.16
RMD-257	GRAB	6640 Blundell Rd.	11-Dec-13	0.45	<1	<2	6	<1	0.17
RMD-204	GRAB	3180 Granville Ave.	13-Dec-13	0.59	<1	<2	6	<1	0.89

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-206	GRAB	4251 Moncton St.	13-Dec-13	0.71	<1	<2	5	<1	0.15
RMD-216	GRAB	11080 No. 2 Rd.	13-Dec-13	0.74	<1	<2	5	<1	0.15
RMD-212	GRAB	Opp. 8600 Ryan Rd.	13-Dec-13	0.68	<1	<2	5	<1	0.13
RMD-208	GRAB	13200 No. 4 Rd.	13-Dec-13	0.71	<1	<2	4	<1	0.11
RMD-205	GRAB	13851 Steveston Hwy.	13-Dec-13	0.78	<1	<2	6	<1	0.18
RMD-202	GRAB	1500 Valemont Way	13-Dec-13	0.42	<1	<2	6	<1	0.13
RMD-214	GRAB	11720 Westminster Hwy.	13-Dec-13	0.65	<1	2	5	<1	0.13
RMD-267	GRAB	17240 Fedoruk	13-Dec-13	0.56	<1	<2	6	<1	0.17
RMD-249	GRAB	23000 Blk. Dyke Rd.	13-Dec-13	0.85	<1	<2	6	<1	0.19
RMD-276	GRAB	22271 Cochrane Drive	13-Dec-13	0.65	<1	<2	6	<1	0.18
RMD-275	GRAB	5180 Smith Cres.	13-Dec-13	0.72	<1	<2	5	<1	0.2
RMD-203	GRAB	23260 Westminster Hwy.	13-Dec-13	0.87	<1	<2	5	<1	0.22
RMD-251	GRAB	5951McCallan Rd.	16-Dec-13	0.65	<1	<2	5	<1	0.12
RMD-273	GRAB	Opp. 8331 Fairfax Place	16-Dec-13	0.48	<1	<2	6	<1	0.1
RMD-252	GRAB	9751 Pendleton Rd.	16-Dec-13	0.67	<1	<2	6	<1	0.14
RMD-274	GRAB	10920 Springwood Court	16-Dec-13	0.71	<1	<2	5	<1	0.12
RMD-250	GRAB	6071 Azure Rd.	16-Dec-13	0.59	<1	<2	5	<1	0.12
RMD-271	GRAB	3800 Cessna Drive	16-Dec-13	0.72	<1	<2	6	<1	0.17
RMD-272	GRAB	751 Catalina Cres.	16-Dec-13	0.74	<1	<2	4	<1	0.11
RMD-255	GRAB	6000 Blk. Miller Rd.	16-Dec-13	0.72	<1	<2	5	<1	0.3
RMD-256	GRAB	1000 Blk. McDonald Rd.	16-Dec-13	0.57	<1	<2	5	<1	0.11
RMD-254	GRAB	5300 No. 3 Rd.	16-Dec-13	0.74	<1	<2	4	<1	0.15
RMD-270	GRAB	8200 Jones Rd.	16-Dec-13	0.68	<1	<2	5	<1	0.12
RMD-269	GRAB	14951 Triangle Rd.	16-Dec-13	0.79	<1	<2	5	<1	0.23
RMD-263	GRAB	12560 Cambie Rd.	18-Dec-13	0.47	<1	<2	5	<1	0.15
RMD-264	GRAB	13100 Mitchell Rd.	18-Dec-13	0.65	<1	<2	4	<1	0.18
RMD-277	GRAB	Opp. 11280 Twigg Place	18-Dec-13	0.74	<1	<2	5	<1	0.15
RMD-262	GRAB	13799 Commerce Pkwy.	18-Dec-13	0.4	<1	<2	6	<1	0.31
RMD-278	GRAB	6651 Fraserwood Place	18-Dec-13	0.67	<1	<2	5	<1	0.38
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	18-Dec-13	0.8	<1	<2	5	<1	0.36
RMD-261	GRAB	9911 Sidaway Rd.	18-Dec-13	0.51	<1	<2	6	<1	0.24
RMD-260	GRAB	11111 Horseshoe Way	18-Dec-13	0.73	<1	<2	5	<1	0.17
RMD-259	GRAB	10020 Amethyst Ave.	18-Dec-13	0.7	<1	<2	5	<1	0.18
RMD-266	GRAB	9380 General Currie Rd.	18-Dec-13	0.73	<1	<2	3	<1	0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	18-Dec-13	0.62	<1	<2	5	<1	0.14
RMD-258	GRAB	7000 Blk. Dyke Rd.	18-Dec-13	0.69	<1	<2	4	<1	0.16
RMD-257	GRAB	6640 Blundell Rd.	18-Dec-13	0.73	<1	<2	3	<1	0.11

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-204	GRAB	3180 Granville Ave.	20-Dec-13	0.65	<1	<2	5	<1	1.5
RMD-206	GRAB	4251 Moncton St.	20-Dec-13	0.71	<1	<2	4	<1	0.16
RMD-216	GRAB	11080 No. 2 Rd.	20-Dec-13	0.72	<1	<2	5	<1	0.18
RMD-212	GRAB	Opp. 8600 Ryan Rd.	20-Dec-13	0.3	<1	<2	4	<1	0.16
RMD-208	GRAB	13200 No. 4 Rd.	20-Dec-13	0.71	<1	<2	5	<1	0.12
RMD-205	GRAB	13851 Steveston Hwy.	20-Dec-13	0.61	<1	<2	5	<1	0.25
RMD-202	GRAB	1500 Valemont Way	20-Dec-13	0.61	<1	<2	5	<1	0.28
RMD-214	GRAB	11720 Westminster Hwy.	20-Dec-13	0.56	<1	2	4	<1	0.16
RMD-267	GRAB	17240 Fedoruk	20-Dec-13	0.5	<1	<2	5	<1	0.22
RMD-249	GRAB	23000 Blk. Dyke Rd.	20-Dec-13	0.65	<1	<2	6	<1	0.23
RMD-276	GRAB	22271 Cochrane Drive	20-Dec-13	0.68	<1	<2	6	<1	0.22
RMD-275	GRAB	5180 Smith Cres.	20-Dec-13	0.78	<1	<2	5	<1	0.24
RMD-203	GRAB	23260 Westminster Hwy.	20-Dec-13	0.74	<1	<2	5	<1	0.25
RMD-251	GRAB	5951McCallan Rd.	23-Dec-13	0.69	<1	NA	3	<1	0.16
RMD-263	GRAB	12560 Cambie Rd.	23-Dec-13	0.73	<1	NA	5	<1	0.19
RMD-250	GRAB	6071 Azure Rd.	23-Dec-13	0.71	<1	NA	3	<1	0.17
RMD-264	GRAB	13100 Mitchell Rd.	23-Dec-13	0.81	<1	NA	6	<1	0.19
RMD-271	GRAB	3800 Cessna Drive	23-Dec-13	0.48	<1	NA	5	<1	0.16
RMD-254	GRAB	5300 No. 3 Rd.	23-Dec-13	0.66	<1	NA	3	<1	0.13
RMD-277	GRAB	Opp. 11280 Twigg Place	23-Dec-13	0.53	<1	NA	6	<1	0.14
RMD-272	GRAB	751 Catalina Cres.	23-Dec-13	0.68	<1	NA	3	<1	0.21
RMD-262	GRAB	13799 Commerce Pkwy.	23-Dec-13	0.48	<1	NA	6	<1	0.27
RMD-255	GRAB	6000 Blk. Miller Rd.	23-Dec-13	0.7	<1	NA	3	<1	0.34
RMD-278	GRAB	6651 Fraserwood Place	23-Dec-13	0.21	<1	NA	6	<1	0.2
RMD-256	GRAB	1000 Blk. McDonald Rd.	23-Dec-13	0.22	<1	NA	3	<1	0.19
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	23-Dec-13	0.57	<1	NA	5	<1	0.21
RMD-261	GRAB	9911 Sidaway Rd.	23-Dec-13	0.09	<1	NA	7	<1	0.22
RMD-270	GRAB	8200 Jones Rd.	23-Dec-13	0.59	<1	NA	4	<1	0.15
RMD-260	GRAB	11111 Horseshoe Way	23-Dec-13	0.63	<1	NA	4	<1	0.17
RMD-259	GRAB	10020 Amethyst Ave.	23-Dec-13	0.56	<1	NA	6	<1	0.18
RMD-266	GRAB	9380 General Currie Rd.	23-Dec-13	0.62	<1	NA	4	<1	0.21
RMD-253	GRAB	11051 No 3 Rd.	23-Dec-13	0.64	<1	NA	3	<1	0.15
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	23-Dec-13	0.56	<1	NA	7	<1	0.22
RMD-274	GRAB	10920 Springwood Court	23-Dec-13	0.62	<1	NA	4	<1	0.25
RMD-258	GRAB	7000 Blk. Dyke Rd.	23-Dec-13	0.58	<1	NA	5	<1	0.16
RMD-252	GRAB	9751 Pendleton Rd.	23-Dec-13	0.63	<1	NA	4	<1	0.19
RMD-257	GRAB	6640 Blundell Rd.	23-Dec-13	0.63	<1	NA	5	<1	0.18

Sample Name	Sample Type	Sample Reported Name	Sampled Date	Chlorine Free mg/L	Ecoli MF/100mLs	HPC CFU/mls	Temperature °C	Total Coliform MF/100mLs	Turbidity NTU
RMD-273	GRAB	Opp. 8331 Fairfax Place	23-Dec-13	0.52	<1	NA	4	<1	0.49
RMD-204	GRAB	3180 Granville Ave.	27-Dec-13	0.61	<1	NA	4	<1	0.34
RMD-206	GRAB	4251 Moncton St.	27-Dec-13	0.69	<1	NA	3	<1	0.22
RMD-216	GRAB	11080 No. 2 Rd.	27-Dec-13	0.57	<1	NA	3	<1	0.16
RMD-212	GRAB	Opp. 8600 Ryan Rd.	27-Dec-13	0.47	<1	NA	4	<1	0.23
RMD-208	GRAB	13200 No. 4 Rd.	27-Dec-13	0.54	<1	NA	3	<1	0.18
RMD-205	GRAB	13851 Steveston Hwy.	27-Dec-13	0.38	<1	NA	4	<1	0.31
RMD-214	GRAB	11720 Westminster Hwy.	27-Dec-13	0.79	<1	NA	3	<1	0.18
RMD-202	GRAB	1500 Valemont Way	27-Dec-13	0.67	<1	NA	4	<1	0.29
RMD-267	GRAB	17240 Fedoruk	27-Dec-13	0.47	<1	NA	4	<1	0.28
RMD-249	GRAB	23000 Blk. Dyke Rd.	27-Dec-13	0.71	<1	NA	4	<1	0.32
RMD-276	GRAB	22271 Cochrane Drive	27-Dec-13	0.64	<1	NA	4	<1	0.28
RMD-275	GRAB	5180 Smith Cres.	27-Dec-13	0.71	<1	NA	5	<1	0.34
RMD-203	GRAB	23260 Westminster Hwy.	27-Dec-13	0.81	<1	NA	5	<1	0.27
RMD-251	GRAB	5951McCallan Rd.	30-Dec-13	0.75	<1	NA	5	<1	0.2
RMD-273	GRAB	Opp. 8331 Fairfax Place	30-Dec-13	0.54	<1	NA	6	<1	0.21
RMD-252	GRAB	9751 Pendleton Rd.	30-Dec-13	0.67	<1	NA	5	<1	0.15
RMD-274	GRAB	10920 Springwood Court	30-Dec-13	0.67	<1	NA	5	<1	0.14
RMD-250	GRAB	6071 Azure Rd.	30-Dec-13	0.74	<1	NA	4	<1	0.15
RMD-271	GRAB	3800 Cessna Drive	30-Dec-13	0.68	<1	NA	6	<1	0.17
RMD-272	GRAB	751 Catalina Cres.	30-Dec-13	0.79	<1	NA	4	<1	0.23
RMD-255	GRAB	6000 Blk. Miller Rd.	30-Dec-13	0.8	<1	NA	6	<1	0.36
RMD-254	GRAB	5300 No. 3 Rd.	30-Dec-13	0.63	<1	NA	5	<1	0.2
RMD-270	GRAB	8200 Jones Rd.	30-Dec-13	0.66	<1	NA	5	<1	0.15
RMD-253	GRAB	11051 No 3 Rd.	30-Dec-13	0.65	<1	NA	3	<1	0.21
RMD-258	GRAB	7000 Blk. Dyke Rd.	31-Dec-13	0.78	<1	NA	5	<1	0.11
RMD-257	GRAB	6640 Blundell Rd.	31-Dec-13	0.77	<1	NA	5	<1	0.14
RMD-266	GRAB	9380 General Currie Rd.	31-Dec-13	0.72	<1	NA	4	<1	0.13
RMD-259	GRAB	10020 Amethyst Ave.	31-Dec-13	0.71	<1	NA	5	<1	0.12
RMD-268	GRAB	13800 No. 3 Rd. (off Garden City)	31-Dec-13	0.7	<1	NA	4	<1	0.12
RMD-260	GRAB	11111 Horseshoe Way	31-Dec-13	0.81	<1	NA	5	<1	0.13
RMD-263	GRAB	12560 Cambie Rd.	31-Dec-13	0.61	<1	NA	6	<1	0.13
RMD-264	GRAB	13100 Mitchell Rd.	31-Dec-13	0.76	<1	NA	5	<1	0.12
RMD-277	GRAB	Opp. 11280 Twigg Place	31-Dec-13	0.32	<1	NA	7	<1	0.15
RMD-262	GRAB	13799 Commerce Pkwy.	31-Dec-13	0.36	<1	NA	6	<1	0.19
RMD-278	GRAB	6651 Fraserwood Place	31-Dec-13	0.25	<1	NA	5	<1	0.18
RMD-279	GRAB	Opp. 20371 Westminster Hwy.	31-Dec-13	0.65	<1	NA	5	<1	0.2

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: 2013 THM AND HAA TEST RESULTS

1st QUARTER

		THM (ppb)						HAA (ppb)							Extras
	Date Sampled	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes		Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid		pH units pH
6071 Azure Rd.	2013-02-18	<1	<1	<1	30	30.8		<0.5	13	<1	3	18	34.1		
5951McCallan Rd.	2013-02-18	<1	<1	<1	29	29.5		<0.5	14	<1	4	20	37.9		
7000 Blk. Dyke Rd.	2013-02-18	<1	<1	<1	27	27.4		<0.5	13	<1	3	19	34.9		
10020 Amethyst Ave.	2013-02-18	<1	<1	<1	25	26.1		<0.5	11	<1	3	16	30.7		7.1

		THM (ppb)							HAA (ppb)							Extras
Sample	Date Sampled	Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Total THM Quarterly Average		Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	Total HAA Quarterly Average	pH units pH
RMD-250	2011-09-12	<1	<1	<1	47	46.7			<0.5	23	<1	16	26	66		
RMD-250	2011-11-14	<1	<1	<1	27	26.7			<0.5	14	<1	19	10	44		
RMD-250	2012-02-27	<1	<1	<1	15	15			<0.5	8	<1	6	9	23		
RMD-250	2012-05-09	<1	<1	<1	32	32	**30**		<0.5	14	<1	16	19	49	**45**	
RMD-250	2012-08-27	<1	<1	<1	44	44	**30**		<0.5	25	<1	<2	42	67	**46**	
RMD-250	2012-11-26	<1	<1	<1	23	23	**29**		<0.5	10	<1	3	11	25	**41**	7
RMD-250	2013-02-18	<1	<1	<1	30	31	**32**		<0.5	13	<1	3	18	34	**44**	
RMD-251	2011-09-12	<1	<1	<1	35	35			<0.5	26	<1	27	28	81		
RMD-251	2011-11-14	<1	<1	<1	26	26.1			<0.5	12	<1	12	11	34		
RMD-251	2012-02-27	<1	<1	<1	15	15			<0.5	7	<1	5	8	20		
RMD-251	2012-05-09	<1	<1	<1	30	30	**27**		<0.5	17	<1	28	22	68	**51**	
RMD-251	2012-08-27	<1	<1	<1	40	40	**28**		<0.5	26	<1	2	43	72	**49**	
RMD-251	2012-11-26	<1	<1	<1	25	25	**27**		<0.5	11	<1	2	13	26	**47**	
RMD-251	2013-02-18	<1	<1	<1	29	30	**31**		<0.5	14	<1	4	20	38	**51**	
RMD-258	2011-09-12	<1	<1	<1	45	45			<0.5	32	<1	12	42	87		
RMD-258	2011-11-14	<1	<1	<1	27	26.8			<0.5	12	<1	14	12	38		
RMD-258	2012-02-27	<1	<1	<1	14	14			<0.5	12	<1	10	10	33		
RMD-258	2012-05-09	<1	<1	<1	28	28	**28**		<0.5	15	<1	9	20	44	**51**	
RMD-258	2012-08-27	<1	<1	<1	45	45	**28**		<0.5	21	<1	<2	56	77	**48**	
RMD-258	2012-11-28	<1	<1	<1	24	24	**28**		<0.5	10	<1	3	10	23	**44**	
RMD-258	2013-02-18	<1	<1	<1	27	27	**31**		<0.5	13	<1	3	19	35	**45**	
RMD-259	2011-09-12	<1	<1	<1	38	38.2			<0.5	29	<1	7	42	78		
RMD-259	2011-11-14	<1	<1	<1	23	23.3			<0.5	12	<1	13	10	35		
RMD-259	2012-02-27	<1	<1	<1	15	15			<0.5	11	<1	9	11	30		
RMD-259	2012-05-09	<1	<1	<1	**26**	26	**26**		<0.5	12	<1	9	15	35	**45**	
RMD-259	2012-08-27	<1	<1	<1	39	39	**26**		<0.5	26	<1	<2	42	68	**42**	
RMD-259	2012-11-28	<1	<1	<1	25	25	**26**		<0.5	11	<1	2	12	25	**40**	
RMD-259	2013-02-18	<1	<1	<1	25	26	**29**		<0.5	11	<1	3	16	31	**40**	

2nd QUARTER

Sample		Date Sampled	THM (ppb)						HAA (ppb)						
			Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes		Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	
RMD-250	6071 Azure Rd.	2013-05-13	<1	<1	<1	52	52		<0.5	31	<1	<2	43	74	
RMD-251	5951McCallan Rd.	2013-05-13	<1	<1	<1	53	53		<0.5	31	<1	4	41	76	
RMD-258	7000 Blk. Dyke Rd.	2013-05-13	<1	<1	<1	52	53		<0.5	32	<1	3	43	79	
RMD-259	10020 Amethyst Ave.	2013-05-13	<1	<1	<1	52	53		<0.5	31	<1	3	42	76	

Sample	Date Sampled	THM (ppb)						HAA (ppb)							Extras
		Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Total THM Quarterly Average	Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	Total HAA Quarterly Average	pH units pH
RMD-250	2011-11-14	<1	<1	<1	27	26.7		<0.5	14	<1	19	10	44		
RMD-250	2012-02-27	<1	<1	<1	15	15		<0.5	8	<1	6	9	23		
RMD-250	2012-05-09	<1	<1	<1	32	32		<0.5	14	<1	16	19	49		
RMD-250	2012-08-27	<1	<1	<1	44	44	**30**	<0.5	25	<1	<2	42	67	**46**	
RMD-250	2012-11-26	<1	<1	<1	23	23	**29**	<0.5	10	<1	3	11	25	**41**	
RMD-250	2013-02-18	<1	<1	<1	30	31	**32**	<0.5	13	<1	3	18	34	**44**	7.4
RMD-250	2013-05-13	<1	<1	<1	52	52.3	**37**	<0.5	31	<1	<2	43	74	**50**	
RMD-251	2011-11-14	<1	<1	<1	26	26.1		<0.5	12	<1	12	11	34		
RMD-251	2012-02-27	<1	<1	<1	15	15		<0.5	7	<1	5	8	20		
RMD-251	2012-05-09	<1	<1	<1	30	30		<0.5	17	<1	28	22	68		
RMD-251	2012-08-27	<1	<1	<1	40	40	**28**	<0.5	26	<1	2	43	72	**49**	
RMD-251	2012-11-26	<1	<1	<1	25	25	**27**	<0.5	11	<1	2	13	26	**47**	
RMD-251	2013-02-18	<1	<1	<1	29	30	**31**	<0.5	14	<1	4	20	38	**51**	
RMD-251	2013-05-13	<1	<1	<1	53	53	**37**	<0.5	31	<1	4	41	76.1	**53**	
RMD-258	2011-11-14	<1	<1	<1	27	26.8		<0.5	12	<1	14	12	38		
RMD-258	2012-02-27	<1	<1	<1	14	14		<0.5	12	<1	10	10	33		
RMD-258	2012-05-09	<1	<1	<1	28	28		<0.5	15	<1	9	20	**44**		
RMD-258	2012-08-27	<1	<1	<1	**45**	45	**28**	<0.5	21	<1	<2	56	77	**48**	
RMD-258	2012-11-28	<1	<1	<1	24	24	**28**	<0.5	10	<1	3	10	23	**44**	
RMD-258	2013-02-18	<1	**<1**	<1	27	27	**31**	<0.5	13	<1	3	19	35	**45**	
RMD-258	2013-05-13	<1	<1	<1	52	52.8	**37**	<0.5	32	<1	3	43	78.5	**53**	
RMD-259	2011-11-14	<1	<1	<1	23	23.3		<0.5	12	<1	13	10	35		
RMD-259	2012-02-27	<1	<1	<1	15	15		<0.5	11	<1	9	11	30		
RMD-259	2012-05-09	<1	<1	<1	26	26		<0.5	12	<1	9	15	35		
RMD-259	2012-08-27	<1	<1	<1	39	39	**26**	<0.5	26	<1	<2	42	68	**42**	
RMD-259	2012-11-28	<1	<1	<1	25	25	**26**	<0.5	11	<1	2	12	25	**40**	
RMD-259	2013-02-18	<1	<1	<1	25	26	**29**	<0.5	11	<1	3	16	31	**40**	
RMD-259	2013-05-13	<1	<1	<1	52	52.6	**36**	<0.5	31	<1	3	42	76.4	**50**	

3rd QUARTER

Sample		Date Sampled	THM (ppb)						HAA (ppb)						
			Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes		Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	
RMD-250	6071 Azure Rd.	2013-09-16 13:40	1	<1	<1	36	37.3		<0.5	11	<1	8	21	40.5	
RMD-251	5951McCallan Rd.	2013-09-16 14:00	<1	<1	<1	31	31.5		<0.5	8	<1	8	9.3	26.9	
RMD-258	7000 Blk. Dyke Rd.	2013-09-16 14:20	1	<1	<1	31	32.3		<0.5	12	<1	9	13.5	35.2	
RMD-259	10020 Amethyst Ave.	2013-09-16 14:40	<1	<1	<1	32	32.4		<0.5	14	<1	8	21	45.1	

Sample	Date Sampled	THM (ppb)						HAA (ppb)						
		Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Total THM Quarterly Average	Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	Total HAA Quarterly Average
RMD-250	02-27-12	<1	<1	<1	15	15		<0.5	8	<1	6	9	23	
RMD-250	05-09-12	<1	<1	<1	32	32		<0.5	14	<1	16	19	49	
RMD-250	08-27-12	<1	<1	<1	44	44		<0.5	25	<1	<2	42	67	
RMD-250	11-26-12	<1	<1	<1	23	23	29	<0.5	10	<1	3	11	25	41
RMD-250	02-18-13	<1	<1	<1	30	31	32	<0.5	13	<1	3	18	34	44
RMD-250	05-13-13	<1	<1	<1	52	52	37	<0.5	31	<1	<2	43	74	50
RMD-250	09-16-13	1	<1	<1	36	37	36	<0.5	11	<1	8	21	41	43
RMD-251	02-27-12	<1	<1	<1	15	15		<0.5	7	<1	5	8	20	
RMD-251	05-09-12	<1	<1	<1	30	30		<0.5	17	<1	28	22	68	
RMD-251	08-27-12	<1	<1	<1	40	40		<0.5	26	<1	2	43	72	
RMD-251	11-26-12	<1	<1	<1	25	25	27	<0.5	11	<1	2	13	26	47
RMD-251	02-18-13	<1	<1	<1	29	30	31	<0.5	14	<1	4	20	38	51
RMD-251	05-13-13	<1	<1	<1	53	53	37	<0.5	31	<1	4	41	76	53
RMD-251	09-16-13	<1	<1	<1	31	32	35	<0.5	8	<1	8	9	27	42
RMD-258	02-27-12	<1	<1	<1	14	14		<0.5	12	<1	10	10	33	
RMD-258	05-09-12	<1	<1	<1	28	28		<0.5	15	<1	9	20	44	
RMD-258	08-27-12	<1	<1	<1	45	45		<0.5	21	<1	<2	56	77	
RMD-258	11-28-12	<1	<1	<1	24	24	28	<0.5	10	<1	3	10	23	44
RMD-258	02-18-13	<1	<1	<1	27	27	31	<0.5	13	<1	3	19	35	45
RMD-258	05-13-13	<1	<1	<1	52	53	37	<0.5	32	<1	3	43	79	53
RMD-258	09-16-13	1	<1	<1	31	32	34	<0.5	12	<1	9	14	35	43
RMD-259	02-27-12	<1	<1	<1	15	15		<0.5	11	<1	9	11	30	
RMD-259	05-09-12	<1	<1	<1	26	26		<0.5	12	<1	9	15	35	
RMD-259	08-27-12	<1	<1	<1	39	39		<0.5	26	<1	<2	42	68	
RMD-259	11-28-12	<1	<1	<1	25	25	26	<0.5	11	<1	2	12	25	40
RMD-259	02-18-13	<1	<1	<1	25	26	29	<0.5	11	<1	3	16	31	40
RMD-259	05-13-13	<1	<1	<1	52	53	36	<0.5	31	<1	3	42	76	50
RMD-259	09-16-13	<1	<1	<1	32	32	34	<0.5	14	<1	8	21	45	44

