

Agenda

City Council

Council Chambers, City Hall 6911 No. 3 Road Monday, January 23, 2017 7:00 p.m.

Pg. # ITEM

MINUTES

- 1. Motion to:
 - (1) adopt the minutes of the Regular Council meeting held on January 9, 2017 (distributed previously); and
 - (2) adopt the minutes of the Regular Council meeting for Public Hearings held on January 16, 2017.

AGENDA ADDITIONS & DELETIONS

PRESENTATIONS

- (1) Marie Fenwick, Manager, Parks Programs, to present the 2017 Street Banners.
- (2) John Watson, Chair, Gateway Theatre Board of Directors and Camilla Tibbs, Executive Director, Gateway Theatre, to present on Gateway Theatre 2015-2016 activities.

5289718

CNCL-12

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. 22.)

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
- Regulations for Marihuana Dispensaries
- Richmond Community Services Advisory Committee (RCSAC) 2016 Annual Report and 2017 Work Program
- Electric Vehicle Charging Infrastructure in Private Developments
- Application by Grafton Enterprises Ltd. for a Strata Title Conversion at 2551 No. 6 Road
- Traffic Safety Advisory Committee Proposed 2017 Initiatives
- Richmond Active Transportation Committee Proposed 2017 Initiatives
- Dike Master Plan Phase 2
- DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643
- Water Shortage Response Plan Proposed Changes

ITEM

Pg. #

Pg. # ITEM

- T.5651 2016 Paving Program (Lafarge Canada Inc.) Contract Extension And Change Order For 2017 Paving Program
- Land use applications for first reading (to be further considered at the Public Hearing on February 20, 2017):
 - 6840 and 6860 No. 3 Road and 8051 Anderson Road Rezone from "Downtown Commercial (CDT1)" to "City Centre High Density Mixed Use With Office (ZMU31) – Brighouse Village" (1004732 BC Ltd. – applicant)
 - 8140/8160 Lundy Road Rezone from Two-Unit Dwellings (RD1) to Single Detached (RS2/C) (Xiufeng Zhang And Shufang Zhang – applicant)
 - 9700, 9720, 9800 Williams Road Rezone from Single Detached (RS1/C) and Single Detached (RS1/E) to Town Housing (ZT81) – Williams Road (Urban Era Builders & Developers Ltd. – applicant)
 - 23100, 23120 and 23140 Westminster Highway Rezone from Single Detached (RS1/F) to Senior's Care Facility (ZR11) – Hamilton Village (Hamilton) (Trellis Seniors Services Ltd. – applicant)
- 5. Motion to adopt Items No. 6 through No. 20 by general consent.

6. COMMITTEE MINUTES

That the minutes of:

- (1) the Community Safety Committee meeting held on January 10, 2017;
 - (2) the General Purposes Committee meeting held on January 16, 2017;
 - (3) the **Planning Committee** meeting held on January 17, 2017;
 - (4) the **Public Works and Transportation Committee** meeting held on January 18, 2017;

be received for information.

Consent Agenda Item

CNCL-26

CNCL-21

- CNCL-30
- CNCL-71

		Council Agenda – Monday, January 23, 2017
Pg. #	ITEM	
]	7.	REGULATIONS FOR MARIHUANA DISPENSARIES (File Ref. No. 03-0900-01) (REDMS No. 5232673 v. 6)
CNCL-76		See Page CNCL-76 for full report
		GENERAL PURPOSES COMMITTEE RECOMMENDATION
		That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 9671 to add a definition of "marihuana dispensary" and add this use to the non-permitted uses and definitions (Section 3.5) of the Richmond Zoning Bylaw No. 8500 to prohibit "marihuana dispensary" in all zones, be introduced and given first reading.
]	8.	RICHMOND COMMUNITY SERVICES ADVISORY COMMITTEE (RCSAC) 2016 ANNUAL REPORT AND 2017 WORK PROGRAM (File Ref. No. 07-3000-01) (REDMS No. 5248121)
CNCL-80		See Page CNCL-80 for full report
		PLANNING COMMITTEE RECOMMENDATION
		That the staff report titled, "Richmond Community Services Advisory Committee (RCSAC) 2016 Annual Report and 2017 Work Program", dated December 20, 2016, from the General Manager, Community Services, be approved.
]	9.	ELECTRIC VEHICLE CHARGING INFRASTRUCTURE IN PRIVATE DEVELOPMENTS (File Ref. No. 10-6125-07-02) (REDMS No. 5258357 v. 4)
CNCL-11	6	See Page CNCL-116 for full report
		PLANNING COMMITTEE RECOMMENDATION
		That the stakeholder consultation program to consult on the development and implementation of electric vehicle charging infrastructure in new private developments, as described in the staff report titled "Electric Vehicle Charging Infrastructure in Private Developments" from the Director, Engineering, dated December 12, 2016, be endorsed.

Pg. # ITEM

Consent Agenda Item

10. APPLICATION BY GRAFTON ENTERPRISES LTD. FOR A STRATA TITLE CONVERSION AT 2551 NO. 6 ROAD

(File Ref. No. SC 16-734026) (REDMS No. 5071719 v. 3)

CNCL-125

See Page CNCL-125 for full report

PLANNING COMMITTEE RECOMMENDATION

- (1) That the application for a Strata Title Conversion by Grafton Enterprises Ltd. for the buildings located on the property at 2551 No.
 6 Road, as generally shown in Attachment 1, be approved on fulfilment of the following conditions:
 - (a) payment of all City utility charges and property taxes up to and including the year 2017;
 - (b) registration of a flood indemnity covenant on title identifying a minimum habitable elevation of 2.9 m GSC;
 - (c) registration of an aircraft noise sensitive use covenant on title;
 - (d) submission of appropriate plans and documents for execution by the Approving Officer within 180 days of the date of this resolution; and
 - (e) 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 installation costs and a 10% contingency; and
- (2) That the City, as the Approving Authority, delegate to the Approving Officer the authority to execute the strata conversion plan on behalf of the City, as the Approving Authority, on the basis that the conditions set out in Recommendation 1 have been satisfied.

			Council Agenda – Monday, January 23, 2017
	Pg. #	ITEM	
Consent Agenda Item		11.	APPLICATION BY 1004732 BC LTD. FOR REZONING AT 6840 & 6860 NO. 3 ROAD AND 8051 ANDERSON ROAD FROM "DOWNTOWN COMMERCIAL (CDT1)" TO "CITY CENTRE HIGH DENSITY MIXED USE WITH OFFICE (ZMU31) – BRIGHOUSE VILLAGE" (File Ref. No. 12-8060-20-009510; RZ 14-678448) (REDMS No. 5247325 v. 2)
	CNCL-145		See Page CNCL-145 for full report
			PLANNING COMMITTEE RECOMMENDATION
			That Richmond Zoning Bylaw 8500, Amendment Bylaw 9510 to create the "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village" zone, and to rezone 6840 & 6860 No. 3 Road and 8051 Anderson Road from "Downtown Commercial (CDT1)" to "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village", be introduced and given first reading.
Consent Agenda Item		12.	APPLICATION BY XIUFENG ZHANG AND SHUFANG ZHANG FOR REZONING AT 8140/8160 LUNDY ROAD FROM TWO-UNIT DWELLINGS (RD1) TO SINGLE DETACHED (RS2/C) (File Ref. No. 12-8060-20-009664; RZ 16-734667) (REDMS No. 5244412)
	CNCL-218		See Page CNCL-218 for full report
			PLANNING COMMITTEE RECOMMENDATION
			That Richmond Zoning Bylaw 8500, Amendment Bylaw 9664, for the rezoning of 8140/8160 Lundy Road from "Two-Unit Dwellings (RD1)" to "Single Detached (RS2/C)", be introduced and given first reading.

			Council Agenda – Monday, January 23, 2017
	Pg. #	ITEM	
Consent Agenda Item		13.	APPLICATION BY URBAN ERA BUILDERS & DEVELOPERS LTD. FOR REZONING 9700, 9720, 9800 WILLIAMS ROAD FROM SINGLE DETACHED (RS1/C) AND SINGLE DETACHED (RS1/E) TO TOWN HOUSING (ZT81) – WILLIAMS ROAD (File Ref. No. 12-8060-20-009667; RZ 15-700431) (REDMS No. 5258398 v. 3)
	CNCL-235		See Page CNCL-235 for full report
			PLANNING COMMITTEE RECOMMENDATION
			That Richmond Zoning Bylaw 8500, Amendment Bylaw 9667 to create the "Town Housing (ZT81) – Williams Road" Zone, and to rezone 9700, 9720 and 9800 Williams Road from "Single Detached (RS1/C)" and "Single Detached (RS1/E)" to "Town Housing (ZT81) – Williams Road", be introduced and given first reading.
Consent Agenda Item		14.	APPLICATION BY TRELLIS SENIORS SERVICES LTD. FOR REZONING AT 23100, 23120 AND 23140 WESTMINSTER HIGHWAY FROM SINGLE DETACHED (RS1/F) TO SENIOR'S CARE FACILITY (ZR11) – HAMILTON VILLAGE (HAMILTON) (File Ref. No. 12-8060-20-009669; RZ 16-738480) (REDMS No. 5265610 v. 2)
	CNCL-266		See Page CNCL-266 for full report
			PLANNING COMMITTEE RECOMMENDATION
			That Richmond Zoning Bylaw 8500, Amendment Bylaw 9669 to create the "Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)" zone, and to rezone 23100, 23120 and 23140 Westminster Highway from "Single Detached (RS1/F)" to "Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)", be introduced and given first reading.
Consent Agenda Item		15.	TRAFFIC SAFETY ADVISORY COMMITTEE – PROPOSED 2017 INITIATIVES (File Ref. No. 01-0100-30-TSAD1-01) (REDMS No. 5222032)
	CNCL-324		See Page CNCL-324 for full report
			PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION
			(1) That the proposed 2017 initiatives for the Traffic Safety Advisory Committee, as outlined in the staff report titled "Traffic Safety Advisory Committee - Proposed 2017 Initiatives" dated November 22, 2016 from the Director, Transportation, be endorsed; and

CNCL-7

	Pg. #	ITEM	(2) That a copy of the above staff report be forwarded to the Richmond Council-School Board Liaison Committee for information.
Consent Agenda Item		16.	RICHMOND ACTIVE TRANSPORTATION COMMITTEE – PROPOSED 2017 INITIATIVES (File Ref. No. 01-0100-20-RCYC1) (REDMS No. 5227687 v. 2)
	CNCL-330)	See Page CNCL-330 for full report
			PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION
			(1) That the proposed 2017 initiatives of the Richmond Active Transportation Committee, as outlined in the staff report titled "Richmond Active Transportation Committee - Proposed 2017 Initiatives" dated December 15, 2016 from the Director, Transportation, be endorsed; and
			(2) That a copy of the above report be forwarded to the Richmond Council-School Board Liaison Committee for information.

Consent

Agenda

Item

CNCL-340

17.

DIKE MASTER PLAN - PHASE 2 (File Ref. No. 10-6060-01) (REDMS No. 5178299 v. 3)

See Page CNCL-340 for full report

PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION

That the public and key external stakeholders be consulted to provide feedback on the medium and long term dike improvements required for part of Richmond's West Dike (between Williams Road and Terra Nova Rural Park) and part of the North Dike (between Terra Nova Rural Park to No. 6 Road) as identified in the staff report titled "Dike Master Plan – Phase 2" from the Director of Engineering, dated December 6, 2016.

			Council Agenda – Monday, January 23, 2017
	Pg. #	ITEM	
Consent Agenda Item		18.	DCC RESERVE FUND EXPENDITURE (4000 MAY DRIVE) BYLAW NO. 9643 (File Ref. No. 03-1000-08-030) (REDMS No. 5203346 v. 5)
	CNCL-401		See Page CNCL-401 for revised report
			See Page CNCL-404 for highlighted revisions
			PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION
			That DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643 be introduced and given first, second and third readings.
Consent Agenda Item		19.	WATER SHORTAGE RESPONSE PLAN – PROPOSED CHANGES (File Ref. No. 10-6060-01) (REDMS No. 5268702 v. 3)
	CNCL-423	;	See Page CNCL-423 for full report
			PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION
			That the comments on Metro Vancouver's proposed changes to the Water Shortage Response Plan, as summarized in the staff report titled "Water Shortage Response Plan – Proposed Changes," dated January 3, 2017, from the Director, Engineering be submitted to Metro Vancouver.
Consent Agenda Item		20.	T.5651 - 2016 PAVING PROGRAM (LAFARGE CANADA INC.) CONTRACT EXTENSION AND CHANGE ORDER FOR 2017 PAVING PROGRAM (File Ref. No. 10-6340-20-P.16207) (REDMS No. 5267595)
	CNCL-429)	See Page CNCL-429 for full report
			PUBLIC WORKS AND TRANSPORTATION COMMITTEE RECOMMENDATION
			That Contract T.5651 – 2016 Paving Program with Lafarge Canada Inc. be extended to include the 2017 Paving Program, and that a Change Order be issued to increase the value of this Contract by \$2,700,000.

		Council Agenda – Monday, January 23, 2017		
Pg. #	ITEM			

		NON-CONSENT AGENDA ITEMS		
		PLANNING COMMITTEE Councillor Linda McPhail, Chair		
	21.	REFERRAL RESPONSE: REGULATING THE SIZE OF LARGE HOUSES IN THE AGRICULTURAL LAND RESERVE (File Ref. No. 08-4057-10; 12-8060-20-009665/9666/9678/9679) (REDMS No. 5251835 v. 3)		
CNCL-432	2	See Page CNCL-432 for full report		
		See Page CNCL-456A for memorandum from staff in response to Planning Committee request for additional information		
		PLANNING COMMITTEE RECOMMENDATION		
		(1) That the staff report titled, "Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve", dated January 10, 2017, from the Director of Development and the Manager of Policy Planning, be received for information; and		
		(2) That staff be directed to conduct public consultations regarding the bylaw options presented in this report ("Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve") regarding house size, farm home plate and setbacks, including residential accessory buildings.		
		PUBLIC ANNOUNCEMENTS AND EVENTS		

NEW BUSINESS

Pg. # ITEM

BYLAWS FOR ADOPTION

CNCL-457 Business Regulation Bylaw No.7538 Amendment Bylaw No. 9639 Opposed at $1^{st}/2^{nd}/3^{rd}$ Readings – None.

DEVELOPMENT PERMIT PANEL

22. RECOMMENDATION

(1)

CNCL-459

CNCL-498

That the minutes of the Development Permit Panel meeting held on January 11, 2017, and the Chair's report for the Development Permit Panel meetings held on July 13, 2016, and December 14, 2016, be received for information; and

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

- (2) That the recommendations of the Panel to authorize the issuance of:
 - (a) a Development Permit (DP 11-566011) for the property at 15111 Williams Road and Richmond Key 1095; and
 - (b) a Development Permit (DP 15-696896) for the property at 7120 No. 3 Road;

be endorsed, and the Permits so issued.

ADJOURNMENT



Regular Council meeting for Public Hearings Monday, January 16, 2017

Place:	Council Chambers
	Richmond City Hall
Present:	Mayor Malcolm D. Brodie
	Councillor Chak Au
	Councillor Derek Dang
	Councillor Carol Day
	Councillor Ken Johnston
	Councillor Alexa Loo

Councillor Bill McNulty Councillor Linda McPhail Councillor Harold Steves

Claudia Jesson, Acting Corporate Officer

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

1. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9613 (RZ 15-718064)

(Location: 7431 Williams Road; Applicant: Xu Yang)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

None.

Submissions from the floor:

None.

Discussion:

In response to a question from Council, Mr. Yang confirmed that it would be possible to reorient the balconies so that they did not face the lane. Staff advised that the Zoning Bylaw requires that coach house balconies face the lane, and a development variance permit would be required if orientation would change.



Regular Council meeting for Public Hearings Monday, January 16, 2017

PH17/1-1 It was moved and seconded That Richmond Zoning Bylaw 8500, Amendment Bylaw 9613 be given second and third readings.

CARRIED

Opposed: Cllr. Day

2. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9638 (RZ 16-734204)

(Location: 9491, 9511, 9531, 9551, 9591 Alexandra Road; Applicant: 0731649 BC Ltd.)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

None.

Submissions from the floor:

None.

Discussion:

In response to a question from Council, staff confirmed that the applicant has agreed to plant 171 trees on the site.

PH17/1-2

It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9638 be given second and third readings.

CARRIED

3. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9641 (08-4430-01)

(Location: City Wide; Applicant: City of Richmond)

Applicant's Comments:

Staff reported that the proposed bylaw amendment updates the affordable housing contribution rates for residential zones.

Written Submissions:

None.

2.



Regular Council meeting for Public Hearings Monday, January 16, 2017

Submissions from the floor:

None.

Discussion:

Council questioned the timing of the submission of the report on potential changes to the Affordable Housing Strategy. Staff confirmed that the affordable housing contributions required under the new Affordable Housing Strategy would be applied to any applications considered by Council after September 24, 2016.

PH17/1-3 It was moved and seconded *That Richmond Zoning Bylaw 8500, Amendment Bylaw 9641 be given second and third readings.*

CARRIED

PH17/1-4 It was moved and seconded *That Richmond Zoning Bylaw 8500, Amendment Bylaw 9641 be adopted.* CARRIED

4. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9644 (RZ 16-731320)

(Location: 6231 Blundell Road; Applicant: Peter Hu)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

- (a) Xiang Yang, 6211 Blundell Road (Schedule 1)
- (b) L. Huang, et al, Richmond Residents (Schedule 2)

Submissions from the floor:

Saraban Singh, 6251 Blundell Road, opposed the rezoning application on the basis of privacy and traffic concerns, reduced sunlight to his property and the anticipated negative impact to his property value.

Stephen Bao, 7711 Cheviot Place, read aloud the letter submitted as Schedule 2.



Regular Council meeting for Public Hearings Monday, January 16, 2017

In response to concerns raised by the speakers and questions from Council, staff provided the following comments:

- minimum setbacks will be met on the property, all requirements of the the Official Community Plan, Area Plan, and lot size policy will be met;
- anticipated traffic and sunlight impacts to the 6251 Blundell Road property are adequately addressed in the rezoning application;
- the rezoning application meets all parking requirements and parking is not permitted in lanes;
- "No Parking" signs are not typically posted in lanes but signage could be installed if requested by the residents;
- coach houses can only be rented as a single unit and short-term rentals can be regulated by the short-term rentals bylaw that will be considered by Council in the near future or through a legal covenant;
- coach houses meet Council's objectives for housing diversity and affordability; and
- the orientation of the coach house balconies is consistent with policy.

PH17/1-5 It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9644 be given second and third readings.

CARRIED Opposed: Cllr. Day

5. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9645 (RZ 16-736824)

(Location: 4560 Garry Street; Applicant: Simon Wong)

Applicant's Comments:

The applicant was available to respond to queries.

Written Submissions:

None.

Submissions from the floor: None.



Regular Council meeting for Public Hearings Monday, January 16, 2017

PH17/1-6 It was moved and seconded That Richmond Zoning Bylaw 8500, Amendment Bylaw 9645 be given second and third readings.

CARRIED

6. RICHMOND ZONING BYLAW 8500, AMENDMENT BYLAW 9660 (RZ 14-659770)

(Location: 4271 Francis Road; Applicant: 101553 BC Ltd.)

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

Written Submissions:

None.

Submissions from the floor: None.

PH17/1-7 It was moved and seconded *That Richmond Zoning Bylaw 8500, Amendment Bylaw 9660 be given second and third readings.*

CARRIED

ADJOURNMENT

PH17/1-8 It was moved and seconded *That the meeting adjourn (7:35 p.m.).*



Regular Council meeting for Public Hearings Monday, January 16, 2017

Certified a true and correct copy of the Minutes of the Regular meeting for Public Hearings of the City of Richmond held on Monday, January 16, 2017.

Mayor (Malcolm D. Brodie)

Acting Corporate Officer (Claudia Jesson)

Schedule 1 to the Minutes of the Public Hearing meeting of To Public Hearing Richmond City Council held on Date: January 1612017 Monday, January 16, 2017. Item # 4 Bylaw 9644 -731380 Respecting history does not a Status que, Maintain our rights. 1. The original purchase of houses is Seen only two families, And is the innermost one, Like quiet and there will be no external vahia and personnel access, So living in 6211 that will feel safe is the most important choice of reason 2. At present we live mainly rely on the eastern Side of the morning sunshine, if the 6221 building two houses will be two pouses away from the future We will be blocked the east of the Sun, because my room grows square, the future diving room window Study the window, the Kitchen window forever Lost the sun, which is our family life can not stand, So firmly opposed 6221 proposal, 3, Once again, I would like to remind the Governmen. of the Sino-British joint officials to listen to our Voice, Our family immigrants to Canada, Living in VanCour Richmand is Looking for convenient living, enjoy the beauti Sunshine Convenient life of the city Do not let some Entry in order to seek benefits to expand the DATE inglarea, vaise prices to earn more money to provide Convenience, and ultimately damage our current Matus and rights of life of themes Aome owners He Xiang Van RECEIVED 6211 Blundell CNCZ=18' HT 12,10,2016. CLERK'S

Schedule 2 to the Minutes of the Public Hearing meeting of Richmond City Council held on Monday, January 16, 2017.

To Public Hearing
Date: Janvary 16,2017
Item # 4, Bylaw 9644
Re: R2-16-731320

Mr. Steven De Sousa City of Richmond Planning, Building & Development

January 9, 2017

Re: Objection to Rezoning Application File No RZ16-731320

Dear Mr. Steven De Sousa

We are writing to provide community feedback and ultimately our objection to the rezoning application (File No RZ16-731320) for 6231 Blundell Road, Richmond, BC. As surrounding neighbors, please find below our reasons for objection:

- Currently, the Blundell and Cheviot place is a quiet residential area with low vehicle traffic. By rezoning to two lots, a vehicle lane entrance is created behind lot 7788 and 6211 from Cheviot. Typically these rezoned lots become high volume rental units. The two lots could hold up to 12 units with each having multiple vehicles. This creates significant vehicle traffic and also reduces the safety of the pedestrian walkway along Cheviot and Blundell Rd.
- In addition to 6231's most adjacent neighbors, there are also many surrounding neighbors including Chatsworth Rd, Chelmsford St, and Chelsea Rd who are all foot pedestrians. Everyone uses the Blundell/Cheviot pedestrian crosswalk very frequently to access the Blundell Shopping Plaza (has a Safeway), the Blundell Park and public Translink bus stop. Many are concerned this new flow of vehicle traffic access from the back ally will create serious problems for foot pedestrians (who enjoy the benefits of walking across Blundell) and also increases vehicle traffic congestions at this intersection across from Blundell Plaza.
- Adjacent lots 6251 and 6291 are still relatively new houses and currently there is likely another 20 years before they are torn down. There is no intention that these owners plan to rezone. So even if 6231 were rezoned, it still does not create a full through back lane.
- By rezoning, the owner of 6231 will obtain a great financial value, but at the expense of hurting the benefits and fee simple estates of its surrounding neighbors.

Based on the above factors, we strongly object to rezoning application File No RZ16-731320. Below are some of the signatures from the closest surrounding neighbors.



CNCL - 19

Signature by owners of:

- (Banarsar Sacut) Xiang Vang Blundell Rd 6251 le.

Blundell Rd 6211

Cheviot Pl, 7733

SAL Boylan Bao Steven

Cheviot Pl. 7711

Hugng Cheviot Pl. 7720

CNCL - 20



Community Safety Committee

Date: Tuesday, January 10, 2017

- Place: Anderson Room **Richmond City Hall**
- Present: Councillor Bill McNulty, Chair Councillor Derek Dang Councillor Alexa Loo Councillor Linda McPhail Mayor Malcolm Brodie
- Absent: Councillor Ken Johnston

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 December 13, 2016, be adopted as circulated.

CARRIED

Minutes

NEXT COMMITTEE MEETING DATE

February 15, 2017, (tentative date) at 4:00 p.m. in the Anderson Room

Committee wished to congratulate Renny Nesset, OIC, Richmond RCMP on his upcoming retirement and commended him for his long-standing service to Richmond.

Andy Hobbs, Richmond resident, thanked Supt. Nesset for his public service.

LAW AND COMMUNITY SAFETY DIVISION

1. COMMUNITY BYLAWS MONTHLY ACTIVITY REPORT – NOVEMBER 2016

(File Ref. No. 12-8060-01) (REDMS No. 5251189)

It was moved and seconded

That the staff report titled "Community Bylaws Monthly Activity Report – November 2016", dated December 15, 2016, from the Acting General Manager, Law and Community Safety, be received for information.

CARRIED

It was moved and seconded

That staff review Bylaw 5870, section 6.1, to analyze potential amendments to include single-family homes and enforcement measures with regard to snow clearing regulations and report back.

The question on the referral motion was not called as discussion ensued with regard to snow clearing along sidewalks and non-arterial roads and snow-related calls received from the public.

In reply to queries from Committee, Ron Graham Acting Manager, Community Bylaws, noted that bylaws staff have issued snow clearing notices to residents and businesses. He added that staff may be dispatched to clear snow in critical areas, such as roads and sidewalks fronting a school.

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

2. RICHMOND FIRE-RESCUE MONTHLY ACTIVITY REPORT - NOVEMBER 2016

(File Ref. No. 09-5000-01) (REDMS No. 5260961)

It was moved and seconded

That the staff report titled "Richmond Fire-Rescue Monthly Activity Report - November 2016", dated December 19, 2016 from the Acting Fire Chief, Richmond Fire-Rescue, be received for information.

CARRIED

In reply to queries from Committee, Acting Fire Chief Tim Wilkinson, spoke on (i) patient transport being legislated to the British Columbia Ambulance Service, (ii) the Richmond Fire-Rescue (RFR) vehicles performing well in recent winter conditions, (iii) the traffic volume in relation to the number of motor vehicle incidents that occur along the S-Curve section of Highway 91, and (iv) the occurrences of fentanyl-related incidents in the city.

2.

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

It was moved and seconded

That staff examine potential measures to increase safety along the S-Curve section of Highway 91 and report back.

CARRIED

3. FIRE CHIEF BRIEFING

(Verbal Report)

Items for discussion:

(i) Anti-Bullying/Pink Shirt Day

Acting Fire Chief Wilkinson noted that Pink Shirt Day is on February 22, 2017 and that staff are encouraged to wear pink on that day.

(ii) Touchstone - Eating Together Family Pancake Breakfast Event

Acting Fire Chief Wilkinson noted that the Touchstone - Eating Together Family Pancake Breakfast Event is scheduled on February 19, 2017 at DeBeck Elementary School.

(iii) Christmas Tree Chip

Acting Fire Chief Wilkinson noted that the Christmas Tree Chip event was successful, raising over \$6,000 for charity.

4. RCMP'S MONTHLY ACTIVITY REPORT – NOVEMBER 2016 (File Ref. No. 09-5000-01) (REDMS No. 5242195 v. 3)

It was moved and seconded

That the report titled "RCMP's Monthly Activity Report – November 2016" dated December 9, 2016 from the Officer in Charge, Richmond RCMP, be received for information.

CARRIED

In reply to queries from Committee, Eric Hall, Inspector, Operations Support Officer, Richmond RCMP, noted that statistics related to drug incidents may be skewed by seizures made in the Vancouver International Airport and the Canada Post facility.

5. **RCMP/OIC BRIEFING**

(Verbal Report)

Insp. Hall spoke on the auxiliary officers' hours and proposed changes to auxiliary uniforms and policies related to auxiliary officer duties.

Insp. Hall then briefed Committee on statistics related to Transit Police, noting that 1,374 calls for service were made along the Richmond portion of the Canada Line.

Insp. Hall, on behalf of the Richmond RCMP, thanked Supt. Nesset for his service.

6. COMMITTEE STANDING ITEM

(i) E-Comm

None.

7. MANAGER'S REPORT

(i) Emergency Services Update

Discussion ensued with regard to earthquake preparedness and in reply to queries from Committee, Lainie Goddard, Manager, Emergency Programs, noted that staff are planning to increase the City's emergency supplies annually and store them in a warehouse facility.

Discussion then continued with regard to alternative locations for storing emergency supplies in the city and Acting Fire Chief Wilkinson noted that the City's fire halls have adequate emergency supplies for RFR operations but are not suitable as emergency supply distribution centres.

(ii) Coast Guard Training Exercise

In reply to queries from Committee, Acting Fire Chief Wilkinson noted that RFR responded to an incident involving a recent Coast Guard training exercise and added that RFR conducts joint training exercises with the Vancouver International Airport. Also, Ms. Goddard noted that Emergency Programs staff participate in training sessions with the Airport.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (4:43 p.m.).*

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, January 10, 2017.

Councillor Bill McNulty Chair Evangel Biason Legislative Services Coordinator



General Purposes Committee

Date: Monday, January 16, 2017

Place: Anderson Room Richmond City Hall

- Present: Mayor Malcolm D. Brodie, Chair Councillor Chak Au Councillor Derek Dang Councillor Carol Day Councillor Ken Johnston Councillor Alexa Loo Councillor Bill McNulty Councillor Linda McPhail Councillor Harold Steves (entered at 4:04 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 General Purposes Committee held on January 3, 2017, be adopted as circulated.

CARRIED

Councillor Harold Steves entered the meeting (4:04 p.m.).

FINANCE AND CORPORATE SERVICES DIVISION

1. REGULATIONS FOR MARIHUANA DISPENSARIES

(File Ref. No. 03-0900-01) (REDMS No. 5232673 v. 6)

In reply to questions, Carli Edwards, Manager, Customer Services and Licencing, confirmed that the report outlines the regulations for marihuana dispensaries and that the zoning in Richmond for marihuana production has already been determined by Council. The proposed bylaw would specify that marihuana dispensary is a prohibited use in Richmond. Wayne Craig, Director, Development, further clarified that current zoning only permits for one site-specific marihuana production facility in Richmond, with no retail component being permitted.

It was moved and seconded

That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 9671 to add a definition of "marihuana dispensary" and add this use to the non-permitted uses and definitions (Section 3.5) of the Richmond Zoning Bylaw No. 8500 to prohibit "marihuana dispensary" in all zones, be introduced and given first reading.

CARRIED

PLANNING AND DEVELOPMENT DIVISION

2. 2016 REPORT FROM CITY CITIZEN REPRESENTATIVES TO THE VANCOUVER INTERNATIONAL AIRPORT AERONAUTICAL NOISE MANAGEMENT COMMITTEE (YVR ANMC) (File Ref. No. 01-0153-04-01) (REDMS No. 5251399)

Victor Wei, Director, Transportation, and Gary Abrams, City Citizen Representative to the Vancouver International Airport Aeronautical Noise Management Committee (YVR ANMC), responded to questions from the Committee regarding noise complaints from Richmond residents and provided the following information: (i) one resident is responsible for 67% of the total complaints, (ii) YVR has not personally met the individual but has responded to their complaints and the complaints of others, and (iii) YVR conducts an annual tour available to the public which provides general information on airport operations. It was moved and seconded

That the report from the City citizen representatives appointed to the Vancouver International Airport Aeronautical Noise Management Committee (YVR ANMC) regarding the Committee's 2016 activities dated December 22, 2016, from the Director, Transportation, be received for information.

CARRIED

COMMUNITY SERVICES DIVISION

3. MINORU COMPLEX ENTRIES AND ARRIVALS PUBLIC ART CONCEPT

(File Ref. No. 11-7000-09-20-202) (REDMS No. 5252534)

The Committee discussed whether or not the artwork reflects the values of Richmond as a community. It was noted that it would be helpful for the Committee to receive the rationale for the selected work along with the other shortlisted works prior to the approval of the art concept. In reply to questions, Eric Fiss, Public Art Planner, noted that the theme for the artwork was decided upon after consultation with the various user groups in the area.

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

It was moved and seconded *That the matter be referred back to staff:*

- (1) to circulate all five shortlisted projects to Council for information; and
- (2) to consult with stakeholders through the Minoru Major Facility Stakeholder Advisory Committee and report back with their feedback.

CARRIED

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (4:40 p.m.).*

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, January 16, 2017.

Mayor Malcolm D. Brodie Chair Shaun Divecha Legislative Services Coordinator



Planning Committee

Date:	Tuesday, January 17, 2017
Place:	Anderson Room Richmond City Hall
Present:	Councillor Linda McPhail, Chair Councillor Bill McNulty Councillor Chak Au Councillor Alexa Loo Councillor Harold Steves Mayor Malcolm Brodie
Also Present:	Councillor Derek Dang Councillor Carol Day (entered at 4:09)
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 December 20, 2016, be adopted as circulated.

CARRIED

Minutes

NEXT COMMITTEE MEETING DATE

February 7, 2017, (tentative date) at 4:00 p.m. in the Anderson Room

COMMUNITY SERVICES DIVISION

1. RICHMOND COMMUNITY SERVICES ADVISORY COMMITTEE (RCSAC) 2016 ANNUAL REPORT AND 2017 WORK PROGRAM (File Ref. No. 07-3000-01) (REDMS No. 5248121)

CNCL - 30

1.

A revised copy of the 2017 RCSAC budget was distributed (attached to and forming part of these minutes as Schedule 1).

In reply to queries from Committee, Lesley Sherlock, Planner 2, noted that the RCSAC will be developing a comprehensive space needs survey for agencies and that it is anticipated that a report on the matter will be presented to Council in June 2017.

It was moved and seconded

That the staff report titled, "Richmond Community Services Advisory Committee (RCSAC) 2016 Annual Report and 2017 Work Program", dated December 20, 2016, from the General Manager, Community Services, be approved.

CARRIED

ENGINEERING AND PUBLIC WORKS DIVISION

2. ELECTRIC VEHICLE CHARGING INFRASTRUCTURE IN PRIVATE DEVELOPMENTS

(File Ref. No. 10-6125-07-02) (REDMS No. 5258357 v. 4)

Correspondence from John Roston, 12262 Ewen Avenue, was distributed (attached to and forming part of these minutes as Schedule 2), and Mr. Roston, representing Plug-in Richmond, suggested that the proposed program expand to include incentives to accommodate electric vehicle (EV) charging stations in existing homes.

Cllr. Day entered the meeting (4:09 p.m.).

In reply to queries from Committee, Brendan McEwen, Sustainability Manager, noted that (i) the City is examining opportunities to build out fastcharging EV infrastructure, (ii) staff are open to advertise consultation opportunities, (iii) the Richmond Chamber of Commerce can be included in the consultation process, and (iv) the consultation will take approximately four to five months and it is anticipated that a report on the matter will be presented to Council in June 2017.

It was moved and seconded

That the stakeholder consultation program to consult on the development and implementation of electric vehicle charging infrastructure in new private developments, as described in the staff report titled "Electric Vehicle Charging Infrastructure in Private Developments" from the Director, Engineering, dated December 12, 2016, be endorsed.

PLANNING AND DEVELOPMENT DIVISION

3. APPLICATION BY GRAFTON ENTERPRISES LTD. FOR A STRATA TITLE CONVERSION AT 2551 NO. 6 ROAD

(File Ref. No. SC 16-734026) (REDMS No. 5071719 v. 3)

Jordan Rockerbie, Planning Technician, reviewed the application, noting that the on and off-site landscaping will be improved and the subject site's zoning will remain industrial.

It was moved and seconded

- That the application for a Strata Title Conversion by Grafton Enterprises Ltd. for the buildings located on the property at 2551 No.
 6 Road, as generally shown in Attachment 1, be approved on fulfilment of the following conditions:
 - (a) payment of all City utility charges and property taxes up to and including the year 2017;
 - (b) registration of a flood indemnity covenant on title identifying a minimum habitable elevation of 2.9 m GSC;
 - (c) registration of an aircraft noise sensitive use covenant on title;
 - (d) submission of appropriate plans and documents for execution by the Approving Officer within 180 days of the date of this resolution; and
 - (e) 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 installation costs and a 10% contingency; and
- (2) That the City, as the Approving Authority, delegate to the Approving Officer the authority to execute the strata conversion plan on behalf of the City, as the Approving Authority, on the basis that the conditions set out in Recommendation 1 have been satisfied.

4. APPLICATION BY 1004732 BC LTD. FOR REZONING AT 6840 & 6860 NO. 3 ROAD AND 8051 ANDERSON ROAD FROM "DOWNTOWN COMMERCIAL (CDT1)" TO "CITY CENTRE HIGH DENSITY MIXED USE WITH OFFICE (ZMU31) – BRIGHOUSE VILLAGE"

(File Ref. No. 12-8060-20-009510; RZ 14-678448) (REDMS No. 5247325 v. 2)

Janet Digby, Planner 3, reviewed the application, highlighting that the proposed development will include a mix of residential, retail and commercial space. Wayne Craig, Director, Development, further noted that the applicant has opted to allocate two one-bedroom and three two-bedroom units for affordable housing and provide a cash contribution for public art.

Discussion ensued with regard to the availability of office space in the city.

In reply to queries from Committee, Mr. Craig noted that the proposed development will include improvements to fronting sidewalks and pedestrian upgrades at the intersections of No. 3 Road and Anderson Road in addition to Anderson Road and Buswell Road. He added that staff are recommending that the proposed development provide a cash-in-lieu community amenity contribution due to the limited floor area that would be allocated for community amenities. Also, Ms. Digby noted that multiple private amenity spaces are proposed for the residential and commercial areas.

A Richmond resident expressed concern with respect to the proposed development's setback and design. Mr. Craig noted that the proposed development does step back from the adjacent residential tower to the east and that should the application proceed, there will be additional opportunities for design adjustments during the development permit process.

It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9510 to create the "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village" zone, and to rezone 6840 & 6860 No. 3 Road and 8051 Anderson Road from "Downtown Commercial (CDT1)" to "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village", be introduced and given first reading.

5. APPLICATION BY XIUFENG ZHANG AND SHUFANG ZHANG FOR REZONING AT 8140/8160 LUNDY ROAD FROM TWO-UNIT DWELLINGS (RD1) TO SINGLE DETACHED (RS2/C)

(File Ref. No. 12-8060-20-009664; RZ 16-734667) (REDMS No. 5244412)

It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9664, for the rezoning of 8140/8160 Lundy Road from "Two-Unit Dwellings (RD1)" to "Single Detached (RS2/C)", be introduced and given first reading.

CARRIED

6. APPLICATION BY URBAN ERA BUILDERS & DEVELOPERS LTD. FOR REZONING 9700, 9720, 9800 WILLIAMS ROAD FROM SINGLE DETACHED (RS1/C) AND SINGLE DETACHED (RS1/E) TO TOWN HOUSING (ZT81) – WILLIAMS ROAD

(File Ref. No. 12-8060-20-009667; RZ 15-700431) (REDMS No. 5258398 v. 3)

Mr. Craig reviewed the application, noting that the proposed development will provide a contribution of three three-bedroom affordable housing units with rental restrictions in accordance with the City's Affordable Housing Strategy and that the proposed development will have a consolidated driveway, a legal agreement for future access to the east, and provide sidewalk improvements.

It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9667 to create the "Town Housing (ZT81) – Williams Road" Zone, and to rezone 9700, 9720 and 9800 Williams Road from "Single Detached (RS1/C)" and "Single Detached (RS1/E)" to "Town Housing (ZT81) – Williams Road", be introduced and given first reading.

CARRIED

7. APPLICATION BY TRELLIS SENIORS SERVICES LTD. FOR REZONING AT 23100, 23120 AND 23140 WESTMINSTER HIGHWAY FROM SINGLE DETACHED (RS1/F) TO SENIOR'S CARE FACILITY (ZR11) – HAMILTON VILLAGE (HAMILTON) (File Ref. No. 12-8060-20-009669; RZ 16-738480) (REDMS No. 5265610 v. 2)

Mark McMullen, Senior Coordinator - Major Projects, reviewed the application highlighting that (i) the proposed seniors care facility will consist of 135 units and will be funded and licensed by Vancouver Coastal Health, (ii) the subject site includes approximately 1,100 m² designated as an Environmentally Sensitive Area (ESA), and (iii) the proposed development will be constructed to achieve LEED Gold standards.

In reply to queries from Committee, Mr. Craig and Mr. McMullen noted that (i) there will be opportunities to refine the proposed landscape and architectural designs at the development permit process, (ii) the ESA will have habitat compensation for the area impacted by the proposed development, (iii) an assessment from a Qualified Environmental Professional was provided and the proposed habitat compensation is envisioned to have higher habitat value than the existing ESA on-site, (iv) the proposed development will include piled structures under the parking area to stabilize the soil, and (v) the proposed development is only zoned for health care use.

It was moved and seconded

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9669 to create the "Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)" zone, and to rezone 23100, 23120 and 23140 Westminster Highway from "Single Detached (RS1/F)" to "Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)", be introduced and given first reading.

CARRIED

8. REFERRAL RESPONSE: REGULATING THE SIZE OF LARGE HOUSES IN THE AGRICULTURAL LAND RESERVE

(File Ref. No. 08-4057-10; 12-8060-20-009665/9666/9678/9679) (REDMS No. 5251835 v. 3)

Correspondence received related to Item No. 8 was distributed (attached to and forming part of these minutes as Schedule 3).

John Hopkins, Planner 3, and Mr. Craig briefed Committee on potential methods to regulate large houses in the Agricultural Land Reserve (ALR), noting that the City has advocated for the introduction of Provincial legislation to address the matter. Mr. Hopkins added that potential regulatory options include restricting the size of the farm homeplate, regulating the siting of residential uses and restricting the size of the dwelling on-site.

Mr. Hopkins briefed Committee on the current Provincial guidelines related to house size in the ALR and contrasted those guidelines with regulations set by the Corporation of Delta. Mr. Hopkins noted that other Metro Vancouver municipalities have recently adopted regulations to address house size in the ALR. Mr. Craig further noted that public consultation on the potential ways to manage residential development on agricultural properties is anticipated to commence in March 2017 and staff will provide a report to Council following the consultation process.

In reply to queries from Committee, Joe Erceg, General Manager, Planning and Development, noted that concern has been raised with respect to the trend of increasing house size in the ALR, adding that the Province has expressed little interest in introducing legislation to address the matter.

6.

Discussion ensued with regard to (i) the effect of the foreign buyers tax on the construction of large homes in the ALR, (ii) large homes in the ALR being utilized for non-compliant uses and the City's enforcement of current regulations, and (iii) including farm access requirements in the proposed amendments.

In reply to queries from Committee, Mr. Craig advised that farm tax incentives related to the classification of agricultural land falls under Provincial jurisdiction.

An example of a listed single-family house with multiple bedrooms was distributed (attached to and forming part of these minutes as Schedule 4).

Discussion ensued with regard to (i) the historical subdivision of large preexisting properties into smaller farm plots provided for veterans, (ii) the definition of a single-family home, (iii) the farm income required to qualify for farm tax incentives, and (iv) limiting the size of accessory buildings.

In response to queries from Committee, staff noted that (i) staff can consult with the Law Department regarding the feasibility of placing a moratorium on the development of new large homes in the ALR, (ii) the Agricultural Land Commission (ALC) is supportive of the Provincial guidelines for house size in the ALR, (iii) staff can provide Council with the public consultation information package prior to the public consultation sessions, and (iv) the average size of the ALR house applications received is approximately 8,000 to 12,000 square feet, with the maximum allowable size dependent on the dimensions of the lot.

John Baines, 11620 No. 4 Road, expressed concern with regard to the development of large homes in the ALR and the potential effect on the value of agricultural land.

Nancy Trant, 10100 No. 3 Road, spoke against the development of large homes in the ALR. Also, she expressed concern with regard to non-compliant uses for the large homes and enforcement measures taken by the City.

Carol Biggs, 12262 Ewen Avenue, commented on the protection of agricultural land and expressed concern with the development of large homes in the ALR.

Bhupinder Dhiman, 9360 Sidaway Road, commented on the potential circumstances where development of large homes on agricultural land is required to accommodate large families and would be beneficial for family-operated farms.

In reply to queries from Committee, Mr. Craig noted that should a maximum house size limitation be implemented, a rezoning application may be submitted to request approval to build a larger home. Erika Simm, 4991 Westminster Highway, commented on the development of large homes on agricultural land and suggested that clear parameters be developed that would permit large homes in certain circumstances to accommodate large families living on the farm.

Cllr. Dang left the meeting (5:56 p.m.) and did not return.

Gurdial Badh, 2831 Westminster Highway, remarked that family-operated farms may require large homes to accommodate family members living onsite and expressed concern with regard to the enforcement of non-compliant properties.

Yvonne Bell, 10431 Mortfield Road, expressed concern with respect to the development of large homes on the ALR and the potential negative impact on agricultural soil.

Randy Schuette, 7620 Ash Street, expressed that potential restrictions to the development of homes on agricultural land may penalize farmers and adversely affect land values. He suggested that houses that are large enough to require firewalls be restricted on agricultural land.

It was moved and seconded

- (1) That the staff report titled, "Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve", dated January 10, 2017, from the Director of Development and the Manager of Policy Planning, be received for information; and
- (2) That staff be directed to conduct public consultations regarding the bylaw options presented in this report ("Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve") regarding house size, farm home plate and setbacks, including residential accessory buildings.

The question on motion was not introduced as discussion ensued with regard to the timeline of the public consultation process. It was suggested that the public consultation process be advanced to commence at an earlier date.

As a result of the discussion, staff were directed to provide information on:

- the number of narrow agricultural lots in city
- the feasibility of placing a moratorium on the development of new large homes in the ALR;
- taxes related to farm classified sites;
- recently issued building permits for single family dwellings in the ALR;
- aerial photograph examples of large homes on agricultural land in the city, including the Global BC news story regarding large homes on agricultural properties in the city; and

 the Corporation of Delta's dwelling size regulations on agricultural land less and greater than eight hectares;

and report back prior to the January 23, 2017 Regular Council meeting.

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

9. MANAGER'S REPORT

(i) Building Massing Regulation Public Consultation

Mr. Craig noted that the first of the scheduled open houses on proposed amendments to building massing regulation is scheduled for January 18, 2017 at the South Arm Community Centre.

(ii) Mylora Non-Farm Use Application

Mr. Craig noted that the City and the applicant have sent supporting documents to the ALC and farm remediation work will commence in the upcoming weeks.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (6:17 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, January 17, 2017.

Councillor Linda McPhail Chair Evangel Biason Legislative Services Coordinator

To Planning Committee Jan. 17, 2017 re: item#1 2016 - January 1 -2017 - January 1 -2014 Budget -2015 - January 1 -December 31 December 31 January 1 -December 31 December 31 **Balance** Projected to be brought Forward December \$6,663.33 \$1,889.40 \$750.00 \$4,212.58 Revenue City of Richmond \$11,000,00 \$11,000.00 \$11,000.00 \$11,000.00 Membership Dues \$1,400.00 \$1,400.00 \$1,400.00 \$1,400.00 Bank Interest \$4.00 \$1.50 \$1.50 \$5.00 Sponsorship Total Revenue \$19,068.33 \$16,614.08 \$14,293.40 \$13,151.50 Expenses Admin Assistant \$10,000.00 \$10,000.00 \$10,000.00 \$10,450.00 \$80.00 \$80.00 Admin Expenses \$200.00 \$100.00 \$1,500.00 Forums/Meetings \$1,000.00 \$1,600.00 \$1,400.00 \$2,000.00 \$800.00 Website + IT \$1,500.00 \$1,100.00 Website \$500.00 \$600.00 Training/Calendar \$1,100,00 \$500.00 Post Box Renewal \$158.00 \$158.00 \$158.00 \$158.00 Volunteer \$250.00 \$200.00 Appreciation \$200.00 \$250.00 . \$5,000.00 Sub Committee/printing \$2,000.00 /events **Total Expenses** \$19,058.00 \$14,308.00 \$13,138.00 \$16,538.00 \$76.08 **Total Balance** -\$14.60 \$10.33 \$13.50

> Schedule 1 to the Minutes of the Planning Committee meeting of Richmond City Council held on Tuesday Lanuary 17, 2017.

JAN 17 2017 RECEIVED Schedule 2 to the Minutes of the Planning Committee meeting of Richmond City Council held on Tuesday, January 17, 2017.

To Planning committee Jan. 17, 2017 re: Item # 2.

From: John Roston, Mr [john.roston@mcgill.ca]
Sent: Tuesday, January 17, 2017 10:54 AM
To: McPhail,Linda; McNulty,Bill; Au,Chak; Loo,Alexa; Steves,Harold
Cc: Brodie,Malcolm; Johnston,Ken; Day,Carol; Dang,Derek; Gonzalez,Robert; Russell,Paul; McEwen,Brendan
Subject: Planning Committee Meeting Jan. 17 - Electric Vehicle Report

Dear members of the Planning Committee,

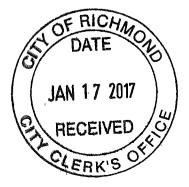
As you may know, Plug-in Richmond is the group of Richmond electric vehicle owners who are promoting the use of electric vehicles in Richmond. I will be attending the meeting this afternoon, but if there is not an opportunity for citizens to speak on agenda items, there are a few points I would like to make.

- The staff report is excellent as far as it goes. It clearly makes the point that adoption of EVs is an essential component of meeting our greenhouse gas emission targets. It correctly states that 80% of all EV charging is done at home so that residential charging infrastructure is essential to the wider adoption of EVs. It also points out that we want charging to take place overnight when demand on the electric grid is very low. Most EVs are equipped with charging timers that control when the charging takes place.
- 2. Given the time and effort required for the consultation process outlined in the report, it is important that as many options as possible are included for residential charging. New private developments are less of a challenge than retrofitting existing residential properties where most of the potential EV owners live. Separate incentives are required for the installation of electrical infrastructure by the property owner or strata corporation and for the purchase of a charging station by the EV owner. The consultation process must include both new and existing residential properties.
- 3. 120V level 1 charging, which usually takes 8 hours for an average depleted battery, is obsolete if we wish to have the charging take place from 1 to 5 am when the demand on the electric grid is very low. This requires 240V level 2 charging in all residential properties. Similarly, any charging infrastructure in non-residential properties should be 400V level 3 which will charge an average EV to 80% capacity in a half hour.
- 4. Norway has proved that priorities (perks) for EVs are as important for increased EV adoption as financial subsidies. The consultation process should include requiring reserved parking for EVs, without charging infrastructure, near existing accessible parking spaces.
- 5. Promotion of electric vehicles at community events is essential where prospective EV owners can chat with existing owners. This is currently being done on a shoestring by Plug-in Richmond in collaboration with the provincially funded Emotive BC. The consultation process should include determining the modest budget required for the City to support these promotional activities including the hiring of two summer students by the City.

I would be pleased to answer any questions or supply any information that would be helpful. Thank you for your interest in electric vehicles.

John Roston Coordinator Plug-in Richmond <u>http://pluginrichmond.ca</u>

john.roston@mcgill.ca John Roston 12262 Ewen Avenue Richmond, BC V7E 6S8 Phone: 604-274-2726 Fax: 604-241-4254



Schedule 3 to the Minutes of the Planning Committee meeting of Richmond City Council held on Tuesday, January 17, 2017.

Planning Committee Meeting January 17, 2017 On Table Item # 8 11 letters as of 3:00 pm

MayorandCouncillors

From: Sent: To: Subject: Planning Committee - Jan 17/17 Item # 8

MayorandCouncillors Tuesday, 17 January 2017 14:40 Crowe,Terry FW: Mega houses on farmland

Categories:

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

From: MayorandCouncillors Sent: Tuesday, 17 January 2017 14:40 To: 'Marion Smith' Subject: RE: Mega houses on farmland

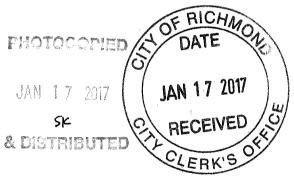
Dear Ms. Smith,

This is to acknowledge and thank you for your correspondence to Richmond City Council. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: <u>cjesson@richmond.ca</u>



From: Marion Smith [mailto:marionsmith@shaw.ca] Sent: Tuesday, 17 January 2017 14:19 To: MayorandCouncillors Subject: Mega houses on farmland

Dear Mayor and Councillors,

Please take every action that you can to eliminate mega houses on Richmond farmland, including refusal of any further building applications.

Houses over a certain size or number of bedrooms should be declared non-farm buildings so that they can no longer claim the agriculture tax rate. These should be taxed at the same or higher rate as the rest of the homes in Richmond.

Regards, Marion Smith Richmond, BC TO: MAYOR & EACH COUNCILLOR FROM: CITY CLERK'S OFFICE

Planning Committee - Jan 17/17

Hem #8

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

JAN 17 2017

PHOTOCOPIED

JAN 17 2017

From:
Sent:
To:
Subject:

CityClerk Tuesday, 17 January 2017 10:57 MayorandCouncillors FW: megahomes on ALR land----written submission for January 17, 2917 Planning Committee meeting

Categories:

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

From: Badyal,Sara Sent: Monday, 16 January 2017 17:47 To: CityClerk Cc: Crowe,Terry; Craig,Wayne; Konkin,Barry; Hopkins,John; Eng,Kevin Subject: FW: megahomes on ALR land----written submission for January 17, 2917 Planning Committee meeting

From: Gabrielle A. Grün [mailto:grun@cs.sfu.ca] Sent: Monday, 16 January 2017 17:11 To: Badyal,Sara; Eng,Kevin Subject: Fwd: megahomes on ALR land----written submission for January 17, 2917 Planning Committee meeting

Hi Sara and Kevin,

How are you? Minhee is on leave, and john has an automated away from the office email message. When is a final decision expected? Many thanks. Have a nice day.

----- Forwarded Message ------

Subject:megahomes on ALR land----written submission for January 17, 2917 Planning Committee meeting Date:Mon, 16 Jan 2017 16:52:02 -0800 From:Gabrielle A. Grün <grun@cs.sfu.ca>

Reply-To:grun@cs.sfu.ca

To: DWeber@richmond.ca

Dear Planning Committee Members,

Here are some points to weigh regarding members on "farmland"

-The phenomena is not new. Some very large homes have existed on ALR land for many years. The roughly 20 000 square foot Ivy Manor at 12911 No. 3 Road was built in 1989, and is the former home of Milan and Maureen Illich.

-There should not be one [relatively low] house size limit on all ALR land regardless of frontage or overall lot size.

CNCL - 44

=The myths that agriculture has to be intrinsically tied to specially designated land, and that our food security is dependent on the farming of small lots in the ALR (<2 ha) should not be perpetuated any longer. Hydroponics and greenhouse operations have higher yields than conventional plant agriculture. On the other side of the coin, some properties were included in the ALR merely on the basis of location and not on actual soil capacity. In the case of conventional farming, the economies of scale have to be taken into account.

-Around May 2008, the City implemented a green roof bylaw for new commercial and industrial construction. To ease the consciences of those who still hold to the "agricultural land" hypothesis, the City can require crop-producing, intensive green roofs on the construction of new houses more than 10 000-12 000 square fee in SIZED

-Decisions should be based on careful reflection and analysis, and not in response to fear.

Thanks for your consideration.

Yours sincerely, Gabrielle A. Grün

M.Sc., Computing Science

10551 No. 6 Road

Richmond BC

V6W 1E6

Planning Committee Jan 17/17 Hern 48 TO: MAYOR & EACH COUNCILLOR FROM: CITY CLERK'S OFFICE

From:
Sent:
To:
Subject:

MayorandCouncillors

MayorandCouncillors Tuesday, 17 January 2017 14:05 Crowe,Terry FW: Fwd: Fwd: Fwd: the proposed chanes to the taxation of ALR land

Categories:

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

From: MayorandCouncillors Sent: Tuesday, 17 January 2017 14:05 To: 'grun@cs.sfu.ca' Subject: RE: Fwd: Fwd: the proposed chanes to the taxation of ALR land

Dear Ms. Grun,

This is to acknowledge and thank you for your correspondence to Richmond City Council. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: <u>cjesson@richmond.ca</u>

----- Forwarded Message -------

Subject: Fwd: Fwd: the proposed chanes to the taxation of ALR land

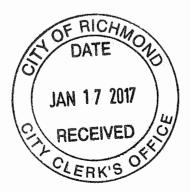
Date:Sun, 15 Jan 2017 22:15:24 -0800

From:Gabrielle A. Grün <grun@cs.sfu.ca>

Reply-To:grun@cs.sfu.ca

To:Park,Minhee

Hi Minhee,



CNCL - 46

How ares you? Please enter the following as a submission for the planning committee meeting on Tuesday. Thanks. Take care.

----- Forwarded Message ------

Subject: Fwd: the proposed chanes to the taxation of ALR land

Date:Sun, 27 Nov 2016 21:48:07 -0800

From:Gabrielle A. Grün <grun@cs.sfu.ca>

Reply-To:grun@cs.sfu.ca

To:Reid.MLA, Linda <Linda.Reid.MLA@leg.bc.ca>

----- Forwarded Message -------

Subject: the proposed chanes to the taxation of ALR land

Date:Sun, 27 Nov 2016 21:40:01 -0800

From:Gabrielle A. Grün <grun@cs.sfu.ca>

Reply-To:grun@cs.sfu.ca

To:peter.fassbender.MLA@leg.bc.ca

Dear Mr. Peter Fastbender, Minister of, **Community, Sport, Cultural Development** and Minister Responsible for Translink,

The proposed changes to the taxation of ALR properties would adversely impact all the owners of these lands, not just speculators or investors. Furthermore, the amendments could actually result in less land being employed in agricultural endeavors. More study, consultation and canvassing of the stakeholders i.e. the diverse body of owners of ALR land throughout BC.

It is of note that some longstanding owners of ALR land do not farm their land for various reasons and circumstances. Seniors an d the disabled should be excluded from any changes to the o ALR property tax credit amounting to 50% of the provincial school tax portion of property tax. For the rest of owners of ALR land that is not actively farmed, a staggered reduction in the credit e.g. of 5-10% per year could be looked at. The retention of a school tax credit of 10-1.985% as "compensation for the additional regulations and reduced potential i.e. in terms of multifamily dwelling units etc. and diminished services such as sanitary sewer and storm sewers. could be entertained too .

As well, any increase in the monetary agricultural production quota required for a property to be classified as "farm" by BC Assessment has to be well thought out as such an raise could actually result in an abandoning of farming efforts altogether on some smaller ALR lots because the cost/benefit ratio would no longer make sense (or the benefit would be almost impossible to to attain). The minimum for properties under 1.98 acres is \$10 000/year, which is already high. On the other hand, the quota for properties between 1.98 acres and 10 acres is only \$2500/year. While this may be reasonable for lots under 3-4 acres in size, it is likely inappropriate for 9-10 acre parcels. There should be more of a graded scale for this category spanning over 8 acres. Agricultural output can vary significantly from year to year, and is dependent on a variety of factors including the weather. Moreover, in order to maximize the number of properties being farming, owners of ALR land should continue to be allowed to contract out the farming activities to others or to lease their land to farmers.

Rather than taking punitive action against all owners of ALR land that is not being farmed, there should be greater support for existing farms and more incentives for innovation in farming and new agricultural operations. An understanding that certain small, ALR properties are not well-suited for conventional farming, and that food production cannot be strictly limited to land especially allocated to agriculture (rooftop gardens, non-soil-based crop growing techniques) is helpful. A firm grasp of the underlying issues is required for the thorough review of the taxation of ALR land so that the e effect is what is intended.

Thanks for your consideration.

Yours sincerely, Gabrielle A. Grün

M.Sc., Computing Science

10551 No. 6 Road

Richmond BC

V6W 1E6

MayorandCouncillors

From: Sent: To: Subject: Weber,David Tuesday, 17 January 2017 12:57 MayorandCouncillors FW: 12911 No. 3 Road

Categories:

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

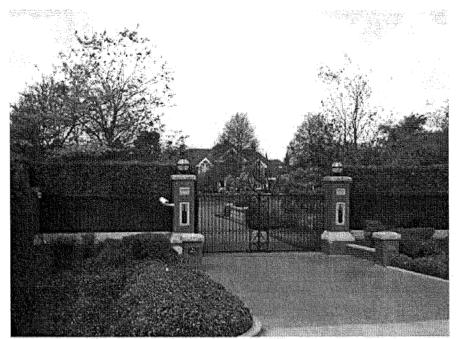
------ Forwarded Message ------Subject:12911 No. 3 Road Date:Mon, 16 Jan 2017 13:38:23 -0800 From:Gabrielle A. Grün <grun@cs.sfu.ca> Reply-To:grun@cs.sfu.ca To:Gabrielle Grun <grun@cs.sfu.ca>

e-valueBC Compare Assessments online FAQs Contact Us

[Address ∨] [] [] [] [] [] []

- RECENT SEARCHES
- MY FAVOURITES

12911 NO. 3 RD RICHMOND



11-320-R049000098 04/28/2014 Total Value \$11,905,000

3197 TAHSIS AVE COQUITLAM



10-305-35185067 01/05/2013

Total Value \$899,000

17331 FEDORUK RD RICHMOND



11-320-R013666070 04/28/2014 Total Value \$356,963

10276 KENT RD CHILLIWACK



Total Value \$495,000

10282 KENT RD CHILLIWACK

Click Details to See Photo

You have no Favourites currently saved.

Click on the on any property page to save and easily access up to 10 of your favourite properties on this device.

12911 NO. 3 RD RICHMOND V7A 1X4



11-320-R049000098 04/28/2014 Total Value \$11,905,000 Assessed as of July 1st, 2016 Land \$7,794,000 Buildings \$4,111,000

Previous Year Value \$9,275,000 Land \$5,196,000 Buildings \$4,079,000 <u>Report a Problem</u> Year Built 1989 Description 2 STY house - custom Area-Jurisdiction-Roll 11-320-R-049-000-098 Are the property details correct? Yes, click here to confirmNo, click here to update

Show less

Land Size 18.46 Acres First Floor Area 10,224 Second Floor Area 9,182 **Basement Finish Area** Strata Area Bedrooms 5 Baths 9 Carports C Garages G Legal Description and Parcel ID Lot 5 Block 3N Plan 33483 Section 8 Range 6W Land District 36 PID: 000-462-772 **Building Storeys** Gross Leaseable Area Net Leasable Area No. of Apartment Units Manufactured Home Width Length Total Area Sales History (in the last 3 years) Comments Map Neighbouring Properties Sample Sold Properties Due to high volume you may experience delays in the response time of the map feature. We apologize for the inconvenience.

MayorandCouncillors

From: Sent: To: Subject: Planning Committee - Jan. 17/2017

Item #8

TO: MAYOR & EACH COUNCILLOR HOM: CITY CLEHK'S OFFICE

MayorandCouncillors
Tuesday, 17 January 2017 10:31
Crowe, Terry
FW: Regulating the size of MEGA houses in the ALR

Categories:

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

FYI

From: MayorandCouncillorsSent: Tuesday, 17 January 2017 10:31To: 'Bell, Yvonne [HSSBC]'Subject: RE: Regulating the size of MEGA houses in the ALR

Dear Yvonne and Lorraine Bell,

This is to acknowledge and thank you for your correspondence to Richmond City Council providing feedback regarding the regulation of houses on farmland. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely,

Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: <u>cjesson@richmond.ca</u>

PHOTOCOPIED	OF RICHMO
JAN 17 2017	DATE 13
SK	(JAN 1 7 2017)
& DISTRIBUTED	RECEIVED
	CLERK'S OFT

From: Bell, Yvonne [HSSBC] [mailto:Yvonne.Bell@hssbc.ca]
Sent: Monday, 16 January 2017 17:12
To: MayorandCouncillors
Subject: Regulating the size of MEGA houses in the ALR

I am in full support of Richmond regulating the size of houses on land in the ALR (and anywhere in Richmond for that matter). Please create a bylaw to limit the floor area of a home in the ALR similar to that of Delta's zoning regulations. Delta restricts the floor area of a home to 3,552 square feet on lots smaller than 20 acres or 5,005 square feet on lots 20 acres or larger. I think the floor area of a home in the ALR should be no larger than 3,552 square feet on any size of lot in the ALR whether it be ½ an acre or 100 acres. Grade A farmland is for growing food, not for building insanely large megahouses. This is 2017. Farmland is one of the most precious resources the earth has besides water. Why do you allow people to squander it on ludicrous Megahouses? Please pass a bylaw controlling the size of megahouses as soon as possible.

Yvonne and Lorraine Bell, life time residence and taxpayers of Richmond CNCL - 56 10431 Mortfield Road Richmond, BC V7A 2W1

MayorandCouncillors

From: Sent: To: Subject: PlanningCommittee - Jan 17/17

Hem #8

MayorandCouncillors Tuesday, 17 January 2017 10:26 Crowe,Terry FW: Homes in the ALR TO: MAYOR & EACH COUNCILLOR FROM: CITY CLERK'S OFFICE

Categories:

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

fyi

-----Original Message-----From: MayorandCouncillors Sent: Tuesday, 17 January 2017 10:26 To: 'Penny Charlebois' Subject: RE: Homes in the ALR

Dear Ms. Charlebois,

This is to acknowledge and thank you for your correspondence to Richmond City Council providing feedback regarding the regulation of houses on farmland. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: <u>cjesson@richmond.ca</u>

-----Original Message-----From: Penny Charlebois [mailto:Pennycharlebois@telus.net] Sent: Monday, 16 January 2017 18:08 To: MayorandCouncillors Subject: Homes in the ALR

Mayor and Council

We are losing valuable farmland daily in Richmond. These massive home are not being built for farmers but speculators buying cheaper land and getting the farm tax benefit. Are they being used as hotels? Are they paying taxes like the rest of us? There are still some really great farmers in Richmond providing food for so many, and some who cannot purchase land but have to lease because the speculators have contributed to rising prices. Penny Charlebois

PHOTOCOPIED

JAN 17 2017

SK & DISTRIBUTED



CNCL - 58

Sent from my iPad

Planning Committee - Jan 17/17 Item #8

MayorandCouncillors

From: Sent: To: Subject: MayorandCouncillors Tuesday, 17 January 2017 10:28 Crowe,Terry FW: Mega houses on agricultural land

Categories:

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

FYI

-----Original Message-----From: MayorandCouncillors Sent: Tuesday, 17 January 2017 10:28 To: 'Maureen Nakanishi' Subject: RE: Mega houses on agricultural land

Dear Mr. and Mrs. Nakanishi,

This is to acknowledge and thank you for your correspondence to Richmond City Council providing feedback regarding the regulation of houses on farmland. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: <u>cjesson@richmond.ca</u> PHOTOCOPIED

JAN 17 2017

SK 8 DIS JAN 17 2017

-----Original Message-----From: Maureen Nakanishi [mailto:mnakanishi521@icloud.com] Sent: Monday, 16 January 2017 17:46 To: MayorandCouncillors Subject: Mega houses on agricultural land

My family and I are concerned about the mega houses being built on Our agricultural lands. It's obvious these homes are not built to Accommodate people who are farming the land. Unless restrictions are put into place and enforced some people will take advantage of any loopholes that Exist. I can't imagine what it must be like to live beside these mall size houses in fact are they really homes? We can't allow what agricultural land we have left in Richmond to be threatened by what is viewed as single family homes.

We trust that our elected officials are looking out for the benefit of the community As a whole, not a select few that take advantage of pre existing regulations.



TO: MAYOR & EACH COUNCILLOR FROM: CITY CLERK'S OFFICE George and Maureen Nakanishi 11571 Plover Drive

Sent from my iPad

MayorandCouncillors

From: Sent: To: Subject: Planning Committee Jan 17/17 __________ TO: MAYOR & EACH COUNCILLOR FROM: CITY CLERK'S OFFICE

MayorandCouncillors Tuesday, 17 January 2017 10:24 Crowe,Terry FW: Houses on farmland

Categories:

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

FYI

From: MayorandCouncillors Sent: Tuesday, 17 January 2017 10:24 To: 'Marion Bellis' Subject: RE: Houses on farmland

Dear Ms. Bellis,

This is to acknowledge and thank you for your correspondence to Richmond City Council providing feedback regarding the regulation of houses on farmland. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: cjesson@richmond.ca PHOTOCOPIED

JAN 17 2017

SK & DISTRIBUTED



From: Marion Bellis [mailto:wmbellis@shaw.ca] Sent: Tuesday, 17 January 2017 07:12 To: MayorandCouncillors Subject: Houses on farmland

Ladies and Gentlemen,

I am hoping that in this meeting about house sizes will actually do something. No house on farmland should be larger than 4,500 sq. ft. Farmland is a precious resource.

Humans need to eat food and the land to grow it on is becoming scarce. Cost of food is going up

For the average household. Change the rules and enforce the rules.

Where has this council been for the last few years that his use of farmland/house size has gotten so out of control. By the way what about the land behind all the churches along Nbr. 5 Rd, which was suppose to be farmed? Why can this land not be

turned into community allotment gardens?

CNCL - 62

Regards Marion Bellis P.S.

Stop pouring money into the Oval, it was suppose to be self sustaining, how about putting some into the Library system.

MayorandCouncillors

From: Sent: To: Subject: Planning Committee -Jan 17/17 ______________ TO: MAYOR & EACH COUNCILLOR FROM: CITY CLERK'S OFFICE

MayorandCouncillors Tuesday, 17 January 2017 13:58 'Courtney N' RE: ALR land

Categories:

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

Dear Ms. Neish and Mr. Besharah,

This is to acknowledge and thank you for your correspondence to Richmond City Council providing feedback regarding the regulation of houses on farmland. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: cjesson@richmond.ca

From: Courtney N [mailto:courtneyneish@gmail.com] Sent: Tuesday, 17 January 2017 13:55 To: MayorandCouncillors Subject: ALR land

We are appalled and disgusted by the building happening on ALR land here in Richmond. We have lived here for almost 37 years and support maintaining farm land for farming.

Please change the by-laws to limit the size of houses to approx. 5,000 sq. ft., and minimize the overall footprint created by roads, pools etc.

As well, if it is part of council's mandate, increase the amount of farming income required before the property is taxed as agricultural rather than residential land.

The sooner steps are taken to preserve farmland and stop the proliferation of multi-million dollar mansions that blatantly defy the intent of the ALR, the better.

Courtney Neish and Benjamin Besharah

PHOTOCOPIED

JAN 17 2017



Sĸ CNCL - 64 DISTRIBUTED

Planning Committee - Jan 17/17

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

MayorandCouncillors

From: Sent: To: Subject: MayorandCouncillors Tuesday, 17 January 2017 14:01 Crowe,Terry FW: Houses on Farm Land

Categories:

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

From: MayorandCouncillorsSent: Tuesday, 17 January 2017 14:00To: 'Don and Rosemary Neish'Subject: RE: Houses on Farm Land

Dear Mr. and Mrs. Neish,

This is to acknowledge and thank you for your correspondence to Richmond City Council providing feedback regarding the regulation of houses on farmland. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

PHOTOCOPIED

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: cjesson@richmond.ca JAN 17 2917





From: Don and Rosemary Neish [mailto:dandrneish@gmail.com]
Sent: Tuesday, 17 January 2017 13:53
To: MayorandCouncillors
Subject: Houses on Farm Land

We are appalled and disgusted by the building happening on ALR land here in Richmond. We have lived here for almost 45 years and support maintaining farm land for farming.

Please change the by-laws to limit the size of houses to approx. 5,000 sq. ft., and minimize the overall footprint created by roads, pools etc.

As well, if it is part of council's mandate, increase the amount of farming income required before the property is taxed as agricultural rather than residential land.

The sooner steps are taken to preserve farmland and stop the proliferation of multi-million dollar mansions that blatantly defy the intent of the ALR, the better.

Don and Rosemary Neish 6900 Gainsborough Dr.

MayorandCouncillors

From: Sent: To: Subject: Planning Committee-Jan 171

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

MayorandCouncillors Tuesday, 17 January 2017 14:02 Crowe,Terry FW: Mega Homes on the Agricultural Land Reserve

Categories:

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

From: MayorandCouncillors Sent: Tuesday, 17 January 2017 14:02 To: 'Lori ' Subject: RE: Mega Homes on the Agricultural Land Reserve

Dear Ms. Yonin and Mr. Eldridge,

This is to acknowledge and thank you for your correspondence to Richmond City Council providing feedback regarding the regulation of houses on farmland. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: cjesson@richmond.ca

From: Lori [mailto:lyonin@shaw.ca]
Sent: Tuesday, 17 January 2017 13:21
To: MayorandCouncillors
Subject: Mega Homes on the Agricultural Land Reserve

We wish to extend our support to any Council members and/or staff reports that recommend limiting the size of homes located within the Agricultural Land Reserve. Anyone who lives in Richmond is aware that under the current regulations, farmland is being appropriated for mansions and country estates. This is not the purpose of the ALR and in fact, reduces productive agricultural land, effectively making it unusable for farming in the future. Agricultural Land is meant for farming, not for mansions.

We are aware that other municipalities within Metro Vancouver have placed size restrictions on homes located within the ALR. We would ask that City of Richmond Council follow their lead and do the same. And while many Richmond citizens may not take the time to let City Council know how they feel about this issue, it is a sore spot among the citizens of Richmond. It will be an issue we, and many other Richmond voters, will take into consideration during the next municipal elections. So, please provide some leadership on this issue, as have many other municipal politicians.

Thank you,

Lori Yonin and John Eldridge #42 – 11491 Seventh Ave., Richmond, B.C.

MayorandCouncillors

From: Sent: To: Subject: Plannin Committee - Jan 17/17 Item #8

MayorandCouncillors Tuesday, 17 January 2017 14:03 Crowe,Terry FW: ALR mega homes and AIR BnB

Categories:

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

-----Original Message-----From: MayorandCouncillors Sent: Tuesday, 17 January 2017 14:03 To: 'geldart1@gmail.com' Subject: RE: ALR mega homes and AIR BnB

Dear Ms. Geldart,

This is to acknowledge and thank you for your correspondence to Richmond City Council. A copy of your email has been forwarded to the Mayor and each Councillor. In addition, your correspondence has also been forwarded to Mr. Terry Crowe, Manager, Policy Planning Department.

Thank you for taking the time to write to Richmond City Council.

Sincerely, Claudia

Claudia Jesson Manager, Legislative Services City Clerk's Office City of Richmond, 6911 No. 3 Road, Richmond, BC V6Y 2C1 Phone: 604-276-4006 | Email: <u>cjesson@richmond.ca</u>

-----Original Message-----From: geldart1@gmail.com [mailto:geldart1@gmail.com] Sent: Tuesday, 17 January 2017 13:14 To: MayorandCouncillors Subject: ALR mega homes and AIR BnB JAN 17 2017 CLERK'S OF

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

Just when I though you weren't listening to the community, both these issues are being addressed. Thank you. Shirley Geldart

Schedule 4 to the Minutes of the Page 1 of 1 Planning Committee meeting of Richmond City Council held on Tuesday, January 17, 2017.

\$ 1,398,000



1

Results

TÖSSŐ MÖLENNÄR PLACE, Richmond, BC, V6X 3G6 Lising idt R2131188



Painter d'aber

.



10586 MCLENNAN PLACE Richmond, BC V6X 3G6

· sales B. . . .

Get Directions

Travel Time

÷

Building type:	Single Family	Land size:	0.13
Bedrooms:	\$ ⁴	Living space:	3021 sq ft
Bethrooms:		Status:	For Sale/Active
Level:	a) Ch	Days on Market:	3
Tex Year:	2016	Basement:	None
Age of Building:	1980	Complex:	None
Community:	Enicopacit Fil		

Minutes



Public Works and Transportation Committee

- Place: Anderson Room Richmond City Hall
- Present: Councillor Chak Au, Chair Councillor Harold Steves, Vice-Chair Councillor Derek Dang Councillor Carol Day Councillor Alexa Loo
- Call to Order: The Chair called the meeting to order at 4:00 p.m.

MINUTES

It was moved and seconded That the minutes of the meeting of the Public Works and Transportation Committee held on November 23, 2016, be adopted as circulated.

CARRIED

NEXT COMMITTEE MEETING DATE

February 22, 2017, (tentative date) at 4:00 p.m. in the Anderson Room

PLANNING AND DEVELOPMENT DIVISION

1. TRAFFIC SAFETY ADVISORY COMMITTEE – PROPOSED 2017 INITIATIVES

(File Ref. No. 01-0100-30-TSAD1-01) (REDMS No. 5222032)

Victor Wei, Director, Transportation, in reply to questions on the Leading Pedestrian Interval (LPI) pilot project, provided the following information: (i) the pilot project will gather information from the City Centre area, (ii) when accommodating seniors, longer durations for walk timers and centre island refuge intersections are being considered, and (iii) if proven to be effective, infrared technologies being tested by neighbouring municipalities can be implemented. Mr. Wei confirmed that the Project Swoop statistics will be made available.

It was moved and seconded

- (1) That the proposed 2017 initiatives for the Traffic Safety Advisory Committee, as outlined in the staff report titled "Traffic Safety Advisory Committee - Proposed 2017 Initiatives" dated November 22, 2016 from the Director, Transportation, be endorsed; and
- (2) That a copy of the above staff report be forwarded to the Richmond Council-School Board Liaison Committee for information.

CARRIED

2. RICHMOND ACTIVE TRANSPORTATION COMMITTEE – PROPOSED 2017 INITIATIVES

(File Ref. No. 01-0100-20-RCYC1) (REDMS No. 5227687 v. 2)

In response to queries, Victor Wei, Director, Transportation, noted that the Cycling and Trails Map is being redesigned into a portable, pocket-sized form and that the electronic document will also be made available on the City's website.

It was moved and seconded

- (1) That the proposed 2017 initiatives of the Richmond Active Transportation Committee, as outlined in the staff report titled "Richmond Active Transportation Committee - Proposed 2017 Initiatives" dated December 15, 2016 from the Director, Transportation, be endorsed; and
- (2) That a copy of the above report be forwarded to the Richmond Council-School Board Liaison Committee for information.

CARRIED

ENGINEERING AND PUBLIC WORKS DIVISION

3. DIKE MASTER PLAN - PHASE 2

(File Ref. No. 10-6060-01) (REDMS No. 5178299 v. 3)

Lloyd Bie, Manager, Engineering Planning, responded to questions regarding potential situations which could be encountered by Richmond's dikes. Mr. Bie noted scientific predictions on crest heights are being monitored and that plans can be amended accordingly in response to these predictions. Comments were made by the Committee regarding the use of agricultural soil on the barrier islands.

It was moved and seconded

That the public and key external stakeholders be consulted to provide feedback on the medium and long term dike improvements required for part of Richmond's West Dike (between Williams Road and Terra Nova Rural Park) and part of the North Dike (between Terra Nova Rural Park to No. 6 Road) as identified in the staff report titled "Dike Master Plan – Phase 2" from the Director of Engineering, dated December 6, 2016.

CARRIED

4. DCC RESERVE FUND EXPENDITURE (4000 MAY DRIVE) BYLAW NO. 9643

(File Ref. No. 03-1000-08-030) (REDMS No. 5203346 v. 5)

The Committee concurred that the wording of the report did not clearly state the source and rationale of the funding for the project. Lloyd Bie, Manager, Engineering Planning, stated that further clarification would be added to the report prior to approval by Council.

It was moved and seconded

That DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643 be introduced and given first, second and third readings.

CARRIED

WATER SHORTAGE RESPONSE PLAN – PROPOSED CHANGES (File Ref. No. 10-6060-01) (REDMS No. 5268702 v. 3)

Discussion ensued on the watering hours for residents and the possibility of changing the permitted hours. Robert Gonzalez, Deputy CAO and General Manager, Engineering and Public Works, explained that keeping the watering hours standardized with Metro Vancouver would simplify enforcement. Mr. Gonzalez also noted that convenience to residents was taken into account by Metro Vancouver when determining the permitted watering hours.

It was moved and seconded

That the comments on Metro Vancouver's proposed changes to the Water Shortage Response Plan, as summarized in the staff report titled "Water Shortage Response Plan – Proposed Changes," dated January 3, 2017, from the Director, Engineering be submitted to Metro Vancouver.

CARRIED

6. T.5651 - 2016 PAVING PROGRAM (LAFARGE CANADA INC.) CONTRACT EXTENSION AND CHANGE ORDER FOR 2017 PAVING PROGRAM

(File Ref. No. 10-6340-20-P.16207) (REDMS No. 5267595)

It was moved and seconded

That Contract T.5651 – 2016 Paving Program with Lafarge Canada Inc. be extended to include the 2017 Paving Program, and that a Change Order be issued to increase the value of this Contract by \$2,700,000.

CARRIED

7. MANAGER'S REPORT

(i) Snow and Ice Responses and Ongoing Preparations

Ben Dias, Manager, Roads and Construction Services, briefed the Committee on the recent weather, noting that: (i) a total of 27 centimetres of snow fell in Richmond during the months of December to January, nearly double what was expected, (ii) a total of 2600 tonnes of salt was used during this period, and (iii) 500-800 tonnes of salt is what is usually budgeted. Staff advised that Works Yard currently has 500 tonnes of salt on hand.

Mr. Dias noted that the unfavorable conditions of snow, followed by freezing temperatures, resulted in a longer than normal duration of the snow. In response to questions, Mr. Dias noted that the financial impact of the weather conditions will not cause an overall increase in the total roads and construction budget and that, although some residents did come to the Works Yard, the City of Richmond did not formally distribute salt.

(ii) High Tide Storm Predictions

Tom Stewart, Director, Public Works Operations, informed the Committee that at 10:09 a.m. there was prediction that high tides in the Britannia area could result in toppling; however, there was no reports of such occurrences.

(iii) Annual Capital Projects Open House

John Irving, Director, Engineering, noted that the proposed date for the Annual Capital Projects Open House will be April 20, 2017.

ADJOURNMENT

It was moved and seconded *That the meeting adjourn (4:39 p.m.).*

CARRIED

Certified a true and correct copy of the Minutes of the meeting of the Public Works and Transportation Committee of the Council of the City of Richmond held on Wednesday, January 18, 2017.

Councillor Chak Au Chair Shaun Divecha Legislative Services Coordinator



Report to Committee

Re:	Regulations for Marihuana Dispensaries		
From:	Cecilia Achiam, MCIP, BCSLA Director, Administration and Compliance	File:	03-0900-01/2016-Vol 01
То:	General Purposes Committee	Date:	January 10, 2017

Staff Recommendation

That Richmond Zoning Bylaw No. 8500, Amendment Bylaw 9671 to add a definition of "marihuana dispensary" and add this use to the non-permitted uses and definitions (Section 3.5) of the Richmond Zoning Bylaw No. 8500 to prohibit "marihuana dispensary" in all zones, be introduced and given first reading.

Cecilia Achiam, MCIP, BCSLA Director, Administration and Compliance (604-276-4122)

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Law Development Applications Policy Planning	E E E E E E	A	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: $\mathcal{D}\mathcal{W}$	APPROVED BY CAO	

Staff Report

Origin

Marihuana laws are changing rapidly in Canada and the federal government recently released a report on a framework for the legalization of cannabis in Canada. This report recommends moving forward with a number of initiatives related to the recreational use of marihuana, including retail sales. Federal regulations that may result from the report's recommendations are expected as early as spring 2017.

This report proposes amendments to the Richmond Zoning Bylaw No. 8500 as a proactive response to the potential Federal legalization of marihuana. Until legalization measures are taken by the Federal Government, the use and retail sale of cannabis is prohibited by existing Federal legislation and not required to be in the City's zoning bylaw. However, in order to manage the potential impacts arising at the local level, it is prudent for the City to implement zoning regulations to prohibit all retailing and/or dispensing of marihuana or cannabis products city-wide.

Analysis

Current Federal Regulations

Federally, marihuana (cannabis) is currently regulated by the Controlled Drugs and Substances Act (CDSA) and the Access to Cannabis for Medical Purposes Regulations (ACMPR), formerly the Marihuana for Medical Purposes Regulations (MMPR). Currently, under this legislation there is no provision allowing for the retail sale or dispensing of marihuana or cannabis products.

Current Municipal Regulations

When the federal regulations came into effect in 2013, in relation to addressing access to medical marihuana (MMPR), Council endorsed a zoning bylaw amendment that defined a medical marihuana production facility and a medical marihuana research facility. This amendment also brought regulations to prohibit these uses City-wide. Through this regulatory framework, case-by case consideration of rezoning applications for proposed medical marihuana production and/or research and development facilities have been reviewed based on Official Community Plan (OCP) policies developed to manage this land use. These zoning bylaw regulations and OCP policy specifically addressed medical marihuana production under the MMPR (now ACMPR).

Richmond Zoning Bylaw 8500 does not currently contain explicit provisions regarding retailing or dispensing of marihuana/cannabis because it is unlawful and contrary to the CDSA. In anticipation of federal legislation that may legalize and regulate marihuana, and to manage this issue within the context and priorities of Richmond, staff propose to:

• Define and add "marihuana dispensary" as a use definition in Section 3.5 (Non-Permitted Uses and Definitions) of the Richmond Zoning Bylaw 8500, wording as shown in the proposed Bylaw Amendment; and

• Include "marihuana dispensary" in Section 3.5 (Non-Permitted Uses and Definitions) of the Richmond Zoning Bylaw 8500, which would not permit this use in any zone city-wide.

The proposed amendment to the zoning bylaw would provide clarity on the City's regulations on this type of business during the period until which time federal legislation on marihuana is brought forward. This approach would ensure that the City's regulations are consistent with current federal legislation, where marihuana retail and/or dispensaries remain unlawful operations.

This is an interim regulatory approach that can be re-visited in the future. Should the Federal Government proceed with implementation of legislation for the legalization of marihuana in Canada, staff will assess the regulatory framework and provide Council with a future report outlining any legalization initiatives and potential options related to marihuana use, including retail sale.

Consultation

Staff have reviewed the proposed Zoning Bylaw amendment and advise that no public consultation is required beyond the public notification requirements.

Financial Impact

None

Conclusion

This staff report recommends that Richmond Zoning Bylaw No.8500, Amendment Bylaw 9671 be brought forward to define "marihuana dispensary" and prohibit them in all zones in the City. The City may make further amendments to respond to any new federal legislation.

Carli Edwards Chief Licence Inspector (604.276.4136)

KE:ce



Richmond Zoning - Bylaw No. 8500 Amendment Bylaw No. 9671

The Council of the City of Richmond enacts as follows:

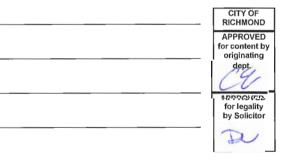
- 1) The Richmond Zoning Bylaw 8500 as amended, is further amended at Section 3.5 (Non-Permitted Uses and Definitions) by:
 - a) Adding the following to Section 3.5.1:
 - "e) Marihuana dispensary"
 - b) adding the following definition of "marihuana dispensary", in alphabetical order to Section 3.5.2:

"Marihuana Dispensary

means a business or other operation involving the sale, barter, storage, distribution or dispensing of cannabis, marihuana or any products containing or derived from cannabis or marihuana."

2) This Bylaw is cited as "Richmond Zoning – Bylaw, Amendment Bylaw 9671".

FIRST READING SECOND READING THIRD READING ADOPTED



MAYOR

CORPORATE OFFICER



Report to Committee

То:	Planning Committee	Date:	December 20, 2016
From:	Cathryn Volkering Carlile General Manager, Community Services	File:	07-3000-01/2016-Vol 01
Re:	Richmond Community Services Advisory C Report and 2017 Work Program	ommittee (R	CSAC) 2016 Annual

Staff Recommendation

That the staff report titled, "Richmond Community Services Advisory Committee (RCSAC) 2016 Annual Report and 2017 Work Program", dated December 20, 2016, from the General Manager, Community Services, be approved.

lilearl. 4

Cathryn Volkering Carlile General Manager, Community Services (604-276-4068)

Att. 3

REPORT CONCURRENC	E
CONCURRENCE OF GENERAL MANAGER	2
REVIEWED BY STAFF REPORT / Agenda Review Subcommittee	INITIALS: DW
APPROVED BY CAO	I

Staff Report

Origin

The mandate of the Richmond Community Services Advisory Committee (RCSAC) is to encourage and promote social policies and community services that contribute to the well-being and quality of life of Richmond residents, and to develop the capacity of the community service sector.

While an advisory body, the RCSAC is only partially a City-appointed committee (i.e. only two citizen representatives are Council-appointed). The City supports the RCSAC by providing an annual operating budget, a Council Liaison and a Staff Liaison.

This report presents the RCSAC 2016 Annual Report (Attachment 1) and proposed 2017 Work Program (Attachment 2). This report supports Council's 2014-2018 Term Goal #2 A Vibrant, Active and Connected City:

Continue the development and implementation of an excellent and accessible system of programs, services, and public spaces that reflect Richmond's demographics, rich heritage, diverse needs, and unique opportunities, and that facilitate active, caring, and connected communities.

2.2. Effective social service networks.

2.3. Outstanding places, programs and services that support active living, wellness and a sense of belonging.

Analysis

RCSAC Charter

As indicated in the RCSAC Charter (Attachment 3), the mission of this advisory committee is "to encourage and promote those social policies and community services which contribute to the general health, welfare and quality of life of the residents of Richmond, and to increase interagency relations and cooperation in order to enhance community capacity". Their mandate is described in the attached Charter as

Section A

The RCSAC shall advise Richmond City Council and may, in consultation with City Council, make representations to other policy-making bodies on the following:

- 1. Policies that encourage cooperative planning and delivery of community services to ensure optimum efficiency and effectiveness;
- 2. Social issues/concerns that have an impact on community services, special needs groups and the quality of life in the community;
- 3. Community impact of governmental changes to policies and/or programs affecting Richmond's community services; and

4. Any other matters that may be referred by Richmond City Council, RCSAC member groups and the community at large.

Section B

1. Coordination of activities and information sharing between the voluntary and public sector.

The RCSAC also has separate "Operating Policies and Procedures" describing membership, structure and procedures.

2016 Annual Report

Highlights of the 2016 RCSAC Work Program, based on Council Term Goals (2010 – 2014) (Attachment 1) include:

- Completion of the annual Social Services and Space Needs Survey exploring funding changes and space needs, with results presented to Planning Committee in December 2016;
- The Non-profit Space Needs Action Team secured a Richmond Community Foundation grant for preliminary work in determining agency-specific space needs;
- Communication Tools were sent to Council regarding changes in VCH Management in Richmond and potential community impact as well as the 2014/2015 RCSAC Social Services and Space Needs Survey; and
- An updated inventory of community tables and committees operating in Richmond.

2017 Work Program

Council Term Goals (2014 - 2018) have been used to form the basis of RCSAC 2017 activities. In addition to responding to Council requests as they arise, highlights of the RCSAC's 2017 plans (Attachment 2) include:

- Hosting an information sharing meeting with Richmond MLAs;
- Continuing to implement the Community Social Services and Space Needs Survey and informing Council of the results;
- Non-profit Space Needs Action Team report to Council;
- Continuing to update an inventory of community-based tables and committees relevant to social services;
- Working collaboratively with other Richmond organizations to provide information regarding affordable housing needs;
- Providing information to Council regarding the impact of Federal and Provincial policy and funding decisions on Richmond services; and
- Continuing to apprise Council of matters affecting community agencies and Richmond residents.

2017 Budget

The 2017 RCSAC budget no longer allows for funding special projects and surveys as these initiatives were funded from a surplus that has been depleted. For example, the RCSAC's annual Social Services and Space Needs Survey results were previously compiled, analyzed and reported on with the help of a research assistant. In August 2016, the RCSAC submitted a letter to Council requesting an increase of \$2,000 per annum to their operating budget to bring the total. amount from \$11,000 to \$13,000. The increase was not recommended as part of the 2017 operating budget process as proposed increases were limited to non-discretionary increases only.

Financial Impact

None.

Conclusion

The RCSAC 2017 Work Program is designed to reflect a number of Council Term Goals (2014 - 2018) and address emerging issues impacting the community. The RCSAC will continue to support the community service sector by fostering collaborative working relationships, networking opportunities and information exchange. The RCSAC thereby plays a vital role in sustaining and enhancing the social well-being of Richmond residents.

horlock

Lesley Sherlock Social Planner (604-276-4220)

Att. 1: RCSAC 2016 Final Report

- 2: RCSAC 2017 Work Program and Budget
- 3: RCSAC Charter



2016 Final Report

2016 RCSAC Executive Committee Report

2016 Executive Committee Membership:

Daylene Marshal, Richmond Youth Services Agency	Co-Chair
Alex Nixon, Richmond Food Bank	Co-Chair
Rick Dubras, Richmond Addictions Services Society	Treasurer
Kathie Chiu, Salvation Army	Member-at-Large
Ihsan Malik, Citizen Appointee	Member-at-Large
De Whalen, Richmond Poverty Response Committee	Member-at-Large
Lisa Whittaker, Family Services of Greater Vancouver	Member-at-Large
Councillor Derek Dang	City Council Liaison
Lesley Sherlock	City Staff Liaison

Results of Executive Elections at the November 10, 2016 Annual General Meeting

As documented in the RCSAC Operating Policies and Procedures, members on the Executive, with the exception of the Co-Chair positions, hold their positions for a period of one year. Elections are held at the November Annual General Meeting (AGM) to elect/re-elect committee members to their respective executive roles. The results of the elections were:

Co-Chair	Alex Nixon, Richmond Food Bank (3 rd year)
Co-Chair	Kathie Chiu, Salvation Army (1 st Year)
Treasurer	Rick Dubras, Richmond Addiction Services Society
Members-at-Large	Jenn Fancy de Mena, BC Responsible and Problem Gambling;
	Ihsan Malik, Citizen Appointee; Haydon Marshall-Fox, Turning
	Point Recovery Society.

Executive Committee Summary of 2016 Activities:

Membership

- Membership increased in 2016 as the Richmond Animal Protection Society joined RCSAC. The Jewish Addiction Community Services and the United Way of the Lower Mainland also showed interest in joining RCSAC.
- There were two Citizen Appointee positions: Hamid Ghanbari and Ihsan Malik.

RCSAC Action Groups

The RCSAC does not have standing sub-committees, but rather has ad hoc, time-limited action groups to address specific concerns or accomplish specific tasks. The following action groups were active in 2016:

- Addictions and Mental Health
- NPO Space Needs
- Service Gaps for New Citizens
- Social Services and Space Needs Survey
- Website
- Youth

Additionally, the RCSAC receives monthly reports from the Richmond Homelessness Coalition to keep the RCSAC informed on housing and homelessness issues.

Action Group Reports

Addictions and Mental Health

Membership: Brenda Plant, Belinda Boyd, Kathie Chiu, Rick Dubras, Jenn Fancy de Mena Heather Hall, Dave MacDonald, Judy Valsonis.

Mandate: To work in an advisory capacity to the City of Richmond on issues related to Addictions and Mental Health (AMH); to enhance the continuum of AMH services in Richmond; and to develop partnerships and identify funding sources for the implementation of AMH working group initiatives.

Activities: With funding from the Province of BC's Ministry of Health, the RCSAC AMH Working Group in partnership with Turning Point Recovery Society established the Outreach and Resource Support (OARS) program to provide a continuum of supports to individuals with addiction and mental health issues that are homeless and/or at risk of homelessness. OARS provides outreach counselling, referrals to housing and health services, community education and training, supports and client advocacy. A Communication Tool was submitted to Council on the development of the OARS program; a community resource guide was updated and circulated in Richmond; the Working Group identified that the most concerning gap in Richmond is the lack of communication and collaboration between some agencies and that this was impacting client care and client navigation. Meetings were held with the City of Richmond, Vancouver Coastal Health and RCSAC AMH Working Group members to address these issues.

NPO Space Needs

Membership: Janice Barr, Janice Lambert, Sandy McIntosh, Daylene Marshall, Alex Nixon.

Mandate: To explore the space needs of Richmond's NPOs and find collaborative solutions to report back to the RCSAC on those needs.

Activities: The member organizations of this committee worked together to secure a grant from Richmond Community Foundation to commission a report on the NPO space needs in Richmond. The preliminary work preparing the report is expected to be completed by December 2016.

Social Services and Space Needs Survey

Membership: Rick Dubras, Daylene Marshall, Alex Nixon.

Mandate: To analyze the results of the Social Services and Space Needs Survey and prepare a final report for City Council.

Activities: The committee compiled and analyzed the results of the 2014-2015 Social Services and Space Needs Survey and prepared a final report for City Council to be presented to Planning

CNCL - 86

Committee in December 2016. The committee also sent the 2015-2016 Social Services and Space Needs Survey out to RCSAC members

Website

Membership: Rick Dubras, Daylene Marshall, Alex Nixon.

Mandate: This group explored options to update the RCSAC website.

Activities: The RCSAC website needed significant upgrades in order to ensure its continued operation. The RCSAC contracted IT Gurl to update the website to a format that should allow it to continue to operate without major upgrades for 3-4 years.

Youth

Membership: Danny Taylor, Lauren Burrows Backhouse.

Mandate: To maintain the What's Up Richmond website and advise RCSAC and City Council on issues facing youth.

Activities: What's Up Richmond (WURd) was maintained and managed successfully through 2016. We faced difficulty confirming a youth volunteer content manager, but have finally established some current stability in the role. Updates continue on a monthly basis, and the goal is to promote a formal youth-specific "launch", whereby the website is promoted to youth in Richmond.

Communications with the City of Richmond

The RCSAC sent the following Communication Tools to City Council to advise them on issues impacting Richmond's citizens and Community Services:

- Changes in VCH Management in Richmond and the potential impact for the community
- Social Services and Space Needs Survey Report

Community Tables/Committee Inventory

As per our 2016 Work Plan, the RCSAC keeps the Richmond Community Table/Committee Inventory. Currently, we are aware of the following committees operating in Richmond.

- Advisory Design Panel
- Affiliation of Multicultural Societies and Services Agencies in BC (AMSSA) Collaborative Opportunity for Resources (CORe)
- Community Living Leadership Network Meeting
- Community Living BC (CLBC) Community Council
- Fetal Alcohol Syndrome FASD round table
- The Gambling Steering Committee in Richmond
- Gilwest Clinic Community Advisory Group
- Metro Vancouver Living Wage Committee municipality sub-committee
- Mental Health and Addictions Coordinating Committee
- Richmond Advisory Council on Perinatal Issues
- Richmond Arthritis Support Group

- Richmond Autism Interagency Committee (RAIC)
- Richmond Caring Place Tenants Council
- Richmond Child Care Development Advisory Committee (RCCDAC)
- Richmond Child Care Alliance
- Richmond Child Care Training Committee (RCCTC)
- Richmond Children First
- Richmond Community Action Team
- Richmond Community Collaboration Table (CCT)
- Richmond Community Meals Round Table
- Richmond Community Peace Labyrinth
- Richmond Falls Prevention Network
- Richmond Family Violence Prevention Network
- Richmond Health Advisory Committee
- Richmond Homelessness Coalition
- Richmond Infant Development Program Local Advisory Committee
- Richmond Literacy Now Committee
- Richmond Poverty Response Committee
- Richmond Public Agency Partners Group
- Richmond Seniors Advisory Committee
- Richmond Supported Child Development Program Local Advisory Committee
- Richmond VIAL of Life Committee
- Safer Relationships, Safer Children
- Settlement Workers In School Advisory Committee.
- Supporting Families With Parental Mental Health and/or Addictions Committee
- Welcoming Community Project Advisory Committee
- Youth Concurrent Disorders Network
- Youth Network

Presentations

Community organizations presented to RCSAC at almost every RCSAC meeting on issues and topics vital to Richmond's community services. The organizations and topics include:

- January: City Centre Area Plan
- February: SFU Kiwanis Place-Making Project
- March: CHIMO Crisis Line Service
 - BC Responsible and Problem Gambling
- April: Richmond Cares, Richmond Gives
- May: Atira Women's Resource Society
- June: MLA Information Session
- September: RCMP Domestic Violence Coordinator
- October: Salvation Army Emergency Response Teams
- November: RCSAC AGM

<u>Financial</u>

A 2016 financial report and proposed 2017 budget was drafted by the Treasurer and approved by the membership at the RCSAC's November AGM.

The RCSAC has continued to operate without an increase in the City Grant for five years, despite the added financial pressures due to increasing membership (from 33 members in 2011 to 40 members in 2016). For 2016, the RCSAC reduced meeting and staff expenses. The RCSAC will need to have increased funding if it is to continue to effectively advise City Council. At the September 10, 2015 General Meeting, the RCSAC membership approved a motion to request an additional \$2,000 for the 2017 budget year.

The 2017 Work Plan was approved at the November 10, 2016 RCSAC AGM as a working document that will be revisited throughout the year and revised as necessary.

Organization	Representative(s)
Voting Members	• • • • • • • • • • • • • • • • • • • •
Avia Employment Centres	Nicole Smith
BC Responsible and Problem Gambling	Jenn Fancy de Mena
Boys and Girls Club of South Coast BC	Jason Lee
Chimo Community Services	Diane Sugars
City Appointee	Hamid Ghanbari
City Appointee	Ihsan Malik
Community Living BC	George Sartori
Developmental Disabilities Association	Donna Cain
Family Services of Greater Vancouver	Lisa Whittaker
Heart of Richmond AIDS Society	Brian Wardley
Individual Member	Jennifer Larsen
Pacific Community Resource Services	Leslie Martin
Pathways Clubhouse Richmond	Una Mulhall
RCMP Richmond	Constable Heather Hall
Richmond Addictions Services Society	Rick Dubras
Richmond Animal Protection Society	Eyal Lichtmann
Richmond Cares, Richmond Gives	Jocelyn Wong
Richmond Caring Place Society	Sandy McIntosh
Richmond Children First	Helen Davidson
Richmond Centre for Disability	Ella Huang
Richmond Division of Family Practice	Denise Ralph
Richmond Family and Youth Court Committee	Neelu Kang Dhaliwal
Richmond Family Place Society	Janice Lambert
Richmond Food Bank Society	Alex Nixon
Richmond Food Security Society	Anita Georgy
Richmond Mental Health Consumer & Friends Society	Barb Bawlf
Richmond Multicultural Community Services	Parm Grewal
Richmond Poverty Response Committee	De Whalen
Richmond School District #38	Monica Pamer/Sherry Elwood
Richmond Seniors Advisory Committee	Corisande Percival-Smith
Richmond Society for Community Living	Janice Barr
Richmond Therapeutic Equestrian Society	TBD
Richmond Women's Resource Centre	Florence Yau
Richmond Youth Service Agency	Daylene Marshall
Salvation Army (Richmond)	Kathie Chiu
S.U.C.C.E.S.S.	Francis Li
Touchstone Family Services	Judy Valsonis
Turning Point Recovery Society	Ted Paxton
Vancouver Coastal Health	Belinda Boyd
Vancouver Transit Police	Inspector Wendy Hawthorne
Non-Voting Members	
Council Liaison	Derek Dang
Staff Liaison	Lesley Sherlock
	*

2016 RCSAC Work Plan Results

For the 2016 year, the RCSAC continued to link its annual work plan initiatives to the Richmond City Council Term Goals. The 2016 Work Plan was designed to provide Council with advice to support Council's Goal Statement for 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.

Within this goal statement, the RCSAC focused on providing advice on Council's following priorities.

The RCSAC also highlighted several other areas to work towards in 2016 to ensure committee stability and to improve Community Agency engagement.

RCSAC further advised Richmond City Council by providing feedback on their Term Goals through two sessions at General member meetings.

Council Term Goal 1.4

Effective interagency relationships and partnerships

Objectives

- To respond to Council requests for advice regarding community safety matters
- To provide a forum for Social Service Providers, Council Liaisons and City Staff, Citizen Appointees and Individual Members to collaborate, share, network and learn from one another, as well as from guest presenters from the City and community
- To identify, advise and provide recommendations to City Council and staff of trends, gaps and needs of our community

Proposed Actions

- Participate in City consultations regarding community safety
- Continuing to implement the RCSAC Community Social Services and Space Needs Survey.
- Advise Council if changes in social service programs and corresponding funding structures will impact the City of Richmond
- Invite guest presenters to educate the RCSAC on topics relevant to Social Service providers and their clients
- Determine the need for further service gaps analysis in service areas in addition to Addictions and Mental Health
- Build on the success of the Mental Health and Addiction services wallet card. Determine potential need for other similar service cards in the community
- Complete a multi-year analysis of Community Social Services Survey results (2014 2016)
- Support initiatives that reduce barriers to accessing services in the community

Anticipated Outcomes/Indicators of success

- Advice provided to Council regarding community safety matters
- Community Social Services and Space Needs Survey and Report Completed
- Communication Tools to Council as appropriate
- Final report on successful actions completed

2016 Activities

- Encouraged member organizations to participate in the City of Richmond's Municipal Policing Survey
- Provided a robust report for the 2014-2015 Social Services and Space Needs Survey that included multi-year analysis
- Developed and submitted the Changes to VCH Management communication tool to Council to inform them of potential additional gaps in mental health and addictions services
- Heard eight presentations from various groups on topics relevant to RCSAC member organizations and Richmond social services

Council Term Goal 2.2

Effective social service networks

Objectives

- To increase connections within the RCSAC membership
- To increase access to information and opportunities to plan and promote community and social service events and activities
- To review and broaden the membership of the RCSAC and encourage organizations providing community and social services in the Richmond community to join.
- To increase administrative efficiency for RCSAC

Proposed Actions

- Maintain the Community Table/Committee Inventory and provide an update to Council in the RCSAC 2016 Annual Report
- Continue to develop members only log-in section on the RCSAC website so members can access minutes, agendas, reports etc.
- Support on-going updates to the RCSAC website
- Form an action team to review membership and determine organizations to receive invitation to learn more about the RCSAC

Outcomes/Indicators of Success

- RCSAC website members-only log-in page continues to be enhanced and utilized by members
- RCSAC website utilization continues to increase. Increased number of webpage hits.

- Increased number of events and program information posted to the RCSAC website
- Potential new memberships joining the RCSAC
- Report on successful outcomes completed and included in the RCSAC 2016 Annual Report

Anticipated Outcomes/Indicators of Success

- RCSAC website members-only log-in page continues to be enhanced and utilized by members
- RCSAC website utilization continues to increase. Increased number of webpage hits.
- Increased number of events and program information posted to the RCSAC website
- Potential new memberships joining the RCSAC
- Report on successful outcomes completed and included in the RCSAC 2016 Annual Report

2016 Activities

- Maintained the Community Table/Committee Inventory and included an update in the RCSAC 2016 Annual Report
- Actively recruited potential member organizations
- Began the process of upgrading the RCSAC website to ensure that it can continue to be used
- Completed the RCSAC 2016 Annual Report

Council Term Goal 3.4

Diversity of housing stock

Objectives

- Continue to support the implementation of the Affordable Housing Strategy
- Provide input regarding the Affordable Housing Strategy Update

Proposed Actions

- Participate in the Affordable Housing Strategy Update consultations
- Work collaboratively with the Richmond Homeless Coalition –Homes for All, Richmond housing organizations, advocates and the City to identify and highlight affordable and supportive housing needs and projects in Richmond.
- Work collaboratively with Richmond housing organizations and advocates to draft regular communication, which highlights housing needs and projects, to City Council and staff

Outcomes/Indicators of Success

- Affordable Housing Action Team formed as required
- Communication Tool to Council as appropriate regarding the Affordable Housing Strategy Update
- Regular updates presented to RCSAC General Committee meeting

• Successful outcomes completed and reported in the RCSAC 2016 Annual Report

2016 Activities

- Received monthly updates from the Richmond Homeless Coalition
- Received a report from CHIMO and the Richmond Poverty Response Committee on the current homeless situation in Richmond

Council Term Goal 4.2

Innovative projects and initiatives to advance sustainability

Objectives

- Support the City as it advocates for a coordinated regional approach to enhance local food security
- Support the development of a food security action plan for the City of Richmond

Proposed 2016 Actions

- Action teams formed as necessary to meet objectives
- Potential gap analysis undertaken
- Communication Tool developed for Council

Outcomes/Indicators of Success

- Presentation from Richmond Food Security Society on final draft of Food Charter
- Action team formed
- Communication Tools to Council completed as appropriate
- Successful actions completed and included in the RCSAC 2016 Annual Report

2016 Activities

• Received a report from the Richmond Food Security Society on the Richmond Food Charter and encouraged member agencies to consider sponsoring it

Council Term Goal 5.1

Advancement of City priorities through strong intergovernmental relationships

Objectives

• To provide Council with information about the impact of provincial and federal funding decisions on social services agencies and Richmond residents

Proposed 2016 Actions

- Completion of annual Community Social Services Survey and Report provide information to Council on provincial and federal funding decisions that may affect the delivery of social services in Richmond
- Contribute to and update as needed multi-year analysis of Community Social Services Survey
- Membership will submit Communication Tools to Council regarding changes in member agency funding relationships with federal and provincial governments
- Invite MLAs to information exchange with RCSAC members

Outcomes/Indicators of Success

- Communication Tools submitted as appropriate
- Community Social Services survey completed and report submitted to Council
- Successful actions completed and included in the RCSAC 2016 Annual Report
- Meeting held with Richmond MLAs to exchange information regarding social services in Richmond

2016 Activities

- Completed the annual Social Services and Space Needs Survey and submitted the report to Council
- Developed and submitted the "Changes to VCH Management" Communication Tool to Council on changes to VCH staff funding in Richmond
- Held the MLA Information Session and exchanged information on social services and gaps in service in Richmond

Council Term Goal 6.2

Infrastructure is reflective of and keeping pace with community need.