4th QUARTER

Sample		Date Sampled	THM (ppb)						HAA (ppb)							Extras
			Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes		Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid		pH units pH
RMD-250	6071 Azure Rd.	2013-11-27 13:53	<1	<1	<1	30	30.8		<0.5	10	<1	7	14.5	32.3		
RMD-251	5951McCallan Rd.	2013-11-27 14:05	<1	<1	<1	23	23.7		<0.5	8	<1	8	7.8	25.2		
RMD-258	7000 Blk. Dyke Rd.	2013-11-27 13:35	<1	<1	<1	26	26.5		<0.5	7	<1	8	7.7	22.5		
RMD-259	10020 Amethyst Ave.	2013-11-27 13:20	<1	<1	<1	26	27.2		<0.5	9	<1	8	15.6	34.3		7.1

Sample	Date Sampled	THM (ppb)						HAA (ppb)						
		Bromodichloromethane	Bromoform	Chlorodibromomethane	Chloroform	Total Trihalomethanes	Total THM Quarterly Average	Dibromoacetic Acid	Dichloroacetic Acid	Monobromoacetic Acid	Monochloroacetic Acid	Trichloroacetic Acid	Total Haloacetic Acid	Total HAA Quarterly Average
RMD-250	2012-05-09 13:00	<1	<1	<1	32	32		<0.5	14	<1	16	19	49	
RMD-250	2012-08-27 12:30	<1	<1	<1	44	44		<0.5	25	<1	<2	42	67	
RMD-250	2012-11-26 12:45	<1	<1	<1	23	23		<0.5	10	<1	3	11	25	
RMD-250	2013-02-18 12:30	<1	<1	<1	30	31	**32**	<0.5	13	<1	3	18	34	**44**
RMD-250	2013-05-13 14:15	<1	<1	<1	52	52	**37**	<0.5	31	<1	<2	43	74	**50**
RMD-250	2013-09-16 13:40	1	<1	<1	36	37	**36**	<0.5	11	<1	8	21	41	**43**
RMD-250	2013-11-27 13:53	<1	<1	<1	30	31	**38**	<0.5	10	<1	7	14.5	32	**45**
RMD-251	2012-05-09 12:40	<1	<1	<1	30	30		<0.5	17	<1	28	22	68	
RMD-251	2012-08-27 15:30	<1	<1	<1	40	40		<0.5	26	<1	2	43	72	
RMD-251	2012-11-26 12:30	<1	<1	<1	25	25		<0.5	11	<1	2	13	26	
RMD-251	2013-02-18 12:45	<1	<1	<1	29	30	**31**	<0.5	14	<1	**4**	20	38	**51**
RMD-251	2013-05-13 14:30	<1	<1	<1	53	53	**37**	<0.5	31	<1	4	41	76	**53**
RMD-251	2013-09-16 14:00	<1	<1	<1	31	32	**35**	<0.5	8	<1	8	9.3	27	**42**
RMD-251	2013-11-27 14:05	<1	<1	<1	23	24	**34**	<0.5	8	<1	8	7.8	25	**42**
RMD-258	2012-05-09 15:30	<1	<1	<1	28	28		<0.5	15	<1	9	20	44	
RMD-258	2012-08-27 14:20	<1	<1	<1	45	45		<0.5	21	<1	<2	56	77	
RMD-258	2012-11-28 12:50	<1	<1	<1	24	24		<0.5	10	<1	3	10	23	
RMD-258	2013-02-18 13:05	<1	<1	<1	27	27	**31**	<0.5	13	<1	3	19	35	**45**
RMD-258	2013-05-13 13:55	<1	<1	<1	52	53	**37**	<0.5	32	<1	3	43	79	**53**
RMD-258	2013-09-16 14:20	1	<1	<1	31	32	**34**	<0.5	12	<1	9	13.5	35	**43**
RMD-258	2013-11-27 13:35	<1	<1	<1	26	27	**35**	<0.5	7	<1	8	7.7	23	**43**
RMD-259	2012-05-09 14:45	<1	<1	<1	26	26		<0.5	12	<1	9	15	35	
RMD-259	2012-08-27 14:00	<1	<1	<1	39	39		<0.5	26	<1	<2	42	68	
RMD-259	2012-11-28 13:10	<1	<1	<1	25	25		<0.5	11	<1	2	12	25	
RMD-259	2013-02-18 13:30	<1	<1	<1	25	26	**29**	<0.5	11	<1	3	16	31	**40**
RMD-259	2013-05-13 13:25	<1	<1	<1	52	53	**36**	<0.5	31	<1	3	42	76	**50**
RMD-259	2013-09-16 14:40	<1	<1	<1	32	32	**34**	<0.5	14	<1	8	21	45	**44**
RMD-259	2013-11-27 13:20	<1	<1	<1	26	27	**35**	<0.5	9	<1	8	15.6	34	**47**

APPENDIX 6: 2013 HEAVY METAL TESTING RESULTS AND VINYL CHLORIDE RESULTS

Municipal Waters May 2013

Sample Name/ Description/ Date/Type	Aluminum Total	Antimony Total	Arsenic Total	Barium Total	Boron Total	Cadmium Total	Calcium Total	Chromium Total	Cobalt Total	Copper Total	Iron Total	Lead Total	Magnesium Total	Manganese Total	Mercury Total	Molybdenum Total	Nickel Total	Potassium Total	Selenium Total	Silver Total	Sodium Total	Zinc Total
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
RMD-250 6071 Azure Rd. 2013-05-01 12:15:00 PM GRAB	35	<0.5	<0.5	2.8	<10	<0.2	2570	<0.05	<0.5	2.1	9	<0.5	142	1.3	<0.05	<0.5	<0.5	140	<0.5	<0.5	1560	<3
RMD-257 6640 Blundell Rd. 2013-05-01 3:40:00 PM GRAB	36	<0.5	<0.5	2.6	<10	<0.2	2720	<0.05	<0.5	2.0	11	<0.5	129	1.0	<0.05	<0.5	<0.5	144	<0.5	<0.5	1520	<3
RMD-263 12560 Cambie Rd. 2013-05-13 12:55:00 PM GRAB	96	<0.5	<0.5	2.5	<10	<0.2	1420	0.05	<0.5	3.2	40	<0.5	134	1.7	<0.05	<0.5	<0.5	130	<0.5	<0.5	2140	<3

Vinyl Chloride in Drinking Water May 2013

Sample Name	Sample Description	Sampled Date	Sample Type	Vinyl Chloride
RMD-205	13851 Steveston Hwy.	2013/05/13 13:10:00	GRAB	<0.5
RMD-206	4251 Moncton St.	2013/05/13 14:15:00	GRAB	<0.5
RMD-253	11051 No 3 Rd.	2013/05/13 13:40:00	GRAB	<0.5
RMD-263	12560 Cambie Rd.	2013/05/13 12:55:00	GRAB	<0.5

APPENDIX 7: SAMPLE DRINKING WATER QUALITY ADVISORY

CITY OF RICHMOND ANNUAL WATERMAIN FLUSHING NOTIFICATION

Beginning on Sunday, April 6, the Water Services division will execute the annual watermain flushing program. To minimize disruptions, this work will be conducted from Sunday to Friday, 9:00 p.m. to 6:30 a.m. The program will continue for six weeks, ending on Friday, May 16.

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 discoloration. This is not a health concern and should only last for a short time. It is recommended that you run the cold water until it clears.

If you have any questions, please contact the Public Works Service Centre at 604-244-1262. 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.
- Issue 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.

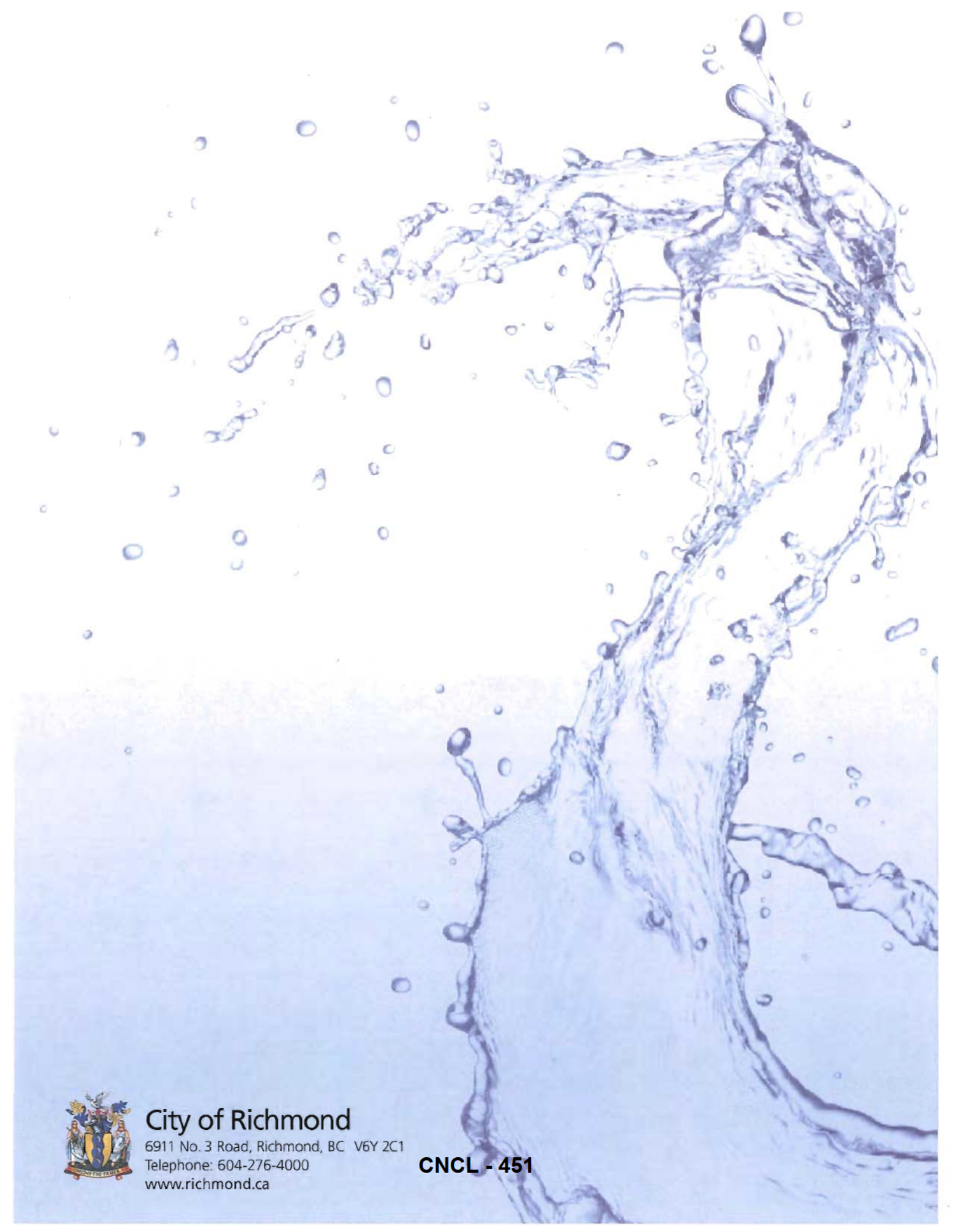
Response to Loss of Pressure Due to High Demand

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.



City of Richmond
6911 No. 3 Road, Richmond, BC V6Y 2C1
Telephone: 604-276-4000
www.richmond.ca

City of Richmond

Report to Committee

To:	Public Works and Transportation Committee	**Date:**	June 5, 2014
From:	Tom Stewart, AScT. Director, Public Works	**File:**	10-6370-00/Vol 01
Re:	**Proposed Policy for Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities**		

Staff Recommendation

That a new policy respecting the Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities, as outlined in Attachment 1 to the staff report from the Director, Public Works dated June 5, 2014, be adopted.

Tom Stewart, AScT.
Director, Public Works
(604-233-3301)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	**CONCURRENCE**	**CONCURRENCE OF GENERAL MANAGER**
Project Development	☑	
Facility Services	☑	
Sustainability	☑	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	**INITIALS:**	**APPROVED BY CAO**

Staff Report

Origin

The Integrated Solid Waste and Resource Management Plan (ISWRMP) outlines a number of strategies to increase reuse and recycling of demolition, land clearing and construction (DLC) waste. These include legislative tools to require recycling at demolition sites and a target to ban clean (untreated) wood from disposal at regional facilities in 2015. These are among many action items identified in the ISWRMP that will be necessary to reach regional waste diversion targets of 70% by 2015 and 80% by 2020.

To help advance recycling of DLC waste and as part of considering a potential industry bylaw, City staff are working on a pilot initiative with the small building industry to trial the practicalities of recycling increased quantities of waste from housing demolition projects. This will be the subject of a future report.

As part of demonstrating leadership in this area, this report presents a policy targeted at corporate actions the City can take to ensure the sound management of waste and maximum reuse/ recycling of materials from City facilities construction and demolition activities. By introducing actions ahead of any potential bylaw impacting industry, the City is demonstrating its commitment to advancing recycling of demolition and construction waste in its own internal practices.

Analysis

Recycling practices within the construction and demolition sectors currently target materials which are required or generally cost effective to recycle, i.e. gypsum, concrete and metals. Among single-family homes, typical recycling rates for demolitions are approximately 40% by weight. Commercial demolitions generate higher recycling rates (approximately 80%) due to the weight of materials involved (i.e. concrete).

In addition to cost, barriers to increased recycling can include concerns to project schedules due the added time requirements to de-construct or otherwise separate materials. Further, lack of awareness or familiarity with new approaches and/or available recycling facilities can also presents challenges to advanced recycling efforts.

The City has taken a number of measures among its own internal practices to recycle materials from demolition and construction activities as outlined below.

Current City Approach

Demolitions:

The City currently undertakes, on average, between 10-15 demolitions annually. Current practice is to work with demolition contractors to maximize recycling from demolitions with no specific stated/required targets. Consideration is given to balancing cost effectiveness against environmental objectives. While recycling rates vary depending on a variety of factors relating to the building type, in general, diversion rates up to 80% are achievable however with a cost

that can be two or three times that of conventional house demolition practices (i.e. $5,000 to $7,000 versus $15,000). The higher the desired diversion rates, the higher the cost due to the additional effort required to sort and/or deconstruct various parts of buildings. A diversion rate of 95% can cost up to three or more times that of achieving 80% diversion ($15,000 vs. $45,000 for a standard single-family style home).

New Construction:

In relation to new construction, the LEED (Leadership in Energy and Environmental Design) rating systems are utilized on suitable projects (i.e. LEED gold certification is the desired target). LEED points are awarded to projects based on diverting waste from landfill, and from using reused and recycled materials.

Existing City Policies

The City has a number of existing policies which promote leadership and responsibility in environmental approaches in relation to this issue, including:

- Corporate Sustainability Policy 1400 – commits to "excellence in local government sustainability practice and serving as an inspiration for greater collective change".
- Sustainable "High Performance" Building Policy – City Owned Facilities Policy 2307 – requires new construction and major renovations to incorporate sustainable building practices, which are measured using the LEED rating system.
- Demolition of City Owned Substandard Houses Policy 9001 – promotes reuse and recycling of buildings and demolition materials, where economical.

To capture and harmonize the City's existing efforts and policies, while at the same time demonstrating leadership ahead of proposed Metro Vancouver disposal bans and as part of advancing recycling market growth, a new policy is proposed which would apply to both demolition and construction waste from City facility projects. As this proposed policy will replace the recycling/reuse component of Policy 9001, a revision to remove this aspect from Policy 9001 will be included as part of an upcoming City Housekeeping Policy report.

Proposed Approach

It is suggested that a new policy be adopted, which identifies aggressive targets for waste diversion. The proposed policy, "Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities", is outlined in Attachment 1. Key aspects of this proposed policy include:

1. Applies to demolition and construction of City facilities
2. Establishes an 80% diversion objective for all waste generated from demolition and construction activities
3. Requires that all clean (untreated) wood waste be diverted from disposal

4. Establishes the waste reduction hierarchy to be followed, (i.e. salvage/re-use, recycling then disposal).

5. Requires that a Waste Disposal and Recycling Services Plan be submitted to outline estimated quantities of waste to be generated and how these materials are expected to be managed to meet established City targets

6. Requires that a Compliance Report, documenting adherence to the Waste Disposal and Recycling Services Plan, be submitted

7. Requires compliance with health and safety regulations pertaining to management of hazardous materials

The Bylaw would be administered principally by the Facilities and Project Development sections of Engineering and Public Works. The City's experience and learning from application of the proposed policy can be made available and/or shared with industry as part of helping to promote best practices in this area.

Financial Impact

The proposed policy has no direct financial impact.

Any financial impacts associated with achieving a higher diversion rate target will be evaluated in relation to each individual City facility construction and demolition project, and will be reviewed as part of standard budget processes.

Conclusion

The proposed policy, "Management of Waste and Recyclable Materials from City Facility Demolition and Construction Activities", establishes aggressive waste diversion objectives in the City's corporate practices. By adopting this policy, the City would be demonstrating leadership ahead of any future industry requirements in this regard; would ensure City practices are in place ahead of any planned clean wood disposal bans; and would be in support of the diversion targets and strategies outlined in the regional Integrated Solid Waste and Resource Management Plan.

These actions will also help to further growth in the recycling industry relating to demolition, construction and land clearing activities.

Suzanne Bycraft
Manager, Fleet & Environmental Programs
(604-233-3338)

Att. 1: Proposed Policy – Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities

Attachment 1

Proposed Policy: Management of Waste and Recyclable Materials from City Facilities Demolition and Construction Activities

City of Richmond

Policy Manual

Page 1 of 1	Adopted by Council: <date>	Policy <policy no.>
File Ref: <file no>	**MANAGEMENT OF WASTE AND RECYCLABLE MATERIALS FROM CITY FACILITIES DEMOLITION AND CONSTRUCTION ACTIVITIES**	

POLICY <POLICY NO.> :

It is Council policy that:

1. **TARGETS**

   1.1 The City of Richmond will target a diversion rate of 80% by weight for the demolition of City facilities houses, new facility construction, and major facility renovations, recognizing that in some instances it will not be feasible to achieve this target in a fiscally prudent manner.

2. **OBJECTIVE**

   The City of Richmond will:

   2.1 Continue to increase the reuse and recycling of demolition, land clearing and construction (DLC) waste from City facilities.

      (a) Require contractors to provide a Waste Disposal and Recycling Services Plan for demolition and construction projects.

         (i) Require contractors to provide a Compliance Report, documenting adherence to the Plan.

      (b) Prioritize the salvage of building components for reuse, then recycling, and finally other waste diversion and disposal technologies, whenever technically feasible and fiscally prudent.

      (c) Encourage contractors to recycle and/or salvage for reuse wood especially, to help build markets for wood waste diversion, and avoid disposal.

         (i) Require that all clean/untreated wood waste be reused or recycled.

   2.2 Seek to improve DLC waste management practices in the demolition and waste management industries.

      (a) Document and share the City's DLC waste management practices with industry.

   2.3 Ensure the demolition activities of City facilities shall comply with the applicable health and safety regulations.

      (a) Ensure a qualified person inspects the site to identify hazardous materials that may be handled, disturbed or removed.

      (b) Ensure the City is provided the resulting hazardous materials report.

4149440

City of Richmond

Report to Committee

To:	Public Works and Transportation Committee	**Date:**	June 2, 2014
From:	John Irving, P.Eng. MPA Director, Engineering	**File:**	
Re:	**Letter Supporting Continuation of Clean Energy Vehicles Rebate**		

Staff Recommendation

That a letter supporting the continuation of the Clean Energy Vehicles for British Columbia be sent to the B.C. Minister of Energy and Mines and Responsible for Core Review under the Mayor's signature, with copies to Metro Vancouver members.

John Irving, P.Eng. MPA
Director, Engineering
(604-276-4140)

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

Staff Report

Origin

The City's 2041 Official Community Plan sets aggressive energy and greenhouse gas (GHG) emissions reduction targets, and its Sustainability Framework calls for preventing GHG emissions. The City's 2014 Community Energy and Emissions Plan identifies Strategy #7: "Promoting Low Carbon Personal Vehicles" as important to reduce energy and GHG emissions.

Supporting continuation of incentives through the Clean Energy Vehicles for B.C. program also addresses Council's Term Goal #8 Sustainability: "Continued implementation and significant progress towards achieving the City's Sustainability Framework".

Background

The Clean Energy Vehicles for B.C. (CEVBC) program is administered by the Province of B.C. The program provides financial incentives to partially offset the cost premiums associated with purchasing alternative fuel vehicles. The program supports a range of alternative fuel vehicles, including electric vehicles (EVs), as well as compressed natural gas and hydrogen fuel cell vehicles. Since 2011, the CEVBC program has facilitated the purchase or lease of over 900 EV across the province, at a cost of $2.26 million to the Province. The program ended March 31, 2014, and the Province has not indicated that it intends to renew funding.

On May 2, 2014, Metro Vancouver's Board moved to send a letter to the B.C. Minister of Energy and Mines and Responsible for Core Review, advocating for the continuation of the CEVBC program and recommending that the letter be forwarded to all Mayors and Councils in the GVRD.

The City has benefited from CEVBC incentives for new vehicles in the City's vehicle fleet. Procuring alternative fuel vehicles is one part of the City's Green Fleet Action Plan, which guides action to reduce costs, energy and emissions from the City's corporate fleet. The City has received $20,000 from the CEVBC program for four EVs procured for its fleet.

The City has also taken a number of actions to support the transition to EVs in Richmond's community. As part of the B.C. Community Charging Infrastructure program, the City installed public electrical charging stations at various locations throughout the community. The 2041 Official Community Plan requires that 45 percent of parking spots in new multi-family developments accommodate future electric vehicle charging equipment; this policy has been implemented since November 2012. Additionally, larger commercial development rezoning processes have included provisions for electric vehicle charging equipment. Support for the CEVBC program can continue the City's leadership on EVs and low carbon transportation.

Discussion

Personal automobile use accounts for approximately 3 out of every 4 trips in Richmond, and contributes 41 per cent of community GHG emissions. Additionally, vehicle travel contributes to air pollution and other environmental issues. The City has set a target of reducing reliance on

vehicle travel to 49 per cent of all trips by 2041 through strategies that support more sustainable modes, including, transit, walking and biking.

The remaining vehicular trips can have less impact through a transition to non-emitting vehicles, such as EVs. EVs fuelled via low carbon electricity on B.C.'s electric grid represent a key opportunity to reduce emissions (see Attachment 1). According to analysis by Metro Vancouver, over a 12-year lifespan, an EV that travels 20,000 km annually with save about 47 tonnes of GHGs, and will save the owner approximately $20,000 in fuel costs, compared to a comparable gasoline vehicle. Given that residents of the Metro Vancouver region are experiencing near-record high gas prices (see Attachment 2), encouraging alternatives to gasoline vehicles is important to reducing cost burdens on Richmond households and businesses.

In part due to the combination of Provincial incentives, and municipal and private charging stations and promotions, electric vehicle sales have increased significantly in B.C., growing by 78 per cent between 2012 and 2013. While EVs are still a small segment of the marketplace, B.C. is leading Canada in EV sales per capita. This growth is expected to continue; however, the loss of incentive funding represents a setback for future growth in market share and associated GHG reductions. As a new technology with limited distribution, EVs are more expensive than comparable conventional vehicles; to illustrate, the cost for the all-electric Nissan Leaf is $31,700 compared with a $17,000 mid-level gasoline Nissan Versa. While various industry analyses project that the cost of EVs will decrease in the future due to declining battery costs and other technological innovations, in the near term incentives are required to make EVs cost competitive. Such incentives can drive market transformation towards low emitting vehicles, providing early sales and enhancing consumer confidence and experience with EVs. In turn, greater market penetration leads to reduced prices and widespread uptake.

Other provinces continue to provide incentives for EVs. The Quebec and Ontario governments provide up to $8,000 and $8,500 per vehicle in purchase incentives, respectively, and both programs are continuing beyond March 2014. In the U.S., the government provides a federal tax credit of up to $7,500 for the purchase of an EV.

Financial Impact

None at this time. Should the City of Richmond continue to purchase EVs for our corporate fleet, availability of incentive funds will have a positive financial impact.