Objectives

- Identify space needs for non-profit societies within Richmond
- Identify housing and community space needs of RCSAC clients and member agencies

Proposed 2016 Actions

- Inclusion of space needs in Community Social Services Survey
- Action team reports to RCSAC as needed

Outcomes/Indicators of Success

- Space results compiled from community needs assessment survey
- Communication Tool to Council as appropriate
- Successful actions completed and included in the RCSAC 2016 Annual Report

2016 Activities

- Included space needs in the Social Services Survey
- Completed the 2016 RCSAC Social Services and Space Needs Survey and submitted the report to Council
- Formed the NPO Space Needs Subcommittee to closely examine NPO space needs in Richmond
- Had presentations from City Staff on the City Centre Area Plan and from the SFU Kiwanis Place-Making Project

Council Term Goal 9.2

Effective engagement strategies and tools.

Objectives

- To share and promote information and engagement opportunities to clients of member agencies
- To stay apprised of results of engagement tools and how they are impacting our clients

Proposed 2016 Actions

- Provide an opportunity for presentations to the RCSAC from City staff and Community Partners on engagement strategies and tools
- Share and promote information and engagement opportunities within agencies and to clients

Outcomes/Indicators of Success

- Communication Tools to Council as appropriate
- Final report on outcomes
- Presentations included in RCSAC meetings
- Information sharing included in meetings

2016 Activities

- Encouraged information sharing at every RCSAC General Meeting
- Sent out weekly updates to RCSAC member organizations that included community and agency updates
- Welcomed eight presentations from various groups on important topics relevant to member organizations

Additional RCSAC Work Plan Activities

Objectives

- To increase connections within RCSAC members
- To review and broaden the membership of RCSAC and encourage organizations providing community and social services in the Richmond community to join
- To increase administrative efficiency for RCSAC

Proposed Actions

- Maintain Community Table/Committee Inventory and provide update to Council in 2015 final report
- Continue to develop members only log-in section on RCSAC website so members can access minutes, agendas, reports etc.
- Support on-going updates to the RCSAC website
- Form an action team to review RCSAC membership and determine which organizations will receive an invitation to learn more about the RCSAC

Anticipated Outcomes/Indicators of Success

- Members only log-in page continues to be enhanced and utilized by members
- Website utilization continues to increase; increased number of webpage hits
- Increased number of events and program information posted to website
- Potential new members joining the RCSAC
- Report on successful outcomes completed

2016 Activities

- Maintained the Community Committees and Tables Inventory
- Increased RCSAC membership
- Encouraged and facilitated sub-committees and task forces to collaborate on projects outside the scope of the RCSAC
- Promoted information sharing amongst member organizations
- Encouraged and facilitated advocacy amongst member organizations
- Reduced meeting and administrative costs of the RCSAC
- Began the process of upgrading the RCSAC website

	2016 - January 1 to December 31
Balance Projected to be brought Forward	\$300.00
Revenue	
City of Richmond	\$11,000.00
Membership Dues	\$1,400.00
Bank Interest	\$1.50
Sponsorship	
Total Revenue	\$12,701.50
Expenses	
Admin Assistant	\$10,000.00
Admin Expenses	\$80.00
Forums/Meetings	\$1,400.00
Website + IT	\$700.00
Website Training/Calendar	\$100.00
Post Box Renewal	\$158.00
Volunteer Appreciation	\$200.00
Sub- Committee/printing/events	
Total Expenses	\$12,638.00
Total Balance	\$63.50



2017 Work Plan and Budget

2017 RCSAC Work Plan

The RCSAC continues to link its annual work plan initiatives to Richmond City Council's Term Goals. The 2017 Work Plan is designed to provide Council with advice on social and other community services to support Council's Goal Statement for a Vibrant, Active and Connected City.

The RCSAC will prioritize responding to Council requests as they arise throughout the year, and provide advice on the following Council Term Goals in the following RCSAC initiatives scheduled for implementation in 2017.

Council Term Goal 1.4

Effective interagency relationships and partnerships

Objectives

- To respond to Council requests for input regarding community safety matters
- To provide a forum for Social Service Providers, Council Liaisons and City Staff, Citizen Appointees and Individual Members to collaborate, share, network and learn from one another, as well as from guest presenters from the City and community
- To identify, advise and provide recommendations to City Council and staff of trends, gaps and needs of our community

Proposed 2017 Actions

- Continue to implement the RCSAC Community Social Services and Space Needs Survey.
- Advise Council if changes in social service programs and corresponding funding structures will impact the City of Richmond
- Continue to build on past results of the RCSAC Community Social Services and Space Needs Survey to provide context on the changing nature of social services in Richmond
- Invite guest presenters to educate the RCSAC on topics relevant to Social Service providers and their clients
- Determine the need for further service gaps analysis in service areas in addition to Addictions and Mental Health
- Support initiatives that reduce barriers to accessing services in the community

Outcomes/Indicators of Success

- Advice provided to Council regarding community safety matters
- Community Social Services and Space Needs Survey and Report Completed
- Communication Tools to Council as appropriate
- Final report on successful actions completed

Council Term Goal 2.2

Effective social service networks

Objectives

- To increase connections within the RCSAC membership
- To increase access to information and opportunities to plan and promote community and social service events and activities
- To review and broaden the membership of the RCSAC and encourage organizations providing community and social services in the Richmond community to join.
- To increase administrative efficiency for RCSAC

Proposed 2017 Actions

- Maintain the Community Table/Committee Inventory and provide an update to Council in the RCSAC Annual Report
- Continue to develop members only log-in section on the RCSAC website so members can access minutes, agendas, reports etc.
- Support on-going updates to the RCSAC website
- Form an action team to review RCSAC membership and determine organizations to receive invitation to learn more about the RCSAC

Outcomes/Indicators of Success

- Increased use of RCSAC website members-only log-in page
- Increased RCSAC website utilization and webpage hits.
- Increased number of events and program information posted to the RCSAC website
- Increase the number of social and community service organizations joining the RCSAC
- Report on successful outcomes completed and included in the RCSAC 2017 Annual Report

Council Term Goal 3.4

Diversity of housing stock

Objective

- Continue to support the implementation of the Affordable Housing Strategy
- Provide input to Council regarding the Affordable Housing Strategy Update

Proposed 2017 Actions

- Participate in the Affordable Housing Strategy Update consultations
- Work collaboratively with the Richmond Homeless Coalition, advocates, and the City to identify and highlight affordable and supportive housing needs and projects in Richmond.

• Work collaboratively with Richmond social services and advocates to draft regular communication, highlighting housing needs and projects, to City Council and staff

Outcomes/Indicators of Success

- Receive monthly reports from the Richmond Homelessness Coalition and report to Council as required
- Regular updates presented to RCSAC General Committee meeting by member organizations on the state of housing and homelessness in Richmond
- Successful outcomes completed and reported in the RCSAC 2017 Annual Report

Council Term Goal 4.2

Innovative projects and initiatives to advance sustainability

Objectives

- Support the City as it advocates for a coordinated regional approach to enhance local food security
- Support the development of a food security action plan for the City of Richmond

Proposed 2017 Actions

- Action teams formed as necessary to meet objectives
- Support social service organizations as they address food security in Richmond

Outcomes/Indicators of Success

- Communication Tools to Council completed as appropriate
- Successful actions completed and included in the RCSAC 2017 Annual Report

Council Term Goal 5.1

Advancement of City priorities through strong intergovernmental relationships

Objectives

• To provide Council with information about the impact of provincial and federal funding decisions on social services agencies and Richmond residents

Proposed 2017 Actions

- Completion of annual RCSAC Social Services and Space Needs Survey and Report provide information to Council on provincial and federal funding decisions that may affect the delivery of social services in Richmond
- Contribute to and update as needed multi-year analysis of RCSAC Social Services and Space Needs Survey
- Invite MLAs to an information session with RCSAC members

Outcomes/Indicators of Success

- Communication Tools submitted as appropriate, including Community Social Services Survey and Space Needs Survey
- Successful actions completed and included in the RCSAC 2017 Annual Report
- Meeting held with Richmond MLAs to exchange information regarding social services in Richmond

Council Term Goal 6.2

Infrastructure is reflective of and keeping pace with community need.

Objectives

- Identify space needs for non-profit societies within Richmond
- Identify housing and community space needs of RCSAC clients and member agencies

Proposed 2017 Actions

- Submit the RCSAC Social Services and Space Needs Survey Communication Tool to Council
- NPO Space Needs Action team reports to RCSAC; RCSAC Communication Tool to Council as needed

Outcomes/Indicators of Success

- Space results compiled from community needs assessment survey
- Communication Tool to Council as appropriate
- Successful actions completed and included in the RCSAC 2017 Annual Report

RCSAC 2016 Work Plan 5262299

CNCL - 103

Council Term Goal 9.2

9.2 Effective engagement strategies and tools.

Objectives

- To share and promote information and engagement opportunities to clients of member agencies
- To stay apprised of results of engagement tools and how they are impacting our clients

Proposed 2017 Actions

- Presentations to the RCSAC from City staff and Community Partners on engagement strategies and tools
- Share and promote information about engagement opportunities within agencies and to clients

Outcomes/Indicators of Success

- Communication Tools to Council as appropriate
- Final report on outcomes
- Presentations included in RCSAC meetings
- Information sharing included in meetings

	2017 - January 1 to December 31
Balance Projected to be brought Forward	\$300.00
Revenue	
City of Richmond	\$11,000.00
Membership Dues	\$1,400.00
Bank Interest	\$1.50
Sponsorship	
Total Revenue	\$12,701.50
Expenses	
Admin Assistant	\$10,000.00
Admin Expenses	\$80.00
Forums/Meetings	\$1000.00
Website + IT	\$700.00
Website Training/Calendar	\$100.00
Post Box Renewal	\$158.00
Volunteer Appreciation	\$200.00
Sub-Committee	\$400.00
Total Expenses	\$12,638.00
Total Balance	\$63.50



Charter

September 11, 2008 Approved by Richmond City Council January 20, 2009

Table of Contents

I. MISSION STATEMENT OF THE RICHMOND COMMUNITY SERVICES AD		
	COMMITTEE	3
II.	HISTORY	4
III.	RICHMOND COMMUNITY SERVICES ADVISORY COMMITTEE (RCSAC) IN BRIEF	5
IV.	RCSAC ROLES	5
V.	CITY LIAISON	б
VI.	MANDATE	6
	Section A	6
	Section B	6
APPE	ENDIX I	
	An Oral History of RCSC, later to become RCSAC	7
APPE	INDIX II	
	40 DEVELOPMENTAL ASSETS	9

I. MISSION STATEMENT OF THE RICHMOND COMMUNITY SERVICES ADVISORY COMMITTEE

To encourage and promote those social policies and community services which contribute to the general health, welfare and quality of life of the residents of Richmond, and to increase inter-agency relations and cooperation in order to enhance community capacity.

- 3 -

II. HISTORY

The Richmond Community Services Advisory Committee, hereinafter referred to as "RCSAC", received formal recognition as an advisory body to Richmond City Council and its appropriate Committees on May 25, 1987¹.

It builds on the information gathering and sharing strengths of the Richmond Community Services Council, which served the community in a similar but less formal capacity from April, 1978 to its evolution as the RCSAC in September, 1987.

During several years of Community services as a voluntary collaborative of non-profit, government and private agencies and organizations in the field of social and related community services, the Richmond Community Services Council and its member organizations were instrumental in the development and establishment of:

- The municipally funded RCMP Youth Intervention Program;
- A municipal social planner position;
- Richmond Child Protection Network;
- Richmond Family Place;
- An open referral in-the-home parenting program (lost with others during the 1983 restraint measures imposed by major government funding sources);
- Collaboration in preparation of the report Preparing for a Livable Future: Recommendations by the City Center Steering Committee;
- Improved Municipal Grant application and appeal processes;
- The Child Care Advisory Committee;
- The Inventory of Social Services in Richmond
- The Richmond Intercultural Advisory Committee

An RCSAC Poverty Response Committee was established, and reports were submitted to Council. This has now become an independent committee.

Representatives from the RCSAC

- participated in the Community Parks, Recreational & Cultural Working Group to assist in providing City Council with a Master Plan;
- currently participate in the Substance Abuse Task Force; and
- the Richmond Intercultural Advisory Committee.

¹ See Appendix I

III. RICHMOND COMMUNITY SERVICES ADVISORY COMMITTEE (RCSAC) IN BRIEF

- 1. Advises Richmond City Council, and/or the appropriate Council Committee.
- 2. Makes representations to other policy-making bodies on social policy and community services matters.
- 3. Provides informed comment and advice to Richmond City Council on implications for policies and services being changed and introduced.
- 4. Undertakes its work at the request of Richmond City Council, the RCSAC membership, and the community at large.
- 5. Provides a strong and active role in overall social policy and community services decisions for community representatives and nonprofit society boards.

IV. RCSAC ROLES

1. The Richmond Community Services Advisory Committee (RCSAC) is a forum for community service* agencies to meet on a regular basis in order to share information and ideas about issues of common interest, and to identify emerging needs.

***Community Services**: defined as those covering the general areas of health, social services, education, and other related service where the overall intent is to improve the quality of life for Richmond residents.

- 2. The RCSAC will foster the development of services, through an asset building² approach, to meet those needs.
- 3. The RCSAC will establish and monitor Task Forces to undertake activities deemed by the RCSAC to be necessary and consistent with the objectives of the RCSAC. All Task Forces will be time limited with both start and end dates, and will produce a written report.
- 4. The RCSAC may employ and hire such staff as deemed necessary to assist in the operation of the RCSAC, including all Task Forces. All employees will report directly to the Co-Chairs of the Executive Committee.
- 5. The RCSAC will provide a leadership and educational role in social issues affecting community services.
- 6. The RCSAC strives to work cooperatively and in a complementary manner with other City advisory committees.

² See Appendix II

V. CITY LIAISON

Liaison with the City of Richmond will be provided by:

- One (1) non-voting Richmond City Council Liaison, and
- One (1) non-voting City Staff Liaison, provided by the Policy Planning Department.

VI. MANDATE

Section A

The RCSAC shall advise Richmond City Council and may, in consultation with City Council, make representations to other policy-making bodies on the following:

- 1. Policies that encourage cooperative planning and delivery of community services to ensure optimum efficiency and effectiveness;
- 2. Social issues/concerns that have an impact community services, special needs groups and the quality of life in the community;
- 3. Community impact of governmental changes to policies and/or programs affecting Richmond's community services; and
- 4. Any other matters that may be referred by Richmond City Council, RCSAC member groups and the community at large.

Section B

1. Coordination of activities and information sharing between the voluntary and public sector.

APPENDIX I

An Oral History of RCSC, later to become RCSAC

(Delivered by Olive Bassett at the RCSAC General meeting of December 8, 2003)

It is ten years since I have been associated with this advisory council, some of which I speak on today could be familiar to many of you but perhaps some of you are not familiar with the early history I hope it will be of interest to you. I was a member of RCSC for many years before becoming a school trustee then I was elected as their Rep. on the PAC (Policy Advisory Council) in 1990. Back in 1978, there was very little planning for social services, something had to be done, and the United Way was invited to set up some social planning for the community. There was no Social Planner at the municipal level at that time. The Child Services Committee, a committee of the United Way, was not representative enough; its mandate was services to children 12 & under. A newly formed Child Abuse Committee was attempting to educate the public on what was happening to children; the community health nurses and social workers were the only ones going into the homes of many abused children. But the climate of the times prevented anyone from speaking out especially about sexual abuse, this was a taboo topic, no one wanted to talk about it. And there were many turf problems, every one was working in isolation on their own particular issues and problems, this is mine that is yours, don't mix the two! Finally the United Way placed an arms length community person in as Chair of the Child Services Committee hoping to become more effective. Something was still needed; the committee was not representative of agencies working with families, children & youth. Palmer School had just gone up in smoke, at the hands of a teen-age girl who badly needed treatment. There were no services of the kind youth like her needed, but it was risking a teachers or a community health nurse's job to speak out on lack of services. It was so difficult to address so many social problems in the community but at that time, the thought of washing your linen in public was not to be tolerated. The School Board refused to put a family life program into the schools. The community was polarized. Many were demanding the program, just as many were in denial it was needed, and these felt the only place to teach this subject was in the home. Which was fine but those children needing the program did not come from homes where this kind of education was taught. It was a little later I believe the Richmond Youth Services Agency came into being to focus on the issues and problems facing the over 12's. And so, it was in this type of atmosphere that a major meeting was held with many of those delivering social services to families. Through this meeting, they got the endorsement needed to be something much broader than the Richmond Children's Committee. A Steering Committee was set up that met twice a month for a solid year and what came out of that was the framework for the Richmond Community Services Council. That was in 1978, and nine years later in '87, with the assistance of a municipal councilor, a social planner had finally been hired, RCSC was restructured and given the formal title of the Richmond Community Services Advisory Council, RCSAC, as it is known today. They would make recommendations for social service issues and report those issues & concerns directly to the Municipal Council through the Policy Advisory Council, who were elected from the Boards of the individual agencies to serve on PAC. They were the political arm of the RCSAC. And Council listened. In their eyes, it was no longer just staff driven. These were elected people making the recommendations. With the new structure, there was also the IAC, Inter Agency committee, made up the staff and the 'Hands On' people who worked in the field, and the Coordinating Committee overseeing both IAC & PAC. This is all in your charter, I found it very interesting to re-read, and it would be well worth your re-reading pages 20 to 24. In

RCSAC Charter -- Approved January 2009

-7-

1989, the RCSAC held a "Strategy Planning and Priority Setting Meeting". This was an extremely important meeting for RCSAC. Johnny Carline, Deputy Administrator, Strategic Planning for Richmond spoke on what Richmond could look like in the future, two questions he asked of the group: 1. "What are the priorities for service provision for all of the agencies in the next three years?" 2. "What suggestions do you have for the municipality to incorporate social issues into the growth management strategy?" A planning committee took all the suggestions, solutions, comments and concerns and brought in a final report in January 1990. Seven (7) recommendations came out of it and were presented to council, they may help you in your deliberations on the restructure process, I will leave it with Michael Then in 1994, RCSAC sent out an excellent questionnaire to member organizations, to see if the advisory council was meeting the needs of its membership by addressing gaps, identifying issues and resources to address them and then develop an action plan. The survey was divided into six major sections: Role & Function, Participation, Community issues, Strengths & Weaknesses, Suggestions for raising the profile of RCSAC and lastly the potential for sending out a newsletter. I will also leave a copy of this with Michael, as it may prove useful. I see you are now contemplating another re-structure, perhaps some questions that you may ask yourselves are: "What do you want to accomplish that you are not doing now?" "When was the last time your charter was brought up to date?" "How many agencies out there are not aware of what you do?" "How many agencies or groups out there doing a service for the community, are you not aware of?" In my opinion the reason RCSAC has survived while many others have not, is because community volunteers and staff have worked together for a common goal, this way everyone wins. The effectiveness of RCSAC has always been present to a greater or lesser degree. It is a tremendously important organization and the accomplishments you have gained have not come easy. It is an organization you can be proud to belong to. However, it must be supported by each and every social service organization in order to have the greatest impact for good.

Thank you.

M. Olive Bassett

APPENDIX II

40 DEVELOPMENTAL ASSETS

Search Institute has identified the following building blocks of healthy development that help young people grow up healthy, caring, and responsible.

External Assets

Category Asset Name and Definition

Support

- 1. Family Support-Family life provides high levels of love and support.
- 2. Positive Family Communication-Young person and her or his parent(s) communicate positively, and young person is willing to seek advice and counsel from parents.
- 3. Other Adult Relationships-Young person receives support from three or more non-parent adults.
- 4. Caring Neighborhood-Young person experiences caring neighbors.
- 5. Caring School Climate-School provides a caring, encouraging environment.
- 6. Parent Involvement in Schooling-Parent(s) are actively involved in helping young person succeed in school.

Empowerment

- 7. Community Values Youth-Young person perceives that adults in the community value youth.
- 8. Youth as Resources-Young people are given useful roles in the community.
- 9. Service to Others-Young person serves in the community one hour or more per week.
- 10. Safety-Young person feels safe at home, school, and in the neighborhood.

Boundaries and Expectations

- 11. Family Boundaries-Family has clear rules and consequences and monitors the young person's whereabouts.
- 12. School Boundaries-School provides clear rules and consequences.
- 13. Neighborhood Boundaries-Neighbors take responsibility for monitoring young people's behavior.
- 14. Adult Role Models-Parent(s) and other adults model positive, responsible behavior.
- 15. Positive Peer Influence-Young person's best friends model responsible behavior.
- 16. High Expectations-Both parent(s) and teachers encourage the young person to do well.

Constructive use of time

- 17. Creative Activities-Young person spends three or more hours per week in lessons or practice in music, theatre, or other arts.
- 18. Youth Programs-Young person spends three or more hours per week in sports, clubs, or organizations at school and/or in the community.
- 19. Religious Community-Young person spends one or more hours per week in activities in a religious institution.
- 20. Time at Home-Young person is out with friends "with nothing special to do" two or fewer nights per week

INTERNAL ASSETS

Category Asset Name and Definition

Commitment to Learning

- 21. Achievement Motivation-Young person is motivated to do well in school.
- 22. School Engagement-Young person is actively engaged in learning.
- 23. Homework-Young person reports doing at least one hour of homework every school day.

RCSAC Charter – Approved January 2009

-9-

- 24. Bonding to School-Young person cares about her or his school.
- 25. Reading for Pleasure-Young person reads for pleasure three or more hours per week.

Positive Values

- 26. Caring-Young person places high value on helping other people.
- 27. Equality and Social Justice-Young person places high value on promoting equality and reducing hunger and poverty.
- 28. Integrity-Young person acts on convictions and stands up for her or his beliefs.
- 29. Honesty-Young person "tells the truth even when it is not easy."
- 30. Responsibility-Young person accepts and takes personal responsibility.
- 31. Restraint-Young person believes it is important not to be sexually active or to use alcohol or other drugs.

Social Competencies

- 32. Planning and Decision Making-Young person knows how to plan ahead and make choices.
- 33. Interpersonal Competence-Young person has empathy, sensitivity, and friendship skills.
- 34. Cultural Competence-Young person has knowledge of and comfort with people of different cultural/racial/ethnic backgrounds.
- 35. Resistance Skills-Young person can resist negative peer pressure and dangerous situations.
- 36. Peaceful Conflict Resolution-Young person seeks to resolve conflict nonviolently.

Positive Identity

- 37. Personal Power-Young person feels he or she has control over "things that happen to me."
- 38. Self-Esteem-Young person reports having a high self-esteem.
- 39. Sense of Purpose-Young person reports that "my life has a purpose."
- 40. Positive View of Personal Future-Young person is optimistic about her or his personal future.

These pages may be reproduced for educational, noncommercial uses only.

Copyright © 1997 by Search Institute, 700 S. Third Street, Suite 210, Minneapolis, MN 55415; 800-888-7828; www.search-institute.org.



Report to Committee

Re:	Electric Vehicle Charging Infrastructure in Private Developments		
From:	John Irving, P.Eng. MPA Director, Engineering	File:	10-6125-07-02/2016- Vol 01
То:	Planning Committee	Date:	December 12, 2016

Staff Recommendation

That the stakeholder consultation program to consult on the development and implementation of electric vehicle charging infrastructure in new private developments, as described in the staff report titled "Electric Vehicle Charging Infrastructure in Private Developments" from the Director, Engineering, dated December 12, 2016, be endorsed.

John Irving, P.Eng. MPA Director, Engineering (604-276-4140)

REPORT CONCURRENCE				
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER		
Building Approvals				
Development Applications				
Policy Planning				
Transportation				
REVIEWED BY STAFF REPORT /	INITIALS:	APPROVED BY CAO		
AGENDA REVIEW SUBCOMMITTEE	DW	Shy Ban		

Staff Report

Origin

In January 2014, Council adopted the Community Energy and Emissions Plan, which includes *Action 18: Set minimum requirements for electric vehicle infrastructure in new developments.*

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

Continue advancement of the City's sustainability framework and initiatives to improve the short and long term livability of our City, and that maintain Richmond's position as a leader in sustainable programs, practices and innovations.

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

Background

In 2010, Council adopted targets in Richmond's Official Community Plan to reduce community greenhouse gas (GHG) emissions 33% below 2007 levels by 2020, and 80% below 2007 levels by 2050. The 2041 Official Community Plan also includes a target to reduce energy use by 10% below 2007 levels by 2020. These targets are in line with what climate science suggests developed nations will need to achieve to have a good chance of avoiding an increase of 2 degrees Celsius in global average temperatures above pre-industrial levels, which is considered a threshold for dangerous climate change.

Richmond's 2014 Community Energy and Emissions Plan (CEEP) outlines strategies and actions for the City to take to reduce community energy use and GHG emissions, including:

- Strategy 7: Promote Low Carbon Personal Vehicles
 - Action 18: Set minimum requirements for electric vehicle infrastructure in new developments.

Modeling undertaken as part of the CEEP indicates Richmond's 2050 emissions reduction targets can only be achieved with the near-universal adoption of zero emissions personal vehicles by the 2040s. The CEEP states that the City will pursue the widespread adoption of low carbon vehicles, in coordination with senior levels of government and industry.

Electric Vehicles (EVs)

Plug-in Electric Vehicles (EVs) include:

- **Battery electric vehicles** (BEVs) A vehicle that runs on electricity stored in batteries and has an electric motor rather than an internal combustion engine.
- **Plug-in Hybrid Electric Vehicles** (PHEVs) A vehicle equipped with a plug that can use either electricity or gasoline fuels. PHEVs typically have smaller batteries than BEVs and use a gasoline engine to provide additional range.

EVs realize near-zero GHG and air contaminant emissions when using power from BC's electric grid. BC is considered one of the most attractive markets for EVs in North America, given its relatively low cost of power and "green" consumption trends.

City Action on Electric Vehicles

The City has demonstrated leadership by being one of the first municipalities in the region to establish policy providing for home access to EV charging. Section 8.5.2 d of the 2041 Official Community Plan currently includes policy for new private multifamily developments to include EV charging infrastructure. This policy specifies that "a minimum of 20% of parking stalls be provided with a 120 volt receptacle to accommodate electric vehicle charging equipment [and] ... an additional 25% of parking stalls be constructed to accommodate the future installation of electric vehicle charging equipment (e.g. pre-ducted for future wiring)".

The City has also led in deployment of public EV charging. In 2012, Council approved a cost sharing project with the Province that allowed the installation of public EV charging stations at Steveston, Thompson and Cambie Community Centres, and City Hall. Currently, there is no cost charged for this public charging service. Use of these stations increased eight-fold between 2013 and 2015, which may suggest that providing this public charging is playing a role in growing demand for EVs. In November 2016, Council directed staff to evaluate the development of a "fast charging" station network, and report back to Council with recommendations for implementation; staff are currently undertaking this investigation and will recommend a course of action to Council later in 2017.

EV procurement is an important part of the City's Green Fleet Action Plan. To date, the City has purchased four EVs, and additional procurement is planned in the future.

Analysis

Market Penetration of EVs

The price of EVs are falling, availability of vehicles is increasing, and demand for EVs is projected to grow. In 2012, BC Hydro forecasted that 20-50% of new light-duty vehicles sold in BC in 2030 will be EVs. Similarly, Bloomberg New Energy Finance estimates that, even in the absence of additional government climate policy, EVs will constitute 25-50% of new vehicle sales worldwide by 2040. A recent survey conducted by the City of Vancouver suggested that

85% of respondents would consider an electric vehicle the next time they purchased a vehicle. Many organizations, such as the International Energy Agency, have noted that government policy speeding the uptake of EVs will be necessary to avoid run away climate change.

A number of jurisdictions illustrate how policies can speed up the adoption of electric vehicles. For example, EVs comprised over 30 per cent of vehicles sold in Norway in the first half of 2016; Norway provides significant consumer incentives, as well as access to HOV lanes, free ferries, and preferred parking. Ten American states have enacted a Zero Emissions Vehicle mandate, requiring 15 per cent of new vehicles be zero emissions by 2025, and the province of Quebec has indicated it will match that requirement. The German parliament has passed a resolution calling for the European Union to pass directives to allow only Zero Emissions Vehicles by 2030. Additionally, the European Union has drafted regulations requiring 100 percent of new and refurbished homes to feature electric access for EV charging. British Columbia has introduced incentives for EV purchases, and in 2016 announced that EVs would be allowed in HOV lanes. The market share of EVs in coming years will ultimately be dictated by EV prices, government policy, oil prices, consumer preferences, and availability of charging infrastructure.

EV Charging Infrastructure

Access to appropriate charging infrastructure is considered a key enabler of the adoption of EVs. The City can play an important role in growing demand for EVs by adopting improved standards for access to charging infrastructure.

Different "levels" of charging stations are recognized, as outlined in the Table 1.

Charging Level	Voltage	Amperage	Apprx km of range per hour of charging	Time to fully Recharge (dependent on battery size)	Applications
"AC Level 1"	120 VAC	12-16 A	~ 7 km/hr	5 to 30 hours	At home, at work.
"AC Level 2"	208 / 240 VAC	<=80A (30 A most common)	15 – 45 km/hr	2 to 8 hours	At home, at work, public charging
"DC Fast Charge"	200 - 400 VAC	80-400 A	200+ km/hr	<10 min to 1 hour	Major public rapid-recharge locations

Table 1: Common EV service equipment charging levels.

Market research suggests that approximately 80 per cent of EV charging occurs at home, with the remaining 20 per cent occurring at work and "on the go". Thus, appropriate infrastructure in residential parking areas is necessary to support EV's adoption. "Level 2" charging access is generally viewed as providing a higher level of service given its faster charging times; however, many EV owners report that "Level 1" (e.g. a standard 120 volt outlet) is adequate for most overnight charging.

Unfortunately, many residences do not currently have appropriate electrical connections for charging. This problem can be particularly acute in multifamily buildings. The Condominium Homeowners Association has estimated that it would cost \$8,000-\$13,000 to retrofit an electric vehicle charger in a multifamily parking area. At this cost, it can become financially unviable to acquire an EV. However, buildings can be "future-proofed" to significantly reduce these costs, as discussed below.

EV Charging Infrastructure Configurations

Buildings can provide EV charging stations, and/or be future-proofed to accommodate lowercost installation of charging stations in the future. The following are options for infrastructure configurations in new developments:

- EV charging stations. EV charging stations (also called EV Service Equipment) are devices used to connect vehicles to an electric receptacle to recharge an EV's battery. Charging stations typically cost \$500-3000, making it costly to equip all parking spaces in new developments. Due to these costs, it is not recommended to require new developments to equip all parking spaces with charging stations. However, in order to develop the "On the Go" charging network, it may be appropriate to equip a small percentage of new publicly accessible commercial parking with charging stations and appropriate signage. Likewise, it may be appropriate to provide a few shared EV charging stations in multifamily developments to provide for guests and/or residents.
- **"Energized" parking stalls.** This infrastructure configuration provides parking stalls with an electrically wired receptacle dedicated for EV charging. A future EV driver need only install the charging station at their cost in order to charge their vehicle.
- **"Partial EV infrastructure" parking stalls.** This infrastructure configuration provides some features in a new buildings' construction that will make it easier to energize stalls and install EV charging stations in the future. While installing a charging station may not be as simple as under an "energized" infrastructure configuration, providing this "partial EV infrastructure" can reduce the costs of retrofitting the building to accommodate EVs in the future.

These options are illustrated in Figure 1.

Innovative Technologies are Reducing the Cost of Implementing EV Charging

Charging technologies that can reduce the costs of EV charging infrastructure are emerging. Notably, "power sharing" technologies can allow multiple chargers to communicate so as not to exceed the capacity of a circuit, and also to time charging to occur when power costs less. Designing for such technologies can reduce the first cost of providing EV charging infrastructure, by reducing the size of building electrical systems that must be installed. These technologies can also ultimately reduce energy costs for users by coordinating vehicle charging to minimize consumer electrical costs, while still ensuring users receive sufficient charge.

"EV Charging Station Installed"

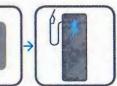












BC Hydro electric grid

Service conduit

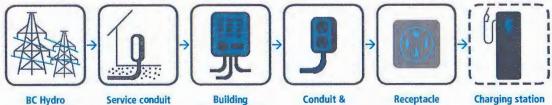
Building electrical system (transformers, panels, switchgear, etc.) sized to accommodate **EV** load

Conduit & conductor

Receptacle

Charging station installed

"Energized Stall"



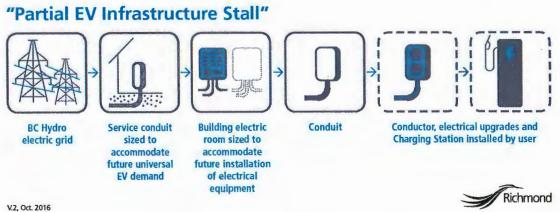
electric grid

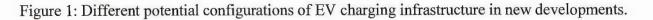
Building electrical system (transformers, panels, switchgear, etc.) sized to

accommodate **EV** load

conductor







City Policy Regarding EV Charging Infrastructure in New Developments

The City has been a leader in supporting EVs adoption, being one of the first communities in the region to specify that new developments feature electrical services for EV charging – Section 8.5.2 d of the 2041 Official Community Plan currently includes policy for new multifamily developments, requiring 20 per cent of residential parking stalls be "energized" with Level 1 (120V) service, with an additional 25 per cent featuring rough-in raceway to the parking stall. This policy applies to new developments undergoing rezoning. The City has successfully applied this policy, with new developments typically complying with or exceeding these provisions.

The City now has the opportunity to build on its leadership in enabling EVs, in light of the expanding EV market and the recognition that buildings currently being constructed are expected to be used well past 2050, when widespread adoption of EVs will be necessary to achieve climate targets. It is proposed that revised EV charging provisions be developed for Council's consideration. A revised policy provides the opportunity to:

- Allow for Level 2 charging. The current policy specifies Level 1 charging. Level 1 charging is viewed by some industry actors to be insufficient for the electric vehicles of the future, which may necessitate Level 2 home charging to provide sufficient overnight charge when battery is low. Staff will investigate whether both Level 1 and Level 2 should be allowed for home charging, or whether a particular infrastructure configuration should be specified.
- Consider providing a greater proportion of households access to EV charging. The current policy provides some form of home EV charging infrastructure access for 45 per cent of residential parking spaces. This is higher than what prevails in many jurisdictions in BC, and constituted significant leadership by the City. Nevertheless, under the current policy, 55 per cent of parking space owners will face a significant cost to implement any form of home charging. Staff will explore options to provide a higher percentage of households with access to EV charging.
- Consider provisions for detached housing, townhouses, "at work" or "on the go" charging. A future policy could cover a larger range of residential development, and also provide requirements for commercial developments to support charging at work and publicly accessible charging. It is important to note, however, that detached housing and townhouses typically do not have the same challenges implementing electric vehicle charging equipment as higher-density residential, mixed-use, commercial and institutional buildings. Moreover, detached housing and townhouses will typically have access to at least a "Level 1" outlet in their parking area.

Stakeholder Consultation Program

In 2016, two meetings with the Urban Development Institute were hosted by staff to solicit initial feedback on EV charging in new multifamily developments and develop principles for an updated approach. The next phase of consultation is intended to develop more detailed options for multifamily EV charging infrastructure. It is recommended that Council endorse the stakeholder engagement program outlined below, guided by the following principles:

- Ensure reasonable costs for EV infrastructure for both developers and end users EV charging requirements should balance costs for both developers and end-users.
- Better accommodate universal access to EV charging. Explore options to support as broad access to EV charging as possible, so as to provide greater options for consumers as EVs reduce in price and allow for the high uptake of EVs that will be necessary for the City to meet its emission reduction goals. This includes realizing higher rates of coverage of EV charging infrastructure in shared parkades, and providing charging infrastructure for building typologies with private garages or carports, including townhomes, duplexes and single family residences.
- Accommodate potential future technologies The requirements should be flexible to accommodate future technologies, including "load management" and power sharing solutions.
- Accommodate at home Level 2 charging Level 2 home charging access is considered by many stakeholders to be important to enable the adoption of EVs. Richmond's policy should change to accommodate Level 2 charging, and not only reference Level 1.
- Support the "at work" and "on the go" EV charging networks The requirements should support the build out of the "at work" and "on the go" charging networks.
- Evaluate development costs and incentives As part of developing policy, staff will evaluate the cost to future-proof new developments with different configurations of EV charging infrastructure; the extent of demand for EV charging infrastructure provisions amongst Richmond residents and homebuyers; and potential incentives or mechanisms that can help balance any incremental costs of EV charging infrastructure borne by new developments.
- Develop workable operating models for future strata corporations As part of stakeholder consultation, staff will investigate how best to ensure that stratas can properly manage EV charging infrastructure and electricity costs.

Options for Council's consideration will be further developed as part of stakeholder consultation. The following consultation program will be carried out with Council's endorsement:

- Condominium owners focus group(s)
- Developer workshop
- Small builders workshop
- Local EV user groups (formal and informal groups)
- EV charging service providers
- Meetings with staff from the province, Metro Vancouver and other municipalities

Financial Impact

None.

Conclusion

This report reviews EV charging infrastructure considerations and options, and recommends that staff engage in stakeholder consultation and report back to Council with recommended options for EV charging infrastructure policy.

Brendan McEwen Sustainability Manager (604-247-4676)

Peter-Russell

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



Report to Committee

Det	Annite attain by Onettain Einternational I tal fama Otr	ata Titla	Conversion of SEE4
From:	Wayne Craig Director of Development	File:	SC 16-734026
То:	Planning Committee	Date:	December 13, 2016

Re: Application by Grafton Enterprises Ltd. for a Strata Title Conversion at 2551 No. 6 Road

Staff Recommendations

- 1. That the application for a Strata Title Conversion by Grafton Enterprises Ltd. for the buildings located on the property at 2551 No. 6 Road, as generally shown in Attachment 1, be approved on fulfilment of the following conditions:
 - (a) Payment of all City utility charges and property taxes up to and including the year 2017;
 - (b) Registration of a flood indemnity covenant on title identifying a minimum habitable elevation of 2.9 m GSC;
 - (c) Registration of an aircraft noise sensitive use covenant on title;
 - (d) Submission of appropriate plans and documents for execution by the Approving Officer within 180 days of the date of this resolution;
 - (e) 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 installation costs and a 10% contingency.
- 2. That the City, as the Approving Authority, delegate to the Approving Officer the authority to execute the strata conversion plan on behalf of the City, as the Approving Authority, on the basis that the conditions set out in Recommendation 1 have been satisfied.

Istance &	
Wayne Craig	
Director of Development	CONCU
WC:jr	
Att. 5	

REPORT CONCURRENCE	
CONCURRENCE OF GENERAL MANAGER	
the fills	

Staff Report

Origin

Grafton Enterprises Ltd. has applied to the City of Richmond for permission to convert three (3) existing industrial buildings at 2551 No. 6 Road from multi-tenant rental buildings into thirteen (13) strata title lots.

Findings of Fact

The subject property is located in an established business park and industrial area in the Bridgeport planning area (Attachment 1). Development immediately surrounding the subject property is as follows:

- To the north, a lot zoned "Light Industrial (IL)," with vehicle access from No. 6 Road.
- To the south, a lot zoned "Light Industrial Limited Office (ZI8) Bridgeport Road Area," with vehicle access from No. 6 Road and Bridgeport Road.
- To the east, across No. 6 Road, lots zoned "Agriculture (AG1)."
- To the west, across a rail right-of-way, lots zoned "Light Industrial (IL)," with vehicle access from Viking Place and Viking Way.

There are three (3) existing buildings on the subject site, referred to as Buildings 1000, 2000, and 3000 in the proposed strata plan (Attachment 2). Building 1000 is located near the east lot line and is accessed directly from No. 6 Road. The building was renovated in 2015 as a multi-tenant building to accommodate eleven (11) industrial units; which are all currently occupied by tenants. This proposal would convert the building into eleven (11) strata lots. Required parking for the building is provided in the front and rear yards.

Buildings 2000 and 3000 are newly constructed and are currently occupied by tenants. The buildings are located at the west lot line, with Building 2000 in the northwest corner and Building 3000 in the southwest corner of the subject site. The buildings are accessed via an internal drive aisle circling the property. The proposal would convert each of these buildings into a strata lot, for a total of two (2) strata lots. Required parking for the buildings is provided in the rear yard.

There is no on-site landscaping between the parking area and the No. 6 Road frontage. Richmond Zoning Bylaw 8500 requires a minimum 3.0 m wide landscaped area along the property line abutting a public road. To address the lack of landscaping within the existing parking area, the applicant has agreed to install a 4.5 m wide landscaped area in the City owned boulevard, between the concrete sidewalk and the property line. The applicant has submitted a Landscape Plan, showing the proposed works (Attachment 3). The applicant will remove and replace any existing street trees in poor condition, install three (3) new trees where none previously existed, and install shrubs and groundcover. The City Parks Department has reviewed the Landscape Plan and supports the proposed planting.

Prior to approval of the Strata Title Conversion, the applicant must provide a revised Landscape Plan, to the satisfaction of the Director of Development, showing additional landscaping within 3.0 m of the property frontage and improved pedestrian access to No. 6 Road; and submit to the City a Landscape Security for 100% of the total cost of installation, including a 10% contingency, to ensure the landscaping is installed.

Analysis

City of Richmond Policy 5031 (Strata Title Conversion Applications – Commercial and Industrial) outlines Council's policy in determining how staff process strata title conversion applications for three (3) or more proposed strata lots (Attachment 4). The applicant has submitted all of the necessary information required by City staff, including a Building Condition Assessment, and a Building Code Compliance report.

- Interior and exterior alterations to Building 1000 in 2014 required a Building Permit. The renovated building received Final Inspection on November 5, 2015.
- The two (2) new buildings have received Final Inspection from the City's Building Approvals Division. Building 2000 received Final Inspection on March 9, 2016; and Building 3000 received Final Inspection on December 1, 2015.
- A Strata Title Conversion report provided by Grafton Enterprises Ltd. and reviewed by Weiler Engineering Ltd. dated May 16, 2016 indicates that the life expectancy of Building 1000 is at least 50 years, and the life expectancy of Buildings 2000 and 3000 is at least 75 years.
- The author of the Building Condition Assessment expects no increase in maintenance, repair, or replacement costs within the next 10 to 20 years.
- The author of the Building Code Compliance report confirms that the existing buildings are substantially in compliance with the BC Building Code. Building 1000 was upgraded to be substantially compliant with the BC Building Code 1998; Buildings 2000 and 3000 are substantially compliant with the BC Building Code 2012.
- Building Approvals confirmed that the proposed strata title conversion of the existing building has no building code implications.
- All three (3) buildings are currently occupied by tenants. The applicant has submitted signed letters from each of the existing tenants, stating that they are aware of and take no issue with this application (Attachment 5).
- The owner's intention is to retain sole ownership of the Lands and to lease the units after the strata title conversion is completed. The existing tenants will continue to occupy the premises with no changes to the terms of the existing leases, other than modifications to reflect the strata title conversion.
- No physical or structural upgrading of the buildings will take place, and no changes affecting open space, landscaping, common facilities, off-street parking, or loading spaces are being proposed.
- All on-site parking and loading areas will be designated as limited common property for the exclusive use of the designated thirteen (13) strata lots. As part of a business license, each business will need to verify that they have access to the Bylaw-required parking.
- The subject property is located within Aircraft Noise Area 4. All aircraft noise sensitive land uses are considered in this area. A restrictive covenant must be registered on title, the purpose of which is to address public awareness and ensure aircraft noise mitigation is incorporated into the design and construction of buildings and additions as required.

In light of this, staff support the proposed strata title conversion subject to:

- 1. Payment of all City utility charges and property taxes up to and including the year 2017.
- 2. Registration of a flood indemnity covenant on title identifying a minimum habitable elevation of 2.9 m GSC.
- 3. Registration of an aircraft noise sensitive use covenant on title.
- 4. Submission of appropriate plans and documents (i.e., Strata Plan Surveyor's Certificate, Application to Deposit, Form V and Form W, etc.) for execution by the Approving Officer within 180 days of the date of this resolution.
- 5. 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 installation costs and a 10% contingency.

Financial Impact

None.

Conclusion

Grafton Enterprises Ltd. has applied to convert three (3) existing industrial buildings at 2551 No. 6 Road into thirteen (13) strata title lots. The proposal is straightforward. Staff have no objection to this application and recommend approval of the strata title conversion application.

Jordan Rockerbie Planning Technician (604-276-4092)

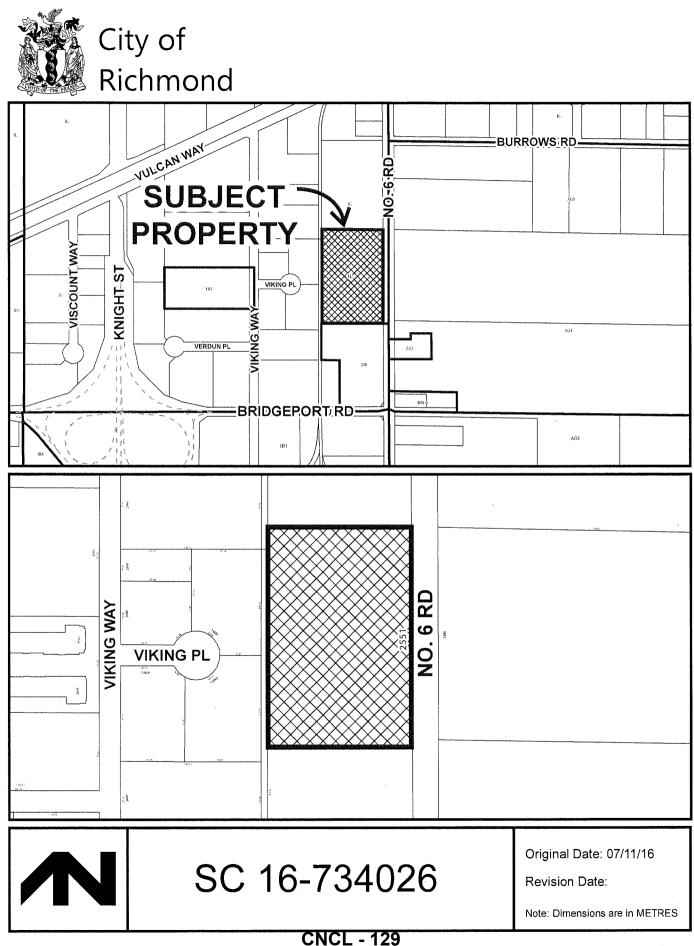
JR:rg

Attachment 1: Location Map and Aerial Photo

Attachment 2: Draft Strata Plan

Attachment 3: Proposed Landscape Plan

Attachment 4: Policy 5031: Strata Title Conversion Applications – Commercial and Industrial Attachment 5: Letters from existing tenants (7)





City of Richmond



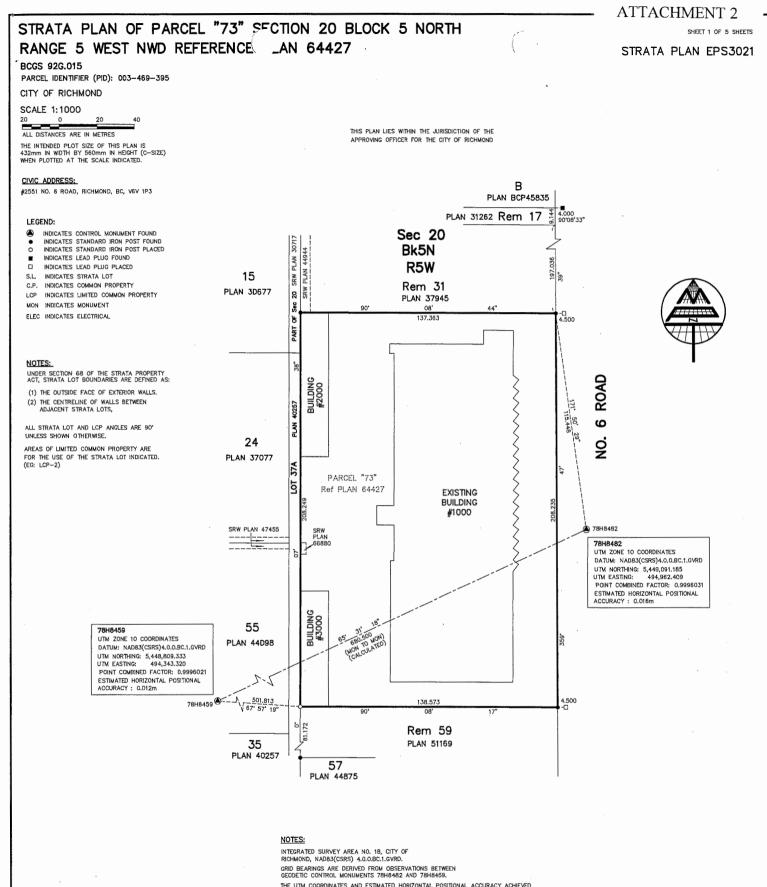
SC 16-734026

Original Date: 07/11/16

Revision Date:

Note: Dimensions are in METRES

CNCL - 130



THE UTH COORDINATES AND ESTIMATED HORIZONTAL POSITIONAL ACCURACY ACHIEVED HAVE BEEN DERIVED FROM THE MASCOT PUBLISHED COORDINATES AND STANDARD DEVIATIONS FOR GEODETIC CONTROL MONUMENTS 78H8482 AND 78H8459.

THIS PLAN SHOWS HORIZONTAL GRUIND-LEVEL DISTANCES UNLESS OTHERWISE SPECIFIED. TO COMPUTE GRID DISTANCES, MULTIPLY GROUND-LEVEL DISTANCES BY THE AVERAGE COMBINED FACTOR OF DOPBOG28 WHICH HAS BEEN DERIVED FROM GEODETIC CONTROL MONUMENTS 78H8482 AND 78H8459.

OFFSET POSTS AND PLUGS ARE ON PRODUCTION OF PROPERTY LINES UNLESS INDICATED OTHERWISE.

PARTS OF THIS PLAN HAVE BEEN EXAGGERATED FOR CLARITY PURPOSES.

CNCL - 131

THE BUILDINGS SHOWN HEREON ARE WITHIN THE EXTERNAL BOUNDARIES OF THE LAND THAT IS THE SUBJECT OF THE STRATA PLAN.

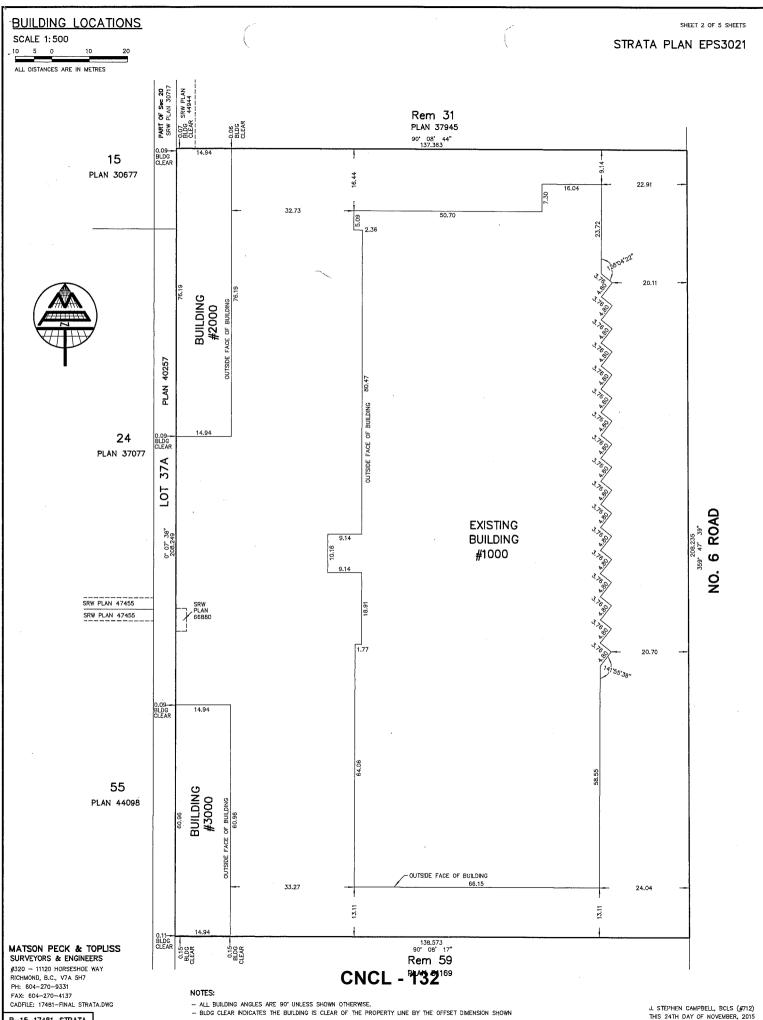
THIS PLAN LIES WITHIN THE GREATER VANCOUVER REGIONAL DISTRICT.

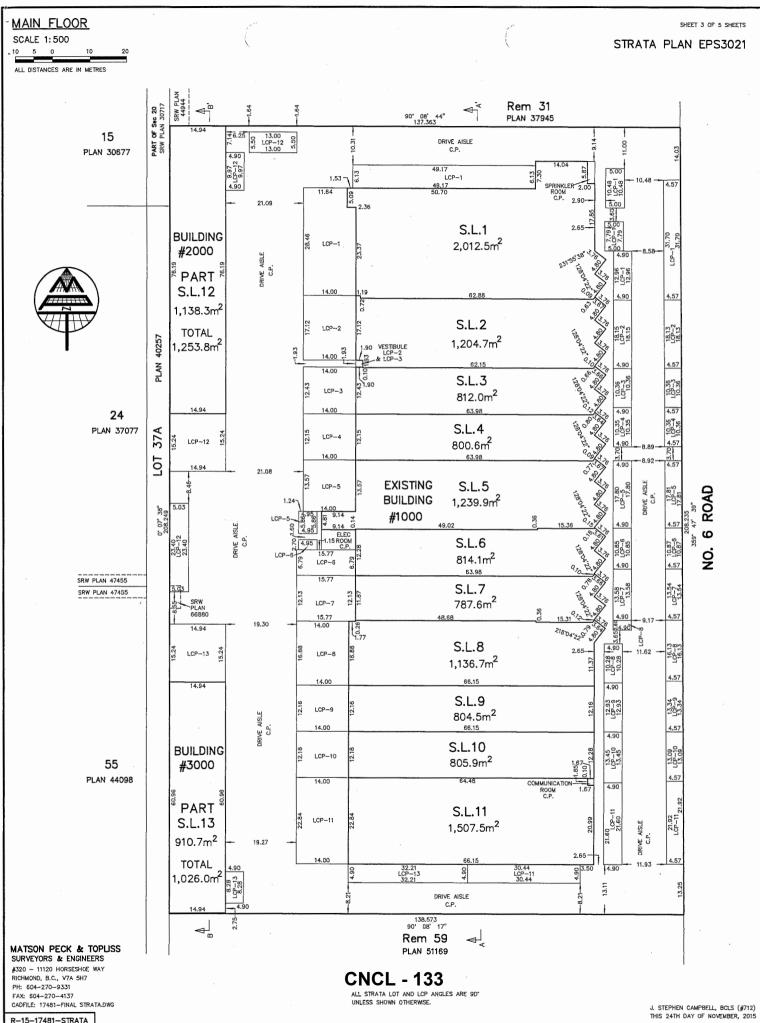
THE FIELD SURVEY REPRESENTED BY THIS PLAN WAS COMPLETED BY J. STEPHEN CAMPBELL, BCLS (#712) ON THIS 24TH DAY OF NOVEMBER, 2015

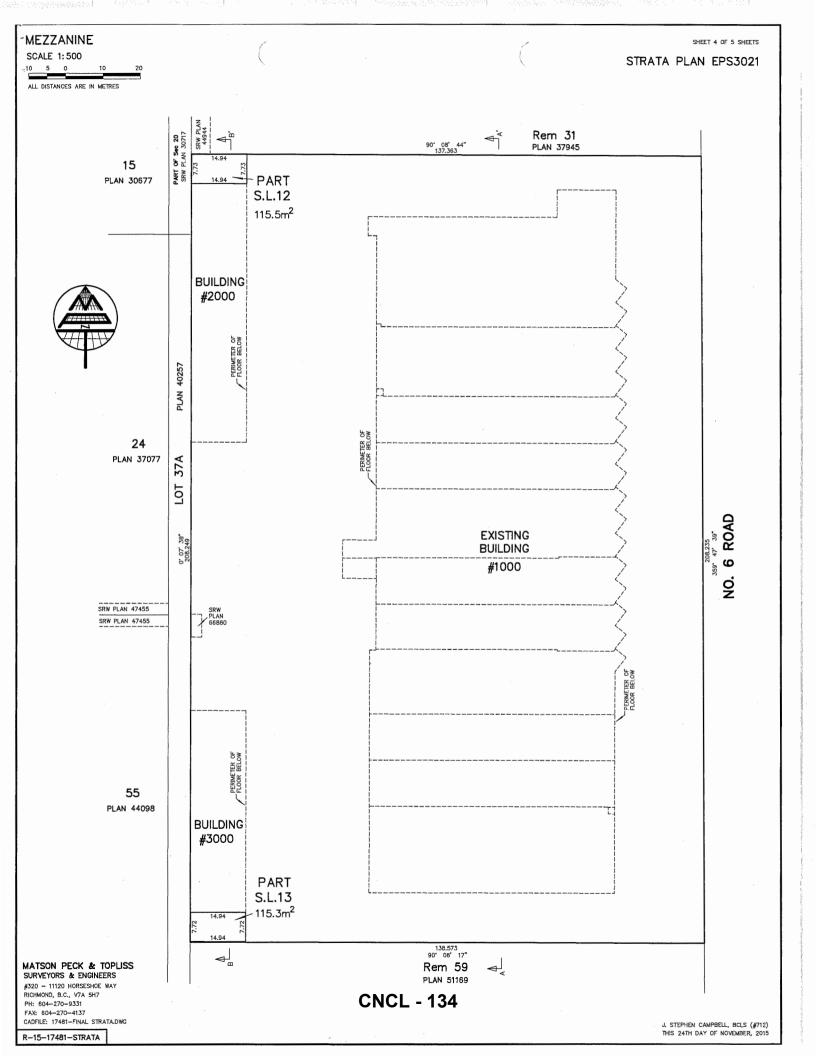
EXISTING BUILDING #1000 INCLUDED IN THIS STRATA PLAN HAS BEEN PREVIOUSLY OCCUPIED.

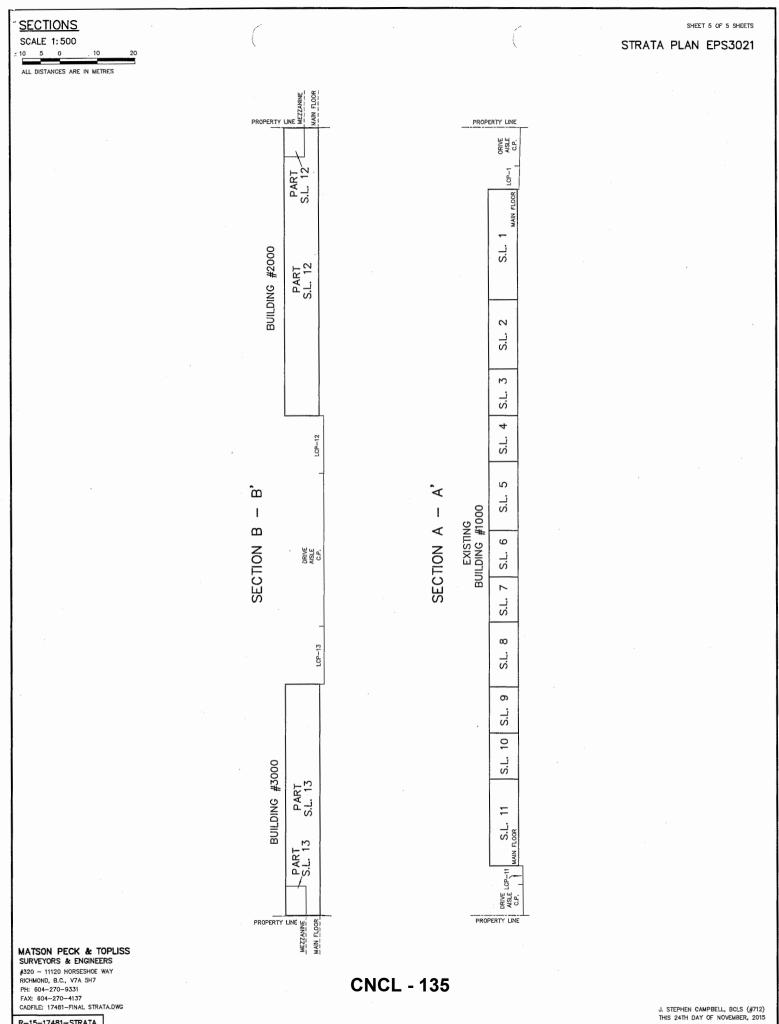
MATSON PECK & TOPLISS

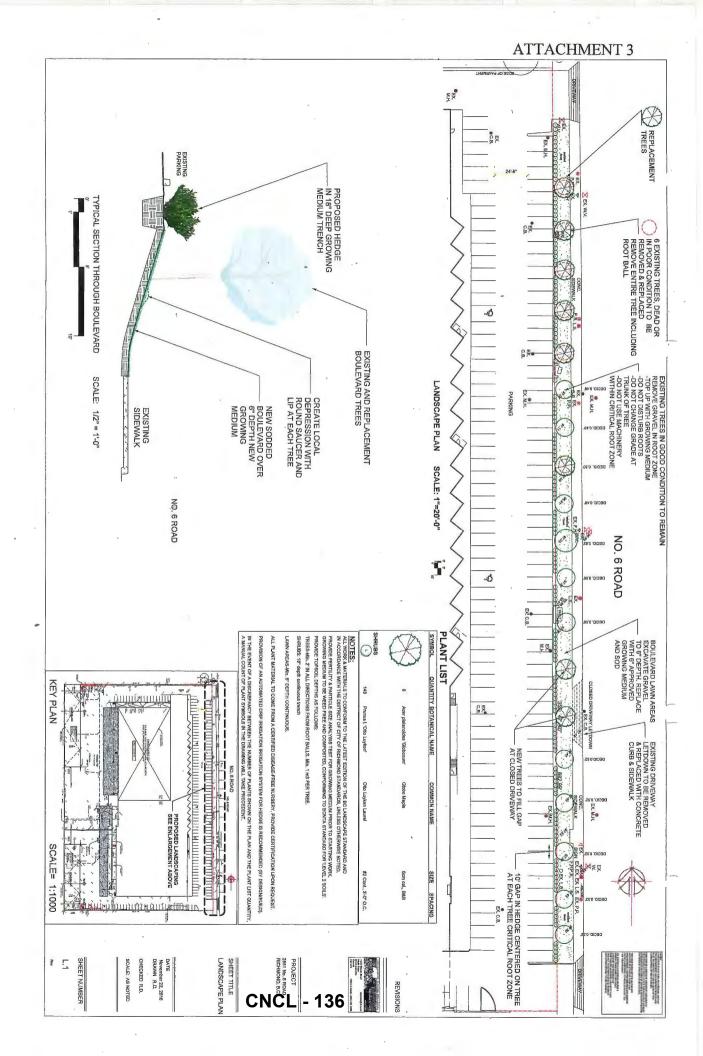
SURVEYORS & ENGINEERS #320 - 11120 HORSESHOE WAY RICHMOND, B.C., V7A 5H7 PH: 604-270-9331 FAX: 604-270-4137 CADFILE: 17461-FINAL STRATA.DWG











ATTACHMENT 4



City of Richmond

Policy Manual

Page 1 of 1	Adopted by Council: Feb. 13/95	POLICY 5031	
	Amended by Council: Mar. 27, 1995; July 27, 2015		
File Ref: 4105-00	STRATA TITLE CONVERSION APPLICATIONS - COMM	FRCIAL AND INDUSTRIAL	

POLICY 5031:

It is Council policy that:

The following matters shall be considered before deciding on any commercial or industrial strata title conversion applications involving three or more strata lots:

- 1. The life expectancy of the building and any projected major increases in maintenance costs due to the condition of the building. This information shall be supplied by the applicant in the form of a written report in an acceptable form prepared by a registered architect, engineer or similarly qualified professional. The report shall review the building's age, quality, general condition and measure of compliance with current building codes and City bylaws.
- 2. The impact of the proposal on the existing tenants in terms of their existing leases and their ability to offer to purchase the units they occupy or to relocate in comparable and suitable rental premises if unable to purchase their existing units.
- 3. The views of the affected tenants as established by a formal canvass by the City Staff or agents of the City. A standard form available from the City's Planning and Development Division may be used for this purpose.
- 4. Any proposals involving upgrading of the buildings or changes affecting open space, landscaping, common facilities, off-street parking and loading spaces. The ownership and management of the off-street parking and loading facilities should be specifically addressed.
- 5. Any other conditions peculiar to the circumstances of the conversion proposal and requiring special measures to be taken as a condition of approval.
- 6. All commercial or industrial strata conversion applications must be compatible with the City's bylaws regulating the use and development of the land and the servicing standards appropriate to the site.

(Planning and Development Division)

ATTACHMENT 5 604-270-4081

GRAFTON ENTERPRISES LTD.

July 15th, 2016

MORTON CLARKE & CO. LTD. ATTENTION: PAUL CLARKE 1105, 1110, 1115, 1120 – 2551 No. 6 RD RICHMOND, BC V6V 1P3

RE: STRATA PLAN EPS3021 AT 2551 No. 6 RD

We are in the final stages of completing the project at the above-noted address. We would like to inform you that the title of your units will be Strata (S.L. 1, S.L. 2, S.L. 3, & S.L. 4). The reason for this is to allow separate metering for gas, electric, water, sewer, and property taxes. This will ensure that tenants will pay for their own expenses and no one else's.

For those of you who do not know, this will have no ramifications with regards to your tenancy and only changes how the landlord, Grafton Enterprises Ltd., owns the property.

Please sign in the space below to indicate you do not take issue with this change. Retain one copy for your records.

Sincerely,

GRAFTON ENTERPRISES LTD. Wayne Grafton

AGREED TO THE ABOVE TERMS BY **MORTON CLARKE & CO. LTD.**

SIGNATURE:

8/05/16 DATE:

NAME:

AUL CLARKS CNCL - 138

604-270-4737 604-270-4081

GRAFTON ENTERPRISES LTD.

July 15th, 2016

ULTIMATE SKATEBOARD DISTRIBUTORS INC. ATTENTION: BRAD RICHMOND 1125 – 2551 No. 6 RD RICHMOND, BC V6V 1P3

RE: STRATA PLAN EPS3021 AT 2551 No. 6 RD

We are in the final stages of completing the project at the above-noted address. We would like to inform you that the title of your unit will be Strata (S.L. 5). The reason for this is to allow separate metering for gas, electric, water, sewer, and property taxes. This will ensure that tenants will pay for their own expenses and no one else's.

For those of you who do not know, this will have no ramifications with regards to your tenancy and only changes how the landlord, Grafton Enterprises Ltd., owns the property.

Please sign in the space below to indicate you do not take issue with this change. Retain one copy for your records.

Sincerely,

GRAFTON ENTERPRISES LTD. Wayne Grafton

AGREED TO THE ABOVE TERMS BY ULTIMATE SKATEBOARD DISTRIBUTORS INC.

SIGNATURE:

BRAD RICHMONDL - 139

604-270-4737 604-270-4081

GRAFTON ENTERPRISES LTD.

July 15th, 2016

1922103 ONTARIO INC. DBA SUPER 3 PRODUCE ATTENTION: BEN CHEN 1130 & 1135 - 2551 No. 6 RD RICHMOND, BC V6V 1P3

RE: STRATA PLAN EPS3021 AT 2551 No. 6 RD

We are in the final stages of completing the project at the above-noted address. We would like to inform you that the title of your units will be Strata (S.L. 6 & S.L. 7). The reason for this is to allow separate metering for gas, electric, water, sewer, and property taxes. This will ensure that tenants will pay for their own expenses and no one else's.

For those of you who do not know, this will have no ramifications with regards to your tenancy and only changes how the landlord, Grafton Enterprises Ltd., owns the property.

Please sign in the space below to indicate you do not take issue with this change. Retain one copy for your records.

Sincerely,

GRAFTON ENTERPRISES LTD. Wayne Grafton

AGREED TO THE ABOVE TERMS BY 1922103 ONTARIO INC. DBA SUPER 3 PRODUCE

SIGNATURE:

DATE: 15mg 5, 16. **CNCL - 140**

604-270-4737 604-270-4081

GRAFTON ENTERPRISES LTD.

July 15th, 2016

BESCORP HOLDINGS INC. (DBA TAPIO TEA COMPANY) ATTENTION: KEN HSU 1140 & 1145 - 2551 No. 6 RD RICHMOND, BC V6V 1P3

STRATA PLAN EPS3021 AT 2551 No. 6 RD RE:

We are in the final stages of completing the project at the above-noted address. We would like to inform you that the title of your units will be Strata (S.L. 8 & S.L. 9). The reason for this is to allow separate metering for gas, electric, water, sewer, and property taxes. This will ensure that tenants will pay for their own expenses and no one else's.

For those of you who do not know, this will have no ramifications with regards to your tenancy and only changes how the landlord, Grafton Enterprises Ltd., owns the property.

Please sign in the space below to indicate you do not take issue with this change. Retain one copy for your records.

Sincerely,

GRAFTON ENTERPRISES LTD. Wayne Grafton

AGREED TO THE ABOVE TERMS BY **BESCORP HOLDINGS INC. (DBA TAPIO TEA COMPANY)**

July 21/14 DATE: SIGNATURE: d change

604-270-4737 604-270-4081

GRAFTON ENTERPRISES LTD.

July 15th, 2016

THE CHEFS' WAREHOUSE PASTRY DIVISION CANADA ULC **ATTENTION: ED DAVIS** 1150 & 1155 - 2551 No. 6 RD RICHMOND, BC V6V 1P3

RE: STRATA PLAN EPS3021 AT 2551 No. 6 RD

We are in the final stages of completing the project at the above-noted address. We would like to inform you that the title of your units will be Strata (S.L. 10 & S.L. 11). The reason for this is to allow separate metering for gas, electric, water, sewer, and property taxes. This will ensure that tenants will pay for their own expenses and no one else's.

For those of you who do not know, this will have no ramifications with regards to your tenancy and only changes how the landlord, Grafton Enterprises Ltd., owns the property.

Please sign in the space below to indicate you do not take issue with this change. Retain one copy for your records.

Sincerely,

GRAFTON ENTERPRISES LTD. Wayne Grafton

AGREED TO THE ABOVE TERMS BY THE CHEFS' WAREHOUSE PASTRY DIVISION CANADA ULC

SIGNATURE: **CNCL - 142**

DATE:

604-270-4737 604-270-4081

GRAFTON ENTERPRISES UTD.

July 15th, 2016

BARROCO FINE FURNITURE LTD. ATTENTION: ROGER CHANG BLDG 2000 – 2551 No. 6 RD RICHMOND, BC V6V 1P3

RE: STRATA PLAN EPS3021 AT 2551 No. 6 RD

We are in the final stages of completing the project at the above-noted address. We would like to inform you that the title of your unit will be Strata (S.L. 12). The reason for this is to allow separate metering for gas, electric, water, sewer, and property taxes. This will ensure that tenants will pay for their own expenses and no one else's.

For those of you who do not know, this will have no ramifications with regards to your tenancy and only changes how the landlord, Grafton Enterprises Ltd., owns the property.

CNCL - 143

Please sign in the space below to indicate you do not take issue with this change. Retain one copy for your records.

Sincerely,

GRAFTON ENTERPRISES LTD. Wayne Grafton

AGREED TO THE ABOVE TERMS BY BARROCO FINE FURNITURE LTD.

SIGNATURE:

DATE: July >6 -2016

604-270-4737 604-270-4081

GRAFTON ENTERPRISES LTD.

July 15th, 2016

TEC FLOOR COVERINGS LTD. ATTENTION: LARS SOLLENIUS BLDG 3000 – 2551 NO. 6 RD RICHMOND, BC V6V 1P3

RE: STRATA PLAN EPS3021 AT 2551 No. 6 RD

We are in the final stages of completing the project at the above-noted address. We would like to inform you that the title of your unit will be Strata (S.L. 13). The reason for this is to allow separate metering for gas, electric, water, sewer, and property taxes. This will ensure that tenants will pay for their own expenses and no one else's.

For those of you who do not know, this will have no ramifications with regards to your tenancy and only changes how the landlord, Grafton Enterprises Ltd., owns the property.

Please sign in the space below to indicate you do not take issue with this change. Retain one copy for your records.

Sincerely,

GRAFTON ENTERPRISES LTD. Wayne Grafton

AGREED TO THE ABOVE TERMS BY **TEC FLOOR COVERINGS LTD.**

21/16. DATE: JOL

NAME:

SIGNATURE:

Alyzon Dollanicence - 144



Report to Committee

Planning and Development Division

To:	Planning Committee
From:	Wayne Craig Director, Development

Date: January 10, 2017

File: RZ 14-678448

Re: Application by 1004732 BC Ltd. for Rezoning at 6840 & 6860 No. 3 Road and 8051 Anderson Road from "Downtown Commercial (CDT1)" to "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village"

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9510 to create the "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village" zone, and to rezone 6840 & 6860 No. 3 Road and 8051 Anderson Road from "Downtown Commercial (CDT1)" to "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village", be introduced and given first reading.

Wayne Craig Director, Development

WC:jd(

Att.

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Affordable Housing	M		
Community Services		reineg	

Staff Report

Origin

1004732 BC Ltd. has applied to the City of Richmond for permission to rezone the properties at 6840 & 6860 No. 3 Road and 8051 Anderson Road (Attachments 1&2) from "Downtown Commercial (CDT1)" to a new site-specific zone, "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village", in order to permit the development of a high-density, mixed commercial and residential use building in City Centre's Brighouse Village (Attachment 3). Key components of the proposal include:

- a podium and tower form of development;
- a total floor area of 18,701 m² (201,292 ft²) comprised of approximately:
 - \circ 1,149 m² (12,371sq.ft.) of retail space on the ground level,
 - 9,794 m² (105,420 sq.ft.) of office space in a twelve-storey tower component facing No. 3 Road, and,
 - 7,757 m² (83,501 sq.ft.) of multi-family residential space in a ten-storey mid-rise component facing Anderson Road;
- a total of seventy-five (75) studio through three-bedroom dwelling units including:
 - sixty-seven (67) one-storey apartment units, and
 - eight (8) two-storey apartment units;
- 5% of the residential floor area allocated to five (5) affordable housing units;
- a variety of utility, transportation and parks improvements and cash contributions along with development of an enhanced public realm along No 3 Road;
- cash-in-lieu contributions of \$515,105.15 for child care, \$1,417,398.31 for community facilities, \$50,304.72 for community planning and \$114,861.64 for public art; and
- a LEED Silver-equivalent building designed and constructed to connect to the future district energy utility (DEU) system.

Conceptual plans of the rezoning proposal are provided (Attachment 5). A list of Rezoning Considerations (Attachment 6) is provided (signed copy on file).

Findings of Fact

A Development Application Data (Attachment 4) is provided for comparison of the proposed development with the proposed site specific zone requirements.

Site and Surrounding Development

The subject site is located on the northeast corner of No. 3 Road and Anderson Road. The site is relatively flat and is currently preloaded in preparation for construction. The previous low scale development has been removed.

Properties in the surrounding area have been or are likely to be redeveloped with higher density commercial, residential and mixed used developments. Please refer to the Brighouse Village Specific Land Use Map for additional information (Attachment 3). Current and future potential surrounding development includes:

To the North: Three lots fronting No. 3 Road developed with low scale commercial buildings

January 10, 2017

and surface parking to the rear. Also, to the north, two lots facing Park Road. All lots to the north could be redeveloped under the current Downtown Commercial (CDT1) zoning or could be rezoned under the CCAP, resulting in a commercial or mixed use podium and tower development with an FAR ranging between 3.0 and 4.0 and a maximum height of 47.0 m GSC.

To the South: Across Anderson Road, four lots fronting No. 3 Road developed with low scale commercial buildings and surface parking to the rear, and, at 8080 Anderson Road, an affordable housing development (currently under construction) that was approved with an FAR of 3.48 and a height of 43.5 m GSC (*DP 12-605094*). The properties fronting No. 3 Road could be redeveloped under the current Downtown Commercial (CDT1) zoning or could be rezoned under the CCAP, resulting in a commercial or mixed use podium and tower development with an FAR of between 3.0 and 4.0 and a maximum height of 47 m GSC.

To the East: An existing commercial and residential podium and tower development, with internal parking (*DP 91-000172*). Further to the east, a recently approved mixed use podium and tower development will be constructed (*DP 13-645286*).

To the West: Across No. 3 Road, the Richmond City Hall precinct with an eight-storey civic building, landscaped grounds and a combination of underground and surface parking. Additionally, across No. 3 Road, the Richmond Centre site which is currently developed with a two-storey mall surrounded by surface parking and is also under application to amend the OCP to adjust land use designation boundaries (*CP 16-752923*).

Related Policies

A. Official Community Plan/City Centre Area Plan

<u>Official Community Plan:</u> The Official Community Plan (OCP) designates the site as "Downtown Mixed Use". The proposed rezoning is consistent with this designation.

<u>City Centre Area Plan</u>: The City Centre Area Plan (CCAP) designates the site as "Urban Core T6 (45m)". The proposed rezoning is consistent with this designation.

B. Other Policies, Strategies and Bylaws

<u>Flood Protection Management Strategy:</u> The proposed redevelopment must meet the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204. Registration of a flood indemnity covenant is required prior to final adoption of the rezoning bylaw.

<u>Aircraft Noise Sensitive Development Policy</u>: The proposed development is located in Area 4 on the Aircraft Noise Sensitive Development Map. The proposed redevelopment must address the requirements of the Aircraft Noise Policy including provision of an acoustic consultant report regarding sound attenuation measures to be incorporated into the development. Registration of aircraft noise covenant is required prior to final adoption of the rezoning bylaw. <u>Mixed Use Noise and Ambient Noise</u>: The proposed development must address additional OCP Noise Management Policies, specifically Mixed Use Noise and Ambient Noise. Requirements include provision of an acoustic consultant report regarding sound attenuation measures and registration of associated noise covenants before final adoption of the rezoning bylaw.

<u>Affordable Housing Strategy:</u> The proposed development provides for affordable housing. Registration of an Affordable Housing Agreement is required prior to final adoption of the rezoning bylaw. The specific details of the affordable housing proposal are provided in Analysis, Section B.2 – Affordable Housing.

<u>Richmond Public Art Policy</u>: The proposed development addresses the Richmond Public Art Policy and provides for a financial contribution toward public art in the Brighouse No. 3 Road Art Walk. The specific details of the affordable housing proposal are provided in Analysis, Section B.3 – Community Amenities.

<u>District Energy Utilities</u>: The proposed development will be designed to utilize energy from a District Energy Utility when a neighbourhood DEU is implemented. Connection to the future DEU system will be secured with a legal agreement.

Public Consultation

A rezoning notification sign was installed on the subject property. In response, staff received comments from existing tenants, residents of an adjacent property and owners of nearby commercial properties.

Existing Tenants: Existing tenants were concerned about being displaced by the proposed development. The developer and tenants resolved their issues, the tenants have since relocated their businesses and the previous development removed from the site.

<u>Neighbouring Residential Properties</u>: The occupants of one of the mid-level residential units in the building immediately to the east of the subject site (8111 Anderson Road) expressed concern that the new development would eliminate existing western views and reduce privacy. The site is being developed in accordance with the City Centre Area Plan. The applicant has responded to neighbours' privacy concerns with multiple changes to the eastern end of the development. Changes include:

- increasing the side yard setback by approximately 1.5 m at the relevant building level;
- orienting the main windows of the proposed development to the north and south;
- making most of the east façade solid with a few, carefully placed, small windows;
- eliminating access to two deck areas parallel to the east property line;
- adding hedge and tree screening on a second, larger deck area also parallel to the east property line; and
- changing the programming of the second deck to focus on urban agriculture rather than ongoing socializing.

<u>Neighbouring Commercial Properties:</u> Owners of nearby commercial developments have expressed concerns about the impacts of site preloading on the structure and finishing of their buildings. Staff have referred the property owners to the applicant as this is considered to be a civil matter.

Advisory Design Panel

The design of the proposed development (DP 15-708092) was forwarded to the ADP for comment on November 18, 2015. Feedback from the Panel (Attachment 7) led to elimination of an east-west pedestrian connection between No. 3 Road and the evolving east-west lane system to the east. Otherwise, the proposal was well received by Panel members, who recommended a variety of small changes.

Analysis

Staff have reviewed the proposed rezoning and find that it is generally consistent with City policy objectives described in the Official Community Plan (OCP) and City Centre Area Plan (CCAP) including but not limited to: public and private infrastructure; community benefits and amenities; and, basic development conditions such as land use, density and height. Further, the proposed development contributes to an enhanced public realm and addresses potential impacts on surrounding developments.

The applicant has agreed to undertake the considerations of rezoning related to the foregoing as well as those related to subdivision, indemnification and other legal agreements to be registered on title (Attachment 6).

A. Proposed Zoning

The proposed rezoning is consistent with the Brighouse Village Specific Land Use Map transect land use designation, Urban Core T6 (45 m), which provides for up to 3.0 FAR of mixed use density and eligibility for an additional 1.0 FAR of Village Centre Bonus (VCB) commercial density.

A new site specific zone, "City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village", is proposed that incorporates specific requirements regarding the relative amounts of commercial and residential uses, the provision of affordable housing on-site and various form of development parameters.

B. CCAP Implementation Policies

1. Utility, Transportation and Parks Infrastructure

The proposed infrastructure improvements are summarized below and will be realized through a Servicing Agreement (SA). The infrastructure improvements are not eligible for Development Cost Charge (DCC) credits and will be funded by the developer.

<u>City Utilities:</u> The developer is required to undertake a variety of water, storm water drainage and sanitary sewer frontage works. Included are:

- a water main upgrade on Anderson Road;
- a storm sewer upgrade on Anderson Road;
- a lane drainage upgrade to the north of the subject site as well as the site to the east; and
- a combination of temporary sanitary sewer work and permanent upgrades on Anderson Road that will connect with a new sanitary sewer to be constructed on Buswell Street under the City's Capital Plan.

The frontage and other infrastructure improvements are detailed in the Servicing Agreement section of the Rezoning Considerations (Attachment 6).

Private Utilities: Undergrounding of Hydro service lines is required.

<u>Transportation Network:</u> The CCAP encourages completion and enhancement of the City street and lane network. Based on the City's road network objectives and the submitted Traffic Impact Analysis (TIA) frontage and off-site street, lane and intersection improvements are as follows.

- <u>No. 3 Road</u>: The No. 3 Road vehicle lane widths will remain the same. The back-of-curb cross-section will be widened to accommodate a boulevard, bikeway, greenway and sidewalk, all of which are intended to support an enhanced public realm. A property dedication is required.
- <u>Anderson Road</u>: The Anderson Road vehicle and back-of-curb cross-section widths will remain the same. No dedications are required. The finishing of the back of curb areas will be upgraded, including the frontage of 8111 Anderson Road, to establish a consistent frontage design between No. 3 Road and Buswell Street.
- <u>North-South Lane</u>: Development of a formalized north-south lane system to the east of No. 3 Road will begin with the creation of a new north-south connection through the subject site. Because of the configuration of the site and building, this connection will occur at ground level only and will be secured as a volumetric statutory right of way (SRW). The connection is designed to be used by cars, trucks and pedestrians.
- <u>East-West Lane</u>: There is an evolving east-west lane system running from Buswell Street to the site. The proposed development will contribute to this system with a 3.0 m land dedication from the north east edge of the site along with associated frontage improvements. (Note: Additional contributions to the interim functioning of the evolving east-west lane system are discussed in Analysis, Section C.2 Site Access-Off-site).
- <u>*Transportation Impact Analysis Measures (TIA):*</u> Based on the findings of the TIA study, various off-site improvements are required as follow.
 - pedestrian upgrades at the No. 3 Road and Anderson Road intersection including:
 - upgrade the crosswalks at the intersection with decorative stamped asphalt treatment and yellow tactile warning pavers at the curb ramps to improve visibility and accessibility of crosswalks;
 - pedestrian upgrades at the Anderson Road and Buswell Road intersection including:
 - installation of two special crosswalk signals (side-mounted) with APS for the north and south legs of the intersection and service panel; pedestrian detection and communications conduit, cable and junction boxes;
 - add new curb ramps on east side per City Engineering Design Specification standards with tactile warning strips; and
 - street sign upgrades at the Granville Avenue and Buswell Street intersection including:
 o upgrade intersection with illuminated street name signs.

<u>Parks and Open Space Network:</u> The CCAP identifies No 3 Road as part of the City's greenway system. The No. 3 Road back-of-curb cross-section accommodates greenway functions.

<u>Public Realm Design – No. 3 Road:</u> Detailed design development of the required frontage improvements will be undertaken through the Development Permit and Servicing Agreement processes. The preliminary public realm plan for the subject development (Attachment 8) shows

the proposed locations and designs for various paths, spaces, hard and soft landscape, street furnishings and finishing. However, as the CCAP envisions an "art walk" along No. 3 Road from the Canada Line Station to Granville Ave., staff are hoping to work with current developers and/or a consultant to develop a comprehensive public realm vision that unifies and celebrates the Brighouse Village Centre and the Brighouse section of the No. 3 Road corridor.

<u>Public Realm Design - North-South Lane SRW:</u> The proposed north-south lane runs through the middle of the ground level of the proposed development. To encourage pedestrian use, increase safety and reduce the visual impact of a large opening in the streetwall, the applicant proposes an enhanced design treatment on the ground, walls and ceiling using coloured concrete banding interspersed with embedded lighting. The enhanced design will be implemented through the Development Permit and Servicing Agreement processes.

2. Affordable Housing

The CCAP Implementation Strategy, in conjunction with the Affordable Housing Strategy, provides for density bonusing to achieve low end market rental units in residential and mixed use development of 80 or more units. Where there are fewer than 80 units, cash-in-lieu may be provided.

Low End Market Rental Housing (LEMR): Although the proposed development is less than 80 units, the developer has chosen to provide the affordable housing on-site. The proposal includes a total of five (5) LEMR units, with a combined floor area of 395.7 m^2 (4,259.28 sq.ft.) which is 5% of the residential floor area. The proposed LEMR unit allocation includes:

	Affor	Project Targets (2)			
Unit Type	Minimum Unit Area	Maximum Monthly Unit Rent (1)	Total Maximum Household Income (1)	Unit Mix	# of Units
Bachelor	37 m ² (400 ft ²)	\$850	\$34,000 or less	0%	0
1-Bedroom	50 m ² (535 ft ²)	\$950	\$38,000 or less	40%	2
2- Bedroom	80 m ² (860 ft ²)	\$1,162	\$46,500 or less	60%	3
3-Bedroom	91 m ² (980 ft ²)	\$1,437	\$57,500 or less	0%	0
TOTAL		N/A	N/A	100%	5

(1) May be adjusted periodically, as provided for under adopted City policy.

(2) 100% of affordable housing units shall meet Richmond Basic Universal Housing (BUH) standards or better.

The units will be secured with a housing agreement which will include terms regarding the integration of the affordable units with the market units; tenant access to the indoor and outdoor common amenity areas; and, provision of affordable parking spaces at no additional charge.

3. Community Amenities

The CCAP Implementation Strategy includes density bonusing and other measures to support community enhancements that are desirable in the context of City Centre densification. The proposed rezoning includes offers to contribute to the following community amenities in accordance with the OCP.

<u>Child Care:</u> The proposed rezoning is located in the Brighouse Village Specific Land Use Map "T6" area and is subject to a density bonus provision requiring that one percent (1%) of the residential floor area (excluding affordable housing floor area) be provided to the City in the

January 10, 2017

form of child care space or a cash-in-lieu contribution to the Childcare Development Reserve Fund and Childcare Operating Contributions accounts (90% and 10% respectively). Community Services staff have reviewed the location of the development and the potential for child care in the available floor area and recommend that the City accept a total cash-in-lieu contribution based on the finished value of the space (a minimum of \$515,105.15 calculated using the proposed floor area [0.01 x 7,361.8 m² x \$6,997/m²]).

<u>Community Facilities:</u> The proposed rezoning is located in the Brighouse Village Specific Land Use Map "Village Centre Bonus (VCB)" area and incorporates a VCB density increase of 0.83 FAR. Five percent (5%) of this area is expected to be provided back to the City in the form of community amenity space or a cash-in-lieu contribution to the City Centre Facility Development Fund (100%). Community Services staff have reviewed the location of the development and the potential for community amenities in the limited floor area (202.6 m²) and recommend that the City accept a cash-in-lieu contribution based on the finished value of the space (a minimum of \$1,417,398.31 calculated using the proposed floor area [0.05 x .83 x 4,881.26 m² x \$6,997 /m²]).

<u>Community Planning</u>: The proposed rezoning is subject to a community planning implementation contribution to the CC-Community Planning and Engineering account contribution for future community planning (a minimum of \$50,304.72 calculated using the proposed floor area [18,700.64 $m^2 x$ \$2.69 / m^2]).

<u>Public Art:</u> The CCAP looks to public art to enrich and animate the public realm. The subject site is located on No. 3 Road between Granville Avenue and the Brighouse Canada Line Station, an area specifically identified for development of an "art walk" in the public and adjacent private realm. Community Services staff have considered public art contribution options for this area and recommend that the City accept a cash-in-lieu contribution to the Public Art Provision account (15%) and the Public Art Reserve account (85%) so that a co-ordinated approach for the full length of the art walk (Granville Avenue to the Canada Line Station) can be pursued. The public art contribution is calculated on both the commercial and residential space (a minimum of \$114,861.64 calculated using the proposed floor areas [10,943.14 m² x \$4.63 /m² + 7361.8 m² x \$8.72 m²]).

C. Other CCAP Development Policies

1. Households and Housing

<u>Seniors and Special Needs</u>: The CCAP encourages inclusion of seniors and special needs housing close to shops, services, transit and community amenities. The proposed development is consistent with the policy and includes a variety of independent living unit types to support aging in place and different ability needs.

Туре	Affordable	Market	Intent	Standard
Aging in Place	0	66	- support mobility and usability	Per OCP
Adaptable + Basic Universal Housing	4	4	- reno potential for wheelchair plus added floor area for manoeuvring	Per BCBC and RZB
Barrier Free	1	0	- move in with wheelchair - includes basic universal housing	Per BCDH

2. Transportation

Site Access: Pedestrian and vehicular access is provided as follows.

- <u>Site Access On-site</u>: Pedestrian access is provided to individual shop fronts on the two street frontages, to an office lobby on No. 3 Road and to a residential lobby on Anderson Road. Vehicular access is provided via the new north-south lane SRW, which can be entered from Anderson Road on the south and from the evolving east-west lane system on the north.
- <u>Site Access Off-site</u>: The applicant is proposing to utilize the evolving east-west lane system on the north side of the site to support truck movement. To establish a functional lane width, the current dedicated portions of the lane must be supplemented with statutory rights of way (SRWs) on various properties to the north of the subject site. Provision of the SRWs as well as interim upgrades such as curbing and paving are a consideration of rezoning.

<u>Parking and Loading</u>: The proposal addresses the City's parking and loading policy objectives as follows.

- <u>*Parking:*</u> The proposed parking rates are consistent with the parking provisions of the Richmond Zoning Bylaw including the opportunity to reduce parking in conjunction with transportation demand management (TDM) measures. A 10% TDM reduction is proposed for the commercial (retail) parking and the following TDM measures are offered.
 - <u>On-Site Measures</u>: Proposed on-site measures, to be implemented through the DP, include:
 - end of trip facilities for the commercial uses; and
 - provision of two EV quick-charge car share spaces within the development with cars provided and managed for a minimum of three years by a car share company.
 - <u>Off-Site Measures</u>: Proposed off-site measures, to be implemented through the SA, include:
 - back of curb frontage improvements across the width of 8111 Anderson Road to match those of subject site;
 - lane improvements including installation of a 1.5 m sidewalk along the north side of 8111 Anderson Road; and
 - a contribution of \$50,000 to future upgrading of the traffic signal at Park Road and Buswell Street.
- <u>Loading</u>: The proposed development is consistent with the Richmond Zoning Bylaw loading provisions for medium and large size trucks. An agreement regarding shared commercial/residential use of the medium size truck spaces is required.

<u>Electric Vehicles:</u> The OCP supports integration of new vehicle technologies that reduce use of non-renewable energy. The proposed rezoning will incorporate EV charging into 20% of the residential parking stalls, prepare a further 25% of the residential parking stalls for future installation of EV charging and provide EV charging for 1 per 10 Class 1 bicycle spaces.

3. Ecology and Adaptability

<u>Living Landscape</u>: The CCAP looks to development to support and enhance ecological functioning in City Centre through the creation of a continuous and interconnected landscape

January 10, 2017

system. The proposed development will contribute to the ecological network through a number of measures including:

- retention of existing street trees along No. 3 Road;
- addition of street trees along Anderson Road;
- provision of soft landscape areas in the back-of-curb public realm areas of No. 3 and Anderson Roads that will be designed as multi-layered habitats complete with trees;
- provision of extensive soft landscape, including trees, in the development's common outdoor amenity areas, which are located on multiple floor levels and the residential roof level; and
- provision of intensive/extensive green roofs on other roof levels.

Further review of the landscape proposal will occur with the Development permit process.

<u>Greening of the Built Environment:</u> The proposed development will be designed to achieve a sustainability level equivalent to the Canada Green Building Council LEED Silver certification.

4. Development Concept Review

The CCAP includes a variety of policies intended to shape development to be livable, functional and complementary to the surrounding public and private realm. Those policies most critical to the development concept at the rezoning stage are reviewed below.

<u>Massing Strategy:</u> The massing of the proposed development is arranged to reflect the allocation of uses on the site and is consistent with the general objectives of the CCAP. Double height retail spaces line both street frontages at the ground level. The office uses are primarily located in a 46.9 m (GSC) high "tower" building that overlooks both No. 3 Road and the interior podium level courtyard. The residential uses are primarily located in a 33.6 m (GSC) high "midrise" building that overlooks Anderson Road and the interior podium-level courtyard. The tower and midrise are set in a lower scale podium base, which is sized, in the case of No. 3 Road, to establish a strong and continuous streetwall on the block face, and, in the case of Anderson Road, to have a more residential scale that will step back in sync with the existing mixed use development to the east. Loading and five levels of parking are located within the podium, along with the north-south lane SRW.

<u>Adjacencies:</u> The relationship of new development to adjacent public and private properties is assessed with the intent that negative impacts are reduced and positive ones enhanced.

- <u>Public Adjacencies</u>: The overall massing arrangement, which pushes the bulk of the building floor area toward the street edges, helps establish comfortable street cross-section proportions on No.3 Road and Anderson Road, both of which are "wider-than-typical" streets. Street animating uses, with large window areas and opportunities for sunny outdoor patios, are located along both streets and weather protection is provided.
- <u>Private Adjacencies</u>: The proposed development is massed to locate the densest and highest forms away from adjacent sites. For future development to the north, this reduces shadowing and overlook impacts and increases tower location options. For existing development to the east (8111 Anderson Road), this optimizes light access and outlook for most of the residential units in the development.

• <u>Common Property Line Interfaces</u>: Because the design of the proposed development anticipates a similar podium and tower style development on the site to the north, there is a long wall on the shared property line. The applicant proposes to embellish this wall with a combination of architectural concrete, painted concrete and metal mesh panels to provide "interim" visual interest. The property line interface with the property to the east is not visible as the podium of the subject development steps along with the podium of the adjacent development.

<u>DP Guidelines</u>: Additional review of the following building features will occur through the Development Permit Application process.

- <u>*Parking and Loading:*</u> A draft functional plan showing internal truck manoeuvring has been provided and will be finalized through the DP process.
- <u>*Waste Management:*</u> A draft waste management plan has been submitted and will be finalized through the DP process.
- <u>Rooftop Equipment</u>: Rooftop mechanical equipment and building mounted telecom equipment can be unsightly when viewed from the ground and from surrounding buildings. To prevent diminishment of both the architectural character and the skyline, a more detailed design strategy for rooftop equipment/enclosures is required.
- <u>Common Amenity Spaces</u>: The proposed indoor and outdoor common amenity space areas slightly exceed the OCP and CCAP DP Guidelines expectations, as tabulated in the Development Application Data and Floor Area Summary (Attachment 4). A legal agreement stipulating that all amenity spaces be available to all tenants is a requirement of rezoning. Review of the proposed amenity space programming and landscaping will occur with the DP process.
- <u>Private Amenity Spaces</u>: The City has adopted guidelines for the provision of private outdoor space for residential uses. Assessment of the proposed private amenity areas will be undertaken within the DP process.
- <u>Crime Prevention through Environmental Design (CPTED)</u>: The City has adopted policies intended to minimize opportunities for crime and promote a sense of security. A CPTED checklist and plans demonstrating natural access, natural surveillance, defensible space and maintenance measures will be reviewed within the development permit process.
- <u>Accessibility:</u> In addition to providing a variety of accessible units (per Analysis, Section C.1 Households and Housing), the proposed development will be required to provide good site and building accessibility and visitabilty. Provision of a checklist along with design implementation will occur within the development permit process.

<u>Form and Character</u>: Within the Development Permit Application process, the form and character of the proposed development is assessed against the expectations of the development Permit Guidelines. As a DP Application was submitted shortly after the Rezoning Application, form and character comments have been provided to the applicant by both staff and the Advisory Design Panel. Additional modifications resulting from Council recommendations or further Advisory Design Panel comments will be addressed within the Development Permit approval process.

D. City-wide Policies

1. Tree Retention, Protection and Replacement

<u>Off-site Trees:</u> Three existing street trees located on No. 3 Road are proposed to be retained and a fourth to be removed to accommodate intersection visibility and bike lane integration. The other two trees are located on adjacent frontages and will be protected. A contribution of \$1,300 to the City's Tree Compensation Fund for the removed tree is a consideration of rezoning.

<u>Tree Management Plan:</u> The applicant has submitted a tree management plan which identifies the six off-site trees and related tree protection measures. Further, the applicant has submitted a Certified Arborist Memo concerning the No. 3 Road street trees that includes recommendations for management of upheaval due to the root system.

<u>Tree Protection</u>: Due to concerns about sidewalk buckling, the No. 3 Road sidewalk was recently repaved on the instructions of Engineering staff. This work, which included pruning of the tree roots, may ultimately compromise the viability of the trees. Should the trees require replacement, appropriate contributions will be managed through the Servicing Agreement process. In the meantime, staff recommend proceeding as though the trees will remain viable.

E. Land and Legal Interests

The proposed rezoning will alter the current property boundaries and legal encumbrances as well as create new ones, as summarized below.

Existing Encumbrances: The applicant has provided a Charge Summary and Opinion prepared by a lawyer. The lawyer advises that encumbrances related to various existing Statutory Rights of Way may be removed and that the proposed rezoning does not create other adverse circumstances. There are six SRWs that may be discharged or, where relevant, modified to accommodate new "public right of passage" SRWs to be provided on properties to the north of the subject site (per east-west lane). The SRWs are described in the Rezoning Considerations (Attachment 6).

<u>Subdivision and New Encumbrances:</u> Sketch survey plans showing the preliminary consolidated site dimensions and site area after required dedications, as well as the location, preliminary dimensions and areas of on-site statutory rights of way, easements and encroachments have been provided (Attachment 9).

F. Financial Impact

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

Conclusion

The application by 1004732 BC Ltd to rezone the properties at 6840 & 6860 No. 3 Road and 8051 Anderson Road in order to develop a high-density, mixed commercial and residential use high rise building is consistent with City objectives as set out in the OCP, CCAP and other City policies, strategies and bylaws. The public realm and built form designs will set a high standard for redevelopment of the Brighouse Village No. 3 Road "art walk" corridor and the engineering, transportation and parks improvements, along with the in-kind and in-lieu density bonusing contributions provided by the developer, will help to address a variety of community needs. On this basis, it is recommended that Zoning Bylaw 8500, Amendment Bylaw 9510 be introduced and given first reading.