Conclusion

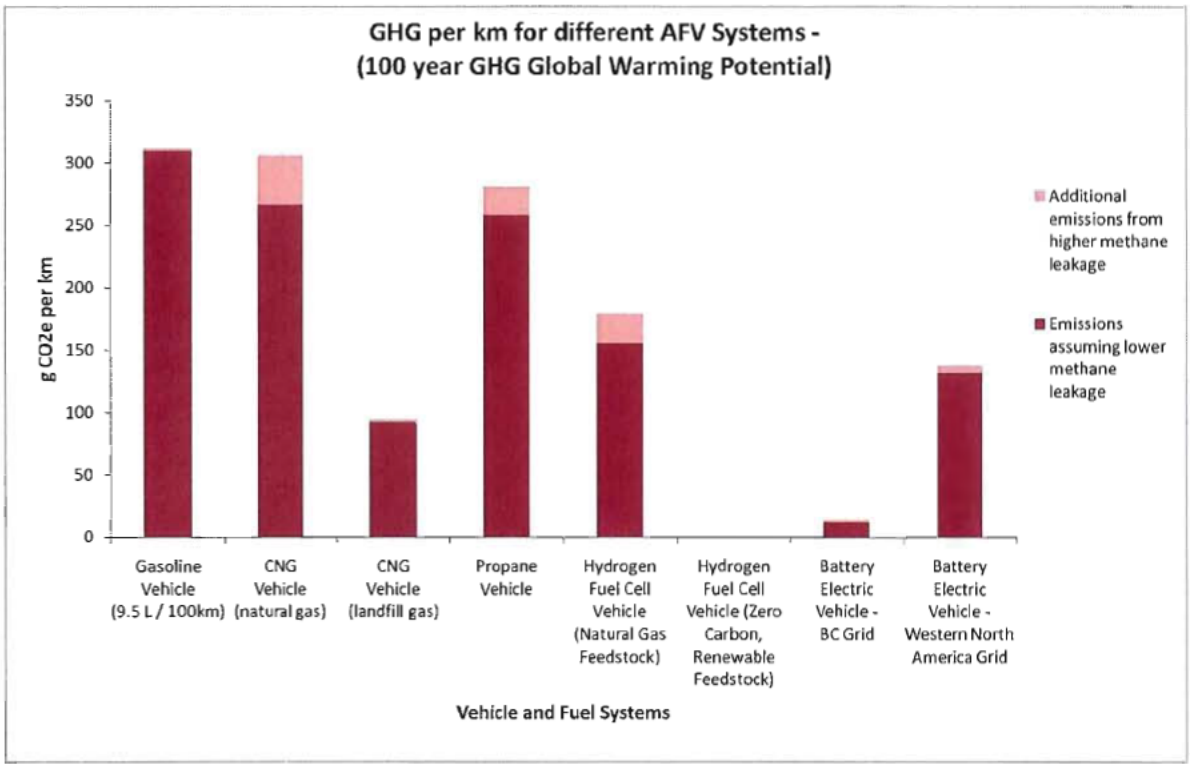
Continued Provincial funding for the Clean Energy Vehicles for B.C. program, and associated efforts to support EVs through charging infrastructure, outreach, and other means, represent an important opportunity to reduce Richmond's community GHG emissions and energy spending. This report recommends that a letter under the Mayor's signature be sent to the B.C. Minister of Energy and Mines and Responsible for Core Review, calling for continued support for Clean Energy Vehicles for B.C.

Brendan McEwen
Manager, Sustainability
(604-247-4676)

BM:bm

Attachment 1

GHG Emissions per Kilometre Traveled for Different Alternative Fuel Technologies – Impacts on Global Warming After 100 Years



Notes: Estimates are relative to a gasoline vehicle achieving 9.5L / 100km (25 miles per gallon).

Produced using the *California Air Resource Board – Low Carbon Fuel Standard Life Cycle Analysis (CA-GREET).*
GHG emissions factors from: IPCC, 2013. *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 1535 pp.
Lower methane leakage scenario from: Burnham et al. October 2013. *Updated Fugitive GHG Emissions for Natural Gas Pathways in the GREET Model* assumptions for conventional natural gas.
Higher methane leakage scenario from: US EPA. 2011. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009,* and from Alvarez et al. 2012. "Greater focus needed on methane leakage from natural gas infrastructure". *Proceedings of the National Academy of Sciences*.
BC electricity fuel mix from: BC Ministry of Energy and Mines. *Electricity Generation and Supply.* http://www.empr.gov.bc.ca/EPD/Electricity/supply/Pages/default.aspx.
Western North America Grid for the Western Interconnect from: Sopinka and Pitt. *Trends in the Western Electricity Coordinating Council: Retrospect and Prospect.* Pacific Institute for Climate Solutions.

Attachment 2

Historical gasoline prices (Canadian cents per L of fuel) in Metro Vancouver Region – 2004 - 2014

Source: http://www.vancouvergasprices.com

City of Richmond

Report to Committee

To:	Public Works and Transportation Committee	**Date:**	May 23, 2014
From:	Victor Wei, P. Eng. Director, Transportation	**File:**	01-0150-20- THIG1/2014-Vol 01
Re:	**George Massey Tunnel Replacement - Status Update and Proposed Project Objectives**		

Staff Recommendation

1. That the proposed project objectives for the replacement of the George Massey Tunnel as described in the report be endorsed and forwarded to the Ministry of Transportation & Infrastructure for its consideration in the development of a preferred project scope of improvements.

2. That the above Council resolution and a copy of the above report be forwarded to TransLink, the Corporation of Delta and the Cities of Surrey, White Rock and Vancouver for information.

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

Att. 2

REPORT CONCURRENCE		
ROUTED TO:	**CONCURRENCE**	**CONCURRENCE OF GENERAL MANAGER**
Intergovernmental Relations & Protocol Unit	☑	
Economic Development	☑	
Engineering	☑	
Sustainability	☑	
Policy Planning	☑	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	**INITIALS:**	**APPROVED BY CAO**

Staff Report

Origin

At the September 23, 2013 Council meeting, Council resolved:

That staff analyse the implications for Richmond with regard to the new bridge for the George Massey Tunnel replacement and report back.

Staff were also directed to report back with more information regarding:

(i) the cost of the new bridge
(ii) the details surrounding the new bridge's on/off ramps, including information regarding Richmond lands needed to facilitate the project
(iii) the details regarding the overpass at Steveston Highway
(iv) the opportunity to retain the George Massey Tunnel for public transit purposes
(v) improvements to the Oak Street Bridge and Highway 99 corridor as it relates to traffic to and from the George Massey Tunnel.

Staff were further directed to examine the future of the Fraser River and its use as an industrial river.

This report provides the status of work undertaken to date on the George Massey Tunnel (the Tunnel) Replacement Project and next steps over the next several months. As a preferred design option for the new bridge has not yet been determined, there is insufficient information provided by the Ministry of Transportation and Infrastructure (MOTI) at this time to enable staff to respond to all of the referral items and, as such, anticipate reporting back periodically as new information becomes available. The referral regarding the future use of the Fraser River will be the subject of a separate future report as the response will require further consultation with external stakeholders such as Metro Vancouver and Port Metro Vancouver.

Analysis

Project Progress and Consultation to Date

Premier Clark announced in September 2012 that the Province would begin the process to replace the Tunnel. MOTI subsequently initiated a multi-phase consultation process in November 2012. In addition to the general public, stakeholders consulted include the relevant municipalities (Richmond, Delta, Surrey, and White Rock), TransLink, Port Metro Vancouver, Vancouver Airport Authority, the BC Trucking Association, and local Chambers of Commerce.

1. Phase 1: Understanding the Need (November-December 2012)

   Phase 1 focused on understanding the need and potential constraints to develop the project scope and design requirements. A key theme from the Phase 1 consultation is that traffic congestion at the tunnel is a significant problem that is causing safety concerns and significant community and economic impacts. The top three factors identified for consideration in developing replacement options were:

- congestion reduction;
- economic growth, particularly given the importance of the Fraser River for marine transport and Asia-Pacific Gateway trade; and
- the inclusion of transportation alternatives.

2. Phase 2: Exploring the Options (March-April 2013)

Based on Phase 1 consultation results and preliminary technical work, Phase 2 sought input on the draft project scope and goals, five potential replacement scenarios and on the criteria to evaluate the options. As shown in Table 1, Scenario 5 proposed maintaining the tunnel and constructing a new crossing in a new location roughly aligned with No. 8 Road. In response, Council resolved at its March 11, 2013 meeting to send a letter to MOTI formally opposing any proposed river crossing options that would significantly impact existing farm lands and communities, particularly Scenario 5. As one of the stakeholders consulted, Port Metro Vancouver (PMV) indicated its preference for the removal of the tunnel and a new high-level crossing that allows larger vessels to access industrial sites along the Fraser River (see Attachment 1).

Table 1: Potential GMT Replacement Scenarios

Scenario	Ranking
1 Maintain existing tunnel	Low Support
2 Replace existing tunnel with new bridge	High Support
3 Replace existing tunnel with new tunnel	Low Support
4 Maintain existing tunnel and build new adjacent bridge	Medium Support
5 Maintain existing tunnel and build new bridge in new No. 8 Rd corridor	Least Support

Of the five scenarios, the highest support was for a new crossing along the Highway 99 corridor with preference for a new bridge. There was also a strong desire for transit, cycling and pedestrian improvements, including protecting the Highway 99 corridor for future rapid transit.

3. Preferred Replacement Option and Proposed Work Plan (September-December 2013)

In September 2013, the results of the Phase 2 public consultation were released and, on the same day, Premier Clark announced that the Tunnel would be replaced with a bridge (see Attachment 2) in the same corridor. Table 2 indicates the proposed timelines for the work program. Following an environmental assessment process, construction is planned to begin in 2017 with completion in 2022. A project office was opened at Ironwood Mall in January 2014 that includes an area for public information and interaction. Project inquiries can also be made by phone to 1-855-5-MASSEY (1-855-562-7739) or by e-mail to masseytunnel@gov.bc.ca. As of December 2013, staff meet approximately every two weeks with MOTI staff to discuss technical issues related to the planning and design process.

Table 2: Proposed Work Plan

Work Plan Element	Timeline
Draft scope and project definition report	Winter 2013-Spring 2014
Public consultation re project definition report	Late Spring 2014
Initiate environmental assessment process	Fall 2014
Assessment of procurement models	2015
Retain contractor	Late 2015-Late 2016
Design & Construction	2017-2022

4. Project Scope and Definition (December 2013-June 2014)

The core project scope encompasses the new bridge, the interchanges at both ends (i.e., Steveston Highway and Highway 17A) and the removal of the tunnel. The broader project scope considers the Highway 99 corridor from Bridgeport Road in Richmond to the Canada/U.S. border in Surrey including all interchanges, as well as connections to other provincial highways, and regional and local routes. Improvements to the Oak Street Bridge are not part of the project scope. Over the next few months, MOTI will conduct additional technical work that will include:

- more detailed traffic analysis (e.g., current and forecast traffic volumes and patterns, transit options, origin-destination studies);
- structural and geotechnical considerations (e.g., review of soil conditions, rehabilitation and seismic upgrade of the Deas Slough, Rice Mill Road and CN Rail bridges, and at the Steveston Highway and Highway 17 overpasses across Highway 99);
- constructability reviews to ensure that traffic will be able to move throughout the corridor and tunnel while the replacement structure is built; and
- potential associated Highway 99 corridor improvements.

Stakeholder consultation during this time has included a workshop to obtain feedback on opportunities for local cycling improvements as part of the project scope. City staff and members of the Richmond Active Transportation Committee attended the workshop held at the project office on April 16, 2014. A follow-up meeting to discuss initial concepts is tentatively scheduled in late June 2014.

This phase of work will culminate with the preparation of a project definition report, which will identify a preferred scope of improvements including the number of lanes on the bridge and improvements to specific interchanges. A draft business case will also be prepared that will include a project cost estimate. The results of the above work are anticipated to be presented by MOTI for public discussion in late Spring 2014.

Summary of Key Points of Discussion to Date

Through bi-weekly meetings since December, 2013, key aspects of the project discussed to date between City and MOTI staff are noted below.

- Impacts on Land Use: MOTI indicates that the selected option has the least impact on farmland on both sides of the river. There would be no piers in the river and no dredging of the river will be required. Staff continue to provide input to MOTI to ensure that any impacts to existing land use in Richmond, particularly within the Agricultural Land Reserve, are minimized or nil. The full extent of the land requirements will not be known until a preliminary design is developed.
- Address Congestion: Staff have identified that the overall project must address traffic congestion along the entire corridor and not result in simply shifting it from one location to another (e.g., from the north end of the tunnel to the south end of the Oak Street Bridge).
- Steveston Highway-Highway 99 Interchange: MOTI anticipates construction of a new interchange rather than an upgrade of the existing interchange with some of the ramps on the

east side potentially being re-configured. MOTI is examining options that would enable elimination of the existing traffic light on the east side of the interchange to improve traffic flows (e.g., existing northbound Highway 99 off-ramp moved to the north side and re-configured as a cloverleaf). Staff have expressed the need for a safe and convenient drop-off area and connecting walkway for passengers accessing bus stops within the area of the interchange as TransLink envisions this location as a major passenger transfer point.

- Retention of Tunnel: MOTI advises that the core project includes removal of the tunnel as the new crossing will be more cost-effective due to on-going maintenance expenses associated with the tunnel.
- Origin-Destination Survey of Tunnel Traffic: Preliminary findings of recent field data collected by MOTI regarding traffic volumes through the GMT suggest that:
    - over 50 per cent of traffic is destined for Richmond; and
    - of the above 50 per cent, 17 per cent in the morning peak and 26-30 per cent in the mid-afternoon/evening peak is oriented to Steveston Highway west of Highway 99.

  Staff are seeking further clarification and details to validate these findings.
- Bridge Design: At this time, MOTI envisions a cable stay bridge at a height similar to that of the Alex Fraser Bridge. Staff have suggested that consideration be given to incorporating design elements that would distinguish the new bridge as an iconic gateway to the region rather than simply constructing a copy of the Alex Fraser Bridge. MOTI also advise that the bridge will include provision for pedestrians and cyclists. Staff have requested that the project incorporate transit improvements (e.g., safe and convenient bus transfer points, potential kiss-and-ride site).
- Number of Lanes: While no decision had been made yet regarding the number of vehicle lanes, it appears that MOTI is pursuing either an eight- or ten-lane crossing comprised of the following in each direction:
    - three general purposes lanes (as in existing peak hour conditions);
    - one transit/HOV lane; and
    - one special purpose lane potentially for trucks (i.e., climbing lane) or provision for future rapid transit.

  It is expected that before any decision is made on the number of lanes, a number of traffic modelling scenarios will be undertaken to test the sensitivity of travel demand by varying the number of lanes, rate of toll and interchange configurations.
- Funding & Potential for Tolls: MOTI have indicated that no decision has been made at this time on whether or not the new bridge would be tolled. However, it is conceivable that the new bridge will most likely be tolled, preceded by recent new major bridges such as Port Mann Bridge and Golden Ears Bridge, as a transportation demand management measure and means to recover project costs. Staff have further expressed to MOTI the need for a comprehensive review of the provincial tolling policy as the current model of tolling selected crossings is resulting in undesirable and unbalanced traffic demand across all crossings including the free alternatives. Indeed, the Province should undertake a review of its current tolling policy with the intent of moving to a policy of "mobility pricing" whereby a consistent approach to distance-based tolling across the entire region is applied that is fair, rational and efficient.
- Blundell Road-Highway 99 Interchange: While improvements along the Highway 99 corridor between Delta and Vancouver are anticipated, it is unknown at this time whether or

not a new interchange at Blundell Road would be part of this project. Staff have advised MOTI that the new interchange has been part of the Richmond *Official Community Plan* since 1999 and it is expected to be included for consideration as part of the project primarily for goods movement. As noted in Attachment 1, PMV has also expressed its desire for more direct access from Highway 99 to the Fraserport site.

- Westminster Highway-Highway 99 Interchange: MOTI advises that the existing overpasses are among the oldest along the Highway 99 corridor and, as such, may be candidates for replacement as part of the project.
- Local Road Improvements: Staff also expect that the project will call for the timely implementation of various local road improvements and have stressed that the respective responsibility for provincial and local road improvements should be clearly defined based on jurisdictional boundaries with allowance for local improvements triggered by the project to be included in the project scope. The overall planning and construction between the two jurisdictions should also be coordinated in a seamless manner with external funding (e.g., TransLink, PMV, ICBC) towards any local road improvements to be sought and maximized.

Proposed Project Objectives

In light of the upcoming next round of public consultation, it is important that any key improvement objectives from Richmond's perspective be identified prior to any key decisions made by MOTI on defining the project scope. As such, staff recommend that the following broad project objectives be endorsed and forwarded to MOTI for its consideration in the development of a preferred scope of improvements for the George Massey Tunnel Replacement.

A. Land Use: ensure a net zero or positive impact to agricultural land.

B. Support Regional Transportation Vision: TransLink's Regional Transportation Strategy Framework has target goals for 2045 of more than one-half of the region's trips to be by means other than private vehicle (versus 27 per cent in 2013) and for kilometres driven by auto to be reduced by one-third. Accordingly, any expanded peak-hour lane capacity on a new bridge should be dedicated to a specific use (e.g., transit, HOV, trucks) rather than open to general purpose traffic in order to adhere to these goals. Furthermore, the project should include effective improvements to support the increased use of transit, cycling, carpooling and walking in the vicinity of interchanges.

C. Reduce Congestion: travel times, reliability and GHG emissions from idling vehicles should be improved, particularly at the Steveston Highway-No. 5 Road intersection where it has been consistently ranked as highest in Richmond for congestion and traffic safety concerns. Many major businesses, employees, residents, and visitors in this area have cited the tunnel traffic congestion as their biggest challenge to maintaining reasonable access. Furthermore, congestion should be improved along the entire corridor including connecting roadways and not be simply moved to further downstream of traffic flow.

D. Supporting Connections: connecting pedestrian, cycling, transit, and related roadway improvements at both ends of the crossing and along Hwy 99 corridor, including replacement/upgrade of the interchanges within the highway right-of-way and local roadway tie-ins, should be included in the design, scope and budget of the overall project.

E. An Iconic Bridge: being the first river crossing on Highway 99 entering into the western part of the region from the south, the new bridge should provide a provincial and regional legacy by

incorporating a creative architectural design to signify it as an iconic visual gateway and to celebrate its excellence in facilitating sustainable transportation.

Financial Impact

None.

Conclusion

The Ministry of Transportation & Infrastructure is working towards the release at the end of June 2014 of a draft project definition report for the George Massey Tunnel Replacement Project, which will be followed by a public consultation phase to allow comment on the report. Staff recommend that MOTI be forwarded the proposed broad project objectives for its consideration in the development of a preferred project scope of improvements to ensure Richmond's and regional interest is respected.

Joan Caravan
Transportation Planner
(604-276-4035)

JC:lce

Att. 1: Letter from Port Metro Vancouver to Ministry of Transportation & Infrastructure
Att. 2: Rendering of New George Massey Tunnel Replacement Bridge

PORT METRO vancouver

April 26, 2013

Mr. Geoff Freer
Executive Project Director
George Massey Tunnel Replacement Project
Ministry of Transportation and Infrastructure
7351 Vantage Way
Delta, BC V4G 1C9

Dear Mr. Freer:

Thank you for inviting Port Metro Vancouver's (PMV) participation in the Province's consultation process for the George Massey Tunnel Replacement Project. We recognize the importance of this project to improving the efficient movement of people and goods along the Highway 99 corridor in support of a number of regional objectives related to livable communities and a healthy economy. As the manager of Port lands throughout the region that are both served by this corridor and impacted by the Tunnel, our interests for this project are primarily related to the goods movement aspect. We appreciate this opportunity to provide our comments in the early stage of the project as you assess a range of different options for a future crossing and consider other improvements along the corridor.

This project has potential to improve the efficiency of container truck movements along the corridor in at least two ways: reducing congestion that currently occurs at the tunnel and improving connectivity to nearby industrial lands. While trucks destined for or originating from a port facility currently account for a very small portion of total traffic travelling through the project area, their efficient movement is important to the competitiveness of this region's gateway. Replacement of the tunnel with a modern crossing can reduce congestion and improve this competitiveness, particularly if consideration is given to improving traffic flows at the interchanges on either side of the tunnel.

We were pleased to see the scope of the project now includes a longer section of the Highway 99 corridor. As you explore opportunities for improvements along the route, we encourage you to consider options to provide direct access from Highway 99 to major truck destinations nearby such as the busy and growing logistics hub along Blundell Road. Doing so would support several of the project's stated draft goals by diverting truck traffic away from local communities, reducing truck travel distances and related emissions, and facilitating trade through efficient goods movement.

This project can also expand trade opportunities for marine terminals along the Fraser River, located both on PMV managed land and on privately held sites, by improving vessel access to those terminals. The Fraser River is a thriving national asset, as economically significant to the Canadian economy as the St. Lawrence Seaway. The river economy generates more than $4.6 billion in GDP annually, $9.6 billion in economic output and generates 53,150 jobs. The single biggest challenge to growing or even just maintaining these benefits is the George Massey Tunnel.

.../2

100 The Pointe, 999 Canada Place, Vancouver, B.C. Canada V6C 3T4
100, The Pointe, 999, Canada Place, Vancouver, C.-B. Canada V6C 3T4
portmetrovancouver.com

The current depth of the Tunnel limits the maximum channel depth that can be achieved for the main arm of the Fraser River. With a continuing trend towards larger vessels in the shipping industry, the percentage of the total global fleet that can transit the river is decreasing. Established terminals up river of the Tunnel are already at risk of becoming obsolete as they are unable to accommodate these larger vessels. Similarly, the Tunnel deters new investment to expand or develop new marine terminals on vacant or underutilized industrial sites along the river. In our land-constrained region, it is critical that we make best use of existing industrial lands and support their continued viability. Replacing the tunnel with a new crossing that allows larger vessels to access industrial sites along the river would provide such support.

In summary, our preference is for a project design that enables container trucks to travel more efficiently, improves connections to riverfront industrial lands and provides sufficient channel clearances for existing and potential future vessels transiting the Fraser River. We recognize there are a number of options that could achieve these objectives in balance with objectives of other stakeholders. Of the options you've presented for the George Massey Tunnel itself, only Scenarios Two and Three have potential to address our last objective to provide sufficient channel clearances. We are happy to work with you to develop channel clearance criteria to advance either of these options. However, please note that there are many privately held industrial parcels along the Fraser River that we do not represent. We encourage you to consult with the owners of these parcels directly as they will have their own aspirations for their sites that may inform the design of a new crossing.

Once again, I'd like to thank you for this opportunity to provide feedback on the George Massey Tunnel Replacement Project. A modernized crossing and improved connectivity to industrial lands from the Highway 99 corridor will further expand trade opportunities for the Fraser River terminals well into the future, which in turn supports a strong economy and good local jobs for many years to come. Should you have any questions regarding the above, please contact either myself or Jennifer Natland, Manager, Development, at 604-665-9206 or Jennifer.natland@portmetrovancouver.com.

Yours truly,

PORT METRO VANCOUVER

Robin Silvester
President and Chief Executive Officer

cc: Jennifer Natland, PMV

Rendering of New George Massey Tunnel Replacement Bridge

City of Richmond

Report to Council

To:	Richmond City Council	**Date:**	June 20, 2014
From:	Andrew Nazareth General Manager, Finance and Corporate Services	**File:**	01-0105-08-01/2014-Vol 01
Re:	**Council Remuneration and Expenses for 2013**		

Staff Recommendation

That the Council Remuneration and Expenses report for the year ended December 31, 2013 be received for information.

Andrew Nazareth
General Manager, Finance and Corporate Services
(604-276-4095)

REPORT CONCURRENCE
CONCURRENCE OF GENERAL MANAGER
APPROVED BY CAO

Staff Report

Origin

Pursuant to Section 168 (1) of the Community Charter, the total remuneration, benefits and expenses incurred by each member of Council must be reported annually.

Analysis

Total salaries paid to Council members for the year 2013 was $565,811 and the cost of benefits was $51,654. Total expenses incurred were $43,868. The schedule below provides a summary for each Council member.

NAME	BASE SALARY	BENEFITS[1]	EXPENSES
Mayor Brodie	$119,081	$9,596	$2,852
Councillor Au	$55,841	$5,418	$5,629
Councillor Barnes	$55,841	$2,200	$9,033
Councillor Dang	$55,841	$7,949	$50
Councillor Halsey-Brandt	$55,841	$5,418	$168
Councillor Johnston	$55,841	$6,864	$192
Councillor McNulty	$55,841	$6,864	$9,094
Councillor McPhail	$55,841	$2,200	$8,319
Councillor Steves	$55,841	$5,144	$8,532

1. Consists of taxable and non-taxable benefits. The 2013 Statement of Financial Information issued under separate cover reports taxable benefits only

Financial Impact

None

Conclusion

That the report on Council remuneration and expenses for the year ended December 31, 2013 be received for information.

Katherine Lecy
Manager, Business Advisory Services
(604-276-4103)

KL:zf

City of Richmond

Report to Council

To:	Richmond City Council	**Date:**	June 20, 2014
From:	Andrew Nazareth General Manager, Finance and Corporate Services	**File:**	03-1200-03/2014-Vol 01
Re:	**2013 Statement of Financial Information**		

Staff Recommendation

That the 2013 Statement of Financial Information as per the staff report dated June 20, 2014 from the Manager, Business Advisory Services, be approved.

Andrew Nazareth
General Manager, Finance and Corporate Services
(604-276-4095)

REPORT CONCURRENCE
CONCURRENCE OF GENERAL MANAGER
APPROVED BY CAO

Staff Report

Origin

Section 2(2) and (3) of the Financial Information Act stipulate that a municipality must prepare the following "Statement of Financial Information" within six months of the end of each fiscal year. Furthermore, Section 9(2) of the Financial Information Regulation requires that the statement be approved by its Council and by the officer assigned responsibility for financial administration under the Local Government Act. The following statements and schedules of financial information must be prepared:

- statement of assets and liabilities;
- an operational statement;
- a schedule of debts;
- a schedule of guarantee and indemnity agreements;
- a schedule showing remuneration and expenses paid to or on behalf of each employee as required by the Act;
- a schedule showing the payments for each supplier of goods and services;
- a schedule of grants and subsidies.

The current prescribed amount for purposes of reporting stipulated in the Financial Information Regulation for employee remuneration/expenses and payments to suppliers are $75,000 and $25,000 respectively.

Analysis

Sections 1 to 4 of the attached schedules is captured in the City's 2013 audited consolidated financial statements. Section 5 is not applicable as there were no guarantee and indemnity agreements provided under the Guarantees and Indemnities Regulation (BC Reg. 258/87).

A statement which shows employee remuneration in excess of $75,000 and related expenses for the 2013 fiscal year is attached in Section 6.

Remuneration consists of base salary, taxable benefits, and payouts. Taxable benefits as specified by the Canada Revenue Agency or Council Policy which include employer paid extended health premiums such as Medical Services Plan, life insurance, AD&D insurance, vehicle benefits, acting pay and job scope related to duties in support of committees, advisory groups, and public consultation. Payouts include leave balances such as banked overtime, gratuity and vacation banks for which the majority are specified in collective agreements.

For the City of Richmond, (excluding Mayor and Councillors) remuneration for 1,980 employees totalled $108.2 million. Remuneration reported in 2013 includes retroactive payments pertaining to 2012 due to the settlement of collective agreements, leave payouts due to the retirement of long service staff, policy requirements, and voluntary payouts. For the Richmond Public Library, remuneration for 148 employees totalled $5.5 million.

Management salaries in the amount of $63,630 were charged to the Richmond Olympic Oval Corporation in conjunction with the Chief Administrative Officer performing duties in the capacity as Chief Executive Officer as reported on the Richmond Olympic Oval Corporation's Statement of Financial Information.

Expenses are reported in accordance with the Financial Information Act, and include items such as individual professional memberships, employee tuition and travel costs. Expenses also include business related expenditures incurred by staff to perform their job functions.

The remuneration and expenses that are being reported are within the budget that was previously approved by Council through the 5 Year Financial Plan Bylaw. Staff ensure through administrative procedures, guidelines, and internal controls, that compliance is followed and expenditures are properly verified.

A statement listing payments to suppliers for goods and services in excess of $25,000 for the 2013 fiscal year is attached in Section 7.

A statement listing payments for the purposes of grants and subsidies is attached in Section 7.

Financial Impact

None.

Conclusion

The attached 2013 Statement of Financial Information has been prepared in accordance with the *Financial Information Act*.

Katherine Lecy
Manager, Business Advisory Services
(604-276-4103)

KL:zf

CITY OF RICHMOND
STATEMENT OF FINANCIAL INFORMATION
For the year ended December 31, 2013

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1)	Consolidated Statements.....	See Financial Statements
2)	Statement of Assets and Liabilities.....	See Financial Statements
3)	Operational Statement.....	See Financial Statements
4)	Schedule of Debts.....	See Financial Statements
5)	Schedule of Guarantee and Indemnity Agreements	None
6)	Schedule of Remuneration and Expenses:	
	Elected Officials.....	Section 6
	Employees.....	Section 6
	Statement of Severance Agreements.....	Section 6
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7)	Schedule of Payments to Suppliers for Goods and Services:	
	Statement of Payments for Goods and Service in excess of $25,000 and consolidated total.....	Section 7
	Statement of Grants and Subsidies.....	Section 7
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CITY OF RICHMOND

2013 STATEMENT OF FINANCIAL INFORMATION APPROVAL

The undersigned, as authorized by the Financial Information Regulation, Schedule 1, subsection 9(2) approves all the statements and schedules included in this Statement of Financial Information, produced under the *Financial Information Act*.

Andrew Nazareth
General Manager, Finance and
Corporate Services

Malcolm D. Brodie
Mayor

Prepared pursuant to the Financial Information Regulation, Schedule 1, Section 9

MANAGEMENT REPORT

The consolidated financial statements contained in this Statement of Financial Information under the *Financial Information Act* have been prepared by management in accordance with generally accepted accounting principles. The integrity and objectivity of the consolidated financial statements is management's responsibility. Management is also responsible for all the schedules prepared for the Statement of Financial Information, and for ensuring that the schedules are consistent, where appropriate, with the information contained in the consolidated financial statements.

Management is also responsible for implementing and maintaining a system of internal controls to provide reasonable assurance that reliable financial information is produced.

Council is responsible for ensuring that management fulfils its responsibilities for financial reporting and internal control.

The external auditors, KPMG LLP, conducted an independent examination, in accordance with generally accepted auditing standards, and expressed their opinion on the consolidated Statement of Financial Information financial statements. Their examination does not relate to the other schedules and statements required by the Act. Their audit involves obtaining audit evidence about the amount and disclosures in the consolidated financial statements. The audit also includes appropriate tests and procedures to provide reasonable assurance that the financial statements are presented fairly. The external auditors presented their audit findings to the City's Finance Committee.

Andrew Nazareth
General Manager, Finance and Corporate Services

Dated: June 20, 2014

Consolidated Financial Statements of

CITY OF RICHMOND

Year ended December 31, 2013

KPMG LLP
Chartered Accountants
Metrotower II
Suite 2400 - 4720 Kingsway
Burnaby BC V5H 4N2
Canada

Telephone (604) 527-3600
Fax (604) 527-3636
Internet www.kpmg.ca

INDEPENDENT AUDITORS' REPORT

To the Mayor and Council

We have audited the accompanying consolidated financial statements of the City of Richmond, which comprise the consolidated statement of financial position as at December 31, 2013 and the consolidated statements of operations, changes in net financial assets and cash flows for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the City of Richmond as at December 31, 2013, and its consolidated results of operations, its changes in net consolidated financial assets and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

KPMG LLP

Chartered Accountants

May 12, 2014

Burnaby, Canada

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.
KPMG Canada provides services to KPMG LLP.

CITY OF RICHMOND

Consolidated Statement of Financial Position
(Expressed in thousands of dollars)

December 31, 2013, with comparative information for 2012

	2013	2012
Financial Assets		
Cash and cash equivalents	$ 38,368	$ 49,632
Investments (note 3)	716,114	590,961
Accrued interest receivable	3,224	3,122
Accounts receivable (note 4)	19,625	22,682
Taxes receivable	9,244	8,895
Development fees receivable	21,405	12,923
Debt reserve fund deposits (note 5)	200	386
	808,180	688,601
Liabilities		
Accounts payable and accrued liabilities (note 6)	83,146	75,325
Deposits and holdbacks (note 7)	51,841	40,669
Deferred revenue (note 8)	35,870	37,307
Development cost charges (note 9)	87,212	62,547
Obligations under capital leases (note 10)	58	106
Debt, net of MFA sinking fund deposits (note 11)	1,056	3,488
	259,183	219,442
Net financial assets	548,997	469,159
Non-Financial Assets		
Tangible capital assets (note 12)	1,877,298	1,830,619
Inventory of materials and supplies	2,363	2,276
Prepaid expenses	1,594	1,954
	1,881,255	1,834,849
Accumulated surplus (note 13)	$ 2,430,252	$ 2,304,008

Commitments and contingencies (note 17)

See accompanying notes to consolidated financial statements.

General Manager, Finance and Corporate Services

CITY OF RICHMOND

Consolidated Statement of Operations
(Expressed in thousands of dollars)

Year ended December 31, 2013, with comparative information for 2012

	Budget 2013 (notes 2(m) and 22)	2013	2012
Revenue:			
Taxation and levies	$ 174,825	$ 176,283	$ 167,529
Utility fees	74,321	79,613	74,222
Sales of services	40,366	45,941	41,449
Payments-in-lieu of taxes	13,199	14,406	13,189
Provincial and federal grants	7,256	7,092	9,487
Development cost charges	1,280	11,730	10,480
Other capital funding sources	71,768	55,542	19,306
Other revenues:			
Investment income	16,792	13,490	17,144
Gaming revenue	12,364	17,632	15,585
Licenses and permits	7,537	9,178	8,734
Other (note 20)	7,662	23,096	23,186
	427,370	454,003	400,311
Expenses:			
Law and Community safety	83,844	77,587	75,193
Utilities: water, sewerage and sanitation	73,862	73,764	72,682
Engineering, public works and project development	56,427	53,219	53,164
Community services	49,162	49,753	46,796
General government	47,931	41,677	38,570
Planning and development	12,513	11,854	11,961
Richmond Olympic Oval	11,432	10,509	9,826
Library services	9,540	9,396	9,245
	344,711	327,759	317,437
Annual surplus	82,659	126,244	82,874
Accumulated surplus, beginning of year	2,304,008	2,304,008	2,221,134
Accumulated surplus, end of year	$ 2,386,667	$ 2,430,252	$ 2,304,008

See accompanying notes to consolidated financial statements.

CITY OF RICHMOND

Consolidated Statement of Changes in Net Financial Assets
(Expressed in thousands of dollars)

Year ended December 31, 2013, with comparative information for 2012

	2013 budget (notes 2(m) and 22)	2013	2012
Surplus for the year	$ 82,659	$ 126,244	$ 82,874
Acquisition of tangible capital assets	(82,659)	(47,447)	(66,377)
Contributions of tangible capital assets	-	(50,887)	(12,784)
Amortization of tangible capital assets	-	50,334	49,566
Gain on disposal of tangible capital assets - land	-	(4,024)	(5,405)
Loss (gain) on disposal of tangible capital assets	-	434	(423)
Proceeds on sale of tangible capital assets	-	4,911	6,434
	-	79,565	53,885
Acquisition of inventories of supplies	-	(2,363)	(2,276)
Acquisition of prepaid expenses	-	(1,594)	(1,954)
Consumption of inventories of supplies	-	2,276	1,934
Use of prepaid expenses	-	1,954	1,847
Change in net financial assets	-	79,838	53,436
Net financial assets, beginning of year	469,159	469,159	415,723
Net financial assets, end of year	$ 469,159	$ 548,997	$ 469,159

See accompanying notes to consolidated financial statements.

CITY OF RICHMOND

Consolidated Statement of Cash Flows
(Expressed in thousands of dollars)

Year ended December 31, 2013, with comparative information for 2012

	2013	2012
Cash provided by (used in):		
Operations:		
Annual surplus	$ 126,244	$ 82,874
Items not involving cash:		
Amortization	50,334	49,566
Gain on disposal of tangible capital assets - land	(4,024)	(5,405)
Loss (gain) on disposal of tangible capital assets	434	(423)
Contributions of tangible capital assets	(50,887)	(12,784)
Change in non-cash operating working capital:		
Increase in accrued interest receivable	(102)	(412)
Decrease (increase) in accounts receivable	3,057	(587)
Increase in taxes receivable	(349)	(2,179)
(Increase) decrease in development fees receivable	(8,482)	3,903
Decrease in debt reserve fund	186	-
Decrease (increase) in prepaid expenses	360	(107)
Increase in inventory of materials and supplies	(87)	(342)
Increase (decrease) in accounts payable and accrued liabilities	7,821	(2,373)
Increase in deposits and holdbacks	11,172	3,916
(Decrease) increase in deferred revenue	(1,437)	2,506
Increase in development cost charges	24,665	10,168
Net change in cash from operating activities	158,905	128,321
Capital activities:		
Cash used to acquire tangible capital assets	(47,447)	(66,323)
Proceeds on disposal of tangible capital assets	4,911	6,434
Net change in cash from capital activities	(42,536)	(59,889)
Financing activities:		
Principal payments on debt	(2,432)	(2,320)
Principal payments on obligations under capital leases	(48)	(447)
Net change in cash from financing activities	(2,480)	(2,767)
Investing activities:		
Change in investments	(125,153)	(27,799)
Net change in cash and cash equivalents	(11,264)	37,866
Cash and cash equivalents, beginning of year	49,632	11,766
Cash and cash equivalents, end of year	$ 38,368	$ 49,632
Supplementary Information:		
Non-cash transactions:		
Tangible capital assets financed by capital leases	$ -	$ 54

See accompanying notes to consolidated financial statements.

1. Operations:

The City of Richmond (the "City") is incorporated under the Local Government Act of British Columbia. The City's principal activities include the provision of local government services to residents of the incorporated area. These include administrative, protective, transportation, environmental, recreational, water, and sewer.

2. Significant accounting policies:

The consolidated financial statements of the City are the representation of management prepared in accordance with Canadian Public Sector Accounting Board as prescribed by the Public Sector Accounting Board ("PSAB") of the Canadian Institute of Chartered Accountants.

(a) Basis of consolidation:

The consolidated financial statements reflect a combination of the City's General Revenue, General Capital and Loan, Waterworks and Sewerworks, and Reserve Funds consolidated with the Richmond Public Library (the "Library"), the Richmond Olympic Oval and the Lulu Island Energy Company Ltd. (LIEC). The Library is consolidated as the Library Board is appointed by the City. The Richmond Olympic Oval and LIEC are consolidated as they are wholly owned municipal corporations of the City and operate as other government organizations. Interfund transactions, fund balances and activities have been eliminated on consolidation.

(i) General Revenue Fund:

This fund is used to account for the current operations of the City as provided for in the Annual Budget, including collection of taxes, administering operations, policing, and servicing general debt.

(ii) General Capital and Loan Fund:

This fund is used to record the City's tangible capital assets and work-in-progress, including engineering structures such as roads and bridges, and the related long-term debt.

(iii) Waterworks and Sewerworks Funds:

These funds have been established to cover the costs of operating these utilities, with related capital and loan funds to record the related capital assets and long-term debt.

(iv) Reserve Funds:

Certain funds are established by bylaws for specific purposes. They are funded primarily by budgeted contributions from the General Revenue Fund plus interest earned on fund balances.

2. Significant accounting policies (continued):

(b) Basis of accounting:

The City follows the accrual method of accounting for revenues and expenses. Revenues are recognized in the year in which they are earned and measurable. Expenses are recognized as they are incurred and measurable as a result of receipt of goods and services and/or the creation of a legal obligation to pay.

(c) Government transfers:

Restricted transfers from governments are deferred and recognized as revenue as the related expenditures are incurred or the stipulations in the related agreement are met. Unrestricted transfers are recognized as revenue when received or if the amount to be received can be reasonably estimated and collection is reasonably assured.

(d) Cash and cash equivalents:

Cash and cash equivalents consist of cash, highly liquid money market investments and short-term investments with maturities of less than 90 days from date of acquisition.

(e) Investments:

Investments are recorded at cost, adjusted for amortization of premiums or discounts. Provisions for losses are recorded when they are considered to be other than temporary. At various times during the term of each individual investment, market value may be less than cost. Such declines in value are considered temporary for investments with known maturity dates as they generally reverse as the investments mature and therefore an adjustment to market value for these market declines is not recorded.

(f) Accounts receivable:

Accounts receivable are net of an allowance for doubtful accounts and therefore represent amounts expected to be collected.

(g) Development cost charges:

Development cost charges are restricted by legislation to expenditures on capital infrastructure. These amounts are deferred upon receipt and recognized as revenue when the expenditures are incurred in accordance with the restrictions.

(h) Post-employment benefits:

The City and its employees make contributions to the Municipal Pension Plan. As this plan is a multi-employee plan, contributions are expensed as incurred.

Post-employment benefits also accrue to the City's employees. The liabilities related to these benefits are actuarially determined based on service and best estimates of retirement ages and expected future salary and wage increases. The liabilities under these benefits plans are accrued based on projected benefits prorated as employees render services necessary to earn the future benefits.

2. Significant accounting policies (continued):

(i) Non-financial assets:

Non-financial assets are not available to discharge existing liabilities and are held for use in the provision of services. They have useful lives extending beyond the current year and are not intended for sale in the ordinary course of operations.

(i) Tangible capital assets:

Tangible capital assets are recorded at cost, which include amounts that are directly attributable to acquisition, construction, development, or betterment of the assets. The cost, less the residual value of the tangible capital assets, excluding land, is amortized on a straight-line basis over their estimated useful lives as follows:

Asset	Useful life - years
Buildings and building improvements	10 - 75
Infrastructure	5 - 100
Vehicles, machinery and equipment	3 - 40
Library's collections, furniture and equipment	4 - 20

Amortization is charged over the asset's useful life commencing when the asset is acquired. Assets under construction are not amortized until the asset is available for productive use.

(ii) Contributions of tangible capital assets:

Tangible capital assets received as contributions are recorded at their fair value at the date of receipt and also are recorded as revenue.

(iii) Natural resources:

Natural resources that have been purchased are not recognized as assets in the consolidated financial statements.

(iv) Works of art and cultural and historic assets:

Works of art and cultural and historic assets are not recorded as assets in these consolidated financial statements.

(v) Interest capitalization:

The City does not capitalize interest costs associated with the construction of a tangible capital asset.

(vi) Labour capitalization:

Internal labour directly attributable to the construction, development or implementation of a tangible capital asset is capitalized.

2. Significant accounting policies (continued):

(i) Non-financial assets (continued):

(vii) Leased tangible capital assets:

Leases, which transfer substantially all of the benefits and risks incidental to ownership of property, are accounted for as leased tangible capital assets. All other leases are accounted for as operating leases and the related payments are charged to expenses as incurred.

(viii) Impairment of tangible capital assets:

Tangible capital assets are written down when conditions indicate that they no longer contribute to the Company's ability to provide goods and services, or when the value of future economic benefits associated with the tangible capital assets are less than their net book value. The net write-downs are accounted for as expenses in the consolidated statement of operations.

(ix) Inventory of materials and supplies:

Inventory is recorded at cost, net of an allowance for obsolete stock. Cost is determined on a weighted average basis.

(j) Deferred revenue:

The City defers a portion of the revenue collected from permits, licenses and other fees and recognizes this revenue in the year in which related inspections are performed or other related expenditures are incurred.

(k) Deposits:

Receipts restricted by the legislation of senior governments or by agreement with external parties are deferred and reported as deposits and are refundable under certain circumstances. When qualifying expenditures are incurred, deposits are recognized as revenue at amounts equal to the qualifying expenditures.

(l) Debt:

Debt is recorded net of related sinking fund balances.

(m) Budget information:

Budget information, presented on a basis consistent with that used for actual results, was included in the City of Richmond's Five Year Financial Plan and was originally adopted through Bylaw No. 8990 on February 25, 2013.

2. Significant accounting policies (continued):

(n) Use of accounting estimates:

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amount of revenue and expenses during the reporting period. Significant areas requiring the use of management estimates relate to the value of contributed tangible capital assets, value of developer contributions, useful lives for amortization, determination of provisions for accrued liabilities, performing actuarial valuation of employee future benefits, allowance for doubtful accounts, and provision for contingencies. Actual results could differ from those estimates. Adjustments, if any, will be reflected in the consolidated financial statements in the period that the change in estimate is made, as well as in the period of settlement if the amount is different.

(o) Segment disclosures:

A segment is defined as a distinguishable activity of group of activities of a government for which it is appropriate to separately report financial information to achieve the objectives of the standard. The City of Richmond has provided definitions of segments used by the City as well as presented financial information in segment format (note 21).

3. Investments:

	2013		2012	
	Cost	Market value	Cost	Market value
Short-term notes and deposits	$ 205,162	$ 205,186	$ 61,835	$ 62,206
Government and government guaranteed bonds	442,963	444,447	466,984	468,382
Municipal Finance Authority Pooled Investment	22,033	22,033	21,691	21,692
Other bonds	45,956	47,100	40,451	42,192
	$ 716,114	$ 718,766	$ 590,961	$ 594,472

4. Accounts receivable:

	2013	2012
Water and sewer utilities	$ 8,949	$ 8,130
Casino revenues	4,292	3,580
Capital grant	1,350	3,054
Other trade receivables	5,034	7,918
	$ 19,625	$ 22,682

5. Debt reserve fund deposits and contingent demand notes:

The City issues its debt instruments through the Municipal Finance Authority (the "MFA"). As a condition of these borrowings, a portion of the debenture proceeds is withheld by the MFA in a Debt Reserve Fund. The City also executes demand notes in connection with each debenture whereby the City may be required to loan certain amounts to the MFA. These demand notes are contingent in nature and are not reflected in the City's accounts. The details of the cash deposits and contingent demand notes at December 31, 2013 are as follows:

	Cash deposits	Contingent demand notes
General Revenue Fund	$ 200	$ 868

6. Accounts payable and accrued liabilities:

	2013	2012
Trade and other liabilities	$ 53,104	$ 46,911
Post-employment benefits (note 15)	30,042	28,414
	$ 83,146	$ 75,325

7. Deposits and holdbacks:

	Balance December 31, 2012	Deposit contributions	Refund expenditures	Balance December 31, 2013
Security deposits	$ 27,490	$ 17,354	$ 8,985	$ 35,859
Developer contribution	6,002	162	-	6,164
Contract holdbacks	1,667	2,100	2,169	1,598
Transit Oriented Development Fund	1,523	-	-	1,523
Other	3,987	4,512	1,802	6,697
	$ 40,669	$ 24,128	$ 12,956	$ 51,841

8. Deferred revenue:

Deferred revenue represents revenues that are collected but not earned as of December 31, 2013. These revenues will be recognized in future periods as they are earned. Deferred revenue also represents funds received from external parties for specified purposes. These revenues are recognized in the period in which the related expenses are incurred.

	Balance December 31, 2012	External restricted inflows	Revenue earned	Balance December 31, 2013
Taxes and utilities	$ 18,026	$ -	$ 1,183	$ 16,843
Building permits/business licenses	7,710	4,800	3,275	9,235
Capital grants	4,351	1,527	2,691	3,187
Leased land	2,409	42	42	2,409
Other	4,811	315	930	4,196
	$ 37,307	$ 6,684	$ 8,121	$ 35,870

9. Development cost charges:

	2013	2012
Balance, beginning of year	$ 62,547	$ 52,379
Contributions	35,424	19,772
Interest	971	876
Revenue recognized	(11,730)	(10,480)
Balance, end of year	$ 87,212	$ 62,547

10. Obligations under capital leases:

The City has entered into capital lease agreements to finance certain equipment at an estimated cost of borrowing of 2% per year.

Future minimum lease payments, relating to obligations under capital leases expiring on various dates, are as follows:

Year ending December 31:	
2014	$ 31
2015	22
2016	6
Total future minimum lease payments	59
Less amount representing interest	(1)
Present value of capital lease payments	$ 58

11. Debt:

The rates of interest on the principal amount of the MFA debentures vary between 3.15% and 8.50% per annum. The average rate of interest for the year ended December 31, 2013 approximates 4.82%.

The City obtains debt instruments through the MFA pursuant to security issuing bylaws under authority of the Community Charter to finance certain capital expenditures.

Gross amount for the debt, less principal payments and actuarial adjustments to date, are as follows:

	Gross amount Borrowed	Repayments and actuarial adjustments	Net debt 2013	Net debt 2012
General Fund	$ 37,600	$ 36,544	$ 1,056	$ 3,412
Sewerworks Fund	1,000	1,000	-	76
	$ 38,600	$ 37,544	$ 1,056	$ 3,488

Repayments on net outstanding debenture debt over the next year are as follows:

	General	Sewerworks	Total
2014	$ 1,056	$ -	$ 1,056

12. Tangible capital assets:

Cost	Balance at December 31, 2012	Additions and transfers	Disposals	Balance at December 31, 2013
Land	$ 633,580	$ 39,137	$ (795)	$ 671,922
Buildings and building improvements	347,867	5,433	(363)	352,937
Infrastructure	1,529,191	36,739	(4,874)	1,561,056
Vehicles, machinery and equipment	88,288	7,846	(770)	95,364
Library's collections, furniture and equipment	9,193	2,415	(2,217)	9,391
Assets under construction	33,490	6,764	-	40,254
	$ 2,641,609	$ 98,334	$ (9,019)	$ 2,730,924

Accumulated amortization	Balance at December 31, 2012	Disposals	Amortization expense	Balance at December 31, 2013
Buildings and building improvements	$ 103,049	$ (163)	$ 12,506	$ 115,392
Infrastructure	647,597	(4,596)	30,783	673,784
Vehicles, machinery and equipment	55,243	(754)	5,405	59,894
Library's collections, furniture and equipment	5,101	(2,185)	1,640	4,556
	$ 810,990	$ (7,698)	$ 50,334	$ 853,626

12. Tangible capital assets (continued):

	Net book value December 31, 2013	Net book value December 31, 2012
Land	$ 671,922	$ 633,580
Buildings and building improvements	237,545	244,818
Infrastructure	887,272	881,594
Vehicles, machinery and equipment	35,470	33,045
Library's collection, furniture and equipment	4,835	4,092
Assets under construction	40,254	33,490
Balance, end of year	$ 1,877,298	$ 1,830,619

(a) Assets under construction:

Assets under construction, having a value of approximately $40,254,000 (2012 - $33,490,000), have not been amortized. Amortization of these assets will commence when the asset is put into service.

(b) Contributed tangible capital assets:

Contributed tangible capital assets have been recognized at fair market value at the date of contribution. The value of contributed assets received during the year is approximately $50,887,000 (2012 - $12,784,000), comprised of infrastructure in the amount of approximately $10,934,000 (2012 - $9,838,000), land in the amount of approximately $38,982,000 (2012 - $2,946,000), and Library books in the amount of approximately $971,000 (2012 - nil).