Janet Digby, Architect AIBC Planner 3

JD:rg

Attachment 2: Location Map (Aerial)

Attachment 3: City Centre Brighouse Village Specific Land Use Map

Attachment 4: Development Application Data (per applicant)

Attachment 5: Rezoning Proposal Conceptual Plans (per applicant)

Attachment 6: Rezoning Considerations

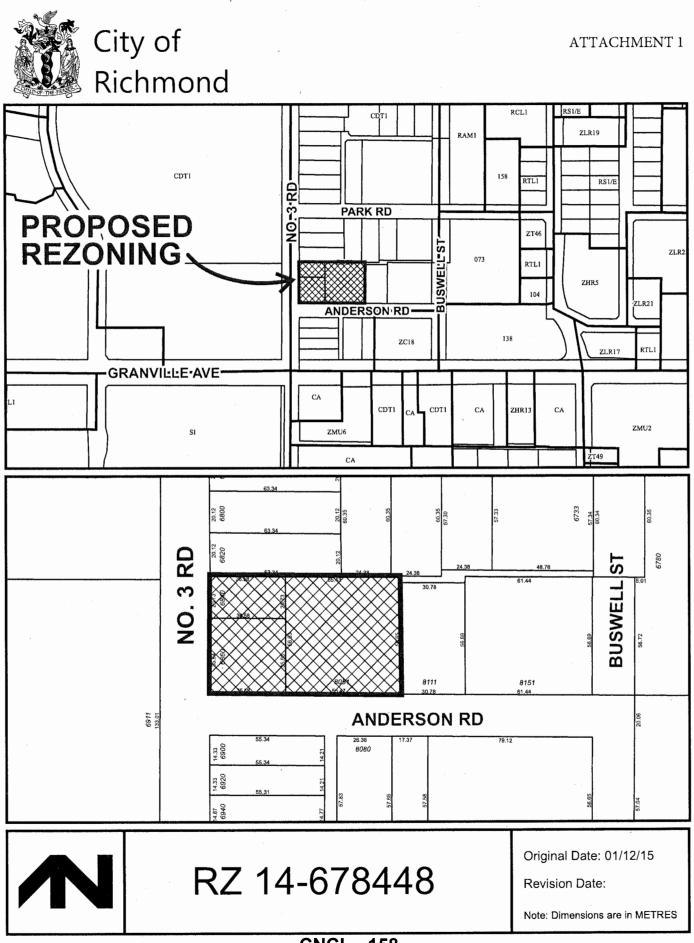
Attachment 7: Advisory Design Panel Minutes (per ADP)

Attachment 8: Subject Site Public Realm Concept Plan (per applicant)

Attachment 9: Sketch Survey Plans (Subdivision)

Sketch Survey Plans (SRWs)

Enclosure

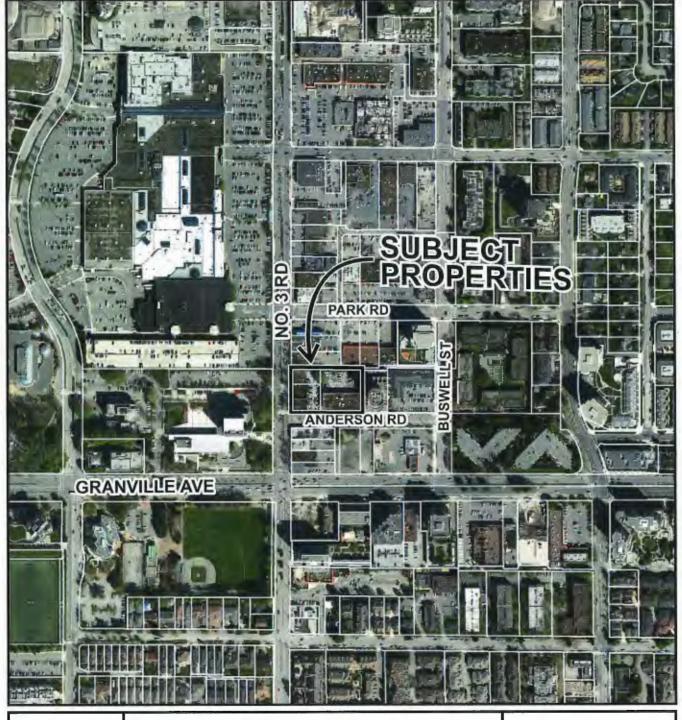


CNCL - 158

ATTACHMENT 2



City of Richmond

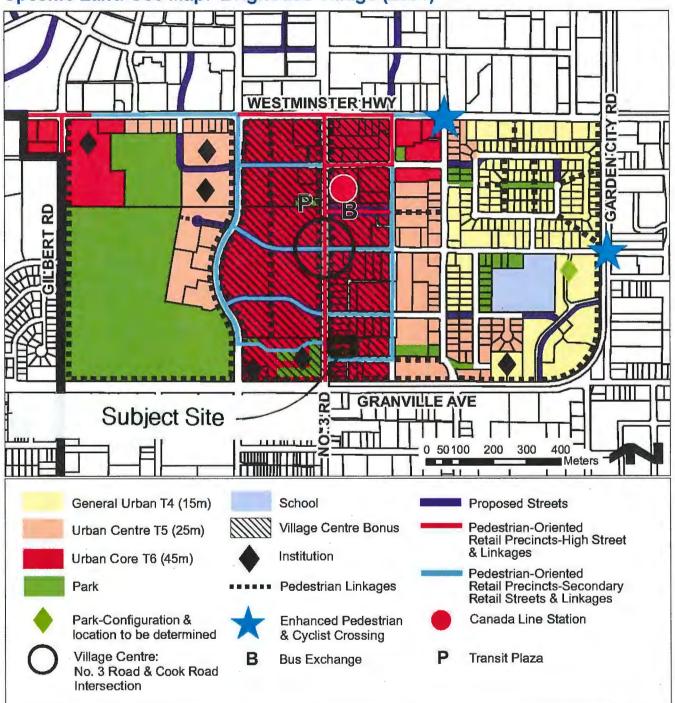


RZ 14-678448

Original Date: 01/12/15

Revision Date

Note: Dimensions are in METRES



Specific Land Use Map: Brighouse Village (2031)



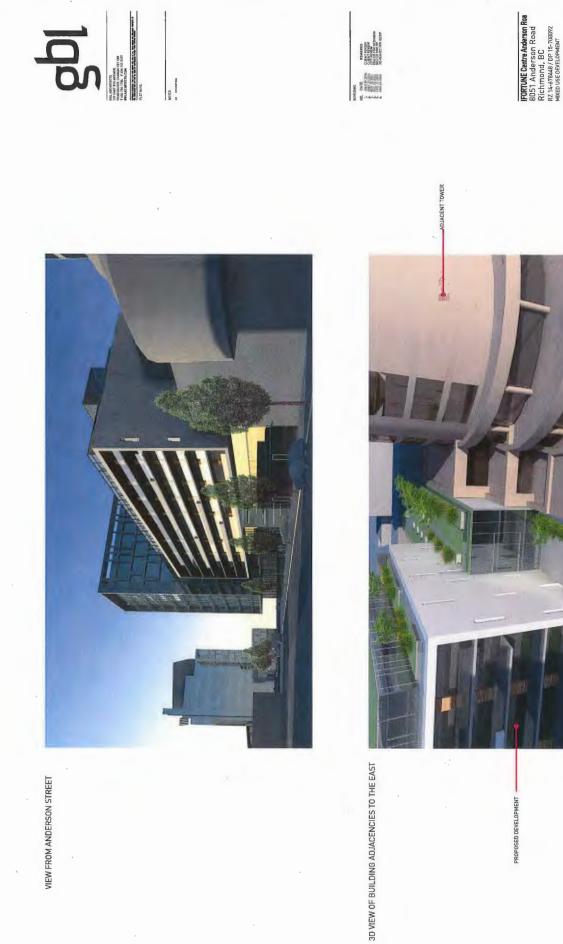
Development Application (RZ) Data and Floor Area Summary

RZ 14-678448		
Address:	6840 and 6860 No 3 Road and 8051 Anderson Road	
Owner/Applicant:	1004732 BC Ltd / 1004732 BC Ltd	
Planning Area(s):	City Centre Area Plan – Brighouse Village – T6 (45m) – VCB Overlay – Sub-Area B.4	
Other Area(s):	Aircraft Noise Sensitive Use Area 4 – Flood Construction Level Area A	

RZ 14-678448	Existing	Proposed
OCP Designation:	Downtown Mixed Use	Downtown Mixed Use
Land Uses:	Commercial	Commercial & Residential
Zoning:	CDT1	ZMU31
Site Area (before and after dedications):	5,219.39 m2	4,778.50 m2
Net Development Site Area (for floor area calculation):	N/A	4,881.26 m2
Number of Residential Units:	0	75

RZ 14-678448	Proposed Site Specific Zone	Proposed Development	Variance
Base FAR (max):	3.00	3.00	
Village Centre Bonus (VCB) (max):	0.85	0.83	
Commercial FAR (max):	2.25	2.24	
Residential FAR (max.):	1.60	1.59	
Total FAR (max):	3.85	3.83	
Indoor Amenity Space FAR Increase (max):	· 0.1	0.03	
Floor Area Gross (not including parking):	n/a	19,037.00 m2	
Floor Area FAR (max):	19,525.04 m2	18,700.64 m2	
Lot Coverage (max.):	90%	64%	
Setback – Front Yard (min):	3.8 m/0.8 m	3.89 m/0.84 m	
Setback – Exterior Side Yard (min):	3.8 m/1.5 m	4.01 m/1.52 m	
Setback – Interior Side Yard (min):	0.0 m	0.0 m	
Setback – Rear Yard (min):	0.0 m	0.0 m	
Height Dimensional (geodetic) (max):	47 m	46.94 m	
Height Accessory (max):	n/a	n/a	
Subdivision/Lot Size (minimum):	4780 m2	4,778.5 m2	
Off-street Parking – Commercial (incl. Accessible, EV, CS) (min):	141	155	
Off-street Parking – Residential (incl. Accessible, EV,CS) (min):	75	82	
Off-Street Parking – Visitor Parking (shared) (min):	15	15	
Off-Street Parking – Disabled (Commerc'l + Resident'l) (min):	4	5	
Off-street Parking – Total (incl. Accessible, EV, CS) (min):	216	237	
TDM Reduction (max):	10%	10% (commercial only)	
Tandem Parking Spaces (max):	n/a	n/a	
Class 1 Bicycle Parking – Commercial (min):	24	24	
Class 2 Bicycle Parking – Commercial (min):	35	35	
Class 1 Bicycle Parking – Residential (min):	94	94	
Class 2 Bicycle Parking – Residential (min):	15	15	
Loading – Medium (min):	3	3	
Loading – Large (min):	2	2	
Amenity Space – Common Outdoor (min):	938 m2	1115 m2	
Amenity Space – Common Child Play (min):	225 m2	225 m2	
Amenity Space – Common Indoor (min):	100 m2	135 m2	





VIEW FROM ANDERSON STREET

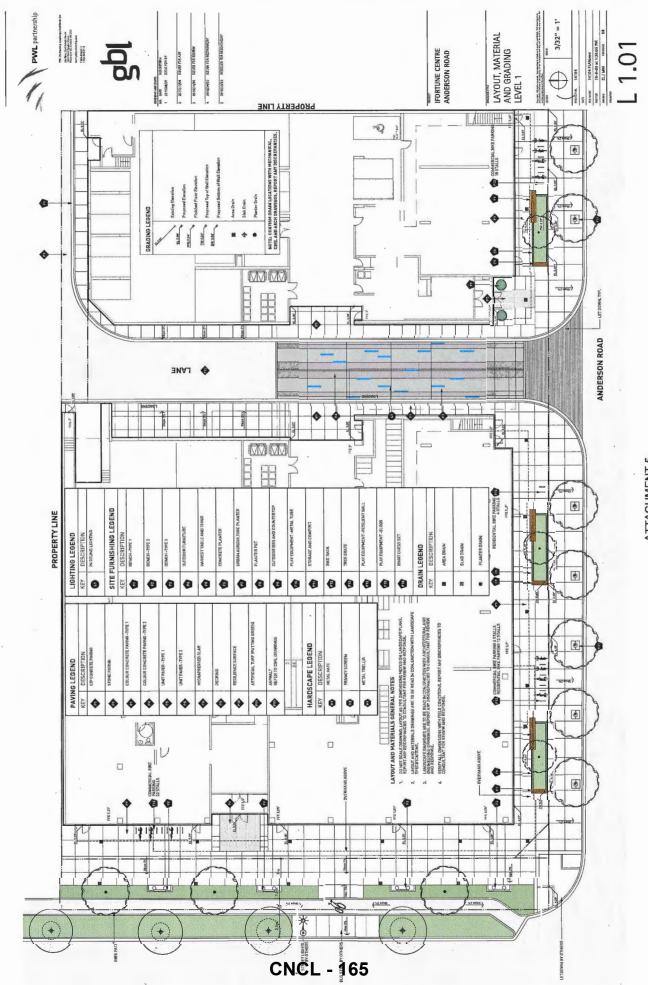
ATTACHMENT 5

A-6.02

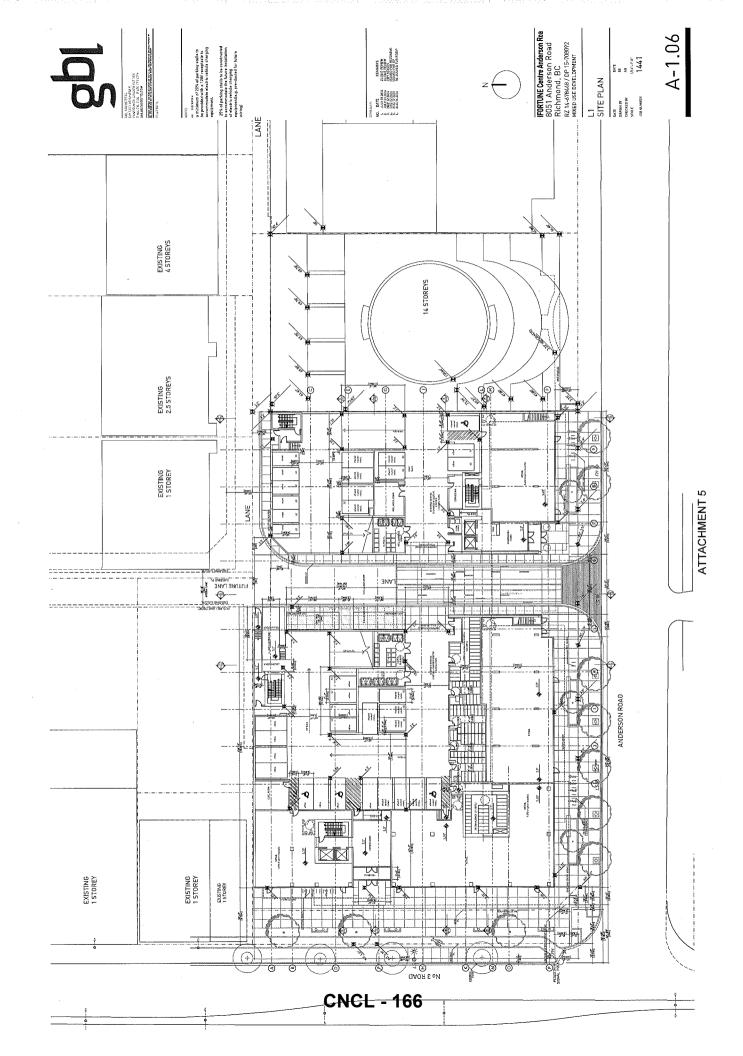
T441

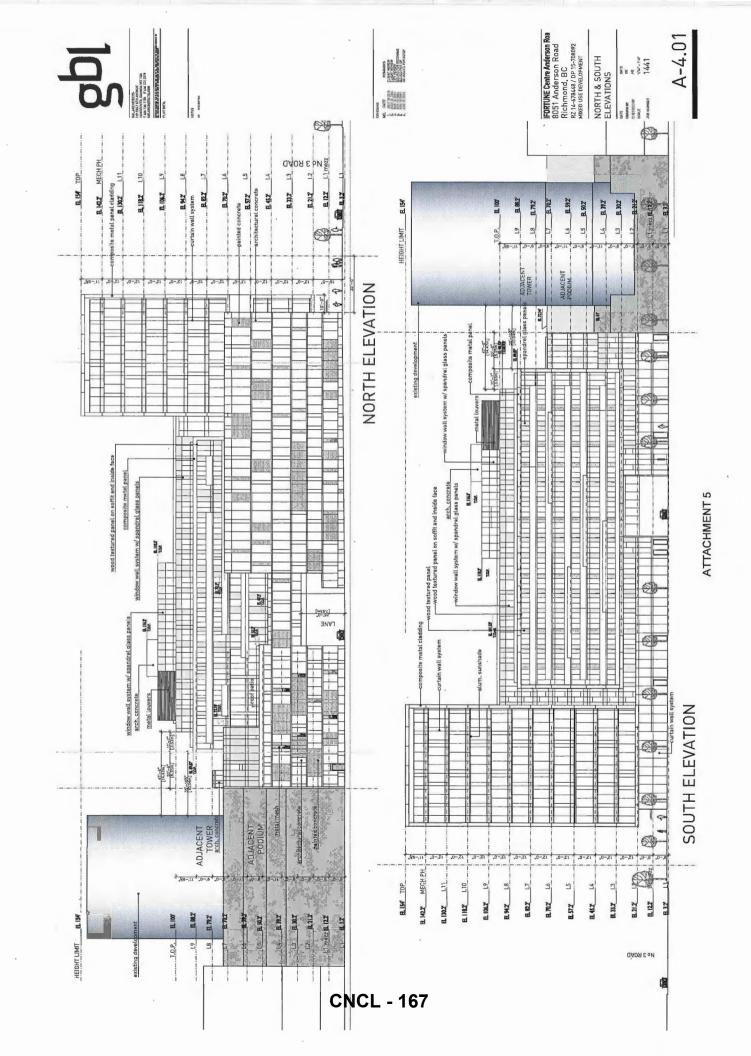
PROPOSED DEVELOPMENT

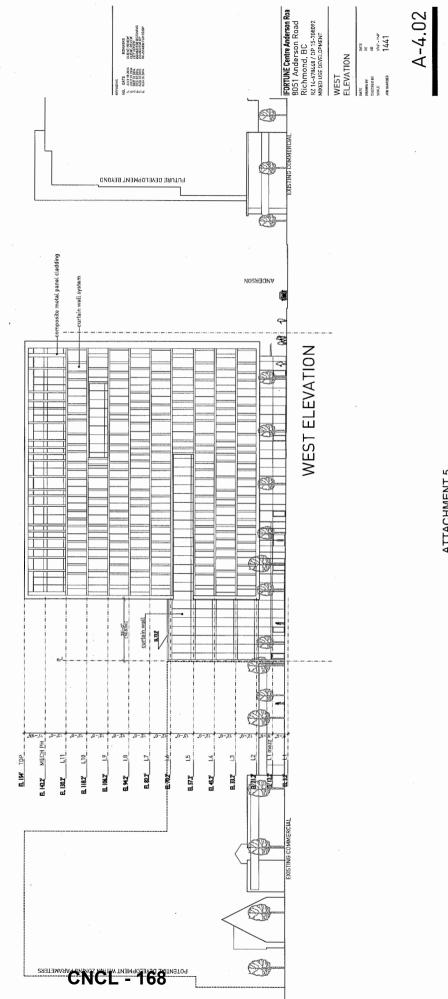




ATTACHMENT 5

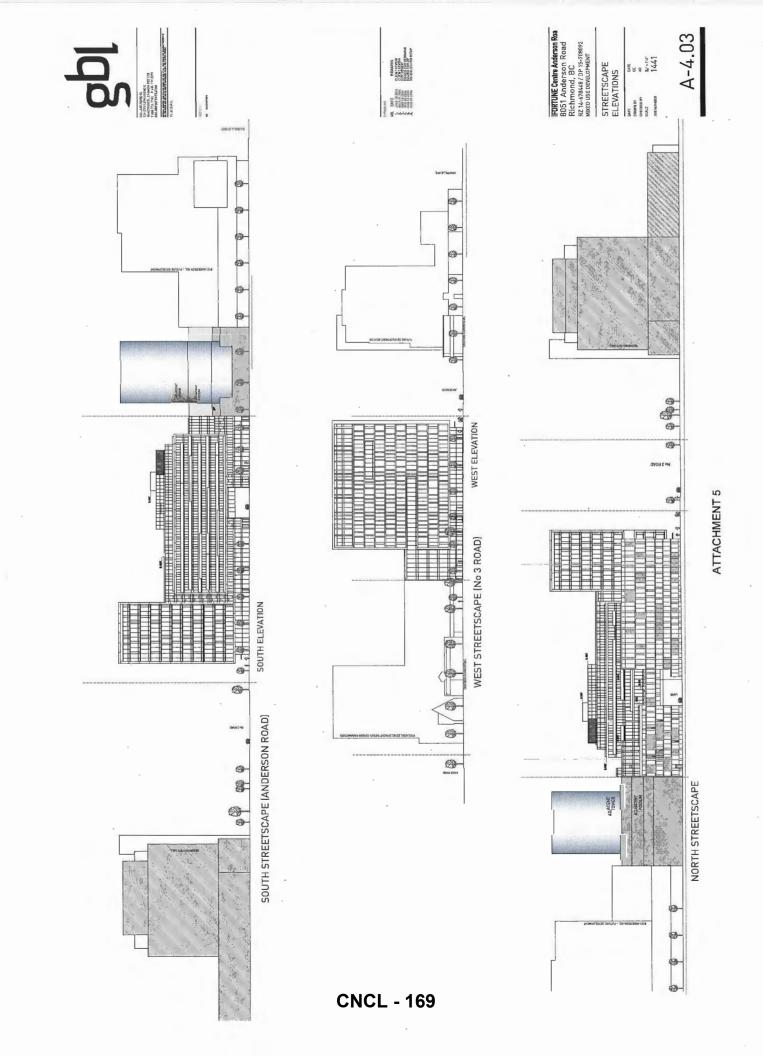




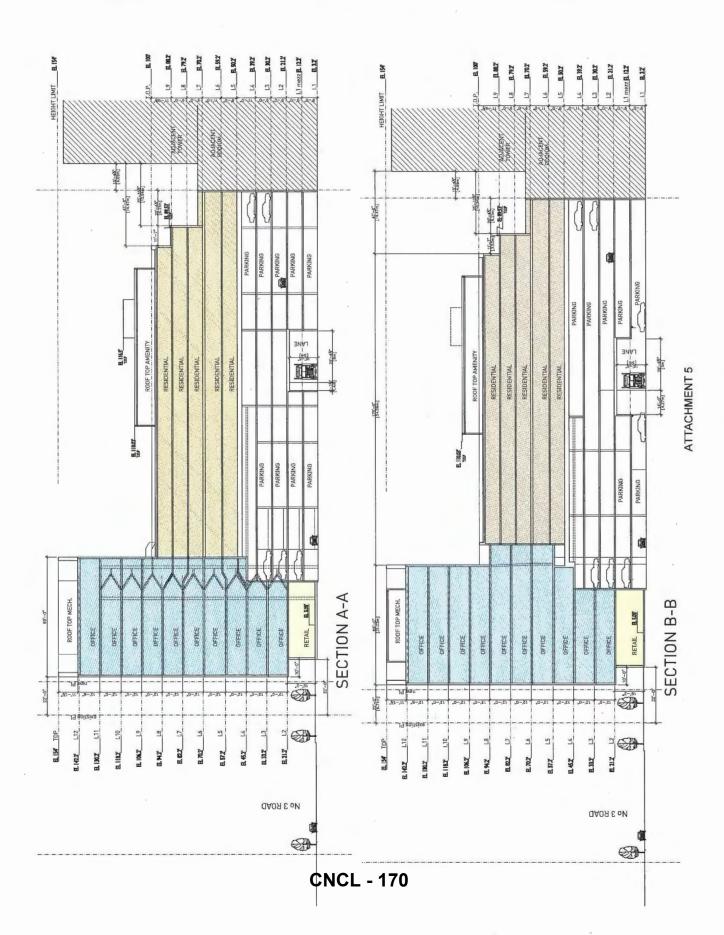


A CARE OF A CARE NOTES No atservices

ATTACHMENT 5







REMARKS CLEAT CENTW CLEAT CENTW CLEAT CENTW CLEAT CENTW CLEAT CENTW CLEAT CENTW CENTWO CENTO CENTWO CENTWO

and granted

A-5.01

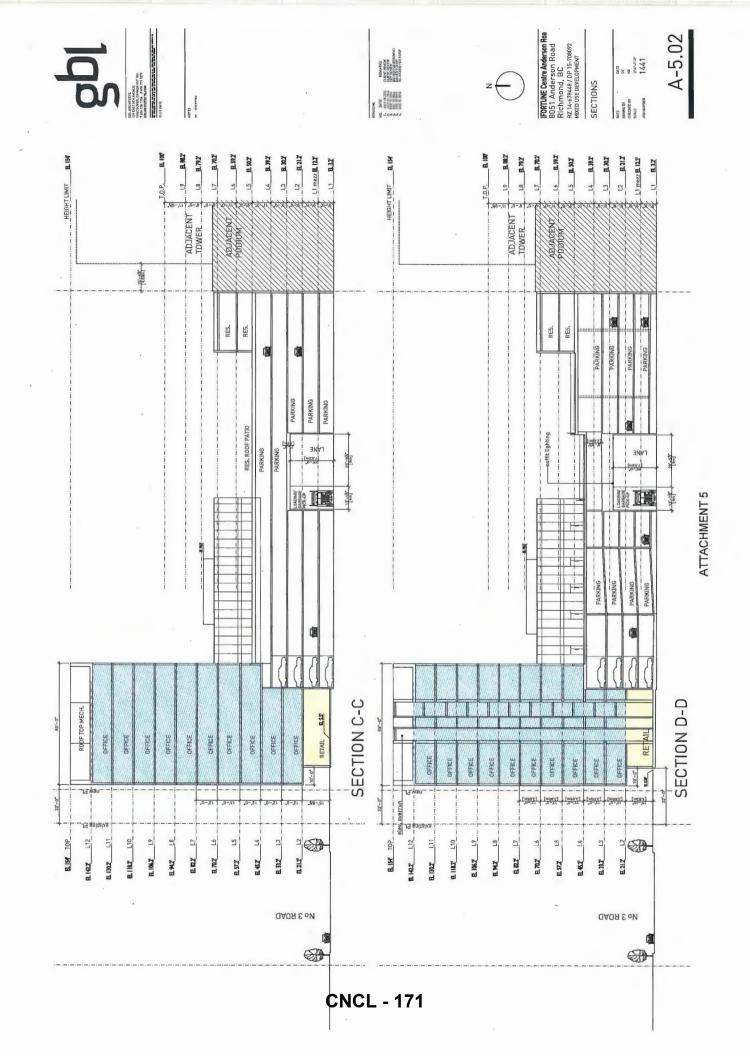
окте ске 1441

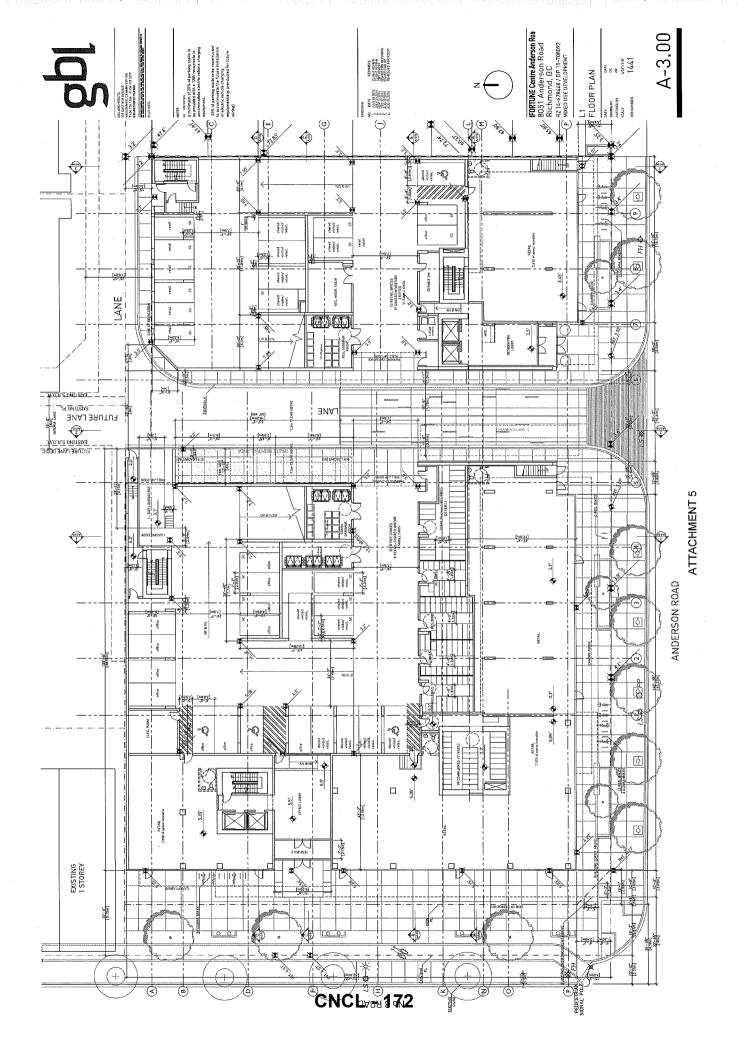
DRAWN BY DRAWN BY CHECKED BY SCALE

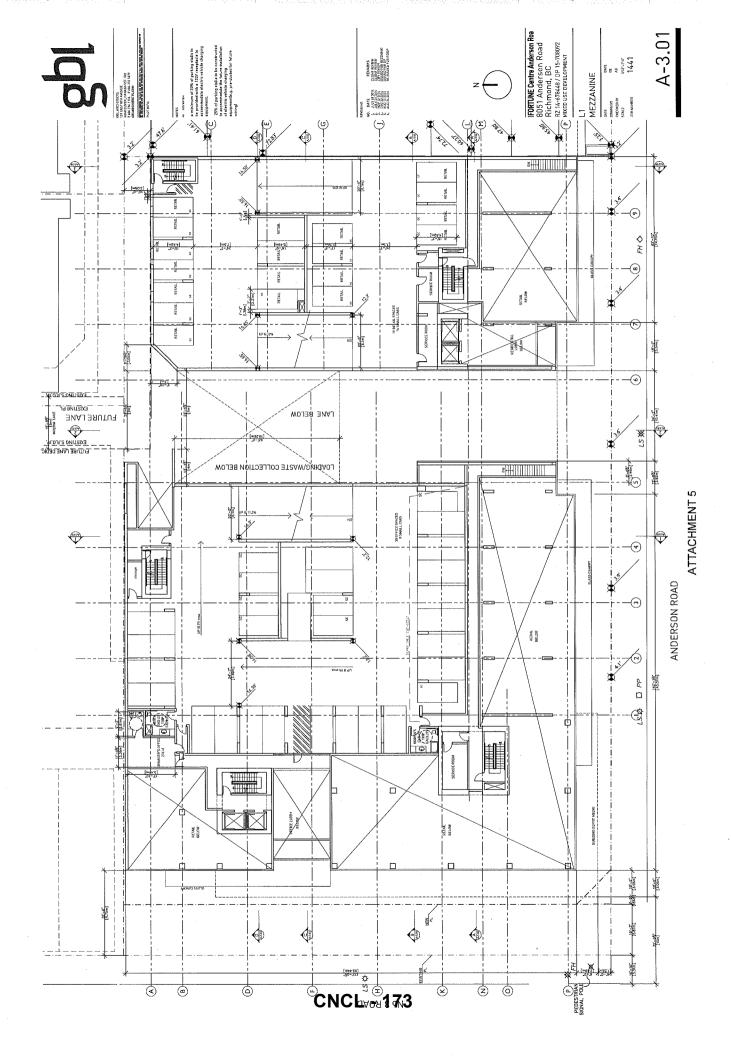
IFORTUNE Centre Anderson Roa 8051 Anderson Road Richmond, BC R2 14-678448 / DP 15-708092 MIXED USE DEVELOPMENT

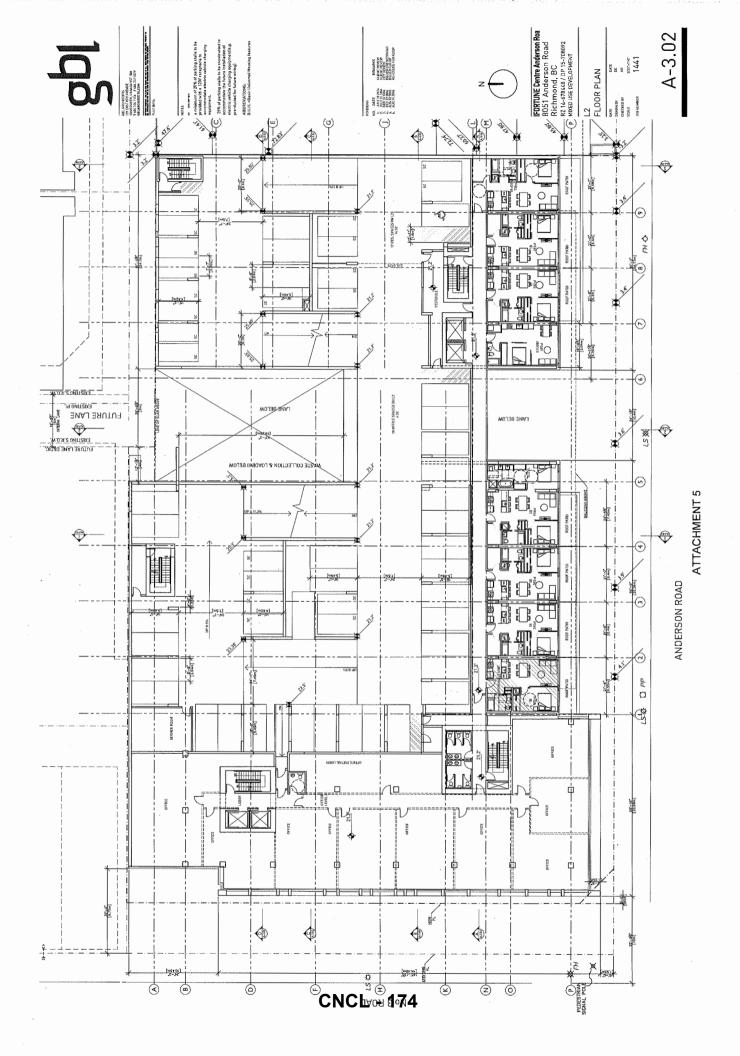
z

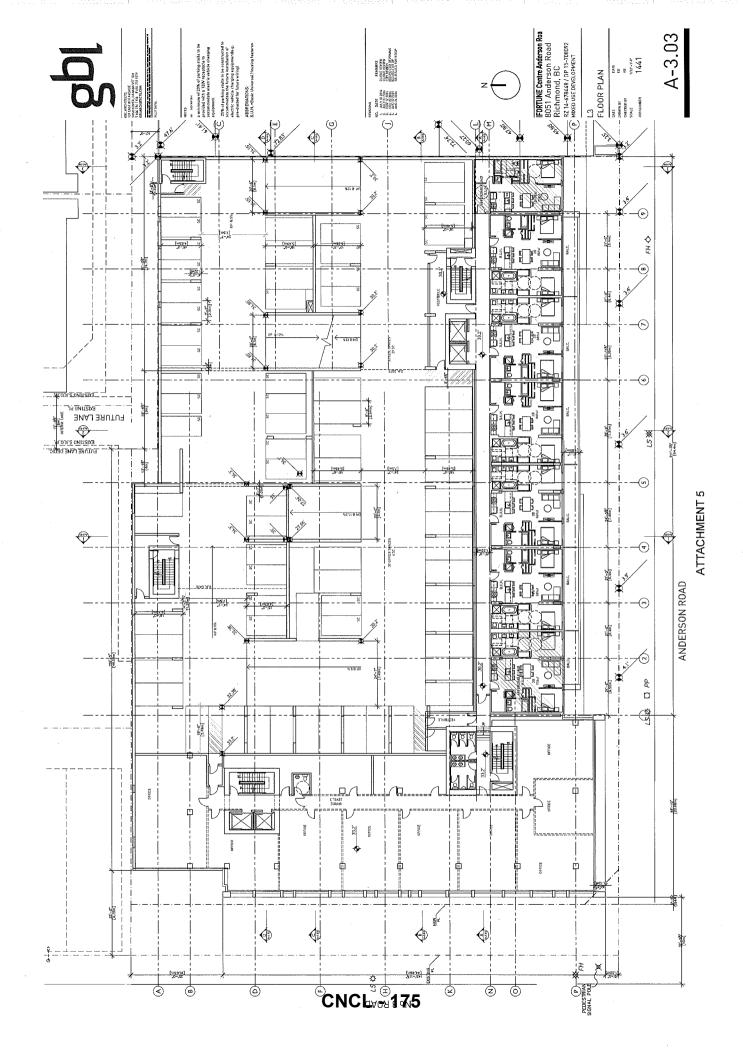
SECTIONS

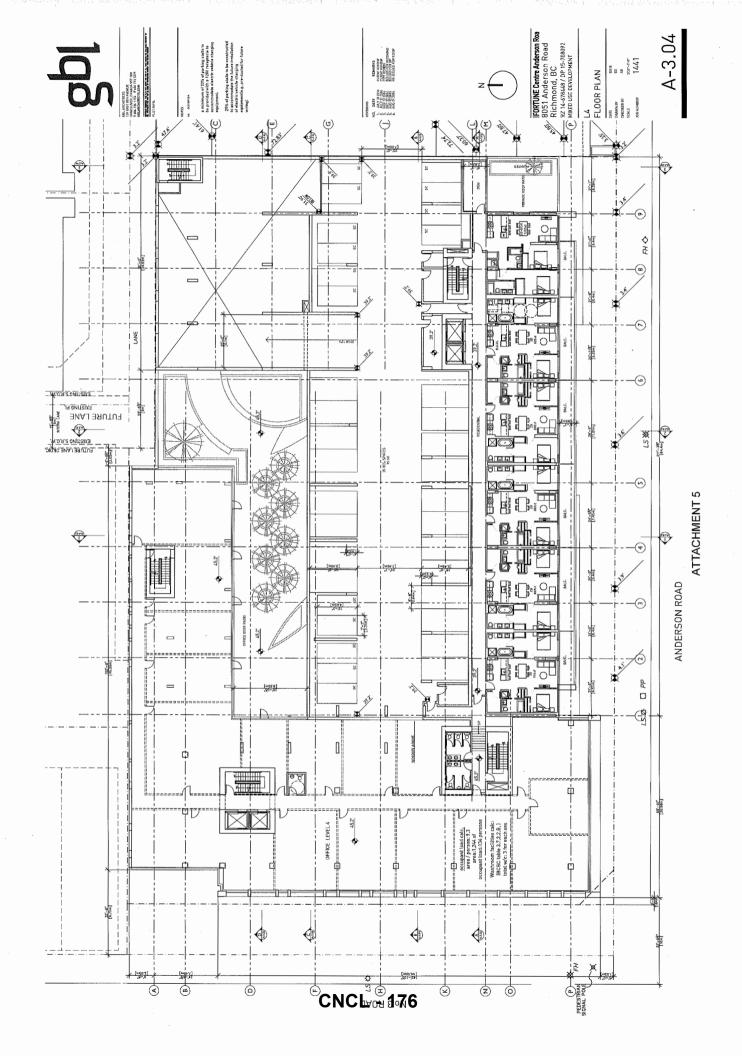


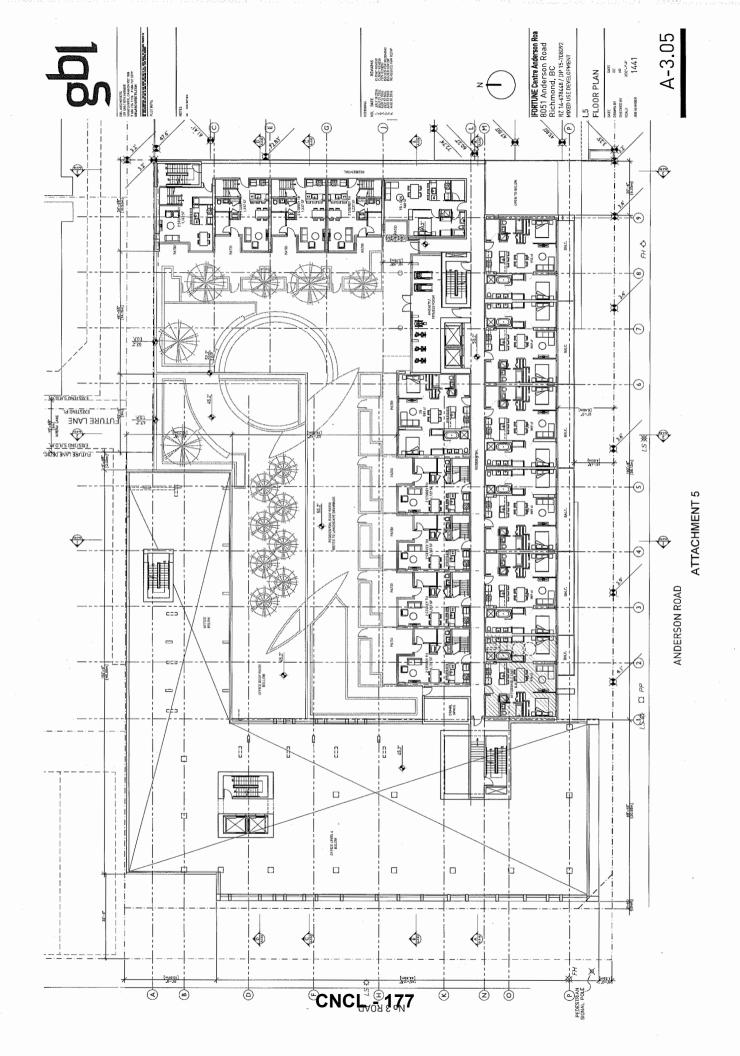


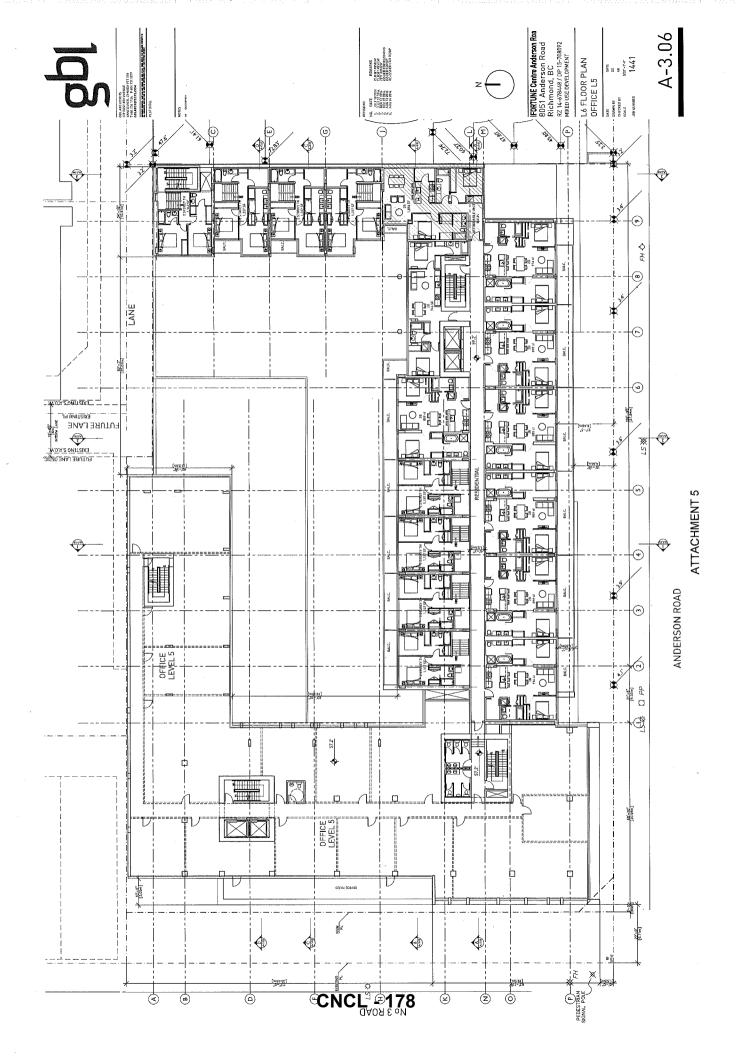


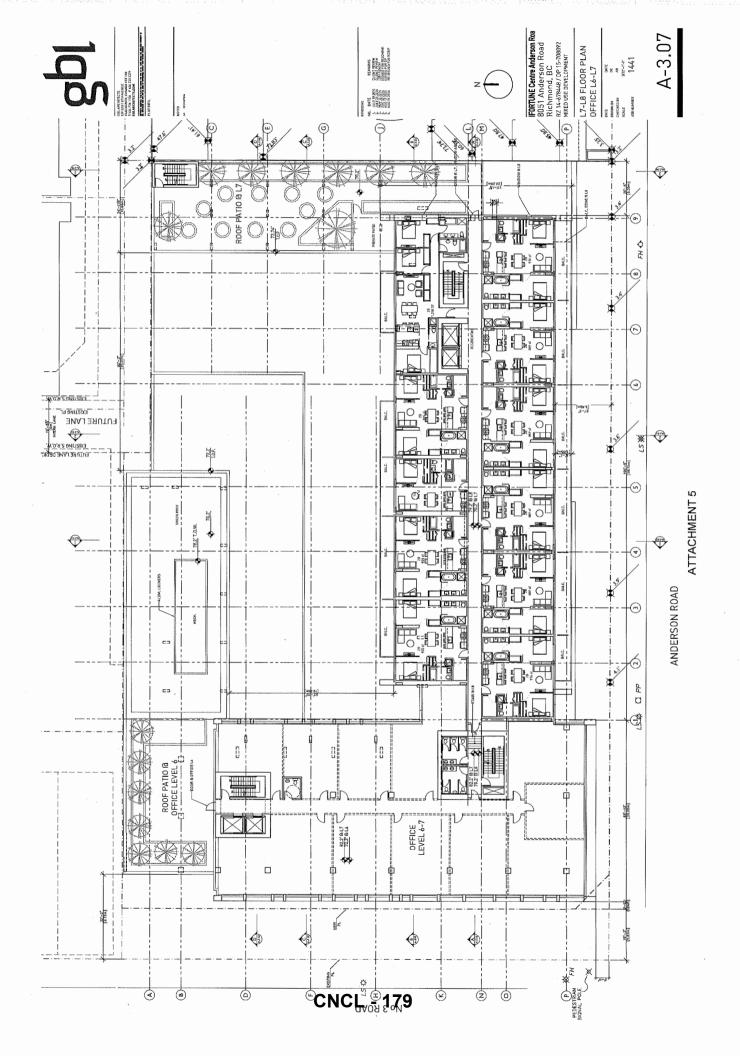


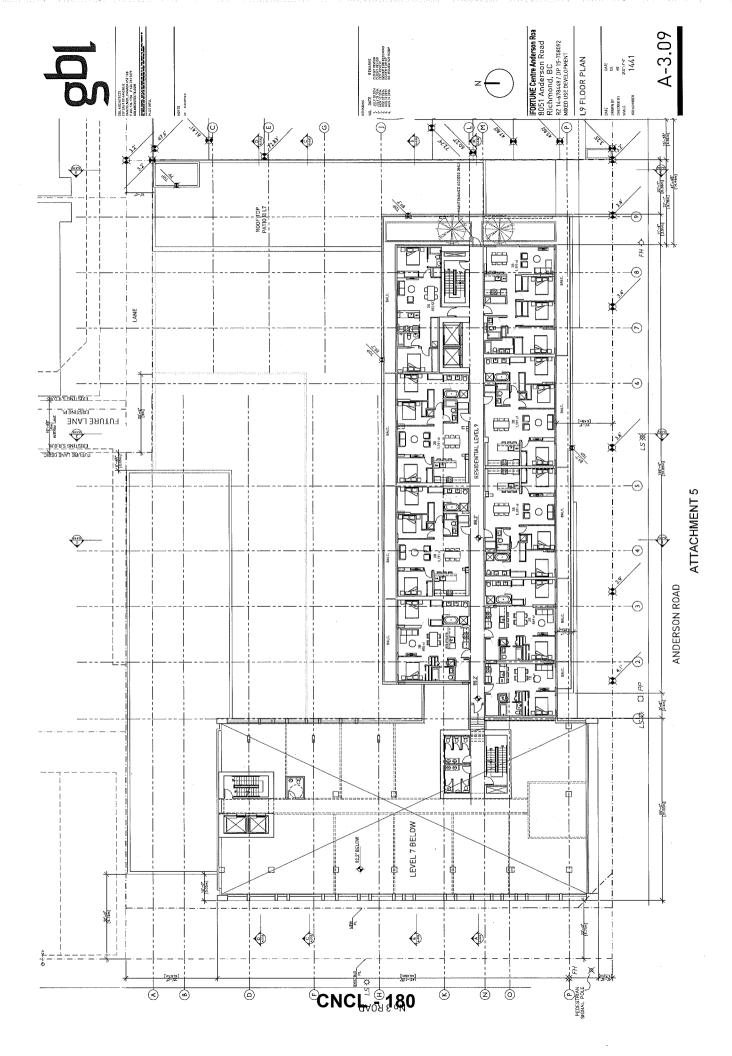


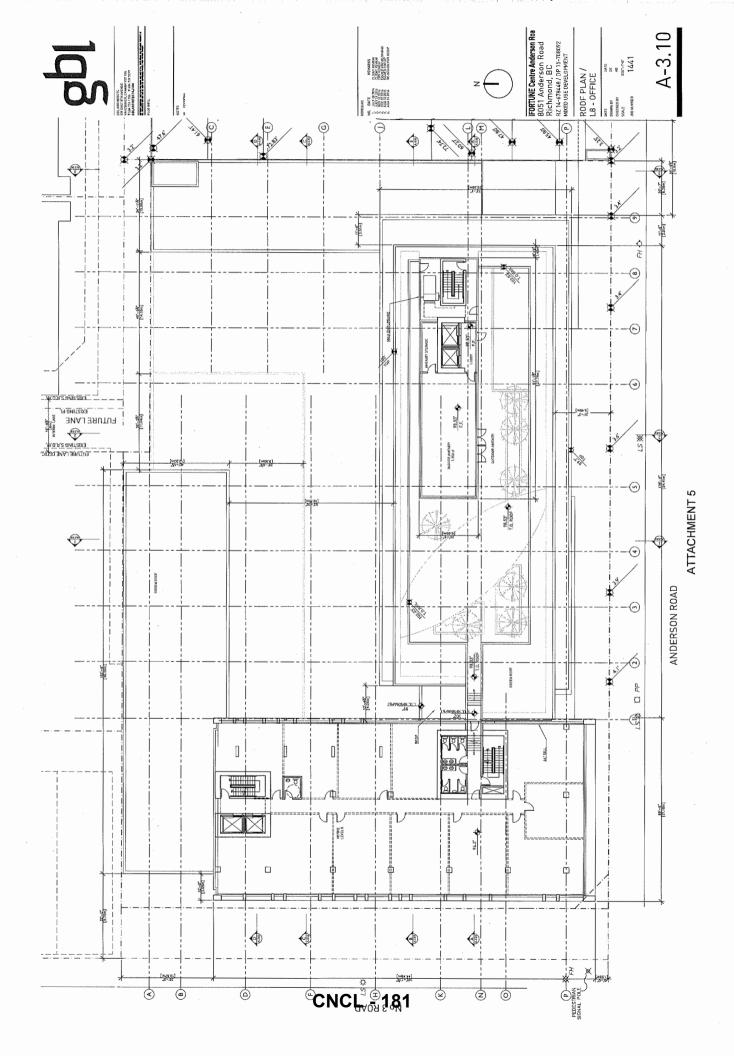


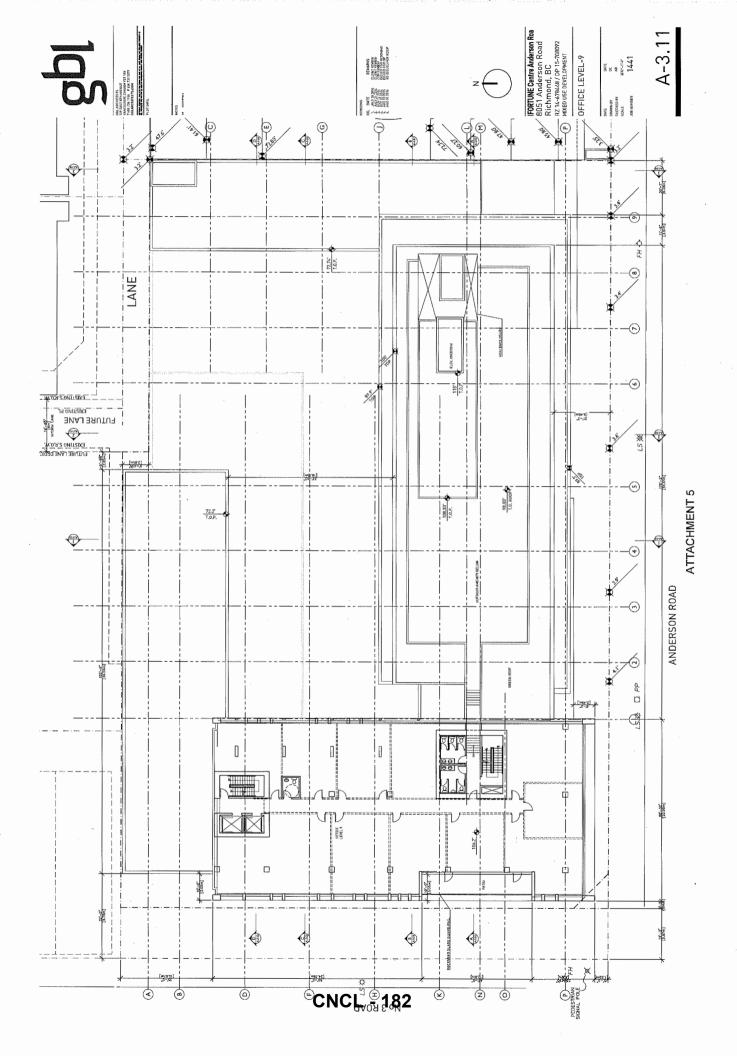


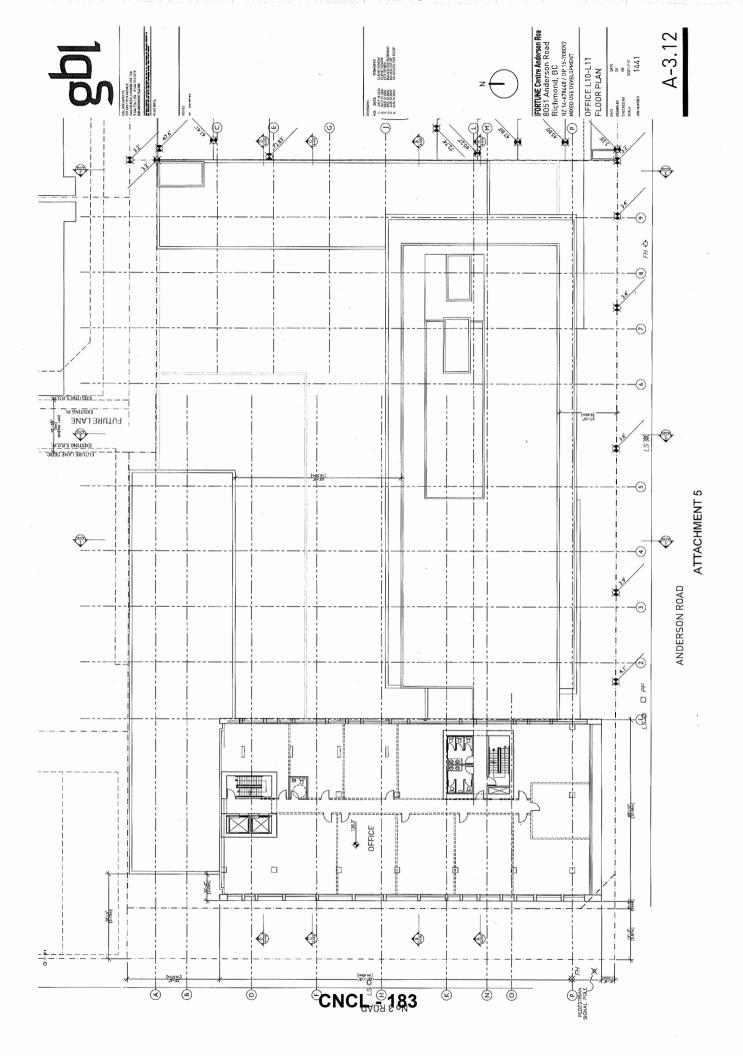


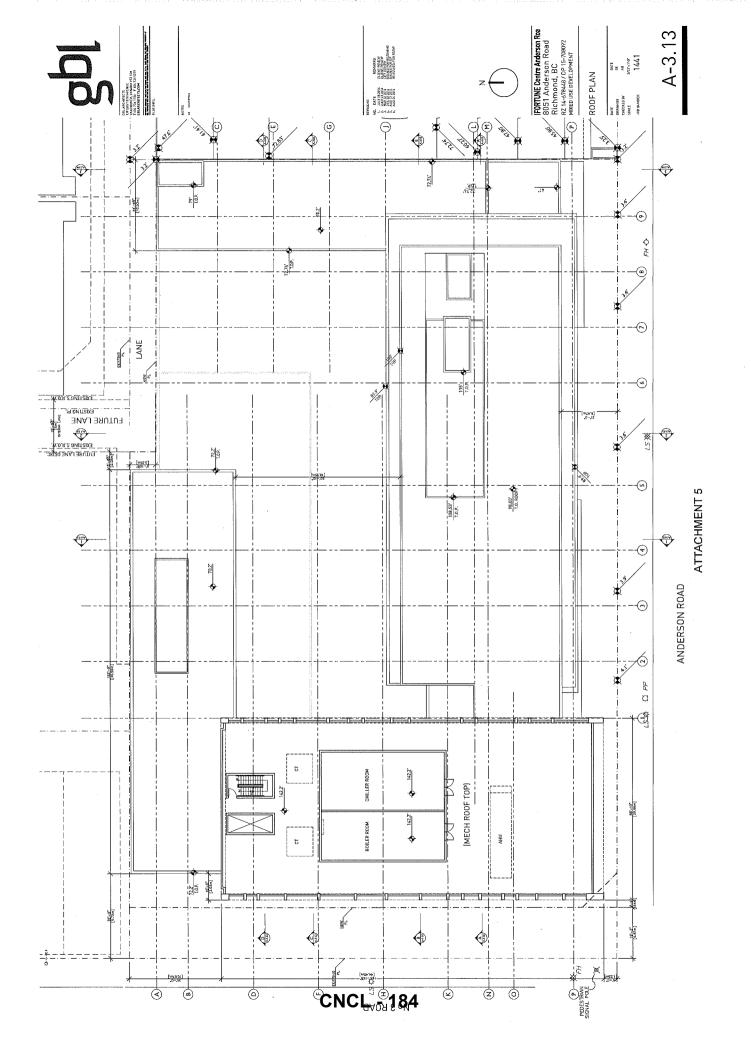


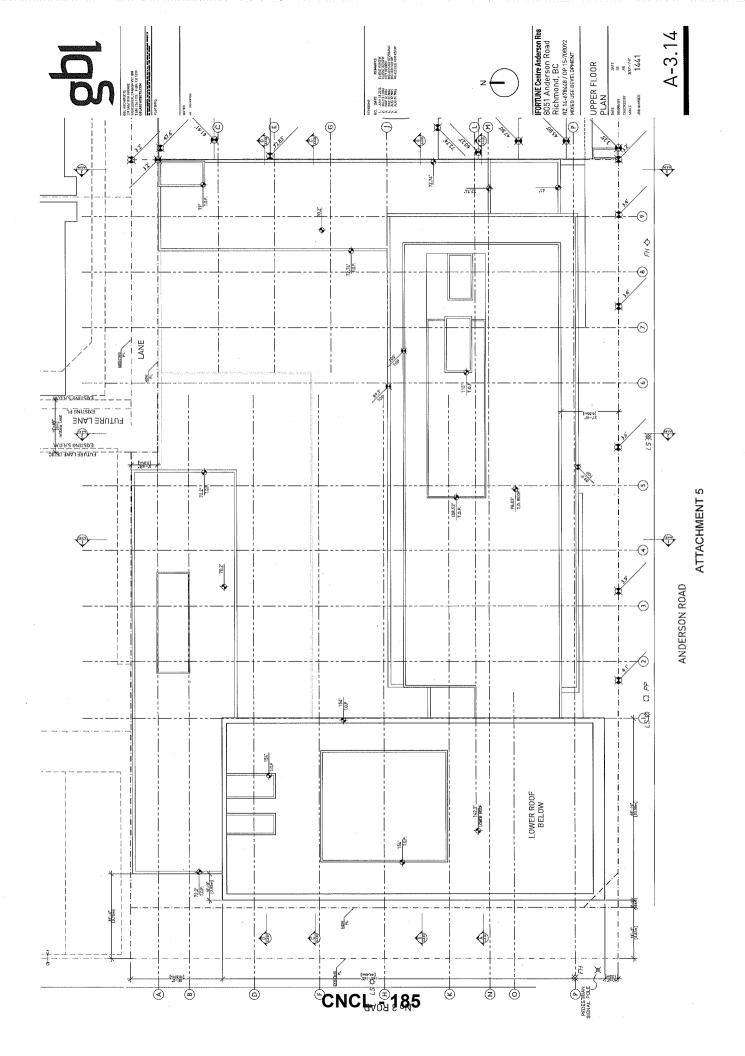




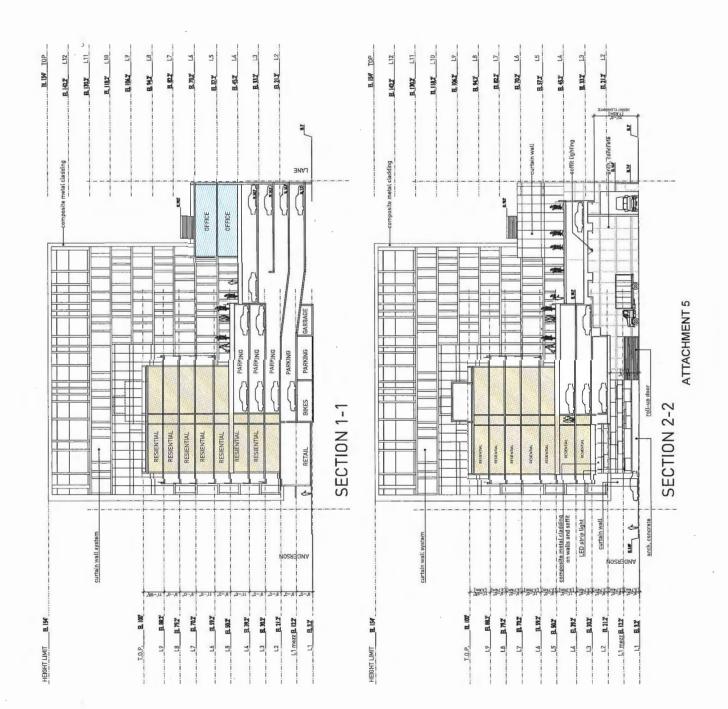












REMARKS CUINT TRYEW CUINT TRYEW SHUDD FOR REZEACH

g answe

IFORTUNE Centre Anderson Roa 8051 Anderson Road Richmond, BC R2 14-67848 / DP 15-708092 MIXED USE DEVELOPMENT

z

SECTIONS

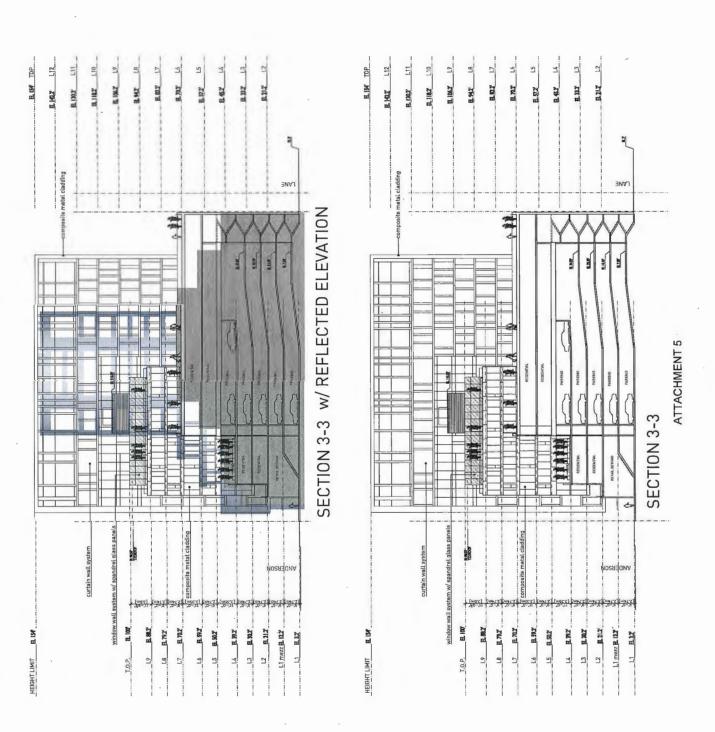
A-5.03

0411 016 104-11-07 104-11-07 104-11-07

EATE DRAWN TH CHECKED TH STALE JOB NUMBER

CNCL - 186

A Contraction of the second se



REMARKS CLIDIT REVIEW CLIDIT REVIEW CLIDIT REVIEW CLIDIT REVIEW SCLIDIT POR RETONING SCLIDIT POR RETONING RELACUTO FOR RETONING

Revelands No. 1 March 1996 IFORTUNE Centre Anderson Roa 8051 Anderson Road Richmond, BC R2 14-678448 / DP 15-708092 MIXED USE DEVELOPMENT

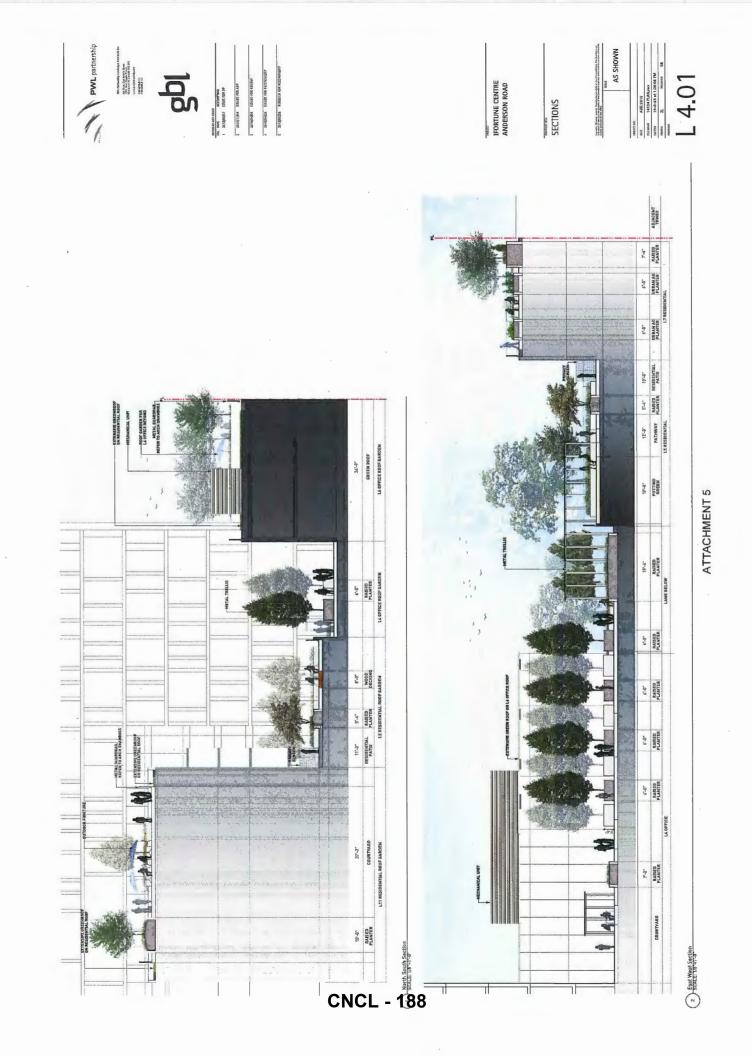
z

SECTION 3-3

A-5.04

001 1441 1441

DATE DRAMH ITY CHECKED BY SCALE JOB NUMBER





Rezoning Considerations Development Applications Department

6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 6840 and 6860 No. 3 Road and 8051 Anderson Road

File No.: RZ 14-678448

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9510, the owner is required to complete the following.

(Subdivision, Dedications, SRWs and Encroachments)

- 1. Discharge* of the following Statutory Rights of Way:
 - a) with respect to 6840 No. 3 Road,
 - SRW Township of Richmond 287391C;
 - b) with respect to 6860 No. 3 Road,
 - SRW Township of Richmond 285751C;
 - SRW Township of Richmond 285759C;
 - c) with respect to 8051 Anderson Road,
 - SRW Township of Richmond 284721C;
 - SRW Township of Richmond 285746C; and
 - SRW Township of Richmond 285752C.

* Existing SRWs may be amended where relevant to implementing new SRW requirements, with the agreement of the City Solicitor.

- 2. Submission of interim and ultimate road functional drawings, showing all dedicated land and statutory rights of way areas pertaining to the subject property and adjacent properties, to the satisfaction of the City.
- 3. Consolidation of all parcels and registration of a subdivision plan for the subject site that satisfies the following conditions, generally as shown in the sketch survey plan(s) (RTC Attachment 9):
 - a) dedication of approximately 5.8 m along the No. 3 Road frontage for street widening, subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation; and
 - b) dedication of an area approximately 33.7 m x 3.0 m in the northeast corner of the site for lane purposes, subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation.

(Note: Refer to Servicing Agreement section for information regarding frontage improvements on fronting City and dedicated lands.)

- 4. Granting of a volumetric public right of passage and utilities statutory right-of-way for an internal lane composed of a minimum of:
 - an approximately 10.3 m wide x 31.7 m long x 5.0 m high south portion (to accommodate vehicular traffic);
 - an approximately 9.0 m wide x 22.1 m long x 7.5 m high north portion (to accommodate vehicular traffic and overflow waste loading);

5258185v3

Updated: January 10, 2017 3:21 PM

- a 3.0 m x 3.0 m corner cut on either side of the intersection of the SRW with the Anderson Road property line; and
- a 3.0 x 3.0 m corner cut on the east side of the intersection of the SRW with the east-west lane,

generally as shown in the related sketch survey plan (RTC Attachment 9) and subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation, providing for:

- a) universal accessibility;
- b) design and construction requirements, including decorative finishing and lighting for the ground, wall and ceiling surfaces in the south portion, as determined through the Development Permit and Servicing Agreement processes;
- c) design and construction at owner's cost; and
- d) maintenance and repair at owner's cost.
- 5. Granting of an approximately 90 m² public right of passage and utilities statutory right of way to accommodate car share stalls and drive aisle access, generally as shown in the related sketch survey plan (RTC Attachment 9) and subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation, providing for:
 - a) universal accessibility;
 - b) design and construction, including decorative finishing and lighting for the ground, wall and ceiling surfaces to match the decorative finishing in the volumetric SRW (south portion), as determined through the Development Permit and Servicing Agreement processes;
 - c) design and construction, at owner's cost; and
 - d) maintenance and repair, at owner's cost.
- 6. Granting of a volumetric public right of passage and utilities statutory right of way at the corner of No. 3 Road and Anderson Road to satisfy the 4.0 m x 4.0 m transportation corner cut requirement, generally as shown in the related sketch survey plan (RTC Attachment 9). The statutory right-of-way shall provide for:
 - a) a clear height of 5.0 m;
 - b) universal accessibility;
 - c) decorative finishing consistent with the finishing on surrounding city and private land, as determined through the Development Permit and Servicing Agreement processes;
 - d) design and construction at owner's cost; and
 - e) maintenance and repair at owner's cost.
- 7. Granting of a public right of passage and utilities statutory rights of way in favour of the City on the properties at 6820 No. 3 Road, 8080 Park Road, and 8108 Park Road for the purposes of supplementing the existing secured portions of the east-west lane that runs to Buswell Street and composed of:
 - for 6820 No. 3 Road, approximately 5.348 m x 5.00 m in the south east corner of the site;
 - for 8080 Park Road, approximately 5.348 m x 24.387 m along the south PL; and
 - for 8108 Park Road, approximately 5.348 m x 24.387 m along the south PL,

generally as shown in the sketch survey plan(s) (RTC Attachment 9), subject to final dimensions established by the surveyor on the basis of functional plans completed to the satisfaction of the Director of Transportation and to provide for:

5258185v3

Updated: January 10, 2017 3:21 PM

- a) each SRW to be free and clear of obstructions except that, in the case of 8080 and 8108 Park Road, loading may occur in the north 3.0 m of the statutory right of way subject to the provisions of the Traffic Regulation By law;
- b) universal accessibility;
- c) interim improvements at the developer's cost, as determined by the Servicing Agreement process; and
- d) maintenance and repair at owner's cost.

<u>Note:</u> Refer also to the District Energy Utility conditions regarding statutory rights of way related to district energy facilities.

<u>Note:</u> Refer also to Servicing Agreement conditions regarding statutory rights of way related to private utility connections.

(Covenants and Agreements)

- 8. (*Flood Construction Level*) Registration of a flood covenant on title identifying the basic minimum flood construction level of 2.9 m GSC for Area A.
- 9. (*Aircraft Noise*) Registration of an aircraft noise restrictive covenant on title suitable for residential uses and a SRW in favour of the Airport Authority.
- 10. (*Mixed Use Noise*) Registration of a mixed use noise restrictive covenant on title that identifies the development as being of mixed use (residential and commercial).
- 11. **(Ambient Noise)** Registration of an ambient noise restrictive covenant on title noting that the development is located in a densifying urban area and may be subject to impacts that affect the use and enjoyment of the property including, but not limited to, ambient noise, ambient light, shading, light access, privacy, outlook, vibration, dust and odours from development or redevelopment of public and private land in the surrounding area.
- 12. (Affordable Housing) Registration of a Housing Agreement securing the owner's commitment to:
 - a) provide 5% of the residential floor area to affordable housing dwelling units, in perpetuity;
 - b) provide for affordable housing units, of numbers, types, sizes and associated rent and income levels in accordance with the table below:

	Affor	Project Targets (2)			
Unit Type	Minimum Unit Area	Maximum Monthly Unit Rent (1)	Total Maximum Household Income (1)	Unit Mix	# of Units
Bachelor	37 m ² (400 ft ²)	\$850	\$34,000 or less	0%	0
1-Bedroom	50 m ² (535 ft ²)	\$950	\$38,000 or less	40%	2
2- Bedroom	80 m ² (860 ft ²)	\$1,162	\$46,500 or less	60%	3
3-Bedroom	91 m ² (980 ft ²)	\$1,437	\$57,500 or less	0%	0
TOTAL		N/A	N/A	100%	5

(1) May be adjusted periodically, as provided for under adopted City policy.

(2) 100% of affordable housing units shall meet Richmond Basic Universal Housing (BUH) standards or better.

5258185v3

- c) provide for private outdoor amenity area for each unit consistent with the minimum requirements of the CCAP and OCP Development Permit Guidelines;
- d) provide for full and unlimited access to, and use of, all on-site indoor and outdoor amenity spaces, at no additional charge;
- e) provide 5 parking stalls for exclusive use of the occupiers of the Affordable Housing Units at no cost in perpetuity;
- f) provide for full and unlimited access to, and use of, other building facilities including, but not limited to, casual, shared or assigned bicycle storage, visitor parking, electric vehicle charging and related facilities, at no additional charge;
- g) provide for all affordable housing units and related uses (e.g. parking) and amenities (e.g. common outdoor amenity space) to be completed to a turnkey level of finish at the sole cost of the developer and to the satisfaction of Director of Development and Manager, Community Services;
- a) incorporate and identify the affordable housing dwelling units and associated facilities in the Development Permit plans, subject to the advice (e.g. changes to unit circumstances and/or confirmation of unit locations) of the Housing Co-ordinator; and
- b) incorporate and identify the affordable housing dwelling units and associated facilities in the Building Permit plans, subject to the advice (e.g. changes to unit circumstances and/or confirmation of unit locations) of the Housing Co-ordinator.
- 13. *(Shared Commercial and Residential Visitor Parking)* Registration of a restrictive covenant on title securing the owner's commitment to:
 - a) provide a pool of forty-one (41) shared commercial/residential visitor parking stalls;
 - b) locate the shared stalls on the ground level of the parkade, on either side of the north-south lane, using all of the available commercial stalls, and locate any remainder on the next parkade level, subject to the approval of the Director of Transportation;
 - c) ensure the shared stalls will remain unassigned;
 - d) ensure the shared stalls will be fully accessible (e.g. entry gate open) during standard business operating hours;
 - e) ensure the visitor use of the shared stalls will be accessible (e.g. buzz entry) during non-standard business hours;
 - f) identify the shared commercial/visitor parking stalls in the Development Permit plans;
 - g) identify the shared commercial/visitor parking stalls in the Building Permit plans; and
 - h) prior to Building Permit issuance granting occupancy, provide wayfinding and stall identification signage for the shared commercial/residential visitor stalls, to the satisfaction of the Director of Transportation.
- 14. *(Shared Commercial and Residential Truck Loading)* Registration of a restrictive covenant on title securing the owner's commitment to:
 - a) provide a pool of three (3) shared commercial/residential medium size truck loading spaces;
 - b) ensure the shared spaces will remain unassigned;
 - c) identify the shared commercial/visitor medium size truck loading spaces in the Development Permit plans;
 - d) identify the shared commercial/visitor medium size truck loading spaces in the Building Permit plans; and

5258185v3

e) prior to Building Permit issuance granting occupancy, provide wayfinding and space identification signage for the shared commercial/residential large size truck loading space, to the satisfaction of the Director of Transportation.

Note: Two adjoining medium size truck spaces are also intended to be used for provision of one of the required large size truck loading spaces.

- 15. (*Electric Vehicle Provisions*) Registration of a restrictive covenant on title securing the owner's commitment to:
 - a) provide a minimum of 20% of residential parking stalls with a 120 volt receptacle to accommodate electric vehicle charging equipment;
 - b) provide a n additional minimum of 25% of residential parking stalls with pre- ducting to support future installation of electric vehicle charging equipment;
 - c) provide a minimum of one 120 volt receptacle is provided to accommodate electric charging equipment for every 10 Class 1 bike parking stalls;
 - d) identify the electric vehicle stalls in the Development Permit plans;
 - e) identify the electric vehicle stalls in the Building Permit plans; and
 - f) prior to Building Permit issuance granting occupancy, provide wayfinding and stall identification signage for the electric vehicle stalls, to the satisfaction of the Director of Transportation.
- 16. *(End of Trip Facilities)* Registration of a restrictive covenant on title securing the owner's commitment to:
 - a) provide cycling end of trip facilities for the shared use of all commercial uses (e.g. retail and office) generally as follows:
 - i. one male facility and one female facility, each with a minimum of two showers; and
 - ii. located such that the facilities are easily accessible from bicycle parking areas and all intended users.
 - b) identify the cycling end of trip facilities in the Development Permit plans;
 - c) identify the cycling end of trip facilities in the Building Permit plans; and
 - d) prior to Building Permit issuance granting occupancy, provide wayfinding signage for the end of trip facilities, to the satisfaction of the Director of Transportation.

(Note: Facilities shall be a handicapped-accessible suite of rooms containing a change room, toilet, wash basin, shower, lockers, and grooming station (i.e. mirror, counter, and electrical outlets) designed to accommodate use by two or more people at one time.)

- 17. *(Car Share Provisions)* Registration of a restrictive covenant on title or alternative legal agreement(s), subject to the final approval of the Director of Transportation, securing the owner's commitment to:
 - a) provide two car-share stalls with drive aisle access, secured with a SRW in favour of the City, on the ground level of the parkade adjacent to the north-south lane SRW;
 - b) provide the forgoing stalls with 24 hour a day public access;
 - c) provide each car-share stall with an EV quick-charge (240 volt) charging station for its convenient and exclusive use;
 - d) identify the location, size, access, EV and CPTED characteristics of the car share stalls on the Development Permit plans;
 - e) identify the location, size, access, EV and CPTED characteristics of the car share stalls on the Building Permit plans;

5258185v3

Updated: January 10, 2017 3:21 PM

- f) prior to Building Permit issuance granting occupancy, provide wayfinding signage for the car share stalls, to the satisfaction of the Director of Transportation;
- g) provide the car share stalls and associated access at no cost to the car share operator;
- h) provide the car share stalls and associated access at no cost to individual users of the car share service, except as otherwise determined by the City;
- i) provide two car share cars, of which at least one is an electric vehicle, at no cost to the car share operator;
- j) submit a draft contract of the agreement between the Developer and the car share provider for City's review;
- k) submit a Letter of Credit prior to Development Permit for the sum of \$45,000 to secure the developer's commitment to provide the car share cars;
- should the car share cars not be provided at the time of Building Permit issuance granting occupancy, voluntarily contribute the \$45,000 secured by LOC towards alternate transportation demand management modes of transportation;
- m) prior to Building Permit issuance granting occupancy, enter into a contract with a car share operator for a minimum of three years from the first date of building occupancy, a copy of which shall be provided to the City; and
- n) in the event that the car-share facilities are not operated for car-share purposes as intended via the subject rezoning application (e.g., operator's contract is terminated or expires), control of the carshare facilities shall be transferred to the City, at no cost to the City, and the City at its sole discretion, without penalty or cost, shall determine how the facilities shall be used going forward.
- 18. (Common Amenity Space) Registration of a restrictive covenant on title or alternative legal agreement(s), to the satisfaction of the City, securing the owner's commitment to:
 - a) provide for full and unlimited access to and use of all common residential indoor and outdoor recreational and/or social amenity spaces/facilities for all residents including, but not limited to, the podium level deck, the Level 7 urban agriculture deck and the roof level deck, except in the case that individual facilities are reserved for private use by residents on a managed, time-limited and specified purpose basis.
- 19. (District Energy Utility) Registration of a restrictive covenant and/or alternative legal agreement(s), to the satisfaction of the City, securing the owner's commitment to connect to District Energy Utility (DEU), which covenant and/or legal agreement(s) will include, at minimum, the following terms and conditions:
 - a) no Building Permit will be issued for a building on the subject site unless the building is designed with the capability to connect to and be serviced by a DEU and the owner has provided an energy modelling report satisfactory to the Director of Engineering;
 - b) if a DEU is available for connection, no final building inspection permitting occupancy of a building will be granted until: the Owner has executed and delivered to the City a Section 219 Covenant for the installation, operation and maintenance of all necessary facilities for supplying the services to the Lands; the Owner has entered into a Service Provider Agreement as required by the City; and the Owner has granted or acquired the Statutory Right-of-Way(s) and/or easements necessary for supplying the DEU services to the Lands; and
 - c) if a DEU is not available for connection, then the following is required prior to the earlier of subdivision (stratification) or final building inspection permitting occupancy of a building:
 - i. the City receives a professional engineer's certificate stating that the building has the capability to connect to and be serviced by a DEU;

5258185v3

- ii. the owner enters into a covenant and/or other legal agreement to require that the building connect to a DEU when a DEU is in operation;
- iii. the owner grants or acquires the Statutory Right-of-Way(s) and/or easements necessary for supplying DEU services to the building; and
- iv. if required by the Director of Engineering, the owner provides to the City with security for costs associated with acquiring any further Statutory Right of Way(s) and/or easement(s) and preparing and registering legal agreements and other documents required to facilitate the building connecting to a DEU when it is in operation.

(Contributions)

- 20. (Child Care) City acceptance of an offer to voluntarily contribute at least \$515,105.15 (one percent of the residential floor area, excluding affordable housing floor area, calculated using the proposed floor area *e.g.* 0.01 x 7,361.8 m² x $\$6,997/m^2$) towards the development and operation of child care (90% to Childcare Development Reserve Fund Account # 7600-80-000-90157-0000 and 10% to Childcare Operating Contributions Account # 7600-80-000-90159-0000).
- 21. (Community Facilities) City acceptance of an offer to voluntarily contribute at least \$1,417,398.31 (five percent of the Village Centre Bonus floor area calculated using the proposed floor area *e.g.* 0.05 x .83 x 4,881.26 m² x $\$6,997 / m^2$) towards the development of community facilities (City Centre Facility Development Fund Account # 7600-80-000-90170-0000).
- 22. (Community Planning) City acceptance of an offer to voluntarily contribute at least $\frac{50,304.72}{(100\%)}$ of the total floor area calculated using the proposed floor area e.g. 18,700.64 m² x \$2.69 / m²) towards City Centre community planning (CC-Community Planning and Engineering Account # 3132-10-520-00000-0000).
- 23. (Public Art) City acceptance of an offer to voluntarily contribute at least \$114,861.64 (100% commercial floor area @ \$4.63 per square meter and 100% residential floor area, excluding affordable housing floor area, @ \$8.72 per square meter calculated using the proposed floor area e.g. 10,943.14 m² x \$4.63 /m² + 7,361.8 m² x \$8.72 m²) towards public art (15% to Public Art Provision Account # 7500-10-000-90337-0000 and 85% to ma # 7600-80-000-90173-0000).
- 24. (*Transportation Demand Management*) City acceptance of an offer to voluntarily contribute <u>\$50,000</u> to upgrading the traffic signal at Park Road/Buswell Street (General Account (Transportation) Account # 5132-10-550-55005-0000) for pedestrian environment enhancement in support of a reduction in parking.
- 25. (Trees City Property) City acceptance of an offer to voluntarily contribute <u>\$1300</u> (calculated as \$1300 per tree) to the City's Tree Compensation Fund (Account # 2336-10-000-00000-0000) for the planting of replacement trees within the City.

Fer Current Floor Area Estimates.									
Total Floor Area m ²	Commercial Floor Area m ²	Residential Floor Area m ²	Calculable Residential Floor Area m ²	Affordable Housing Floor Area m ²					
18,700.64	10,943.14	7,757.50	7361.8	395.7					

Per Current Floor Area Estimates:

(Miscellaneous Considerations)

26. *(LEED)* Design and construction of the development to LEED Silver Equivalent based on advice provided by a LEED AP BD+C.

5258185v3

27. (Accessibility) Design and construction of the development to include accessible housing units consistent with the following table:

Туре	Affordable	Market	Intent	Standard
Aging in Place	0	66	- support mobility and usability	Per OCP
Adaptable + Basic Universal Housing	4 4		- reno potential for wheelchair plus added floor area for manoeuvring	Per BCBC and RZB
Barrier Free	. 1	0	- move in with wheelchair	Per BCDH
Total Units	5	70		

28. (Common Amenity Area) Design and construction of the development to include common indoor and outdoor amenity area consistent with the common amenity area provisions of the OCP/CCAP.

(Servicing Agreement)

29. Submission and processing of a Servicing Agreement* application, completed to a level deemed acceptable by the Director of Engineering, for the design and construction of works associated with the proposed rezoning, subject to the following conditions:

(Water Works)

- a) Using the OCP Model, there is 683.6 L/s of water available at a 20 psi residual at the No 3 Rd frontage and 145.3 L/s at the Anderson Rd frontage. Based on your proposed Development your site requires a minimum fire flow of 220 L/s.
- b) The Developer is required to:
 - i. Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm the development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage and Building designs.
 - ii. Upgrade the existing 150mm AC water main along Anderson Road frontage to a 200mm watermain and install additional hydrants as required to achieve minimum 75m spacing along Anderson Road frontage.
 - iii. Install a new water service connection. Water meter to be located on-site (e.g. in a mechanical room).
 - iv. Confirm the actual settlement of the water main located along the No 3 Road frontage via the settlement test points indicated in the Preload Induced Utility Settlement report prepared by Geopacific dated November 5th, 2015, and report the final results to the City. If unacceptable settlement has occurred, the replacement of the water main along the effected length shall be added into the Servicing Agreement scope of works at the Developer's cost.
- c) At Developers cost, the City is to:
 - i. Cut and cap the existing water service connection at the watermain along the No 3 Road frontage.
 - ii. Complete all tie-ins to existing water mains.

(Storm Sewer Works)

d) The Developer is required to:

5258185v3

Updated: January 10, 2017 3:21 PM

- i. Install a new storm sewer within the center of Anderson Road from the existing 600 mm storm sewer to No 3 Road complete with manholes as required. Sizing shall be via the servicing agreement design review.
- ii. Remove the adjacent existing storm sewers along both sides of the Anderson Road frontage, and tie-in the upstream portions and all existing service connections and catch basins to the proposed storm sewer along the centreline of Anderson Road. Removal of the existing storm sewer on the south side of Anderson Road will require curb, gutter, and sidewalk restoration.
- iii. Note that the existing lane drainage to the south of Anderson Road will require extension to tie in to the proposed storm sewer via a new manhole.
- iv. Tie-in existing storm mains, service connections and catch basin leads to the new storm sewer as required.
- v. Install a new storm service connection complete with an inspection chamber located on-site within a proposed 1.5 m-deep, 3.0 m-wide SRW along the Anderson Rd frontage. Exact dimensions to be determined during the servicing agreement design review.
- vi. Cut and cap the existing service connections and remove existing inspection chambers along the No 3 Road and Anderson Road frontages.
- vii. Upgrade and install lane drainage along the east-west lane from 8051 Anderson Road to the east property line of 8111 Anderson Road to City specifications, complete with catch basins and manholes. The pipes shall be sized via a capacity analysis, minimum 200 mm diameter. The design of the lane drainage must be coordinated with the City-funded sanitary sewer to be placed within the east-west lane. Note: no service connections are permitted to connect to lane drainage.
- viii. Remove the existing diagonally-aligned drainage line within the east-west lane along the frontage of 8111 Anderson Road.
- ix. Confirm the actual settlement of the storm sewer located along the No 3 Road frontage via a CCTV inspection and submit to the City. If unacceptable settlement has occurred, the replacement of the storm sewer along the effected length shall be added into the Servicing Agreement scope of works at the Developer's cost.
- e) At Developers cost, the City is to:
 - i. Complete all tie-ins of the proposed works to existing City infrastructure.

(Sanitary Sewer Works)

- f) The Developer is required to:
 - i. As the site pre-load and other ground improvements, which will impact the existing sanitary main within the development site, has commenced prior to the City's construction of the sanitary main along Buswell Street, the developer was required to construct a temporary sanitary pump station and forcemain diversion. Following this, the Developer, at his sole costs, is required to:
 - ii. Design and construct a 200mm diameter sanitary main along Anderson Road by the completion date set out within the related servicing SA 16-731504 and connect to the future City-funded Buswell Street sanitary sewer when it becomes available. Tie-in to the west shall be to the existing sanitary sewer within the north-south aligned lane south of Anderson Road.
 - iii. Prior to start of on-site excavation and foundation works, construct the 200 mm diameter sanitary sewer along Anderson Road, decommission and remove the on-site forcemain and temporary pump station, and connect to the City-funded Buswell Street sanitary sewer.

5258185v3

- iv. Coordinate the construction of the sanitary main along Anderson Road with the construction schedule of the City-funded sanitary main along Buswell Street. The Developer is required to connect to the new sanitary sewer within Buswell Street, as soon as it becomes available.
- v. Maintain, monitor and repair, to the satisfaction of the City, the temporary sanitary pump station and the piping system, until such time that the new 200mm diameter sanitary main to be built by the developer along Anderson Road and the City funded sanitary main along Buswell Street are constructed and operational.
- vi. Remove the temporary sanitary pump station and the piping system and restore to original condition or better the affected areas after the connection to the new sanitary sewer within Buswell Street.
- vii. Perform all other tasks required by the related servicing agreement SA 16-731504.
- g) At Developers cost, the City is to:
 - i. Complete all tie-ins of the proposed works to existing City infrastructure.

(Frontage Improvements – Engineering)

- h) The Developer is required to:
 - i. Review street lighting levels and street light type along No. 3 Rd and Anderson Rd frontages and upgrade lighting as required to meet City standards.
 - ii. Provide street lighting along the proposed east-west lane along the north property line of 8051 Anderson Road.
 - iii. Design the ultimate road cross-section of Anderson Road to accommodate for future District Energy Utility corridor within the roadway.
 - iv. Coordinate with BC Hydro, Telus and other private communication service providers
 - To underground proposed Hydro service lines.
 - When relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - To determine if above ground structures are required and coordinate their locations (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc.). All such structures are to be located within the subject site's property line.
 - v. Complete other frontage improvements as per Transportation's requirements.

(General Items – Engineering)

- i) The Developer is required to:
 - i. Grant utilities statutory rights of way for required connections between City utilities and the development as determined within the Servicing Agreement process.
 - ii. Locate/relocate all above ground utility cabinets and kiosks required to service the proposed development within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the development process design review. Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the requirements (e.g., statutory right-of-way dimensions) and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of statutory right-of-ways that shall be shown in the functional plan and registered prior to SA design approval:

5258185v3

- BC Hydro PMT 4mW X 5m (deep)
- BC Hydro LPT 3.5mW X 3.5m (deep)
- Street light kiosk 1.5mW X 1.5m (deep)
- Traffic signal kiosk 1mW X 1m (deep)
- Traffic signal UPS 2mW X 1.5m (deep)
- Shaw cable kiosk 1mW X 1m (deep) show possible location in functional plan
- Telus FDH cabinet-1.1 m W X 1 m (deep show possible location in functional plan

(Frontage Improvements – Transportation)

(General Note: Servicing Agreement for design and construction to City Centre standards. All requirements subject to final functional design including, but not limited to, the items outlined in this section and any associated required technical changes.)

- j) The Developer is required to:
 - i. For No. 3 Rd.:
 - a. Maintain existing curb.
 - b. From existing curb line provide:
 - 0.15m curb;
 - 2.50m boulevard;
 - 2.00m bike lane;
 - 1.50m lighting/street furniture buffer strip; and
 - 3.00m sidewalk.
 - ii. For Anderson Rd.:
 - a. Maintain existing curb.
 - b. From the existing north curb line provide:
 - 0.15 curb;
 - 1.5m hardscaped treed boulevard; and
 - 2.0m scored concrete sidewalk.
 - iii. For the internal north-south lane SRW PROP:
 - a. From east side:
 - 1.50m sidewalk free and clear of all obstructions;
 - 7.50m min. pavement width; and
 - 0.60 m buffer.
 - Note: Rollover curbs both sides consistent with CC lane design standard.

iv. For the east-west lane upgrade - subject site portions:

(Note: Works are required to make the E-W lane operational to the greatest extent possible for two way traffic to and from Buswell Rd, to the satisfaction of the City.)

- a. From the new subject site north PL (after lane dedication):
 - per forgoing note;
 - 1.50 m concrete sidewalk including rollover curb; and
 - 1.50 m pavement width; and
 - grading, drainage, gutter, lighting and traffic marking, as determined through the
 - Servicing Agreement process.

v. For the east-west lane upgrade – off-site portions:

(Note: Works are required to make the E-W lane operational to the greatest extent possible for two way traffic to and from Buswell Rd, to the satisfaction of the City.)

a. For 6820 No. 3 Road:

5258185v3

- per forgoing note; and

- grading, drainage, curb and gutter, paving, lighting and traffic marking, as determined through the Servicing Agreement process.

- b. For 8080 and 8108 Park Road:
 - per forgoing note; and

- grading, drainage, curb and gutter, paving, lighting and traffic marking, as determined through the Servicing Agreement process.

c. For 8120 Park Road:

- per forgoing note; and

- grading, drainage, curb and gutter, paving, lighting and traffic marking, as determined through the Servicing Agreement process.

- d. For 8111 Anderson Road:
 - per forgoing note;

- 1.50 m concrete sidewalk including lighting and rollover curb along north PL; and - grading, drainage, curb and gutter, paving, lighting and traffic marking, as determined through the Servicing Agreement process.

(TIA Improvements – Transportation)

k) The Developer is required to:

i.

- For the No. 3 Rd./Anderson Rd. intersection:
 - a. upgrade the crosswalks at the intersection with decorative stamped asphalt treatment and tactile warning pavers at the curb ramps to improve visibility of crosswalks.
- ii. For the Anderson Rd./Buswell Rd intersection:
 - a. to install two special crosswalk signals (side-mounted) with APS and service panel; pedestrian detection and communications conduit, cable and junction boxes; and
 - b. add new curb ramps on east side per City Engineering Design Specification standards with tactile warning strips.
- iii. For the Granville Ave./Buswell St. intersection:
 - a. upgrade intersection with illuminated street name signs.

(Parks - City Trees)

- 1) The developer is required to provide for the retention of three existing trees on City property along No. 3 Road, unless otherwise determined by the SA process, in which case replacement terms shall be determined within the SA process. Retention shall be supported with:
 - i. installation of appropriate tree protection fencing around all trees to be retained on the No. 3 Road frontage, as well as trees located in adjacent frontages that may be affected by the construction of the proposed development and associated frontage improvements; and
 - ii. submission of a contract entered into by the applicant and a Certified Arborist for the supervision of all works conducted in close proximity to the aforesaid tree protection zones. The contract must include the scope of work to be undertaken, including the proposed number of monitoring inspections at specified stages of construction, any special measures required to ensure tree protection, and a provision for the arborist to submit a post-construction impact assessment to the City for review.

5258185v3

(Servicing Agreement – Letter of Credit)

m) Provision of a Letter of Credit to secure the completion of the works in an amount determined by the Director of Development.

(Servicing Agreement – LTO Registration)

n) Registration of the Servicing Agreement on title.

(Development Permit)

- 30. Submission and processing of a Development Permit* application, completed to a level deemed acceptable by the Director of Development, demonstrating:
 - a) design development of the rezoning concept to address:
 - i. Council directions arising out of Public Hearing;
 - ii. form and character objectives noted in the associated Report to Planning Committee;
 - iii. form and character objectives described in the OCP and CCAP Development Permit Guidelines;
 - iv. technical resolution, as necessary, of building services, private utilities, public utilities, parking and loading and waste management including provision of final utility, loading, waste management and signage and wayfinding plans; and
 - v. technical resolution, as necessary, of the landscape plans related to:
 - a. the protection, installation and/or maintenance (including automatic irrigation) of retained and/or new ecological network landscape;
 - b. the protection, installation and/or maintenance (including automatic irrigation) of retained and/or new trees; and
 - c. the installation and/or maintenance (including automatic irrigation) of additional landscape; and
 - b) the owner's commitment to design and construct the development in accordance with rezoning policy, the rezoning considerations and the draft site-specific zoning bylaw, by incorporating information into the Development Permit plans (inclusive of architectural, landscape and other plans, sections, elevations, details, specifications, checklists and supporting consultant work) including, but not limited to:
 - i. statutory rights of way, easements, encroachments, no build areas, agreements and other legal restrictions;
 - ii. flood construction level(s);
 - iii. use, density, height, siting, building form, landscaping, parking and loading and other zoning provisions;
 - iv. site access and vehicular crossings;
 - v. the required shared commercial/visitor parking stalls;
 - vi. the required EV-charging and EV-ready vehicle parking stalls;
 - vii. the required EV-charging and EV-ready bicycle parking stalls;
 - viii. the required car-share parking stalls;
 - ix. the required end of trip facilities, including their location, number, size, type and use;
 - x. the location of areas reserved for DEU connection facilities and a notation regarding the need for DEU pre-ducting;
 - xi. the required affordable housing units, including their size and location;
 - xii. the required aging in place, basic universal, accessible, adaptable and/or convertible dwelling units, including their associated design features;

5258185v3

- xiii. a site and building Accessibility checklist and identification of specific recommended measures on the plans, where relevant;
- xiv. a CPTED checklist and identification of specific recommended measures on the plans, where relevant;
- xv. a LEED Checklist with measures recommended by a LEED AP BD+C to achieve LEED Silver equivalent and identification of specific measures to be incorporated into the Building Permit plans;
- xvi. an acoustic and mechanical report with recommendations prepared by an appropriate registered professional regarding measures to be incorporated into the Building Permit drawings to achieve the exterior and interior noise levels and other noise mitigation standards articulated in the aircraft and mixed use noise covenants;
- xvii. the required common indoor, common outdoor and private outdoor amenity areas including their location, size, use and finishing;
- xviii. the location and specifications for ecological network landscaping; and
- xix. the dimensions of any tree protection fencing illustrated on the Tree Retention/Management Plan provided with the application.

(Letter of Credit – Trees, Ecological Network and Landscape)

c) Submission of a letter of credit for landscaping based on 100% of the cost estimate provided by the Landscape Architect, including installation costs, plus a 10% contingency cost.

(Building Permit)

<u>Note:</u> Prior to Building Permit issuance the approved Development Permit and associated conditions, as well as any additional items referenced in "Schedule B: Assurance of Professional Design and Commitment for Field Review", shall be incorporated into the Building Permit plans (drawings and documents) prior to Building Permit issuance.

<u>Note:</u> Prior to Building Permit issuance the developer must submit a "Construction Parking and Traffic Management Plan" to the Transportation Department. 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.

<u>Note:</u> Prior to Building Permit issuance the developer must obtain a Building Permit for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

General Notes:

- 1. Some of the foregoing items (*) may require a separate application.
- 2. Where the Director of Development deems it appropriate, legal 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

5258185v3

Updated: January 10, 2017 3:21 PM

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 legal 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.

- 3. Enter into, if required, additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering, including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- 4. 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

Signed

Date

5258185v3

Updated: January 10, 2017 3:21 PM

COPY ADP MINUTES

3. RZ 14-678448/DP 15-708092 – PROPOSED REZONING OF 6840-6860 NO.3 ROAD AND 8051 ANDERSON ROAD TO PROVIDE FOR THE DEVELOPMENT OF A MIXED COMMERCIAL AND MULTI-FAMILY RESIDENTIAL USE DEVELOPMENT WITH A TOTAL FAR OF 3.84 AND A HEIGHT OF 47 M GSC.

APPLICANT: Ifortune Homes

PROPERTY LOCATION: 8051 Anderson Road

Applicant's Presentation

Daniel Eisenberg and Amela Brudar, GBL Architects, and Landscape Architect Grant Brumpton, PWL Partnerships, presented the project on behalf of the applicant and answered queries from the Panel.

Panel Discussion

Comments from the Panel were as follows:

- the design of the proposed building is unique in Richmond but suitable for its location;
- the building design is new and interesting; however, the south-facing balconies of the residential midrise need further articulation to achieve its architectural objective;
- consider introducing architectural elements and/or lighting in the proposed north-south lane to make it more friendly;
- would like to see the application back to the Panel if substantial changes will be made to the proposed development;
- the west façade of the building almost opposite Richmond City Hall is interesting; appreciate the inversion of the "podium streetwall with tower" and the pedestrian use of the space under the cantilevered rectangular volumes;
- applicant should ensure that the proposed commercial balconies are kept tidy and free from unsightly objects (e.g. barbeque grills, potted plants, etc.) as they are an important piece on the south façade;
- consider continuing the concrete paving treatment on the covered southern portion of the north-south lane up to the exposed northern portion to improve the experience of pedestrians and motorists coming from the north of the subject site;
- consider eliminating the sidewalk on the proposed north-south lane to enable pedestrians and motorists to share the use of the lane;
- lanes should be well lit to ensure pedestrian safety;
- commend the applicant for a clear and thorough presentation on the architecture and landscaping of the proposed development;
- the planting palette is well considered; appreciate the animation and landscaping on the various levels of the building; appreciate the round garden plots and the tables in between;

ATTACHMENT 7

- appreciate the applicant's intent to contrast the landscaping of the different building levels with the rectilinear architecture of the building; overall geometry works in the plan drawings but may not be experienced by the residents at the different floor levels; up close, curves may look fuzzy and accidental; some curves, lines and diagonal trellises create too much geometry; consider design development and refinement of geometry on the landscaped areas in the building;
- curved planting beds fronting Anderson Road is not consistent with the overall architecture of the building and landscaping on the ground level; consider a rectilinear form for the planting beds;
- would like to see the proposal back to the Panel if there will be changes to the proposed landscaping;
- appreciate the proposed building form and massing which is unique in Richmond; appreciate the landscaped rooftop of the office tower;
- overall landscaping is cohesive and works well in aerial view; however, the landscaped areas work independently at each level and will not be experienced as a whole by the residents;
- the common outdoor space at the end of the hallway on level 9 is excessive and may not be used by residents; consider utilizing a portion of the space to create an extended private balcony for the two adjacent residential units;
- consider a more extended overhang to provide 4-5 meters of covered space on the ground level of the office tower along No. 3 Road; will provide better weather protection to future occupants of the office tower; also consider more seating opportunities (e.g. partially covered and partially exposed bench areas) along No. 3 Road and Anderson Road and at the corners to provide meeting places for people; application of Canada Line setback guidelines in this location is not necessary as there is no intention to extend the Canada Line southward;
- attention given to the north-south lane is excessive; should be used only as a vehicle service lane and not for pedestrian circulation; pedestrians should utilize the public realm fronting the streets; an east-west lane is not supported, unless the lane is designed to incorporate commercial and active use at ground level (ex. Fan Tan Alley in Victoria), it will not be well-used by pedestrians; provided service access can be accommodated by the north-south lane, removal of the east-west lane is supported; consider covering the entire lane to screen the exposed parkade and introduce a green roof to provide more visual interest from above;
- applicant can look at appropriate precedents if it wants to animate the lane, e.g. Fan Tan Alley in Victoria, Maiden Lane in San Francisco, and other pedestrian lanes in Europe;
- will support the project if the applicant will incorporate the suggested design changes to the proposed north-south and east-west lanes;
- support the previous comment regarding the needed design changes for the proposed east-west lane especially with regard to eliminating the pedestrian sidewalk;

the applicant needs to provide adequate setback along No. 3 Road for the possible extension of Canada Line in the future;

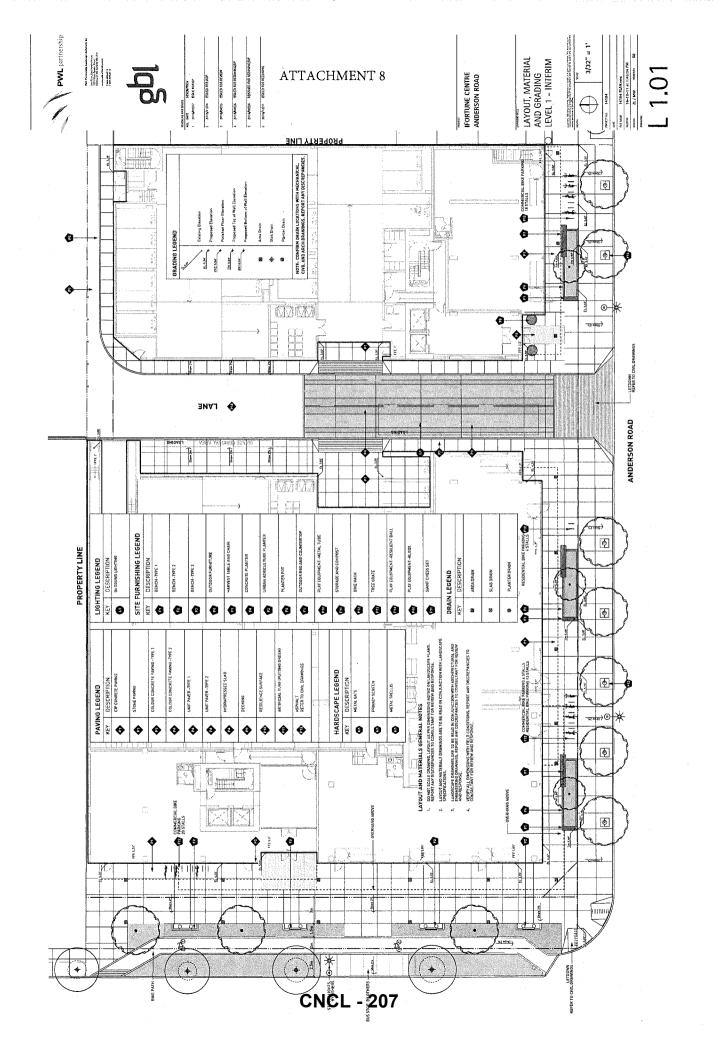
appreciate the provision of affordable units and the incorporation of universal access features in residential units; also appreciate the provision of pocket doors in some residential units;

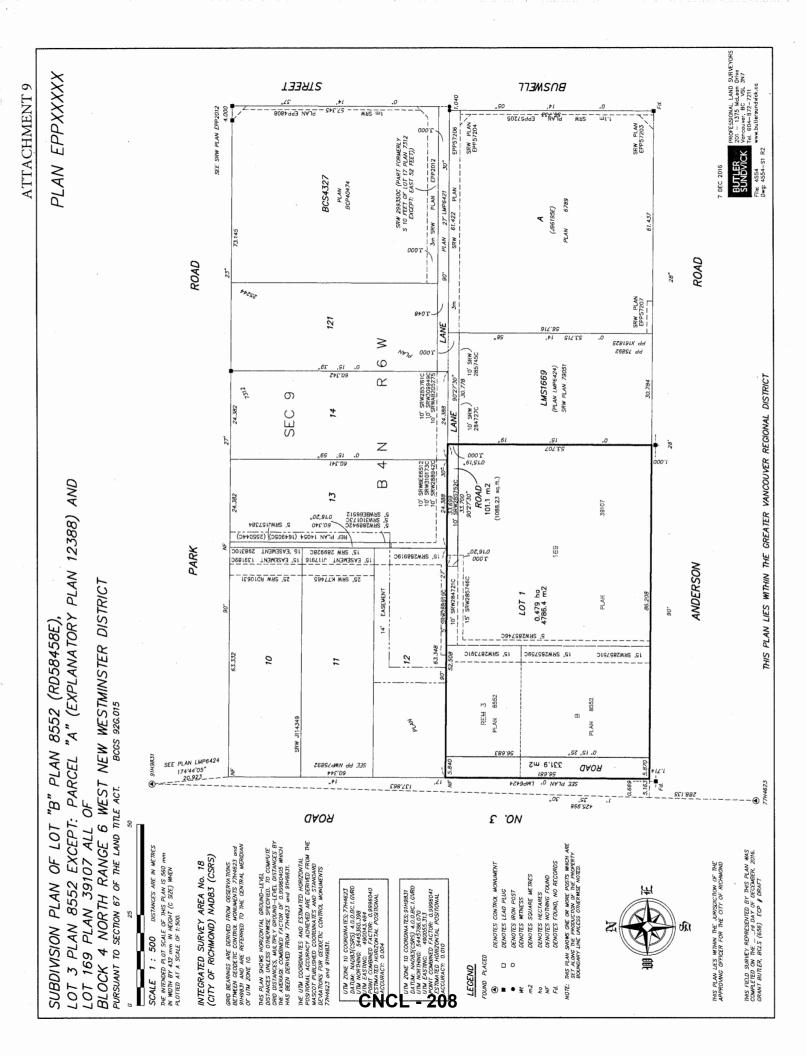
- project may not return to the Panel unless substantial changes are made to the Canada Line setback and the building overhang;
- the applicant is encouraged to identify public art opportunities for the proposed development;
- appreciate the elevation along No. 3 Road and the overhanging tower; agree with comments that it could be further extended;
- the proposed development is sited in a prominent location; design development is needed to emphasize the importance of the project;
- the proposed north-south lane is highlighted by the applicant; however, it lacks appropriate treatments and amenities which would enhance the pedestrian and motorist experience;
- review the relationship of the subject development with the adjacent development along Anderson Road; the stepping down of the residential midrise is a weak move; consider a stronger transition;
- consider a stronger interaction of the north side of the proposed development,
 e.g. more "eyes on the street", with the east-west pedestrian mews; and
- would like to see the application again in the Panel.

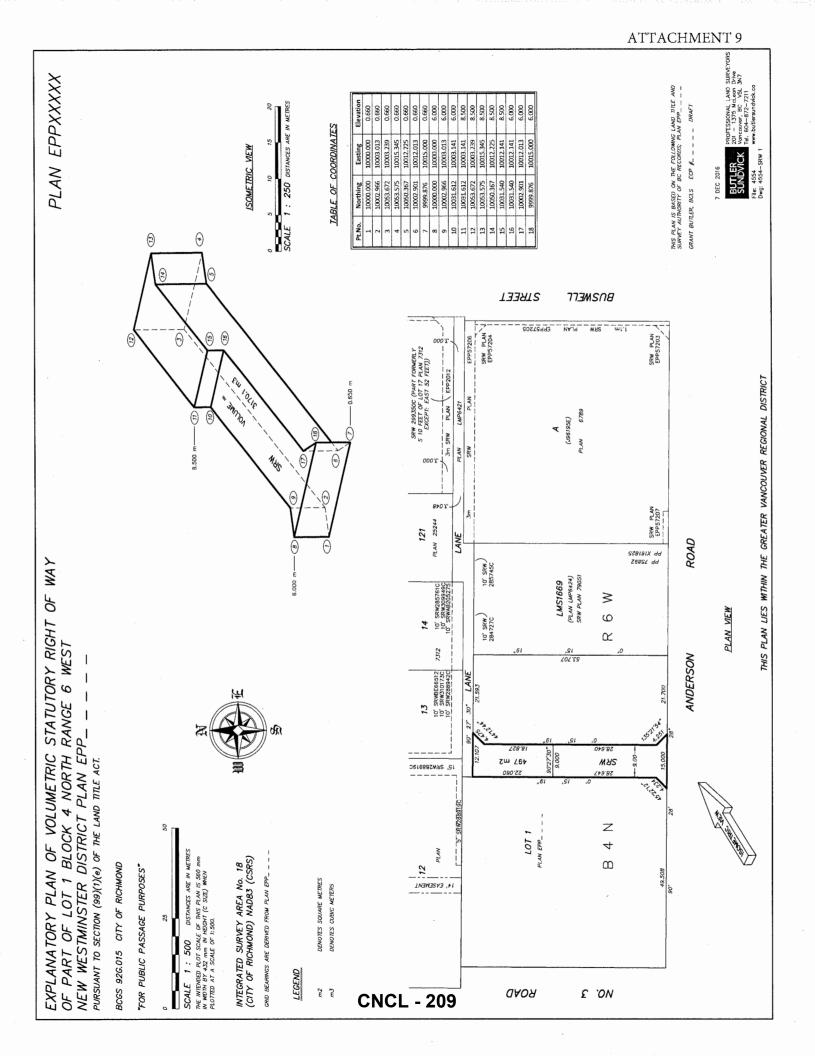
Panel Decision

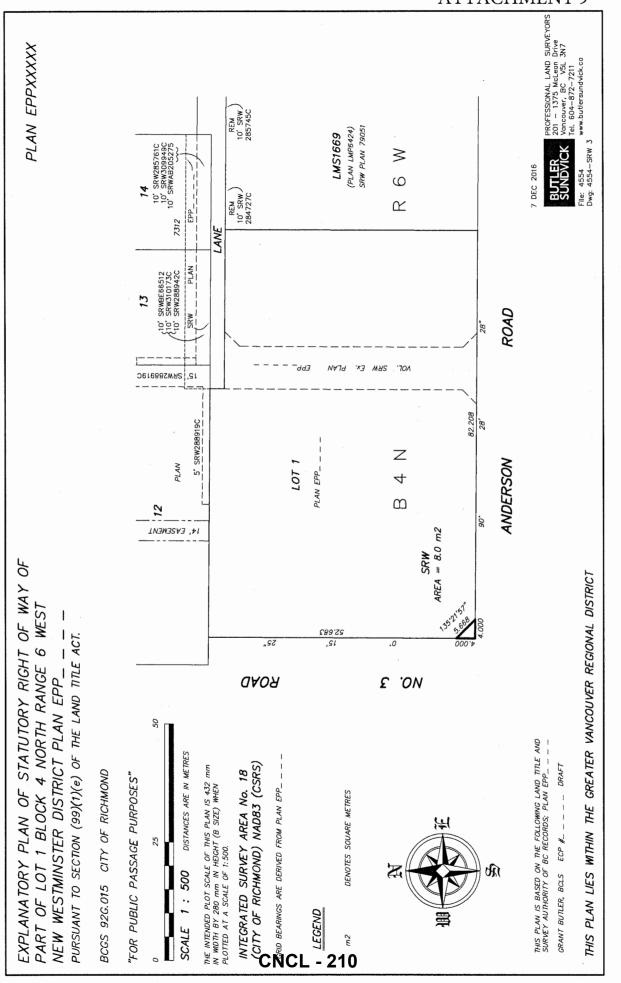
It was moved and seconded That DP 15-708092 return to the Panel with the applicant giving consideration to the comments of the Panel.

CARRIED

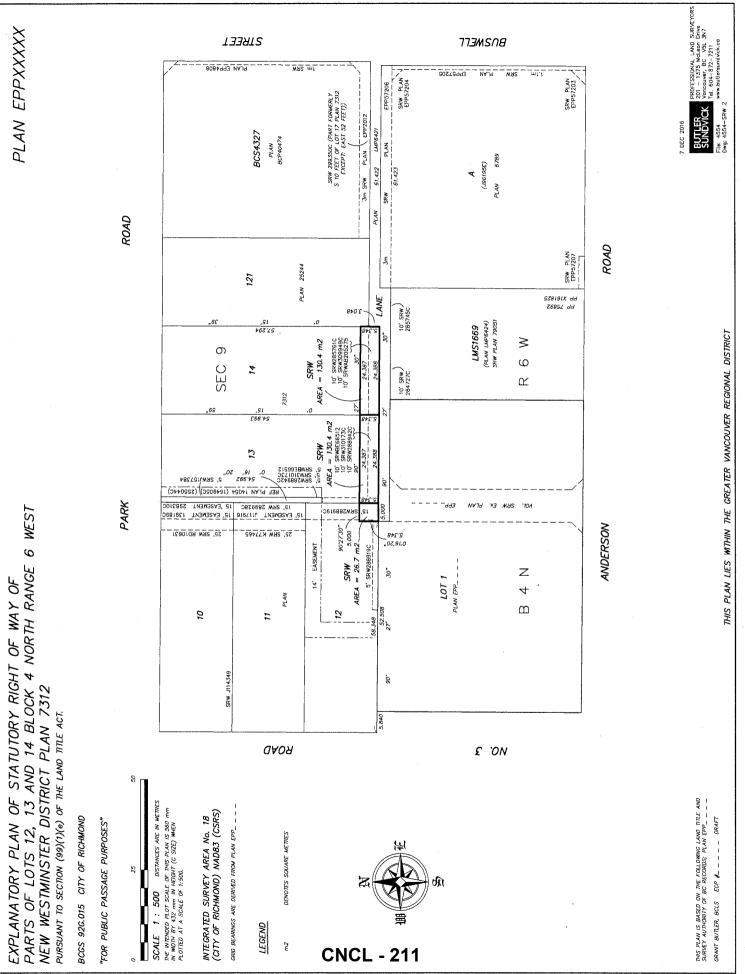




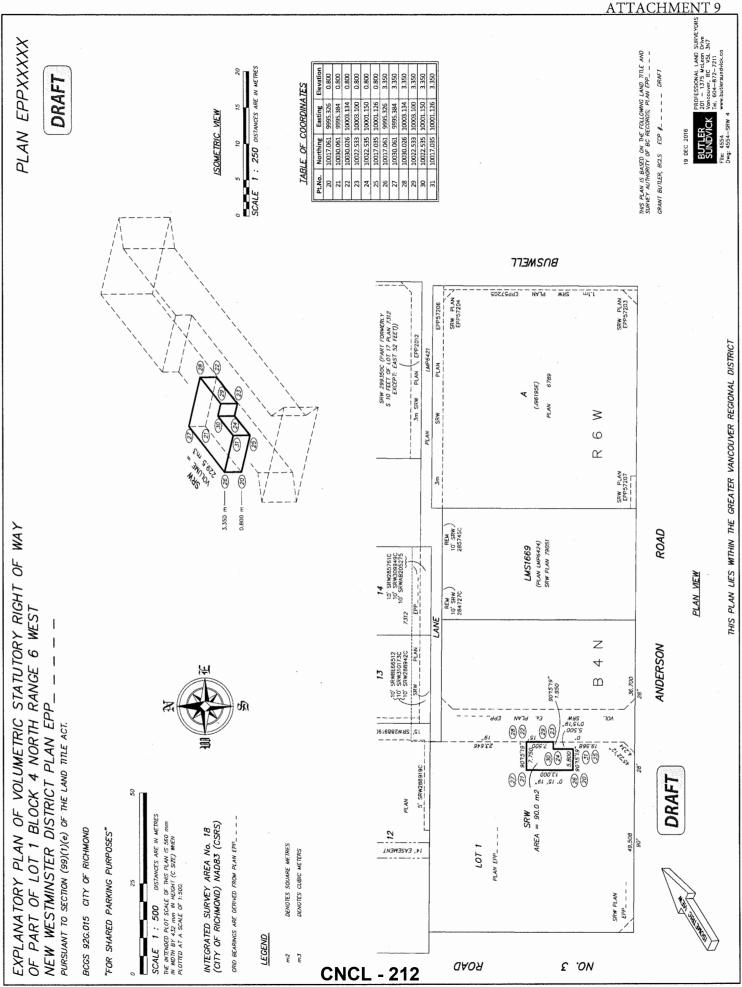




ATTACHMENT 9



ATTACHMENT 9



RZ 14-678448

Bylaw 9510



Richmond Zoning Bylaw 8500 Amendment Bylaw 9510 (RZ 14-678448) 6840 & 6860 No. 3 Road and 8051 Anderson Road

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

1. Richmond Zoning Bylaw 8500 is amended by inserting the following into Section 20 (Site Specific Mixed Use Zones), in numerical order:

20.31 City Centre High Density Mixed Use with Office (ZMU31) – Brighouse Village

20.31.1 Purpose

The **zone** provides for a broad range of commercial, service, business, entertainment and residential uses typical of the **City Centre**. Additional **density** is provided to achieve **City** objectives related to the development of **affordable housing units**, **child care**, **community amenity space** and **commercial uses**, including a significant component of **office**.

20.31.2 Permitted Uses

- animal grooming
- broadcasting studio
- child care
- education
- education, commercial
- education, university
- entertainment, spectator
- government service
- health service, minor
- housing, apartment
- housing, town
- library and exhibit
- liquor primary
 establishment
- manufacturing, custom indoor
- microbrewery, winery and distillery

- neighbourhood public house
- office
- parking, non-accessory
- private club
- recreation, indoor
- religious assembly
- restaurant
- retail, convenience
- retail, general
- retail, second hand
- service, business support
- service, financial
- service, household repair
- service, personal
- studio
- vehicle rental, convenience
- veterinary service

20.31.3 Secondary Uses

- amenity space, community
- boarding and lodging
- community care facility minor
- home-based business

20.31.4 Permitted Density

- 1. For the purposes of this **zone**, the calculation of **floor area ratio** is based on a **site** area of 4,882 sq. m.
- 2. The maximum floor area ratio is:
 - a) for residential uses, 1.00; and
 - b) for non-residential uses, 1.40.

together with an additional 0.1 floor area ratio provided that the additional floor area is used entirely to accommodate indoor amenity space.

- 3. Notwithstanding Section 20.31.4.2(a), the reference to "1.00" is increased to a higher **floor area ratio** of "1.60" if, at the time **Council** adopts a zoning amendment bylaw to create the ZMU31 **zone** and include the **lot** in the **zone**, the **owner**:
 - a) has agreed to provide affordable housing units on site and the combined habitable space of the affordable housing units is not less than 5% of the total residential floor area;
 - b) has entered into a **housing agreement** with respect to the **affordable housing units** and registers the **housing agreement** against title to the **lot** and files a notice in the Land Title Office; and
 - c) pays a sum into the **child care reserve fund** based on 1% of the value of the total residential **floor area ratio** less the value of the **affordable housing unit floor area ratio**, calculated using the "equivalent to construction value" rate determined by **Council** during the rezoning process.
- 4. Notwithstanding Section 20.31.4.2(b), the reference to "1.40" is increased to a higher **floor area ratio** of "2.25" provided that:
 - a) the **owner** uses the additional 0.85 **floor area ratio** for **office uses** only; and
 - b) if, at the time Council adopts a zoning amendment bylaw to create the ZMU31 zone and include the lot in the zone, the owner pays a sum into the City Centre Facility Development Fund based on 5% of the 0.85 floor area ratio "Village Centre Bonus", calculated using the "equivalent to construction value" rate determined by Council during the rezoning process.

20.31.5 **Permitted Lot Coverage**

1 The maximum lot coverage is 90% for buildings.

20.31.6 Yards & Setbacks

- 1. The minimum front vard is:
 - 3.80 m but the minimum front vard may be reduced to 0.80 m for a) a maximum of 80% of the width of the front yard in the case of portions of the **building** located 5.0 m or more above grade; and,
 - weather protection associated with ground level uses may project b) into the front vard a maximum of 1.8 m.
- 2. The minimum exterior side yard is:
 - 3.80 m but the minimum exterior side yard may be reduced to a) 1.50 m for a maximum of 25% of the width of the exterior side yard in the case of portions of the building located 5.0 m or more above grade: and,
 - weather protection associated with ground level uses may project b) into the exterior side yard a maximum of 1.8 m.
- 3 The minimum interior side yard is 0.0 m.
- 4. The minimum rear vard is 0.0 m.
- 5. In addition to any front, exterior side, interior side and rear yard requirements, a minimum **building setback** of 1.5 m is required in any area where a building door provides direct access to or from City land or a secured, publicly-accessible exterior space.

20.31.7 **Permitted Heights**

- 1. The maximum building height for principal buildings is 47.0 m geodetic.
- 2. The maximum **building height** for **accessory buildings** is 12.0 m.

20.31.8 Subdivision Provisions/Minimum Lot Size

- The minimum lot area is 4780 sq. m. 1.
- 2. The minimum lot width is 45.0 m.
- 3. The minimum lot depth is 40.0 m.

20.31.9 Landscaping & Screening

Landscaping and screening shall be provided according to the 1. provisions of Section 6.0. **CNCL - 215**

20.31.10 On-Site Parking and Loading

1. On-site **vehicle** and bicycle parking and loading shall be provided according to the standards set out in Section 7.0.

20.31.11 Other Regulations

- 1. **Telecommunication antenna** must be located a minimum 20.0 m above the ground (i.e., on a roof of a **building**).
- 2. 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.
- 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 parcels and by designating them CITY CENTRE HIGH DENSITY MIXED USE WITH OFFICE (ZMU31) – BRIGHOUSE VILLAGE:
 - P.I.D. 011-325-666 LOT 3 EXCEPT: PARCEL "A" (EXPLANATORY PLAN 12388); SECTION 9 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 8552
 - P.I.D. 003-609-944 LOT "B" (RD58458E) SECTION 9 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 8552
 - P.I.D. 002-850-702 LOT 169 SECTION 9 BLOCK 4 NORTH RANGE 6 WEST NEW WESTMINSTER DISTRICT PLAN 39107

3. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9510".

FIRST READING

PUBLIC HEARING

SECOND READING

THIRD READING

OTHER CONDITIONS SATISFIED

ADOPTED

MAYOR

CORPORATE OFFICE

CITY OF RICHMOND

APPROVED by

APPROVED by Director or Solicitor

T



Report to Committee

Planning and Development Division

Re:	Application by Xiufeng Zhang and Shufang Zha 8140/8160 Lundy Road from Two-Unit Dwellings	•	~
From:	Wayne Craig Director, Development	File:	RZ 16-734667
To:	Planning Committee	Date:	December 19, 2016

Staff Recommendation

(RS2/C)

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9664, for the rezoning of 8140/8160 Lundy Road from "Two-Unit Dwellings (RD1)" to "Single Detached (RS2/C)", be introduced and given first reading.

and

Wayne Craig Director, Development

SDS:blg Att. 6

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Affordable Housing	E.	he Energ	

Staff Report

Origin

Xiufeng Zhang and Shufang Zhang have applied to the City of Richmond for permission to rezone the property at 8140/8160 Lundy Road from the "Two-Unit Dwellings (RD1)" zone to "Single Detached (RS2/C)" zone, to permit the property to be subdivided to create two (2) single-family lots, with vehicle access from Lundy Road (Attachment 1). The site is currently occupied by a stratified duplex, which will be demolished. A site survey showing the proposed subdivision plan 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

Development immediately surrounding the site is as follows:

- To the North: Single-family dwelling on a lot zoned "Single Detached (RS1/E)" fronting Lundy Road.
- To the South: Single-family dwellings on lots zoned "Single Detached (RS2/C)" fronting Lundy Road.
- To the East: Single-family dwellings on lots zoned "Single Detached (RS1/E)" fronting Lucerne Place.
- To the West: Single-family dwellings on lots zoned "Single Detached (RS2/B)" and "Single Detached (RS1/E)" fronting Lundy Road.

Related Policies & Studies

Official Community Plan

The Official Community Plan (OCP) land use designation for the subject property is "Neighbourhood Residential" (NRES). The proposed rezoning and subdivision would comply with this designation.

Single-Family Lot Size Policy 5423/Zoning Bylaw 8500

The subject property is located within the area governed by Single-Family Lot Size Policy 5423 (adopted by Council on November 20, 1989 and last amended in 2004) (Attachment 4). The Policy permits properties with duplexes to be rezoned and subdivided into two (2) equal sized lots, provided that each lot created meets the requirements of the "Single Detached (RS2/B)" or "Single Detached (RS2/C)" zones. Proposed lots will be approximately 14.6 m (48 ft.) wide and 588.8 m² (6,337 ft.²) in area. The proposed rezoning and subdivision would comply with the requirements of the "Single Detached (RS2/C)" zone and Single-Family Lot Size Policy 5423.

Floodplain Management Implementation Strategy

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

Public Consultation

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

Should the Planning Committee endorse this application and Council grant first reading to the rezoning bylaw, the bylaw will be forwarded to a Public Hearing; where any area resident or interested party will have an opportunity to comment. Public notification for the Public Hearing will be provided as per the *Local Government Act*.

Analysis

Existing Legal Encumbrances

There is an existing 3.0 m wide statutory right-of-way (SRW) registered on Title for utilities (sanitary sewer) along the rear of the subject property. This SRW will not be impacted by the proposed development. The applicant is aware that encroachment into the SRW is not permitted.

There is also an existing restrictive covenant registered on the Title of each strata lot, restricting the use of the subject property to a duplex (Document No. AE6888). The covenant must be discharged from Title as a condition of rezoning.

Prior to subdivision, the applicant must cancel the existing Strata Plan (NWS3444) from the Title of the subject property.

Transportation and Site Access

Vehicle access to the proposed lots is to be from Lundy Road via separate driveway crossings.

Tree Retention and Replacement

A Certified Arborist's Report was submitted by the applicant, which identifies tree species, assesses tree structure and condition, and provides recommendations on tree retention and removal relative to the proposed development. The report assesses two (2) trees located on the subject site, two (2) trees located on neighbouring properties and one (1) City-owned tree.

The City's Tree Preservation Coordinator has reviewed the Arborist's Report, conducted an onsite visual tree assessment, and concurs with the Arborist's recommendations to:

• Retain and protect one (1) Dogwood tree (tag# 34) located on the subject site due to good condition (15 cm dbh).

- Retain and protect two (2) trees (tag# Neigh.1 & Neigh.2) located on the neighbouring property to the south.
- Remove and replace one (1) Birch tree (tag# 35) located on the subject site in poor condition due to Bronze Birch Borer infestation (56 cm dbh).
- Remove and replace one (1) City-owned Birch tree (tag# 33) located in front of the subject property (138 cm dbh). The City's Parks Arborist has assessed the tree for removal and indicated that the required servicing works (including ditch infill) will have a negative impact on the tree's health. The applicant has received approval from the Parks Department and must contact the department four (4) days prior to removal. Compensation of \$1,300 is required for removal of the tree, in order for the Parks Department to plant two (2) trees at or near the subject property.

Tree Protection

The proposed Tree Management Diagram is shown in Attachment 5, which outlines the protection of the one (1) tree on-site and two (2) trees on the neighbouring property.

To ensure the protection of the three (3) trees (tag# 34, Neigh.1 & Neigh.2), the applicant is required to complete the following:

- Prior to final adoption of the rezoning bylaw, submission to the City of a contract with a Certified Arborist for supervision of all works conducted within or in close proximity to tree protection zones. The contract must include the scope of work required, the number of proposed monitoring inspections at specified stages of construction, any special measures required to ensure tree protection, and a provision for the arborist to submit a post-construction impact assessment to the City for review.
- Submission of a Tree Survival Security to the City in the amount of \$5,000 for the one (1) on-site tree to be retained.
- Prior to the demolition of the existing dwelling on the subject site, the applicant is required to install tree protection fencing around all trees to be retained. Tree protection fencing must be installed to City standard in accordance with the City's Tree Protection Information Bulletin TREE-03, prior to any works being conducted on-site, and remain in place until construction and landscaping works are completed.

Tree Replacement

For the removal of the one (1) tree on-site, the OCP tree replacement ratio goal of 2:1 requires two (2) replacement trees to be planted and maintained on the proposed lots. Council Policy #5032 for Tree Planting (Universal) (adopted by Council on July 10, 1995 and amended in 2015) encourages a minimum of two (2) trees to be planted and maintained on every lot. The applicant has proposed to plant and maintain a minimum of two (2) trees on each lot (one (1) in the front yard and one (1) in the rear yard); for a total of four (4) replacement trees.

As per Tree Protection Bylaw No. 8057, based on the sizes of the on-site trees being removed (56 cm dbh), replacement trees shall be the following minimum sizes:

No. of Replacement Trees	Minimum Caliper of Deciduous Replacement Tree	or	Minimum Height of Coniferous Replacement Tree
2 6 cm			3.5 m
2 10 cm			5.5 m

To ensure that four (4) replacement trees are planted on-site at development stage, the applicant is required to submit a Landscaping Security in the amount of \$2,000 (\$500/tree) prior to final adoption of the rezoning bylaw. Securities will not be released until a landscaping inspection has been passed by City staff after construction and landscaping has been completed. The City may retain a portion of the security for a one year maintenance period from the date of the landscape inspection.

Affordable Housing Strategy

The City's Affordable Housing Strategy for single-family rezoning applications requires a secondary suite on 100% of new lots, or a secondary suite on 50% of new lots, plus a cash-in-lieu contribution of $2.00/ft^2$ of total buildable area towards the City's Affordable Housing Reserve Fund for the remaining 50% of new lots, or a 100% cash-in-lieu contribution if no secondary suites are provided.

The applicant proposes to provide a legal secondary suite on both of the two (2) lots proposed at the subject site. To ensure that the secondary suites are built to the satisfaction of the City in accordance with the City's Affordable Housing Strategy, the applicant is required to enter into a legal agreement registered on Title, stating that no final Building Permit inspection will be granted until the secondary suite is constructed to the satisfaction of the City in accordance with the BC Building Code and Richmond Zoning Bylaw 8500. Registration of this legal agreement is required prior to final adoption of the rezoning bylaw.

Site Servicing and Frontage Improvements

At Subdivision stage, the applicant is required to complete the following:

- Payment of current year's taxes and the costs associated with the completion of the required servicing works as described in Attachment 6.
- Payment to the City, in accordance with the Subdivision and Development Bylaw No. 8751, a \$36,319.60 cash-in-lieu contribution for the design and construction of frontage upgrades, including new concrete curb and gutter, concrete sidewalk, pavement widening, roadway lighting and boulevard landscape/trees.

Financial Impact or Economic Impact

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

Conclusion

The purpose of this rezoning application is to rezone the property at 8140/8160 Lundy Road from the "Two-Unit Dwellings (RD1)" zone to "Single Detached (RS2/C)" zone, to permit the property to be subdivided to create two single-family (2) lots.

This rezoning application complies with the land use designations and applicable policies contained within the OCP for the subject site.

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

On this basis, it is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 9664 be introduced and given first reading.

Steven De Sousa Planning Technician – Design (604-276-8529)

SDS:blg

Attachment 1: Location Map/Aerial Photo

Attachment 2: Proposed Subdivision Plan

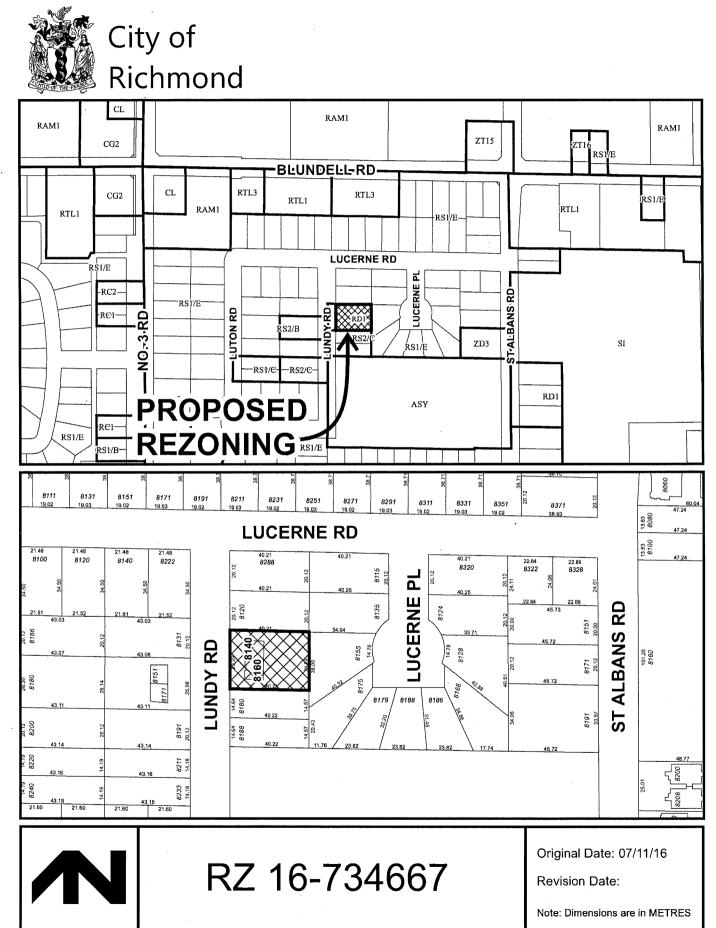
Attachment 3: Development Application Data Sheet

Attachment 4: Single-Family Lot Size Policy 5423

Attachment 5: Tree Management Plan

Attachment 6: Rezoning Considerations

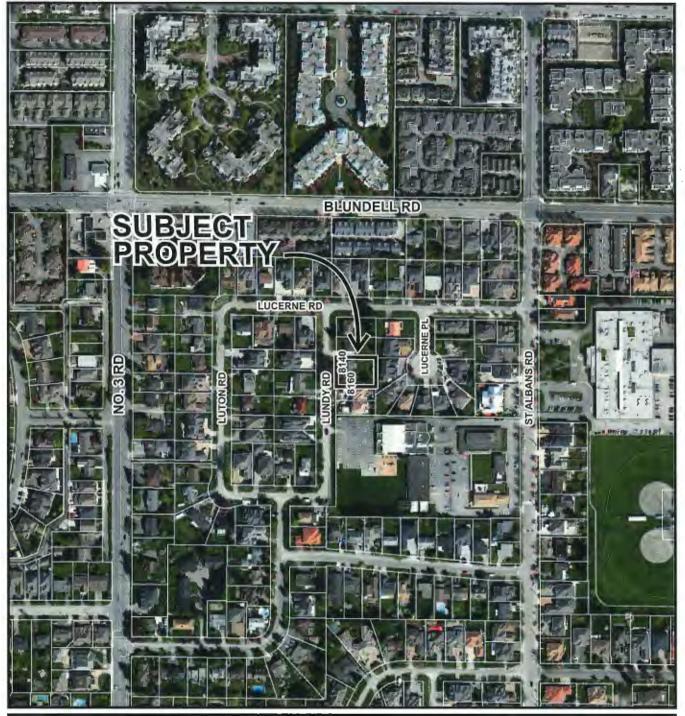
ATTACHMENT 1



CNCL - 224



City of Richmond





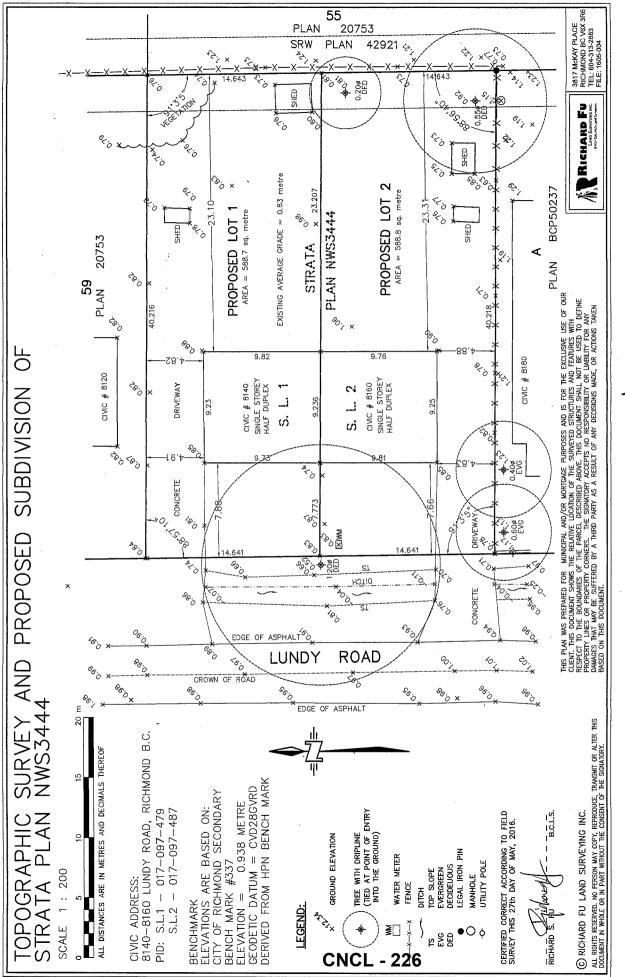
RZ 16-734667

Original Date: 07/11/16

Revision Date:

Note: Dimensions are in METRES

ATTACHMENT 2



.



Development Application Data Sheet

Development Applications Department

Attachment 3

RZ 16-734667

Address: 8140/8160 Lundy Road

Applicant: Xiufeng Zhang and Shufang Zhang

Planning Area(s): Broadmoor

	Existing	Proposed
Owner:	X. & S. Zhang	To be determined
Site Size:	1,177.5 m ² (12,674 ft ²)	Lot 1: 588.7 m ² (6,337 ft ²) Lot 2: 588.8 m ² (6,337 ft ²)
Land Uses:	Single-family residential	No change
OCP Designation:	Neighbourhood Residential	Complies
Lot Size Policy Designation:	Single Detached (RS2/B) or Single Detached (RS2/C)	Complies
Zoning:	Two-Unit Dwellings (RD1)	Single Detached (RS2/C)

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.55 for 464.5 m ² of Lot Area + 0.3 for remainder	Max. 0.55 for 464.5 m ² of Lot Area + 0.3 for remainder	None Permitted
Buildable Floor Area:*	Max. 292.7 m² (3,150 ft²)	Max. 292.7 m² (3,150 ft²)	None Permitted
Lot Coverage:	Building: Max. 45% Non-porous: Max. 70% Landscaping: Max. 25%	Building: Max. 45% Non-porous: Max. 70% Landscaping: Max. 25%	None
Lot Size:	360 m²	588 m ²	None
Lot Dimensions:	Width: 13.5 m Depth: 24.0 m	Width: 14.6 m Depth: 40.2 m	None
Setbacks:	Front: Min. 6 m Rear: Min. 6 m Interior Side: Min. 1.2 m	Front: Min. 6 m Rear: Min. 6 m Interior Side: Min. 1.2 m	None
Height:	Max. 2 ½ storeys	Max. 2 ½ storeys	None

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

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

ATTACHMENT 4



City of Richmond

Policy Manual

Page 1 of 2	Adopted by Council: November 20, 1989	POLICY 5423
	Amended by Council: November 17 th , 2003	
	Amended by Council: March 15 th , 2004	
File Ref: 4045-00	SINGLE-FAMILY LOT SIZE POLICY IN QUARTER-SEC	TION 21-4-6

POLICY 5423:

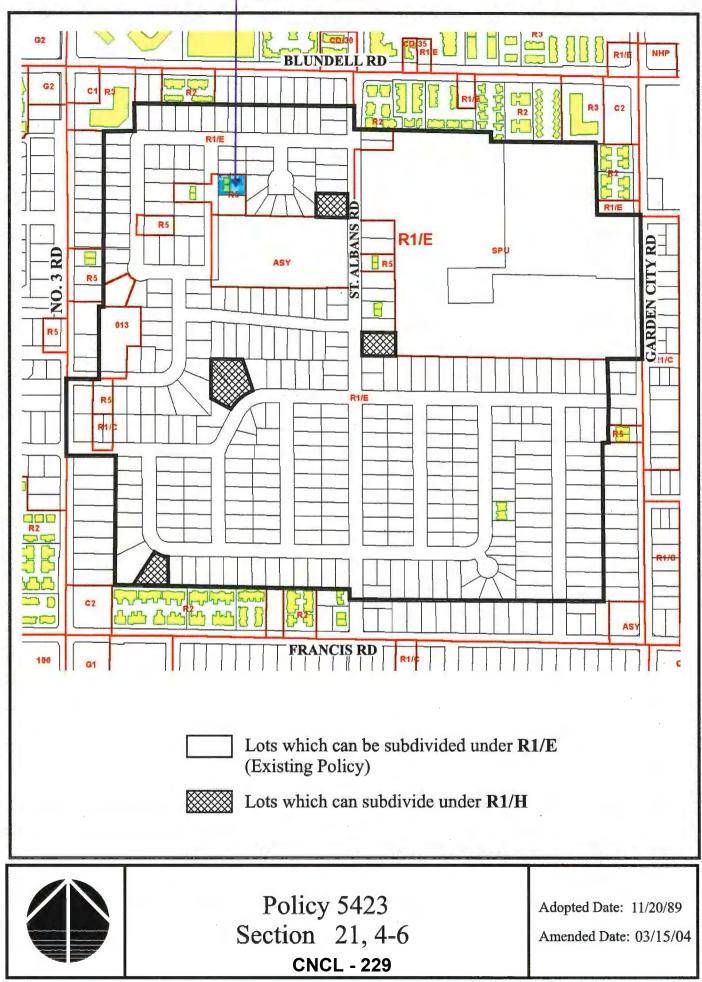
The following policy establishes lot sizes within the area generally bounded by **Blundell Road**, **No. 3 Road**, **Francis Road and Garden City Road** (in a portion of Section 21-4-6):

That properties within the area generally bounded by Blundell Road, No. 3 Road, Francis Road and Garden City Road, in a portion of Section 21-4-6, be permitted to subdivide in accordance with the provisions of Single-Family Housing District, Subdivision Area E (R1/E) in Zoning and Development Bylaw 5300, with the exception that:

- a) properties with duplexes be permitted to subdivide into two equal halves, provided that each lot created meets the requirements of the Single-Family Housing District (R1/B) or (R1/C).
- b) five properties highlighted on the map be permitted to subdivide in accordance with the provisions of Single-Family Housing District, Subdivision Area H (R1/H) in Zoning and Development Bylaw 5300.

This policy, as shown on the accompanying plan, is to 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.

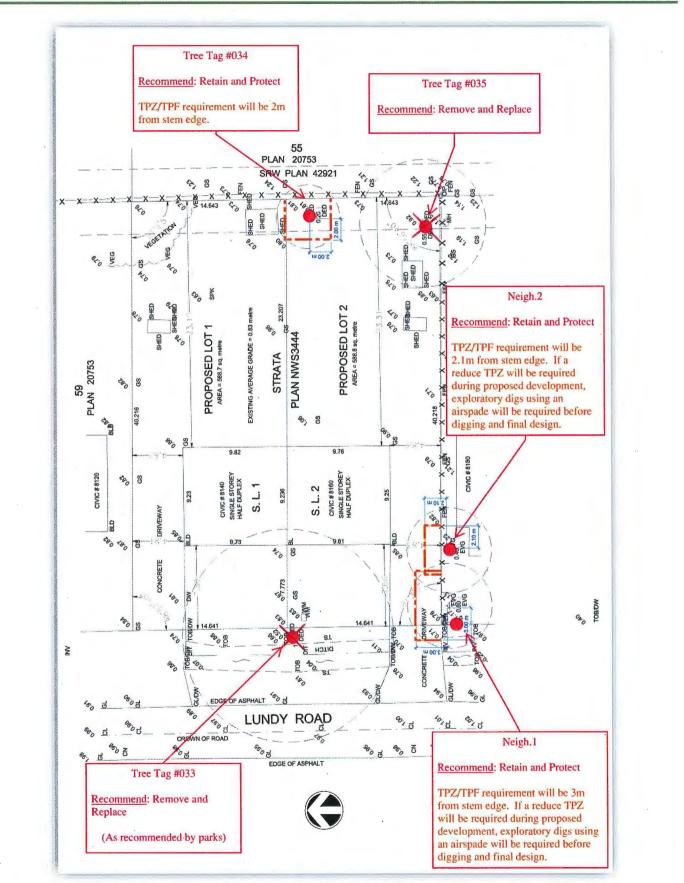
- SUBJECT PROPERTY



ATTACHMENT 5

Defined Treescapes: Proposed Re-zoning / Sub-Development 8140/8160 Lundy Rd, Richmond, BC

Site Plan (Mark up)



CNCL - 230

6

ATTACHMENT 6



Rezoning Considerations

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

Address: 8140/8160 Lundy Road

File No.: RZ 16-734667

Coniferous

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9664, the developer is required to complete the following:

1. Submission of a Landscape Security in the amount of \$2,000 (\$500/tree) to ensure that a total of four (4) replacement trees (one (1) in the front yard and one (1) in the rear yard of each lot) are planted and maintained on the proposed lots with the following minimum sizes:

No. of Replacement Trees	Minimum Caliper of Deciduous Replacement Tree	or	Minimum Height of Replacement
2	6 cm		3.5 m
2	10 cm		5.5 m

The security will not be released until a landscaping inspection is passed by City staff. The City may retain a portion of the security for a one-year maintenance period.

- 2. Submission of a Contract entered into between the applicant and a Certified Arborist for supervision of any on-site works conducted within the tree protection zone of the trees to be retained. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the Arborist to submit a post-construction assessment report to the City for review.
- 3. Submission of a Tree Survival Security to the City in the amount of \$5,000 for the one (1) on-site tree to be retained.
- 4. City's acceptance of the applicant's voluntary contribution of \$1,300 for the removal of the one (1) City-owned tree; in order for the City to plant two (2) trees at or near the developments site.
- 5. Registration of a flood indemnity covenant on Title.
- 6. Registration of a legal agreement on Title to ensure that no final Building Permit inspection is granted until a secondary suite is constructed on two (2) of the two (2) future lots, to the satisfaction of the City in accordance with the BC Building Code and the City's Zoning Bylaw.
- 7. Discharge of the existing covenant registered on Title of the subject property (i.e. AE6888); which restricts the use of the subject property to a duplex.

At Demolition Permit* stage, the developer is required to complete the following:

1. Installation of tree protection fencing around all trees to be retained. Tree protection fencing must be installed to City standard in accordance with the City's Tree Protection Information Bulletin TREE-03 prior to any works being conducted on-site, and must remain in place until construction and landscaping on-site is completed.

At Subdivision* and Building Permit* stage, the developer must complete the following requirements:

- 1. Cancellation of existing Strata Plan (NWS3444).
- 2. The Developer is required to pay, in keeping with the Subdivision and Development Bylaw No. 8751, a \$36,319.60 cash-in-lieu contribution for the design and construction of frontage upgrades as set out below:

Concrete Curb and Gutter (EP.0641)	\$5,858.00
Concrete Sidewalk (EP.0642)	\$8,494.10
Pavement Widening (EP.0643)	\$10,251.50
Roadway Lighting (EP.0644)	\$3,221.90
Boulevard Landscape/Trees (EP.0647)	\$8,494.10

3. Payment of current year's taxes and the costs associated with the completion of the required servicing works and frontage improvements.



Initial:

4. The following servicing works and off-site improvements may be completed through either: a) a Servicing Agreement* entered into by the applicant to design and construct the works to the satisfaction of the Director of Engineering; or b) a cash contribution based on a City cost estimate for the City to manage the design and construction of the works:

Water Works:

- Using the OCP Model, there is 335 L/s of water available at a 20 psi residual at the Lundy Road frontage. Based on your proposed development, your site requires a minimum fire flow of 95 L/s.
- The Developer is required to:
 - Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm the development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage Building designs.
 - Retain the 2 existing 25 mm water service connections for the development site.

Storm Sewer Works:

- The Developer is required to:
 - Infill the existing ditch and install a new 600 mm storm sewer along the entire lot's frontage.
 - Install two (2) new storm service connections and inspection chambers at the northwest and southwest corners of the lots.
- At Developer's cost, the City is to:
- Perform all tie-ins of proposed works to existing City infrastructure.

Sanitary Sewer Works:

•

- The Developer is required to:
 - Not start on-site building construction prior to rear yard sanitary works.
- At Developer's cost, the City is to:
 - Install a new sanitary service connection at the adjoining property line of the two (2) newly subdivided lots, complete with inspection chamber and dual service leads.
 - Cut and cap the existing sanitary lead at the northeast corner of the subject site.

Frontage Improvements:

- The Developer is required to:
 - Coordinate with BC Hydro, Telus and other private communication service providers.
 - When relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - To determine if above ground structures are required and coordinate their locations (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc.). These should be located on-site.
 - Complete other frontage improvements as per Transportation's requirements.

General Items:

- a. The Developer is required to:
 - Enter into, if required, additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering, including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other
 - activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- 5. If applicable, submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
- 6. If applicable, payment of latecomer agreement charges associated with eligible latecomer works.
- 7. 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

CNCL - 232

Initial:

fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

Note:

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

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

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

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

[Signed copy on file]

Signed

Date

Bylaw 9664



Richmond Zoning Bylaw 8500 Amendment Bylaw 9664 (RZ 16-734667) 8140/8160 Lundy Road

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

1. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning Bylaw 8500, is amended by repealing the existing zoning designation of the following area and by designating it **"SINGLE DETACHED (RS2/C)"**.

P.I.D. 017-097-479

Strata Lot 1 Section 21 Block 4 North Range 6 West New Westminster District Strata Plan NWS3444 together with an interest in the Common Property in proportion to the unit entitlement of the Strata Lot as shown on Form 1

P.I.D. 017-097-487

Strata Lot 2 Section 21 Block 4 North Range 6 West New Westminster District Strata Plan NWS3444 together with an interest in the Common Property in proportion to the unit entitlement of the Strata Lot as shown on Form 1

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9664".

MAYOR

CORPORATE OFFICER



Report to Committee

То:	Planning Committee	Date:	January 9, 2017
From:	Wayne Craig Director, Development	File:	RZ 15-700431
Re:	Application by Urban Era Builders & Developers 9800 Williams Road from Single Detached (RS1/C (RS1/E) to Town Housing (ZT81) – Williams Road	C) and Si	

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9667 to create the "Town Housing (ZT81) – Williams Road" Zone, and to rezone 9700, 9720 and 9800 Williams Road from "Single Detached (RS1/C)" and "Single Detached (RS1/E)" to "Town Housing (ZT81) – Williams Road", be introduced and given first reading.

ß ast Wayne Craig

Director, Development

WC:hc

Att: 5

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Affordable Housing		pe Ever	

Staff Report

Origin

Urban Era Builders & Developers Ltd. has applied to the City of Richmond for permission to rezone 9700, 9720, 9800 Williams Road (Attachment 1) from "Single Detached (RS1/C)" and "Single Detached (RS1/E)" to a site-specific zone in order to develop a 18-unit townhouse project with access from Williams Road. The development would include three (3) affordable housing units that combined have not less than 15% of the total floor area. The subject site consists of three (3) lots each of which currently contains one (1) single-family dwelling that will be demolished.

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (Attachment 2).

Surrounding Development

Existing development immediately surrounding the subject site includes the following:

- To the North are single-family dwellings on lots zoned "Single Detached (RS1/K)", "Single Detached (RS1/E)" and "Compact Single Detached (RC1)" along Williams Road.
- To the South are single-family dwellings on lots zoned "Single Detached (RS1/E)" along Swansea Drive with north-south access along a walkway that connects to Williams Road.
- To the East are single-family dwellings on lots zoned "Single Detached (RS1/E)", which front Williams Road.
- To the West are single-family dwellings on lots zoned "Single Detached (RS1/E)", which front Williams Road. The properties at 9620, 9640, 9660 and 9680 Williams Road are subject to an active rezoning application (RZ 15-715406) for townhouses. A staff report will be presented to Planning Committee for this project upon completion of staff review.

Related Policies & Studies

Official Community Plan (OCP)

The OCP Bylaw 9000 land use designation for the subject site is "Neighbourhood Residential" where single-family, two-family, and multiple family housing are the principal uses. This development proposal is consistent with the land use designation.

Arterial Road Policy

On December 19, 2016, Council adopted the amended OCP Arterial Road Policy. Under the amended policy the subject site is designated for townhouse use in the new Arterial Road Development Map.

The proposal is further consistent with the Arterial Road Policy for the siting of townhouse developments as follows:

- The townhouse development would have a frontage of greater than 50 m along a minor arterial road (i.e. Williams Road);
- Shared vehicle access to the east of the subject site for future townhouse developments will be secured through a legal agreement registered on title prior to rezoning approval;
- Vehicle access points to the townhouse development would be located at a distance of more than 50 m from the intersection of a minor arterial road (Williams Road) with a major arterial road (No. 4 Road).

The amended Arterial Road Policy allows additional density along arterial roads to be considered subject to provision of Low End Market Rental (LEMR) housing units, as per the below conditions:

- Bonus density is used to provide built LEMR units secured through a Housing Agreement;
- Built LEMR units comply with the City's Affordable Housing Strategy with respect to the housing unit sizes, tenant eligibility criteria and maximum monthly rental rates; and
- The overall design of the development complies with the Development Permit Area design guidelines for arterial road townhouse developments.

The proposed development under this application is generally consistent with this new policy.

Floodplain Management Implementation Strategy

The proposed development must meet the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204. Registration of a flood indemnity covenant on title is required prior to adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9667.

Public Consultation

A rezoning sign is installed on the subject property. No comments have been received to date as a result of the sign on the property.

Should the Planning Committee endorse this application and Council grant 1st reading to Richmond Zoning Bylaw 8500, Amendment Bylaw 9667, it will be forwarded to a Public Hearing, where area residents and other interested parties will have the opportunity to comment. Public notification for the Public Hearing will occur as per *Local Government Act* requirements.

Analysis

Density, Form, and Affordable Housing

The Arterial Road Policy specifies a typical density of 0.60 FAR (Floor Area Ratio) for townhouse developments along arterial roads, subject to the applicant providing a cash-in-lieu contributions to the City's Affordable Housing Reserve Fund in the amount of \$4.00 per buildable square foot, prior to Council approval of any rezoning application.

This policy further provides for the consideration of additional density for townhouse development if the proposal includes built affordable housing units, secured by the City's standard Housing Agreement. The applicant is proposing medium density townhouses with 0.73 FAR including three (3) affordable housing units with a combined floor area of not less than 15% of the total floor area. These units would be secured through a restrictive covenant and Housing Agreement registered on property title prior to Council approval of the rezoning.

Conceptual development plans are contained in Attachment 3. The three (3) affordable housing units are proposed to be located in the easterly building fronting Williams Road in close proximity to the outdoor amenity space. Each unit would also have a private front yard.

Consistent with the OCP policies for a variety of housing, the proposed affordable housing units would be ground-oriented in design, and family-oriented in type and size as detailed below:

Number of Units	Unit Type	Minimum Unit Area as per Affordable Housing Strategy	Proposed Unit Size
3	3 Bdrm	91 m ² (980 ft ²)	120.87 m ² (1301 ft ²)
Total: 3			Total: 362.60 m ² (3,903 ft ²) (approx. 15% of total floor area proposed)

Staff recommend that Council support this proposal as the community benefit is significant and the proposed form and massing of the triplex buildings is generally consistent with the Arterial Road Policy, as detailed below. Accordingly, a new site-specific zone "Town Housing (RT81) – Williams Road" is proposed to accommodate this townhouse development with a maximum base density of 0.60 FAR, and bonus density of 0.13 FAR, up to a total maximum of 0.73 FAR. The bonus density is conditional upon the provision of three (3) affordable housing units with a combined floor area of not less than 15% of total floor area. These units would be secured through a restrictive covenant and a Housing Agreement to be registered on title, prior to rezoning approval.

The ZT81 zone also reflects the applicant's proposal to allow:

- A maximum lot coverage for buildings of 44%;
- A maximum projection of 0.52 m into the front yard setback for columns only; and
- A minimum 4.5 m front yard setback in favour of a minimum 6.0 m rear yard setback for a building above first storey to transition to existing single detached housing to the south.

Site Planning, Access, and Parking

The subject site of consolidated lots is $3,154 \text{ m}^2$ (33, 949 ft²) in total area, located on the south side of Williams Road, between Severn Drive and No. 4 Road, in the Broadmoor neighbourhood.

The proposed site plan has a total of 18 units. Seven (7) units in one (1) building fronting Williams Road and six (6) units in two (2) triplex buildings fronting the walkway to the west. Two (2) units in one (1) duplex front the internal north/south drive aisle, but are sited near to the outdoor amenity space, and three (3) units in one (1) triplex front the internal east/west drive aisle but each have private rear yard patios.

The buildings at the rear have a setback of 4.52 m at ground level, and 6.0 m above the first storey. As this application was in-stream prior to Council adoption of the new Arterial Road Policy for townhouses, this does not conform with the new guideline for not more than 50% of the first storey to have a rear yard setback of less than 6 m. However, it is consistent with the intent of the guidelines and the policy in place at the date of application to ensure a visual transition to single detached housing to the south, as envisioned in the Arterial Road design guidelines for townhouse development.

Outdoor amenity space is well-sited for direct access for pedestrians from the walkway to the west. The proposal also includes a Statutory Right-of-Way for public passage along the west property line of the subject site to accommodate expanded sidewalk and grass boulevard improvements to the north/south walkway from Williams Road to Swansea Drive.

The point of vehicle access is a new driveway entrance from Williams Road and each townhouse garage door entry is sited along the internal east-west or north/south drive aisles. A Statutory Right-of-Way for public passage is required to be registered on title, prior to Council approval of the proposed rezoning, for access to future development adjacent to the east.

As per Richmond Zoning Bylaw 8500, the proposal requires a total of 37 spaces including 33 spaces for resident parking (30 for strata townhouses, 3 for affordable housing units) and four (4) spaces for visitor parking. The proposal exceeds this amount with a total of 36 spaces for residents of which 18 spaces are tandem in arrangement. Another 18 resident spaces are side-by-side stalls and include nine (9) standard spaces and nine (9) small sized spaces. Four (4) visitor spaces are proposed in total, including one (1) for disabled parking. Registration of a legal agreement that prohibits conversion of tandem parking spaces into habitable area is included in the rezoning conditions (Attachment 4).

The plan also includes a total of 27 resident bicycle parking spaces (Class 1) in individual garages and a visitor bicycle rack (Class 2) with four (4) spaces located within the outdoor amenity space.

Amenity Space

Consistent with the OCP and Council Policy 5041, the applicant would provide a contribution in the amount of \$18,000 (\$1,000/unit), prior to Council approval of Richmond Zoning Bylaw Amendment Bylaw 9667, in-lieu of the provision of an on-site indoor amenity space.

Outdoor amenity space is proposed, and would be located on the west side of the subject site between the two (2) triplex buildings. In the preliminary plan, the proposed outdoor amenity space is 109.9 m^2 exceeding the OCP requirement of 6 m^2 per unit (108 m^2). Staff will continue to work with the applicant at the Development Permit application review stage to ensure that the design of this outdoor amenity space does comply with applicable design guidelines in the OCP.

Tree Retention and Replacement

The applicant has submitted a Certified Arborist Report (Attachment 5), which identifies on-site and off-site tree species, assesses their condition and provides recommendations on tree retention and removal in relation to the proposed development. The Report assesses nine (9) trees on the subject site, six (6) trees on adjacent properties (9931 and 9951 Swansea Drive), two (2) trees on a shared property line (9800 Williams Road and 9951 Swansea Drive), and one (1) hedgerow on an adjacent property (9931 Swansea Drive).

The City's Tree Preservation Coordinator and Parks Department Arborist have reviewed the Arborist Report, conducted visual tree assessments and provide the following comments:

- Six (6) trees (tags #A, #B, #C, #D, #E, #F) located on adjacent properties (9931 and 9951 Swansea Drive) and one (1) hedgerow located on an adjacent property (9931 Swansea Drive) must be retained and protected.
- Two (2) trees (tags #12, #133) located on a shared property line between the subject site (9800 Williams Road) and an adjacent property (9951 Swansea Drive) should be removed due to existing poor condition, subject to written consent of the adjacent property owner, prior to issuance of the Development Permit. Should consent not achieved, the trees must be retained.
- Nine (9) trees (tags #135, #136, #137, #138, #139, #140, #141, #142, #143) on the subject site should be removed due to existing poor condition.

Tree Retention

Six (6) trees (tags #A, #B, #C, #D, #E, #F) on the subject site must be retained and protected as per the Tree Retention and Removal Plan in the Certified Arborist Report.

To ensure the protection of these trees, the applicant must complete the following items prior to the final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9667:

• Submit a contract with a Certified Arborist for supervision of all works conducted within close proximity to the tree protection zone. The contract must include the scope of work, including the number of monitoring inspections at specified stages of construction, and specific measures to ensure tree protection, and a provision for the Arborist to submit a post-construction impact assessment to the City for Review.

Additionally, two trees (tags #12, #133) on shared property lines must be retained and protected unless the adjacent property owner provides written consent to remove them prior to the issuance of the Development Permit.

Prior to the demolition of the existing buildings on the subject site, the applicant must install tree protection fencing to City standards in accordance with the City's Tree Protection Information Bulletin TREE-03 prior to any works being conducted on site. Protection fencing must remain in place until such time as the construction and on-site landscaping works are completed.

Tree Replacement

The Arborist report recommends the removal of nine (9) trees from the subject site and two (2) trees located on a shared property line between the subject site (9800 Williams Road) and an adjacent property (9951 Swansea Drive). City staff have reviewed the proposal this report and concur with the recommendations. The OCP tree replacement ratio of 2:1 requires that 22 replacement trees be planted and retained on the site. As per the preliminary Landscape Plan, the applicant is committed to plant a total of 22 replacement trees including one (1) in the front yard of each townhouse unit fronting Williams Road and fronting the walkway to the west and two (2) trees in the outdoor amenity area.

As part of the future Development Permit application, the applicant is required to submit a final proposed Landscape Plan. A Registered Landscape Architect must prepare the Landscape Plan, and the Cost Estimate for the works provided, and 10% contingency, for fencing, hard surfaces, trees, soft landscaping and installation, and the applicant must provide a Landscape Security for 100% of the Cost Estimate. The Landscape Plan, Cost Estimate and Landscape Security must be submitted prior to issuance of the Development Permit.

Public Art

In response to the City's Public Art Program (Policy 8703), the applicant proposes a voluntary contribution to the City's Public Art Reserve Fund at a rate of \$0.79 per buildable square foot (not including the affordable housing units) and a total contribution in the amount of \$16,491.

Townhouse Energy Efficiency and Renewable Energy

Consistent with the OCP energy policy for townhouse rezoning applications, the applicant has committed to design and build each townhouse unit so that it scores 82 or higher on the EnerGuide scale, and so that all units will meet the BC Solar Hot Water Ready Regulations.

Prior to adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9667, the applicant is required to meet the complete the following as rezoning conditions:

- Submit a Building Energy Report prepared by a Certified Energy Advisor that confirms the proposed design and construction will achieve EnerGuide 82, or higher, based on the energy performance of at least one unit built to building code minimum requirements including the unit with the poorest energy performance of all the proposed units; and
- Registration on title of a restrictive covenant to secure the design and construction of all townhouse units in compliance with the Building Energy Report and to comply with BC Solar Hot Water Ready Regulations.

Site Servicing and Frontage Improvements

Prior to rezoning, the applicant must enter into a Servicing Agreement for the design and construction of servicing connections, upgrades, and frontage improvements as outlined in the Rezoning Conditions (Attachment 4). These works include, but are not limited to: review of street lighting levels along frontages of the development site for any additional street lighting requirements or upgrades: widening and upgrading of the existing north-south walkway along the entire west property line; removal of the existing driveways from Williams Road; and installation of new sidewalk, curb and gutter on Williams Road.

Development Permit Application Considerations

A Development Permit application is required for the proposal to ensure consistence with the applicable OCP policies and design guidelines for townhouses.

Further refinements to architectural, landscape and urban design will be made as part of the Development Permit application review process including, but not limited to, the following:

- A detailed design of the outdoor amenity space.
- Perimeter fencing along Williams Road and the pedestrian path to the west.
- A detailed landscape design including trees, shrubs and plantings and hard surface treatments.
- Architectural expression and proposed colour palette and exterior building materials.
- Features that incorporate Crime Prevention through Environmental Design (CPTED).

Interior plans must demonstrate that all of the relevant accessibility features are incorporated into the proposed Convertible Unit design and that aging-in-place (i.e. adaptable unit) features can be incorporated into all units.

Further items may be identified as part of the Development Permit application review process, which must proceed to an acceptable stage prior to Council adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9667.

Financial Impact

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

Conclusion

This application is to rezone 9700, 9720 and 9800 Williams Road from "Single Detached (RS1/C)" Zone and "Single Detached (RS1/E)" Zone to a new site-specific zone, "Town Housing (ZT81) – Williams Road", to permit the development of 18 townhouses including three (3) affordable housing units.

The townhouse proposal is consistent with the OCP land use designation and is generally consistent with the OCP Arterial Road Policy for townhouses. The conceptual development plans attached are generally consistent with all applicable OCP design guidelines, and would be further refined in the Development Permit application review process.

The application includes the significant benefit of three (3) three-bedroom affordable housing units, which will be secured through a restrictive covenant and a Housing Agreement at the Development Permit stage.

It is recommended that Richmond Zoning Bylaw 8500, Amendment Bylaw 9667 be introduced and given first reading.

Helen Cain_

Helen Cain Planner 2, Heritage, Policy Planning

HC:cas

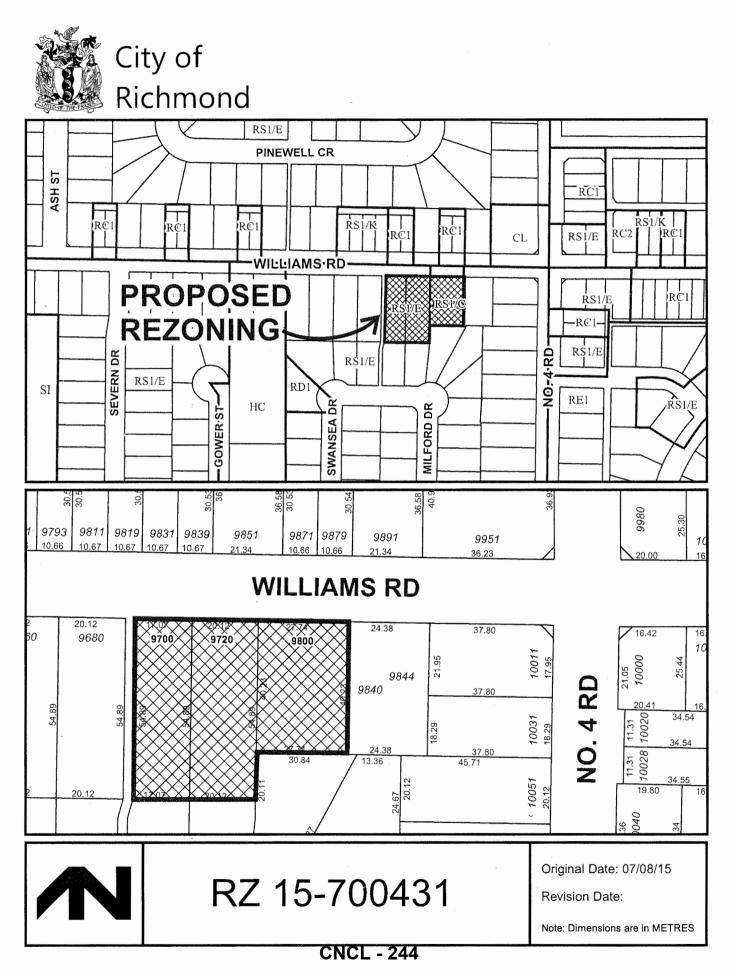
Attachment 1: Location Map/Aerial Photo

Attachment 2: Development Application Data Sheet

Attachment 3: Conceptual Development Plans

Attachment 4: Rezoning Considerations

Attachment 5: Proposed Tree Management Plan





City of Richmond



RZ 15-700431

Original Date: 07/08/15

Revision Date:

Note: Dimensions are in METRES



Development Application Data Sheet

Development Applications Department

RZ 15-700431

Attachment 2

Address: 9700, 9720 and 9800 Williams Road

Applicant: Urban Era Builders & Developers Inc.

Planning Area(s): Broadmoor

	Existing	Proposed
Owner:	Urban Era Builders & Development, Inc.	No change
Site Size (m ²):	3,154 m ² (33,949 ft ²)	3,154 m ² (33,949 ft ²)
Land Uses:	Single-detached dwelling	18 townhouse units
OCP Designation:	Neighbourhood Residential	No change
Zoning:	Single Detached (RS1/E, RS1/C)	Town Housing (ZT81) – Williams Road
Number of Units:	3	18
Other Designations:	The Arterial Road Policy for location of new townhouses	Consistent with the Arterial Road Policy.

On Future Subdivided Lots	Bylaw Re	quirement	Prop	osed	Variance
Floor Area Ratio:	Max.	0.73	0.	0.73	
Lot Coverage – Buildings:	Max.	44%	44	1%	none
Lot Coverage – Buildings, Structures, and Non-Porous Surfaces:	Max.	65%	58.6%		none
Lot Coverage – Live Plant Material:	Min. 25%		27.8 %		none
Lot Size (min. dimensions):	N/A		N/A		none
Lot Width (min. dimension):	40 m		65 m		none
Setback – Front Yard (m):	Min. 4.5 m		4.52 m		none
Setback – Rear Yard (m):	Min. 3.0 m		4.50 m for 1 st storey 6.00 m above 1 st storey		none
Setback – Side Yard (m):	Min. 3.0 m		West - 4.01 m East - 3.14 m		none
Height (m):	12 m		11.98 m		none
On-Site Vehicle Parking Spaces – Regular (R):	Market housing	2 (R)/unit	Market 30 spaces		none

January 9, 2017

On Future Subdivided Lots	Bylaw Ree	quirement	Proposed		Variance
	Affordable housing	1 (R)/unit	Affordable housing	6 spaces (1 R x 3 + 3 surplus)	
On-Site Vehicle Parking Spaces – Regular (V):	0.2 (V) per unit = 4 spaces		4 spaces		none
On-Site Vehicle Parking Spaces – 7	otal: 37 spaces		40 spaces		none
On-Site Vehicle Parking Spaces – Handicapped:	0.02 of required visitor spaces (4) = 1 space		1 space		none
Tandem Parking Spaces:	Permitted (max 50%) = 18 spaces		18 spaces		none
Small Car Parking Spaces:	Permitted (max 50%) = 9 spaces		9 spaces		none
Amenity Space – Indoor:	Min. 50 m ² or Cash-in-lieu		Cash-in-lieu		none
Amenity Space – Outdoor:	Min. 6 m ² per unit (108 m ²)		109.9 m ² (1,183 ft ²)		none

CNCL - 247

REZONING FOR PROPOSED TOWNHOUSE AT 9700, 9720, 9800 WILLIAMS ROAD, RICHMOND, BC

 (A) CIVIC ADDRESS: (B) LEGAL DESCRIPTION: (C) LOT AREA: (D) ZONING USE 	9700, 9720, 9800 WILLAMS ROAD, RICHANOND, BC LOT 8 & LOT 9 PLAN 11454, LOT 170 PLAN 3631 3154 SM (33,04857) CURRENT, RSJ/F, (PROPOSED: SITE SPECIFIC)	9700, 9720, 9800 WILIAMS ROAD, RICHAMOND, BC 105 & LOT 9 PLMN 11454, LOT 170 PLMN 36305 ALL SECTION 34, BLOCK 4 NORTH, RANGE 6 WEST NWD 3154 SK (323,94857), GROPOSED: SITE SPECIFIC)	4 NORTH, RANGE 6 WEST NWD
	CURRENT ZONING (UNDER RS1 ZONING)	PROPOSED REZDNING (SITE SPECIFIC)	PROPOSED
(E) FLOOR AREA RATID	0.55 TO 454.5 SM 0.3 TD REST OF SITE AREA	0.73 TOTAL FLOOR AREA 0.73 X3154 SM = 2302 SM. (24.778 SF)	0.73 2302 SM (24,778 SF) FLDDR AREA 18 UNITS FUNCTIONAL 3 BEARTAL FUNCE FORE A1 1301 SO FT)
(F) NUMBER OF UNIT:	1 PER LOT	(10 0///ww)	TOTAL AFFORDABLE RENTAL ANEA: 3903 SQ. FT (15%) SEE DWG A5]
(c) BUILDING COVERAGE:	MAX - 45%	MAX - 40%	43.6% 14796 SQ. FT. (VARNACE REQ) TOTA. NON POROUS AREA. 19809 SG. FT. / 33949 SQ. FT = 56.6% UNF FLANT AREA: 9493 SQ. FT. / 33949 SQ. FT = 77.6% PENKARLE PARES. 4607 SG. FT. / 33949 SQ. FT = 13.6%
(H) BUILDING HEIGHT:(I) SETBACK:	MAX HEIGHT – 9M FRONTYARD – 6M SIDEYARD – 2M REARYARD – 6M	MAX MAN BULDING HEGHT - 12M FRONTARD FACING WILLIAMS - 4.5M ÉÁST AND WEST SIDEYARD - 3M REAR YARD - 4.5M	BULDING HEIGHT - 11.98M (39'4") FRONTYARD FACING WILLAMS - 4.52M (14'10") WEST SIDEYARD - 4.01M (13'2") EAST SIDEYARD - 3.14M (10'3") REAR YARD - 1/F: 4.52M (14'10") 2/F: 6.00M (19'7")
(J) OUTDOOR AMENITY		6.0 SM (64.58 SF) PER UNIT 6SM X18 = 108 SM (1183 SF)	109.95M (1183 SQ. FT.)
(c) PARKING: SITE 2 SITE HT MILLIAMS ROAD MILLIAMS ROAD	2 PER DWELLING UNIT	2 PER DWELLING UNITS X18 = 35 0.2 VISTICR PARKNUG / UNIT X18 = 4 VISTICR PARKNUG / UNIT X18 = 4 VISTICR BICYCLE 0.2 PER DWELLING UNIT X18=23 1.25 PER DWELLI	RESIDENTIAL PARKING: 9 EREULAR 9 SAALL 9 SAALL 9 TANDEM (18 REGULAR) (50%) 9 TANDEM (18 REGULAR) (50%) 3 REGULAR 3 REGULAR 8 DENTIAL 27 (NSIDE GARACE)

CNCL - 248







- / NTS

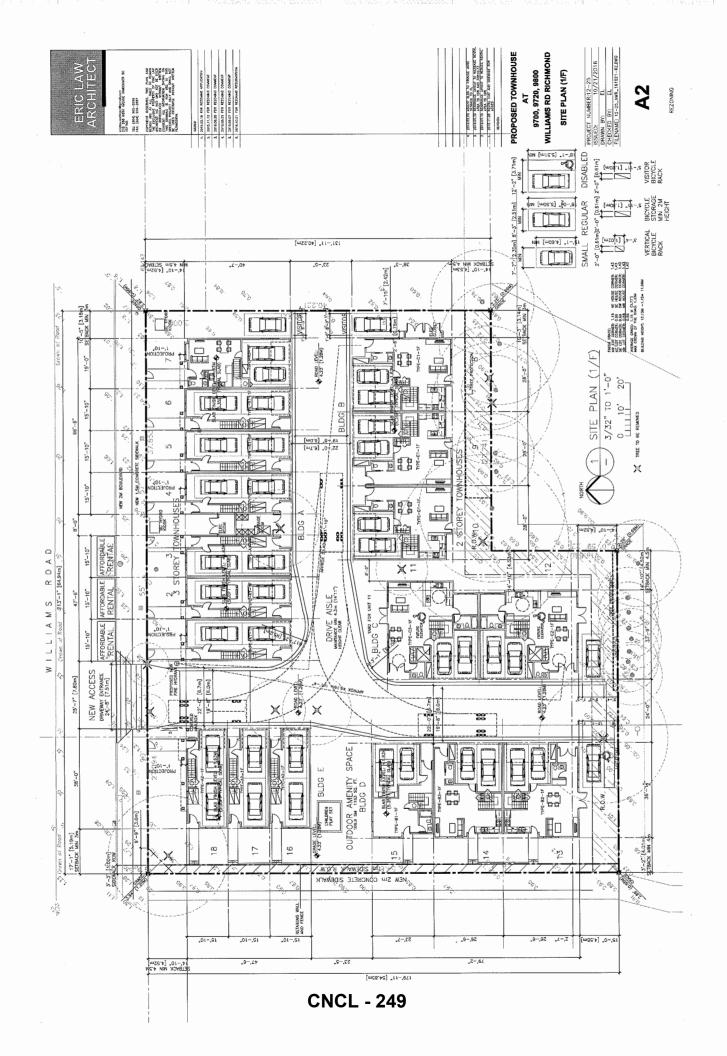
DEVELOPMENT SUMMARY

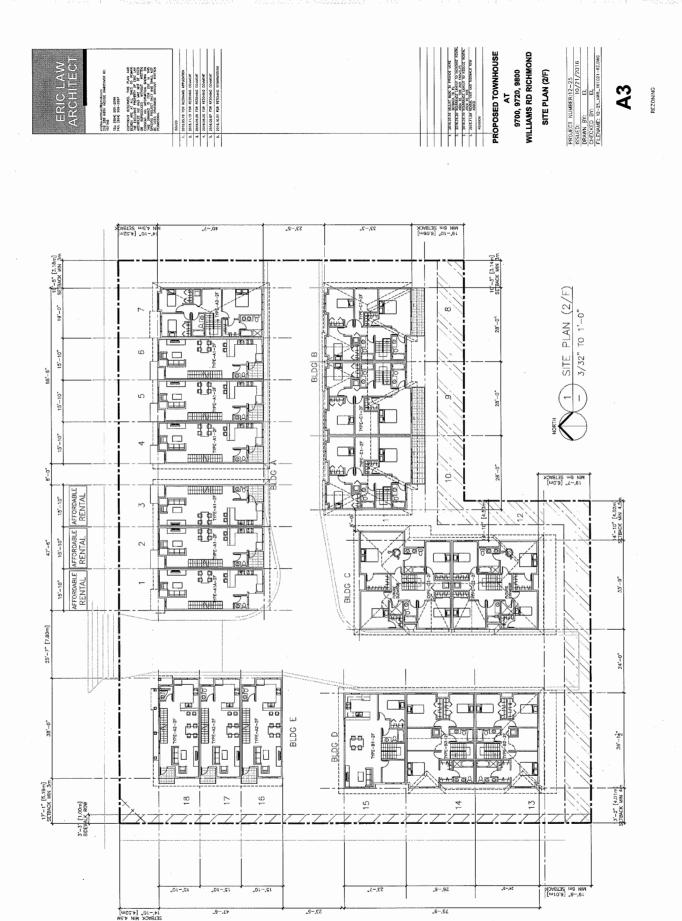
PROPOSED TOWNHOUSE

AT

and the state

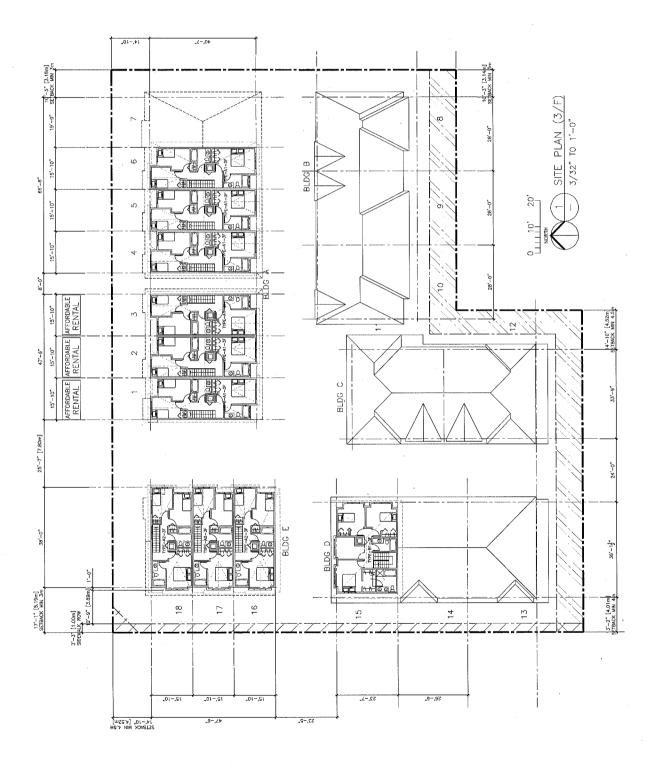
9700, 9720, 9800 WILLIAMS RD RICHMOND



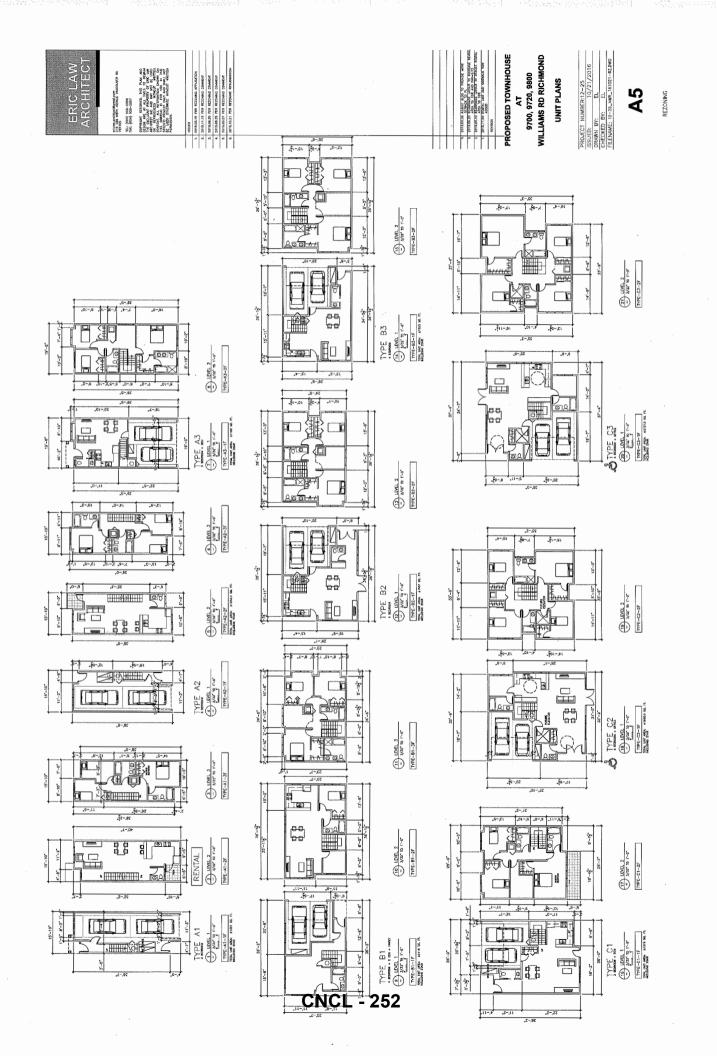


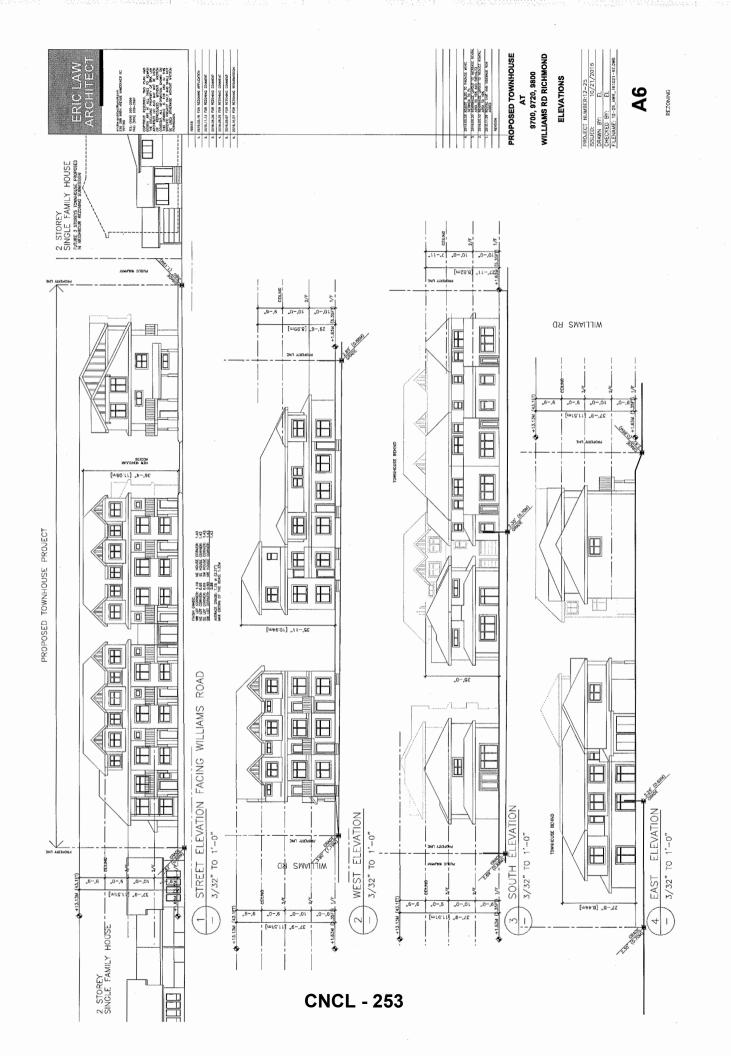
CNCL - 250

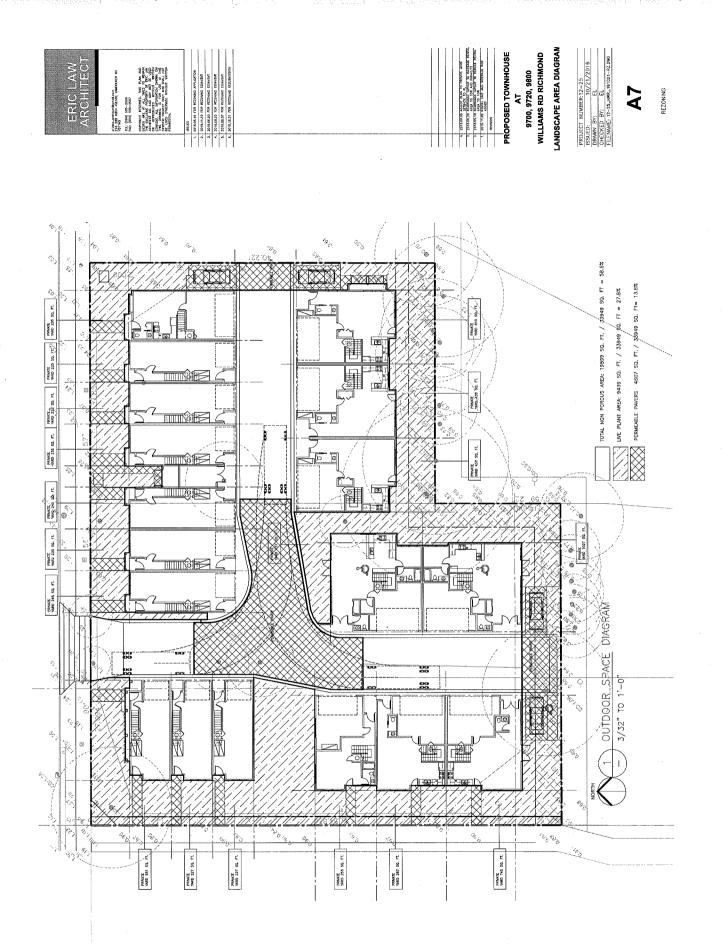




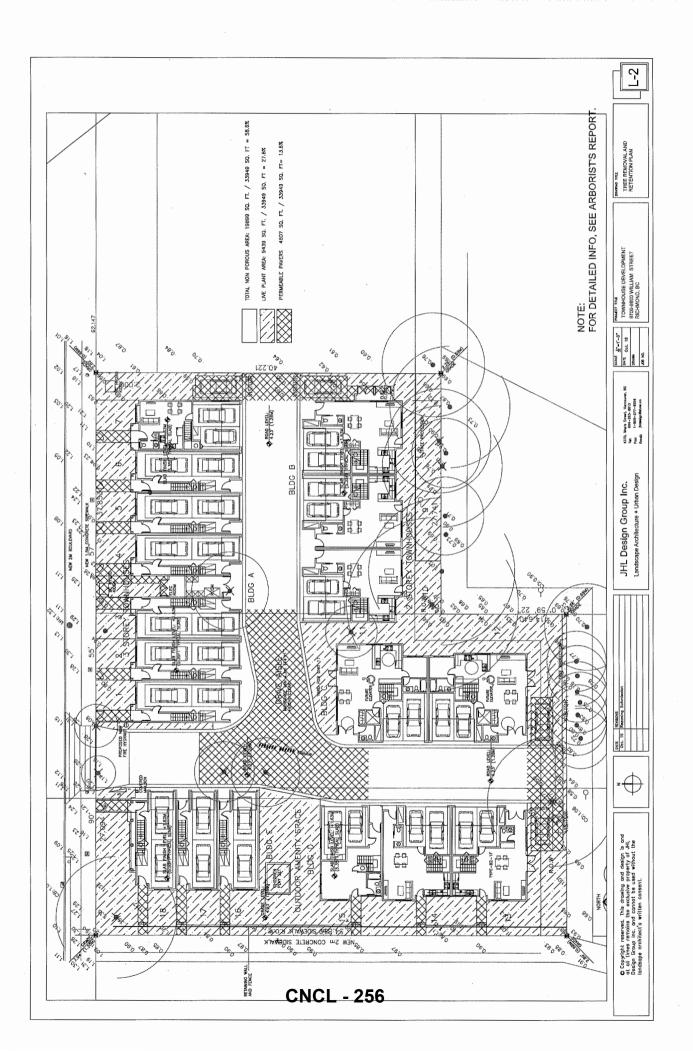
CNCL - 251

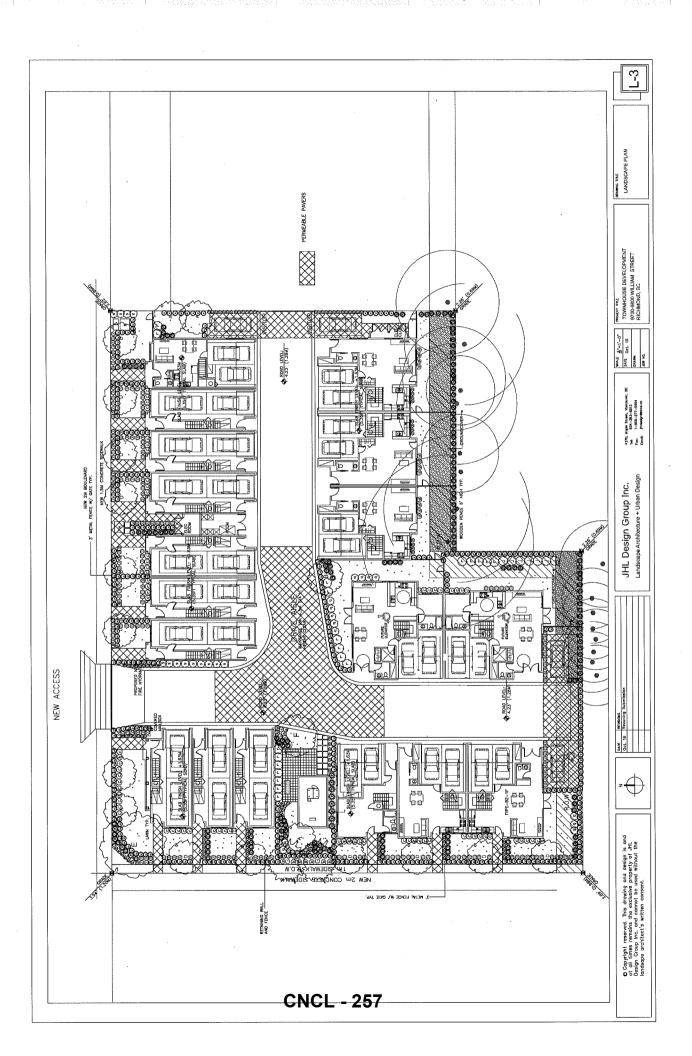






Spacing Spacing 35 brown 36 brown 37 brown 38 brown	Real The Present the Present the Present the Present the Proceeding Present the Proceeding Present The Proceeding Present The Proceeding Present The P
Common Name Size Common Name Size Red Flowening Daymood Sim sail 849 Windback for Himalyan Buch Kom sail 829 Windback Snowhell Zom sail 829 Mannes Snowhell Zom sail 829 Japanes Snowhell Zom sail 829 James Snowhell Zom sail 820 Montermanes Zom sail 820 James Snowhell Zom sail 820 Vindermanes Zom sail 200 Vinderme	Sroup Inc. on the sect wave the sect wave. It is the sector of the secto
PLANT LST Common Manue Cuannity Symbols Solatistat Hame Cuannity Symbols Solatistat Hame Amen Common Manue Cuannity Symbols Solatistat Hame Cuannity Symbols Solatistat Hame Cuannity Symbols Solatistat Hame Cannot Brand Symbols Cuannity Symbols Solatistat Eachthold Themes Cannot Brand Symbols Cannot Brand New Solatistat Cannot Brand Symbols Cannot Brand Symbols Cannot Brand Symbols Cannot Brand Symbols Cannot Brand Solatistat Hame Cannot Brand Solatistat Eachthold Themes Symbols Solatistat Eachthold Themes Display Cannot Symbols Display Solatistat Eachthold Themes Display Solatistat Eachthold Themes Display Solatistat Display Solatistat Display Solatistat Display Solatistat Display	JHL Design Group Inc. Landscape Architecture + Urban Design
PLANT LET Quantity Sympo- P P P P P P P P P P P P P P P P P P P	NATE ALL AND A
NOTES: ADDRES A	Copyright reserved. This drawing and design is and copyright reserved. This drawing properly of AL Dataget Group Inc. and connot be used without the basingher drakited's written consent.





ATTACHMENT 4



Rezoning Considerations

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

Address: 9700, 9720, 9800 Williams Road

File No.: RZ 15-700431

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9667, the applicant is required to complete the following:

- 1. Submission of a Contract entered into between the applicant and a Certified Arborist for supervision of any on-site works conducted within the tree protection zone of the trees to be retained. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections (at specified stages of construction), and a provision for the Arborist to submit a post-construction impact assessment report to the City for review.
- 2. City acceptance of the developer's offer to voluntarily contribute \$0.79 per buildable square foot (e.g. \$16,491) to the City's Public Art Reserve Fund.
- 3. City acceptance of the applicant's voluntary contribution in the amount of \$18,000 (\$1,000/unit) in-lieu of providing on-site indoor amenity space.
- 4. The granting of a 1 m wide x 55 m long Statutory Right-of-Way (SRW) for public right-of-passage along the west property line to accommodate widened sidewalk and grass boulevard on the east side of the existing City walkway.
- 5. The granting of a Statutory Right-of-Way (SRW) for public-right-of-passage over the entire north-south and east-west internal drive aisle to provide legal means of public/vehicular access to future developments located east of the subject site. The drive aisle is to be constructed by the developer and to be maintained by the strata.
- 6. Registration of a flood indemnity covenant on title.
- 8. Registration of a legal agreement on title prohibiting the conversion of the tandem parking area into habitable space.
- 9. Registration of a legal agreement on title identifying that the proposed townhouse development must be designed and constructed to meet or exceed EnerGuide 82 criteria for energy efficiency and that all units will meet the BC Solar Hot Water Ready Regulations.
- 10. Registration of the City's standard Housing Agreement to secure three (3) affordable housing units, the combined habitable floor area of which shall comprise not less than 15% of the subject development's total residential building area. Occupants of the affordable housing units subject to the Housing Agreement shall enjoy full and unlimited access to and use of the outdoor amenity space. The terms of the Housing Agreements shall indicate that they apply in perpetuity and provide for the following:

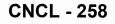
Unit Type	Number of Units	Minimum Unit Area	Maximum Monthly Unit Rent**	Total Maximum Household Income**
3 Bdrm	3	90 m ² (980 ft ²)	\$1,437	\$57,500 or less

** May be adjusted periodically as provided for under adopted City policy.

- 11. The submission and processing of a Development Permit* completed to a level deemed acceptable by the Director of Development.
- 12. Enter into a Servicing Agreement* for the design and construction of servicing connections/upgrades and frontage improvements. Works include, but may not be limited to the following:

Water Works

• Using the OCP Model, there is 675.0 L/s of water available at a 20 psi residual at the Williams Road frontage. Based on your proposed development, your site requires a minimum fire flow of 220.0 L/s. At Building Permit stage, the developer is required to submit fire flow calculations signed and sealed by a Professional



Initial:

Engineer as per the Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) to confirm that there is adequate available flow for onsite fire protection.

- At the developer's cost, the City is to:
 - Cut and cap the existing water service connection on Williams Road.
 - Install a new water connection complete with meter and meter box to be placed on-site.

Storm Sewer Works

- Install drainage along upgraded walkway of approximately 55 m in length.
- At the developer's cost, the City is to;
 - Cut and cap the existing storm service connections and remove the existing inspection chamber along the 9800 Williams Road frontage.
 - Upgrade the existing storm service connection and inspection chamber located along 9700 Williams Road frontage. Utilize the existing core into the existing box culvert.

Sanitary Sewer Works

- At the developer's cost, the City is to:
 - Cut and cap the existing sanitary service connections and remove the existing inspection chamber along the south property line.
 - Install one (1) new sanitary service connection complete with new inspection chamber within the existing SRW at the southwest corner of the development site, tie-in new service to existing manhole (SMH2161). All sanitary works to be completed prior to any onsite building construction.

Frontage Improvements

- Review street lighting levels along the north and west frontages of the development site for any additional street lighting requirements or upgrades to LED fixtures.
- Widening and upgrading of the existing north-south walkway along the entire west property line through the provision of a 1m x 1m corner cut at the access from Williams Road and a 2.0 m wide sidewalk and 1.0 wide grassed boulevard on the east side of the walkway. The exact width of the new grass strip at all points along the walkway is to be determined in consultation with the Parks Department through the review processes for the Development Permit application and Servicing Agreement.
- Removal of the existing driveways providing access to the subject site from Williams Road and replacement with barrier/curb gutter, 1.5 m wide concrete sidewalk and 2.0 m wide grassed boulevard between the new sidewalk and the new road curb. The sidewalk must connect to the existing sidewalk east and west of the subject site along the Williams Road frontage.
- The developer is to coordinate with BC Hydro, Telus and other private communication service providers:
 - To underground the service lines for the proposed development.
 - When relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - To determine if above ground structures are required and coordinate their locations (e.g. Vista, PMT, LPT, Shaw cabinets, Telus Kiosks, etc). All above ground structures to be located on the development site. Architects to coordinate with private utility companies to determine location prior to Development Permit application. Proposed locations to be included on the Development Permit plans.

General Items

• 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.

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

- Written consent of the adjacent property owners to remove two (2) trees on shared property lines. If written consent is not provided, the trees must be retained and protected through inclusion in the contract between the developer and a Certified Arborist that is outlined in rezoning condition #1 as per above.
- Complete a proposed townhouse energy efficiency report and recommendations prepared by a Certified Energy Advisor which demonstrates how the proposed construction will meet or exceed the required townhouse energy efficiency standards (EnerGuide 82 or higher), in compliance with the City's Official Community Plan.

Prior to Building Permit* issuance, the following must be completed:

- Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
- Incorporation of three (3) affordable housing units, the combined habitable floor area of which shall comprise approximately 15% of the subject development's total residential building area, and which are to comply with all of the terms of the Housing Agreement that is required to be registered on title prior to Development Permit issuance.
- Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. 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 Department at 604-276-4285.

Note:

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

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

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

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

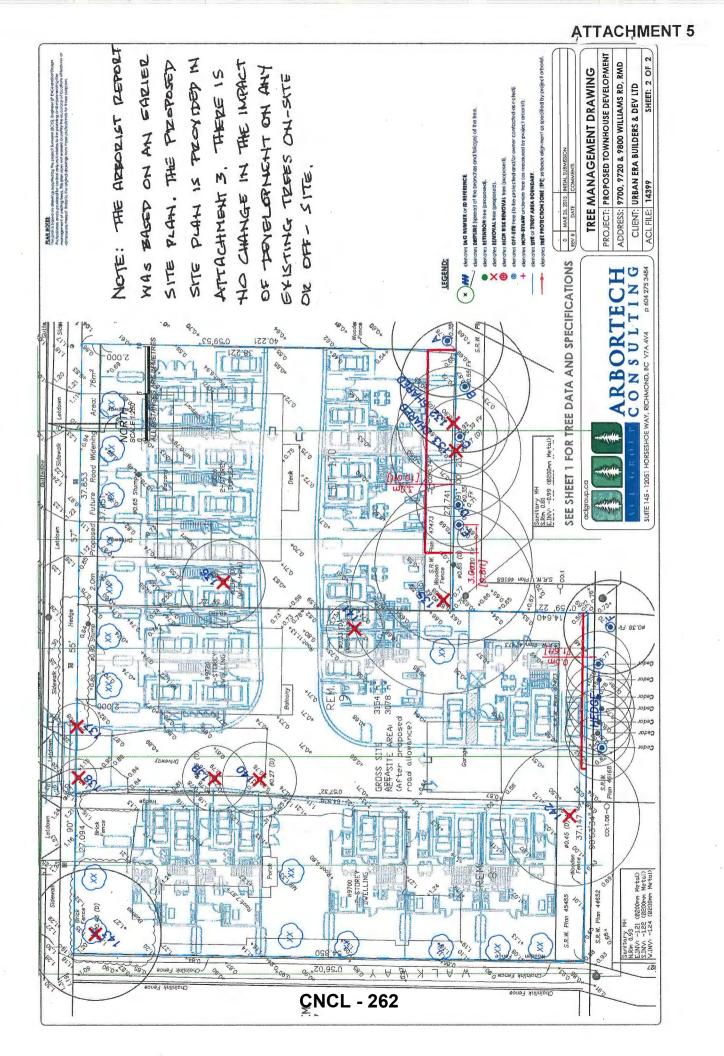
CNCL - 260

Initial:

(signed concurrence on file)

Signed

Date



Bylaw 9667



Richmond Zoning Bylaw 8500 Amendment Bylaw 9667 (RZ 15-700431) 9700, 9720 and 9800 Williams 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:
 - 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
"ZT81	\$4.00"

b. Inserting as Section 17.81 thereof the following:

17.81 Town Housing (ZT81) – Williams Road

17.81.1 Purpose

The zone provides for town housing and other compatible uses.

- 17.81.2 Permitted Uses
 - child care
 - housing, town

Secondary Uses

- boarding and lodging
- home business
- community care facility, minor

17.81.3 Permitted Density

- 1. The maximum floor area ratio (FAR) is 0.40, together with an additional 0.1 floor area ratio provided that it is entirely used to accommodate amenity space.
- 2. Notwithstanding Section 17.81.3.1, the reference to "0.4" is increased to a higher density of "0.60" if the owner, at the time Council adopts a zoning amendment bylaw to include the owner's lot in the ZT81 zone, pays into the affordable housing reserve the sum specified in Section 5.15 of this bylaw.

- a) provides in the building not less than 3 affordable housing units and the combined habitable space of the total number of affordable housing units comprises not less than 15% of total floor area that is habitable space; and
- b) enters into a **housing agreement** with respect to the **affordable housing units** and registers the **housing agreement** against the title to the **lot**.

17.81.4 Permitted Lot Coverage

- 1. The maximum **lot coverage** is 44% for **buildings**.
- 2. No more than 65% of the **lot** may be occupied by **buildings**, **structures** and **non-porous surfaces**.
- 3. 25% of the lot area is restricted to landscaping with live plant material.

17.81.5 Yards & Setbacks

- 1. The minimum **front yard** is 4.5 m, except for the projection of building columns for a maximum of 0.52 m.
- 2. The minimum **interior side yard** is 3.0 m.
- 3. The minimum **rear yard** is 6.0 m, except for the projection of the first **storey** for a maximum of 1.5 m.

17.81.6 Permitted Heights

- 1. The maximum **height** for **buildings** is 12.0 m (3 **storeys**).
- 2. The maximum **height** for **accessory buildings** is 5.0 m.
- 3. The maximum **height** for **accessory structures** is 9.0 m.
- 17.81.7 Subdivision Provisions/Minimum Lot Size
- 1. The minimum lot width on minor arterial roads is 40.0 m.
- 2. The minimum **lot depth** is 35.0 m.
- 3. There is no minimum **lot area**.

17.81.8 Landscaping & Screening

1. **Landscaping** and **screening** shall be provided in accordance with the provisions of Section 6.0.

17.81.9 On-Site Parking and Loading

1. On-site **vehicle** and bicycle parking and loading shall be provided according to the standards set out in Section 7.0.

17.81.10 Other Regulations

- 1. In addition to the regulations listed above, the General Development Regulations of Section 4.0 and the Specific Use Regulations of 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 areas and by designating them **"TOWN HOUSING (ZT81) WILLIAMS ROAD"**.

P.I.D. 003-606-333

Lot 8 Except: Part Subdivided by Plan 44427, Section 34 Block 4 North Range 6 West New Westminster District Plan 11454

P.I.D. 004-870-620

Lot 9 Except: Part Subdivided by Plan 45409, Section 34 Block 4 North Range 6 West New Westminster District Plan 11454

P.I.D. 003-798-798

Lot 170 Section 34 Block 4 North Range 6 West New Westminster District Plan 36305

3. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9667".

 FIRST READING
 CITY OF

 A PUBLIC HEARING WAS HELD ON
 APPROVED

 SECOND READING
 Dy

 THIRD READING
 B)

 OTHER CONDITIONS SATISFIED
 CITY OF

ADOPTED

MAYOR

CORPORATE OFFICER



Planning and Development Division

Re:	Application by Trellis Seniors Services Ltd. for F	Rezoning	g at 23100, 23120
From:	Wayne Craig Director, Development	File:	RZ 16-738480
To:	Planning Committee	Date:	January 10, 2017

Re: Application by Trellis Seniors Services Ltd. for Rezoning at 23100, 23120 and 23140 Westminster Highway from Single Detached (RS1/F) to Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)

Staff Recommendation

That Richmond Zoning Bylaw 8500, Amendment Bylaw 9669 to create the "Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)" zone, and to rezone 23100, 23120 and 23140 Westminster Highway from "Single Detached (RS1/F)" to "Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)", be introduced and given first reading.

Wayne Craig

Director, Development

WC:mm

REPORT CONCURRENCE				
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER		
Parks Services Engineering Transportation		herener		

Staff Report

Origin

Trellis Seniors Services Ltd. has applied to the City of Richmond for permission to create a new site-specific zone and rezone a 0.59 ha. (1.46 acre) site at 23100, 23120 and 23140 Westminster Highway from "Single Detached (RS1/F)" to "Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)". This application is to facilitate development of a three (3) storey, 135-bed health care facility (Attachment 1). All residents will be provided with meals, supervision and full-time health care services. The facility is to be licenced by Vancouver Coastal Health (VCH) and is receiving funding from VCH to subsidize all units for the accommodation and care for seniors referred to it by VCH and other Provincial programs.

The proposed development site is referred to in this report as Parcel 4, and is located immediately to the north of two (2) in-stream rezoning applications that have been submitted by Oris Developments Ltd. for their Parcel 2 and 3 developments (RZ14-660662 and RZ14-660663) which received Third Reading on September 8, 2015 (see Context Map in Attachment 2). These applications include the Oris mixed-use building on Parcel 2 located on Gilley Road and the adjacent apartment / seniors congregate housing building on Parcel 3 proposed by New Coast Lifestyles (NCL) Management Ltd. The subject Parcel 4 developments (see Conceptual Development Plans in Attachment 3). The "New Road" provides public access secured through a statutory right of way (SRW) and will be named at a later date through the City's road naming process with Council approval.

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is attached (Attachment 4).

Surrounding Development

Development surrounding the subject site is as follows:

- To the North: Single-Family dwellings zoned "Single Detached (RS1/F)".
- To the South: Single-Family lots currently zoned "Single Detached (RS1/F)" which are under application to be rezoned to permit the 130 unit seniors housing building on Parcel 3 (RZ14-660662).
- To the East: Single-Family dwellings zoned "Single Detached (RS1/F)".
- To the West: Former fire hall site (vacant) fronting onto Westminster Highway zoned "School and Institutional (SI)".

Related Policies & Studies

Official Community Plan / Hamilton Area Plan

The Official Community Plan (OCP) designates the subject site as "Residential" and the Hamilton Area Plan designates the site as "Neighbourhood Village Centre (Residential 4 Storey 1.50 FAR)" which provides for apartments and a range of assisted living uses (see Attachment 5). The proposal is consistent with the OCP and Hamilton Area Plan.

Environmentally Sensitive Area (ESA)

The development site includes approximately $1,100m^2$ (0.27 acre) of ESA which is part of a larger contiguous $5,500m^2$ (1.35 acre) ESA that extends eastward (see maps in Attachment 6). The applicant's Qualified Environmental Professional (QEP) has examined how the site should be managed in the context of the larger ESA. On this basis, the QEP report includes the following conclusions and recommendations in their Stage 1 report as follows:

- The report examines the on-site ESA within the context of the larger contiguous 5,500 m² (1.35 acre) ESA that includes the subject site and adjacent lots to the north and east. The report also reviews the site in the broader context of connections to other natural areas within the City's broader *Ecological Network* within Hamilton. The proposed ESA enhancement and compensation areas will provide vegetation and habitat corridors to the ESA on future development properties to the north and east. Furthermore, the area along the north boundary of the site will form part of a habitat corridor link running from the Queen Canal greenway in the west to the ESA on the lots to the east.
- In accordance with the OCP *ESA Development Permit Guidelines*, a QEP report providing a detailed inventory and conservation evaluation that includes maintenance of part of the physical area of the ESA area and compensation for lost ESA area, was prepared.
- The QEP and arborist have found that a majority of the 1,100 m² (0.27 acre) on-site ESA area includes mature forest with most trees being in poor or fair condition along with areas of invasive understory plants such as buttercup and canary grass.
- The report also includes recommendations on retention of three (3) coniferous trees and maintenance of approximately one-quarter of the existing ESA area along the north property boundary supplemented with replanting, the addition forest floor soils and removal of invasive species to create a robust native species forest area.
- The habitat compensation for the area impacted by the development is to be provided at a 1:1 physical area basis on the existing 1,100 m² (0.27 acre) area of ESA on the site. The compensation planting is included within the conceptual development landscape plans (Attachments 3 and 6) for the rezoning. The QEP also concludes that the relative ecological value of the replanted and enhanced areas will be greater than the existing ESA.

Should the rezoning application proceed, the applicant and their QEP will prepare a more detailed native planting plan, invasive species removal specifications, and a monitoring and maintenance plan for the ESA.

Affordable Housing Strategy

The City's Affordable Housing Strategy is not applicable to this application as it allows only for senior's health care facility and not independent senior's residential units. As it is not a residential apartment use, it is exempted from providing affordable housing under the Strategy.

Floodplain Management Implementation Strategy

The proposed redevelopment must meet the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204 which provides for a 3.5 m flood construction level (FCL). Registration of a flood indemnity covenant on Title is required prior to final adoption of the rezoning bylaw.

Public Consultation

A rezoning sign has been installed on the subject property. Staff have received several telephone inquiries from the public about the general purpose of the rezoning application in response to the placement of the rezoning sign on the property, but no concerns were expressed.

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

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

Analysis

Built Form and Architectural Character

Site Planning

- The proposed building is located on the centre of the site with three (3) wings radiating northward from the common areas and lobby located on the south side of the building adjacent to the "New Road".
- The building's two (2) north courtyards separate the three (3) wings of the building and will open out onto the proposed natural landscaped Environmentally Sensitive Area (ESA) compensation area.
- As required in the Hamilton Area Plan, the North-South Greenway is provided on the east side of the site on the building podium. The greenway will connect Gilley Road (to the south) to Willet Avenue (to the north), and is an extension of the greenway sections being secured as part of the Parcel 2 and 3 developments. A 4.0 m (13.1 ft.) wide SRW will be registered to secure public pedestrian access, provide for developer construction and future owner maintenance of the landscaping and 2.5 m (8.0 ft.) pathway.
- The main floor elevation of the building will be approximately 2.5 m (8.0 ft.) above Westminster Highway. There is a 6.0 m (20.0 ft.) wide sloping, landscaped area rising up from Westminster Highway to provide an attractive grade transition to the building and fully screen the parkade.
- The proposed interim grade transition to the existing single-family dwellings on the north and east sides of building (designated for stacked townhouse development in the Hamilton

Area Plan) are addressed with temporary landscape walls averaging 2.3 m (7.5 ft.) and landscaping adjacent to the property lines.

• The "New Road" will rise from Westminster Highway up to the 3.95 m elevation of the building's main floor. The building's large port cochere/driveway canopy will face "New Road", and provide cover for the main pedestrian entrance while providing for easy vehicle drop-off/pick-up of residents.

Architectural Form and Character

- The three (3) wings of the building fan outwards to the north from its centre block on the building's south side.
- The first two (2) storeys of the building are clad in brown brick to provide a stronger, substantial base.
- The third floor has a lighter appearance with beige cementitious siding with sections of large roof overhangs separating this floor from the lower two (2) floors.
- Adjacent to the intersection of the "New Road" with Westminster Highway, the southwest corner of the building includes a large brick-clad vertical buttress/fin element that rises from grade to above the main roof level. This vertical element, together with a similar vertical element on the adjacent Parcel 3 seniors building provide an attractive shared gateway to both developments.
- The building has a flat roof with sections of a sloping roof rising up to 3.0 m (10.0 ft.) above the main flat roof; these sloping roof sections are clad in charcoal colour standing metal seam roofing material. These sections of roof provide for further visual interest on the prominent west and will help screen rooftop mechanical equipment.

Existing Legal Encumbrances

Two (2) legal agreements were registered on the title of the subject Parcel 4 development site as part of the rezoning and development permit applications for the adjacent Parcel 3 development. These agreements facilitate both developments proceeding in a complementary manner and include:

- A statutory right of way over the shared "New Road" which is registered on Parcels 3 and 4 including the southern 7.0 m (23.0 ft.) of the subject Parcel 4 site and the northern 7.0 m (23.0 ft.) of the adjacent Parcel 3 site.
- An easement to allow for construction and maintenance of an interim landscape buffer on the southern 5.0 m (16.5 ft.) of the subject Parcel 4 site by the adjacent Parcel 3 developer to provide landscaped screening of the Parcel 3 parkade in the event that the subject Parcel 4 does not proceed before or concurrently with the Parcel 3 development.

Transportation and Site Access

Site Access

As noted above, vehicle and pedestrian access will be provided by the "New Road". The building's parkade entrance will be located near Westminster Highway. The subject Parcel 4 building and adjacent Parcel 3 building to the south include complementary large porte cocheres

to provide covered pedestrian entrances for Handy Dart buses and private vehicle drop-off and pick-up of pedestrians.

The Rezoning Considerations for this application include the registration of a reciprocal easement on Parcels 3 and 4 to allow for each developer to access the adjacent parcel to construct a functional "New Road" if the parcels do not develop concurrently. The considerations also include the requirement for a small extension of the existing "New Road" SRW further north onto Parcel 4 to secure public access for the sidewalk. There is a further requirement for a construction turn-around easement to be registered on the adjacent Parcel 3 development which is secured by a Letter of Agreement between the developers of Parcels 3 and 4.

Parking

The subject development will provide for a total of 59 parking spaces within an enclosed parkade which exceeds the 45 spaces required under Zoning Bylaw 8500. There is also one (1) medium (SU9) loading space that meets the Zoning Bylaw's requirements.

The applicant will register an electric vehicle parking covenant on title requiring that 20% of resident parking stalls that will be equipped with 120V electric plug-ins and that an additional 25% of the resident parking stalls will be pre-ducted to accommodate the future installation of electric vehicle charging equipment.

LEED Development

As required by the Hamilton Area Plan, developers need to ensure that the project has been designed to achieve a sufficient score to meet the current Canadian Green Building Council LEED Silver rating. This will require review from a LEED certified consultant which confirms that buildings have been designed at Development Permit and constructed at Building Permit to achieve the required LEED certification or equivalent. The applicant has committed to VCH and the City that they will construct a LEED Gold equivalent building.

Tree Retention and Replacement

The applicant has submitted a Certified Arborist's Report which identifies on-site and off-site tree species, assesses tree structure and condition, and provides recommendations on tree retention and removal relative to the proposed development. The Report assesses:

- 70 trees located on the development site to be removed and replaced.
- 15 trees located on neighbouring property located on adjacent neighbouring properties are identified to be retained and protected and to be provided tree protection as per City of Richmond Tree Protection Information Bulletin Tree-03.
- 4 (four) trees located on City property (Westminster Highway) which were assessed previously by City Parks and authorized for removal through the adjacent Parcel 3 rezoning application (RZ14-660662).

The City's Tree Preservation Coordinator has reviewed the Arborist's Report and has the following comments (Attachment 7):

- Three (3) trees (tag# 869, 871, 872) located on the development site are proposed to be removed, but are not in conflict with the proposed development and identified in "fair" condition. These trees are proposed to be retained and protected.
- A total of 134 replacement trees are to be specified at 2:1 ratio for the remaining 67 trees to be removed as per the OCP to be included within the Development Permit landscape plans.

Tree Replacement

The applicant wishes to remove 67 on-site trees. The 2:1 replacement ratio would require a total of 134 replacement trees. The applicant has agreed to plant 72 trees on the development site.

The applicant will also plant a large number of smaller trees within the ESA compensation area to be determined with the QEP's Stage 2 Report and landscape plan included within the Development Permit for the project. The applicant has agreed to provide a voluntary contribution of \$500 per replacement tree to the City's tree compensation (e.g. \$31,000) for each of the remaining 62 replacement trees that are not be able to be secured for planting with the landscape plans within the Development Permit.

Tree Protection

The above-noted three (3) on-site trees and 15 trees on the neighbouring property to the north are to be retained and protected in accordance with the City's Tree Protection Information Bulletin Tree-03 prior to any works being conducted on-site, and remain in place until construction and landscaping on-site is completed.

Elements to be Addressed in Development Permit

The forthcoming Development Permit application for the subject development needs to address the following elements:

- The detailed Phase 2 ESA report and landscaping plans which include the detailed specifications for the replanting of native plant species in the ESA compensation area with the appropriate detail for the Development Permit.
- Completion of the detailed landscape and on-site civil plans that include refined grading, planting soil profiles and wall details for aesthetic and trees preservation reasons.
- Completion of the architectural plans which include further design detail on the building cladding and materials along with additional elevation and perspective plans.