(c) Tangible capital assets disclosed at nominal values:

Where an estimate of fair value could not be made, the tangible capital assets were recognized at a nominal value.

(d) Works of Art and Historical Treasures:

The City manages and controls various works of art and non-operational historical cultural assets, including building, artifacts, paintings, and sculptures located at City sites and public display areas. The assets are not recorded as tangible capital assets and are not amortized.

(e) Writedown of tangible capital assets:

There were no writedowns of tangible capital assets during the year (2012 - nil).

13. Accumulated surplus:

	General Funds and Reserve	Water Utility Fund	Sanitary Sewer Utility Fund	Richmond Olympic Oval	Library Services	2013 Total	2012 Total
Investment in tangible capital assets	$ 1,868,683	$ -	$ -	$ 2,664	$ 4,837	$ 1,876,184	$ 1,827,025
Reserves (note 14)	349,073	-	-	4,732	-	353,805	295,001
Appropriated surplus	148,209	3,595	7,047	577	131	159,559	150,895
Obligations to be funded	-	-	-	-	-	-	(4)
Surplus	12,674	15,229	9,186	1,065	187	38,341	28,839
Other equity	2,363	-	-	-	-	2,363	2,252
Balance, end of year	$ 2,381,002	$ 18,824	$ 16,233	$ 9,038	$ 5,155	$ 2,430,252	$ 2,304,008

14. Reserves:

	2012	Change during year	2013
Reserve funds:			
Affordable housing	$ 18,082	$ 2,614	$ 20,696
Arts, culture and heritage	-	4,379	4,379
Capital building and infrastructure	36,686	9,708	46,394
Capital reserve	78,254	23,580	101,834
Capstan station	-	3,862	3,862
Child care development	1,995	701	2,696
Community legacy and land replacement	16,681	(328)	16,353
Drainage improvement	27,948	7,607	35,555
Equipment replacement	16,579	1,241	17,820
Leisure facilities	3,177	374	3,551
Local improvements	6,428	99	6,527
Neighborhood improvement	6,011	324	6,335
Public art program	1,967	315	2,282
Sanitary sewer	33,672	3,561	37,233
Steveston off-street parking	282	5	287
Steveston road ends	1,347	(663)	684
Waterfront improvement	112	(8)	104
Watermain replacement	41,680	801	42,481
Oval	4,100	632	4,732
	$ 295,001	$ 58,804	$ 353,805

15. Post-employment benefits:

The City provides certain post-employment benefits, non-vested sick leave, compensated absences, and termination benefits to its employees.

	2013	2012
Balance, beginning of year	$ 28,414	$ 26,890
Current service cost	2,212	2,095
Interest cost	1,038	1,021
Amortization of actuarial loss	389	460
Benefits paid	(2,011)	(2,052)
Balance, end of year	$ 30,042	$ 28,414

An actuarial valuation for these benefits was performed to determine the City's accrued benefit obligation as at December 31, 2013. The difference between the actuarially determined accrued benefit obligation of approximately $31,135,000 and the liability of approximately $30,042,000 as at December 31, 2013 is an unamortized net actuarial loss of $1,093,000. This actuarial loss is being amortized over a period equal to the employees' average remaining service lifetime of 10 years.

	2013	2012
Actuarial benefit obligation:		
Liability, end of year	$ 30,042	$ 28,414
Unamortized actuarial loss	1,093	412
Balance, end of year	$ 31,135	$ 28,826

Actuarial assumptions used to determine the City's accrued benefit obligation are as follows:

	2013	2012
Discount rate	3.50%	3.50%
Expected future inflation rate	2.00%	2.50%
Expected wage and salary range increases	2.50%	3.50%

16. Pension plan:

The City and its employees contribute to the Municipal Pension Plan (the "Plan"), a jointly trusteed pension plan. The board of trustees, representing plan members and employers, is responsible for overseeing the management of the Plan, including the investment of the assets and administration of benefits. The Plan is a multi-employer contributory pension plan. Basic pension benefits provided are based on a formula. The Plan has about 179,000 active members and approximately 71,000 retired members. Active members include approximately 1,500 contributors from the City.

The most recent actuarial valuation as at December 31, 2012 indicated a $1,370 million funding deficit for basic pension benefits. The next valuation will be as at December 31, 2015 with results available in 2016. Employers participating in the Plan record their pension expense as the amount of employer contributions made during the year (defined contribution pension plan accounting). This is because Plan records accrued liabilities and accrued assets for the Plan in aggregate with the result that there is no consistent and reliable basis for allocating the obligation, assets and cost to individual employers participating in the Plan.

The City paid $10,311,445 (2012 - $9,970,567) for employer contributions to the Plan in fiscal 2013. Employees paid $8,677,397 (2012 - $8,324,541) for employee contributions to the Plan in fiscal 2013.

17. Commitments and contingencies:

(a) Joint and several liabilities:

The City has a contingent liability with respect to debentures of the Greater Vancouver Water District, Greater Vancouver Sewerage and Drainage District and Greater Vancouver Regional District, to the extent provided for in their respective Enabling Acts, Acts of Incorporation and Amending Acts. Management does not consider payment under this contingency to be likely and therefore, no amounts have been accrued.

(b) Lease payments:

In addition to the obligations under capital leases, at December 31, 2013, the City was committed to operating lease payments for premises and equipment in the following approximate amounts:

2014	$ 4,525
2015	4,472
2016	4,141
2017	4,032
2018 and thereafter	21,622

17. Commitments and contingencies (continued):

(c) Litigation:

As at December 31, 2013, there were a number of claims or risk exposures in various stages of resolution. The City has made no specific provision for those where the outcome is presently not determinable.

(d) Municipal Insurance Association of British Columbia:

The City is a participant in the Municipal Insurance Association of British Columbia (the "Association"). Should the Association pay out claims in excess of premiums received, it is possible that the City, along with other participants, would be required to contribute towards the deficit. Management does not consider external payment under this contingency to be likely and therefore, no amounts have been accrued.

(e) Contractual obligation:

The City has entered into various contracts for services and construction with periods ranging beyond one year. These commitments are in accordance with budgets passed by Council.

(f) E-Comm Emergency Communications for Southwest British Columbia ("E-Comm"):

The City is a shareholder of the Emergency Communications for Southwest British Columbia Incorporated (E-Comm) whose services provided include: regional 9-1-1 call centre for the Greater Vancouver Regional District; Wide Area Radio network; dispatch operations; and records management. The City has 2 Class A shares and 1 Class B share (of a total of 28 Class A and 23 Class B shares issued and outstanding as at December 31, 2013). As a Class A shareholder, the City shares in both funding the future operations and capital obligations of E-Comm (in accordance with a cost sharing formula), including any lease obligations committed to by E-Comm up to the shareholder's withdrawal date.

(g) Community Associations:

The City has a close relationship with the various community associations which operate the community centers throughout the City. While they are separate legal entities, the City does generally provide the buildings and grounds for the use of the community associations as well as pay the operating costs of the facilities. Typically the community associations are responsible for providing programming and services to the community. The community associations retain all revenue which they receive. The City provides the core staff for the facilities as well as certain additional services such as information technology services.

17. Commitments and contingencies (continued):

(c) Litigation:

As at December 31, 2013, there were a number of claims or risk exposures in various stages of resolution. The City has made no specific provision for those where the outcome is presently not determinable.

(d) Municipal Insurance Association of British Columbia:

The City is a participant in the Municipal Insurance Association of British Columbia (the "Association"). Should the Association pay out claims in excess of premiums received, it is possible that the City, along with other participants, would be required to contribute towards the deficit. Management does not consider external payment under this contingency to be likely and therefore, no amounts have been accrued.

(e) Contractual obligation:

The City has entered into various contracts for services and construction with periods ranging beyond one year. These commitments are in accordance with budgets passed by Council.

(f) E-Comm Emergency Communications for Southwest British Columbia ("E-Comm"):

The City is a shareholder of the Emergency Communications for Southwest British Columbia Incorporated (E-Comm) whose services provided include: regional 9-1-1 call centre for the Greater Vancouver Regional District; Wide Area Radio network; dispatch operations; and records management. The City has 2 Class A shares and 1 Class B share (of a total of 28 Class A and 23 Class B shares issued and outstanding as at December 31, 2013). As a Class A shareholder, the City shares in both funding the future operations and capital obligations of E-Comm (in accordance with a cost sharing formula), including any lease obligations committed to by E-Comm up to the shareholder's withdrawal date.

(g) Community Associations:

The City has a close relationship with the various community associations which operate the community centers throughout the City. While they are separate legal entities, the City does generally provide the buildings and grounds for the use of the community associations as well as pay the operating costs of the facilities. Typically the community associations are responsible for providing programming and services to the community. The community associations retain all revenue which they receive. The City provides the core staff for the facilities as well as certain additional services such as information technology services.

17. Commitments and contingencies (continued):

(h) Contingent liabilities:

The City has a contract with the federal government whereby the federal government provides Royal Canadian Mounted Police (RCMP) policing services. RCMP members and the federal government are currently in legal proceedings regarding pay raises for 2009 and 2010 that were retracted for RCMP members. As the final outcome of the legal action and the potential financial impact to the City is not determinable, the City has not recorded any provision for this matter in the consolidated financial statements as at December 31, 2013.

(i) Municipal Financing Authority:

City Council adopted Loan Authorization Bylaw No. 9075 on November 25, 2013 for the City to borrow up to $50,815,000 for a maximum term of 30 years. Subsequent to year-end, the City obtained statutory approval from the Ministry of Community, Sport and Cultural Development of British Columbia and obtained consent from Metro Vancouver to proceed with the long-term borrowing from the Municipal Financing Authority for a term of 10 years. The Municipal Finance Authority issued the long-term debt to the City at a rate of 3.30%.

18. Trust funds:

Certain assets have been conveyed or assigned to the City to be administered as directed by agreement or statute. The City holds the assets for the benefit of and stands in fiduciary relationship to the beneficiary. The following trust fund is excluded from the City's consolidated financial statements.

	2013	2012
Richmond Community Associations	$ 1,107	$ 1,091

19. Collections for other governments:

The City is obligated to collect certain taxation revenue on behalf of other government bodies. These funds are excluded from the City's consolidated financial statements since they are not revenue of the City. Such taxes collected and remitted to the government bodies during the year are as follows:

	2013	2012
Province of British Columbia - Schools	$ 133,660	$ 128,610
Greater Vancouver Regional District and others	39,918	39,498
	$ 173,578	$ 168,108

20. Other revenue:

	2013	2012
Developer reserve contribution	$ 9,248	$ 8,534
Tangible capital assets gain on land	4,024	5,405
Taxes and fines	2,433	2,003
Parking program	1,994	1,566
Debt funding	1,291	1,180
Sponsorship	188	200
Donation	1,022	53
Other	2,896	4,245
	$ 23,096	$ 23,186

21. Segmented reporting:

The City of Richmond provides a wide variety of services to its residents. For segment disclosure, these services are grouped and reported under service areas/departments that are responsible for providing such services. They are as follows:

Law and Community Safety brings together the City's public safety providers such as Police (RCMP), Fire-Rescue, Emergency Programs, and Community Bylaws, along with sections responsible for legal and regulatory matters. It is responsible for ensuring safe communities by providing protection services with a focus on law enforcement, crime prevention, emergency response, protection of life and properties, and legal services.

Utilities provide such services as planning, designing, constructing, operating, and maintaining the City's infrastructure of water and sewer networks and sanitation and recycling.

Engineering, Public Works and Project Development comprises of General Public Works, Roads and Construction, Storm Drainage, Fleet Operations, Engineering, Project Development, and Facility Management. The services provided are construction and maintenance of the City's infrastructure and all City owned buildings, maintenance of the City's road networks, managing and operating a mixed fleet of vehicles, heavy equipment and an assortment of specialized work units for the City operations, development of current and long-range engineering planning and construction of major projects.

Community Services comprises of Parks, Recreation, Arts, Culture and Heritage Services and Community Social Development. These departments ensure recreation opportunities in Richmond by maintaining a variety of facilities such as arenas, community centres, pools, etc. It designs, constructs and maintains parks and sports fields to ensure there is adequate open green space and sports fields available for Richmond residents. It also addresses the arts, culture, and community issues that the City encounters.

21. Segmented reporting (continued):

General Government comprises of Mayor and Council, Corporate Administration, and Finance and Corporate Services. It is responsible for adopting bylaws, effectively administering City operations, levying taxes, providing sound management of human resources, information technology, economic development, and City finance, and ensuring high quality services to Richmond residents.

Planning and Development is responsible for land use plans, developing bylaws and policies for sustainable development in the City, including the City's transportation systems.

Richmond Olympic Oval is formed as a wholly-owned subsidiary of the City. The City uses the Richmond Olympic Oval facility as a venue for a wide range of sports, business and community activities.

Richmond Public Library provides public access to information by maintaining 5 branches throughout the City.

Lulu Island Energy Company Ltd. (LIEC) was incorporated on August 19, 2013 under the Business Corporations Act of British Columbia as a municipal corporation wholly owned by the City of Richmond for the management of district energy utilities. There are no activities in 2013.

21. Segmented reporting (continued):

	Law and community safety	Utilities	Engineering, public works and project development	Community services	General government	Planning and development	Richmond Olympic Oval	Richmond Public Library	2013 Consolidated	2012 Consolidated
Revenues:										
Taxation and levies	$ -	$ -	$ -	$ -	$ 176,283	$ -	$ -	$ -	$ 176,283	$ 167,529
User fees	-	70,385	9,228	-	-	-	-	-	79,613	74,222
Sales of services	4,871	11,734	2,197	8,650	9,470	2,250	6,568	201	45,941	41,449
Payments-in-lieu of taxes	-	-	-	-	14,406	-	-	-	14,406	13,189
Provincial and federal grants	81	-	1,993	-	1,772	8	2,823	415	7,092	9,487
Development cost charges	-	396	2,183	3,839	5,312	-	-	-	11,730	10,480
Other capital funding sources	(40)	5,358	9,005	2,164	38,982	-	-	73	55,542	19,306
Other revenue from own sources:										
Investment Income	-	697	-	-	12,793	-	-	-	13,490	17,144
Gaming revenue	599	-	1,400	-	15,633	-	-	-	17,632	15,585
Licenses and permits	227	-	87	-	3,525	5,339	-	-	9,178	8,734
Other	2,154	81	510	281	17,563	87	1,235	1,185	23,096	23,186
	7,892	**88,651**	**26,603**	**14,934**	**295,739**	**7,684**	**10,626**	**1,874**	**454,003**	**400,311**
Expenses:										
Wages and salaries	35,276	10,039	20,717	27,467	19,337	9,318	6,713	6,599	135,466	129,980
Supplies and materials	2,586	45,768	(3,402)	11,281	6,911	1,379	3,443	1,044	69,010	63,684
Amortization of tangible capital assets	2,438	7,157	21,936	5,047	10,883	923	310	1,640	50,334	49,566
Contract services	37,259	5,868	487	2,320	2,677	109	43	173	48,936	47,945
Public works maintenance	8	4,121	11,960	2,426	137	72	-	3	18,727	20,901
Interest and finance	22	949	-	2	1,459	-	-	6	2,438	4,495
Transfer from (to) capital for tangible capital assets	(2)	(332)	1,494	1,210	77	51	-	(84)	2,414	1,289
Loss (gain) on disposal of tangible capital assets	-	194	27	-	196	2	-	15	434	(423)
	77,587	73,764	53,219	49,753	41,677	11,854	10,509	9,396	327,759	317,437
Annual surplus (deficit)	**$ (69,695)**	**$ 14,887**	**$ (26,616)**	**$ (34,819)**	**$ 254,062**	**$ (4,170)**	**$ 117**	**$ (7,522)**	**$ 126,244**	**$ 82,874**

22. Budget data:

The budget data presented in these consolidated financial statements is based on the 2013 operating and capital budgets approved by Council on February 25, 2013 and the approved budget for Richmond Olympic Oval. Below is the reconciliation of the approved budget to the budget amount reported in these consolidated financial statements.

		Budget Amount
Revenues:		
Approved operating budget	$	392,829
Approved capital budget		169,290
Approved Oval budget		12,983
Less:		
Transfer from other funds		7,870
Intercity recoveries		39,195
Intercompany recoveries		3,145
Carried forward capital expenditures		97,522
Total revenue		427,370
Expenses:		
Approved operating budget		392,829
Approved capital budget		169,290
Approved Oval budget		11,432
Less:		
Transfer to other funds		16,047
Intercity payments		39,217
Intercompany payments		3,145
Capital expenditures		71,768
Debt principal payments		1,141
Carried forward capital expenditures		97,522
Total expenses		344,711
Annual surplus per statement of operations	$	82,659

A Schedule of Guarantees and Indemnity payments has not been prepared as the City of Richmond has not given any guarantees or indemnities under the Guarantees and Indemnities Regulation.

Prepared under the Financial Information Regulation, Schedule 1, Section 5

CITY OF RICHMOND
SCHEDULE OF REMUNERATION AND EXPENSES

Elected Officials for 2013

NAME		BASE SALARY	BENEFITS[1]	EXPENSES
Brodie, Malcolm	Mayor	119,081	6,378	2,852
Au, Chak Kwong	Councillor	55,841	2,200	5,629
Barnes, Linda	Councillor	55,841	2,200	9,033
Dang, Derek	Councillor	55,841	3,796	50
Halsey-Brandt, Evelina	Councillor	55,841	2,200	168
Johnston, Ken	Councillor	55,841	3,646	192
McNulty, William B	Councillor	55,841	3,646	9,094
McPhail, Linda	Councillor	55,841	2,200	8,319
Steves, Harold	Councillor	55,841	1,925	8,532
Number of Elected Officials	9	565,811	28,191	43,868

1. Consists of taxable benefits only.

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Achiam,Cecilia	142,666	31,565	1,691
Ackerman,Robert Harold	72,395	2,992	395
Adair,Darrin Robert	76,010	6,376	550
Adams,Reg	87,464	1,827	347
Allen,Michael	86,319	11,852	1,229
Alves,Luis	91,230	5,067	252
Anderson,David Brian	33,593	88,497	0
Anderson,Doug	116,587	29,236	305
Andersson,Bengt	71,937	4,975	200
Arcari,Lorenzo	103,252	9,875	1,273
Arrigo,Stephen	72,888	4,826	1,929
Ash,Adrienne	74,993	1,627	0
Atwal,Bhupinder (Bob)	73,948	3,427	0
Aujla,Jag	73,657	2,500	0
Ayers,Elizabeth	122,084	21,239	1,337
Bachynski,Laurie	110,158	13,882	0
Badyal,Sara	91,728	3,024	1,170
Bains,Joginder	29,733	57,379	70
Baker,Danny	81,697	7,711	115
Baker,Steven J	84,563	5,979	0
Baliong,Glenn	72,590	3,451	0
Bardock,Gerry	71,470	3,891	0
Barlow,Paul Graham	86,070	2,316	0
Barnes,Richard	122,710	19,460	0
Barstow,Murray	74,101	4,301	1,503
Bartley-Smith,Brenda	99,655	10,294	1,474
Bateman,Grant	86,018	4,428	0
Bath,Paul	92,486	5,680	0
Batke,Wilfred	74,109	2,964	0
Batkin,Wayne	105,251	12,516	0
Bauder,Kristine	76,274	22,464	118
Bavis,Nathan	86,250	4,685	77
Bealey,Ron	71,249	5,708	0
Beare,Adam	81,685	8,096	0
Beeby,James	90,094	5,156	0
Beetstra,Jack	106,302	9,268	0
Bell,Andrew	95,411	15,101	845
Bennett,Adam	86,048	4,380	5,072
Bennett,Shayne	84,840	7,902	54
Benning,Dal	69,021	10,602	60
Beno,Dena Kae	94,127	21,363	413
Bentley,Sharon	74,391	1,310	2,634
Bergsma,Nolan	70,730	9,689	70

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Bergsma,Peter J	85,233	6,761	0
Bertoia,Marc A	71,840	5,628	0
Bicego,Romeo	121,549	23,910	0
Bie,Lloyd	120,299	14,384	975
Billings,Alan	91,283	5,156	0
Bissett,Lorraine	91,952	21,086	12
Bogner,Christopher	85,112	5,166	0
Bohnen,Joshua	84,506	3,826	0
Bola,Kulwinder	81,192	2,500	1,223
Bonato,Steven	90,489	1,640	0
Bowley-Cowan,Laura Dee	89,223	852	2,494
Boyce,Ryan	69,739	5,711	70
Brannen,Andrew	88,601	4,278	42
Braun,Robert	71,824	4,470	0
Brevner,Mark	90,919	2,078	287
Broughton,Skyler	74,687	4,158	0
Brown,Colin Bruce	70,846	4,226	0
Brownlee,David	91,858	3,263	22
Brunskill,Jason	92,039	5,550	1,264
Buchannon,William Victor	105,658	7,863	1,271
Buemann,Tricia A.	73,740	2,997	0
Buie,Dovelle	101,994	10,426	568
Bulick,John	81,149	4,078	0
Burke,Holger	60,183	18,777	474
Burns,Tony	79,012	4,282	252
Bursey,Bradley Ross	99,201	8,027	395
Busich-Veloso,Eva	86,018	4,428	1,243
Buttar,Onkar	75,559	4,507	0
Bycraft,Jeff R	92,203	2,234	393
Bycraft,Suzanne J	125,717	42,652	1,096
Cabatic,Allan	82,736	6,473	0
Cameron,Glenn S	97,737	6,662	0
Candusso,Giorgio	77,559	3,459	0
Cantarella,Lorraine	80,766	19,529	4
Capogna,Nan	79,783	10,981	2,684
Caravan,Bob B	86,833	9,927	407
Caravan,Joan	86,055	4,420	0
Carey,Alisa	75,701	2,978	0
Carlile,Cathryn Volkering	199,208	45,113	6,655
Carlson,Erland	76,483	3,421	0
Carlyle,Phyllis	211,039	45,233	16,178
Carron,Kimberley L.	72,596	5,251	0
Carter,Chris	84,630	2,533	0

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Carter-Huffman,Suzanne	103,005	8,697	823
Cerantola,Davin	87,162	5,156	0
Chaichian,Camyar	82,425	4,959	1,460
Chan,Donna	117,781	10,070	579
Chan,Kavid	94,168	5,516	86
Chan,Michael	94,977	20,418	487
Chan,Milton	121,364	11,002	1,605
Cheuk,Chun Yu (Tom)	71,851	5,513	0
Chiang,Paul Chi-Kin	78,863	4,588	1,003
Chima,Jaspal	83,668	3,930	0
Chin,Donald	92,432	7,764	0
Ching,Mike	88,959	7,583	664
Chong,Jerry	156,226	35,329	1,389
Christopherson,Tracy Ann	68,983	8,113	60
Clark,Alison	85,574	2,087	0
Collinge,Chris	73,631	3,024	52
Connery,Kevin	82,897	2,232	1,155
Coombs,Brian M	77,679	13,475	0
Cooper,Brad D	89,664	5,613	0
Cordoni,Raymond M	140,360	22,782	5,364
Cornelssen,Kelvin	89,836	4,858	626
Craig,Wayne	143,415	24,888	499
Creighton,Gregg	88,407	7,644	196
Crowe,Terence	140,360	15,599	800
Crumley,Kerry	81,938	2,418	127
Csepany,Andras	74,313	5,646	0
Curry,Anthony	80,878	2,500	0
Cuthbert,Coralys	73,443	6,328	470
D'Altroy,Curtis Arthur	100,637	10,825	0
Dalziel,Jeffrey	80,523	4,632	0
Davidson,Frank P	87,307	8,308	0
Davies,Sean	72,403	4,945	178
Dawson,Evelyn	87,464	2,169	0
Deane,Gregory Thomas	103,780	10,158	1,223
Decker,Kim	100,207	11,762	2,960
DeCrom,Theodore G	105,895	27,967	2,520
Deer,Angela	85,096	12,154	284
DeGianni,Rod	89,963	5,313	0
Dennis,Alison	73,201	2,981	24
Dhaliwal,Kamaljit "Bill"	77,715	7,989	75
Dhanowa,Dalvinder	69,321	5,909	204
Dhillon,Kearnbir	80,432	3,913	0
Dias,Ben Jack	125,714	27,679	12

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Dickson,James	84,028	6,689	0
Dineen,Scott	88,072	3,201	1,313
Dion,Harold K	104,960	12,732	0
Discusso,Peter	81,537	4,723	583
Discusso,Susan L	74,066	1,569	309
Dixon,Scott	87,008	5,006	1,267
Doornberg,Corrine	73,228	2,497	186
Douglas,Lesley	98,167	11,751	1,799
Douglas,Stewart	86,780	4,078	0
Draper,Jason	89,068	5,156	1,442
Dube,Danielle	79,203	175	77
Dubeau,John	75,062	4,961	0
Dubnov,Shawn	74,408	4,745	395
Duncan,George	291,250	17,084	5,097
Duncan,Jeremy	86,368	5,154	0
Duncan,Scott	98,812	34,883	1,267
Dunn,Darrell	103,802	9,529	0
Duranleau,Sonia	87,283	9,906	1,223
Dyer,Sean	84,179	3,234	2,120
Edinger,David G	106,682	12,855	0
Edwards,Brenda	73,469	2,060	0
Edwards,William J	72,133	9,241	0
Einarson,Craig L	96,165	13,054	0
Elshof,Eric R	89,787	6,114	0
Enefer,John	86,599	5,762	0
Eng,Kevin	81,043	3,178	0
Erceg,Joe	218,408	127,197	1,114
Esko,Jamie	91,730	12,675	796
Estabrook,Russell	74,156	9,258	0
Eward,Cindy	72,403	4,431	216
Falconer,Todd James	103,476	7,046	0
Farrell,Daniel	75,559	4,615	0
Fengstad,Grant	77,769	12,976	0
Fenwick,Marie	73,170	7,090	4,499
Ferland,Khadija	78,040	9,225	1,707
Fernyhough,Jane Lee	141,395	34,664	1,009
Ferraro,Domenic	74,328	4,276	70
Fiss,Eric	92,610	4,832	7,099
Fitton,Russell	88,453	5,156	0
Forrest,Rebecca	79,704	3,804	192
Foster,John	117,736	15,506	6,355
Frampton,Michael	85,732	3,902	34
Frederickson,Gordon D	78,917	4,442	0