Hamilton Area Plan Amenity Contributions

This Hamilton Area Plan requires amenity contributions for residential apartments of \$49.50 per square meter (\$4.60 per square foot) amenity contributions. This rezoning permits a health care facility and not independent senior's residential units. The applicant has further confirmed that they have obtained VCH funding for 100% of the beds to be provided at below market rates. Thus, it is not subject to providing the Area Plan's amenity contributions which are applicable for residential apartments. In this regard, the applicant has provided written confirmation from the *Vancouver Coast Health Authority* that the development will be licenced for a senior's care facility under the *Community Care and Assisted Living Act*.

Public Art Program

The City's Public Art Program is not applicable to this application as it is to allow for a senior's health care facility and not a residential apartment building that would be subject to the Program.

Amenity Space

The proposed project will include $1,015 \text{ m}^2 (10,925 \text{ ft.}^2)$ of common indoor amenity space with dining rooms and lounges on each of the building's three (3) floors. There is a large multipurpose activity room on the third floor with access to a large south-facing sundeck.

There will also be 830 m² (8,934 ft.²) of common outdoor amenity area located largely in two (2) courtyards located between the three (3) main wings of the building. Main features of these areas will include:

- Large open air and covered seating areas.
- Walking pathways encircling the courtyards.
- Garden planters.
- Water features.
- A gazebo and trellis structures.

Site Servicing and Frontage Improvements

Westminster Highway Frontage Improvements

The applicant will be undertaking the following works under a Servicing Agreement on the site's road frontage: 3.0 m (9.8 ft.) wide concrete sidewalk, 1.75 m (5.75 ft.) boulevard with grass and street trees, and installation of street lights with pedestrian arm lights. There will also be pavement widening and line painting on Westminster to provide for a 1.8 m (5.9 ft.) wide northbound bike lane, left turn lane and landscaped median.

Servicing Works

The servicing requirements are included within the Rezoning Considerations (Attachment 8) and are outlined below.

For water servicing, the applicant is required to install additional fire hydrants and replace the existing 300 mm diameter watermain along Westminster Highway to the limits of the road works. For storm servicing, the applicant is required to install a new storm service connection complete tie-in to the existing storm sewer along Westminster Highway.

Regarding sanitary sewer servicing, the applicant is required to:

- Receive confirmation from the City of the finalized sanitary servicing layout of the lots to the south (under RZ14-660662 and 14-660663 for Oris Parcels 2 and 3) prior to this rezoning application for Parcel 4 progressing to zoning adoption; or
- To provide alternative sewer servicing by either of the following two (2) alternative options in the event the developments to the south are delayed in construction:

- Install a new permanent sanitary sewer to the City's future pump station located potentially within the VLA Park on Willett Avenue; or
- If the construction of the proposed development proceeds ahead of the pump station, the applicant will be required to obtain an easement through the developments to the south and construct temporary sanitary sewers to the Metro Vancouver pump station on Gilley Road.

Financial Impact or Economic Impact

There are no financial or economic impacts of note for the proposed project.

Conclusion

The proposed senior's health care facility on Parcel 4 is the third rezoning application to be considered under the Hamilton Area Plan. The proposed development includes a 135–unit senior's health care facility that complements the adjacent 130-unit independent living seniors building on Parcel 3 that has been considered by Council and is at 3rd Reading.

This development will involve improvements to Westminster Highway and further contribute to the development of the pedestrian-oriented Hamilton Village Centre as envisioned under the Hamilton Area Plan.

Thus, it is recommended that Zoning Bylaw 8500, Amendment Bylaw 9669 be introduced and given first reading.

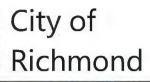
Mark McMullén Senior Coordinator - Major Projects

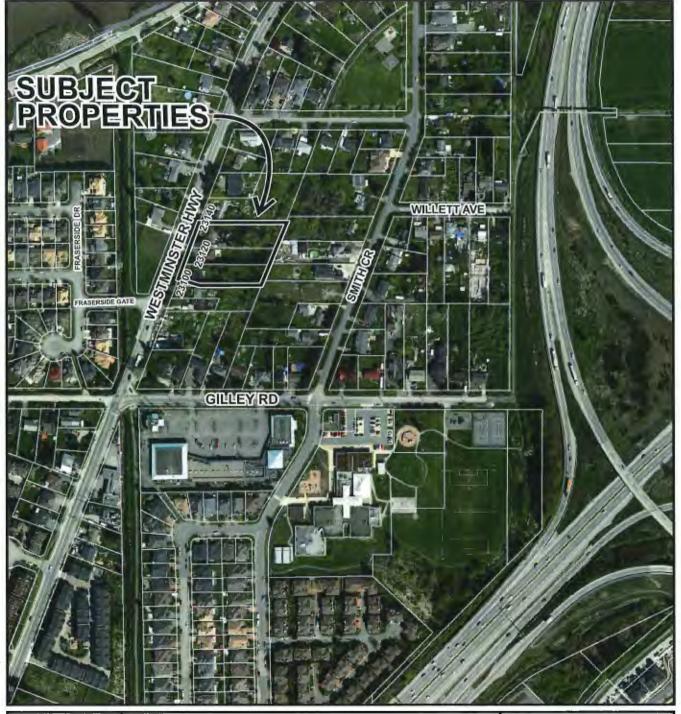
MM:rg

Attachment 1: Location Map Attachment 2: Development Context Map Attachment 3: Conceptual Development Plans Attachment 4: Development Application Data Sheet Attachment 5: Hamilton Area Plan Land Use Map Attachment 6: Environmentally Sensitive Area Report Maps Attachment 7: Tree Survey Attachment 8: Rezoning Considerations

ATTACHMENT 1







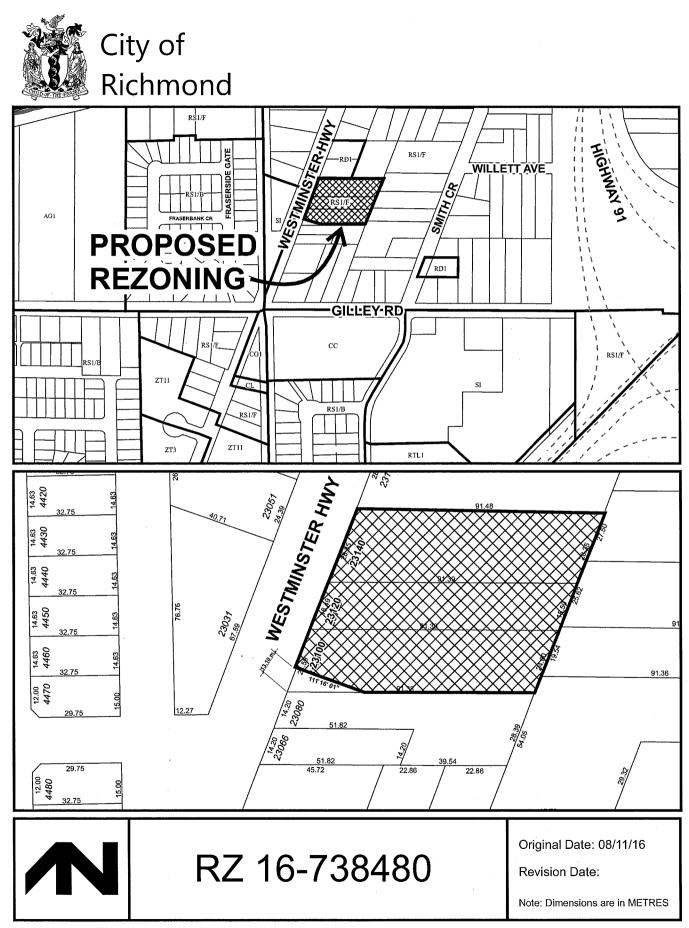


RZ 16-738480

Original Date: 08/11/16

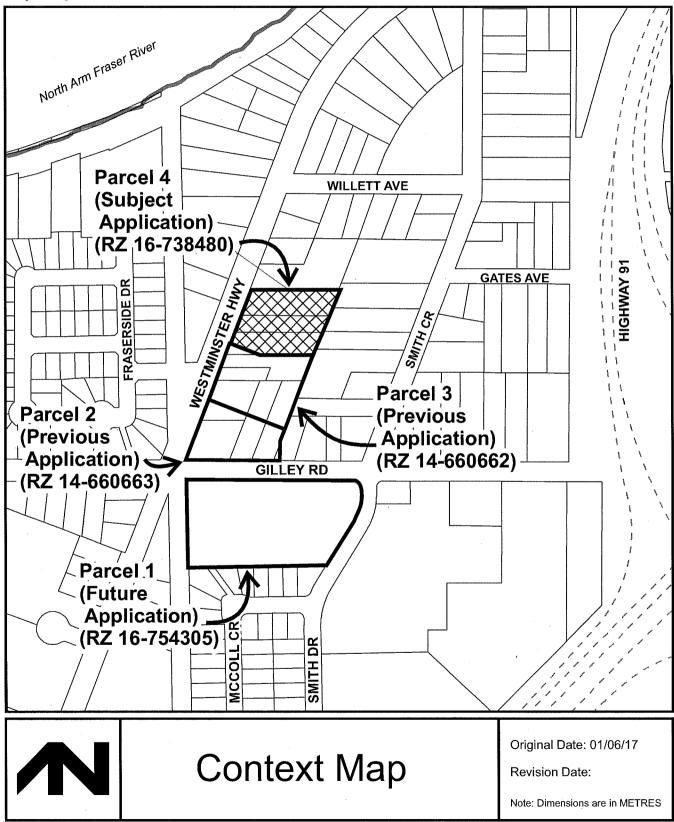
Revision Date:

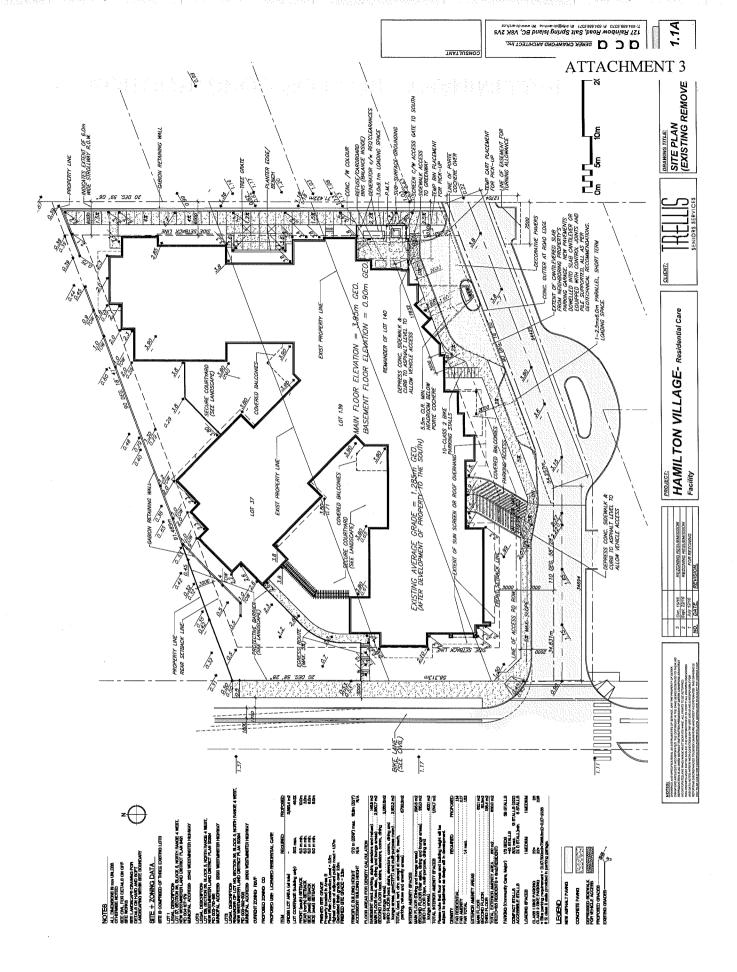
Note: Dimensions are in METRES

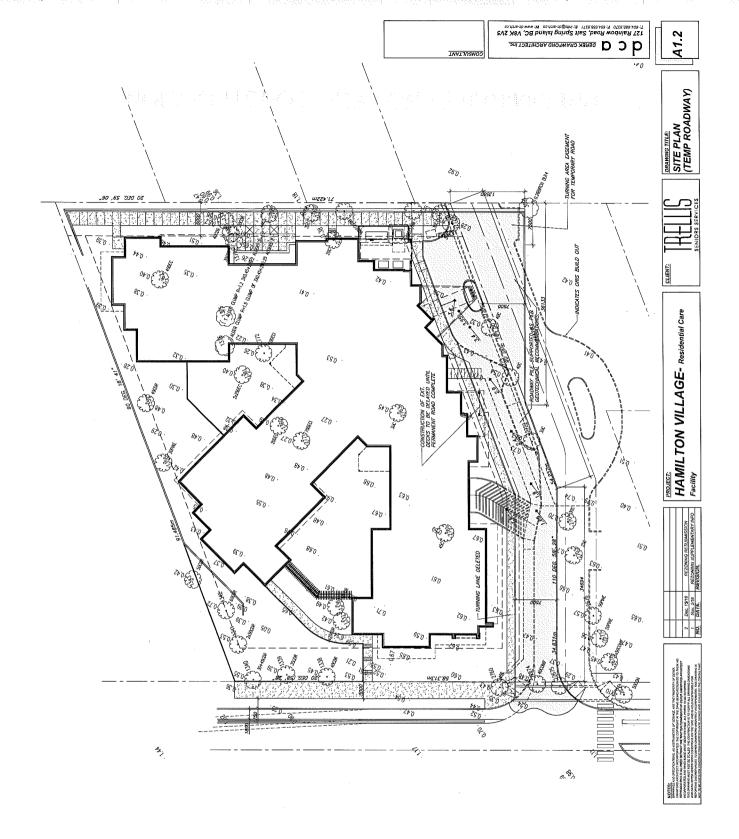


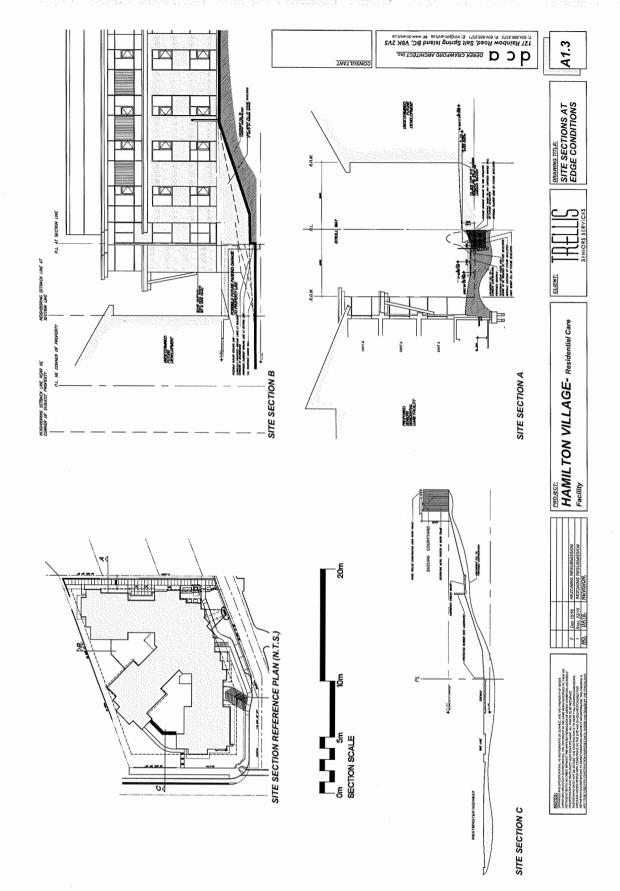
CNCL - 276

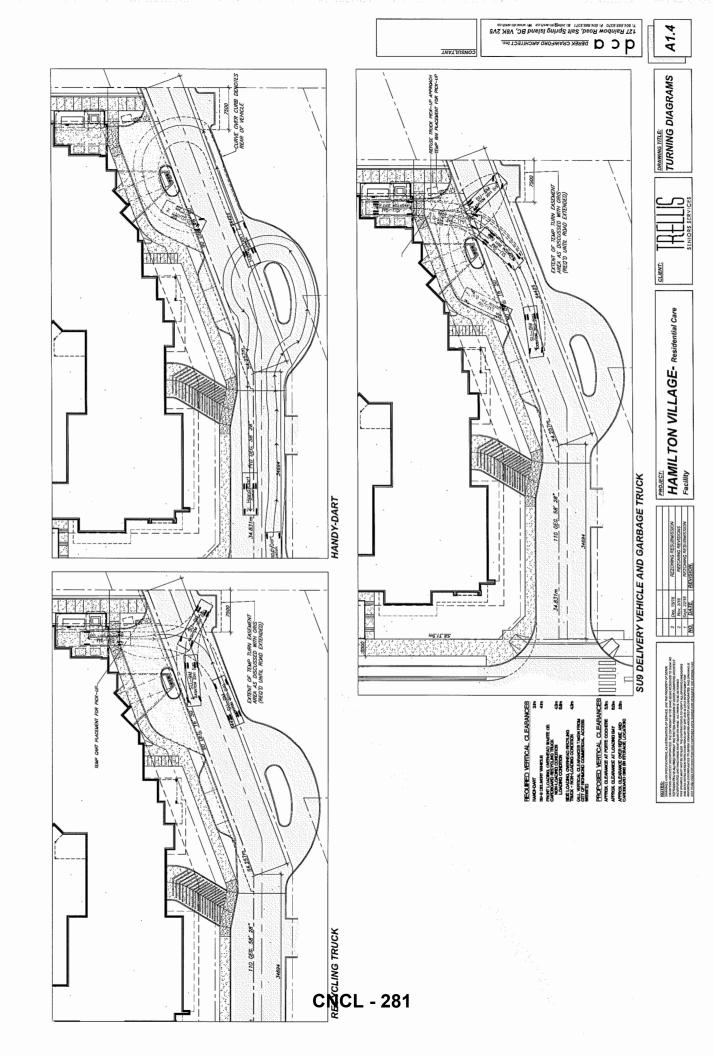


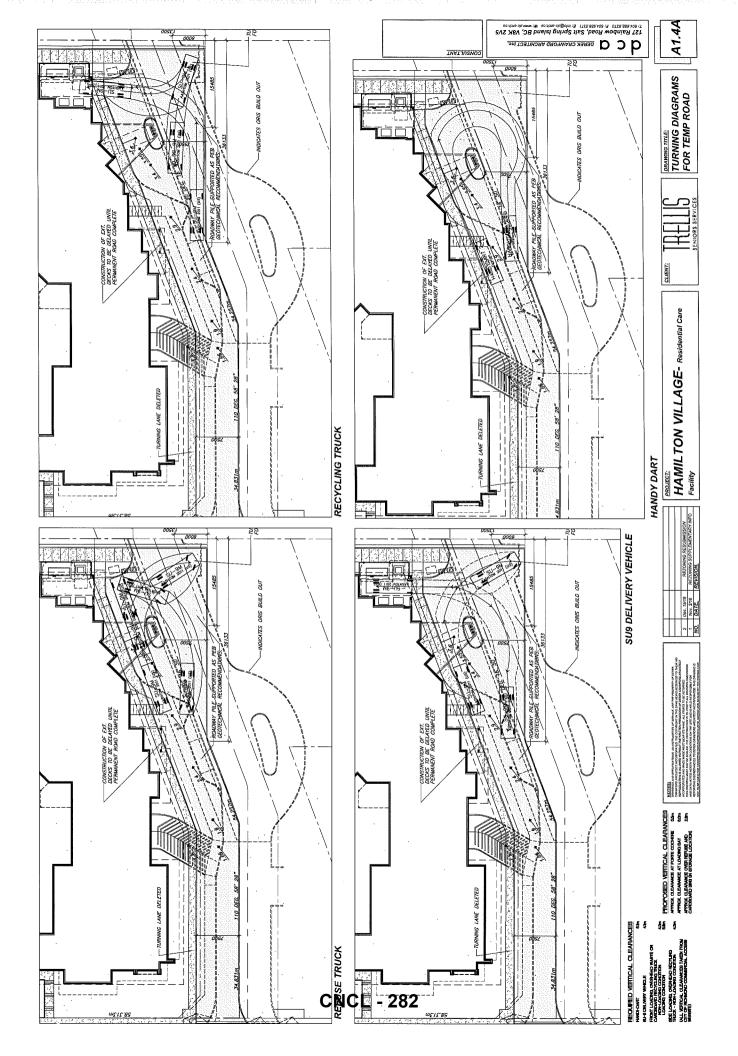


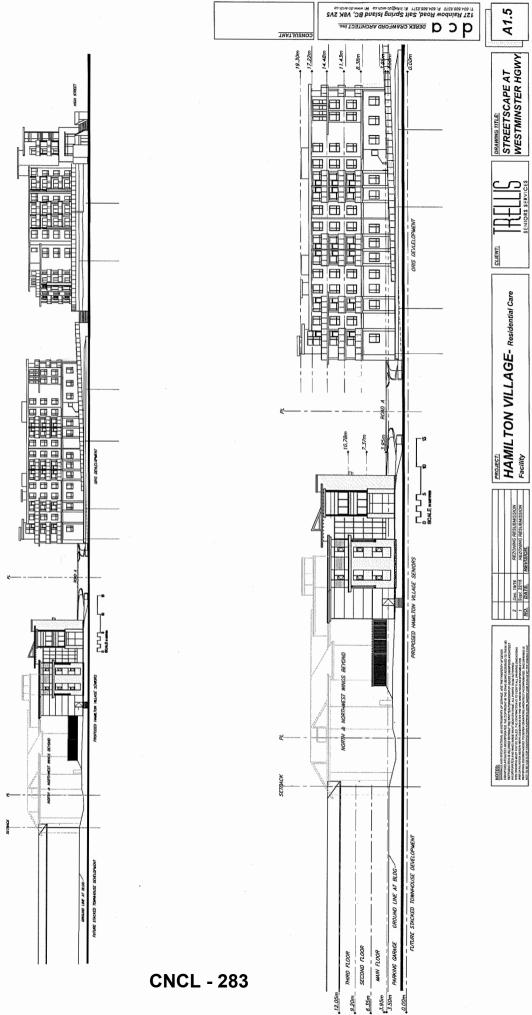


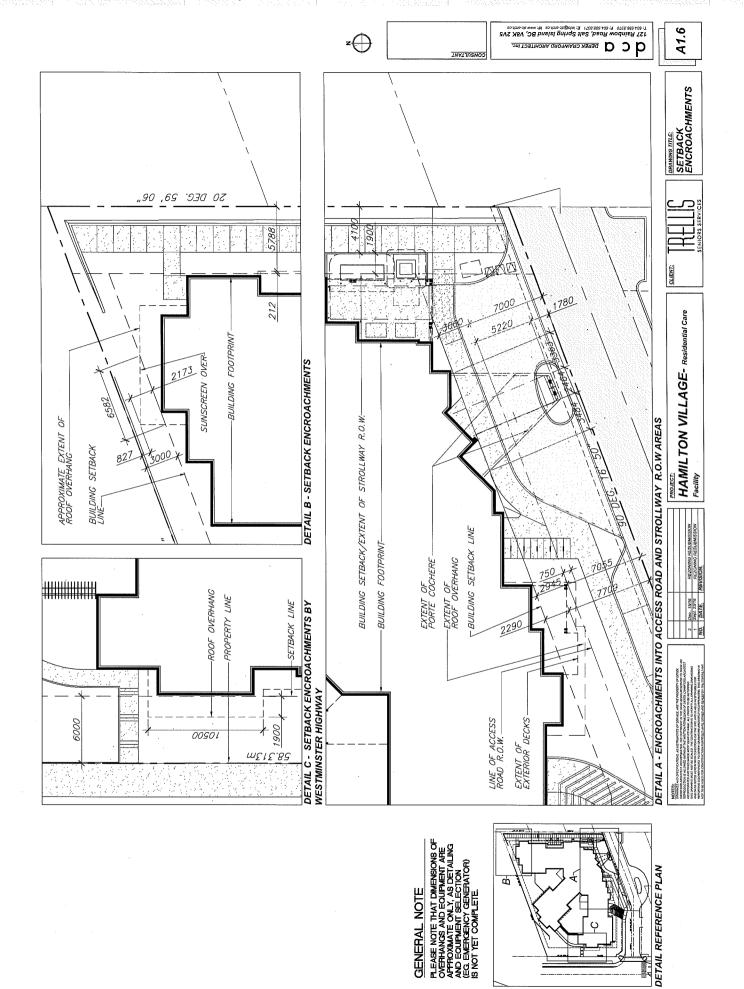


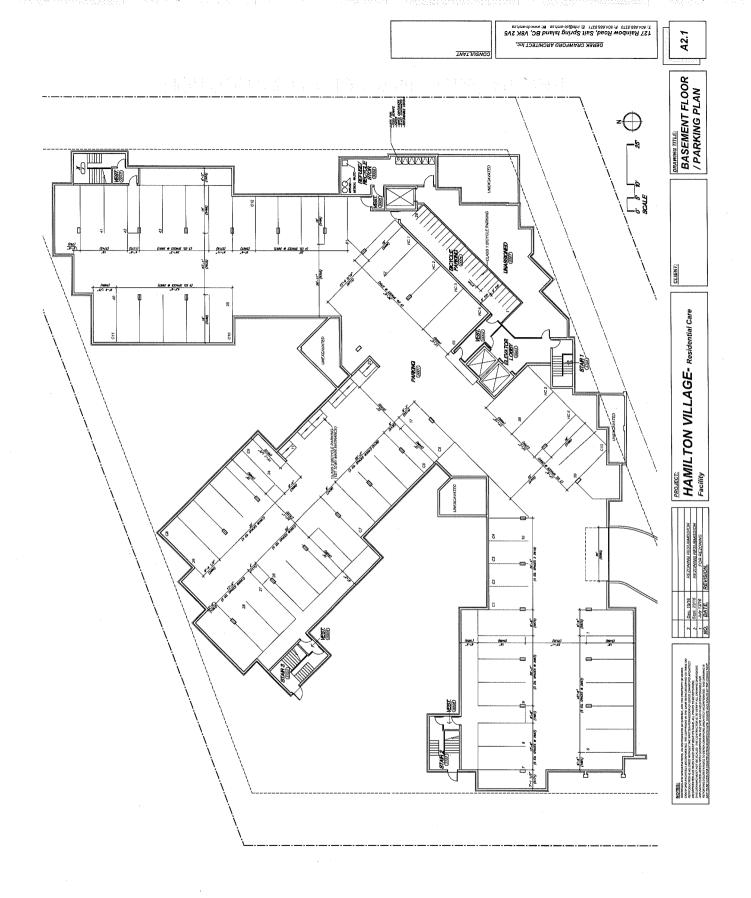


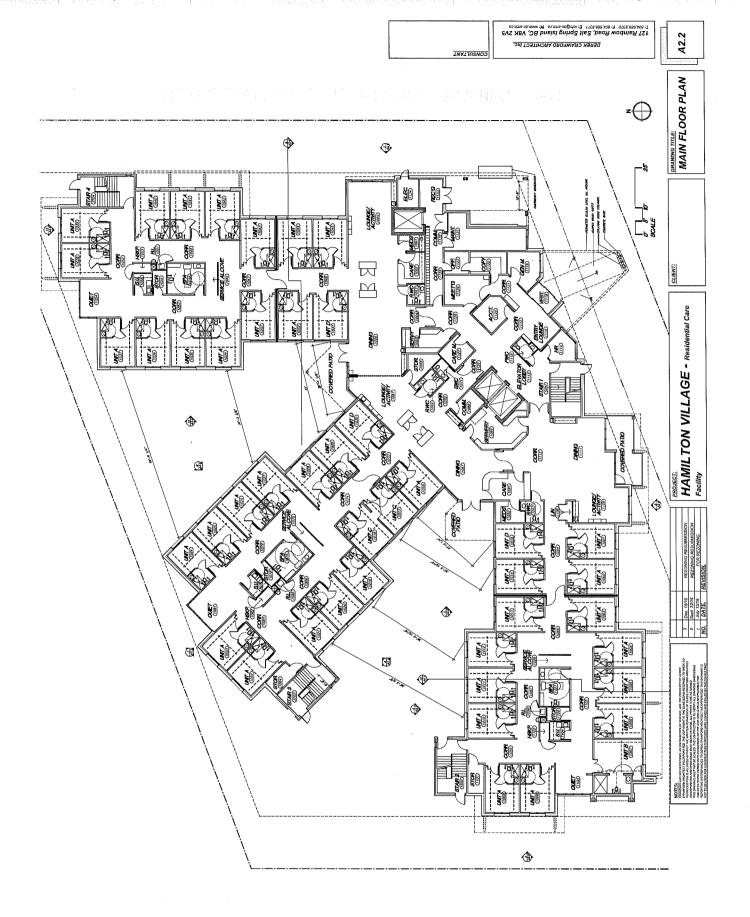


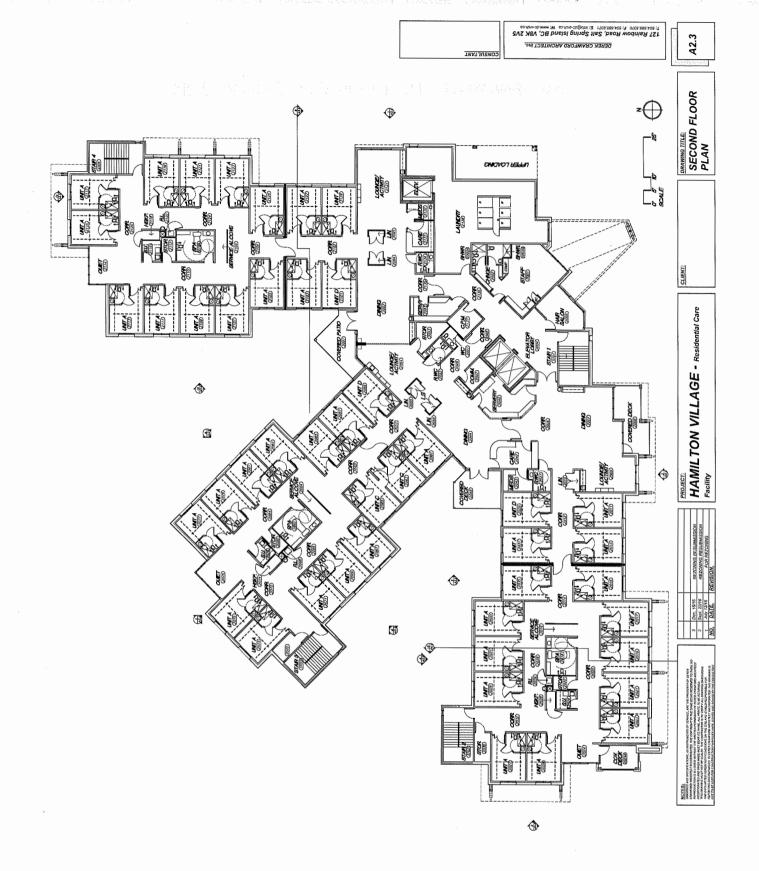


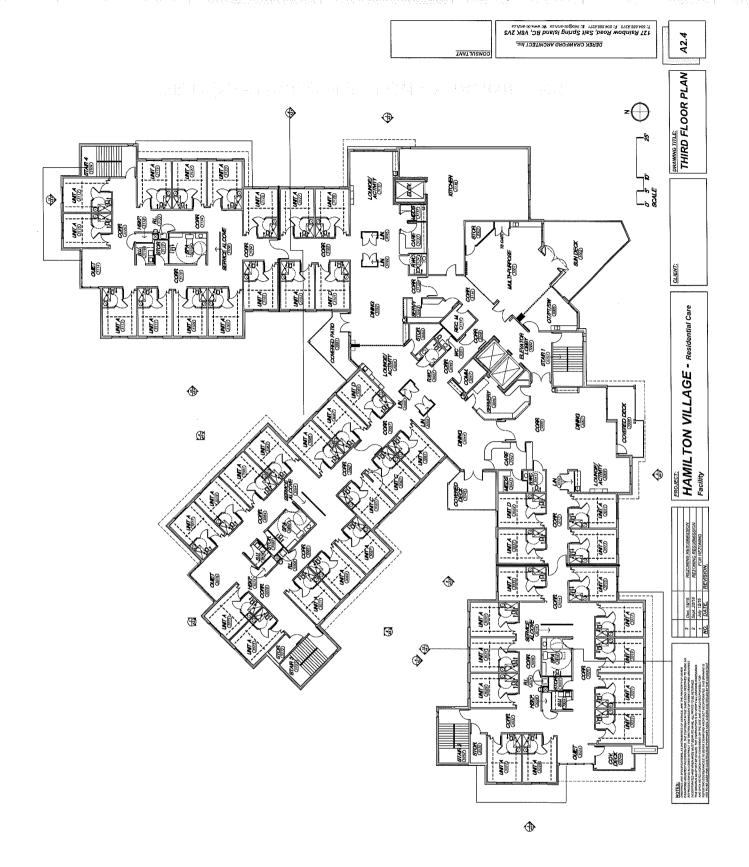


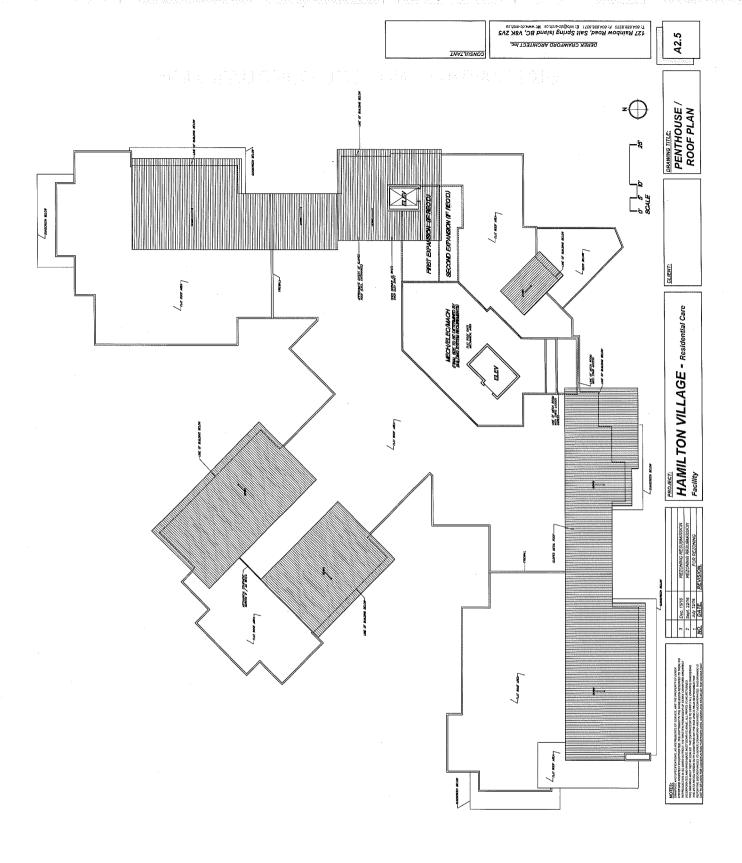


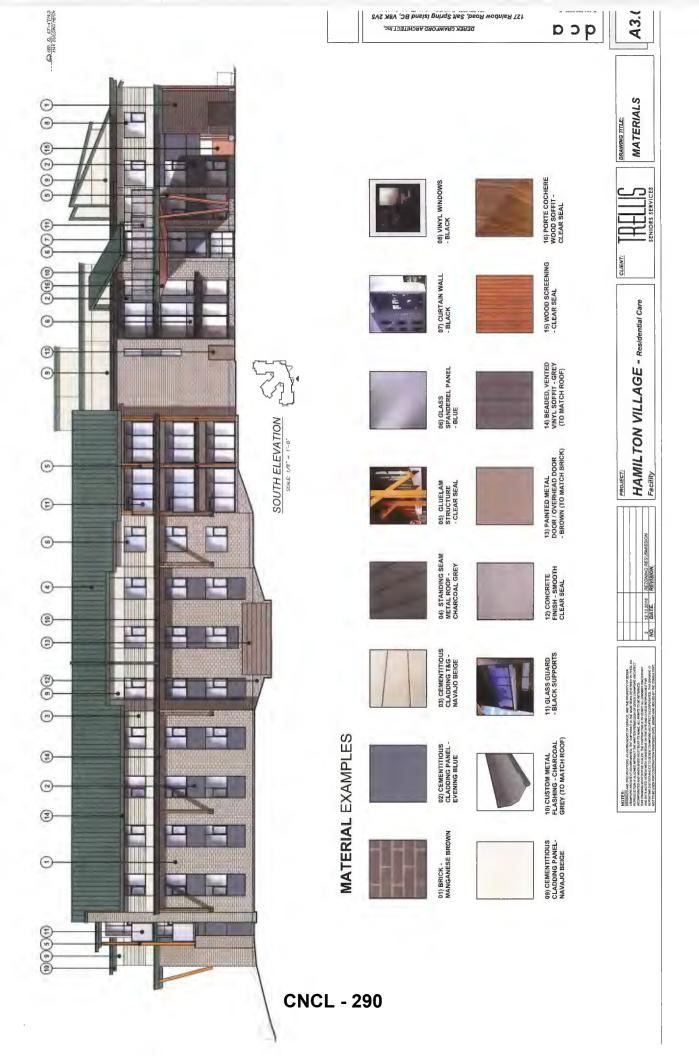


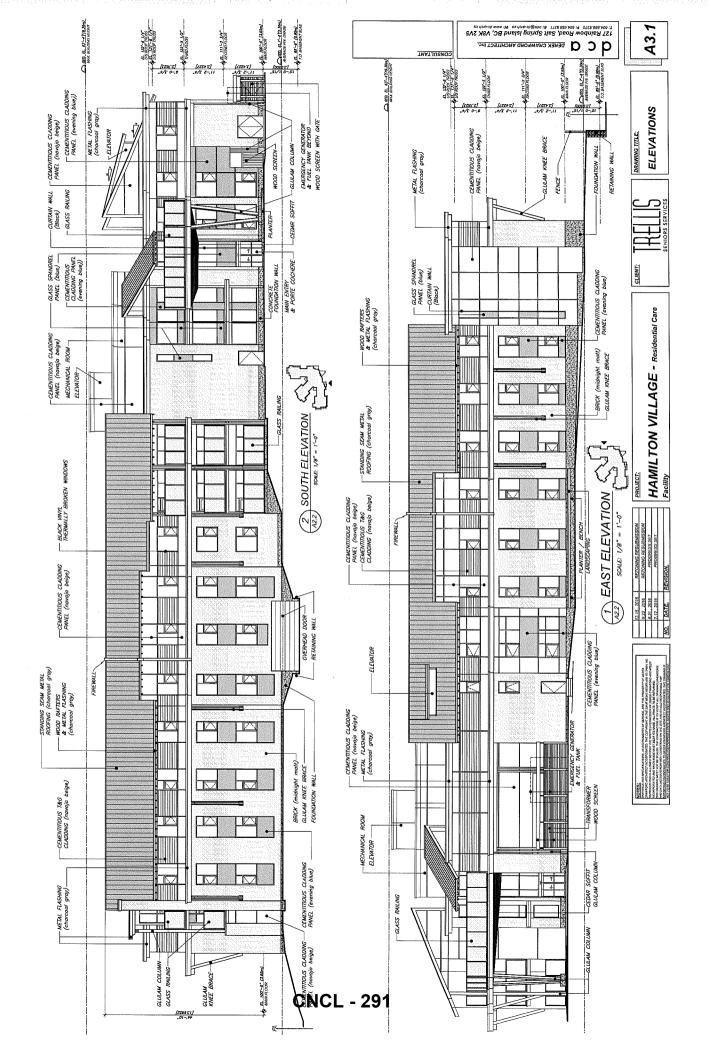


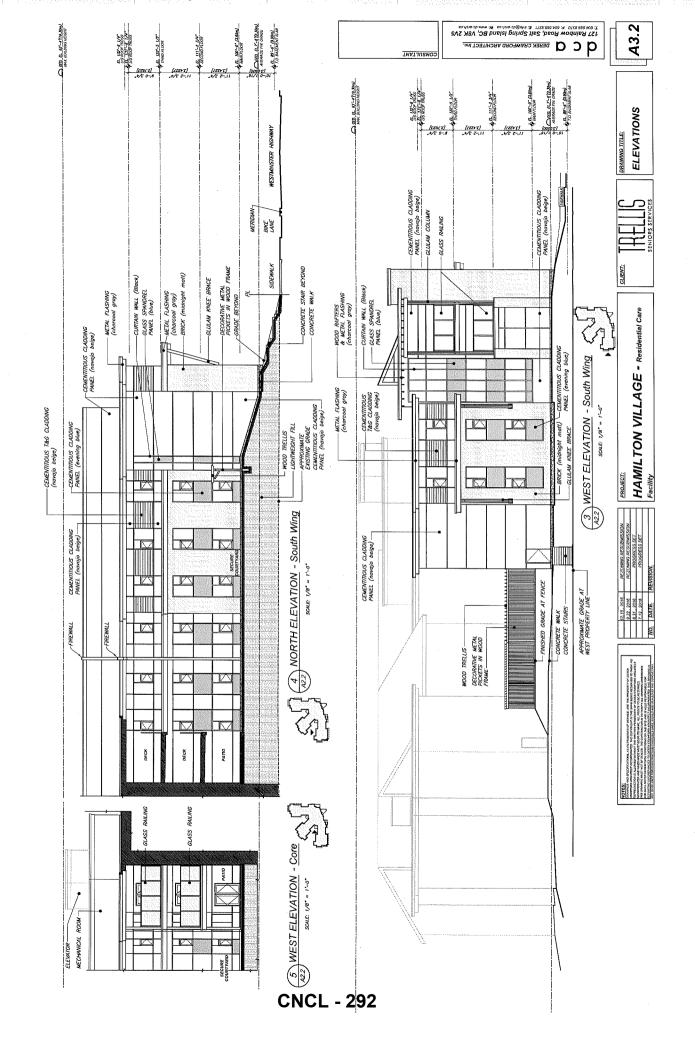


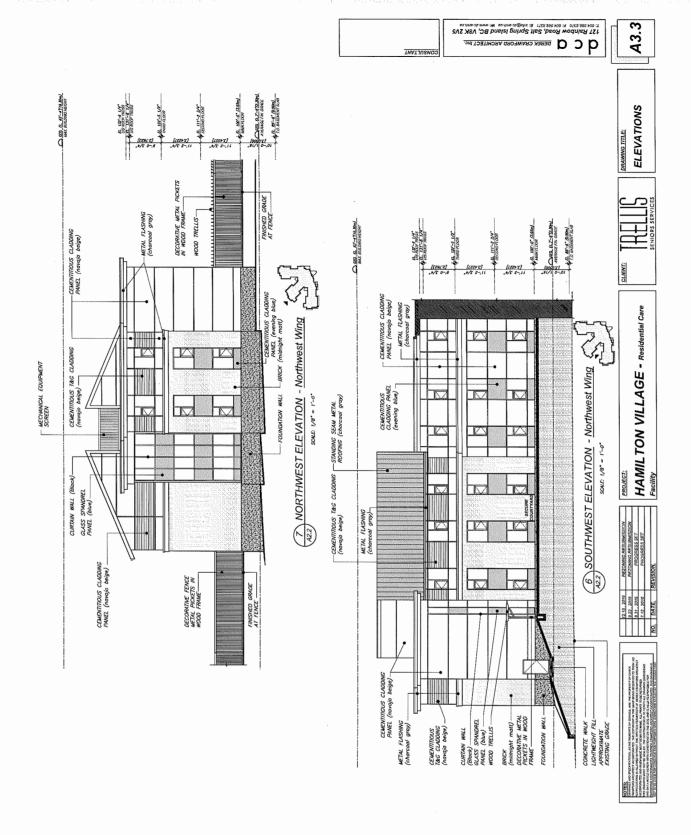


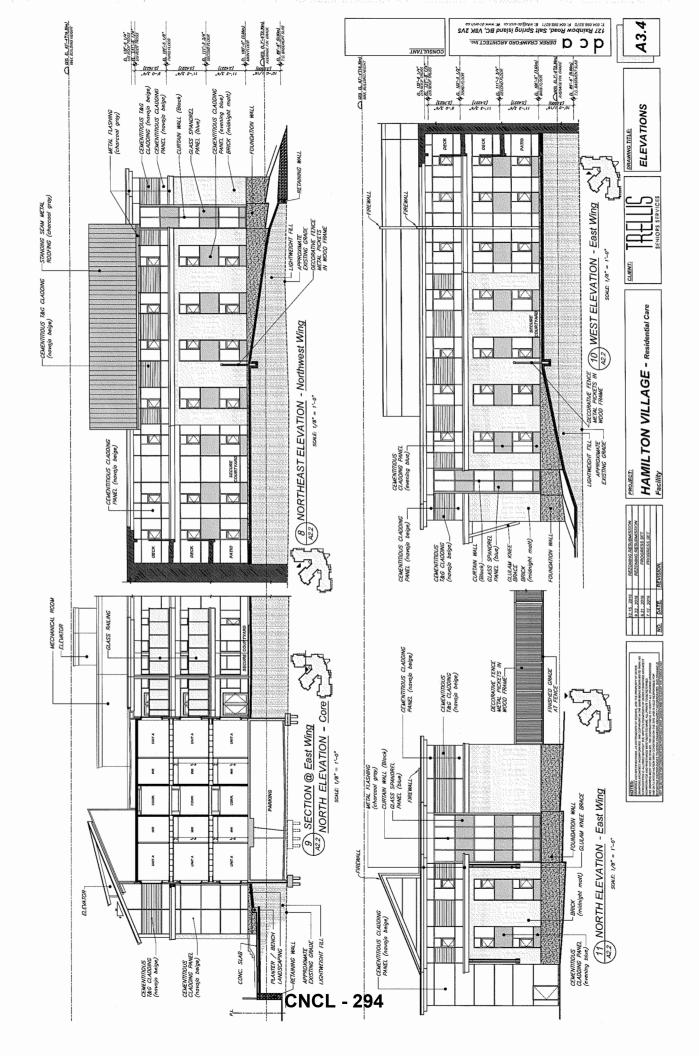


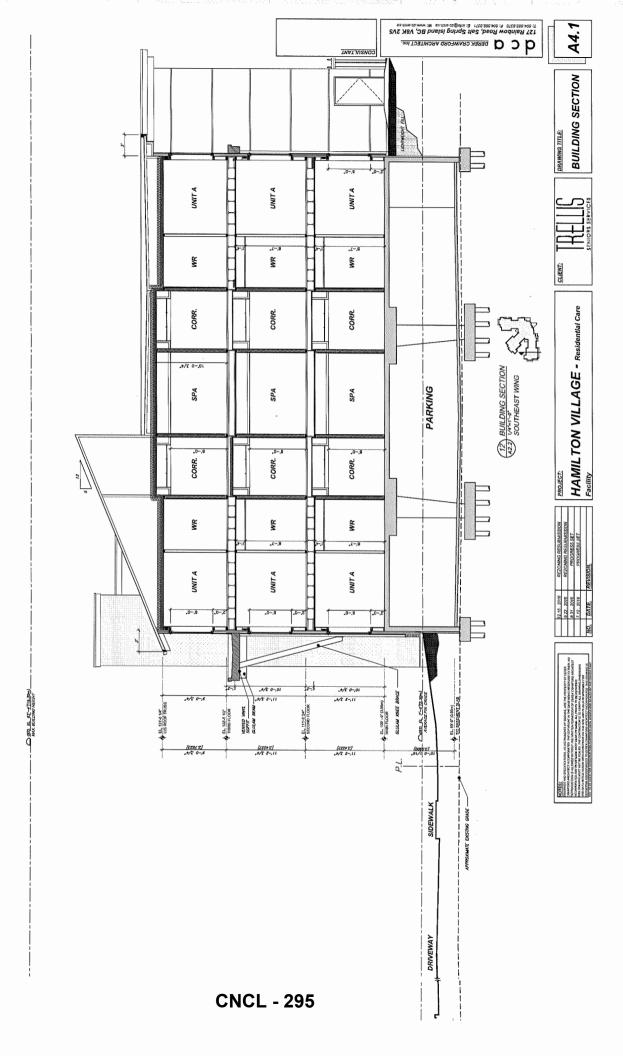












HAMILTON VILLAGE - RESIDENTIAL CARE FACILITY LANDSCAPE: Issued for Re-Zoning

Landscape Sheet Index

Cover Sheet

L-01

L-02 L-03 L-04

Overall Site Plan Arborist Plan

Planting Plan

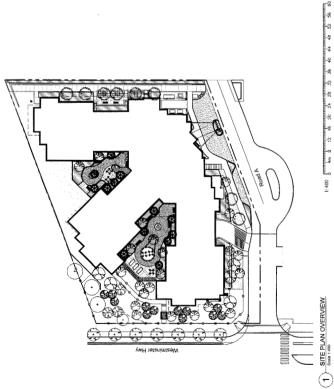
Sections Sections

Sections

L-05 L-05 L-07

Contact Information	Other Key Contacts:	
van der Zalm + associates Inc.	Trellis Senior Services	Derek Crawford Architect Inc.
Suite 1 - 20177 970n Avenue Langley, British Columbia, V1M 489 L 604 662 0024 1, 604 582 0042		127 Rainhow Road, Salt Spring Island BC VBK 2V5 1.604 698 6370
Primary project contact: Travis Martin travis@wdz.ca		
o. 604 882 0024 x 25 Alternale contacts fincate avait:	Legal Address and Description:	escription:
Mark van der Zahn Principal Landscape Architect	Lot 1 - Lot 37, Section 36, Block 5, North Range 4 West, New Westminster Lan Plan 8421, PID 004-107-179, Municipal Address: 23140 Westminster Highway.	Lot 1 - Lot 37, Section 36, Block 5, North Range 4 West, New Westminster Land District Plan 8421, PID 004-107-179, Municipal Address: 23140 Westminster Highway.
0.004 852 0024 x 22	Lot 2 - Lot 139, Section 36, Block 5, North Range 4 West, New Westminster Land District Pien S0394, PitD 003-710-661, Municipal Address: 23120 Westminster Hig	Lot 2 - Lot 139. Section 36. Block 5, North Runge 4 Viest, New Westminster Land District Plan 50394, PID 003-710-601, Municipal Address: 23120 Westminster Highway.
	Lot 3 - Remainder of Lot 140, Section 36, Biock 5, North Range 4 Wast, New Westminister Land District Plan 50364, PID 003-392-303, Municipal Address: 23100 Westminister Highway.	ock 5, North Range 4, West, New 303-392-503, Municipal Address: 23100





			150
PR NO	1		14
140	Sec. 1	1.00	
1	San Lana	11	

2402 239 409 -Principality + Cullippende Architectu

2 LOCATION MAP

DRAWING TITLE: COVER SHEET

Ľ

zØ

CLIENT:

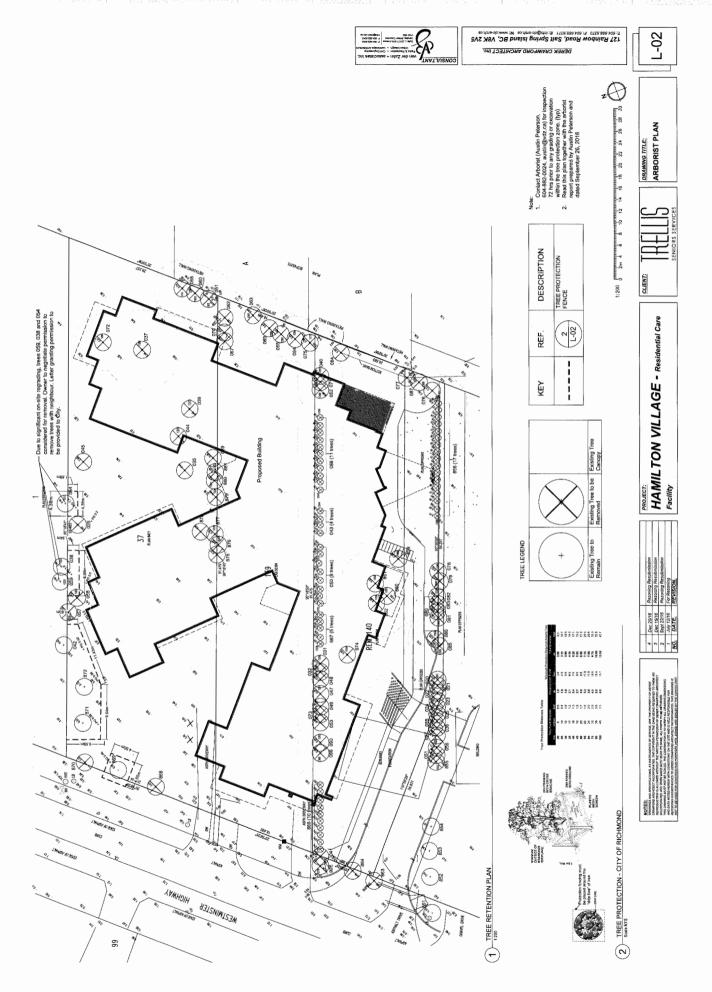
HAMILTON VILLAGE - Residential Care Facility

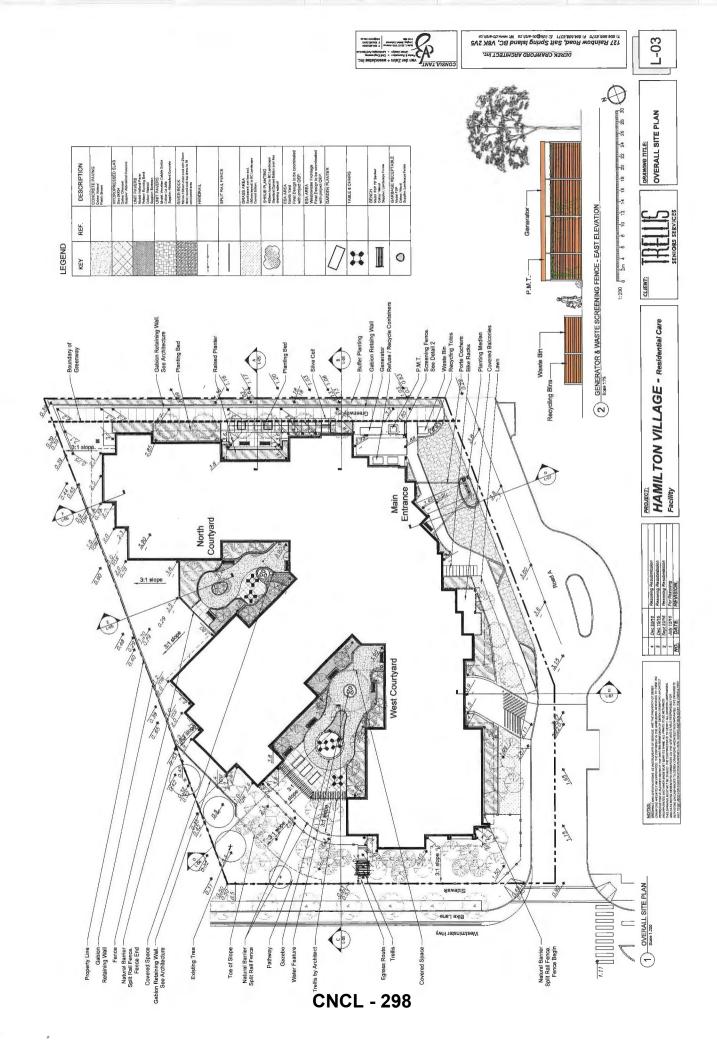
PROJECT:

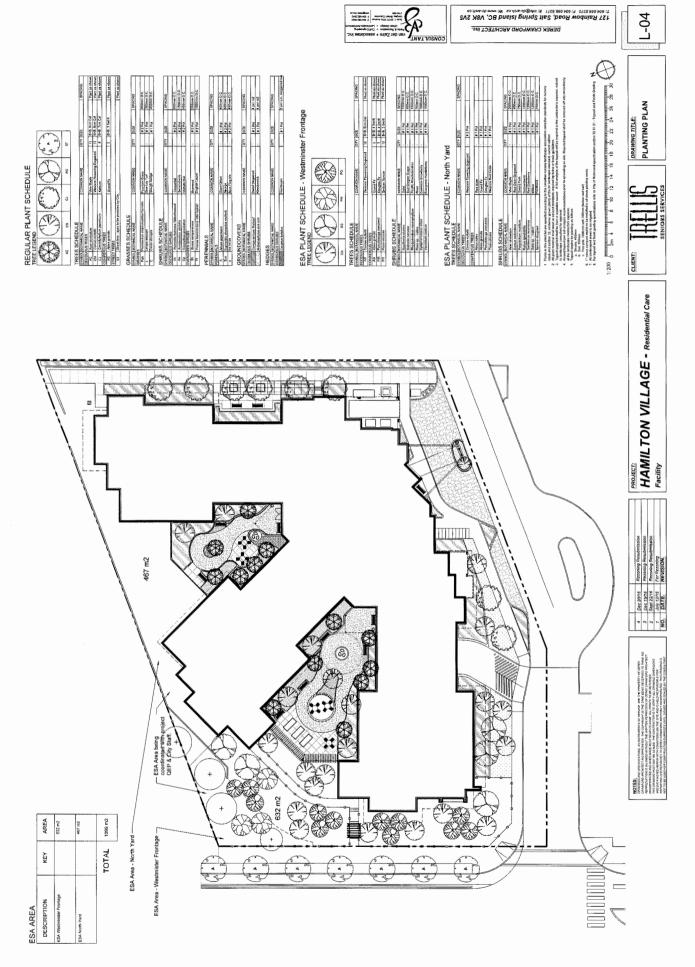
NOTES: (wultimp) countrols mereocic meceevar fres ceran

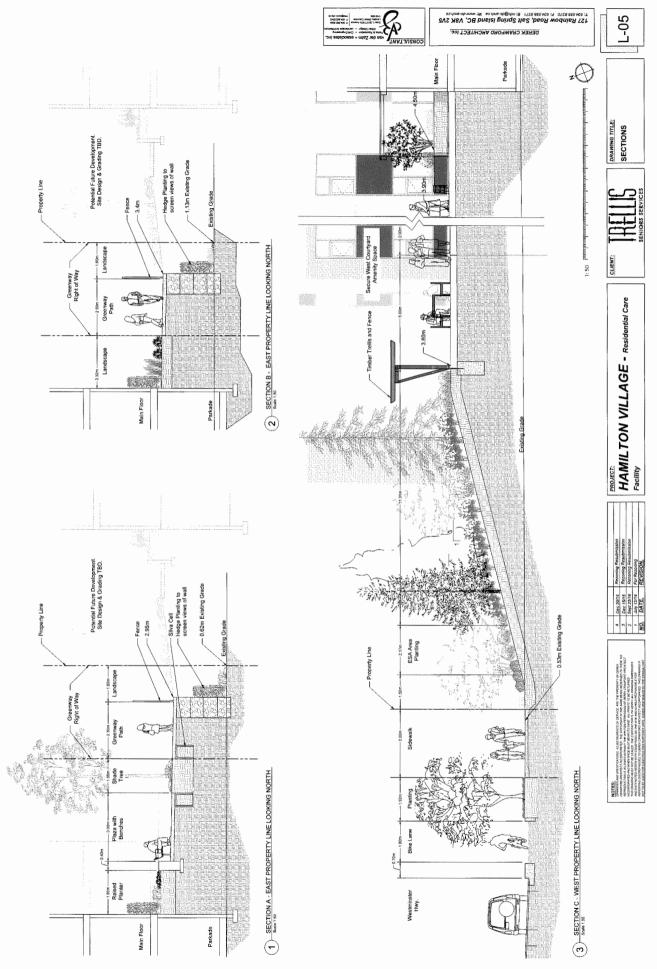
DEREK CRAWFORD ARCHITECT Inc.

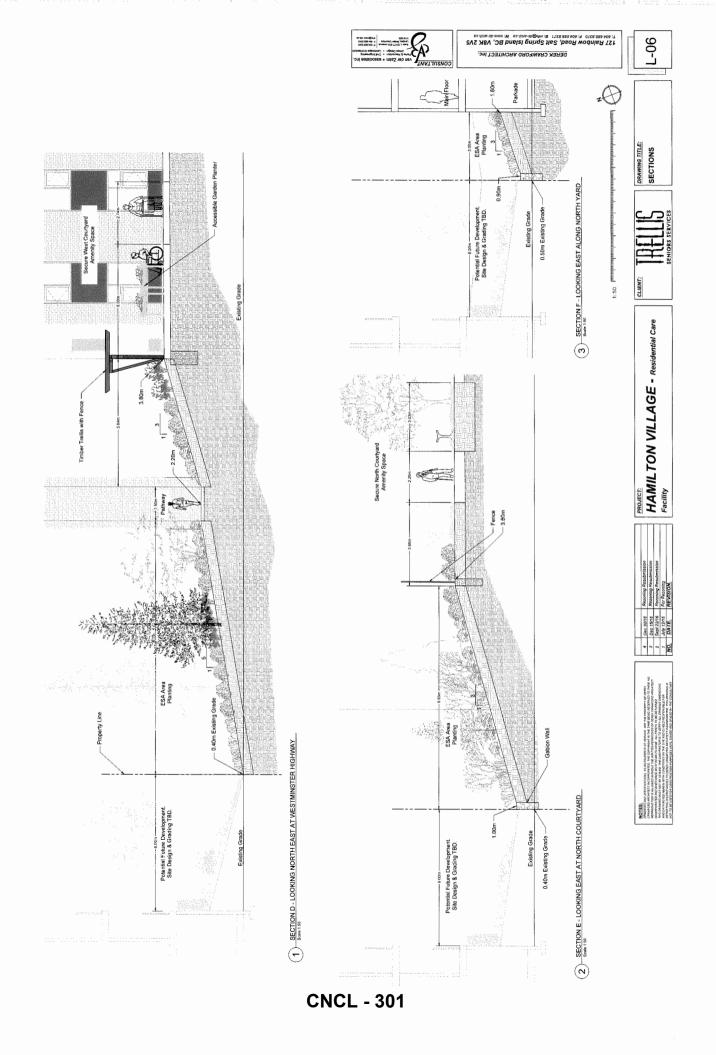
127 Reinbow Road, Salt Spring Island BC, V8K 2V5 T: 604.688.8370 F: 604.688.8371 E: Imb@de-amb.ca W: www.de-amb.ca

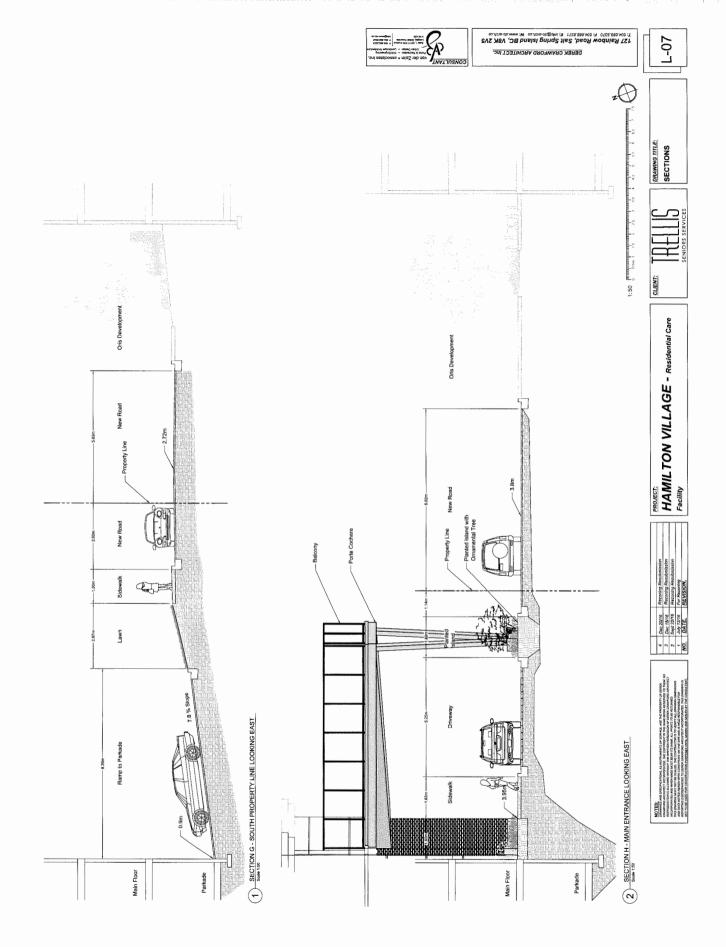














Development Application Data Sheet

Development Applications Department

RZ 16-738480

Attachment 4

Address: 23100, 23120 and 23140 Westminster Highway

Applicant: Trellis Seniors Services Ltd.

Planning Area(s): Hamilton

	Existing	Proposed
Owner:	Trellis Seniors Services Ltd.	Trellis Seniors Services Ltd.
Site Size (m ²):	5,885 m ²	5,885 m ²
Land Uses:	Single Family Residential	Seniors Health Care Facility
OCP Designation:	Residential	Residential
Area Plan Designation:	Neighbourhood Village Centre (Residential 4 Storey 1.5 FAR)	Neighbourhood Village Centre (Residential 4 Storey 1.5 FAR)
Zoning:	Single Detached (RS1/F)	Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)
Number of Units:	Three (3) single family dwellings	135 senior's care units
Other Designations:	Environmentally Sensitive Area	Environmentally Sensitive Area

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 1.4 FAR	1.32 FAR	none permitted
Buildable Floor Area (m ²):*	Max. 8,239 m² (88,684 ft²)	7,745 m² (83,366 ft²)	none permitted
Lot Coverage (% of lot area):	Building: Max. 50%	Building: Max. 46.3%	none
Lot Size:	Min. 5,500 m ²	5,885 m ²	none
Lot Dimensions (m):	Min. Width: 40.0 m Min. Depth: 80.0 m	Width: 58.31m Depth: 91.49 m	none
Setbacks (m):	Front: Min. 6.0 m Rear: Min. 6.0 m North Side: Min. 3.0 m South Side: Min.10.0 m	Front: Min. 6.0 m Rear: Min. 6.0 m North Side: Min. 3.0 m South Side: Min.10.0 m	none
Height (m):	Max. 17.0 m	16.8 m	none
Off-street Parking Spaces – Total:	Min. 45	59	none
Tandem Parking Spaces:	Permitted – Maximum of 50% of required spaces	None	none
Amenity Space – Indoor:	Min. 100 m ²	1,015 m ²	none
Amenity Space – Outdoor:	Min. 810 m ²	830 m ²	none

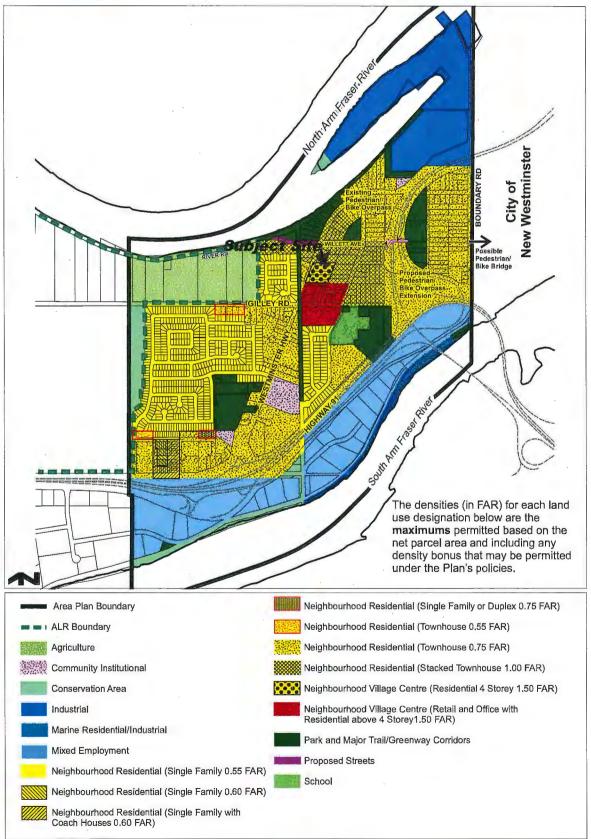
Other: Tree replacement compensation required for loss of significant trees.

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

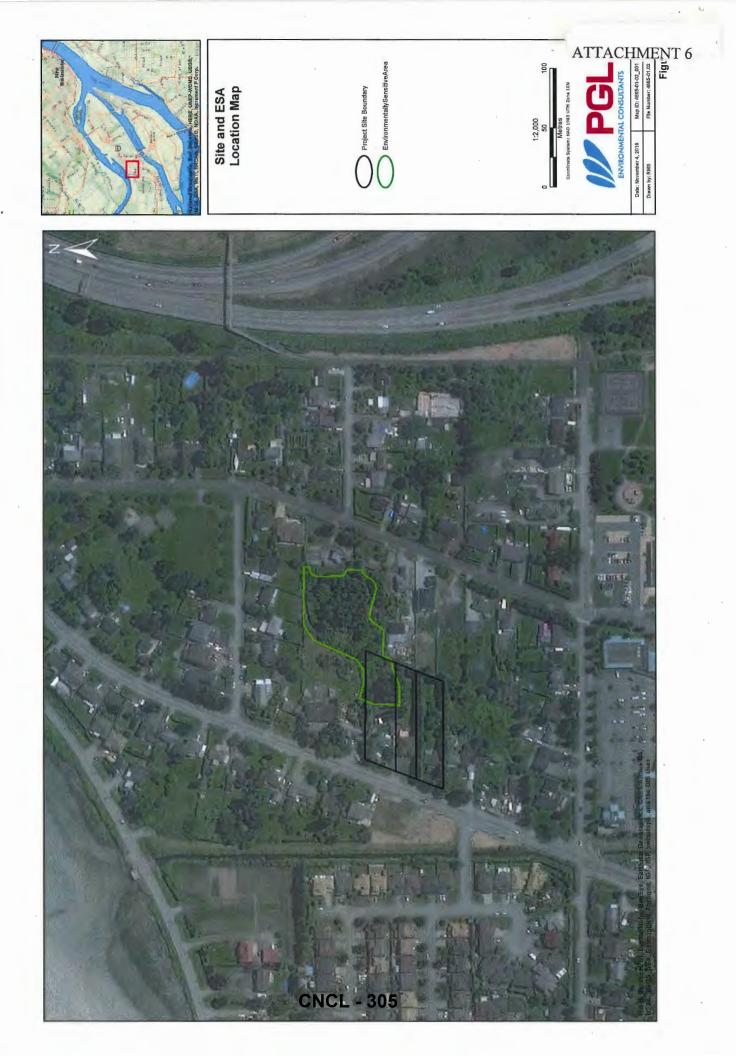
ATTACHMENT 5

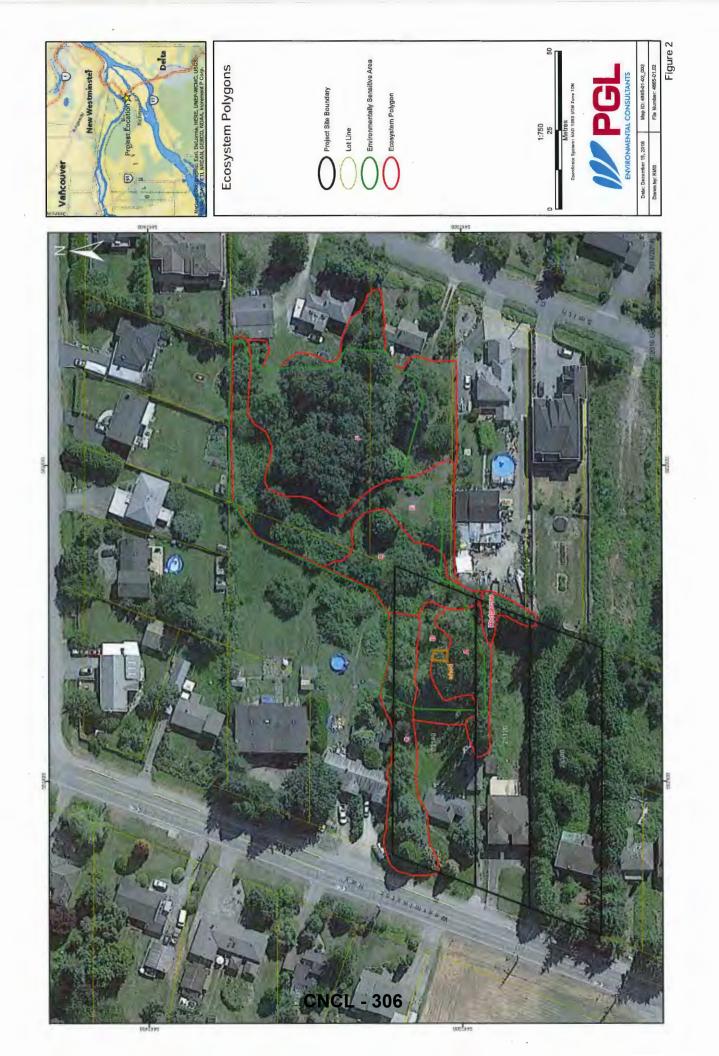
Hamilton Area Plan

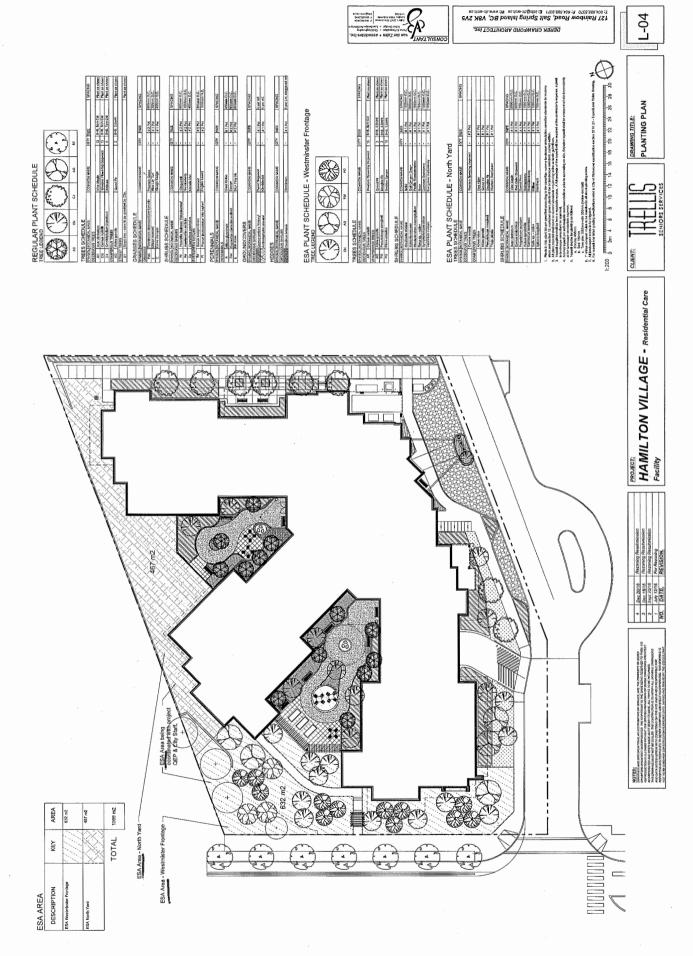




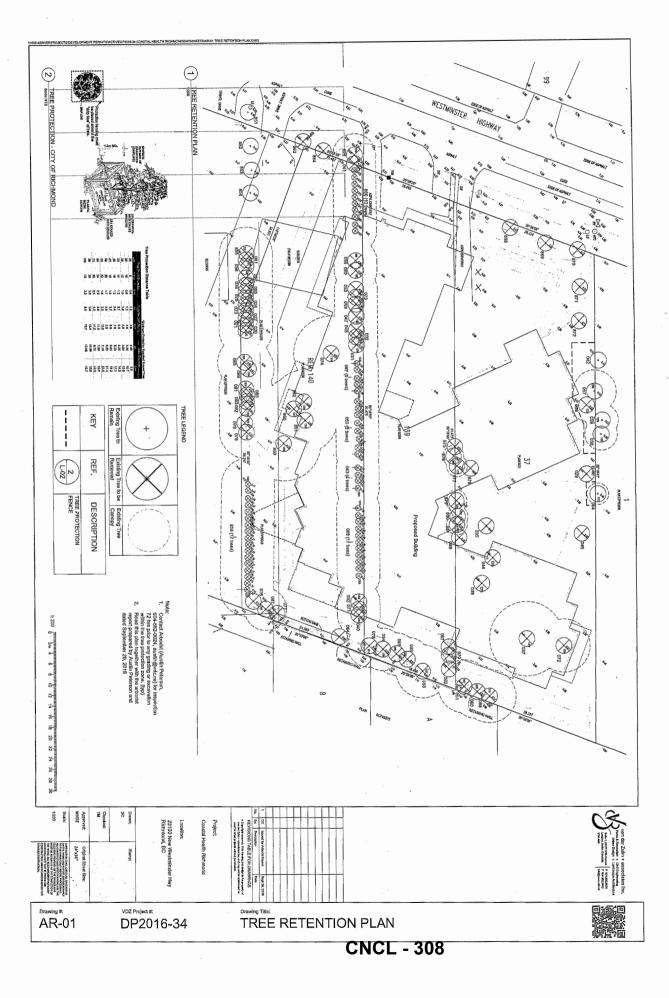
Original Adoption: Juc Nicel Plan A3.0.4 February 25, 2014







ATTACHMENT 7



ATTACHMENT 8



Rezoning Considerations

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

Address: 23100, 23120 & 23140 Westminster Hwy Trellis Seniors Services

File No.: RZ 16-738480

Prior to final adoption of Richmond Zoning Bylaw 8500, Amendment Bylaw 9669, the developer is required to complete the following:

- 1. Provincial Ministry of Transportation & Infrastructure Approval.
- 2. Consolidation of all the three (3) lots into one development parcel (which will require the demolition of the existing dwellings).
- 3. Submission of a Tree Survival Security to the City in the amount of \$30,000 to be held for a term of three (3) years for the three (3) trees that are to be retained (labelled with tag nos. 869, 871,872 in the revised Arborist Report from Vander Zalm & Associates dated December 15, 2016).
- 4. Submission of a landscape plan for the Development Permit that includes 134 replacement trees based on a ratio of at least 2:1 to compensate for the 67 on-site trees to be removed. The applicant has confirmed that 72 replacement trees will be planted on the development site which leaves a shortfall of 62 trees. The required replacement trees are to be of the following minimum sizes, based on the size of the trees being removed as per Tree Protection Bylaw No. 8057. The applicant will also plant a large number of smaller trees within the ESA compensation area to be determined with the Stage 2 ESA Report preferred by the QEP as required for the Development Permit for the project.
- 5. Provision of a voluntary contribution of \$500 per replacement tree to the City's tree compensation fund for the 62 replacement tree shortfall not included within the Development Permit (a total contribution of \$31,000 based on 62 trees).
- 6. Registration of a flood plain covenant on title identifying a minimum habitable elevation of 3.5 m GSC.
- 7. Extending North-South Greenway / Strollway: Registration of a cross-access easement, statutory right-of-way (SRW), and/or other legal agreements or measures, as determined to the satisfaction of the Director of Development for a greenway/strollway over the most easterly 4.0 m of the site as shown on Attachment 4, that provides for a 2.5m wide hard surface pathway, landscaping, way-finding signage, pedestrian lighting and retaining walls under an approved Development Permit, with the owner/developer being responsible for liability, construction and maintenance of these works, and provision for the City and/or its agents (adjacent property owner/developer) for removal the existing landscaping and retaining wall and completion of landscaping and extension the east-west "New Road" walkway over the easternmost 1.5m of the SRW to complete works under a future Development Permit issued for the adjacent development to the east.
- 8. Extending "New Road" Statutory Right-of-Way (SRW): Registration amendment for Statutory Right-of-Way (shown on SRW Plan EPP 55269) to extend this existing SRW for public vehicle and pedestrian access over the additional area shown on Attachment 2, and a text amendment to allow for encroachment of a driveway canopy structure (port cochere) into the SRW on the subject Lot 4 development as permitted under an approved Development Permit.
- 9. Temporary Construction Access Turn-Around Easement: Registration of an easement and/or registration of other legal agreements in favour of the proposed Lot 4 over Lot 3, Block 5, North Range 4, Plan EPP55255, NWD as shown on Attachment 2 to allow for interim construction vehicle access and provide for developer construction of the road and supporting structure as necessary for development of both lots under approved Development Permits, as determined to the satisfaction of the Director of Development; with the easement to be discharged once construction of ultimate "New Road" is completed for developments on both lots.
- 10. Interim Construction Easement for "New Road": Registration of a reciprocal easement and/or registration of other legal agreements in favour of the proposed Lot 4 and Lot 3, Block 5, North Range 4, Plan EPP55255, NWD over statutory right-of-way Plan EPP 55269 to allow for interim construction access, and construction of the road, sidewalk and supporting structure necessary to provide for permanent vehicle and pedestrian access to developments under approved Development Permits on both lots as determined to the satisfaction of the Director of Development.

Initial:

- 11. Further to the Letter of Agreement in Attachment 5, the developer is required to provide a letter/report and diagram from their structural and geotechnical engineers describing how the portion of the parkade of Lot 3 can be constructed in the interim to support the temporary turnaround and part of New Road A required to provide access to the proposed Lot 4 development in the event that the Lot 3 development does not proceed simultaneously or prior to the proposed Lot 4 development.
- 12. Submission of a letter from a LEED certified consultant as a requirement of issuance of the development permit and building permit confirming that the development has been designed to achieve a sufficient score to meet the current Canadian Green Building Council LEED Gold score criteria. The submission of follow-up letter from a LEED certified consultant that confirms that buildings have been constructed to achieve LEED Gold certification or equivalent is required. Consideration should be given to building design with higher energy efficiency ratings than required by the BC Building Code and utilizing geo-exchange energy systems.
- 13. Registration of an electric vehicle parking covenant on title requiring that 20% of resident parking stalls that will be equipped with 120V electric plug-ins and that an additional 25% of the resident parking stalls will be pre-ducted for future wiring to accommodate the future installation of electric vehicle charging equipment.
- 14. Ensure to the satisfaction of the City that the Construction, Phasing and Interim Design Measures in Appendix 1 of the Hamilton Area Plan (Schedule 2.14, Official Community Plan Bylaw 9000) are addressed, as applicable, in the Development Permit and Servicing Agreement.
- 15. The submission and processing of a Development Permit* that addresses the Area Plan and OCP Multiple Family Guidelines and the Environmentally Sensitive Area Guidelines, completed to a level deemed acceptable by the Director of Development.
- 16. The developer is to be provide confirmation from the Vancouver Coast Health Authority that the development will be licenced under the *Community Care and Assisted Living Act*, or the City may accept the developer's offer to voluntarily contribute \$49.50 per buildable square meter or \$4.60 per buildable square foot (e.g. \$383,484.00) to the City's Hamilton Area Plan Amenity Reserve Fund (with the exact amount to be confirmed on the floor area within the Development Permit plans).
- 17. Enter into a Servicing Agreement* for the design and construction of works described in Attachment 3 Servicing Works.

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

- 1. Incorporate the "Basic Universal Housing" provisions of Zoning 8500 for all units within the building.
- 2. Provide a dimensioned plan showing the following:
 - Garbage collection (front end bin); cardboard collection (front end bin); food scraps collection using carts; medical waste collection; paper collection (cart); mixed containers collection (cart); glass container collection (cart); refundable bottles/cans collection (cart); and grease collection container.
 - Wash basin with faucet and hose plus floor drainage in the garbage and recycling area.
 - Illustrate or demonstrate how the garbage and recycling trucks will be servicing the bins and carts.
- 3. Environmentally Sensitive Area (ESA): The developer is required to address the vegetation and habitat loss within the on-site ESA with compensation area in excess of 1:1 as provided in the Stage 1 Report dated December, 2016 from Pottinger Gaherty, Environmental Consultants Ltd. (QEP Report); the detailed planting and monitoring plans are to be included within the Stage 2 QEP Report prepared for the Development Permit for this project to the satisfaction of the Director of Development.
- 4. Landscape Plan: The developer is to provide additional detailed finished landscape plan that re-creates natural sloping grades as much as possible, reduces impacts on the preserved trees and prevents potential runoff onto adjacent properties.

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

 Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570 CNCL - 310

5255723

Initial:

- 2. Incorporation of the "Basic Universal Housing" provisions of Zoning 8500 for all units as provided in the Development Permit.
- 3. Submission of a Dewatering Plan to the satisfaction the Manager, Engineering Planning and Manager, Sustainability.
- 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.
- 5. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

Note:

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

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

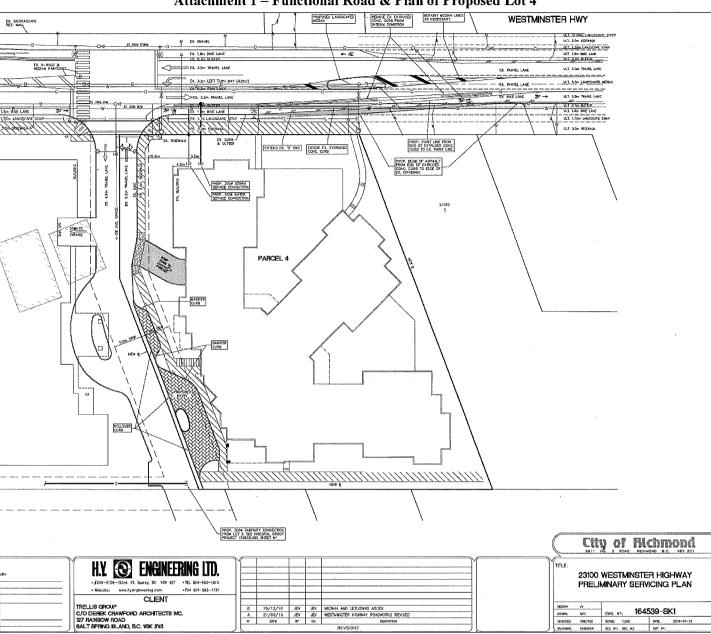
The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director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

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

Signed

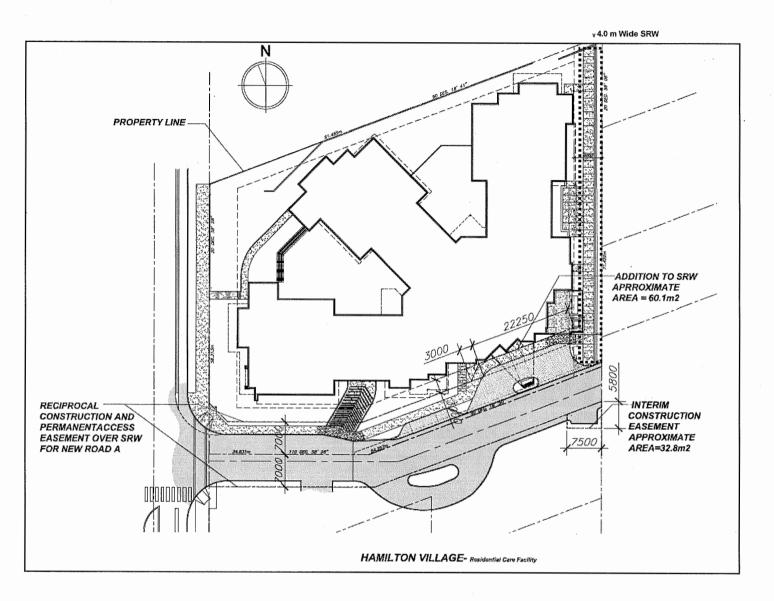
Date

Initial:



Attachment 1 - Functional Road & Plan of Proposed Lot 4

- 4 -



Attachment 2 - New SRW and Easement Areas

- 5 -

Attachment 3 – Servicing Works

The following works must be included with the Servicing Agreement:

1. Engineering Works

Drainage and water servicing shall generally follow the concepts and layouts proposed in the Hamilton Area Servicing Study (HASS) prepared for the City by KWL, dated Oct 29, 2014. Increased storm sewer diameters and other amendments to the HASS may be required to meet the City's minimum standards and meet existing conditions. All works and agreements will be to the satisfaction of the Director of Engineering.

• Water Works:

- a. The Developer is required to:
 - Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm the development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage and Building designs.
 - Install additional fire hydrants as required along the developments frontages to achieve the City's standard spacing requirements.
 - Replace the existing 300 mm diameter AC watermain along Westminster Hwy to the limits of the proposed road works, complete with tie-in to the watermain to the north and south.
 - Install a new water service connection for each new lot complete with tie-in to the newly constructed watermain along Westminster Hwy.
 - Cut and cap at main, all existing water service connections.
- b. At the Developer's cost, the City will:
 - Complete all tie-ins for proposed works to existing City infrastructure.

• Storm Sewer Works:

- a. The Developer is required to:
 - Provide erosion and sediment control plans for all on-site and off-site works.
 - Install a new storm service connection complete with inspection chamber for each lot, tie-in to existing 750mm storm sewer along Westminster Hwy.
 - Cut, cap and remove all existing storm service connections and inspections chambers.
 - At the Developer's cost, the City will:
 - Complete all tie-ins for proposed works to existing City infrastructure.
- Sanitary Sewer Works:
 - The Developer is required to receive confirmation from the City of the finalized sanitary servicing layout of the lots to the south (under the Servicing Agreement and Building Permit for the buildings associated with RZ14-660662 & 14-660663 for Oris Parcels 2 and 3) prior to rezoning application for Parcel 4 progressing to zoning adoption. As all sanitary sewage is to be directed to the onsite sewer to the south, the architectural plans submitted for the Development Permit shall take into consideration the onsite sanitary servicing strategy for this site.
 - If such City confirmation regarding on-site sanitary sewer servicing is not received, the Developer will be required to complete one of the following alternatives prior to the zoning bylaw amendment being adopted:
 CNCL 314

- The Developer is required to install a new permanent sanitary sewer from the south property line on Westminster Highway to the future pump station located potentially within the park space on Willett Avenue. The developer shall inform the City on the timing of the projected occupancy for the proposed development and they shall coordinate the design and construction of the required permanent sanitary sewer with the future Willett sanitary pump station. The permanent sanitary sewer shall be sized using a sanitary catchment analysis based on OCP densities at the servicing agreement stage.
- o If, through unforeseen circumstances, the construction of the new sanitary pump station is delayed and the proposed development proceeds ahead of the pump station, the Developer shall obtain an easement through the development to the south (RZ14-660662 and RZ14-660663) and construct temporary sanitary sewers to the Metro Vancouver pump station on Gilley Road; this will require the raising of Gilley Road by approximately 1.0 m, as well as raising of existing aboveground and at-grade structures and utilities, including but not limited to streetlights, catch basins, fire hydrants, new concrete curb & gutter, new concrete sidewalk, etc. The Developer is responsible for confirming, prior to entering into any legal easement agreement with the owner/developer of RZ 14-660662 and RZ14-660663, who shall pay for the removal of the temporary sanitary works as well as the diversion of the sanitary flows from RZ16-738480 while RZ14-660662 and RZ14-660663 are under construction.
- In the event that the City confirms the on-site sewer servicing to the south, but the developments to the south (RZ14-660662 & RZ14-660663) are delayed in construction or do not proceed as originally intended, the Developer will need to design and undertake works to complete one of the above sanitary servicing options.

• General Items:

- a. The Developer is required to:
 - The City is aware of ongoing hydrocarbon contamination issues originating from a gas station located at 22490 Westminster Highway. At the developer's cost, the developer is required to manage any hydrocarbon contamination encountered during construction of the servicing agreement works in compliance with the Environmental Management Act.
 - Locate all above ground utility cabinets and kiosks required to service the proposed development within the development site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the development design review process. Coordination is required with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the requirements and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The following are <u>examples</u> of SRWs that shall be shown in the functional plan and registered prior to SA design approval:
 - 1. BC Hydro PMT 4mW X 5m (deep)
 - 2. BC Hydro LPT 3.5mW X 3.5m (deep)
 - 3. Street light kiosk -1.5 mW X 1.5 m (deep)
 - 4. Traffic signal kiosk 1mW X 1m (deep)
 - 5. Traffic signal UPS 2mW X 1.5m (deep)
 - 6. Shaw cable kiosk 1mW X 1m (deep) show possible location in functional plan
 - 7. Telus FDH cabinet 1.1mW X 1m (deep) show possible location in functional plan
 - Assess streetlight levels along Westminster Highway and areas of public rights-of-passage and install/upgrade lighting as required to meet City standards.

Initial: _____

• Assess the potential differential settlement between the proposed piled buildings and the surrounding un-piled areas and design City utilities and service connections to accommodate this movement, to the City's satisfaction.

- 8 -

- Provide, prior to first SA design submission, a geotechnical assessment of preload and soil preparation impacts on the existing utilities fronting or within the development site and proposed utility/road installations and provide mitigation recommendations. The mitigation recommendations (if required) shall be incorporated into the first SA design submission or if necessary prior to pre-load.
- 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.
- Provide frontage improvements as per Transportation's requirements.

2. Transportation Works

1. Developer responsible for the design and construction of the following frontage works:

Westminster Highway (from the property line to north):

- 3.0 m wide concrete sidewalk.
- 1.75 m boulevard with grass and street trees to the satisfaction of City Parks.
- Within the same boulevard, street lights (City Pole Type 7) with 3000K LED lights with pedestrian arm lights with sufficient spacing to provide sufficient street lighting for full width of Westminster Hwy to the satisfaction of City Engineering.
- New 0.15m wide curb and gutter.
- Pavement widening and line painting to provide for a 1.8m wide northbound bike lane, 0.7m wide painted buffer, 3.5m wide northbound travel lane, 3.5m wide southbound left turn lane, landscaped median and maintain existing southbound travel lane and shoulder.
- Outside the development frontage, interim pavement, markings and extruded concrete curb as shown on Attachment 1.

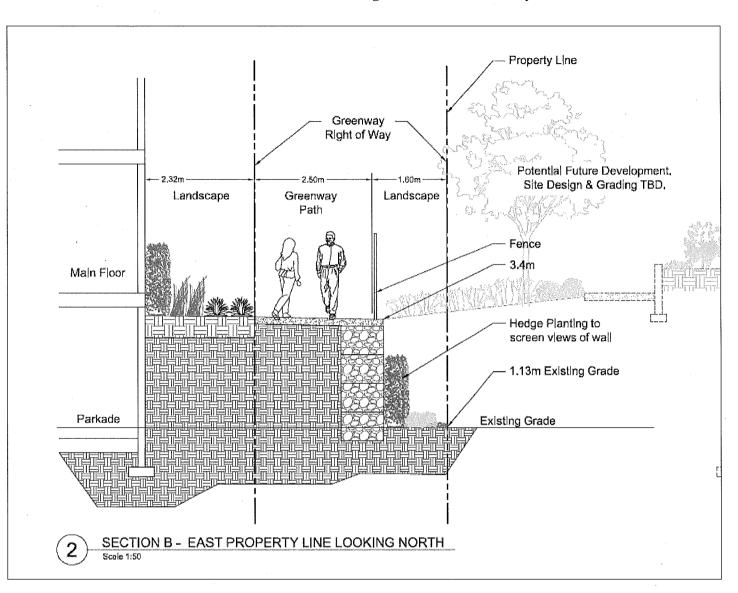
These works are to be included within the Servicing Agreement to be reviewed and approved by the City, secured with a Letter of Credit and built by the developer.

2. The required **On-Site Works** as shown on Attachment 1 include, but are not limited to:

- New Road A with a road width of 11.1m.
- Adjacent 2.0 m wide concrete sidewalk and Proposed Entry as shown on Attachment 1

These works are to be included within the Servicing Agreement to be reviewed and approved by the City with respect to construction standards and to be built by the developer.

Initial: _____



Attachment 4 – Plan Showing North-South Greenway

- 9 -

Attachment 5 - Letter Agreement on Construction Interim New Road A

- 10 -



Oris Consulting Ltd 12235 No 1 Rd, Richmond, BC V7E 1T6

December 16, 2016

City of Richmond 6911 No. 3 Rd Richmond, BC

RE: Letter of Agreement between Oris Developments (Hamilton) Corp., 23100 Hamilton Holdings Corp., and Hamilton Village Care Centre Holdings Ltd.

Dear Sir/Madam,

Oris Development (Hamilton) Corp., 23100 Hamilton Holdings Corp., and Hamilton Village Care Centre Holdings Ltd., jointly agree to register a reciprocal easement over the "New Road A" SRW (as shown as Sketch A below) on Parcel 3 (Lot 3) and Parcel 4/5 (Rem Lot 140).

In the event that the sale of Parcel 3 is completed between Oris Development (Hamilton) Corp. to 23100 Hamilton Holdings Corp. prior to the easement agreement being completed, the agreement will be between 23100 Hamilton Holdings Corp. and Hamilton Village Care Centre Holdings Ltd.

In the event the developments on Parcel 3 and Parcel 4/5 are not developed at the same time, the City of Richmond requires an acceptable interim road and pedestrian access solution within the respective Parcels' boundaries including the portion of the development Parcels which will become the Road A SRW (under EPP55269).

To clarify, each of Parcel 3 and Parcel 4/5 has separately provided to the City of Richmond an Interim solution for their respective developments which includes a functional road and pedestrian access within the Parcels' boundaries. The Parcel 4/5 interim solution also will require a temporary easement over the north east corner of Parcel 3 to provide for the turning of service vehicles and each of Oris Development (Hamilton) Corp. and 23100 Hamilton Holdings Corp., as the case may be, agree to provide such additional easement if so required.

Dana Westermark Oris Developments (Hamilton) Corp.

Dán McDougall O Hamilton Village Care Centre Holdings Ltd.

Rob Howard 23100 Hamilton Holdings Corp.

Telephone: 604 241 4657 / www.orisconsulting.com THE BUILDER RESERVES THE RIGHT TO MAKE MODIFICATIONS AND CHANGES

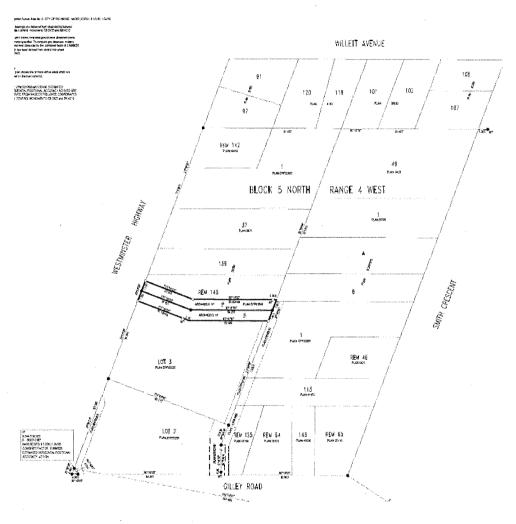


Sketch A

(SRW for Future "Road A" under EPP55269)

- 11 -

 \mathfrak{P}



Bylaw 9669



Ù

Richmond Zoning Bylaw 8500 Amendment Bylaw 9669 (RZ16-738480) 23100, 23120 and 23140 Westminster Highway

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

1. Richmond Zoning Bylaw 8500 is amended by inserting the following into Section 21 (Site Specific Residential (Other) Zones), in numerical order as follows:

"21.11 Senior's Care Facility (ZR11) – Hamilton Village (Hamilton)

21.11.1 PURPOSE

This **zone** provides for a senior's care facility with a maximum **floor area ratio** of 1.40.

- 21.11.2 PERMITTED USES
 - community care facility, major
- 21.11.3 SECONDARY USES
 - health service, minor

21.11.4 PERMITTED DENSITY

- 1. The maximum **floor area ratio** is 0.40 for a residential apartment development.
- 2. Notwithstanding Section 21.11.4.1, the reference to "0.40" is increased to a higher **density** of "1.40" if, at the time **Council** adopts a zoning amendment bylaw to include the **owner's lot** in the ZR11 **zone**, the **owner** has provided confirmation from the Vancouver Coast Health Authority that the development will be licenced under the *Community Care and Assisted Living Act*, or the **owner** has paid \$49.50 per square meter of the total residential **floor area** into the **Hamilton Area Plan community amenity capital reserve.**

21.11.5 MAXIMUM LOT COVERAGE

1. The maximum **lot coverage** for **buildings** is 50%.

21.11.6 Yards & Setbacks

- 1. The minimum **setbacks** are:
 - a) 6.0 m for the **front yard**;
 - b) 6.0 m for the **rear yard**;
 - c) 3.0 m for the north interior side yard;
 - d) 10.0 m to the **building** face for the south **interior side yard**; and
 - e) 0.30 m for a vehicular driveway canopy for the south interior side yard.
- 2. Common pedestrian entrance canopies, staircases, eaves, sunscreens and unenclosed **balconies** may project into any **setback** to a maximum distance of 2.3 m.
- 3. Notwithstanding the above **setbacks**, an enclosed parking **structure** may project into the **setbacks** provided that the **structure** either is not visible from the exterior of the **building**, or is landscaped or screened by a combination of trees, shrubs, ornamental plants or lawn as specified by a Development Permit approved by the **City**, and is no closer than 6.0 m from Westminster Highway.

21.11.7 MAXIMUM HEIGHTS

- 1. The maximum height for principal buildings is 17.0 m (not to exceed (3) storeys).
- 2. The maximum height for accessory buildings and accessory structures is 6.0 m.

21.11.8 SUBDIVISION PROVISIONS/MINIMUM LOT SIZE

- 1. The minimum lot width is 40.0 m and minimum lot depth is 80.0 m.
- 2. The minimum lot area is $5,000 \text{ m}^2$.

21.11.9 LANDSCAPING AND SCREENING

1. **Landscaping** and **screening** shall be provided according to the provisions of Section 6.0.

21.11.10 ON-SITE PARKING AND LOADING

1. On-site **vehicle** and bicycle parking and loading shall be provided according to the standards set out in Section 7.0.

21.11.11 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."
- 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 "Senior's Care Facility (ZR11) Hamilton Village (Hamilton)":

That area outlined in bold on "Schedule A attached to and forming part of Bylaw No. 9669"

2. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9669".

FIRST READING

A PUBLIC HEARING WAS HELD ON

SECOND READING

THIRD READING

OTHER CONDITIONS SATISFIED

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE APPROVAL

ADOPTED

MAYOR

CORPORATE OFFICER

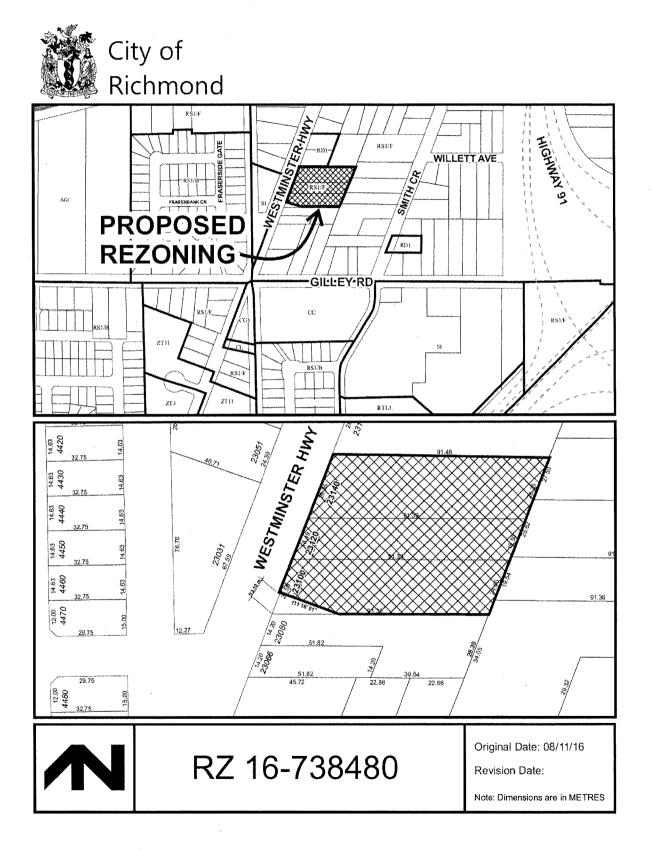
CITY OF RICHMOND

APPROVED

APPROVED by Director or Solicitor

al







To:	Public Works and Transportation Committee	Date:	November 22, 2016
From:	Victor Wei, P. Eng. Director, Transportation	File:	01-0100-30-TSAD1- 01/2016-Vol 01
Re:	Traffic Safety Advisory Committee – Proposed 2017 Initiatives		

Staff Recommendation

- 1. That the proposed 2017 initiatives for the Traffic Safety Advisory Committee, as outlined in the staff report titled "Traffic Safety Advisory Committee Proposed 2017 Initiatives" dated November 22, 2016 from the Director, Transportation, be endorsed.
- 2. That a copy of the above staff report be forwarded to the Richmond Council-School Board Liaison Committee for information.

22

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

Att:1

REPORT CONCURRENCE				
ROUTED TO: CO	NCURRENCE	CONCURRENCE OF GENERAL MANAGER		
Community Bylaws Fire Rescue RCMP	দ দ ম	Are Eneg		
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	Initials: DW	APPROVED BY CAO		

Staff Report

Origin

Council endorsed the establishment of the Traffic Safety Advisory Committee (TSAC) in 1997, in order to create a co-operative partnership between City staff, community groups and other agencies that seek to enhance traffic and pedestrian safety in Richmond. The Committee provides input and feedback on a wide range of traffic safety issues such as school zone concerns, neighbourhood traffic calming requests and traffic-related education initiatives. TSAC has representation from the following groups: Insurance Corporation of BC (ICBC), Richmond School District, Richmond RCMP, Richmond Fire-Rescue, Richmond District Parents Association, and the City's Transportation and Community Bylaws Departments. This report summarizes the Committee's activities in 2016 and identifies proposed initiatives for 2017.

Analysis

The Committee's major activities and accomplishments in 2016 are summarized below.

Road and School Zone Safety Initiatives in 2016

The Committee provided input on and/or participated in the following measures aimed at improving the safety of Richmond roads for all users, particularly in school zones.

- <u>Pedestrian Zone Markers School Zones</u>: Given the past success of in-street mounted school zone signage in school zone locations in Richmond, two signs were installed within the school zone on Odlin Road fronting Tomsett Elementary School. Identical signs were also installed on the section of Westminster Highway north of Highway 91 in front of Choice School for the Gifted. However, due to repeated vandalism (i.e., illegal removal of the signs) at this location, staff are now considering the installation of speed humps in the school zone, subject to expressed support by local residents.
- <u>Traffic Calming</u>: Installation of speed humps in Burkeville (two on Airport Road in front of Burkeville Park) and on Dyke Road (two in the 23,000-block). Modifications to the existing traffic circle on Saunders Road at Whelan Road to improve driver awareness at the traffic circle and reinforce the requirement to yield to other traffic that comprised road markings and delineation to channel drivers to the right as they approach the traffic circle, painted white hatched "stop" bars to provide reference for vehicle staging, improved placement and enlarging of yield signage, and the addition of yield ahead signs at each approach to the traffic circle.
- <u>Potential Pilot Project for Pedestrian Safety</u>: Members discussed the feasibility of
 implementing a pilot project intended to enhance the safety of pedestrians at signalized
 intersections, particularly those with high pedestrian volumes. The pilot project would assess
 the effectiveness of a "Leading Pedestrian Interval (LPI)," which is a traffic signal strategy
 whereby pedestrians are given the "Walk" signal typically three to seven seconds prior to the
 activation of a green light for motorists. Research indicates that by giving pedestrians a head
 start, it is less likely that there will be conflict between pedestrians and turning vehicles.
 LPIs increase the percentage of motorists who yield the right-of-way to pedestrians because

pedestrians are in the crosswalk by the time the traffic signal turns green for parallel vehicle movements. The Committee is currently considering a potential location (likely in the City Centre) for the pilot project.

• <u>School Travel Planning</u>: Continuation of a pilot program with the Richmond School District, TravelSmart (part of TransLink) and HASTe (Hub for Active School Travel, contractor to TravelSmart) to develop a customized School Travel Plan for three elementary schools: Garden City, AB Dixon and Walter Lee. The Plans aim to create an environment that encourages healthy and active transportation to and from school, improves the journey for those who use vehicles or take school busses, and improves transportation safety for everyone. Attachment 1 provides a draft "Safe Routes to School" map, which is one component of the plan, for Walter Lee Elementary School developed in consultation with parents and City and Richmond School District staff.

Amendments to Traffic Bylaw 5870

The Committee provided input on the development of amendments to the City's Traffic Bylaw 5870, which include permitting motorcycle and bicycle parking at intersections corner clearances and new regulations and fines for jaywalking, pedestrians disobeying a traffic control device and drivers yielding to pedestrians at crosswalks. The amendments were adopted at the November 14, 2016 Council meeting and staff are preparing to convey the key changes to the public via avenues such as a City Board notice in the Richmond News, updating the City's website, safety pamphlets to be handed out at future pedestrian safety campaigns, and social media.

TransLink Regional Goods Movement Strategy - Commercial Vehicle Staff Working Group

Through City staff participation on the TransLink Working Group, the Committee is providing input on proposed actions to harmonize regulations concerning truck size, weight and noise across the region and develop a centralized regional permit system that is coordinated with the provincial permit system to provide a single point of contact for trucking companies operating within Metro Vancouver to obtain needed permits, including for oversize/overweight trucks.

Traffic and Pedestrian Safety Campaigns in 2016

Committee members participated in the following ICBC- and Richmond RCMP-led road and pedestrian safety campaigns.

- <u>Pedestrian Safety</u>: In Fall 2016, Richmond RCMP in partnership with ICBC and Richmond Fire-Rescue conducted four pedestrian safety education and enforcement campaigns (e.g., distribution of reflectors and proactive engagement with pedestrians) in Richmond.
- "<u>Project Swoop</u>": During this event held in May, Speed Watch volunteers set up a speed reader board at a high incident crash location and those drivers who choose to continue to speed even after being clocked by the Speed Watch volunteers will receive a speeding ticket from an RCMP officer a few blocks down the road. Four officers and 28 volunteers were deployed at eight locations and checked over 4,000 motorists.

- <u>Distracted Driving</u>: As part of this campaign that is conducted year-round, RCMP officers and community police volunteers conducted two "Cell Watch" blitz days in March and September and checked over 11,000 motorists. Community police volunteers conducted a further two "Cell Watch" blitz days in March and June.
- <u>Auto Crime Awareness</u>: As part of this annual campaign, community police volunteers conducted two "Lock Out Auto Crime" blitz days in February and issued 1,850 notices. Lock Out Crime audits are also conducted year-round by community police volunteers.

Proposed Traffic Safety Activities for 2017

In addition to developing and providing input on corrective measures to address identified traffic safety concerns, the Committee will undertake a number of proactive initiatives to enhance traffic safety in 2017.

- <u>*Traffic Calming*</u>: The assessment, implementation and monitoring of road safety and traffic calming measures where warranted in local neighbourhoods, together with consultation with Richmond RCMP and Richmond Fire-Rescue prior to the implementation of any traffic calming measures.
- <u>School Zone Traffic Safety</u>: On-going review and improvement of traffic and pedestrian safety in school zones through improving vehicle parking and circulation layout at schools, supporting the enforcement of school zone traffic violations, and introducing new walkways and crosswalks as well as upgraded crosswalks to improve pedestrian safety. Specific schools planned for review and potential improvement include Cambie Secondary School, Hamilton Elementary School and Choice School for the Gifted.
- <u>Pedestrian and Traffic Safety Projects and Campaigns</u>: Implement and assess a pilot "Leading Pedestrian Interval" project at a selected City Centre intersection, provide input on potential road safety improvement measures on River Road in the vicinity of Westminster Highway and continue to support and participate in on-going multi-agency efforts to increase the level of pedestrian and traffic safety, such as annual campaigns held by ICBC and Richmond RCMP.
- <u>Discouraging Vehicle Speeding</u>: The member agencies of the Committee will continue to jointly work on initiatives to curb vehicle speeding in the community, such as the targeted enforcement program of Richmond RCMP.
- <u>Special Events</u>: Provide comment and input from a traffic safety perspective on the development and implementation of traffic management plans to support special events.

Financial Impact

Costs associated with the installation of traffic control devices, walkway construction and other road and traffic safety improvements are normally accommodated in the City's annual capital budget and considered as part of the annual budget review process. Some of these projects are eligible for financial contribution from external agencies (e.g., ICBC and TransLink). If successful, staff will report back on the amount of financial contribution obtained from these

November 22, 2016

external agencies through the annual staff reports on ICBC and TransLink cost-sharing programs respectively.

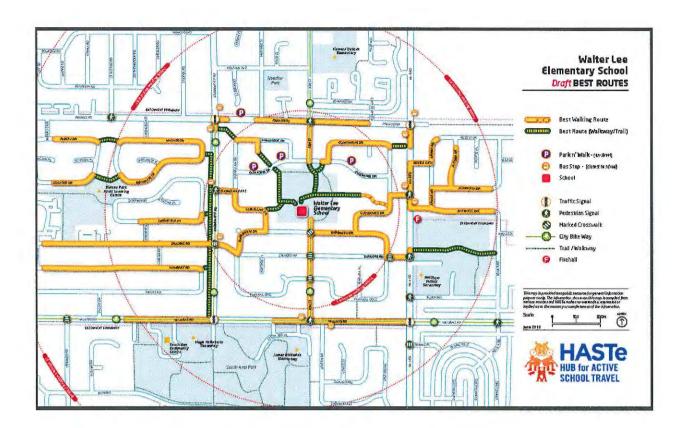
Conclusion

The Traffic Safety Advisory Committee is one of the few multi-agency forums in the region dedicated to enhancing pedestrian and traffic safety within its home municipality. Since its inception in 1997, the Committee has provided input on and support of various traffic safety improvements and programs and initiated a range of successful measures encompassing engineering, education and enforcement activities. Staff recommend that the proposed 2017 initiatives of the Committee be endorsed and this staff report forwarded to the Richmond Council-School Board Liaison Committee for information.

Conswan

Joan Caravan Transportation Planner (604-276-4035) (on behalf of the Traffic Safety Advisory Committee)

Att. 1: Draft Safe Routes to School Map for Walter Lee Elementary School



Draft Safe Routes to School Map for Walter Lee Elementary School



То:	Public Works and Transportation Committee	Date:	December 15, 2016
From:	Victor Wei, P. Eng. Director, Transportation	File:	01-0100-20- RCYC1/2016-Vol 01
Re:	Richmond Active Transportation Committee – Prop	oosed 20	17 Initiatives

Staff Recommendation

- 1. That the proposed 2017 initiatives of the Richmond Active Transportation Committee, as outlined in the staff report titled "Richmond Active Transportation Committee Proposed 2017 Initiatives" dated December 15, 2016 from the Director, Transportation, be endorsed.
- 2. That a copy of the above report be forwarded to the Richmond Council-School Board Liaison Committee for information.

C =

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

Att. 2

REPORT CONCURRENCE					
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER			
Parks Services Recreation Services Sustainability Engineering		Are Erres			
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: DW	APPROVED BY CAO			

Staff Report

Origin

The Richmond Community Cycling Committee was formed in 1993 to allow City staff to work in partnership with the community to promote commuter and recreational cycling in Richmond. In 2013, Council approved the evolution of the Committee into the Richmond Active Transportation Committee (RATC) to reflect a broader mandate that includes skateboarding, inline skating and low-speed scooters. The Committee provides input and feedback to the City on infrastructure projects designed for these modes and undertakes various activities in co-operation with the City that encourage, educate and raise awareness of active transportation.

This report reviews the 2016 activities of the RATC and identifies a number of initiatives for 2017 that would support its mandate to provide input and advice to the City on issues in the planning, development, improvement, and promotion of an active transportation network that supports a greater number of trips by cycling, walking and rolling.

This report supports Council's 2014-2018 Term Goal #2 A Vibrant, Active and Connected City:

2.3. Outstanding places, programs and services that support active living, wellness and a sense of belonging.

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

3.3. Effective transportation and mobility networks.

Analysis

The RATC undertook and participated in a number of activities in 2016 that contributed to enhanced cycling and rolling opportunities, and increased education and awareness of active transportation in Richmond.

Planning, Expansion and Improvement of Active Transportation Network in 2016

The City continued to add to Richmond's active transportation network in 2016, which now comprises nearly 71 km of on- and offstreet bike and rolling routes. The Committee provided feedback on the planning, design, construction, and/or improvement of the following facilities.

• <u>Parkside Neighbourhood Link</u>: Completion of this north-south route on Ash Street between Williams Road and Garden City Park with the upgrade of the special crosswalk on Blundell Road to a pedestrian signal and the addition of pavement markings and signage (Figure 1). A future phase will extend the route north to Westininster Highway to connect to the planned perimeter trails around the Garden City Lands.



Figure 1: Parkside Wayfinding Signage

- <u>Crosstown Neighbourhood Link</u>: Upgrade of special crosswalks to pedestrian signals to
 facilitate cyclists crossing major arterial roads at No. 2 Road-Colville Road and Gilbert
 Road-Lucas Road. Currently under development, the east-west Crosstown Neighbourhood
 Link is aligned between Blundell Road and Francis Road and will link the Railway
 Greenway to the Parkside Neighbourhood Link on Ash Street.
- <u>Green Surface Treatment</u>: Addition of green-coloured anti-skid surface complete with bike stencils within bike lanes at strategic locations where there is a higher potential for conflicts between cyclists travelling straight through and motorists needing to cross the bike lane in order to merge or make a turn. The vibrant colour is the approved national standard that is intended to highlight and raise awareness to both cyclists and motorists to watch out for each other and use caution



Figure 2: Green Surface in No. 2 Road Bike Lane

when in the area. The green treatment was added within the bike lane at southbound No. 2 Road south of the No. 2 Road Bridge (Figure 2).

Railway Avenue Greenway: Enhancements to the northern section of the greenway that included: upgrade of the special crosswalk at Westminster Highway-McCallan Road to a pedestrian signal: the addition of signage and "sharrow" pavement markings on McCallan Road between Westminster Highway and River Road; construction of a paved ramp from River Road to the Middle Arm Trail: and addition of new crosswalk with green surface treatment on River Road at McCallan Road (Figure 3).

New Crossing on Granville Avenue:

The Committee provided feedback



Figure 3: Railway Greenway Crossing at River Road-McCallan Road

on the design for a new pedestrian-cycling crossing to be located on Granville Avenue at the main entrance to the new Minoru Complex between Minoru Gate and Gilbert Road.

 <u>Detailed Design for Road Improvement Projects</u>: The Committee provided feedback on the progress of detailed design for the following planned roadway improvement projects that each include the provision of a two-way paved multi-use pathway: No. 2 Road (Steveston each include the provision of a two-way paved multi-use pathway: No. 2 Road (Steveston Highway-Dyke Road) and Lansdowne Road (Minoru Blvd-Alderbridge Way).

- <u>*River Road*</u>: The Committee, other cyclists and members of HUB Cycling and the BC Cycling Coalition provided feedback on road safety improvement options for potential implementation on River Road between No. 6 Road and Westminster Highway at its December 2016 meeting. Feedback was obtained from one of the individuals who spoke on this topic at the November meeting of the Public Works & Transportation Committee; the other individual who spoke was invited but was unable to attend. The individual who wrote a letter to Mayor and Councillors on the topic (also published in the Richmond News) was invited but did not attend. Staff will address the Council referral to "examine the circumstances and the area around the accident that occurred on River Road on November 6, 2016 and report back" in a separate report anticipated to be presented in early 2017.
- <u>George Massey Tunnel Replacement Project</u>: As part of staff's participation in the Cycling Working Group established by the Ministry of Transportation and Infrastructure for the Project, the Committee provided feedback on potential alternative north-south cycling routes in Richmond that would parallel Highway 99 given that cycling facilities will not be provided within the highway right-of-way.

Promotion of Active Transportation Network in 2016

The Committee participated in the following activities in 2016 to promote cycling and other active transportation modes in Richmond.

 <u>Bike to Work Week (May and</u> <u>October 2016)</u>: The Committee worked with organizers of this region-wide annual initiative to continue to successfully stage these events in Richmond. Region-wide, the two events recorded year-over-year increases for the number of people registered online (a combined total of over 17,400 cyclists) and the number of commutes logged (nearly 96,000, up 12 per cent from 2016). A total of 692 riders who work in Richmond registered on-line

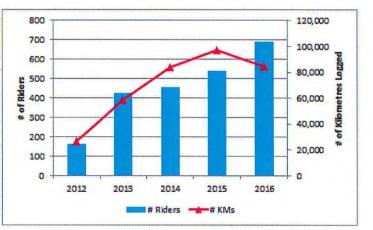


Figure 4: Participation of Cyclists who work in Richmond in Bike to Work Week

for both events (up from 543 participants in 2015), and collectively logged 5,906 trips for a total distance of 84,000 kilometres thereby avoiding the emission of 18.2 tonnes of greenhouse gases (see Figure 4). Within this group were three teams from the City of Richmond comprising 33 cyclists. Together, the City teams logged 321 trips for a total distance of 2,947 kilometres, thus avoiding the emission of 639 kilograms of greenhouse gases.

Celebration stations for cyclists were held at the Canada Line Bridge and Flight Path Park on Russ Baker Way for both the Spring and Fall events plus at Richmond General Hospital during the Fall event. Collectively, these celebration stations logged numbers comparable to 2015 despite wetter weather conditions.

- <u>16th Annual "Island City, by Bike" Tour (June 12, 2016)</u>: Each year in June, as part of regional Bike Month activities and the City's Environment Week events, the Committee and the City jointly stage guided tours for the community of some of the city's cycling routes. The 16th annual "Island City, by Bike" tour was based at Cambie Community Centre and offered short (6.5-km) and long (22-km) rides with escorts provided by volunteer members of the Richmond RCMP bike squad. The loops featured the Bath Slough and Bridgeport Trails as well as quiet roads in east Richmond (e.g., No. 7 Road). Activities included a bike and helmet safety check prior to the ride plus a barbecue lunch and raffle prize draw at the finish. Richmond RCMP also provided registration services for an anti-theft bike initiative. The event attracted 70 cyclists of all ages and ability. Attendance at the event over the past five years has averaged 100 participants.
- <u>All Aboard! (August 6, 2016)</u>: The Committee participated in this annual event held at the Steveston Interurban Tram Building, which celebrates the history of transportation in Richmond. Members provided information on how to get around Richmond in fun, safe and environmentally friendly ways.
- <u>Update of Cycling & Trails Map</u>: The Committee provided input into the update of the 2013 edition of the Richmond cycling and trails map that will incorporate recent improvements to the local cycling and trails network including the Parkside Neighbourhood Link. The new map will be produced in a more portable format (i.e., folds down to slightly larger than a credit card) and will be distributed in early 2017 to community centres, libraries and other civic facilities as well as handed out at various City events.

Active Transportation Education in 2016

- The City provided funding to *HUB: Your Cycling Connection*, a non-profit organization focused on making cycling better through education and events, to operate cycling education courses for local residents with input from the Committee. The City's support for cycling education generates multiple benefits including increased safety, encouragement of a life-long healthy activity and sustainable mode of travel, and potential to reduce traffic congestion around schools as more students choose to ride a bike, all of which align with the City's Official Community Plan goals. Beginning in 2015, the City is eligible for a 30 per cent discount off program costs as a result of Council's endorsement in October 2014 of the City becoming a TravelSmart partner municipality with TransLink.
- <u>Bike to School Education for Students</u>: Nearly 600 students from Grades 4 and 5 at Jessie Wowk and McKinney Elementary Schools (two classes at each school) and Grades 6 and 7 at Garden City, AB Dixon and Walter Lee Elementary Schools (two classes at each school) participated in five-day bike education courses, held in co-operation with Richmond School District. The courses include in-class lessons, on-bike playground cycling safety training for younger students and neighbourhood road ride education for older youth. The courses were well received and enjoyed the enthusiastic participation of all students. Following the

course, students reported a 43 per cent increase in cycling, which is higher than the regional average of 32 per cent. Attachment 1 provides a summary of the outcomes and feedback.

• <u>Learn to Ride Education for Adults</u>: Four beginner's courses targeted to recent immigrants were held in co-operation with Immigrant Services Society of BC. A total of 13 new riders of varied immigrant backgrounds, who live in Richmond, took to the classroom, an empty parking lot, and eventually to the road to learn to ride safely and confidently on Richmond streets. Attachment 2 provides a summary of the course outcomes.

Proposed Active Transportation Network Initiatives in 2017

The Committee will provide input at the earliest conceptual stage on the prioritization, planning, design, and implementation of the following projects that expand and/or improve the network of infrastructure that can be used by active transportation modes.

- <u>Planned Active Transportation Network Expansion</u>: Projects include further progress on the Crosstown Neighbourhood Link and improvements to Westminster Highway (conversion of bike lanes to two-way multi-use path between No. 8 Road and Nelson Road), Great Canadian Way (upgrade of sidewalk to two-way multi-use path between Bridgeport Road and Van Horne Way) and River Drive (construction of new two-way multi-use path between Van Horne Way and No. 4 Road).
- <u>Active Transportation Network Spot Improvements</u>: Potential projects include localized improvements to existing on-street cycling facilities such as improved pavement markings (e.g., green painted bike lanes at potential conflict areas), additional signage, new ramps to facilitate access to off-street pathways, and installation of delineators to prevent motorists from encroaching into bike lanes.
- <u>Planned Park, Road and Development Projects</u>: The Committee will review additional City and external agency projects that impact existing or would incorporate new active transportation infrastructure as part of the overall project such as the George Massey Tunnel Replacement, No. 2 Road upgrade (Steveston Highway-Dyke Road), and new civic facilities at Minoru Park.

Proposed Education and Promotion of Active Transportation in 2017

The Committee will encourage and promote active transportation as sustainable travel modes that also have significant health benefits via the following activities.

- <u>Distribution of Cycling & Trails Map</u>: Identify locations and facilitate distribution of the new map to ensure it is broadly accessible to the community (e.g., deliver to local bike shops).
- <u>17th Annual "Island City, by Bike" Tour</u>: Assist in the planning, promotion and staging of the seventeenth annual bike tour of Richmond during Bike Month in June 2017, which is set for Sunday, June 11th at West Richmond Community Centre. Both the long and short routes will feature the recent improvements to the Railway Greenway at its northern end and a preview of the Crosstown Neighbourhood Link to raise community awareness of the neighbourhood facilities that support walking, cycling and rolling activities.

- <u>Bike to Work & School</u>: Assist in the planning, promotion and staging of this region-wide event during May and October 2017, which includes the provision of celebration stations in Richmond for cyclists.
- <u>Bicycle Education for Students and Adults</u>: In co-operation with HUB, the Richmond School District and a variety of community agencies to expand the delivery of safe cycling education courses to additional elementary schools and recent immigrants in Richmond.
- <u>Promotion of Active Transportation Network</u>: Continue to participate in City events related to health and transportation to raise the awareness of new active transportation facilities both locally and regionally. Continue to update, revise and enhance related information on the City's website and Facebook site.

Financial Impact

Project costs associated with the expansion and improvement of the active transportation network for 2017 are accommodated in the City's annual capital budget and considered as part of the annual budget review process. Some of these projects are eligible for financial contribution from external agencies (e.g., ICBC and TransLink). If successful, staff will report back on the amount of financial contribution obtained from these external agencies through the annual staff reports on ICBC and TransLink cost-sharing programs respectively.

Conclusion

The Richmond Active Transportation Committee continues to build its diversity of users' experience to support its broader mandate that includes other rolling transportation modes. The Committee's proposed 2017 initiatives would continue efforts to further encourage greater and safer use of active transportation modes in Richmond, which in turn will support progress towards meeting the City's target for the reduction of greenhouse gas emissions as well as the travel mode share targets of the City's Official Community Plan.

Scenavan

Joan Caravan Transportation Planner Staff Liaison to Richmond Active Transportation Committee (604-276-4035)

Att. 1: Summary of 2016 Bike to School Program Results Att. 2: Summary of 2016 Streetwise Immigrant Newcomer Program Results

HUB Cycling 2016 Instruction for City of Richmond Youth

The City of Richmond allocated an active transportation / sustainability budget in 2016 which, matched with TransLink TravelSmart subsidies, allowed HUB to deliver two Learn2Ride courses and three Ride the Road courses in Richmond schools providing positive impact for approximately 588 Richmond youth.

Learn2Ride Courses:

 Jessie Wowk Elementary: delivered to four classes of grade 3 to 6 students. Sept 14 and 21.

Ride the Road Courses:

- Garden City Elementary: instruction to four classes of grade 4 to 7 students. May 9-13
- Walter Lee Elementary: instruction to three classes of grade 5 to 7 students. June 13-17

Richmond Teacher Feedback

7 students.

Sept 13-27

and 19.

McKinney Elementary. delivered to six

classes of grade 3 to 5 students. Sept 12

AB Dixon Elementary, instruction to

four classes of grade 5 to 7 students.

"It is an excellent program (and delivery). I look forward to booking again next year." – Walter Lee Elementary

"Staff voted to use our limited school resources to purchase extra sessions above what we won so that we could make sure that every student from grade 2-5 (and some 6's) got the lessons. Staff enthusiastically signed up their classes and in some cases split classes to fill us sessions so we could be sure we reached as many as possible." – James McKinney Elementary

Photos of Garden City Ride the Road bike maintenance day:





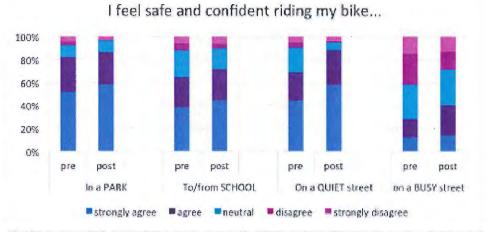
Following are indicators about potential transportation habit changes related to the delivery of HUB Ride the Road courses at Richmond schools.

52% of students said they were more likely to ride a bike after the course

78% of students said the course was effective in teaching them bike safety skills

Students reported a 43% increase in riding after the course - *higher than regional average of* 32%

22% of students say they have never ridden a bike prior to the course – on par with regional average of 2.3%



Students reported some increased sense of safety and confidence in cycling in all settings post course.



The proportion of students who said they were "Fairly" or "Very" knowledgeable about road cycling safety increased from 61% to 82% after the course.

HUB 2016 Street Wise Immigrant Newcomer Course in Richmond

The City of Richmond Transportation and Sustainability Departments funded HUB to deliver one *Immigrant Learn to Ride* course in 2016. The *Immigrant Services Society of BC* (ISSofBC) acted as HUB's primary partner for organizing and recruiting for the course.

HUB divided participants into two different classes, depending upon whether each had prior cycling skills. For the participants getting their first introduction to cycling, HUB delivered a Level 1: *Learn to Ride* course. For the participants with good general cycling skills but wanting more city riding knowledge, we delivered Level 2: *Ride the Road* which included a short on-road instruction session.

Immigrant Newcomer Course Delivery

Level 1 Course (Intro to Cycling): 2 participants Level 2 Course (Urban Cycling Skills): 11 participants Friday July 8, Friday July 15; courses delivered at ISSofBC Richmond and Garden City Park

Course Outcomes

All immigrant newcomer course participants (Levels 1 and 2):

- Developed their ability to balance, pedal, steer and brake on a bicycle.
- Built their basic cycling skills including straight-line riding, turning, braking, shoulder checks, and hand signals

Immigrant newcomers with prior cycling experience (Level 2):

- Learned about the Canadian road use context, specific traffic law (BC Motor Vehicle Act) and how insurance applies to cycling
- Gained knowledge about urban cycling infrastructure and safety equipment
- Became familiar with various types of cycling gear including clothing, helmets, lights and reflectors, cargo carriers, tools and rain gear
- Understood the dynamics of bike storage, security, and theft prevention
- Learned how to assess their bike's condition, and make basic adjustments to keep their bike operating well
- Built practical urban cycling and collision avoidance skills in a group ride setting
- Found out about the most useful Metro Vancouver cycle route planning resources and how to use them
- Assessed their individual course learning outcomes through applied road and written tests.



То:	Public Works and Transportation Committee	Date:	December 6, 2016
From:	John Irving, P.Eng. MPA Director, Engineering	File:	10-6060-01/2016-Vol 01
Re:	Dike Master Plan - Phase 2		

Staff Recommendation

That the public and key external stakeholders be consulted to provide feedback on the medium and long term dike improvements required for part of Richmond's West Dike (between Williams Road and Terra Nova Rural Park) and part of the North Dike (between Terra Nova Rural Park to No. 6 Road) as identified in the staff report titled "Dike Master Plan – Phase 2" from the Director of Engineering, dated December 6, 2016.

John Irving, P.Eng. MPA Director, Engineering (604-276-4140)

A	tt.	1
		-

REPORT CONCURRENCE				
ROUTED TO:	CONCURRENCE	CONCURRENCE, OF GENERAL MANAGER		
Parks Services Roads & Construction Real Estate Services Sewer & Drainage	ল হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ হ	<u> </u>		
Development Applications Policy Planning Transportation	R R			
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: DW	APPROVED BY CAO		

Staff Report

Origin

The 2008 – 2031 Richmond Flood Protection Strategy identified the need to "Prepare and implement a comprehensive dike improvement program." On February 11, 2014, Council approved \$200,000 from the 2014 Capital Budget to prepare Phase 2 of a Dike Master Plan.

By the year 2100, climate change scientists estimate that sea level will rise approximately 1.0 meter, combined with 0.2 meters of subsidence that is expected in that same time period. Richmond will be required to raise dikes to accommodate these changes.

Richmond lies in the Fraser River delta, and is surrounded by the Fraser River estuary. The estuary provides critical habitat for many species of fish and wildlife, and important ecosystem services such as erosion control, shoreline stabilization and storm surge protection.

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

6.1. Safe and sustainable infrastructure.

The purpose of this staff report is to present the medium and long term dike improvements along part of the West Dike and part of the North Dike (Phase 2 Study Area) that will be required to address climate change induced sea level rise. The West Dike spans between Williams Road and Terra Nova Rural Park. The North Dike section of the study area spans between Terra Nova Rural Park and No. 6 Road. Staff request Council's endorsement to consult public and key external stakeholders on the long term dike improvements in the Phase 2 Study Area.

Analysis

The City of Richmond is approximately 1.0 meter above mean sea level and protected by 49 kilometers of dike. Climate change scientists estimate that sea level will rise approximately 1.0 meter by the year 2100, combined with 0.2 meter of subsidence that is expected in that same time period. Guided by the 2008 – 2031 Richmond Flood Protection Strategy, the City continues to adapt its flood protection system to protect against climate change induced sea level rise primarily through raising dike crest elevations. The City's target dike elevation for 2100 is 4.7 m geodetic with the ability to expand it to 5.5 m geodetic. Dike improvements are ongoing through the Capital Program and the strategy forecasts that implementation completion will be required within the next 25 to 50 years to stay ahead of rising sea levels (current climate change science predicts sea level rise will be approximately 0.2 m by 2050). Implementation may include intermediate dike improvements where they make sense and would extend the timing for achieving 4.7 m geodetic dike heights for those reaches. Ultimately, the timing of implementation completion will be influenced by evolving climate change science and observed sea level rise. Staff will update Council on significant updates for sea level rise predictions and any impact they have on the Dike Master Plan implementation as they occur.

The Dike Master Plan is intended to be a comprehensive guide to upgrade the City's dikes to:

- Protect Richmond from both ocean storm surges and Fraser River freshet events;
- Adapt to sea level rise;
- Be seismically resilient;
- Integrate the Ecological Network Management Strategy principles and goals;
- Follow the five strategic directions of the City's 2009 Waterfront Strategy; and
- Prioritize dike improvement phasing to efficiently use resources.

Phase 1 of the Dike Master Plan, adopted by Council on April 22, 2013, focussed on Steveston and a portion of the West Dike south of Williams Road.

Phase 2 of the Dike Master Plan focusses on the north portion of Richmond's West Dike between Williams Road and Terra Nova Rural Park and part of Richmond's North Dike between Terra Nova Rural Park and No. 6 Road (Phase 2 Study Area), as shown in Figure 1.

The City engaged Parsons as the lead consultant to complete Phase 2 of the Dike Master Plan (see Attachment 1). The Phase 2 Study Area dike improvements required to address climate change induced sea level rise, as outlined in the Parsons report, are summarized in this report.

The City is committed to avoid, mitigate or compensate for environmental impacts on all capital projects. In general, the dike in the Phase 2 Study Area cannot be raised without environmental impacts and mitigation or compensation will be pursued in alignment with the City's ecological policies and strategies.

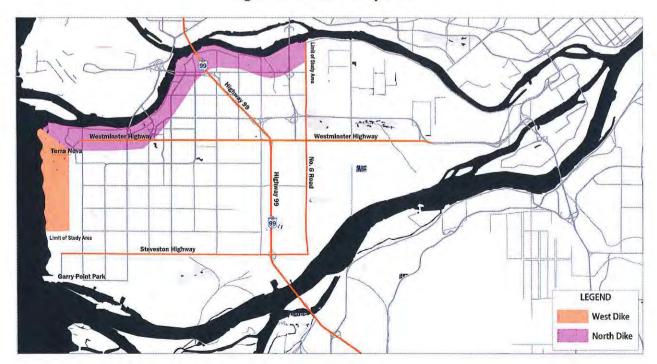


Figure 1: Phase 2 Study Area

The Phase 2 Study Area is separated into thirteen design areas based on the planning boundaries established in the Official Community Plan (OCP). The thirteen design areas are shown in Figure 2.

- 4 -

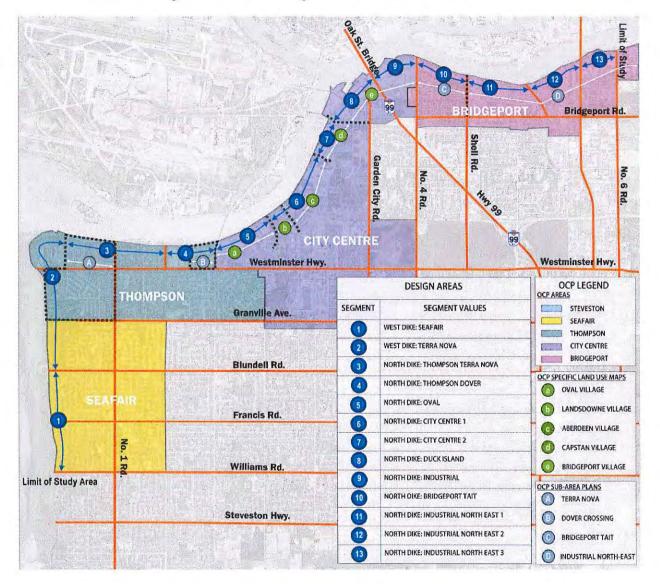


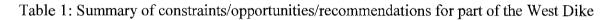
Figure 2: Phase 2 Design Areas and OCP Boundaries

West Dike (Williams Road to Terra Nova Rural Park)

The Phase 2 Study Area includes part of the West Dike between Williams Road and Terra Nova Rural Park. Constraints, opportunities and recommendations for the Phase 2 Study Area of the West Dike separated by design area are summarized in Table 1.

Tables 1 and 2 identify environmental information pertinent to this area. FREMP refers to data from the Fraser River Estuary Management Program that identifies habitat productivity mapping. Though FREMP is no longer in place, this data continues to be pertinent to dike master plans. RMA refers to Riparian Management Areas which are City designated riparian habitats with associated 5 or 15 metres setbacks in response to the provincial Riparian Areas Regulation. In addition, the Fraser River shoreline within the LIDMP area is a City designated Environmental Sensitive Area with an associated development permit and applies to the entire study area.

The trigger for implementation of the long term dike improvement recommendation between Williams Road and Terra Nova Rural Park is sea level rise as has been projected by various expert panels through the year 2100.



	FRE	MP C	Data	RN	/A			
Design Area	Red Coded	Yellow Coded	Green Coded	Presence	Absence	Constraints	Opportunities	Long Term Dike Improvement Recommendation
1) Seafair 2) Terra Nova	•			Y		 Infilling of drainage ditches impacts potential storage in the City's local drainage network 	• Barrier islands may be considered to reduce wave run- up, mitigating the need for future dike crest increases	• Raise dike on existing alignment • Further study required to determine the ecological and technical advantages/ disadvantages of land side and water side expansion

North Dike (Terra Nova to No. 6 Road)

The Phase 2 Study Area includes part of the North Dike between Terra Nova Rural Park and No. 6 Road. Constraints, opportunities and recommendations for the Phase 2 Study Area of the North Dike separated by design area are summarized in Table 2.

The triggers for implementation of the long term dike improvement recommendation between Terra Nova Rural Park and No. 6 Road are sea level rise, development, redevelopment and River Road reconstruction. Table 2: Summary of constraints/opportunities/recommendations for part of the North Dike

	FRE	MP C	ata	R	ЛА			
Design Area	Red Coded	Yellow Coded	Green Coded	Presence	Absence	- Constraints	Opportunities	Long Term Dike Improvement Recommendation
3) Thompson Terra Nova	7				2	• Residential driveway access and drainage along River Road may be complicated by raising the dike		 Raise the dike on existing alignment with land side expansion Plan for the long-term raising of River Road
4) Thompson Dover	7				¥		• River Road may be raised in a single event as driveway access to multi-family complexes can be maintained in this area	 Raise the dike on existing alignment with land side expansion Plan to raise River Road
5) Oval	Y			L			 Future dike raising can take place on the existing dike alignment and integrate into adjacent landscaping 	• Existing dike has been raised
6) City Centre 1		V	☑		☑	Mature trees near land side toe of existing dike	• This section of River Road will ultimately be realigned to the former rail corridor	 Raise the dike on existing alignment with land side expansion
7) City Centre 2		V	V		V	 Access to existing marinas may be complicated by raising the dike 	 This section of River Road will ultimately be realigned to the former rail corridor Redevelopment is occurring in this area 	• Raise the dike on existing alignment with land side expansion in conjunction with redevelopment
8) Duck Island	☑	•	~		V		Redevelopment is occurring in this area	• Dike improvements will be a part of the Duck Island development plan.
9) Industrial	7		Y		2	Easements will be required Waterfront lands constrained by private industrial uses		 Raise the dike on existing alignment with land side expansion Site specific solution may be required to accommodate waterfront lands constrained by private industrial uses
10) Bridgeport Tait	V	2			V		• Future dike raising can take place on the existing dike alignment and integrate into adjacent landscaping	• Existing dike has been raised
11) Industrial North East 1		V	7	J		Driveway access along River Road may be complicated by raising the dike Property will need to be acquired to complete dike raising	• Waterfront trail can be constructed over the dike when property is acquired	• Raise the dike on existing alignment with land side expansion
12) Industrial North East 2		V	V	V		 Mature trees near water side toe of existing dike Street parking will be impacted Driveway access along River Road may be complicated by 	Waterfront trail can be constructed over the dike	• Raise the dike on existing alignment • Further study required to determine the ecological and technical advantages/ disadvantages of land side and water side expansion
13) Industrial North East 3	2		Y	Y		Mature trees near water side toe of existing dike Street parking will be impacted Driveway access along River Road may be complicated by raising the dike Infilling of drainage ditches impacts potential storage in the City's local drainage network	Waterfront trail can be constructed over the dike No easements or land acquisitions required for dike raising	 Raise the dike on existing alignment Further study required to determine the ecological and technical advantages/ disadvantages of land side and water side expansion Site specific solution may be required to accommodate waterfront lands constrained by private industrial uses

Land Acquisition

Some dike reaches are constrained by land ownership and will likely require land acquisition to facilitate dike raising. Land acquisition will primarily be achieved through redevelopment, however, where redevelopment does not occur; the City may consider opportunistic land purchase over the next 25 to 50 years. The Dike Maintenance Act allows the City through the Provincial Inspector of Dikes to access the entire dike protecting Lulu Island for the purpose of dike maintenance or improvement regardless of land ownership. However, long term strategic acquisition of land and cooperative work with the development community will reduce the impact of dike improvements on the community as compared to reliance on the Dike Maintenance Act.

Next Steps

Staff will consult with key external stakeholders and the public on the long term dike improvements in the Phase 2 Study Area. Key stakeholders include:

- Adjacent residences and the general public
- Port of Vancouver
- Department of Fisheries and Oceans
- BC Inspector of Dikes
- Advisory Committee on the Environment
- Urban Development Institute

The key external stakeholder group will be engaged through ongoing meetings and communications. Public consultation will include two public open houses.

Financial Impact

Capital projects will be brought forward for Council's consideration.

Conclusion

Consistent with the City's 2008 – 2031 Richmond Flood Protection Strategy, Phase 2 of a Dike Master Plan has been drafted. Dike Master Plan Phase II presents the medium and long term dike improvements along part of the West Dike (Williams Road to Terra Nova Rural Park) and part of the North Dike (Terra Nova Rural Park to No. 6 Road) that will be required to address climate change induced sea level rise. Staff request Council's endorsement to consult public and key external stakeholders in order to obtain feedback on the long term dike improvement recommendations within the Phase 2 Study Area.

Lloyd Bie, P. Eng Manager, Engineering Planning (604-276-4075)

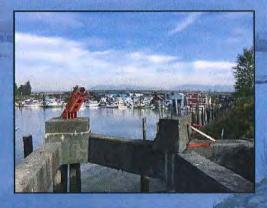
e Haer-EII

Project Engineer (604-276-4026)

Att. 1: Dike Master Plan - Phase 2











CNCL - 347



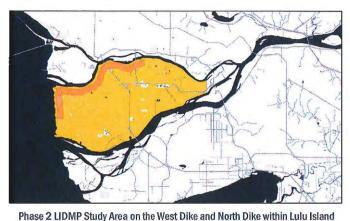
LULU ISLAND DIKE MASTER PLAN PHASE 2 DRAFT REPORT





Executive Summary

The purpose of the Lulu Island Dike Master Plan (LIDMP) is to identify preferred methods for implementing the objectives of the City of Richmond's 2008 – 2031 Flood Protection Strategy. The Lulu Island Dike Master Plan is being prepared in phases. Parsons (as Delcan) prepared Phase 1 of the plan for the Steveston and southern West Dike areas¹ (Phase 1 LIDMP). The Study Area for Phase 2 has been defined from Williams Road on the West Dike to No. 6 Road on the North Dike. The Study Area is highlighted orange within Lulu Island in the figure below. Lulu Island lies in the Fraser River Delta, and is surrounded by the Fraser River Estuary. The estuary provides critical habitat for many species of fish and wildlife, and important ecosystems services such as erosion control, shoreline stabilization and storm surge protection.



The Phase 1 LIDMP focused largely on technical issues of assessing significant changes in dike alignment. Instead of adapting upgrades to the existing shoreline alignment which may have impacted heritage structures in Steveston, the engineering feasibility of a future dike and flood-gate along Steveston Island was presented.

In the Phase 2 Study Area, the existing dike alignment along the waterfront is established and well defined. There is limited basis to support any major changes to the alignment of the existing dike, thus the recommendations are generally in keeping with traditional dike crest increases, with consideration for localized constraints and opportunities. The Study Area

has been segmented into thirteen design areas to make these recommendations on an area specific basis. There are also opportunities to consider flood protection strategies that are applicable throughout the entire Study Area. These area wide strategies may be implemented to fortify the area specific adaptations.

The City has identified a target dike crest elevation of 4.7 m, with consideration for raising the dike to 5.5 m in the long term future. Dike adaptations that achieve the target crest elevation are considered by area, forming the area specific adaptations. These include dikes and floodwalls in any conformation. Area wide adaptations are those which may not achieve the target dike crest elevation on their own, but contribute to overall flood protection. For example, barrier islands that reduce wave run-up to eliminate the need for additional target crest increases, or policy changes that facilitate the implementation of dike adaptations are both categorized as area wide adaptations. Both area wide and area specific strategies will be presented in the LIDMP, forming a comprehensive plan to achieve the objectives of the Flood Protection Strategy. Area wide and area specific strategies will be considered within the context of the City's Ecological Network Management Strategy (ENMS) such that the recommendations presented in the LIDMP are consistent with strengthening the City's green infrastructure, while managing and enhancing ecological assets.

Area Wide Protection Strategies

A number of area wide approaches can be considered to enhance long term flood protection in the City and create resiliency in addressing climate change and sea level rise. Preferred strategies are summarized below.

Plan for the long-term raising of lands adjacent to and inland of the existing dikes: Long term raising of land levels has previously been recommended (2008-2031 Flood Protection Strategy). Maximizing the width of raised land adjacent to the river decreases flood and seismic risks by increasing the integrity of the dike. Plan to raise the ground elevation of waterfrount development sites to the prescribed dike crest elevation.

¹ Lulu Island Dike Master Plan Phase 1, Delcan, March 2013



Enhance floodproofing through amendments to the FCL By-law: The City's Flood Construction Level (FCL) Bylaw establishes minimum levels to which land needs to be raised. Amending the FCL bylaw is the recommended area wide strategy to regulate raising ground elevations with redevelopment to improve flood protection throughout the Study Area.

Support site assemblies along the waterfront that promote cohesive adaptations for flood protection: Large developments along the waterfront allow for major improvements to flood protection infrastructure and often result in robust superdike conditions.

Plan for implementation of offshore protection on Sturgeon Banks: If climate change and sea level rise predictions materialize, increased depths offshore could simultaneously increase wave heights, particularly in the Georgia Strait. Upland limitations to natural accretion within the Sturgeon Bank Wildlife Management Area may also contribute to increased offshore depths beyond the West Dike. Offshore barrier islands are one option to consider to dissipate wave energy prior to waves reaching the West Dike and stabilize shorelines, thereby minimizing future dike crest increases. Enhancement of intertidal habitat alongside the creation of offshore barrier islands may provide natural ecosystem mechanisms to further dissipate wave energy. The City may consider offshore protection in its long-term plans for flood protection along the West Dike.

Area Specific Flood Protection Strategies

In practice, when dike upgrades have been made, they have been made along the existing alignment. Apart from select site specific constraints and opportunities, the recommended future dike alignment for the Phase 2 Study Area matches the existing dike alignment. Area specific strategies were selected with consideration for: flood protection, environmental, geotechnical, infrastructure, site-specific constraints, social, property, economic, operational and cost considerations. The City is committed to avoid, mitigate or compensate for any environmental impacts that may result from dike adaptation projects. Completely avoiding any impact on an environmental area may not be feasible in some cases, for example where dikes are highly constrained. In these instances, mitigation or compensation that follows a net gain approach may be pursued.

Area specific strategies for the Phase 2 study are summarized below:

West Dike: Raise the dike on the existing alignment. Additional studies required to quantify drainage impacts of land side expansion, habitat impacts and costs associated with water side or land side expansion, and long term resiliency of a constrained dike solution. Consider routing the dike inland through Terra Nova Rural Park.

North Dike: Terra Nova to No. 2 Road Bridge: Raise the dike on the existing alignment with land side expansion. Plan for the raising of River Road.

North Dike: No. 2 Road Bridge to Dinsmore Bridge: Existing and proposed developments are raising elevations to 4.0 m to 4.7 m. Future raisings to 5.5 m can take place on the existing alignments and integrate into the adjacent landscaping.

North Dike: Dinsmore Bridge to Moray Bridge: Raise the dike with land side expansion. Consider creation of a set-back dike and inland raising (superdike) in conjunction with the future Middle Arm Waterfront Park construction. Ensure any interim dike upgrades are compatible with the long term strategy of constructing superdikes.

North Dike: Moray Bridge to Oak Street Bridge: Implement flood protection with approved development plans for Duck Island and the River Rock Casino when available. If required to address sea level rise and climate change prior to implementation of the approved strategy at the Duck Island or River Rock Casino sites, plan for a temporary adaptation, such as a demountable floodwall, to protect City assets

North Dike: Oak Street Bridge to No. 4 Road: Raise the dike on the existing alignment. Site specific solutions may be required at the Fraser River Terminal site. Plan for temporary dike along the alternate alignment if required to address sea level rise and climate change prior to implementation of a strategy at the Fraser River Terminal site.

North Dike: No. 4 Road to Shell Road: Existing and proposed developments will raise the area generally to an elevation of 4.7 m. Future raisings to 5.5 m can take place on the existing alignments and integrate into the adjacent landscaping.

North Dike: Shell Road to No. 6 Road: Raise the dike on the existing alignment. Land acquisition may be required to facilitate construction of a trapezoidal dike (through redevelopment or otherwise). Implementation of a temporary floodwall



adjacent to the waterfront lots may be required in advance of a permanent adaptation to address sea level rise and climate change. Consider Bath Slough Revitalization Initiative for future designs. Additional studies are required to quantify drainage, habitat impacts, and costs associated with land side expansion of a trapezoidal dike. A constrained land side slope may be required to integrate with the existing drainage infrastructure.

Next Steps

Parsons has characterized the existing conditions and constraints of the Study Area, and has established and recommended preferred area wide and area specific adaptation strategies for the City's consideration.

The recommended next steps to finalize the Phase 2 LIDMP are:

- 1) Council Review;
- 2) Key External Stakeholder Review;
- 3) Public Information Session and Consultation;
- 4) Revise the Draft Final Master Plan Report per consultation if required; and
- 5) Council adoption of the Final Dike Master Plan Phase 2 Report.



Table of Contents

EXECUT	TIVE SUI	MMARY	
1 IN	TRODU	CTION	1
1.1	SCO	PE	2
1.2	APPI	ROACH	2
1.3	ADD	DITIONAL GUIDANCE DOCUMENTS	2
2 ST		REA	3
2.1	PRE	SENT AND FUTURE LAND USE	5
2.2	GEO	TECHNICAL CONDITIONS	6
2.3	ENV	IRONMENTAL CONDITIONS	7
2.4	EXIS	TING FLOOD PROTECTION INFRASTRUCTURE	10
2.5	EXIS	STING FLOOD PROTECTION POLICY	11
3 CC	ONSIDE	RATIONS	11
3.1	FLO	OD PROTECTION CONSIDERATIONS	11
3.2	ENV	IRONMENTAL CONSIDERATIONS	12
3.3	GEO	TECHNICAL CONSIDERATIONS	12
3.4	INFF	RASTRUCTURE CONSIDERATIONS	14
3.5	SITE	ES WITH UNIQUE CONSTRAINTS	15
3.6	SOC	AL CONSIDERATIONS	15
3.7	PRO	PERTY CONSIDERATIONS	15
3.8	ECO	NOMIC CONSIDERATIONS	16
3.9	OPE	RATIONAL CONSIDERATIONS	16
3.10) cos	T CONSIDERATIONS	16
4 FL		ISK MANAGEMENT ADAPTATIONS	16
4.1	ARE	A WIDE ADAPTATIONS	18
4.	1.1	Superdikes	18
4.	.1.2	Flood Proofing	19
4.	.1.3	Planning and Development Controls	21
4.	.1.4	Breakwaters and Barrier Islands	21
4.	.1.5	Secondary Dikes	23
4.2	ARE	A SPECIFIC ADAPTATIONS	24
4.	.2.1	Seafair	27



4.2.2	2	Terra Nova	28				
4.2.3	з .	Thompson Terra Nova					
4.2.4	4	Thompson Dover					
4.2.5	5	Oval	31				
4.2.6	6	City Centre 1	32				
4,2,7	7	City Centre 2					
4.2.8	8	Duck Island	34				
4.2.9	9	Industrial					
4.2.:	10	Bridgeport Tait					
4.2.:	11	Industrial North East 1					
4.2.:	12	Industrial North East 2					
4.2.:	13	Industrial North East 3					
4.3	SITE	SPECIFIC ADAPTATIONS	40				
4.3.:	1	Bridges	40				
4.3.: 4.3.:		Bridges Raise River Road					
4.3.:	2		41				
4.3.:	2 IN <mark>G</mark> OF	Raise River Road	41				
4.3.: 5 TIMI	2 I <mark>NG OF</mark> REDE	Raise River Road	41 42 43				
4.3.: 5 TIMI 5.1	2 ING OF REDE LAND	Raise River Road ADAPTATION PROJECTS EVELOPMENT OF SMALL LOTS	41 42 43 43				
4.3.2 5 TIMI 5.1 5.2	2 ING OF REDE LAND RAISI	Raise River Road ADAPTATION PROJECTS. EVELOPMENT OF SMALL LOTS ACQUISITIONS & LEGAL ACCESS	41 42 43 43 43				
4.3.: 5 TIMI 5.1 5.2 5.3 5.4	2 ING OF REDE LAND RAISI INTEF	Raise River Road ADAPTATION PROJECTS. EVELOPMENT OF SMALL LOTS ACQUISITIONS & LEGAL ACCESS ING THE TARGET DIKE CREST ELEVATION	41 42 43 43 43 43				
4.3.: 5 TIMI 5.1 5.2 5.3 5.4	2 REDE LAND RAISI INTEF	Raise River Road ADAPTATION PROJECTS. EVELOPMENT OF SMALL LOTS ACQUISITIONS & LEGAL ACCESS ING THE TARGET DIKE CREST ELEVATION RIM ADAPTATIONS	41 42 43 43 43 43 43 43 43				
4.3.: 5 TIMI 5.1 5.2 5.3 5.4 6 IMPI	2 REDE LAND RAISI INTEF LEMEN WATE	Raise River Road ADAPTATION PROJECTS EVELOPMENT OF SMALL LOTS	41 42 43 43 43 43 43 44 44				
4.3.: 5 TIMI 5.1 5.2 5.3 5.4 6 IMPI 6.1	2 REDE LAND RAISI INTEF WATE INTEF	Raise River Road ADAPTATION PROJECTS EVELOPMENT OF SMALL LOTS ACQUISITIONS & LEGAL ACCESS ING THE TARGET DIKE CREST ELEVATION RIM ADAPTATIONS NTATION OPPORTUNITIES	41 42 43 43 43 43 43 44 44 45				
4.3.3 5 TIMI 5.1 5.2 5.3 5.4 6 IMPL 6.1 6.2 6.3	2 REDE LAND RAISI INTEF LEMEN WATE INTEF HABI	Raise River Road	41 42 43 43 43 43 43 43 44 45 45				



List of Figures

Figure 1	Study Area
Figure 2	Design Areas and OCP Boundaries
Figure 3	Riparian Management Areas (RMA's)
Figure 4	Foreshore Habitat Coding in the Study Area
Figure 5	Superdikes in the Study Area
Figure 6	Flood Construction Levels (FCL's)
Figure 7	Artistic Rendering of Barrier Island Concept for Sturgeon Bank
Figure 8	Secondary Dike Alignment through Terra Nova
Figure 9	Concept Plan for the Proposed Middle Arm Park
Figure 10	Bridges in the Study Area
Figure 11	Raising River Road in the Thompson Neighbourhood

List of Tables

Table 1	Existing and Future Conditions
Table 2	Recommended Flood Risk Management Strategies
Table 3	Recommended Area Specific Adaptations
Table 4	Bridge Constraints and Recommended Adaptations
Table 5	Triggers to Implementation of Adaptations

List of Appendices

Appendix A	Official Community Plan Maps
Appendix B	Riparian Management Areas
Appendix C	Environmentally Sensitive Areas
Appendix D	Ecological Network Strategy Areas
Appendix E	Habitat Coding Maps
Appendix F	Typical Dike Cross Sections

List of Attachments

Attachment 1	Technical Memo #1 - Parsons
Attachment 2	Technical Memo #2 - Parsons
Attachment 3	Geotechnical Input Memo - Thurber
Attachment 4	Environmental Technical Brief – Envirowest
Attachment 5	Seismic Deformation Analysis – Thurber

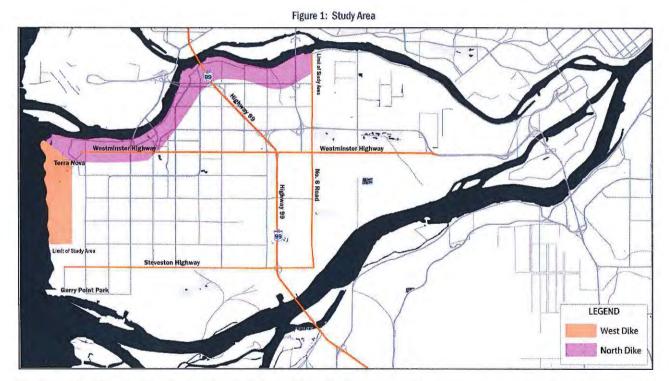


1 Introduction

Richmond is a city of over 200,000 people in 130 square kilometres with considerable assets to be protected from flood damage. The City has endeavoured to adapt its flood protection systems to changing flood risks, including anticipated increases to flood levels resulting from climate change and sea level rise. With the establishment of the 2008 – 2031 Flood Protection Strategy, the City committed to prepare and implement a perimeter dike improvement program. The purpose of the Lulu Island Dike Master Plan (LIDMP) is to identify preferred methods for implementing the objectives of the City of Richmond's 2008 – 2031 Flood Protection Strategy.

With Richmond located at the mouth of the Fraser River, and the flood protection infrastructure interfacing with the high ecological value of the Fraser River Estuary, the LIDMP also works to integrate the objectives of key City documents such as the City's Ecological Network Management Strategy (ENMS), and put forward recommendations that will strengthen the City's green infrastructure network.

The LIDMP is being prepared in phases. Parsons (as Delcan) prepared Phase 1 of the LIDMP for the Steveston and southern West Dike areas² (Phase 1 LIDMP). The Study Area for the second phase of the LIDMP (Phase 2 LIDMP) includes the West Dike from Willams Road to Terra Nova Rural Park, and the North Dike from Terra Nova Rural Park to No. 6 Road as shown in *Figure 1*.



The Phase 2 LIDMP provides the framework to direct future dike improvement projects and ensure that diking requirements are considered as waterfront lands are redeveloped. It establishes a well-planned strategy to identify future flood protection infrastructure requirements along the waterfront. The Phase 2 LIDMP presents recommended adaptations for flood protection, including guidelines for incorporating flood protection into future waterfront developments. It also presents considerations for any dike adaptation project in the Study Area to minimize impacts and to integrate adaptations within the public and natural realms.

² Lulu Island Dike Master Plan Phase 1, Delcan, March 2013





The recommended flood protection adaptations forming the Phase 2 LIDMP are assessed for their ability to achieve a minimum crest elevation of 4.7 m, and accommodate a future increase to 5.5 m as prescribed by the City. No independent evaluation of these crest elevations has been conducted by Parsons. These target elevations have been accepted as the basis for the Phase 2 LIDMP.

Recommendations have been categorized as either area wide or area specific adaptations. Area wide strategies encompass adaptations that are applicable for the entire Study Area, or a substantial part of it. These include policy adaptations, as well as structural adaptations that would fortify the primary dike, but would not achieve the City's target crest elevation on its own. The Phase 2 LIDMP recommends adaptations in both categories to produce a comprehensive strategy for improving flood protection in the Study Area.

Area specific strategies are structural adaptations that modify the existing dike or replace it to achieve the City's target dike crest elevation of 4.7 m. The Study Area has been broken into thirteen design areas to recommend area specific adaptations. The design areas have been delineated according to the boundaries for planning areas in the City's Official Community Plan (OCP). The design areas are described further in *Section 2* and *Section 4.2*.

The Phase 2 LIDMP is a guidance document for future dike adaptation design and construction projects. No detailed design, nor any construction will be undertaken as part of the Phase 2 LIDMP. Design and construction projects are beyond the scope of the current planning exercise. Proponents of diking design and construction projects will need to confirm their projects are in compliance with all regulatory requirements, in addition to adhering to the Master Plan, when projects move forward.

1.2 APPROACH

In preparation of the Phase 2 LIDMP, Parsons previously prepared and submitted two technical memos to the City. Technical Memo #1³ (TM #1) presented potential flood protection options that may be appropriate for implementation in the Study Area, based on a detailed review of current and future land uses, environmental and geotechnical conditions, and other City guidance documents. Technical Memo #2⁴ (TM #2) outlined the evaluation of potential flood protection adaptations within the Phase 2 Study Area, and presented the preliminary concept for the Phase 2 LIDMP. Both technical memos have been attached to the Phase 2 LIDMP as *Attachment 1* and *Attachment 2* for reference.

Both technical memos were circulated internally to relevant City departments for review. The feedback received from these stakeholders was integrated into the technical memos before each was finalized. The final Phase 2 LIDMP is derived from these previous studies and as such, City feedback has been incorporated into the Phase 2 LIDMP.

1.3 ADDITIONAL GUIDANCE DOCUMENTS

The recommendations in the Phase 2 LIDMP have been prepared in keeping with other City strategies and plans. Any proposed diking projects should be designed and constructed with consideration for the Phase 2 LIDMP, as well as any other City guidance documents in effect at the time an adaptation project proceeds to design and construction. Policy adaptations should also be implemented with consideration for compatibility with other City strategies and guidelines. City guidance documents considered in the development of the Phase 2 LIDMP included:

2009 Waterfront Strategy:

The five Strategic Directions of the 2009 Waterfront Strategy were considered in the development of the Phase 2 LIDMP. The Strategic Directions include: 1) Working Together; 2) Amenities and Legacy; 3) Thriving Ecosystems; 4) Economic Vitality; and 5) Responding to Climate Change and Natural Hazards.

³ Lulu Island Dike Master Plan Phase 2 – Technical Memo No. 1: Review of Existing Conditions, Parsons, Oct 5, 2016

⁴ Lulu Island Dike Master Plan Phase 2 – Technical Memo No. 2: Analysis of Flood Protection Alternatives, Parsons, Oct 5, 2016



	envision more sm
Flood Plain Designation and Protection By-Law 8204:	The Phase 2 LIDMP considers the existing Flood Plain Designation and Protection By- Law, and will consider outlines potential options to amend or accelerate increasing flood construction levels adjacent to the foreshore.
2008 – 2031 Richmond Flood Protection Strategy:	The Phase 2 LIDMP has been developed to address the goals of the Flood Protection Strategy.
2015 Ecological Network Management Strategy:	The Phase 2 LIDMP is informed by the strategic goals outlined in the 2015 Ecological Network Management Strategy (ENMS) to promote the Ecological Network. The City's ENMS is an ecological blueprint for the preservation of natural land City-wide. Through the ENMS the City will protect, restore and connect natural lands to avoid habitat fragmentation. The strategic goals outlined in the ENMS are: 1) Manage and Enhance Ecological Assets; 2) Strengthen City Green Infrastructure; 3) Create, Connect, and Protect Diverse and Healthy Spaces; 4) Engage through Stewardship and Collaboration. The objective of developing an Ecological Network was initially outlined in the OCP under Chapter 9: Island Natural Environment (and Ecological Network Approach).
2006 Riparian Response Strategy:	The Phase 2 LIDMP is consistent with the Riparian Response Strategy (RRS), which protects Riparian Management Areas that form part of the City's Ecological Network. The RRS identifies 5 m and 15 m Riparian Management Area (RMA) setbacks on minor and major watercourses that flow into and support fish life in the Fraser River, and are to remain free from development in accordance with requirements under the provincial Riparian Area Regulation. The RRS applies to riparian habitat on the City's inland watercourses but does not apply to the Fraser River, which is protected through designation as Environmentally Sensitive Area (ESA) in the OCP.
2008 Climate Change Response Agenda:	The recommendations from the Phase 2 LIDMP are made with consideration of the 3 rd pillar of the City's Climate Change Response Agenda – implement strategies for adapting to unavoidable changes. Strategies have been considered that can meet the short and long term goals with respect to crest elevations; however, they must also be adaptable to change.
2010 Richmond Trail Strategy:	The Phase 2 LIDMP is developed with regard for the goal of maximizing access to the waterfront, as identified in the Richmond Trail Strategy.

2 Study Area

The Phase 2 Study Area includes parts of the West Dike and the North Dike. The West Dike section of the Study Area spans from Williams Road to Terra Nova Rural Park at the Middle Arm of the Fraser River. The North Dike section of the Study Area spans from Terra Nova Rural Park to No. 6 Road.

On the water side of the West Dike is Sturgeon Bank, a provincially designated Wildlife Management Area (WMA) within the Fraser River Estuary. It is comprised primarily of near shore and intertidal brackish marsh, sandflats, mudflats, and open water. It is a protected area for the conservation of critical, internationally significant habitat for year-round migration and wintering waterfowl populations and important fish habitat. The water side of the North Dike includes pockets of mud flat, salt marsh, and eelgrass habitat.

On the land side of the West and North Dikes, Riparian Management Areas (RMA's) are interspersed throughout the Study Area. RMA designated watercourses are wetted the majority of the year and flow into and support fish life in the Fraser River. The City's RMA's have predetermined setbacks of 5 m or 15 m from top of bank to delineate areas that support the form and function of the watercourses. These areas are protected under the provincial Riparian Area Regulation and form



a key component of the City's ENMS. The entire Study Area is also designated Environmentally Sensitive Area (ESA) within the OCP.

For the purposes of evaluating current and future land conditions and recommending appropriate structural adaptations, the Study Area has been broken into thirteen design areas. These areas are based on the planning boundaries established in the OCP for OCP Areas, OCP Sub-Area Plans, and OCP Specific Land Use Maps. The relevant OCP figures showing these areas are provided for reference in *Appendix A*.

The design areas have been delineated using the OCP boundaries to ensure that the recommendations in this Master Plan can be readily integrated with other City guidelines and City planning initiatives. Area specific adaptations are recommended by area, with consideration for special sites within the thirteen design areas. Existing conditions for each design area, as well as future conditions as provided for in the OCP, are described in *Section 2.1*. The design areas within the Study Area are illustrated in *Figure 2*.

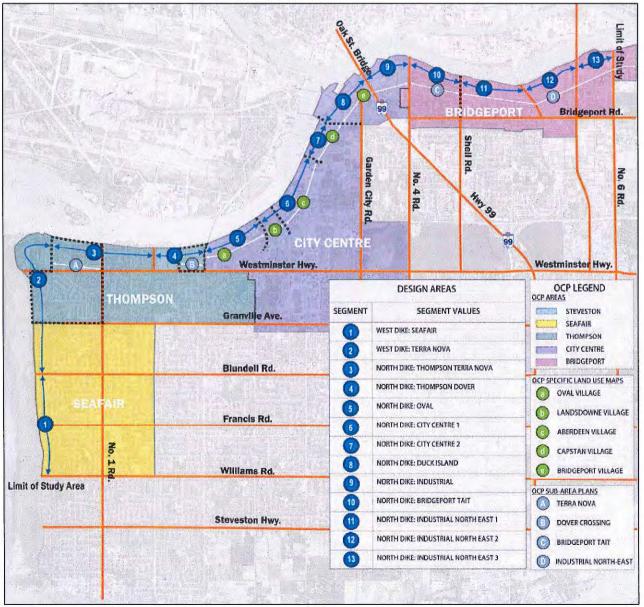


Figure 2: Design Areas and OCP Boundaries

CNCL - 357

4



2.1 PRESENT AND FUTURE LAND USE

A brief summary of existing conditions and planned future uses (as outlined in the OCP) for each of the thirteen design areas is provided in *Table 1*. Site conditions or future uses having an anticipated impact on dike planning are discussed in more detail in the discussion of each design area in *Section 4.2*, where the recommended adaptation is presented for each design area.

Table 1: Summary of Existing and Future Conditions

DESIGN AREA	BOUNDARIES	_	DESCRIPTION OF EXISTING AND FUTURE CONDITIONS PER OCP
SEAFAIR	Williams Rd to Granville Ave	Existing	Primarily established single family and low-rise residential. Sturgeon Bank is west of the dike. The West Dike Trail is over the dike, with natural areas on either side. The northern third of the plan is the Quilchena Golf & Country Club, situated on Agricultural Land Reserve (ALR) lands. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	No major changes anticipated.
TERRA NOVA	Granville Ave to Terra Nova Rural Park	Existing	Situated entirely on ALR lands. Primarily open space, with few buildings. Includes Quilchena Golf & Country Club, Terra Nova Rural Park, and agricultural areas. Sturgeon Bank is west of the dike; includes the Grauer Lands, an enhanced habitat site. West Dike Trail continues north. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	No major changes anticipated.
THOMPSON TERRA NOVA	Terra Nova Rural Park to M℃allan Road	Existing	Established residential neighbourhood of single family homes. River Road is substantially offset from the waterfront, with a wide open space from the road to the dike, which includes a trail. Typical park amenities are in the open space, including benches, sign posts and washroom facilities. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	No major changes anticipated.
THOMPSON Dover	M⁰Callan Road to No. 2 Rd Bridge	Existing	Half industrial, a City works yard and recycling depot. Half residential neighbourhood of townhouses and medium- density apartment complexes. Buildings are set back from River Road, and built on higher land than the road elevation. No driveway access from River Road to the condo complexes. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	No major changes anticipated.
OVAL	No. 2 Rd Bridge to Dinsmore Bridge	Existing	Mostly redeveloped in the past fifteen years, with the Olympic Oval, high-rise condos and offices. River Road is realigned behind waterfront development. A waterfront trail and recreational areas are along the waterfront, including intertidal zones and park amenities, such as benches. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	Development is currently underway for the remaining sites, and nearly complete. These areas are designated for mixed use in the OCP. Retail and other commercial uses will be at the main levels of new developments.
CITY CENTRE 1	Dinsmore Bridge to Cambie Rd	Existing	Low-rise office industrial lands and parking lots. Office sites have substantial footprints. River Road is adjacent to the waterfront. The UBC Boathouse and other marinas are on the water. Along the waterfront there is a thin linear park including a dike trail with park amenities and public art. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	The area from the waterfront to the former rail corridor is planned to be the proposed Middle Arm Park, a large park surrounded by high density mixed use and commercial uses of the planned Pedestrian-Oriented Retail Precincts. A museum and arts centre are proposed for this area.
CITY CENTRE 2	Cambie Rd to Moray Bridge	Existing	Low-rise office industrial lands and parking lots. Office sites have smaller footprints with narrow frontages on the water. River Road is adjacent to the waterfront, with parking lots along the dike. Marinas are present along this entire area. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	Intensification of the urban area with high density mixed use and commercial zones in planned Pedestrian- Oriented Retail Precincts. Expansion of marinas for residential and non-residential boats. The proposed Capstar Canada Line Station .



DESIGN AREA	BOUNDARIES		DESCRIPTION OF EXISTING AND FUTURE CONDITIONS PER OCP
DUCK ISLAND	Moray Bridge to Oak St Bridge	Existing	Former industrial lands, currently vacant lots that host the Richmond Night Market during the summer. River Rock Casino & Marina, and large parking lots. A constructed wetland between the parking lot and the marina. Smaller industrial sites west of the Oak Street Bridge. Disused CP Rail bridge. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	Parklands and marinas along the waterfront. Development of urban commercial and residential uses. A bridge for the Canada Line and a new Skytrain station. NOTE: Private developers are currently submitting development plans to the City for approval.
INDUSTRIAL	Oak St Bridge to No. 4 Rd	Existing	Industrial facilities and parking lots. Fraser River Terminal, BC Hydro power station. Canada Line and Bikeway bridge. River Drive in aligned inland. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	No major changes anticipated. Industrial lands for the foreseeable future. Residential uses are prohibited.
BRIDGEPORT TAIT	No. 4 Rd to Shell Rd	Existing	Formerly industrial, presently existing high-rise condos; approved condo and townhouses currently under development. River Road at the waterfront was decommissioned on this section. Small light industrial site remains. Single family residential south of the waterfront area. Log booms on the water. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	Ongoing redevelopment to be completed in the near future. No major changes anticipated once redevelopment is complete.
INDUSTRIAL North East 1	Shell Rd to Bath Slough	Existing	Industrial area. Businesses and associated parking lots on the narrow strip of land between River Road and the waterfront. Log booms on the water. ESA type is Shoreline, Intertidal or Freshwater Wetland.
		Future	No major changes anticipated.
INDUSTRIAL North East 2	Bath Slough to Knight St Bridge	Existing	Industrial area. Offices and parking lots. River Road is against the waterfront. Large trees and established vegetation on the waterfront area north of River Road. A small vacant lot under Port Metro Vancouver ownership is west of the Knight Street Bridge. Drainage ditches south of River Road. ESA type is Shoreline, Intertidal or Freshwater Wetland.
		Future	No major changes anticipated.
INDUSTRIAL North East 3	Knight St Bridge to No. 6 Rd	Existing	Industrial area. Large lumber processing yard and waterfront log transport facilities. Large trees and established vegetation on the waterfront. Public access to River Road is blocked by gates however the City has a ROW. ESA type is Shoreline on the land side and Intertidal on the water side.
		Future	No major changes anticipated.

2.2 GEOTECHNICAL CONDITIONS

Thurber Engineering Ltd (Thurber) conducted a review of the Study Area to assess the anticipated geotechnical conditions. Based on their review, the anticipated subsurface conditions within the Study Area are primarily fill and silt overlying alluvial Fraser River deposits. The silt is clayey near the surface and becomes sandier with depth. This layer is generally about 2 to 4 m thick, although it ranges from about 1 m to 6 m thick. Below the silt, there is a zone that transitions from silt to sand at about 7 m depth. The sand layer below about 7 m depth becomes cleaner and coarser with depth and is typically 8 to 25 m thick. This sand layer is susceptible to seismically induced liquefaction. Below the sand there is a sequence of silt and sand layers. Underlying the silt and sand sequence, there is a thick deposit of silt, which is underlain by dense till-like soil at depths of 50 m or more. Geotechnical investigations and modelling may be required at the design stage of a dike adaptation project to establish site-specific subsurface conditions, and any associated geotechnical requirements.

The report⁵ prepared by Thurber in support of the Phase 2 LIDMP is included as *Attachment 3* for reference.

⁵ Lulu Island Dike Master Plan - Phase 2: Geotechnical Input, Thurber Engineering Ltd., October 6, 2016

Lulu Island Dike Master Plan Phase 2 - Draft Report.



2.3 ENVIRONMENTAL CONDITIONS

Richmond is located at the mouth of the Fraser River, an urban and agricultural City juxtaposed within the high ecological values of the Fraser River Estuary. The City's Ecological Network Management Strategy (ENMS) provides context for the protection, enhancement and connectivity of an interconnected system of natural areas that make up Richmond's distinctive landscape. The ENMS recognizes the essential ecosystem services integral to the subtidal, intertidal and upland riparian areas within the Study Area, such as water storage and filtration, wave energy attenuation, temperature mitigation and prevention of soil erosion. Green infrastructure, which refers to components of the natural and built environment that provide ecosystem services, are also promoted within the ENMS. A map of Riparian Management Areas (RMA's) of Lulu Island is shown below in *Figure 3* and provided in full size in *Appendix B*.

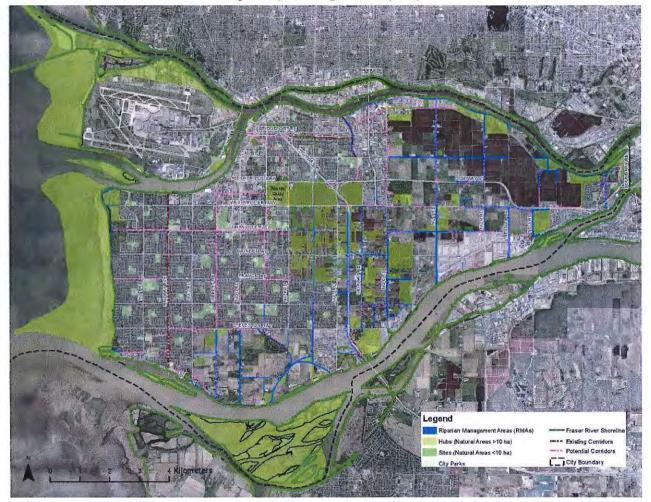


Figure 3: Riparian Management Areas (RMA's)

Ecological lands within the LIDMP Study Area include City parks, RMA's and ESA's designated in the OCP, as well as other ecologically valuable lands such as the provincially designated Sturgeon Bank WMA. The LIDMP Study Area includes six of the ten geographic strategy areas identified within the ENMS: Traditional Neighbourhoods, City Centre, West Dike, WMA's, Industrial Area and the Fraser River. The ENMS and associated Strategy Areas inform the LIDMP.

The ENMS encompasses all ecological lands in the City, regardless of tenure. Priorities to reduce the fragmentation of natural habitats is central to the ENMS principles. The LIDMP Study Area includes some of the City's highest ecological values within the Fraser River delta. An overview of the City and non-City designated ecological attributes within the Study



Area is provided below. Further detail is provided in the Envirowest Technical Brief⁶ included as *Attachment* 4 for reference. The following discussion presents environmental factors, regulations and guidance documents in place at the time of this writing. Any additional regulations that may be in place in future at the time that any diking project moves forward should also be reviewed and considered in the preparation of dike design and construction plans.

Riparian Management Areas (RMA's) and Channelized Watercourses

Richmond has interconnected drainage catchments that are delineated by the operation of pump stations that discharge into the Fraser River. The inland watercourses are slow moving and wetted the majority of the time. The high groundwater table that feeds local watercourses and sloughs contains naturally-occurring dissolved iron and other metals, and low levels of dissolved oxygen. These water quality conditions are generally inhospitable to salmon and trout; however, other species of fish, reptiles and amphibians may utilize the inland aquatic areas.

The City's watercourses flow into and contribute to fish and wildlife resources sustained by the Fraser River. As such the watercourses are designated fish habitat under the federal Fisheries Act, the provincial Water Sustainability Act, and the provincial Riparian Areas Protection Act. While the majority of these watercourses have been historically realigned into road grid to support agricultural development, they are identified by the City as channelized watercourses and not stormwater ditches. To support the form and function of these channelized watercourses, pre-designated riparian setbacks of 5 m and 15 m are designated by the City on minor and major watercourses, respectively. These setbacks, developed in consultation with the Department of Fisheries and Oceans (DFO), are identified by the City as Riparian Management Areas (RMA's) and protected from development. Channelized watercourses, and their associated RMA's, are interspersed on the landside of the West and North dikes within the LIDMP Study Area. Locations of RMA's are shown on the map included in *Appendix B*.

Environmentally Sensitive Areas

The City has designated Environmentally Sensitive Areas (ESA's) throughout the City. As identified in Chapter 9 of the OCP, intertidal and shoreline ESA Development Permit (DP) areas are in place around the Lulu Island perimeter. The intertidal DP area is defined as 30 m out into the intertidal or subtidal area measured from the High Water Mark as defined in the Riparian Area Regulations. The shoreline DP area is defined as 30 m inland of the shoreline into upland riparian habitat. This ESA recognizes the estuarine values surrounding Lulu Island and provide direction for application of the DP through DP permit guidelines. Along the West Dike section of the Study Area, ESA DP areas contain upland riparian, brackish marsh, sandflats, mudflats, and open water habitat. Along the North Dike section of the Study Area, the ESA DP areas contain pockets of mud flat, salt marsh, eelgrass and upland riparian habitat. This ESA recognizes the estuarine values surrounding the DP through DP permit guidelines. Along the West Dike section of the DP through DP permit guidelines. Along the West Dike section of the DP through DP permit guidelines. Along the West Dike section of the DP through DP permit guidelines. Along the West Dike section of the DP through DP permit guidelines. Along the West Dike section of the DP through DP permit guidelines. Along the West Dike section of the DP through DP permit guidelines. Along the West Dike section of the LIDMP Study Area, the ESA Development Permit Area contains upland riparian, brackish marsh, sandflats, mudflats, and open water habitat. Along the North Dike section of the LIDMP Study Area, the ESA Development Permit Area contains upland riparian, brackish marsh, sandflats, mudflats, and open water habitat. Along the North Dike section of the LIDMP Study Area, the ESA Development Permit Area contains pockets of mud flats, salt marsh, eelgrass and upland riparian habitat. Locations of ESA's are shown on the map included in *Appendix C*.

City Parks

The West Dyke Trail and Terra Nova Rural Park are both City park attributes contained within the Study Area. There is habitat functionality and ecological value comprised within these lands.

Bath Slough

The Study Area includes Bath Slough at the boundary between the Industrial North East 1 and Industrial North East 2 design areas. Bath Slough forms part of the historical watercourse complex that stretched across Lulu Island, and receives run-off from industrial and residential lands in the Bridgeport area. Through the 2014 Bath Slough Revitalization Initiative, the City has conducted a number of innovative ecological initiatives along Bath Slough including water quality improvements, riparian enhancements and native pollinator pasture initiatives. The Bath Slough Revitalization Initiative should be considered in the design and construction phase of proposed dike upgrade projects in this area.

⁶ Lulu Island Dike Master Plan Phase 2: Technical Brief, Envirowest Consultants, November 2, 2016.

Lulu Island Dike Master Plan Phase 2 - Draft Report



Ecological Network Management Strategy (ENMS) Strategy Areas

Both inland and foreshore ecological values are embedded within the six ENMS Strategy Areas. The ENMS and associated Strategy Areas provide key ecological context within the Study Area. ENMS Strategy Areas as shown on the map included in *Appendix D*.

Wildlife Management Area (WMA) - Sturgeon Bank

Sturgeon Bank is a provincially designated Wildlife Management Area (WMA) established in 1998 and is located on the water side of the West Dike. It is protected for the conservation of critical, internationally-significant habitat for year-round bird migration and wintering waterfowl populations. It is also important fish habitat. It is comprised primarily of near shore and intertidal brackish marsh, sandflats, mudflats, and open water. The WMA foreshore marsh and mudflat habitats provide critical ecological values as well as ecosystem services for wave energy attenuation and shoreline erosion and stabilization. Consideration for these key climate change adaptation and resiliency attributes along Sturgeon Bank should be considered in the design and construction phase of proposed dike upgrade projects in this area.

Fraser River Estuary Management Program (FREMP) Mapping

Since the mid-1980's habitat productivity mapping has been undertaken along the Fraser River shoreline from the mouth of the Fraser River Delta upstream to the Pitt River/Maple Ridge area. This mapping was undertaken by the former Fraser River Estuary Management Program (FREMP). FREMP was a cooperative agreement amongst member agencies, including Environment Canada, Fisheries and Oceans Canada, Transport Canada, Fraser River Port Authority, North Fraser Port Authority, BC Ministry of Environment, and the Greater Vancouver Regional District. Though FREMP ceased to exist in 2013, the City continues to utilize this data resource to inform activities in and along the City's Fraser River foreshore. The FREMP classification system comprises a three tiered colour-coded system: habitats are colour-coded red, yellow or green. Red-coded shorelines sustain highly productive fish and wildlife habitats. Yellow-coded shorelines sustained moderately productive habitats, while green-coded shorelines were characterized by habitats of low productivity. Generally development constraints are greatest within red-coded habitats, while development within green-coded habitats are constrained the least. Habitat productivity within the LIDMP Study Area includes a majority of red-coded reaches along the West Dike and North Arm.

Detailed maps showing habitat coding throughout the Study Area are presented in *Appendix E*. An overview of the foreshore habitat coding in the Study Area is shown in *Figure 4*. High productivity habitat is depicted to extend along the north dike generally from No. 6 Road to the Knight Street bridge, along the Tait Waterfront Park, from No.4 Road to the Canada Line bridge, under the Oak Street Bridge, immediately west of the River Rock casino, south of the Canada Line YVR line, and west of Hollybridge Way to the Terra Nova Rural Park. Moderate and low productive habitat are interspersed along this shoreline between Hollybridge Way and Knight Street bridge. High productivity habitat is depicted to extend along the entire seaward edge of the west dike fronting Sturgeon Bank and Terra Nova Rural Park.

Fraser River Fish and Species at Risk Values

The Fraser River Estuary contains rich habitat for many species of fish and wildlife. Estuary marshes support a significant portion of the regions migrating salmon. While the inland watercourses are generally considered to not be hospitable to salmon and trout species, they do flow into and support fish life in the Fraser River and are therefore considered to be nutrient providing fish habitat.

A desktop review for species of management concern (i.e. included in Schedule 1 of the Federal Species at Risk Act, and Provincial Conservation Data Centre red- and blue-listed species) was undertaken on the Provincial Conservation Data Centre web map. The search provided a single result, specifically utilization of the Fraser River by white sturgeon. The search did not provide any results along the seaward extent of the west dike, or along inland channelized watercourses. The absence of search results does not indicate that species at risk or of management concern are absent, but that they have either not been observed and /or recorded within these areas. A detailed species at risk assessment will need to be undertaken at the time of design construction as the potential for listed species such as white sturgeon, Vancouver Island beggertick, streambank lupin etc. within the Study Area is high.



Figure 4: Foreshore Habitat Coding in the Study Area

2.4 EXISTING FLOOD PROTECTION INFRASTRUCTURE

At present, Lulu Island is protected from flood hazards by a perimenter ring dike consisting of the West Dike, the North Dike, and the South Dike. The Study Area comprises the waterfront and lands protected by the West Dike, and part of the North Dike from Terra Nova Rural Park to No. 6 Road. These dikes provide flood protection from storm surges and Fraser River freshet events. Generally the dike is a standard trapezoidal earth dike in most locations, with a trail or a road over the dike crest.

The existing dike crest elevations in the Study Area vary from 3.0 m to 4.7 m depending on when the dike was last upgraded, or when surrounding lands were last redeveloped. Drainage ditches and storm sewers behind the dikes convey storm flows and flood waters to pump stations discharging to the Fraser River and the Georgia Strait. Public dikes and all drainage infrastructure are now owned solely by the City of Richmond.

The West Dike protects the City from high tides and storm surges originating in the Strait of Georgia. Sturgeon Bank, a mudflat and marshland, extends up to 6 km into the Strait of Georgia from the toe of the dike. These lands consist of a relatively flat face with grass cover next to the dike, then marsh and mudflats further out towards the sea. Sturgeon Bank currently provides some protection from wave run-up to the West Dike.

The North Dike protects the City from high tides and storm surge impacts originating in the Strait of Georgia and migrating up the North and Middle Arms of the Fraser River. To a lesser extent, these dikes protect from high Fraser River freshet events. Generally the North Dike is bounded by the Fraser River foreshore and River Road. Through the City Center OCP Area, the dike is primarily a linear park on the waterfront bounded on the land side by River Road or development. Waterfront developments that have been constructed in the past ten years have often elected to raise their lands to the



dike crest elevation, forming a superdike. A superdike is formed whenever the lands behind the dike are filled to the same elevation as the dike crest, and development is built on a ground elevation equal to the dike crest. Superdikes are discussed in greater detail in *Section 4.1.2*. Through the industrial areas north of the City Center, the dike remains generally earthfill with sections of sheet pile and floodwalls associated with specific sites.

2.5 EXISTING FLOOD PROTECTION POLICY

The City of Richmond has two primary policies in place that guide flood protection initiatives. The OCP establishes flood protection as a priority in the context of land use planning. Flood proofing objectives are enforced through Bylaw No. 8204.

At present, the OCP states that ESA's serve the dual purpose of planning for environmental and flood protection needs. Flood protection has been established as a priority alongside environmental priorities within the OCP, especially in areas that are designated ESA's. This includes the entire waterfront of the Study Area. The OCP also establishes a priority for a green infrastructure network throughout the City's ecological network, including the intertidal, shoreline and upland riparian areas. A green infrastructure network integrates the built and natural environment to realize associated ecosystem services such as flood mitigation, and stormwater management.

The City currently enforces flood proofing through the Flood Plain Designation and Protection Bylaw No. 8204, established in 2008 to set minimum Flood Construction Levels (FCL's) throughout the City. The FCL prescribes the minimum elevation where the underside of a floor system can be constructed. The By-law also provides for diking needs such as ROWs by specifying that lands at a certain distance from the dike or waterfront must be dedicated to dike works.

Proposed developments at the waterfront must commit to implementing flood protection measures in order to secure approval for development plans. These are typically negotiated with the City on a site-by-site basis. In recent years, residential developers have voluntarily raised the elevation of development lands to the same elevation as the dike crest (creating a superdike) to ensure that the units on the ground floor will have a view of the water.

3 Considerations

The considerations in this section were used to evaluate potential flood protection adaptations to make the recommendations that comprise the Phase 2 LIDMP. Any flood protection adaptation, whether in compliance with or deviating from the Phase 2 LIDMP, should use the following considerations in evaluating the suitability of a proposed flood protection project for implementation. It is important that any proposed project avoid or mitigate negative impacts, while maximizing the benefits, as a balance of the following considerations. In the event that a dike adaptation project differs from the recommended adaptation for that design area, the project should still take these considerations into account. These considerations outline important factors that should be incorporated into the implementation plans for both structural adaptations that will alter the existing landscape, or policy adaptations that have indirect impacts on the landscape.

3.1 FLOOD PROTECTION CONSIDERATIONS

The City has established a design crest elevation of 4.7 m with consideration to be further raised to 5.5 m in response to climate change and sea level rise predictions. These design crest elevations have been adopted by the City in response to a combination of sea level rise predictions (1.0 m) and land subsidence $(0.2 m)^7$, anticipated to materialize by the year 2100.

Increases in dike crest levels (up to 4.7 or future 5.5 m) to address sea level rise and climate change are anticipated to be staged and implemented over the next few decades to respond to rising sea levels. The City will continue to monitor sea level rise and adjust the target dike crest elevations as required. Any flood protection project in the Study Area should, at

⁷ Sea Level Rise Adaptation Primer, Arlington Group et. al, January 2013

Lulu Island Dike Master Plan Phase 2 - Draft Report



a minimum, adhere to these elevations. Additional regional guidelines should also be considered at the design stage of dike improvements.

Adaptations should be compatible with existing dikes and other flood protection measures adjoining the site of proposed works. Connections to existing flood protection works should be designed to ensure there will not be inconsistencies or weak points where an adaptation meets a pre-existing dike.

3.2 ENVIRONMENTAL CONSIDERATIONS

The Study Area is situation along the Georgia Strait and the Fraser River, two important fish and wildlife habitats. There are also riparian areas and intertidal zones that have ecological value. Any diking projects should be well-integrated with the surrounding natural realm, and should be designed to mitigate alterations that compromise the local environment, either aesthetically or ecologically. The Study Area includes substantial open space and parklands, including wetlands and natural areas on the waterfront. The City has an interest in preserving the environment at the waterfront for public uses, in particular the dike trail for cyclists and pedestrians. The aesthetic value of the natural environment along the trails should be considered as well as ecological significance.

The breadth of ecological values comprised within the study area is reflective of estuary habitats as described in *Section 2.3.* The perimeter ring dike in the Study Area is flanked by either ripariam or upland ESA habitat to the landside, and high value shoreline & intertidal ESA or WMA habitats on the foreshore. Any proposed dike design and construction projects should undertake an assessment of the adjacent ecological values to determine the most appropriate dike design and footprint using an approach to avoid alterations in high value habitats, and if that is not feasible, then mitigate or compensate with a net gain approach. The Study Area is comprised of large tracts of open space and park lands that contribute significant aesthetic values within the estuary which must be considered in concert with the ecological values.

An overview of the federal and provincial regulatory context is provided above in *Section 2.3*. Detrimental impacts to the environment are to be avoided wherever possible, in accordance with the City's environmental regulations. In addition, sea level rise should be monitored and reviewed in order to determine the impact on existing foreshore wetlands within the Study Area. Additional guidance documents outlining the City's environmental protection and enhancement strategies are listed in *Section 1.3*. Any flood protection project should be prepared by qualified persons having reviewed and understood these documents, as well as any environmental guidance documents or regulations in effect at the time a project is proposed. The design of proposed diking projects should follow the City's approach regarding the priority to avoid habitat impact first. Where that is not feasible, enhancement and mitigation may be pursued with a net gain approach.

3.3 GEOTECHNICAL CONSIDERATIONS

Geotechnical design considerations for dike adaptations include seepage control both under and through the dike, dike slope stability, dike crest settlement, and seismic performance. Furthermore, additional loading from increased dike size over any existing structures, such as building footings or bridge abutments, will need to be verified for confirmation that existing infrastructure will not be negatively impacted. Other types of structural flood protection measures will also need to be verified for impacts to existing infrastructure.

Thurber has reviewed the existing geotechnical conditions in the Study Area. Their comments on the key design considerations are outlined on the following pages.

Seepage

Seepage risk should be assessed and mitigated for any dike adaptation project, whether for dikes or floodwall systems. Seepage becomes problematic where water flow through or under the dike dislocate the fill materials forming the dike, which may weaken the integrity of the dike and increase the risk of failure during high water events. Adaptations should be designed with proper drainage to mitigate seepage risks.

Increasing the height of an existing dike to 4.7 m or 5.5 m may increase the design flood height, defined as the height from the ground at the land side toe of the dike to the height of water against the dike during a high water event. Existing dikes



are between 3.0 m and 4.7 m, and the ground elevation on the landside of the dikes is generally at about 2.0 m. Raising an existing dike may also increase the flood height, unless the lands adjacent to the dike are also raised in conjunction with crest height increases, forming a superdike. Increasing the flood height may increase risks of landside heave of the less permeable surficial silt layer, and piping through the dike or its foundation.

Piping occurs when excessive seepage forces cause the migration of soil particles through the soil matrix resulting in internal erosion and eventually retrogressive failure. Heave can occur when there are excessive hydraulic pressures on the landside of the dike caused by a lower permeability soil layer forming a cap over a more permeable layer near the ground surface. Heave can lift and fracture the cap, causing large localised seepage volumes and internal erosion, which could cause a dike breach.

To provide reliable protection from higher design flood heights, a system of seepage control measures will likely be required for any dike adaptation project. The potential for heave and piping may be mitigated using relief wells, drainage blankets or trenches to drain water from behind the dike face to an outlet such as a sewer or ditch. The receiving system's capacity should be verified to ensure drainage can be accommodated in the system. Relief wells and trenches should be designed with filters, such as a geotextile, to prevent piping and internal erosion. Seepage exits should be similarly protected with filters to minimize risk of fill materials migrating out of the dike.

Where there are ditches at the toe of an existing dike, filling the ditches may be considered within the scope of a proposed dike adaptation project. Ditches at the toe of a dike increase the risk of piping, since these ditches shorten the seepage path length and increase the hydraulic gradient. Filling the ditches may contribute to a comprehensive plan to reduce the risk of seepage.

Seepage potential should be evaluated and mitigated for any structural adaptation, as seepage may cause build-up of pressures behind the structure that may increases risks of failure. Constrained dikes, designed with a retaining wall on one or both sides, may be less susceptible to seepage risk if the dike face is a uniform material, such as a concrete cut-off wall or a floodwall. A dike face constructed with a segmental wall system, such as lock blocks or armour stone, may need to have the joints between segments grouted to prevent seepage at the joints.

Stability

Any dike adaptation project should be designed and constructed to withstand pressures and forces it may be subjected to during a high water event. For dike adaptations, high quality dike fill materials should be used and placed in accordance with accepted engineering practice to maximize stability. The standard dike section is anticipated to be generally stable with increased flood heights, although it will be less stable than the lower height configuration. In areas where stability is a concern, minor modifications to the standard dike section may be required, such as flattening the landside slope, constructing a toe berm or providing a seepage cut-off and filter within the dike. The stability of dikes may be further improved where ditches at the landside toe are infilled.

Settlement

Any dike adaptation project should be designed and constructed with consideration for settlement. Designs that minimize settlement are preferred, though some measure of settlement is anticipated in the long-term in all cases.

Raising existing dikes may induce consolidation settlement of the surficial silt layers. This settlement could be up to about 5% of the increase of the thickness of new dike fill placed. Dikes and surrounding areas may also experience compression settlement due to on-going long-term compression of deeper silt layers. This ongoing settlement is typically in the range of 1 to 2 mm per year for dikes built on soil conditions in Richmond. Settlement could potentially be compensated for by overbuilding the dike to a higher initial crest elevation, anticipating that it will settle to the target dike crest.

Local soil properties should be investigated prior to finalizing the design of any adaptations. Where construction is over peat or highly organic soils, settlement may be higher.





Seismic Performance

The Provincial Seismic Design Guidelines for Dikes⁸ (Seismic Guidelines) published in June 2014 recommends designing high consequence dikes to control seismic deformations within prescribed limits. For a trapezoidal dike to achieve the objectives of the Seismic Guidelines, ground improvement may be required. Ground improvement reduces seismic vulnerability by densifying the foundation of the dike. Compaction of the ground underlying the dike may achieve the targets in the Seismic Guidelines. However, more intensive methods such as deep soil mixing or vibro-replacement to a specified depth may be pursued if compaction alone is found to be insufficient. These ground improvements may be very costly. Dikes that are set back from the waterfront are more resistant to seismic events due to being restrained by earth at both dike toes, as compared to a waterfront dike where the waterside toe is much deeper and may provide less force anchoring the dike in place. Therefore, setback dikes require less intensive methods to meet the Seismic Guidelines. Likewise, widening the dike crest to create a superdike increases resilience to seismic events without typically requiring ground improvements. Superdikes are discussed in greater detail in *Section 4.1.2*.

To further understand the potential seismic risks to dikes within the Study Area, Thurber conducted seismic deformation analyses at three select locations (No. 1 Road Pump Station, No. 4 Road Pump Station, and Bath Slough Pump Station). Results are included in their Seismic Deformation Analysis report⁹ included in *Attachment 5*. Results from the assessment identified that at the three sites selected, horizontal deformations were within the allowances prescribed for the 1:2,475 year event by the Seismic Guidelines. Vertical deformations exceeded the tolerances; however, overbuilding the dike to provide post-earthquakle freeboard may be an acceptable alternate to meet the Seismic Guidelines instead of costly ground improvements. The results are largely depended on the underlying soil conditions, slope of the riverbank, and depth of the river bottom. Larger deformation Analysis pertain only to the three sections analyzed; these are generally representative of Lulu Island however the results cannot be assumed to be consistent for any other locations. At the design stage of a proposed dike adaptation project, a site-specific seismic deformation analysis, for example a Plaxis model, may inform whether ground improvements may be required, and what level of ground improvements may be required to meet the Seismic Guidelines.

3.4 INFRASTRUCTURE CONSIDERATIONS

It is advantageous to pursue dike works alongside other infrastructure upgrades in the vicinity of the dike. Where infrastructure works are proposed on the waterfront, local diking needs should be evaluated and included in the scope of proposed work wherever possible. For example, when a road is being raised or resurfaced, the adjacent dike could be upgraded concurrently. Including dike adaptations within the scope of other municipal works may also present a cost savings as compared to pursuing projects independently. The resulting dikes may also be better integrated with the local landscape if they proceed concurrently with neighbouring infrastructure upgrades.

Any impacts to local stormwater drainage patterns should be evaluated to ensure compatibility with the local infrastructure, such as pump stations or roads. Where adaptations will interfere with existing drainage patterns, the capacity of the receiving pump station must be confirmed. If ditches at the toe of the dike are to be filled, the associated loss of stormwater storage and conveyance functions may need to be compensated with underground pipes or alternative systems.

Above ground utilities may be impacted by diking projects. Utility poles may need to be temporarily relocated while dike works are underway, and relocated to a permanent position when works are complete. There may be an opportunity to relocate cables underground when dike works proceed, particularly if roadworks are included. The dike trail and associate park infrastructure, such as park benches and lookouts, may need to be relocated to accommodate dike adaptations.

Lulu Island Dike Master Plan Phase 2 - Draft Report

 ⁸ Seismic Design Guidelines for Dikes, 2nd ed., Golder, Ministry of Forests Lands and Natural Resources (MFLNRO) Flood Safety Section, Jun 2014
 ⁹ Lulu Island Dike Master Plan - Phase 2: Seismic Deformation Analysis, Thurber Engineering Ltd., Sep 12, 2016



3.5 SITES WITH UNIQUE CONSTRAINTS

There may be sites with unique features that must be accommodated when adaptations proceed. Dike adaptations may be realigned to avoid special sites, however this may not always be feasible. Where development and infrastructure exists along the waterfront where a dike adaptation project would ideally proceed, a custom design to accommodate that site may be required. Examples include pump stations, bridges, or industrial sites located immediately on the water. There are a number of bridges in the Study Area. Adaptations at bridge sites are discussed further under *Section 4.3*.

The adjoining adaptations on either side of the special site should be well-integrated with that site's custom adaptation design, to ensure there are no vulnerabilities in the flood protection strategy at the boundaries between adaptation types. For example, a section of floodwall within a dike should be protected at the joints to ensure the joints are as robust as both the dike and floodwall. The joints should be as capable of withstandard high water levels as the adaptations on either side.

3.6 SOCIAL CONSIDERATIONS

Dike adaptations should be designed with consideration of the public realm. The City's 2009 Waterfront Strategy presents a vision that promotes community wellness, economic vitality and a healthy environment through initiatives that integrate the waterfront with the urban landscape. The Study Area contains recreation, culture and heritage resources to be preserved wherever feasible, according to the regulatory protections in place for heritage resources. Recreational uses may include walking and cycling on the trail, as well as offshore activities such as sport fishing and boating.

Heritage sites may be treated as sites with unique constraints, as described in *Section 3.5*, that require special accommodations within a diking project. Heritage sites that have been identified as culturally significant should be preserved per the Heritage Procedures Bylaw 8400 as applicable.

Any impacts that restrict use and enjoyment of the waterfront, as well as views of the waterfront, should be mitigated. Impacts on cultural and heritage resources limiting the accessibility of these sites should be mitigated. Sites should remain accessible to all people including those using mobility aids, such as wheelchairs or crutches.

Public access to the waterfront is provided by the perimeter dike trail system. Where waterfront access is constrained, the City's Parks Planning and Design (Parks) department has identified connectivity at the waterfront as preferable to inland trail detours. For example, where the existing dike trail alignment crosses under low bridges, raising the dike may not provide adequate clearance to maintain the trail over the dike. The preference is to keep the trail at the waterfront. A boardwalk at the waterside toe of the dike would be a preferred approach as opposed to directing pedestrians up to the road to circumvent a barrier.

Adaptations should be aesthetically integrated with the surrounding area. For example, in recreational areas or ecological landscapes, adaptations that do not detract from the natural beauty of the local environment are preferable to those adaptations requiring severe hardscaping, such as concrete or retaining walls. The local character of industrial areas is amenable to man-made structures thus floodwalls may be in keeping with the landscape themes in industrial areas.

Adaptations should support, and be integrated with, the habitat functionality and aesthetics of the surrounding environment.

3.7 PROPERTY CONSIDERATIONS

The City must have permanent access to the dike adaptations in the long-term, for both construction and ongoing maintenance operations. Acquiring property may add considerable costs to a diking project. Wherever feasible, adaptations should proceed within the lands that are already under City ownership, or that the City may access through easements or right-of-ways (ROW's).

Much of the City's waterfront was developed prior to the establishment of robust policies for dedicating lands to diking. As a result, older buildings remain directly on the waterfront, or within 30 m from the natural boundary. In cases where no alternative alignment can be implemented, it may be necessary for the City to acquire waterfront lands or obtain easements or ROWs to construct or maintain adaptations.



3.8 ECONOMIC CONSIDERATIONS

For the purposes of the Phase 2 LIDMP, economic considerations encompass impacts to local businesses operating in the vicinity of existing or proposed dikes. The cost of adaptation projects is also an economic consideration, however for the purposes of the Phase 2 LIDMP these will be referred to as "cost considerations," discussed further under *Section 3.10*.

Flood protection projects provide an overall economic good by preventing damage to assets. However, any changes to existing conditions may trigger negative impacts to the local economy. For example, diking may damage views to the waterfront, or challenge industrial activities by limiting water access.

Where economic impacts cannot be completely avoided, they should be mitigated to the extent feasible. Dike adaptations should consider local economic factors in the overall decision making context.

Lands that were formerly used for economic purposes, such as waterfront shipping facilities, but are no longer being used for economic activities may be suitable lands for dike adaptations. If alternative lands are available that do not have any associated economic uses, those lands should be used rather than compromising lands of economic interest.

3.9 OPERATIONAL CONSIDERATIONS

Dikes in the Study Area provide access to City assets that must be maintained, such as drainage ditches and trails. Adequate clearance must be retained for maintenance vehicles to navigate the dikes where required, and carry out maintenance activities. For example, if a dike is raised in an area where there are drainage ditches at the dike toe, the boom of an excavator on the dike must be able to reach the ditches for cleaning and maintenance.

Raising a dike may complicate access as the slopes must remain suitable for maintenance and emergency access. Additional lands may be required to improve access to the dike.

3.10 COST CONSIDERATIONS

The overall cost of implementing adaptations is driven by a number of factors that include habitat consideration, land acquisition and ground improvements. When evaluating the cost of an adaptation, the costs of all associated works and mitigation plans should be included. A project with relatively higher construction costs may still be the least expensive option if it does not require any habitat compensation, for example.

4 Flood Risk Management Adaptations

Flood Risk Management adaptations have been categorized as either area wide or area specific.

Ultimately the City's goal is to fortify the perimeter ring dike to a design crest elevation of 4.7 m, with consideration to be further raised to 5.5 m in response to climate change and sea level rise predictions. Area wide adaptations are those that facilitate the City's flood protection objectives in tandem with the dikes or alternative protection measures in place at the waterfront. These could be policy adaptations, structural measures, or enhancement of green infrastructure to secure additional benefits to an adaptation that will achieve the 4.7 m crest elevation. Area wide adaptations may not be sufficient to meet the City's target dike crest elevation if implemented in isolation, however they may facilitate achieving the City's flood protection goals. For example, revising City policies to include specific diking requirements would be an area wide adaptation, as this is applicable across the entire Study Area, however, on its own, a revision to City policy would not achieve the target dike crest elevation. Area wide adaptations encompass strategies to facilitate implementing flood protection projects, and seizing opportunities presented by waterfront development to implement flood protection works concurrently. Area wide adaptations are defined and described in further detail in *Section 4.1*.

Area specific adaptations are recommended for each of the thirteen specified design areas. These include all dike and floodwall adaptations that may achieve the 4.7 m design crest, and may be further raised to 5.5 m in future when required. As noted in *Section 2*, the design areas have been delineated using the City's Official Community Plan (OCP) boundaries



as identified in the OCP Areas, OCP Land Use Maps and OCP Sub-Area Plans. OCP Areas have been subdivided where similar waterfront conditions exist for a clearly defined part of an area. Area specific adaptations are defined and described in further detail in *Section 4.2*.

Recommendations from both area wide and area specific categories have been made to create a comprehensive flood protection strategy for the Study Area. A summary of the recommended Flood Risk Management Stragies that apply to either specific design areas, or all of the Study Area is provided in *Table 2*. The contexts for the recommended application of each adaptation are detailed in *Section 4.1* and *Section 4.2*.

AREA SPECIFIC			AREA WIDE					
DI	DIKES		FLOODWALLS					
Widen Footprint to Land or Water Side	Raise in Place / Constrained Dike	Permanent	Demountable	Superdikes	Flood Proofing	Planning and Development Controls	Breakwaters and Barrier Islands	Secondary Dikes

Table 2: Recommended Flood Risk Management Strategies

Note that other adaptations were reviewed and evaluated for implementation in the Study Area, though only the recommended adaptations are presented in the Phase 2 LIDMP. Adaptations that were eliminated at the evaluation phase include coastal wetlands, emergency preparedness and response, and managed retreated.

Coastal Wetlands:	Coastal wetlands, including intertidal habitat such as brackish wetlands, eelgrass beds, mud flats, and sandflats, temper the extremity of storm impacts by attenuating wave energy, similar to breakwaters. There are no candidate sites within the Study Area to create new coastal wetlands for the purposes of flood protection; however, existing coastal wetlands can be maintained and enhanced to improve their flood protection characteristics.
	The West Dike runs adjacent to the Sturgeon Bank WMA which is comprised of intertidal brackish marsh, sandflats, mudflats, and open water. The North Dike runs adjacent to pockets of mud flat, salt marsh, and eelgrass habitat. This intertidal habitat currently provides ecosystem services such as erosion and wave attenuation. Where feasible through dike upgrades this intertidal habitat could be enhanced. As part of the LIDMP the City will need to continue to work with interjurisdictional partners to monitor the complexity of the surrounding intertidal habitat, evaluate the existing ecosystems services that this habitat provides, and based on monitoring collaborate of efforts and initiatives to maintain and enhance this area.
Emergency Preparedness and Response:	This strategy accommodates flood risks by preparing robust mitigation plans, to be carried out in the event of flood emergencies. The City has an existing emergency response plan: the Emergency Operations Centre coordinates with various departments to execute the Emergency Preparedness Flood Management Plan. The plans in place have not been reviewed as part of the Phase 2 LIDMP as this is beyond the scope of this study.
Managed Retreat:	Managed retreat involves decommissioning or demolishing existing assets within a specified hazard zone, thereby eliminating flood risk by removing any development where flooding may occur. This strategy is not appropriate for the Study Area. The economic value of retaining existing





assets exceeds the cost of reducing the risk of flood damage by relocating assets. The existence of development on Lulu Island that must be protected from flooding is considered a permanent condition for the purposes of the LIDMP.

4.1 AREA WIDE ADAPTATIONS

In the context of the Phase 2 LIDMP, area wide adaptations are those that facilitate the City's flood protection objectives in tandem with the dikes or alternative protection measures in place at the waterfront, but may not be sufficient to meet the City's target dike crest elevation in isolation. The target dike crest elevation is addressed through the area specific adaptations described in *Section 4.2*.

The recommended area wide adaptations are: superdikes; floodproofing; planning and development controls; breakwaters and barrier islands; and, secondary dikes,. Each recommended adaptation is discussed in the following sections.

4.1.1 SUPERDIKES

As noted in *Section 2.4*, a superdike is formed where the lands behind the dike are filled to the same elevation as the dike crest. Development is then built on a ground elevation equal to the dike crest.

Maximizing the width of raised land adjacent to the river decreases flood and seismic risks by increasing the integrity of the dike. The existing dikes of Lulu Island are built on soft soils that are subject to liquefaction during seismic events. These dikes may require ground improvements to meet the 2014 Seismic Design Guidelines (Seismic Guidelines). Superdikes are an approach to achieve the dual objectives of reducing vulnerability to both high water levels and seismic events. A superdike is more likely to withstand lateral movement and sloughing of the dike face without resulting in a dike breach, as compared to a standard trapezoidal dike alone. By raising lands to a superdike condition, costly ground improvements may not be required, even if they may have been required for a standard trapezoidal dike in the same area.

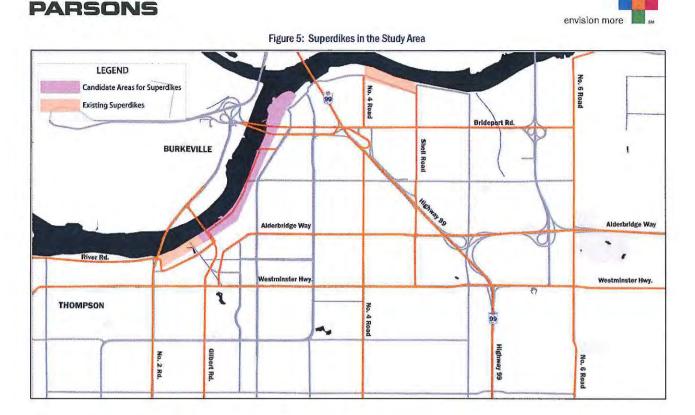
Any proposed dike adaptation project should comply with the Seismic Guidelines. If a proposed dike adaptation project will not meet the requirements in the Seismic Guidelines, superdikes may be considered as an alternative to ground improvements. At the design stage, a number of strategies should be investigated to determine which will meet the Seismic Guidelines at the lowest cost, on the overall balance of the considerations listed in *Section 3*.

Any redevelopment of waterfront sites presents an opportunity to fortify existing flood protection measures. Although the Study Area is already fully built out, lands will continue to be redeveloped over the long-term future. Opportunities for implementing superdikes are most attainable where existing commercial and industrial sites are leveled in support of developing residential uses. Generally, industrial sites have different waterfront access and aesthetic needs than residential sites, which benefit most from a superdike condition. In recent years, residential developers have voluntarily raised the ground elevation of development sites to the same elevation as the dike crest to ensure that the units on the ground floor will have a view of the water. Within the Study Area, this has been the case at the multi-family residential developments next to the Olympic Oval, and the multi-family residential development under construction on the formerly industrial waterfront sites between No. 4 Road and Shell Road.

Application: Commercial & Residential Lands on the North Dike

The lands of the City Centre area are anticipated to experience extensive intensification and redevelopment in the coming years, further detailed in *Section 4.2.7* and *Section 4.2.8*. This area has been identified as a candidate for superdikes, as shown in *Figure 5*.

Redevelopment of waterfront sites presents opportunities to implement flood protection works concurrently with development. The optimal time for implementing superdikes is when existing assets are demolished and the site is leveled to accommodate new development.