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Fredlund,Daniel	73,429	3,025	266
Friess,Paul	71,629	6,402	253
Froelich,Judy	76,944	9,497	0
Fu,Anthony	95,619	18,602	700
Fylling,Robert Leith	73,201	2,996	0
Fyrk,Terry	71,558	4,528	0
Galbraith,Adam	88,181	5,156	0
Galloway,Shane I	70,476	4,625	70
Gelz,Earl Steven	80,475	9,390	0
Gilchrist,Robert	89,816	5,904	0
Gilfillan,Cindy	100,990	23,794	1,249
Gilfillan,Terry K	81,447	10,488	50
Gill,Raminder	83,581	5,157	0
Gillis,David M	92,960	4,817	878
Gillis,Kerry	78,611	7,735	156
Gillon,Robert	71,787	6,210	410
Glahn,Brad	89,654	4,955	0
Goddard,M. Elaine	104,590	9,086	1,093
Goll,Sharil	72,403	4,424	0
Gonzalez,Robert	211,039	83,630	7,155
Goshko,Gary	70,341	4,737	70
Graebel,Gordon	127,374	13,951	501
Graeme,Kirby	107,622	16,554	98
Graham,Ronald	70,141	12,399	60
Gray,Kevin Edward	116,121	22,713	2,175
Griffin,Kevin	87,254	5,153	198
Griffin,Michael	82,949	2,306	0
Grinberg,Rafail	73,108	4,749	0
Gronlund,Todd	89,324	5,298	1,283
Grover,Roger William	103,318	10,591	0
Grunlund,Darin Ashley	68,680	6,692	1,710
Gushel,Brad J	90,998	6,742	0
Guzzi,Brian	99,641	11,148	1,266
Hahn,Ruth H.S.	90,520	4,747	594
Halldorson,Arnie	87,570	6,767	247
Hamalainen,Juha	73,354	4,647	0
Hansen,Terry Donald	102,071	7,749	1,263
Harris,David	80,972	4,096	1,223
Harris,Douglas	103,296	7,165	0
Harris,Peter	74,221	6,413	0
Harrison,Anthony J	61,898	16,405	0
Heidrich,George	71,367	4,217	346
Heinrich,George	96,150	10,326	70

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Hemsted,Ron	104,109	9,204	0
Higgs,Levi	90,522	11,105	4,152
Hikida,Joanne	81,927	2,160	2,579
Hill,Alan	72,403	5,274	715
Hingorani,Sonali	99,490	20,271	701
Ho,Jason	86,841	13,938	527
Hoff,Paul	101,523	7,877	0
Hoff,Tresse	82,281	6,281	3,859
Hogan,Angela Jean	73,999	3,339	0
Hogg,Philip James	103,206	14,268	374
Hooker,Thomas	96,024	12,486	2,341
Howard,Justin Jay	73,201	2,972	0
Howe,Shawn	72,576	4,167	0
Howell,Kim	134,503	13,505	3,152
Huang,Louise	75,559	5,190	2,767
Hui,Ka Yi	87,357	3,316	0
Humhej,Jerry John	89,772	5,231	0
Hung,Edward H P	140,360	25,845	1,566
Hunter,Derek	96,577	13,775	70
Hyde,Tim	82,649	7,984	0
Ilott,Steve	69,491	5,754	152
Ince,David R	85,716	7,290	21
Irvine,Katherine	70,915	4,315	538
Irving,John D.	156,226	62,975	5,463
Isaac,Darryl	86,899	3,901	0
Isherwood,Ted	75,674	4,086	0
Isley,Dale	83,721	4,353	0
Ison,Marvin	82,045	3,699	0
Jacobo,Erwin	71,016	4,095	0
Jacques,Vernon	142,433	22,912	1,788
Jaggs,Gordon	99,480	23,145	680
James,Craig	72,373	4,417	80
Jameson,Marty	94,053	14,580	0
Jansen,R Peter	69,786	6,452	0
Jansen,Sandra	119,637	10,635	0
Jansson,Michelle	90,908	11,849	0
Jauk,Liesl	90,399	10,691	3,317
Jeffcoatt,Steven Paul	101,289	18,970	0
Jochimski,Walter	81,456	2,330	1,003
Johal,Bill	73,725	6,619	75
Johal,Jatinder	72,057	5,338	676
Johnson,David	80,120	5,687	0
Johnson,Thomas Andrew	103,918	9,560	0

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Johnson,Trevor William	121,181	11,676	0
Johnston,David W	113,899	11,749	1,308
Johnstone,Patrick	70,627	16,702	370
Jones,Alan	88,582	5,099	0
Jones,Debra	74,243	4,018	12
Jones,Karen E	84,600	3,296	0
Jorger,Ben	79,295	5,349	70
Kam,Richard	86,025	2,317	112
Karpun,Mark Edward	93,692	7,277	0
Karpun,Mike A	90,024	3,953	0
Keating,Roger	87,377	6,854	223
Keatley,Roger H	72,112	4,025	0
Keenan,Bernadette	71,096	4,090	874
Kelder,Randall M	105,614	11,218	1,526
Kelly,Michael J	93,117	5,644	0
Kenny,Richard	70,217	5,066	433
Kiesewetter,Harold Michael	106,310	23,943	0
Kinney,Gary	85,161	8,982	138
Kinsey,David P	102,371	11,435	0
Kirichuk,Iryna	86,182	4,757	0
Kita,Jason	98,897	11,809	2,504
Kivari,Mia	85,454	8,684	0
Klies,Grant Allan	100,760	16,287	0
Klomp,Frederik J	94,755	14,680	1,223
Knapp,Barry	103,352	5,740	0
Knowles,Thomas Edward	68,038	7,037	0
Kolb,Daniel	73,999	1,550	0
Kongus,Bryan	94,483	6,313	1,255
Konkin,Barry	93,441	6,475	0
Kopp,Brent D	97,312	4,516	1,223
Kube,Jennifer	86,652	14,477	282
Kulusic,Stephen	77,070	3,067	0
Kumagai,Karen	81,015	5,863	132
Kump,Will	72,403	4,421	13
Kurta,Ed	87,558	3,319	2,503
Lai,Emy	72,863	2,936	307
Lai,Victor	77,288	23,637	1,180
Laljee,Magda	78,197	5,968	185
Lamont,Ryan	106,448	10,073	0
Lannard,Kevin D	78,862	4,936	874
Lapalme,Karina	113,915	13,256	1,285
Larsen,John	73,999	1,543	310
Law,Randy G	101,724	12,220	0

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Lazar-Schuler,Christina	74,251	1,589	0
Lecy,Katherine	114,898	16,403	3,314
Ledezma,Gonzalo	82,608	4,097	1,223
Lee,Wun Fung	74,978	3,203	0
Lees,Brooke	72,553	6,684	220
Lehbauer,Jordan	83,182	10,318	46
Lei,Loletta	98,909	5,104	0
Leney,Kyle	88,944	5,159	0
Lentz,Douglas Warren	71,494	8,736	0
Lepine,Carol	73,999	1,544	1,389
Leung,May	140,360	11,245	3,206
Leung,Michael	69,218	5,872	0
Lewis,Arthur Michael	86,014	14,003	204
Lilova,Neonila	112,737	22,617	1,281
Lim,Derrick	103,235	12,006	57
Lim,Wesley	87,032	13,244	2,295
Lin,Fred	112,772	19,989	481
Lindenbach,Greg	88,255	8,387	0
Liu,Douglas	78,045	4,475	0
Liu,Marcus	90,712	5,132	0
Livingston,Steve R	87,758	5,574	0
Long,Doug	178,191	32,259	3,848
Loran,Gerry	75,229	5,202	0
Luk,Yun	75,910	1,721	840
Lusk,Serena	101,939	14,244	6,672
Ma,Cliff	85,316	3,554	0
MacDonald,David	128,589	11,637	214
Mack,Kelly	90,939	5,439	0
Mackie,Sue J	79,804	4,289	1,160
MacKinnon,Deb	89,065	18,758	0
MacLeod,Brian	84,615	3,560	0
MacNeill,Thomas Brian	88,671	4,038	1,525
MacPherson,Brian	72,694	2,945	585
Mah,Geoffry	87,464	2,176	0
Mahon,Steve	80,370	5,941	0
Makaoff,Frank	74,345	10,356	1,362
Manke,Gordon	77,269	3,479	0
Marion,John	75,779	8,038	0
Markova,Yelena	85,290	4,420	0
Martin,Paul	82,700	4,834	1,223
Massender,Ian	94,716	5,170	1,061
Matheson,Stephen Leslie	72,553	5,750	376
Maxwell,Mark	73,411	5,992	0

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Maxwell,Michael L.	101,231	5,351	143
Mayberry,Richard K B	80,839	5,070	138
McBride,David E	123,507	13,738	164
McCaffrey,John	104,961	8,706	0
McCall,Robert	80,899	1,771	116
McCullough,Charles M	102,470	9,028	50
McElgunn,Jennifer	84,540	2,306	520
McGee,David H	72,239	5,939	490
McGowan,William J	163,526	39,681	1,486
McGrath,Alan J	92,083	5,711	1,644
McKenzie-Cook,Christopher	85,368	12,638	691
McKnight,Bjarne	84,547	4,078	1,276
McLaughlin,W Glenn	124,914	21,755	5
McLeod,W Craig	81,270	5,347	0
McMillan,Richard	104,608	9,513	1,277
McMullen,Mark	105,912	16,137	723
McVea,Aidan M	101,756	6,817	0
Mearns,Jonathan	76,636	4,460	2,192
Medhurst,Colin	84,616	4,686	1,223
Melnychuk,John	78,862	6,169	252
Memon,Wasim	118,241	16,937	198
Mercer,Barry J	84,513	6,947	0
Metzak,Brian	86,973	4,094	0
Miller,Chad A	77,623	7,355	0
Miller,Courtney	78,251	3,846	1,315
Mitzel,Dale R	73,201	2,981	407
Mohan,Colin	105,537	9,795	0
Molema,Kenneth	87,618	7,519	147
Molina,Francisco	81,053	8,250	700
Monkman,Thomas William	105,956	10,680	0
Montague,Eli	70,395	5,674	70
Mora,Jamie	82,492	3,901	0
Morizawa,Paul I	69,787	5,629	725
Morris,Allen Jay	80,110	3,221	0
Moss,Kelly	82,715	8,818	0
Moxin,Greg Alan	77,476	4,563	395
Muir,Morgan	72,539	6,903	0
Mulder,Wilhelmus	102,972	12,574	85
Mullock,Kevin	98,599	7,237	0
Murray,Ken	89,165	1,965	0
Muter,Heather	73,810	3,860	392
Nagata,Darren	74,036	8,777	0
Nathorst,Dave	74,271	7,273	0

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Nazareth,Andrew	211,039	87,055	1,539
Neidig,Brad A	102,046	12,587	0
Newell,Allan D	84,872	5,210	0
Nikolic,Diana	89,919	4,121	516
Nishi,Ernest S	87,395	3,227	407
Nishi,Grant	74,258	1,554	24
Nolan,Mark	73,628	3,812	0
Northrup,Trevor	88,025	1,964	295
Nurse,Roy	82,618	4,849	0
Olson,Brandon	72,833	2,888	675
Olson,Norma	84,634	3,157	0
Ooi,Emily	73,732	5,323	586
Orr,Richard Edward	77,343	4,361	0
Ostafiew,Alan D	84,961	6,258	0
Owens,David Michael	78,111	5,810	195
Paller,Elena	94,450	6,883	353
Palliser,Howard	72,403	5,163	0
Pankratz,Caitlyn	73,437	1,750	0
Parhar,Gurdawar	82,050	2,501	80
Parker,Cory Dean	104,885	17,214	0
Patkau,Brad	90,646	5,156	1,338
Pearson,Sandra L	82,464	3,657	0
Pellant,Mike	156,222	52,436	414
Penney,Daniel	84,474	2,306	0
Peppler,Reginald G	40,677	49,061	0
Perkins,Michael	90,179	5,157	107
Petraschuk,Douglas A	106,491	10,961	0
Phi,Thanh	72,766	5,748	137
Pighin,Darren	83,156	5,155	0
Piluso,Riccardo	92,183	6,285	449
Pinkney,Jason	83,909	23,554	85
Pitts,Dermott	90,466	16,529	215
Pollock,Alistair M	71,006	6,415	478
Pommier,Lionel Jay	86,428	5,564	151
Popescu,Marius	79,198	3,767	550
Portelance,Joel Eric	71,047	5,073	0
Postolka,Alen	107,663	10,652	4,489
Powell,Gavin	72,586	3,245	0
Poxon,Gerald	84,005	6,987	0
Price,Peter	128,957	18,210	0
Priest,Stephen	89,668	11,180	321
Procter,Deborah	100,275	10,395	400
Protz,Gregory A	89,055	6,173	0

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Purver,William H.	87,500	1,840	0
Qaddoumi,Hikmat	99,961	10,347	148
Racic,Mile	89,876	13,888	80
Rattan,Amarjeet	141,375	25,921	5,945
Redlinski,Jacek	78,863	6,267	577
Redpath,Michael	133,903	24,409	8,936
Redzic,Vesna	86,018	4,446	0
Rempel,Donald	73,201	2,985	407
Rende,Michael	90,872	7,681	59
Renwick,Rick	106,053	24,391	0
Richards,David Bruce	82,689	8,283	120
Ricketts,Terry	75,032	1,444	0
Roberts,Lance	72,504	3,435	1,265
Robles,Miguel	70,953	4,312	0
Robson,Mark	81,608	4,834	1,223
Rocha,Carlos	82,511	6,570	119
Rodriguez,Edgar	82,570	5,735	0
Romanas,Amy	73,635	5,017	479
Rowley,Darren	86,630	8,818	0
Russell,Paul	86,739	5,429	1,716
Russell,Peter	78,477	9,251	867
Ryle,Brendan	73,383	3,325	525
Sage,Barbara	140,138	19,956	3,404
Saggers,Paul	79,089	6,310	582
Saito,Aaron	88,672	5,157	0
Sakai,Ross	74,056	5,043	1,247
Salmasi,Kamran	79,903	4,882	37
Salzl,Maria	100,137	9,855	252
Samson,Brent	83,031	5,690	0
Sangha,Rajvinder	84,315	7,651	1,273
Saunders,Ron	75,006	5,601	0
Savoie,Gilbert	72,422	5,109	0
Sayson,Aida Co-Hee	103,276	32,594	32
Sayson,Alexander	88,067	1,995	0
Schell,Terry Peter	104,751	12,620	402
Schlossarek,Teresa	76,799	1,562	0
Schouten,Stacey	84,151	3,686	0
Schroeder,Scott	82,361	4,625	172
Schultz,Jeremy	86,738	4,276	0
Schultz,Susan Leilani	156,226	27,568	4,667
Sciberras,Francis G	86,857	3,266	0
Scott,Douglas V	106,017	15,204	0
Scyebel,Robert George	81,875	11,106	0

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Seibel,Daniel Dennis	72,994	4,424	602
Selinger,Edward A	88,903	6,166	1,349
Sellers,J Larry	74,245	11,775	0
Selver,Deanna	76,162	1,786	605
Semple,David C	199,208	45,691	9,445
Shapiro,David	105,791	7,532	0
Shaw,John	83,384	6,641	0
Shepherd,Bryan A	94,601	8,673	373
Sheridan,Conor	72,254	6,925	1,663
Sherlock,Lesley	90,210	11,350	939
Shum,Chi Ting	90,238	14,243	0
Sihoe,Clarence	87,036	4,699	0
Sikora,Rose	76,199	11,703	487
Simas,Antonio	85,868	8,269	1,981
Simkin,Eric	84,150	3,621	1,223
Simmons,Norman	68,487	7,774	0
Simpson,Peter J	39,709	75,613	0
Sinclair,Karen L	77,209	4,191	0
Smith,Colleen	72,410	4,066	1,022
Smith,Mark	89,481	5,154	1,268
Smith,Michael	84,943	4,096	1,223
Somerville,Kim M	102,749	14,321	2,175
Sparolin,Eric	99,904	18,160	751
Standerwick,Jeffrey	89,935	9,819	1,223
Stene,Ryan	88,861	5,156	1,261
Stevens,Anne	126,132	21,541	130
Stewardson,Kevin	88,167	10,592	1,381
Stewart,Tom	150,585	46,808	558
Stich,Yvonne	88,258	4,483	218
Stock,Dennis	82,561	5,723	0
Stock,John M	71,008	5,571	0
Stockdale,Todd	81,548	4,096	1,223
Stocking,Nicole	76,118	2,179	67
Stoliker,Ronald	99,508	11,806	51
Stowe,Syd	100,137	10,413	3,782
Stratuliak,John Clarence	72,375	5,538	0
Sung,Paul	113,383	16,552	1,101
Sutton,Stuart	95,370	20,938	2,724
Swanigan,Sandra	98,677	14,555	208
Swift,Brad D	95,860	6,181	0
Tack,Troy	37,753	43,957	0
Tait,Jim	113,805	13,233	1,962
Tait,Kyle	83,858	4,097	1,223

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Talmey Jr,Patrick	95,901	7,431	195
Talmey,Paul Kelly	102,245	6,918	0
Tambellini,Denise	94,838	19,464	264
Tanaka,Martin M	10,634	72,490	0
Tarr,Christopher	84,889	9,611	0
Taylor,Kirk	99,325	11,916	825
Taylor,Mervyn	77,176	2,069	0
Tellis,Peter	82,314	6,736	10
Teo,James	91,898	4,347	86
Tetlock,Dan	99,006	6,476	70
Thandi,Neera	84,181	6,232	888
Thibodeau,Jon	83,814	3,402	0
Thomas,Bryan	71,663	4,589	0
Thomas,Cindy	99,505	9,809	380
Thomas,Marianne	94,509	9,779	1,093
Thornley,Rich	97,682	7,062	0
Thorsteinson,Jordan	99,447	13,259	2,414
Tikanmaki,Anna	88,250	9,264	275
Tillyer,Steve	91,934	11,430	48
Timmons,Mark	71,255	9,326	485
Toda,Richard K	102,773	10,660	12
Toews,Curt	79,187	4,794	970
Tompkins,Lucy	66,806	23,469	491
Townsend,Ted	140,360	16,367	3,035
Townsley,Gail	92,180	3,751	1,423
Turick,Renata	73,999	1,540	80
Ubial,Jessie F	77,868	1,625	114
Vallance,Scott	72,564	4,144	0
Van Bruksvoort,Alex W	97,239	8,571	0
Van Den Boogaard,Leonardus	118,889	19,122	1,273
Varley,Sue	82,428	4,964	1
Vaughn,Jerret	87,492	3,562	1,266
Veerman,Maarten	139,234	18,019	3,350
Villaluz,Jaime	78,150	5,391	691
Vrakela,Ivana	88,445	1,825	3,843
Vrba,Karol	86,956	3,913	0
Vrooman,Rowan	90,966	4,966	0
Wahl,Kevin E	95,671	8,088	0
Walker,Wesley	85,883	14,888	50
Wall,Anthony	86,903	4,856	0
Walters,Bryan	87,936	5,749	0
Warkentin,Daryle Dean	102,733	11,396	0
Warren,Darren	79,048	4,967	411

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

Employee Earnings In Excess of $75,000 And Related Expenses for 2013

NAME	BASE SALARY	BENEFITS & OTHER[1]	EXPENSES
Warzel,Edward Brian	103,071	12,610	453
Weber,David	149,185	25,326	690
Wei,Victor	149,093	23,560	2,982
Weissler,Forrest	96,417	12,953	1,486
Wellsted,Darryl	93,506	3,603	4,689
Welsh,Michael	85,958	5,158	0
Weststrate,Jason Campbell	70,932	5,613	52
Wheeler,Gregg	90,948	11,419	2,223
White,Simon J	91,972	10,046	0
Whitty,Cheryl Ann	70,244	6,999	771
Whitty,Robert	86,501	5,158	0
Whyman,William	86,565	7,014	1,225
Wild,Danyon	106,445	6,837	77
Wilke,Steve	72,877	9,406	150
Wilkinson,Timothy J G	137,048	32,615	6,678
Williams,Steve J	102,324	12,882	0
Wilson,Larry	70,617	4,986	60
Wong,Ivy	114,751	14,480	920
Wong,Kenneth	73,999	1,561	0
Wong,William	83,037	4,417	0
Woo,Gavin	141,072	14,551	1,386
Wright,Nora Ann	67,805	16,129	935
Wyatt,Sail	71,332	13,555	0
Wyenberg,Grant	102,718	7,481	1,355
Wynne,Philip	89,872	6,953	328
Yang,Judy	73,323	2,990	874
Yee,Stephen	71,183	5,573	302
Yee,Wayne	87,156	14,821	750
Yeung,Yuen Tung	72,403	4,417	407
Yoo,John	85,292	3,671	0
Young,Jim	140,983	13,318	1,226
Younis,Munkith	105,044	6,061	680
Zanardo,Angela	81,366	12,911	1,057
Zukowsky,Doug	75,273	5,900	430
Number of Employees - 593	$ 53,576,148	$ 5,850,672	$ 400,800

1. Consists of taxable benefits (ie. MSP, group life, and vehicle) and lump sum payments, including for example, leave balance payouts (ie. banked vacation, gratuity, and overtime).

CITY OF RICHMOND
SCHEDULE OF REMUNERATION AND EXPENSES

Grand Total For 2013

NAME	No. of Employees	REMUNERATION*	EXPENSES
Employees Over $75K	593	59,426,821	400,800
Employees Under $75K	1,387	48,742,685	116,023
Grand Total	1,980	$ 108,169,506	$ 516,823

* Combines salary, taxable benefits, and other lump sum payouts

RICHMOND PUBLIC LIBRARY
SCHEDULE OF REMUNERATION AND EXPENSES FOR 2013

Schedule 1 - Board of Trustees

NAME	No. Of Board Trustees	REMUNERATION	EXPENSES
Kafka, Peter	Chair		1,870
Tang, Simon	Vice-Chair		2,620
Barnes, Linda	Councillor		0
Bostwick, Mark	Trustee		0
Cuenca, Dulce	Trustee		368
Cousar, Diane	Trustee		196
Khangura, Sanjiv	Trustee		196
Koch, Susan	Trustee		2,127
Watson, Pat	Trustee		420
	9	$ -	$ 7,796

Schedule 2 - Employees Earnings in Excess of $75,000

NAME	No. of employees	REMUNERATION*	EXPENSES
Buss,Gregory A.		178,376	2,037
Civkin,Shelley		78,830	152
Ellis,J.Mark		109,907	1,504
He,Ping		83,074	250
Jang,Wendy		81,889	47
Rahman,Shaneena		76,335	1,726
Smith,Lee Anne		84,469	304
Walters,Susan		121,964	2,780
	8	$ 814,846	$ 8,800
Employees Less Than $75,000			
	140	$ 4,673,631	$ 2,896
Grand Total	148	$ 5,488,477	$ 11,696

* Combines salary, taxable benefits, and other payouts

There were 2 severance agreements between the City of Richmond and its employees during 2013

These agreements represent 7 weeks to 8 months of salaries.