4.1.2 FLOOD PROOFING

Flood proofing is a strategy to minimizing the damage to critical infrastructure in the event of a dike breach. Buildings can be constructed as flood proofed by ensuring habitable space is set at an elevation above the flood risk zone. Damage and losses incurred during flooding are minimal as any valuable or vulnerable assets are located above the possible flood elevation. In these buildings, habitable space and sensitive assets are located above a prescribed ground floor elevation, and lower floors are used only for storage of flood-resistant or low value assets. Another flood proofing strategy is using only impermeable building materials and watertight building equipment below the prescribed flood risk elevation.

The City's influence on where private building operators locate their assets within their buildings is limited, however construction of buildings with habitable space or vital assets below a specified elevation may be prohibited through legislation. By flood proofing buildings located in a specified waterfront or low elevation area, vital assets are prohibited from being located in high risk zones so that flooding will only affect non-vital infrastructure. Generally, flood proofing legislation impacts only the construction of new buildings; existing buildings constructed prior to the legislation's implementation are typically not impacted except through building permit applications for renovations or additions.

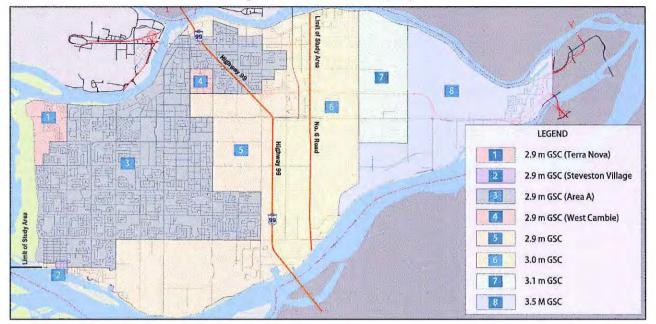
As noted in *Section 2.5*, the City currently enforces flood proofing through the Flood Plain Designation and Protection Bylaw No. 8204. The Bylaw sets minimum Flood Construction Levels (FCL's) throughout the City. The FCL prescribes the minimum elevation where the underside of a floor system can be constructed. Long term raising of land levels has previously been recommended (2008-2031 Flood Protection Strategy); however, is challenging to implement in already built up areas. The bylaw also specifies setbacks from a dike ROW to make land available for diking.

Application: Flood Construction By-law Amendments

Every part of Lulu Island has a designated FCL, not only the waterfront area. The bylaw organizes FCL's by area, as shown in *Figure 6*. Presently, the majority of the Study Area fronting the existing dikes is within 'Area A' of the bylaw. The requirements for 'Area A' are to construct to 2.9 m or at least 0.3 m above the highest elevation of the crown of any road that is adjacent to the parcel. Commercial and industrial buildings are fully exempt if the main entrance is within 3 m of a



road. Developments within the Terra Nova Area are further exempt only requiring the underside of the floor slab to be greater than 2.6 m. There are no exemptions in the north-east portion of the Study Area, where a 2.9 m FCL is required.





Amendments to Bylaw No. 8204 may be appropriate given the current predictions for sea-level rise. These amendments could include creation of an additional FCL Area adjacent to or within a stipulated distance from the existing dike or waterfront. The area could require an FCL of 4.7 m with exemptions based development size or parcel size. The FCL's would also have to consider overall lot raising and not just habitable space.

Examples of alternate concepts for consideration are provided below:

Single Family Dwellings and Small Lots: The bylaw could be amended to increase the rate at which land is raised concurrently with redevelopment. Presently, this rate is 0.3 m above the road centreline. For smaller lots, this strategy may then present challenges to local grading, producing inconsistent grades across lots and possibly introducing complex drainage patterns. Smaller lots are more likely to be highly constrained by existing grades on neighbouring lots and the road. Where grading is highly constrained, retaining walls may be required to accommodate substantial changes in elevation. Aesthetically, abrupt grade changes are undesirable, especially in neighbourhoods of single family homes. Varied grading between lots can also create issues with differential settlement. Grading designs that are consistent with the surrounding lot fabric and do not use retaining walls are preferred. The sidewalks and road network must also be carefully graded to maintain minimal slopes and safe connections at intersections. Any FCL increase must be implemented strategically to mitigate the potential grading challenges it may introduce.

Zoning bylaws could potentially be modified to provide additional guidance and requirements for lot coverage, setback, building heights, and others to help plan how the greater staggered lot elevations may integrate with each other. This will be challenging to implement but would increase the rate of increasing the land height in residential areas.

Mid-Size Development Lots or Building Permit Value Criteria: The bylaw could be amended to require raising to 4.7 m or 1 m (or alternate) above the road. Challenges may still exist with incorporating grading to adjacent parcels and roads.



Large Development Lots or Building Permit Value Criteria: The bylaw could be amended to require raising to 4.7 m and upgrading the local road network to accommodate access. This is currently done in practice, however, it is not specifically required under the current bylaw.

Additional studies on implementation of modified FCL bylaws should be conducted prior to proceeding with any changes. Input should be provided from architects, planners, engineers, environmental consultants and key stakeholders to obtain a comprehensive understanding of opportunities and factors to be mitigated while achieving flood protection goals.

Flood risk should be evaluated by the City periodically to determine whether increased risk warrants raising the target dike crest elevation. The bylaw can be amended as required to meet evolving City guidelines as they are adjusted per changes to flood risk conditions. For example, if the design crest elevation is raised from 4.7 m to 5.5 m, the FCL bylaw can be amended to reflect the new minimum elevation. In this way, flood proofing can progress over time as required.

4.1.3 PLANNING AND DEVELOPMENT CONTROLS

Planning and development controls may be implemented by enacting legislation to prohibit or restrict development in a defined hazard zone, such as a floodplain. More flexible policies can also be enacted to include conditional development approvals, where projects may be approved on condition that developers commit to implementing flood protection measures such as raising the abutting dike or raising the land elevation to a superdike.

Application: Site Assembly Size in the City Centre

In the Study Area, there are opportunities to pursue flood protection improvements in conjunction with new development, especially in areas expected to be intensified in the coming years. In Richmond, planning and development controls can be implemented through bylaws or amendments to the OCP.

Increasing the ground elevation of a single waterfront site is restricted by the existing elevations of adjacent lands. Where adjacent sites remain low, a redevelopment site can only be minimally raised without introducing challenges to the local road network and drainage patterns. To avoid complications arising from steep grades or retaining walls, the City can encourage developers to assemble multiple adjacent sites until a specified minimum waterfront frontage can be developed concurrently. This strategy permits increasing the dike crest level fully to the current standard elevation, and eases the transition of the waterfront to a superdike.

4.1.4 BREAKWATERS AND BARRIER ISLANDS

Breakwaters may be constructed to dissipate wave energy before waves reach the shore. This reduces the burden on the flood control structures at the waterfront. In combination with a foreshore structure, flood control structures with lower crest elevations may remain adequate to withstand increased wave run-up associated with increased water depths due to climate change and sea level rise.

With appropriate environmental consideration during design and construction, breakwaters and barrier islands can create intertidal habitat, such as sand flats, mud flats, salt marsh and eelgrass beds. These features can assist with erosion and wave attenuation. The intertidal habitat can work in combination with a constructed flood control structures like dikes and floodwalls, to mitigate flood risk.

Sea level rise and upland limitations to natural accretion within the Sturgeon Bank WMA could result in increased offshore depths beyond the West Dike, which could simultaneously increase wave heights reaching the West Dike.

Increased water depths off-shore reduce the wave attenuating properties of Sturgeon Bank. The current predictions and assumptions used in the BC Sea Dike Guidelines¹⁰ for the year 2100 suggest wave run-up may account for up to 2.7 m of the future dike crest elevation. The full extent of future crest height increases will require detailed observation and study of observed sea level rise.

¹⁰ Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use Draft Policy Discussion Paper, Ausenco Sandwell, Jan 27 2011

Application: The West Dike Foreshore -Sturgeon Bank

The West Dike runs adjacent to Sturgeon Bank WMA comprised of intertidal brackish marsh, sandflats, mudflats, and open water. Maintenance and enhancement of these areas could provide wave dissipation and erosion protection.

The West Dike is a candidate for barrier islands, as presented in the Phase 1 LIDMP. Presently, the features of Sturgeon Bank dissipate wave energy. With future increased water depths on the Sturgeon Bank, wave heights are expected to increase, reducing the wave dissipate benefits of Sturgeon Bank, putting the West Dike at higher future risk of overtopping. Construction of breakwaters or



Photograph: Sturgeon Bank Management Area

barrier islands, including the maintenance and enhancement of intertidal habitat, is one approach to offset the potential future loss the existing wave dissipation benefits of Sturgeon Banks.

While breakwaters and barrier islands will not address the immediate crest elevation requirements of 4.7 m, construction of barrier islands may allow for future deferrals of crest height increases. A general concept plan showing possible locations for barrier islands is presented in *Figure 7*.

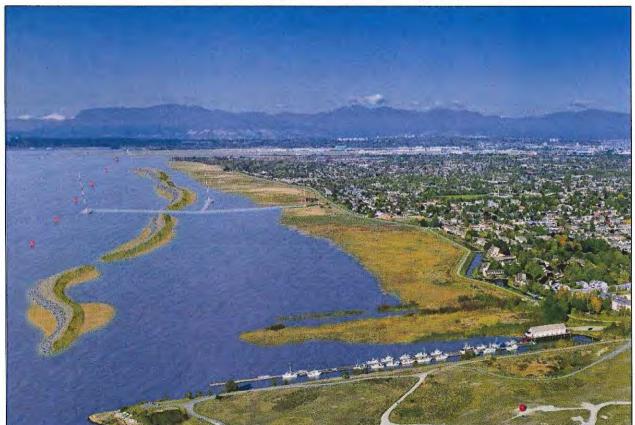


Figure 7: Artistic Rendering of Barrier Island Concept for Sturgeon Bank



Breakwaters are most effective when constructed close to the shore, as broken waves grow again behind the breakwater under the influence of wind. The effectiveness depends also on the crest height of the breakwater, with a higher breakwater giving more wave reduction. Preliminary calculations from the Phase 1 LIDMP indicated that wave reduction with a breakwater or barrier islands constructed to +3.0 m geodetic would reduce wave height by 70% if constructed 200 m offshore, 60% at 500 m offshore, and 45% at 2000 m offshore.

Intertidal ecosystems are driven by interdependent components including rates of accretion, stream velocity, salinity, water quality, sea level, temperature, vegetation productivity, adjacent land use etc. that are complex to measure and model. Understanding the complexity of current conditions to better prepare for predictable increases in sea level rise will help direct strategies to maintain and enhance intertidal ecosystems. To this end, the City continues to work on interjurisdictional efforts to better understand the influencing factors that affect the Sturgeon Bank WMA, and intertidal habitat throughout the Fraser River Estuary.

4.1.5 SECONDARY DIKES

Secondary dikes work in conjunction with primary dikes to reduce the impact of a flood in the event that a primary dike is breached or overtopped. A secondary dike protects assets behind the secondary dike alignment while the lands between the primary and secondary dikes may flood intermittently. Secondary dikes are appropriate for implementation where the lands between the primary and secondary dike require a different measure of protection than lands behind the secondary dike. Eligible areas may include parking lots, parks or natural areas that can withstand intermittent flooding with minimal damage or losses incurred.

As secondary dikes are built inland, they can be less costly to build and less susceptible to damage during seismic events as compared to adaptations directly on the waterfront. The advantage is that an equivalent measure of protection can be extended to important inland assets, at a lower cost and lower seismic risk, than raising the primary dike at the waterfront. In the Study Area, secondary dikes are recommended for consideration where no critical assets are located on waterfront lands and there are assets further inland that require protection.

Application: Terra Nova

In future, the City may consider exploring establishing an alternative dike alignment for a part of the Terra Nova area through the park lands, as shown in *Figure 8*.

By setting the alignment inland, the City may avoid costly ground improvement measures that may be required for upgrading the existing alignment on the waterfront. Assets sensitive to flooding, such as private homes and heritage sites, would be protected by the secondary dike. Less sensitive assets, such as the park, trails and open space lands, can withstand occasional flooding with minimal losses incurred and therefore may be adequately protected by a dike with a relatively lower crest elevation.







4.2 AREA SPECIFIC ADAPTATIONS

For the purposes of the master plan, an area specific adaptation is a structural adaptation that can achieve the target 4.7 m crest height, with consideration for a future increase to 5.5 m. This section outlines the preferred area specific adaptation measures for each of the thirteen design areas.

The recommended approaches to area specific adaptations includes: widen footprint to land or water side; raise in place / constrained dike; permanent floodwall; demountable floodwall.

Widen Footprint to Land or Water Side

Dikes are the most common form of structural flood protection. Lulu Island is currently protected by a perimeter ring dike, with floodwalls or alternative protections at some sites. In the Study Area, improvements to the existing dike should be pursued wherever possible.



As per the typical dike sections presented in *Appendix F*, the typical City dike upgrade cross-section consists of a 2:1 slope on the water side, and a 3:1 slope on the land side¹¹. Raising a dike by 1 m then triggers a 5 m horizontal space requirement (assuming the standard slopes are applied). Land side dike expansions can be challenging where the footprint is constrained by existing buildings, infrastructure, drainage ditches, or RMA's at the toe. Where a dike's land side toe is heavily constrained, a standard dike can be raised by widening its footprint onto the water side.

While shoreline habitat within the Fraser River Estuary will generally have a higher habitat value, and expansion into this area should be avoided, this may not always be the case. Implementation of area specific flood protection strategies will have an environmental impact regardless of the strategy put forth for a given area. Environmental assessments and valuation will be undertaken in the design construction phase, where possible habitat impact will be avoided. Where impact cannot be avoided, efforts will be made to mitigate, and if necessary compensate for impact following a net gain approach.

Raise in Place / Constrained Dike

Where dike expansion is constrained on both the land and water sides, it may be possible to raise a dike within its existing footprint, creating a constrained dike. This may be achieved by introducing a retaining wall on one or both sides. In Richmond, RMA's, development and infrastructure may abrupt to the landside of the dike, and intertidal habitat or marine infrastructure may be on the water side of the dike, meaning the dike may have constraints on both sides. In the Study Area, raising the dike in place can be pursued to minimize impacts on adjacent lands.

Permanent Floodwall

A floodwall is a constructed barrier designed to hold back flood waters. In the Study Area, floodwalls can be implemented where space is limited and a dike would interfere with other land uses or infrastructure, such as existing buildings. Floodwalls may also be preferable to a dike where access to the water is required for economic activity, such as fishing or shipping. Generally, where feasible, earth fill trapezoidal dikes are preferable as they generally have lower costs, they are easier to maintenance, they are more reliable and easier to repair in emergency situations.

Demountable Floodwall

In areas where waterfront access is desired, demountable flood barriers can be constructed so that the barrier is erected only when required, during storm events. Regular access to the waterfront is maintained otherwise. This adaptation may be applied in the Study Area at industrial sites or marinas, where activities require amenities directly on the waterfront that cannot be set back behind a floodwall or dike. Where possible, this form of dike is avoided due to their higher costs, mobilization requirements, and reliability concerns.

Parsons assessed each potential dike adaptation strategy based on the considerations outlined in *Section 3*. A summary of the recommendations for each design area is provided in *Table 3*. Key issues and opportunities to be considered when implementing the recommended adaptations are presented for each design area in *Section 4.2.1* through *Section 4.2.13*.

¹¹ Typical Cross Section River Dike Upgrade, City Drawing Mb-98, Golder Associates, 2008





Table 3: Recommended Area Specific Adaptations

FLOOD PROTECTION SEGMENT	RECOMMENDATION	
WEST DIKE		
Seafair	Raise the dike on the existing alignment. Additional studies required to quantify drainage impacts of land side expansion, habitat impacts and costs associated with water side or land side expansion, and long term resiliency of a constrained dike solution.	
Terra Nova	Raise the dike on the existing alignment. Additional studies required to quantify drainage impacts of land side expansion, habitat impacts and costs associated with water side or land side expansion, and long term resiliency of a constrained dike solution. Alternatively, consider routing a secondary dike inland through Terra Nova Rural Park, in lieu of raising the primary dike at the waterfront.	
NORTH DIKE		
Thompson Terra Nova	Raise the dike on the existing alignment with land side expansion. Plan for the long-term raising of River Road.	
Thompson Dover	Raise the dike on the existing alignment with land side expansion. Plan to raise River Road.	
Oval	Existing area generally redeveloped as a superdike scenario (elevations from 4.0 to 4.5m). Future raisings to 5.5 m can place on the existing alignments and integrate into the adjacent landscaping.	
City Centre 1	Raise a dike with land side expansion. Consider creation of a set-back dike and inland raising (superdike) in conjunction the future Middle Arm Waterfront Park construction.	
City Centre 2	Raise the dike on the existing alignment with land side expansion in conjunction with redevelopment. Ensure any interim dike upgrades are compatible with the long term strategy of constructing superdikes.	
Duck Island River Rock	Implement approved development plans. Plan for temporary dike to protect City assets if required to address sea level rise and climate change prior to implementation of the approved strategy at the Duck Island or River Rock Casino sites.	
Industrial	Raise the dike on the existing alignment. Site specific solutions may be required at the Fraser River Terminal site. Plan for temporary dike along the alternate alignment if required to address sea level rise and climate change prior to implementation of a strategy at the Fraser River Terminal site.	
Bridgeport Tait Existing area generally redeveloped as a superdike scenario (elevation 4.7m). Future raisings to 5.5 m can take previous and integrate into the adjacent landscaping.		
Industrial North East 1 Raise the dike on the existing alignment. Land acquisition may be required to facilitate construction of a traper. (through redevelopment or otherwise). Implementation of a temporary floodwall adjacent to the waterfront lot required in advance of a permanent adaptation to address sea level rise and climate change. Consider Ba Revitalization Initiative for future designs.		
Industrial North East 2	Raise the dike on the existing alignment. Additional studies required to quantify drainage, habitat impacts, and costs associated with land side expansion of a trapezoidal dike. A constrained land side slope may be required to integrate with the existing drainage infrastructure. Consider Bath Slough Revitalization Initiative for future designs.	
Industrial North East 3 Raise the dike on the existing alignment. Additional studies required to quantify drainage, habitat associated with land side expansion of a trapezoidal dike. A constrained land side slope may be required existing drainage infrastructure.		

4.2.1 SEAFAIR

envision more

The Seafair design area consists of established residential neighbourhoods of single family homes and townhouse complexes. On the foreshore, lands are undeveloped as is the case for the entirety of Sturgeon Bank. The Quilchena Golf & Country Club makes up the northern third of the plan; it sits entirely on Agricultural Land Reserve (ALR) lands. No major changes to the Seafair waterfront are identified in the OCP.

The preferred adaptation is to raise the dike on its existing alignment. Expansions to either side are constrained by environmental and infrastructure factors. These should be evaluated at the time an adaptation project is proposed to inform a detailed design that will best balance the considerations outlined in *Section 3*.

Barrier islands may be considered to reduce wave run-up and mitigate the need for future dike crest increases, as discussed in *Section 4.1.4*.

If ditches at the toe of the dike are to be filled, the associated loss of stormwater storage and conveyance may need to be compensated with underground pipes or alternative systems. Ditches may be designated as RMA's. Associated restrictions to alterantions should be investigated when dike adaptations proceed to design and construction. Revised drainage plans must be compatible with local pump stations.

The Williams Road pump station was upgraded in 2013. The dike crest in the vicinity of the pump station is higher than adjacent lands. The pump station is not anticipated to pose special requirements for raising the dike on adjacent lands, however raising the dike crest over the pump station may increase the loading on this infrastructure. Dike adaptation projects that include raising the dike crest over the pump station should consider the pump station's structural and operational needs, including access.



LOCATION:

Williams Road to Granville Avenue

RECOMMENDATION:

Raise the dike on the existing alignment. Additional studies required to quantify drainage impacts of land side expansion, habitat impacts and costs associated with water side or land side expansion, and long term resiliency of a constrained dike solution.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area

- West Dike
- Traditional
- Neighbourhood ESA Habitat Type
- Intertidal
- Shoreline
- FREMP Data
- The build
- Red-coded

RMA Presence

5m RMA Presence

PHOTOGRAPH:

West Dike, facing north at Williams Road Pump Station

4.2.2 TERRA NOVA

envision more

The Terra Nova area is primarily recreational and agricultural including small, low density areas of single family homes. Recreational and natural areas include the Quilchena Golf & Country Club and Terra Nova Rural Park. The park has extensive natural areas with trails and observation decks at the slough and wetland areas. A large children's play structure, the Adventure Play Environment, opened in 2014 at the northwest corner of the park. No major changes to the waterfront or parklands are identified in the OCP for this design area. The entire park is identified as conservation lands within the OCP.

The open space provides a unique setting within the Study Area to consider both waterfront adaptations at the existing primary dike, or a secondary dike alignment through the park. For more information on the secondary dike option, refer to *Section 4.1.5*. Barrier islands may be considered for implementation on Sturgeon Bank to reduce wave run-up and avoid the need for future dike crest increases, as discussed in *Section 4.1.4*. Opportunities to create intertidal habitat areas in the park may be pursued when dike adaptations proceed.

The historic Terra Nova Cannery site is present on the north side of the park, in front of the private homes on River Road within the park. There are no visible remains of the cannery, except the shoreline recedes inwards around the former cannery's boundaries. Heritage status and associated restrictions to local alterations should be investigated when dike upgrades at the waterfront are proposed. Sheet pile may need to be considered for the segment adjacent to the Cannery site to minimize impacts.



LOCATION:

Granville Avenue to Terra Nova Rural Park

RECOMMENDATION:

Raise the dike on the existing alignment. Additional studies required to quantify drainage impacts of land side expansion, habitat impacts and costs associated with water side or land side expansion, and long term resiliency of a constrained dike solution.

Alternatively, consider routing a secondary dike inland through Terra Nova Rural Park, in lieu of raising the primary dike at the waterfront.

ENVIRONMENTAL CONSIDERATIONS:

- ENMS Strategy Area
- West Dike
- ESA Habitat Type
- Intertidal
- Shoreline
- FREMP Data
- Red-coded
- **RMA** Presence
- 5 m & 15m RMA Presence

PHOTOGRAPH:

West Dike, facing north at Terra Nova Rural Park



The Thompson Terra Nova design area is residential, with recreational uses between River Road and the waterfront in the form of the dike trail and surrounding open space. The residential areas consist primarily of single family homes. No major changes to the Thompson Terra Nova design area are identified in the OCP.

The existing dike is situated between the Middle Arm of the Fraser River and River Road. Future expansions in some areas will be challenging due to the lack of space. Raising River Road will help with future dike crest elevation increases; however, will be challenging to implement.

Single family homes have driveway access from River Road throughout the design area. Individual lots are anticipated to be incrementally raised as they are redeveloped, however, this will take numerous decades to occur.





LOCATION:

Terra Nova Rural Park to McCallan Road

RECOMMENDATION:

Raise the dike on the existing alignment with land side expansion. Plan for the longterm raising of River Road.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area

- Fraser River
- Traditional Neighbourhood

ESA Habitat Type

Intertidal

Shoreline

FREMP Data

Red-coded

RMA Presence

None

PHOTOGRAPH:

North Dike, facing east near Terra Nova Rural Park entrance

4.2.4 THOMPSON DOVER

The Thompson Dover design area includes a City works yard and recycling facility, as well as mid-rise multi-family residential complexes. Recreational uses exist between River Road and the waterfront in the form of the dike trail and surrounding open space. Within the Thompson Dover design area, only the City works yard has driveway access to River Road. No major changes to the Thompson Dover design area are identified in the OCP. It is anticipated that the City works yard will be redeveloped to residential uses consistent with the surrounding neighbourhood at some point in the future.

It would be advantageous to raise River Road and assist in future land and dike crest increases in the long term. The multi-family residential lands were raised much higher than River Road when these sites were developed. Raising River Road at this location would not have the same access challenges as the Thompson Terra Nova area as there is no driveway access and the buildings are already on high land. River Road may be raised to the dike crest elevation on this section at any time. It would be advantageous to do a longer segment of River Road together, thus raising the road here should proceed concurrently with raising River Road in the Thompson Terra Nova design area to the west. Raising River Road along the City works yard may be considered concurrently with redevelopment of the site in the event that this site is redeveloped.

Issues and opportunities with raising River Road are further discussed in Section 4.3.2.



CNCL - 383



LOCATION:

McCallan Road to No. 2 Road Bridge

RECOMMENDATION:

Raise the dike on the existing alignment with land side expansion. Plan for the longterm raising of River Road.

ENVIRONMENTAL CONSIDERATIONS:

- ENMS Strategy Area
- Fraser River
 City Centre

ESA Habitat Type

Intertidal

Shoreline

FREMP Data

Red-coded
 RMA Presence

None

monto

PHOTOGRAPH:

North Dike, facing east at Lynas Lane

30



4.2.5 OVAL

Within the Oval design area, the River Road alignment has been relocated south of development to the former rail corridor. The dike trail is part of a wide landscaped area abutting high rise condos. Redevelopment of the Oval design area began in advance of the 2010 Vancouver Winter Olympics, for which the Richmond Olympic Oval skating and fitness centre was built. The adjacent sites have since been redeveloped as well. The majority of these lands were filled to the dike crest elevation when the dike was raised in conjunction with site redevelopment. This design area is considered complete for the time being as the dike crest elevations vary from 4.0 m to 4.5 m, which is within range of the current 4.7 m target dike crest elevation.

There is one existing building directly west of the Dinsmore Bridge, forming the one remaining section of this design area to be raised. As this building has been set back from the waterfront, there is land available to raise the dike by widening the footprint to the land side at this site. This option may be pursued when this segment of River Road is decommissioned and relocated to the former rail corridor inland.



LOCATION:

No. 2 Road Bridge to Dinsmore Bridge

RECOMMENDATION:

Existing area generally redeveloped as a superdike scenario (elevations from 4.0 to 4.5m). Future raisings to 5.5m can take place on the existing alignments and integrate into the adjacent landscaping.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area

Fraser River

City Centre

ESA Habitat Type

Intertidal

Shoreline

FREMP Data

Red-coded

RMA Presence

 5 m & 15 m RMA Presence

PHOTOGRAPH:

North Dike, facing east at the Richmond Oval

4.2.6 CITY CENTRE 1

The City Centre 1 design area is is presently long-established office industrial sites with sizeable parking lots. All sites have access from River Road, which runs along the waterfront in this design area. Marinas exist along the waterfront. The existing Middle Arm Waterfront Park is a linear park along the waterfront constructed concurrently with the Olympic Oval in 2009. The park's amenities include the dike trail, playgrounds, and piers. Outdoor seating and stages for public events have been inset on the water side dike face. The OCP identifies major changes, including commercial intensification and creation of a large park.

A new park, Middle Arm Park, is proposed in the OCP adjacent to the existing Middle Arm Waterfront Park, as shown on the City Centre Area Plan presented in *Appendix A*. The existing River Road is planned to be realigned to the former rail corridor, and all lands between the rail corridor (the future River Road) and the waterfront are proposed to become the parklands forming Middle Arm Park. A concept sketch¹² is presented in *Figure 9*.

Plans for the new park have not yet been formalized; however, based on consultation with City staff, there is support for establishing the future dike alignment inland to improve public connectivity with the waterfront, and facilitate creation of intertidal habitat within the park. A set-back dike combined with inland raising to create a superdike would provide the most resilient solution for this area. Dike plans should be prepared concurrently with plans for the proposed park.

In the event that the City wishes to fortify the existing dike in advance of the development of Middle Arm Park, the City may consider raising a temporary flood protection adaptation in the interim until the proposed park's plans are finalized and implemented. LOCATION:

Dinsmore Bridge to Cambie Road

RECOMMENDATION:

Raise dike with land side expansion. Consider creation of a set-back dike and inland raising (superdike) in conjunction with the future Middle Arm Waterfront Park construction.

A CONTRACT OF A

Figure 9: 2006 Concept Plan for the Proposed Middle Arm Park



ENVIRONMENTAL CONSIDERATIONS:

- ENMS Strategy Area
- Fraser River
- City Centre
- ESA Habitat Type
- IntertidalShoreline
- FREMP Data
 - Yellow-coded
 - Green-coded
- **RMA** Presence
- None

PHOTOGRAPH:

North Dike at Gilbert Road, facing east

¹² Middle Arm Open Space Master Plan Concept, PFS Studio, December 2006

Lulu Island Dike Master Plan Phase 2 - Draft Report





4.2.7 CITY CENTRE 2

Marinas are present throughout the City Centre 2 design area. The dike trail ends approximately 200 m north of Cambie Road, where the dike becomes marina parking lots. The proposed Middle Arm Park ends where the dike trail becomes parking lots. These parking lots are directly adjacent to the trafficable road; there is no shoulder between the road and the parking lots. Parking lots are raised from River Road with either steep slopes or retaining walls. This section of River Road will ultimately be realigned to the former rail corridor. Lands are planned to be redeveloped into high density commercial and mixed use buildings. Redevelopment of this area has begun.

While the optimal time to implement flood protection adaptations is concurrently with redevelopment of adjacent sites, the parcels of land in this area have narrow frontages, and smaller lot depths. This lot geometry can create challenges in implementing flood protection upgrades alongside redevelopment. These issues can be addressed through site assemblies, as detailed above in *Section 4.1.3*. The approach to flood protection in this area should generally mimic the recent improvements in the Oval area, with redevelopment raising the waterfront and the development site to establish a superdike.

The adaptations along this design area may include sites with floodwalls in order to maintain access and usage of the existing marinas. Any interim dike upgrades planned in this area should be designed with consideration for future adaptations to establish a superdike, the long-term goal in this area.





LOCATION:

Cambie Road to Moray Bridge

RECOMMENDATION:

Raise the dike on the existing alignment with land side expansion in conjunction with redevelopment. Ensure any interim dike upgrades are compatible with the long term strategy of constructing superdikes.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area

- Fraser River
- City Centre

ESA Habitat Type

- Intertidal
- Shoreline

FREMP Data

- Yellow-coded
- Green-coded

RMA Presence

None

PHOTOGRAPH

Float homes off North Dike at Capstan Way

4.2.8 DUCK ISLAND

envision more

The Duck Island design area consists of former industrial lands, substantial parking lots and the River Rock Casino, which includes a marina and a wetland. The River Road alignment is inland from Duck Island. The former industrial area, now vacant, hosts the Richmond Night Market in the summer. The landowners of this area are currently seeking development approval to develop the site for commercial uses, consistent with the land uses identified in the OCP.

The existing waterfront lands in the Duck Island design area are entirely privately-owned. The landowners are currently developing private flood protection plans, to be reviewed and approved by the City. The plans are expected to be implemented in the near future, upon approval by the City.

In the event that a suitable strategy is not developed for the private waterfront lands in this area, or if an interim adaptation measure is required, there are inland alternative alignments available to the City to maintain protection for Lulu Island. The alternate alignment would follow River Road or the CN Rail Corridor through this design area. This approach is not preferred; however, details on the alignment and approach are outlined in TM#2 (*Attachment 2*).



LOCATION:

Moray Bridge to Oak Street

RECOMMENDATION:

As per approved development plans. Plan for temporary dike to protect City assets if required to address sea level rise and climate change prior to implementation of the approved strategy at the Duck Island or River Rock Casino sites.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area Fraser River City Centre ESA Habitat Type Intertidal Shoreline FREMP Data Red-coded Yellow-coded Green-coded RMA Presence None PHOTOGRAPH: Marina at River Rock Casino

Lulu Island Dike Master Plan Phase 2 - Draft Report



4.2.9 INDUSTRIAL

The Industrial design area includes industrial areas and parking lots. The Fraser River Terminal and a BC Hydro power station are located here. River Drive is aligned south of these sites, set back from the waterfront. These lands are anticipated to be industrial uses for the foreseeable future, as noted in the OCP.

The North Arm Bridge carrying the Canada Line and a bikeway was constructed in this design area in 2009 with ample clearance for dike works beneath the bridge deck. At the detailed design stage, dike works would need to be verified for confirmation that the footings can withstand additional loading without risk of settling, or any other risks that may compromise the bridge structure.

Adaptations in this area are constrained by existing waterfront development and uses. This industrial area includes the Fraser River Terminal - a shipping port and ship repair centre – as well as the BC Hydro Kidd #2 Substation. This area is anticipated to be industrial for the foreseeable future. Because waterfront lands are constrained by private industrial uses, the City may consider pursuing a temporary adaptation in the interim until the industrial sites are redeveloped. A temporary structure along the River Drive alignment may be considered. This approach is not preferred; however, details on the alignment and approach are outlined in TM#2 (*Attachment 2*).



LOCATION:

Oak Street Bridge to No. 4 Road

RECOMMENDATION:

Raise the dike on the existing alignment. Site specific solutions may be required at the Fraser River Terminal site. Plan for temporary dike along the alternate alignment if required to address sea level rise and climate change prior to implementation of a strategy at the Fraser River Terminal site.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area Fraser River City Centre ESA Habitat Type Intertidal Shoreline FREMP Data Red-coded Green-coded RMA Presence None PHOTOGRAPH:

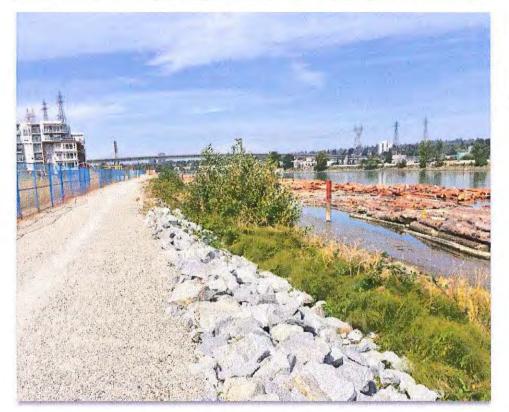
North Dike, west of Fraser River Terminal



4.2.10 BRIDGEPORT TAIT

The Bridgeport Tait design area was formerly entirely industrial. An auto repair facility remains at its eastern edge. The remainder of these lands were recently developed to high-rise multi-family residential, with ongoing development of associated residential and commercial uses.

During site devepment, the dike crest elevation was raised to 4.7 m and the development lands were filled to a superdike condition. This area is considered complete for the time being. A wide landscaped area exists between the waterfront and the buildings, providing a trail through the neighbourhood at the waterfront. Future dike crest height increases can be accommodated in this area, and integrated with the local landscaping and waterfront trail.



CNCL - 389

LOCATION:

No. 4 Road to Shell Road

RECOMMENDATION:

Existing area generally redeveloped as a superdike scenario (elevation 4.7m). Future raisings to 5.5 m can take place on the existing alignments and integrate into the adjacent landscaping.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area

Fraser River

City Centre

ESA Habitat Type

Intertidal

Shoreline

FREMP Data

Red-coded

Yellow-coded

RMA Presence

None

PHOTOGRAPH:

North Dike, facing west at the Park Riviera Development

4.2.11 INDUSTRIAL NORTH EAST 1

The Industrial NE 1 design area is entirely industrial, and no major changes are outlined in the OCP. Limited space is available in this design area as River Road is either directly on the waterfront or confined by developed lots. Where River Road is adjacent to the waterfront, it will need to be raised concurrently with dike works to meet the target dike crest elevation with a standard trapezoidal cross-section. This may impact driveway access to the lots south of River Road. An interim constrained land side dike toe may be required to mitigate impacts to adjacent lots in the interim until redevelopment and land raising occurs.

A number of small businesses operate on a narrow strip of land between River Road and the waterfront. These lands, approximately 2 ha, are privately owned. The City may consider acquiring these lands to implement diking in this area. The acquisition of approximately 2 ha of private lands north of Simpson Road may add significant costs to diking in this area.

A floodwall may be considered for this section of the design area as an interim solution in advance of the City implementing a permanent trapezoidal dike adaptation. Any interim solutions will require cooperation with the existing landowners. Outside this section, there are lands available from the River Road ROW to the shore to raise the existing dike. At the detailed design stage, if lands are too highly constrained to expand the dike footprint, the City may also consider acquiring additional lands from the parking lots on the south side of River Road.

The Industrial North East 1 LIDMP Study Area is bounded by Bath Slough. Through the Bath Slough Revitalization Initiative, adopted in 2014, the City has conducted a number of innovative ecological initiatives along Bath Slough including water quality improvements, riparian enhancement and native pollinator pasture initiatives. The Bath Slough Revitalization Initiative should be considered in the design and construction phase of diking in this area.



envision more

LOCATION:

Shell Road to Bath Slough

RECOMMENDATION:

Raise the dike on the existing alignment. Land acquisition may be required to facilitate construction of a trapezoidal dike (through redevelopment or otherwise). Implementation of a temporary floodwall adjacent to the waterfront lots may be required in advance of a permanent adaptation to address sea level rise and climate change. Consider Bath Slough Revitalization Initiative for future designs.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area

- Fraser River
- Industrial
 ESA Habitat Type
- Intertidal
- Shoreline
- Freshwater Wetland

FREMP Data

- Yellow-coded
- Green-coded

RMA Presence

15m RMA Presence

PHOTOGRAPH:

North Dike, facing west at No. 5 Road



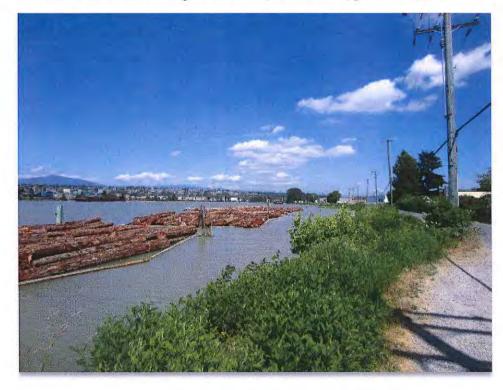
4.2.12 INDUSTRIAL NORTH EAST 2

The Industrial NE 2 design area is entirely industrial. River Road abuts the waterfront. Port Metro Vancouver owns a vacant lot west of the Knight Street Bridge. There are large ditches along the south side of River Road. No major changes to this area are presented in the OCP.

River Road is currently the dike in this design area. There are insufficient lands available north of the road to raise the dike, although the elevation of the entire River Road may be raised. No businesses within this area access the waterfront directly from their lots, therefore maintaining waterfront access for these businesses is not required. Existing drainage on the land side may need to be modified as large ditches are present along River Road.

Public access to the waterfront may be improved by the addition of a trail adjacent to the raised River Road, in compliance with the City's long term vision of a connected trail system at the waterfront of the entire island.

The Industrial North East 2 LIDMP Study Area is bounded by the Bath Slough. Through the Bath Slough Revitalization Initiative, adopted in 2014 the City has conducted a number of innovative ecological initiatives along Bath Slough including water quality improvements; riparian enhancement and native pollinator pasture initiatives. The Bath Slough Revitalization Initiative should be considered in the design construction phase of dike upgrades in this area.



LOCATION:

Bath Slough to Knight Street Bridge

RECOMMENDATION:

Raise the dike on the existing alignment. Additional studies required to quantify drainage, habitat impacts, and costs associated with land side expansion of a trapezoidal dike. A constrained land side slope may be required to integrate with the existing infrastructure. drainage Consider Bath Slough Revitalization Initiative for future designs.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area

- Fraser River
- Industrial

ESA Habitat Type

- Intertidal
- Shoreline

Freshwater Wetland

FREMP Data

- Red-coded
- Yellow-coded
- Green-coded

RMA Presence

15m RMA Presence

PHOTOGRAPH:

North Dike, facing east at Bath Slough Pump Station



4.2.13 INDUSTRIAL NORTH EAST 3

The Industrial NE 3 design area is entirely industrial. River Road abuts the waterfront and provides access to substantial parking lots for associated industrial sites and businesses. There are large ditches along the south side of River Road. No major changes to this area are presented in the OCP.

River Road is currently the dike in this design area. Large natural areas along the waterfront host mature trees, primarily on the north side of the dike. There is also smaller, less established vegetation along the south side of River Road. It is anticipated that the entire road must be raised to implement dike crest increases.

A lumber yard occupies a substantial part of this design area. The City has a ROW through the site over the River Road alignment, however access is blocked off with gates at either end of the lumber yard site. The waterfront trail is also currently blocked off through this area. If ever this site is redeveloped, dike adaptations may be pursued concurrently. However, no major changes to this industrial area are anticipated in the near future.



LOCATION:

Knight Street Bridge to No. 6 Road

RECOMMENDATION:

Raise the dike on the existing alignment. Additional studies required to quantify drainage, habitat impacts, and costs associated with land side expansion of a trapezoidal dike. A constrained land side slope may be required to integrate with the existing drainage infrastructure.

ENVIRONMENTAL CONSIDERATIONS:

ENMS Strategy Area

- Fraser River
- Industrial

ESA Habitat Type

- Intertidal
- Shoreline
- FREMP Data
- Red-coded
- Green-coded
- **RMA** Presence
- 15m RMA Presence

PHOTOGRAPH:

Conveyor belt over North Dike at No. 6 Road.



4.3 SITE SPECIFIC ADAPTATIONS

Where existing infrastructure conflicts with the recommended flood protection adaptation, a custom design for that site may be required, or the existing infrastructure may be retrofitted to accommodate diking. Infrastructure including but not limited to pump stations, road or railways, bridges or industrial infrastructure may present site-specific constraints that preclude the implementation of the recommended adaptation for the rest of that design area.

Ideally, dike adaptations are pursued when the adjacent lands are redeveloped. Flood protection measures can then be included in the scope of the proposed works. However, existing infrastructure may be suitable for a design life extending far into the future, farther than the City wishes to defer dike adaptations. In these cases, interim adaptations may be pursued.

Site-specific adaptation designs, whether permanent or temporary, should take into account all the considerations listed in *Section 3*.

4.3.1 BRIDGES

Bridges have unique constraints within a design area. The recommended adaptation for a design area may not be feasible at a bridge site, in which case a site-specific adaptation may be designed to be integrated with the standard adaptation on either side of the bridge.

A list of bridges and the particular constraints that may guide a site-specific adaptation is presented in *Table 4* below. Note that the recommended adaptation strategies in the table are recommended based on adaptations proceeding in advance of any bridge upgrades or replacement. If any bridges are to be upgraded or replaced, flood protection measures at the bridge site should be included within the scope of work.

AREA	CONSTRAINTS AND CONDITIONS	RECOMMENDED ADAPTATION STRATEGY
1) NO. 2 ROAD BR	IDGE (CITY OF RICHMOND, ROAD)	
Oval	 Bridge deck is low. Footings are under the existing dike. Bridge crosses over River Road. Bridge crosses over dike trail. Bike ramp to bridge from dike trail sensitive to grade changes. 	Tied to abutments
2) DINSMORE BR	DGE (CITY OF RICHMOND, ROAD)	
Oval	 Bridge deck is low. Footings are under the existing dike. Bridge crosses over River Road with 4.3m clearance. Bridge crosses over dike trail. 	Tied to abutments
3) MORAY BRIDG	E (CITY OF RICHMOND, ROAD)	
City Centre 1	 Bridge deck is very low. Existing dike is inland, not under the bridge. Bridge does not cross any road or trail. No waterfront trail currently exists under the bridge. Existing dike is aligned over the bridge. 	Tied to abutments
4) SEA ISLAND CO	INNECTOR (CITY OF RICHMOND, ROAD)	
City Centre 1	 Bridge deck is very low. Existing dike is inland, not under a bridge. Bridge does not cross any road or trail. No waterfront trail currently exists under the bridge. Existing dike is aligned over the bridge. 	Tied to abutments

Table 4: Bridge Constraints and Recommended Adaptations

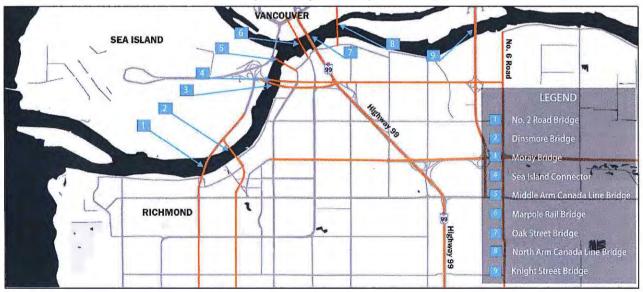


BRIDGE NAME (OWNERSHIP, BRIDGE TYPE)

AREA	CONSTRAINTS AND CONDITIONS	RECOMMENDED ADAPTATION STRATEGY	
5) MIDDLE ARM C	ANADA LINE BRIDGE (TRANSLINK, RAIL)		
Duck Island	None	Under span	
6) MARPOLE RAIL	BRIDGE (CP RAIL, RAIL)		
Duck Island	 Bridge deck is low. Timber trestle bridge; minimal space between footings. Not currently operational. Repairs required to return bridge to operational conditions. CP Rail's intentions for future use are unknown. 	Tied to abutments	
7) OAK STREET BE	NDGE (BC MINISTRY OF TRANSPORTATION, ROAD)		
Duck Island	None	Under span	
8) NORTH ARM CA	NADA LINE BRIDGE (TRANSLINK, RAIL)		
Industrial	None	Under span	
9) KNIGHT STREET	I BRIDGE (TRANSLINK, ROAD)		
Industrial NE2	None	Under span	
10) PROPOSED BU	RKEVILLE PEDESTRIAN BRIDGE (CITY OF RICHMOND, PEDESTRIAN)		
City Centre 1	 Proposed bridge design has not yet been prepared. Diking to be incorporated when design proceeds. 	N/A	

The locations of all bridges listed in Table 3 are shown in Figure 10.

Figure 10: Bridges in the Study Area



4.3.2 RAISE RIVER ROAD

In the Thompson Terra Nova and Thompson Dover areas, River Road is immediately adjacent to the existing dyke; however, is constructed at a lower elevation to match the existing developed area. It is anticipated that land-side expansion of the existing dike will encroach on River Road. As such, the City should consider raising the grade of River Road from Cornwall Drive to No. 2 Road. The area identified for this strategy is show in *Figure 11*.









The benefits to long-term flood protection assocated with raising River Road include:

- Improves dike stability and seepage performance;
- Reduce requirement for water-side expansion and impacts to environmental habitat;
- Promotes the long-term increase in site grades for redevelopment of the Thompson Residential Area; and,
- Facilitates future dike crest increases or overbuilding of the existing dike height to accommodate settlement during a seismic event.

Challenges to raising River Road will include:

- · Maintaining driveway access and for the single family residential developments;
- Tieing the raised River Road into adjacent streets;
- Addressing settlement concerns with underground utilities;
- Planning to cost-effectively stage incrementally raising of River Road; and,
- Addressing potential impacts to RMA's and ESA's.

Raising River Road is then a very long-term strategy to assist with achieving higher waterfront land elevations, and minimize future waterside works to achieve higher crest elevations.

5 Timing of Adaptation Projects

Implementation of adaptations is best pursued alongside adjacent works. For example, when adjacent lands are being developed, dike adaptations can be included in the scope of site redevelopment. If there are substantial works to an area that are upcoming, the City may choose to implement an interim adaptation until those adjoining works proceed.



5.1 REDEVELOPMENT OF SMALL LOTS

Small lots with narrow frontages are highly constrained by grading. There must be adequate lands available to raise a dike immediately to the target crest elevation. In areas where lot sizes are too small to implement adaptations that may immediately achieve the dike crest elevation, lands can be incrementally raised by raising the lots in small intervals each time it is redeveloped. Similarly, the frontage road can be raised by a practical interval whenever substantial road rehabilitation works proceed. This is a very long-term strategy.

The ground elevation of individual lots may be raised as they are redeveloped, however the grading will be constrained by matching neighbouring ground elevations, as well maintaining driveway access to the road. If the road is also raised, then individual lots can be raised higher, however existing lots at relatively low elevations must still have driveway access to the road. This limits the overall height that the frontage road can be raised. Over time, the frontage road and adjoining lots are raised at different times. In this way, the road and surrounding lots are raised in steps. In the very long term, the overall land elevation can be raised to the target dike crest elevation using this strategy. The City may pursue interim adaptations if a greater level of flood protection is deemed to be required before the lands can be raised to the specified elevation.

Where flood protection will be integrated with redevelopment, lot consolidation is preferred to minimize impacts associated with tying in to neighbuoring properties.

5.2 LAND ACQUISITIONS & LEGAL ACCESS

The City may need to acquire property where development is immediately adjacent to the waterfront, and bound on the land side by roads, buildings or other assets. Obtaining a sufficient ROW from some properties for diking may effectively sterilize the lot, leaving insufficient space available for development. In those instances, the City may need to acquire the entire property in order to implement dike adaptations. The riverfront lots between Shell Road and No. 5 Road may be candidates for acquisition when dike upgrades proceed in that area, depending on land requirements to implement dike upgrades.

The City should acquire easements where dikes are being constructed on private property. All adaptations on private lands depend on the City being able to secure legal access to the property in order to maintain them.

5.3 RAISING THE TARGET DIKE CREST ELEVATION

The City should monitor sea level rise to pursue flood protection adaptations when higher dike crest elevations become necessary. Presently, all adaptations will be designed to meet the 4.7 m target crest elevation, with consideration for an increase to 5.5 m. Depending on whether sea level rise predictions materialize, the City may wish to raise the target dike crest elevation.

5.4 INTERIM ADAPTATIONS

Temporary adaptations, such as a demountable floodwall, may be necessary where existing conditions are constrained by existing infrastructure (such as bridges, roads, ditches, or buildings) that cannot be impacted or modified to make way for diking. Temporary adaptations may also be pursued in instances where the City cannot yet secure adequate lands or capital to implement the ultimate adaptation.

The timeline until the ultimate adaptation can be implemented should be considered when allocating resources to temporary works. For example, if the interim adaptation will only be in place for a period of a few months, it it likely not worth investing substantial resources into it. Interim adaptations may be considered if necessitated by sea level rise or any other increase in flood risk.

Compatibility with the ultimate adaptation should be considered in the design of any interim adaptation. An interim adaptation should be easily decommissioned, or able to remain in place indefinitely without interfering with the ultimate





adaptation or any other land use. The ultimate adaptations are anticipated to be implemented alongside concurrent waterfront works, as noted in *Table 5*.

AREA	EXISTING	SUMMARY OF RECOMMENDED ADAPTATION	TRIGGER TO IMPLEMENTATION OF RECOMMENDED ADAPTATION
Steveston	Earthfill Dike	Raise Dike on Existing Alignment & Consider Construction of Barrier Islands	City Initiative
Seafair	Earthfill Dike	Raise Dike on Existing Alignment & Consider Construction of Barrier Islands	City Initiative
Terra Nova	Earthfill Dike	Raise Dike on Existing Alignment & Consider Construction of Barrier Islands	City Initiative
Thompson Terra Nova	Earthfill Dike	Raise Dike on Existing Alignment & Plan for Long-term Raising of River Road	River Road is Reconstructed
Thompson Dover	Earthfill Dike	Raise Dike on Existing Alignment & Plan for Long-term Raising of River Road	River Road is Reconstructed
Oval	Superdike	Complete	N/A
City Centre 1	Earthfill Dike	Raise Dike at Waterfront or Set Back & Fill Adjoining Lots to Superdikes	Development of Middle Arm Park
City Centre 2	Earthfill Dike	Raise Dike on Existing Alignment & Fill Adjoining Lots to Superdikes	Redevelopment
Duck Island	Varies	Implement Recommendations of Approved Developer's Plan	Approval of Developer's Plan
Industrial	Varies	Raise Dike on Existing Alignment	Redevelopment of Fraser River Termina
Bridgeport Tait	Superdike	Complete	N/A
Industrial North East 1	Earthfill Dike	Raise Dike on Existing Alignment	Assembly of Sufficient Lands to Implement Dike Upgrades
Industrial North East 2	Earthfill Dike	Raise Dike on Existing Alignment	Rehabilitation of River Road or Redevelopment of Industrial Sites
Industrial North East 3	Earthfill Dike	Raise Dike on Existing Alignment	Rehabilitation of River Road or Redevelopment of Industrial Sites

Table 5: Triggers to Implementation of Adaptations

6 Implementation Opportunities

Dike upgrades are best undertaken alongside alterations to adjacent lands and infrastructure. In addition to the examples of concurrent infrastructure development noted in the sections above, dike adaptations may present opportunities to implement projects strategically to accomplish other City goals.

6.1 WATERFRONT TRAIL SYSTEM

The City's Parks Planning and Design (Parks) department has identified a goal to improve public access to the waterfront. Recreational trails and linear parks should be considered wherever dikes are modified. Even where waterfront trails are

PARSONS



already present, there may be an opportunity to increase waterfront access by improving trails with ramps or paved surfaces. Dike trails should remain accessible to people using mobility aids, such as wheelchairs or strollers.

The Parks department's preference is to have a trail directly adjacent to the water, without any rerouting inland, even if this means trails are sometimes flooded.

6.2 INTERTIDAL ZONES

Dike adaptations that proceed alongside the development of waterfront parks may be suited to the concurrent development of intertidal zones, to create additional habitat. The local ecosystem's productivity may be increased by providing a rich riparian environment. These intertidal zones may be integrated with the typical foreshore rip rap or other erosion protection by insetting habitat at lower elevations to be closer to the daily water level, and flooded during high water events. Projects incorporating the development of intertidal habitat may be designated as compensation sites for alterations required in environmentally sensitive areas.

6.3 HABITAT BANKING

As the Study Area lies within intertidal, shoreline and upland riparian habitat, environmental impact may be unavoidable. Environmental assessments and valuation will be undertaken in the design construction phase, where possible habitat impact will be avoided. Where impact cannot be avoided, efforts will be made to mitigate, and if necessary compensate for impact following a net gain approach. To achieve a net gain approach to compensation the City may consider establishing a formal habitat banking program. Habitat banking guidelines should articulate appropriate compensation ratios by habitat type, monitoring periods and success measures for created or enhanced habitat. Additionally a hierarchy of compensation options may be considered that replaces habitat types in order of priority as follows:

- Create or increase productive capacity of like for like habitat within the same ecological unit;
- Create or increase the productive capacity of unlike habitat in the same ecological unit; and
- Create or increase the projective capacity of habitat in a different ecological unit.

Habitat credits could be applied to multiple projects, or stored for future dike works. A formal habitat banking program may assist with the implementation of long term flood protection infrastructure upgrade programs.

7 Recommendations

Key recommendations for the Phase 2 LIDMP Study Area are outlined as follows:

1. Plan to raise the existing dike on its existing alignment.

The existing dike alignment along the waterfront is established and well defined. There is limited basis to support any major changes to the alignment of the existing dike, thus the recommendations are generally in keeping with traditional dike crest increases, with consideration for area specific constraints and opportunities.

2. Prepare conceptual level designs for the West Dike upgrades and conduct drainage and environmental studies on the alternatives.

Future crest height increases to the West Dike will required landside or waterside expansion. Both will have impacts to either intertidal, or upland riparian habitat. Environmental impacts should be quantified, and an approach of avoid, mitigate, and compensate following a net gain approach should be used to in evaluating the preferred strategy.

Landside expansion will impact drainage infrastructure. Impacts should be quantified to identify potential internal drainage network upgrades required if landside expansion is the preferred alignment.

PARSONS



3. Continue to monitor sea level rise.

Design crest height elevations are selected with consideration for climate change and sea level rise predictions. The City should continue to monitor sea level rise and adjust crest height targets and City flood protection police as required to address any changes in predicitons.

4. Plan to establish a habitat banking program for dike improvement projects.

Where impact to habitat cannot be avoided, efforts will be made to mitigate, and if necessary compensate for impacts following a net gain approach. To achieve a net gain approact to compensation, the City may consider establishing a formal habitat banking program. Habitat banking guidelines should outline appropriate compensation ratios by habitat type, monitoring periods, and success measures.

5. Plan for implementation of offshore protection along the West Dike as a response to climate change and sea level rise.

Sea level rise and upland limitations to natural accretion within the Sturgeon Bank WMA could result in increased offshore depths beyond the West Dike, which could simultaneously increase wave heights reaching the West Dike. Offshore barrier islands are one option to consider to dissipate wave energy prior to reaching the west dike, thereby minimizing future dike crest increases.

With appropriate environmental consideration during design and construction, breakwaters and barrier islands can create intertidal habitat, such as sand flats, mud flats, salt marsh and eelgrass beds. These features can assist with erosion and wave attenuation. The intertidal habitat can work in combination with a constructed flood control structures like dikes and floodwalls, to mitigate flood risk.

The City should continue to coordinate with relevant agencies including (Port of Vancouver, Fisheries and Oceans Canada, and others) to research and identify opportunities to improve flood protection and enhance interdital habitats in the Sturgeon Bank WMA and throughout the Fraser River Estuary.

6. Plan to raise River Road in the Thompson neighborhood.

The existing dike in the Thompson Neighborhood is confined by the Fraser River and River Road. Increasing the grade of River Road will improve dike stability and resilence; and minimize requirement to expand the dike into the Fraser River. The City should plan to incrementally raise River Road.

7. Consider aquiring land to accommodate future dike construction between Shell Road and No. 5 Road.

Land acquisition may be required to accommodate construction of a future trapezoidal dike between Shell Road and No. 5 Road. It is anticipated that acquisition will primarily be achieved through redevelopment, however, where redevelopment does not occur; the City may consider opportunistic land purchase to accommodate future dike crest height increases in the area. Plan to complete a conceptual design of the future dike through the constrained area to verify the future dike footprint.

8. Plan for the long-term raising of lands adjacent to and inland of the existing dikes.

Long term raising of land levels has previously been recommended (2008-2031 Flood Protection Strategy). Maximizing the width of raised land adjacent to the river decreases flood and seismic risks by increasing the integrity of the dike. Plan to raise the ground elevation of waterfrount development sites to the prescribed dike crest elevation.

9. Support site assemblies along the waterfront that promote cohesive adaptations for flood protection.

Large developments along the waterfront allow for major improvements to flood protection infrastructure and often result in robust superdike conditions.

PARSONS



10. Consider enhanced floodproofing through amendments to the FCL Bylaw

The City's Flood Construction Level (FCL) Bylaw establishes minimum levels to which land needs to be raised. Amending the FCL bylaw is the recommended area wide strategy to regulate raising ground elevations with redevelopment to improve flood protection throughout the Study Area. Plan to conduct an assessment on the implementation of a modified FCL bylaw.

11. Facilitate public access to the waterfront.

Integrate new trails and trail improvements with diking projects; provide trails and waterfront recreation areas that are accessible to persons using mobility aids; and, route any new trails along the waterfront instead of rerouting the trail inland.

8 Closure & Next Steps

Parsons has characterized the existing conditions and constraints of the Study Area, and has established and recommended preferred area wide and area specific adaptation strategies for the City's consideration.

The recommended next steps to finalize the Phase 2 LIDMP are:

- 1. Council Review;
- 2. Key External Stakeholder Review;
- 3. Public Information Session and Consultation;
- 4. Revise the Draft Final Master Plan Report per consultation if required; and
- 5. Council adoption of the Final Master Plan

Regards,

Reviewed By:

DRAFT

DRAFT

Evelyne Russell, EIT

Project Engineer

Todd Bowie, P.Eng Project Manager



То:	Public Works and Transportation Committee	Date:	January 10, 2017
From:	John Irving, P.Eng. MPA Director, Engineering	File:	03-1000-08-030/Vol 01
Re:	DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643		

Staff Recommendation

That DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643 be introduced and given first, second and third readings.

John Irving, P.Eng. MPA

Cohn Irving, P.Eng. MPA Director, Engineering (604-276-4140)

Att. 1

REPORT CONCURRENCE				
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER		
Finance Department Law Development Applications	र्घ रहा ख			
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: DW	APPROVED BY CAO		

Staff Report

Origin

In addition to Development Cost Charges (DCCs) applicable city-wide, local area DCCs are collected for the Alexandra neighbourhood within the West Cambie Area, as per Development Cost Charges Imposition Bylaw No. 8024.

Per West Cambie Area Plan, forming part of the Official Community Plan Bylaw No. 7100, developers are responsible for the construction of local roads along their frontages. Where specified roads are included in the Local Area DCC Program, developers are eligible for DCC rebates via front-ender agreements for the cost of land and construction of the specified roads.

The developer for 4000 May Drive has completed the construction and dedication of their road frontages, which are included in the Alexandra Neighbourhood Roads DCC Program, and has requested a front-ender agreement to recover a portion of their costs.

This report outlines the proposed DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643, which includes the authorization to execute a DCC front-ender agreement with the developer for 4000 May Drive and to release DCC Reserve Funds in respect of their land and construction costs.

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

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

6.2. Infrastructure is reflective of and keeping pace with community need.

Analysis

Pursuant to section 566(2) of the Local Government Act, money in development cost charge reserve funds, such as the Alexandra Neighbourhood Roads DCC Program, may be used to pay the capital costs of providing and constructing sewage, water, drainage and highway (road) facilities, and to pay a person who incurred such capital costs if the project was completed under an agreement between that person and the City.

Aga Khan Foundation, with the assistance of Larco Investments Ltd. (collectively, "the developer"), has completed frontage road construction as per their servicing agreement with the City and transferred ownership of the dedicated road areas to the City. The fronting roads are included in the Alexandra Neighbourhood Roads DCC Program, as identified by sections C7 and L1 in the proposed agreement (Attachment 1, Schedule A).

The allocated values for these fronting roads under the Alexandra Neighbourhood Roads DCC Program are as follows:

• Road segment C7 (May Drive from Cambie Road to McKim Way)

Land \$1,627,503.26 Construction \$251,117.97

• Road segment L1 (May Drive from McKim Way to Odlin Road)

Land \$1,424,065.35 Construction \$175,940.70

Pursuant to section 566(3) of the Local Government Act, the authority to make payments from the Alexandra Neighbourhood Roads DCC Program reserve fund must be authorized by bylaw. As such, staff recommend that DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643, which authorizes the execution of the DCC front-ender agreement by the Chief Administrative Officer and the General Manager, Engineering and Public Works, on the terms detailed below, and authorizes the release of DCC reserve funds as set out below and in further detail in the proposed agreement (Attachment 1), be introduced and given first, second and third readings.

The following are the key terms and conditions of the proposed DCC front-ender agreement with Aga Khan Foundation and Larco Investments Ltd.:

- The developer contributed 43.1% of the land and 50% of the construction value for road segment C7.
- The developer contributed 57.6% of the land and 20% of the construction value for road segment L1.
- DCC rebates pertaining to land dedication are payable to Aga Khan Foundation, the property owner.
- DCC rebates pertaining to construction are payable to Larco Investments Ltd., which provided funding for the road construction.
- The maximum compensation payable to the developer is \$1,682,463 (\$1,521,716 to Aga Khan and \$160,747 to Larco Investments Ltd.)
- The agreement is in effect until the earlier of:
 - i. 15 years from the completion date of road construction January 21, 2031; or
 - ii. the City has collected and remitted all applicable payments to Aga Khan and Larco, as described in the agreement, whichever comes earlier.
- Initial payment to the developer is based on DCC amounts collected to date for the neighbourhood.
- Subsequent payments will occur annually based on updated DCC amounts collected.

Financial Impact

Upon execution of the agreement, initial payment to the developer will be \$509,849, based on DCC amounts collected to date for the neighbourhood. Subsequent payments will occur annually based on updated DCC amounts collected. The maximum compensation payable to the developer is \$1,682,463, and payments will be made from the West Cambie Roads DCC balance. Compensation is provided to reimburse the developer for their contribution of land and construction value for roads servicing the neighbourhood. Compensation is funded from local area DCC amounts collected from other developments in the neighbourhood.

Conclusion

The developer for 4000 May Drive has completed the construction and dedication of their road frontages, which are included in the Alexandra Neighbourhood Roads DCC Program, and has requested a front-ender agreement to recover a portion of their costs. Staff recommend that DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643 be introduced and given first, second and third readings, to authorize the execution of the DCC front-ender agreement by the Chief Administrative Officer and the General Manager, Engineering and Public Works and the release of DCC reserve funds as set out in the attached DCC front-ender agreement.

Lloyd Bie, P.Eng. Manager, Engineering Planning (4075)

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

LB:jh

Att. 1: DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643



DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643

WHEREAS the Council has established a development cost charge reserve fund for road construction in the Alexandra Area (the "**DCC Reserve Fund**"); and

AND WHEREAS pursuant to sections 566(2) and 566(3) of the *Local Government Act*, Council intends to expend a portion of the monies set aside in the DCC Reserve Fund to reimburse a developer who has built part of the works that form the basis of the calculations for the development cost charges paid into the DCC Reserve Fund;

NOW THEREFORE, The Council of the City of Richmond, enacts as follows:

- 1. Council authorizes the execution of the DCC Front-Ender Agreement in substantially similar form to that attached hereto as Schedule "A" by the Chief Administrative Officer and the General Manager, Engineering and Public Works.
- 2. Council authorizes the expenditure of up to \$1,682,463 (the "expenditure") from the DCC Reserve Fund on account of May Drive land acquisition and road works, in accordance with the terms of the DCC Front-Ender Agreement attached hereto as Schedule "A".
- 3. Should any of the above expenditure remain unexpended after the expenditure hereby authorized has been made, any unexpended balance shall be returned to the credit of the DCC Reserve Fund.
- 4. This Bylaw is cited as "DCC Reserve Fund Expenditure (4000 May Drive) Bylaw No. 9643".

FIRST READING	 CITY OF RICHMOND
SECOND READING	APPROVED for content by originating dept.
THIRD READING	 <u>U3</u>
ADOPTED	 APPROVED for legality by Solicitor
	SA

MAYOR

CORPORATE OFFICER

Schedule A

DEVELOPMENT COST CHARGE FRONT-ENDER AGREEMENT

ALEXANDRA AREA ROADS DCC PROGRAM

THIS AGREEMENT made as of ______, 2016 (the "Commencement Date").

BETWEEN:

CITY OF RICHMOND

6911 No. 3 Road Richmond, B.C. V6Y 2C1

(the "City")

AND:

AGA KHAN FOUNDATION (CANADA)

Incorporation No. XS-0016100 199 Sussex Dr. Ottawa, Ontario K1N 1K6

(the "Developer")

AND:

LARCO INVESTMENTS LTD.

Incorporation No. BC0436664 Third Floor, 100 Park Royal West Vancouver B.C. V7T 1A2

("Larco")

WHEREAS:

- A. Five (5) legal parcels were consolidated to create Lot A (hereinafter defined) pursuant to a subdivision plan filed September 26, 2013 assigned number EPP32741 (the **"Subdivision Plan"**);
- B. The five (5) legal parcels referred to in Recital A of this Agreement are legally described as follows:
 - a) West half of Lot 10 Block A Section 34 Block 5 North Range 6 West NWD Plan 1224;
 - b) East half of Lot 10 Block A Section 34 Block 5 North Range 6 West NWD Plan 1224;

- c) West half of Lot 19 Block A Section 34 Block 5 North Range 6 West NWD Plan 1224;
- d) East half of Lot 19 Block A Section 34 Block 5 North Range 6 West NWD Plan 1224; and
- e) East half of Lot 20 Block A Section 34 Block 5 North Range 6 West NWD Plan 1224;
- C. Pursuant to the filing of the Subdivision Plan, certain lands were dedicated as road;
- D. Due to the filing of the Subdivision Plan, the Developer became the registered and beneficial owner of lands legally described as:

PID: 029-176-263 Lot A, Section 34, Block 5 North, Range 6 West, New Westminster District, Plan EPP32741

("Lot A")

- E. Pursuant to a Servicing Agreement dated August 22,2013 (application SA 10-530663), between the City and the Developer (the **"Servicing Agreement"**), the Developer, has with the assistance of Larco, at the Developer's and Larco's expense, undertaken the construction of certain road works more particularly described in the Servicing Agreement (the **"Road Works"**) and have since transferred ownership of the Road Works, including the dedication of road areas as highway to the City at no cost to the City;
- F. While the Developer alone was defined as the Developer in the Servicing Agreement, only Larco paid the cost of the construction of the Road Works, and only the Developer contributed land through the road dedication
- G. Proposed road works for the Alexandra Area (as described in City of Richmond *Development Cost Charges Imposition Bylaw No. 8024,* as amended from time to time (the **"DCC Bylaw"**)) are contained within the City's Official Community Plan, adopted under Bylaw 7100, for the West Cambie Area;
- H. Section 1.1.1 and Schedule F of the DCC Bylaw provide for supplementary development cost charges in the Alexandra Area in addition to the development cost charges applicable city-wide in Richmond;
- The total lands that benefit from the Road Works and are therefore benefiting lands within the Alexandra DCC area, excluding parks, schools and lands owned by the City, are all the lands shown within the dotted outline on Schedule A of this Agreement (the "Benefiting Lands");

- J. The City created the Alexandra Area Road DCC Program which that the owners of the Benefiting Lands shall pay development cost charges to the City when they apply for a subdivision or a building permit to a maximum of \$24,439,792.00 being the total Alexandra Area Road DCC Program value including land and construction for all the north south roads as shown on the attached Schedule A within the dotted line including related signal, turning bays and other related installations;
- K. The City created the Alexandra Area Road DCC Reserve Fund into which it shall deposit the funds received pursuant to the Alexandra Area Road DCC Program;
- L. This Agreement concerns that area labelled "May Drive" on Schedule A attached hereto between Cambie Road and McKim Way (also known as "Road Segment C7") ("**May Drive C7**") and between McKim Way and Odlin Road (also known as "Road Segment L1") ("**May Drive L1**", together with May Drive C7, **"May Drive"**).
- M. The allocated value of land acquisition and the Road Works under the Alexandra Area Roads DCC program for May Drive C7 is \$1,878,621.23 (being land value of \$1,627,503.26 and construction value of \$251,117.97) and for May Drive L1 is \$1,600,006.05 (being land value of \$1,424,065.35 and construction value of \$175,940.70);
- N. The City, as of the date of this Agreement, has provided \$0 development cost charge credits to the Developer and to Larco;
- O. The Developer contributed 43.1% of the land value for May Drive C7 by way of Subdivision Plan EPP32741 and 57.6% of the land value for May Drive L1 by way of Subdivision Plan EPP32741;
- P. Larco constructed permanent works associated with half of the ultimate road configuration, amounting to 50% of the road construction value for May Drive C7, and constructed permanent works associated with the east sidewalk, placement of road base material for approximately 35% of the total road width, and temporary road pavement for approximately half of the ultimate road configuration, amounting to 20% of the road construction value for May Drive L1;
- Q. The maximum compensation payable to the Developer and Larco under this Agreement is \$1,682,463.00 (the **"Agreement Value"**), being \$827,013.00 with respect to May Drive C7 and \$855,450.00 with respect to May Drive L1, which Agreement Value is to be divided between the Developer and Larco as follows:
 - 1) \$1,521,716.00 to the Developer (the "Developer's Agreement Value"); and
 - 2) \$160,747.00 to Larco (the "Larco's Agreement Value"); and

3

- R. Council of the City adopted a bylaw on _____, 2017, authorizing:
 - 1) the parties to enter into this Development Cost Charge Front-ender Agreement pursuant to sections 933(8) and 935 of the *Local Government Act*, for the provision of the Road Works; and
 - 2) the payment to the Developer and Larco of the amounts described in this Agreement from the City's Alexandra Area Roads DCC Reserve Fund, in accordance with this Agreement.

NOW THEREFORE in consideration of the mutual promises contained in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by the parties), the parties agree as follows:

<u>Term</u>

- 1. The term of this Agreement begins on the Commencement Date and terminates on the earlier of:
 - (a) January 20, 2031 (being 15 years after the Completion Date (hereinafter defined)); and
 - (b) the date the City has collected and remitted all applicable payments to the Developer as described in this Agreement,

(the **"Term"**).

- 2. The Developer acknowledges and agrees that this Agreement and the obligations of the City under this Agreement terminate on January 20, 2031, even if all applicable Development Cost Charges have not been collected in respect of the Benefiting Lands.
- 3. Despite section 1 of this Agreement, sections 4, 28, 29, 31, 33, and 34 shall survive the expiration or earlier termination of this Agreement

Representations and Warranties

- 4. The Developer represents and warrants to the City that:
 - (a) the Road Works have been completed in the manner set-out in the Servicing Agreement;
 - (b) the Road Works were completed on January 21, 2016 and the City accepted the condition of the Road Works in writing by issuing a Certificate of Completion (the "Completion Date");

- (c) the Developer is absolutely entitled to any and all Alexandra Road DCCs (defined in section 10 below) payable pursuant to this Agreement;
- (d) the Developer has not assigned any of its right, title or interest in the Alexandra Road DCCs (hereinafter defined), except to Larco with respect to the construction of the Road Works;
- (e) the information set out in Schedule A of this Agreement is true and correct;
- (f) as of the date of this Agreement, the actual cost incurred by the Developer to construct the Road Works, excluding GST, is \$0;
- (g) the allocated value of land acquisition under the Alexandra Area Roads DCC program for May Drive is \$3,051,568.61 (being the land value of \$1,627,503.26 for May Drive C7 and \$1,424,065.35 for May Drive L1);
- (h) the maximum compensation payable to the Developer under this Agreement from the City's Alexandra Area Roads DCC Reserve Fund is the Developer's Agreement Values (defined above), being \$1,521,716 less \$0 being development cost charge credits already provided to the Developer;
- (i) the Developer has not received, claimed, demanded or collected money or any other consideration from any owner of the Benefiting Lands for the provision of, or in expectation of the provision of, the Road Works, other than as contemplated by this Agreement; and
- (j) the Developer has not entered into any agreement or legal obligation with any owner of the Benefiting Lands for consideration in any way related to or connected directly or indirectly with the provision of the Road Works.
- 5. Larco represents and warrants to the City that:
 - (a) the Road Works have been completed in the manner set-out in the Servicing Agreement;
 - (b) the Road Works were completed on the Completion Date;
 - (c) the Developer has assigned its right, title or interest in the Alexandra Road DCCs with respect to the construction of the Road Works to Larco;
 - (d) the information set out in Schedule A of this Agreement is true and correct;
 - (e) as of the date of this Agreement, the actual cost incurred by Larco to construct the Road Works, excluding GST, is \$1,037,400;

- (f) the allocated value of the Road Works under the Alexandra Area Roads DCC program for May Drive is \$427,058.67 (being the construction costs of \$251,117.97 for May Drive C7 and \$175,940.70 for May Drive L1);
- (g) the maximum compensation payable to Larco under this Agreement from the City's Alexandra Area Roads DCC Reserve Fund is Larco's Agreement Value (defined above), being \$160,747 less \$0 being development cost charge credits already provided to Larco;
- (h) Larco has not received, claimed, demanded or collected money or any other consideration from any owner of the Benefiting Lands for the provision of, or in expectation of the provision of, the Road Works, other than as contemplated by this Agreement; and
- (i) Larco has not entered into any agreement or legal obligation with any owner of the Benefiting Lands for consideration in any way related to or connected directly or indirectly with the provision of the Road Works.

DCC Front-Ender Works

- 6. The Developer is solely responsible for the design, engineering and construction of the Road Works and for retaining consultants and entering into any contracts required to construct the Road Works, including with Larco, subject to the direction of the City.
- 7. The following tables set out items and amounts paid for with the collected Alexandra Road DCCs (hereinafter defined) and the payments to the Developer and Larco:

.....

Table 1 – Contributions for the Developer

Item	Item Description	Value (\$)		
	Total Alexandra Area Road DCC Program value relating to the area outlined in Schedule A, comprising:			
(a)	a) - land and construction costs for all north-south roads (\$19,285,340.00), and			
	- related signals and turning bays required for the entire area, including arterial road improvements (\$5,154,452.00)			
(b)	Gross Alexandra Area Road DCC's collected, as of Dec 31, 2015	7,406,170		
	ROAD SEGMENT C7 (May Drive between Cambie Road and McKim Way)			
(c-1)	Road Segment C7 – Land acquisition value	1,627,503		
(d-1)	% of land acquisition contribution from Developer to Road Segment C7	43.10%		

(e-1)	% of Developer contribution to total DCC program = [(c-1)(d-1)/a]	2.87%
(f-1)	Agreement Value (max compensation to Developer for Road Segment C7 = (e-1)*a	
(g-1)	Portion of DCC collected payable to Developer on Dec 31, 2015 = (e-1)*b	212,567
(h-1)	Total DCC credits/Front-Ender Agreement Payments already provided to Developer	0
(i-1)	The DCC Front-Ender Agreement Payment Value = (g-1)-(h-1). (If this value is negative no payment will be made at this time)	212,567
(j-1)	As of the Commencement Date, the outstanding value of this Front- Ender Agreement payable to the Developer for Road Segment C7 = $(f-1)-(h-1)-(i-1)$	488,887
	ROAD SEGMENT L1 (May Drive between McKim Way and Odlin Roa	d)
(c-2)	Road Segment L1 – Land acquisition value	1,424,065
(d-2)	% of land acquisition contribution from Developer to Road Segment L1	57.60%
(e-2)	% of Developer contribution to total DCC program = [(c-2)(d-2)/a]	3.36%
(f-2)	Agreement Value (max compensation to Developer for Road Segment L1 = (e-2)*a	820,262
(g-2)	Portion of DCC collected payable to Developer on Dec 31, 2015 = (e-2)*b	248,570
(h-2)	Total DCC credits/Front-Ender Agreement Payments already provided to Developer	0
(i-2)	The DCC Front-Ender Agreement Payment Value = (g-2)-(h-2). (If this value is negative no payment will be made at this time)	248,570
(j-2)	As of the Commencement Date, the outstanding value of this Front- Ender Agreement payable to the Developer for Road Segment L1 = $(f-2)-(h-2)-(i-2)$	571,692
	Total Payments	
(k)	The Total DCC Front-Ender Agreement Payment Value for payment to the Developer = (i-1)+(i-2)	461,137
(1)	As of the Commencement Date, the outstanding value of this Front- Ender Agreement payable to the Developer = $(j-1)+(j-2)$	
		1,060,579

8

Table 2 – Contributions for Larco

ltem	Item Description	Value (\$)
	Total Alexandra Area Road DCC Program value relating to the area shown outlined in broken bold on Schedule A, comprising:	
(a)	- land and construction costs for all north-south roads (\$19,285,340.00), and	
	- related signals and turning bays required for the entire area, including arterial road improvements (\$5,154,452.00)	
(b)	Gross Alexandra Area Road DCC's collected to Dec 31, 2015	7,406,170
	ROAD SEGMENT C7 (May Drive between Cambie Road and McKim V	Vay)
(c-1)	Road Segment C7 – Roadwork construction value	251,118
(d-1)	% of permanent roadworks construction contribution from Larco to Road Segment C7	50.00%
(e-1)	% of Larco contribution to total DCC program = [(c-1)(d-1)/a]	0.51%
(f-1)	Agreement Value – max compensation to Larco for Road Segment C7 = (e-1)*a	125,559
(g-1)	Portion of DCC collected payable to Larco on Dec 31, 2015 = (e-1)*b	38,049
(h-1)	Total DCC credits/Front-Ender Agreement Payments already provided to Larco	0
(i-1)	The DCC Front-Ender Agreement Payment Value = (g-1)-(h-1). If this value is negative no payment will be made	38,049
(j-1)	As of the Commencement Date, the outstanding value of this Front- Ender Agreement payable to Larco for Road Segment C7 = (f-1)-(h-1)-(i- 1)	87,510
	ROAD SEGMENT L1 (May Drive between McKim Way and Odlin Roa	ad)
(c-2)	Road Segment L1 – Roadwork construction value	175,941
(d-2)	% of permanent roadworks construction contribution from Larco to Road Segment L1	20.00%
(e-2)	% of Larco contribution to total DCC program = [(d-2)(e-2)/a]	0.14%
(f-2)	Agreement Value – max compensation to Developer for Road Segment L1 = (e-2)*a	35,188
(g-2)	Portion of DCC collected payable to Larco on Dec 31, 2015 = (e-2)*b	10,663
(h-2)	Total DCC credits/Front-Ender Agreement Payments already provided to Larco	0

(i-2)	The DCC Front-Ender Agreement Payment Value = (g-2)-(h-2). If this value is negative no payment will be made	10,663		
(j-2)	As of the Commencement Date, the outstanding value of this Front- Ender Agreement payable to Larco for Road Segment L1 = (f-2)-(h-2)-(i- 2)	24,525		
	Total Payments			
(k)	The Total DCC Front-Ender Agreement Payment Value for payment to Larco = (i-1)-(i-2)	48,712		
(1)	As of the Commencement Date, the outstanding value of this Front-Ender Agreement payable to Larco = $(j-1)+(j-2)$	112,035		

- 8. The Developer and Larco have facilitated the design, engineering and construction of the Road Works through the provision of funds as set out in this Agreement.
- 9. The City is not responsible for financing any of the costs of the Road Works.

Calculation and Collection of Alexandra Road DCCs

- 10. In consideration of the land dedication by the Developer and the completion of the Road Works by Larco to the satisfaction of the City's General Manager of Engineering and Public Works, without incurring any cost to the City, the City agrees to impose and collect from the owners of the Benefiting Lands the road Development Cost Charges payable by them when they seek to subdivide or obtain a building permit (the "Alexandra Road DCCs").
- 11. The events upon which the City is obliged to impose and collect Alexandra Road DCCs with respect to a parcel within the Benefiting Lands are the earlier of:
 - (a) the approval of a subdivision; and
 - (b) the issuance of a building permit authorizing construction, alteration or extension of a new building or structure,

although, in practice, the City usually collects Development Cost Charges at the time of building permit issuance.

12. The Developer and Larco agree that the City is to calculate all Alexandra Road DCCs, and that the City's determination of such amounts is in each case conclusive and binding on the Developer and Larco.

Payment for DCC Front-Ender Works

- 13. The City shall pay to the Developer the sum of the Developer's Agreement Value, excluding GST, as follows:
 - (a) \$509,849.00 initial payment in accordance with item (k) in the Table 1 in Section7 of this Agreement; and
 - (b) subsequent payments will be calculated based on a review of items (b) through
 (h) and (l) inclusive of the Table 1 in section 7 of this Agreement and to the extent of the Alexandra Road DCCs collected during the Term from the Benefiting Lands in accordance with sections 10 and 11 of this Agreement.
- 14. The City shall pay to Larco the sum of Larco's Agreement Value, excluding GST, as follows:
 - (a) \$48,712.00 initial payment in accordance with item (k) in the Table 2 in Section 7 of this Agreement; and
 - (b) subsequent payments will be calculated based on a review of items (b) through
 (h) and (l) inclusive of the Table 2 in section 7 of this Agreement and to the extent of the Alexandra Road DCCs collected during the Term from the Benefiting Lands in accordance with sections 10 and 11 of this Agreement.
- 15. Subject to there being sufficient reserves in the City's account designated for this purpose, the City will remit the amounts described in section 13(b) to the Developer and the amounts described in section 14(b) to Larco following the City's financial audit or on or before June 30th of each year of the Term, in accordance with City policies and procedures from time to time.
- 16. If there are any unpaid payments due to there being insufficient reserves in the City's account designated for this purpose, the City will pay such payments upon being in receipt of sufficient reserves in the City's account designated for this purpose.
- 17. After the Term has expired, the City shall have no further obligation to the Developer or to Larco to make any payment pursuant to this Agreement.
- 18. The Developer and Larco acknowledge and agree that no interest is payable by the City on Alexandra Road DCCs for the period between their receipt by the City and their payment to the Developer to the sum of the Developer's Agreement Value and to Larco to the sum of Larco's Agreement Value.
- 19. The Developer and Larco acknowledge and agree that the City is not obliged to make any payments under this Agreement except to the extent that the owner of a parcel within the Benefiting Lands has actually paid Alexandra Road DCCs to the City.

5160298v.2

- 20. The Developer and Larco acknowledge and agree that once the City has fully paid out the total Alexandra Area Road DCC Program value (\$24,439,792.00), the City may elect in its sole discretion (subject however to compliance with any City bylaw requirements) to discontinue collecting Alexandra Area Roads DCCs.
- 21. The Developer and Larco acknowledge and agree that it is possible that the City may not ever fully reimburse the Developer and/or Larco for all their costs in providing the land dedicated for Road and in providing the Road Works. Accordingly, the Developer and Larco acknowledge and agree that they will not make a claim against the City or City Personnel for any lack of full reimbursement for all the Developer's costs and Larco's costs in providing the land dedicated for Road and the Road Works.
- 22. The Developer acknowledges and agrees that the City does not owe the Developer any monies for the cost of the Road Works.
- 23. The Developer warrants and represents to the City that the Developer did not contribute any monies towards the Road Works.
- 24. Larco acknowledges and agrees that the City does not owe Larco any monies pursuant to the land dedicated for Road.
- 25. Larco warrants and represents to the City that Larco did not provide any land dedicated for May Drive.
- 26. The Developer and Larco shall each provide the City from time to time with a current address(es) to which amounts payable under this Agreement may be sent by ordinary mail, if such address is different from the addresses first set-out above. If the Developer and/or Larco fails to provide such address to the City and amounts sent to the address set out in this Agreement or the most recently provided address are returned to the City, the City may retain such amounts for its own use and is thereafter discharged from any obligation to remit the remaining Alexandra Road DCCs.
- 27. The Developer and Larco direct that the amounts payable to the Developer and Larco pursuant to this Agreement from the City's Alexandra Area Roads DCC Reserve Fund be paid as follows:
 - a) To the Developer re May Drive C7: 2.87% of whatever amounts the City collects each year of the Term in connection with the Alexandra Area DCC Charges (such amounts collected determined in the City's sole discretion), with the total maximum value to be paid under this agreement being \$701,454;
 - b) To the Developer re May Drive L1: 3.36% of whatever amounts the City collects each year of the Term in connection with the Alexandra Area DCC Charges (such amounts

collected determined in the City's sole discretion), with the total maximum value to be paid under this agreement being \$820,262;

- c) To Larco re May Drive C7: 0.51% of whatever amounts the City collects each year of the Term in connection with the Alexandra Area DCC Charges (such amounts collected determined in the City's sole discretion), with the total maximum value to be paid under this agreement being \$125,559; and
- d) To Larco re May Drive L1: 0.14% of whatever amounts the City collects each year of the Term in connection with the Alexandra Area DCC Charges (such amounts collected determined in the City's sole discretion), with the total maximum value to be paid under this agreement being \$35,188.

Release and Indemnity

- 28. The Developer and Larco hereby jointly and severally release, waive and agree not to commence legal proceedings against the City, or its elected officials, officers, employees, agents, or contractors ("City Personnel"), from and in respect of any duty, obligation or liability of any of them in way connected with any error, omission or act relating to this Agreement, including without limitation, failure to pass any resolution, adopt any bylaw, enter into any agreement, or impose, calculate or collect any Alexandra Road DCCs.
- 29. The Developer and Larco hereby jointly and severally release, waive and agree to indemnify and save the City harmless from and against all costs, expenses, damages, claims, demands, actions, suits and liability by whomever brought or made and however arising whether directly or indirectly, from any misrepresentation by the Developer and/or Larco or breach of this Agreement by the Developer and/or Larco.

Assignment

- 30. Neither the Developer nor Larco shall assign or transfer its rights under this Agreement without the City's prior written consent.
- 31. In the event of the assignment or transfer of the rights of the Developer voluntarily, or by operation of law, the City may pay any benefits accruing under this agreement, after notice, to the successor of the Developer as the City, in its sole discretion, deems entitled to such benefits. In the event of conflicting demands being made on the City for benefits accruing under this agreement, the City may at its option commence an action in interpleader joining any party claiming rights under this agreement, or other parties which the City believes to be necessary or proper, and the City shall be discharged from further liability on paying the person or persons whom the court having jurisdiction over such interpleader action shall determine, and in such action the City shall be entitled to recover its reasonable legal fees and costs, which fees and costs shall

constitute a lien upon all funds accrued or accruing pursuant to this agreement and the City shall have a right of set-off in respect of such fees and costs.

13

- 32. In the event of the assignment or transfer of the rights of Larco voluntarily, or by operation of law, the City may pay any benefits accruing under this agreement, after notice, to the successor of Larco as the City, in its sole discretion, deems entitled to such benefits. In the event of conflicting demands being made on the City for benefits accruing under this agreement, the City may at its option commence an action in interpleader joining any party claiming rights under this agreement, or other parties which the City believes to be necessary or proper, and the City shall be discharged from further liability on paying the person or persons whom the court having jurisdiction over such interpleader action shall determine, and in such action the City shall be entitled to recover its reasonable legal fees and costs, which fees and costs shall constitute a lien upon all funds accrued or accruing pursuant to this agreement and the City shall have a right of set-off in respect of such fees and costs.
- 33. The Developer and Larco acknowledge and agree that the City is released from any liability under this Agreement by paying amounts payable to the Developer and/or Larco to the assignee(s), transferee(s) or successor(s) considered by the City, in its sole discretion, to be entitled to receive those payments or by paying the amounts payable to the Developer and/or Larco under this Agreement to the person whom the Supreme Court of British Columbia orders in any interpleader proceedings is entitled to receive those amounts, or as otherwise ordered by the Supreme Court of British Columbia.

General Provisions

- 34. The Developer represents and warrants to the City that:
 - (a) it has the full and complete power, authority and capacity to enter into, execute and deliver this Agreement;
 - (b) all necessary corporate actions and proceedings have been taken to authorize entry into and performance of this Agreement;
 - (c) this Agreement shall be fully and completely binding upon such party in accordance with the terms hereof;
 - (d) neither the execution and delivery, nor the performance of or covenants in, this Agreement breaches any other agreement or obligation or causes default of any other agreement or obligation on the part of such party; and
 - (e) the foregoing representations and warranties shall have force and effect notwithstanding any knowledge on the part of the City whether actual or

constructive concerning the status of such party or any other matter whatsoever.

- 35. Larco represents and warrants to the City that:
 - (a) it has the full and complete power, authority and capacity to enter into, execute and deliver this Agreement;
 - (b) all necessary corporate actions and proceedings have been taken to authorize entry into and performance of this Agreement;
 - (c) this Agreement shall be fully and completely binding upon such party in accordance with the terms hereof;
 - (d) neither the execution and delivery, nor the performance of or covenants in, this Agreement breaches any other agreement or obligation or causes default of any other agreement or obligation on the part of such party; and
 - (e) the foregoing representations and warranties shall have force and effect notwithstanding any knowledge on the part of the City whether actual or constructive concerning the status of such party or any other matter whatsoever.
- 36. Any notice to be given under this Agreement shall be in writing and may be delivered personally or sent by prepaid registered mail. The addresses of the parties for the purpose of notice shall be the addresses set-out in this Agreement. Any party may at any time give notice in writing to another of any change of address.
- 37. No partnership, joint venture or agency involving the City or the Developer or Larco is created by or under this Agreement and neither the Developer nor Larco will have the authority to commit and will not purport to commit the City to the payment of any money to any person.
- 38. The parties each agree that this Agreement creates only contractual rights and obligations among them and each party by this section agrees that no tort or other duty, obligation or liability is created by or under this Agreement (including any duty of care or fiduciary duty).
- 39. This Agreement is the entire agreement among the parties, apart from the Servicing Agreement between the Developer and the City, and supersedes and terminates all previous agreements, promises, representations and warranties respecting the subject matter of this Agreement. The City has made no representations, warranties, guarantees, promises, covenants or agreements to or with the Developer or Larco other than those in this Agreement and the Servicing Agreement. For certainty, the Developer

and Larco each acknowledge and agree that the City has not made or given any representations or warranties to the Developer and/or Larco respecting the subject matter of this Agreement.

- 40. No amendment to this Agreement is valid unless in writing and executed by the parties.
- 41. Wherever the singular or masculine is used in this Agreement, the same shall be construed as meaning the plural or the feminine or the body corporate or politic where the context or the parties so require.
- 42. If any section, or lesser portion of this Agreement is held invalid by a court of competent jurisdiction, the invalid portion shall be severed and the invalidity of such section or portion shall not affect the validity of the remainder.
- 43. Time is of the essence of this Agreement.
- 44. This Agreement shall enure to the benefit of and be binding upon the parties, their respective heirs, executors, administrators, successors and permitted assigns.
- 45. Nothing contained or implied in this Agreement shall fetter in any way the discretion of the City or the Council of the City. Further, nothing contained or implied in this Agreement shall derogate from the obligation of the Developer or Larco under any other agreement with the City or, if the City so elects, prejudice or affect the City's rights, powers, duties or obligation in the exercise of its functions pursuant to the *Community Charter* or the *Local Government Act*, as amended or replaced from time to time, or act to fetter or otherwise affect the City's discretion, and the rights, powers, duties and obligations of the City under all public and private statutes, by-laws, orders and regulations, which may be, if the City so elects, as fully and effectively exercised as if this Agreement had not been executed and delivered by the parties.
- 46. The laws of British Columbia are to govern its interpretation and enforcement and each of the City and the Developer accepts the jurisdiction of the courts of British Columbia. If a party to this Agreement consists of more than one person, firm, or corporation, the covenants and obligations of such party under this Agreement shall be joint and several.
- 47. This Agreement may be signed by the parties hereto in counterparts and by facsimile or pdf email transmission, each such counterpart, facsimile or pdf email transmission copy shall constitute an original document and such counterparts, taken together, shall constitute one and the same instrument.

- The Remainder of this Page is Intentionally Blank -

IN WITNESS WHEREOF the parties have set their hands and seals on the day and year first above written.

CITY OF RICHMOND by its authorized signatory:

George Duncan Chief Administrative Officer

Robert Gonzalez General Manager, Engineering & Public Works

AGA KHAN FOUNDATION (CANADA)

by its authorized signatory:

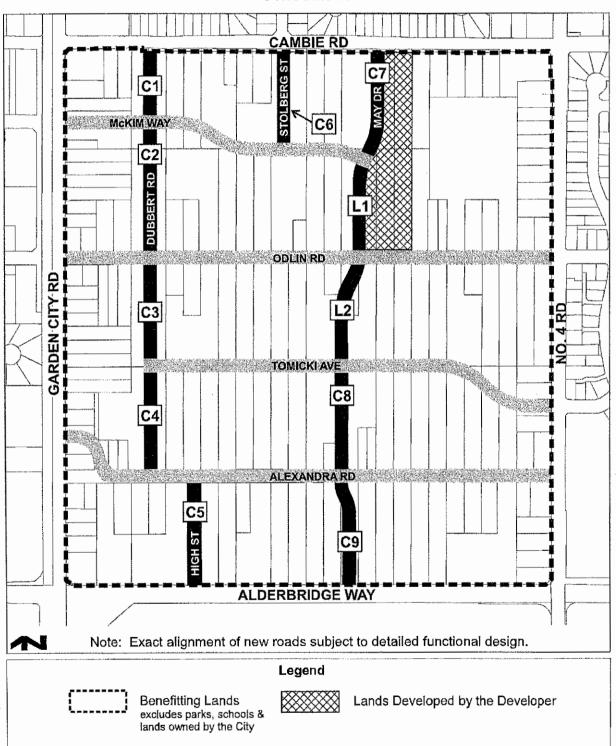
Print Name: Print Title:

LARCO INVESTMENTS LTD.

by its authorized signatory:

Print Name: Print Title:





Schedule A

5160298v.2



Report to Committee

Re:	Water Shortage Response Plan – Proposed Changes		
From:	John Irving, P.Eng. MPA Director, Engineering	File:	10-6060-01/2016-Vol 01
То:	Public Works and Transportation Committee	Date:	January 3, 2017

Staff Recommendation

That the comments on Metro Vancouver's proposed changes to the Water Shortage Response Plan, as summarized in the staff report titled "Water Shortage Response Plan – Proposed Changes," dated January 3, 2017, from the Director, Engineering be submitted to Metro Vancouver.

John Irving, P.Eng. MPA Director, Engineering (604-276-4140)

REPORT CONCURRENCE				
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER		
Water Services Parks Byl a ws	य य व			
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: DW	APPROVED BYCAO		

Staff Report

Origin

The Metro Vancouver Water Shortage Response Plan was prepared by Metro Vancouver and adopted by the City of Richmond as the Water Use Restriction Bylaw No. 7784. The bylaw restricts water use during the summer months and any time during the year in the event of a water shortage, and is intended to manage discretionary uses of water while minimizing impacts on residents and avoiding unnecessary hardships on businesses.

The plan was originally adopted in 2004, with updates adopted in 2011 and 2016. The 2016 update was initiated as a result of the hot and dry summer of 2015 and the resulting activation of incremental stages of the Water Shortage Response Plan. A review process was initiated by Metro Vancouver to address public feedback and challenges experienced. Immediate amendments were implemented the summer of 2016, and a broader review of the plan is being completed in 2016 and 2017.

On December 14, 2016, Metro Vancouver hosted a Local Government Workshop, where proposed updates to the Water Shortage Response Plan were presented to member municipalities. Metro Vancouver has requested municipal feedback on the proposed updates indicating support, support with conditions, or do not support for each of the proposed updates.

Analysis

Proposed Updates to the Water Shortage Response Plan

Stage 1 Activation Period

The annual activation period for Stage 1 is proposed to be extended from the existing period of May 15 to October 15 to the proposed period of May 1 to October 15. This change is intended to improve consistency with other BC jurisdictions and to address increased water consumption earlier in the season that has been observed in recent years.

Staff recommends support of this proposed update. The need for lawn watering in May is generally low as Richmond's average May precipitation is 71.9 mm. In most years, Richmond residents will not need to water their lawns during this time and the earlier activation of Stage 1 will cause little convenience. In years of drought, such as 2015, this earlier activation will conserve water in the early season for use later in the summer. Given the low degree of inconvenience and the potential to delay or avoid the activation of advanced stages of the Water Shortage Response Plan in drought years, staff recommends support of this update.

Sprinkling of Lawns

Lawn sprinkling during Stage 1 is proposed to be reduced from three (3) mornings per week to two (2) mornings per week. The proposed plan permits lawn sprinkling for residential properties at the following times:

- Even-number addresses: Wednesdays and Saturdays, 4 am 9 am
- Odd-number addresses: Thursdays and Sundays, 4 am 9 am

This change is based on the rationale that lawns only require watering once a week, and is estimated to reduce seasonal water use by 2%.

Staff recommends support of this update as it will reduce the potential for over-watering of lawns and will assist in water conservation with little or no negative impact to the public. The Canadian Mortgage and Housing Corporation recommend lawn watering once per week before 9 am to maintain a healthy lawn. The update provides two opportunities per week for residents to apply this recommended level of irrigation.

Sprinkling of Flowers, Planters, Shrubs and Trees

The sprinkling of flowers, planters, shrubs and trees during Stages 1 and 2 is proposed to be restricted to morning lawn watering hours (4 am - 9 am) on any day.

Staff recommends support of this update. The proposed change in sprinkling hours will reduce the amount of irrigation water lost to evaporation and will continue to provide adequate irrigation for flowers, planters, shrubs and trees. Watering by hand will continue to be unrestricted should residents need to water outside the restricted hours.

Watering of Sports Fields

Watering of school yards, sports and sand-based playing fields, which is currently unrestricted in the 2016 Plan, is proposed to be restricted as follows:

- Stage 1: Restricted to 7:00 pm 9:00 am, any day
- Stage 2: Restricted to 7:00 pm 9:00 am, 4 days per week, unless operating under an approved local government water management plan
- Stage 3: Restricted to 7:00 pm 9:00 am, 3 days per week, unless operating under an approved local government water management plan

The proposed change is intended to promote public sector leadership in water conservation efforts, and to prevent mid-day sprinkling to limit water lost to evaporation.

Staff recommends supporting this update with the condition that the irrigation of sports fields outside of the designated hours be permitted where damage to these fields would otherwise result. Based on Richmond's experience, watering of new or renovated sand-based fields during morning hours only may not be sufficient during hot summer months and may result in damage. If this additional condition is satisfied, staff recommends recommending the proposed change as it shows municipal leadership by following similar sprinkling hours to residential restrictions while allowing enough irrigation to support high traffic sand based playing fields.

Watering of Golf Courses

Fairway watering for golf courses are restricted in Stages 2 and 3 under the existing Plan. The proposed Plan allows the watering of golf courses under an approved local government water management plan. This increases staff administration efforts, but allows more flexibility to golf courses while maintaining water use reduction targets.

Staff recommends supporting this update as it offers golf courses the flexibility of preparing irrigation plans that facilitate reduced water use while minimizing impacts on their commercial viability.

Commercial Car Washing

Commercial car washing is currently unrestricted for all Stages. The revised plan proposes to restrict use under Stage 3 to automatic systems that recirculate at least 50% of water, or high-pressure wand facilities. This is to provide consistency with other aesthetic water use restrictions within Stage 3.

Staff recommends supporting this update as the proposed change encourages the adoption of efficient technologies that will reduce annual water use in car wash facilities.

Filling of Commercial Pool and Hot Tubs

The topping up or filling of hotel, residential strata, and private club pools and hot tubs, is currently prohibited under Stage 3. The revised plan proposes that the topping up and filling of these pools be permitted.

Staff recommends supporting this update as the proposed change will minimize impacts to public pool users and businesses with only marginal increases to Stage 3 water use.

Additional Comments

Water Metering

Water metering is a proven water demand management tool. It reduces water use by offering cost incentives to discouraging wastage of water, as well as helping property owners identify and reduce leaks on private property. Richmond recommends that Metro Vancouver implement universal water metering as a regional water demand management tool. If all municipalities followed the example set by metered communities, there would be significant volumes of water conserved without creating hardships for communities and businesses in the region. This has the potential of deferring or eliminating the need to activate advanced stages of the Water Shortage Response Plan, thereby minimizing impacts to residents and businesses.

Richmond has installed water meters for 100% of ICI properties, 93% of single-family properties, and 40% of multi-family properties. This allows the City to review quarterly water consumptions in order to identify properties with possible leaks and inform homeowners in a timely manner. Such leaks would have been unnoticed and continue to leak indefinitely if water meters had not been installed.

Activation of Advanced Stages

Richmond recommends that measurable triggers, such as reservoir levels, for activating and deactivating stages 2, 3 and 4 of the Water Shortage Response Plan be implemented. This will improve Metro Vancouver's ability to activate and deactivate stages in a consistent, transparent and pragmatic manner. The activation and deactivation of these stages is currently at the discretion of the GVWD Commissioner guided by factors outlined within the Water Shortage Response Plan.

Financial Impact

There is no financial impact anticipated.

Conclusion

The Metro Vancouver Water Shortage Response Plan has been an effective tool for managing water demand during times of shortages or emergencies. The proposed amendments further improve demand management and promote water conservation.

Staff recommends that comments regarding the proposed updates to the Water Shortage Response Plan as summarized in Table 1 be endorsed and submitted to Metro Vancouver.

Activity	Proposed Update	City of Richmond Comment
Stage 1 Activation	Amend activation of Stage 1 from May 15 to May 1.	Support.
Lawn Watering	Reduce from three (3) mornings per week to two (2) mornings per week during Stages 1 and 2.	Support.
Sprinkling of Flowers, Planters, Shrubs and Trees	Restrict to morning hours only during Stages 1 and 2.	Support.
Watering of Sports Fields	Restrict to 7:00 pm – 9:00 am, any day during Stage 1 and four (4) and three (3) days respectively during Stages 2 and 3.	Support with condition – that the irrigation of sports fields outside of the designated hours be permitted where damage to these fields would otherwise result.
Watering of Golf Courses	Allow under an approved local government water management plan during Stages 2 and 3.	Support.
Commercial Car Wash	Restrict to use of automatic systems that recirculate water or high pressure wand facilities only during Stage 2.	Support.

Table 1 - Water Shortage Response Plan Comments

Filling of Commercial Pools and Hot Tubs	Allow during Stage 3.	Support.
Water Metering	N/A .	Richmond supports universal water metering across the region.
Activation of Advanced Stages	N/A	Richmond recommends that measurable triggers for activating and deactivating of advanced stages be implemented.

Municipal comments will be incorporated into the final Water Shortage Response Plan which is scheduled to be presented to the Greater Vancouver Water District Board for approval in the spring of 2017 and implemented in November 2017.

Lloyd Bie, P. Eng. Manager, Engineering Planning (4075)

LB: bn

Beata Ng, P. Eng. Project Engineer (4257)



То:	Public Works and Transportation Committee	Date:	December 21, 2016
From:	John Irving, P.Eng. MPA Director, Engineering	File:	10-6340-20- P.16207/Vol 01
Re:	⊤.5651 - 2016 Paving Program (Lafarge Canada Inc.) Contract Extension and Change Order for 2017 Paving Program		

Staff Recommendation

That Contract T.5651 – 2016 Paving Program with Lafarge Canada Inc. be extended to include the 2017 Paving Program, and that a Change Order be issued to increase the value of this Contract by 2,700,000.

John Irving, P.Eng. MPA Director, Engineering (604-276-4140)

REPORT CONCURRENCE						
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER				
Finance Department		(Lim)				
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: DW	APPROVED BY CAO				

Staff Report

Origin

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

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

Background

The paving program is required to maintain the City's road network to current operating levels as well as reduce the need for costly repairs. As part of the Capital Budget process, Staff develop a prioritized list of locations which are included in the following year's Paving Program. The Contract for the annual Paving Program is based upon unit rates that are valid for one calendar year.

Analysis

As in past years, the 2016 Paving Program was tendered early in the year to realize favourable asphalt pricing. To maximize the benefit of these rates to the City, an extension clause was included in the Contract language that would allow the City and the Contractor, by mutual agreement to extend the contract through 2017.

The tender for the 2016 Paving Program was issued to the market in January 2016 and awarded to Lafarge Canada Inc. Through the remainder of the year, Lafarge successfully completed the list of locations included in the 2016 program, demonstrating their ability to meet the City's performance and delivery expectations.

Lafarge Canada Inc. has indicated that they are willing to extend the 2016 Contract rates into 2017.

The Paving Program unit prices are influenced by a number of factors including oil prices, labour costs, equipment costs, disposal costs, and increasing traffic control requirements. Since 2010, paving costs have increased by an average of 7% annually. Also, bids received in 2016 for paving work outside the scope of the paving program were higher than the paving program rates.

Lafarge Canada Inc. has also indicated that, as part of the proposed Change Order, Lafarge will provide sponsorship or services in kind to Richmond community events in 2017 at no additional cost to the City.

Based on the factors listed above, extending the 2016 Paving Program rates through 2017 presents the best value to the City.

The current value of the 2016 Contract T.5651 is \$2,625,608. The proposed Change Order for the 2017 Paving Program is \$2,700,000, giving a revised contract value of \$5,325,608.

CNCL - 430

Financial Impact

Funding for the 2017 Paving Program was approved by Council as part of the 2017 Capital Budget.

Table 1 – Estimated Cost for 2017 Paving Program

Approved Budget

CR00042 – Annual Asphalt Re-Paving Program - MRN	\$1,081,000
CR00043 – Annual Asphalt Re-Paving Program – Non-MRN	\$3,200,000
Total Approved 2017 Budget	\$4,281,000
Estimated Costs	
• T.5651 Change Order – 2017 Paving Program	\$2,700,000
Pavement Management Plan Updates	\$400,000
• Ancillary Work (curb and gutter repair, valve adjustments)	\$500,000
Paving Co-ordinated with Utility Upgrades	\$600,000
Total Estimated Costs	\$4,200,000
Estimated Funds Remaining	\$81,000

Conclusion

Remaining pro-active with the annual paving program is necessary to maintain the current condition of Richmond's road network, and reduce the need for costly repairs in the future. Extending the 2016 Paving Program rates into 2017 presents good value to the City.

Milton Chan, P.Eng Manager, Engineering Design and Construction (604-276-4377)

MC:mc



Report to Committee

То:	Planning Committee		Date:	January 10, 2017
From:	Wayne Craig Director, Development		File:	08-4057-10/2016-Vol 01
	Terry Crowe Manager, Policy Planning			
Re:	Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve			

Staff Recommendation

- 1. That the staff report titled, "Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve", dated January 10, 2017, from the Director of Development and the Manager of Policy Planning, be received for information; and
- 2. That staff be directed to conduct public consultations regarding the bylaw options presented in this report ("Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve") regarding house size, farm home plate and setbacks, including residential accessory buildings.

w. Wayne Craig Director, Development

(604-247

Terry Crowe Manager, Policy Planning (604-276-4139)

Att. 5

REPORT CONCURRENCE					
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER			
Building Approvals	V	fetoreg			
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS	APPROVED BY CAO			

Staff Report

Origin

This report is in response to a referral from the November 22, 2016 Planning Committee Meeting, which requested staff:

To examine and prepare a report on limiting the size of homes in agricultural areas based on:

- (1) The BC Ministry of Agriculture's report "Bylaw Standard for Residential Uses in the Agricultural Land Reserve" (currently entitled "Guide for Bylaw Development in Farming Areas," 2015); and
- (2) The Corporation of Delta's Zoning Bylaw, Part V, Al Zone Agriculture; and

report back by the end of January 2017.

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

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

Findings of Fact

Since 1994, Richmond has been progressive in managing dwelling units in the provincial Agricultural Land Reserve (ALR) when it established a 50 m (164 ft) maximum setback for dwelling units in its Agriculture (AG1) zone. This City Zoning Bylaw requirement has been effective in ensuring that dwelling units do not encroach onto viable agricultural land beyond this setback. Since Richmond established this 50 m (164 ft) setback, it has been used by the BC Ministry of Agriculture (Ministry) in their "Guide for Bylaw Development in Farming Areas", and is incorporated in the Corporation of Delta's Zoning Bylaw for the Agriculture (A1) zone.

In 2009, the City of Richmond began re-evaluating the issue of house size and footprint in agricultural areas. During the City's Zoning Bylaw review in 2009-2010, the City's Agricultural Advisory Committee (AAC) reviewed the issue with no consensus to pursue regulating agricultural house size limits and it was determined that accessory structures should not be included within the 50 m maximum setback. Further, the farming community and others expressed that no further house size limitations should be imposed in agricultural areas.

During this time, the BC Ministry of Agriculture & Lands had a number of discussions and workshops with municipal officials about the Provincial trend towards larger homes in the ALR. A number of other municipalities such as Mission, Surrey, and Pitt Meadows attempted to introduce bylaws that would limit the size of homes on agricultural land, but were met with significant opposition. As the issue of limiting house sizes is difficult to implement at the local level, and the trend for larger homes is commonplace across the Province, on several occasions, Council lobbied the Province to establish ALR house size maximum regulations as the issue has

Provincial implications, and the establishment of consistent regulation is within the Ministry's mandate of preserving agricultural lands for agricultural production.

In 2011, the Ministry of Agriculture released a discussion paper entitled "Regulating the Siting and Size of Residential Uses in the ALR" and requested feedback from local governments. Richmond City Council and staff provided feedback and requested that the Province establish regulations in the Agricultural Land Commission Act rather than establish guidelines as guidelines are unenforceable and may be inconsistently applied.

In 2013, despite this request, the Ministry released a set of Guidelines entitled "Guide for Bylaw Development in Farming Areas". The Guide provided guidelines for municipalities to consider amending their zoning bylaws to manage farm areas in the ALR, including maximum dwelling unit setbacks from the road, farm home plate size, and house size. In 2015, the Guide was updated to include changes to the appendix and setbacks for farm buildings.

In July 2016, with no Ministry ALR house size and farm home plate regulations, the issue of managing houses in the ALR in Richmond was brought to the attention of Planning Committee when Building Approvals staff advised that they had cancelled a Building Permit application for a house in the ALR, which proposed a floor area of 3,809 m² (41,000 ft²) and 21 bedrooms. The Building Permit cancellation prompted Council to send letters to both the ALC and the Ministry, to again request the Ministry to establish provincial regulations to control the maximum house size and location of houses in the ALR. Throughout the Province, the Ministry is responsible for establishing ALR regulations and the Agricultural Land Commission (ALC) is responsible for enforcing them. The Ministry responded by indicating that they would not establish ALR house size regulations. The ALC indicated that they would only assist municipalities in interpreting the Guidelines. Staff's assessment is that the Provincial government and agencies are highly unlikely to move ahead with the necessary province-wide regulations at this time.

On November 22, 2016, Planning Committee requested staff to examine the issue further and prepare a report on options to limit the size of homes in agricultural areas based on the Ministry's Guidelines and the Corporation of Delta's Agriculture (A1) zone.

On December 1, 2016, at the City's request, City staff met with ALC and Ministry senior staff to again request them to establish province-wide regulations, to manage house size and location in the provincial ALR as:

- a) Limiting ALR large house size is not unique to Richmond, the trend is increasing and will not go away, and many municipalities are facing the same problem in the Province;
- b) The Province has an ongoing and long term responsibility to protect and enhance agricultural viability in the ALR, and by establishing such consistent regulations, not Guidelines, would greatly assist in achieving these objectives;
- c) Varied local government regulations would not promote consistency across the Province; and

d) Uniform provincial regulations would discourage ALR land speculation and speculators from leapfrogging their large house size proposals to municipalities, which, either do not limit house size and location in the ALR, or allow larger houses with fewer restrictions.

Despite these reasons that this issue be addressed by the Province by establishing province-wide regulations, which could be consistently applied and enforced across the ALR, both the ALC and Ministry senior staff indicated that the Ministry Guidelines are sufficient and they are unwilling to establish province-wide regulations at this time.

Analysis

House Size Trends in the ALR

In 2010, the average total floor area of houses in the ALR within Richmond was 681 m² (7,329 ft²) and by 2015, it increased to 1,123 m² (12,087 ft²). The trend is for increasingly large house construction in the ALR.

Without Provincial regulations to uniformly control the ALR maximum house size and location, house size trends in the ALR may increase.

Summary of the Ministry's Guidelines, Delta's Regulations and Richmond's Regulations

Attachment 1 provides a summary of house size regulations from the Ministry of Agriculture's guidelines, the Corporation of Delta's A1 zone, and the City of Richmond's AG1 zone. The residential uses described below include: (1) the principal dwelling unit, (2) additional dwelling units (for full-time farm workers), and (3) seasonal farm labour accommodation, as well as their accessory buildings (e.g., garage, shed) and accessory structures (e.g., swimming pools, tennis courts). As non-residential and farm-related buildings (e.g., barns, greenhouses) are beyond the scope of this report; the regulations remain the same in the attached draft bylaws.

1. Ministry of Agriculture Guidelines

The Ministry of Agriculture's "Guide for Bylaw Development in Farming Areas" (2015) outlines three options for addressing the impacts of residential development on ALR land. These are:

- 1. restricting the size of dwelling units on a farm;
- 2. regulating the siting of residential uses; and
- 3. restricting the size of the farm home plate.

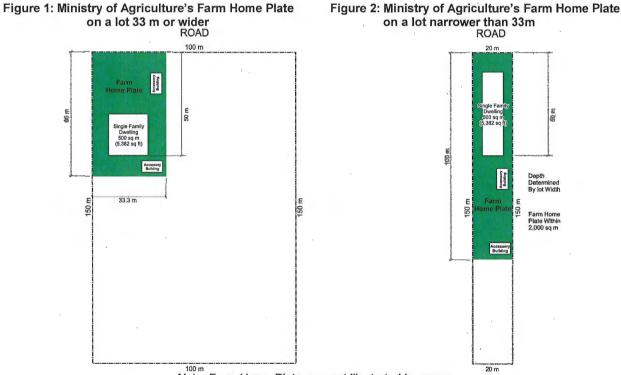
The three can work together to minimize residential development on agricultural lands and increase farm viability.

Maximum Farm Home Plate: The Guide defines the term 'farm home plate' as that portion of a lot that consists of a principal dwelling unit, any additional dwelling units, any residential accessory buildings (e.g., garage, shed) or accessory structures (e.g., artificial ponds, tennis courts, swimming pools). The farm home plate also includes driveways and landscaping.

The Guide suggests that the maximum size of the farm home plate should be $2,000 \text{ m}^2 (21,528 \text{ ft}^2)$ for the principal dwelling unit, plus $1,000 \text{ m}^2 (10,764 \text{ ft}^2)$ for each additional dwelling unit where permitted, plus another $35 \text{ m}^2 (376.7 \text{ ft}^2)$ for each occupant of a seasonal farm labour accommodation where permitted. All residential accessory buildings and accessory structures, including seasonal farm labour accommodation must be located on a farm home plate and cannot be split into multiple farm home plates. Figures 1 and 2 illustrate how a farm home plate works. For a corner lot, the location of the farm home plate would be determined by the location of the permitted road access.

- 5 -

Maximum Setbacks (Siting): The Guide suggests that residential building setbacks should be as close as possible to the road. On lots that are 33 m (108 ft) or wider, the maximum depth of the farm home plate is suggested to be 60 m (197 ft) as depicted in Figure 1. On lots that are narrower than 33 m (108 ft), the Guide suggests that the maximum depth of a farm home plate may exceed 60 m (197 ft), up to the maximum farm home plate area as illustrated in Figure 2. The Guide suggests that all dwelling units must remain within the 50 m (164 ft) maximum setback regardless of lot width, which is consistent with Richmond's current zoning regulations.



Note: Farm Home Plate concept illustrated in green. Overall farm home plate to not exceed 2000 m² regardless of lot width.

Maximum Floor Area: The Guide suggests that the maximum floor area for a dwelling unit be the lesser of a floor area commensurate with urban areas or $500 \text{ m}^2 (5,382 \text{ ft}^2)$ for a principal dwelling unit, up to $300 \text{ m}^2 (3,229 \text{ ft}^2)$ for each additional dwelling unit where permitted, and up to $15 \text{ m}^2 (161.5 \text{ ft}^2)$ for each occupant of a seasonal farm labour accommodation where permitted as shown in Table 1. For a floor area to be commensurate with urban areas, the Guide suggests using the density calculations commonly found in urban residential zones. For Richmond, this would be the RS1 zone. If the floor area ratio from the RS1 zone were used, a property in the

ALR would require a lot size of 1,279.6 m² (13,767 ft²) in order to achieve the suggested maximum principal residential floor area of 500 m² (5,382 ft²).

Table 1. Ministry of Agriculture's Maximum Floor Area Suideimes				
Type of Dwelling	Maximum Floor Area			
Principal Dwelling Unit (one per lot)	 Lesser of floor area: commensurate with urban areas or a maximum of 500 m² (5,382 ft²) 			
Additional Dwelling Unit (for full time workers on the farm where permitted by the local government)	300 m ² (3,229 ft ²) (Guidelines do not specify the maximum number of additional dwelling units; this would be up to the local government)			
Seasonal Farm Labour Accommodation (one building is permitted when the farmer has justified to the local government that seasonal workers are needed)	15 m ² (161.5 ft ²) for each occupant up to a maximum building size of 400 m ² (4,305 ft ²)			
Residential Accessory Buildings (e.g., garage, shed, covered pool)	Not regulated for size			

Table 1: Ministry of Agriculture's Maximum Floor Area Guidelines

2. Corporation of Delta's A1 Zone

The Corporation of Delta updated their Agriculture (A1) zone in 2007, prior to the publication of the Ministry's Guidelines noted above. The regulations in the Delta Zoning Bylaw use the recommended three approaches to limiting house sizes.

Maximum Farm Home Plate: The term farm home plate in Delta's bylaw is very similar to the Ministry's definition of farm home plate, but indicates that the septic tank for a dwelling unit is included in the farm home plate. The maximum farm home plate area is $3,600 \text{ m}^2 (38,750 \text{ ft}^2)$ for the principal dwelling unit. As Delta allows one additional dwelling unit for a full-time farm worker regardless of the size of the lot, the maximum farm home plate area for two dwelling units is $5,000 \text{ m}^2 (53,819.5 \text{ ft}^2)$. An additional farm home plate of up to $1,400 \text{ m}^2 (15,069 \text{ ft}^2)$ is permitted for a seasonal farm labour accommodation where permitted. This would allow an absolute maximum farm home plate of $6,400 \text{ m}^2 (68,889 \text{ ft}^2)$.

Maximum Setbacks (Siting): Delta's A1 zone has a maximum buildable setback of 50 m (164 ft) for all dwelling units from the road. A maximum farm home plate depth of 60 m (197ft) is permitted for all accessory structures and buildings to allow for a 10 m (32.8 ft) backyard as shown in Figure 3. A maximum farm home plate depth of 100 m (326 ft) is allowed if the farm home plate is located on the same parcel as a contiguous seasonal farm labour accommodation.

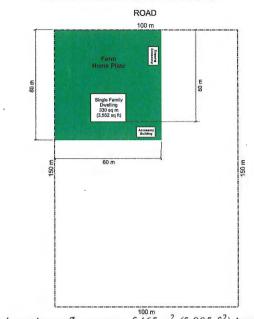


Figure 3: Corporation of Delta's Farm Home Plate and Floor Area on a lot less than 8 ha

-7-

Note: A maximum floor area of $465 \text{ m}^2 (5,005 \text{ ft}^2)$ is allowed for a single family dwelling on lots 8 ha (20 acres) or greater

Maximum Floor Area: The following maximum residential floor areas outlined in Table 2 are allowed in Delta's A1 zone.

Type of Dwelling	Lots < 8 ha (20 acres) in area	Lots 8 ha or greater in area
Single Family Dwelling (one per lot)	330 m ² (3,552 ft ²)	465 m ² (5,005 ft ²)
Additional Single Family Dwelling (for full time workers on the farm where permitted; no more than one is permitted per lot)	180 m ² (1,937.5ft ²)	233 m ² (2,508 ft ²)
Seasonal Farm Labour Accommodation (one building permitted where approved)	10 m ² (107.6 ft ²) regardless of lot size for each occupant up to a maximum of 420 m ² for 42 workers	
Residential Accessory Buildings	Not regulated for size	

Table 2: Corporation	n of Delta's	Maximum	Floor Are	a Regulations

3. City of Richmond's AG1 Zone

Maximum Setbacks (Siting): Implemented prior to the Ministry's Guidelines, a maximum buildable setback of 50 m (164 ft) from the road is permitted for a dwelling unit as illustrated in Figure 4. The distance between the dwelling unit and any residential accessory building or accessory structure must be between 1.2 m–50 m (4 ft–164 ft), which may extend the depth of residential development to more than 100 m (328 m). Additional seasonal farm labour accommodation must be within the 50 m (164 ft) buildable setback from the road.

Maximum Floor Area: The City imposes a maximum floor area ratio in the AG1 zone of 0.6 for both residential and farm buildings (0.75 floor area ratio if this includes greenhouses provided that 0.7 is used for greenhouses) for the entire farm parcel as shown in Table 3. The maximum house size would increase with the lot area. With respect to seasonal farm labour accommodation, a minimum floor area for each occupant is $10 \text{ m}^2 (107.6 \text{ ft}^2)$ up to a maximum building size of $400 \text{ m}^2 (4,305.5 \text{ ft}^2)$ where permitted.

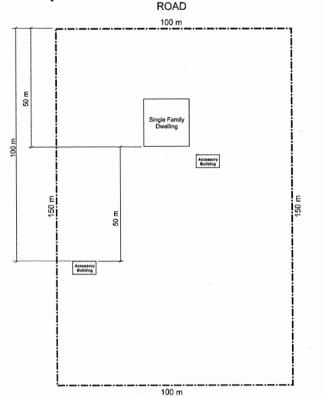


Figure 4: City of Richmond's Buildable Setback on Farm Parcel

Table 3: City of Richmond's maximum floor area

Type of Dwelling	Maximum Floor Area
All principal and accessory residential and farm buildings on the parcel	0.60 FAR
All residential and farm buildings on the parcel (with greenhouses)	0.75 FAR, of which at least 0.70 FAR must be used for greenhouses
Seasonal Farm Labour Accommodation	Minimum floor area for each occupant is 10 m ² (107.6 ft ²) up to a maximum building size of 400 m ² (4,305.5 ft ²) where permitted

Additional Dwelling Units: Richmond's AG1 zone allows for additional dwelling units for fulltime farm workers for a farm operation provided that the need is justified by a professional agrologist. One additional dwelling unit may be considered on a lot between 8 ha - 25 ha (20 acres - 61.7 acres), two additional dwelling units may be considered on a lot between 25 ha -30 ha (61.7 acres -74 acres) and three additional dwelling units may be considered on a lot over 30 ha (74 acres). Seasonal Farm Labour Accommodation: Seasonal farm labour accommodation is only permitted in Richmond's AG3 zone within the ALR. The property must be designated as Agriculture in the Official Community Plan (OCP), and classified as farm under the BC Assessment Act. Only one seasonal farm labour accommodation is permitted per farm operation which must be located on the same lot as an existing dwelling unit. The property must have a minimum farm operation size of 8.09 ha (20 acres), the building used for seasonal farm labour accommodation cannot exceed 400 m² (4,305.5 ft²), and a maximum of 40 occupants is permitted. To date, there are no properties zoned as AG3.

4. Options and Draft Bylaws

To address the referral, staff have prepared four draft bylaw options for consideration, as follows:

- Option 1 Bylaw 9665 (Attachment 2) is based on the Ministry of Agriculture Guidelines to control house size, farm home plate and setbacks and would:
 - i. maintain a maximum buildable setback for a dwelling unit at 50 m (164 ft);
 - ii. establish a maximum buildable setback for all residential accessory buildings and structures for lots 33 m (108 ft) or wider at 60 m (197 ft);
 - iii. allow the maximum buildable setback for all residential accessory buildings and structures for lots less than 33 m (108 ft) wide to exceed 60 m (197 ft), up to the maximum farm home plate area;
 - iv. limit the farm home plate for a principal dwelling unit to $2,000 \text{ m}^2$ (21,527 ft²), plus 1000 m^2 (10,764 ft²) for each additional dwelling unit, plus 35 m² (376.7 ft²) for each occupant of a seasonal farm labour accommodation where permitted; and
 - v. limit the floor area for:
 - a principal dwelling unit to $500 \text{ m}^2 (5,382 \text{ ft}^2)$,
 - 300 m² (3,229 ft²) for each additional dwelling unit,
 - $-15m^2$ (1,236 ft²) for each occupant of a seasonal farm labour accommodation where permitted.
- Option 2 Bylaw 9666 (Attachment 3) is based on the Ministry of Agriculture Guidelines to control only house size and would:
 - i. limit the floor area for a principal dwelling unit to $500 \text{ m}^2 (5,382 \text{ ft}^2)$;
 - ii. allow $300 \text{ m}^2 (3,229 \text{ ft}^2)$ for each additional dwelling unit; and
 - iii. allow $15m^2$ (1,236 ft²) for each occupant of a seasonal farm labour accommodation where permitted.

- Option 3 Draft Bylaw 9678 (Attachment 4) is based on the Corporation of Delta's A1 zoning regulations to manage house size, farm home plate and setbacks) and would:
 - i. maintain a maximum buildable setback for a dwelling unit at 50m (164 ft), and 100m (328 ft) for a seasonal farm labour accommodation;
 - ii. establish a maximum buildable setback for all residential accessory buildings and structures at 60 m (197 ft);
 - iii. limit the farm home plate for a principal dwelling unit to 3,500 m² (38,750 ft²), 5,000m² (58,819 ft²) for any additional dwelling units, and an additional 1,400 m² (15,069 ft²) for a seasonal farm labour accommodation where permitted;
 - iv. on lots less than 8 ha (20 ac.) limit the floor area of a principal dwelling unit to 330m² (3,552 ft²); and
 - v. on lots 8 ha (20 ac.) or greater:
 - limit the floor area of a principal dwelling unit to $465 \text{ m}^2 (5,005 \text{ ft}^2)$;
 - allow 233 m^2 (2,508 ft²) for each additional dwelling unit; and
 - allow $10 \text{ m}^2 (107 \text{ ft}^2)$ for each occupant of a seasonal farm labour accommodation where permitted.
- Option 4 Bylaw 9679 (Attachment 5) is based on the Corporation of Delta's A1 zoning regulations to control only house size and would:
 - i. on lots less than 8 ha (20 ac.) limit the floor area of a principal dwelling unit to 330m² (3,552 ft²);
 - ii. on lots 8 ha (20 ac.) or greater:
 - limit the floor area of a principal dwelling unit to $465 \text{ m}^2 (5,005 \text{ ft}^2)$;
 - allow 233 m^2 (2,508 ft²) for each additional dwelling unit; and
 - allow $10 \text{ m}^2 (107 \text{ ft}^2)$ for each occupant of a seasonal farm labour accommodation where permitted.

Each draft Bylaw incorporates the respective regulations from the Ministry's Guidelines and the Corporation of Delta's A1 zone, and complements Richmond's Zoning Bylaw (e.g., definitions, floor area exemptions).

All four draft Bylaws use terminology that is consistent with the City's Zoning Bylaw. Further, the draft Bylaws do not establish a size limit for residential accessory buildings and structures, as neither the Ministry Guidelines or Delta's A1 zone address the matter. See the Public Consultation Section below regarding how this matter may be addressed.

CNCL - 441

For clarification, the two draft Bylaws (i.e., Bylaw 9665 – Attachment 2, and Bylaw 9678 – Attachment 4) that address farm home plate would include the following in the farm home plate area:

- principal dwelling unit, additional dwelling unit(s) and any accessory buildings or accessory structures,
- driveways, decorative landscaping, artificial ponds not serving drainage, irrigation needs or aquaculture use, and
- sewerage septic tanks and field.

Non-Conforming Uses

If any bylaw is adopted that limits the size and footprint of residential buildings, legal nonconforming status would apply to all existing buildings and structures as per the *Local Government Act*. This means that any new development will need to conform to the adopted bylaw, but existing development is acknowledged to be lawfully in existence before a new zoning bylaw comes into effect.

Public Consultation

As the issue of regulating house size, farm home plate and setbacks, as well as the size of residential accessory buildings in the ALR, is anticipated to be controversial, staff recommend holding one public consultation open house at City Hall and seeking comments from the Agricultural Advisory Committee (AAC) in March 2017, and reporting back to Planning Committee afterwards. The March meetings are proposed to avoid any conflicts with other public consultations scheduled in February (e.g., House Massing Review, Tree Protection Bylaw Information Sessions). Staff also recommend consulting regarding the size of residential accessory buildings, as none of the proposed bylaws address the matter and clarity is needed. Staff will prepare appropriate residential accessory building size options for public comment during the consultation.

Financial Impact

None.

Conclusion

The report responds to the referral made by Planning Committee to examine house size limitations as recommended by the Ministry of Agriculture's "Guide for Bylaw Development in Farming Area", and the Corporation of Delta's regulations under the Agriculture (A1) zone. Draft bylaws reflecting the Ministry's suggested guidelines and Delta's A1 zone are attached for information.

John Hopkins Senior Planner (604-276-4279)

JH:cas

- Att. 1: Comparison of Buildable Setback, Home Plate and House Size Limitations
 - 2: Draft Bylaw 9665 based on the Ministry of Agriculture's Guidelines to manage house size, farm home plate and setbacks
 - 3: Draft Bylaw 9666 based on the Ministry of Agriculture's Guidelines to manage house size only
 - 4: Draft Bylaw 9678 based on the Corporation of Delta's A1 Zone to manage house size, farm home plate and setbacks
 - 5: Draft Bylaw 9679 based on the Corporation of Delta's A1 Zone to manage house size only

Size
House
and
<u>Plate</u>
Home
Setback,
of Buildable
<u>Comparison o</u>

Item to Regulate	Type of Structures	Ministry of Agriculture	Corporation of Delta	elta	City of Richmond
Buildable Setback	All dwelling units including seasonal farm labour accommodation	50 m (164 ft)	50 m (164 ft) for a dwelling unit, and 100m (328 ft) if a dwelling unit with seasonal farm labour accommodation	ng unit, velling abour	50 m (164 ft)
(Maximum)	Accessory residential buildings and structures	60 m (197 ft)	60 m (197 ft)		Distance between dwelling unit and accessory building from 1.2m- 50 m (4ft -164 ft).
	Principal Dwelling Unit (one per lot)	The lesser of a footprint commensurate with urban areas or 2000 m ² (21,528 ft ²)	3,500 m ² (38,750 ft ²)		
Farm Home Plate (Maximum)	Additional Dwelling Unit(s)	Plus 1000 m^2 (10,764 ft ²) for each additional dwelling unit (where permitted by the local government)	Plus 1,500 m^2 (16,145 ft ²) if there are two dwelling units (only one additional dwelling unit permitted for a full-time farm worker)	²) if there nly one ermitted er)	The Farm Home Plate is not currently regulated in the Richmond Zoning Bylaw.
	Seasonal Farm Labour Accommodation	Plus 35 m ² (376.7 ft ²) for each temporary worker's residence up to 1,400 m ² (15,069 ft ²) (where permitted by the local government)	Plus 1,400 m ² (15,069 ft ²) (only one building permitted on a lot size greater than 8 ha)	²) (only n a lot	
	Principal Dwelling Unit (one per lot)	Lesser of a floor area commensurate with urban areas or 500 m ² (5,382 ft ²)	330 m² 465 m² (3,552tf²) on (5,005ff²) lots less than lots 8 ha 8ha (20 acres) greater	465 m² (5,005ft²) on lots 8 ha or greater	A maximum 0.60 floor area ratio (FAR) for residential and farm buildings, except where greenhouses are located on the
House Size (Maximum Floor Area)	Additional Dwelling Unit(s)	300 m^2 (3,229 ft ²) for each additional dwelling unit (where permitted by the local government)	180m ² (1,937ft ²) 233 m ² on lots less than lots 8ha 8 ha (20 acres) greater	233 m ² (2,508ft²) on lots 8ha or greater	lot, in which case the maximum FAR would be 0.75, of which at least 0.70 FAR must be used for greenhouses.
	Seasonal Farm Labour Accommodation	15 m^2 (161 ft ²) for each occupant of a seasonal farm labour accommodation up to 400 m^2 (4,305ft ²) (where permitted by the local government)	10 m ² (107 ft ²) for each occupant of a seasonal farm labour accommodation up to 420 m ² (4,520 ft ²) (only one building permitted on a lot size greater than 8 ha)	occupant Ir 20 m ² ding reater	400 m ² (4,305.5 ft ²) (only one building permitted on a lot size greater than 8 ha; subject to rezoning to AG3)
Farm-Related Buildings (e.g. barns, stables)	(e.g. barns, stables)	Permitted subject to local government setback regulations	Permitted subject to setback and site coverage regulations	back and	Permitted subject to 0.6 FAR and setback regulations

CNCL - 444

ATTACHMENT 1



City of Richmond

House Size Regulations in the Agricultural Land Reserve – Based on Ministry of Agriculture Guidelines

Bylaw 9665

Richmond Zoning Bylaw 8500 Amendment Bylaw 9665 (House Size, Farm Home Plate and Setback Regulations in the Agricultural Land Reserve)

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

1. Richmond Zoning Bylaw 8500, as amended, is further amended at Section 3.4 by adding the following definition of "**farm home plate**", in alphabetical order:

"Farm home plate means the portion of a lot including or located between a principal dwelling unit, additional dwelling unit(s), and any accessory buildings or accessory structures, including driveways to dwelling unit(s), decorative landscaping, artificial ponds not serving farm drainage, irrigation needs or aquaculture use, and sewerage septic tanks and field.

Farm home plate setback means the distance that the rear of a **farm home plate** may be set back from a **lot** line or any other features specified by this Bylaw."

2. Richmond Zoning Bylaw 8500, as amended, is further amended by deleting Section 14.1.4. (Permitted Density) and replacing it with the following:

"14.1.4 Permitted Density

- 1. The maximum **floor area** is:
 - a) the lesser of
 - i. the **floor area ratio** of 0.55 applied to a maximum of 464.5 m² of the **lot area**, together with 0.30 applied to the balance of the **lot area** in excess of 464.5 m², or
 - ii. 500 m^2 ,

for a principal dwelling unit;

- b) 300 m^2 for each additional **dwelling unit**, where permitted as per Section 14.1.4.5; and
- c) 15 m^2 for each occupant of a seasonal farm labour accommodation.

- 2. The maximum floor area ratio is 0.60, except where greenhouses are located on the lot, in which case the maximum floor area ratio is 0.75, of which at least 0.70 floor area ratio must be used for greenhouses.
- 3. The maximum area of the **farm home plate** is:
 - a) $2,000 \text{ m}^2$ for a **principal dwelling unit**; and
 - b) 1000 m^2 for each **dwelling unit** where permitted as per Section 14.1.4.5; and
 - c) 35 m^2 for each occupant of a seasonal farm labour accommodation where permitted.
- 4. The maximum **density** is one **principal dwelling unit** per **lot**.
- 5. The following additional **dwelling units** for full-time farm workers for a **farm operation** employed on the **lot** in question are permitted provided that the need for the additional **dwelling units** is justified by a certified professional registered with the BC Institute of Agrologists (P.Ag) and that the **lot** has the **lot area** specified below:
 - a) 1 additional **dwelling unit** on a lot between 8.0 ha and 25.0 ha; or
 - b) 2 additional **dwelling units** on a lot between 25.0 ha and 30.0 ha; or
 - c) 3 additional **dwelling units** on a lot over 30.0 ha.
- 6. For lots zoned AG4, the maximum floor area ratio is 0.11."
- 3. Richmond Zoning Bylaw 8500, as amended, is further amended by deleting Section 14.1.6. (Yards & Setbacks) and replacing it with the following:
 - "14.1.6 Yards & Setbacks
 - 1. The maximum farm home plate setback from the front lot line to the rear of the farm home plate is 60 m. A property with a lot width less than 33 m are exempted from the 60 m farm home plate setback for the farm home plate from the front lot line; however, the farm home plate must be located at the front of the lot to a maximum of $2,000 \text{ m}^2$.
 - 2. No portion of a single detached housing building, including any additional dwelling units, shall be located further than 50.0 m from a constructed public road abutting the property. On a corner lot or double fronting lot, the 50.0 m setback from a constructed public road abutting the property shall be determined based on the location of the permitted access to the single detached housing building or additional dwelling unit(s).
 - 3. The minimum yards for single detached housing, including any additional dwelling units and all accessory buildings or accessory structures to the single detached housing are:

CNCL - 446

- a) 6.0 m in the **front yard**;
- b) on an interior lot, 1.2 m on one interior side yard and
 - i) 3.0 m on the other **interior side yard** for **lots** less than 0.8 ha; or
 - ii) 6.0 m on the other interior side yard for lots of 0.8 ha or more;
- c) on a corner lot, 1.2 m on the interior side yard and 3.0 m on the exterior side yard regardless if the lot is less than 0.8 ha or is 0.8 ha or more; and
- d) 10.0 m in the rear yard for single detached housing, including any additional dwelling units.
- 4. All accessory buildings or accessory structures to the single detached housing shall have a minimum building separation space of 1.2 m.
- 5. The minimum yards for all agricultural buildings and structures for:
 - a) **front yard** and **exterior side yard** is:
 - i) 15.0 m for mushroom barns, livestock barns, poultry brooder houses, confined livestock areas, fur farming sheds, livestock shelters, milking facilities, stables and hatcheries; and
 - ii) 7.5 m for all other agricultural buildings and structures.
 - b) **interior side yard** and **rear yard** is:
 - i) 15.0 m for livestock barns, poultry brooder houses, confined livestock areas, fur farming shelters, livestock sheds, milking facilities, stables and hatcheries;
 - ii) 7.5 m for mushroom barns, apiculture hives, honey houses and shelters; and
 - iii) 4.5 m for all other agricultural buildings and structures.
- 6. For lots zoned AG4, the minimum setbacks for buildings and structures are:
 - a) 20 m for west and east **setbacks**;
 - b) 18 m for south **setbacks**; and
 - c) 13 m for north setbacks.
- 7. For lots zoned AG4, the minimum setbacks for accessory buildings and structures is 9 m to all property lines."

CNCL - 447

4. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9665".

FIRST READING

PUBLIC HEARING

SECOND READING

THIRD READING

ADOPTED



MAYOR

CORPORATE OFFICER



House Size Regulations in the Agricultural Land Reserve – Based on Ministry of Agriculture Guidelines (house size only)

Bylaw 9666

Richmond Zoning Bylaw 8500 Amendment Bylaw 9666 (House Size Regulations in the Agricultural Land Reserve)

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 deleting Section 14.1.4. (Permitted Density) and replacing it with the following:

"14.1.4 Permitted Density

- 1. The maximum **floor area** is:
 - a) the lesser of
 - i. the **floor area ratio** of 0.55 applied to a maximum of 464.5 m² of the **lot area**, together with 0.30 applied to the balance of the **lot area** in excess of 464.5 m², or
 - ii. 500 m^2 ,

for a principal dwelling unit;

- b) 300 m^2 for each additional **dwelling unit**, where permitted as per Section 14.1.4.4; and
- c) 15 m^2 for each occupant of a seasonal farm labour accommodation.
- 2. The maximum **floor area ratio** is 0.60, except where greenhouses are located on the lot, in which case the maximum **floor area ratio** is 0.75, of which at least 0.70 **floor area ratio** must be used for greenhouses.
- 3. The maximum **density** is one **principal dwelling unit** per **lot**.
- 4. The following additional **dwelling units** for full-time farm workers for a **farm operation** employed on the **lot** in question are permitted provided that the need for the additional **dwelling units** is justified by a certified professional registered with the BC Institute of Agrologists (P.Ag) and that the **lot** has the **lot area** specified below:
 - a) 1 additional **dwelling unit** on a lot between 8.0 ha and 25.0 ha; or
 - b) 2 additional dwelling units on a lot between 25.0 ha and 30.0 ha; or

Bylaw 9666

Page 2

c) 3 additional **dwelling units** on a lot over 30.0 ha.

5. For lots zoned AG4, the maximum floor area ratio is 0.11."

4. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9666".

MAYOR

CORPORATE OFFICER



House Size Regulations in the Agricultural Land Reserve – Based on Delta's Zoning Bylaw

Bylaw 9678

Richmond Zoning Bylaw 8500 Amendment Bylaw 9678 (House Size, Farm Home Plate and Setback Regulations in the Agricultural Land Reserve)

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

1. Richmond Zoning Bylaw 8500, as amended, is further amended at Section 3.4 by adding the following definition of "**farm home plate**", in alphabetical order:

"Farm home plate means the portion of a lot including or located between a principal dwelling unit, additional dwelling unit(s), and any accessory buildings or accessory structures, including driveways to dwelling unit(s), decorative landscaping, artificial ponds not serving farm drainage, irrigation needs or aquaculture use, and sewerage septic tanks and field.

Farm home plate setback means the distance that the rear of a **farm home plate** may be set back from a **lot** line or any other features specified by this Bylaw."

2. Richmond Zoning Bylaw 8500, as amended, is further amended by deleting Section 14.1.4. (Permitted Density) and replacing it with the following:

"14.1.4 Permitted Density

1. The maximum **floor area** is:

- a) $330m^2$ for a **principal dwelling unit** on a **lot** less than 8 ha in area;
- b) $465m^2$ for a **principal dwelling unit** on a **lot** 8 ha or greater in area;
- c) 233 m^2 for each additional **dwelling unit**, where permitted as per Section 14.1.4.5; and
- d) 10 m^2 for each occupant of a seasonal farm labour accommodation.
- 2. The maximum **floor area ratio** is 0.60, except where greenhouses are located on the lot, in which case the maximum **floor area ratio** is 0.75, of which at least 0.70 **floor area ratio** must be used for greenhouses.

- 3. The maximum area of a **farm home plate** is:
 - a) $3,600 \text{ m}^2$ for a **principal dwelling unit**; or
 - b) 5,000 m² if there is a **principal dwelling unit** and any additional **dwelling unit(s)** where permitted as per Section 14.1.4.5; and
 - c) $1,400 \text{ m}^2$ for a seasonal farm labour accommodation where permitted.
- 4. The maximum **density** is one **principal dwelling unit** per **lot**.
- 5. The following additional **dwelling units** for full-time farm workers for a **farm operation** employed on the **lot** in question are permitted provided that the need for the additional **dwelling units** is justified by a certified professional registered with the BC Institute of Agrologists (P.Ag) and that the **lot** has the **lot area** specified below:
 - a) 1 additional **dwelling unit** on a **lot** between 8.0 ha and 25.0 ha; or
 - b) 2 additional **dwelling units** on a **lot** between 25.0 ha and 30.0 ha; or
 - c) 3 additional **dwelling units** on a **lot** over 30.0 ha.
- 6. For lots zoned AG4, the maximum floor area ratio is 0.11."
- 3. Richmond Zoning Bylaw 8500, as amended, is further amended by deleting Section 14.1.6. (Yards & Setbacks) and replacing it with the following:

"14.1.6 Yards & Setbacks

- 1. The maximum farm home plate setback from the front lot line to the rear of the farm home plate is 60 m. Where a farm home plate accommodates a dwelling unit and seasonal farm labour accommodation, the maximum combined farm home plate setback from the front lot line to the rear of the farm home plate is 100 m.
- 2. No portion of a single detached housing building, including any additional dwelling units, shall be located further than 50.0 m from a constructed public road abutting the property. On a corner lot or double fronting lot, the 50.0 m from a constructed public road abutting the property shall be determined based on the location of the permitted access to the single detached housing building or additional dwelling unit(s).
- 3. The minimum yards for single detached housing, including any additional dwelling units and all accessory buildings or accessory structures to the single detached housing are:
 - a) 6.0 m in the **front yard**;

- b) on an interior lot, 1.2 m on one interior side yard and
 - i) 3.0 m on the other **interior side yard** for **lots** less than 0.8 ha; or
 - ii) 6.0 m on the other interior side yard for lots of 0.8 ha or more;
- c) on a corner lot, 1.2 m on the interior side yard and 3.0 m on the exterior side yard regardless if the lot is less than 0.8 ha or is 0.8 ha or more; and
- d) 10.0 m in the rear yard for single detached housing, including any additional dwelling units.
- 4. All accessory buildings or accessory structures to the single detached housing shall have a minimum building separation space of 1.2 m.
- 5. The minimum yards for all agricultural buildings and structures for:
 - a) **front yard** and **exterior side yard** is:
 - i) 15.0 m for mushroom barns, livestock barns, poultry brooder houses, confined livestock areas, fur farming sheds, livestock shelters, milking facilities, stables and hatcheries; and
 - ii) 7.5 m for all other agricultural buildings and structures.
 - b) **interior side yard** and **rear yard** is:
 - i) 15.0 m for livestock barns, poultry brooder houses, confined livestock areas, fur farming shelters, livestock sheds, milking facilities, stables and hatcheries;
 - ii) 7.5 m for mushroom barns, apiculture hives, honey houses and shelters; and
 - iii) 4.5 m for all other agricultural buildings and structures.
- 6. For lots zoned AG4, the minimum setbacks for buildings and structures are:
 - a) 20 m for west and east **setbacks**;
 - b) 18 m for south **setbacks**; and
 - c) 13 m for north **setbacks**.
- 7. For lots zoned AG4, the minimum setbacks for accessory buildings and structures is 9 m to all property lines."

Bylaw 9678

4. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9678".

FIRST READING

PUBLIC HEARING

SECOND READING

THIRD READING

ADOPTED



MAYOR

CORPORATE OFFICER



House Size Regulations in the Agricultural Land Reserve – Based on Delta's Zoning Bylaw (house size only)

Bylaw 9679

Richmond Zoning Bylaw 8500 Amendment Bylaw 9679 (House Size Regulations in the Agricultural Land Reserve)

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 deleting Section 14.1.4. (Permitted Density) and replacing it with the following:

"14.1.4 Permitted Density

- 1. The maximum **floor area** is:
 - a) 330 m^2 for a **principal dwelling unit** on a **lot** less than 8 ha in area;
 - b) 465 m^2 for a **principal dwelling unit** on a **lot** 8 ha or greater in area;
 - c) 233 m^2 for each additional **dwelling unit**, where permitted as per Section 14.1.4.4; and
 - d) 10 m^2 for each occupant of a seasonal farm labour accommodation.
- 2. The maximum **floor area ratio** is 0.60, except where greenhouses are located on the lot, in which case the maximum **floor area ratio** is 0.75, of which at least 0.70 **floor area ratio** must be used for greenhouses.
- 3. The maximum **density** is one **principal dwelling unit** per **lot**.
- 4. The following additional **dwelling units** for full-time farm workers for a **farm operation** employed on the **lot** in question are permitted provided that the need for the additional **dwelling units** is justified by a certified professional registered with the BC Institute of Agrologists (P.Ag) and that the **lot** has the **lot area** specified below:
 - a) 1 additional **dwelling unit** on a **lot** between 8.0 ha and 25.0 ha; or
 - b) 2 additional **dwelling units** on a **lot** between 25.0 ha and 30.0 ha; or
 - c) 3 additional **dwelling units** on a **lot** over 30.0 ha.
- 5. For lots zoned AG4, the maximum floor area ratio is 0.11."

4. This Bylaw may be cited as "Richmond Zoning Bylaw 8500, Amendment Bylaw 9679".

FIRST READING

PUBLIC HEARING

SECOND READING

THIRD READING

ADOPTED

 CITY OF RICHMOND
 APPROVED by
 APPROVED by Director or Solicitor
Jo

MAYOR

CORPORATE OFFICER



Memorandum Planning and Development Division Policy Planning

To: Mayor and Councillors

From: Wayne Craig Director, Development

> Terry Crowe Manager, Policy Planning

Date:January 20, 2017File:08-4057-10/2017-Vol 01

Re: Additional Information to the "Referral Response: Regulating the Size of Large Houses in the Agricultural Reserve" Report

Purpose

This memorandum responds to Planning Committee's request for additional information following their consideration of the report titled "Referral Response: Regulating the Size of Large Houses in the Agricultural Reserve".

The following resolution was passed by Planning Committee on January 17, 2017:

(1) That the staff report titled, "Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve", dated January 10, 2017, from the Director of Development and the Manager of Policy Planning, be received for information; and

(2) That staff be directed to conduct public consultations regarding the bylaw options presented in this report ("Referral Response: Regulating the Size of Large Houses in the Agricultural Land Reserve") regarding house size, farm home plate and setbacks, including residential accessory buildings.

The question on the motion was not introduced as discussion ensued with regard to the timeline of the public consultation process. It was suggested that the public consultation process be advanced to commence at an earlier date.

As a result of the discussion, staff were directed to provide information on:

- the number of narrow agricultural lots in city;
- the feasibility of placing a moratorium on the development of new large homes in the ALR;
- taxes related to farm classified sites;
- recently issued building permits for single family dwellings in the ALR;
- aerial photograph examples of large homes on agricultural land in the city, including the Global BC news story regarding large homes on agricultural properties in the city; and
- the Corporation of Delta's dwelling size regulations on agricultural land less than and greater than eight hectares;

CNCL - 456 A

and report back prior to the January 23, 2017 Regular Council meeting.



Additional Information

1. <u>The Number of Narrow Agricultural Lots in City</u>

There are a total of 1,369 parcels in the ALR that have residential development potential as these properties have frontage on an improved road allowance. 530 (39%) of these parcels have a lot width less than 33 m (108 ft).

2. Feasibility of Placing a Moratorium on the Development of New Large Homes in the ALR

While staff do not have the authority to place a moratorium on withholding new building permits that conform to existing municipal bylaws, Section 463 of the *Local Government Act* (LGA) allows Council to withhold a building permit if the permit is in conflict with a bylaw under preparation.

To temporarily withhold a building permit in accordance with this section of the LGA, Council would need to pass a resolution with specific direction to prepare a zoning amendment bylaw to establish new limitations on single family dwelling building size in the Agriculture (AG1) zone.

If Council passes such a resolution to prepare a bylaw limiting house size in the AG1 zone, all in stream building permit applications, and building permit applications received within 7 days following the Council resolution would need to be reviewed in accordance with the existing zoning bylaw provisions.

If a building permit application for a single family dwelling is submitted following the 7 day period, Council would, within 30 days of the permit application being received, need to consider a staff report on the proposed building permit application, resolve that the application is in conflict with a bylaw under preparation and pass a resolution to withhold the permit.

During the same 30 day period, a second staff report would need to be received by Council and Council would need to pass a resolution to either:

- 1. Grant a building permit, but impose conditions on it that would be in the public interest, having regard to the bylaw that is under preparation; or
- 2. Withhold the application for a further 60 days through a Council resolution.

If at the conclusion of the 60 day period, a bylaw has been adopted by Council, then the building permit must comply with the new bylaw.

If at the conclusion of the 60 day period, a bylaw has not been adopted by Council, the building permit must be issued in accordance with the zoning regulations in place and the owner is entitled to compensation for damages arising from the withholding of the building permit. The owner would be responsible for demonstrating those losses.

3. <u>Taxes Related to Farm Classified Sites</u>

The City's role is to apply taxes based on the assessment value and classification provided by BC Assessment. Farm classifications are given to properties that are farmed and meet BC Assessment's farming requirements.

CNCL - 456 B

- 3 -

The minimum farm income requirements as determined by BC Assessment to classify as a farm are:

- a. \$10,000 on land less than 0.8 hectares (1.98 acres) in area;
- b. \$2,500 on land between 0.8 hectares (1.98 acres) and 4 hectares (10 acres); and
- c. on land larger than 4 hectares (10 acres), earnings must be \$2,500 plus five per cent of the actual value of any farm land in excess of 4 hectares.

For all parcels in the ALR, property owners receive a 50% school tax exemption from the Province. For property owners in the ALR that do not farm or lease the parcel for farming purposes, they will be taxed as Class 01-residential. If owners lease to a farmer, the farmed portion of the property will be assessed as farmland, which will yield significant tax savings. If the property owner lives on the property and farms it, the property can get full farm valuation for the land and building. In this case, the land will be assessed as Class 09-farm and the building will be Class 01-residential but with a significant reduction in assessed value.

The Foreign Home Buyer's Tax does not apply to any property with a farm classification. If a foreign home buyer purchases a property with 100% farm classification, no foreign home buyer tax applies. If the purchaser buys a property with 50% farm classification and 50% residential classification, the Foreign Home Buyer tax applies to the 50% residential classification.

4. Recently Issued Building Permits for Single Family Dwellings in the ALR

Staff were asked to provide information about building permits applications for single family dwellings in Richmond's ALR. Table 1 provides this information between 2010-2016 which indicates a trend towards increasing house sizes in the ALR.

	Table 1 – Single Family Dwellings Building Permit Information in the ALR (2010-2016)					
Year	Number of Building Permit Applications Received	Average House Size of Received Building Permit Applications	Building Permit Applications Received over 10,000 ft ² (929 m ²)	Building Permit Applications with the Largest Floor Area		
2010	9	795 m ² (8,557 ft ²)	5 (56%)	1,444 m ² (15,544 ft ²)		
2011	21	872 m ² (9,383 ft ²)	7 (33%)	1,662 m ² (17,892 ft ²)		
2012	12	932 m ² (10,035 ft ²)	6 (50%)	1,851 m ² (19,923 ft ²)		
2013	15	1,094 m ² (11,775 ft ²)	8 (53%)	2,122 m ² (22,846 ft ²)		
2014	10	878 m ² (9,455 ft ²)	5 (50%)	1,319 m ² (14,197 ft ²)		
2015	16	1,169 m ² (12,583 ft ²)	11 (65%)	2,233 m ² (24,032 ft ²)		
2016	19	1,028 m ² (11,070 ft ²)	6 (32%)	3,809 m ² (41,000 ft ²)		

The information in the table includes building permit applications that were cancelled including the building permit application received in 2016 which proposed a floor area of $3,809 \text{ m}^2$ (41,000 ft²).

5. Aerial Photograph Examples of Large Homes on Agricultural Land in the City

Attachment 1 contains additional air photos of ALR properties with recently constructed large houses on lot sizes ranging from 0.6 ha (1.46 acres) to 5.68 ha (14 acres). An approximate farm home plate has been added to these images to illustrate the extent of land used for residential

CNCL - 456 C

purposes. In some cases, the dwelling occupies a significant portion of the approximated farm home plate, whereas in other examples, the home, accessory buildings and other residential improvements occupy a significantly larger area as illustrated by the approximated farm home plate.

The Global News BC's January 15, 2017 video regarding large homes in the ALR can be accessed at: <u>http://globalnews.ca/video/3183130/richmond-looks-to-address-megahomes-built-on-</u>farmland.

6. Delta's Dwelling Size Regulations on Agricultural land less than and greater than 8 hectares

Attachment 2 illustrates the maximum farm home plate and house size under Delta's existing regulations for lots less than and greater than 8 ha (20 ac) in area. It should be noted that the farm home plate area is the same regardless of the lot area.

Next Steps

Staff have recommended that a consultation process be undertaken before considering any new regulations related to better managing residential development on agricultural properties. The staff report outlined potential measures in keeping with the BC Ministry of Agriculture's Guidelines and the Corporation of Delta's regulations. The proposed public consultation would provide a public opportunity to review these possible regulatory schemes, as well as identifying any other approaches, to better manage residential development on Richmond's agricultural land. The consultation would also facilitate discussion on potential approaches for regulating accessory residential building size and ensuring that farm vehicle access is accommodated on agricultural residential properties.

If Planning Committee's recommendation is endorsed by Council, staff will begin consulting with the Richmond Agricultural Advisory Committee (AAC), Richmond Farmers Institute and other agricultural industry organizations in February 2017. Staff intend to begin the public consultation, including one open house at City Hall, on February 28 or March 1, 2017, after the final Building Massing consultation meeting is held on February 23, 2017. Public consultation details and materials will be provided to Council, prior to initiating the consultation process. Staff suggest that proposed consultation is essential before preparing any agricultural regulatory changes.

For clarification, please contact either of the undersigned.

mine 1

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

WC:acr

Terry Crowe Manager, Policy Planning (604-276-4139)

Att 1: Air photo of ALR properties with larger houses Att 2: Figures for the Corporation of Delta's regulations on Farm Home Plate and House Size

CNCL - 456 D

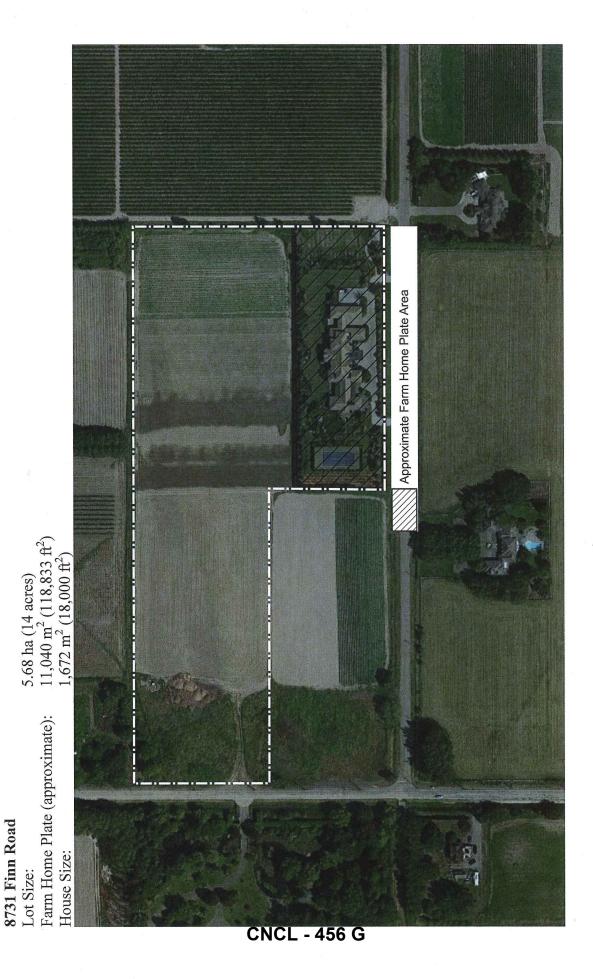
- 5 -

cc. Joe Erceg, General Manager, Planning and Development Gavin Woo, Senior Manager, Building Approvals Terry Crowe, Manager, Policy Planning John Hopkins, Senior Planner Ada Chan Russell, Planner 1



Air Photos of ALR Properties with Larger Homes

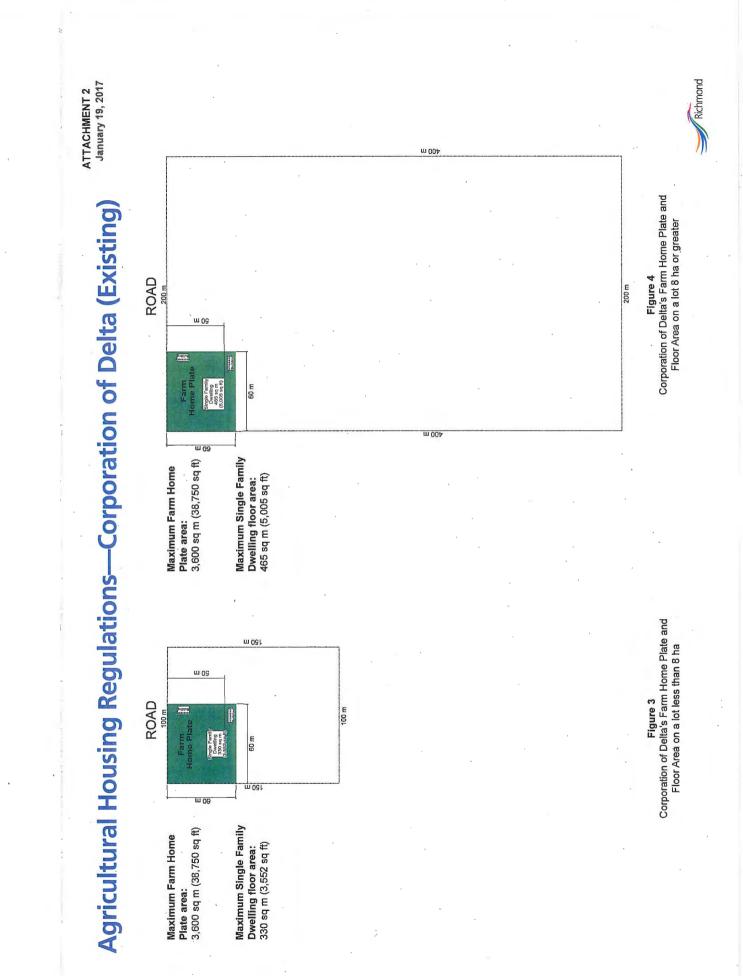
ATTACHMENT 1





Approximate Farm Home Plate Area 2 ha (5 acres) 3,000 m² (32,291 ft²) 2,118 m² (21,800ft²) Farm Home Plate (approximate): 13220 Westminster Highway House Size: Lot Size: . --CNCL - 456 I





CNCL - 456 K

Bylaw 9639



Business Regulation Bylaw No.7538 Amendment Bylaw No. 9639

The Council of the City of Richmond enacts as follows:

- 1. That Business Regulation Bylaw No. 7538, as amended, is further amended by deleting in its entirety, Schedule A attached to Bylaw No. 7538, and substituting Schedule A attached hereto and forming part of this bylaw.
- 2. This Bylaw is cited as "Business Regulation Bylaw No.7538, Amendment Bylaw No. 9639".

FIRST READING

SECOND READING

THIRD READING

ADOPTED

DEC 2 1 2016 DEC 2 1 2016 DEC 2 1 2016 DEC 2 1 2016 APPROVED for content by originating Gen. APPROVED for legality by Solicitor APPROVED for legality by Solicitor

CORPORATE OFFICER

Bylaw 9639

Schedule A to Bylaw 9639

SCHEDULE A to BYLAW 7538 AMUSEMENT CENTRES

	Civic Address	Civic Number	Original Bylaw Reference
1.	Alderbridge Way	7951 Unit 140	7147
2.	Entertainment Boulevard	14200 Unit 150	6810
3.	Entertainment Boulevard	14211	6856
4.	Garden City Road	4731 Unit 140	6829
5.	No. 3 Road	3411 Unit 170	9191
6.	No. 3 Road	3700	6044
7.	No. 3 Road	4351 Unit 110	8546
8.	No. 3 Road	4351 Unit 120	6833
9.	No. 3 Road	4351 Unit 160	9639
10.	No. 3 Road	4351 Unit 175	8474
11.	No. 3 Road	4411 Unit 101	7316
12.	No. 3 Road	5300	4540
13.	No. 3 Road	5300 Unit 323	4540
14.	Park Road	8160 Unit 105	9639
15.	Sea Island Way	8555 Unit 120	9289
16.	Viceroy Place	2100	7172
17.	Westminster Highway	8260	6199

**6631 Sidaway Road - exempted from Zoning Bylaw



Minutes

Development Permit Panel Wednesday, January 11, 2017

Time: 3:30 p.m.

- Place: Council Chambers Richmond City Hall
- Present: Joe Erceg, Chair Cathryn Volkering-Carlile, General Manager, Community Services Robert Gonzalez, General Manager, Engineering and Public Works

The meeting was called to order at 3:32 p.m.

Minutes

It was moved and seconded That the minutes of the meeting of the Development Permit Panel held on December 14, 2016, be adopted.

CARRIED

1.

1. Development Permit 16-731461 (REDMS No. 5065727)

> APPLICANT: Musson Cattell Mackey Partnership Architects Designers Planners PROPERTY LOCATION: 8811 Bridgeport Road

INTENT OF PERMIT:

1. Permit an exterior renovation at 8811 Bridgeport Road, on a site zoned "Auto-Oriented Commercial (CA)".

Applicant's Comments

Jacques Beaudreault, MCM Partnership, provided background information on the proposed renovation of the existing Hampton Inn building, noting that (i) the hotel building was built in the late 1990s and will be upgraded to the hotel's new corporate standards and image in North America, (ii) the biggest work on the building would be replacing the current orange mansard roof with a more contemporary parapet, (iii) the existing orange roof of the porte cochere will also be replaced with a simpler parapet, (iv) the base of the building will be clad with wafer stone, and a new colour scheme will be introduced on the building, (v) a lighting system will be introduced to light the building, and (vi) a rubberized paving is proposed on the existing concrete surface on the entry driveway.

Patricia Campbell, PMG Landscape Architects, briefed the Panel on the proposed landscaping for the project, noting that (i) the existing tree and shrub landscaping on site is substantial and will be retained except one dead tree on the lane side which will be removed, (ii) the existing planting scheme is outdated and will be updated through new plantings; and (iii) new planters will be introduced at the top of the building base and an irrigation system will be provided.

Staff Comments

Wayne Craig, Director, Development, advised that staff appreciate the refreshing of the landscaping on the subject site.

Panel Discussion

The Panel expressed support for the proposed refresh of the hotel building and the enhancement of the landscaping.

Correspondence

None.

Gallery Comments

None.

Panel Decision

It was moved and seconded

That a Development Permit be issued which would permit an exterior renovation at 8811 Bridgeport Road, on a site zoned "Auto-Oriented Commercial (CA)".

CARRIED

2. Development Variance 16-733949 (REDMS No. 5129854 v. 2)

APPLICANT:

MQN Architects

2.

Development Permit Panel Wednesday, January 11, 2017

PROPERTY LOCATION: 9580 Williams Road (Formerly 9580 & 9600 Williams Road & 10140 Gower Street) and 10060 Gower Street

INTENT OF PERMIT:

Vary the following provisions of Richmond Zoning Bylaw 8500 to:

- a) Increase the maximum permitted lot coverage from 45% to 48%;
- b) Reduce the minimum side yard setback from 6.0 m to 2.2 m for the west side yard and 4.7 for the east side yard; and
- c) Revise Transportation related requirements to:
 - i) Increase the maximum on-site parking reduction with transportation demand management measures from 10% to 13%;
 - ii) Reduce the minimum number of on-site loading spaces from 2 medium size and 1 large size loading spaces to 1 medium size loading space and manoeuvring for an additional medium size truck; and
 - iii) Reduce the minimum number of on-site bicycle parking spaces from 31 to 8 Class 1 spaces and from 31 to 11 Class 2 spaces;

to permit the construction of a 199 bed residential intermediate care facility at 9580 Williams Road on a site zoned "Health Care (HC)" with associated existing garden at 10060 Gower Street.

Applicant's Comments

Roger Green, MQN Architects, and Mary Chan-Yip, PMG Landscape Architects, with the aid of a visual presentation (attached to and forming part of these Minutes as Schedule 1), provided background information on the proposed development.

Mr. Green noted that the 45-year old existing care facility will increase its capacity from 101 to 199 beds, the existing two-storey central portion will be retained and improved with new three-storey north and south wings added.

Mr. Green further noted that (i) variances are being proposed for lot coverage, east and west side yard setbacks, on-site vehicle and bicycle parking spaces, and number of on-site loading spaces, (ii) the upgrading of the facility will be done in three phases, beginning with the construction of the south wing, (iii) the existing 2.2-meter west setback along Gower Street will be maintained to retain the existing kitchen and service area facing Gower Street, (iv) an enlarged parking area off Williams Road will provide parking for care facility employees and visitors, (v) the facility will be designed with a neighbourhood and house concept to enable the residents to move around in smaller compact units inside the building, and (vi) massing of the proposed building is broken down visually through variation in building heights, use of subdued colours, and introducing sloped roof forms and gable roof dormer bay elements.

In response to queries from the Panel, Mr. Green acknowledged that (i) the existing setback along the center portion of the east edge of the site is 3.6 to 4.6 meters but will be increased to 4.7 meters and a setback variance is requested, (ii) the existing loading activity on Gower Street will be retained and an additional loading area will be located adjacent to the main entrance off Williams Road, and (iii) the upgrading of the facility will not result in an increase in the number of deliveries to the facility; however, a higher volume of materials per delivery is anticipated.

Ms. Chan-Yip noted that the proposed landscaping scheme for the project supports the proposed tree protection, facilitates pedestrian movement around the site and provides needed amenities for facility residents. Also, she stated that (i) a hedge at the western edge of the site adjacent to the parking lot will be retained, (ii) a pedestrian walkway is proposed off Williams Road leading to the main entrance of the care facility, (iii) the Williams Road frontage will be upgraded, (iv) three internal courtyard amenity areas will be provided within the site, in addition to the existing garden along the west edge of the site, (v) the internal courtyard amenity areas will provide seating, open space and planting, (vi) existing hedges along the edges of the site to protect existing trees, and (viii) gated walkways will be provided along the perimeter of the site.

In response to queries from the Panel, Ms. Chan-Yip confirmed that (i) the gated walkway will not completely encircle the proposed building, (ii) all existing hedges on-site and neighbours' trees will be retained, (iii) existing perimeter wood fence will be upgraded, and (iv) planting in the internal courtyards will be irrigated and receive adequate sunlight exposure.

In response to a queries from the Panel, Mr. Green advised that minimal exterior lighting will be introduced along the east side of the site to address safety and the comfort of neighbours and facility residents as lighting will be coming from adjacent rooms, and (ii) a shower and change room will be provided at the staff locker location.

In response to queries from the Panel, the care facility owner confirmed that there is a nosmoking policy within the premises of the facility.

Staff Comments

Mr. Craig advised that (i) the proposed variance for lot coverage was calculated only against the Williams Road property due to zoning boundaries; however, the lot coverage for the overall site including the Gower Street garden property would be below the 45 percent maximum permitted lot coverage, (ii) a legal agreement on title to the Gower Street garden property will be registered to ensure the long-term retention of the outdoor garden exclusively for the use of care facility residents, (iii) a 5.7 meters setback variance is proposed along the northern portion of the site's east edge, in addition to the proposed 4.7 meters setback variance along the central portion of the east edge of the site, (iv) a legal agreement on title will be registered to limit truck activity on Gower Street, including limiting delivery hours from 8:00 a.m. to 5:00 p.m. Monday through Friday, and (v) there are transportation demand measures associated with the subject application to address the proposed parking variance.

Also, Mr. Craig acknowledged that (i) the applicant conducted public consultation through door to door visits to neighbouring homes, and (ii) the applicant is required to submit a construction and parking management plan which includes details regarding deliveries to the site and construction vehicle parking. In response to a query from the Panel, Mr. Craig confirmed that the construction and parking management plan is required prior to the issuance of a building permit.

Correspondence

Val Yamamoto, 9711 Swansea Drive (Schedule 2)

Raymond Ng, 9560 Williams Road (Schedule 3)

Mr. Craig noted that Ms. Yamamoto is seeking clarification from the applicant regarding the three proposed setback variances along the east side of the proposed development, noting that the resident's backyard is adjacent to the proposed south wing addition where a 6.0 meter side yard setback on the east side of the subject site is being proposed by the applicant.

Mr. Craig noted that Mr. Ng expressed concern regarding the existing hedge along the facility's west property line encroaching into the east side of his property and the adverse impacts of upgrading the existing facility including increased noise, smoke emission, food smells, rodent population and volume of traffic in the area, and more exhaust fumes coming from cars in the parking lot adjacent to Mr. Ng's property.

In response to the concerns expressed by Mr. Ng, Mr. Craig stated that it is the understanding of staff that (i) the applicant has a contract with a pest control company, and (ii) the applicant will contact Mr. Ng to coordinate the trimming of the existing hedge adjacent to Mr. Ng's property.

Gallery Comments

Terry Stashuk, 10171 Gower Street, noted that (i) 10 to 15 years ago, the movement of trucks and heavy equipment loading and unloading huge piles of soil on the empty lot of the facility had been bothering the neighbourhood, (ii) the residents are concerned on the impacts to the neighbourhood of the planned three-year construction period to expand the facility, (iii) a small driveway off Gower Street located at the southern part of the facility property is being accessed by large trucks and heavy equipment for pre-loading activities, and will likely to be accessed for future construction-related activities, and (iv) a neighbour has complained about cracks in his windows as a result of pre-loading activities.

Mr. Stashuk also questioned the impact of the height of the proposed development to the single-family homes in the neighbourhood and in response to a query from the Panel, Mr. Green noted that the current zoning of the subject site allows a building height of up to 12 meters, while the height of the proposed three-storey north and south wings is 11.95 meters. In response to the same query, Mr. Craig confirmed that the maximum allowable height for a new single-family dwelling is nine meters.

5.

Mr. Stashuk further noted that (i) a neighbour has expressed concern regarding losing cherry tree screening along the Gower Street frontage of the facility facing his neighbour's property, and (ii) delivery and garbage collection trucks backing onto Gower Street due to lack of on-site truck turn around area are posing safety risks to pedestrians and motorists and generate a lot of noise.

In response to a query from the Panel, Mr. Green acknowledged that the proposed design of the receiving area of the facility along Gower Street will enable delivery trucks to make a three-point turn on-site even if cars are parked on the other side.

In response to a query whether the facility's receiving area could be relocated to the main entrance on Williams Road, Mr. Green noted that locating the receiving area close to the care facility residents' living areas would adversely impact the well-being of residents, especially those with dementia.

Shiraine Haas, 10131 Gower Street, expressed concern regarding current and potential adverse impacts of the proposed development on the neighbourhood, noting that (i) the current level of noise and traffic on Gower Street generated by garbage and recycling pick-ups and truck deliveries to the care facility is expected to worsen when the facility will be upgraded, (ii) her parents plan to stay permanently in their property and will be affected by the proposed development, (iii) the proposed three-storey additional building fronting their property will impact their privacy and potentially affect the trees in front of their property, (iv) the emergency generators of the facility pose a noise concern, (v) Gower Street is currently being used for care facility employee and visitor parking, reducing available on-street parking spaces for residents in the area and further congesting the narrow street, and (vi) care facility employees have been observed smoking near the facility's loading area along Gower Street.

In addition, Ms. Haas expressed her hope that all truck deliveries will be made at the facility's main entrance off Williams Road when the facility will be upgraded.

In response to queries from the Panel, Mr. Green acknowledged that (i) the scale of the proposed development necessitates the provision of two entrances along Gower Street, (ii) the facility's two Gower Street entrances are not designed to be the main entry for visitors, and (iii) adequate parking spaces for staff and visitors are provided at the outdoor parking area adjacent to the facility's main entrance off Williams Road.

Raymond Young, 9791 Swansea Drive, stated that and he and his in-laws live in a duplex east of the existing two-storey facility. He expressed concern regarding his property's lack of privacy due to the absence of screening at the portion of the east side of the facility fronting the back of his property and questioned whether his concern could be addressed by landscaping and/or planting trees on the east edge of the facility's property. Also, he expressed concern that the back of his property could potentially be facing a three-storey building.

In addition, Mr. Young also questioned whether the facility could introduce measures to mitigate the noise emanating from care facility residents with dementia.

6.

In response to a query from the Panel, Mr. Green acknowledged that the existing building is old, has older windows, and not well-ventilated; however, the upgraded care facility will have operable windows, a more controlled indoor environment and will meet the current energy standard for buildings.

In response to a further query from the Panel, Mr. Green confirmed that (i) there is an existing hedge along the southern portion of the east property line, and (ii) there are no existing trees along the northern portion of the east property line and no new tree or hedge planting is being proposed due to the tightness of the site and the tree planting prohibition on the sanitary sewer Statutory Rights-of-Way (SRWs) located east and north of the proposed building.

Ruth Tsui, 10111 Gower Street, noted the adverse impacts of the facility to the neighbourhood and was of the opinion that Gower Street has been turned into a back alley lane due to the frequent use of the street by delivery and garbage collection trucks and by care facility visitors and employees for parking and smoking area.

Ms. Tsui further noted that Gower Street is located in a predominantly residential neighbourhood and suggested that majority of the present and future uses of Gower Street by non-residents in the area should be diverted to the facility's main entrance off Williams Road.

In addition, Ms. Tsui expressed concern regarding (i) the possibility of the applicant using Gower Street for construction-related activities, and (ii) the noise coming from the facility's emergency generator directly facing her property and from the existing wind turbine on the roof of the facility.

It was also noted that the current volume of traffic along Gower Street and its potential increase in the future due to the upgrading of the facility pose safety risks for children crossing the street on their way to James Whiteside Elementary School and for people riding bicycles in the area.

Clinton Neal, 9811 Swansea Drive, noted one incidence of damage to property as a result of pre-loading activities and expressed concern regarding potential damages to properties in future construction activities in the area.

The Chair advised that residents in the neighbourhood could take photographs of their property before and after the construction of the proposed development and note any damage to their property as a result of construction-related activities undertaken by the applicant. The Chair further advised that affected residents discuss the matter directly with the applicant.

Panel Discussion

The Chair stated that the project has many positive features; however, he noted that the concerns expressed by the care facility's neighbours are legitimate and should be addressed by the applicant through further consultation. He added that the applicant needs to provide information on the management of construction and parking activities during the three-year period, formulate a plan to control care facility visitor and employee parking as well as smoking on Gower Street, and provide a rationale for the two proposed facility entrances along Gower Street.

Panel Decision

It was moved and seconded *That:*

- (a) Development Variance Permit application 16-733949 be referred back to staff for further discussions with the applicant and for the applicant to (i) hold further consultations with residents in the neighbourhood to address present and future adverse impacts of the existing and proposed development to the neighbourhood, (ii) provide information on the management of construction and parking activities for the three-year construction period including proposed uses of Gower Street for construction purposes, and (iii) formulate a plan to control care facility visitor and employee parking as well as smoking on Gower Street; and
- (b) the subject application be brought back for consideration by the Development Permit Panel at the January 25, 2017 meeting of the Panel.

CARRIED

3. Development Variance 16-743379 (REDMS No. 5214026 v. 3)

APPLICANT: Cypress Land Services Inc., on behalf of TM Mobile Inc. (Telus) PROPERTY LOCATION: 3911 No. 3 Road

INTENT OF PERMIT:

1. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the interior side yard setback from 3.0 m (9.8 ft.) to 2.025 m (6.65 ft.) in the "Auto-Oriented Commercial (CA)" zoning district in order to permit the construction of a 14.9 m (48.9 ft.) high monopole antenna tower at 3911 No. 3 Road.

Applicant's Comments

Chad Marlatt, Cypress Land Services, Inc., with the aid of a visual presentation (attached to and forming part of these Minutes as Schedule 4), noted that due to an increased demand for wireless services, Telus is proposing to upgrade an existing facility along No. 3 Road by replacing an existing wood monopole antenna with a new steel tower with the same height to increase its capacity to serve the community.

In addition, Mr. Marlatt stated that the (i) applicant is asking to reduce the required 3 meters side yard setback to 2.025 meters to accommodate the construction of the foundation of the proposed tower, (ii) a door-to-door public consultation was conducted by the applicant in the neighbourhood, (iii) a six-foot cedar hedge is proposed along the north property line to provide screening to an adjacent window supply company, and (iv) there is an existing mature planting along the No. 3 Road frontage of the existing Telus facility.

In response to a query from the Panel, Mr. Marlatt advised that he will communicate to the applicant the suggestion to enhance the older existing planting along the No. 3 Road frontage of the facility.

Staff Comments

None.

Correspondence

Del Jiang and Qian Gong (no address stated) (Schedule 5)

Mr. Craig noted that the two residents indicated their opposition to the construction of the proposed replacement tower.

Panel Discussion

The Panel noted that the existing Telus facility and proposed replacement tower is located in an emerging neighbourhood and the older landscaping needs to be enhanced.

Panel Decision

It was moved and seconded

That DV 16-743379 be referred back to staff for further discussions with the applicant to improve the existing and proposed landscaping for the Telus facility especially along its No. 3 Road frontage and brought back for consideration by the Panel at the January 25, 2017 meeting of the Panel.

CARRIED

4. Date of Next Meeting: January 25, 2017

5. Adjournment

It was moved and seconded *That the meeting be adjourned at 5:35 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, January 11, 2017.

Joe Erceg Chair Rustico Agawin Auxiliary Committee Clerk Schedule 1 to the Minutes of the Panel on Wednesday, Permit meeting held of January 11, 2017. Development

FRASERVIEW COMPLEX RESIDENTIAL CARE FACILITY

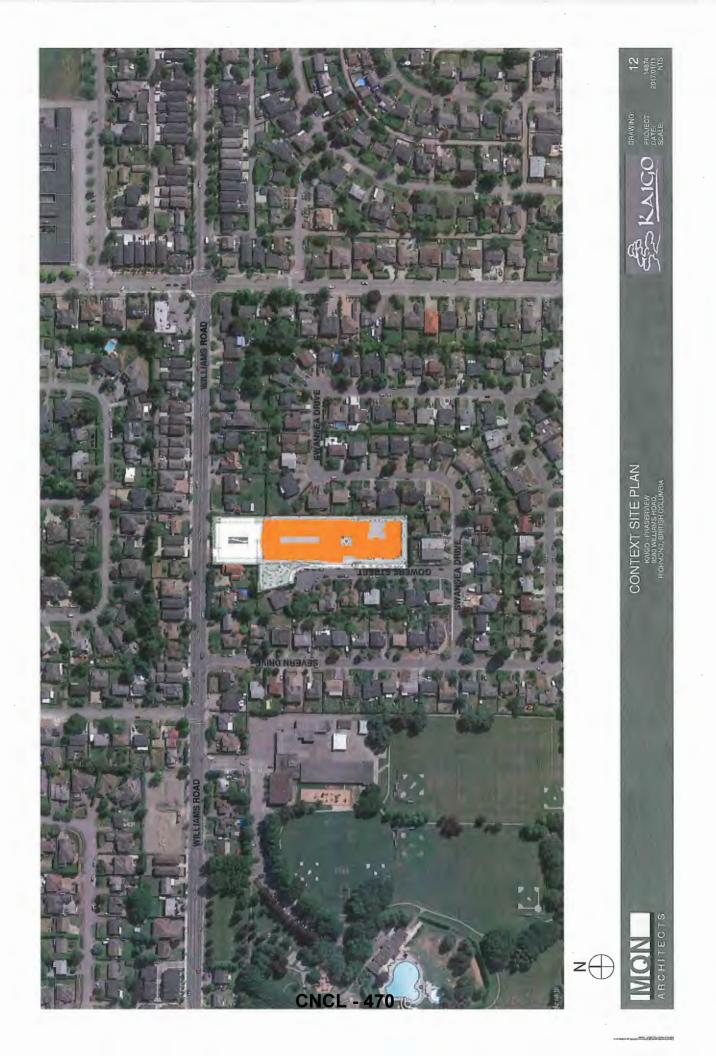
9580 WILLIAMS ROAD, RICHMOND, BC



RAIGO

COVER SHEET

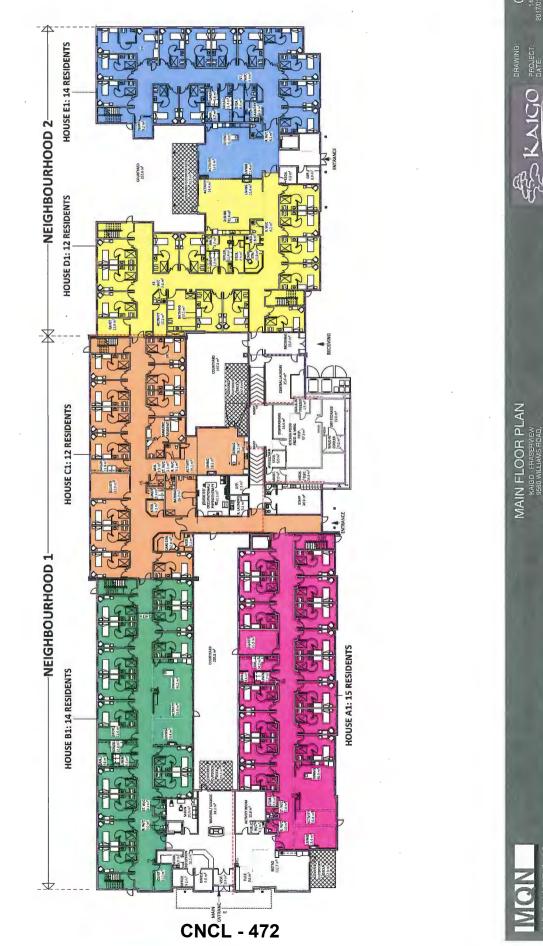
ARCHITECTS



 \bigoplus_{N}



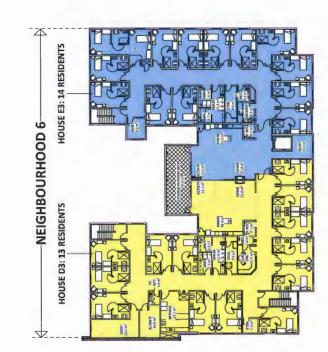




 $\bigoplus_{\mathbf{N}}$



 $\bigoplus_{\mathbf{N}}$



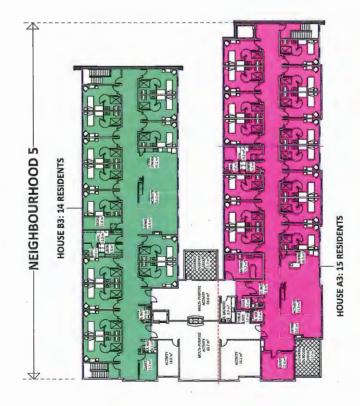
06 14874 7/01/11

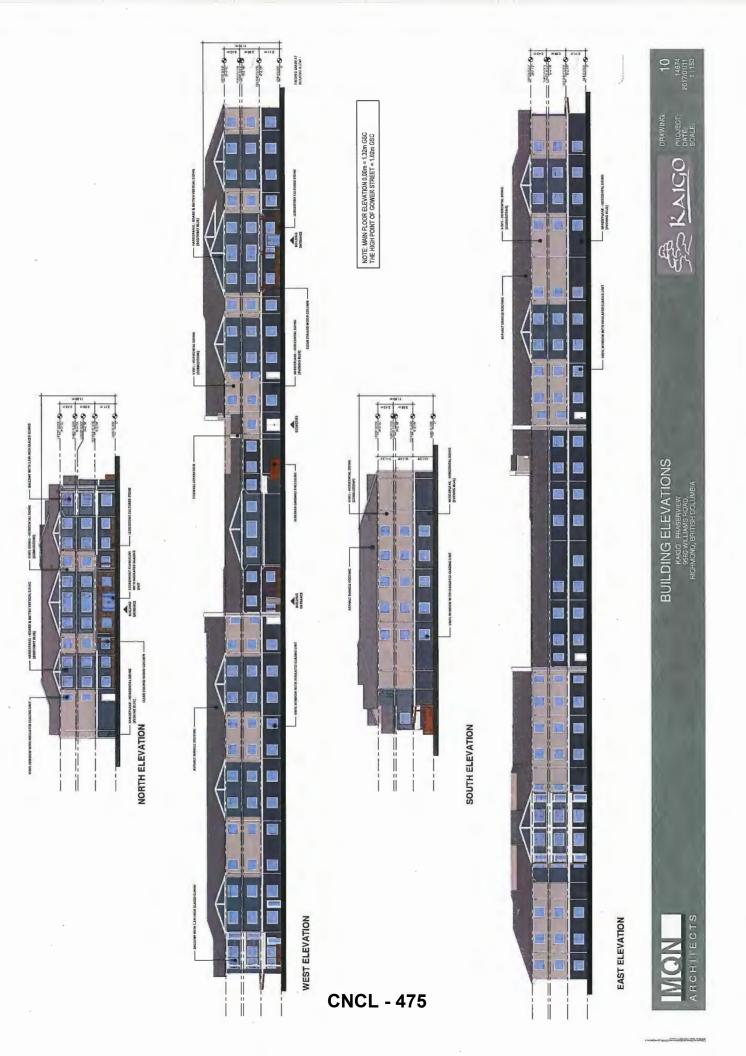
AIGO

alle

THIRD FLOOR PLAN

RCHITECTS









PERSPECTIVE - SOUTHWEST VIEW - HOUSES D&E

CNCL - 476





PERSPECTIVE VIEWS





Schedule 2 to the Minutes of the Development Permit Panel meeting held on Wednesday, January 11, 2017.

CityClerk

From: Sent: To: Subject: Home <mommayam@telus.net> Friday, 30 December 2016 10:43 Badyal,Sara Fraserview Care Home Clarification

-10-	
	i o Govelopment Permit Panel
	Date: January 11, 2017
and the second	Itom # 2
and the second se	Ro: DVP 16-733949
100000000	CERTINGUES THE REAL PROCESS AND ALL LEADERS AND ALL MEETING AND ALL MEETING AND ALL AND A
Erwine -	

Hello Sara.

I met with you a few months ago about the redevelopment project for the Fraserview Care Home on Williams Road and appreciate the time you took to show me the proposed plans. I live at 9711 Swansea Drive. My back yard is adjacent to the south east part of the project.

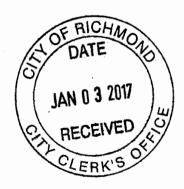
I just left a phone message however, I thought I should clarify my question. We received a "Notice of Application for a Development Variance Permit" from the city on behalf of MQN Architects. Would you be so kind to clarify Intent b on our letter (Reduce the minimum side yard setback from 6.0 m to 2.2m for the west side yard and 4.7 for the east side yard)

My question is in relation to the original proposal (Site Plan sent to neighbourhood) where the 3 additional buildings have 3 different proposed setbacks along the East Side as: North addition- 5.7m Centre Addition- 4.7m South Addition- 6.0m (our back yard)

My question: Is the variance permit as stated in our letter "Intent of Permit" item b in reference for <u>ALL</u> 3 building additions or just the centre addition as originally proposed?

As per the Site Plan the neighbourhood received, intent b is referenced along different areas of the 3 building additions but not along the whole perimeter so I would like to confirm my understanding.

Thank you for your time and addressing my concern. Val Yamamoto



an tha a the second second state of the second s	 Devices and the Mark of Mark and American Street States 	Schedule 3 to	the Minutes of the
		Development	Permit Panel
	Po Double of Secold Donal	meeting held	on Wednesday,
	To Development Permit Panel	January 11, 20	17.
	Date: janvan/11, 2017	•••••• , =•	
	Item # 2		
Director, City Clerk's office,	Re: DV 16-733949		
Council Chambers, Richmond City hal		L-JAN - 201	7
· · ·	Const Transmission and Annalism and Annalism and Annalism and Annal Street St	/	f

Re: development variance permit DV16-733949, located 9580 Williams Road.

I am resident and owner of 9560 Williams Road, Richmond. | have following questions and proposal for the the aboved permit.

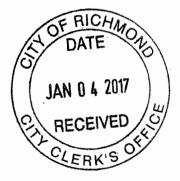
1/ the proposed 199 beds, together with 80 staff and 50 visitor per day. That means they will have more than 300 persons moving around that building. That will generate a lot of noise, emission of smoke, transmittion of diease, the kitchen will create food left over and rats, and transportation problem because the increase of cars moving in and out of the building. The houses around the proposed property are mostly single family house with a population of 5-6 persons per house, therefore the proposed project will have the population of 60 houses. In fact I saw a lot of rats after they put down the two old buildings.

2/ the side yard setback, they have more than ten parking lots beside my house on the east side of my building. The exhaust air from the cars are pushing into my house and they should not allow car to back up into the parking lots or they should build a fence to stop it from coming into my house. They should keep the setback enough to let fresh air moving and pushing the exhaust away.

Lastly, I want to point out that they have trees growing along the east side and south side of my house and those trees block the sunlight coming into my property and the branches from the trees crossing the boundary and touching my building and I have to spend money to trim those trees which are not belong to me. I hope they should do something tho trim those trees which belong to the proposed property.

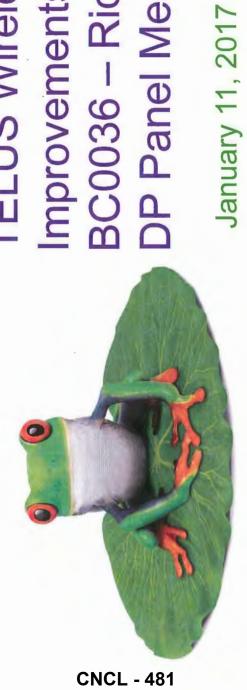
yours truly

Raymond Ng, 9560 Williams Road.



Schedule 4 to the Minutes of the Development Permit Panel meeting held on Wednesday, January 11, 2017.

TELUS



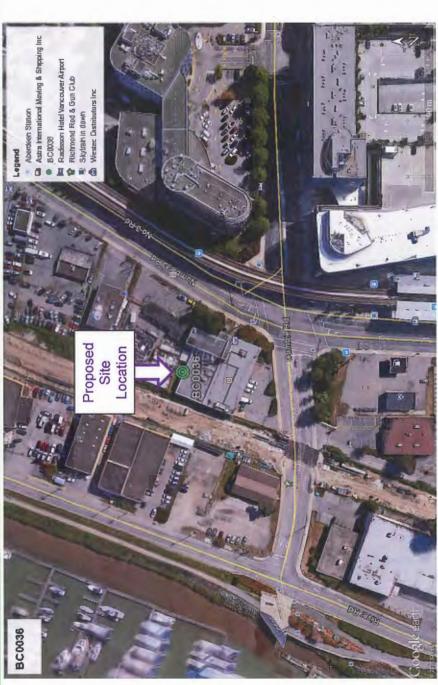
TELUS Wireless Network Improvements: BC0036 – Richmond CO DP Panel Meeting

TELUS 5. Site plan & Elevation Drawing 1. Overview of Wireless Trends 7. Service Area Objectives 6. Safety Code 6 Analysis 3. Consultation details 4. Photo-simulations 2. Site Location 8. Questions Agenda **CNCL - 482**





BC0036 - 3911 No. 3 Road



CNCL - 484

In response to demand for improved wireless service and a national network upgrade in Richmond, TELUS galvanized tubular steel monopole antenna facility at 3911 No. 3 road. The existing 15.24 metre wood pole interior side yard setback from 3.0 metre to 2.025 metres in order to allow an installation of a 14.9 metre c/o Cypress Land Services Inc. has applied to the City of Richmond for permission to vary the required with antenna array at the top will be removed once the new site become operational





- TELUS proposes to replace an existing monopole structure with a new monopole structure of similar height to enable a LTE Upgrade to better service the wireless needs of the community
- Typically poles can be replaced without consultation although in this instance a side yard setback could not be met because the steel pole requires a larger foundation than the wooden pole, so it needs more space from the foundation of the shelter.
 - 18 July 2016 Pre-consultation with City staff resulting in DVP application equirement
- 26 Aug 2016 DVP application submitted to vary the side yard setback for a replacement wireless antenna installation from 3.0 m to 2.025 m.
 - 02 Nov 2016 Development sign posted
- representative, Tawny Verigin hand delivered a notice of construction to the following 18 Nov 2016 – Hand delivered notifications to surrounding buildings TELUS properties to advise them of the proposed replacement tower:
 - 3891 No. 3 Rd
- 7780 River Rd
- 7760 River Rd / 7891 Cambie Rd (Rod & Gun Club)
- 7800 River Rd
- No comments were received during the consultation period



Existing TELUS Network

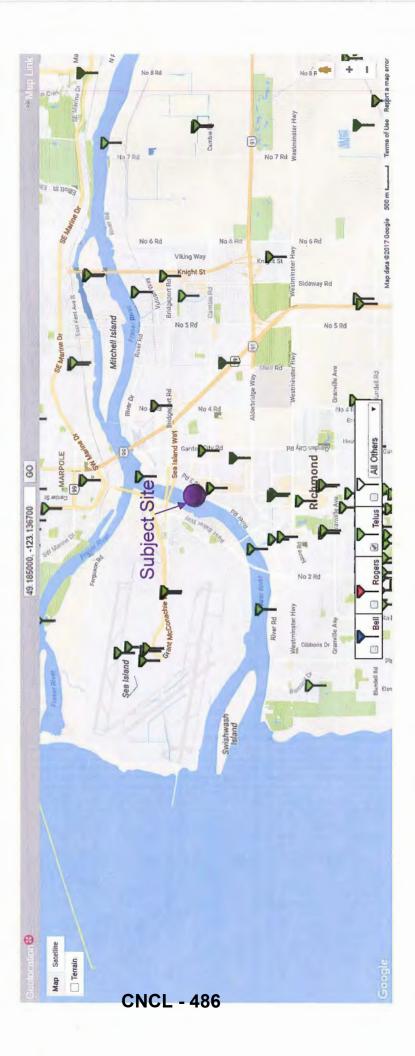
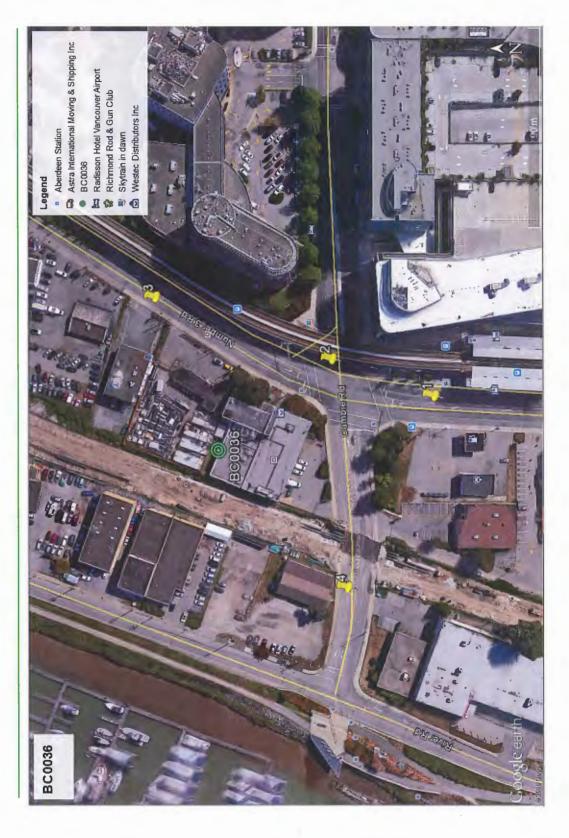
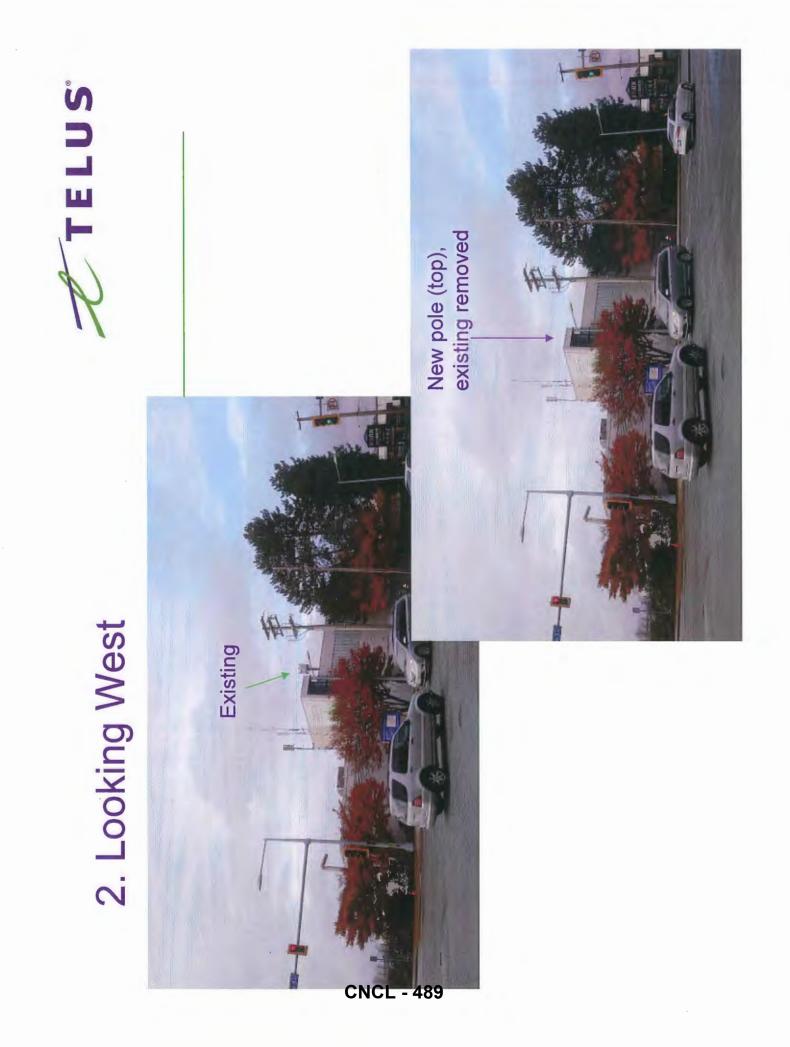


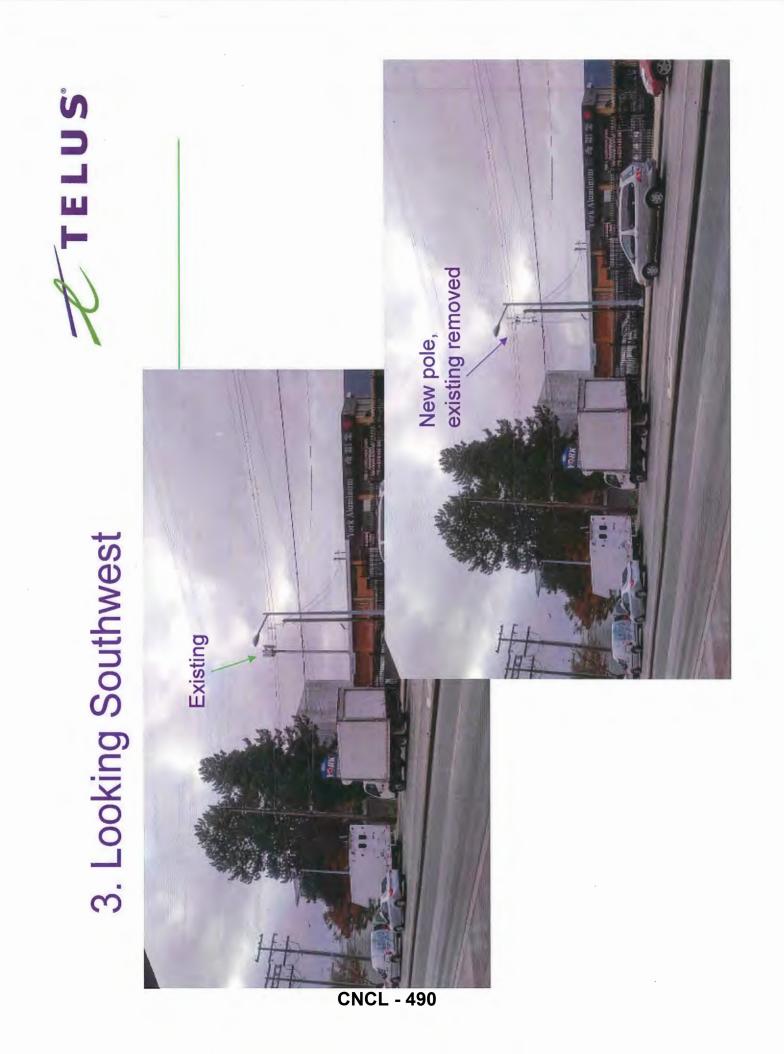


Photo-simulation Locations





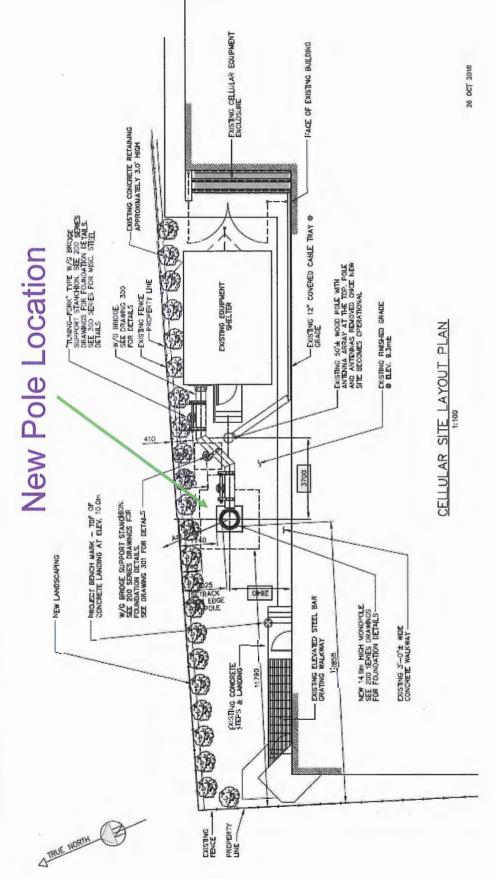






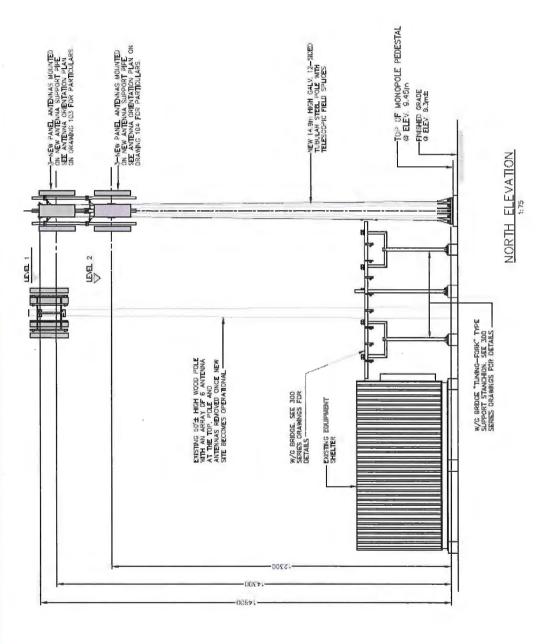


Site Plan



TELUS

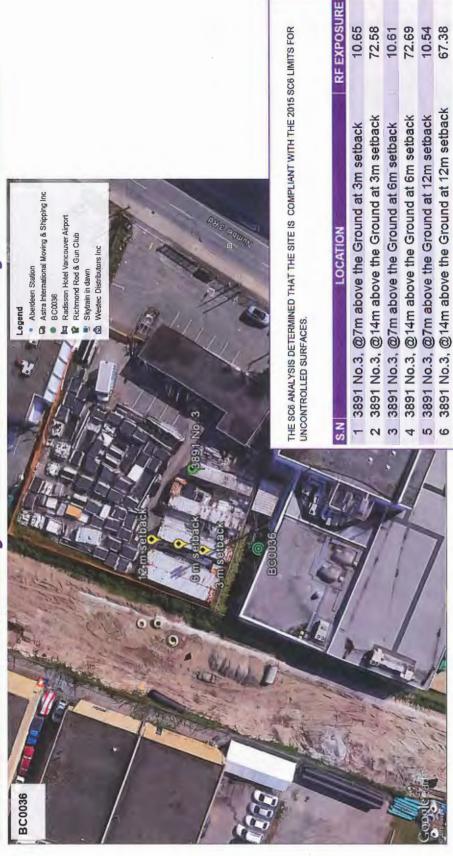
Elevation







Safety Code 6 Analysis 2



Reading taken from 3m, 6m & 12m setback locations as show above at 7m and 14m above ground*

A human being a maximum height of 2m will be in these volumes if he stands on those rooftops (ISED requirement)." Since the requested readings were for 5m and 12m high, our study analyzed "5m to 7m" and for "12m to 14m". *If the rooftop heights is "X", the volume for the study will be from "X" to "X+2".

the future is friendly®



CityClerk	meeting held on Wednesday,	Item # 3
From: Sent: To: Subject:	gong qian <janeqgong@hotmail.com> Monday, 9 January 2017 20:34 CityClerk DV 16-743379</janeqgong@hotmail.com>	Re: <u>DV 16-743379</u>

Dear Mr. David Weber,

Regarding the Development Permit Panel meeting @ 3:30pm on January 11, 2017, we are sorry that we can not make it. Our opinion is a negative one. We do not want the antenna tower to be built at the stated address.

Thank you and best regards. Jiang,DeL Gong, Qian





Report to Council

То:	Richmond City Council	Date:	January 19, 2017
From:	Joe Erceg Chair, Development Permit Panel	File:	01-0100-20-DPER1- 01/2017-Vol 01
Re:	Development Permit Panel Meetings Held on July 13, 2016 and December 14, 2016		

Staff Recommendation

- 1. That the recommendation of the Panel to authorize the issuance of:
 - a) A Development Permit (DP 11-566011) for the property at 15111 Williams Road and Richmond Key 1095; and
 - b) A Development Permit (DP 15-696896) for the property at 7120 No. 3 Road;

be endorsed, and the Permits so issued.

Joe Erceg

Chair, Development Permit Panel

WC:blg

Panel Report

The Development Permit Panel considered the following items at its meetings held on July 13, 2016 and December 14, 2016.

DP 11-566011 – ECOWASTE INDUSTRIES LTD. – 15111 WILLIAMS ROAD AND RICHMOND KEY 1095 (July 13, 2016)

The Panel considered a Development Permit application to permit the construction of a 65.22 ha (161.14 acre) Industrial Logistics Park on a site zoned "Industrial (I)" that is adjacent to the Agricultural Land Reserve (ALR) and several Environmental Sensitive Areas (ESAs). Variances are included in the proposal for increased building height and reduced parking for freight forwarding services and warehouse storage services uses.

The development team provided a brief presentation. Angus Beattie, Development Manager, and Alisa Bailey, Project Manager, of Omicron; and Landscape Architect, Ken Larsson, of Connect Landscape Architecture, provided a brief presentation, noting that:

- The project will significantly increase the City's industrial building inventory; with the proposed five-phase project building out over a period of up to 20 years.
- The building height variance request results from the raised land fill site elevation and the industry demand for ceiling height clearance.
- The parking variance results from appropriate parking rates identified in a parking study.
- Off-site infrastructure works include construction of a new two-lane bridge over the No. 7 Road Canal, improvements to adjacent public roads, and a storm water system discharging directly to the Fraser River.
- The landscape design is inspired by the Fraser River estuarian habitat, and the project's Riparian Management Area (RMA) and Environmentally Sensitive Area (ESA) impacts and proposed compensations include construction of an upland wetland habitat on-site.

In response to Panel queries, the applicant team advised that:

- The greatest grade difference between the site and Blundell Road is nearly 30 ft.; with a buffer zone that is sloped 2:1 and planted with trees, shrubs and grasses.
- Internal roadways are designed with accessible slopes and accommodate cycling.
- The proposed bridge on Blundell Road over the No. 7 Road Canal will impact on the RMA and proposed RMA and ESA compensation includes invasive plant removal and enhancement planting on-site adjacent to the No. 7 Road Canal.
- Future improvements along Savage Road and the proposed construction of the storm water direct discharge system to the Fraser River will have ESA impacts and the proposed triangle-shaped upland wetland habitat will provide ESA and RMA compensation.
- The requested parking variance was based on a parking study on warehousing and freight forwarding industrial sites in the area and in other municipalities.

- The requested building height variance was based on best practices for new logistics and freight forwarding industrial sites and ceiling heights market demand by potential tenants.
- The design and configuration of the future buildings in the subject development will be built to suit the requirements of prospective tenants.
- Construction of Phase 1 of the five-phase project is expected to commence in 2017.

Staff advised that the proposal is an adaptive reuse of an existing industrial site and development will be phased. The project's ALR buffer strategy and ESA and RMA compensation schemes respond to the specific conditions in the subject site and the City's sustainability objectives. Staff are studying the possibility of introducing amendments to the City's Zoning Bylaw in relation to maximum building height and parking requirements in industrial sites to reflect current best practices. The ALR buffers were reviewed and endorsed by the City's AAC.

No correspondence was submitted to the Development Permit Panel regarding the application.

The Panel expressed support to the proposed development, noting that: (i) the grade differences in the subject site are satisfactorily addressed by the applicant; and (ii) the project will add a strong presence in the City's industrial land inventory.

The Panel recommends that the Permit be issued.

DP 15-696896 – MCDONALD'S RESTAURANTS OF CANADA LTD. – 7120 NO. 3 ROAD (December 14, 2016)

The Panel considered a Development Permit application to permit the construction of a single storey restaurant with a drive-thru on a site zoned "Auto-Oriented Commercial (CA)". No variances are included in the proposal.

Architect, Brian Johnson, of Reprise Design Architecture; Landscape Architect, Cameron Owen, of IBI Group; Graham Fane, Real Estate Representative, of McDonald's Restaurants of Canada Ltd.; and Joe Guzzo, McDonald's restaurant owner, provided a brief presentation, noting that:

- A wide walkway with pedestrian scale furniture is proposed to provide direct access to the main entrance of the restaurant from No. 3 Road.
- Proposed building materials e.g., metal panel, natural stone, and natural brick, provide a West Coast feel to the building façade.
- Sustainability features of the project include white roofing, energy management systems for lighting and HVAC controls, full LED lighting for interior and exterior lighting, low-e solar grade glazing and low-flow plumbing fixtures.
- Rooftop HVAC is proposed in a custom louvered screened rooftop area to address potential noise and aesthetic concerns of neighbouring developments.
- The existing heritage McDonald's sign is proposed to be retained and refurbished.
- Safety measures will ensure safe pedestrian circulation; such as signs and bollards at the drive-thru exit and protecting the outdoor seating area with physical barriers.

- Proposed trees will provide more shade in the parking lot. Proposed root barriers will provide tree protection when the east-west City lane is widened in the future.
- A new 1.8 m high wood fence on the north, south and east property lines provide separation and screening to adjacent properties.
- Drive-thru speakers will be equipped with automatic volume controls (AVC) based on outdoor day and night time noise levels.
- The restaurant will be equipped with high performance exhaust fans with projected noise and odour levels lower than currently existing and in compliance with the City Noise Bylaw.
- The subject site is the first McDonald's restaurant outside of the United States and will be celebrating its 50th anniversary in 2017.

In response to Panel queries, the project team noted that: (i) metal louvres screen rooftop mechanical units; (ii) a final acoustic study will be submitted; (iii) the project will meet Noise Bylaw requirements; (iv) the proposed kitchen exhaust fans will discharge air vertically; (v) buffering along the north property line consists of a 1.8 m high wood fence, large canopy trees, dense low shrubs and a strip of lawn; (vi) newspaper boxes and similar structures will not be allowed on the subject site; (vii) proposed ramps will provide accessibility to people in wheelchairs; (viii) the white roof is being proposed from a sustainability perspective, but the applicant will consider the suggestion for using other colours or introducing patterning on the rooftop surface; and (ix) a stamped concrete surface treatment is proposed for the loading area.

Discussion ensued on the proposed rooftop surface treatment and staff was directed to work with the applicant to investigate opportunities to enhance the proposed rooftop treatment through replacing the white colour and/or introducing patterns and designs to enhance the roof's visual appeal and address potential overlook concerns from the high-rise commercial/residential building to the north of the subject site.

Staff advised that: (i) the retention and refurbishing of the McDonald's heritage sign was appreciated; (ii) the landscape plan respects existing trees along the perimeter of the site; (iii) the applicant will introduce a significant amount of permeable pavers on-site; and (iv) there is a Servicing Agreement associated with frontage improvements along No. 3 Road.

In response to a Panel query, staff confirmed that the applicant is providing Public Rights-of-Passage (PROP) Statutory Right-of-Way (SRW) along No. 3 Road for frontage improvements and along the north property line for future widening and extension of the east-west City lane.

Subsequent to the Panel meeting, the original design with white roof membrane and white painted rooftop mechanical equipment was revised to improve views down onto the roof in response to Panel discussion. All mechanical equipment is now screened in a rooftop penthouse with acoustic louvres and the roof surface and elements are arranged; representing a "checkerboard" pattern in tan and gray colour (matching the building colour palette).

No correspondence was submitted to the Development Permit Panel regarding the application.

The Panel recommends that the Permit be issued.