CITY OF RICHMOND
SCHEDULE OF REMUNERATION AND EXPENSES
For the year ended December 31, 2013

Reconciliation of Remuneration to Financial Statements

Total Remuneration Per Section 6 - Schedule of Remuneration and Expenses:	**2013**
Elected Officials	$594,002
Employees - City of Richmond	$108,169,506
Employees - Richmond Public Library	$5,488,477
	$114,251,985
Total Salaries Per Financial Statements	
Wages and Salaries	$135,465,533
Capital Programs and Billings	$6,546,936
	$142,012,469
Less Employer share of non-taxable payroll remittances (City)	($18,421,421)
Less Employer share of non-taxable payroll remittances (Library)	($1,165,528)
Less 2013 payroll accrued in financial statements paid in 2014	($3,740,290)
Plus 2012 payroll accrued in financial statements paid in 2013	$4,062,343
Less 2013 payroll accrued liabilities in financial statements	($31,760,258)
Plus 2012 payroll accrued liabilities in financial statements	$29,977,547
Deduct Richmond Olympic Oval Corporation salaries	($6,712,878)
Deduct Lulu Island Energy Company Ltd salaries	$0
	$114,251,985
Difference	$0

CITY OF RICHMOND

Statement of Payments to Suppliers For Goods and Services

In Excess of $25,000 in 2013

PAYMENTS	Amount
1832 Asset Management LP	30,000
3M Canada Company	31,342
A R Mower & Supply Ltd	87,043
Acklands - Grainger Inc	380,979
Acom Building Maintenance Ltd	27,421
Active Network, Ltd	129,305
AECOM Canada Ltd	119,506
Airon Heating & Air Conditioning Ltd	662,765
AMEC Environment & Infrastructure	44,674
Andrew Sheret Ltd	504,079
Andrews Architects Inc	45,016
Anigraph Productions Limited	205,985
Annex Consulting Group Inc	125,940
Aon Reed Stenhouse Inc	1,189,011
Apex Communications Inc	89,759
Aplin & Martin Consultants Ltd	137,734
Arcturus Realty	60,550
Armtec Limited Partnership	27,794
Arpac Storage Systems Corporation	61,000
Ashton Mechanical Ltd	182,860
Ashton Service Group Ltd	3,289,810
Associated Engineering (BC) Ltd	48,418
Associated Fire and Safety	115,490
Atlas Power Sweeping Ltd	57,217
BC Assessment*	4,902,994
BC Hydro	3,502,594
BC Libraries Cooperative	87,776
BC Life & Casualty*	813,143
BC Plant Health Care Inc	102,221
BCD Holdings Ltd	46,959
BD Hall Constructors Corp	47,700
Beyond Tech Solutions	107,503
BFI Canada Inc	104,641
Birmingham & Wood Architects & Planners	76,658
Black Press Group Ltd	164,556
Blanchette Press	40,050
Bowden, Tony	41,870
Brock White Canada Company, LLC	28,117
Brookshaw Electrical Installations Ltd	112,643
BTY Group	37,450
Canada Post Corporation	154,910
Canada Revenue Agency*	31,139,411
Canada Safeway Limited	33,323
Canada Savings Bonds*	578,332
Canadian Linen Supply	57,909
Canadian National Railway Company	55,118
Cannon Design Architecture Inc	172,243
Cansel Survey Equipment	42,835
Canuel Caterers	45,199
Cascadia Sport Systems Inc	407,302
Cat Rental Store	61,291
CDC Construction Ltd	132,997
CDW Canada	106,085
CEI Architecture Planning Interiors	64,258
Centro Ovalsquare Development Ltd	27,407

* Payments include tax transfers and third party remittances.

CITY OF RICHMOND

Statement of Payments to Suppliers For Goods and Services

In Excess of $25,000 in 2013

PAYMENTS	Amount
Chase Paymentech	258,778
Chevron Canada Ltd	1,879,478
Chinese InforMedia Consulting Group Inc	89,061
Churchill Armoured Car Service Inc	33,666
Cimco Refrigeration	95,359
City of Vancouver	1,691,578
City Spaces Consulting Ltd	119,045
Cleartech Industries Inc	110,620
Cobra Electric Ltd	1,429,162
Coencorp Consultant Corporation Inc	64,153
Cold Fire Fire Prevention Inc	39,543
Columbia Bitulithic Ltd	535,049
Columbia Fuels	28,578
Combined Painting (1985) Ltd	50,989
Commercial Aquatic Sup	28,985
Commercial Industrial Residential	74,891
Commercial Lighting Products Ltd	304,732
Conquest Sales & Rentals	30,775
ContainerWest	34,750
Coriolis Consulting Corp	46,620
Corix Utilities Inc	325,606
Corix Water Products Limited Partnership	100,860
Cover Star Structures Ltd	31,180
Crease Harman LLP In Trust	294,600
Creative Door Services Ltd	52,064
Crighton, El	33,542
CSDC Systems Inc	97,778
Cullen Diesel Power Ltd	110,403
CUPE 394*	544,123
CUPE Library 3966*	191,650
CUPE Local 718*	757,618
Cushman & Wakefield Ltd	62,475
CVS Midwest Tape	99,534
D Jensen & Associates Ltd	44,933
D Litchfield & Co Ltd	127,763
Davis LLP	178,523
DB Perks & Associates Ltd	91,757
Deanne Achong or Faith Moosang	62,911
Dekra-Lite	42,427
Delcan Corporation	685,037
Dell Canada Inc	217,472
Dexter Consultants (514351 BC Ltd)	75,900
Diamond Head Consulting Ltd	50,556
Dillon Consulting	34,583
Direct Energy Marketing Ltd	607,128
Direct Equipment West Ltd	41,587
Directional Mining & Drilling Ltd	264,575
Don Dickey Supplies	54,676
Dorset Realty Group Canada Ltd	62,075
Douglas Lake Equipment Ltd	105,135
DreamRider Theatre	30,800
Dueck Lansdowne Pontiac Buick Cadillac	217,650
Dynamic Facility Services Ltd	189,263
Dynamic Specialty Vehicles Ltd	126,892
E B Horsman & Son Ltd	69,630

* Payments include tax transfers and third party remittances.

CITY OF RICHMOND

Statement of Payments to Suppliers For Goods and Services

In Excess of $25,000 in 2013

PAYMENTS	Amount
East Richmond Nurseries	78,424
EBB Environmental Consulting Inc	47,745
E-comm,Emergency Communications for SWBC	3,125,581
Econolite Canada Inc	331,554
Ecowaste Industries Ltd	173,505
ECS Electrical Cable Supply Ltd	35,600
Eecol Electric Corp	63,026
Eltec Elevator Ltd	68,934
Entech Environmental Consutlants Ltd	46,729
Escape Fire Protection Ltd	175,768
ESRI Canada Ltd	126,125
Extreme Glass Ltd	28,450
Faster Asset Solutions	57,141
Federation of Canadian Municipalities	29,196
Finning (Canada)	510,928
First Truck Centre Vancouver Inc	416,893
Fishbone Etc Design	33,991
Flocor Inc	110,973
FortisBC - Natural Gas	371,395
Frances Andrew Site Furnishings Ltd	33,512
Fraser Richmond Soil and Fibre Ltd	642,024
Fraser Valley Equipment Ltd	31,792
Fred Surridge Ltd	1,405,489
G B Bobcat Service	113,871
G P Rollo & Associates Ltd	32,939
General Paint Corp	91,053
Genesis Integration Inc	59,239
Geo Scientific Ltd	59,575
Gladiuk Contracting Ltd	194,835
Global Risk Innovations	39,600
Golder Associates Ltd	39,010
Gordian Group Inc	128,391
Govan Brown Szeto Construction Managers	42,243
Graham Hoffart Mathiasen Architects	101,726
Greater Vancouver Regional District*	25,912,385
Greater Vancouver Water District	20,294,462
Guillevin International Inc	39,601
GWG Rentals Ltd	35,541
Habitat Systems Inc	198,870
Hapa Landscape Architecture Collaborativ	138,206
Harbour International Trucks	27,562
Harper Grey LLP	25,327
Harris & Company	292,839
Heritage Office Furnishings Ltd	504,028
Hexcel Construction Ltd	1,573,025
Hilton Industrial Design	29,853
Holland Imports Inc	27,593
Home Depot	37,952
HR Architects	36,189
Hrynyk, Doug	36,155
Hughes Condon Marler: Architects	152,723
IBI Group	107,374
IDR Commercial Construction	28,545
Impact Ironworks Ltd	63,700
Imperial Paving Ltd	4,591,177

* Payments include tax transfers and third party remittances.

CITY OF RICHMOND

Statement of Payments to Suppliers For Goods and Services

In Excess of $25,000 in 2013

PAYMENTS	Amount
Imperial Paving Ltd (Unit Pricing)	31,320
Infor (Canada), Ltd	94,376
Inprotect Systems Inc	59,602
Intercontinental Truck Body (BC) Ltd	71,855
International Web exPress	40,961
Interprovincial Traffic Service Ltd	351,241
Intrepid Security	90,199
Ironwood Developments	143,892
ISL Engineering and Land Services Ltd	38,076
Island Key Computer Ltd	98,242
Jacob Bros. Construction Ltd	1,473,988
James, Erick	113,496
Jego, Miyouki	42,111
JSP Enterprises	29,132
Justice Institute of B C	76,845
JW Lees Law Corporation	39,638
Kal Tire	177,962
Kay, Lydia	25,360
Kerr Wood Leidal Associates Limited	81,523
Kokanee Enterprises Ltd (HEQ)	58,161
Konica Minolta Business Solutions	74,967
KPMG LLP	141,173
Kronos Canadian Systems Inc	57,068
Kutny's Richmond Soils (Unit Pricing)	41,086
Kwan, Tommy	25,430
L & L Travel Management Ltd	41,813
L. Parker Consulting Services Inc	27,358
Lafarge Concrete Ltd	270,076
Lando & Company LLP In Trust	881,786
Layfield Inc	90,523
Leavitt Machinery	65,264
Levelton Consultants Ltd	99,060
Library Bound Inc	693,805
Lincor Enterprises Ltd	41,682
LIT Aquatics Ltd	161,074
LMN23 Interactive Structures	90,000
London Drugs (Horseshoe Place)	58,144
Lordco Parts Ltd	145,435
MacAulay Trucking Ltd	179,040
MailChannels Corporation	37,000
Mainland Sand & Gravel Ltd	631,164
Mainroad Lower Mainland Cont	89,649
Mainroad Maintenance Products	67,282
Manulife Financial	136,745
Maple Leaf Tree Movers	43,799
Maple Ridge Chrysler	169,613
Marine Repair & Maintenance	105,327
Matakana Scaffolding BC Inc	27,720
Maydanyk Trucking Ltd	43,429
Mc Squared System Design Group Inc	39,590
McElhanney Consulting Services Ltd	27,091
McKinney Bulldozing Ltd	44,160
McRae's Environmental Services Ltd	901,790
Medical Services Plan*	1,445,390
Mercedes-Benz Canada Inc	135,586

* Payments include tax transfers and third party remittances.

CITY OF RICHMOND

Statement of Payments to Suppliers For Goods and Services

In Excess of $25,000 in 2013

PAYMENTS	Amount
Merletti Construction (1999) Ltd	1,144,515
Metro Motors Ltd	355,258
MFA*	85,981
Mickelson Consulting, Inc	158,763
Mills Printing & Stationery Co Ltd	326,953
Minister of Finance*	85,033
Minoru Seniors Society	45,896
MNA Distribution Inc	46,498
Morph Industries Ltd	59,900
Mortal Coil Performance Society	124,622
Mountain Interactive Inc	70,463
Mundie Trucking	68,490
Municipal Insurance Association of BC	1,083,282
Muncipal Pension Plan*	18,299,424
Murdy & McAllister Barrister & Solicitor	30,300
NAPA Auto Parts	65,443
NAS Recruitment Communications	43,687
Nedco	55,703
Neptune Technology Group (Canada) Ltd	976,681
New Line Products Ltd	27,676
Northwest Tech-Con Systems Ltd	59,880
Nu-Gro Ltd	88,593
Nutech Facility Services Ltd	90,580
Ocean Pipe	49,466
Open Text Corporation	451,800
OPUS DaytonKnight Consultants Ltd	344,055
Oracle Canada ULC	356,265
Orbis Canada Limited	32,181
Oris Geo Energy Ltd	28,873
OverDrive Inc	89,623
P D Trucking	106,972
Pacific Blue Cross*	3,291,323
Pacific Cutting and Coring Ltd	176,723
Pacific Fasteners Ltd	60,927
Pacific Flow Control Ltd	35,324
Parkwood Construction Ltd	126,717
Paul Sahota Trucking	62,410
Penta Builders Group	923,272
Performance Contracting Ltd	1,623,654
Performance Objects	28,500
Personnel Department	55,960
Philips Lumec	40,121
Phillips Farevaag Smallenberg	30,414
PJS Systems	147,597
Plan Group	134,413
Planet Clean	322,092
Postage By Phone	94,000
PPC Worldwide Canada EAP Services Ltd	79,981
PrairieCoast Equipment	47,329
Precise Parklink Inc	28,566
Premier Security Inc	29,209
Pro Active Hazmat and Environmental	34,900
Pro-Can Construction Group Corp	197,393
Procom Consultants Group Ltd	31,304
Profire Emergency Equipment Inc	73,694

* Payments include tax transfers and third party remittances.

CITY OF RICHMOND

Statement of Payments to Suppliers For Goods and Services

In Excess of $25,000 in 2013

PAYMENTS	Amount
Public Library Interlink	69,252
Purtech Service Group Inc	32,581
PVL Projects	119,896
PW Trenchless Construction Inc	391,067
PWL Partnership Landscape Architects Inc	92,194
Quest Software, Canada	50,838
R F Binnie and Associates Ltd	30,919
Raja Trailer & Equipment Sales Ltd	71,536
RCMP - E Division FSS	226,743
Rec Gen for Canada (E Division FSS)	58,649
Rec Gen for Canada (Industry - Radio)	27,137
Rec Gen for Canada (RCMP-ONT)	33,181,451
Recorded Books Inc	72,673
Rectec Industries Inc	75,397
RGC Trucking & Excavating	29,887
Rhino Print Solutions	51,369
Richmond Animal Protection Society	423,584
Richmond Art Gallery Association	35,377
Richmond Chamber of Commerce	68,118
Richmond Firefighter Assn IAFF Local1286*	439,159
Richmond Fitness & Wellness Assocation	178,205
Richmond News	32,927
Richmond Olympic Oval	3,574,700
Richvan Holdings Ltd	233,348
Ricoh Canada Inc	223,006
Riverport Business Park Portfolio Inc	3,414,806
River Road Investments Ltd	47,730
Rod's Building Supplies Ltd	167,484
Rogers Wireless Inc	28,479
Rollins Machinery Ltd	46,513
Royal City Fire Supplies Ltd	70,908
Ruth Beer & Charlotte Wall Studio	26,950
Safe & Sound Security Systems Ltd	161,758
Sandhu, Dalip	64,390
Sandpiper Contracting Ltd	393,871
Scada Controls Central Ltd	41,850
Scalar Decisions Inc	48,813
School District 38 Richmond*	109,893,381
Scotia Asset Management LP	139,675
Scotia Cassels	98,016
Scott Special Projects Ltd	906,455
Scottish Line Painting Ltd	38,147
Selectron Technologies Inc	28,420
ServiceMaster Clean	61,531
Shaw Business Solutions Inc	29,810
Sherine Industries Ltd	25,020
Sidhoo Trucking Ltd	89,724
Sierra Waste Services Ltd	7,666,357
Simson-Maxwell	58,146
Sino United Publishing (Canada) Ltd	85,542
SmartEdge Networks Inc	240,895
Smith Bros & Wilson (BC) Ltd	765,250
Smithrite Disposal Ltd	101,989
Smithrite Portable Services Ltd	34,804
SoftChoice Corporation	148,794

* Payments include tax transfers and third party remittances.

CITY OF RICHMOND

Statement of Payments to Suppliers For Goods and Services

In Excess of $25,000 in 2013

PAYMENTS	Amount
South Arm Contracting Ltd	229,339
South Arm Excavating	215,148
Spears Sales & Service Ltd	25,778
Sportstown BC Operations Ltd	199,662
SSQ Insurance Company Inc*	40,068
Stage 3 Renewables Inc	81,715
Stantec Consulting Ltd	69,158
Stefan, Fraser and Associates Inc	50,840
Steveston Community Society	25,513
Streamline Fencing & Contracting Ltd	130,097
Stuart Olson Dominion Construction Ltd	1,628,152
Summit Valve & Control	29,575
Sun Life Financial*	30,970
Sustainable Strategies	25,848
Switch United Design Incorporated	47,027
T M Johnston Gradall Ltd	192,028
TaLedi Distribution	69,693
Targa Contracting Ltd	999,818
TEC Floor Coverings Ltd	39,838
Telus Communications	513,901
Telus Mobility	332,767
Telus Services Inc	103,790
Tempest Development Group Inc	250,453
Textile Image Inc	36,340
Thomas Trucking	76,424
TLD Computers Inc	52,619
Tourism Richmond*	2,562,445
Traffic Pro Services	68,193
Trane Canada	132,798
Translink*	32,744,736
TRB Architecture and Interior Design Inc	105,328
Tremco A Division of RPM Canada	89,612
Twining Short & Haakonson " In Trust "	75,000
UBCM*	113,022
UCS Group	37,500
Ulmer Contracting Ltd	456,548
Unilytics Corporation	29,053
United Library Services Inc	80,243
United Rentals	39,829
United Way of The Lower Mainland*	38,552
Urban Agriculture Consulting Inc	25,624
Valkyrie Law Group LLP	133,391
Valmont West Coast Engineering	91,610
Vancouver Coastal Health Authority	223,924
Vancouver Fraser Port Authority	131,617
VFA	73,130
Vimar Equipment Ltd	374,899
VTLS, Inc	46,485
Walker's Gradall Services Ltd	330,057
Watson, Morley	37,467
Wesclean Equipment & C	28,849
Wesco Distribution Canada Inc	104,363
West Coast Electric Ltd	33,479
West Coast Engineering Group	39,994
Westburne Supply (BC)	28,581

* Payments include tax transfers and third party remittances.

CITY OF RICHMOND

Statement of Payments to Suppliers For Goods and Services

In Excess of $25,000 in 2013

PAYMENTS	Amount
Westcoast Drainage & Contracting	151,918
Westvac Industrial Ltd	88,684
Westview Sales Ltd	165,723
Westwind Greenhouses	29,514
WFR Wholesale Fire & Rescue Ltd	208,968
Wilco Civil Inc	865,914
Wong's Greenhouse	33,672
WorkSafe BC	1,654,760
World Water and Wastewater Solutions Ltd	35,370
Xinhua Bookstore (Canada)	54,415
Xylem Canada Company	154,378
Young, Anderson Barristers & Solicitors	66,340
Zenith Appraisal and Land Consulting Ltd	60,404
Payments > $25,000	$ 381,833,312
Consolidated Payments < $25,000	$ 9,592,267
	$ 391,425,579

* Payments include tax transfers and third party remittances.

Grants and Subsidies	Amount
Alzheimer Society of B C	2,040
Arthritis Society BC & Yukon Division	1,250
BC Children's Arts & Literacy Centre	10,000
Big Brothers of Greater Vancouver	4,500
Big Sisters of BC Lower Mainland	4,500
Boys & Girls Clubs of South Coast BC	2,500
Brighouse United Church	4,969
Canadian Mental Health Assoc (Richmond)	34,000
Canadian Mental Health Association	5,000
Canadian Red Cross Society	4,400
CHIMO - Crisis Services	47,000
Chinese Cultural Centre of Greater	500
Chinese Mental Wellness Association	8,874
Cinevolution Media Arts Society	10,000
City Centre Community Association	45,288
East Richmond Community Association	6,723
Family Integration & Resource Support	1,530
Family Services of Greater Vancouver	46,600
Gulf of Georgia Cannery Society	1,000
Hamilton Community Association	30,354
Heart of Richmond Aids Society	10,200
Integration Youth Services Society	3,213
KidSport Richmond	9,700
Minoru Seniors Society	2,500
Multicultural Helping House Society	8,160
Richmond Addiction Services Society	198,377
Richmond Agricultural & Industrial	11,000
Richmond Amateur Radio Club	1,500
Richmond Art Gallery Association	5,000
Richmond Arts Coalition	3,600
Richmond Bethel Church	2,500
Richmond Carefree Society	5,000
Richmond Centre for Disability	120,586
Richmond Chinese Community Society	3,000
Richmond City Centre Community Assn	10,700
Richmond Community Band Society	3,600
Richmond Community Orchestra & Chorus	10,000
Richmond Family Place Society	24,000
Richmond Fitness & Wellness Association	7,000
Richmond Food Security Society	4,080
Richmond Gateway Theatre Society	1,003,812
Richmond Hospice Association	7,000
Richmond Mental Health Consumer	3,570
Richmond Multicultural Community	10,200
Richmond Museum Society	1,600
Richmond Music School Society	10,000
Richmond Potters' Club	3,000
Richmond Poverty Response Committee	5,000
Richmond Singers	1,500

Grants and Subsidies	Amount
Richmond Society for Community Living	25,172
Richmond Therapeutic Equestrian Society	56,400
Richmond Weavers & Spinners Guild	1,900
Richmond Women's Resource Centre	15,300
Richmond Youth Choral Society	9,900
Richmond Youth Services Agency	12,500
Sea Island Community Association	5,968
Society of Richmond Children's Centres	5,104
St Albans Anglican Church	9,000
Steveston Community Society	50,000
Tapestry Christian Preschool Society	8,310
Textile Arts Guild of Richmond	5,600
The Community Arts Council of Richmond	9,100
The Kehila Society of Richmond	500
The Sharing Farm Society	1,000
Touchstone Family Association	99,000
Turning Point Recovery Society	5,750
Vancouver Cantonese Opera	3,000
Vancouver Tagore Society	3,000
Volunteer Richmond Information Services	47,230
Grand Total	$ 2,134,161

CITY OF RICHMOND
SCHEDULE OF PAYMENTS TO SUPPLIERS FOR GOODS AND SERVICES
For the year ended December 31, 2013

Reconciliation of Payments for Goods and Services to Financial Statements

Total payments to Canadian & US Suppliers (Section 7)	$391,425,579
Total expenditures per Financial Statements (Statement of Revenue and Expenditures)	$327,759,000
Repayment of Debt and Capital Lease Obligations	$2,480,000
Items included in financial statements but not in Section 7:	
Salaries and benefits per Section 6	($135,466,000)
Amortization of Tangible Capital Assets	($50,334,000)
Oval Expenses	($3,486,000)
Loss (Gain) on disposal of tangible capital assets	($434,000)
Grants and Subsidies	($2,134,161)
Employee Expense Reimbursements	($340,133)
2013 Accounts payable and accrued liabilities	($83,146,000)
Items in Section 7 but not included in expenditures in the financial statements:	
2012 Accounts payable and accrued liabilities	$75,325,000
2013 Capital Acquisitions (net of capital salaries and transfers)	$43,529,006
Oval Transfer	$3,574,700
Change in prepaid expenses	$360,000
Change in inventories of supplies	$87,000
Payroll Related Remittances	$38,897,577
Items in Section 7 - 3rd party remittances and transfers not included in expenditures in the financial statements	
Tourism Richmond	$2,562,445
School District 38 Richmond (Site Acquisition Fees)	$799,188
Metro Vancouver Sewer DCCs	$1,899,169
Items in Section 7 - tax transfers not included in expenditures in the financial statements:	
School District 38 Richmond	$109,094,193
Translink	$32,727,052
Metro Vancouver - Property Tax Payment	$4,268,489
Metro Vancouver - Sewer/Debt Levy/GVSDD	$18,233,853
Metro Vancouver - PILT Grants in lieu of Taxes	$186,615
Metro Vancouver - GRS	$33,788
BC Assessment Authority	$4,902,994
Minister of Finance - Home Owner Grant	$30,608
Municipal Finance Authority (MFA)	$15,198
	$391,425,579
Difference	$0

City of Richmond

Bylaw 9028

Richmond Zoning Bylaw 8500
Amendment Bylaw 9028 (RZ 13 - 631467)
6433 Dyke Road

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

1. Richmond Zoning Bylaw 8500, as amended, is further amended by:

   i. Inserting the following after Section 16.3:

16.4 Heritage Two-Unit Dwelling (ZD4) – London Landing (Steveston)

16.4.1 Purpose

The **zone** provides for a heritage-style two-unit **dwelling**.

16.4.2 Permitted Uses

- **housing, two-unit**

16.4.3 Secondary Uses

- **boarding and lodging**
- **home business**

16.4.4 Permitted Density

1. The maximum **density** is one **two-unit housing** unit.
2. The maximum **floor area ratio** is 0.70, together with 0.1 **floor area ratio** which must be used exclusively for covered areas of the **principal building** which are open on one or more sides.

16.4.5 Permitted Lot Coverage

1. The maximum **lot coverage** is 50% for **buildings**.
2. No more than 80% of a **lot** may be occupied by **buildings, structures** and **non-porous surfaces**.
3. 20% of the **lot area** is restricted to **landscaping** with live plant material.

16.4.6 Yards & Setbacks

1. The minimum **front yard** is 6.5 m, except that entry stairs my project into the **front yard** for a distance of no more than 1.5 m.
2. The minimum west **side yard** is 3.0 m.
3. The minimum east **side yard** is 2.2 m, except that entry stairs may project into the east **side yard** by no more than 1.0 m.

4. The minimum north-east **side yard** is 1.5 m.
5. The minimum **rear** yard is 6.0 m.
6. **Porches, balconies,** bay **windows**, and **cantilevered roofs** forming part of the **principal building** may project into the **exterior side yard** and **side yard** for a distance of not more than 0.6 m.

16.4.7 Permitted Heights

1. The maximum **height** for **principal buildings** is 12.5 m, but containing not more than 2 habitable **storeys**.
2. The **maximum height** for **accessory structures** is 4.0 m.

16.4.8 Subdivision Provisions/Minimum Lot Size

1. The minimum **lot area** is 500.0 m^2.
2. There are no minimum **frontage, lot width** or **lot depth** requirements.

16.4.9 Landscaping & Screening

1. **Landscaping** and **screening** shall be provided according to the provisions of Section 6.0.

16.4.10 On-site Parking & Loading

1. On-site **vehicle** and bicycle parking and loading shall be provided according to the standards set out in Section 7.0.

16.4.11 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 by designating it **HERITAGE TWO-UNIT DWELLING (ZD4) – LONDON LANDING (STEVESTON).**

   P.I.D. 024-669-750
   Lot 4 Section 18 Block 3 North Range 6 West New Westminster District Plan LMP44643

3. This Bylaw may be cited as **"Richmond Zoning Bylaw 8500, Amendment Bylaw 9028".**

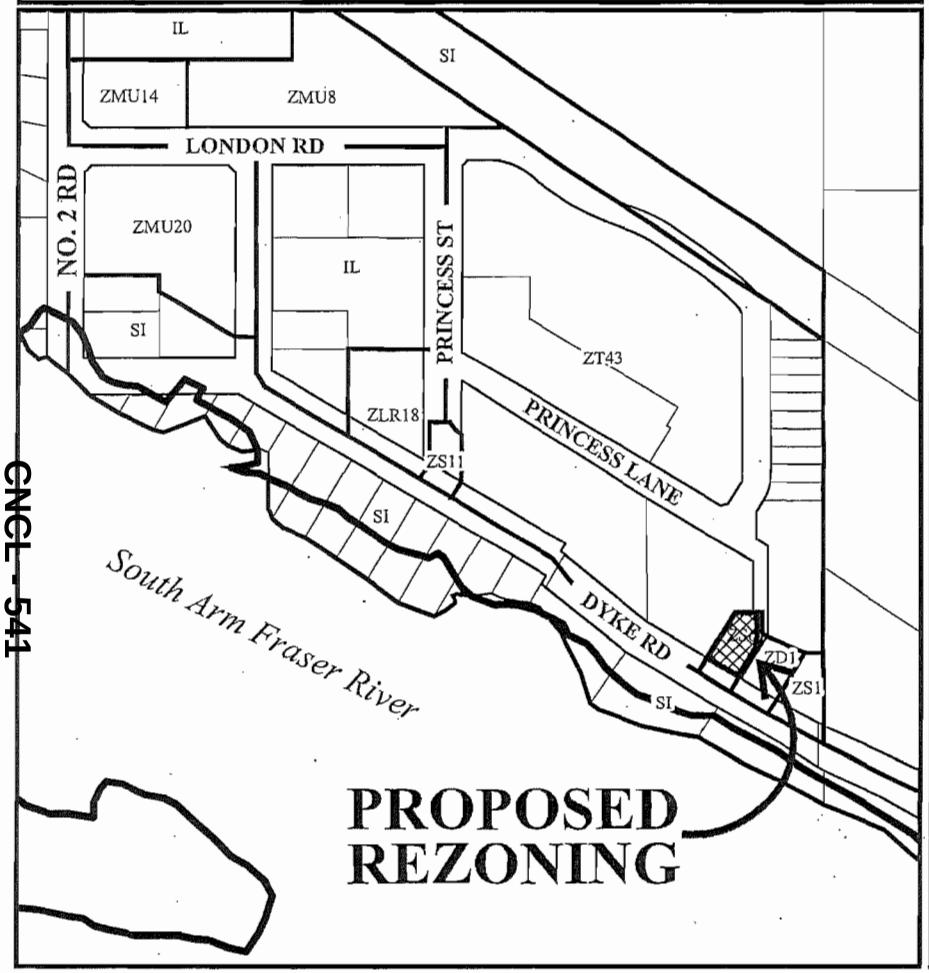
FIRST READING	JUL 22 2013
A PUBLIC HEARING WAS HELD ON	SEP 03 2013
SECOND READING	SEP 03 2013
THIRD READING	SEP 03 2013
OTHER CONDITIONS SATISFIED	JUN 18 2014
ADOPTED	

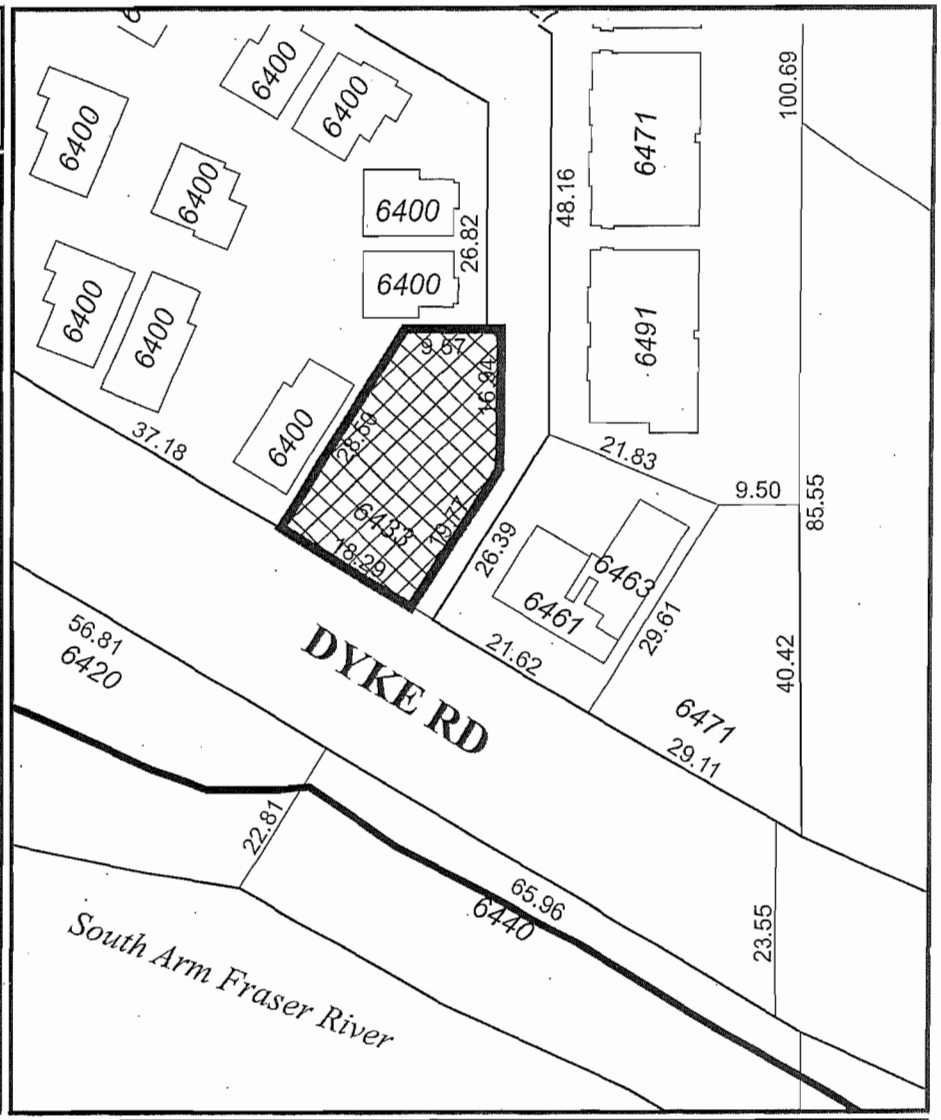
CITY OF RICHMOND
APPROVED by
APPROVED by Director or Solicitor

MAYOR

CORPORATE OFFICER

City of Richmond





CNCL - 541

RZ 13-631467

Original Date: 03/08/13

Revision Date:

Note: Dimensions are in METRES

City of Richmond

Bylaw 9142

Business Regulation Bylaw No. 7538, Amendment Bylaw No. 9142

The Council of the City of Richmond enacts as follows:

1. That **Business Regulation Bylaw No. 7538**, as amended, is further amended by adding the following in Schedule A after item 35:

	Civic address	Civic Number	Original Bylaw Reference
35A.	No. 3 Road	4411 – Unit 118	9142

2. This Bylaw is cited as **"Business Regulation Bylaw No. 7538, Amendment Bylaw No. 9142".**

FIRST READING	MAY 26 2014
SECOND READING	MAY 26 2014
THIRD READING	MAY 26 2014
ADOPTED	

CITY OF RICHMOND
APPROVED for content by originating dept.
APPROVED for legality by Solicitor

MAYOR

CORPORATE OFFICER

City of Richmond

Minutes

Development Permit Panel
Wednesday, May 14, 2014

Time:	3:30 p.m.
Place:	Council Chambers Richmond City Hall
Present:	Joe Erceg, Chair Robert Gonzalez, General Manager, Engineering and Public Works Dave Semple, General Manager, Community Services

The meeting was called to order at 3:30 p.m.

1. Minutes

It was moved and seconded
That the minutes of the meeting of the Development Permit Panel held on Wednesday, April 30, 2014, be adopted.

CARRIED

2. Development Permit 13-645579
(File Ref. No.: DP 13-645579) (REDMS No. 4089087)

APPLICANT:	NSDA Architects on behalf of the Pacific Autism Family Centre Foundation
PROPERTY LOCATION:	1001 Hudson Avenue (formerly part of 3600 Lysander Lane)

INTENT OF PERMIT:

1. Permit the construction of a 5,553 m² building for treatment of, and education about, Autism Spectrum Disorder at 1001 Hudson Avenue on a site zoned "Auto-Oriented Commercial (ZC10)) – Airport and Aberdeen Village"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum commercial parking spaces setback (Zoning Bylaw s 7.5.17) from 1.5 metres to zero metres along the northern lot line.

Applicant's Comments

Larry Adams, Principal, NSDA Architects, accompanied by Garth Ramsey, Project Manager, NSDA Architects, provided background information regarding the form and character of the proposed development and highlighted the following:

- it is a multi-use community-based project which is intended to bring together the autism community in British Columbia principally through knowledge dissemination, research and assessment;
- the proposed building is envisioned to become a provincial centre connected to a series of satellite facilities and services across the province;
- the project is located on a piece of subdivided land with an area of approximately 54,000 square feet and is currently used as a parking lot;
- the triangle-shaped, long and linear building has a series of courtyards on the east side facing the dike and the Fraser River;
- the courtyards facing the Fraser River include a passive courtyard for family contemplation and two outdoor play areas for children ages 3-5 and ages 5-10, respectively;
- major funding for the project comes from the Province and the three-storey building will need to comply with the requirements of the Province's Wood First program;
- the project has addressed the traffic and aircraft noise concerns;
- the building is intended to be transparent and will maximize the use of glazing;
- daylighting is introduced as much as possible in the interior of the building as it is beneficial to children living with autism;
- building entrance is at the northwest corner;
- significant sustainability features will be incorporated and the building is proposed to meet LEED Silver equivalent standards;
- the major components of the simple building exterior include a mixture of wood panels and wood cladding;
- sunscreening is introduced particularly at the west and south sides of the building; and
- metal louvers are used to screen rooftop mechanical structures.

In addition, Mr. Adams reviewed the project's site context.

Panel Discussion

Discussion ensued regarding the status of foreshore trees along the east side of the proposed development facing the Fraser River. In response to a query from the Panel, Mr. Adams advised that the trees are located on an Environmentally Sensitive Area (ESA) which is not part of the subject property. In response to the same query, Barry Konkin, Program Coordinator-Development, commented that a separate ESA Development Permit approved by Council has addressed the impacts to the foreshore trees related to the proposed dike construction along the foreshore area. In addition, Mr. Konkin noted that compensation planting in the foreshore area has been negotiated with City staff.

Discussion ensued regarding public access to the dike. In response to a query from the Panel, Mr. Adams and Mr. Ramsey reviewed the pedestrian routes within the proposed development leading to the dike, noting that the main floor of the proposed building will be raised to the level of the dike.

In response to queries from the Panel, Mr. Konkin provided the following information:

- the existing grade of the site will be raised to 4.7 meter GSC, higher than the required 4.35 meter GSC, to provide better transition between the proposed building grade and the dike grade;
- the subdivision of the subject site from the parent property secured a statutory right of way for public access to the dike; and
- proposed dike improvements and upgrades have been secured through the subdivision servicing and ESA Development Permit applications.

The Panel noted that the proposed sustainability measures are significant and substantial, which would possibly exceed the project's LEED Silver equivalency goal.

Staff Comments

Mr. Konkin commented that the project is a significant one and has potential to contribute to the City and the Province's autism community. He noted that the project has secured approximately 28 million dollars in public and private funding.

Also, Mr. Konkin noted the following major sustainability measures being proposed by the applicant:

- the building to be built according to LEED Silver equivalent standards;
- a high-performance building envelope will be constructed to achieve energy efficiency;
- provision of 120-volt electric vehicle charging plug-ins for five parking stalls;
- introduction of drought resistant planting in landscaped areas; and
- planting of 52 bylaw sized trees to compensate for the 26 bylaw sized trees to be removed from the subject site.

Discussion ensued regarding the siting of outdoor parking spaces on the required setback from the northern lot line. In response to a query from the Panel, David Brownlee, Planner 2, advised that the proposed outdoor parking area at the northern edge of the site is located on a shared drive aisle with the adjacent property to the north which provides public access to the dike. Also, Mr. Konkin mentioned that the rationale for the requested variance to the minimum commercial spaces parking setback is to allow the shifting of the proposed building to the north to accommodate the City's request for dike improvements.

Correspondence

None.

Gallery Comments

None.

Panel Discussion

The Panel expressed its support for the project and commended the applicant for (i) the significant sustainability measures to be incorporated, (ii) the proposed project design, (iii) the materials palette, and (iv) the landscaping scheme. Also, the Panel noted the detailed work done on the playgrounds which provide a tranquil environment conducive to children with autism.

Panel Decision

It was moved and seconded

That Development Permit be issued which would:

1. ***Permit the construction of a 5,553 m² building for treatment of, and education about, Autism Spectrum Disorder at 1001 Hudson Avenue on a site zoned "Auto-Oriented Commercial (ZC10)) – Airport and Aberdeen Village"; and***

2. ***Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum commercial parking spaces setback (Zoning Bylaw s 7.5.17) from 1.5 metres to zero metres along the northern lot line.***

CARRIED

3. New Business

It was moved and seconded
That the Development Permit Panel meeting tentatively scheduled for Wednesday, May 28, 2014, be cancelled.

CARRIED

4. Date Of Next Meeting: Wednesday, June 11, 2014

5. Adjournment

It was moved and seconded
That the meeting be adjourned at 3:50 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 14, 2014.

Joe Erceg
Chair

Rustico Agawin
Auxiliary Committee Clerk

City of Richmond

Minutes

Development Permit Panel
Wednesday, June 11, 2014

Time:	3:30 p.m.
Place:	Council Chambers Richmond City Hall
Present:	Joe Erceg, Chair Robert Gonzalez, General Manager, Engineering and Public Works Dave Semple, General Manager, Community Services

The meeting was called to order at 3:30 p.m.

1. Minutes

It was moved and seconded
That the minutes of the meeting of the Development Permit Panel held on Wednesday, May 14, 2014, be adopted.

CARRIED

The Chair advised that the order of the agenda would be varied to consider Item No. 3 first.

3. Development Variance 14-657986
(File Ref. No.: DV 14-657986 (REDMS No. 4231371)

APPLICANT: Clive Alladin

PROPERTY LOCATION: 3800 Georgia Street

INTENT OF PERMIT:

1. To vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum exterior setback for a principal dwelling (Zoning Bylaw Section 8.1.6.4) from 3.0 m to 1.2m and reduce the minimum setback for a detached accessory building (Zoning Bylaw Section 8.1.6.8) from 3.0 m to 2.4 m.

Applicant's Comments

Clive Alladin, 1176 Keil Crescent, White Rock, B.C., advised that he is planning to construct a single family home on the subject site.

Staff Comments

Wayne Craig, Director, Development, advised that the subject site fronts an undeveloped City road right-of-way, and as a result, required additional setbacks. He added that staff have worked with the applicant on house and landscape designs. Also, he added that there are currently no plans to upgrade the road and long-term options could include closure of the road should Council decide closing the road was appropriate.

Correspondence

None.

Gallery Comments

None.

Panel Decision

It was moved and seconded

That a Development Variance Permit be issued which would vary the provisions of Richmond Zoning Bylaw 8500 to reduce the minimum exterior setback for a principal dwelling (Zoning Bylaw Section 8.1.6.4) from 3.0 m to 1.2 m and reduce the minimum setback for a detached accessory building (Zoning Bylaw Section 8.1.6.8) from 3.0 m to 2.4 m.

CARRIED

2. Development Permit 13-650988

(File Ref. No.: DP 13-650988) (REDMS No. 4144693)

APPLICANT:	First Richmond North Shopping Centres Ltd., (SmartCentres)
PROPERTY LOCATION:	4660, 4680, 4700, 4720, 4740 Garden City Road and 9040, 9060, 9080, 9180, 9200, 9260, 9280, 9320, 9340, 9360, 9400, 9420, 9440, 9480, 9500 Alexandra Road

INTENT OF PERMIT:

1. To permit the construction of a neighbourhood commercial centre at 4660, 4680, 4700, 4720, 4740 Garden City Road and 9040, 9060, 9080, 9180, 9200, 9260, 9280, 9320, 9340, 9360, 9400, 9420, 9440, 9480, 9500 Alexandra Road on a site zoned "Neighbourhood Commercial (ZC32) – West Cambie Area"; and

2. To Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the building setback for Building N on May Drive from 5.0 m to 1.5 m.

Applicant's Comments

With the aid of a visual presentation, (attached to and forming part of these minutes as **Schedule 1**) Christopher Block, Architect, Chandler Associates Architecture Inc., and Mary Chan Yip, Landscape Architect, PMG Landscape Architects, gave a brief overview of the proposed development with respect to (i) urban design; (ii) architectural form and character; and (iii) landscaping and open space design. They highlighted the following:

- incorporating a modern design of the buildings into the natural surroundings;
- incorporating lantern elements into the corner locations of the proposed development;
- using native plant species in the landscaping;
- creating an agricultural screen/buffer;
- installing a least three rows of trees and plants along the site's frontage to act as a visual buffer;
- using high quality building materials on the façade of the development;
- the screening of the parking garage;
- installing a green deck above the surface parking area and using the deck as an open flex space; and
- incorporating a water feature on the east side of the development that would detain roof rain water.

Panel Discussion

In reply to queries from the Panel regarding the High Street portion of the proposed development, Mr. Block advised that design features will include (i) additional glazing on the buildings; (ii) additional access to retail units; (iii) lantern elements along the entrance to the plaza; (iv) bicycle stalls; and (v) pedestrian access from the street.

Mr. Block noted that Building L will incorporate a similar design to other buildings in the proposed development, including the lantern elements. He added that the retail units will be single-sided.

In reply to queries from the Panel, Mr. Block noted that recommendations from the Advisory Design Panel have been incorporated into the current design.

The Chair spoke of the differences in design between the ends and middle sections of the buildings. Mr. Block noted that landscaping will help screen the buildings.

Mr. Block commented on Building H and noted that the building could be occupied by a restaurant and added that glazing will be incorporated in the front and wrapped along the sides.

Discussion ensued regarding the density of the landscaping. In reply to queries from the Panel, Mr. Block advised that landscaping will not completely restrict visibility of the buildings. Ms. Yip noted that landscaping will include a mix of evergreen and deciduous tree species. Ms. Yip added that the landscaping will open up along the entrances to the plaza.

Discussion then ensued with regard to having an agricultural buffer. Ms. Yip noted that the landscaping will use native plant species and cultivars to prevent the spread of seeds and invasive plant species.

In reply to queries from the Panel, Ms. Yip advised that the landscape design incorporates a natural design and complements the architectural design of the proposed development.

Discussion ensued regarding incorporating native species on the proposed landscaping design.

Mr. Block commented on the design and architectural form and character of the Garden City Road portion of the proposed development. Ms. Yip noted that there will be four rows of plants and trees along the Garden City Road side of the proposed development.

Mr. Block then commented on the design and architectural form and character of the Alexandra Road portion of the proposed development which includes a four-level parking garage. He noted that the parking garage will use tinted glass and perforated metal panels to screen the parking area and allow for ventilation. He added that the parking garage will feature softer lighting at night.

Ms. Yip commented on the landscaping for the Alexandra Road portion of the proposed development and noted that the same species of trees proposed to be planted across the road will be incorporated into the landscaping.

In reply to queries from the Panel, Ms. Yip spoke of the pedestrian elements along Alexandra Road and noted that pedestrians will be separated from the road and building by canopy trees. She added that there will be shrubs planted along the base of the building and that the sidewalk will be two metres wide.

Discussion ensued with regard to the loading area of the proposed development along High Street. Mr. Block commented on the design and materials used on the buildings and loading area along High Street. He added that a trellis structure encapsulating the loading area, together with barriers will be installed to provide screening.

Discussion then ensued with regard to the delivery schedule and potential noise from the deliveries. In reply to queries from the Panel, Mr. Block anticipates that there will be approximately 14 deliveries per week and delivery staff will use hand carts to minimize noise.

In reply to queries from the Panel, Mike Gilman, Senior Land Developer Manager, SmartCentres Inc., commented on the possible delivery schedules and noted that he anticipates that deliveries will occur during regular business hours.

In reply to queries from the Panel, Mr. Block commented on possible noise sources in the loading bay and advised that a solid roof was not feasible due to the requirement of additional elements such as the addition of fire suppression and ventilation equipment.

Discussion ensued regarding the planted deck flex space and in reply to queries from the Panel, Ms. Yip noted that the deck will include (i) a grading slope; (ii) short plant species; (iii) irrigating elements; and (iv) parking under the deck. Ms. Yip advised that the deck could be used as a green space for shoppers and residents in the neighbourhood.

In reply to queries from the Panel, Ms. Yip advised that the planted deck space will not include any natural play elements. Also, she noted that the planted deck will include lighting and will be maintained by the development.

Mr. Block then commented on the design and architectural form and character of the May Drive portion of the proposed development.

Discussion ensued with regard to transit access to the proposed development and in reply to queries from the Panel, Ms. Yip advised that the bus stop will be located on the Garden City Road side of the site.

In reply to queries from the Panel with regard to the sustainability features of the proposed development, Mr. Block noted that the development will be rated as a Leed Silver equivalent development and will include (i) a district energy connection; (ii) a green roof system on the parking deck; (iii) reflective roofing surfaces; (iv) bicycle parking facilities; (v) accessible shower facilities; (vi) rain water recycling; (vii) permeable paving; (viii) low-flow washrooms; (ix) use of local building materials; and (x) use of low VOC paints.

In reply to queries from the Panel, Ms. Yip noted that some plant species in the proposed development will be dormant during the winter time but will regenerate in the spring months. She added that the plants will be maintained and that any dead plant material will be replaced by the development.

In reply to queries from the Panel, Mr. Block advised that the location of the district energy connection on the subject site has not been finalized.

Staff Comments

Mr. Craig spoke of the proposed development and highlighted the following:

- the western portion of the site will include a continuation of the Alexandra Road Greenway and will connect to other greenways in the area;
- a comprehensive transportation demand management package will be included;
- there will be a 25% increase over the minimum bicycle parking space and storage requirement;

- a cash contribution for bus shelter upgrades in the area will be included;
- four electric vehicle charging stations will be included; and
- 10% of the total parking spaces will have rough-in provisions for electric vehicle charging.

Correspondence

None.

Gallery Comments

None.

Panel Decision

Discussion ensued with regard to the application process and the approval process timeline.

Discussion then ensued with regard to (i) the potential for excessive noise from the loading bay; (ii) design and architectural from of building L; (iii) sustainability features; and (iv) play elements of the planted deck flex space.
As a result of the discussion the following **referral** was introduced:

It was moved and seconded
That the staff report titled, Application by First Richmond North Shopping Centres Ltd., (SmartCentres) for a Development Permit at 4660, 4680, 4700, 4720, 4740 Garden City Road and 9040, 9060, 9080, 9180, 9200, 9260, 9280, 9320, 9340, 9360, 9400, 9420, 9440, 9480, 9500 Alexandra Road, dated June 11, 2014, from the Director of Development, be referred to staff to examine:

(1) design improvements to buildings A and L, and the parking structure;

(2) design improvements and noise mitigation for the loading bay; and

(3) the location for the district energy related infrastructure;

and report back to the June 25, 2014 Development Permit Panel meeting.

CARRIED

2. New Business

3. Date Of Next Meeting: June 25, 2014

4. Adjournment

It was moved and seconded
That the meeting be adjourned at 5:05 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, June 11, 2014.

Joe Erceg
Chair

Evangel Biason
Auxiliary Committee Clerk

Schedule 1 to the Minutes of the Development Permit Panel meeting held on Wednesday, June 11, 2014.

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City of Richmond

Report to Council

To:	Richmond City Council	**Date:**	June 18, 2014
From:	Joe Erceg, MCIP Chair, Development Permit Panel	**File:**	01-0100-20-DPER1-01/2014-Vol 01

Re: **Development Permit Panel Meeting Held on June 11, 2014**

Staff Recommendation

That the recommendation of the Panel to authorize the issuance of:

i. a Development Variance Permit (DV 14-657986) for the property at 3800 Georgia Street;

be endorsed, and the Permit so issued.

Joe Erceg, MCIP
Chair, Development Permit Panel

SB:blg

Staff Report

The Development Permit Panel considered the following item at its meeting held on June 11, 2014.

DV 14-657986 – CLIVE ALLADIN – 3800 GEORGIA STREET
(June 11, 2014)

The Panel considered a Development Variance Permit application to reduce the exterior side yard setback from 3.0 m to 1.2 m for a single detached home and from 3.0 m to 2.4 m for a garage on a site zoned Single Detached (RS1/A).

Applicant, Mr. Clive Alladin, advised that he was the owner and was seeking the variance in order to build a new home.

Staff supported the Development Variance Permit application and advised that: (i) the subject site is adjacent to an unbuilt City road allowance; (ii) the City has no need to build a road in the allowance; (iii) the variance allows for a typical midblock single-family side yard setback; and (iv) the variance does not preclude the possibility of road construction or closure and sale in the future should Council wish to dispose of the road allowance.

The Panel recommends that the Permit be issued.